THE COLLECTED WORKS OF JULES VERNE

by Jules Verne

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Twenty Thousand Leagues Under the Sea
by JULES VERNE

FIRST PART

CHAPTER 1

A Runaway Reef

THE YEAR 1866 was marked by a bizarre development, an unexplained and downright inexplicable phenomenon that surely no one has forgotten. Without getting into those rumors that upset civilians in the seaports and deranged the public mind even far inland, it must be said that professional seamen were especially alarmed. Traders, shipowners, captains of vessels, skippers, and master mariners from Europe and America, naval officers from every country, and at their heels the various national governments on these two continents, were all extremely disturbed by the business.

In essence, over a period of time several ships had encountered "an enormous thing" at sea, a long spindle-shaped object, sometimes giving off a phosphorescent glow, infinitely bigger and faster than any whale.

The relevant data on this apparition, as recorded in various logbooks, agreed pretty closely as to the structure of the object or creature in question, its unprecedented speed of movement, its startling locomotive power, and the unique vitality with which it seemed to be gifted. If it was a cetacean, it exceeded in bulk any whale previously classified by science. No naturalist, neither Cuvier nor Lacépède, neither Professor Dumeril nor Professor de Quatrefages, would have accepted the existence of such a monster sight unseen-- specifically, unseen by their own scientific eyes.

Striking an average of observations taken at different times-- rejecting those timid estimates that gave the object a length of 200 feet, and ignoring those exaggerated views that saw it as a mile wide and three long--you could still assert that this phenomenal creature greatly exceeded the dimensions of anything then known to ichthyologists, if it existed at all.

Now then, it did exist, this was an undeniable fact; and since the human mind dotes on objects of wonder, you can understand the worldwide excitement caused by this unearthly apparition. As for relegating it to the realm of fiction, that charge had to be dropped.

In essence, on July 20, 1866, the steamer Governor Higginson, from the Calcutta & Burnach Steam Navigation Co., encountered this moving mass five miles off the eastern shores of Australia.

Captain Baker at first thought he was in the presence of an unknown reef; he was even about to fix its exact position when two waterspouts shot out of this inexplicable object and sprang hissing into the air some 150 feet. So, unless this reef was subject to the intermittent eruptions of a geyser, the Governor Higginson had fair and honest dealings with some aquatic mammal, until then unknown, that could spurt from its blowholes waterspouts mixed with air and steam.

Similar events were likewise observed in Pacific seas, on July 23 of the same year, by the Christopher Columbus from the West India & Pacific Steam Navigation Co. Consequently, this extraordinary cetacean could transfer itself from one locality to another with startling swiftness, since within an interval of just three days, the Governor Higginson and the Christopher Columbus had observed it at two positions on the charts separated by a distance of more than 700 nautical leagues.

Fifteen days later and 2,000 leagues farther, the Helvetia from the Compagnie Nationale and the Shannon from the Royal Mail line, running on opposite tacks in that part of the Atlantic lying between the United States and Europe, respectively signaled each other that the monster had been sighted in latitude 42 degrees 15' north and longitude 60 degrees 35' west of the meridian of Greenwich. From their simultaneous observations, they were able to estimate the mammal's minimum length at more than 350 English feet;* this was because both the Shannon and
the Helvetia were of smaller dimensions, although each measured 100 meters stem to stern. Now then, the biggest
whales, those rorqual whales that frequent the waterways of the Aleutian Islands, have never exceeded a length of
56 meters—if they reach even that.

*Author's Note: About 106 meters. An English foot is only 30.4 centimeters.

One after another, reports arrived that would profoundly affect public opinion: new observations taken by the
transatlantic liner Pereire, the Inman line’s Etna running afoul of the monster, an official report drawn up by officers
on the French frigate Normandy, dead-earnest reckonings obtained by the general staff of Commodore Fitz-James
aboard the Lord Clyde. In lighthearted countries, people joked about this phenomenon, but such serious, practical
countries as England, America, and Germany were deeply concerned.

In every big city the monster was the latest rage; they sang about it in the coffee houses, they ridiculed it in the
newspapers, they dramatized it in the theaters. The tabloids found it a fine opportunity for hatching all sorts of
hoaxes. In those newspapers short of copy, you saw the reappearance of every gigantic imaginary creature, from
"Moby Dick," that dreadful white whale from the High Arctic regions, to the stupendous kraken whose tentacles
could entwine a 500-ton craft and drag it into the ocean depths. They even reprinted reports from ancient times: the
views of Aristotle and Pliny accepting the existence of such monsters, then the Norwegian stories of Bishop
Pontoppidan, the narratives of Paul Egede, and finally the reports of Captain Harrington—whose good faith is above
suspicion—in which he claims he saw, while aboard the Castilian in 1857, one of those enormous serpents that, until
then, had frequented only the seas of France’s old extremist newspaper, The Constitutional.

An interminable debate then broke out between believers and skeptics in the scholarly societies and scientific
journals. The "monster question" inflamed all minds. During this memorable campaign, journalists making a
profession of science battled with those making a profession of wit, spilling waves of ink and some of them even
two or three drops of blood, since they went from sea serpents to the most offensive personal remarks.

For six months the war seesawed. With inexhaustible zest, the popular press took potshots at feature articles
from the Geographic Institute of Brazil, the Royal Academy of Science in Berlin, the British Association, the
Smithsonian Institution in Washington, D.C., at discussions in The Indian Archipelago, in Cosmos published by
Father Moigno, in Petermann’s Mittheilungen,* and at scientific chronicles in the great French and foreign
newspapers. When the monster’s detractors cited a saying by the botanist Linnaeus that “nature doesn’t make leaps,”
witty writers in the popular periodicals parodied it, maintaining in essence that "nature doesn’t make lunatics," and
ordering their contemporaries never to give the lie to nature by believing in krakens, sea serpents, "Moby Dicks," and
other all-out efforts from drunken seamen. Finally, in a much-feared satirical journal, an article by its most
popular columnist finished off the monster for good, spurning it in the style of Hippolytus repulsing the amorous
advances of his stepmother Phaedra, and giving the creature its quietus amid a universal burst of laughter. Wit had
defeated science.

*German: "Bulletin." Ed.

During the first months of the year 1867, the question seemed to be buried, and it didn’t seem due for
resurrection, when new facts were brought to the public’s attention. But now it was no longer an issue of a scientific
problem to be solved, but a quite real and serious danger to be avoided. The question took an entirely new turn. The
monster again became an islet, rock, or reef, but a runaway reef, unfixed and elusive.

On March 5, 1867, the Moravian from the Montreal Ocean Co., lying during the night in latitude 27 degrees 30'
and longitude 72 degrees 15’, ran its starboard quarter afoil of a rock marked on no charts of these waterways.
Under the combined efforts of wind and 400-horsepower steam, it was traveling at a speed of thirteen knots.
Without the high quality of its hull, the Moravian would surely have split open from this collision and gone down
together with those 237 passengers it was bringing back from Canada.

This accident happened around five o’clock in the morning, just as day was beginning to break. The officers on
watch rushed to the craft’s stern. They examined the ocean with the most scrupulous care. They saw nothing except a
strong eddy breaking three cable lengths out, as if those sheets of water had been violently churned. The site’s exact
bearings were taken, and the Moravian continued on course apparently undamaged. Had it run afoil of an
underwater rock or the wreckage of some enormous derelict ship? They were unable to say. But when they
examined its undersides in the service yard, they discovered that part of its keel had been smashed.

This occurrence, extremely serious in itself, might perhaps have been forgotten like so many others, if three
weeks later it hadn’t been reenacted under identical conditions. Only, thanks to the nationality of the ship victimized
by this new ramming, and thanks to the reputation of the company to which this ship belonged, the event caused an
immense uproar.

No one is unaware of the name of that famous English shipowner, Cunard. In 1840 this shrewd industrialist
founded a postal service between Liverpool and Halifax, featuring three wooden ships with 400-horsepower paddle
wheels and a burden of 1,162 metric tons. Eight years later, the company’s assets were increased by four 650-
horsepower ships at 1,820 metric tons, and in two more years, by two other vessels of still greater power and tonnage. In 1853 the Cunard Co., whose mail-carrying charter had just been renewed, successively added to its assets the Arabia, the Persia, the China, the Scotia, the Java, and the Russia, all ships of top speed and, after the Great Eastern, the biggest ever to plow the seas. So in 1867 this company owned twelve ships, eight with paddle wheels and four with propellers.

If I give these highly condensed details, it is so everyone can fully understand the importance of this maritime transportation company, known the world over for its shrewd management. No transoceanic navigational undertaking has been conducted with more ability, no business dealings have been crowned with greater success. In twenty-six years Cunard ships have made 2,000 Atlantic crossings without so much as a voyage canceled, a delay recorded, a man, a craft, or even a letter lost. Accordingly, despite strong competition from France, passengers still choose the Cunard line in preference to all others, as can be seen in a recent survey of official documents. Given this, no one will be astonished at the uproar provoked by this accident involving one of its finest steamers.

On April 13, 1867, with a smooth sea and a moderate breeze, the Scotia lay in longitude 15 degrees 12' and latitude 45 degrees 37'. It was traveling at a speed of 13.43 knots under the thrust of its 1,000-horsepower engines. Its paddle wheels were churning the sea with perfect steadiness. It was then drawing 6.7 meters of water and displacing 6,624 cubic meters.

At 4:17 in the afternoon, during a high tea for passengers gathered in the main lounge, a collision occurred, scarcely noticeable on the whole, affecting the Scotia's hull in that quarter a little astern of its port paddle wheel.

The Scotia hadn't run afoul of something, it had been fouled, and by a cutting or perforating instrument rather than a blunt one. This encounter seemed so minor that nobody on board would have been disturbed by it, had it not been for the shouts of crewmen in the hold, who climbed on deck yelling:

"We're sinking! We're sinking!"

At first the passengers were quite frightened, but Captain Anderson hastened to reassure them. In fact, there could be no immediate danger. Divided into seven compartments by watertight bulkheads, the Scotia could brave any leak with impunity.

Captain Anderson immediately made his way into the hold. He discovered that the fifth compartment had been invaded by the sea, and the speed of this invasion proved that the leak was considerable. Fortunately this compartment didn't contain the boilers, because their furnaces would have been abruptly extinguished.

Captain Anderson called an immediate halt, and one of his sailors dived down to assess the damage. Within moments they had located a hole two meters in width on the steamer's underside. Such a leak could not be patched, and with its paddle wheels half swamped, the Scotia had no choice but to continue its voyage. By then it lay 300 miles from Cape Clear, and after three days of delay that filled Liverpool with acute anxiety, it entered the company docks.

The engineers then proceeded to inspect the Scotia, which had been put in dry dock. They couldn't believe their eyes. Two and a half meters below its waterline, there gaped a symmetrical gash in the shape of an isosceles triangle. This breach in the sheet iron was so perfectly formed, no punch could have done a cleaner job of it. Consequently, it must have been produced by a perforating tool of uncommon toughness--plus, after being launched with prodigious power and then piercing four centimeters of sheet iron, this tool had needed to withdraw itself by a backward motion truly inexplicable.

This was the last straw, and it resulted in arousing public passions all over again. Indeed, from this moment on, any maritime casualty without an established cause was charged to the monster's account. This outrageous animal had to shoulder responsibility for all derelict vessels, whose numbers are unfortunately considerable, since out of those 3,000 ships whose losses are recorded annually at the marine insurance bureau, the figure for steam or sailing ships supposedly lost with all hands, in the absence of any news, amounts to at least 200!

Now then, justly or unjustly, it was the "monster" who stood accused of their disappearance; and since, thanks to it, travel between the various continents had become more and more dangerous, the public spoke up and demanded straight out that, at all cost, the seas be purged of this fearsome cetacean.

CHAPTER 2

The Pros and Cons
DURING THE PERIOD in which these developments were occurring, I had returned from a scientific undertaking organized to explore the Nebraska badlands in the United States. In my capacity as Assistant Professor at the Paris Museum of Natural History, I had been attached to this expedition by the French government. After spending six months in Nebraska, I arrived in New York laden with valuable collections near the end of March. My departure for France was set for early May. In the meantime, then, I was busy classifying my mineralogical, botanical, and zoological treasures when that incident took place with the Scotia.

I was perfectly abreast of this question, which was the big news of the day, and how could I not have been? I had read and reread every American and European newspaper without being any farther along. This mystery puzzled me. Finding it impossible to form any views, I drifted from one extreme to the other. Something was out there, that much was certain, and any doubting Thomas was invited to place his finger on the Scotia's wound.

When I arrived in New York, the question was at the boiling point. The hypothesis of a drifting islet or an elusive reef, put forward by people not quite in their right minds, was completely eliminated. And indeed, unless this reef had an engine in its belly, how could it move about with such prodigious speed?

Also discredited was the idea of a floating hull or some other enormous wreckage, and again because of this speed of movement.

So only two possible solutions to the question were left, creating two very distinct groups of supporters: on one side, those favoring a monster of colossal strength; on the other, those favoring an "underwater boat" of tremendous motor power.

Now then, although the latter hypothesis was completely admissible, it couldn't stand up to inquiries conducted in both the New World and the Old. That a private individual had such a mechanism at his disposal was less than probable. Where and when had he built it, and how could he have built it in secret?

Only some government could own such an engine of destruction, and in these disaster-filled times, when men tax their ingenuity to build increasingly powerful aggressive weapons, it was possible that, unknown to the rest of the world, some nation could have been testing such a fearsome machine. The Chassepot rifle led to the torpedo, and the torpedo has led to this underwater battering ram, which in turn will lead to the world putting its foot down. At least I hope it will.

But this hypothesis of a war machine collapsed in the face of formal denials from the various governments. Since the public interest was at stake and transoceanic travel was suffering, the sincerity of these governments could not be doubted. Besides, how could the assembly of this underwater boat have escaped public notice? Keeping a secret under such circumstances would be difficult enough for an individual, and certainly impossible for a nation whose every move is under constant surveillance by rival powers.

So, after inquiries conducted in England, France, Russia, Prussia, Spain, Italy, America, and even Turkey, the hypothesis of an underwater Monitor was ultimately rejected.

And so the monster surfaced again, despite the endless witticisms heaped on it by the popular press, and the human imagination soon got caught up in the most ridiculous ichthyological fantasies.

After I arrived in New York, several people did me the honor of consulting me on the phenomenon in question. In France I had published a two-volume work, in quarto, entitled The Mysteries of the Great Ocean Depths. Well received in scholarly circles, this book had established me as a specialist in this pretty obscure field of natural history. My views were in demand. As long as I could deny the reality of the business, I confined myself to a flat "no comment." But soon, pinned to the wall, I had to explain myself straight out. And in this vein, "the honorable Pierre Aronnax, Professor at the Paris Museum," was summoned by The New York Herald to formulate his views no matter what.

I complied. Since I could no longer hold my tongue, I let it wag. I discussed the question in its every aspect, both political and scientific, and this is an excerpt from the well-padded article I published in the issue of April 30.

"Therefore," I wrote, "after examining these different hypotheses one by one, we are forced, every other supposition having been refuted, to accept the existence of an extremely powerful marine animal.

"The deepest parts of the ocean are totally unknown to us. No soundings have been able to reach them. What goes on in those distant depths? What creatures inhabit, or could inhabit, those regions twelve or fifteen miles beneath the surface of the water? What is the constitution of these animals? It's almost beyond conjecture."

"However, the solution to this problem submitted to me can take the form of a choice between two alternatives.

"Either we know every variety of creature populating our planet, or we do not.

"If we do not know every one of them, if nature still keeps ichthyological secrets from us, nothing is more admissible than to accept the existence of fish or cetaceans of new species or even new genera, animals with a basically 'cast-iron' constitution that inhabit strata beyond the reach of our soundings, and which some development or other, an urge or a whim if you prefer, can bring to the upper level of the ocean for long intervals.
"If, on the other hand, we do know every living species, we must look for the animal in question among those marine creatures already cataloged, and in this event I would be inclined to accept the existence of a giant narwhale.

"The common narwhale, or sea unicorn, often reaches a length of sixty feet. Increase its dimensions fivefold or even tenfold, then give this cetacean a strength in proportion to its size while enlarging its offensive weapons, and you have the animal we're looking for. It would have the proportions determined by the officers of the Shannon, the instrument needed to perforate the Scotia, and the power to pierce a steamer's hull.

"In essence, the narwhale is armed with a sort of ivory sword, or lance, as certain naturalists have expressed it. It's a king-sized tooth as hard as steel. Some of these teeth have been found buried in the bodies of baleen whales, which the narwhale attacks with invariable success. Others have been wrenched, not without difficulty, from the undersides of vessels that narwhales have pierced clean through, as a gimlet pierces a wine barrel. The museum at the Faculty of Medicine in Paris owns one of these tusks with a length of 2.25 meters and a width at its base of forty-eight centimeters!

"All right then! Imagine this weapon to be ten times stronger and the animal ten times more powerful, launch it at a speed of twenty miles per hour, multiply its mass times its velocity, and you get just the collision we need to cause the specified catastrophe.

"So, until information becomes more abundant, I plump for a sea unicorn of colossal dimensions, no longer armed with a mere lance but with an actual spur, like ironclad frigates or those warships called 'rams,' whose mass and motor power it would possess simultaneously.

"This inexplicable phenomenon is thus explained away--unless it's something else entirely, which, despite everything that has been sighted, studied, explored and experienced, is still possible!"

These last words were cowardly of me; but as far as I could, I wanted to protect my professorial dignity and not lay myself open to laughter from the Americans, who when they do laugh, laugh raucously. I had left myself a loophole. Yet deep down, I had accepted the existence of "the monster."

My article was hotly debated, causing a fine old uproar. It rallied a number of supporters. Moreover, the solution it proposed allowed for free play of the imagination. The human mind enjoys impressive visions of unearthly creatures. Now then, the sea is precisely their best medium, the only setting suitable for the breeding and growing of such giants--next to which such land animals as elephants or rhinoceroses are mere dwarves. The liquid masses support the largest known species of mammals and perhaps conceal mollusks of incomparable size or crustaceans too frightful to contemplate, such as 100-meter lobsters or crabs weighing 200 metric tons! Why not? Formerly, in prehistoric days, land animals (quadrupeds, apes, reptiles, birds) were built on a gigantic scale. Our Creator cast them using a colossal mold that time has gradually made smaller. With its untold depths, couldn't the sea keep alive such huge specimens of life from another age, this sea that never changes while the land masses undergo almost continuous alteration? Couldn't the heart of the ocean hide the last-remaining varieties of these titanic species, for whom years are centuries and centuries millennia?

But I mustn't let these fantasies run away with me! Enough of these fairy tales that time has changed for me into harsh realities. I repeat: opinion had crystallized as to the nature of this phenomenon, and the public accepted without argument the existence of a prodigious creature that had nothing in common with the fabled sea serpent.

Yet if some saw it purely as a scientific problem to be solved, more practical people, especially in America and England, were determined to purge the ocean of this daunting monster, to insure the safety of transoceanic travel. The industrial and commercial newspapers dealt with the question chiefly from this viewpoint. The Shipping & Mercantile Gazette, the Lloyd's List, France's Packetboat and Maritime & Colonial Review, all the rags devoted to insurance companies--who threatened the existence of "the monster."

Public opinion being pronounced, the States of the Union were the first in the field. In New York preparations were under way for an expedition designed to chase this narwhale. A high-speed frigate, the Abraham Lincoln, was fitted out for putting to sea as soon as possible. The naval arsenals were unlocked for Commander Farragut, who pressed energetically forward with the arming of his frigate.

But, as it always happens, just when a decision had been made to chase the monster, the monster put in no further appearances. For two months nobody heard a word about it. Not a single ship encountered it. Apparently the unicorn had gotten wise to these plots being woven around it. People were constantly babbling about the creature, even via the Atlantic Cable! Accordingly, the wags claimed that this slippery rascal had waylaid some passing telegram and was making the most of it.

So the frigate was equipped for a far-off voyage and armed with fearsome fishing gear, but nobody knew where to steer it. And impatience grew until, on June 2, word came that the Tampico, a steamer on the San Francisco line sailing from California to Shanghai, had sighted the animal again, three weeks before in the northerly seas of the Pacific.

This news caused intense excitement. Not even a 24-hour breather was granted to Commander Farragut. His
provisions were loaded on board. His coal bunkers were overflowing. Not a crewman was missing from his post. To cast off, he needed only to fire and stoke his furnaces! Half a day's delay would have been unforgivable! But Commander Farragut wanted nothing more than to go forth.

I received a letter three hours before the Abraham Lincoln left its Brooklyn pier;* the letter read as follows:

*Author's Note: A pier is a type of wharf expressly set aside for an individual vessel.

Pierre Aronnax
Professor at the Paris Museum
Fifth Avenue Hotel
New York
Sir:
If you would like to join the expedition on the Abraham Lincoln, the government of the Union will be pleased to regard you as France's representative in this undertaking. Commander Farragut has a cabin at your disposal.

Very cordially yours,
J. B. HOBSON,
Secretary of the Navy.

CHAPTER 3

As Master Wishes

THREE SECONDS before the arrival of J. B. Hobson's letter, I no more dreamed of chasing the unicorn than of trying for the Northwest Passage. Three seconds after reading this letter from the honorable Secretary of the Navy, I understood at last that my true vocation, my sole purpose in life, was to hunt down this disturbing monster and rid the world of it.

Even so, I had just returned from an arduous journey, exhausted and badly needing a rest. I wanted nothing more than to see my country again, my friends, my modest quarters by the Botanical Gardens, my dearly beloved collections! But now nothing could hold me back. I forgot everything else, and without another thought of exhaustion, friends, or collections, I accepted the American government's offer.

"Besides," I mused, "all roads lead home to Europe, and our unicorn may be gracious enough to take me toward the coast of France! That fine animal may even let itself be captured in European seas—as a personal favor to me—and I'll bring back to the Museum of Natural History at least half a meter of its ivory lance!"

But in the meantime I would have to look for this narwhale in the northern Pacific Ocean; which meant returning to France by way of the Antipodes.

"Conseil!" I called in an impatient voice.

Conseil was my manservant. A devoted lad who went with me on all my journeys; a gallant Flemish boy whom I genuinely liked and who returned the compliment; a born stoic, punctilious on principle, habitually hardworking, rarely startled by life's surprises, very skillful with his hands, efficient in his every duty, and despite his having a name that means "counsel," never giving advice— not even the unsolicited kind!

From rubbing shoulders with scientists in our little universe by the Botanical Gardens, the boy had come to know a thing or two. In Conseil I had a seasoned specialist in biological classification, an enthusiast who could run with acrobatic agility up and down the whole ladder of branches, groups, classes, subclasses, orders, families, genera, subgenera, species, and varieties. But there his science came to a halt. Classifying was everything to him, so he knew nothing else. Well versed in the theory of classification, he was poorly versed in its practical application, and I doubt that he could tell a sperm whale from a baleen whale! And yet, what a fine, gallant lad!

For the past ten years, Conseil had gone with me wherever science beckoned. Not once did he comment on the length or the hardships of a journey. Never did he object to buckling up his suitcase for any country whatever, China or the Congo, no matter how far off it was. He went here, there, and everywhere in perfect contentment. Moreover, he enjoyed excellent health that defied all ailments, owned solid muscles, but hadn't a nerve in him, not a sign of nerves— the mental type, I mean.
The lad was thirty years old, and his age to that of his employer was as fifteen is to twenty. Please forgive me for this underhanded way of admitting I had turned forty.

But Conseil had one flaw. He was a fanatic on formality, and he only addressed me in the third person—to the point where it got tiresome.

"Conseil!" I repeated, while feverishly beginning my preparations for departure.

To be sure, I had confidence in this devoted lad. Ordinarily, I never asked whether or not it suited him to go with me on my journeys; but this time an expedition was at issue that could drag on indefinitely, a hazardous undertaking whose purpose was to hunt an animal that could sink a frigate as easily as a walnut shell! There was good reason to stop and think, even for the world's most emotionless man. What would Conseil say?

"Conseil!" I called a third time.

Conseil appeared.

"Did master summon me?" he said, entering.

"Yes, my boy. Get my things ready, get yours ready. We're departing in two hours."

"As master wishes," Conseil replied serenely.

"We haven't a moment to lose. Pack as much into my trunk as you can, my traveling kit, my suits, shirts, and socks, don't bother counting, just squeeze it all in--and hurry!"

"What about master's collections?" Conseil ventured to observe.

"We'll deal with them later."

"What! The archaeotherium, hyracotherium, oreodonts, cheiropotamus, and master's other fossil skeletons?"

"The hotel will keep them for us."

"What about master's live babirusa?"

"They'll feed it during our absence. Anyhow, we'll leave instructions to ship the whole menagerie to France."

"Then we aren't returning to Paris?" Conseil asked.

"Yes, we are . . . certainly . . . " I replied evasively, "but after we make a detour."

"Whatever detour master wishes."

"Oh, it's nothing really! A route slightly less direct, that's all. We're leaving on the Abraham Lincoln."

"As master thinks best," Conseil replied placidly.

"You see, my friend, it's an issue of the monster, the notorious narwhale. We're going to rid the seas of it! The author of a two-volume work, in quarto, on The Mysteries of the Great Ocean Depths has no excuse for not setting sail with Commander Farragut. It's a glorious mission but also a dangerous one! We don't know where it will take us! These beasts can be quite unpredictable! But we're going just the same! We have a commander who's game for anything!"

"What master does, I'll do," Conseil replied.

"But think it over, because I don't want to hide anything from you. This is one of those voyages from which people don't always come back!"

"As master wishes."

A quarter of an hour later, our trunks were ready. Conseil did them in a flash, and I was sure the lad hadn't missed a thing, because he classified shirts and suits as expertly as birds and mammals.

The hotel elevator dropped us off in the main vestibule on the mezzanine. I went down a short stair leading to the ground floor. I settled my bill at that huge counter that was always under siege by a considerable crowd. I left instructions for shipping my containers of stuffed animals and dried plants to Paris, France. I opened a line of credit sufficient to cover the babirusa and, Conseil at my heels, I jumped into a carriage.

For a fare of twenty francs, the vehicle went down Broadway to Union Square, took Fourth Ave. to its junction with Bowery St., turned into Katrin St. and halted at Pier 34. There the Katrin ferry transferred men, horses, and carriage to Brooklyn, that great New York annex located on the left bank of the East River, and in a few minutes we arrived at the wharf next to which the Abraham Lincoln was vomiting torrents of black smoke from its two funnels.

Our baggage was immediately carried to the deck of the frigate. I rushed aboard. I asked for Commander Farragut. One of the sailors led me to the afterdeck, where I stood in the presence of a smart-looking officer who extended his hand to me.

"Professor Pierre Aronnax?" he said to me.

"The same," I replied. "Commander Farragut?"

"In person. Welcome aboard, professor. Your cabin is waiting for you."

I bowed, and letting the commander attend to getting under way, I was taken to the cabin that had been set aside for me.

The Abraham Lincoln had been perfectly chosen and fitted out for its new assignment. It was a high-speed frigate furnished with superheating equipment that allowed the tension of its steam to build to seven atmospheres.
Under this pressure the Abraham Lincoln reached an average speed of 18.3 miles per hour, a considerable speed but still not enough to cope with our gigantic cetacean.

The frigate's interior accommodations complemented its nautical virtues. I was well satisfied with my cabin, which was located in the stern and opened into the officers' mess.

"We'll be quite comfortable here," I told Conseil.

"With all due respect to master," Conseil replied, "as comfortable as a hermit crab inside the shell of a whelk."

I left Conseil to the proper stowing of our luggage and climbed on deck to watch the preparations for getting under way.

Just then Commander Farragut was giving orders to cast off the last moorings holding the Abraham Lincoln to its Brooklyn pier. And so if I'd been delayed by a quarter of an hour or even less, the frigate would have gone without me, and I would have missed out on this unearthly, extraordinary, and inconceivable expedition, whose true story might well meet with some skepticism.

But Commander Farragut didn't want to waste a single day, or even a single hour, in making for those seas where the animal had just been sighted. He summoned his engineer.

"Are we up to pressure?" he asked the man.

"Aye, sir," the engineer replied.

"Go ahead, then!" Commander Farragut called.

At this order, which was relayed to the engine by means of a compressed-air device, the mechanics activated the start-up wheel. Steam rushed whistling into the gaping valves. Long horizontal pistons groaned and pushed the tie rods of the drive shaft. The blades of the propeller churned the waves with increasing speed, and the Abraham Lincoln moved out majestically amid a spectator-laden escort of some 100 ferries and tenders.*

*Author's Note: Tenders are small steamboats that assist the big liners.

The wharves of Brooklyn, and every part of New York bordering the East River, were crowded with curiosity seekers. Departing from 500,000 throats, three cheers burst forth in succession. Thousands of handkerchiefs were waving above these tightly packed masses, hailing the Abraham Lincoln until it reached the waters of the Hudson River, at the tip of the long peninsula that forms New York City.

The frigate then went along the New Jersey coast--the wonderful right bank of this river, all loaded down with country homes-- and passed by the forts to salutes from their biggest cannons. The Abraham Lincoln replied by three times lowering and hoisting the American flag, whose thirty-nine stars gleamed from the gaff of the mizzen sail; then, changing speed to take the buoy-marked channel that curved into the inner bay formed by the spit of Sandy Hook, it hugged this sand-covered strip of land where thousands of spectators acclaimed us one more time.

The escort of boats and tenders still followed the frigate and only left us when we came abreast of the lightship, whose two signal lights mark the entrance of the narrows to Upper New York Bay.

Three o'clock then sounded. The harbor pilot went down into his dinghy and rejoined a little schooner waiting for him to leeward. The furnaces were stoked; the propeller churned the waves more swiftly; the frigate skirted the flat, yellow coast of Long Island; and at eight o'clock in the evening, after the lights of Fire Island had vanished into the northwest, we ran at full steam onto the dark waters of the Atlantic.

CHAPTER 4

Ned Land

COMMANDER FARRAGUT was a good seaman, worthy of the frigate he commanded. His ship and he were one. He was its very soul. On the cetacean question no doubts arose in his mind, and he didn't allow the animal's existence to be disputed aboard his vessel. He believed in it as certain pious women believe in the leviathan from the Book of Job--out of faith, not reason. The monster existed, and he had vowed to rid the seas of it. The man was a sort of Knight of Rhodes, a latter-day Sir Dieudonné of Gozo, on his way to fight an encounter with the dragon devastating the island. Either Commander Farragut would slay the narwhale, or the narwhale would slay Commander Farragut. No middle of the road for these two.

The ship's officers shared the views of their leader. They could be heard chatting, discussing, arguing,
calculating the different chances of an encounter, and observing the vast expanse of the ocean. Voluntary watches from the crosstrees of the topgallant sail were self-imposed by more than one who would have cursed such toil under any other circumstances. As often as the sun swept over its daily arc, the masts were populated with sailors whose feet itched and couldn't hold still on the planking of the deck below! And the Abraham Lincoln's stempost hadn't even cut the suspected waters of the Pacific.

As for the crew, they only wanted to encounter the unicorn, harpoon it, haul it on board, and carve it up. They surveyed the sea with scrupulous care. Besides, Commander Farragut had mentioned that a certain sum of $2,000.00 was waiting for the man who first sighted the animal, be he cabin boy or sailor, mate or officer. I'll let the reader decide whether eyes got proper exercise aboard the Abraham Lincoln.

As for me, I didn't lag behind the others and I yielded to no one my share in these daily observations. Our frigate would have had fivescore good reasons for renaming itself the Argus, after that mythological beast with 100 eyes! The lone rebel among us was Conseil, who seemed utterly uninterested in the question exciting us and was out of step with the general enthusiasm on board.

As I said, Commander Farragut had carefully equipped his ship with all the gear needed to fish for a gigantic cetacean. No whaling vessel could have been better armed. We had every known mechanism, from the hand-hurled harpoon, to the blunderbuss firing barbed arrows, to the duck gun with exploding bullets. On the forecastle was mounted the latest model breech-loading cannon, very heavy of barrel and narrow of bore, a weapon that would figure in the Universal Exhibition of 1867. Made in America, this valuable instrument could fire a four-kilogram conical projectile an average distance of sixteen kilometers without the least bother.

So the Abraham Lincoln wasn't lacking in means of destruction. But it had better still. It had Ned Land, the King of Harpooners.

Gifted with uncommon manual ability, Ned Land was a Canadian who had no equal in his dangerous trade. Dexterity, coolness, bravery, and cunning were virtues he possessed to a high degree, and it took a truly crafty baleen whale or an exceptionally astute sperm whale to elude the thrusts of his harpoon.

Ned Land was about forty years old. A man of great height--over six English feet--he was powerfully built, serious in manner, not very sociable, sometimes headstrong, and quite ill-tempered when crossed. His looks caught the attention, and above all the strength of his gaze, which gave a unique emphasis to his facial appearance.

Commander Farragut, to my thinking, had made a wise move in hiring on this man. With his eye and his throwing arm, he was worth the whole crew all by himself. I can do no better than to compare him with a powerful telescope that could double as a cannon always ready to fire.

To say Canadian is to say French, and as unsociable as Ned Land was, I must admit he took a definite liking to me. No doubt it was my nationality that attracted him. It was an opportunity for him to speak, and for me to hear, that old Rabelaisian dialect still used in some Canadian provinces. The harpooner's family originated in Quebec, and they were already a line of bold fishermen back in the days when this town still belonged to France.

Little by little Ned developed a taste for chatting, and I loved hearing the tales of his adventures in the polar seas. He described his fishing trips and his battles with great natural lyricism. His tales took on the form of an epic poem, and I felt I was hearing some Canadian Homer reciting his Iliad of the High Arctic regions.

I'm writing of this bold companion as I currently know him. Because we've become old friends, united in that permanent comradeship born and cemented during only the most frightful crises! Ah, my gallant Ned! I ask only to live 100 years more, the longer to remember you!

And now, what were Ned Land's views on this question of a marine monster? I must admit that he flatly didn't believe in the unicorn, and alone on board, he didn't share the general conviction. He avoided even dealing with the subject, for which one day I felt compelled to take him to task.

During the magnificent evening of June 25—in other words, three weeks after our departure—the frigate lay abreast of Cabo Blanco, thirty miles to leeward of the coast of Patagonia. We had crossed the Tropic of Capricorn, and the Strait of Magellan opened less than 700 miles to the south. Before eight days were out, the Abraham Lincoln would plow the waves of the Pacific.

Seated on the afterdeck, Ned Land and I chatted about one thing and another, staring at that mysterious sea whose depths to this day are beyond the reach of human eyes. Quite naturally, I led our conversation around to the giant unicorn, and I weighed our expedition's various chances for success or failure. Then, seeing that Ned just let me talk without saying much himself, I pressed him more closely.

"Ned," I asked him, "how can you still doubt the reality of this cetacean we're after? Do you have any particular reasons for being so skeptical?"

The harpooner stared at me awhile before replying, slapped his broad forehead in one of his standard gestures, closed his eyes as if to collect himself, and finally said:

"Just maybe, Professor Aronnax."
"But Ned, you're a professional whaler, a man familiar with all the great marine mammals--your mind should easily accept this hypothesis of an enormous cetacean, and you ought to be the last one to doubt it under these circumstances!"

"That's just where you're mistaken, professor," Ned replied. "The common man may still believe in fabulous comets crossing outer space, or in prehistoric monsters living at the earth's core, but astronomers and geologists don't swallow such fairy tales. It's the same with whalers. I've chased plenty of cetaceans, I've harpooned a good number, I've killed several. But no matter how powerful and well armed they were, neither their tails or their tusks could puncture the sheet-iron plates of a steamer."

"Even so, Ned, people mention vessels that narwhale tusks have run clean through."

"Wooden ships maybe," the Canadian replied. "But I've never seen the like. So till I have proof to the contrary, I'll deny that baleen whales, sperm whales, or unicorns can do any such thing."

"Listen to me, Ned--"

"No, no, professor. I'll go along with anything you want except that. Some gigantic devilfish maybe . . . ?"

"Even less likely, Ned. The devilfish is merely a mollusk, and even this name hints at its semiliquid flesh, because it's Latin meaning soft one. The devilfish doesn't belong to the vertebrate branch, and even if it were 500 feet long, it would still be utterly harmless to ships like the Scotia or the Abraham Lincoln. Consequently, the feats of krakens or other monsters of that ilk must be relegated to the realm of fiction."

"So, Mr. Naturalist," Ned Land continued in a bantering tone, "you'll just keep on believing in the existence of some enormous cetacean . . . ?"

"Yes, Ned, I repeat it with a conviction backed by factual logic. I believe in the existence of a mammal with a powerful constitution, belonging to the vertebrate branch like baleen whales, sperm whales, or dolphins, and armed with a tusk made of horn that has tremendous penetrating power."

"Humph!" the harpooner put in, shaking his head with the attitude of a man who doesn't want to be convinced.

"Note well, my fine Canadian," I went on, "if such an animal exists, if it lives deep in the ocean, if it frequents the liquid strata located miles beneath the surface of the water, it needs to have a constitution so solid, it defies all comparison."

"And why this powerful constitution?" Ned asked.

"Because it takes incalculable strength just to live in those deep strata and withstand their pressure."

"Oh really?" Ned said, tipping me a wink.

"Oh really, and I can prove it to you with a few simple figures."

"Bosh!" Ned replied. "You can make figures do anything you want!"

"In business, Ned, but not in mathematics. Listen to me. Let's accept that the pressure of one atmosphere is represented by the pressure of a column of water thirty-two feet high. In reality, such a column of water wouldn't be quite so high because here we're dealing with salt water, which is denser than fresh water. Well then, when you dive under the waves, Ned, for every thirty-two feet of water above you, your body is tolerating the pressure of one more atmosphere, in other words, one more kilogram per each square centimeter on your body's surface. So it follows that at 320 feet down, this pressure is equal to ten atmospheres, to 100 atmospheres at 3,200 feet, and to 1,000 atmospheres at 32,000 feet, that is, at about two and a half vertical leagues down. Which is tantamount to saying that if you could reach such a depth in the ocean, each square centimeter on your body's surface would be experiencing 1,000 kilograms of pressure. Now, my gallant Ned, do you know how many square centimeters you have on your bodily surface?"

"I haven't the foggiest notion, Professor Aronnax."

"About 17,000."

"As many as that?"

"Yes, and since the atmosphere's pressure actually weighs slightly more than one kilogram per square centimeter, your 17,000 square centimeters are tolerating 17,568 kilograms at this very moment."

"Without my noticing it?"

"Without your noticing it. And if you aren't crushed by so much pressure, it's because the air penetrates the interior of your body with equal pressure. When the inside and outside pressures are in perfect balance, they neutralize each other and allow you to tolerate them without discomfort. But in the water it's another story."

"Yes, I see," Ned replied, growing more interested. "Because the water surrounds me but doesn't penetrate me."

"Precisely, Ned. So at thirty-two feet beneath the surface of the sea, you'll undergo a pressure of 17,568 kilograms; at 320 feet, or ten times greater pressure, it's 175,680 kilograms; at 3,200 feet, or 100 times greater pressure, it's 1,756,800 kilograms; finally, at 32,000 feet, or 1,000 times greater pressure, it's 17,568,000 kilograms; in other words, you'd be squashed as flat as if you'd just been yanked from between the plates of a hydraulic press!"

"Fire and brimstone!" Ned put in.
"All right then, my fine harpooner, if vertebrates several hundred meters long and proportionate in bulk live at such depths, their surface areas make up millions of square centimeters, and the pressure they undergo must be assessed in billions of kilograms. Calculate, then, how much resistance of bone structure and strength of constitution they'd need in order to withstand such pressures!"

"They'd need to be manufactured," Ned Land replied, "from sheet-iron plates eight inches thick, like ironclad frigates."

"Right, Ned, and then picture the damage such a mass could inflict if it were launched with the speed of an express train against a ship's hull."

"Yes . . . indeed . . . maybe," the Canadian replied, staggered by these figures but still not willing to give in.

"Well, have I convinced you?"

"You've convinced me of one thing, Mr. Naturalist. That deep in the sea, such animals would need to be just as strong as you say-- if they exist."

"But if they don't exist, my stubborn harpooner, how do you explain the accident that happened to the Scotia?"

"It's maybe . . . ," Ned said, hesitating.

"Go on!"

"Because . . . it just couldn't be true!" the Canadian replied, unconsciously echoing a famous catchphrase of the scientist Arago.

But this reply proved nothing, other than how bullheaded the harpooner could be. That day I pressed him no further. The Scotia's accident was undeniable. Its hole was real enough that it had to be plugged up, and I don't think a hole's existence can be more emphatically proven. Now then, this hole didn't make itself, and since it hadn't resulted from underwater rocks or underwater machines, it must have been caused by the perforating tool of some animal.

Now, for all the reasons put forward to this point, I believed that this animal was a member of the branch Vertebrata, class Mammalia, group Pisciforma, and finally, order Cetacea. As for the family in which it would be placed (baleen whale, sperm whale, or dolphin), the genus to which it belonged, and the species in which it would find its proper home, these questions had to be left for later. To answer them called for dissecting this unknown monster; to dissect it called for catching it; to catch it called for harpooning it-- which was Ned Land's business; to harpoon it called for sighting it-- which was the crew's business; and to sight it called for encountering it-- which was a chancy business.

CHAPTER 5

At Random!

FOR SOME WHILE the voyage of the Abraham Lincoln was marked by no incident. But one circumstance arose that displayed Ned Land's marvelous skills and showed just how much confidence we could place in him.

Off the Falkland Islands on June 30, the frigate came in contact with a fleet of American whalers, and we learned that they hadn't seen the narwhale. But one of them, the captain of the Monroe, knew that Ned Land had shipped aboard the Abraham Lincoln and asked his help in hunting a baleen whale that was in sight. Anxious to see Ned Land at work, Commander Farragut authorized him to make his way aboard the Monroe. And the Canadian had such good luck that with a right-and-left shot, he harpooned not one whale but two, striking the first straight to the heart and catching the other after a few minutes' chase!

Assuredly, if the monster ever had to deal with Ned Land's harpoon, I wouldn't bet on the monster.

The frigate sailed along the east coast of South America with prodigious speed. By July 3 we were at the entrance to the Strait of Magellan, abreast of Cabo de las Virgenes. But Commander Farragut was unwilling to attempt this tortuous passageway and maneuvered instead to double Cape Horn.

The crew sided with him unanimously. Indeed, were we likely to encounter the narwhale in such a cramped strait? Many of our sailors swore that the monster couldn't negotiate this passageway simply because "he's too big for it!"
Near three o'clock in the afternoon on July 6, fifteen miles south of shore, the Abraham Lincoln doubled that solitary islet at the tip of the South American continent, that stray rock Dutch seamen had named Cape Horn after their hometown of Hoorn. Our course was set for the northwest, and the next day our frigate's propeller finally churned the waters of the Pacific.

"Open your eyes! Open your eyes!" repeated the sailors of the Abraham Lincoln.

And they opened amazingly wide. Eyes and spyglasses (a bit dazzled, it is true, by the vista of $2,000.00) didn't remain at rest for an instant. Day and night we observed the surface of the ocean, and those with nyctalopic eyes, whose ability to see in the dark increased their chances by fifty percent, had an excellent shot at winning the prize.

As for me, I was hardly drawn by the lure of money and yet was far from the least attentive on board. Snatching only a few minutes for meals and a few hours for sleep, come rain or come shine, I no longer left the ship's deck. Sometimes bending over the forecastle railings, sometimes leaning against the sternrail, I eagerly scoured that cotton-colored wake that whitened the ocean as far as the eye could see! And how many times I shared the excitement of general staff and crew when some unpredictable whale lifted its blackish back above the waves. In an instant the frigate's deck would become densely populated. The cowls over the companionways would vomit a torrent of sailors and officers. With panting chests and anxious eyes, we each would observe the cetacean's movements. I stared; I stared until I nearly went blind from a worn-out retina, while Conseil, as stoic as ever, kept repeating to me in a calm tone:

"If master's eyes would kindly stop bulging, master will see farther!"

But what a waste of energy! The Abraham Lincoln would change course and race after the animal sighted, only to find an ordinary baleen whale or a common sperm whale that soon disappeared amid a chorus of curses!

However, the weather held good. Our voyage was proceeding under the most favorable conditions. By then it was the bad season in these southernmost regions, because July in this zone corresponds to our January in Europe; but the sea remained smooth and easily visible over a vast perimeter.

Ned Land still kept up the most tenacious skepticism; beyond his spells on watch, he pretended that he never even looked at the surface of the waves, at least while no whales were in sight. And yet the marvelous power of his vision could have performed yeoman service. But this stubborn Canadian spent eight hours out of every twelve reading or sleeping in his cabin. A hundred times I chided him for his unconcern.

"Bah!" he replied. "Nothing's out there, Professor Aronnax, and if there is some animal, what chance would we have of spotting it? Can't you see we're just wandering around at random? People say they've sighted this slippery beast again in the Pacific high seas-- I'm truly willing to believe it, but two months have already gone by since then, and judging by your narwhale's personality, it hates growing moldy from hanging out too long in the same waterways! It's blessed with a terrific gift for getting around. Now, professor, you know even better than I that nature doesn't violate good sense, and she wouldn't give some naturally slow animal the ability to move swiftly if it hadn't a need to use that talent. So if the beast does exist, it's already long gone!"

I had no reply to this. Obviously we were just groping blindly. But how else could we go about it? All the same, our chances were automatically pretty limited. Yet everyone still felt confident of success, and not a sailor on board would have bet against the narwhale appearing, and soon.

On July 20 we cut the Tropic of Capricorn at longitude 105 degrees, and by the 27th of the same month, we had cleared the equator on the 110th meridian. These bearings determined, the frigate took a more decisive westward heading and tackled the seas of the central Pacific. Commander Farragut felt, and with good reason, that it was best to stay in deep waters and keep his distance from continents or islands, whose neighborhoods the animal always seemed to avoid--"No doubt," our bosun said, "because there isn't enough water for him!" So the frigate kept well out when passing the Tuamotu, Marquesas, and Hawaiian Islands, then cut the Tropic of Cancer at longitude 132 degrees and headed for the seas of China.

We were finally in the area of the monster's latest antics! And in all honesty, shipboard conditions became life-threatening. Hearts were pounding hideously, gearing up for futures full of incurable aneurysms. The entire crew suffered from a nervous excitement that it's beyond me to describe. Nobody ate, nobody slept. Twenty times a day some error in perception, or the optical illusions of some sailor perched in the crosstrees, would cause intolerable anguish, and this emotion, repeated twenty times over, kept us in a state of irritability so intense that a reaction was bound to follow.

And this reaction wasn't long in coming. For three months, during which each day seemed like a century, the Abraham Lincoln plowed all the northerly seas of the Pacific, racing after whales sighted, abruptly veering off course, swerving sharply from one tack to another, stopping suddenly, putting on steam and reversing engines in quick succession, at the risk of stripping its gears, and it didn't leave a single point unexplored from the beaches of Japan to the coasts of America. And we found nothing! Nothing except an immenseness of deserted waves! Nothing remotely resembling a gigantic narwhale, or an underwater islet, or a derelict shipwreck, or a runway reef, or
anything the least bit unearthly!

So the reaction set in. At first, discouragement took hold of people's minds, opening the door to disbelief. A new feeling appeared on board, made up of three-tenths shame and seven-tenths fury. The crew called themselves "out-and-out fools" for being hoodwinked by a fairy tale, then grew steadily more furious! The mountains of arguments amassed over a year collapsed all at once, and each man now wanted only to catch up on his eating and sleeping, to make up for the time he had so stupidly sacrificed.

With typical human fickleness, they jumped from one extreme to the other. Inevitably, the most enthusiastic supporters of the undertaking became its most energetic opponents. This reaction mounted upward from the bowels of the ship, from the quarters of the bunker hands to the messroom of the general staff; and for certain, if it hadn't been for Commander Farragut's characteristic stubbornness, the frigate would ultimately have put back to that cape in the south.

But this futile search couldn't drag on much longer. The Abraham Lincoln had done everything it could to succeed and had no reason to blame itself. Never had the crew of an American naval craft shown more patience and zeal; they weren't responsible for this failure; there was nothing to do but go home.

A request to this effect was presented to the commander. The commander stood his ground. His sailors couldn't hide their discontent, and their work suffered because of it. I'm unwilling to say that there was mutiny on board, but after a reasonable period of intransigence, Commander Farragut, like Christopher Columbus before him, asked for a grace period of just three days more. After this three-day delay, if the monster hadn't appeared, our helmsman would give three turns of the wheel, and the Abraham Lincoln would chart a course toward European seas.

This promise was given on November 2. It had the immediate effect of reviving the crew's failing spirits. The ocean was observed with renewed care. Each man wanted one last look with which to sum up his experience. Spyglasses functioned with feverish energy. A supreme challenge had been issued to the giant narwhale, and the latter had no acceptable excuse for ignoring this Summons to Appear!

Two days passed. The Abraham Lincoln stayed at half steam. On the offchance that the animal might be found in these waterways, a thousand methods were used to spark its interest or rouse it from its apathy. Enormous sides of bacon were trailed in our wake, to the great satisfaction, I must say, of assorted sharks. While the Abraham Lincoln heaved to, its longboats radiated in every direction around it and didn't leave a single point of the sea unexplored.

But the evening of November 4 arrived with this underwater mystery still unsolved.

At noon the next day, November 5, the agreed-upon delay expired. After a position fix, true to his promise, Commander Farragut would have to set his course for the southeast and leave the northerly regions of the Pacific decisively behind.

By then the frigate lay in latitude 31 degrees 15' north and longitude 136 degrees 42' east. The shores of Japan were less than 200 miles to our leeward. Night was coming on. Eight o'clock had just struck. Huge clouds covered the moon's disk, then in its first quarter. The sea undulated placidly beneath the frigate's stempost.

Just then I was in the bow, leaning over the starboard rail. Conseil, stationed beside me, stared straight ahead. Roosting in the shrouds, the crew examined the horizon, which shrank and darkened little by little. Officers were probing the increasing gloom with their night glasses. Sometimes the murky ocean sparkled beneath moonbeams that darted between the fringes of two clouds. Then all traces of light vanished into the darkness.

Observing Conseil, I discovered that, just barely, the gallant lad had fallen under the general influence. At least so I thought. Perhaps his nerves were twitching with curiosity for the first time in history.

"Come on, Conseil!" I told him. "Here's your last chance to pocket that $2,000.00!"

"If master will permit my saying so," Conseil replied, "I never expected to win that prize, and the Union government could have promised $100,000.00 and been none the poorer."

"You're right, Conseil, it turned out to be a foolish business after all, and we jumped into it too hastily. What a waste of time, what a futile expense of emotion! Six months ago we could have been back in France--"

"In master's little apartment," Conseil answered. "In master's museum! And by now I would have classified master's fossils. And master's babirusa would be ensconced in its cage at the zoo in the Botanical Gardens, and it would have attracted every curiosity seeker in town!"

"Quite so, Conseil, and what's more, I imagine that people will soon be poking fun at us!"

"To be sure," Conseil replied serenely, "I do think they'll have fun at master's expense. And must it be said...?"

"It must be said, Conseil."

"Well then, it will serve master right!"

"How true!"

"When one has the honor of being an expert as master is, one mustn't lay himself open to--"

Conseil didn't have time to complete the compliment. In the midst of the general silence, a voice became audible. It was Ned Land's voice, and it shouted:
"Ahoy! There's the thing in question, abreast of us to leeward!"

CHAPTER 6

At Full Steam

AT THIS SHOUT the entire crew rushed toward the harpooner--commander, officers, mates, sailors, cabin boys, down to engineers leaving their machinery and stokers neglecting their furnaces. The order was given to stop, and the frigate merely coasted.

By then the darkness was profound, and as good as the Canadian's eyes were, I still wondered how he could see—and what he had seen. My heart was pounding fit to burst.

But Ned Land was not mistaken, and we all spotted the object his hand was indicating.

Two cable lengths off the Abraham Lincoln's starboard quarter, the sea seemed to be lit up from underneath. This was no mere phosphorescent phenomenon, that much was unmistakable. Submerged some fathoms below the surface of the water, the monster gave off that very intense but inexplicable glow that several captains had mentioned in their reports. This magnificent radiance had to come from some force with a great illuminating capacity. The edge of its light swept over the sea in an immense, highly elongated oval, condensing at the center into a blazing core whose unbearable glow diminished by degrees outward.

"It's only a cluster of phosphorescent particles!" exclaimed one of the officers.

"No, sir," I answered with conviction. "Not even angel-wing clams or salps have ever given off such a powerful light. That glow is basically electric in nature. Besides... look, look! It's shifting! It's moving back and forth! It's darting at us!"

A universal shout went up from the frigate.

"Quiet!" Commander Farragut said. "Helm hard to leeward! Reverse engines!"

Sailors rushed to the helm, engineers to their machinery. Under reverse steam immediately, the Abraham Lincoln beat to port, sweeping in a semicircle.

"Right your helm! Engines forward!" Commander Farragut called.

These orders were executed, and the frigate swiftly retreated from this core of light.

My mistake. It wanted to retreat, but the unearthly animal came at us with a speed double our own.

We gasped. More stunned than afraid, we stood mute and motionless. The animal caught up with us, played with us. It made a full circle around the frigate—then doing fourteen knots—and wrapped us in sheets of electricity that were like luminous dust. Then it retreated two or three miles, leaving a phosphorescent trail comparable to those swirls of steam that shoot behind the locomotive of an express train. Suddenly, all the way from the dark horizon where it had gone to gather momentum, the monster abruptly dashed toward the Abraham Lincoln with frightening speed, stopped sharply twenty feet from our side plates, and died out—not by diving under the water, since its glow did not recede gradually—but all at once, as if the source of this brilliant emanation had suddenly dried up. Then it reappeared on the other side of the ship, either by circling around us or by gliding under our hull. At any instant a collision could have occurred that would have been fatal to us.

Meanwhile I was astonished at the frigate's maneuvers. It was fleeing, not fighting. Built to pursue, it was being pursued, and I commented on this to Commander Farragut. His face, ordinarily so emotionless, was stamped with indescribable astonishment.

"Professor Aronnax," he answered me, "I don't know what kind of fearsome creature I'm up against, and I don't want my frigate running foolish risks in all this darkness. Besides, how should we attack this unknown creature, how should we defend ourselves against it? Let's wait for daylight, and then we'll play a different role."

"You've no further doubts, commander, as to the nature of this animal?"

"No, sir; it's apparently a gigantic narwhale, and an electric one to boot."

"Maybe," I added, "it's no more approachable than an electric eel or an electric ray!"

"Right," the commander replied. "And if it has their power to electrocute, it's surely the most dreadful animal ever conceived by our Creator. That's why I'll keep on my guard, sir."

The whole crew stayed on their feet all night long. No one even thought of sleeping. Unable to compete with the monster's speed, the Abraham Lincoln slowed down and stayed at half steam. For its part, the narwhale mimicked
the frigate, simply rode with the waves, and seemed determined not to forsake the field of battle.

However, near midnight it disappeared, or to use a more appropriate expression, "it went out," like a huge glowworm. Had it fled from us? We were duty bound to fear so rather than hope so. But at 12:53 in the morning, a deafening hiss became audible, resembling the sound made by a waterspout expelled with tremendous intensity.

By then Commander Farragut, Ned Land, and I were on the afterdeck, peering eagerly into the profound gloom.

"Ned Land," the commander asked, "you've often heard whales bellowing?"

"Often, sir, but never a whale like this, whose sighting earned me $2,000.00."

"Correct, the prize is rightfully yours. But tell me, isn't that the noise cetaceans make when they spurt water from their blowholes?"

"The very noise, sir, but this one's way louder. So there can be no mistake. There's definitely a whale lurking in our waters. With your permission, sir," the harpooner added, "tomorrow at daybreak we'll have words with it."

"If it's in a mood to listen to you, Mr. Land," I replied in a tone far from convinced.

"Let me get within four harpoon lengths of it," the Canadian shot back, "and it had better listen!"

"But to get near it," the commander went on, "I'd have to put a whaleboat at your disposal?"

"Certainly, sir."

"That would be gambling with the lives of my men."

"And with my own!" the harpooner replied simply.

Near two o'clock in the morning, the core of light reappeared, no less intense, five miles to windward of the Abraham Lincoln. Despite the distance, despite the noise of wind and sea, we could distinctly hear the fearsome thrashings of the animal's tail, and even its panting breath. Seemingly, the moment this enormous narwhale came up to breathe at the surface of the ocean, air was sucked into its lungs like steam into the huge cylinders of a 2,000-horsepower engine.

"Hmm!" I said to myself. "A cetacean as powerful as a whole cavalry regiment--now that's a whale of a whale!"

We stayed on the alert until daylight, getting ready for action. Whaling gear was set up along the railings. Our chief officer loaded the blunderbusses, which can launch harpoons as far as a mile, and long duck guns with exploding bullets that can mortally wound even the most powerful animals. Ned Land was content to sharpen his harpoon, a dreadful weapon in his hands.

At six o'clock day began to break, and with the dawn's early light, the narwhale's electric glow disappeared. At seven o'clock the day was well along, but a very dense morning mist shrank the horizon, and our best spyglasses were unable to pierce it. The outcome: disappointment and anger.

I hoisted myself up to the crosstrees of the mizzen sail. Some officers were already perched on the mastheads.

At eight o'clock the mist rolled ponderously over the waves, and its huge curls were lifting little by little. The horizon grew wider and clearer all at once.

Suddenly, just as on the previous evening, Ned Land's voice was audible.

"There's the thing in question, astern to port!" the harpooner shouted.

Every eye looked toward the point indicated.

There, a mile and a half from the frigate, a long blackish body emerged a meter above the waves. Quivering violently, its tail was creating a considerable eddy. Never had caudal equipment thrashed the sea with such power. An immense wake of glowing whiteness marked the animal's track, sweeping in a long curve.

Our frigate drew nearer to the cetacean. I examined it with a completely open mind. Those reports from the Shannon and the Helvetia had slightly exaggerated its dimensions, and I put its length at only 250 feet. Its girth was more difficult to judge, but all in all, the animal seemed to be wonderfully proportioned in all three dimensions.

While I was observing this phenomenal creature, two jets of steam and water sprang from its blowholes and rose to an altitude of forty meters, which settled for me its mode of breathing. From this I finally concluded that it belonged to the branch Vertebrata, class Mammalia, subclass Monodelphia, group Pisciforma, order Cetacea, family . . . but here I couldn't make up my mind. The order Cetacea consists of three families, baleen whales, sperm whales, dolphins, and it's in this last group that narwhales are placed. Each of these families is divided into several genera, each genus into species, each species into varieties. So I was still missing variety, species, genus, and family, but no doubt I would complete my classifying with the aid of Heaven and Commander Farragut.

The crew were waiting impatiently for orders from their leader. The latter, after carefully observing the animal, called for his engineer. The engineer raced over.

"Sir," the commander said, "are you up to pressure?"

"Aye, sir," the engineer replied.

"Fine. Stoke your furnaces and clap on full steam!"

Three cheers greeted this order. The hour of battle had sounded. A few moments later, the frigate's two funnels vomited torrents of black smoke, and its deck quaked from the trembling of its boilers.
Driven forward by its powerful propeller, the Abraham Lincoln headed straight for the animal. Unconcerned, the latter let us come within half a cable length; then, not bothering to dive, it got up a little speed, retreated, and was content to keep its distance. This chase dragged on for about three-quarters of an hour without the frigate gaining two fathoms on the cetacean. At this rate, it was obvious that we would never catch up with it.

Infuriated, Commander Farragut kept twisting the thick tuft of hair that flourished below his chin.

"Ned Land!" he called.

The Canadian reported at once.

"Well, Mr. Land," the commander asked, "do you still advise putting my longboats to sea?"

"No, sir," Ned Land replied, "because that beast won't be caught against its will."

"Then what should we do?"

"Stoke up more steam, sir, if you can. As for me, with your permission I'll go perch on the bobstays under the bowsprit, and if we can get within a harpoon length, I'll harpoon the brute."

"Go to it, Ned," Commander Farragut replied. "Engineer," he called, "keep the pressure mounting!"

Ned Land made his way to his post. The furnaces were urged into greater activity; our propeller did forty-three revolutions per minute, and steam shot from the valves. Heaving the log, we verified that the Abraham Lincoln was going at the rate of 18.5 miles per hour.

But that damned animal also did a speed of 18.5.

For the next hour our frigate kept up this pace without gaining a fathom! This was humiliating for one of the fastest racers in the American navy. The crew were working up into a blind rage. Sailor after sailor heaved insults at the monster, which couldn't be bothered with answering back. Commander Farragut was no longer content simply to twist his goatee; he chewed on it.

The engineer was summoned once again.

"You're up to maximum pressure?" the commander asked him.

"Aye, sir," the engineer replied.

"And your valves are charged to . . . ?"

"To six and a half atmospheres."

"Charge them to ten atmospheres."

A typical American order if I ever heard one. It would have sounded just fine during some Mississippi paddle-wheeler race, to "outstrip the competition!"

"Conseil," I said to my gallant servant, now at my side, "you realize that we'll probably blow ourselves skyhigh?"

"As master wishes!" Conseil replied.

All right, I admit it: I did wish to run this risk!

The valves were charged. More coal was swallowed by the furnaces. Ventilators shot torrents of air over the braziers. The Abraham Lincoln's speed increased. Its masts trembled down to their blocks, and swirls of smoke could barely squeeze through the narrow funnels.

We heaved the log a second time.

"19.3 miles per hour, sir."

"Keep stoking the furnaces."

The engineer did so. The pressure gauge marked ten atmospheres. But no doubt the cetacean itself had "warmed up," because without the least trouble, it also did 19.3.

What a chase! No, I can't describe the excitement that shook my very being. Ned Land stayed at his post, harpoon in hand. Several times the animal let us approach.

"We're overhauling it!" the Canadian would shout.

Then, just as he was about to strike, the cetacean would steal off with a swiftness I could estimate at no less than thirty miles per hour. And even at our maximum speed, it took the liberty of thumbing its nose at the frigate by running a full circle around us! A howl of fury burst from every throat!

By noon we were no farther along than at eight o'clock in the morning.

Commander Farragut then decided to use more direct methods.

"Bah!" he said. "So that animal is faster than the Abraham Lincoln. All right, we'll see if it can outrun our conical shells! Mate, man the gun in the bow!"

Our forecastle cannon was immediately loaded and leveled. The cannoneer fired a shot, but his shell passed some feet above the cetacean, which stayed half a mile off.

"Over to somebody with better aim!" the commander shouted. "And $500.00 to the man who can pierce that
Infernal beast!

Calm of eye, cool of feature, an old gray-bearded gunner--I can see him to this day--approached the cannon, put it in position, and took aim for a good while. There was a mighty explosion, mingled with cheers from the crew.

The shell reached its target; it hit the animal, but not in the usual fashion--it bounced off that rounded surface and vanished into the sea two miles out.

"Oh drat!" said the old gunner in his anger. "That rascal must be covered with six-inch armor plate!"

"Curse the beast!" Commander Farragut shouted.

The hunt was on again, and Commander Farragut leaned over to me, saying:

"I'll chase that animal till my frigate explodes!"

"Yes," I replied, "and nobody would blame you!"

We could still hope that the animal would tire out and not be as insensitive to exhaustion as our steam engines. But no such luck. Hour after hour went by without it showing the least sign of weariness.

However, to the Abraham Lincoln's credit, it must be said that we struggled on with tireless persistence. I estimate that we covered a distance of at least 500 kilometers during this ill-fated day of November 6. But night fell and wrapped the surging ocean in its shadows.

By then I thought our expedition had come to an end, that we would never see this fantastic animal again. I was mistaken.

At 10:50 in the evening, that electric light reappeared three miles to windward of the frigate, just as clear and intense as the night before.

The narwhale seemed motionless. Was it asleep perhaps, weary from its workday, just riding with the waves? This was our chance, and Commander Farragut was determined to take full advantage of it.

He gave his orders. The Abraham Lincoln stayed at half steam, advancing cautiously so as not to awaken its adversary. In midocean it's not unusual to encounter whales so sound asleep they can successfully be attacked, and Ned Land had harpooned more than one in its slumber. The Canadian went to resume his post on the bobstays under the bowsprit.

The frigate approached without making a sound, stopped two cable lengths from the animal and coasted. Not a soul breathed on board. A profound silence reigned over the deck. We were not 100 feet from the blazing core of light, whose glow grew stronger and dazzled the eyes.

Just then, leaning over the forecastle railing, I saw Ned Land below me, one hand grasping the martingale, the other brandishing his dreadful harpoon. Barely twenty feet separated him from the motionless animal.

All at once his arm shot forward and the harpoon was launched. I heard the weapon collide resonantly, as if it had hit some hard substance.

The electric light suddenly went out, and two enormous waterspouts crashed onto the deck of the frigate, racing like a torrent from stem to stern, toppling crewmen, breaking spare masts and yardarms from their lashings.

A hideous collision occurred, and thrown over the rail with no time to catch hold of it, I was hurled into the sea.

CHAPTER 7

A Whale of Unknown Species

ALTHOUGH I WAS startled by this unexpected descent, I at least have a very clear recollection of my sensations during it.

At first I was dragged about twenty feet under. I'm a good swimmer, without claiming to equal such other authors as Byron and Edgar Allan Poe, who were master divers, and I didn't lose my head on the way down. With two vigorous kicks of the heel, I came back to the surface of the sea.
My first concern was to look for the frigate. Had the crew seen me go overboard? Was the Abraham Lincoln tacking about? Would Commander Farragut put a longboat to sea? Could I hope to be rescued?

The gloom was profound. I glimpsed a black mass disappearing eastward, where its running lights were fading out in the distance. It was the frigate. I felt I was done for.

"Help! Help!" I shouted, swimming desperately toward the Abraham Lincoln.

My clothes were weighing me down. The water glued them to my body, they were paralyzing my movements. I was sinking! I was suffocating . . . !

"Help!"

This was the last shout I gave. My mouth was filling with water. I struggled against being dragged into the depths . . . .

Suddenly my clothes were seized by energetic hands, I felt myself pulled abruptly back to the surface of the sea, and yes, I heard these words pronounced in my ear:

"If master would oblige me by leaning on my shoulder, master will swim with much greater ease."

With one hand I seized the arm of my loyal Conseil.

"You!" I said. "You!"

"Myself," Conseil replied, "and at master's command."

"That collision threw you overboard along with me?"

"Not at all. But being in master's employ, I followed master."

The fine lad thought this only natural!

"What about the frigate?" I asked.

"The frigate?" Conseil replied, rolling over on his back. "I think master had best not depend on it to any great extent!"

"What are you saying?"

"I'm saying that just as I jumped overboard, I heard the men at the helm shout, 'Our propeller and rudder are smashed!'"

"Smashed?"

"Yes, smashed by the monster's tusk! I believe it's the sole injury the Abraham Lincoln has sustained. But most inconveniently for us, the ship can no longer steer."

"Then we're done for!"

"Perhaps," Conseil replied serenely. "However, we still have a few hours before us, and in a few hours one can do a great many things!"

Conseil's unflappable composure cheered me up. I swam more vigorously, but hampered by clothes that were as restricting as a cloak made of lead, I was managing with only the greatest difficulty. Conseil noticed as much.

"Master will allow me to make an incision," he said.

And he slipped an open clasp knife under my clothes, slitting them from top to bottom with one swift stroke. Then he briskly undressed me while I swam for us both.

I then did Conseil the same favor, and we continued to "navigate" side by side.

But our circumstances were no less dreadful. Perhaps they hadn't seen us go overboard; and even if they had, the frigate-- being undone by its rudder--couldn't return to leeward after us. So we could count only on its longboats.

Conseil had coolly reasoned out this hypothesis and laid his plans accordingly. An amazing character, this boy; in midocean, this stoic lad seemed right at home!

So, having concluded that our sole chance for salvation lay in being picked up by the Abraham Lincoln's longboats, we had to take steps to wait for them as long as possible. Consequently, I decided to divide our energies so we wouldn't both be worn out at the same time, and this was the arrangement: while one of us lay on his back, staying motionless with arms crossed and legs outstretched, the other would swim and propel his partner forward. This towing role was to last no longer than ten minutes, and by relieving each other in this way, we could stay afloat for hours, perhaps even until daybreak.

Slim chance, but hope springs eternal in the human breast! Besides, there were two of us. Lastly, I can vouch--as improbable as it seems--that even if I had wanted to destroy all my illusions, even if I had been willing to "give in to despair," I could not have done so!

The cetacean had rammed our frigate at about eleven o'clock in the evening. I therefore calculated on eight hours of swimming until sunrise. A strenuous task, but feasible, thanks to our relieving each other. The sea was pretty smooth and barely tired us. Sometimes I tried to peer through the dense gloom, which was broken only by the phosphorescent flickers coming from our movements. I stared at the luminous ripples breaking over my hands, shimmering sheets spattered with blotches of bluish gray. It seemed as if we'd plunged into a pool of quicksilver.

Near one o'clock in the morning, I was overcome with tremendous exhaustion. My limbs stiffened in the grip of
intense cramps. Conseil had to keep me going, and attending to our self-preservation became his sole responsibility. I soon heard the poor lad gasping; his breathing became shallow and quick. I didn't think he could stand such exertions for much longer.

"Go on! Go on!" I told him.

"Leave master behind?" he replied. "Never! I'll drown before he does!"

Just then, past the fringes of a large cloud that the wind was driving eastward, the moon appeared. The surface of the sea glistened under its rays. That kindly light rekindled our strength. I held up my head again. My eyes darted to every point of the horizon. I spotted the frigate. It was five miles from us and formed no more than a dark, barely perceptible mass. But as for longboats, not a one in sight!

I tried to call out. What was the use at such a distance! My swollen lips wouldn't let a single sound through. Conseil could still articulate a few words, and I heard him repeat at intervals:

"Help! Help!"

Ceasing all movement for an instant, we listened. And it may have been a ringing in my ear, from this organ filling with impeded blood, but it seemed to me that Conseil's shout had received an answer back.

"Did you hear that?" I muttered.

"Yes, yes!"

And Conseil hurled another desperate plea into space.

This time there could be no mistake! A human voice had answered us! Was it the voice of some poor devil left behind in midocean, some other victim of that collision suffered by our ship? Or was it one of the frigate's longboats, hailing us out of the gloom?

Conseil made one final effort, and bracing his hands on my shoulders, while I offered resistance with one supreme exertion, he raised himself half out of the water, then fell back exhausted.

"What did you see?"

"I saw . . . ," he muttered, "I saw . . . but we mustn't talk . . . save our strength . . . !"

What had he seen? Then, lord knows why, the thought of the monster came into my head for the first time . . . ! But even so, that voice . . . ? Gone are the days when Jonahs took refuge in the bellies of whales!

Nevertheless, Conseil kept towing me. Sometimes he looked up, stared straight ahead, and shouted a request for directions, which was answered by a voice that was getting closer and closer. I could barely hear it. I was at the end of my strength; my fingers gave out; my hands were no help to me; my mouth opened convulsively, filling with brine; its coldness ran through me; I raised my head one last time, then I collapsed. . . .

Just then something hard banged against me. I clung to it. Then I felt myself being pulled upward, back to the surface of the water; my chest caved in, and I fainted. . . .

For certain, I came to quickly, because someone was massaging me so vigorously it left furrows in my flesh. I half opened my eyes. . . .

"Conseil!" I muttered.

"Did master ring for me?" Conseil replied.

Just then, in the last light of a moon settling on the horizon, I spotted a face that wasn't Conseil's but which I recognized at once.

"Ned!" I exclaimed.

"In person, sir, and still after his prize!" the Canadian replied.

"You were thrown overboard after the frigate's collision?"

"Yes, professor, but I was luckier than you, and right away I was able to set foot on this floating islet."

"Islet?"

"Or in other words, on our gigantic narwhale."

"Explain yourself, Ned."

"It's just that I soon realized why my harpoon got blunted and couldn't puncture its hide."

"Why, Ned, why?"

"Because, professor, this beast is made of boilerplate steel!"

At this point in my story, I need to get a grip on myself, reconstruct exactly what I experienced, and make doubly sure of everything I write.

The Canadian's last words caused a sudden upheaval in my brain. I swiftly hoisted myself to the summit of this half-submerged creature or object that was serving as our refuge. I tested it with my foot. Obviously it was some hard, impenetrable substance, not the soft matter that makes up the bodies of our big marine mammals.

But this hard substance could have been a bony carapace, like those that covered some prehistoric animals, and I might have left it at that and classified this monster among such amphibious reptiles as turtles or alligators.

Well, no. The blackish back supporting me was smooth and polished with no overlapping scales. On impact, it
gave off a metallic sonority, and as incredible as this sounds, it seemed, I swear, to be made of riveted plates.

No doubts were possible! This animal, this monster, this natural phenomenon that had puzzled the whole scientific world, that had muddled and misled the minds of seamen in both hemispheres, was, there could be no escaping it, an even more astonishing phenomenon-- a phenomenon made by the hand of man.

Even if I had discovered that some fabulous, mythological creature really existed, it wouldn't have given me such a terrific mental jolt. It's easy enough to accept that prodigious things can come from our Creator. But to find, all at once, right before your eyes, that the impossible had been mysteriously achieved by man himself: this staggers the mind!

But there was no question now. We were stretched out on the back of some kind of underwater boat that, as far as I could judge, boasted the shape of an immense steel fish. Ned Land had clear views on the issue. Conseil and I could only line up behind him.

"But then," I said, "does this contraption contain some sort of locomotive mechanism, and a crew to run it?"

"Apparently," the harpooner replied. "And yet for the three hours I've lived on this floating island, it hasn't shown a sign of life."

"This boat hasn't moved at all?"

"No, Professor Aronnax. It just rides with the waves, but otherwise it hasn't stirred."

"But we know that it's certainly gifted with great speed. Now then, since an engine is needed to generate that speed, and a mechanic to run that engine, I conclude: we're saved."

"Humph!" Ned Land put in, his tone denoting reservations.

Just then, as if to take my side in the argument, a bubbling began astern of this strange submersible--whose drive mechanism was obviously a propeller--and the boat started to move. We barely had time to hang on to its topside, which emerged about eighty centimeters above water. Fortunately its speed was not excessive.

"So long as it navigates horizontally," Ned Land muttered, "I've no complaints. But if it gets the urge to dive, I wouldn't give $2.00 for my hide!"

The Canadian might have quoted a much lower price. So it was imperative to make contact with whatever beings were confined inside the plating of this machine. I searched its surface for an opening or a hatch, a "manhole," to use the official term; but the lines of rivets had been firmly driven into the sheet-iron joins and were straight and uniform.

Moreover, the moon then disappeared and left us in profound darkness. We had to wait for daylight to find some way of getting inside this underwater boat.

So our salvation lay totally in the hands of the mysterious helmsmen steering this submersible, and if it made a dive, we were done for! But aside from this occurring, I didn't doubt the possibility of our making contact with them. In fact, if they didn't produce their own air, they inevitably had to make periodic visits to the surface of the ocean to replenish their oxygen supply. Hence the need for some opening that put the boat's interior in contact with the atmosphere.

As for any hope of being rescued by Commander Farragut, that had to be renounced completely. We were being swept westward, and I estimate that our comparatively moderate speed reached twelve miles per hour. The propeller churned the waves with mathematical regularity, sometimes emerging above the surface and throwing phosphorescent spray to great heights.

Near four o'clock in the morning, the submersible picked up speed. We could barely cope with this dizzying rush, and the waves battered us at close range. Fortunately Ned's hands came across a big mooring ring fastened to the topside of this sheet-iron back, and we all held on for dear life.

Finally this long night was over. My imperfect memories won't let me recall my every impression of it. A single detail comes back to me. Several times, during various lulls of wind and sea, I thought I heard indistinct sounds, a sort of elusive harmony produced by distant musical chords. What was the secret behind this underwater navigating, whose explanation the whole world had sought in vain? What beings lived inside this strange boat? What mechanical force allowed it to move about with such prodigious speed?

Daylight appeared. The morning mists surrounded us, but they soon broke up. I was about to proceed with a careful examination of the hull, whose topside formed a sort of horizontal platform, when I felt it sinking little by little.

"Oh, damnation!" Ned Land shouted, stamping his foot on the resonant sheet iron. "Open up there, you antisocial navigators!"

But it was difficult to make yourself heard above the deafening beats of the propeller. Fortunately this submerging movement stopped.

From inside the boat, there suddenly came noises of iron fastenings pushed roughly aside. One of the steel plates flew up, a man appeared, gave a bizarre yell, and instantly disappeared.
A few moments later, eight strapping fellows appeared silently, their faces like masks, and dragged us down into their fearsome machine.

CHAPTER 8

"Mobilis in Mobili"

THIS BRUTALLY EXECUTED capture was carried out with lightning speed. My companions and I had no time to collect ourselves. I don't know how they felt about being shoved inside this aquatic prison, but as for me, I was shivering all over. With whom were we dealing? Surely with some new breed of pirates, exploiting the sea after their own fashion.

The narrow hatch had barely closed over me when I was surrounded by profound darkness. Saturated with the outside light, my eyes couldn't make out a thing. I felt my naked feet clinging to the steps of an iron ladder. Forcibly seized, Ned Land and Conseil were behind me. At the foot of the ladder, a door opened and instantly closed behind us with a loud clang.

We were alone. Where? I couldn't say, could barely even imagine. All was darkness, but such utter darkness that after several minutes, my eyes were still unable to catch a single one of those hazy gleams that drift through even the blackest nights.

Meanwhile, furious at these goings on, Ned Land gave free rein to his indignation.

"Damnation!" he exclaimed. "These people are about as hospitable as the savages of New Caledonia! All that's lacking is for them to be cannibals! I wouldn't be surprised if they were, but believe you me, they won't eat me without my kicking up a protest!"

"Calm yourself, Ned my friend," Conseil replied serenely. "Don't flare up so quickly! We aren't in a kettle yet!"

"In a kettle, no," the Canadian shot back, "but in an oven for sure. It's dark enough for one. Luckily my Bowie knife hasn't left me, and I can still see well enough to put it to use.* The first one of these bandits who lays a hand on me--"

*Author's Note: A Bowie knife is a wide-bladed dagger that Americans are forever carrying around.

"Don't be so irritable, Ned," I then told the harpooner, "and don't ruin things for us with pointless violence. Who knows whether they might be listening to us? Instead, let's try to find out where we are!"

I started moving, groping my way. After five steps I encountered an iron wall made of riveted boilerplate. Then, turning around, I bumped into a wooden table next to which several stools had been set. The floor of this prison lay hidden beneath thick, hempen matting that deadened the sound of footsteps. Its naked walls didn't reveal any trace of a door or window. Going around the opposite way, Conseil met up with me, and we returned to the middle of this cabin, which had to be twenty feet long by ten wide. As for its height, not even Ned Land, with his great stature, was able to determine it.

Half an hour had already gone by without our situation changing, when our eyes were suddenly spirited from utter darkness into blinding light. Our prison lit up all at once; in other words, it filled with luminescent matter so intense that at first I couldn't stand the brightness of it. From its glare and whiteness, I recognized the electric glow that had played around this underwater boat like some magnificent phosphorescent phenomenon. After involuntarily closing my eyes, I reopened them and saw that this luminous force came from a frosted half globe curving out of the cabin's ceiling.

"Finally! It's light enough to see!" Ned Land exclaimed, knife in hand, staying on the defensive.

"Yes," I replied, then ventured the opposite view. "But as for our situation, we're still in the dark."

"Master must learn patience," said the emotionless Conseil.

This sudden illumination of our cabin enabled me to examine its tiniest details. It contained only a table and five stools. Its invisible door must have been hermetically sealed. Not a sound reached our ears. Everything seemed dead inside this boat. Was it in motion, or stationary on the surface of the ocean, or sinking into the depths? I couldn't tell.
But this luminous globe hadn't been turned on without good reason. Consequently, I hoped that some crewmen would soon make an appearance. If you want to consign people to oblivion, you don't light up their dungeons.

I was not mistaken. Unlocking noises became audible, a door opened, and two men appeared.

One was short and stocky, powerfully muscled, broad shouldered, robust of limbs, the head squat, the hair black and luxuriant, the mustache heavy, the eyes bright and penetrating, and his whole personality stamped with that southern-blooded zest that, in France, typifies the people of Provence. The philosopher Diderot has very aptly claimed that a man's bearing is the clue to his character, and this stocky little man was certainly a living proof of this claim. You could sense that his everyday conversation must have been packed with such vivid figures of speech as personification, symbolism, and misplaced modifiers. But I was never in a position to verify this because, around me, he used only an odd and utterly incomprehensible dialect.

The other replied with a shake of the head and added two or three utterly incomprehensible words. Then he asked that this was a man of great pride, that his calm, firm gaze seemed to reflect thinking on an elevated plane, and that the harmony of his facial expressions and bodily movements resulted in an overall effect of unquestionable candor—according to the findings of physiognomists, those analysts of facial character.

I felt "involuntarily reassured" in his presence, and this boded well for our interview.

Whether this individual was thirty-five or fifty years of age, I could not precisely state. He was tall, his forehead broad, his nose straight, his mouth clearly etched, his teeth magnificent, his hands refined, tapered, and to use a word from palmistry, highly "psychic," in other words, worthy of serving a lofty and passionate spirit. This man was certainly the most wonderful physical specimen I had ever encountered. One unusual detail: his eyes were spaced a little far from each other and could instantly take in nearly a quarter of the horizon. This ability—as I later verified—was strengthened by a range of vision even greater than Ned Land's. When this stranger focused his gaze on an object, his eyebrow lines gathered into a frown, his heavy eyelids closed around his pupils to contract his huge field of vision, and he looked! What a look—as if he could magnify objects shrinking into the distance; as if he could probe your very soul; as if he could pierce those sheets of water so opaque to our eyes and scan the deepest seas...!

Wearing caps made of sea-otter fur, and shod in sealskin fishing boots, these two strangers were dressed in clothing made from some unique fabric that flattered the figure and allowed great freedom of movement.

The taller of the two—apparently the leader on board—examined us with the greatest care but without pronouncing a word. Then, turning to his companion, he conversed with him in a language I didn't recognize. It was a sonorous, harmonious, flexible dialect whose vowels seemed to undergo a highly varied accentuation.

The other replied with a shake of the head and added two or three utterly incomprehensible words. Then he seemed to question me directly with a long stare.

I replied in clear French that I wasn't familiar with his language; but he didn't seem to understand me, and the situation grew rather baffling.

"Still, master should tell our story," Conseil said to me. "Perhaps these gentlemen will grasp a few words of it!"

I tried again, telling the tale of our adventures, clearly articulating my every syllable, and not leaving out a single detail. I stated our names and titles; then, in order, I introduced Professor Aronnax, his manservant Conseil, and Mr. Ned Land, harpooner.

The man with calm, gentle eyes listened to me serenely, even courteously, and paid remarkable attention. But nothing in his facial expression indicated that he understood my story. When I finished, he didn't pronounce a single word.

One resource still left was to speak English. Perhaps they would be familiar with this nearly universal language. But I only knew it, as I did the German language, well enough to read it fluently, not well enough to speak it correctly. Here, however, our overriding need was to make ourselves understood.

"Come on, it's your turn," I told the harpooner. "Over to you, Mr. Land. Pull out of your bag of tricks the best English ever spoken by an Anglo-Saxon, and try for a more favorable result than mine."

Ned needed no persuading and started our story all over again, most of which I could follow. Its content was the same, but the form differed. Carried away by his volatile temperament, the Canadian put great animation into it. He complained vehemently about being imprisoned in defiance of his civil rights, asked by virtue of which law he was hereby detained, invoked writs of habeas corpus, threatened to press charges against anyone holding him in illegal custody, ranted, gesticulated, shouted, and finally conveyed by an expressive gesture that we were dying of hunger.
This was perfectly true, but we had nearly forgotten the fact.

Much to his amazement, the harpooner seemed no more intelligible than I had been. Our visitors didn't bat an eye. Apparently they were engineers who understood the languages of neither the French physicist Arago nor the English physicist Faraday.

Thoroughly baffled after vainly exhausting our philological resources, I no longer knew what tactic to pursue, when Conseil told me:

"If master will authorize me, I'll tell the whole business in German."

"What! You know German?" I exclaimed.

"Like most Flemish people, with all due respect to master."

"On the contrary, my respect is due you. Go to it, my boy."

And Conseil, in his serene voice, described for the third time the various vicissitudes of our story. But despite our narrator's fine accent and stylish turns of phrase, the German language met with no success.

Finally, as a last resort, I hauled out everything I could remember from my early schooldays, and I tried to narrate our adventures in Latin. Cicero would have plugged his ears and sent me to the scullery, but somehow I managed to pull through. With the same negative result.

This last attempt ultimately misfiring, the two strangers exchanged a few words in their incomprehensible language and withdrew, not even favoring us with one of those encouraging gestures that are used in every country in the world. The door closed again.

"This is outrageous!" Ned Land shouted, exploding for the twentieth time. "I ask you! We speak French, English, German, and Latin to these rogues, and neither of them has the decency to even answer back!"

"Calm down, Ned," I told the seething harpooner. "Anger won't get us anywhere."

"But professor," our irascible companion went on, "can't you see that we could die of hunger in this iron cage?"

"Bah!" Conseil put in philosophically. "We can hold out a good while yet!"

"My friends," I said, "we can't despair. We've gotten out of tighter spots. So please do me the favor of waiting a bit before you form your views on the commander and crew of this boat."

"My views are fully formed," Ned Land shot back. "They're rogues!"

"Oh good! And from what country?"

"Roguedom!"

"My gallant Ned, as yet that country isn't clearly marked on maps of the world, but I admit that the nationality of these two strangers is hard to make out! Neither English, French, nor German, that's all we can say. But I'm tempted to think that the commander and his chief officer were born in the low latitudes. There must be southern blood in them. But as to whether they're Spaniards, Turks, Arabs, or East Indians, their physical characteristics don't give me enough to go on. And as for their speech, it's utterly incomprehensible."

"That's the nuisance in not knowing every language," Conseil replied, "or the drawback in not having one universal language!"

"Which would all go out the window!" Ned Land replied. "Don't you see, these people have a language all to themselves, a language they've invented just to cause despair in decent people who ask for a little dinner! Why, in every country on earth, when you open your mouth, snap your jaws, smack your lips and teeth, isn't that the world's most understandable message? From Quebec to the Tuamotu Islands, from Paris to the Antipodes, doesn't it mean: I'm hungry, give me a bite to eat!"

"Oh," Conseil put in, "there are some people so unintelligent by nature . . ."

As he was saying these words, the door opened. A steward entered.* He brought us some clothes, jackets and sailor's pants, made out of a fabric whose nature I didn't recognize. I hurried to change into them, and my companions followed suit.

*Author's Note: A steward is a waiter on board a steamer.

Meanwhile our silent steward, perhaps a deaf-mute, set the table and laid three place settings.

"There's something serious afoot," Conseil said, "and it bodes well."

"Bah!" replied the rancorous harpooner. "What the devil do you suppose they eat around here? Turtle livers, loin of shark, dogfish steaks?"

"We'll soon find out!" Conseil said.

Overlaid with silver dish covers, various platters had been neatly positioned on the table cloth, and we sat down to eat. Assuredly, we were dealing with civilized people, and if it hadn't been for this electric light flooding over us, I would have thought we were in the dining room of the Hotel Adelphi in Liverpool, or the Grand Hotel in Paris. However, I feel compelled to mention that bread and wine were totally absent. The water was fresh and clear, but it was still water—which wasn't what Ned Land had in mind. Among the foods we were served, I was able to identify various daintily dressed fish; but I couldn't make up my mind about certain otherwise excellent dishes, and I couldn't
even tell whether their contents belonged to the vegetable or the animal kingdom. As for the tableware, it was
elegant and in perfect taste. Each utensil, spoon, fork, knife, and plate, bore on its reverse a letter encircled by a
Latin motto, and here is its exact duplicate:

MOBILIS IN MOBILI
N

Moving within the moving element! It was a highly appropriate motto for this underwater machine, so long as
the preposition in is translated as within and not upon. The letter N was no doubt the initial of the name of that
mystifying individual in command beneath the seas!

Ned and Conseil had no time for such musings. They were wolfing down their food, and without further ado I
did the same. By now I felt reassured about our fate, and it seemed obvious that our hosts didn't intend to let us die
of starvation.

But all earthly things come to an end, all things must pass, even the hunger of people who haven't eaten for
fifteen hours. Our appetites appeased, we felt an urgent need for sleep. A natural reaction after that interminable
night of fighting for our lives.

"Ye gods, I'll sleep soundly," Conseil said.
"Me, I'm out like a light!" Ned Land replied.

My two companions lay down on the cabin's carpeting and were soon deep in slumber.

As for me, I gave in less readily to this intense need for sleep. Too many thoughts had piled up in my mind, too
many insoluble questions had arisen, too many images were keeping my eyelids open! Where were we? What
strange power was carrying us along? I felt--or at least I thought I did--the submersible sinking toward the sea's
lower strata. Intense nightmares besieged me. In these mysterious marine sanctuaries, I envisioned hosts of unknown
animals, and this underwater boat seemed to be a blood relation of theirs: living, breathing, just as fearsome . . . !
Then my mind grew calmer, my imagination melted into hazy drowsiness, and I soon fell into an uneasy slumber.

CHAPTER 9

The Tantrums of Ned Land

I HAVE NO IDEA how long this slumber lasted; but it must have been a good while, since we were
completely over our exhaustion. I was the first one to wake up. My companions weren't yet stirring and still lay
in their corners like inanimate objects.

I had barely gotten up from my passably hard mattress when I felt my mind clear, my brain go on the alert. So I
began a careful reexamination of our cell.

Nothing had changed in its interior arrangements. The prison was still a prison and its prisoners still prisoners.
But, taking advantage of our slumber, the steward had cleared the table. Consequently, nothing indicated any
forthcoming improvement in our situation, and I seriously wondered if we were doomed to spend the rest of our
lives in this cage.

This prospect seemed increasingly painful to me because, even though my brain was clear of its obsessions from
the night before, I was feeling an odd short-windedness in my chest. It was becoming hard for me to breathe. The
heavy air was no longer sufficient for the full play of my lungs. Although our cell was large, we obviously had used
up most of the oxygen it contained. In essence, over an hour's time a single human being consumes all the oxygen
found in 100 liters of air, at which point that air has become charged with a nearly equal amount of carbon dioxide
and is no longer fit for breathing.

So it was now urgent to renew the air in our prison, and no doubt the air in this whole underwater boat as well.
Here a question popped into my head. How did the commander of this aquatic residence go about it? Did he
obtain air using chemical methods, releasing the oxygen contained in potassium chlorate by heating it, meanwhile
absorbing the carbon dioxide with potassium hydroxide? If so, he would have to keep up some kind of relationship
with the shore, to come by the materials needed for such an operation. Did he simply limit himself to storing the air
in high-pressure tanks and then dispense it according to his crew's needs? Perhaps. Or, proceeding in a more
convenient, more economical, and consequently more probable fashion, was he satisfied with merely returning to
breathe at the surface of the water like a cetacean, renewing his oxygen supply every twenty-four hours? In any
event, whatever his method was, it seemed prudent to me that he use this method without delay.

In fact, I had already resorted to speeding up my inhalations in order to extract from the cell what little oxygen it
contained, when suddenly I was refreshed by a current of clean air, scented with a salty aroma. It had to be a sea
breeze, life-giving and charged with iodine! I opened my mouth wide, and my lungs glutted themselves on the fresh
particles. At the same time, I felt a swaying, a rolling of moderate magnitude but definitely noticeable. This boat,
this sheet-iron monster, had obviously just risen to the surface of the ocean, there to breathe in good whale fashion.
So the ship's mode of ventilation was finally established.

When I had absorbed a chestful of this clean air, I looked for the conduit--the "air carrier," if you prefer--that
allowed this beneficial influx to reach us, and I soon found it. Above the door opened an air vent that let in a fresh
current of oxygen, renewing the thin air in our cell.

I had gotten to this point in my observations when Ned and Conseil woke up almost simultaneously, under the
influence of this reviving air purification. They rubbed their eyes, stretched their arms, and sprang to their feet.
"Did master sleep well?" Conseil asked me with his perennial good manners.
"Extremely well, my gallant lad," I replied. "And how about you, Mr. Ned Land?"
"Like a log, professor. But I must be imagining things, because it seems like I'm breathing a sea breeze!"
A seaman couldn't be wrong on this topic, and I told the Canadian what had gone on while he slept.
"Good!" he said. "That explains perfectly all that bellowing we heard, when our so-called narwhale lay in sight
of the Abraham Lincoln."
"Perfectly, Mr. Land. It was catching its breath!"
"Only I've no idea what time it is, Professor Aronnax, unless maybe it's dinnertime?"
"Dinnertime, my fine harpooner? I'd say at least breakfast time, because we've certainly woken up to a new day."
"Which indicates," Conseil replied, "that we've spent twenty-four hours in slumber."
"That's my assessment," I replied.
"I won't argue with you," Ned Land answered. "But dinner or breakfast, that steward will be plenty welcome
whether he brings the one or the other."
"The one and the other," Conseil said.
"Well put," the Canadian replied. "We deserve two meals, and speaking for myself, I'll do justice to them both."
"All right, Ned, let's wait and see!" I replied. "It's clear that these strangers don't intend to let us die of hunger,
otherwise last evening's dinner wouldn't make any sense."
"Unless they're fattening us up!" Ned shot back.
"I object," I replied. "We have not fallen into the hands of cannibals."
"Just because they don't make a habit of it," the Canadian replied in all seriousness, "doesn't mean they don't
indulge from time to time. Who knows? Maybe these people have gone without fresh meat for a long while, and in
that case three healthy, well-built specimens like the professor, his manservant, and me ---"
"Get rid of those ideas, Mr. Land," I answered the harpooner. "And above all, don't let them lead you to flare up
against our hosts, which would only make our situation worse."
"Anyhow," the harpooner said, "I'm as hungry as all Hades, and dinner or breakfast, not one puny meal has
arrived!"
"Mr. Land," I answered, "we have to adapt to the schedule on board, and I imagine our stomachs are running
ahead of the chief cook's dinner bell."
"Well then, we'll adjust our stomachs to the chef's timetable!" Conseil replied serenely.
"There you go again, Conseil my friend!" the impatient Canadian shot back. "You never allow yourself any
displays of bile or attacks of nerves! You're everlastingly calm! You'd say your after-meal grace even if you didn't
get any food for your before-meal blessing-- and you'd starve to death rather than complain!"
"What good would it do?" Conseil asked.
"Complaining doesn't have to do good, it just feels good! And if these pirates--I say pirates out of consideration
for the professor's feelings, since he doesn't want us to call them cannibals-- if these pirates think they're going to
smother me in this cage without hearing what cusswords spice up my outbursts, they've got another think coming!
Look here, Professor Aronnax, speak frankly. How long do you figure they'll keep us in this iron box?"
"To tell the truth, friend Land, I know little more about it than you do."
"But in a nutshell, what do you suppose is going on?"

"My supposition is that sheer chance has made us privy to an important secret. Now then, if the crew of this underwater boat have a personal interest in keeping that secret, and if their personal interest is more important than the lives of three men, I believe that our very existence is in jeopardy. If such is not the case, then at the first available opportunity, this monster that has swallowed us will return us to the world inhabited by our own kind."

"Unless they recruit us to serve on the crew," Conseil said, "and keep us here--"

"Till the moment," Ned Land answered, "when some frigate that's faster or smarter than the Abraham Lincoln captures this den of buccaneers, then hangs all of us by the neck from the tip of a mainmast yardarm!"

"Well thought out, Mr. Land," I replied. "But as yet, I don't believe we've been tendered any enlistment offers. Consequently, it's pointless to argue about what tactics we should pursue in such a case. I repeat: let's wait, let's be guided by events, and let's do nothing, since right now there's nothing we can do."

"On the contrary, professor," the harpooner replied, not wanting to give in. "There is something we can do."

"Oh? And what, Mr. Land?"

"Break out of here!"

"Breaking out of a prison on shore is difficult enough, but with an underwater prison, it strikes me as completely unworkable."

"Come now, Ned my friend," Conseil asked, "how would you answer master's objection? I refuse to believe that an American is at the end of his tether."

Visibly baffled, the harpooner said nothing. Under the conditions in which fate had left us, it was absolutely impossible to escape. But a Canadian's wit is half French, and Mr. Ned Land made this clear in his reply.

"So, Professor Aronnax," he went on after thinking for a few moments, "you haven't figured out what people do when they can't escape from their prison?"

"No, my friend."

"Easy. They fix things so they stay there."

"Of course!" Conseil put in. "Since we're deep in the ocean, being inside this boat is vastly preferable to being above it or below it!"

"But we fix things by kicking out all the jailers, guards, and wardens," Ned Land added.

"What's this, Ned?" I asked. "You'd seriously consider taking over this craft?"

"Very seriously," the Canadian replied.

"It's impossible."

"And why is that, sir? Some promising opportunity might come up, and I don't see what could stop us from taking advantage of it. If there are only about twenty men on board this machine, I don't think they can stave off two Frenchmen and a Canadian!"

It seemed wiser to accept the harpooner's proposition than to debate it. Accordingly, I was content to reply:

"Let such circumstances come, Mr. Land, and we'll see. But until then, I beg you to control your impatience. We need to act shrewdly, and your flare-ups won't give rise to any promising opportunities. So swear to me that you'll accept our situation without throwing a tantrum over it."

"I give you my word, professor," Ned Land replied in an unenthusiastic tone. "No vehement phrases will leave my mouth, no vicious gestures will give my feelings away, not even when they don't feed us on time."

"I have your word, Ned," I answered the Canadian.

Then our conversation petered out, and each of us withdrew into his own thoughts. For my part, despite the harpooner's confident talk, I admit that I entertained no illusions. I had no faith in those promising opportunities that Ned Land mentioned. To operate with such efficiency, this underwater boat had to have a sizeable crew, so if it came to a physical contest, we would be facing an overwhelming opponent. Besides, before we could do anything, we had to be free, and that we definitely were not. I didn't see any way out of this sheet-iron, hermetically sealed cell. And if the strange commander of this boat did have a secret to keep-- which seemed rather likely--he would never give us freedom of movement aboard his vessel. Now then, would he resort to violence in order to be rid of us, or would he drop us off one day on some remote coast? There lay the unknown. All these hypotheses seemed extremely plausible to me, and to hope for freedom through use of force, you had to be a harpooner.

I realized, moreover, that Ned Land's brooding was getting him madder by the minute. Little by little, I heard those aforesaid cusswords welling up in the depths of his gullet, and I saw his movements turn threatening again. He stood up, pacing in circles like a wild beast in a cage, striking the walls with his foot and fist. Meanwhile the hours passed, our hunger nagged unmercifully, and this time the steward did not appear. Which amounted to forgetting our castaway status for much too long, if they really had good intentions toward us.

Tortured by the growling of his well-built stomach, Ned Land was getting more and more riled, and despite his word of honor, I was in real dread of an explosion when he stood in the presence of one of the men on board.
For two more hours Ned Land's rage increased. The Canadian shouted and pleaded, but to no avail. The sheet-iron walls were deaf. I didn't hear a single sound inside this dead-seeming boat. The vessel hadn't stirred, because I obviously would have felt its hull vibrating under the influence of the propeller. It had undoubtedly sunk into the watery deep and no longer belonged to the outside world. All this dismal silence was terrifying.

As for our neglect, our isolation in the depths of this cell, I was afraid to guess at how long it might last. Little by little, hopes I had entertained after our interview with the ship's commander were fading away. The gentleness of the man's gaze, the generosity expressed in his facial features, the nobility of his bearing, all vanished from my memory. I saw this mystifying individual anew for what he inevitably must be: cruel and merciless. I viewed him as outside humanity, beyond all feelings of compassion, the implacable foe of his fellow man, toward whom he must have sworn an undying hate!

But even so, was the man going to let us die of starvation, locked up in this cramped prison, exposed to those horrible temptations to which people are driven by extreme hunger? This grim possibility took on a dreadful intensity in my mind, and fired by my imagination, I felt an unreasoning terror run through me. Conseil stayed calm. Ned Land bellowed.

Just then a noise was audible outside. Footsteps rang on the metal tiling. The locks were turned, the door opened, the steward appeared.

Before I could make a single movement to prevent him, the Canadian rushed at the poor man, threw him down, held him by the throat. The steward was choking in the grip of those powerful hands.

Conseil was already trying to loosen the harpooner's hands from his half-suffocated victim, and I had gone to join in the rescue, when I was abruptly nailed to the spot by these words pronounced in French:
"Calm down, Mr. Land! And you, professor, kindly listen to me!"

CHAPTER 10

The Man of the Waters

IT WAS THE ship's commander who had just spoken.

At these words Ned Land stood up quickly. Nearly strangled, the steward staggered out at a signal from his superior; but such was the commander's authority aboard his vessel, not one gesture gave away the resentment that this man must have felt toward the Canadian. In silence we waited for the outcome of this scene; Conseil, in spite of himself, seemed almost fascinated, I was stunned.

Arms crossed, leaning against a corner of the table, the commander studied us with great care. Was he reluctant to speak further? Did he regret those words he had just pronounced in French? You would have thought so.

After a few moments of silence, which none of us would have dreamed of interrupting:
"Gentlemen," he said in a calm, penetrating voice, "I speak French, English, German, and Latin with equal fluency. Hence I could have answered you as early as our initial interview, but first I wanted to make your acquaintance and then think things over. Your four versions of the same narrative, perfectly consistent by and large, established your personal identities for me. I now know that sheer chance has placed in my presence Professor Pierre Aronnax, specialist in natural history at the Paris Museum and entrusted with a scientific mission abroad, his manservant Conseil, and Ned Land, a harpooner of Canadian origin aboard the Abraham Lincoln, a frigate in the national navy of the United States of America."

I bowed in agreement. The commander hadn't put a question to me. So no answer was called for. This man expressed himself with perfect ease and without a trace of an accent. His phrasing was clear, his words well chosen, his facility in elocution remarkable. And yet, to me, he didn't have "the feel" of a fellow countryman.

He went on with the conversation as follows:
"No doubt, sir, you've felt that I waited rather too long before paying you this second visit. After discovering your identities, I wanted to weigh carefully what policy to pursue toward you. I had great difficulty deciding. Some extremely inconvenient circumstances have brought you into the presence of a man who has cut himself off from humanity. Your coming has disrupted my whole existence."
"Unintentionally," I said. "Unintentionally?" the stranger replied, raising his voice a little. "Was it unintentionally that the Abraham Lincoln hunted me on every sea? Was it unintentionally that you traveled aboard that frigate? Was it unintentionally that your shells bounced off my ship's hull? Was it unintentionally that Mr. Ned Land hit me with his harpoon?"

I detected a controlled irritation in these words. But there was a perfectly natural reply to these charges, and I made it.

"Sir," I said, "you're surely unaware of the discussions that have taken place in Europe and America with yourself as the subject. You don't realize that various accidents, caused by collisions with your underwater machine, have aroused public passions on those two continents. I'll spare you the innumerable hypotheses with which we've tried to explain this inexplicable phenomenon, whose secret is yours alone. But please understand that the Abraham Lincoln chased you over the Pacific high seas in the belief it was hunting some powerful marine monster, which had to be purged from the ocean at all cost."

A half smile curled the commander's lips; then, in a calmer tone:

"Professor Aronnax," he replied, "do you dare claim that your frigate wouldn't have chased and cannonaded an underwater boat as readily as a monster?"

This question baffled me, since Commander Farragut would certainly have shown no such hesitation. He would have seen it as his sworn duty to destroy a contrivance of this kind just as promptly as a gigantic narwhale.

"So you understand, sir," the stranger went on, "that I have a right to treat you as my enemy."

I kept quiet, with good reason. What was the use of debating such a proposition, when superior force can wipe out the best arguments?

"It took me a good while to decide," the commander went on. "Nothing obliged me to grant you hospitality. If I were to part company with you, I'd have no personal interest in ever seeing you again. I could put you back on the platform of this ship that has served as your refuge. I could sink under the sea, and I could forget you ever existed. Wouldn't that be my right?"

"Perhaps it would be the right of a savage," I replied. "But not that of a civilized man."

"Professor," the commander replied swiftly, "I'm not what you term a civilized man! I've severed all ties with society, for reasons that I alone have the right to appreciate. Therefore I obey none of its regulations, and I insist that you never invoke them in front of me!"

This was plain speaking. A flash of anger and scorn lit up the stranger's eyes, and I glimpsed a fearsome past in this man's life. Not only had he placed himself beyond human laws, he had rendered himself independent, out of all reach, free in the strictest sense of the word! For who would dare chase him to the depths of the sea when he thwarted all attacks on the surface? What ship could withstand a collision with his underwater Monitor? What armor plate, no matter how heavy, could bear the thrusts of his spur? No man among men could call him to account for his actions. God, if he believed in Him, his conscience if he had one-- these were the only judges to whom he was answerable.

These thoughts swiftly crossed my mind while this strange individual fell silent, like someone completely self-absorbed. I regarded him with a mixture of fear and fascination, in the same way, no doubt, that Oedipus regarded the Sphinx.

After a fairly long silence, the commander went on with our conversation.

"So I had difficulty deciding," he said. "But I concluded that my personal interests could be reconciled with that natural compassion to which every human being has a right. Since fate has brought you here, you'll stay aboard my vessel. You'll be free here, and in exchange for that freedom, moreover totally related to it, I'll lay on you just one condition. Your word that you'll submit to it will be sufficient."

"Go on, sir," I replied. "I assume this condition is one an honest man can accept?"

"Yes, sir. Just this. It's possible that certain unforeseen events may force me to confine you to your cabins for some hours, or even for some days as the case may be. Since I prefer never to use violence, I expect from you in such a case, even more than in any other, your unquestioning obedience. By acting in this way, I shield you from complicity, I absolve you of all responsibility, since I myself make it impossible for you to see what you aren't meant to see. Do you accept this condition?"

So things happened on board that were quite odd to say the least, things never to be seen by people not placing themselves beyond society's laws! Among all the surprises the future had in store for me, this would not be the mildest.

"We accept," I replied. "Only, I'll ask your permission, sir, to address a question to you, just one."

"Go ahead, sir."

"You said we'd be free aboard your vessel?"

"Completely."
"Then I would ask what you mean by this freedom."
"Why, the freedom to come, go, see, and even closely observe everything happening here--except under certain rare circumstances--in short, the freedom we ourselves enjoy, my companions and I."
It was obvious that we did not understand each other.
"Pardon me, sir," I went on, "but that's merely the freedom that every prisoner has, the freedom to pace his cell! That's not enough for us."
"Nevertheless, it will have to do!"
"What! We must give up seeing our homeland, friends, and relatives ever again?"
"Yes, sir. But giving up that intolerable earthly yoke that some men call freedom is perhaps less painful than you think!"
"By thunder!" Ned Land shouted. "I'll never promise I won't try getting out of here!"
"I didn't ask for such a promise, Mr. Land," the commander replied coldly.
"Sir," I replied, flaring up in spite of myself, "you're taking unfair advantage of us! This is sheer cruelty!"
"No, sir, it's an act of mercy! You're my prisoners of war! I've cared for you when, with a single word, I could plunge you back into the ocean depths! You attacked me! You've just stumbled on a secret no living man must probe, the secret of my entire existence! Do you think I'll send you back to a world that must know nothing more of me? Never! By keeping you on board, it isn't you whom I care for, it's me!"
These words indicated that the commander pursued a policy impervious to arguments.
"Then, sir," I went on, "you give us, quite simply, a choice between life and death?"
"Quite simply."
"My friends," I said, "to a question couched in these terms, our answer can be taken for granted. But no solemn promises bind us to the commander of this vessel."
"None, sir," the stranger replied.
Then, in a gentler voice, he went on:
"Now, allow me to finish what I have to tell you. I've heard of you, Professor Aronnax. You, if not your companions, won't perhaps complain too much about the stroke of fate that has brought us together. Among the books that make up my favorite reading, you'll find the work you've published on the great ocean depths. I've pored over it. You've taken your studies as far as terrestrial science can go. But you don't know everything because you haven't seen everything. Let me tell you, professor, you won't regret the time you spend aboard my vessel. You're going to voyage through a land of wonders. Stunned amazement will probably be your habitual state of mind. It will be a long while before you tire of the sights constantly before your eyes. I'm going to make another underwater tour of the world--perhaps my last, who knows?--and I'll review everything I've studied in the depths of these seas that I've crossed so often, and you can be my fellow student. Starting this very day, you'll enter a new element, you'll see what no human being has ever seen before--since my men and I no longer count--and thanks to me, you're going to learn the ultimate secrets of our planet."
I can't deny it; the commander's words had a tremendous effect on me. He had caught me on my weak side, and I momentarily forgot that not even this sublime experience was worth the loss of my freedom. Besides, I counted on the future to resolve this important question. So I was content to reply:
"Sir, even though you've cut yourself off from humanity, I can see that you haven't disowned all human feeling. We're castaways whom you've charitably taken aboard, we'll never forget that. Speaking for myself, I don't rule out that the interests of science could override even the need for freedom, which promises me that, in exchange, our encounter will provide great rewards."
I thought the commander would offer me his hand, to seal our agreement. He did nothing of the sort. I regretted that.
"One last question," I said, just as this inexplicable being seemed ready to withdraw.
"Ask it, professor."
"By what name am I to call you?"
"Sir," the commander replied, "to you, I'm simply Captain Nemo;* to me, you and your companions are simply passengers on the Nautilus."
*Latin: nemo means "no one." Ed.
Captain Nemo called out. A steward appeared. The captain gave him his orders in that strange language I couldn't even identify. Then, turning to the Canadian and Conseil:
"A meal is waiting for you in your cabin," he told them. "Kindly follow this man."
"That's an offer I can't refuse!" the harpooner replied.
After being confined for over thirty hours, he and Conseil were finally out of this cell.
"And now, Professor Aronnax, our own breakfast is ready. Allow me to lead the way."
"Yours to command, captain."

I followed Captain Nemo, and as soon as I passed through the doorway, I went down a kind of electrically lit passageway that resembled a gangway on a ship. After a stretch of some ten meters, a second door opened before me.

I then entered a dining room, decorated and furnished in austere good taste. Inlaid with ebony trim, tall oaken sideboards stood at both ends of this room, and sparkling on their shelves were staggered rows of earthenware, porcelain, and glass of incalculable value. There silver-plated dinnerware gleamed under rays pouring from light fixtures in the ceiling, whose glare was softened and tempered by delicately painted designs.

In the center of this room stood a table, richly spread. Captain Nemo indicated the place I was to occupy.

"Be seated," he told me, "and eat like the famished man you must be."

Our breakfast consisted of several dishes whose contents were all supplied by the sea, and some foods whose nature and derivation were unknown to me. They were good, I admit, but with a peculiar flavor to which I would soon grow accustomed. These various food items seemed to be rich in phosphorous, and I thought that they, too, must have been of marine origin.

Captain Nemo stared at me. I had asked him nothing, but he read my thoughts, and on his own he answered the questions I was itching to address him.

"Most of these dishes are new to you," he told me. "But you can consume them without fear. They're healthy and nourishing. I renounced terrestrial foods long ago, and I'm none the worse for it. My crew are strong and full of energy, and they eat what I eat."

"So," I said, "all these foods are products of the sea?"

"Yes, professor, the sea supplies all my needs. Sometimes I cast my nets in our wake, and I pull them up ready to burst. Sometimes I go hunting right in the midst of this element that has long seemed so far out of man's reach, and I corner the game that dwells in my underwater forests. Like the flocks of old Proteus, King Neptune's shepherd, my herds graze without fear on the ocean's immense prairies. There I own vast properties that I harvest myself, and which are forever sown by the hand of the Creator of All Things."

I stared at Captain Nemo in definite astonishment, and I answered him:

"Sir, I understand perfectly how your nets can furnish excellent fish for your table; I understand less how you can chase aquatic game in your underwater forests; but how a piece of red meat, no matter how small, can figure in your menu, that I don't understand at all."

"Nor I, sir," Captain Nemo answered me. "I never touch the flesh of land animals."

"Nevertheless, this . . .", I went on, pointing to a dish where some slices of loin were still left.

"What you believe to be red meat, professor, is nothing other than loin of sea turtle. Similarly, here are some dolphin livers you might mistake for stewed pork. My chef is a skillful food processor who excels at pickling and preserving these various exhibits from the ocean. Feel free to sample all of these foods. Here are some preserves of sea cucumber that a Malaysian would declare to be unrivaled in the entire world, here's cream from milk furnished by the udders of cetaceans, and sugar from the huge fucus plants in the North Sea; and finally, allow me to offer you some marmalade of sea anemone, equal to that from the tastiest fruits."

So I sampled away, more as a curiosity seeker than an epicure, while Captain Nemo delighted me with his incredible anecdotes.

"But this sea, Professor Aronnax," he told me, "this prodigious, inexhaustible wet nurse of a sea not only feeds me, she dresses me as well. That fabric covering you was woven from the masses of filaments that anchor certain seashells; as the ancients were wont to do, it was dyed with purple ink from the murex snail and shaded with violet tints that I extract from a marine slug, the Mediterranean sea hare. The perfumes you'll find on the washstand in your cabin were produced from the oozings of marine plants. Your mattress was made from the ocean's softest eelgrass. Your quill pen will be whalebone, your ink a juice secreted by cuttlefish or squid. Everything comes to me from the sea, just as someday everything will return to it!"

"You love the sea, captain."

"Yes, I love it! The sea is the be all and end all! It covers seven-tenths of the planet earth. Its breath is clean and healthy. It's an immense wilderness where a man is never lonely, because he feels life astir on every side. The sea is simply the vehicle for a prodigious, unearthly mode of existence; it's simply movement and love; it's living infinity, as one of your poets put it. And in essence, professor, nature is here made manifest by all three of her kingdoms, mineral, vegetable, and animal. The last of these is amply represented by the four zoophyte groups, three classes of articulates, five classes of mollusks, and three vertebrate classes: mammals, reptiles, and those countless legions of fish, an infinite order of animals totaling more than 13,000 species, of which only one-tenth belong to fresh water. The sea is a vast pool of nature. Our globe began with the sea, so to speak, and who can say we won't end with it! Here lies supreme tranquility. The sea doesn't belong to tyrants. On its surface they can still exercise their iniquitous
claims, battle each other, devour each other, haul every earthly horror. But thirty feet below sea level, their dominion ceases, their influence fades, their power vanishes! Ah, sir, live! Live in the heart of the seas! Here alone lies independence! Here I recognize no superiors! Here I'm free!"

Captain Nemo suddenly fell silent in the midst of this enthusiastic outpouring. Had he let himself get carried away, past the bounds of his habitual reserve? Had he said too much? For a few moments he strolled up and down, all aquiver. Then his nerves grew calmer, his facial features recovered their usual icy composure, and turning to me:
"Now, professor," he said, "if you'd like to inspect the Nautilus, I'm yours to command."

CHAPTER 11

The Nautilus

CAPTAIN NEMO stood up. I followed him. Contrived at the rear of the dining room, a double door opened, and I entered a room whose dimensions equaled the one I had just left.

It was a library. Tall, black-rosewood bookcases, inlaid with copperwork, held on their wide shelves a large number of uniformly bound books. These furnishings followed the contours of the room, their lower parts leading to huge couches upholstered in maroon leather and curved for maximum comfort. Light, movable reading stands, which could be pushed away or pulled near as desired, allowed books to be positioned on them for easy study. In the center stood a huge table covered with pamphlets, among which some newspapers, long out of date, were visible. Electric light flooded this whole harmonious totality, falling from four frosted half globes set in the scrollwork of the ceiling. I stared in genuine wonderment at this room so ingeniously laid out, and I couldn't believe my eyes.

"Captain Nemo," I told my host, who had just stretched out on a couch, "this is a library that would do credit to more than one continental palace, and I truly marvel to think it can go with you into the deepest seas."

"Where could one find greater silence or solitude, professor?" Captain Nemo replied. "Did your study at the museum afford you such a perfect retreat?"

"No, sir, and I might add that it's quite a humble one next to yours. You own 6,000 or 7,000 volumes here . . ."

"12,000, Professor Aronnax. They're my sole remaining ties with dry land. But I was done with the shore the day my Nautilus submerges for the first time under the waters. That day I purchased my last volumes, my last pamphlets, my last newspapers, and ever since I've chosen to believe that humanity no longer thinks or writes. In any event, professor, these books are at your disposal, and you may use them freely."

I thanked Captain Nemo and approached the shelves of this library. Written in every language, books on science, ethics, and literature were there in abundance, but I didn't see a single work on economics— they seemed to be strictly banned on board. One odd detail: all these books were shelved indiscriminately without regard to the language in which they were written, and this jumble proved that the Nautilus's captain could read fluently whatever volumes he fancied to pick up.

Among these books I noted masterpieces by the greats of ancient and modern times, in other words, all of humanity's finest achievements in history, poetry, fiction, and science, from Homer to Victor Hugo, from Xenophon to Michelet, from Rabelais to Madame George Sand. But science, in particular, represented the major investment of this library: books on mechanics, ballistics, hydrography, meteorology, geography, geology, etc., held a place there no less important than works on natural history, and I realized that they made up the captain's chief reading. There I saw the complete works of Humboldt, the complete Arago, as well as works by Foucault, Henri Sainte-Claire...
Deville, Chasles, Milne-Edwards, Quatrefages, John Tyndall, Faraday, Berthelot, Father Secchi, Petermann, Commander Maury, Louis Agassiz, etc., plus the transactions of France's Academy of Sciences, bulletins from the various geographical societies, etc., and in a prime location, those two volumes on the great ocean depths that had perhaps earned me this comparatively charitable welcome from Captain Nemo. Among the works of Joseph Bertrand, his book entitled The Founders of Astronomy even gave me a definite date; and since I knew it had appeared in the course of 1865, I concluded that the fitting out of the Nautilus hadn't taken place before then. Accordingly, three years ago at the most, Captain Nemo had begun his underwater existence. Moreover, I hoped some books even more recent would permit me to pinpoint the date precisely; but I had plenty of time to look for them, and I didn't want to put off any longer our stroll through the wonders of the Nautilus.

"Sir," I told the captain, "thank you for placing this library at my disposal. There are scientific treasures here, and I'll take advantage of them."

"This room isn't only a library," Captain Nemo said, "it's also a smoking room."

"A smoking room?" I exclaimed. "Then one may smoke on board?"

"Surely."

"In that case, sir, I'm forced to believe that you've kept up relations with Havana."

"None whatever," the captain replied. "Try this cigar, Professor Aronnax, and even though it doesn't come from Havana, it will satisfy you if you're a connoisseur."

I took the cigar offered me, whose shape recalled those from Cuba; but it seemed to be made of gold leaf. I lit it at a small brazier supported by an elegant bronze stand, and I inhaled my first whiffs with the relish of a smoker who hasn't had a puff in days.

"It's excellent," I said, "but it's not from the tobacco plant."

"Right," the captain replied, "this tobacco comes from neither Havana nor the Orient. It's a kind of nicotine-rich seaweed that the ocean supplies me, albeit sparingly. Do you still miss your Cubans, sir?"

"Captain, I scorn them from this day forward."

"Then smoke these cigars whenever you like, without debating their origin. They bear no government seal of approval, but I imagine they're none the worse for it."

"On the contrary."

Just then Captain Nemo opened a door facing the one by which I had entered the library, and I passed into an immense, splendidly lit lounge.

It was a huge quadrilateral with canted corners, ten meters long, six wide, five high. A luminous ceiling, decorated with delicate arabesques, distributed a soft, clear daylight over all the wonders gathered in this museum. For a museum it truly was, in which clever hands had spared no expense to amass every natural and artistic treasure, displaying them with the helter-skelter picturesqueness that distinguishes a painter's studio.

Some thirty pictures by the masters, uniformly framed and separated by gleaming panoplies of arms, adorned walls on which were stretched tapestries of austere design. There I saw canvases of the highest value, the likes of which I had marveled at in private European collections and art exhibitions. The various schools of the old masters were represented by a Raphael Madonna, a Virgin by Leonardo da Vinci, a nymph by Correggio, a woman by Titian, an adoration of the Magi by Veronese, an assumption of the Virgin by Murillo, a Holbein portrait, a monk by Velazquez, a martyr by Rubens, a village fair by Rubens, two Flemish landscapes by Teniers, three little genre paintings by Gerard Dow, Metsu, and Paul Potter, two canvases by Gericault and Prud'hon, plus seascapes by Backhuysen and Vernet. Among the works of modern art were pictures signed by Delacroix, Ingres, Decamps, Troyon, Meissonier, Daubigny, etc., and some wonderful miniature statues in marble or bronze, modeled after antiquity's finest originals, stood on their pedestals in the corners of this magnificent museum. As the Nautilus's commander had predicted, my mind was already starting to fall into that promised state of stunned amazement.

"Professor," this strange man then said, "you must excuse the informality with which I receive you, and the disorder reigning in this lounge."

"Sir," I replied, "without prying into who you are, might I venture to identify you as an artist?"

"A collector, sir, nothing more. Formerly I loved acquiring these beautiful works created by the hand of man. I sought them greedily, ferreted them out tirelessly, and I've been able to gather some objects of great value. They're my last mementos of those shores that are now dead for me. In my eyes, your modern artists are already as old as the ancients. They've existed for 2,000 or 3,000 years, and I mix them up in my mind. The masters are ageless."

"What about these composers?" I said, pointing to sheet music by Weber, Rossini, Mozart, Beethoven, Haydn, Meyerbeer, Hérold, Wagner, Auber, Gounod, Victor Massé, and a number of others scattered over a full size piano-organ, which occupied one of the wall panels in this lounge.

"These composers," Captain Nemo answered me, "are the contemporaries of Orpheus, because in the annals of the dead, all chronological differences fade; and I'm dead, professor, quite as dead as those friends of yours sleeping..."
six feet under!"

Captain Nemo fell silent and seemed lost in reverie. I regarded him with intense excitement, silently analyzing his strange facial expression. Leaning his elbow on the corner of a valuable mosaic table, he no longer saw me, he had forgotten my very presence.

I didn't disturb his meditations but continued to pass in review the curiosities that enriched this lounge.

After the works of art, natural rarities predominated. They consisted chiefly of plants, shells, and other exhibits from the ocean that must have been Captain Nemo's own personal finds. In the middle of the lounge, a jet of water, electrically lit, fell back into a basin made from a single giant clam. The delicately festooned rim of this shell, supplied by the biggest mollusk in the class Acephala, measured about six meters in circumference; so it was even bigger than those fine giant clams given to King François I by the Republic of Venice, and which the Church of Saint-Sulpice in Paris has made into two gigantic holy-water fonts.

Around this basin, inside elegant glass cases fastened with copper bands, there were classified and labeled the most valuable marine exhibits ever put before the eyes of a naturalist. My professorial glee may easily be imagined.

The zoophyte branch offered some very unusual specimens from its two groups, the polyps and the echinoderms. In the first group: organ-pipe coral, gorgonian coral arranged into fan shapes, soft sponges from Syria, isis coral from the Molucca Islands, sea-pen coral, wonderful coral of the genus Umbellularia, alcyonarian coral, then a whole series of those madrepores that my mentor Professor Milne-Edwards has so shrewdly classified into divisions and among which I noted the wonderful genus Flabellina as well as the genus Oculina from Réunion Island, plus a "Neptune's chariot" from the Caribbean Sea--every superb variety of coral, and in short, every species of these unusual polyparies that congregate to form entire islands that will one day turn into continents. Among the echinoderms, notable for being covered with spines: starfish, feather stars, sea lilies, free-swimming crinoids, brittle stars, sea urchins, sea cucumbers, etc., represented a complete collection of the individuals in this group.

An excitable conchologist would surely have fainted dead away before other, more numerous glass cases in which were classified specimens from the mollusk branch. There I saw a collection of incalculable value that I haven't time to describe completely. Among these exhibits I'll mention, just for the record: an elegant royal hammer shell from the Indian Ocean, whose evenly spaced white spots stood out sharply against a base of red and brown; an imperial spiny oyster, brightly colored, bristling with thorns, a specimen rare to European museums, whose value I estimated at 20,000 francs; a common hammer shell from the seas near Queensland, very hard to come by; exotic cockles from Senegal, fragile white bivalve shells that a single breath could pop like a soap bubble; several varieties of watering-pot shell from Java, a sort of limestone tube fringed with leafy folds and much fought over by collectors; a whole series of top-shell snails--greenish yellow ones fished up from American seas, others colored reddish brown that patronize the waters off Queensland, the former coming from the Gulf of Mexico and notable for their overlapping shells, the latter some sun-carrier shells found in the southernmost seas, finally and rarest of all, the magnificent spurred-star shell from New Zealand; then some wonderful peperovy-furrow shells; several valuable species of cythera clams and venus clams; the trellis wentletrap snail from Tranquebar on India's eastern shore; a marbled turban snail gleaming with mother-of-pearl; green parrot shells from the seas of China; the virtually unknown cone snail from the genus Coenodullus; every variety of cowry used as money in India and Africa; a "glory-of-the-seas," the most valuable shell in the East Indies; finally, common periwinkles, delphinula snails, turrett snails, violet snails, European cowries, volute snails, olive shells, miter shells, helmet shells, murex snails, whelks, harp shells, spiky periwinkles, triton snails, horn shells, spindle shells, conch shells, spider conchs, limpets, glass snails, sea butterflies--every kind of delicate, fragile seashell that science has baptized with its most delightful names.

Aside and in special compartments, strings of supremely beautiful pearls were spread out, the electric light flecking them with little fiery sparks: pink pearls pulled from saltwater fan shells in the Red Sea; green pearls from the rainbow abalone; yellow, blue, and black pearls, the unusual handiwork of various mollusks from every ocean and of certain mussels from rivers up north; in short, several specimens of incalculable worth that had been oozed by the rarest of shellfish. Some of these pearls were bigger than a pigeon egg; they more than equaled the one that the explorer Tavernier sold the Shah of Persia for 3,000,000 francs, and they surpassed that other pearl owned by the Imam of Muscat, which I had believed to be unrivaled in the entire world.

Consequently, to calculate the value of this collection was, I should say, impossible. Captain Nemo must have spent millions in acquiring these different specimens, and I was wondering what financial resources he tapped to satisfy his collector's fancies, when these words interrupted me:

"You're examining my shells, professor? They're indeed able to fascinate a naturalist; but for me they have an added charm, since I've collected every one of them with my own two hands, and not a sea on the globe has escaped my investigations."
"I understand, captain, I understand your delight at strolling in the midst of this wealth. You're a man who gathers his treasure in person. No museum in Europe owns such a collection of exhibits from the ocean. But if I exhaust all my wonderment on them, I'll have nothing left for the ship that carries them! I have absolutely no wish to probe those secrets of yours! But I confess that my curiosity is aroused to the limit by this Nautilus, the motor power it contains, the equipment enabling it to operate, the ultra powerful force that brings it to life. I see some instruments hanging on the walls of this lounge whose purposes are unknown to me. May I learn--"

"Professor Aronnax," Captain Nemo answered me, "I've said you'd be free aboard my vessel, so no part of the Nautilus is off-limits to you. You may inspect it in detail, and I'll be delighted to act as your guide."

"I don't know how to thank you, sir, but I won't abuse your good nature. I would only ask you about the uses intended for these instruments of physical measure--"

"Professor, these same instruments are found in my stateroom, where I'll have the pleasure of explaining their functions to you. But beforehand, come inspect the cabin set aside for you. You need to learn how you'll be lodged aboard the Nautilus."

I followed Captain Nemo, who, via one of the doors cut into the lounge's canted corners, led me back down the ship's gangways. He took me to the bow, and there I found not just a cabin but an elegant stateroom with a bed, a washstand, and various other furnishings.

I could only thank my host.
"Your stateroom adjoins mine," he told me, opening a door, "and mine leads into that lounge we've just left."

I entered the captain's stateroom. It had an austere, almost monastic appearance. An iron bedstead, a worktable, some washstand fixtures. Subdued lighting. No luxuries. Just the bare necessities.

Captain Nemo showed me to a bench.
"Kindly be seated," he told me.

I sat, and he began speaking as follows:

CHAPTER 12

Everything through Electricity

"SIR," CAPTAIN NEMO SAID, showing me the instruments hanging on the walls of his stateroom,

"these are the devices needed to navigate the Nautilus. Here, as in the lounge, I always have them before my eyes, and they indicate my position and exact heading in the midst of the ocean. You're familiar with some of them, such as the thermometer, which gives the temperature inside the Nautilus; the barometer, which measures the heaviness of the outside air and forecasts changes in the weather; the humidistat, which indicates the degree of dryness in the atmosphere; the storm glass, whose mixture decomposes to foretell the arrival of tempests; the compass, which steers my course; the sextant, which takes the sun's altitude and tells me my latitude; chronometers, which allow me to calculate my longitude; and finally, spyglasses for both day and night, enabling me to scrutinize every point of the horizon once the Nautilus has risen to the surface of the waves."

"These are the normal navigational instruments," I replied, "and I'm familiar with their uses. But no doubt these others answer pressing needs unique to the Nautilus. That dial I see there, with the needle moving across it--isn't it a pressure gauge?"

"It is indeed a pressure gauge. It's placed in contact with the water, and it indicates the outside pressure on our hull, which in turn gives me the depth at which my submersible is sitting."

"And these are some new breed of sounding line?"

"They're thermometric sounding lines that report water temperatures in the different strata."

"And these other instruments, whose functions I can't even guess?"

"Here, professor, I need to give you some background information," Captain Nemo said. "So kindly hear me out."

He fell silent for some moments, then he said:

"There's a powerful, obedient, swift, and effortless force that can be bent to any use and which reigns supreme aboard my vessel. It does everything. It lights me, it warms me, it's the soul of my mechanical equipment. This force is electricity."
"Electricity!" I exclaimed in some surprise.
"Yes, sir."
"But, captain, you have a tremendous speed of movement that doesn't square with the strength of electricity. Until now, its dynamic potential has remained quite limited, capable of producing only small amounts of power!"
"Professor," Captain Nemo replied, "my electricity isn't the run-of-the-mill variety, and with your permission, I'll leave it at that."
"I won't insist, sir, and I'll rest content with simply being flabbergasted at your results. I would ask one question, however, which you needn't answer if it's indiscreet. The electric cells you use to generate this marvelous force must be depleted very quickly. Their zinc component, for example: how do you replace it, since you no longer stay in contact with the shore?"
"That question deserves an answer," Captain Nemo replied. "First off, I'll mention that at the bottom of the sea there exist veins of zinc, iron, silver, and gold whose mining would quite certainly be feasible. But I've tapped none of these land-based metals, and I wanted to make demands only on the sea itself for the sources of my electricity."
"The sea itself?"
"Yes, professor, and there was no shortage of such sources. In fact, by establishing a circuit between two wires immersed to different depths, I'd be able to obtain electricity through the diverging temperatures they experience; but I preferred to use a more practical procedure."
"And that is?"
"You're familiar with the composition of salt water. In 1,000 grams one finds 96.5% water and about 2.66% sodium chloride; then small quantities of magnesium chloride, potassium chloride, magnesium bromide, sulfate of magnesia, calcium sulfate, and calcium carbonate. Hence you observe that sodium chloride is encountered there in significant proportions. Now then, it's this sodium that I extract from salt water and with which I compose my electric cells."
"Sodium?"
"Yes, sir. Mixed with mercury, it forms an amalgam that takes the place of zinc in Bunsen cells. The mercury is never depleted. Only the sodium is consumed, and the sea itself gives me that. Beyond this, I'll mention that sodium batteries have been found to generate the greater energy, and their electro-motor strength is twice that of zinc batteries."
"Captain, I fully understand the excellence of sodium under the conditions in which you're placed. The sea contains it. Fine. But it still has to be produced, in short, extracted. And how do you accomplish this? Obviously your batteries could do the extracting; but if I'm not mistaken, the consumption of sodium needed by your electric equipment would be greater than the quantity you'd extract. It would come about, then, that in the process of producing your sodium, you'd use up more than you'd make!"
"Accordingly, professor, I don't extract it with batteries; quite simply, I utilize the heat of coal from the earth."
"From the earth?" I said, my voice going up on the word.
"We'll say coal from the seafloor, if you prefer," Captain Nemo replied.
"And you can mine these veins of underwater coal?"
"You'll watch me work them, Professor Aronnax. I ask only a little patience of you, since you'll have ample time to be patient. Just remember one thing: I owe everything to the ocean; it generates electricity, and electricity gives the Nautilus heat, light, motion, and, in a word, life itself."
"But not the air you breathe?"
"Oh, I could produce the air needed on board, but it would be pointless, since I can rise to the surface of the sea whenever I like. However, even though electricity doesn't supply me with breathable air, it at least operates the powerful pumps that store it under pressure in special tanks; which, if need be, allows me to extend my stay in the lower strata for as long as I want."
"Captain," I replied, "I'll rest content with marveling. You've obviously found what all mankind will surely find one day, the true dynamic power of electricity."
"I'm not so certain they'll find it," Captain Nemo replied icily. "But be that as it may, you're already familiar with the first use I've found for this valuable force. It lights us, and with a uniformity and continuity not even possessed by sunlight. Now, look at that clock: it's electric, it runs with an accuracy rivaling the finest chronometers. I've had it divided into twenty-four hours like Italian clocks, since neither day nor night, sun nor moon, exist for me, but only this artificial light that I import into the depths of the seas! See, right now it's ten o'clock in the morning."
"That's perfect."
"Another use for electricity: that dial hanging before our eyes indicates how fast the Nautilus is going. An electric wire puts it in contact with the patent log; this needle shows me the actual speed of my submersible. And... hold on... just now we're proceeding at the moderate pace of fifteen miles per hour."
"It's marvelous," I replied, "and I truly see, captain, how right you are to use this force; it's sure to take the place of wind, water, and steam."

"But that's not all, Professor Aronnax," Captain Nemo said, standing up. "And if you'd care to follow me, we'll inspect the Nautilus's stern."

In essence, I was already familiar with the whole forward part of this underwater boat, and here are its exact subdivisions going from amidships to its spur: the dining room, 5 meters long and separated from the library by a watertight bulkhead, in other words, it couldn't be penetrated by the sea; the library, 5 meters long; the main lounge, 10 meters long, separated from the captain's stateroom by a second watertight bulkhead; the aforesaid stateroom, 5 meters long; mine, 2.5 meters long; and finally, air tanks 7.5 meters long and extending to the stempost. Total: a length of 35 meters. Doors were cut into the watertight bulkheads and were shut hermetically by means of India-rubber seals, which insured complete safety aboard the Nautilus in the event of a leak in any one section.

I followed Captain Nemo down gangways located for easy transit, and I arrived amidships. There I found a sort of shaft heading upward between two watertight bulkheads. An iron ladder, clamped to the wall, led to the shaft's upper end. I asked the captain what this ladder was for.

"It goes to the skiff," he replied.

"What! You have a skiff?" I replied in some astonishment.

"Surely. An excellent longboat, light and unsinkable, which is used for excursions and fishing trips."

"But when you want to set out, don't you have to return to the surface of the sea?"

"By no means. The skiff is attached to the topside of the Nautilus's hull and is set in a cavity expressly designed to receive it. It's completely decked over, absolutely watertight, and held solidly in place by bolts. This ladder leads to a manhole cut into the Nautilus's hull and corresponding to a comparable hole cut into the side of the skiff. I insert myself through this double opening into the longboat. My crew close up the hole belonging to the Nautilus; I close up the one belonging to the skiff, simply by screwing it into place. I undo the bolts holding the skiff to the submersible, and the longboat rises with prodigious speed to the surface of the sea. I then open the deck paneling, carefully closed until that point; I up mast and hoist sail—or I take out my oars—and I go for a spin."

"But how do you return to the ship?"

"I don't, Professor Aronnax; the Nautilus returns to me."

"At your command?"

"At my command. An electric wire connects me to the ship. I fire off a telegram, and that's that."

"Right," I said, tipsy from all these wonders, "nothing to it!"

After passing the well of the companionway that led to the platform, I saw a cabin 2 meters long in which Conseil and Ned Land, enraptured with their meal, were busy devouring it to the last crumb. Then a door opened into the galley, 3 meters long and located between the vessel's huge storage lockers.

There, even more powerful and obedient than gas, electricity did most of the cooking. Arriving under the stoves, wires transmitted to platinum griddles a heat that was distributed and sustained with perfect consistency. It also heated a distilling mechanism that, via evaporation, supplied excellent drinking water. Next to this galley was a bathroom, conveniently laid out, with faucets supplying hot or cold water at will.

After the galley came the crew's quarters, 5 meters long. But the door was closed and I couldn't see its accommodations, which might have told me the number of men it took to operate the Nautilus.

At the far end stood a fourth watertight bulkhead, separating the crew's quarters from the engine room. A door opened, and I stood in the compartment where Captain Nemo, indisputably a world-class engineer, had set up his locomotive equipment.

Brightly lit, the engine room measured at least 20 meters in length. It was divided, by function, into two parts: the first contained the cells for generating electricity, the second that mechanism transmitting movement to the propeller.

Right off, I detected an odor permeating the compartment that was sui generis.* Captain Nemo noticed the negative impression it made on me.

*Latin: "in a class by itself." Ed.

"That," he told me, "is a gaseous discharge caused by our use of sodium, but it's only a mild inconvenience. In any event, every morning we sanitize the ship by ventilating it in the open air."

Meanwhile I examined the Nautilus's engine with a fascination easy to imagine.

"You observe," Captain Nemo told me, "that I use Bunsen cells, not Ruhmkorff cells. The latter would be ineffectual. One uses fewer Bunsen cells, but they're big and strong, and experience has proven their superiority. The electricity generated here makes its way to the stern, where electromagnets of huge size activate a special system of levers and gears that transmit movement to the propeller's shaft. The latter has a diameter of 6 meters, a pitch of 7.5 meters, and can do up to 120 revolutions per minute."
"And that gives you?"

"A speed of fifty miles per hour."

There lay a mystery, but I didn't insist on exploring it. How could electricity work with such power? Where did this nearly unlimited energy originate? Was it in the extraordinary voltage obtained from some new kind of induction coil? Could its transmission have been immeasurably increased by some unknown system of levers?** This was the point I couldn't grasp.

**Author's Note: And sure enough, there's now talk of such a discovery, in which a new set of levers generates considerable power. Did its inventor meet up with Captain Nemo?**

"Captain Nemo," I said, "I'll vouch for the results and not try to explain them. I've seen the Nautilus at work out in front of the Abraham Lincoln, and I know where I stand on its speed. But it isn't enough just to move, we have to see where we're going! We must be able to steer right or left, up or down! How do you reach the lower depths, where you meet an increasing resistance that's assessed in hundreds of atmospheres? How do you rise back to the surface of the ocean? Finally, how do you keep your ship at whatever level suits you? Am I indiscreet in asking you all these things?"

"Not at all, professor," the captain answered me after a slight hesitation, "since you'll never leave this underwater boat. Come into the lounge. It's actually our work room, and there you'll learn the full story about the Nautilus!"

CHAPTER 13

Some Figures

A MOMENT LATER we were seated on a couch in the lounge, cigars between our lips. The captain placed before my eyes a working drawing that gave the ground plan, cross section, and side view of the Nautilus. Then he began his description as follows:

"Here, Professor Aronnax, are the different dimensions of this boat now transporting you. It's a very long cylinder with conical ends. It noticeably takes the shape of a cigar, a shape already adopted in London for several projects of the same kind. The length of this cylinder from end to end is exactly seventy meters, and its maximum breadth of beam is eight meters. So it isn't quite built on the ten-to-one ratio of your high-speed steamers; but its lines are sufficiently long, and their tapering gradual enough, so that the displaced water easily slips past and poses no obstacle to the ship's movements.

"These two dimensions allow you to obtain, via a simple calculation, the surface area and volume of the Nautilus. Its surface area totals 1,011.45 square meters, its volume 1,507.2 cubic meters-- which is tantamount to saying that when it's completely submerged, it displaces 1,500 cubic meters of water, or weighs 1,500 metric tons.

"In drawing up plans for a ship meant to navigate underwater, I wanted it, when floating on the waves, to lie nine-tenths below the surface and to emerge only one-tenth. Consequently, under these conditions it needed to displace only nine-tenths of its volume, hence 1,356.48 cubic meters; in other words, it was to weigh only that same number of metric tons. So I was obliged not to exceed this weight while building it to the aforesaid dimensions.

"The Nautilus is made up of two hulls, one inside the other; between them, joining them together, are iron T-bars that give this ship the utmost rigidity. In fact, thanks to this cellular arrangement, it has the resistance of a stone block, as if it were completely solid. Its plating can't give way; it's self-adhering and not dependent on the tightness of its rivets; and due to the perfect union of its materials, the solidarity of its construction allows it to defy the most violent seas.

"The two hulls are manufactured from boilerplate steel, whose relative density is 7.8 times that of water. The first hull has a thickness of no less than five centimeters and weighs 394.96 metric tons. My second hull, the outer cover, includes a keel fifty centimeters high by twenty-five wide, which by itself weighs 62 metric tons; this hull, the engine, the ballast, the various accessories and accommodations, plus the bulkheads and interior braces, have a combined weight of 961.52 metric tons, which when added to 394.96 metric tons, gives us the desired total of
"1,356.48 metric tons. Clear?"

"Clear," I replied.

"So," the captain went on, "when the Nautilus lies on the waves under these conditions, one-tenth of it does emerge above water. Now then, if I provide some ballast tanks equal in capacity to that one-tenth, hence able to hold 150.72 metric tons, and if I fill them with water, the boat then displaces 1,507.2 metric tons-- or it weighs that much--and it would be completely submerged. That's what comes about, professor. These ballast tanks exist within easy access in the lower reaches of the Nautilus. I open some stopcocks, the tanks fill, the boat sinks, and it's exactly flush with the surface of the water."

"Fine, captain, but now we come to a genuine difficulty. You're able to lie flush with the surface of the ocean, that I understand. But lower down, while diving beneath that surface, isn't your submersible going to encounter a pressure, and consequently undergo an upward thrust, that must be assessed at one atmosphere per every thirty feet of water, hence at about one kilogram per each square centimeter?"

"Precisely, sir."

"Then unless you fill up the whole Nautilus, I don't see how you can force it down into the heart of these liquid masses."

"Professor," Captain Nemo replied, "static objects mustn't be confused with dynamic ones, or we'll be open to serious error. Comparatively little effort is spent in reaching the ocean's lower regions, because all objects have a tendency to become 'sinkers.' Follow my logic here."

"I'm all ears, captain."

"When I wanted to determine what increase in weight the Nautilus needed to be given in order to submerge, I had only to take note of the proportionate reduction in volume that salt water experiences in deeper and deeper strata."

"That's obvious," I replied.

"Now then, if water isn't absolutely incompressible, at least it compresses very little. In fact, according to the most recent calculations, this reduction is only .0000436 per atmosphere, or per every thirty feet of depth. For instance, to go 1,000 meters down, I must take into account the reduction in volume that occurs under a pressure equivalent to that from a 1,000-meter column of water, in other words, under a pressure of 100 atmospheres. In this instance the reduction would be .00436. Consequently, I'd have to increase my weight from 1,507.2 metric tons to 1,513.77. So the added weight would only be 6.57 metric tons."

"That's all?"

"That's all, Professor Aronnax, and the calculation is easy to check. Now then, I have supplementary ballast tanks capable of shipping 100 metric tons of water. So I can descend to considerable depths. When I want to rise again and lie flush with the surface, all I have to do is expel that water; and if I desire that the Nautilus emerge above the waves to one-tenth of its total capacity, I empty all the ballast tanks completely."

This logic, backed up by figures, left me without a single objection.

"I accept your calculations, captain," I replied, "and I'd be ill-mannered to dispute them, since your daily experience bears them out. But at this juncture, I have a hunch that we're still left with one real difficulty."

"What's that, sir?"

"When you're at a depth of 1,000 meters, the Nautilus's plating bears a pressure of 100 atmospheres. If at this point you want to empty the supplementary ballast tanks in order to lighten your boat and rise to the surface, your pumps must overcome that pressure of 100 atmospheres, which is 100 kilograms per each square centimeter. This demands a strength--"

"That electricity alone can give me," Captain Nemo said swiftly. "Sir, I repeat: the dynamic power of my engines is nearly infinite. The Nautilus's pumps have prodigious strength, as you must have noticed when their waterspouts swept like a torrent over the Abraham Lincoln. Besides, I use my supplementary ballast tanks only to reach an average depth of 1,500 to 2,000 meters, and that with a view to conserving my machinery. Accordingly, when I have a mind to visit the ocean depths two or three vertical leagues beneath the surface, I use maneuvers that are more time-consuming but no less infallible."

"What are they, captain?"

"Here I'm naturally led into telling you how the Nautilus is maneuvered."
they slant, the Nautilus follows the angle of that slant and, under its propeller's thrust, either sinks on a diagonal as steep as it suits me, or rises on that diagonal. And similarly, if I want to return more swiftly to the surface, I throw the propeller in gear, and the water's pressure makes the Nautilus rise vertically, as an air balloon inflated with hydrogen lifts swiftly into the skies."

"Bravo, captain!" I exclaimed. "But in the midst of the waters, how can your helmsman follow the course you've given him?"

"My helmsman is stationed behind the windows of a pilothouse, which protrudes from the topside of the Nautilus's hull and is fitted with biconvex glass."

"Is glass capable of resisting such pressures?"

"Perfectly capable. Though fragile on impact, crystal can still offer considerable resistance. In 1864, during experiments on fishing by electric light in the middle of the North Sea, glass panes less than seven millimeters thick were seen to resist a pressure of sixteen atmospheres, all the while letting through strong, heat-generating rays whose warmth was unevenly distributed. Now then, I use glass windows measuring no less than twenty-one centimeters at their centers; in other words, they've thirty times the thickness."

"Fair enough, captain, but if we're going to see, we need light to drive away the dark, and in the midst of the murky waters, I wonder how your helmsman can--"

"Set astern of the pilothouse is a powerful electric reflector whose rays light up the sea for a distance of half a mile."

"Oh, bravo! Bravo three times over, captain! That explains the phosphorescent glow from this so-called narwhale that so puzzled us scientists! Pertinent to this, I'll ask you if the Nautilus's running afoul of the Scotia, which caused such a great uproar, was the result of an accidental encounter?"

"Entirely accidental, sir. I was navigating two meters beneath the surface of the water when the collision occurred. However, I could see that it had no dire consequences."

"None, sir. But as for your encounter with the Abraham Lincoln...?"

"Professor, that troubled me, because it's one of the best ships in the gallant American navy, but they attacked me and I had to defend myself! All the same, I was content simply to put the frigate in a condition where it could do me no harm; it won't have any difficulty getting repairs at the nearest port."

"Ah, commander," I exclaimed with conviction, "your Nautilus is truly a marvelous boat!"

"Yes, professor," Captain Nemo replied with genuine excitement, "and I love it as if it were my own flesh and blood! Aboard a conventional ship, facing the ocean's perils, danger lurks everywhere; on the surface of the sea, your chief sensation is the constant feeling of an underlying chasm, as the Dutchman Jansen so aptly put it; but below the waves aboard the Nautilus, your heart never fails you! There are no structural deformities to worry about, because the double hull of this boat has the rigidity of iron; no rigging to be worn out by rolling and pitching on the waves; no sails for the wind to carry off; no boilers for steam to burst open; no fires to fear, because this submersible is made of sheet iron not wood; no coal to run out of, since electricity is its mechanical force; no collisions to fear, because it navigates the watery deep all by itself; no storms to brave, because just a few meters beneath the waves, it finds absolute tranquility! There, sir. There's the ideal ship! And if it's true that the engineer has more confidence in a craft than the builder, and the builder more than the captain himself, you can understand the utter abandon with which I place my trust in this Nautilus, since I'm its captain, builder, and engineer all in one!"

Captain Nemo spoke with winning eloquence. The fire in his eyes and the passion in his gestures transfigured him. Yes, he loved his ship the same way a father loves his child!

But one question, perhaps indiscreet, naturally popped up, and I couldn't resist asking it.

"You're an engineer, then, Captain Nemo?"

"Yes, professor," he answered me. "I studied in London, Paris, and New York back in the days when I was a resident of the earth's continents."

"But how were you able to build this wonderful Nautilus in secret?"

"Each part of it, Professor Aronnax, came from a different spot on the globe and reached me at a cover address. Its keel was forged by Creusot in France, its propeller shaft by Pen & Co. in London, the sheet-iron plates for its hull by Laird's in Liverpool, its propeller by Scott's in Glasgow. Its tanks were manufactured by Call & Co. in Paris, its engine by Krupp in Prussia, its spur by the Motala workshops in Sweden, its precision instruments by Hart Bros. in New York, etc.; and each of these suppliers received my specifications under a different name."

"But," I went on, "once these parts were manufactured, didn't they have to be mounted and adjusted?"

"Professor, I set up my workshops on a deserted islet in midocean. There our Nautilus was completed by me and my workmen, in other words, by my gallant companions whom I've molded and educated. Then, when the operation was over, we burned every trace of our stay on that islet, which if I could have, I'd have blown up."

"From all this, may I assume that such a boat costs a fortune?"
"An iron ship, Professor Aronnax, runs 1,125 francs per metric ton. Now then, the Nautilus has a burden of 1,500 metric tons. Consequently, it cost 1,687,000 francs, hence 2,000,000 francs including its accommodations, and 4,000,000 or 5,000,000 with all the collections and works of art it contains."

"One last question, Captain Nemo."

"Ask, professor."

"You're rich, then?"

"Infinitely rich, sir, and without any trouble, I could pay off the ten-billion-franc French national debt!"

I gaped at the bizarre individual who had just spoken these words. Was he playing on my credulity? Time would tell.

CHAPTER 14

The Black Current

THE PART OF THE planet earth that the seas occupy has been assessed at 3,832,558 square myriameters, hence more than 38,000,000,000 hectares. This liquid mass totals 2,250,000,000 cubic miles and could form a sphere with a diameter of sixty leagues, whose weight would be three quintillion metric tons. To appreciate such a number, we should remember that a quintillion is to a billion what a billion is to one, in other words, there are as many billions in a quintillion as ones in a billion! Now then, this liquid mass nearly equals the total amount of water that has poured through all the earth's rivers for the past 40,000 years!

During prehistoric times, an era of fire was followed by an era of water. At first there was ocean everywhere. Then, during the Silurian period, the tops of mountains gradually appeared above the waves, islands emerged, disappeared beneath temporary floods, rose again, were fused to form continents, and finally the earth's geography settled into what we have today. Solid matter had wrested from liquid matter some 37,657,000 square miles, hence 12,916,000,000 hectares.

The outlines of the continents allow the seas to be divided into five major parts: the frozen Arctic and Antarctic oceans, the Indian Ocean, the Atlantic Ocean, and the Pacific Ocean.

The Pacific Ocean extends north to south between the two polar circles and east to west between America and Asia over an expanse of 145 degrees of longitude. It's the most tranquil of the seas; its currents are wide and slow-moving, its tides moderate, its rainfall abundant. And this was the ocean that I was first destined to cross under these strangest of auspices.

"If you don't mind, professor," Captain Nemo told me, "we'll determine our exact position and fix the starting point of our voyage. It's fifteen minutes before noon. I'm going to rise to the surface of the water."

The captain pressed an electric bell three times. The pumps began to expel water from the ballast tanks; on the pressure gauge, a needle marked the decreasing pressures that indicated the Nautilus's upward progress; then the needle stopped.

"Here we are," the captain said.

I made my way to the central companionway, which led to the platform. I climbed its metal steps, passed through the open hatches, and arrived topside on the Nautilus.

The platform emerged only eighty centimeters above the waves. The Nautilus's bow and stern boasted that spindle-shaped outline that had caused the ship to be compared appropriately to a long cigar. I noted the slight overlap of its sheet-iron plates, which resembled the scales covering the bodies of our big land reptiles. So I had a perfectly natural explanation for why, despite the best spyglasses, this boat had always been mistaken for a marine animal.

Near the middle of the platform, the skiff was half set in the ship's hull, making a slight bulge. Fore and aft stood two cupolas of moderate height, their sides slanting and partly inset with heavy biconvex glass, one reserved for the helmsman steering the Nautilus, the other for the brilliance of the powerful electric beacon lighting his way.

The sea was magnificent, the skies clear. This long aquatic vehicle could barely feel the broad undulations of the ocean. A mild breeze out of the east rippled the surface of the water. Free of all mist, the horizon was ideal for
There was nothing to be seen. Not a reef, not an islet. No more Abraham Lincoln. A deserted immenseness.

Raising his sextant, Captain Nemo took the altitude of the sun, which would give him his latitude. He waited for a few minutes until the orb touched the rim of the horizon. While he was taking his sights, he didn't move a muscle, and the instrument couldn't have been steadier in hands made out of marble.

"Noon," he said. "Professor, whenever you're ready..."

I took one last look at the sea, a little yellowish near the landing places of Japan, and I went below again to the main lounge.

There the captain fixed his position and used a chronometer to calculate his longitude, which he double-checked against his previous observations of hour angles. Then he told me:

"Professor Aronnax, we're in longitude 137 degrees 15' west--"

"West of which meridian?" I asked quickly, hoping the captain's reply might give me a clue to his nationality.

"Sir," he answered me, "I have chronometers variously set to the meridians of Paris, Greenwich, and Washington, D.C. But in your honor, I'll use the one for Paris."

This reply told me nothing. I bowed, and the commander went on:

"We're in longitude 137 degrees 15' west of the meridian of Paris, and latitude 30 degrees 7' north, in other words, about 300 miles from the shores of Japan. At noon on this day of November 8, we hereby begin our voyage of exploration under the waters."

"May God be with us!" I replied.

"And now, professor," the captain added, "I'll leave you to your intellectual pursuits. I've set our course east-northeast at a depth of fifty meters. Here are some large-scale charts on which you'll be able to follow that course. The lounge is at your disposal, and with your permission, I'll take my leave."

Captain Nemo bowed. I was left to myself, lost in my thoughts. They all centered on the Nautilus's commander. Would I ever learn the nationality of this eccentric man who had boasted of having none? His sworn hate for humanity, a hate that perhaps was bent on some dreadful revenge--what had provoked it? Was he one of those unappreciated scholars, one of those geniuses "embittered by the world," as Conseil expressed it, a latter-day Galileo, or maybe one of those men of science, like America's Commander Maury, whose careers were ruined by political revolutions? I couldn't say yet. As for me, whom fate had just brought aboard his vessel, whose life he had held in the balance: he had received me coolly but hospitably. Only, he never took the hand I extended to him. He never extended his own.

For an entire hour I was deep in these musings, trying to probe this mystery that fascinated me so. Then my eyes focused on a huge world map displayed on the table, and I put my finger on the very spot where our just-determined longitude and latitude intersected.

Like the continents, the sea has its rivers. These are exclusive currents that can be identified by their temperature and color, the most remarkable being the one called the Gulf Stream. Science has defined the global paths of five chief currents: one in the north Atlantic, a second in the south Atlantic, a third in the north Pacific, a fourth in the south Pacific, and a fifth in the southern Indian Ocean. Also it's likely that a sixth current used to exist in the northern Indian Ocean, when the Caspian and Aral Seas joined up with certain large Asian lakes to form a single uniform expanse of water.

Now then, at the spot indicated on the world map, one of these seagoing rivers was rolling by, the Kuroshio of the Japanese, the Black Current: heated by perpendicular rays from the tropical sun, it leaves the Bay of Bengal, crosses the Strait of Malacca, goes up the shores of Asia, and curves into the north Pacific as far as the Aleutian Islands, carrying along trunks of camphor trees and other local items, the pure indigo of its warm waters sharply contrasting with the ocean's waves. It was this current the Nautilus was about to cross. I watched it on the map with my eyes, I saw it lose itself in the immenseness of the Pacific, and I felt myself swept along with it, when Ned Land and Conseil appeared in the lounge doorway.

My two gallant companions stood petrified at the sight of the wonders on display.

"Where are we?" the Canadian exclaimed. "In the Quebec Museum?"

"Begging master's pardon," Conseil answered, "but this seems more like the Sommerard artifacts exhibition!"

"My friends," I replied, signaling them to enter, "you're in neither Canada nor France, but securely aboard the Nautilus, fifty meters below sea level."

"If master says so, then so be it," Conseil answered. "But in all honesty, this lounge is enough to astonish even someone Flemish like myself."

"Indulge your astonishment, my friend, and have a look, because there's plenty of work here for a classifier of your talents."

Conseil needed no encouraging. Bending over the glass cases, the gallant lad was already muttering choice
Meanwhile Ned Land, less dedicated to conchology, questioned me about my interview with Captain Nemo. Had I discovered who he was, where he came from, where he was heading, how deep he was taking us? In short, a thousand questions I had no time to answer.

I told him everything I knew—or, rather, everything I didn't know—and I asked him what he had seen or heard on his part.

"Haven't seen or heard a thing!" the Canadian replied. "I haven't even spotted the crew of this boat. By any chance, could they be electric too?"

"Electric?"

"Oh ye gods, I'm half tempted to believe it! But back to you, Professor Aronnax," Ned Land said, still hanging on to his ideas. "Can't you tell me how many men are on board? Ten, twenty, fifty, a hundred?"

"I'm unable to answer you, Mr. Land. And trust me on this: for the time being, get rid of these notions of taking over the Nautilus or escaping from it. This boat is a masterpiece of modern technology, and I'd be sorry to have missed it! Many people would welcome the circumstances that have been handed us, just to walk in the midst of these wonders. So keep calm, and let's see what's happening around us."

"See!" the harpooner exclaimed. "There's nothing to see, nothing we'll ever see from this sheet-iron prison! We're simply running around blindfolded—"

Ned Land was just pronouncing these last words when we were suddenly plunged into darkness, utter darkness. The ceiling lights went out so quickly, my eyes literally ached, just as if we had experienced the opposite sensation of going from the deepest gloom to the brightest sunlight.

We stood stock-still, not knowing what surprise was waiting for us, whether pleasant or unpleasant. But a sliding sound became audible. You could tell that some panels were shifting over the Nautilus's sides.

"It's the beginning of the end!" Ned Land said.

"... order Hydromedusa," Conseil muttered.

Suddenly, through two oblong openings, daylight appeared on both sides of the lounge. The liquid masses came into view, brightly lit by the ship's electric outpourings. We were separated from the sea by two panes of glass. Initially I shuddered at the thought that these fragile partitions could break; but strong copper bands secured them, giving them nearly infinite resistance.

The sea was clearly visible for a one-mile radius around the Nautilus. What a sight! What pen could describe it? Who could portray the effects of this light through these translucent sheets of water, the subtlety of its progressive shadings into the ocean's upper and lower strata?

The transparency of salt water has long been recognized. Its clarity is believed to exceed that of spring water. The mineral and organic substances it holds in suspension actually increase its translucency. In certain parts of the Caribbean Sea, you can see the sandy bottom with startling distinctness as deep as 145 meters down, and the penetrating power of the sun's rays seems to give out only at a depth of 300 meters. But in this fluid setting traveled by the Nautilus, our electric glow was being generated in the very heart of the waves. It was no longer illuminated water, it was liquid light.

If we accept the hypotheses of the microbiologist Ehrenberg— who believes that these underwater depths are lit up by phosphorescent organisms—nature has certainly saved one of her most prodigious sights for residents of the sea, and I could judge for myself from the thousandfold play of the light. On both sides I had windows opening over these unexplored depths. The darkness in the lounge enhanced the brightness outside, and we stared as if this clear glass were the window of an immense aquarium.

"You wanted to see something, Ned my friend; well, now you have something to see!"

"How unusual!" the Canadian put in, setting aside his tantrums and getaway schemes while submitting to this irresistible allure. "A man would go an even greater distance just to stare at such a sight!"

"Ah!" I exclaimed. "I see our captain's way of life! He's found himself a separate world that saves its most astonishing wonders just for him!"

"But where are the fish?" the Canadian ventured to observe. "I don't see any fish!"

"Why would you care, Ned my friend?" Conseil replied. "Since you have no knowledge of them."

"Me? A fisherman!" Ned Land exclaimed.

And on this subject a dispute arose between the two friends, since both were knowledgeable about fish, but from...
totally different standpoints.

Everyone knows that fish make up the fourth and last class in the vertebrate branch. They have been quite aptly defined as: "cold-blooded vertebrates with a double circulatory system, breathing through gills, and designed to live in water." They consist of two distinct series: the series of bony fish, in other words, those whose spines have vertebrae made of bone; and cartilaginous fish, in other words, those whose spines have vertebrae made of cartilage.

Possibly the Canadian was familiar with this distinction, but Conseil knew far more about it; and since he and Ned were now fast friends, he just had to show off. So he told the harpooner:

"Ned my friend, you're a slayer of fish, a highly skilled fisherman. You've caught a large number of these fascinating animals. But I'll bet you don't know how they're classified."

"Sure I do," the harpooner replied in all seriousness. "They're classified into fish we eat and fish we don't eat!"

"Spoken like a true glutton," Conseil replied. "But tell me, are you familiar with the differences between bony fish and cartilaginous fish?"

"Just maybe, Conseil."

"And about the subdivisions of these two large classes?"

"I haven't the foggiest notion," the Canadian replied.

"All right, listen and learn, Ned my friend! Bony fish are subdivided into six orders. Primo, the acanthopterygians, whose upper jaw is fully formed and free-moving, and whose gills take the shape of a comb. This order consists of fifteen families, in other words, three-quarters of all known fish. Example: the common perch."


"Secundo," Conseil went on, "the abdominals, whose pelvic fins hang under the abdomen to the rear of the pectorals but aren't attached to the shoulder bone, an order that's divided into five families and makes up the great majority of freshwater fish. Examples: carp, pike."

"Ugh!" the Canadian put in with distinct scorn. "You can keep the freshwater fish!"

"Tertio," Conseil said, "the subbrachians, whose pelvic fins are attached under the pectorals and hang directly from the shoulder bone. This order contains four families. Examples: flatfish such as sole, turbot, dab, plaice, brill, etc."

"Excellent, really excellent!" the harpooner exclaimed, interested in fish only from an edible viewpoint.

"Quarto," Conseil went on, unabashed, "the apods, with long bodies that lack pelvic fins and are covered by a heavy, often glutinous skin, an order consisting of only one family. Examples: common eels and electric eels."

"So-so, just so-so!" Ned Land replied.

"Quinto," Conseil said, "the lophobranchians, which have fully formed, free-moving jaws but whose gills consist of little tufts arranged in pairs along their gill arches. This order includes only one family. Examples: seahorses and dragonfish."

"Bad, very bad!" the harpooner replied.

"Sexto and last," Conseil said, "the plectognaths, whose maxillary bone is firmly attached to the side of the intermaxillary that forms the jaw, and whose palate arch is locked to the skull by sutures that render the jaw immovable, an order lacking true pelvic fins and which consists of two families. Examples: puffers and moonfish."

"They're an insult to a frying pan!" the Canadian exclaimed.

"Are you grasping all this, Ned my friend?" asked the scholarly Conseil.

"Not a lick of it, Conseil my friend," the harpooner replied. "But keep going, because you fill me with fascination."

"As for cartilaginous fish," Conseil went on unflappably, "they consist of only three orders."

"Good news," Ned put in.

"Primo, the cyclostomes, whose jaws are fused into a flexible ring and whose gill openings are simply a large number of holes, an order consisting of only one family. Example: the lamprey."


"Secundo, the selacians, with gills resembling those of the cyclostomes but whose lower jaw is free-moving. This order, which is the most important in the class, consists of two families. Examples: the ray and the shark."

"What!" Ned Land exclaimed. "Rays and man-eaters in the same order? Well, Conseil my friend, on behalf of the rays, I wouldn't advise you to put them in the same fish tank!"

"Tertio," Conseil replied, "the sturionians, whose gill opening is the usual single slit adorned with a gill cover, an order consisting of four genera. Example: the sturgeon."

"Ah, Conseil my friend, you saved the best for last, in my opinion anyhow! And that's all of 'em?"

"Yes, my gallant Ned," Conseil replied. "And note well, even when one has grasped all this, one still knows next to nothing, because these families are subdivided into genera, subgenera, species, varieties--"

"All right, Conseil my friend," the harpooner said, leaning toward the glass panel, "here come a couple of your
"Yes! Fish!" Conseil exclaimed. "One would think he was in front of an aquarium!"
"No," I replied, "because an aquarium is nothing more than a cage, and these fish are as free as birds in the air!"
"Well, Conseil my friend, identify them! Start naming them!" Ned Land exclaimed.
"Me?" Conseil replied. "I'm unable to! That's my employer's bailiwick!"

And in truth, although the fine lad was a classifying maniac, he was no naturalist, and I doubt that he could tell a bonito from a tuna. In short, he was the exact opposite of the Canadian, who knew nothing about classification but could instantly put a name to any fish.

"A triggerfish," I said.
"It's a Chinese triggerfish," Ned Land replied.
"Genus Balistes, family Scleroderma, order Plectognatha," Conseil muttered.

Assuredly, Ned and Conseil in combination added up to one outstanding naturalist.

The Canadian was not mistaken. Cavorting around the Nautilus was a school of triggerfish with flat bodies, grainy skins, armed with stings on their dorsal fins, and with four prickly rows of quills quivering on both sides of their tails. Nothing could have been more wonderful than the skin covering them: white underneath, gray above, with spots of gold sparkling in the dark eddies of the waves. Around them, rays were undulating like sheets flapping in the wind, and among these I spotted, much to my glee, a Chinese ray, yellowish on its topside, a dainty pink on its belly, and armed with three stings behind its eyes; a rare species whose very existence was still doubted in Lacépède's day, since that pioneering classifier of fish had seen one only in a portfolio of Japanese drawings.

For two hours a whole aquatic army escorted the Nautilus. In the midst of their leaping and cavorting, while they competed with each other in beauty, radiance, and speed, I could distinguish some green wrasse, bewhiskered mullet marked with pairs of black lines, white gobies from the genus Eleotris with curved caudal fins and violet spots on the back, wonderful Japanese mackerel from the genus Scomber with blue bodies and silver heads, glittering azure goldfish whose name by itself gives their full description, several varieties of porgy or gilthead (some banded gilthead with fins variously blue and yellow, some with horizontal heraldic bars and enhanced by a black strip around their caudal area, some with color zones and elegantly corseted in their six waistbands), trumpetfish with flutelike beaks that looked like genuine seafaring woodcocks and were sometimes a meter long, Japanese salamanders, serpentine moray eels from the genus Echidna that were six feet long with sharp little eyes and a huge mouth bristling with teeth; etc.

Our wonderment stayed at an all-time fever pitch. Our exclamations were endless. Ned identified the fish, Conseil classified them, and as for me, I was in ecstasy over the verve of their movements and the beauty of their forms. Never before had I been given the chance to glimpse these animals alive and at large in their native element.

Given such a complete collection from the seas of Japan and China, I won't mention every variety that passed before our dazzled eyes. More numerous than birds in the air, these fish raced right up to us, no doubt attracted by the brilliant glow of our electric beacon.

Suddenly daylight appeared in the lounge. The sheet-iron panels slid shut. The magical vision disappeared. But for a good while I kept dreaming away, until the moment my eyes focused on the instruments hanging on the wall. The compass still showed our heading as east-northeast, the pressure gauge indicated a pressure of five atmospheres (corresponding to a depth of fifty meters), and the electric log gave our speed as fifteen miles per hour.

I waited for Captain Nemo. But he didn't appear. The clock marked the hour of five.

Ned Land and Conseil returned to their cabin. As for me, I repaired to my stateroom. There I found dinner ready for me. It consisted of turtle soup made from the daintiest hawksbill, a red mullet with white, slightly flaky flesh, whose liver, when separately prepared, makes delicious eating, plus loin of imperial angelfish, whose flavor struck me as even better than salmon.

I spent the evening in reading, writing, and thinking. Then drowsiness overtook me, I stretched out on my eelgrass mattress, and I fell into a deep slumber, while the Nautilus glided through the swiftly flowing Black Current.
CHAPTER 15

An Invitation in Writing

THE NEXT DAY, November 9, I woke up only after a long, twelve-hour slumber. Conseil, a creature of habit, came to ask “how master’s night went,” and to offer his services. He had left his Canadian friend sleeping like a man who had never done anything else.

I let the gallant lad babble as he pleased, without giving him much in the way of a reply. I was concerned about Captain Nemo’s absence during our session the previous afternoon, and I hoped to see him again today.

Soon I had put on my clothes, which were woven from strands of seashell tissue. More than once their composition provoked comments from Conseil. I informed him that they were made from the smooth, silken filaments with which the fan mussel, a type of seashell quite abundant along Mediterranean beaches, attaches itself to rocks. In olden times, fine fabrics, stockings, and gloves were made from such filaments, because they were both very soft and very warm. So the Nautilus’s crew could dress themselves at little cost, without needing a thing from cotton growers, sheep, or silkworms on shore.

As soon as I was dressed, I made my way to the main lounge. It was deserted.

I dove into studying the conchological treasures amassed inside the glass cases. I also investigated the huge plant albums that were filled with the rarest marine herbs, which, although they were pressed and dried, still kept their wonderful colors. Among these valuable water plants, I noted various seaweed: some Cladostephus verticillatus, peacock’s tails, fig-leafed caulerpa, grain-bearing beauty bushes, delicate rosetangle tinted scarlet, sea colander arranged into fan shapes, mermaid’s cups that looked like the caps of squat mushrooms and for years had been classified among the zoophytes; in short, a complete series of algae.

The entire day passed without my being honored by a visit from Captain Nemo. The panels in the lounge didn't open. Perhaps they didn't want us to get tired of these beautiful things.

The Nautilus kept to an east-northeasterly heading, a speed of twelve miles per hour, and a depth between fifty and sixty meters.

Next day, November 10: the same neglect, the same solitude. I didn't see a soul from the crew. Ned and Conseil spent the better part of the day with me. They were astonished at the captain’s inexplicable absence. Was this eccentric man ill? Did he want to change his plans concerning us?

But after all, as Conseil noted, we enjoyed complete freedom, we were daintily and abundantly fed. Our host had kept to the terms of his agreement. We couldn't complain, and moreover the very uniqueness of our situation had such generous rewards in store for us, we had no grounds for criticism.

That day I started my diary of these adventures, which has enabled me to narrate them with the most scrupulous accuracy; and one odd detail: I wrote it on paper manufactured from marine eelgrass.

Early in the morning on November 11, fresh air poured through the Nautilus’s interior, informing me that we had returned to the surface of the ocean to renew our oxygen supply. I headed for the central companionway and climbed onto the platform.

It was six o’clock. I found the weather overcast, the sea gray but calm. Hardly a billow. I hoped to encounter Captain Nemo there—would he come? I saw only the helmsman imprisoned in his glass-windowed pilothouse. Seated on the ledge furnished by the hull of the skiff, I inhaled the sea’s salty aroma with great pleasure.

Little by little, the mists were dispersed under the action of the sun’s rays. The radiant orb cleared the eastern
horizon. Under its gaze, the sea caught on fire like a trail of gunpowder. Scattered on high, the clouds were colored
in bright, wonderfully shaded hues, and numerous "ladyfingers" warned of daylong winds.*

*Author's Note: "Ladyfingers" are small, thin, white clouds with ragged edges.

But what were mere winds to this Nautilus, which no storms could intimidate!

So I was marveling at this delightful sunrise, so life-giving and cheerful, when I heard someone climbing onto
the platform.

I was prepared to greet Captain Nemo, but it was his chief officer who appeared--whom I had already met during
our first visit with the captain. He advanced over the platform, not seeming to notice my presence. A powerful
spyglass to his eye, he scrutinized every point of the horizon with the utmost care. Then, his examination over, he
approached the hatch and pronounced a phrase whose exact wording follows below. I remember it because, every
morning, it was repeated under the same circumstances. It ran like this:

"Nautron respoc lorni virch."

What it meant I was unable to say.

These words pronounced, the chief officer went below again. I thought the Nautilus was about to resume its
underwater navigating. So I went down the hatch and back through the gangways to my stateroom.

Five days passed in this way with no change in our situation. Every morning I climbed onto the platform. The
same phrase was pronounced by the same individual. Captain Nemo did not appear.

I was pursuing the policy that we had seen the last of him, when on November 16, while reentering my
stateroom with Ned and Conseil, I found a note addressed to me on the table.

I opened it impatiently. It was written in a script that was clear and neat but a bit "Old English" in style, its
characters reminding me of German calligraphy.

The note was worded as follows:

Professor Aronnax
Aboard the Nautilus
November 16, 1867

Captain Nemo invites Professor Aronnax on a hunting trip that will take place tomorrow morning in his Crespo
Island forests. He hopes nothing will prevent the professor from attending, and he looks forward with pleasure to the
professor's companions joining him.

CAPTAIN NEMO,
Commander of the Nautilus.

"A hunting trip!" Ned exclaimed.
"And in his forests on Crespo Island!" Conseil added.
"But does this mean the old boy goes ashore?" Ned Land went on.
"That seems to be the gist of it," I said, rereading the letter.
"Well, we've got to accept!" the Canadian answered. "Once we're on solid ground, we'll figure out a course of
action. Besides, it wouldn't pain me to eat a couple slices of fresh venison!"

Without trying to reconcile the contradictions between Captain Nemo's professed horror of continents or islands
and his invitation to go hunting in a forest, I was content to reply:

"First let's look into this Crespo Island."

I consulted the world map; and in latitude 32 degrees 40' north and longitude 167 degrees 50' west, I found an
islet that had been discovered in 1801 by Captain Crespo, which old Spanish charts called Rocca de la Plata, in other
words, "Silver Rock." So we were about 1,800 miles from our starting point, and by a slight change of heading, the
Nautilus was bringing us back toward the southeast.

I showed my companions this small, stray rock in the middle of the north Pacific.
"If Captain Nemo does sometimes go ashore," I told them, "at least he only picks desert islands!"

Ned Land shook his head without replying; then he and Conseil left me. After supper was served me by the mute
and emotionless steward, I fell asleep; but not without some anxieties.

When I woke up the next day, November 17, I sensed that the Nautilus was completely motionless. I dressed
hurriedly and entered the main lounge.

Captain Nemo was there waiting for me. He stood up, bowed, and asked if it suited me to come along.
Since he made no allusion to his absence the past eight days, I also refrained from mentioning it, and I simply answered that my companions and I were ready to go with him.

"Only, sir," I added, "I'll take the liberty of addressing a question to you."

"Address away, Professor Aronnax, and if I'm able to answer, I will."

"Well then, captain, how is it that you've severed all ties with the shore, yet you own forests on Crespo Island?"

"Professor," the captain answered me, "these forests of mine don't bask in the heat and light of the sun. They aren't frequented by lions, tigers, panthers, or other quadrupeds. They're known only to me. They grow only for me. These forests aren't on land, they're actual underwater forests."

"Underwater forests!" I exclaimed.

"Yes, professor."

"And you're offering to take me to them?"

"Precisely."

"On foot?"

"Without getting your feet wet."

"While hunting?"

"While hunting."

"Rifles in hand?"

"Rifles in hand."

I stared at the Nautilus's commander with an air anything but flattering to the man.

"Assuredly," I said to myself, "he's contracted some mental illness. He's had a fit that's lasted eight days and isn't over even yet. What a shame! I liked him better eccentric than insane!"

These thoughts were clearly readable on my face; but Captain Nemo remained content with inviting me to follow him, and I did so like a man resigned to the worst.

We arrived at the dining room, where we found breakfast served.

"Professor Aronnax," the captain told me, "I beg you to share my breakfast without formality. We can chat while we eat. Because, although I promised you a stroll in my forests, I made no pledge to arrange for your encountering a restaurant there. Accordingly, eat your breakfast like a man who'll probably eat dinner only when it's extremely late."

I did justice to this meal. It was made up of various fish and some slices of sea cucumber, that praiseworthy zoophyte, all garnished with such highly appetizing seaweed as the Porphyra laciniata and the Laurencia primafetida. Our beverage consisted of clear water to which, following the captain's example, I added some drops of a fermented liquor extracted by the Kamchatka process from the seaweed known by name as Rhodymenia palmata.

At first Captain Nemo ate without pronouncing a single word. Then he told me:

"Professor, when I proposed that you go hunting in my Crespo forests, you thought I was contradicting myself. When I informed you that it was an issue of underwater forests, you thought I'd gone insane. Professor, you must never make snap judgments about your fellow man."

"But, captain, believe me--"

"Kindly listen to me, and you'll see if you have grounds for accusing me of insanity or self-contradiction."

"I'm all attention."

"Professor, you know as well as I do that a man can live underwater so long as he carries with him his own supply of breathable air. For underwater work projects, the workman wears a waterproof suit with his head imprisoned in a metal capsule, while he receives air from above by means of force pumps and flow regulators."

"That's the standard equipment for a diving suit," I said.

"Correct, but under such conditions the man has no freedom. He's attached to a pump that sends him air through an india-rubber hose; it's an actual chain that fetters him to the shore, and if we were to be bound in this way to the Nautilus, we couldn't go far either."

"Then how do you break free?" I asked.

"We use the Rouquayrol-Denayrouze device, invented by two of your fellow countrymen but refined by me for my own special uses, thereby enabling you to risk these new physiological conditions without suffering any organic disorders. It consists of a tank built from heavy sheet iron in which I store air under a pressure of fifty atmospheres. This tank is fastened to the back by means of straps, like a soldier's knapsack. Its top part forms a box where the air is regulated by a bellows mechanism and can be released only at its proper tension. In the Rouquayrol device that has been in general use, two india-rubber hoses leave this box and feed to a kind of tent that imprisons the operator's nose and mouth; one hose is for the entrance of air to be inhaled, the other for the exit of air to be exhaled, and the tongue closes off the former or the latter depending on the breather's needs. But in my case, since I face considerable pressures at the bottom of the sea, I needed to enclose my head in a copper sphere, like those found on standard
diving suits, and the two hoses for inhalation and exhalation now feed to that sphere."

"That's perfect, Captain Nemo, but the air you carry must be quickly depleted; and once it contains no more than 15% oxygen, it becomes unfit for breathing."

"Surely, but as I told you, Professor Aronnax, the Nautilus's pumps enable me to store air under considerable pressure, and given this circumstance, the tank on my diving equipment can supply breathable air for nine or ten hours."

"I've no more objections to raise," I replied. "I'll only ask you, captain: how can you light your way at the bottom of the ocean?"

"With the Ruhmkorff device, Professor Aronnax. If the first is carried on the back, the second is fastened to the belt. It consists of a Bunsen battery that I activate not with potassium dichromate but with sodium. An induction coil gathers the electricity generated and directs it to a specially designed lantern. In this lantern one finds a glass spiral that contains only a residue of carbon dioxide gas. When the device is operating, this gas becomes luminous and gives off a continuous whitish light. Thus provided for, I breathe and I see."

"Captain Nemo, to my every objection you give such crushing answers, I'm afraid to entertain a single doubt. However, though I have no choice but to accept both the Rouquayrol and Ruhmkorff devices, I'd like to register some reservations about the rifle with which you'll equip me."

"But it isn't a rifle that uses gunpowder," the captain replied.

"Then it's an air gun?"

"Surely. How can I make gunpowder on my ship when I have no saltpeter, sulfur, or charcoal?"

"Even so," I replied, "to fire underwater in a medium that's 855 times denser than air, you'd have to overcome considerable resistance."

"That doesn't necessarily follow. There are certain Fulton-style guns perfected by the Englishmen Philippe-Coles and Burley, the Frenchman Furcy, and the Italian Landi; they're equipped with a special system of airtight fastenings and can fire in underwater conditions. But I repeat: having no gunpowder, I've replaced it with air at high pressure, which is abundantly supplied me by the Nautilus's pumps."

"But this air must be swiftly depleted."

"Well, in a pinch can't my Rouquayrol tank supply me with more? All I have to do is draw it from an ad hoc spigot.* Besides, Professor Aronnax, you'll see for yourself that during these underwater hunting trips, we make no great expenditure of either air or bullets."

*Latin: a spigot "just for that purpose." Ed.

"But it seems to me that in this semidarkness, amid this liquid that's so dense in comparison to the atmosphere, a gunshot couldn't carry far and would prove fatal only with difficulty!"

"On the contrary, sir, with this rifle every shot is fatal; and as soon as the animal is hit, no matter how lightly, it falls as if struck by lightning."

"Why?"

"Because this rifle doesn't shoot ordinary bullets but little glass capsules invented by the Austrian chemist Leniebroek, and I have a considerable supply of them. These glass capsules are covered with a strip of steel and weighted with a lead base; they're genuine little Leyden jars charged with high-voltage electricity. They go off at the slightest impact, and the animal, no matter how strong, drops dead. I might add that these capsules are no bigger than number 4 shot, and the chamber of any ordinary rifle could hold ten of them."

"I'll quit debating," I replied, getting up from the table. "And all that's left is for me to shoulder my rifle. So where you go, I'll go."

Captain Nemo led me to the Nautilus's stern, and passing by Ned and Conseil's cabin, I summoned my two companions, who instantly followed us.

Then we arrived at a cell located within easy access of the engine room; in this cell we were to get dressed for our stroll.

CHAPTER 16

Strolling the Plains
THIS CELL, properly speaking, was the Nautilus's arsenal and wardrobe. Hanging from its walls, a dozen diving outfits were waiting for anybody who wanted to take a stroll.

After seeing these, Ned Land exhibited an obvious distaste for the idea of putting one on.

"But my gallant Ned," I told him, "the forests of Crespo Island are simply underwater forests!"

"Oh great!" put in the disappointed harpooner, watching his dreams of fresh meat fade away. "And you, Professor Aronnax, are you going to stick yourself inside these clothes?"

"It has to be, Mr. Ned."

"Have it your way, sir," the harpooner replied, shrugging his shoulders. "But speaking for myself, I'll never get into those things unless they force me!"

"No one will force you, Mr. Land," Captain Nemo said.

"And is Conseil going to risk it?" Ned asked.

"Where master goes, I go," Conseil replied.

At the captain's summons, two crewmen came to help us put on these heavy, waterproof clothes, made from seamless india rubber and expressly designed to bear considerable pressures. They were like suits of armor that were both yielding and resistant, you might say. These clothes consisted of jacket and pants. The pants ended in bulky footwear adorned with heavy lead soles. The fabric of the jacket was reinforced with copper mail that shielded the chest, protected it from the water's pressure, and allowed the lungs to function freely; the sleeves ended in supple gloves that didn't impede hand movements.

These perfected diving suits, it was easy to see, were a far cry from such misshapen costumes as the cork breastplates, leather jumpers, seagoing tunics, barrel helmets, etc., invented and acclaimed in the 18th century.

Conseil and I were soon dressed in these diving suits, as were Captain Nemo and one of his companions—a herculean type who must have been prodigiously strong. All that remained was to encase one's head in its metal sphere. But before proceeding with this operation, I asked the captain for permission to examine the rifles set aside for us.

One of the Nautilus's men presented me with a streamlined rifle whose butt was boilerplate steel, hollow inside, and of fairly large dimensions. This served as a tank for the compressed air, which a trigger-operated valve could release into the metal chamber. In a groove where the butt was heaviest, a cartridge clip held some twenty electric bullets that, by means of a spring, automatically took their places in the barrel of the rifle. As soon as one shot had been fired, another was ready to go off.

"Captain Nemo," I said, "this is an ideal, easy-to-use weapon. I ask only to put it to the test. But how will we reach the bottom of the sea?"

"Right now, professor, the Nautilus is aground in ten meters of water, and we've only to depart."

"But how will we set out?"

"You'll see."

Captain Nemo inserted his cranium into its spherical headgear. Conseil and I did the same, but not without hearing the Canadian toss us a sarcastic "happy hunting." On top, the suit ended in a collar of threaded copper onto which the metal helmet was screwed. Three holes, protected by heavy glass, allowed us to see in any direction with simply a turn of the head inside the sphere. Placed on our backs, the Rouquayrol device went into operation as soon as it was in position, and for my part, I could breathe with ease.

The Ruhmkorff lamp hanging from my belt, my rifle in hand, I was ready to go forth. But in all honesty, while imprisoned in these heavy clothes and nailed to the deck by my lead soles, it was impossible for me to take a single step.

But this circumstance had been foreseen, because I felt myself propelled into a little room adjoining the wardrobe. Towed in the same way, my companions went with me. I heard a door with watertight seals close after us, and we were surrounded by profound darkness.

After some minutes a sharp hissing reached my ears. I felt a distinct sensation of cold rising from my feet to my chest. Apparently a stopcock inside the boat was letting in water from outside, which overran us and soon filled up the room. Contrived in the Nautilus's side, a second door then opened. We were lit by a subdued light. An instant later our feet were treading the bottom of the sea.

And now, how can I convey the impressions left on me by this stroll under the waters. Words are powerless to describe such wonders! When even the painter's brush can't depict the effects unique to the liquid element, how can the writer's pen hope to reproduce them?

Captain Nemo walked in front, and his companion followed us a few steps to the rear. Conseil and I stayed next to each other, as if daydreaming that through our metal carapaces, a little polite conversation might still be possible!
Already I no longer felt the bulkiness of my clothes, footwear, and air tank, nor the weight of the heavy sphere inside which my head was rattling like an almond in its shell. Once immersed in water, all these objects lost a part of their weight equal to the weight of the liquid they displaced, and thanks to this law of physics discovered by Archimedes, I did just fine. I was no longer an inert mass, and I had, comparatively speaking, great freedom of movement.

Lighting up the seafloor even thirty feet beneath the surface of the ocean, the sun astonished me with its power. The solar rays easily crossed this aqueous mass and dispersed its dark colors. I could easily distinguish objects 100 meters away. Farther on, the bottom was tinted with fine shades of ultramarine; then, off in the distance, it turned blue and faded in the midst of a hazy darkness. Truly, this water surrounding me was just a kind of air, denser than the atmosphere on land but almost as transparent. Above me I could see the calm surface of the ocean.

We were walking on sand that was fine-grained and smooth, not wrinkled like beach sand, which preserves the impressions left by the waves. This dazzling carpet was a real mirror, throwing back the sun's rays with startling intensity. The outcome: an immense vista of reflections that penetrated every liquid molecule. Will anyone believe me if I assert that at this thirty-foot depth, I could see as if it was broad daylight?

For a quarter of an hour, I trod this blazing sand, which was strewn with tiny crumbs of seashell. Looming like a long reef, the Nautilus's hull disappeared little by little, but when night fell in the midst of the waters, the ship's beacon would surely facilitate our return on board, since its rays carried with perfect distinctness. This effect is difficult to understand for anyone who has never seen light beams so sharply defined on shore. There the dust that saturates the air gives such rays the appearance of a luminous fog; but above water as well as underwater, shafts of electric light are transmitted with incomparable clarity.

Meanwhile we went ever onward, and these vast plains of sand seemed endless. My hands parted liquid curtains that closed again behind me, and my footsteps faded swiftly under the water's pressure.

Soon, scarcely blurred by their distance from us, the forms of some objects took shape before my eyes. I recognized the lower slopes of some magnificent rocks carpeted by the finest zoophyte specimens, and right off, I was struck by an effect unique to this medium.

By then it was ten o'clock in the morning. The sun's rays hit the surface of the waves at a fairly oblique angle, decomposing by refraction as though passing through a prism; and when this light came in contact with flowers, rocks, buds, seashells, and polyps, the edges of these objects were shaded with all seven hues of the solar spectrum. This riot of rainbow tints was a wonder, a feast for the eyes: a genuine kaleidoscope of red, green, yellow, orange, violet, indigo, and blue; in short, the whole palette of a color-happy painter! If only I had been able to share with Conseil the intense sensations rising in my brain, competing with him in exclamations of wonderment! If only I had known, like Captain Nemo and his companion, how to exchange thoughts by means of prearranged signals! So, for lack of anything better, I talked to myself: I declaimed inside this copper box that topped my head, spending more air on empty words than was perhaps advisable.

Conseil, like me, had stopped before this splendid sight. Obviously, in the presence of these zoophyte and mollusk specimens, the fine lad was classifying his head off. Polyps and echinoderms abounded on the seafloor: various isis coral, corumarian coral living in isolation, tufts of virginal genus Oculina formerly known by the name "white coral," prickly fungus coral in the shape of mushrooms, sea anemone holding on by their muscular disks, providing a literal flowerbed adorned by jellyfish from the genus Porpita wearing collars of azure tentacles, and starfish that spangled the sand, including veinalike feather stars from the genus Asterophyton that were like fine lace embroidered by the hands of water nymphs, their festoons swaying to the faint undulations caused by our walking. It filled me with real chagrin to crush underfoot the gleaming mollusk samples that littered the seafloor by the thousands: concentric comb shells, hammer shells, coquina (seashells that actually hop around), top-shell snails, red helmet shells, angel-wing conchs, sea hares, and so many other exhibits from this inexhaustible ocean. But we had to keep walking, and we went forward while overhead there scudded schools of Portuguese men-of-war that let their ultramarine tentacles drift in their wakes, medusas whose milky white or dainty pink parasols were festooned with azure tassels and shaded us from the sun's rays, plus jellyfish of the species Pelagia panopyra that, in the dark, would have strewn our path with phosphorescent glimmers!

All these wonders I glimpsed in the space of a quarter of a mile, barely pausing, following Captain Nemo whose gestures kept beckoning me onward. Soon the nature of the seafloor changed. The plains of sand were followed by a bed of that viscous slime Americans call "ooze," which is composed exclusively of seashells rich in limestone or silica. Then we crossed a prairie of algae, open-sea plants that the waters hadn't yet torn loose, whose vegetation grew in wild profusion. Soft to the foot, these densely textured lawns would have rivaled the most luxurious carpets woven by the hand of man. But while this greenery was sprawling under our steps, it didn't neglect us overhead. The surface of the water was crisscrossed by a floating arbor of marine plants belonging to that superabundant algae family that numbers more than 2,000 known species. I saw long ribbons of fucus drifting above me, some globular,
others tubular: Laurencia, Cladostephus with the slenderest foliage, Rhodymenia palmata resembling the fan shapes of cactus. I observed that green-colored plants kept closer to the surface of the sea, while reds occupied a medium depth, which left blacks and browns in charge of designing gardens and flowerbeds in the ocean's lower strata.

These algae are a genuine prodigy of creation, one of the wonders of world flora. This family produces both the biggest and smallest vegetables in the world. Because, just as 40,000 near-invisible buds have been counted in one five-square-millimeter space, so also have fucus plants been gathered that were over 500 meters long!

We had been gone from the Nautilus for about an hour and a half. It was almost noon. I spotted this fact in the perpendicularity of the sun's rays, which were no longer refracted. The magic of these solar colors disappeared little by little, with emerald and sapphire shades vanishing from our surroundings altogether. We walked with steady steps that rang on the seafloor with astonishing intensity. The tiniest sounds were transmitted with a speed to which the ear is unaccustomed on shore. In fact, water is a better conductor of sound than air, and under the waves noises carry four times as fast.

Just then the seafloor began to slope sharply downward. The light took on a uniform hue. We reached a depth of 100 meters, by which point we were undergoing a pressure of ten atmospheres. But my diving clothes were built along such lines that I never suffered from this pressure. I felt only a certain tightness in the joints of my fingers, and even this discomfort soon disappeared. As for the exhaustion bound to accompany a two-hour stroll in such unfamiliar trappings—it was nil. Helped by the water, my movements were executed with startling ease.

Arriving at this 300-foot depth, I still detected the sun's rays, but just barely. Their intense brilliance had been followed by a reddish twilight, a midpoint between day and night. But we could see well enough to find our way, and it still wasn't necessary to activate the Ruhmkorff device.

Just then Captain Nemo stopped. He waited until I joined him, then he pointed a finger at some dark masses outlined in the shadows a short distance away.

"It's the forest of Crespo Island," I thought; and I was not mistaken.

CHAPTER 17

An Underwater Forest

WE HAD FINALLY arrived on the outskirts of this forest, surely one of the finest in Captain Nemo's immense domains. He regarded it as his own and had laid the same claim to it that, in the first days of the world, the first men had to their forests on land. Besides, who else could dispute his ownership of this underwater property? What other, bolder pioneer would come, ax in hand, to clear away its dark underbrush?

This forest was made up of big treelike plants, and when we entered beneath their huge arches, my eyes were instantly struck by the unique arrangement of their branches—an arrangement that I had never before encountered.

None of the weeds carpeting the seafloor, none of the branches bristling from the shrubbery, crept, or leaned, or stretched on a horizontal plane. They all rose right up toward the surface of the ocean. Every filament or ribbon, no matter how thin, stood ramrod straight. Fucus plants and creepers were growing in stiff perpendicular lines, governed by the density of the element that generated them. After I parted them with my hands, these otherwise motionless plants would shoot right back to their original positions. It was the regime of verticality.

I soon grew accustomed to this bizarre arrangement, likewise to the comparative darkness surrounding us. The seafloor in this forest was strewn with sharp chunks of stone that were hard to avoid. Here the range of underwater flora seemed pretty comprehensive to me, as well as more abundant than it might have been in the arctic or tropical zones, where such exhibits are less common. But for a few minutes I kept accidentally confusing the two kingdoms, mistaking zoophytes for water plants, animals for vegetables. And who hasn't made the same blunder? Flora and fauna are so closely associated in the underwater world!

I observed that all these exhibits from the vegetable kingdom were attached to the seafloor by only the most makeshift methods. They had no roots and didn't care which solid objects secured them, sand, shells, husks, or pebbles; they didn't ask their hosts for sustenance, just a point of purchase. These plants are entirely self-propagating, and the principle of their existence lies in the water that sustains and nourishes them. In place of leaves, most of them sprouted blades of unpredictable shape, which were confined to a narrow gamut of colors consisting only of pink, crimson, green, olive, tan, and brown. There I saw again, but not yet pressed and dried like the
Nautilus's specimens, some peacock's tails spread open like fans to stir up a cooling breeze, scarlet rosetangle, sea
tangle stretching out their young and edible shoots, twisting strings of kelp from the genus Nereocystis that bloomed
to a height of fifteen meters, bouquets of mermaid's cups whose stems grew wider at the top, and a number of other
open-sea plants, all without flowers. "It's an odd anomaly in this bizarre element!" as one witty naturalist puts it.
"The animal kingdom blossoms, and the vegetable kingdom doesn't!"

These various types of shrubbery were as big as trees in the temperate zones; in the damp shade between them,
there were clustered actual bushes of moving flowers, hedges of zoophytes in which there grew stony coral striped
with twisting furrows, yellowish sea anemone from the genus Caryophyllia with translucent tentacles, plus anemone
with grassy tufts from the genus Zoantharia; and to complete the illusion, minnows flitted from branch to branch like
a swarm of hummingbirds, while there rose underfoot, like a covey of snipe, yellow fish from the genus
Lepisocanthus with bristling jaws and sharp scales, flying gurnards, and pinecone fish.

Near one o'clock, Captain Nemo gave the signal to halt. Speaking for myself, I was glad to oblige, and we
stretched out beneath an arbor of winged kelp, whose long thin tendrils stood up like arrows. This short break was a delight. It lacked only the charm of conversation. But it was impossible to speak, impossible to reply. I simply nudged my big copper headpiece against Conseil's headpiece. I saw a happy gleam in
the gallant lad's eyes, and to communicate his pleasure, he jiggled around inside his carapace in the world's silliest
way.

After four hours of strolling, I was quite astonished not to feel any intense hunger. What kept my stomach in
such a good mood I'm unable to say. But, in exchange, I experienced that irresistible desire for sleep that comes over
every diver. Accordingly, my eyes soon closed behind their heavy glass windows and I fell into an uncontrollable
doze, which until then I had been able to fight off only through the movements of our walking. Captain Nemo and
his muscular companion were already stretched out in this clear crystal, setting us a fine naptime example.

How long I was sunk in this torpor I cannot estimate; but when I awoke, it seemed as if the sun were settling
toward the horizon. Captain Nemo was already up, and I had started to stretch my limbs, when an unexpected
apparition brought me sharply to my feet.

A few paces away, a monstrous, meter-high sea spider was staring at me with beady eyes, poised to spring at me.
Although my diving suit was heavy enough to protect me from this animal's bites, I couldn't keep back a shudder of
horror. Just then Conseil woke up, together with the Nautilus's sailor. Captain Nemo alerted his companion to this
hideous crustacean, which a swing of the rifle butt quickly brought down, and I watched the monster's horrible legs
writhing in dreadful convulsions.

This encounter reminded me that other, more daunting animals must be lurking in these dark reaches, and my
diving suit might not be adequate protection against their attacks. Such thoughts hadn't previously crossed my mind,
and I was determined to keep on my guard. Meanwhile I had assumed this rest period would be the turning point in
our stroll, but I was mistaken; and instead of heading back to the Nautilus, Captain Nemo continued his daring
excursion.

The seafloor kept sinking, and its significantly steeper slope took us to greater depths. It must have been nearly
three o'clock when we reached a narrow valley gouged between high, vertical walls and located 150 meters down.
Thanks to the perfection of our equipment, we had thus gone ninety meters below the limit that nature had, until
then, set on man's underwater excursions.

I say 150 meters, although I had no instruments for estimating this distance. But I knew that the sun's rays, even
in the clearest seas, could reach no deeper. So at precisely this point the darkness became profound. Not a single
object was visible past ten paces. Consequently, I had begun to grope my way when suddenly I saw the glow of an
intense white light. Captain Nemo had just activated his electric device. His companion did likewise. Conseil and I
followed suit. By turning a switch, I established contact between the induction coil and the glass spiral, and the sea,
lit up by our four lanterns, was illuminated for a radius of twenty-five meters.

Captain Nemo continued to plummet into the dark depths of this forest, whose shrubbery grew ever more sparse.
I observed that vegetable life was disappearing more quickly than animal life. The open-sea plants had already left
behind the increasingly arid seafloor, where a prodigious number of animals were still swarming: zoophytes,
articulates, mollusks, and fish.

While we were walking, I thought the lights of our Ruhmkorff devices would automatically attract some
inhabitants of these dark strata. But if they did approach us, at least they kept at a distance regrettable from the
hunter's standpoint. Several times I saw Captain Nemo stop and take aim with his rifle; then, after sighting down its
barrel for a few seconds, he would straighten up and resume his walk.

Finally, at around four o'clock, this marvelous excursion came to an end. A wall of superb rocks stood before us,
imposing in its sheer mass: a pile of gigantic stone blocks, an enormous granite cliffside pitted with dark caves but
not offering a single gradient we could climb up. This was the underpinning of Crespo Island. This was land.
The captain stopped suddenly. A gesture from him brought us to a halt, and however much I wanted to clear this wall, I had to stop. Here ended the domains of Captain Nemo. He had no desire to pass beyond them. Farther on lay a part of the globe he would no longer tread underfoot.

Our return journey began. Captain Nemo resumed the lead in our little band, always heading forward without hesitation. I noted that we didn't follow the same path in returning to the Nautilus. This new route, very steep and hence very arduous, quickly took us close to the surface of the sea. But this return to the upper strata wasn't so sudden that decompression took place too quickly, which could have led to serious organic disorders and given us those internal injuries so fatal to divers. With great promptness, the light reappeared and grew stronger; and the refraction of the sun, already low on the horizon, again ringed the edges of various objects with the entire color spectrum.

At a depth of ten meters, we walked amidst a swarm of small fish from every species, more numerous than birds in the air, more agile too; but no aquatic game worthy of a gunshot had yet been offered to our eyes.

Just then I saw the captain's weapon spring to his shoulder and track a moving object through the bushes. A shot went off, I heard a faint hissing, and an animal dropped a few paces away, literally struck by lightning.

It was a magnificent sea otter from the genus Enhydra, the only exclusively marine quadruped. One and a half meters long, this otter had to be worth a good high price. Its coat, chestnut brown above and silver below, would have made one of those wonderful fur pieces so much in demand in the Russian and Chinese markets; the fineness and luster of its pelt guaranteed that it would go for at least 2,000 francs. I was full of wonderment at this unusual mammal, with its circular head adorned by short ears, its round eyes, its white whiskers like those on a cat, its webbed and clawed feet, its bushy tail. Hunted and trapped by fishermen, this valuable carnivore has become extremely rare, and it takes refuge chiefly in the northernmost parts of the Pacific, where in all likelihood its species will soon be facing extinction.

Captain Nemo's companion picked up the animal, loaded it on his shoulder, and we took to the trail again.

For an hour plains of sand unrolled before our steps. Often the seafloor rose to within two meters of the surface of the water. I could then see our images clearly mirrored on the underside of the waves, but reflected upside down: above us there appeared an identical band that duplicated our every movement and gesture; in short, a perfect likeness of the quartet near which it walked, but with heads down and feet in the air.

Another unusual effect. Heavy clouds passed above us, forming and fading swiftly. But after thinking it over, I realized that these so-called clouds were caused simply by the changing densities of the long ground swells, and I even spotted the foaming "white caps" that their breaking crests were proliferating over the surface of the water. Lastly, I couldn't help seeing the actual shadows of large birds passing over our heads, swiftly skimming the surface of the sea.

On this occasion I witnessed one of the finest gunshots ever to thrill the marrow of a hunter. A large bird with a wide wingspan, quite clearly visible, approached and hovered over us. When it was just a few meters above the waves, Captain Nemo's companion took aim and fired. The animal dropped, electrocuted, and its descent brought it within reach of our adroit hunter, who promptly took possession of it. It was an albatross of the finest species, a wonderful specimen of these open-sea fowl.

This incident did not interrupt our walk. For two hours we were sometimes led over plains of sand, sometimes over prairies of seaweed that were quite arduous to cross. In all honesty, I was dead tired by the time I spotted a hazy wide wingspan, quite clearly visible, approached and hovered over us. When it was just a few meters above the waves, Captain Nemo's companion took aim and fired. The animal dropped, electrocuted, and its descent brought it within reach of our adroit hunter, who promptly took possession of it. It was an albatross of the finest species, a wonderful specimen of these open-sea fowl.

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Captain Nemo closed it after we reentered the first cell. Then he pressed a button. I heard pumps operating within
the ship, I felt the water lowering around me, and in a few moments the cell was completely empty. The inside door
opened, and we passed into the wardrobe.

There our diving suits were removed, not without difficulty; and utterly exhausted, faint from lack of food and
rest, I repaired to my stateroom, full of wonder at this startling excursion on the bottom of the sea.

CHAPTER 18

Four Thousand Leagues Under the Pacific

BY THE NEXT MORNING, November 18, I was fully recovered from my exhaustion of the day before, and I
climbed onto the platform just as the Nautilus's chief officer was pronouncing his daily phrase. It then occurred to
me that these words either referred to the state of the sea, or that they meant: "There's nothing in sight."

And in truth, the ocean was deserted. Not a sail on the horizon. The tips of Crespo Island had disappeared during
the night. The sea, absorbing every color of the prism except its blue rays, reflected the latter in every direction and
sported a wonderful indigo tint. The undulating waves regularly took on the appearance of watered silk with wide
stripes.

I was marveling at this magnificent ocean view when Captain Nemo appeared. He didn't seem to notice my
presence and began a series of astronomical observations. Then, his operations finished, he went and leaned his
elbows on the beacon housing, his eyes straying over the surface of the ocean.

Meanwhile some twenty of the Nautilus's sailors--all energetic, well-built fellows--climbed onto the platform.
They had come to pull up the nets left in our wake during the night. These seamen obviously belonged to different
nationalities, although indications of European physical traits could be seen in them all. If I'm not mistaken, I
recognized some Irishmen, some Frenchmen, a few Slavs, and a native of either Greece or Crete. Even so, these men
were frugal of speech and used among themselves only that bizarre dialect whose origin I couldn't even guess. So I
had to give up any notions of questioning them.

The nets were hauled on board. They were a breed of trawl resembling those used off the Normandy coast, huge
pouches held half open by a floating pole and a chain laced through the lower meshes. Trailing in this way from
these iron glove makers, the resulting receptacles scoured the ocean floor and collected every marine exhibit in their
path. That day they gathered up some unusual specimens from these fish-filled waterways: anglerfish whose comical
movements qualify them for the epithet "clowns," black Commerson anglers equipped with their antennas,
undulating triggerfish encircled by little red bands, bloated puffers whose venom is extremely insidious, some olive-
hued lampreys, snipefish covered with silver scales, cutlass fish whose electrocuting power equals that of the
electric eel and the electric ray, scaly featherbacks with brown crosswise bands, greenish codfish, several varieties
of goby, etc.; finally, some fish of larger proportions: a one-meter jack with a prominent head, several fine bonito from
the genus Scomber decked out in the colors blue and silver, and three magnificent tuna whose high speeds couldn't
save them from our trawl.

I estimate that this cast of the net brought in more than 1,000 pounds of fish. It was a fine catch but not
surprising. In essence, these nets stayed in our wake for several hours, incarcerating an entire aquatic world in
prisons made of thread. So we were never lacking in provisions of the highest quality, which the Nautilus's speed
and the allure of its electric light could continually replenish.

These various exhibits from the sea were immediately lowered down the hatch in the direction of the storage
lockers, some to be eaten fresh, others to be preserved.
After its fishing was finished and its air supply renewed, I thought the Nautilus would resume its underwater excursion, and I was getting ready to return to my stateroom, when Captain Nemo turned to me and said without further preamble:

"Look at this ocean, professor! Doesn't it have the actual gift of life? Doesn't it experience both anger and affection? Last evening it went to sleep just as we did, and there it is, waking up after a peaceful night!"

No hellos or good mornings for this gent! You would have thought this eccentric individual was simply continuing a conversation we'd already started!

"See!" he went on. "It's waking up under the sun's caresses! It's going to relive its daily existence! What a fascinating field of study lies in watching the play of its organism. It owns a pulse and arteries, it has spasms, and I side with the scholarly Commander Maury, who discovered that it has a circulation as real as the circulation of blood in animals."

I'm sure that Captain Nemo expected no replies from me, and it seemed pointless to pitch in with "Ah yes," "Exactly," or "How right you are!" Rather, he was simply talking to himself, with long pauses between sentences. He was meditating out loud.

"Yes," he said, "the ocean owns a genuine circulation, and to start it going, the Creator of All Things has only to increase its heat, salt, and microscopic animal life. In essence, heat creates the different densities that lead to currents and countercurrents. Evaporation, which is nil in the High Arctic regions and very active in equatorial zones, brings about a constant interchange of tropical and polar waters. What's more, I've detected those falling and rising currents that make up the ocean's true breathing. I've seen a molecule of salt water heat up at the surface, sink into the depths, reach maximum density at -2 degrees centigrade, then cool off, grow lighter, and rise again. At the poles you'll see the consequences of this phenomenon, and through this law of far-seeing nature, you'll understand why water can freeze only at the surface!"

As the captain was finishing his sentence, I said to myself: "The pole! Is this brazen individual claiming he'll take us even to that location?"

Meanwhile the captain fell silent and stared at the element he had studied so thoroughly and unceasingly. Then, going on:

"Salts," he said, "fill the sea in considerable quantities, professor, and if you removed all its dissolved saline content, you'd create a mass measuring 4,500,000 cubic leagues, which if it were spread all over the globe, would form a layer more than ten meters high. And don't think that the presence of these salts is due merely to some whim of nature. No. They make ocean water less open to evaporation and prevent winds from carrying off excessive amounts of steam, which, when condensing, would submerge the temperate zones. Salts play a leading role, the role of stabilizer for the general ecology of the globe!"

Captain Nemo stopped, straightened up, took a few steps along the platform, and returned to me:

"As for those billions of tiny animals," he went on, "those infusoria that live by the millions in one droplet of water, 800,000 of which are needed to weigh one milligram, their role is no less important. They absorb the marine salts, they assimilate the solid elements in the water, and since they create coral and madrepores, they're the true builders of limestone continents! And so, after they've finished depriving our water drop of its mineral nutrients, the droplet gets lighter, rises to the surface, there absorbs more salts left behind through evaporation, gets heavier, sinks again, and brings those tiny animals new elements to absorb. The outcome: a double current, rising and falling, constant movement, constant life! More intense than on land, more abundant, more infinite, such life blooms in every part of this ocean, an element fatal to man, they say, but vital to myriads of animals--and to me!"

When Captain Nemo spoke in this way, he was transfigured, and he filled me with extraordinary excitement.

"There," he added, "out there lies true existence! And I can imagine the founding of nautical towns, clusters of underwater households that, like the Nautilus, would return to the surface of the sea to breathe each morning, free towns if ever there were, independent cities! Then again, who knows whether some tyrant..."

Captain Nemo finished his sentence with a vehement gesture. Then, addressing me directly, as if to drive away an ugly thought:

"Professor Aronnax," he asked me, "do you know the depth of the ocean floor?"

"At least, captain, I know what the major soundings tell us."

"Could you quote them to me, so I can double-check them as the need arises?"

"Here," I replied, "are a few of them that stick in my memory. If I'm not mistaken, an average depth of 8,200 meters was found in the north Atlantic, and 2,500 meters in the Mediterranean. The most remarkable soundings were taken in the south Atlantic near the 35th parallel, and they gave 12,000 meters, 14,091 meters, and 15,149 meters. All in all, it's estimated that if the sea bottom were made level, its average depth would be about seven kilometers."

"Well, professor," Captain Nemo replied, "we'll show you better than that, I hope. As for the average depth of
this part of the Pacific, I'll inform you that it's a mere 4,000 meters."

This said, Captain Nemo headed to the hatch and disappeared down the ladder. I followed him and went back to
the main lounge. The propeller was instantly set in motion, and the log gave our speed as twenty miles per hour.

Over the ensuing days and weeks, Captain Nemo was very frugal with his visits. I saw him only at rare intervals.
His chief officer regularly fixed the positions I found reported on the chart, and in such a way that I could exactly
plot the Nautilus's course.

Conseil and Land spent the long hours with me. Conseil had told his friend about the wonders of our undersea
stroll, and the Canadian was sorry he hadn't gone along. But I hoped an opportunity would arise for a visit to the
forests of Oceania.

Almost every day the panels in the lounge were open for some hours, and our eyes never tired of probing the
mysteries of the undersea world.

The Nautilus's general heading was southeast, and it stayed at a depth between 100 and 150 meters. However,
from lord-knows-what whim, one day it did a diagonal dive by means of its slanting fins, reaching strata located
2,000 meters underwater. The thermometer indicated a temperature of 4.25 degrees centigrade, which at this depth
seemed to be a temperature common to all latitudes.

On November 26, at three o'clock in the morning, the Nautilus cleared the Tropic of Cancer at longitude 172
degrees. On the 27th it passed in sight of the Hawaiian Islands, where the famous Captain Cook met his death on
February 14, 1779. By then we had fared 4,860 leagues from our starting point. When I arrived on the platform that
morning, I saw the Island of Hawaii two miles to leeward, the largest of the seven islands making up this group. I
could clearly distinguish the tilled soil on its outskirts, the various mountain chains running parallel with its
coastline, and its volcanoes, crowned by Mauna Kea, whose elevation is 5,000 meters above sea level. Among other
specimens from these waterways, our nets brought up some peacock-tailed flabellarian coral, polyps flattened into
stylish shapes and unique to this part of the ocean.

The Nautilus kept to its southeasterly heading. On December 1 it cut the equator at longitude 142 degrees, and
on the 4th of the same month, after a quick crossing marked by no incident, we raised the Marquesas Islands. Three
miles off, in latitude 8 degrees 57' south and longitude 139 degrees 32' west, I spotted Martin Point on Nuku Hiva,
chief member of this island group that belongs to France. I could make out only its wooded mountains on the
horizon, because Captain Nemo hated to hug shore. There our nets brought up some fine fish samples: dolphinfish
with azure fins, gold tails, and flesh that's unrivaled in the entire world, wrasse from the genus Hologymnosus that
were nearly denuded of scales but exquisite in flavor, knifejaws with bony beaks, yellowish albacore that were as
tasty as bonito, all fish worth classifying in the ship's pantry.

After leaving these delightful islands to the protection of the French flag, the Nautilus covered about 2,000 miles
from December 4 to the 11th. Its navigating was marked by an encounter with an immense school of squid, unusual
mollusks that are near neighbors of the cuttlefish. French fishermen give them the name "cuckoldfish," and they
belong to the class Cephalopoda, family Dibranchiata, consisting of themselves together with cuttlefish and
argonauts. The naturalists of antiquity made a special study of them, and these animals furnished many ribald figures
of speech for soapbox orators in the Greek marketplace, as well as excellent dishes for the tables of rich citizens, if
we're to believe Athenaeus, a Greek physician predating Galen.

It was during the night of December 9-10 that the Nautilus encountered this army of distinctly nocturnal
mollusks. They numbered in the millions. They were migrating from the temperate zones toward zones still warmer,
following the itineraries of herring and sardines. We stared at them through our thick glass windows: they swam
backward with tremendous speed, moving by means of their locomotive tubes, chasing fish and mollusks, eating the
little ones, eaten by the big ones, and tossing in indescribable confusion the ten feet that nature has rooted in their
heads like a hairpiece of pneumatic snakes. Despite its speed, the Nautilus navigated for several hours in the midst
of this school of animals, and its nets brought up an incalculable number, among which I recognized all nine species
that Professor Orbigny has classified as native to the Pacific Ocean.

During this crossing, the sea continually lavished us with the most marvelous sights. Its variety was infinite. It
changed its setting and decor for the mere pleasure of our eyes, and we were called upon not simply to contemplate
the works of our Creator in the midst of the liquid element, but also to probe the ocean's most daunting mysteries.

During the day of December 11, I was busy reading in the main lounge. Ned Land and Conseil were observing
the luminous waters through the gaping panels. The Nautilus was motionless. Its ballast tanks full, it was sitting at a
depth of 1,000 meters in a comparatively unpopulated region of the ocean where only larger fish put in occasional
appearances.

Just then I was studying a delightful book by Jean Macé, The Servants of the Stomach, and savoring its
ingenious teachings, when Conseil interrupted my reading.

"Would master kindly come here for an instant?" he said to me in an odd voice.
"What is it, Conseil?"
"It's something that master should see."

I stood up, went, leaned on my elbows before the window, and I saw it.

In the broad electric daylight, an enormous black mass, quite motionless, hung suspended in the midst of the waters. I observed it carefully, trying to find out the nature of this gigantic cetacean. Then a sudden thought crossed my mind.

"A ship!" I exclaimed.

"Yes," the Canadian replied, "a disabled craft that's sinking straight down!"

Ned Land was not mistaken. We were in the presence of a ship whose severed shrouds still hung from their clasps. Its hull looked in good condition, and it must have gone under only a few hours before. The stumps of three masts, chopped off two feet above the deck, indicated a flooding ship that had been forced to sacrifice its masting. But it had heeled sideways, filling completely, and it was listing to port even yet. A sorry sight, this carcass lost under the waves, but sorrier still was the sight on its deck, where, lashed with ropes to prevent their being washed overboard, some human corpses still lay! I counted four of them—four men, one still standing at the helm—then a woman, halfway out of a skylight on the afterdeck, holding a child in her arms. This woman was young. Under the brilliant lighting of the Nautilus's rays, I could make out her features, which the water hadn't yet decomposed. With a supreme effort, she had lifted her child above her head, and the poor little creature's arms were still twined around its mother's neck! The postures of the four seamen seemed ghastly to me, twisted from convulsive movements, as if making a last effort to break loose from the ropes that bound them to their ship. And the helmsman, standing alone, calmer, his face smooth and serious, his grizzled hair plastered to his brow, his hands clutching the wheel, seemed even yet to be guiding his wrecked three-master through the ocean depths!

What a scene! We stood dumbstruck, hearts pounding, before this shipwreck caught in the act, as if it had been photographed in its final moments, so to speak! And already I could see enormous sharks moving in, eyes ablaze, drawn by the lure of human flesh!

Meanwhile, turning, the Nautilus made a circle around the sinking ship, and for an instant I could read the board on its stern:

The Florida
Sunderland, England

CHAPTER 19

Vanikoro

THIS DREADFUL SIGHT was the first of a whole series of maritime catastrophes that the Nautilus would encounter on its run. When it plied more heavily traveled seas, we often saw wrecked hulls rotting in midwater, and farther down, cannons, shells, anchors, chains, and a thousand other iron objects rusting away.

Meanwhile, continuously swept along by the Nautilus, where we lived in near isolation, we raised the Tuamotu Islands on December 11, that old "dangerous group" associated with the French global navigator Commander Bougainville; it stretches from Ducie Island to Lazareff Island over an area of 500 leagues from the east-southeast to the west-northwest, between latitude 13 degrees 30' and 23 degrees 50' south, and between longitude 125 degrees 30' and 151 degrees 30' west. This island group covers a surface area of 370 square leagues, and it's made up of some sixty subgroups, among which we noted the Gambier group, which is a French protectorate. These islands are coral formations. Thanks to the work of polyps, a slow but steady upheaval will someday connect these islands to each other. Later on, this new island will be fused to its neighboring island groups, and a fifth continent will stretch from New Zealand and New Caledonia as far as the Marquesas Islands.
The day I expounded this theory to Captain Nemo, he answered me coldly:
"The earth doesn't need new continents, but new men!"

Sailors' luck led the Nautilus straight to Reao Island, one of the most unusual in this group, which was discovered in 1822 by Captain Bell aboard the Minerva. So I was able to study the madreporic process that has created the islands in this ocean.

Madrepores, which one must guard against confusing with precious coral, clothe their tissue in a limestone crust, and their variations in structure have led my famous mentor Professor Milne-Edwards to classify them into five divisions. The tiny microscopic animals that secrete this polypary live by the billions in the depths of their cells. Their limestone deposits build up into rocks, reefs, islets, islands. In some places, they form atolls, a circular ring surrounding a lagoon or small inner lake that gaps place in contact with the sea. Elsewhere, they take the shape of barrier reefs, such as those that exist along the coasts of New Caledonia and several of the Tuamotu Islands. In still other localities, such as Réunion Island and the island of Mauritius, they build fringing reefs, high, straight walls next to which the ocean's depth is considerable.

While cruising along only a few cable lengths from the underpinning of Reao Island, I marveled at the gigantic piece of work accomplished by these microscopic laborers. These walls were the express achievements of madrepores known by the names fire coral, finger coral, star coral, and stony coral. These polyps grow exclusively in the agitated strata at the surface of the sea, and so it's in the upper reaches that they begin these substructures, which sink little by little together with the secreted rubble binding them. This, at least, is the theory of Mr. Charles Darwin, who thus explains the formation of atolls--a theory superior, in my view, to the one that says these madreporic edifices sit on the summits of mountains or volcanoes submerged a few feet below sea level.

I could observe these strange walls quite closely: our sounding lines indicated that they dropped perpendicularly for more than 300 meters, and our electric beams made the bright limestone positively sparkle.

In reply to a question Conseil asked me about the growth rate of these colossal barriers, I thoroughly amazed him by saying that scientists put it at an eighth of an inch per biennium.
"Therefore," he said to me, "to build these walls, it took . . . ?"

"192,000 years, my gallant Conseil, which significantly extends the biblical Days of Creation. What's more, the formation of coal-- in other words, the petrifaction of forests swallowed by floods-- and the cooling of basaltic rocks likewise call for a much longer period of time. I might add that those 'days' in the Bible must represent whole epochs and not literally the lapse of time between two sunrises, because according to the Bible itself, the sun doesn't date from the first day of Creation."

When the Nautilus returned to the surface of the ocean, I could take in Reao Island over its whole flat, wooded expanse. Obviously its madreporic rocks had been made fertile by tornadoes and thunderstorms. One day, carried off by a hurricane from neighboring shores, some seed fell onto these limestone beds, mixing with decomposed particles of fish and marine plants to form vegetable humus. Propelled by the waves, a coconut arrived on this new coast. Its germ took root. Its tree grew tall, catching steam off the water. A brook was born. Little by little, vegetation spread. Tiny animals--worms, insects--rode ashore on tree trunks snatched from islands to windward. Turtles came to lay their eggs. Birds nested in the young trees. In this way animal life developed, and drawn by the greenery and fertile soil, man appeared. And that's how these islands were formed, the immense achievement of microscopic animals.

Near evening Reao Island melted into the distance, and the Nautilus noticeably changed course. After touching the Tropic of Capricorn at longitude 135 degrees, it headed west-northwest, going back up the whole intertropical zone. Although the summer sun lavished its rays on us, we never suffered from the heat, because thirty or forty meters underwater, the temperature didn't go over 10 degrees to 12 degrees centigrade.

By December 15 we had left the alluring Society Islands in the west, likewise elegant Tahiti, queen of the Pacific. In the morning I spotted this island's lofty summits a few miles to leeward. Its waters supplied excellent fish for the tables on board: mackerel, bonito, albacore, and a few varieties of that sea serpent named the moray eel.

The Nautilus had cleared 8,100 miles. We logged 9,720 miles when we passed between the Tonga Islands, where crews from the Argo, Port-au-Prince, and Duke of Portland had perished, and the island group of Samoa, scene of the slaying of Captain de Langle, friend of that long-lost navigator, the Count de La Pérouse. Then we raised the Fiji Islands, where savages slaughtered sailors from the Union, as well as Captain Bureau, commander of the Darling Josephine out of Nantes, France.

Extending over an expanse of 100 leagues north to south, and over 90 leagues east to west, this island group lies between latitude 2 degrees and 6 degrees south, and between longitude 174 degrees and 179 degrees west. It consists of a number of islands, islets, and reefs, among which we noted the islands of Viti Levu, Vanua Levu, and Kadavu.

It was the Dutch navigator Tasman who discovered this group in 1643, the same year the Italian physicist Torricelli invented the barometer and King Louis XIV ascended the French throne. I'll let the reader decide which of
these deeds was more beneficial to humanity. Coming later, Captain Cook in 1774, Rear Admiral d'Entrecasteaux in 1793, and finally Captain Dumont d'Urville in 1827, untangled the whole chaotic geography of this island group. The Nautilus drew near Wailea Bay, an unlucky place for England's Captain Dillon, who was the first to shed light on the longstanding mystery surrounding the disappearance of ships under the Count de La Pérouse.

This bay, repeatedly dredged, furnished a huge supply of excellent oysters. As the Roman playwright Seneca recommended, we opened them right at our table, then stuffed ourselves. These mollusks belonged to the species known by name as Ostrea lamellosa, whose members are quite common off Corsica. This Wailea oysterbank must have been extensive, and for certain, if they hadn't been controlled by numerous natural checks, these clusters of shellfish would have ended up jam-packing the bay, since as many as 2,000,000 eggs have been counted in a single individual.

And if Mr. Ned Land did not repent of his gluttony at our oyster fest, it's because oysters are the only dish that never causes indigestion. In fact, it takes no less than sixteen dozen of these headless mollusks to supply the 315 grams that satisfy one man's minimum daily requirement for nitrogen.

On December 25 the Nautilus navigated amid the island group of the New Hebrides, which the Portuguese seafarer Queirós discovered in 1606, which Commander Bougainville explored in 1768, and to which Captain Cook gave its current name in 1773. This group is chiefly made up of nine large islands and forms a 120-league strip from the north-northwest to the south-southeast, lying between latitude 2 degrees and 15 degrees south, and between longitude 164 degrees and 168 degrees. At the moment of our noon sights, we passed fairly close to the island of Aurou, which looked to me like a mass of green woods crowned by a peak of great height.

That day it was yuletide, and it struck me that Ned Land badly missed celebrating "Christmas," that genuine family holiday where Protestants are such zealots.

I hadn't seen Captain Nemo for over a week, when, on the morning of the 27th, he entered the main lounge, as usual acting as if he'd been gone for just five minutes. I was busy tracing the Nautilus's course on the world map. The captain approached, placed a finger over a position on the chart, and pronounced just one word: "Vanikoro."

This name was magic! It was the name of those islets where vessels under the Count de La Pérouse had miscarried. I straightened suddenly.

"The Nautilus is bringing us to Vanikoro?" I asked.
"Yes, professor," the captain replied.
"And I'll be able to visit those famous islands where the Compass and the Astrolabe came to grief?"
"If you like, professor."
"When will we reach Vanikoro?"
"We already have, professor."

Followed by Captain Nemo, I climbed onto the platform, and from there my eyes eagerly scanned the horizon.

In the northeast there emerged two volcanic islands of unequal size, surrounded by a coral reef whose circuit measured forty miles. We were facing the island of Vanikoro proper, to which Captain Dumont d'Urville had given the name "Island of the Search"; we lay right in front of the little harbor of Vana, located in latitude 16 degrees 4' south and longitude 164 degrees 32' east. Its shores seemed covered with greenery from its beaches to its summits inland, crowned by Mt. Kapogo, which is 476 fathoms high.

After clearing the outer belt of rocks via a narrow passageway, the Nautilus lay inside the breakers where the sea had a depth of thirty to forty fathoms. Under the green shade of some tropical evergreens, I spotted a few savages who looked extremely startled at our approach. In this long, blackish object advancing flush with the water, didn't they see some fearsome cetacean that they were obliged to view with distrust?

Just then Captain Nemo asked me what I knew about the shipwreck of the Count de La Pérouse.
"And could you kindly tell me what everybody knows?" he asked me in a gently ironic tone.
"Very easily."

I related to him what the final deeds of Captain Dumont d'Urville had brought to light, deeds described here in this heavily condensed summary of the whole matter.

In 1785 the Count de La Pérouse and his subordinate, Captain de Langle, were sent by King Louis XVI of France on a voyage to circumnavigate the globe. They boarded two sloops of war, the Compass and the Astrolabe, which were never seen again.

In 1791, justly concerned about the fate of these two sloops of war, the French government fitted out two large cargo boats, the Search and the Hope, which left Brest on September 28 under orders from Rear Admiral Bruni d'Entrecasteaux. Two months later, testimony from a certain Commander Bowen, aboard the Albemarle, alleged that rubble from shipwrecked vessels had been seen on the coast of New Georgia. But d'Entrecasteaux was unaware of
this news—which seemed a bit dubious anyhow—and headed toward the Admiralty Islands, which had been named in a report by one Captain Hunter as the site of the Count de La Pérouse's shipwreck.

They looked in vain. The Hope and the Search passed right by Vanikoro without stopping there; and overall, this voyage was plagued by misfortune, ultimately costing the lives of Rear Admiral d’Entrecasteaux, two of his subordinate officers, and several seamen from his crew.

It was an old hand at the Pacific, the English adventurer Captain Peter Dillon, who was the first to pick up the trail left by castaways from the wrecked vessels. On May 15, 1824, his ship, the St. Patrick, passed by Tikopia Island, one of the New Hebrides. There a native boatman pulled alongside in a dugout canoe and sold Dillon a silver sword hilt bearing the imprint of characters engraved with a cutting tool known as a burin. Furthermore, this native boatman claimed that during a stay in Vanikoro six years earlier, he had seen two Europeans belonging to ships that had run aground on the island's reefs many years before.

Dillon guessed that the ships at issue were those under the Count de La Pérouse, ships whose disappearance had shaken the entire world. He tried to reach Vanikoro, where, according to the native boatman, a good deal of rubble from the shipwreck could still be found, but winds and currents prevented his doing so.

Dillon returned to Calcutta. There he was able to interest the Asiatic Society and the East India Company in his discovery. A ship named after the Search was placed at his disposal, and he departed on January 23, 1827, accompanied by a French deputy.

This new Search, after putting in at several stops over the Pacific, dropped anchor before Vanikoro on July 7, 1827, in the same harbor of Vana where the Nautilus was currently floating.

There Dillon collected many relics of the shipwreck: iron utensils, anchors, eyelets from pulleys, swivel guns, an eighteen-pound shell, the remains of some astronomical instruments, a piece of sternrail, and a bronze bell bearing the inscription "Made by Bazin," the foundry mark at Brest Arsenal around 1785. There could no longer be any doubt.

Finishing his investigations, Dillon stayed at the site of the casualty until the month of October. Then he left Vanikoro, headed toward New Zealand, dropped anchor at Calcutta on April 7, 1828, and returned to France, where he received a very cordial welcome from King Charles X.

But just then the renowned French explorer Captain Dumont d’Urville, unaware of Dillon's activities, had already set sail to search elsewhere for the site of the shipwreck. In essence, a whaling vessel had reported that some medals and a Cross of St. Louis had been found in the hands of savages in the Louisiade Islands and New Caledonia.

So Captain Dumont d’Urville had put to sea in command of a vessel named after the Astrolabe, and just two months after Dillon had left Vanikoro, Dumont d’Urville dropped anchor before Hobart. There he heard about Dillon's findings, and he further learned that a certain James Hobbs, chief officer on the Union out of Calcutta, had put to shore on an island located in latitude 8 degrees 18' south and longitude 156 degrees 30' east, and had noted the natives of those waterways making use of iron bars and red fabrics.

Pretty perplexed, Dumont d’Urville didn't know if he should give credence to these reports, which had been carried in some of the less reliable newspapers; nevertheless, he decided to start on Dillon's trail.

On February 10, 1828, the new Astrolabe hove before Tikopia Island, took on a guide and interpreter in the person of a deserter who had settled there, plied a course toward Vanikoro, raised it on February 12, sailed along its reefs until the 14th, and only on the 20th dropped anchor inside its barrier in the harbor of Vana.

On the 23rd, several officers circled the island and brought back some rubble of little importance. The natives, adopting a system of denial and evasion, refused to guide them to the site of the casualty. This rather shady conduct aroused the suspicion that the natives had mistreated the castaways; and in truth, the natives seemed afraid that Dumont d’Urville had come to avenge the Count de La Pérouse and his unfortunate companions.

But on the 26th, appeased with gifts and seeing that they didn't need to fear any reprisals, the natives led the chief officer, Mr. Jacquinot, to the site of the shipwreck.

At this location, in three or four fathoms of water between the Paeu and Vana reefs, there lay some anchors, cannons, and ingots of iron and lead, all caked with limestone concretions. A launch and whaleboat from the new Astrolabe were steered to this locality, and after going to exhausting lengths, their crews managed to dredge up an anchor weighing 1,800 pounds, a cast-iron eight-pounder cannon, a lead ingot, and two copper swivel guns.

Questioning the natives, Captain Dumont d’Urville also learned that after La Pérouse's two ships had miscarried on the island's reefs, the count had built a smaller craft, only to go off and miscarry a second time. Where? Nobody knew.

The commander of the new Astrolabe then had a monument erected under a tuft of mangrove, in memory of the famous navigator and his companions. It was a simple quadrangular pyramid, set on a coral base, with no ironwork...
to tempt the natives' avarice.

Then Dumont d'Urville tried to depart; but his crews were run down from the fevers raging on these unsanitary shores, and quite ill himself, he was unable to weigh anchor until March 17.

Meanwhile, fearing that Dumont d'Urville wasn't abreast of Dillon's activities, the French government sent a sloop of war to Vanikoro, the Bayonnaise under Commander Legaraunt de Tromelin, who had been stationed on the American west coast. Dropping anchor before Vanikoro a few months after the new Astrolabe's departure, the Bayonnaise didn't find any additional evidence but verified that the savages hadn't disturbed the memorial honoring the Count de La Pérouse.

This is the substance of the account I gave Captain Nemo.

"So," he said to me, "the castaways built a third ship on Vanikoro Island, and to this day, nobody knows where it went and perished?"

"Nobody knows."

Captain Nemo didn't reply but signaled me to follow him to the main lounge. The Nautilus sank a few meters beneath the waves, and the panels opened.

I rushed to the window and saw crusts of coral: fungus coral, siphonula coral, alcyon coral, sea anemone from the genus Caryophylia, plus myriads of charming fish including greenfish, damselfish, sweepers, snappers, and squirrelfish; underneath this coral covering I detected some rubble the old dredges hadn't been able to tear free-- iron stirrups, anchors, cannons, shells, tackle from a capstan, a stempost, all objects hailing from the wrecked ships and now carpeted in moving flowers.

And as I stared at this desolate wreckage, Captain Nemo told me in a solemn voice:

"Commander La Pérouse set out on December 7, 1785, with his ships, the Compass and the Astrolabe. He dropped anchor first at Botany Bay, visited the Tonga Islands and New Caledonia, headed toward the Santa Cruz Islands, and put in at Nomuka, one of the islands in the Ha'apai group. Then his ships arrived at the unknown reefs of Vanikoro. Traveling in the lead, the Compass ran afoul of breakers on the southerly coast. The Astrolabe went to its rescue and also ran aground. The first ship was destroyed almost immediately. The second, stranded to leeward, held up for some days. The natives gave the castaways a fair enough welcome. The latter took up residence on the island and built a smaller craft with rubble from the two large ones. A few seamen stayed voluntarily in Vanikoro. The others, weak and ailing, set sail with the Count de La Pérouse. They headed to the Solomon Islands, and they perished with all hands on the westerly coast of the chief island in that group, between Cape Deception and Cape Satisfaction!"

"And how do you know all this?" I exclaimed.

"Here's what I found at the very site of that final shipwreck!"

Captain Nemo showed me a tin box, stamped with the coat of arms of France and all corroded by salt water. He opened it and I saw a bundle of papers, yellowed but still legible.

They were the actual military orders given by France's Minister of the Navy to Commander La Pérouse, with notes along the margin in the handwriting of King Louis XVI!

"Ah, what a splendid death for a seaman!" Captain Nemo then said. "A coral grave is a tranquil grave, and may Heaven grant that my companions and I rest in no other!"

CHAPTER 20

The Torres Strait

DURING THE NIGHT of December 27-28, the Nautilus left the waterways of Vanikoro behind with extraordinary speed. Its heading was southwesterly, and in three days it had cleared the 750 leagues that separated La Pérouse's islands from the southeastern tip of Papua.

On January 1, 1868, bright and early, Conseil joined me on the platform.
"Will master," the gallant lad said to me, "allow me to wish him a happy new year?"

"Good heavens, Conseil, it's just like old times in my office at the Botanical Gardens in Paris! I accept your kind wishes and I thank you for them. Only, I'd like to know what you mean by a 'happy year' under the circumstances in which we're placed. Is it a year that will bring our imprisonment to an end, or a year that will see this strange voyage continue?"

"Ye gods," Conseil replied, "I hardly know what to tell master. We're certainly seeing some unusual things, and for two months we've had no time for boredom. The latest wonder is always the most astonishing, and if this progression keeps up, I can't imagine what its climax will be. In my opinion, we'll never again have such an opportunity."

"Never, Conseil."

"Besides, Mr. Nemo really lives up to his Latin name, since he couldn't be less in the way if he didn't exist."

"True enough, Conseil."

"Therefore, with all due respect to master, I think a 'happy year' would be a year that lets us see everything--"

"Everything, Conseil? No year could be that long. But what does Ned Land think about all this?"

"Ned Land's thoughts are exactly the opposite of mine," Conseil replied. "He has a practical mind and a demanding stomach. He's tired of staring at fish and eating them day in and day out. This shortage of wine, bread, and meat isn't suitable for an upstanding Anglo-Saxon, a man accustomed to beefsteak and unfazed by regular doses of brandy or gin!"

"For my part, Conseil, that doesn't bother me in the least, and I've adjusted very nicely to the diet on board."

"So have I," Conseil replied. "Accordingly, I think as much about staying as Mr. Land about making his escape. Thus, if this new year isn't a happy one for me, it will be for him, and vice versa. No matter what happens, one of us will be pleased. So, in conclusion, I wish master to have whatever his heart desires."

"Thank you, Conseil. Only I must ask you to postpone the question of new year's gifts, and temporarily accept a hearty handshake in their place. That's all I have on me."

"Master has never been more generous," Conseil replied.
And with that, the gallant lad went away.

By January 2 we had fared 11,340 miles, hence 5,250 leagues, from our starting point in the seas of Japan. Before the Nautilus's spur there stretched the dangerous waterways of the Coral Sea, off the northeast coast of Australia. Our boat cruised along a few miles away from that daunting shoal where Captain Cook's ships wellnigh miscarried on June 10, 1770. The craft that Cook was aboard charged into some coral rock, and if his vessel didn't go down, it was thanks to the circumstance that a piece of coral broke off in the collision and plugged the very hole it had made in the hull.

I would have been deeply interested in visiting this long, 360-league reef, against which the ever-surging sea broke with the fearsome intensity of thunderclaps. But just then the Nautilus's slanting fins took us to great depths, and I could see nothing of those high coral walls. I had to rest content with the various specimens of fish brought up by our nets. Among others I noted some long-finned albacore, a species in the genus Scomber, as big as tuna, bluish on the flanks, and streaked with crosswise stripes that disappear when the animal dies. These fish followed us in schools and supplied our table with very dainty flesh. We also caught a large number of yellow-green gilthead, half a decimeter long and tasting like dorado, plus some flying gurnards, authentic underwater swallows that, on dark nights, alternately streak air and water with their phosphorescent glimmers. Among mollusk and zoophytes, I found in our trawl's meshes various species of alcyonarian coral, sea urchins, hammer shells, spurred-star shells, wentletrap snails, horn shells, glass snails. The local flora was represented by fine floating algae: sea tangle, and kelp from the genus Macrocystis, saturated with the mucilage their pores perspire, from which I selected a wonderful Nemastoma gelinarioides, classifying it with the natural curiosities in the museum.

On January 4, two days after crossing the Coral Sea, we raised the coast of Papua. On this occasion Captain Nemo told me that he intended to reach the Indian Ocean via the Torres Strait. This was the extent of his remarks. Ned saw with pleasure that this course would bring us, once again, closer to European seas.

The Torres Strait is regarded as no less dangerous for its bristling reefs than for the savage inhabitants of its coasts. It separates Queensland from the huge island of Papua, also called New Guinea.
Papua is 400 leagues long by 130 leagues wide, with a surface area of 40,000 geographic leagues. It's located between latitude 0 degrees 19' and 10 degrees 2' south, and between longitude 128 degrees 23' and 146 degrees 15'.

Discovered in 1511 by the Portuguese Francisco Serrano, these shores were successively visited by Don Jorge de Meneses in 1526, by Juan de Grijalva in 1527, by the Spanish general Alvaro de Saavedra in 1528, by Inigo Ortiz in 1545, by the Dutchman Schouten in 1616, by Nicolas Sruick in 1753, by Tasman, Dampier, Fumel, Carteret,
Edwards, Bougainville, Cook, McClure, and Thomas Forrest, by Rear Admiral d'Entrecasteaux in 1792, by Louis-Isidore Duperrey in 1823, and by Captain Dumont d'Urville in 1827. "It's the heartland of the blacks who occupy all Malaysia," Mr. de Rienzi has said; and I hadn't the foggiest inkling that sailors' luck was about to bring me face to face with these daunting Andaman aborigines.

So the Nautilus hove before the entrance to the world's most dangerous strait, a passageway that even the boldest navigators hesitated to clear: the strait that Luis Vaez de Torres faced on returning from the South Seas in Melanesia, the strait in which sloops of war under Captain Dumont d'Urville ran aground in 1840 and nearly miscarried with all hands. And even the Nautilus, rising superior to every danger in the sea, was about to become intimate with its coral reefs.

The Torres Strait is about thirty-four leagues wide, but it's obstructed by an incalculable number of islands, islets, breakers, and rocks that make it nearly impossible to navigate. Consequently, Captain Nemo took every desired precaution in crossing it. Floating flush with the water, the Nautilus moved ahead at a moderate pace. Like a cetacean's tail, its propeller churned the waves slowly.

Taking advantage of this situation, my two companions and I found seats on the ever-deserted platform. In front of us stood the pilothouse, and unless I'm extremely mistaken, Captain Nemo must have been inside, steering his Nautilus himself.

Under my eyes I had the excellent charts of the Torres Strait that had been surveyed and drawn up by the hydrographic engineer Vincendon Dumoulin and Sublieutenant (now Admiral) Coupvent-Desbois, who were part of Dumont d'Urville's general staff during his final voyage to circumnavigate the globe. These, along with the efforts of Captain King, are the best charts for untangling the snarl of this narrow passageway, and I consulted them with scrupulous care.

Around the Nautilus the sea was boiling furiously. A stream of waves, bearing from southeast to northwest at a speed of two and a half miles per hour, broke over heads of coral emerging here and there.

"That's one rough sea!" Ned Land told me.
"Abominable indeed," I replied, "and hardly suitable for a craft like the Nautilus."
"That damned captain," the Canadian went on, "must really be sure of his course, because if these clumps of coral so much as brush us, they'll rip our hull into a thousand pieces!"

The situation was indeed dangerous, but as if by magic, the Nautilus seemed to glide right down the middle of these rampaging reefs. It didn't follow the exact course of the Zealous and the new Astrolabe, which had proved so ill-fated for Captain Dumont d'Urville. It went more to the north, hugged the Murray Islands, and returned to the southwest near Cumberland Passage. I thought it was about to charge wholeheartedly into this opening, but it went up to the northwest, through a large number of little-known islands and islets, and steered toward Tound Island and the Bad Channel.

I was already wondering if Captain Nemo, rash to the point of sheer insanity, wanted his ship to tackle the narrows where Dumont d'Urville's two sloops of war had gone aground, when he changed direction a second time and cut straight to the west, heading toward Gueboroa Island.

By then it was three o'clock in the afternoon. The current was slacking off, it was almost full tide. The Nautilus drew near this island, which I can see to this day with its remarkable fringe of screw pines. We hugged it from less than two miles out.

A sudden jolt threw me down. The Nautilus had just struck a reef, and it remained motionless, listing slightly to port.

When I stood up, I saw Captain Nemo and his chief officer on the platform. They were examining the ship's circumstances, exchanging a few words in their incomprehensible dialect.

Here is what those circumstances entailed. Two miles to starboard lay Gueboroa Island, its coastline curving north to west like an immense arm. To the south and east, heads of coral were already on display, left uncovered by the ebbing waters. We had run aground at full tide and in one of those seas whose tides are moderate, an inconvenient state of affairs for floating the Nautilus off. However, the ship hadn't suffered in any way, so solidly joined was its hull. But although it could neither sink nor split open, it was in serious danger of being permanently attached to these reefs, and that would have been the finish of Captain Nemo's submersible.

I was mulling this over when the captain approached, cool and calm, forever in control of himself, looking neither alarmed nor annoyed.

"An accident?" I said to him.
"No, an incident," he answered me.
"But an incident," I replied, "that may oblige you to become a resident again of these shores you avoid!"

Captain Nemo gave me an odd look and gestured no. Which told me pretty clearly that nothing would ever force him to set foot on a land mass again. Then he said:
"No, Professor Aronnax, the Nautilus isn't consigned to perdition. It will still carry you through the midst of the ocean's wonders. Our voyage is just beginning, and I've no desire to deprive myself so soon of the pleasure of your company."

"Even so, Captain Nemo," I went on, ignoring his ironic turn of phrase, "the Nautilus has run aground at a moment when the sea is full. Now then, the tides aren't strong in the Pacific, and if you can't unballast the Nautilus, which seems impossible to me, I don't see how it will float off."

"You're right, professor, the Pacific tides aren't strong," Captain Nemo replied. "But in the Torres Strait, one still finds a meter-and-a-half difference in level between high and low seas. Today is January 4, and in five days the moon will be full. Now then, I'll be quite astonished if that good-natured satellite doesn't sufficiently raise these masses of water and do me a favor for which I'll be forever grateful."

This said, Captain Nemo went below again to the Nautilus's interior, followed by his chief officer. As for our craft, it no longer stirred, staying as motionless as if these coral polyps had already walled it in with their indestructible cement.

"Well, sir?" Ned Land said to me, coming up after the captain's departure.

"Well, Ned my friend, we'll serenely wait for the tide on the 9th, because it seems the moon will have the good nature to float us away!"

"As simple as that?"

"As simple as that."

"So our captain isn't going to drop his anchors, put his engines on the chains, and do anything to haul us off?"

"Since the tide will be sufficient," Conseil replied simply.

The Canadian stared at Conseil, then he shrugged his shoulders. The seaman in him was talking now.

"Sir," he answered, "you can trust me when I say this hunk of iron will never navigate again, on the seas or under them. It's only fit to be sold for its weight. So I think it's time we gave Captain Nemo the slip."

"Ned my friend," I replied, "unlike you, I haven't given up on our valiant Nautilus, and in four days we'll know where we stand on these Pacific tides. Besides, an escape attempt might be timely if we were in sight of the coasts of England or Provence, but in the waterways of Papua it's another story. And we'll always have that as a last resort if the Nautilus doesn't right itself, which I'd regard as a real calamity."

"But couldn't we at least get the lay of the land?" Ned went on. "Here's an island. On this island there are trees. Under those trees land animals loaded with cutlets and roast beef, which I'd be happy to sink my teeth into."

"In this instance our friend Ned is right," Conseil said, "and I side with his views. Couldn't master persuade his friend Captain Nemo to send the three of us ashore, if only so our feet don't lose the knack of treading on the solid parts of our planet?"

"I can ask him," I replied, "but he'll refuse."

"Let master take the risk," Conseil said, "and we'll know where we stand on the captain's affability."

Much to my surprise, Captain Nemo gave me the permission I asked for, and he did so with grace and alacrity, not even exacting my promise to return on board. But fleeing across the New Guinea territories would be extremely dangerous, and I wouldn't have advised Ned Land to try it. Better to be prisoners aboard the Nautilus than to fall into the hands of Papuan natives.

The skiff was put at our disposal for the next morning. I hardly needed to ask whether Captain Nemo would be coming along. I likewise assumed that no crewmen would be assigned to us, that Ned Land would be in sole charge of piloting the longboat. Besides, the shore lay no more than two miles off, and it would be child's play for the Canadian to guide that nimble skiff through those rows of reefs so ill-fated for big ships.

The next day, January 5, after its deck paneling was opened, the skiff was wrenched from its socket and launched to sea from the top of the platform. Two men were sufficient for this operation. The oars were inside the longboat and we had only to take our seats.

At eight o'clock, armed with rifles and axes, we pulled clear of the Nautilus. The sea was fairly calm. A mild breeze blew from shore. In place by the oars, Conseil and I rowed vigorously, and Ned steered us into the narrow lanes between the breakers. The skiff handled easily and sped swiftly.

Ned Land couldn't conceal his glee. He was a prisoner escaping from prison and never dreaming he would need to reenter it.

"Meat!" he kept repeating. "Now we'll eat red meat! Actual game! A real mess call, by thunder! I'm not saying fish aren't good for you, but we mustn't overdo 'em, and a slice of fresh venison grilled over live coals will be a nice change from our standard fare."

"You glutton," Conseil replied, "you're making my mouth water!"
"It remains to be seen," I said, "whether these forests do contain game, and if the types of game aren't of such size that they can hunt the hunter."

"Fine, Professor Aronnax!" replied the Canadian, whose teeth seemed to be as honed as the edge of an ax. "But if there's no other quadruped on this island, I'll eat tiger--tiger sirloin."

"Our friend Ned grows disturbing," Conseil replied.

"Whatever it is," Ned Land went on, "any animal having four feet without feathers, or two feet with feathers, will be greeted by my very own one-gun salute."

"Oh good!" I replied. "The reckless Mr. Land is at it again!"

"Don't worry, Professor Aronnax, just keep rowing!" the Canadian replied. "I only need twenty-five minutes to serve you one of my own special creations."

By 8:30 the Nautilus's skiff had just run gently aground on a sandy strand, after successfully clearing the ring of coral that surrounds Gueboroa Island.

CHAPTER 21

Some Days Ashore

STEPPING ASHORE had an exhilarating effect on me. Ned Land tested the soil with his foot, as if he were laying claim to it. Yet it had been only two months since we had become, as Captain Nemo expressed it, "passengers on the Nautilus," in other words, the literal prisoners of its commander.

In a few minutes we were a gunshot away from the coast. The soil was almost entirely madreporic, but certain dry stream beds were strewn with granite rubble, proving that this island was of primordial origin. The entire horizon was hidden behind a curtain of wonderful forests. Enormous trees, sometimes as high as 200 feet, were linked to each other by garlands of tropical creepers, genuine natural hammocks that swayed in a mild breeze. There were mimosas, banyan trees, beefwood, teakwood, hibiscus, screw pines, palm trees, all mingling in wild profusion; and beneath the shade of their green canopies, at the feet of their gigantic trunks, there grew orchids, leguminous plants, and ferns.

Meanwhile, ignoring all these fine specimens of Papuan flora, the Canadian passed up the decorative in favor of the functional. He spotted a coconut palm, beat down some of its fruit, broke them open, and we drank their milk and ate their meat with a pleasure that was a protest against our standard fare on the Nautilus.

"Excellent!" Ned Land said.

"Exquisite!" Conseil replied.

"And I don't think," the Canadian said, "that your Nemo would object to us stashing a cargo of coconuts aboard his vessel?"

"I imagine not," I replied, "but he won't want to sample them."

"Too bad for him!" Conseil said.

"And plenty good for us!" Ned Land shot back. "There'll be more left over!"

"A word of caution, Mr. Land," I told the harpooner, who was about to ravage another coconut palm. "Coconuts are admirable things, but before we stuff the skiff with them, it would be wise to find out whether this island offers other substances just as useful. Some fresh vegetables would be well received in the Nautilus's pantry."

"Master is right," Conseil replied, "and I propose that we set aside three places in our longboat: one for fruit, another for vegetables, and a third for venison, of which I still haven't glimpsed the tiniest specimen."

"Don't give up so easily, Conseil," the Canadian replied. "So let's continue our excursion," I went on, "but keep a sharp lookout. This island seems uninhabited, but it still might harbor certain individuals who aren't so finicky about the sort of game they eat!"

"Hee hee!" Ned put in, with a meaningful movement of his jaws.

"Ned! Oh horrors!" Conseil exclaimed.

"Ye gods," the Canadian shot back, "I'm starting to appreciate the charms of cannibalism!"

"Ned, Ned! Don't say that!" Conseil answered. "You a cannibal? Why, I'll no longer be safe next to you, I who
share your cabin! Does this mean I'll wake up half devoured one fine day?"

"I'm awfully fond of you, Conseil my friend, but not enough to eat you when there's better food around."

"Then I daren't delay," Conseil replied. "The hunt is on! We absolutely must bag some game to placate this man-eater, or one of these mornings master won't find enough pieces of his manservant to serve him."

While exchanging this chitchat, we entered beneath the dark canopies of the forest, and for two hours we explored it in every direction.

We couldn't have been luckier in our search for edible vegetation, and some of the most useful produce in the tropical zones supplied us with a valuable foodstuff missing on board.

I mean the breadfruit tree, which is quite abundant on Gueboroa Island, and there I chiefly noted the seedless variety that in Malaysia is called "rima."

This tree is distinguished from other trees by a straight trunk forty feet high. To the naturalist's eye, its gracefully rounded crown, formed of big multilobed leaves, was enough to denote the artocarpus that has been so successfully transplanted to the Mascarene Islands east of Madagascar. From its mass of greenery, huge globular fruit stood out, a decimeter wide and furnished on the outside with creases that assumed a hexagonal pattern. It's a handy plant that nature gives to regions lacking in wheat; without needing to be cultivated, it bears fruit eight months out of the year.

Ned Land was on familiar terms with this fruit. He had already eaten it on his many voyages and knew how to cook its edible substance. So the very sight of it aroused his appetite, and he couldn't control himself.

"Sir," he told me, "I'll die if I don't sample a little breadfruit pasta!"

"Sample some, Ned my friend, sample all you like. We're here to conduct experiments, let's conduct them."

"It won't take a minute," the Canadian replied.

Equipped with a magnifying glass, he lit a fire of deadwood that was soon crackling merrily. Meanwhile Conseil and I selected the finest artocarpus fruit. Some still weren't ripe enough, and their thick skins covered white, slightly fibrous pulps. But a great many others were yellowish and gelatinous, just begging to be picked.

This fruit contained no pits. Conseil brought a dozen of them to Ned Land, who cut them into thick slices and placed them over a fire of live coals, all the while repeating:

"You'll see, sir, how tasty this bread is!"

"Especially since we've gone without baked goods for so long," Conseil said.

"It's more than just bread," the Canadian added. "It's a dainty pastry. You've never eaten any, sir?"

"No, Ned."

"All right, get ready for something downright delectable! If you don't come back for seconds, I'm no longer the King of Harpooners!"

After a few minutes, the parts of the fruit exposed to the fire were completely toasted. On the inside there appeared some white pasta, a sort of soft bread center whose flavor reminded me of artichoke.

This bread was excellent, I must admit, and I ate it with great pleasure.

"Unfortunately," I said, "this pasta won't stay fresh, so it seems pointless to make a supply for on board."

"By thunder, sir!" Ned Land exclaimed. "There you go, talking like a naturalist, but meantime I'll be acting like a baker! Conseil, harvest some of this fruit to take with us when we go back."

"And how will you prepare it?" I asked the Canadian.

"I'll make a fermented batter from its pulp that'll keep indefinitely without spoiling. When I want some, I'll just cook it in the galley on board--it'll have a slightly tart flavor, but you'll find it excellent."

"So, Mr. Ned, I see that this bread is all we need--"

"Not quite, professor," the Canadian replied. "We need some fruit to go with it, or at least some vegetables."

"Then let's look for fruit and vegetables."

When our breadfruit harvesting was done, we took to the trail to complete this "dry-land dinner."

We didn't search in vain, and near noontime we had an ample supply of bananas. This delicious produce from the Torrid Zones ripens all year round, and Malaysians, who give them the name "pisang," eat them without bothering to cook them. In addition to bananas, we gathered some enormous jackfruit with a very tangy flavor, some tasty mangoes, and some pineapples of unbelievable size. But this foraging took up a good deal of our time, which, even so, we had no cause to regret.

Conseil kept Ned under observation. The harpooner walked in the lead, and during his stroll through this forest, he gathered with sure hands some excellent fruit that should have completed his provisions.

"So," Conseil asked, "you have everything you need, Ned my friend?"

"Humph!" the Canadian put in.
"What! You're complaining?"

"All this vegetation doesn't make a meal," Ned replied. "Just side dishes, dessert. But where's the soup course? Where's the roast?"

"Right," I said. "Ned promised us cutlets, which seems highly questionable to me."

"Sir," the Canadian replied, "our hunting not only isn't over, it hasn't even started. Patience! We're sure to end up bumping into some animal with either feathers or fur, if not in this locality, then in another."

"And if not today, then tomorrow, because we mustn't wander too far off," Conseil added. "That's why I propose that we return to the skiff."

"What! Already!" Ned exclaimed.

"We ought to be back before nightfall," I said.

"But what hour is it, then?" the Canadian asked.

"Two o'clock at least," Conseil replied.

"How time flies on solid ground!" exclaimed Mr. Ned Land with a sigh of regret.

"Off we go!" Conseil replied.

So we returned through the forest, and we completed our harvest by making a clean sweep of some palm cabbages that had to be picked from the crowns of their trees, some small beans that I recognized as the "abrou" of the Malaysians, and some high-quality yams.

We were overloaded when we arrived at the skiff. However, Ned Land still found these provisions inadequate. But fortune smiled on him. Just as we were boarding, he spotted several trees twenty-five to thirty feet high, belonging to the palm species. As valuable as the artocarpus, these trees are justly ranked among the most useful produce in Malaysia.

They were sago palms, vegetation that grows without being cultivated; like mulberry trees, they reproduce by means of shoots and seeds.

Ned Land knew how to handle these trees. Taking his ax and wielding it with great vigor, he soon stretched out on the ground two or three sago palms, whose maturity was revealed by the white dust sprinkled over their palm fronds.

I watched him more as a naturalist than as a man in hunger. He began by removing from each trunk an inch-thick strip of bark that covered a network of long, hopelessly tangled fibers that were puttyed with a sort of gummy flour. This flour was the starch-like sago, an edible substance chiefly consumed by the Melanesian peoples.

For the time being, Ned Land was content to chop these trunks into pieces, as if he were making firewood; later he would extract the flour by sifting it through cloth to separate it from its fibrous ligaments, let it dry out in the sun, and leave it to harden inside molds.

Finally, at five o'clock in the afternoon, laden with all our treasures, we left the island beach and half an hour later pulled alongside the Nautilus. Nobody appeared on our arrival. The enormous sheet-iron cylinder seemed deserted. Our provisions loaded on board, I went below to my stateroom. There I found my supper ready. I ate and then fell asleep.

The next day, January 6: nothing new on board. Not a sound inside, not a sign of life. The skiff stayed alongside in the same place we had left it. We decided to return to Gueboroa Island. Ned Land hoped for better luck in his hunting than on the day before, and he wanted to visit a different part of the forest.

By sunrise we were off. Carried by an inbound current, the longboat reached the island in a matter of moments. We disembarked, and thinking it best to abide by the Canadian's instincts, we followed Ned Land, whose long legs threatened to outpace us.

Ned Land went westward up the coast; then, fording some stream beds, he reached open plains that were bordered by wonderful forests. Some kingfishers lurked along the watercourses, but they didn't let us approach. Their cautious behavior proved to me that these winged creatures knew where they stood on bipeds of our species, and I concluded that if this island wasn't inhabited, at least human beings paid it frequent visits.

After crossing a pretty lush prairie, we arrived on the outskirts of a small wood, enlivened by the singing and soaring of a large number of birds.

"Still, they're merely birds," Conseil said.

"But some are edible," the harpooner replied.

"Wrong, Ned my friend," Conseil answered, "because I see only ordinary parrots here."

"Conseil my friend," Ned replied in all seriousness, "parrots are like pheasant to people with nothing else on their plates."

"And I might add," I said, "that when these birds are properly cooked, they're at least worth a stab of the fork."
Indeed, under the dense foliage of this wood, a whole host of parrots fluttered from branch to branch, needing only the proper upbringing to speak human dialects. At present they were cackling in chorus with parakeets of every color, with solemn cockatoos that seemed to be pondering some philosophical problem, while bright red lories passed by like pieces of bunting borne on the breeze, in the midst of kalao parrots raucously on the wing. Papuan lories painted the subtlest shades of azure, and a whole variety of delightful winged creatures, none terribly edible.

However, one bird unique to these shores, which never passes beyond the boundaries of the Aru and Papuan Islands, was missing from this collection. But I was given a chance to marvel at it soon enough.

After crossing through a moderately dense thicket, we again found some plains obstructed by bushes. There I saw some magnificent birds soaring aloft, the arrangement of their long feathers causing them to head into the wind. Their undulating flight, the grace of their aerial curves, and the play of their colors allured and delighted the eye. I had no trouble identifying them.

"Birds of paradise!" I exclaimed.

"Order Passeriforma, division Clystomora," Conseil replied.

"Partridge family?" Ned Land asked.

"I doubt it, Mr. Land. Nevertheless, I'm counting on your dexterity to catch me one of these delightful representatives of tropical nature!"

"I'll give it a try, professor, though I'm handier with a harpoon than a rifle."

Malaysians, who do a booming business in these birds with the Chinese, have various methods for catching them that we couldn't use. Sometimes they set snares on the tops of the tall trees that the bird of paradise prefers to inhabit. At other times they capture it with a tenacious glue that paralyzes its movements. They will even go so far as to poison the springs where these fowl habitually drink. But in our case, all we could do was fire at them on the wing, which left us little chance of getting one. And in truth, we used up a good part of our ammunition in vain.

Near eleven o'clock in the morning, we cleared the lower slopes of the mountains that form the island's center, and we still hadn't bagged a thing. Hunger spurred us on. The hunters had counted on consuming the proceeds of their hunting, and they had miscalculated. Luckily, and much to his surprise, Conseil pulled off a right-and-left shot and insured our breakfast. He brought down a white pigeon and a ringdove, which were briskly plucked, hung from a spit, and roasted over a blazing fire of deadwood. While these fascinating animals were cooking, Ned prepared some bread from the artocarpus. Then the pigeon and ringdove were devoured to the bones and declared excellent. Nutmeg, on which these birds habitually gorge themselves, sweetens their flesh and makes it delicious eating.

"They taste like chicken stuffed with truffles," Conseil said.

"All right, Ned," I asked the Canadian, "now what do you need?"

"Game with four paws, Professor Aronnax," Ned Land replied. "All these pigeons are only appetizers, snacks. So till I've bagged an animal with cutlets, I won't be happy!"

"Nor I, Ned, until I've caught a bird of paradise."

"Then let's keep hunting," Conseil replied, "but while heading back to the sea. We've arrived at the foothills of these mountains, and I think we'll do better if we return to the forest regions."

It was good advice and we took it. After an hour's walk we reached a genuine sago palm forest. A few harmless snakes fled underfoot. Birds of paradise stole off at our approach, and I was in real despair of catching one when Conseil, walking in the lead, stooped suddenly, gave a triumphant shout, and came back to me, carrying a magnificent bird of paradise.

"Oh bravo, Conseil!" I exclaimed.

"Master is too kind," Conseil replied.

"Not at all, my boy. That was a stroke of genius, catching one of these live birds with your bare hands!"

"If master will examine it closely, he'll see that I deserve no great praise."

"And why not, Conseil?"

"Because this bird is as drunk as a lord."

"Drunk?"

"Yes, master, drunk from the nutmegs it was devouring under that nutmeg tree where I caught it. See, Ned my friend, see the monstrous results of intemperance!"

"Damnation!" the Canadian shot back. "Considering the amount of gin I've had these past two months, you've got nothing to complain about!"

Meanwhile I was examining this unusual bird. Conseil was not mistaken. Tipsy from that potent juice, our bird of paradise had been reduced to helplessness. It was unable to fly. It was barely able to walk. But this didn't alarm me, and I just let it sleep off its nutmeg.

This bird belonged to the finest of the eight species credited to Papua and its neighboring islands. It was a "great emerald," one of the rarest birds of paradise. It measured three decimeters long. Its head was comparatively small,
and its eyes, placed near the opening of its beak, were also small. But it offered a wonderful mixture of hues: a yellow beak, brown feet and claws, hazel wings with purple tips, pale yellow head and scruff of the neck, emerald throat, the belly and chest maroon to brown. Two strands, made of a horn substance covered with down, rose over its tail, which was lengthened by long, very light feathers of wonderful fineness, and they completed the costume of this marvelous bird that the islanders have poetically named "the sun bird."

How I wished I could take this superb bird of paradise back to Paris, to make a gift of it to the zoo at the Botanical Gardens, which doesn't own a single live specimen.

"So it must be a rarity or something?" the Canadian asked, in the tone of a hunter who, from the viewpoint of his art, gives the game a pretty low rating.

"A great rarity, my gallant comrade, and above all very hard to capture alive. And even after they're dead, there's still a major market for these birds. So the natives have figured out how to create fake ones, like people create fake pearls or diamonds." "What!" Conseil exclaimed. "They make counterfeit birds of paradise?"

"Yes, Conseil."

"And is master familiar with how the islanders go about it?"

"Perfectly familiar. During the easterly monsoon season, birds of paradise lose the magnificent feathers around their tails that naturalists call 'below-the-wing' feathers. These feathers are gathered by the fowl forgers and skilfully fitted onto some poor previously mutilated parakeet. Then they paint over the suture, varnish the bird, and ship the fruits of their unique labors to museums and collectors in Europe."

"Good enough!" Ned Land put in. "If it isn't the right bird, it's still the right feathers, and so long as the merchandise isn't meant to be eaten, I see no great harm!"

But if my desires were fulfilled by the capture of this bird of paradise, those of our Canadian huntsman remained unsatisfied. Luckily, near two o'clock Ned Land brought down a magnificent wild pig of the type the natives call "bari-outang." This animal came in the nick of time for us to bag some real quadruped meat, and it was warmly welcomed. Ned Land proved himself quite gloriously with his gunshot. Hit by an electric bullet, the pig dropped dead on the spot.

The Canadian properly skinned and cleaned it, after removing half a dozen cutlets destined to serve as the grilled meat course of our evening meal. Then the hunt was on again, and once more would be marked by the exploits of Ned and Conseil.

In essence, beating the bushes, the two friends flushed a herd of kangaroos that fled by bounding away on their elastic paws. But these animals didn't flee so swiftly that our electric capsules couldn't catch up with them.

"Oh, professor!" shouted Ned Land, whose hunting fever had gone to his brain. "What excellent game, especially in a stew! What a supply for the Nautilus! Two, three, five down! And just think how we'll devour all this meat ourselves, while those numbskulls on board won't get a shred!"

In his uncontrollable glee, I think the Canadian might have slaughtered the whole horde, if he hadn't been so busy talking! But he was content with a dozen of these fascinating marsupials, which make up the first order of aaplacental mammals, as Conseil just had to tell us.

These animals were small in stature. They were a species of those "rabbit kangaroos" that usually dwell in the hollows of trees and are tremendously fast; but although of moderate dimensions, they at least furnish a meat that's highly prized.

We were thoroughly satisfied with the results of our hunting. A gleeful Ned proposed that we return the next day to this magic island, which he planned to depopulate of its every edible quadruped. But he was reckoning without events.

By six o'clock in the evening, we were back on the beach. The skiff was aground in its usual place. The Nautilus, looking like a long reef, emerged from the waves two miles offshore.

Without further ado, Ned Land got down to the important business of dinner. He came wonderfully to terms with its entire cooking. Grilling over the coals, those cutlets from the "bari-outang" soon gave off a succulent aroma that perfumed the air.

But I catch myself following in the Canadian's footsteps. Look at me--in ecstasy over freshly grilled pork! Please grant me a pardon as I've already granted one to Mr. Land, and on the same grounds!

In short, dinner was excellent. Two ringdoves rounded out this extraordinary menu. Sago pasta, bread from the artocarpus, mangoes, half a dozen pineapples, and the fermented liquor from certain coconuts heightened our glee. I suspect that my two fine companions weren't quite as clearheaded as one could wish.

"What if we don't return to the Nautilus this evening?" Conseil said.
"What if we never return to it?" Ned Land added.
Just then a stone whizzed toward us, landed at our feet, and cut short the harpooner's proposition.

CHAPTER 22

The Lightning Bolts of Captain Nemo

WITHOUT STANDING UP, we stared in the direction of the forest, my hand stopping halfway to my mouth, Ned Land's completing its assignment.
"Stones don't fall from the sky," Conseil said, "or else they deserve to be called meteorites."
A second well-polished stone removed a tasty ringdove leg from Conseil's hand, giving still greater relevance to his observation.
We all three stood up, rifles to our shoulders, ready to answer any attack.
"Apes maybe?" Ned Land exclaimed.
"Head for the skiff!" I said, moving toward the sea.
Indeed, it was essential to beat a retreat because some twenty natives, armed with bows and slings, appeared barely a hundred paces off, on the outskirts of a thicket that masked the horizon to our right.
The skiff was aground ten fathoms away from us.
The savages approached without running, but they favored us with a show of the greatest hostility. It was raining stones and arrows.
Ned Land was unwilling to leave his provisions behind, and despite the impending danger, he clutched his pig on one side, his kangaroos on the other, and scampered off with respectable speed.
In two minutes we were on the strand. Loading provisions and weapons into the skiff, pushing it to sea, and positioning its two oars were the work of an instant. We hadn't gone two cable lengths when a hundred savages, howling and gesticulating, entered the water up to their waists. I looked to see if their appearance might draw some of the Nautilus's men onto the platform. But no. Lying well out, that enormous machine still seemed completely deserted.
Twenty minutes later we boarded ship. The hatches were open. After mooring the skiff, we reentered the Nautilus's interior.
I went below to the lounge, from which some chords were wafting. Captain Nemo was there, leaning over the organ, deep in a musical trance.
"Captain!" I said to him.
He didn't hear me.
"Captain!" I went on, touching him with my hand.
He trembled, and turning around:
"Ah, it's you, professor!" he said to me. "Well, did you have a happy hunt? Was your herb gathering a success?"
"Yes, captain," I replied, "but unfortunately we've brought back a horde of bipeds whose proximity worries me."
"What sort of bipeds?"
"Savages."
"Savages!" Captain Nemo replied in an ironic tone. "You set foot on one of the shores of this globe, professor, and you're surprised to find savages there? Where aren't there savages? And besides, are they any worse than men elsewhere, these people you call savages?"
"But captain--"
"Speaking for myself, sir, I've encountered them everywhere."
"Well then," I replied, "if you don't want to welcome them aboard the Nautilus, you'd better take some precautions!"
"Easy, professor, no cause for alarm."
"But there are a large number of these natives."

"What's your count?"
"At least a hundred."
"Professor Aronnax," replied Captain Nemo, whose fingers took their places again on the organ keys, "if every islander in Papua were to gather on that beach, the Nautilus would still have nothing to fear from their attacks!"

The captain's fingers then ran over the instrument's keyboard, and I noticed that he touched only its black keys, which gave his melodies a basically Scottish color. Soon he had forgotten my presence and was lost in a reverie that I no longer tried to dispel.

I climbed onto the platform. Night had already fallen, because in this low latitude the sun sets quickly, without any twilight. I could see Gueboroa Island only dimly. But numerous fires had been kindled on the beach, attesting that the natives had no thoughts of leaving it.

For several hours I was left to myself, sometimes musing on the islanders--but no longer fearing them because the captain's unflappable confidence had won me over--and sometimes forgetting them to marvel at the splendors of this tropical night. My memories took wing toward France, in the wake of those zodiacal stars due to twinkle over it in a few hours. The moon shone in the midst of the constellations at their zenith. I then remembered that this loyal, good-natured satellite would return to this same place the day after tomorrow, to raise the tide and tear the Nautilus from its coral bed. Near midnight, seeing that all was quiet over the darkened waves as well as under the waterside trees, I repaired to my cabin and fell into a peaceful sleep.

The night passed without mishap. No doubt the Papuans had been frightened off by the mere sight of this monster aground in the bay, because our hatches stayed open, offering easy access to the Nautilus's interior.

At six o'clock in the morning, January 8, I climbed onto the platform. The morning shadows were lifting. The island was soon on view through the dissolving mists, first its beaches, then its summits.

The islanders were still there, in greater numbers than on the day before, perhaps 500 or 600 of them. Taking advantage of the low tide, some of them had moved forward over the heads of coral to within two cable lengths of the Nautilus. I could easily distinguish them. They obviously were true Papuans, men of fine stock, athletic in build, forehead high and broad, nose large but not flat, teeth white. Their woolly, red-tinted hair was in sharp contrast to their bodies, which were black and glistening like those of Nubians. Beneath their pierced, distented earlobes there dangled strings of beads made from bone. Generally these savages were naked. I noted some women among them, dressed from hip to knee in grass skirts held up by belts made of vegetation. Some of the chieftains adorned their necks with crescents and with necklaces made from beads of red and white glass. Armed with bows, arrows, and shields, nearly all of them carried from their shoulders a sort of net, which held those polished stones their slings hurl with such dexterity.

One of these chieftains came fairly close to the Nautilus, examining it with care. He must have been a "mado" of high rank, because he paraded in a mat of banana leaves that had ragged edges and was accented with bright colors.

I could easily have picked off this islander, he stood at such close range; but I thought it best to wait for an actual show of hostility. Between Europeans and savages, it's acceptable for Europeans to shoot back but not to attack first.

During this whole time of low tide, the islanders lurked near the Nautilus, but they weren't boisterous. I often heard them repeat the word "assai," and from their gestures I understood they were inviting me to go ashore, an invitation I felt obliged to decline.

So the skiff didn't leave shipside that day, much to the displeasure of Mr. Land who couldn't complete his provisions. The adroit Canadian spent his time preparing the meat and flour products he had brought from Gueboroa Island. As for the savages, they went back to shore near eleven o'clock in the morning, when the heads of coral began to disappear under the waves of the rising tide. But I saw their numbers swell considerably on the beach. It was likely that they had come from neighboring islands or from the mainland of Papua proper. However, I didn't see one local dugout canoe.

Having nothing better to do, I decided to dredge these beautiful, clear waters, which exhibited a profusion of shells, zoophytes, and open-sea plants. Besides, it was the last day the Nautilus would spend in these waterways, if, tomorrow, it still floated off to the open sea as Captain Nemo had promised.

So I summoned Conseil, who brought me a small, light dragnet similar to those used in oyster fishing.

"What about these savages?" Conseil asked me. "With all due respect to master, they don't strike me as very wicked!"
"They're cannibals even so, my boy."

"A person can be both a cannibal and a decent man," Conseil replied, "just as a person can be both gluttonous and honorable. The one doesn't exclude the other."

"Fine, Conseil! And I agree that there are honorable cannibals who decently devour their prisoners. However, I'm opposed to being devoured, even in all decency, so I'll keep on my guard, especially since the Nautilus's commander seems to be taking no precautions. And now let's get to work!"

For two hours our fishing proceeded energetically but without bringing up any rarities. Our dragnet was filled with Midas abalone, harp shells, obelisk snails, and especially the finest hammer shells I had seen to that day. We also gathered in a few sea cucumbers, some pearl oysters, and a dozen small turtles that we saved for the ship's pantry.

But just when I least expected it, I laid my hands on a wonder, a natural deformity I'd have to call it, something very seldom encountered. Conseil had just made a cast of the dragnet, and his gear had come back up loaded with a variety of fairly ordinary seashells, when suddenly he saw me plunge my arms swiftly into the net, pull out a shelled animal, and give a conchological yell, in other words, the most piercing yell a human throat can produce.

"Eh? What happened to master?" Conseil asked, very startled. "Did master get bitten?"

"No, my boy, but I'd gladly have sacrificed a finger for such a find!"

"What find?"

"This shell," I said, displaying the subject of my triumph.

"But that's simply an olive shell of the 'tent olive' species, genus Oliva, order Pectinibranchia, class Gastropoda, branch Mollusca--"

"Yes, yes, Conseil! But instead of coiling from right to left, this olive shell rolls from left to right!"

"It can't be!" Conseil exclaimed.

"Yes, my boy, it's a left-handed shell!"

"A left-handed shell!" Conseil repeated, his heart pounding.

"Look at its spiral!"

"Oh, master can trust me on this," Conseil said, taking the valuable shell in trembling hands, "but never have I felt such excitement!"

And there was good reason to be excited! In fact, as naturalists have ventured to observe, "dextrality" is a well-known law of nature. In their rotational and orbital movements, stars and their satellites go from right to left. Man uses his right hand more often than his left, and consequently his various instruments and equipment (staircases, locks, watch springs, etc.) are designed to be used in a right-to-left manner. Now then, nature has generally obeyed this law in coiling her shells. They're right-handed with only rare exceptions, and when by chance a shell's spiral is left-handed, collectors will pay its weight in gold for it.

So Conseil and I were deep in the contemplation of our treasure, and I was solemnly promising myself to enrich the Paris Museum with it, when an ill-timed stone, hurled by one of the islanders, whizzed over and shattered the valuable object in Conseil's hands.

I gave a yell of despair! Conseil pounced on his rifle and aimed at a savage swinging a sling just ten meters away from him. I tried to stop him, but his shot went off and shattered a bracelet of amulets dangling from the islander's arm.

"Conseil!" I shouted. "Conseil!"

"Eh? What? Didn't master see that this man-eater initiated the attack?"

"A shell isn't worth a human life!" I told him.

"Oh, the rascal!" Conseil exclaimed. "I'd rather he cracked my shoulder!"

Conseil was in dead earnest, but I didn't subscribe to his views. However, the situation had changed in only a short time and we hadn't noticed. Now some twenty dugout canoes were surrounding the Nautilus. Hollowed from tree trunks, these dugouts were long, narrow, and well designed for speed, keeping their balance by means of two bamboo poles that floated on the surface of the water. They were maneuvered by skillful, half-naked paddlers, and I viewed their advance with definite alarm.

It was obvious these Papuans had already entered into relations with Europeans and knew their ships. But this long, iron cylinder lying in the bay, with no masts or funnels--what were they to make of it? Nothing good, because at first they kept it at a respectful distance. However, seeing that it stayed motionless, they regained confidence little by little and tried to become more familiar with it. Now then, it was precisely this familiarity that we needed to prevent. Since our weapons made no sound when they went off, they would have only a moderate effect on these islanders, who reputedly respect nothing but noisy mechanisms. Without thunderclaps, lightning bolts would be much less frightening, although the danger lies in the flash, not the noise.

Just then the dugout canoes drew nearer to the Nautilus, and a cloud of arrows burst over us.
"Fire and brimstone, it's hailing!" Conseil said. "And poisoned hail perhaps!"
"We've got to alert Captain Nemo," I said, reentering the hatch.
I went below to the lounge. I found no one there. I ventured a knock at the door opening into the captain's stateroom.
The word "Enter!" answered me. I did so and found Captain Nemo busy with calculations in which there was no shortage of X and other algebraic signs.
"Am I disturbing you?" I said out of politeness.
"Correct, Professor Aronnax," the captain answered me. "But I imagine you have pressing reasons for looking me up?"
"Very pressing. Native dugout canoes are surrounding us, and in a few minutes we're sure to be assaulted by several hundred savages."
"Ah!" Captain Nemo put in serenely. "They've come in their dugouts?"
"Yes, sir."
"Well, sir, closing the hatches should do the trick."
"Precisely, and that's what I came to tell you--"
"Nothing easier," Captain Nemo said.
And he pressed an electric button, transmitting an order to the crew's quarters.
"There, sir, all under control!" he told me after a few moments. "The skiff is in place and the hatches are closed. I don't imagine you're worried that these gentlemen will stave in walls that shells from your frigate couldn't breach?"
"No, captain, but one danger still remains."
"What's that, sir?"

"Tomorrow at about this time, we'll need to reopen the hatches to renew the Nautilus's air."
"No argument, sir, since our craft breathes in the manner favored by cetaceans."
"But if these Papuans are occupying the platform at that moment, I don't see how you can prevent them from entering."
"Then, sir, you assume they'll board the ship?"
"I'm certain of it."
"Well, sir, let them come aboard. I see no reason to prevent them. Deep down they're just poor devils, these Papuans, and I don't want my visit to Gueboroa Island to cost the life of a single one of these unfortunate people!"

On this note I was about to withdraw; but Captain Nemo detained me and invited me to take a seat next to him. He questioned me with interest on our excursions ashore and on our hunting, but seemed not to understand the Canadian's passionate craving for red meat. Then our conversation skimmed various subjects, and without being more forthcoming, Captain Nemo proved more affable.

Among other things, we came to talk of the Nautilus's circumstances, aground in the same strait where Captain Dumont d'Urville had nearly miscarried. Then, pertinent to this:

"He was one of your great seamen," the captain told me, "one of your shrewdest navigators, that d'Urville! He was the Frenchman's Captain Cook. A man wise but unlucky! Braving the ice banks of the South Pole, the coral of Oceania, the cannibals of the Pacific, only to perish wretchedly in a train wreck! If that energetic man was able to think about his life in its last seconds, imagine what his final thoughts must have been!"

As he spoke, Captain Nemo seemed deeply moved, an emotion I felt was to his credit.

Then, chart in hand, we returned to the deeds of the French navigator: his voyages to circumnavigate the globe, his double attempt at the South Pole, which led to his discovery of the Adélie Coast and the Louis-Philippe Peninsula, finally his hydrographic surveys of the chief islands in Oceania.

"What your d'Urville did on the surface of the sea," Captain Nemo told me, "I've done in the ocean's interior, but more easily, more completely than he. Constantly tossed about by hurricanes, the Zealous and the new Astrolabe couldn't compare with the Nautilus, a quiet work room truly at rest in the midst of the waters!"

"Even so, captain," I said, "there is one major similarity between Dumont d'Urville's sloops of war and the Nautilus."
"What's that, sir?"
"Like them, the Nautilus has run aground!"
"The Nautilus is not aground, sir," Captain Nemo replied icily. "The Nautilus was built to rest on the ocean floor, and I don't need to undertake the arduous labors, the maneuvers d'Urville had to attempt in order to float off his sloops of war. The Zealous and the new Astrolabe wellnigh perished, but my Nautilus is in no danger. Tomorrow, on the day stated and at the hour stated, the tide will peacefully lift it off, and it will resume its navigating through
the seas."
"Captain," I said, "I don't doubt--"
"Tomorrow," Captain Nemo added, standing up, "tomorrow at 2:40 in the afternoon, the Nautilus will float off and exit the Torres Strait undamaged."
Pronouncing these words in an extremely sharp tone, Captain Nemo gave me a curt bow. This was my dismissal, and I reentered my stateroom.
There I found Conseil, who wanted to know the upshot of my interview with the captain.
"My boy," I replied, "when I expressed the belief that these Papuan natives were a threat to his Nautilus, the captain answered me with great irony. So I've just one thing to say to you: have faith in him and sleep in peace."
"Master has no need for my services?"
"No, my friend. What's Ned Land up to?"
"Begging master's indulgence," Conseil replied, "but our friend Ned is concocting a kangaroo pie that will be the eighth wonder!"
I was left to myself; I went to bed but slept pretty poorly. I kept hearing noises from the savages, who were stamping on the platform and letting out deafening yells. The night passed in this way, without the crew ever emerging from their usual inertia. They were no more disturbed by the presence of these man-eaters than soldiers in an armored fortress are troubled by ants running over the armor plate.
I got up at six o'clock in the morning. The hatches weren't open. So the air inside hadn't been renewed; but the air tanks were kept full for any eventuality and would function appropriately to shoot a few cubic meters of oxygen into the Nautilus's thin atmosphere.
I worked in my stateroom until noon without seeing Captain Nemo even for an instant. Nobody on board seemed to be making any preparations for departure.
I still waited for a while, then I made my way to the main lounge. Its timepiece marked 2:30. In ten minutes the tide would reach its maximum elevation, and if Captain Nemo hadn't made a rash promise, the Nautilus would immediately break free. If not, many months might pass before it could leave its coral bed.
But some preliminary vibrations could soon be felt over the boat's hull. I heard its plating grind against the limestone roughness of that coral base.
At 2:35 Captain Nemo appeared in the lounge.
"We're about to depart," he said.
"Ah!" I put in.
"I've given orders to open the hatches."
"What about the Papuans?"
"What about them?" Captain Nemo replied, with a light shrug of his shoulders.
"Won't they come inside the Nautilus?"
"How will they manage that?"
"By jumping down the hatches you're about to open."
"Professor Aronnax," Captain Nemo replied serenely, "the Nautilus's hatches aren't to be entered in that fashion even when they're open."
I gaped at the captain.
"You don't understand?" he said to me.
"Not in the least."
"Well, come along and you'll see!"
I headed to the central companionway. There, very puzzled, Ned Land and Conseil watched the crewmen opening the hatches, while a frightful clamor and furious shouts resounded outside.
The hatch lids fell back onto the outer plating. Twenty horrible faces appeared. But when the first islander laid hands on the companionway railing, he was flung backward by some invisible power, lord knows what! He ran off, howling in terror and wildly prancing around.
Ten of his companions followed him. All ten met the same fate.
Conseil was in ecstasy. Carried away by his violent instincts, Ned Land leaped up the companionway. But as soon as his hands seized the railing, he was thrown backward in his turn.
"Damnation!" he exclaimed. "I've been struck by a lightning bolt!"
These words explained everything to me. It wasn't just a railing that led to the platform, it was a metal cable fully charged with the ship's electricity. Anyone who touched it got a fearsome shock-- and such a shock would have been fatal if Captain Nemo had thrown the full current from his equipment into this conducting cable! It could honestly be
said that he had stretched between himself and his assailants a network of electricity no one could clear with impunity.

Meanwhile, crazed with terror, the unhinged Papuans beat a retreat. As for us, half laughing, we massaged and comforted poor Ned Land, who was swearing like one possessed.

But just then, lifted off by the tide's final undulations, the Nautilus left its coral bed at exactly that fortieth minute pinpointed by the captain. Its propeller churned the waves with lazy majesty. Gathering speed little by little, the ship navigated on the surface of the ocean, and safe and sound, it left behind the dangerous narrows of the Torres Strait.

CHAPTER 23
"Aegri Somnia"*
*Latin: "troubled dreams." Ed.

THE FOLLOWING DAY, January 10, the Nautilus resumed its travels in midwater but at a remarkable speed that I estimated to be at least thirty-five miles per hour. The propeller was going so fast I could neither follow nor count its revolutions.

I thought about how this marvelous electric force not only gave motion, heat, and light to the Nautilus but even protected it against outside attack, transforming it into a sacred ark no profane hand could touch without being blasted; my wonderment was boundless, and it went from the submersible itself to the engineer who had created it.

We were traveling due west and on January 11 we doubled Cape Wessel, located in longitude 135 degrees and latitude 10 degrees north, the western tip of the Gulf of Carpentaria. Reefs were still numerous but more widely scattered and were fixed on the chart with the greatest accuracy. The Nautilus easily avoided the Money breakers to port and the Victoria reefs to starboard, positioned at longitude 130 degrees on the tenth parallel, which we went along rigorously.

On January 13, arriving in the Timor Sea, Captain Nemo raised the island of that name at longitude 122 degrees. This island, whose surface area measures 1,625 square leagues, is governed by rajahs. These aristocrats deem themselves the sons of crocodiles, in other words, descendants with the most exalted origins to which a human being can lay claim. Accordingly, their scaly ancestors infest the island's rivers and are the subjects of special veneration. They are sheltered, nurtured, flattered, pampered, and offered a ritual diet of nubile maidens; and woe to the foreigner who lifts a finger against these sacred saurians.

But the Nautilus wanted nothing to do with these nasty animals. Timor Island was visible for barely an instant at noon while the chief officer determined his position. I also caught only a glimpse of little Roti Island, part of this same group, whose women have a well-established reputation for beauty in the Malaysian marketplace.

After our position fix, the Nautilus's latitude bearings were modulated to the southwest. Our prow pointed to the Indian Ocean. Where would Captain Nemo's fancies take us? Would he head up to the shores of Asia? Would he pull nearer to the beaches of Europe? Unlikely choices for a man who avoided populated areas! So would he go down south? Would he double the Cape of Good Hope, then Cape Horn, and push on to the Antarctic pole? Finally, would he return to the seas of the Pacific, where his Nautilus could navigate freely and easily? Time would tell.

After cruising along the Cartier, Hibernia, Seringapatam, and Scott reefs, the solid element's last exertions against the liquid element, we were beyond all sight of shore by January 14. The Nautilus slowed down in an odd manner, and very unpredictable in its ways, it sometimes swam in the midst of the waters, sometimes drifted on their surface.

During this phase of our voyage, Captain Nemo conducted interesting experiments on the different temperatures in various strata of the sea. Under ordinary conditions, such readings are obtained using some pretty complicated instruments whose findings are dubious to say the least, whether they're thermometric sounding lines, whose glass often shatters under the water's pressure, or those devices based on the varying resistance of metals to electric currents. The results so obtained can't be adequately double-checked. By contrast, Captain Nemo would seek the sea's temperature by going himself into its depths, and when he placed his thermometer in contact with the various layers of liquid, he found the sought-for degree immediately and with certainty.

And so, by loading up its ballast tanks, or by sinking obliquely with its slanting fins, the Nautilus successively reached depths of 3,000, 4,000, 5,000, 7,000, 9,000, and 10,000 meters, and the ultimate conclusion from these experiments was that, in all latitudes, the sea had a permanent temperature of 4.5 degrees centigrade at a depth of 1,000 meters.

I watched these experiments with the most intense fascination. Captain Nemo brought a real passion to them. I often wondered why he took these observations. Were they for the benefit of his fellow man? It was unlikely, because sooner or later his work would perish with him in some unknown sea! Unless he intended the results of his experiments for me. But that meant this strange voyage of mine would come to an end, and no such end was in sight.

Be that as it may, Captain Nemo also introduced me to the different data he had obtained on the relative densities
of the water in our globe's chief seas. From this news I derived some personal enlightenment having nothing to do with science.

It happened the morning of January 15. The captain, with whom I was strolling on the platform, asked me if I knew how salt water differs in density from sea to sea. I said no, adding that there was a lack of rigorous scientific observations on this subject.

"I've taken such observations," he told me, "and I can vouch for their reliability."

"Fine," I replied, "but the Nautilus lives in a separate world, and the secrets of its scientists don't make their way ashore."

"You're right, professor," he told me after a few moments of silence. "This is a separate world. It's as alien to the earth as the planets accompanying our globe around the sun, and we'll never become familiar with the work of scientists on Saturn or Jupiter. But since fate has linked our two lives, I can reveal the results of my observations to you."

"I'm all attention, captain."

"You're aware, professor, that salt water is denser than fresh water, but this density isn't uniform. In essence, if I represent the density of fresh water by 1.000, then I find 1.028 for the waters of the Atlantic, 1.026 for the waters of the Pacific, 1.030 for the waters of the Mediterranean--"

Aha, I thought, so he ventures into the Mediterranean?

"--1.018 for the waters of the Ionian Sea, and 1.029 for the waters of the Adriatic."

Assuredly, the Nautilus didn't avoid the heavily traveled seas of Europe, and from this insight I concluded that the ship would take us back—perhaps very soon—to more civilized shores. I expected Ned Land to greet this news with unfeigned satisfaction.

For several days our work hours were spent in all sorts of experiments, on the degree of salinity in waters of different depths, or on their electric properties, coloration, and transparency, and in every instance Captain Nemo displayed an ingenuity equaled only by his graciousness toward me. Then I saw no more of him for some days and again lived on board in seclusion.

On January 16 the Nautilus seemed to have fallen asleep just a few meters beneath the surface of the water. Its electric equipment had been turned off, and the motionless propeller let it ride with the waves. I assumed that the crew were busy with interior repairs, required by the engine's strenuous mechanical action.

My companions and I then witnessed an unusual sight. The panels in the lounge were open, and since the Nautilus's beacon was off, a hazy darkness reigned in the midst of the waters. Covered with heavy clouds, the stormy sky gave only the faintest light to the ocean's upper strata.

I was observing the state of the sea under these conditions, and even the largest fish were nothing more than ill-defined shadows, when the Nautilus was suddenly transferred into broad daylight. At first I thought the beacon had gone back on and was casting its electric light into the liquid mass. I was mistaken, and after a hasty examination I discovered my error.

The Nautilus had drifted into the midst of some phosphorescent strata, which, in this darkness, came off as positively dazzling. This effect was caused by myriads of tiny, luminous animals whose brightness increased when they glided over the metal hull of our submersible. In the midst of these luminous sheets of water, I then glimpsed flashes of light, like those seen inside a blazing furnace from streams of molten lead or from masses of metal brought to a white heat—flashes so intense that certain areas of the light became shadows by comparison, in a fiery setting from which every shadow should seemingly have been banished. No, this was no longer the calm emission of our usual lighting! This light throbbed with unprecedented vigor and activity! You sensed that it was alive!

In essence, it was a cluster of countless open-sea infusoria, of noctiluca an eighth of an inch wide, actual globules of transparent jelly equipped with a threadlike tentacle, up to 25,000 of which have been counted in thirty cubic centimeters of water. And the power of their light was increased by those glimmers unique to medusas, starfish, common jellyfish, angel-wing clams, and other phosphorescent zoophytes, which were saturated with grease from organic matter decomposed by the sea, and perhaps with mucus secreted by fish.

For several hours the Nautilus drifted in this brilliant tide, and our wonderment grew when we saw huge marine animals cavorting in it, like the fire-dwelling salamanders of myth. In the midst of these flames that didn't burn, I could see swift, elegant porpoises, the tireless pranksters of the seas, and sailfish three meters long, those shrewd heralds of hurricanes, whose fearsome broadswords sometimes banged against the lounge window. Then smaller fish appeared: miscellaneous triggerfish, leather jacks, unicornfish, and a hundred others that left stripes on this luminous atmosphere in their course.

Some magic lay behind this dazzling sight! Perhaps some atmospheric condition had intensified this phenomenon? Perhaps a storm had been unleashed on the surface of the waves? But only a few meters down, the Nautilus felt no tempest's fury, and the ship rocked peacefully in the midst of the calm waters.
And so it went, some new wonder constantly delighting us. Conseil observed and classified his zoophytes, articulates, mollusks, and fish. The days passed quickly, and I no longer kept track of them. Ned, as usual, kept looking for changes of pace from our standard fare. Like actual snails, we were at home in our shell, and I can vouch that it's easy to turn into a full-fledged snail.

So this way of living began to seem simple and natural to us, and we no longer envisioned a different lifestyle on the surface of the planet earth, when something happened to remind us of our strange circumstances.

On January 18 the Nautilus lay in longitude 105 degrees and latitude 15 degrees south. The weather was threatening, the sea rough and billowy. The wind was blowing a strong gust from the east. The barometer, which had been falling for some days, forecast an approaching struggle of the elements.

I had climbed onto the platform just as the chief officer was taking his readings of hour angles. Out of habit I waited for him to pronounce his daily phrase. But that day it was replaced by a different phrase, just as incomprehensible. Almost at once I saw Captain Nemo appear, lift his spyglass, and inspect the horizon.

For some minutes the captain stood motionless, rooted to the spot contained within the field of his lens. Then he lowered his spyglass and exchanged about ten words with his chief officer. The latter seemed to be in the grip of an excitement he tried in vain to control. More in command of himself, Captain Nemo remained cool. Furthermore, he seemed to be raising certain objections that his chief officer kept answering with flat assurances. At least that's what I gathered from their differences in tone and gesture.

As for me, I stared industriously in the direction under observation but without spotting a thing. Sky and water merged into a perfectly clean horizon line.

Meanwhile Captain Nemo strolled from one end of the platform to the other, not glancing at me, perhaps not even seeing me. His step was firm but less regular than usual. Sometimes he would stop, cross his arms over his chest, and observe the sea. What could he be looking for over that immense expanse? By then the Nautilus lay hundreds of miles from the nearest coast!

The chief officer kept lifting his spyglass and stubbornly examining the horizon, walking up and down, stamping his foot, in his nervous agitation a sharp contrast to his superior.

But this mystery would inevitably be cleared up, and soon, because Captain Nemo gave orders to increase speed; at once the engine stepped up its drive power, setting the propeller in swifter rotation.

Just then the chief officer drew the captain's attention anew. The latter interrupted his strolling and aimed his spyglass at the point indicated. He observed it a good while. As for me, deeply puzzled, I went below to the lounge and brought back an excellent long-range telescope I habitually used. Leaning my elbows on the beacon housing, which jutted from the stern of the platform, I got set to scour that whole stretch of sky and sea.

But no sooner had I peered into the eyepiece than the instrument was snatched from my hands.

I spun around. Captain Nemo was standing before me, but I almost didn't recognize him. His facial features were transfigured. Gleaming with dark fire, his eyes had shrunk beneath his frowning brow. His teeth were half bared. His rigid body, clenched fists, and head drawn between his shoulders, all attested to a fierce hate breathing from every pore. He didn't move. My spyglass fell from his hand and rolled at his feet.

Had I accidentally caused these symptoms of anger? Did this incomprehensible individual think I had detected some secret forbidden to guests on the Nautilus?

No! I wasn't the subject of his hate because he wasn't even looking at me; his eyes stayed stubbornly focused on that inscrutable point of the horizon.

Finally Captain Nemo regained his self-control. His facial appearance, so profoundly changed, now resumed its usual calm. He addressed a few words to his chief officer in their strange language, then he turned to me:

"Professor Aronnax," he told me in a tone of some urgency, "I ask that you now honor one of the binding agreements between us."

"Which one, captain?"

"You and your companions must be placed in confinement until I see fit to set you free."

"You're in command," I answered, gaping at him. "But may I address a question to you?"

"You may not, sir."

After that, I stopped objecting and started obeying, since resistance was useless.

I went below to the cabin occupied by Ned Land and Conseil, and I informed them of the captain's decision. I'll let the reader decide how this news was received by the Canadian. In any case, there was no time for explanations. Four crewmen were waiting at the door, and they led us to the cell where we had spent our first night aboard the Nautilus.

Ned Land tried to lodge a complaint, but the only answer he got was a door shut in his face.

"Will master tell me what this means?" Conseil asked me.

I told my companions what had happened. They were as astonished as I was, but no wiser.
Then I sank into deep speculation, and Captain Nemo’s strange facial seizure kept haunting me. I was incapable of connecting two ideas in logical order, and I had strayed into the most absurd hypotheses, when I was snapped out of my mental struggles by these words from Ned Land:

“Well, look here! Lunch is served!”

Indeed, the table had been laid. Apparently Captain Nemo had given this order at the same time he commanded the Nautilus to pick up speed.

“Will master allow me to make him a recommendation?” Conseil asked me.

“Yes, my boy,” I replied.

“Well, master needs to eat his lunch! It’s prudent, because we have no idea what the future holds.”

“You’re right, Conseil.”

“Unfortunately,” Ned Land said, “they’ve only given us the standard menu.”

“Ned my friend,” Conseil answered, “what would you say if they’d given us no lunch at all?”

This dose of sanity cut the harpooner’s complaints clean off.

We sat down at the table. Our meal proceeded pretty much in silence. I ate very little. Conseil, everlastingly prudent, “force-fed” himself; and despite the menu, Ned Land didn’t waste a bite. Then, lunch over, each of us propped himself in a corner.

Just then the luminous globe lighting our cell went out, leaving us in profound darkness. Ned Land soon dozed off, and to my astonishment, Conseil also fell into a heavy slumber. I was wondering what could have caused this urgent need for sleep, when I felt a dense torpor saturate my brain. I tried to keep my eyes open, but they closed in spite of me. I was in the grip of anguished hallucinations. Obviously some sleep-inducing substance had been laced into the food we’d just eaten! So imprisonment wasn’t enough to conceal Captain Nemo’s plans from us—sleep was needed as well!

Then I heard the hatches close. The sea’s undulations, which had been creating a gentle rocking motion, now ceased. Had the Nautilus left the surface of the ocean? Was it reentering the motionless strata deep in the sea?

I tried to fight off this drowsiness. It was impossible. My breathing grew weaker. I felt a mortal chill freeze my dull, nearly paralyzed limbs. Like little domes of lead, my lids fell over my eyes. I couldn’t raise them. A morbid sleep, full of hallucinations, seized my whole being. Then the visions disappeared and left me in utter oblivion.

CHAPTER 24

The Coral Realm

THE NEXT DAY I woke up with my head unusually clear. Much to my surprise, I was in my stateroom. No doubt my companions had been put back in their cabin without noticing it any more than I had. Like me, they would have no idea what took place during the night, and to unravel this mystery I could count only on some future happenstance.

I then considered leaving my stateroom. Was I free or still a prisoner? Perfectly free. I opened my door, headed down the gangways, and climbed the central companionway. Hatches that had been closed the day before were now open. I arrived on the platform.

Ned Land and Conseil were there waiting for me. I questioned them. They knew nothing. Lost in a heavy sleep of which they had no memory, they were quite startled to be back in their cabin.

As for the Nautilus, it seemed as tranquil and mysterious as ever. It was cruising on the surface of the waves at a moderate speed. Nothing seemed to have changed on board.

Ned Land observed the sea with his penetrating eyes. It was deserted. The Canadian sighted nothing new on the horizon, neither sail nor shore. A breeze was blowing noisily from the west, and disheveled by the wind, long
billows made the submersible roll very noticeably.

After renewing its air, the Nautilus stayed at an average depth of fifteen meters, enabling it to return quickly to the surface of the waves. And, contrary to custom, it executed such a maneuver several times during that day of January 19. The chief officer would then climb onto the platform, and his usual phrase would ring through the ship's interior.

As for Captain Nemo, he didn't appear. Of the other men on board, I saw only my emotionless steward, who served me with his usual mute efficiency.

Near two o'clock I was busy organizing my notes in the lounge, when the captain opened the door and appeared. I bowed to him. He gave me an almost imperceptible bow in return, without saying a word to me. I resumed my work, hoping he might give me some explanation of the previous afternoon's events. He did nothing of the sort. I stared at him. His face looked exhausted; his reddened eyes hadn't been refreshed by sleep; his facial features expressed profound sadness, real chagrin. He walked up and down, sat and stood, picked up a book at random, discarded it immediately, consulted his instruments without taking his customary notes, and seemed unable to rest easy for an instant.

Finally he came over to me and said:

"Are you a physician, Professor Aronnax?"

This inquiry was so unexpected that I stared at him a good while without replying.

"Are you a physician?" he repeated. "Several of your scientific colleagues took their degrees in medicine, such as Gratiolet, Moquin-Tandon, and others."

"That's right," I said, "I am a doctor, I used to be on call at the hospitals. I was in practice for several years before joining the museum."

"Excellent, sir."

My reply obviously pleased Captain Nemo. But not knowing what he was driving at, I waited for further questions, ready to reply as circumstances dictated.

"Professor Aronnax," the captain said to me, "would you consent to give your medical attentions to one of my men?"

"Someone is sick?"

"Yes."

"I'm ready to go with you."

"Come."

I admit that my heart was pounding. Lord knows why, but I saw a definite connection between this sick crewman and yesterday's happenings, and the mystery of those events concerned me at least as much as the man's sickness.

Captain Nemo led me to the Nautilus's stern and invited me into a cabin located next to the sailors' quarters.

On a bed there lay a man some forty years old, with strongly molded features, the very image of an Anglo-Saxon.

I bent over him. Not only was he sick, he was wounded. Swathed in blood-soaked linen, his head was resting on a folded pillow. I undid the linen bandages, while the wounded man gazed with great staring eyes and let me proceed without making a single complaint.

It was a horrible wound. The cranium had been smashed open by some blunt instrument, leaving the naked brains exposed, and the cerebral matter had suffered deep abrasions. Blood clots had formed in this dissolving mass, taking on the color of wine dregs. Both contusion and concussion of the brain had occurred. The sick man's breathing was labored, and muscle spasms quivered in his face. Cerebral inflammation was complete and had brought on a paralysis of movement and sensation.

I took the wounded man's pulse. It was intermittent. The body's extremities were already growing cold, and I saw that death was approaching without any possibility of my holding it in check. After dressing the poor man's wound, I redid the linen bandages around his head, and I turned to Captain Nemo.

"How did he get this wound?" I asked him.

"That's not important," the captain replied evasively. "The Nautilus suffered a collision that cracked one of the engine levers, and it struck this man. My chief officer was standing beside him. This man leaped forward to intercept the blow. A brother lays down his life for his brother, a friend for his friend, what could be simpler? That's the law for everyone on board the Nautilus. But what's your diagnosis of his condition?"

I hesitated to speak my mind.

"You may talk freely," the captain told me. "This man doesn't understand French."

I took a last look at the wounded man, then I replied:

"This man will be dead in two hours."
"Nothing can save him?"
"Nothing."
Captain Nemo clenched his fists, and tears slid from his eyes, which I had thought incapable of weeping.
For a few moments more I observed the dying man, whose life was ebbing little by little. He grew still more pale
under the electric light that bathed his deathbed. I looked at his intelligent head, furrowed with premature wrinkles
that misfortune, perhaps misery, had etched long before. I was hoping to detect the secret of his life in the last words
that might escape from his lips!
"You may go, Professor Aronnax," Captain Nemo told me.
I left the captain in the dying man's cabin and I repaired to my stateroom, very moved by this scene. All day long
I was aquiver with gruesome forebodings. That night I slept poorly, and between my fitful dreams, I thought I heard
a distant moaning, like a funeral dirge. Was it a prayer for the dead, murmured in that language I couldn't understand?

The next morning I climbed on deck. Captain Nemo was already there. As soon as he saw me, he came over.
"Professor," he said to me, "would it be convenient for you to make an underwater excursion today?"
"With my companions?"
"If they're agreeable."
"We're yours to command, captain."
"Then kindly put on your diving suits."
As for the dead or dying man, he hadn't come into the picture. I rejoined Ned Land and Conseil. I informed them
of Captain Nemo's proposition. Conseil was eager to accept, and this time the Canadian proved perfectly amenable
to going with us.

It was eight o'clock in the morning. By 8:30 we were suited up for this new stroll and equipped with our two
devices for lighting and breathing. The double door opened, and accompanied by Captain Nemo with a dozen
crewmen following, we set foot on the firm seafloor where the Nautilus was resting, ten meters down.
A gentle slope gravitated to an uneven bottom whose depth was about fifteen fathoms. This bottom was
completely different from the one I had visited during my first excursion under the waters of the Pacific Ocean. Here
I saw no fine-grained sand, no underwater prairies, not one open-sea forest. I immediately recognized the wondrous
region in which Captain Nemo did the honors that day. It was the coral realm.

In the zoophyte branch, class Alcyonaria, one finds the order Gorgonaria, which contains three groups: sea fans,
isidian polyps, and coral polyps. It's in this last that precious coral belongs, an unusual substance that, at different
times, has been classified in the mineral, vegetable, and animal kingdoms. Medicine to the ancients, jewelry to the
moderns, it wasn't decisively placed in the animal kingdom until 1694, by Peysonnel of Marseilles.

A coral is a unit of tiny animals assembled over a polypary that's brittle and stony in nature. These polyps have a
unique generating mechanism that reproduces them via the budding process, and they have an individual existence
while also participating in a communal life. Hence they embody a sort of natural socialism. I was familiar with the
latest research on this bizarre zoophyte-- which turns to stone while taking on a tree form, as some naturalists have
very aptly observed--and nothing could have been more fascinating to me than to visit one of these petrified forests
that nature has planted on the bottom of the sea.

We turned on our Ruhmkorff devices and went along a coral shoal in the process of forming, which, given time,
will someday close off this whole part of the Indian Ocean. Our path was bordered by hopelessly tangled bushes,
formed from snarls of shrubs all covered with little star-shaped, white-streaked flowers. Only, contrary to plants on
shore, these tree forms become attached to rocks on the seafloor by heading from top to bottom.
Our lights produced a thousand delightful effects while playing over these brightly colored boughs. I fancied I
saw these cylindrical, membrane-filled tubes trembling beneath the water's undulations. I was tempted to gather their
fresh petals, which were adorned with delicate tentacles, some newly in bloom, others barely opened, while nimble
fish with fluttering fins brushed past them like flocks of birds. But if my hands came near the moving flowers of
these sensitive, lively creatures, an alarm would instantly sound throughout the colony. The white petals retracted
into their red sheaths, the flowers vanished before my eyes, and the bush changed into a chunk of stony nipples.

Sheer chance had placed me in the presence of the most valuable specimens of this zoophyte. This coral was the
equal of those fished up from the Mediterranean off the Barbary Coast or the shores of France and Italy. With its
bright colors, it lived up to those poetic names of blood flower and blood foam that the industry confers on its finest
exhibits. Coral sells for as much as 500 francs per kilogram, and in this locality the liquid strata hid enough to make
the fortunes of a whole host of coral fishermen. This valuable substance often merges with other polyparies, forming
compact, hopelessly tangled units known as "macciota," and I noted some wonderful pink samples of this coral.

But as the bushes shrank, the tree forms magnified. Actual petrified thickets and long alcoves from some
fantastic school of architecture kept opening up before our steps. Captain Nemo entered beneath a dark gallery
whose gentle slope took us to a depth of 100 meters. The light from our glass coils produced magical effects at times, lingering on the wrinkled roughness of some natural arch, or some overhang suspended like a chandelier, which our lamps flecked with fiery sparks. Amid these shrubs of precious coral, I observed other polyps no less unusual: melita coral, rainbow coral with jointed outgrowths, then a few tufts of genus Corallina, some green and others red, actually a type of seaweed encrusted with limestone salts, which, after long disputes, naturalists have finally placed in the vegetable kingdom. But as one intellectual has remarked, "Here, perhaps, is the actual point where life rises humbly out of slumbering stone, but without breaking away from its crude starting point."

Finally, after two hours of walking, we reached a depth of about 300 meters, in other words, the lowermost limit at which coral can begin to form. But here it was no longer some isolated bush or a modest grove of low timber. It was an immense forest, huge mineral vegetation, enormous petrified trees linked by garlands of elegant hydras from the genus Plumularia, those tropical creepers of the sea, all decked out in shades and gleams. We passed freely under their lofty boughs, lost up in the shadows of the waves, while at our feet organ-pipe coral, stony coral, star coral, fungus coral, and sea anemone from the genus Caryophylia formed a carpet of flowers all strewn with dazzling gems.

What an indescribable sight! Oh, if only we could share our feelings! Why were we imprisoned behind these masks of metal and glass! Why were we forbidden to talk with each other! At least let us lead the lives of the fish that populate this liquid element, or better yet, the lives of amphibians, which can spend long hours either at sea or on shore, traveling through their double domain as their whims dictate!

Meanwhile Captain Nemo had called a halt. My companions and I stopped walking, and turning around, I saw the crewmen form a semicircle around their leader. Looking with greater care, I observed that four of them were carrying on their shoulders an object that was oblong in shape.

At this locality we stood in the center of a huge clearing surrounded by the tall tree forms of this underwater forest. Our lamps cast a sort of brilliant twilight over the area, making inordinately long shadows on the seafloor. Past the boundaries of the clearing, the darkness deepened again, relieved only by little sparkles given off by the sharp crests of coral.

Ned Land and Conseil stood next to me. We stared, and it dawned on me that I was about to witness a strange scene. Observing the seafloor, I saw that it swelled at certain points from low bulges that were encrusted with limestone deposits and arranged with a symmetry that betrayed the hand of man.

In the middle of the clearing, on a pedestal of roughly piled rocks, there stood a cross of coral, extending long arms you would have thought were made of petrified blood.

At a signal from Captain Nemo, one of his men stepped forward and, a few feet from this cross, detached a mattock from his belt and began to dig a hole.

I finally understood! This clearing was a cemetery, this hole a grave, that oblong object the body of the man who must have died during the night! Captain Nemo and his men had come to bury their companion in this communal resting place on the inaccessible ocean floor!

No! My mind was reeling as never before! Never had ideas of such impact raced through my brain! I didn't want to see what my eyes saw!

Meanwhile the grave digging went slowly. Fish fled here and there as their retreat was disturbed. I heard the pick ringing on the limestone soil, its iron tip sometimes giving off sparks when it hit a stray piece of flint on the sea bottom. The hole grew longer, wider, and soon was deep enough to receive the body.

Then the pallbearers approached. Wrapped in white fabric made from filaments of the fan mussel, the body was lowered into its watery grave. Captain Nemo, arms crossed over his chest, knelt in a posture of prayer, as did all the friends of him who had loved them. . . . My two companions and I bowed reverently.

The grave was then covered over with the rubble dug from the seafloor, and it formed a low mound.

When this was done, Captain Nemo and his men stood up; then they all approached the grave, sank again on bended knee, and extended their hands in a sign of final farewell. . . .

Then the funeral party went back up the path to the Nautilus, returning beneath the arches of the forest, through the thickets, along the coral bushes, going steadily higher.

Finally the ship's rays appeared. Their luminous trail guided us to the Nautilus. By one o'clock we had returned.

After changing clothes, I climbed onto the platform, and in the grip of dreadfully obsessive thoughts, I sat next to the beacon.

Captain Nemo rejoined me. I stood up and said to him:
"So, as I predicted, that man died during the night?"
"Yes, Professor Aronnax," Captain Nemo replied.
"And now he rests beside his companions in that coral cemetery?"
"Yes, forgotten by the world but not by us! We dig the graves, then entrust the polyps with sealing away our
dead for eternity!"

And with a sudden gesture, the captain hid his face in his clenched fists, vainly trying to hold back a sob. Then he added:

"There lies our peaceful cemetery, hundreds of feet beneath the surface of the waves!"
"At least, captain, your dead can sleep serenely there, out of the reach of sharks!"
"Yes, sir," Captain Nemo replied solemnly, "of sharks and men!"

END OF THE FIRST PART

*Author's Note: About 106 meters. An English foot is only 30.4 centimeters. *German: "Bulletin." Ed. *Author's Note: A pier is a type of wharf expressly set aside for an individual vessel. *Author's Note: Tenders are small steamboats that assist the big liners. *Author's Note: A Bowie knife is a wide-bladed dagger that Americans are forever carrying around. *Author's Note: A steward is a waiter on board a steamer. *Latin: nemo means "no one." Ed. *Latin: "in a class by itself." Ed. **Author's Note: And sure enough, there's now talk of such a discovery, in which a new set of levers generates considerable power. Did its inventor meet up with Captain Nemo? *Author's Note: "Ladyfingers" are small, thin, white clouds with ragged edges. *Latin: a spigot "just for that purpose." Ed. *Latin: "troubled dreams." Ed. 2 · Twenty Thousand Leagues Under the Seas
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Now we begin the second part of this voyage under the seas. The first ended in that moving scene at the coral cemetery, which left a profound impression on my mind. And so Captain Nemo would live out his life entirely in the heart of this immense sea, and even his grave lay ready in its impenetrable depths. There the last sleep of the Nautilus's occupants, friends bound together in death as in life, would be disturbed by no monster of the deep! "No man either!" the captain had added.

Always that same fierce, implacable defiance of human society!

As for me, I was no longer content with the hypotheses that satisfied Conseil. That fine lad persisted in seeing the Nautilus's commander as merely one of those unappreciated scientists who repay humanity's indifference with contempt. For Conseil, the captain was still a misunderstood genius who, tired of the world's deceptions, had been driven to take refuge in this inaccessible environment where he was free to follow his instincts. But to my mind, this hypothesis explained only one side of Captain Nemo.

In fact, the mystery of that last afternoon when we were locked in prison and put to sleep, the captain's violent precaution of snatching from my grasp a spyglass poised to scour the horizon, and the fatal wound given that man during some unexplained collision suffered by the Nautilus, all led me down a plain trail. No! Captain Nemo wasn't content simply to avoid humanity! His fearsome submersible served not only his quest for freedom, but also, perhaps, it was used in lord-knows-what schemes of dreadful revenge.

Right now, nothing is clear to me, I still glimpse only glimmers in the dark, and I must limit my pen, as it were,
to taking dictation from events.

But nothing binds us to Captain Nemo. He believes that escaping from the Nautilus is impossible. We are not even constrained by our word of honor. No promises fetter us. We’re simply captives, prisoners masquerading under the name "guests" for the sake of everyday courtesy. Even so, Ned Land hasn't given up all hope of recovering his freedom. He’s sure to take advantage of the first chance that comes his way. No doubt I will do likewise. And yet I will feel some regret at making off with the Nautilus's secrets, so generously unveiled for us by Captain Nemo! Because, ultimately, should we detest or admire this man? Is he the persecutor or the persecuted? And in all honesty, before I leave him forever, I want to finish this underwater tour of the world, whose first stages have been so magnificent. I want to observe the full series of these wonders gathered under the seas of our globe. I want to see what no man has seen yet, even if I must pay for this insatiable curiosity with my life! What are my discoveries to date? Nothing, relatively speaking-- since so far we've covered only 6,000 leagues across the Pacific!

Nevertheless, I'm well aware that the Nautilus is drawing near to populated shores, and if some chance for salvation becomes available to us, it would be sheer cruelty to sacrifice my companions to my passion for the unknown. I must go with them, perhaps even guide them. But will this opportunity ever arise? The human being, robbed of his free will, craves such an opportunity; but the scientist, forever inquisitive, dreads it.

That day, January 21, 1868, the chief officer went at noon to take the sun’s altitude. I climbed onto the platform, lit a cigar, and watched him at work. It seemed obvious to me that this man didn't understand French, because I made several remarks in a loud voice that were bound to provoke him to some involuntary show of interest had he understood them; but he remained mute and emotionless.

While he took his sights with his sextant, one of the Nautilus's sailors-- that muscular man who had gone with us to Crespo Island during our first underwater excursion--came up to clean the glass panes of the beacon. I then examined the fittings of this mechanism, whose power was increased a hundredfold by biconvex lenses that were designed like those in a lighthouse and kept its rays productively focused. This electric lamp was so constructed as to yield its maximum illuminating power. In essence, its light was generated in a vacuum, insuring both its steadiness and intensity. Such a vacuum also reduced wear on the graphite points between which the luminous arc expanded. This was an important savings for Captain Nemo, who couldn’t easily renew them. But under these conditions, wear and tear were almost nonexistent.

When the Nautilus was ready to resume its underwater travels, I went below again to the lounge. The hatches closed once more, and our course was set due west.

We then plowed the waves of the Indian Ocean, vast liquid plains with an area of 550,000,000 hectares, whose waters are so transparent it makes you dizzy to lean over their surface. There the Nautilus generally drifted at a depth between 100 and 200 meters. It behaved in this way for some days. To anyone without my grand passion for the sea, these hours would surely have seemed long and monotonous; but my daily strolls on the platform where I was revived by the life-giving ocean air, the sights in the rich waters beyond the lounge windows, the books to be read in the library, and the composition of my memoirs, took up all my time and left me without a moment of weariness or boredom.

All in all, we enjoyed a highly satisfactory state of health. The diet on board agreed with us perfectly, and for my part, I could easily have gone without those changes of pace that Ned Land, in a spirit of protest, kept taxing his ingenuity to supply us. What's more, in this constant temperature we didn't even have to worry about catching colds. Besides, the ship had a good stock of the madrepore Dendrophyllia, known in Provence by the name sea fennel, and a poultice made from the dissolved flesh of its polyps will furnish an excellent cough medicine.

For some days we saw a large number of aquatic birds with webbed feet, known as gulls or sea mews. Some were skillfully slain, and when cooked in a certain fashion, they make a very acceptable platter of water game. Among the great wind riders--carried over long distances from every shore and resting on the waves from their exhausting flights-- I spotted some magnificent albatross, birds belonging to the Longipennes (long-winged) family, whose discordant calls sound like the braying of an ass. The Totipalmes (fully webbed) family was represented by swift frigate birds, nimbly catching fish at the surface, and by numerous tropic birds of the genus Phaeton, among others the red-tailed tropic bird, the size of a pigeon, its white plumage shaded with pink tints that contrasted with its dark-hued wings.

The Nautilus’s nets hauled up several types of sea turtle from the hawksbill genus with arching backs whose scales are highly prized. Diving easily, these reptiles can remain a good while underwater by closing the fleshy valves located at the external openings of their nasal passages. When they were captured, some hawksbills were still asleep inside their carapaces, a refuge from other marine animals. The flesh of these turtles was nothing memorable, but their eggs made an excellent feast.

As for fish, they always filled us with wonderment when, staring through the open panels, we could unveil the secrets of their aquatic lives. I noted several species I hadn't previously been able to observe.
I'll mention chiefly some trunkfish unique to the Red Sea, the sea of the East Indies, and that part of the ocean washing the coasts of equinoctial America. Like turtles, armadillos, sea urchins, and crustaceans, these fish are protected by armor plate that's neither chalky nor stony but actual bone. Sometimes this armor takes the shape of a solid triangle, sometimes that of a solid quadrangle. Among the triangular type, I noticed some half a decimeter long, with brown tails, yellow fins, and wholesome, exquisitely tasty flesh; I even recommend that they be acclimatized to fresh water, a change, incidentally, that a number of saltwater fish can make with ease. I'll also mention some quadrangular trunkfish topped by four large protuberances along the back; trunkfish sprinkled with white spots on the underside of the body, which make good house pets like certain birds; boxfish armed with stings formed by extensions of their bony crusts, and whose odd grunting has earned them the nickname "sea pigs"; then some trunkfish known as dromedaries, with tough, leathery flesh and big conical humps.

From the daily notes kept by Mr. Conseil, I also retrieve certain fish from the genus Tetradon unique to these seas: southern puffers with red backs and white chests distinguished by three lengthwise rows of filaments, and jugfish, seven inches long, decked out in the brightest colors. Then, as specimens of other genera, blowfish resembling a dark brown egg, furrowed with white bands, and lacking tails; globefish, genuine porcupines of the sea, armed with stings and able to inflate themselves until they look like a pin cushion bristling with needles; seahorses common to every ocean; flying dragonfish with long snouts and highly distended pectoral fins shaped like wings, which enable them, if not to fly, at least to spring into the air; spatula-shaped paddlefish whose tails are covered with many scaly rings; needlefish with long jaws, excellent animals twenty-five centimeters long and gleaming with the most cheerful colors; bluish gray dragonets with wrinkled heads; myriads of leaping blennies with black stripes and long pectoral fins, gliding over the surface of the water with prodigious speed; delicious sailfish that can hoist their fins in a favorable current like so many unfurled sails; splendid nurseryfish on which nature has lavished yellow, azure, silver, and gold; yellow mackerel with wings made of filaments; bullheads forever spattered with mud, which make distinct hissing sounds; sea robins whose livers are thought to be poisonous; ladyfish that can flutter their eyelids; finally, archerfish with long, tubular snouts, real oceangoing flycatchers, armed with a rifle unforeseen by either Remington or Chassepot: it slays insects by shooting them with a simple drop of water.

From the eighty-ninth fish genus in Lacépède's system of classification, belonging to his second subclass of bony fish (characterized by gill covers and a bronchial membrane), I noted some scorpionfish whose heads are adorned with stings and which have only one dorsal fin; these animals are covered with small scales, or have none at all, depending on the subgenus to which they belong. The second subgenus gave us some Didactylus specimens three to four decimeters long, streaked with yellow, their heads having a phantasmagoric appearance. As for the first subgenus, it furnished several specimens of that bizarre fish aptly nicknamed "toadfish," whose big head is sometimes gougéd with deep cavities, sometimes swollen with protuberances; bristling with stings and strewn with nodules, it sports hideously irregular horns; its body and tail are adorned with callosities; its stings can inflict dangerous injuries; it's repulsive and horrible.

From January 21 to the 23rd, the Nautilus traveled at the rate of 250 leagues in twenty-four hours, hence 540 miles at twenty-two miles per hour. If, during our trip, we were able to identify these different varieties of fish, it's because they were attracted by our electric light and tried to follow alongside; but most of them were outdistanced by our speed and soon fell behind; temporarily, however, a few managed to keep pace in the Nautilus's waters.

On the morning of the 24th, in latitude 12 degrees 5' south and longitude 94 degrees 33', we raised Keeling Island, a madreporic upheaving planted with magnificent coconut trees, which had been visited by Mr. Darwin and Captain Fitzroy. The Nautilus cruised along a short distance off the shore of this desert island. Our dragnets brought up many specimens of polyps and echinoderms plus some unusual shells from the branch Mollusca. Captain Nemo's treasures were enhanced by some valuable exhibits from the delphinula snail species, to which I joined some pointed treasures were enhanced by some valuable exhibits from the delphinula snail species, to which I joined some pointed

"Civilization!" Ned Land told me that day. "Much better than those Papuan Islands where we ran into more savages than venison! On this Indian shore, professor, there are roads and railways, English, French, and Hindu villages. We wouldn't go five miles without bumping into a fellow countryman. Come on now, isn't it time for our sudden departure from Captain Nemo?"

"No, no, Ned," I replied in a very firm tone. "Let's ride it out, as you seafaring fellows say. The Nautilus is approaching populated areas. It's going back toward Europe, let it take us there. After we arrive in home waters, we can do as we see fit. Besides, I don't imagine Captain Nemo will let us go hunting on the coasts of Malabar or Coromandel as he did in the forests of New Guinea."

"Well, sir, can't we manage without his permission?"

I didn't answer the Canadian. I wanted no arguments. Deep down, I was determined to fully exploit the good
fortune that had put me on board the Nautilus.

After leaving Keeling Island, our pace got generally slower. It also got more unpredictable, often taking us to
great depths. Several times we used our slanting fins, which internal levers could set at an oblique angle to our
waterline. Thus we went as deep as two or three kilometers down but without ever verifying the lowest depths of
this sea near India, which soundings of 13,000 meters have been unable to reach. As for the temperature in these
lower strata, the thermometer always and invariably indicated 4 degrees centigrade. I merely observed that in the
upper layers, the water was always colder over shallows than in the open sea.

On January 25, the ocean being completely deserted, the Nautilus spent the day on the surface, churning the
waves with its powerful propeller and making them spurt to great heights. Under these conditions, who wouldn't
have mistaken it for a gigantic cetacean? I spent three-quarters of the day on the platform. I stared at the sea.
Nothing on the horizon, except near four o’clock in the afternoon a long steamer to the west, running on our opposite
tack. Its masting was visible for an instant, but it couldn't have seen the Nautilus because we were lying too low in
the water. I imagine that steamboat belonged to the Peninsular & Oriental line, which provides service from the
island of Ceylon to Sidney, also calling at King George Sound and Melbourne.

At five o’clock in the afternoon, just before that brief twilight that links day with night in tropical zones, Conseil
and I marveled at an unusual sight.

It was a delightful animal whose discovery, according to the ancients, is a sign of good luck. Aristotle,
Athenaeus, Pliny, and Oppian studied its habits and lavished on its behalf all the scientific poetry of Greece and
Italy. They called it "nautilus" and "pompilius." But modern science has not endorsed these designations, and this
mollusk is now known by the name argonaut.

Anyone consulting Conseil would soon learn from the gallant lad that the branch Mollusca is divided into five
classes; that the first class features the Cephalopoda (whose members are sometimes naked, sometimes covered
with a shell), which consists of two families, the Dibranchiata and the Tetrabranchiata, which are distinguished by their
number of gills; that the family Dibranchiata includes three genera, the argonaut, the squid, and the cuttlefish, and
that the family Tetrabranchiata contains only one genus, the nautilus. After this catalog, if some recalcitrant listener
confuses the argonaut, which is acetabuliferous (in other words, a bearer of suction tubes), with the nautilus, which
is tentaculiferous (a bearer of tentacles), it will be simply unforgivable.

Now, it was a school of argonauts then voyaging on the surface of the ocean. We could count several hundred of
them. They belonged to that species of argonaut covered with protuberances and exclusive to the seas near India.

These graceful mollusks were swimming backward by means of their locomotive tubes, sucking water into these
tubes and then expelling it. Six of their eight tentacles were long, thin, and floated on the water, while the other two
were rounded into palms and spread to the wind like light sails. I could see perfectly their undulating, spiral-shaped
shells, which Cuvier aptly compared to an elegant cockleboat. It's an actual boat indeed. It transports the animal that
secretes it without the animal sticking to it.

"The argonaut is free to leave its shell," I told Conseil, "but it never does."

"Not unlike Captain Nemo," Conseil replied sagely. "Which is why he should have christened his ship the
Argonaut."

For about an hour the Nautilus cruised in the midst of this school of mollusks. Then, lord knows why, they were
gripped with a sudden fear. As if at a signal, every sail was abruptly lowered; arms folded, bodies contracted, shells
turned over by changing their center of gravity, and the whole flotilla disappeared under the waves. It was
instantaneous, and no squadron of ships ever maneuvered with greater togetherness.

Just then night fell suddenly, and the waves barely surged in the breeze, spreading placidly around the Nautilus's
side plates.

The next day, January 26, we cut the equator on the 82nd meridian and we reentered the northern hemisphere.

During that day a fearsome school of sharks provided us with an escort. Dreadful animals that teem in these seas
and make them extremely dangerous. There were Port Jackson sharks with a brown back, a whitish belly, and eleven
rows of teeth, bigeeye sharks with necks marked by a large black spot encircled in white and resembling an eye, and
Isabella sharks whose rounded snouts were strewn with dark speckles. Often these powerful animals rushed at the
lounge window with a violence less than comforting. By this point Ned Land had lost all self-control. He wanted to
rise to the surface of the waves and harpoon the monsters, especially certain smooth-hound sharks whose mouths
were paved with teeth arranged like a mosaic, and some big five-meter tiger sharks that insisted on personally
provoking him. But the Nautilus soon picked up speed and easily left astern the fastest of these man-eaters.

On January 27, at the entrance to the huge Bay of Bengal, we repeatedly encountered a gruesome sight: human
corpses floating on the surface of the waves! Carried by the Ganges to the high seas, these were deceased Indian
villagers who hadn't been fully devoured by vultures, the only morticians in these parts. But there was no shortage of
sharks to assist them with their undertaking chores.
Near seven o'clock in the evening, the Nautilus lay half submerged, navigating in the midst of milky white waves. As far as the eye could see, the ocean seemed lactified. Was it an effect of the moon's rays? No, because the new moon was barely two days old and was still lost below the horizon in the sun's rays. The entire sky, although lit up by stellar radiation, seemed pitch-black in comparison with the whiteness of these waters.

Conseil couldn't believe his eyes, and he questioned me about the causes of this odd phenomenon. Luckily I was in a position to answer him.

"That's called a milk sea," I told him, "a vast expanse of white waves often seen along the coasts of Amboina and in these waterways."

"But," Conseil asked, "could master tell me the cause of this effect, because I presume this water hasn't really changed into milk!"

"No, my boy, and this whiteness that amazes you is merely due to the presence of myriads of tiny creatures called infusoria, a sort of diminutive glowworm that's colorless and gelatinous in appearance, as thick as a strand of hair, and no longer than one-fifth of a millimeter. Some of these tiny creatures stick together over an area of several leagues."

"Several leagues!" Conseil exclaimed.

"Yes, my boy, and don't even try to compute the number of these infusoria. You won't pull it off, because if I'm not mistaken, certain navigators have cruised through milk seas for more than forty miles."

I'm not sure that Conseil heeded my recommendation, because he seemed to be deep in thought, no doubt trying to calculate how many one-fifths of a millimeter are found in forty square miles. As for me, I continued to observe this phenomenon. For several hours the Nautilus's spur sliced through these whitish waves, and I watched it glide noiselessly over this soapy water, as if it were cruising through those foaming eddies that a bay's currents and countercurrents sometimes leave between each other.

Near midnight the sea suddenly resumed its usual hue, but behind us all the way to the horizon, the skies kept mirroring the whiteness of those waves and for a good while seemed imbued with the hazy glow of an aurora borealis.

CHAPTER 2
A New Proposition from Captain Nemo

ON JANUARY 28, in latitude 9 degrees 4' north, when the Nautilus returned at noon to the surface of the sea, it lay in sight of land some eight miles to the west. Right off, I observed a cluster of mountains about 2,000 feet high, whose shapes were very whimsically sculpted. After our position fix, I reentered the lounge, and when our bearings were reported on the chart, I saw that we were off the island of Ceylon, that pearl dangling from the lower lobe of the Indian peninsula.

I went looking in the library for a book about this island, one of the most fertile in the world. Sure enough, I found a volume entitled Ceylon and the Singhalese by H. C. Sirr, Esq. Reentering the lounge, I first noted the bearings of Ceylon, on which antiquity lavished so many different names. It was located between latitude 5 degrees 55' and 9 degrees 49' north, and between longitude 79 degrees 42' and 82 degrees 4' east of the meridian of Greenwich; its length is 275 miles; its maximum width, 150 miles; its circumference, 900 miles; its surface area, 24,448 square miles, in other words, a little smaller than that of Ireland.

Just then Captain Nemo and his chief officer appeared.

The captain glanced at the chart. Then, turning to me:

"The island of Ceylon," he said, "is famous for its pearl fisheries. Would you be interested, Professor Aronnax, in visiting one of those fisheries?"

"Certainly, captain."

"Fine. It's easily done. Only, when we see the fisheries, we'll see no fishermen. The annual harvest hasn't yet begun. No matter. I'll give orders to make for the Gulf of Mannar, and we'll arrive there late tonight."

The captain said a few words to his chief officer who went out immediately. Soon the Nautilus reentered its liquid element, and the pressure gauge indicated that it was staying at a depth of thirty feet.

With the chart under my eyes, I looked for the Gulf of Mannar. I found it by the 9th parallel off the northwestern
shores of Ceylon. It was formed by the long curve of little Mannar Island. To reach it we had to go all the way up Ceylon's west coast.

"Professor," Captain Nemo then told me, "there are pearl fisheries in the Bay of Bengal, the seas of the East Indies, the seas of China and Japan, plus those seas south of the United States, the Gulf of Panama and the Gulf of California; but it's off Ceylon that such fishing reaps its richest rewards. No doubt we'll be arriving a little early. Fishermen gather in the Gulf of Mannar only during the month of March, and for thirty days some 300 boats concentrate on the lucrative harvest of these treasures from the sea. Each boat is manned by ten oarsmen and ten fishermen. The latter divide into two groups, dive in rotation, and descend to a depth of twelve meters with the help of a heavy stone clutched between their feet and attached by a rope to their boat."

"You mean," I said, "that such primitive methods are still all that they use?"

"All," Captain Nemo answered me, "although these fisheries belong to the most industrialized people in the world, the English, to whom the Treaty of Amiens granted them in 1802."

"Yet it strikes me that diving suits like yours could perform yeoman service in such work."

"Yes, since those poor fishermen can't stay long underwater. On his voyage to Ceylon, the Englishman Percival made much of a Kaffir who stayed under five minutes without coming up to the surface, but I find that hard to believe. I know that some divers can last up to fifty-seven seconds, and highly skillful ones to eighty-seven; but such men are rare, and when the poor fellows climb back on board, the water coming out of their noses and ears is tinted with blood. I believe the average time underwater that these fishermen can tolerate is thirty seconds, during which they hastily stuff their little nets with all the pearl oysters they can tear loose. But these fishermen generally don't live to advanced age: their vision weakens, ulcers break out on their eyes, sores form on their bodies, and some are even stricken with apoplexy on the ocean floor."

"Yes," I said, "it's a sad occupation, and one that exists only to gratify the whims of fashion. But tell me, captain, how many oysters can a boat fish up in a workday?"

"About 40,000 to 50,000. It's even said that in 1814, when the English government went fishing on its own behalf, its divers worked just twenty days and brought up 76,000,000 oysters."

"At least," I asked, "the fishermen are well paid, aren't they?"

"Hardly, professor. In Panama they make just $1.00 per week. In most places they earn only a penny for each oyster that has a pearl, and they bring up so many that have none!"

"Only one penny to those poor people who make their employers rich! That's atrocious!"

"On that note, professor," Captain Nemo told me, "you and your companions will visit the Mannar oysterbank, and if by chance some eager fisherman arrives early, well, we can watch him at work."

"That suits me, captain."

"By the way, Professor Aronnax, you aren't afraid of sharks, are you?"

"Sharks?" I exclaimed.

This struck me as a pretty needless question, to say the least.

"Well?" Captain Nemo went on.

"I admit, captain, I'm not yet on very familiar terms with that genus of fish."

"We're used to them, the rest of us," Captain Nemo answered. "And in time you will be too. Anyhow, we'll be armed, and on our way we might hunt a man-eater or two. It's a fascinating sport. So, professor, I'll see you tomorrow, bright and early."

This said in a carefree tone, Captain Nemo left the lounge.

If you're invited to hunt bears in the Swiss mountains, you might say: "Oh good, I get to go bear hunting tomorrow!" If you're invited to hunt lions on the Atlas plains or tigers in the jungles of India, you might say: "Ha! Now's my chance to hunt lions and tigers!" But if you're invited to hunt sharks in their native element, you might want to think it over before accepting.

As for me, I passed a hand over my brow, where beads of cold sweat were busy forming.

"Let's think this over," I said to myself, "and let's take our time. Hunting otters in underwater forests, as we did in the forests of Crespo Island, is an acceptable activity. But to roam the bottom of the sea when you're almost certain to meet man-eaters in the neighborhood, that's another story! I know that in certain countries, particularly the Andaman Islands, Negroes don't hesitate to attack sharks, dagger in one hand and noose in the other; but I also know that many who face those fearsome animals don't come back alive. Besides, I'm not a Negro, and even if I were a Negro, in this instance I don't think a little hesitation on my part would be out of place."

And there I was, fantasizing about sharks, envisioning huge jaws armed with multiple rows of teeth and capable of cutting a man in half. I could already feel a definite pain around my pelvic girdle. And how I resented the offhand manner in which the captain had extended his deplorable invitation! You would have thought it was an issue of going into the woods on some harmless fox hunt!
"Thank heavens!" I said to myself. "Conseil will never want to come along, and that'll be my excuse for not going with the captain."

As for Ned Land, I admit I felt less confident of his wisdom. Danger, however great, held a perennial attraction for his aggressive nature.

I went back to reading Sirr's book, but I leafed through it mechanically. Between the lines I kept seeing fearsome, wide-open jaws.

Just then Conseil and the Canadian entered with a calm, even gleeful air. Little did they know what was waiting for them.

"Ye gods, sir!" Ned Land told me. "Your Captain Nemo--the devil take him--has just made us a very pleasant proposition!"

"Oh!" I said "You know about--"

"With all due respect to master," Conseil replied, "the Nautilus's commander has invited us, together with master, for a visit tomorrow to Ceylon's magnificent pearl fisheries. He did so in the most cordial terms and conducted himself like a true gentleman."

"He didn't tell you anything else?"

"Nothing, sir," the Canadian replied. "He said you'd already discussed this little stroll."

"Indeed," I said. "But didn't he give you any details on--"

"Not a one, Mr. Naturalist. You will be going with us, right?"

"Me? Why yes, certainly, of course! I can see that you like the idea, Mr. Land."

"Yes! It will be a really unusual experience!"

"And possibly dangerous!" I added in an insinuating tone.

"Dangerous?" Ned Land replied. "A simple trip to an oysterbank?"

Assuredly, Captain Nemo hadn't seen fit to plant the idea of sharks in the minds of my companions. For my part, I stared at them with anxious eyes, as if they were already missing a limb or two. Should I alert them? Yes, surely, but I hardly knew how to go about it.

"Would master," Conseil said to me, "give us some background on pearl fishing?"

"On the fishing itself?" I asked. "Or on the occupational hazards that--"

"On the fishing," the Canadian replied. "Before we tackle the terrain, it helps to be familiar with it."

"All right, sit down, my friends, and I'll teach you everything I myself have just been taught by the Englishman H. C. Sirr!"

Ned and Conseil took seats on a couch, and right off the Canadian said to me:

"Sir, just what is a pearl exactly?"

"My gallant Ned," I replied, "for poets a pearl is a tear from the sea; for Orientals it's a drop of solidified dew; for the ladies it's a jewel they can wear on their fingers, necks, and ears that's oblong in shape, glassy in luster, and formed from mother-of-pearl; for chemists it's a mixture of calcium phosphate and calcium carbonate with a little gelatin protein; and finally, for naturalists it's a simple festering secretion from the organ that produces mother-of-pearl in certain bivalves."

"Branch Mollusca," Conseil said, "class Acephala, order Testacea."

"Correct, my scholarly Conseil. Now then, those Testacea capable of producing pearls include rainbow abalone, turbo snails, giant clams, and saltwater scallops--briefly, all those that secrete mother-of-pearl, in other words, that blue, azure, violet, or white substance lining the insides of their valves."

"Are mussels included too?" the Canadian asked.

"Yes! The mussels of certain streams in Scotland, Wales, Ireland, Saxony, Bohemia, and France."

"Good!" the Canadian replied. "From now on we'll pay closer attention to 'em."

"But," I went on, "for secreting pearls, the ideal mollusk is the pearl oyster Meleagrina margaritifera, that valuable shellfish. Pearls result simply from mother-of-pearl solidifying into a globular shape. Either they stick to the oyster's shell, or they become embedded in the creature's folds. On the valves a pearl sticks fast; on the flesh it lies loose. But its nucleus is always some small, hard object, say a sterile egg or a grain of sand, around which the mother-of-pearl is deposited in thin, concentric layers over several years in succession."

"Can one find several pearls in the same oyster?" Conseil asked.

"Yes, my boy. There are some shellfish that turn into real jewel coiffers. They even mention one oyster, about which I remain dubious, that supposedly contained at least 150 sharks."

"150 sharks!" Ned Land yelped.

"Did I say sharks?" I exclaimed hastily. "I meant 150 pearls. Sharks wouldn't make sense."

"Indeed," Conseil said. "But will master now tell us how one goes about extracting these pearls?"

"One proceeds in several ways, and often when pearls stick to the valves, fishermen even pull them loose with
pliers. But usually the shellfish are spread out on mats made from the esparto grass that covers the beaches. Thus they die in the open air, and by the end of ten days they've rotted sufficiently. Next they're immersed in huge tanks of salt water, then they're opened up and washed. At this point the sorters begin their twofold task. First they remove the layers of mother-of-pearl, which are known in the industry by the names legitimate silver, bastard white, or bastard black, and these are shipped out in cases weighing 125 to 150 kilograms. Then they remove the oyster's meaty tissue, boil it, and finally strain it, in order to extract even the smallest pearls."

"Do the prices of these pearls differ depending on their size?" Conseil asked.

"Not only on their size," I replied, "but also according to their shape, their water--in other words, their color--and their orient-- in other words, that dappled, shimmering glow that makes them so delightful to the eye. The finest pearls are called virgin pearls, or paragons; they form in isolation within the mollusk's tissue. They're white, often opaque but sometimes of opalescent transparency, and usually spherical or pear-shaped. The spherical ones are made into bracelets; the pear-shaped ones into earrings, and since they're the most valuable, they're priced individually. The other pearls that stick to the oyster's shell are more erratically shaped and are priced by weight. Finally, classed in the lowest order, the smallest pearls are known by the name seed pearls; they're priced by the measuring cup and are used mainly in the creation of embroidery for church vestments."

"But it must be a long, hard job, sorting out these pearls by size," the Canadian said.

"No, my friend. That task is performed with eleven strainers, or sieves, that are pierced with different numbers of holes. Those pearls staying in the strainers with twenty to eighty holes are in the first order. Those not slipping through the sieves pierced with 100 to 800 holes are in the second order. Finally, those pearls for which one uses strainers pierced with 900 to 1,000 holes make up the seed pearls."

"How ingenious," Conseil said, "to reduce dividing and classifying pearls to a mechanical operation. And could master tell us the profits brought in by harvesting these banks of pearl oysters?"

"According to Sirr's book," I replied, "these Ceylon fisheries are farmed annually for a total profit of 3,000,000 francs!"

"Francs!" Conseil rebuked.

"Yes, francs! 3,000,000 francs!" I went on. "But I don't think these fisheries bring in the returns they once did. Similarly, the Central American fisheries used to make an annual profit of 4,000,000 francs during the reign of King Charles V, but now they bring in only two-thirds of that amount. All in all, it's estimated that 9,000,000 francs is the current yearly return for the whole pearl-harvesting industry."

"But," Conseil asked, "haven't certain famous pearls been quoted at extremely high prices?"

"Yes, my boy. They say Julius Caesar gave Servilia a pearl worth 120,000 francs in our currency."

"I've even heard stories," the Canadian said, "about some lady in ancient times who drank pearls in vinegar."

"Cleopatra," Conseil shot back.

"It must have tasted pretty bad," Ned Land added.

"Abominable, Ned my friend," Conseil replied. "But when a little glass of vinegar is worth 1,500,000 francs, its taste is a small price to pay."

"I'm sorry I didn't marry the gal," the Canadian said, throwing up his hands with an air of discouragement.

"Ned Land married to Cleopatra?" Conseil exclaimed.

"But I was all set to tie the knot, Conseil," the Canadian replied in all seriousness, "and it wasn't my fault the whole business fell through. I even bought a pearl necklace for my fiancée, Kate Tender, but she married somebody else instead. Well, that necklace cost me only $1.50, but you can absolutely trust me on this, professor, its pearls were so big, they wouldn't have gone through that strainer with twenty holes."

"My gallant Ned," I replied, laughing, "those were artificial pearls, ordinary glass beads whose insides were coated with Essence of Orient."

"Wow!" the Canadian replied. "That Essence of Orient must sell for quite a large sum."

"As little as zero! It comes from the scales of a European carp, it's nothing more than a silver substance that collects in the water and is preserved in ammonia. It's worthless."

"Maybe that's why Kate Tender married somebody else," replied Mr. Land philosophically.

"But," I said, "getting back to pearls of great value, I don't think any sovereign ever possessed one superior to the pearl owned by Captain Nemo."

"This one?" Conseil said, pointing to a magnificent jewel in its glass case.

"Exactly. And I'm certainly not far off when I estimate its value at 2,000,000 . . . uh . . . ."

"Francs!" Conseil said quickly.

"Yes," I said, "2,000,000 francs, and no doubt all it cost our captain was the effort to pick it up."

"Hai!" Ned Land exclaimed. "During our stroll tomorrow, who says we won't run into one just like it?"

"Bah!" Conseil put in.
"And why not?"
"What good would a pearl worth millions do us here on the Nautilus?"
"Here, no," Ned Land said. "But elsewhere. . . ."
"Oh! Elsewhere!" Conseil put in, shaking his head.
"In fact," I said, "Mr. Land is right. And if we ever brought back to Europe or America a pearl worth millions, it would make the story of our adventures more authentic—and much more rewarding."
"That's how I see it," the Canadian said.
"But," said Conseil, who perpetually returned to the didactic side of things, "is this pearl fishing ever dangerous?"
"No," I replied quickly, "especially if one takes certain precautions."
"What risks would you run in a job like that?" Ned Land said. "Swallowing a few gulps of salt water?"
"Whatever you say, Ned." Then, trying to imitate Captain Nemo's carefree tone, I asked, "By the way, gallant Ned, are you afraid of sharks?"
"Me?" the Canadian replied. "I'm a professional harpooner! It's my job to make a mockery of them!"
"It isn't an issue," I said, "of fishing for them with a swivel hook, hoisting them onto the deck of a ship, chopping off the tail with a sweep of the ax, opening the belly, ripping out the heart, and tossing it into the sea."
"So it's an issue of . . . ?"
"Yes, precisely."
"In the water?"
"In the water."
"Ye gods, just give me a good harpoon! You see, sir, these sharks are badly designed. They have to roll their bellies over to snap you up, and in the meantime . . . ."
Ned Land had a way of pronouncing the word "snap" that sent chills down the spine.
"Well, how about you, Conseil? What are your feelings about these man-eaters?"
"Me?" Conseil said. "I'm afraid I must be frank with master."
Good for you, I thought.
"If master faces these sharks," Conseil said, "I think his loyal manservant should face them with him!"

CHAPTER 3
A Pearl Worth Ten Million

NIGHT FELL. I went to bed. I slept pretty poorly. Man-eaters played a major role in my dreams. And I found it more or less appropriate that the French word for shark, requin, has its linguistic roots in the word requiem.
The next day at four o'clock in the morning, I was awakened by the steward whom Captain Nemo had placed expressly at my service. I got up quickly, dressed, and went into the lounge.
Captain Nemo was waiting for me.
"Professor Aronnax," he said to me, "are you ready to start?"
"I'm ready."
"Kindly follow me."
"What about my companions, captain?"
"They've been alerted and are waiting for us."
"Aren't we going to put on our diving suits?" I asked.
"Not yet. I haven't let the Nautilus pull too near the coast, and we're fairly well out from the Mannar oysterbank. But I have the skiff ready, and it will take us to the exact spot where we'll disembark, which will save us a pretty long trek. It's carrying our diving equipment, and we'll suit up just before we begin our underwater exploring."
Captain Nemo took me to the central companionway whose steps led to the platform. Ned and Conseil were there, entrapped with the "pleasure trip" getting under way. Oars in position, five of the Nautilus's sailors were waiting for us aboard the skiff, which was moored alongside. The night was still dark. Layers of clouds cloaked the sky and left only a few stars in view. My eyes flew to the side where land lay, but I saw only a blurred line covering three-quarters of the horizon from southwest to northwest. Going up Ceylon's west coast during the night, the
Nautilus lay west of the bay, or rather that gulf formed by the mainland and Mannar Island. Under these dark waters there stretched the bank of shellfish, an inexhaustible field of pearls more than twenty miles long.

Captain Nemo, Conseil, Ned Land, and I found seats in the stern of the skiff. The longboat's coxswain took the tiller; his four companions leaped into their oars; the moorings were cast off and we pulled clear.

The skiff headed southward. The oarsmen took their time. I watched their strokes vigorously catch the water, and they always waited ten seconds before rowing again, following the practice used in most navies. While the longboat coasted, drops of liquid flicked from the oars and hit the dark troughs of the waves, pitter-pattering like splashes of molten lead. Coming from well out, a mild swell made the skiff roll gently, and a few cresting billows lapped at its bow.

We were silent. What was Captain Nemo thinking? Perhaps that this approaching shore was too close for comfort, contrary to the Canadian's views in which it still seemed too far away. As for Conseil, he had come along out of simple curiosity.

Near 5:30 the first glimmers of light on the horizon defined the upper lines of the coast with greater distinctness. Fairly flat to the east, it swelled a little toward the south. Five miles still separated it from us, and its beach merged with the misty waters. Between us and the shore, the sea was deserted. Not a boat, not a diver. Profound solitude reigned over this gathering place of pearl fishermen. As Captain Nemo had commented, we were arriving in these waterways a month too soon.

At six o'clock the day broke suddenly, with that speed unique to tropical regions, which experience no real dawn or dusk. The sun's rays pierced the cloud curtain gathered on the easterly horizon, and the radiant orb rose swiftly.

I could clearly see the shore, which featured a few sparse trees here and there.

The skiff advanced toward Mannar Island, which curved to the south. Captain Nemo stood up from his thwart and studied the sea.

At his signal the anchor was lowered, but its chain barely ran because the bottom lay no more than a meter down, and this locality was one of the shallowest spots near the bank of shellfish. Instantly the skiff wheeled around under the ebb tide's outbound thrust.

"Here we are, Professor Aronnax," Captain Nemo then said. "You observe this confined bay? A month from now in this very place, the numerous fishing boats of the harvesters will gather, and these are the waters their divers will ransack so daringly. This bay is felicitously laid out for their type of fishing. It's sheltered from the strongest winds, and the sea is never very turbulent here, highly favorable conditions for diving work. Now let's put on our underwater suits, and we'll begin our stroll."

I didn't reply, and while staring at these suspicious waves, I began to put on my heavy aquatic clothes, helped by the longboat's sailors. Captain Nemo and my two companions suited up as well. None of the Nautilus's men were to go with us on this new excursion.

Soon we were imprisoned up to the neck in india-rubber clothing, and straps fastened the air devices onto our backs. As for the Ruhmkorff device, it didn't seem to be in the picture. Before inserting my head into its copper capsule, I commented on this to the captain.

"Our lighting equipment would be useless to us," the captain answered me. "We won't be going very deep, and the sun's rays will be sufficient to light our way. Besides, it's unwise to carry electric lanterns under these waves. Their brightness might unexpectedly attract certain dangerous occupants of these waterways."

As Captain Nemo pronounced these words, I turned to Conseil and Ned Land. But my two friends had already encased their craniums in their metal headgear, and they could neither hear nor reply.

I had one question left to address to Captain Nemo.

"What about our weapons?" I asked him. "Our rifles?"

"Rifles! What for? Don't your mountaineers attack bears dagger in hand? And isn't steel surer than lead? Here's a sturdy blade. Slip it under your belt and let's be off."

I stared at my companions. They were armed in the same fashion, and Ned Land was also brandishing an enormous harpoon he had stowed in the skiff before leaving the Nautilus.

Then, following the captain's example, I let myself be crowned with my heavy copper sphere, and our air tanks immediately went into action.

An instant later, the longboat's sailors helped us overboard one after the other, and we set foot on level sand in a meter and a half of water. Captain Nemo gave us a hand signal. We followed him down a gentle slope and disappeared under the waves.

There the obsessive fears in my brain left me. I became surprisingly calm again. The ease with which I could move increased my confidence, and the many strange sights captivated my imagination.

The sun was already sending sufficient light under these waves. The tiniest objects remained visible. After ten minutes of walking, we were in five meters of water, and the terrain had become almost flat.
Like a covey of snipe over a marsh, there rose underfoot schools of unusual fish from the genus Monopterus, whose members have no fin but their tail. I recognized the Javanese eel, a genuine eight-decimeter serpent with a bluish gray belly, which, without the gold lines over its flanks, could easily be confused with the conger eel. But from the butterfish genus, whose oval bodies are very flat, I observed several adorned in brilliant colors and sporting a dorsal fin like a sickle, edible fish that, when dried and marinated, make an excellent dish known by the name "karawade"; then some sea poachers, fish belonging to the genus Aspidophoroides, whose bodies are covered with scaly armor divided into eight lengthwise sections.

Meanwhile, as the sun got progressively higher, it lit up the watery mass more and more. The seafloor changed little by little. Its fine-grained sand was followed by a genuine causeway of smooth crags covered by a carpet of mollusks and zoophytes. Among other specimens in these two branches, I noted some window-pane oysters with thin valves of unequal size, a type of ostracod unique to the Red Sea and the Indian Ocean, then orange-hued lucina with circular shells, awl-shaped auger shells, some of those Persian murex snails that supply the Nautilus with such wonderful dyes, spiky periwinkles fifteen centimeters long that rose under the waves like hands ready to grab you, turban snails with shells made of horn and bristling all over with spines, lamp shells, edible duck clams that feed the Hindu marketplace, subtly luminous jellyfish of the species Pelagia panopyra, and finally some wonderful Oculina flabelliforma, magnificent sea fans that fashion one of the most luxuriant tree forms in this ocean.

In the midst of this moving vegetation, under arbors of water plants, there raced legions of clumsy articulate slugs, in particular some fanged frog crabs whose carapaces form a slightly rounded triangle, robber crabs exclusive to these waterways, and horrible parthenope crabs whose appearance was repulsive to the eye. One animal no less hideous, which I encountered several times, was the enormous crab that Mr. Darwin observed, to which nature has given the instinct and requisite strength to eat coconuts; it scrambles up trees on the beach and sends the coconuts tumbling; they fracture in their fall and are opened by its powerful pincers. Here, under these clear waves, this crab raced around with matchless agility, while green turtles from the species frequenting the Malabar coast moved sluggishly among the crumbling rocks.

Near seven o'clock we finally surveyed the bank of shellfish, where pearl oysters reproduce by the millions. These valuable mollusks stick to rocks, where they're strongly attached by a mass of brown filaments that forbids their moving about. In this respect oysters are inferior even to mussels, to whom nature has not denied all talent for locomotion.

The shellfish Meleagrina, that womb for pearls whose valves are nearly equal in size, has the shape of a round shell with thick walls and a very rough exterior. Some of these shells were furrowed with flaky, greenish bands that radiated down from the top. These were the young oysters. The others had rugged black surfaces, measured up to fifteen centimeters in width, and were ten or more years old.

Captain Nemo pointed to this prodigious heap of shellfish, and I saw that these mines were genuinely inexhaustible, since nature's creative powers are greater than man's destructive instincts. True to those instincts, Ned Land greedily stuffed the finest of these mollusks into a net he carried at his side.

But we couldn't stop. We had to follow the captain, who headed down trails seemingly known only to himself. The seafloor rose noticeably, and when I lifted my arms, sometimes they would pass above the surface of the sea. Then the level of the oyster bank would lower unpredictably. Often we went around tall, pointed rocks rising like pyramids. In their dark crevices huge crustaceans, aiming their long legs like heavy artillery, watched us with unblinking eyes, while underfoot there crept millipedes, bloodworms, aricia worms, and annelid worms, whose antennas and tubular tentacles were incredibly long.

Just then a huge cave opened up in our path, hollowed from a picturesque pile of rocks whose smooth heights were completely hung with underwater flora. At first this cave looked pitch-black to me. Inside, the sun's rays seemed to diminish by degrees. Their hazy transparencies was nothing more than drowned light.

Captain Nemo went in. We followed him. My eyes soon grew accustomed to this comparative gloom. I distinguished the unpredictably contoured springings of a vault, supported by natural pillars firmly based on a granite foundation, like the weighty columns of Tuscan architecture. Why had our incomprehensible guide taken us into the depths of this underwater crypt? I would soon find out.

After going down a fairly steep slope, our feet trod the floor of a sort of circular pit. There Captain Nemo stopped, and his hand indicated an object that I hadn't yet noticed.

It was an oyster of extraordinary dimensions, a titanic giant clam, a holy-water font that could have held a whole lake, a basin more than two meters wide, hence even bigger than the one adorning the Nautilus's lounge.

I approached this phenomenal mollusk. Its mass of filaments attached it to a table of granite, and there it grew by degrees. Their hazy transparencies was nothing more than drowned light.

Captain Nemo was obviously familiar with this bivalve's existence. This wasn't the first time he'd paid it a visit,
and I thought his sole reason for leading us to this locality was to show us a natural curiosity. I was mistaken. Captain Nemo had an explicit personal interest in checking on the current condition of this giant clam.

The mollusk's two valves were partly open. The captain approached and stuck his dagger vertically between the shells to discourage any ideas about closing; then with his hands he raised the fringed, membrane-filled tunic that made up the animal's mantle.

There, between its leaflike folds, I saw a loose pearl as big as a coconut. Its globular shape, perfect clarity, and wonderful orient made it a jewel of incalculable value. Carried away by curiosity, I stretched out my hand to take it, weigh it, fondle it! But the captain stopped me, signaled no, removed his dagger in one swift motion, and let the two valves snap shut.

I then understood Captain Nemo's intent. By leaving the pearl buried beneath the giant clam's mantle, he allowed it to grow imperceptibly. With each passing year the mollusk's secretions added new concentric layers. The captain alone was familiar with the cave where this wonderful fruit of nature was "ripening"; he alone reared it, so to speak, in order to transfer it one day to his dearly beloved museum. Perhaps, following the examples of oyster farmers in China and India, he had even predetermined the creation of this pearl by sticking under the mollusk's folds some piece of glass or metal that was gradually covered with mother-of-pearl. In any case, comparing this pearl to others I already knew about, and to those shimmering in the captain's collection, I estimated that it was worth at least 10,000,000 francs. It was a superb natural curiosity rather than a luxurious piece of jewelry, because I don't know of any female ear that could handle it.

Our visit to this opulent giant clam came to an end. Captain Nemo left the cave, and we climbed back up the bank of shellfish in the midst of these clear waters not yet disturbed by divers at work.

We walked by ourselves, genuine loiterers stopping or straying as our fancies dictated. For my part, I was no longer worried about those dangers my imagination had so ridiculously exaggerated. The shallows drew noticeably closer to the surface of the sea, and soon, walking in only a meter of water, my head passed well above the level of the ocean. Conseil rejoined me, and gluing his huge copper capsule to mine, his eyes gave me a friendly greeting. But this lofty plateau measured only a few fathoms, and soon we reentered Our Element. I think I've now earned the right to dub it that.

Ten minutes later, Captain Nemo stopped suddenly. I thought he'd called a halt so that we could turn and start back. No. With a gesture he ordered us to crouch beside him at the foot of a wide crevice. His hand motioned toward a spot within the liquid mass, and I looked carefully.

Five meters away a shadow appeared and dropped to the seafloor. The alarming idea of sharks crossed my mind. But I was mistaken, and once again we didn't have to deal with monsters of the deep.

It was a man, a living man, a black Indian fisherman, a poor devil who no doubt had come to gather what he could before harvest time. I saw the bottom of his dinghy, moored a few feet above his head. He would dive and go back up in quick succession. A stone cut in the shape of a sugar loaf, which he gripped between his feet while a rope connected it to his boat, served to lower him more quickly to the ocean floor. This was the extent of his equipment. Arriving on the seafloor at a depth of about five meters, he fell to his knees and stuffed his sack with shellfish gathered at random. Then he went back up, emptied his sack, pulled up his stone, and started all over again, the whole process lasting only thirty seconds.

This diver didn't see us. A shadow cast by our crag hid us from his view. And besides, how could this poor Indian ever have guessed that human beings, creatures like himself, were near him under the waters, eavesdropping on his movements, not missing a single detail of his fishing!

So he went up and down several times. He gathered only about ten shellfish per dive, because he had to tear them from the banks where each clung with its tough mass of filaments. And how many of these oysters for which he risked his life would have no pearl in them!

I observed him with great care. His movements were systematically executed, and for half an hour no danger seemed to threaten him. So I had gotten used to the sight of this fascinating fishing when all at once, just as the Indian was kneeling on the seafloor, I saw him make a frightened gesture, stand, and gather himself to spring back to the surface of the waves.

I understood his fear. A gigantic shadow appeared above the poor diver. It was a shark of huge size, moving in diagonally, eyes ablaze, jaws wide open!

I was speechless with horror, unable to make a single movement.

With one vigorous stroke of its fins, the voracious animal shot toward the Indian, who jumped aside and avoided the shark's bite but not the thrashing of its tail, because that tail struck him across the chest and stretched him out on the seafloor.

This scene lasted barely a few seconds. The shark returned, rolled over on its back, and was getting ready to cut the Indian in half, when Captain Nemo, who was stationed beside me, suddenly stood up. Then he strode right
toward the monster, dagger in hand, ready to fight it at close quarters.

Just as it was about to snap up the poor fisherman, the man-eater saw its new adversary, repositioned itself on its belly, and headed swiftly toward him.

I can see Captain Nemo's bearing to this day. Bracing himself, he waited for the fearsome man-eater with wonderful composure, and when the latter rushed at him, the captain leaped aside with prodigious quickness, avoided a collision, and sank his dagger into its belly. But that wasn't the end of the story. A dreadful battle was joined.

The shark bellowed, so to speak. Blood was pouring into the waves from its wounds. The sea was dyed red, and through this opaque liquid I could see nothing else.

Nothing else until the moment when, through a rift in the clouds, I saw the daring captain clinging to one of the animal's fins, fighting the monster at close quarters, belaboring his enemy's belly with stabs of the dagger yet unable to deliver the deciding thrust, in other words, a direct hit to the heart. In its struggles the man-eater churned the watery mass so furiously, its eddies threatened to knock me over.

I wanted to run to the captain's rescue. But I was transfixed with horror, unable to move.

I stared, wild-eyed. I saw the fight enter a new phase. The captain fell to the seafloor, toppled by the enormous mass weighing him down. Then the shark's jaws opened astoundingly wide, like a pair of industrial shears, and that would have been the finish of Captain Nemo had not Ned Land, quick as thought, rushed forward with his harpoon and driven its dreadful point into the shark's underside.

The waves were saturated with masses of blood. The waters shook with the movements of the man-eater, which thrashed about with indescribable fury. Ned Land hadn't missed his target. This was the monster's death rattle. Pierced to the heart, it was struggling with dreadful spasms whose aftershocks knocked Conseil off his feet.

Meanwhile Ned Land pulled the captain clear. Uninjured, the latter stood up, went right to the Indian, quickly cut the rope binding the man to his stone, took the fellow in his arms, and with a vigorous kick of the heel, rose to the surface of the sea.

The three of us followed him, and a few moments later, miraculously safe, we reached the fisherman's longboat.

Captain Nemo's first concern was to revive this unfortunate man. I wasn't sure he would succeed. I hoped so, since the poor devil hadn't been under very long. But that stroke from the shark's tail could have been his deathblow.

Fortunately, after vigorous massaging by Conseil and the captain, I saw the nearly drowned man regain consciousness little by little. He opened his eyes. How startled he must have felt, how frightened even, at seeing four huge, copper craniums leaning over him!

And above all, what must he have thought when Captain Nemo pulled a bag of pearls from a pocket in his diving suit and placed it in the fisherman's hands? This magnificent benefaction from the Man of the Waters to the poor Indian from Ceylon was accepted by the latter with trembling hands. His bewildered eyes indicated that he didn't know to what superhuman creatures he owed both his life and his fortune.

At the captain's signal we returned to the bank of shellfish, and retracing our steps, we walked for half an hour until we encountered the anchor connecting the seafloor with the Nautilus's skiff.

Back on board, the sailors helped divest us of our heavy copper carapaces.

Captain Nemo's first words were spoken to the Canadian.

"Thank you, Mr. Land," he told him.

"Tit for tat, captain," Ned Land replied. "I owed it to you."

The ghost of a smile glided across the captain's lips, and that was all.

"To the Nautilus," he said.

The longboat flew over the waves. A few minutes later we encountered the shark's corpse again, floating.

From the black markings on the tips of its fins, I recognized the dreadful Squalus melanopterus from the seas of the East Indies, a variety in the species of sharks proper. It was more than twenty-five feet long; its enormous mouth occupied a third of its body. It was an adult, as could be seen from the six rows of teeth forming an isosceles triangle in its upper jaw.

Conseil looked at it with purely scientific fascination, and I'm sure he placed it, not without good reason, in the class of cartilaginous fish, order Chondropterygia with fixed gills, family Selacia, genus Squalus.

While I was contemplating this inert mass, suddenly a dozen of these voracious melanoptera appeared around our longboat; but, paying no attention to us, they pounced on the corpse and quarreled over every scrap of it.

By 8:30 we were back on board the Nautilus.

There I fell to thinking about the incidents that marked our excursion over the Mannar oysterbank. Two impressions inevitably stood out. One concerned Captain Nemo's matchless bravery, the other his devotion to a human being, a representative of that race from which he had fled beneath the seas. In spite of everything, this strange man hadn't yet succeeded in completely stifling his heart.
When I shared these impressions with him, he answered me in a tone touched with emotion:

"That Indian, professor, lives in the land of the oppressed, and I am to this day, and will be until my last breath, a native of that same land!"

CHAPTER 4

The Red Sea

DURING THE DAY of January 29, the island of Ceylon disappeared below the horizon, and at a speed of twenty miles per hour, the Nautilus glided into the labyrinthine channels that separate the Maldive and Laccadive Islands. It likewise hugged Kiltan Island, a shore of madreporic origin discovered by Vasco da Gama in 1499 and one of nineteen chief islands in the island group of the Laccadives, located between latitude 10 degrees and 14 degrees 30' north, and between longitude 50 degrees 72' and 69 degrees east.

By then we had fared 16,220 miles, or 7,500 leagues, from our starting point in the seas of Japan.

The next day, January 30, when the Nautilus rose to the surface of the ocean, there was no more land in sight. Setting its course to the north-northwest, the ship headed toward the Gulf of Oman, carved out between Arabia and the Indian peninsula and providing access to the Persian Gulf.

This was obviously a blind alley with no possible outlet. So where was Captain Nemo taking us? I was unable to say. Which didn't satisfy the Canadian, who that day asked me where we were going.

"We're going, Mr. Ned, where the captain's fancy takes us."

"His fancy," the Canadian replied, "won't take us very far. The Persian Gulf has no outlet, and if we enter those waters, it won't be long before we return in our tracks."

"All right, we'll return, Mr. Land, and after the Persian Gulf, if the Nautilus wants to visit the Red Sea, the Strait of Bab el Mandeb is still there to let us in!"

"I don't have to tell you, sir," Ned Land replied, "that the Red Sea is just as landlocked as the gulf, since the Isthmus of Suez hasn't been cut all the way through yet; and even if it was, a boat as secretive as ours wouldn't risk a canal intersected with locks. So the Red Sea won't be our way back to Europe either."

"But I didn't say we'd return to Europe."

"What do you figure, then?"

"I figure that after visiting these unusual waterways of Arabia and Egypt, the Nautilus will go back down to the Indian Ocean, perhaps through Mozambique Channel, perhaps off the Mascarene Islands, and then make for the Cape of Good Hope."

"And once we're at the Cape of Good Hope?" the Canadian asked with typical persistence.

"Well then, we'll enter that Atlantic Ocean with which we aren't yet familiar. What's wrong, Ned my friend? Are you tired of this voyage under the seas? Are you bored with the constantly changing sight of these underwater wonders? Speaking for myself, I'll be extremely distressed to see the end of a voyage so few men will ever have a chance to make."

"But don't you realize, Professor Aronnax," the Canadian replied, "that soon we'll have been imprisoned for three whole months aboard this Nautilus?"

"No, Ned, I didn't realize it, I don't want to realize it, and I don't keep track of every day and every hour."

"But when will it be over?"

"In its appointed time. Meanwhile there's nothing we can do about it, and our discussions are futile. My gallant Ned, if you come and tell me, 'A chance to escape is available to us,' then I'll discuss it with you. But that isn't the case, and in all honesty, I don't think Captain Nemo ever ventures into European seas."

This short dialogue reveals that in my mania for the Nautilus, I was turning into the spitting image of its commander.

As for Ned Land, he ended our talk in his best speechifying style: "That's all fine and dandy. But in my humble opinion, a life in jail is a life without joy."

For four days until February 3, the Nautilus inspected the Gulf of Oman at various speeds and depths. It seemed to be traveling at random, as if hesitating over which course to follow, but it never crossed the Tropic of Cancer.

After leaving this gulf we raised Muscat for an instant, the most important town in the country of Oman.
marveled at its strange appearance in the midst of the black rocks surrounding it, against which the white of its houses and forts stood out sharply. I spotted the rounded domes of its mosques, the elegant tips of its minarets, and its fresh, leafy terraces. But it was only a fleeting vision, and the Nautilus soon sank beneath the dark waves of these waterways.

Then our ship went along at a distance of six miles from the Arabic coasts of Mahra and Hadhramaut, their undulating lines of mountains relieved by a few ancient ruins. On February 5 we finally put into the Gulf of Aden, a genuine funnel stuck into the neck of Bab el Mandeb and bottling these Indian waters in the Red Sea.

On February 6 the Nautilus cruised in sight of the city of Aden, perched on a promontory connected to the continent by a narrow isthmus, a sort of inaccessible Gibraltar whose fortifications the English rebuilt after capturing it in 1839. I glimpsed the octagonal minarets of this town, which used to be one of the wealthiest, busiest commercial centers along this coast, as the Arab historian Idrisi tells it.

I was convinced that when Captain Nemo reached this point, he would back out again; but I was mistaken, and much to my surprise, he did nothing of the sort.

The next day, February 7, we entered the Strait of Bab el Mandeb, whose name means "Gate of Tears" in the Arabic language. Twenty miles wide, it's only fifty-two kilometers long, and with the Nautilus launched at full speed, clearing it was the work of barely an hour. But I didn't see a thing, not even Perim Island where the British government built fortifications to strengthen Aden's position. There were many English and French steamers plowing this narrow passageway, liners going from Suez to Bombay, Calcutta, Melbourne, Réunion Island, and Mauritius; far too much traffic for the Nautilus to make an appearance on the surface. So it wisely stayed in midwater.

Finally, at noon, we were plowing the waves of the Red Sea.

The Red Sea: that great lake so famous in biblical traditions, seldom replenished by rains, fed by no important rivers, continually drained by a high rate of evaporation, its water level dropping a meter and a half every year! If it were fully landlocked like a lake, this odd gulf might dry up completely; on this score it's inferior to its neighbors, the Caspian Sea and the Dead Sea, whose levels lower only to the point where their evaporation exactly equals the amounts of water they take to their hearts.

This Red Sea is 2,600 kilometers long with an average width of 240. In the days of the Ptolemies and the Roman emperors, it was a great commercial artery for the world, and when its isthmus has been cut through, it will completely regain that bygone importance that the Suez railways have already brought back in part.

I would not even attempt to understand the whim that induced Captain Nemo to take us into this gulf. But I wholeheartedly approved of the Nautilus's entering it. It adopted a medium pace, sometimes staying on the surface, sometimes diving to avoid some ship, and so I could observe both the inside and topside of this highly unusual sea.

On February 8, as early as the first hours of daylight, Mocha appeared before us: a town now in ruins, whose walls would collapse at the mere sound of a cannon, and which shelters a few leafy date trees here and there. This once-important city used to contain six public marketplaces plus twenty-six mosques, and its walls, protected by fourteen forts, fashioned a three-kilometer girdle around it.

Then the Nautilus drew near the beaches of Africa, where the sea is considerably deeper. There, through the open panels and in a midwater of crystal clarity, our ship enabled us to study wonderful bushes of shining coral and huge chunks of rock wrapped in splendid green furs of algae and fucus. What an indescribable sight, and what a variety of settings and scenery where these reefs and volcanic islands leveled off by the Libyan coast! But soon the Nautilus hugged the eastern shore where these tree forms appeared in all their glory. This was off the coast of Tihama, and there such zoophyte displays not only flourished in all their glory. This was off the coast of Tihama, and there such zoophyte displays not only flourished below sea level but they also fashioned picturesque networks that unreeled as high as ten fathoms above it; the latter were more whimsical but less colorful than the former, which kept their bloom thanks to the moist vitality of the waters.

How many delightful hours I spent in this way at the lounge window! How many new specimens of underwater flora and fauna I marveled at beneath the light of our electric beacon! Mushroom-shaped fungus coral, some slate-colored sea anemone including the species Thalassianthus aster among others, organ-pipe coral arranged like flutes and just begging for a puff from the god Pan, shells unique to this sea that dwell in madreporic cavities and whose bases are twisted into squat spirals, and finally a thousand samples of a polypary I hadn't observed until then: the common sponge.

First division in the polyp group, the class Spongiaria has been created by scientists precisely for this unusual exhibit whose usefulness is beyond dispute. The sponge is definitely not a plant, as some naturalists still believe, but an animal of the lowest order, a polypary inferior even to coral. Its animal nature isn't in doubt, and we can't accept even the views of the ancients, who regarded it as halfway between plant and animal. But I must say that naturalists are not in agreement on the structural mode of sponges. For some it's a polypary, and for others, such as Professor
Milne-Edwards, it's a single, solitary individual.

The class Spongiaria contains about 300 species that are encountered in a large number of seas and even in certain streams, where they've been given the name freshwater sponges. But their waters of choice are the Red Sea and the Mediterranean near the Greek Islands or the coast of Syria. These waters witness the reproduction and growth of soft, delicate bath sponges whose prices run as high as 150 francs apiece: the yellow sponge from Syria, the horn sponge from Barbary, etc. But since I had no hope of studying these zoophytes in the seaports of the Levant, from which we were separated by the insuperable Isthmus of Suez, I had to be content with observing them in the waters of the Red Sea.

So I called Conseil to my side, while at an average depth of eight to nine meters, the Nautilus slowly skimmed every beautiful rock on the easterly coast.

There sponges grew in every shape, globular, stalklike, leaflike, fingerlike. With reasonable accuracy, they lived up to their nicknames of basket sponges, chalice sponges, distaff sponges, elkhorn sponges, lion's paws, peacock's tails, and Neptune's gloves--designations bestowed on them by fishermen, more poetically inclined than scientists. A gelatinous, semifluid substance coated the fibrous tissue of these sponges, and from this tissue there escaped a steady trickle of water that, after carrying sustenance to each cell, was being expelled by a contracting movement. This jellylike substance disappears when the polyp dies, emitting ammonia as it rots. Finally nothing remains but the fibers, either gelatinous or made of horn, that constitute your household sponge, which takes on a russet hue and is used for various tasks depending on its degree of elasticity, permeability, or resistance to saturation.

These polyparies were sticking to rocks, shells of mollusks, and even the stalks of water plants. They adorned the smallest crevices, some sprawling, others standing or hanging like coral outgrowths. I told Conseil that sponges are fished up in two ways, either by dragnet or by hand. The latter method calls for the services of a diver, but it's preferable because it spares the polypary's tissue, leaving it with a much higher market value.

Other zoophytes swarming near the sponges consisted chiefly of a very elegant species of jellyfish; mollusks were represented by varieties of squid that, according to Professor Orbigny, are unique to the Red Sea; and reptiles by virgata turtles belonging to the genus Chelonia, which furnished our table with a dainty but wholesome dish.

As for fish, they were numerous and often remarkable. Here are the ones that the Nautilus's nets most frequently hauled on board: rays, including spotted rays that were oval in shape and brick red in color, their bodies strewed with erratic blue speckles and identifiable by their jagged double stings, silver-backed skates, common stingrays with stippled tails, butterfly rays that looked like huge two-meter cloaks flapping at middepth, toothless guitarfish that were a type of cartilaginous fish closer to the shark, trunkfish known as dromedaries that were one and a half feet long and had humps ending in backward-curving stings, serpentine moray eels with silver tails and bluish backs plus brown pectorals trimmed in gray piping, a species of butterfly called the fiatola decked out in thin gold stripes and the three colors of the French flag, Montague blennies four decimeters long, superb jacks handsomely embellished by seven black crosswise streaks with blue and yellow fins plus gold and silver scales, snooks, standard mullet with yellow heads, parrotfish, wrasse, triggerfish, gobies, etc., plus a thousand other fish common to the oceans we had already crossed.

On February 9 the Nautilus cruised in the widest part of the Red Sea, measuring 190 miles straight across from Suakin on the west coast to Qunfidha on the east coast.

At noon that day after our position fix, Captain Nemo climbed onto the platform, where I happened to be. I vowed not to let him go below again without at least sounding him out on his future plans. As soon as he saw me, he came over, graciously offered me a cigar, and said to me:

"Well, professor, are you pleased with this Red Sea? Have you seen enough of its hidden wonders, its fish and zoophytes, its gardens of sponges and forests of coral? Have you glimpsed the towns built on its shores?"

"Yes, Captain Nemo," I replied, "and the Nautilus is wonderfully suited to this whole survey. Ah, it's a clever boat!"

"Yes, sir, clever, daring, and invulnerable! It fears neither the Red Sea's dreadful storms nor its currents and reefs."

"Indeed," I said, "this sea is mentioned as one of the worst, and in the days of the ancients, if I'm not mistaken, it had an abominable reputation."

"Thoroughly abominable, Professor Aronnax. The Greek and Latin historians can find nothing to say in its favor, and the Greek geographer Strabo adds that it's especially rough during the rainy season and the period of summer prevailing winds. The Arab Idrisi, referring to it by the name Gulf of Colzoum, relates that ships perished in large numbers on its sandbanks and that no one risked navigating it by night. This, he claims, is a sea subject to fearful hurricanes, strewed with inhospitable islands, and 'with nothing good to offer,' either on its surface or in its depths. As a matter of fact, the same views can also be found in Arrian, Agatharchides, and Artemidorus."

"One can easily see," I answered, "that those historians didn't navigate aboard the Nautilus."
"Indeed," the captain replied with a smile, "and in this respect, the moderns aren't much farther along than the ancients. It took many centuries to discover the mechanical power of steam! Who knows whether we'll see a second Nautilus within the next 100 years! Progress is slow, Professor Aronnax."

"It's true," I replied. "Your ship is a century ahead of its time, perhaps several centuries. It would be most unfortunate if such a secret were to die with its inventor!"

Captain Nemo did not reply. After some minutes of silence:

"We were discussing," he said, "the views of ancient historians on the dangers of navigating this Red Sea?"

"True," I replied. "But weren't their fears exaggerated?"

"Yes and no, Professor Aronnax," answered Captain Nemo, who seemed to know "his Red Sea" by heart. "To a modern ship, well rigged, solidly constructed, and in control of its course thanks to obedient steam, some conditions are no longer hazardous that offered all sorts of dangers to the vessels of the ancients. Picture those early navigators venturing forth in sailboats built from planks lashed together with palm-tree ropes, caulked with powdered resin, and coated with dogfish grease. They didn't even have instruments for taking their bearings, they went by guesswork in the midst of currents they barely knew. Under such conditions, shipwrecks had to be numerous. But nowadays steamers providing service between Suez and the South Seas have nothing to fear from the fury of this gulf, despite the contrary winds of its monsoons. Their captains and passengers no longer prepare for departure with sacrifices to placate the gods, and after returning, they don't traipse in wreaths and gold ribbons to say thanks at the local temple."

"Agreed," I said. "And steam seems to have killed off all gratitude in seamen's hearts. But since you seem to have made a special study of this sea, captain, can you tell me how it got its name?"

"Many explanations exist on the subject, Professor Aronnax. Would you like to hear the views of one chronicler in the 14th century?"

"Gladly."

"This fanciful fellow claims the sea was given its name after the crossing of the Israelites, when the Pharaoh perished in those waves that came together again at Moses' command:

To mark that miraculous sequel, the sea turned a red without equal.

Thus no other course would do but to name it for its hue."

"An artistic explanation, Captain Nemo," I replied, "but I'm unable to rest content with it. So I'll ask you for your own personal views."

"Here they come. To my thinking, Professor Aronnax, this 'Red Sea' designation must be regarded as a translation of the Hebrew word 'Edrom,' and if the ancients gave it that name, it was because of the unique color of its waters."

"Until now, however, I've seen only clear waves, without any unique hue."

"Surely, but as we move ahead to the far end of this gulf, you'll note its odd appearance. I recall seeing the bay of El Tur completely red, like a lake of blood."

"And you attribute this color to the presence of microscopic algae?"

"Yes. It's a purplish, mucilaginous substance produced by those tiny buds known by the name trichodesmia, 40,000 of which are needed to occupy the space of one square millimeter. Perhaps you'll encounter them when we reach El Tur."

"Hence, Captain Nemo, this isn't the first time you've gone through the Red Sea aboard the Nautilus?"

"No, sir."

"Then, since you've already mentioned the crossing of the Israelites and the catastrophe that befell the Egyptians, I would ask if you've ever discovered any traces under the waters of that great historic event?"

"No, professor, and for an excellent reason."

"What's that?"

"It's because that same locality where Moses crossed with all his people is now so clogged with sand, camels can barely get their legs wet. You can understand that my Nautilus wouldn't have enough water for itself."

"And that locality is...?" I asked.

"That locality lies a little above Suez in a sound that used to form a deep estuary when the Red Sea stretched as far as the Bitter Lakes. Now, whether or not their crossing was literally miraculous, the Israelites did cross there in returning to the Promised Land, and the Pharaoh's army did perish at precisely that locality. So I think that excavating those sands would bring to light a great many weapons and tools of Egyptian origin."

"Obviously," I replied. "And for the sake of archaeology, let's hope that sooner or later such excavations do take place, once new towns are settled on the isthmus after the Suez Canal has been cut through-- a canal, by the way, of little use to a ship such as the Nautilus!"

"Surely, but of great use to the world at large," Captain Nemo said. "The ancients well understood the usefulness
to commerce of connecting the Red Sea with the Mediterranean, but they never dreamed of cutting a canal between
the two, and instead they picked the Nile as their link. If we can trust tradition, it was probably Egypt's King
Sesostris who started digging the canal needed to join the Nile with the Red Sea. What's certain is that in 615 B.C.
King Necho II was hard at work on a canal that was fed by Nile water and ran through the Egyptian plains opposite
Arabia. This canal could be traveled in four days, and it was so wide, two triple-tiered galleys could pass through it
abreast. Its construction was continued by Darius the Great, son of Hystaspes, and probably completed by King
Ptolemy II. Strabo saw it used for shipping; but the weakness of its slope between its starting point, near Bubastis,
and the Red Sea left it navigable only a few months out of the year. This canal served commerce until the century of
Rome's Antonine emperors; it was then abandoned and covered with sand, subsequently reinstated by Arabia's
Caliph Omar I, and finally filled in for good in 761 or 762 A.D. by Caliph Al-Mansur, in an effort to prevent
supplies from reaching Mohammed ibn Abdullah, who had rebelled against him. During his Egyptian campaign,
your General Napoleon Bonaparte discovered traces of this old canal in the Suez desert, and when the tide caught
him by surprise, he wellnigh perished just a few hours before rejoining his regiment at Hadjaroth, the very place
where Moses had pitched camp 3,300 years before him."

"Well, captain, what the ancients hesitated to undertake, Mr. de Lesseps is now finishing up; his joining of these
two seas will shorten the route from Cadiz to the East Indies by 9,000 kilometers, and he'll soon change Africa into
an immense island."

"Yes, Professor Aronnax, and you have every right to be proud of your fellow countryman. Such a man brings a
nation more honor than the greatest commanders! Like so many others, he began with difficulties and setbacks, but
he triumphed because he has the volunteer spirit. And it's sad to think that this deed, which should have been an
international deed, which would have insured that any administration went down in history, will succeed only
through the efforts of one man. So all hail to Mr. de Lesseps!"

"Yes, all hail to that great French citizen," I replied, quite startled by how emphatically Captain Nemo had just
spoken.

"Unfortunately," he went on, "I can't take you through that Suez Canal, but the day after tomorrow, you'll be able
to see the long jetties of Port Said when we're in the Mediterranean."

"In the Mediterranean!" I exclaimed.

"Yes, professor. Does that amaze you?"

"What amazes me is thinking we'll be there the day after tomorrow."

"Oh really?"

"Yes, captain, although since I've been aboard your vessel, I should have formed the habit of not being amazed
by anything!"

"But what is it that startles you?"

"The thought of how hideously fast the Nautilus will need to go, if it's to double the Cape of Good Hope, circle
around Africa, and lie in the open Mediterranean by the day after tomorrow."

"And who says it will circle Africa, professor? What's this talk about doubling the Cape of Good Hope?"

"But unless the Nautilus navigates on dry land and crosses over the isthmus--"

"Or under it, Professor Aronnax."

"Under it?"

"Surely," Captain Nemo replied serenely. "Under that tongue of land, nature long ago made what man today is
making on its surface."

"What! There's a passageway?"

"Yes, an underground passageway that I've named the Arabian Tunnel. It starts below Suez and leads to the Bay
of Pelusium."

"But isn't that isthmus only composed of quicksand?"

"To a certain depth. But at merely fifty meters, one encounters a firm foundation of rock."

"And it's by luck that you discovered this passageway?" I asked, more and more startled.

"Luck plus logic, professor, and logic even more than luck."

"Captain, I hear you, but I can't believe my ears."

"Oh, sir! The old saying still holds good: Aures habent et non audient!* Not only does this passageway exist, but
I've taken advantage of it on several occasions. Without it, I wouldn't have ventured today into such a blind alley as
the Red Sea."

*Latin: "They have ears but hear not." Ed.

"Is it indiscreet to ask how you discovered this tunnel?"

"Sir," the captain answered me, "there can be no secrets between men who will never leave each other."

I ignored this innuendo and waited for Captain Nemo's explanation.
"Professor," he told me, "the simple logic of the naturalist led me to discover this passageway, and I alone am familiar with it. I'd noted that in the Red Sea and the Mediterranean there exist a number of absolutely identical species of fish: eels, butterfish, greenfish, bass, jewelfish, flying fish. Certain of this fact, I wondered if there weren't a connection between the two seas. If there were, its underground current had to go from the Red Sea to the Mediterranean simply because of their difference in level. So I caught a large number of fish in the vicinity of Suez. I slipped copper rings around their tails and tossed them back into the sea. A few months later off the coast of Syria, I recaptured a few specimens of my fish, adorned with their telltale rings. So this proved to me that some connection existed between the two seas. I searched for it with my Nautilus, I discovered it, I ventured into it; and soon, professor, you also will have cleared my Arabic tunnel!"

CHAPTER 5
Arabian Tunnel

THE SAME DAY, I reported to Conseil and Ned Land that part of the foregoing conversation directly concerning them. When I told them we would be lying in Mediterranean waters within two days, Conseil clapped his hands, but the Canadian shrugged his shoulders.

"An underwater tunnel!" he exclaimed. "A connection between two seas! Who ever heard of such malarkey!"

"Ned my friend," Conseil replied, "had you ever heard of the Nautilus? No, yet here it is! So don't shrug your shoulders so blithely, and don't discount something with the feeble excuse that you've never heard of it."

"We'll soon see!" Ned Land shot back, shaking his head. "After all, I'd like nothing better than to believe in your captain's little passageway, and may Heaven grant it really does take us to the Mediterranean."

The same evening, at latitude 21 degrees 30' north, the Nautilus was afloat on the surface of the sea and drawing nearer to the Arab coast. I spotted Jidda, an important financial center for Egypt, Syria, Turkey, and the East Indies. I could distinguish with reasonable clarity the overall effect of its buildings, the ships made fast along its wharves, and those bigger vessels whose draft of water required them to drop anchor at the port's offshore mooring. The sun, fairly low on the horizon, struck full force on the houses in this town, accenting their whiteness. Outside the city limits, some wood or reed huts indicated the quarter where the bedouins lived.

Soon Jidda faded into the shadows of evening, and the Nautilus went back beneath the mildly phosphorescent waters.

The next day, February 10, several ships appeared, running on our opposite tack. The Nautilus resumed its underwater navigating; but at the moment of our noon sights, the sea was deserted and the ship rose again to its waterline.

With Ned and Conseil, I went to sit on the platform. The coast to the east looked like a slightly blurred mass in a damp fog.

Leaning against the sides of the skiff, we were chatting of one thing and another, when Ned Land stretched his hand toward a point in the water, saying to me:

"See anything out there, professor?"

"No, Ned," I replied, "but you know I don't have your eyes."

"Take a good look," Ned went on. "There, ahead to starboard, almost level with the beacon! Don't you see a mass that seems to be moving around?"

"Right," I said after observing carefully, "I can make out something like a long, blackish object on the surface of the water."

"A second Nautilus?" Conseil said.

"No," the Canadian replied, "unless I'm badly mistaken, that's some marine animal."

"Are there whales in the Red Sea?" Conseil asked.

"Yes, my boy," I replied, "they're sometimes found here."

"That's no whale," continued Ned Land, whose eyes never strayed from the object they had sighted. "We're old chums, whales and I, and I couldn't mistake their little ways."

"Let's wait and see," Conseil said. "The Nautilus is heading that direction, and we'll soon know what we're in for."

In fact, that blackish object was soon only a mile away from us. It looked like a huge reef stranded in midocean. What was it? I still couldn't make up my mind.
"Oh, it's moving off! It's diving!" Ned Land exclaimed. "Damnation! What can that animal be? It doesn't have a forked tail like baleen whales or sperm whales, and its fins look like sawed-off limbs."

"But in that case--" I put in.

"Good lord," the Canadian went on, "it's rolled over on its back, and it's raising its breasts in the air!"

"It's a siren!" Conseil exclaimed. "With all due respect to master, it's an actual mermaid!"

That word "siren" put me back on track, and I realized that the animal belonged to the order Sirenia: marine creatures that legends have turned into mermaids, half woman, half fish.

"No," I told Conseil, "that's no mermaid, it's an unusual creature of which only a few specimens are left in the Red Sea. That's a dugong."

"Order Sirenia, group Pisciforma, subclass Monodelphia, class Mammalia, branch Vertebrata," Conseil replied. "And when Conseil has spoken, there's nothing else to be said."

Meanwhile Ned Land kept staring. His eyes were gleaming with desire at the sight of that animal. His hands were ready to hurl a harpoon. You would have thought he was waiting for the right moment to jump overboard and attack the creature in its own element.

"Oh, sir," he told me in a voice trembling with excitement, "I've never killed anything like that!"

His whole being was concentrated in this last word.

Just then Captain Nemo appeared on the platform. He spotted the dugong. He understood the Canadian's frame of mind and addressed him directly:

"If you held a harpoon, Mr. Land, wouldn't your hands be itching to put it to work?"

"Positively, sir."

"And just for one day, would it displease you to return to your fisherman's trade and add this cetacean to the list of those you've already hunted down?"

"It wouldn't displease me one bit."

"All right, you can try your luck!"

"Thank you, sir," Ned Land replied, his eyes ablaze.

"Only," the captain went on, "I urge you to aim carefully at this animal, in your own personal interest."

"Is the dugong dangerous to attack?" I asked, despite the Canadian's shrug of the shoulders.

"Yes, sometimes," the captain replied. "These animals have been known to turn on their assailants and capsize their longboats. But with Mr. Land that danger isn't to be feared. His eye is sharp, his arm is sure. If I recommend that he aim carefully at this dugong, it's because the animal is justly regarded as fine game, and I know Mr. Land doesn't despise a choice morsel."

"Aha!" the Canadian put in. "This beast offers the added luxury of being good to eat?"

"Yes, Mr. Land. Its flesh is actual red meat, highly prized, and set aside throughout Malaysia for the tables of aristocrats. Accordingly, this excellent animal has been hunted so bloodthirstily that, like its manatee relatives, it has become more and more scarce."

"In that case, captain," Conseil said in all seriousness, "on the offchance that this creature might be the last of its line, wouldn't it be advisable to spare its life, in the interests of science?"

"Maybe," the Canadian answered, "it would be better to hunt it down, in the interests of mealtime."

"Then proceed, Mr. Land," Captain Nemo replied.

Just then, as mute and emotionless as ever, seven crewmen climbed onto the platform. One carried a harpoon and line similar to those used in whale fishing. Its deck paneling opened, the skiff was wrenched from its socket and launched to sea. Six rowers sat on the thwarts, and the coxswain took the tiller. Ned, Conseil, and I found seats in the stern.

"Aren't you coming, captain?" I asked.

"No, sir, but I wish you happy hunting."

The skiff pulled clear, and carried off by its six oars, it headed swiftly toward the dugong, which by then was floating two miles from the Nautilus.

Arriving within a few cable lengths of the cetacean, our longboat slowed down, and the sculls dipped noiselessly into the tranquil waters. Harpoon in hand, Ned Land went to take his stand in the skiff's bow. Harpoons used for hunting whales are usually attached to a very long rope that pays out quickly when the wounded animal drags it with him. But this rope measured no more than about ten fathoms, and its end had simply been fastened to a small barrel that, while floating, would indicate the dugong's movements beneath the waters.

I stood up and could clearly observe the Canadian's adversary. This dugong—which also boasts the name halicore—closely resembled a manatee. Its oblong body ended in a very long caudal fin and its lateral fins in actual fingers. It differs from the manatee in that its upper jaw is armed with two long, pointed teeth that form diverging tusks on either side.
This dugong that Ned Land was preparing to attack was of colossal dimensions, easily exceeding seven meters in length. It didn't stir and seemed to be sleeping on the surface of the waves, a circumstance that should have made it easier to capture.

The skiff approached cautiously to within three fathoms of the animal. The oars hung suspended above their rowlocks. I was crouching. His body leaning slightly back, Ned Land brandished his harpoon with expert hands.

Suddenly a hissing sound was audible, and the dugong disappeared. Although the harpoon had been forcefully hurled, it apparently had hit only water.

"Damnation!" exclaimed the furious Canadian. "I missed it!"

"No," I said, "the animal's wounded, there's its blood; but your weapon didn't stick in its body."

"My harpoon! Get my harpoon!" Ned Land exclaimed.

The sailors went back to their sculling, and the coxswain steered the longboat toward the floating barrel. We fished up the harpoon, and the skiff started off in pursuit of the animal.

The latter returned from time to time to breathe at the surface of the sea. Its wound hadn't weakened it because it went with tremendous speed. Driven by energetic arms, the longboat flew on its trail. Several times we got within a few fathoms of it, and the Canadian hovered in readiness to strike; but then the dugong would steal away with a sudden dive, and it proved impossible to overtake the beast.

I'll let you assess the degree of anger consuming our impatient Ned Land. He hurled at the hapless animal the most potent swearwords in the English language. For my part, I was simply distressed to see this dugong outwit our every scheme.

We chased it unflaggingly for a full hour, and I'd begun to think it would prove too difficult to capture, when the animal got the untimely idea of taking revenge on us, a notion it would soon have cause to regret. It wheeled on the skiff, to assault us in its turn.

This maneuver did not escape the Canadian.

"Watch out!" he said.

The coxswain pronounced a few words in his bizarre language, and no doubt he alerted his men to keep on their guard.

Arriving within twenty feet of the skiff, the dugong stopped, sharply sniffing the air with its huge nostrils, pierced not at the tip of its muzzle but on its topside. Then it gathered itself and sprang at us.

The skiff couldn't avoid the collision. Half overturned, it shipped a ton or two of water that we had to bail out. But thanks to our skillful coxswain, we were fouled on the bias rather than broadside, so we didn't capsize. Clinging to the stempost, Ned Land thrust his harpoon again and again into the gigantic animal, which imbedded its teeth in our gunwale and lifted the longboat out of the water as a lion would lift a deer. We were thrown on top of each other, and I have no idea how the venture would have ended had not the Canadian, still thirsting for the beast's blood, finally pierced it to the heart.

I heard its teeth grind on sheet iron, and the dugong disappeared, taking our harpoon along with it. But the barrel soon popped up on the surface, and a few moments later the animal's body appeared and rolled over on its back. Our skiff rejoined it, took it in tow, and headed to the Nautilus.

It took pulleys of great strength to hoist this dugong onto the platform. The beast weighed 5,000 kilograms. It was carved up in sight of the Canadian, who remained to watch every detail of the operation. At dinner the same day, my steward served me some slices of this flesh, skillfully dressed by the ship's cook. I found it excellent, even better than veal if not beef.

The next morning, February 11, the Nautilus's pantry was enriched by more dainty game. A covey of terns alighted on the Nautilus. They were a species of Sterna nilotica unique to Egypt: beak black, head gray and stippled, eyes surrounded by white dots, back, wings, and tail grayish, belly and throat white, feet red. Also caught were a couple dozen Nile duck, superior-tasting wildfowl whose neck and crown of the head are white speckled with black.

By then the Nautilus had reduced speed. It moved ahead at a saunter, so to speak. I observed that the Red Sea's water was becoming less salty the closer we got to Suez.

Near five o'clock in the afternoon, we sighted Cape Ras Mohammed to the north. This cape forms the tip of Arabia Petraea, which lies between the Gulf of Suez and the Gulf of Aqaba.

The Nautilus entered the Strait of Jubal, which leads to the Gulf of Suez. I could clearly make out a high mountain crowning Ras Mohammed between the two gulfs. It was Mt. Horeb, that biblical Mt. Sinai on whose summit Moses met God face to face, that summit the mind's eye always pictures as wreathed in lightning.

At six o'clock, sometimes afloat and sometimes submerged, the Nautilus passed well out from El Tur, which sat at the far end of a bay whose waters seemed to be dyed red, as Captain Nemo had already mentioned. Then night fell in the midst of a heavy silence occasionally broken by the calls of pelicans and nocturnal birds, by the sound of surf chafing against rocks, or by the distant moan of a steamer churning the waves of the gulf with noisy blades.
From eight to nine o'clock, the Nautilus stayed a few meters beneath the waters. According to my calculations, we had to be quite close to Suez. Through the panels in the lounge, I spotted rocky bottoms brightly lit by our electric rays. It seemed to me that the strait was getting narrower and narrower.

At 9:15 when our boat returned to the surface, I climbed onto the platform. I was quite impatient to clear Captain Nemo's tunnel, couldn't sit still, and wanted to breathe the fresh night air.

Soon, in the shadows, I spotted a pale signal light glimmering a mile away, half discolored by mist.
"A floating lighthouse," said someone next to me.
I turned and discovered the captain.
"That's the floating signal light of Suez," he went on. "It won't be long before we reach the entrance to the tunnel."
"It can't be very easy to enter it."
"No, sir. Accordingly, I'm in the habit of staying in the pilothouse and directing maneuvers myself. And now if you'll kindly go below, Professor Aronnax, the Nautilus is about to sink beneath the waves, and it will only return to the surface after we've cleared the Arabian Tunnel."
I followed Captain Nemo. The hatch closed, the ballast tanks filled with water, and the submersible sank some ten meters down.
Just as I was about to repair to my stateroom, the captain stopped me.
"Professor," he said to me, "would you like to go with me to the wheelhouse?"
"I was afraid to ask," I replied.
"Come along, then. This way, you'll learn the full story about this combination underwater and underground navigating."
Captain Nemo led me to the central companionway. In midstair he opened a door, went along the upper gangways, and arrived at the wheelhouse, which, as you know, stands at one end of the platform.
It was a cabin measuring six feet square and closely resembling those occupied by the helmsmen of steamboats on the Mississippi or Hudson rivers. In the center stood an upright wheel geared to rudder cables running to the Nautilus's stern. Set in the cabin's walls were four deadlights, windows of biconvex glass that enabled the man at the helm to see in every direction.
The cabin was dark; but my eyes soon grew accustomed to its darkness and I saw the pilot, a muscular man whose hands rested on the pegs of the wheel. Outside, the sea was brightly lit by the beacon shining behind the cabin at the other end of the platform.
"Now," Captain Nemo said, "let's look for our passageway."
Electric wires linked the pilothouse with the engine room, and from this cabin the captain could simultaneously signal heading and speed to his Nautilus. He pressed a metal button and at once the propeller slowed down significantly.
I stared in silence at the high, sheer wall we were skirting just then, the firm base of the sandy mountains on the coast. For an hour we went along it in this fashion, staying only a few meters away. Captain Nemo never took his eyes off the two concentric circles of the compass hanging in the cabin. At a mere gesture from him, the helmsman would instantly change the Nautilus's heading.
Standing by the port deadlight, I spotted magnificent coral substructures, zoophytes, algae, and crustaceans with enormous quivering claws that stretched forth from crevices in the rock.
At 10:15 Captain Nemo himself took the helm. Dark and deep, a wide gallery opened ahead of us. The Nautilus was brazenly swallowed up. Strange rumblings were audible along our sides. It was the water of the Red Sea, hurled toward the Mediterranean by the tunnel's slope. Our engines tried to offer resistance by churning the waves with propeller in reverse, but the Nautilus went with the torrent, as swift as an arrow.
Along the narrow walls of this passageway, I saw only brilliant streaks, hard lines, fiery furrows, all scrawled by our speeding electric light. With my hand I tried to curb the pounding of my heart.
At 10:35 Captain Nemo left the steering wheel and turned to me:
"The Mediterranean," he told me.
In less than twenty minutes, swept along by the torrent, the Nautilus had just cleared the Isthmus of Suez.

CHAPTER 6
The Greek Islands
AT SUNRISE the next morning, February 12, the Nautilus rose to the surface of the waves.
I rushed onto the platform. The hazy silhouette of Pelusium was outlined three miles to the south. A torrent had carried us from one sea to the other. But although that tunnel was easy to descend, going back up must have been impossible.

Near seven o'clock Ned and Conseil joined me. Those two inseparable companions had slept serenely, utterly unaware of the Nautilus’s feat.

"Well, Mr. Naturalist," the Canadian asked in a gently mocking tone, "and how about that Mediterranean?"

"We're floating on its surface, Ned my friend."

"What!" Conseil put in. "Last night . . . ?"

"Yes, last night, in a matter of minutes, we cleared that insuperable isthmus."

"I don't believe a word of it," the Canadian replied.

"And you're in the wrong, Mr. Land," I went on. "That flat coastline curving southward is the coast of Egypt."

"Tell it to the marines, sir," answered the stubborn Canadian.

"But if master says so," Conseil told him, "then so be it."

"What's more, Ned," I said, "Captain Nemo himself did the honors in his tunnel, and I stood beside him in the pilothouse while he steered the Nautilus through that narrow passageway."

"You hear, Ned?" Conseil said.

"And you, Ned, who have such good eyes," I added, "you can spot the jetties of Port Said stretching out to sea."

The Canadian looked carefully.

"Correct," he said. "You're right, professor, and your captain's a superman. We're in the Mediterranean. Fine. So now let's have a chat about our little doings, if you please, but in such a way that nobody overhears."

I could easily see what the Canadian was driving at. In any event, I thought it best to let him have his chat, and we all three went to sit next to the beacon, where we were less exposed to the damp spray from the billows.

"Now, Ned, we're all ears," I said. "What have you to tell us?"

"What I've got to tell you is very simple," the Canadian replied. "We're in Europe, and before Captain Nemo's whims take us deep into the polar seas or back to Oceania, I say we should leave this Nautilus."

I confess that such discussions with the Canadian always baffled me. I didn't want to restrict my companions' freedom in any way, and yet I had no desire to leave Captain Nemo. Thanks to him and his submersible, I was finishing my undersea research by the day, and I was rewriting my book on the great ocean depths in the midst of its very element. Would I ever again have such an opportunity to observe the ocean's wonders? Absolutely not! So I couldn't entertain this idea of leaving the Nautilus before completing our course of inquiry.

"Ned my friend," I said, "answer me honestly. Are you bored with this ship? Are you sorry that fate has cast you into Captain Nemo's hands?"

The Canadian paused for a short while before replying. Then, crossing his arms:

"Honestly," he said, "I'm not sorry about this voyage under the seas. I'll be glad to have done it, but in order to have done it, it has to finish. That's my feeling."

"It will finish, Ned."

"Where and when?"

"Where? I don't know. When? I can't say. Or, rather, I suppose it will be over when these seas have nothing more to teach us. Everything that begins in this world must inevitably come to an end."

"I think as master does," Conseil replied, "and it's extremely possible that after crossing every sea on the globe, Captain Nemo will bid the three of us a fond farewell."

"Bid us a fond farewell?" the Canadian exclaimed. "You mean beat us to a fare-thee-well!"

"Let's not exaggerate, Mr. Land," I went on. "We have nothing to fear from the captain, but neither do I share Conseil's views. We're privy to the Nautilus's secrets, and I don't expect that its commander, just to set us free, will meekly stand by while we spread those secrets all over the world."

"But in that case what do you expect?" the Canadian asked.

"That we'll encounter advantageous conditions for escaping just as readily in six months as now."

"Great Scott!" Ned Land put in. "And where, if you please, will we be in six months, Mr. Naturalist?"

"Perhaps here, perhaps in China. You know how quickly the Nautilus moves. It crosses oceans like swallows cross the air or express trains continents. It doesn't fear heavily traveled seas. Who can say it won't hug the coasts of France, England, or America, where an escape attempt could be carried out just as effectively as here."

"Professor Aronnax," the Canadian replied, "your arguments are rotten to the core. You talk way off in the future: We'll be here, we'll be there! Me, I'm talking about right now: we are here, and we must take advantage of it!"

I was hard pressed by Ned Land's common sense, and I felt myself losing ground. I no longer knew what arguments to put forward on my behalf.
"Sir," Ned went on, "let's suppose that by some impossibility, Captain Nemo offered your freedom to you this very day. Would you accept?"

"I don't know," I replied.

"And suppose he adds that this offer he's making you today won't ever be repeated, then would you accept?"

I did not reply.

"And what thinks our friend Conseil?" Ned Land asked.

"Your friend Conseil," the fine lad replied serenely, "has nothing to say for himself. He's a completely disinterested party on this question. Like his master, like his comrade Ned, he's a bachelor. Neither wife, parents, nor children are waiting for him back home. He's in master's employ, he thinks like master, he speaks like master, and much to his regret, he can't be counted on to form a majority. Only two persons face each other here: master on one side, Ned Land on the other. That said, your friend Conseil is listening, and he's ready to keep score."

I couldn't help smiling as Conseil wiped himself out of existence. Deep down, the Canadian must have been overjoyed at not having to contend with him.

"Then, sir," Ned Land said, "since Conseil is no more, we'll have this discussion between just the two of us. I've talked, you've listened. What's your reply?"

It was obvious that the matter had to be settled, and evasions were distasteful to me.

"Ned my friend," I said, "here's my reply. You have right on your side and my arguments can't stand up to yours. It will never do to count on Captain Nemo's benevolence. The most ordinary good sense would forbid him to set us free. On the other hand, good sense decrees that we take advantage of our first opportunity to leave the Nautilus."

"Fine, Professor Aronnax, that's wisely said."

"But one proviso," I said, "just one. The opportunity must be the real thing. Our first attempt to escape must succeed, because if it misfires, we won't get a second chance, and Captain Nemo will never forgive us."

"That's also well put," the Canadian replied. "But your proviso applies to any escape attempt, whether it happens in two years or two days. So this is still the question: if a promising opportunity comes up, we have to grab it."

"Agreed. And now, Ned, will you tell me what you mean by a promising opportunity?"

"One that leads the Nautilus on a cloudy night within a short distance of some European coast."

"And you'll try to get away by swimming?"

"Yes, if we're close enough to shore and the ship's afloat on the surface. No, if we're well out and the ship's navigating under the waters."

"And in that event?"

"In that event I'll try to get hold of the skiff. I know how to handle it. We'll stick ourselves inside, undo the bolts, and rise to the surface, without the helmsman in the bow seeing a thing.""

"Fine, Ned. Stay on the lookout for such an opportunity, but don't forget, one slipup will finish us."

"I won't forget, sir."

"And now, Ned, would you like to know my overall thinking on your plan?"

"Gladly, Professor Aronnax."

"Well then, I think--and I don't mean 'I hope'--that your promising opportunity won't ever arise."

"Why not?"

"Because Captain Nemo recognizes that we haven't given up all hope of recovering our freedom, and he'll keep on his guard, above all in seas within sight of the coasts of Europe."

"I'm of master's opinion," Conseil said.

"We'll soon see," Ned Land replied, shaking his head with a determined expression.

"And now, Ned Land," I added, "let's leave it at that. Not another word on any of this. The day you're ready, alert us and we're with you. I turn it all over to you."

That's how we ended this conversation, which later was to have such serious consequences. At first, I must say, events seemed to confirm my forecasts, much to the Canadian's despair. Did Captain Nemo view us with distrust in these heavily traveled seas, or did he simply want to hide from the sight of those ships of every nation that plowed the Mediterranean? I have no idea, but usually he stayed in midwater and well out from any coast. Either the Nautilus surfaced only enough to let its pilothouse emerge, or it slipped away to the lower depths, although, between the Greek Islands and Asia Minor, we didn't find bottom even at 2,000 meters down.

Accordingly, I became aware of the isle of Karpathos, one of the Sporades Islands, only when Captain Nemo placed his finger over a spot on the world map and quoted me this verse from Virgil:

Est in Carpathio Neptuni gurgite vates
Caerulius Proteus . . .*

*Latin: "There in King Neptune's domain by Karpathos, his spokesman / is azure-hued Proteus . . . " Ed.

It was indeed that bygone abode of Proteus, the old shepherd of King Neptune's flocks: an island located
between Rhodes and Crete, which Greeks now call Karpathos, Italians Scarpanto. Through the lounge window I could see only its granite bedrock.

The next day, February 14, I decided to spend a few hours studying the fish of this island group; but for whatever reason, the panels remained hermetically sealed. After determining the Nautilus's heading, I noted that it was proceeding toward the ancient island of Crete, also called Candia. At the time I had shipped aboard the Abraham Lincoln, this whole island was in rebellion against its tyrannical rulers, the Ottoman Empire of Turkey. But since then I had absolutely no idea what happened to this revolution, and Captain Nemo, deprived of all contact with the shore, was hardly the man to keep me informed.

So I didn't allude to this event when, that evening, I chanced to be alone with the captain in the lounge. Besides, he seemed silent and preoccupied. Then, contrary to custom, he ordered that both panels in the lounge be opened, and going from the one to the other, he carefully observed the watery mass. For what purpose? I hadn't a guess, and for my part, I spent my time studying the fish that passed before my eyes.

Among others I noted that sand goby mentioned by Aristotle and commonly known by the name sea loach, which is encountered exclusively in the salty waters next to the Nile Delta. Near them some semiphosphorescent red porgy rolled by, a variety of gilthead that the Egyptians ranked among their sacred animals, lauding them in religious ceremonies when their arrival in the river's waters announced the fertile flood season. I also noticed some wrasse known as the tapiro, three decimeters long, bony fish with transparent scales whose bluish gray color is mixed with red spots; they're enthusiastic eaters of marine vegetables, which gives them an exquisite flavor; hence these tapiro were much in demand by the epicures of ancient Rome, and their entrails were dressed with brains of peacock, tongue of flamingo, and testes of moray to make that divine platter that so enraptured the Roman emperor Vitellius.

Another resident of these seas caught my attention and revived all my memories of antiquity. This was the remora, which travels attached to the bellies of sharks; as the ancients tell it, when these little fish cling to the undersides of a ship, they can bring it to a halt, and by so impeding Mark Antony's vessel during the Battle of Actium, one of them facilitated the victory of Augustus Caesar. From such slender threads hang the destinies of nations! I also observed some wonderful snappers belonging to the order Lutianida, sacred fish for the Greeks, who claimed they could drive off sea monsters from the waters they frequent; their Greek name anthias means “flower,” and they live up to it in the play of their colors and in those fleeting reflections that turn their dorsal fins into watered silk; their hues are confined to a gamut of reds, from the pallor of pink to the glow of ruby. I couldn't take my eyes off these marine wonders, when I was suddenly jolted by an unexpected apparition.

In the midst of the waters, a man appeared, a diver carrying a little leather bag at his belt. It was no corpse lost in the waves. It was a living man, swimming vigorously, sometimes disappearing to breathe at the surface, then instantly diving again.

I turned to Captain Nemo, and in an agitated voice:
"A man! A castaway!" I exclaimed. "We must rescue him at all cost!"

The captain didn't reply but went to lean against the window.

The man drew near, and gluing his face to the panel, he stared at us.

To my deep astonishment, Captain Nemo gave him a signal. The diver answered with his hand, immediately swam up to the surface of the sea, and didn't reappear.

"Don't be alarmed," the captain told me. "That's Nicolas from Cape Matapan, nicknamed 'Il Pesce.'* He's well known throughout the Cyclades Islands. A bold diver! Water is his true element, and he lives in the sea more than on shore, going constantly from one island to another, even to Crete."

*Italian: "The Fish." Ed.

"You know him, captain?"

"Why not, Professor Aronnax?"

This said, Captain Nemo went to a cabinet standing near the lounge's left panel. Next to this cabinet I saw a chest bound with hoops of iron, its lid bearing a copper plaque that displayed the Nautilus's monogram with its motto Mobilis in Mobili.

Just then, ignoring my presence, the captain opened this cabinet, a sort of safe that contained a large number of ingots.

They were gold ingots. And they represented an enormous sum of money. Where had this precious metal come from? How had the captain amassed this gold, and what was he about to do with it?

I didn't pronounce a word. I gaped. Captain Nemo took out the ingots one by one and arranged them methodically inside the chest, filling it to the top. At which point I estimate that it held more than 1,000 kilograms of gold, in other words, close to 5,000,000 francs.
After securely fastening the chest, Captain Nemo wrote an address on its lid in characters that must have been modern Greek.

This done, the captain pressed a button whose wiring was in communication with the crew's quarters. Four men appeared and, not without difficulty, pushed the chest out of the lounge. Then I heard them hoist it up the iron companionway by means of pulleys.

Just then Captain Nemo turned to me:
"You were saying, professor?" he asked me.
"I wasn't saying a thing, captain."
"Then, sir, with your permission, I'll bid you good evening."

And with that, Captain Nemo left the lounge.

I reentered my stateroom, very puzzled, as you can imagine. I tried in vain to fall asleep. I kept searching for a relationship between the appearance of the diver and that chest filled with gold. Soon, from certain rolling and pitching movements, I sensed that the Nautilus had left the lower strata and was back on the surface of the water.

Then I heard the sound of footsteps on the platform. I realized that the skiff was being detached and launched to sea. For an instant it bumped the Nautilus's side, then all sounds ceased.

Two hours later, the same noises, the same comings and goings, were repeated. Hoisted on board, the longboat was readjusted into its socket, and the Nautilus plunged back beneath the waves.

So those millions had been delivered to their address. At what spot on the continent? Who was the recipient of Captain Nemo's gold?

The next day I related the night's events to Conseil and the Canadian, events that had aroused my curiosity to a fever pitch. My companions were as startled as I was.

"But where does he get those millions?" Ned Land asked.

To this no reply was possible. After breakfast I made my way to the lounge and went about my work. I wrote up my notes until five o'clock in the afternoon. Just then--was it due to some personal indisposition?--I felt extremely hot and had to take off my jacket made of fan mussel fabric. A perplexing circumstance because we weren't in the low latitudes, and besides, once the Nautilus was submerged, it shouldn't be subject to any rise in temperature. I looked at the pressure gauge. It marked a depth of sixty feet, a depth beyond the reach of atmospheric heat.

I kept on working, but the temperature rose to the point of becoming unbearable.

"Could there be a fire on board?" I wondered.

I was about to leave the lounge when Captain Nemo entered. He approached the thermometer, consulted it, and turned to me:
"42 degrees centigrade," he said.
"I've detected as much, captain," I replied, "and if it gets even slightly hotter, we won't be able to stand it."
"Oh, professor, it won't get any hotter unless we want it to!"
"You mean you can control this heat?"
"No, but I can back away from the fireplace producing it."
"So it's outside?"
"Surely. We're cruising in a current of boiling water."
"It can't be!" I exclaimed.
"Look."

The panels had opened, and I could see a completely white sea around the Nautilus. Steaming sulfurous fumes uncoiled in the midst of waves bubbling like water in a boiler. I leaned my hand against one of the windows, but the heat was so great, I had to snatch it back.

"Where are we?" I asked.

"Near the island of Santorini, professor," the captain answered me, "and right in the channel that separates the volcanic islets of Nea Kameni and Palea Kameni. I wanted to offer you the unusual sight of an underwater eruption."

"I thought," I said, "that the formation of such new islands had come to an end."

"Nothing ever comes to an end in these volcanic waterways," Captain Nemo replied, "and thanks to its underground fires, our globe is continuously under construction in these regions. According to the Latin historians Cassiodorus and Pliny, by the year 19 of the Christian era, a new island, the divine Thera, had already appeared in the very place these islets have more recently formed. Then Thera sank under the waves, only to rise and sink once more in the year 69 A.D. From that day to this, such plutonic construction work has been in abeyance. But on February 3, 1866, a new islet named George Island emerged in the midst of sulfurous steam near Nea Kameni and was fused to it on the 6th of the same month. Seven days later, on February 13, the islet of Aphroessa appeared, leaving a ten-meter channel between itself and Nea Kameni. I was in these seas when that phenomenon occurred and I was able to observe its every phase. The islet of Aphroessa was circular in shape, measuring 300 feet in diameter
and thirty feet in height. It was made of black, glassy lava mixed with bits of feldspar. Finally, on March 10, a smaller islet called Reka appeared next to Nea Kameni, and since then, these three islets have fused to form one single, selfsame island."

"What about this channel we're in right now?" I asked.

"Here it is," Captain Nemo replied, showing me a chart of the Greek Islands. "You observe that I've entered the new islets in their place."

"But will this channel fill up one day?"

"Very likely, Professor Aronnax, because since 1866 eight little lava islets have surged up in front of the port of St. Nicolas on Palea Kameni. So it's obvious that Nea and Palea will join in days to come. In the middle of the Pacific, tiny infusoria build continents, but here they're built by volcanic phenomena. Look, sir! Look at the construction work going on under these waves."

I returned to the window. The Nautilus was no longer moving. The heat had become unbearable. From the white it had recently been, the sea was turning red, a coloration caused by the presence of iron salts. Although the lounge was hermetically sealed, it was filling with an intolerable stink of sulfur, and I could see scarlet flames of such brightness, they overpowered our electric light.

I was swimming in perspiration, I was stifling, I was about to be cooked. Yes, I felt myself cooking in actual fact!

"We can't stay any longer in this boiling water," I told the captain.

"No, it wouldn't be advisable," replied Nemo the Emotionless.

He gave an order. The Nautilus tacked about and retreated from this furnace it couldn't brave with impunity. A quarter of an hour later, we were breathing fresh air on the surface of the waves.

It then occurred to me that if Ned had chosen these waterways for our escape attempt, we wouldn't have come out alive from this sea of fire.

The next day, February 16, we left this basin, which tallies depths of 3,000 meters between Rhodes and Alexandria, and passing well out from Cerigo Island after doubling Cape Matapan, the Nautilus left the Greek Islands behind.

CHAPTER 7
The Mediterranean in Forty-Eight Hours

THE MEDITERRANEAN, your ideal blue sea: to Greeks simply "the sea," to Hebrews "the great sea," to Romans mare nostrum.* Bordered by orange trees, aloes, cactus, and maritime pine trees, perfumed with the scent of myrtle, framed by rugged mountains, saturated with clean, transparent air but continuously under construction by fires in the earth, this sea is a genuine battlefield where Neptune and Pluto still struggle for world domination. Here on these beaches and waters, says the French historian Michelet, a man is revived by one of the most invigorating climates in the world.

*Latin: "our sea." Ed.

But as beautiful as it was, I could get only a quick look at this basin whose surface area comprises 2,000,000 square kilometers. Even Captain Nemo's personal insights were denied me, because that mystifying individual didn't appear one single time during our high-speed crossing. I estimate that the Nautilus covered a track of some 600 leagues under the waves of this sea, and this voyage was accomplished in just twenty-four hours times two. Departing from the waterways of Greece on the morning of February 16, we cleared the Strait of Gibraltar by sunrise on the 18th.

It was obvious to me that this Mediterranean, pinned in the middle of those shores he wanted to avoid, gave Captain Nemo no pleasure. Its waves and breezes brought back too many memories, if not too many regrets. Here he no longer had the ease of movement and freedom of maneuver that the oceans allowed him, and his Nautilus felt cramped so close to the coasts of both Africa and Europe.

Accordingly, our speed was twenty-five miles (that is, twelve four-kilometer leagues) per hour. Needless to say, Ned Land had to give up his escape plans, much to his distress. Swept along at the rate of twelve to thirteen meters per second, he could hardly make use of the skiff. Leaving the Nautilus under these conditions would have been like jumping off a train racing at this speed, a rash move if there ever was one. Moreover, to renew our air supply, the submersible rose to the surface of the waves only at night, and relying solely on compass and log, it steered by dead reckoning.

Inside the Mediterranean, then, I could catch no more of its fast-passing scenery than a traveler might see from
an express train; in other words, I could view only the distant horizons because the foregrounds flashed by like lightning. But Conseil and I were able to observe those Mediterranean fish whose powerful fins kept pace for a while in the Nautilus's waters. We stayed on watch before the lounge windows, and our notes enable me to reconstruct, in a few words, the ichthyology of this sea.

Among the various fish inhabiting it, some I viewed, others I glimpsed, and the rest I missed completely because of the Nautilus's speed. Kindly allow me to sort them out using this whimsical system of classification. It will at least convey the quickness of my observations.

In the midst of the watery mass, brightly lit by our electric beams, there snaked past those one-meter lampreys that are common to nearly every clime. A type of ray from the genus Oxyrhynchus, five feet wide, had a white belly with a spotted, ash-gray back and was carried along by the currents like a huge, wide-open shawl. Other rays passed by so quickly I couldn't tell if they deserved that name "eagle ray" coined by the ancient Greeks, or those designations of "rat ray," "bat ray," and "toad ray" that modern fishermen have inflicted on them. Dogfish known as topes, twelve feet long and especially fierce, were racing with each other. Looking like big bluish shadows, thresher sharks went by, eight feet long and gifted with an extremely acute sense of smell. Dorados from the genus Sparus, some measuring up to thirteen decimeters, appeared in silver and azure costumes encircled with ribbons, which contrasted with the dark color of their fins; fish sacred to the goddess Venus, their eyes set in brows of gold; a valuable species that patronizes all waters fresh or salt, equally at home in rivers, lakes, and oceans, living in every clime, tolerating any temperature, their line dating back to prehistoric times on this earth yet preserving all its beauty from those far-off days. Magnificent seagulls, nine to ten meters long and extremely fast, banded their powerful tails against the glass of our panels, showing bluish backs with small brown spots; they resemble sharks, without equaling their strength, and are encountered in every sea; in the spring they delight in swimming up the great rivers, fighting the currents of the Volga, Danube, Po, Rhine, Loire, and Oder, while feeding on herrings, mackerel, salmon, and codfish; although they belong to the class of cartilaginous fish, they rate as a delicacy; they're eaten fresh, dried, marinated, or salt-preserved, and in olden times they were borne in triumph to the table of the Roman epicure Lucullus.

But whenever the Nautilus drew near the surface, those denizens of the Mediterranean I could observe most productively belonged to the sixty-third genus of bony fish. These were tuna from the genus Scomber, blue-black on top, silver on the belly armor, their dorsal stripes giving off a golden gleam. They are said to follow ships in search of refreshing shade from the hot tropical sun, and they did just that with the Nautilus, as they had once done with the vessels of the Count de La Pérouse. For long hours they competed in speed with our submersible. I couldn't stop marveling at these animals so perfectly cut out for racing, their heads small, their bodies sleek, spindle-shaped, and in some cases over three meters long, their pectoral fins gifted with remarkable strength, their caudal fins forked. Like certain flocks of birds, whose speed they equal, these tuna swim in triangle formation, which prompted the ancients to say they'd honed up on geometry and military strategy. And yet they can't escape the Provençal fishermen, who prize them as highly as did the ancient inhabitants of Turkey and Italy; and these valuable animals, as oblivious as if they were deaf and blind, leap right into the Marseilles tuna nets and perish by the thousands.

Just for the record, I'll mention those Mediterranean fish that Conseil and I barely glimpsed. There were whitish eels of the species Gymnotus fasciatus that passed like elusive wisps of steam, conger eels three to four meters long that were tricked out in green, blue, and yellow, three-foot hakes with a liver that makes a dainty morsel, wormfish drifting like thin seaweed, sea robins that poets call lyrefish and seamen pipers and whose snouts have two jagged triangular plates shaped like old Homer's lyre, swallowfish swimming as fast as the bird they're named after, redheaded groupers whose dorsal fins are trimmed with filaments, some shad (spotted with black, gray, brown, blue, yellow, and green) that actually respond to tinkling handbells, splendid diamond-shaped turbot that were like aquatic pheasants with yellowish fins stippled in brown and the left topside mostly marbled in brown and yellow, finally schools of wonderful red mullet, real oceanic birds of paradise that ancient Romans bought for as much as 10,000 sesterces apiece, and which they killed at the table, so they could heartlessly watch it change color from cinnabar red when alive to pallid white when dead.

And as for the rest of fish common to the Atlantic and Mediterranean, I was unable to observe miralets, triggerfish, puffers, seahorses, jewelfish, trumpetfish, blennies, gray mullet, wrasse, smelt, flying fish, anchovies, sea bream, porgies, garfish, or any of the chief representatives of the order Pleuronecta, such as sole, flounder, plaice, dab, and brill, simply because of the dizzying speed with which the Nautilus hustled through these opulent waters.

As for marine mammals, on passing by the mouth of the Adriatic Sea, I thought I recognized two or three sperm whales equipped with the single dorsal fin denoting the genus Physeter, some pilot whales from the genus Globicephalus exclusive to the Mediterranean, the forepart of the head striped with small distinct lines, and also a dozen seals with white bellies and black coats, known by the name monk seals and just as solemn as if they were three-meter Dominicans.
For his part, Conseil thought he spotted a turtle six feet wide and adorned with three protruding ridges that ran lengthwise. I was sorry to miss this reptile, because from Conseil's description, I believe I recognized the leatherback turtle, a pretty rare species. For my part, I noted only some loggerhead turtles with long carapaces.

As for zoophytes, for a few moments I was able to marvel at a wonderful, orange-hued hydra from the genus Galeolaria that clung to the glass of our port panel; it consisted of a long, lean filament that spread out into countless branches and ended in the most delicate lace ever spun by the followers of Arachne. Unfortunately I couldn't fish up this wonderful specimen, and surely no other Mediterranean zoophytes would have been offered to my gaze, if, on the evening of the 16th, the Nautilus hadn't slowed down in an odd fashion. This was the situation.

By then we were passing between Sicily and the coast of Tunisia. In the cramped space between Cape Bon and the Strait of Messina, the sea bottom rises almost all at once. It forms an actual ridge with only seventeen meters of water remaining above it, while the depth on either side is 170 meters. Consequently, the Nautilus had to maneuver with caution so as not to bump into this underwater barrier.

I showed Conseil the position of this long reef on our chart of the Mediterranean.

"But with all due respect to master," Conseil ventured to observe, "it's like an actual isthmus connecting Europe to Africa."

"Yes, my boy," I replied, "it cuts across the whole Strait of Sicily, and Smith's soundings prove that in the past, these two continents were genuinely connected between Cape Boeo and Cape Farina."

"I can easily believe it," Conseil said.

"I might add," I went on, "that there's a similar barrier between Gibraltar and Ceuta, and in prehistoric times it closed off the Mediterranean completely."

"Gracious!" Conseil put in. "Suppose one day some volcanic upheaval raises these two barriers back above the waves!"

"That's most unlikely, Conseil."

"If master will allow me to finish, I mean that if this phenomenon occurs, it might prove distressing to Mr. de Lesseps, who has gone to such pains to cut through his isthmus!"

"Agreed, but I repeat, Conseil: such a phenomenon won't occur. The intensity of these underground forces continues to diminish. Volcanoes were quite numerous in the world's early days, but they're going extinct one by one; the heat inside the earth is growing weaker, the temperature in the globe's lower strata is cooling appreciably every century, and to our globe's detriment, because its heat is its life."

"But the sun--"

"The sun isn't enough, Conseil. Can it restore heat to a corpse?"

"Not that I've heard."

"Well, my friend, someday the earth will be just such a cold corpse. Like the moon, which long ago lost its vital heat, our globe will become lifeless and unlivable."

"In how many centuries?" Conseil asked.

"In hundreds of thousands of years, my boy."

"Then we have ample time to finish our voyage," Conseil replied, "if Ned Land doesn't mess things up!"

Thus reassured, Conseil went back to studying the shallows that the Nautilus was skimming at moderate speed.

On the rocky, volcanic seafloor, there bloomed quite a collection of moving flora: sponges, sea cucumbers, jellyfish called sea gooseberries that were adorned with reddish tendrils and gave off a subtle phosphorescence, members of the genus Beroe that are commonly known by the name melon jellyfish and are bathed in the shimmer of the whole solar spectrum, free-swimming crinoids one meter wide that reddened the waters with their crimson hue, treelike basket stars of the greatest beauty, sea fans from the genus Pavonacea with long stems, numerous edible sea urchins of various species, plus green sea anemones with a grayish trunk and a brown disk lost beneath the olive-colored tresses of their tentacles.

Conseil kept especially busy observing mollusks and articulates, and although his catalog is a little dry, I wouldn't want to wrong the gallant lad by leaving out his personal observations.

From the branch Mollusca, he mentions numerous comb-shaped scallops, hooflike spiny oysters piled on top of each other, triangular coquina, three-pronged glass snails with yellow fins and transparent shells, orange snails from the genus Pleurobranchus that looked like eggs spotted or speckled with greenish dots, members of the genus Aplysia also known by the name sea hares, other sea hares from the genus Dolabella, plump paper-bubble shells, umbrella shells exclusive to the Mediterranean, abalone whose shell produces a mother-of-pearl much in demand, pilgrim scallops, saddle shells that diners in the French province of Languedoc are said to like better than oysters, some of those cockleshells so dear to the citizens of Marseilles, fat white venus shells that are among the clams so abundant off the coasts of North America and eaten in such quantities by New Yorkers, variously colored comb shells with gill covers, burrowing date mussels with a peppery flavor I relish, furrowed heart cockles whose shells
were dashed in this shipwreck! How many victims were swept under the waves! Had some sailor on board lived to sternpost and still hanging from an iron chain, the board on its stern eaten away by marine salts! How many lives impression: sides torn open, funnel bent, paddle wheels stripped to the mountings, rudder separated from the steamers, some lying down, others rearing up like fearsome animals. One of these boats made a dreadful first

The Nautilus drew nearer to the Strait of Gibraltar. By then the shores of Africa and Europe were converging, and in

colors and send us their serial numbers! But no, nothing but silence and death filled this field of catastrophes!

Nautilus passed between them, covering them with sheets of electricity, they seemed ready to salute us with their anchor by some immense, open, offshore mooring where they were waiting for their departure time. When the

parts of engines, cracked cylinders, staved-in boilers, then hulls floating in midwater, here upright, there overturned.

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dorsibranchian worms. But having gone past the shallows of the Strait of Sicily, the Nautilus resumed its usual deep-

water speed. From then on, no more mollusks, no more zoophytes, no more articulates. Just a few large fish

dwelling inside whatever abandoned seashells they could take over, homola crabs with spiny fronts, hermit crabs, hairy porcelain crabs, etc.

There Conseil's work came to a halt. He didn't have time to finish off the class Crustacea through an examination

of its stomatopods, amphipods, homopods, isopods, trilobites, branchiopods, ostracods, and entomostraceans. And in

order to complete his study of marine articulate classes, he needed to mention the class Cirripedia, which contains water fleas and carp lice, plus the class Annelida, which he would have divided without fail into tubifex worms and dorsibranchian worms. But having gone past the shallows of the Strait of Sicily, the Nautilus resumed its usual deep-water speed. From then on, no more mollusks, no more zoophytes, no more articulates. Just a few large fish sweeping by like shadows.

During the night of February 16-17, we entered the second Mediterranean basin, whose maximum depth we found at 3,000 meters. The Nautilus, driven downward by its propeller and slanting fins, descended to the lowest strata of this sea.

There, in place of natural wonders, the watery mass offered some thrilling and dreadful scenes to my eyes. In essence, we were then crossing that part of the whole Mediterranean so fertile in casualties. From the coast of Algiers to the beaches of Provence, how many ships have wrecked, how many vessels have vanished! Compared to the vast liquid plains of the Pacific, the Mediterranean is a mere lake, but it's an unpredictable lake with fickle waves, today kindly and affectionate to those frail single-masters drifting between a double ultramarine of sky and water, tomorrow bad-tempered and turbulent, agitated by the winds, demolishing the strongest ships beneath sudden waves that smash down with a headlong wallow.

So, in our swift cruise through these deep strata, how many vessels I saw lying on the seafloor, some already caked with coral, others clad only in a layer of rust, plus anchors, cannons, shells, iron fittings, propeller blades, parts of engines, cracked cylinders, staved-in boilers, then hulls floating in midwater, here upright, there overturned.

Some of these wrecked ships had perished in collisions, others from hitting granite reefs. I saw a few that had sunk straight down, their masts still upright, their rigging stiffened by the water. They looked like they were at anchor by some immense, open, offshore mooring where they were waiting for their departure time. When the Nautilus passed between them, covering them with sheets of electricity, they seemed ready to salute us with their colors and send us their serial numbers! But no, nothing but silence and death filled this field of catastrophes!

I observed that these Mediterranean depths became more and more cluttered with such gruesome wreckage as the Nautilus drew nearer to the Strait of Gibraltar. By then the shores of Africa and Europe were converging, and in this narrow space collisions were commonplace. There I saw numerous iron undersides, the phantasmagoric ruins of steamers, some lying down, others rearing up like fearsome animals. One of these boats made a dreadful first impression: sides torn open, funnel bent, paddle wheels stripped to the mountings, rudder separated from the sternpost and still hanging from an iron chain, the board on its stern eaten away by marine salts! How many lives were dashed in this shipwreck! How many victims were swept under the waves! Had some sailor on board lived to

have riblike ridges on their arching summits, triton shells pocked with scarlet bumps, carnaira snails with backward-curving tips that make them resemble flimsy gondolas, crowned ferola snails, atlanta snails with spiral shells, gray nudibranchs from the genus Tethys that were spotted with white and covered by fringed mantles, nudibranchs from the suborder Eolidia that looked like small slugs, sea butterflies crawling on their backs, seashells from the genus Auricula including the oval-shaped Auricula myosotis, tan wangletrap snails, common periwinkles, violet snails, cineràira snails, rock borers, ear shells, cabochoon snails, pandora shells, etc.

As for the articulate classes, in his notes Conseil has very appropriately divided them into six classes, three of which belong to the marine world. These classes are the Crustacea, Cirripedia, and Annelida.

Crustaceans are subdivided into nine orders, and the first of these consists of the decapods, in other words, animals whose head and thorax are usually fused, whose cheek-and-mouth mechanism is made up of several pairs of appendages, and whose thorax has four, five, or six pairs of walking legs. Conseil used the methods of our mentor Professor Milne-Edwards, who puts the decapods in three divisions: Brachyura, Macrura, and Anomura. These names may look a tad fierce, but they're accurate and appropriate. Among the Brachyura, Conseil mentions some amanithia crabs whose fronts were armed with two big diverging tips, those inachus scorpions that-- lord knows why--symbolized wisdom to the ancient Greeks, spider crabs of the massena and spinimane varieties that had probably gone astray in these shallows because they usually live in the lower depths, xanthid crabs, pilumna crabs, rhomboid crabs, granular box crabs (easy on the digestion, as Conseil ventured to observe), toothless masked crabs, ebalia crabs, cymopolia crabs, woolly-handed crabs, etc. Among the Macrura (which are subdivided into five families: hardshells, burrowers, crayfish, prawns, and ghost crabs) Conseil mentions some common spiny lobsters whose females supply a meat highly prized, slipper lobsters or common shrimp, waterside gebia shrimp, and all sorts of edible species, but he says nothing of the crayfish subdivision that includes the true lobster, because spiny lobsters are the only type in the Mediterranean. Finally, among the Anomura, he saw common drocina crabs dwelling inside whatever abandoned seashells they could take over, homola crabs with spiny fronts, hermit crabs, hairy porcelain crabs, etc.

There Conseil's work came to a halt. He didn't have time to finish off the class Crustacea through an examination of its stomatopods, amphipods, homopods, isopods, trilobites, branchiopods, ostracods, and entomostraceans. And in order to complete his study of marine articulate classes, he needed to mention the class Cirripedia, which contains water fleas and carp lice, plus the class Annelida, which he would have divided without fail into tubifex worms and dorsibranchian worms. But having gone past the shallows of the Strait of Sicily, the Nautilus resumed its usual deep-water speed. From then on, no more mollusks, no more zoophytes, no more articulates. Just a few large fish sweeping by like shadows.

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There, in place of natural wonders, the watery mass offered some thrilling and dreadful scenes to my eyes. In essence, we were then crossing that part of the whole Mediterranean so fertile in casualties. From the coast of Algiers to the beaches of Provence, how many ships have wrecked, how many vessels have vanished! Compared to the vast liquid plains of the Pacific, the Mediterranean is a mere lake, but it's an unpredictable lake with fickle waves, today kindly and affectionate to those frail single-masters drifting between a double ultramarine of sky and water, tomorrow bad-tempered and turbulent, agitated by the winds, demolishing the strongest ships beneath sudden waves that smash down with a headlong wallow.

So, in our swift cruise through these deep strata, how many vessels I saw lying on the seafloor, some already caked with coral, others clad only in a layer of rust, plus anchors, cannons, shells, iron fittings, propeller blades, parts of engines, cracked cylinders, staved-in boilers, then hulls floating in midwater, here upright, there overturned.

Some of these wrecked ships had perished in collisions, others from hitting granite reefs. I saw a few that had sunk straight down, their masts still upright, their rigging stiffened by the water. They looked like they were at anchor by some immense, open, offshore mooring where they were waiting for their departure time. When the Nautilus passed between them, covering them with sheets of electricity, they seemed ready to salute us with their colors and send us their serial numbers! But no, nothing but silence and death filled this field of catastrophes!

I observed that these Mediterranean depths became more and more cluttered with such gruesome wreckage as the Nautilus drew nearer to the Strait of Gibraltar. By then the shores of Africa and Europe were converging, and in this narrow space collisions were commonplace. There I saw numerous iron undersides, the phantasmagoric ruins of steamers, some lying down, others rearing up like fearsome animals. One of these boats made a dreadful first impression: sides torn open, funnel bent, paddle wheels stripped to the mountings, rudder separated from the sternpost and still hanging from an iron chain, the board on its stern eaten away by marine salts! How many lives were dashed in this shipwreck! How many victims were swept under the waves! Had some sailor on board lived to
tell the story of this dreadful disaster, or do the waves still keep this casualty a secret? It occurred to me, lord knows why, that this boat buried under the sea might have been the Atlas, lost with all hands some twenty years ago and never heard from again! Oh, what a gruesome tale these Mediterranean depths could tell, this huge boneyard where so much wealth has been lost, where so many victims have met their deaths!

Meanwhile, briskly unconcerned, the Nautilus ran at full propeller through the midst of these ruins. On February 18, near three o'clock in the morning, it hove before the entrance to the Strait of Gibraltar.

There are two currents here: an upper current, long known to exist, that carries the ocean's waters into the Mediterranean basin; then a lower countercurrent, the only present-day proof of its existence being logic. In essence, the Mediterranean receives a continual influx of water not only from the Atlantic but from rivers emptying into it; since local evaporation isn't enough to restore the balance, the total amount of added water should make this sea's level higher every year. Yet this isn't the case, and we're naturally forced to believe in the existence of some lower current that carries the Mediterranean's surplus through the Strait of Gibraltar and into the Atlantic basin.

And so it turned out. The Nautilus took full advantage of this countercurrent. It advanced swiftly through this narrow passageway. For an instant I could glimpse the wonderful ruins of the Temple of Hercules, buried undersea, as Pliny and Avianus have mentioned, together with the flat island they stand on; and a few minutes later, we were floating on the waves of the Atlantic.

CHAPTER 8
The Bay of Vigo

THE ATLANTIC! A vast expanse of water whose surface area is 25,000,000 square miles, with a length of 9,000 miles and an average width of 2,700. A major sea nearly unknown to the ancients, except perhaps the Carthaginians, those Dutchmen of antiquity who went along the west coasts of Europe and Africa on their commercial junkets! An ocean whose parallel winding shores form an immense perimeter fed by the world's greatest rivers: the St. Lawrence, Mississippi, Plata, Orinoco, Niger, Senegal, Elbe, Loire, and Rhine, which bring it waters from the most civilized countries as well as the most undeveloped areas! A magnificent plain of waves plowed continuously by ships of every nation, shaded by every flag in the world, and ending in those two dreadful headlands so feared by navigators, Cape Horn and the Cape of Tempests!

The Nautilus broke these waters with the edge of its spur after doing nearly 10,000 leagues in three and a half months, a track longer than a great circle of the earth. Where were we heading now, and what did the future have in store for us?

Emerging from the Strait of Gibraltar, the Nautilus took to the high seas. It returned to the surface of the waves, so our daily strolls on the platform were restored to us.

I climbed onto it instantly, Ned Land and Conseil along with me. Twelve miles away, Cape St. Vincent was hazily visible, the southwestern tip of the Hispanic peninsula. The wind was blowing a pretty strong gust from the south. The sea was swelling and surging. Its waves made the Nautilus roll and jerk violently. It was nearly impossible to stand up on the platform, which was continuously buffeted by this enormously heavy sea. After inhaling a few breaths of air, we went below once more.

I repaired to my stateroom. Conseil returned to his cabin; but the Canadian, looking rather worried, followed me. Our quick trip through the Mediterranean hadn't allowed him to put his plans into execution, and he could barely conceal his disappointment.

After the door to my stateroom was closed, he sat and stared at me silently.

"Ned my friend," I told him, "I know how you feel, but you mustn't blame yourself. Given the way the Nautilus was navigating, it would have been sheer insanity to think of escaping!"

Ned Land didn't reply. His pursed lips and frowning brow indicated that he was in the grip of his monomania.

"Look here," I went on, "as yet there's no cause for despair. We're going up the coast of Portugal. France and England aren't far off, and there we'll easily find refuge. Oh, I grant you, if the Nautilus had emerged from the Strait of Gibraltar and made for that cape in the south, if it were taking us toward those regions that have no continents, then I'd share your alarm. But we now know that Captain Nemo doesn't avoid the seas of civilization, and in a few days I think we can safely take action."

Ned Land stared at me still more intently and finally unpursed his lips:

"We'll do it this evening," he said.
I straightened suddenly. I admit that I was less than ready for this announcement. I wanted to reply to the Canadian, but words failed me.

"We agreed to wait for the right circumstances," Ned Land went on. "Now we've got those circumstances. This evening we'll be just a few miles off the coast of Spain. It'll be cloudy tonight. The wind's blowing toward shore. You gave me your promise, Professor Aronnax, and I'm counting on you."

Since I didn't say anything, the Canadian stood up and approached me:

"We'll do it this evening at nine o'clock," he said. "I've alerted Conseil. By that time Captain Nemo will be locked in his room and probably in bed. Neither the mechanics or the crewmen will be able to see us. Conseil and I will go to the central companionway. As for you, Professor Aronnax, you'll stay in the library two steps away and wait for my signal. The oars, mast, and sail are in the skiff. I've even managed to stow some provisions inside. I've gotten hold of a monkey wrench to unscrew the nuts bolting the skiff to the Nautilus's hull. So everything's ready. I'll see you this evening."

"The sea is rough," I said.

"Admitted," the Canadian replied, "but we've got to risk it. Freedom is worth paying for. Besides, the longboat's solidly built, and a few miles with the wind behind us is no big deal. By tomorrow, who knows if this ship won't be 100 leagues out to sea? If circumstances are in our favor, between ten and eleven this evening we'll be landing on some piece of solid ground, or we'll be dead. So we're in God's hands, and I'll see you this evening!"

This said, the Canadian withdrew, leaving me close to dumbfounded. I had imagined that if it came to this, I would have time to think about it, to talk it over. My stubborn companion hadn't granted me this courtesy. But after all, what would I have said to him? Ned Land was right a hundred times over. These were near-ideal circumstances, and he was taking full advantage of them. In my selfish personal interests, could I go back on my word and be responsible for ruining the future lives of my companions? Tomorrow, might not Captain Nemo take us far away from any shore?

Just then a fairly loud hissing told me that the ballast tanks were filling, and the Nautilus sank beneath the waves of the Atlantic.

I stayed in my stateroom. I wanted to avoid the captain, to hide from his eyes the agitation overwhelming me. What an agonizing day I spent, torn between my desire to regain my free will and my regret at abandoning this marvelous Nautilus, leaving my underwater research incomplete! How could I relinquish this ocean--"my own Atlantic," as I liked to call it--without observing its lower strata, without wresting from it the kinds of secrets that had been revealed to me by the seas of the East Indies and the Pacific! I was putting down my novel half read, I was waking up as my dream neared its climax! How painfully the hours passed, as I sometimes envisioned myself safe on shore with my companions, or, despite my better judgment, as I sometimes wished that some unforeseen circumstances would prevent Ned Land from carrying out his plans.

Twice I went to the lounge. I wanted to consult the compass. I wanted to see if the Nautilus's heading was actually taking us closer to the coast or spiriting us farther away. But no. The Nautilus was still in Portuguese waters. Heading north, it was cruising along the ocean's beaches.

So I had to resign myself to my fate and get ready to escape. My baggage wasn't heavy. My notes, nothing more. As for Captain Nemo, I wondered what he would make of our escaping, what concern or perhaps what distress it might cause him, and what he would do in the twofold event of our attempt either failing or being found out! Certainly I had no complaints to register with him, on the contrary. Never was hospitality more wholehearted than his. Yet in leaving him I couldn't be accused of ingratitude. No solemn promises bound us to him. In order to keep us captive, he had counted only on the force of circumstances and not on our word of honor. But his avowed intention to imprison us forever on his ship justified our every effort.

I hadn't seen the captain since our visit to the island of Santorini. Would fate bring me into his presence before our departure? I both desired and dreaded it. I listened for footsteps in the stateroom adjoining mine. Not a sound reached my ear. His stateroom had to be deserted.

Then I began to wonder if this eccentric individual was even on board. Since that night when the skiff had left the Nautilus on some mysterious mission, my ideas about him had subtly changed. In spite of everything, I thought that Captain Nemo must have kept up some type of relationship with the shore. Did he himself never leave the Nautilus? Whole weeks had often gone by without my encountering him. What was he doing all the while? During all those times I'd thought he was convalescing in the grip of some misanthropic fit, was he instead far away from the ship, involved in some secret activity whose nature still eluded me?

All these ideas and a thousand others assaulted me at the same time. In these strange circumstances the scope for conjecture was unlimited. I felt an unbearable queasiness. This day of waiting seemed endless. The hours struck too slowly to keep up with my impatience.

As usual, dinner was served me in my stateroom. Full of anxiety, I ate little. I left the table at seven o'clock. 120
minutes— I was keeping track of them—still separated me from the moment I was to rejoin Ned Land. My agitation increased. My pulse was throbbing violently. I couldn't stand still. I walked up and down, hoping to calm my troubled mind with movement. The possibility of perishing in our reckless undertaking was the least of my worries; my heart was pounding at the thought that our plans might be discovered before we had left the Nautilus, at the thought of being hauled in front of Captain Nemo and finding him angered, or worse, saddened by my deserting him.

I wanted to see the lounge one last time. I went down the gangways and arrived at the museum where I had spent so many pleasant and productive hours. I stared at all its wealth, all its treasures, like a man on the eve of his eternal exile, a man departing to return no more. For so many days now, these natural wonders and artistic masterworks had been central to my life, and I was about to leave them behind forever. I wanted to plunge my eyes through the lounge window and into these Atlantic waters; but the panels were hermetically sealed, and a mantle of sheet iron separated me from this ocean with which I was still unfamiliar.

Crossing through the lounge, I arrived at the door, contrived in one of the canted corners, that opened into the captain's stateroom. Much to my astonishment, this door was ajar. I instinctively recoiled. If Captain Nemo was in his stateroom, he might see me. But, not hearing any sounds, I approached. The stateroom was deserted. I pushed the door open. I took a few steps inside. Still the same austere, monastic appearance.

Just then my eye was caught by some etchings hanging on the wall, which I hadn't noticed during my first visit. They were portraits of great men of history who had spent their lives in perpetual devotion to a great human ideal: Thaddeus Kosciusko, the hero whose dying words had been Finis Poloniae;* Markos Botzaris, for modern Greece the reincarnation of Sparta's King Leonidas; Daniel O'Connell, Ireland's defender; George Washington, founder of the American Union; Daniele Manin, the Italian patriot; Abraham Lincoln, dead from the bullet of a believer in slavery; and finally, that martyr for the redemption of the black race, John Brown, hanging from his gallows as Victor Hugo's pencil has so terrifyingly depicted.

*Latin: "Save Poland's borders." Ed.

What was the bond between these heroic souls and the soul of Captain Nemo? From this collection of portraits could I finally unravel the mystery of his existence? Was he a fighter for oppressed peoples, a liberator of enslaved races? Had he figured in the recent political or social upheavals of this century? Was he a hero of that dreadful civil war in America, a war lamentable yet forever glorious . . . ?

Suddenly the clock struck eight. The first stroke of its hammer on the chime snapped me out of my musings. I shuddered as if some invisible eye had plunged into my innermost thoughts, and I rushed outside the stateroom. There my eyes fell on the compass. Our heading was still northerly. The log indicated a moderate speed, the pressure gauge a depth of about sixty feet. So circumstances were in favor of the Canadian's plans.

I stayed in my stateroom. I dressed warmly: fishing boots, otter cap, coat of fan-mussel fabric lined with sealskin. I was ready. I was waiting. Only the propeller's vibrations disturbed the deep silence reigning on board. I cocked an ear and listened. Would a sudden outburst of voices tell me that Ned Land's escape plans had just been detected? A ghastly uneasiness stole through me. I tried in vain to recover my composure.

A few minutes before nine o'clock, I glued my ear to the captain's door. Not a sound. I left my stateroom and returned to the lounge, which was deserted and plunged in near darkness.

I opened the door leading to the library. The same inadequate light, the same solitude. I went to man my post near the door opening into the well of the central companionway. I waited for Ned Land's signal.

At this point the propeller's vibrations slowed down appreciably, then they died out altogether. Why was the Nautilus stopping? Whether this layover would help or hinder Ned Land's schemes I couldn't have said.

The silence was further disturbed only by the pounding of my heart.

Suddenly I felt a mild jolt. I realized the Nautilus had come to rest on the ocean floor. My alarm increased. The Canadian's signal hadn't reached me. I longed to rejoin Ned Land and urge him to postpone his attempt. I sensed that we were no longer navigating under normal conditions.

Just then the door to the main lounge opened and Captain Nemo appeared. He saw me, and without further preamble:

"Ah, professor," he said in an affable tone, "I've been looking for you. Do you know your Spanish history?"

Even if he knew it by heart, a man in my disturbed, befuddled condition couldn't have quoted a syllable of his own country's history.

"Well?" Captain Nemo went on. "Did you hear my question? Do you know the history of Spain?"

"Very little of it," I replied.

"The most learned men," the captain said, "still have much to learn. Have a seat," he added, "and I'll tell you about an unusual episode in this body of history."

The captain stretched out on a couch, and I mechanically took a seat near him, but half in the shadows.
"Professor," he said, "listen carefully. This piece of history concerns you in one definite respect, because it will answer a question you've no doubt been unable to resolve."

"I'm listening, captain," I said, not knowing what my partner in this dialogue was driving at, and wondering if this incident related to our escape plans.

"Professor," Captain Nemo went on, "if you're amenable, we'll go back in time to 1702. You're aware of the fact that in those days your King Louis XIV thought an imperial gesture would suffice to humble the Pyrenees in the dust, so he inflicted his grandson, the Duke of Anjou, on the Spaniards. Reigning more or less poorly under the name King Philip V, this aristocrat had to deal with mighty opponents abroad.

In essence, the year before, the royal houses of Holland, Austria, and England had signed a treaty of alliance at The Hague, aiming to wrest the Spanish crown from King Philip V and to place it on the head of an archduke whom they prematurely dubbed King Charles III.

"Spain had to withstand these allies. But the country had practically no army or navy. Yet it wasn't short of money, provided that its galleons, laden with gold and silver from America, could enter its ports. Now then, late in 1702 Spain was expecting a rich convoy, which France ventured to escort with a fleet of twenty-three vessels under the command of Admiral de Chateau-Renault, because by that time the allied navies were roving the Atlantic.

"This convoy was supposed to put into Cadiz, but after learning that the English fleet lay across those waterways, the admiral decided to make for a French port.

"The Spanish commanders in the convoy objected to this decision. They wanted to be taken to a Spanish port, if not to Cadiz, then to the Bay of Vigo, located on Spain's northwest coast and not blockaded.

"Admiral de Chateau-Renault was so indecisive as to obey this directive, and the galleons entered the Bay of Vigo.

"Unfortunately this bay forms an open, offshore mooring that's impossible to defend. So it was essential to hurry and empty the galleons before the allied fleets arrived, and there would have been ample time for this unloading, if a wretched question of trade agreements hadn't suddenly come up.

"Are you clear on the chain of events?" Captain Nemo asked me.

"Perfectly clear," I said, not yet knowing why I was being given this history lesson.

"Then I'll continue. Here's what came to pass. The tradesmen of Cadiz had negotiated a charter whereby they were to receive all merchandise coming from the West Indies. Now then, unloading the ingots from those galleons at the port of Vigo would have been a violation of their rights. So they lodged a complaint in Madrid, and they obtained an order from the indecisive King Philip V: without unloading, the convoy would stay in custody at the offshore mooring of Vigo until the enemy fleets had retreated.

"Now then, just as this decision was being handed down, English vessels arrived in the Bay of Vigo on October 22, 1702. Despite his inferior forces, Admiral de Chateau-Renault fought courageously. But when he saw that the convoy's wealth was about to fall into enemy hands, he burned and scuttled the galleons, which went to the bottom with their immense treasures."

Captain Nemo stopped. I admit it: I still couldn't see how this piece of history concerned me.

"Well?" I asked him.

"Well, Professor Aronnax," Captain Nemo answered me, "we're actually in that Bay of Vigo, and all that's left is for you to probe the mysteries of the place."

The captain stood up and invited me to follow him. I'd had time to collect myself. I did so. The lounge was dark, but the sea's waves sparkled through the transparent windows. I stared.

Around the Nautilus for a half-mile radius, the waters seemed saturated with electric light. The sandy bottom was clear and bright. Dressed in diving suits, crewmen were busy clearing away half-rotted barrels and disemboweled trunks in the midst of the dingy hulks of ships. Out of these trunks and kegs spilled ingots of gold and silver, cascades of jewels, pieces of eight. The sand was heaped with them. Then, laden with these valuable spoils, the men returned to the Nautilus, dropped off their burdens inside, and went to resume this inexhaustible fishing for silver and gold.

I understood. This was the setting of that battle on October 22, 1702. Here, in this very place, those galleons carrying treasure to the Spanish government had gone to the bottom. Here, whenever he needed, Captain Nemo came to withdraw these millions to ballast his Nautilus. It was for him, for him alone, that America had yielded up its precious metals. He was the direct, sole heir to these treasures wrested from the Incas and those peoples conquered by Hernando Cortez!

"Did you know, professor," he asked me with a smile, "that the sea contained such wealth?"

"I know it's estimated," I replied, "that there are 2,000,000 metric tons of silver held in suspension in seawater."

"Surely, but in extracting that silver, your expenses would outweigh your profits. Here, by contrast, I have only to pick up what other men have lost, and not only in this Bay of Vigo but at a thousand other sites where ships have"
gone down, whose positions are marked on my underwater chart. Do you understand now that I'm rich to the tune of billions?"

"I understand, captain. Nevertheless, allow me to inform you that by harvesting this very Bay of Vigo, you're simply forestalling the efforts of a rival organization."

"What organization?"

"A company chartered by the Spanish government to search for these sunken galleons. The company's investors were lured by the bait of enormous gains, because this scuttled treasure is estimated to be worth 500,000,000 francs."

"It was 500,000,000 francs," Captain Nemo replied, "but no more!"

"Right," I said. "Hence a timely warning to those investors would be an act of charity. Yet who knows if it would be well received? Usually what gamblers regret the most isn't the loss of their money so much as the loss of their insane hopes. But ultimately I feel less sorry for them than for the thousands of unfortunate people who would have benefited from a fair distribution of this wealth, whereas now it will be of no help to them!"

No sooner had I voiced this regret than I felt it must have wounded Captain Nemo.

"No help!" he replied with growing animation. "Sir, what makes you assume this wealth goes to waste when I'm the one amassing it? Do you think I toil to gather this treasure out of selfishness? Who says I don't put it to good use? Do you think I'm unaware of the suffering beings and oppressed races living on this earth, poor people to comfort, victims to avenge? Don't you understand . . . ?"

Captain Nemo stopped on these last words, perhaps sorry that he had said too much. But I had guessed.

Whatever motives had driven him to seek independence under the seas, he remained a human being before all else! His heart still throbbed for suffering humanity, and his immense philanthropy went out both to downtrodden races and to individuals!

And now I knew where Captain Nemo had delivered those millions, when the Nautilus navigated the waters where Crete was in rebellion against the Ottoman Empire!

CHAPTER 9
A Lost Continent

THE NEXT MORNING, February 19, I beheld the Canadian entering my stateroom. I was expecting this visit. He wore an expression of great disappointment.

"Well, sir?" he said to me.

"Well, Ned, the fates were against us yesterday."

"Yes! That damned captain had to call a halt just as we were going to escape from his boat."

"Yes, Ned, he had business with his bankers."

"His bankers?"

"Or rather his bank vaults. By which I mean this ocean, where his wealth is safer than in any national treasury."

I then related the evening's incidents to the Canadian, secretly hoping he would come around to the idea of not deserting the captain; but my narrative had no result other than Ned's voicing deep regret that he hadn't strolled across the Vigo battlefield on his own behalf.

"Anyhow," he said, "it's not over yet! My first harpoon missed, that's all! We'll succeed the next time, and as soon as this evening, if need be . . ."

"What's the Nautilus's heading?" I asked.

"I've no idea," Ned replied.

"All right, at noon we'll find out what our position is!"

The Canadian returned to Conseil's side. As soon as I was dressed, I went into the lounge. The compass wasn't encouraging. The Nautilus's course was south-southwest. We were turning our backs on Europe.

I could hardly wait until our position was reported on the chart. Near 11:30 the ballast tanks emptied, and the submersible rose to the surface of the ocean. I leaped onto the platform. Ned Land was already there.

No more shore in sight. Nothing but the immenseness of the sea. A few sails were on the horizon, no doubt ships going as far as Cape São Roque to find favorable winds for doubling the Cape of Good Hope. The sky was overcast.
A squall was on the way.

Furious, Ned tried to see through the mists on the horizon. He still hoped that behind all that fog there lay those shores he longed for.

At noon the sun made a momentary appearance. Taking advantage of this rift in the clouds, the chief officer took the orb's altitude. Then the sea grew turbulent, we went below again, and the hatch closed once more.

When I consulted the chart an hour later, I saw that the Nautilus's position was marked at longitude 16 degrees 17' and latitude 33 degrees 22', a good 150 leagues from the nearest coast. It wouldn't do to even dream of escaping, and I'll let the reader decide how promptly the Canadian threw a tantrum when I ventured to tell him our situation.

As for me, I wasn't exactly grief-stricken. I felt as if a heavy weight had been lifted from me, and I was able to resume my regular tasks in a state of comparative calm.

Near eleven o'clock in the evening, I received a most unexpected visit from Captain Nemo. He asked me very graciously if I felt exhausted from our vigil the night before. I said no.

"Then, Professor Aronnax, I propose an unusual excursion."

"Propose away, captain."

"So far you've visited the ocean depths only by day and under sunlight. Would you like to see these depths on a dark night?"

"Very much."

"I warn you, this will be an exhausting stroll. We'll need to walk long hours and scale a mountain. The roads aren't terribly well kept up."

"Everything you say, captain, just increases my curiosity. I'm ready to go with you."

"Then come along, professor, and we'll go put on our diving suits."

Arriving at the wardrobe, I saw that neither my companions nor any crewmen would be coming with us on this excursion. Captain Nemo hadn't even suggested my fetching Ned or Conseil.

In a few moments we had put on our equipment. Air tanks, abundantly charged, were placed on our backs, but the electric lamps were not in readiness. I commented on this to the captain.

"They'll be useless to us," he replied.

I thought I hadn't heard him right, but I couldn't repeat my comment because the captain's head had already disappeared into its metal covering. I finished harnessing myself, I felt an alpenstock being placed in my hand, and a few minutes later, after the usual procedures, we set foot on the floor of the Atlantic, 300 meters down.

Midnight was approaching. The waters were profoundly dark, but Captain Nemo pointed to a reddish spot in the distance, a sort of wide glow shimmering about two miles from the Nautilus. What this fire was, what substances fed it, how and why it kept burning in the liquid mass, I couldn't say. Anyhow it lit our way, although hazily, but I soon grew accustomed to this unique gloom, and in these circumstances I understood the uselessness of the Ruhmkorff device.

Side by side, Captain Nemo and I walked directly toward this conspicuous flame. The level seafloor rose imperceptibly. We took long strides, helped by our alpenstocks; but in general our progress was slow, because our feet kept sinking into a kind of slimy mud mixed with seaweed and assorted flat stones.

As we moved forward, I heard a kind of pitter-patter above my head. Sometimes this noise increased and became a continuous crackle. I soon realized the cause. It was a heavy rainfall rattling on the surface of the waves. Instinctively I worried that I might get soaked! By water in the midst of water! I couldn't help smiling at this outlandish notion. But to tell the truth, wearing these heavy diving suits, you no longer feel the liquid element, you simply think you're in the midst of air a little denser than air on land, that's all.

After half an hour of walking, the seafloor grew rocky. Jellyfish, microscopic crustaceans, and sea-pen coral lit it faintly with their phosphorescent glimmers. I glimpsed piles of stones covered by a couple million zoophytes and tangles of algae. My feet often slipped on this viscous seaweed carpet, and without my alpenstock I would have fallen more than once. When I turned around, I could still see the Nautilus's whitish beacon, which was starting to grow pale in the distance.

Those piles of stones just mentioned were laid out on the ocean floor with a distinct but inexplicable symmetry. I spotted gigantic furrows trailing off into the distant darkness, their length in calculable. There also were other peculiarities I couldn't make sense of. It seemed to me that my heavy lead soles were crushing a litter of bones that made a dry crackling noise. So what were these vast plains we were now crossing? I wanted to ask the captain, but I still didn't grasp that sign language that allowed him to chat with his companions when they went with him on his underwater excursions.

Meanwhile the reddish light guiding us had expanded and inflamed the horizon. The presence of this furnace under the waters had me extremely puzzled. Was it some sort of electrical discharge? Was I approaching some natural phenomenon still unknown to scientists on shore? Or, rather (and this thought did cross my mind), had the
hand of man intervened in that blaze? Had human beings fanned those flames? In these deep strata would I meet up with more of Captain Nemo's companions, friends he was about to visit who led lives as strange as his own? Would I find a whole colony of exiles down here, men tired of the world's woes, men who had sought and found independence in the ocean's lower depths? All these insane, inadmissible ideas dogged me, and in this frame of mind, continually excited by the series of wonders passing before my eyes, I wouldn't have been surprised to find on this sea bottom one of those underwater towns Captain Nemo dreamed about!

Our path was getting brighter and brighter. The red glow had turned white and was radiating from a mountain peak about 800 feet high. But what I saw was simply a reflection produced by the crystal waters of these strata. The furnace that was the source of this inexplicable light occupied the far side of the mountain.

In the midst of the stone mazes furrowing this Atlantic seafloor, Captain Nemo moved forward without hesitation. He knew this dark path. No doubt he had often traveled it and was incapable of losing his way. I followed him with unshakeable confidence. He seemed like some Spirit of the Sea, and as he walked ahead of me, I marveled at his tall figure, which stood out in black against the glowing background of the horizon.

It was one o'clock in the morning. We arrived at the mountain's lower gradients. But in grappling with them, we had to venture up difficult trails through a huge thicket.

Yes, a thicket of dead trees! Trees without leaves, without sap, turned to stone by the action of the waters, and crowned here and there by gigantic pines. It was like a still-erect coalfield, its roots clutching broken soil, its boughs clearly outlined against the ceiling of the waters like thin, black, paper cutouts. Picture a forest clinging to the sides of a peak in the Harz Mountains, but a submerged forest. The trails were cluttered with algae and fucus plants, hosts of crustaceans swelling among them. I plunged on, scaling rocks, straddling fallen tree trunks, snapping marine creepers that swayed from one tree to another, startling the fish that flitted from branch to branch. Carried away, I didn't feel exhausted any more. I followed a guide who was immune to exhaustion.

What a sight! How can I describe it! How can I portray these woods and rocks in this liquid setting, their lower parts dark and sullen, their upper parts tinted red in this light whose intensity was doubled by the reflecting power of the waters! We scaled rocks that crumbled behind us, collapsing in enormous sections with the hollow rumble of an avalanche. To our right and left there were carved gloomy galleries where the eye lost its way. Huge glades opened up, seemingly cleared by the hand of man, and I sometimes wondered whether some residents of these underwater regions would suddenly appear before me.

But Captain Nemo kept climbing. I didn't want to fall behind. I followed him boldly. My alpenstock was a great help. One wrong step would have been disastrous on the narrow paths cut into the sides of these chasms, but I walked along with a firm tread and without the slightest feeling of dizziness. Sometimes I leaped over a crevasse whose depth would have made me recoil had I been in the midst of glaciers on shore; sometimes I ventured out on a wobbling tree trunk fallen across a gorge, without looking down, having eyes only for marveling at the wild scenery of this region. There, leaning on erratically cut foundations, monumental rocks seemed to defy the laws of balance. From between their stony knees, trees sprang up like jets under fearsome pressure, supporting other trees that supported them in turn. Next, natural towers with wide, steeply carved battlements leaned at angles that, on dry land, the laws of gravity would never have authorized.

And I too could feel the difference created by the water's powerful density—despite my heavy clothing, copper headpiece, and metal soles, I climbed the most impossibly steep gradients with all the nimbleness, I swear it, of a chamois or a Pyrenees mountain goat!

As for my account of this excursion under the waters, I'm well aware that it sounds incredible! I'm the chronicler of deeds seemingly impossible and yet incontestably real. This was no fantasy. This was what I saw and felt!

Two hours after leaving the Nautilus, we had cleared the timberline, and 100 feet above our heads stood the mountain peak, forming a dark silhouette against the brilliant glare that came from its far slope. Petrified shrubs rambled here and there in sprawling zigzags. Fish rose in a body at our feet like birds startled in tall grass. The rocky mass was gouged with impenetrable crevices, deep caves, unfathomable holes at whose far ends I could hear the waters! We scaled rocks that crumbled behind us, collapsing in enormous sections with the hollow rumble of an avalanche. To our right and left there were carved gloomy galleries where the eye lost its way. Huge glades opened up, seemingly cleared by the hand of man, and I sometimes wondered whether some residents of these underwater regions would suddenly appear before me.

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betraying the hand of man, not our Creator. They were huge stacks of stones in which you could distinguish the indistinct forms of palaces and temples, now arrayed in hosts of blossoming zoophytes, and over it all, not ivy but a heavy mantle of algae and fucus plants.

But what part of the globe could this be, this land swallowed by cataclysms? Who had set up these rocks and stones like the dolmens of prehistoric times? Where was I, where had Captain Nemo's fancies taken me?

I wanted to ask him. Unable to, I stopped him. I seized his arm. But he shook his head, pointed to the mountain's topmost peak, and seemed to tell me:

"Come on! Come with me! Come higher!"

I followed him with one last burst of energy, and in a few minutes I had scaled the peak, which crowned the whole rocky mass by some ten meters.

I looked back down the side we had just cleared. There the mountain rose only 700 to 800 feet above the plains; but on its far slope it crowned the receding bottom of this part of the Atlantic by a height twice that. My eyes scanned the distance and took in a vast area lit by intense flashes of light. In essence, this mountain was a volcano. Fifty feet below its peak, amid a shower of stones and slag, a wide crater vomited torrents of lava that were dispersed in fiery cascades into the heart of the liquid mass. So situated, this volcano was an immense torch that lit up the lower plains all the way to the horizon.

As I said, this underwater crater spewed lava, but not flames. Flames need oxygen from the air and are unable to spread underwater; but a lava flow, which contains in itself the principle of its incandescence, can rise to a white heat, overpower the liquid element, and turn it into steam on contact. Swift currents swept away all this diffuse gas, and torrents of lava slid to the foot of the mountain, like the disgorgings of a Mt. Vesuvius over the city limits of a second Torre del Greco.

In fact, there beneath my eyes was a town in ruins, demolished, overwhelmed, laid low, its roofs caved in, its temples pulled down, its arches dislocated, its columns stretching over the earth; in these ruins you could still detect the solid proportions of a sort of Tuscan architecture; farther off, the remains of a gigantic aqueduct; here, the caked heights of an acropolis along with the fluid forms of a Parthenon; there, the remnants of a wharf, as if some bygone port had long ago harbored merchant vessels and triple-tiered war galleys on the shores of some lost ocean; still farther off, long rows of collapsing walls, deserted thoroughfares, a whole Pompeii buried under the waters, which Captain Nemo had resurrected before my eyes!

Where was I? Where was I? I had to find out at all cost, I wanted to speak, I wanted to rip off the copper sphere imprisoning my head.

But Captain Nemo came over and stopped me with a gesture. Then, picking up a piece of chalky stone, he advanced to a black basaltic rock and scrawled this one word:

ATLANTIS

What lightning flashed through my mind! Atlantis, that ancient land of Meropis mentioned by the historian Theopompus; Plato's Atlantis; the continent whose very existence has been denied by such philosophers and scientists as Origen, Porphyry, Iamblichus, d'Anville, Malte-Brun, and Humboldt, who entered its disappearance in the ledger of myths and folk tales; the country whose history has nevertheless been accepted by such other thinkers as Posidonius, Pliny, Ammianus Marcellinus, Tertullian, Engel, Scherer, Tournefort, Buffon, and d'Avezac; I had this land right under my eyes, furnishing its own unimpeachable evidence of the catastrophe that had overtaken it!

So this was the submerged region that had existed outside Europe, Asia, and Libya, beyond the Pillars of Hercules, home of those powerful Atlantean people against whom ancient Greece had waged its earliest wars!

The writer whose narratives record the lofty deeds of those heroic times is Plato himself. His dialogues Timaeus and Critias were drafted with the poet and legislator Solon as their inspiration, as it were.

One day Solon was conversing with some elderly wise men in the Egyptian capital of Sais, a town already 8,000 years of age, as documented by the annals engraved on the sacred walls of its temples. One of these elders related the history of another town 1,000 years older still. This original city of Athens, ninety centuries old, had been invaded and partly destroyed by the Atlanteans. These Atlanteans, he said, resided on an immense continent greater than Africa and Asia combined, taking in an area that lay between latitude 12 degrees and 40 degrees north. Their dominion extended even to Egypt. They tried to enforce their rule as far as Greece, but they had to retreat before the indomitable resistance of the Hellenic people. Centuries passed. A cataclysm occurred—floods, earthquakes. A single night and day were enough to obliterate this Atlantis, whose highest peaks (Madeira, the Azores, the Canaries, the Cape Verde Islands) still emerge above the waves.

These were the historical memories that Captain Nemo's scrawl sent rushing through my mind. Thus, led by the strangest of fates, I was treading underfoot one of the mountains of that continent! My hands were touching ruins many thousands of years old, contemporary with prehistoric times! I was walking in the very place where
contemporaries of early man had walked! My heavy soles were crushing the skeletons of animals from the age of fable, animals that used to take cover in the shade of these trees now turned to stone!

Oh, why was I so short of time! I would have gone down the steep slopes of this mountain, crossed this entire immense continent, which surely connects Africa with America, and visited its great prehistoric cities. Under my eyes there perhaps lay the warlike town of Makhimos or the pious village of Eusebes, whose gigantic inhabitants lived for whole centuries and had the strength to raise blocks of stone that still withstood the action of the waters. One day perhaps, some volcanic phenomenon will bring these sunken ruins back to the surface of the waves! Numerous underwater volcanoes have been sighted in this part of the ocean, and many ships have felt terrific tremors when passing over these turbulent depths. A few have heard hollow noises that announced some struggle of the elements far below, others have hauled in volcanic ash hurled above the waves. As far as the equator this whole seafloor is still under construction by plutonic forces. And in some remote epoch, built up by volcanic disgorgings and successive layers of lava, who knows whether the peaks of these fire-belching mountains may reappear above the surface of the Atlantic!

As I mused in this way, trying to establish in my memory every detail of this impressive landscape, Captain Nemo was leaning his elbows on a moss-covered monument, motionless as if petrified in some mute trance. Was he dreaming of those lost generations, asking them for the secret of human destiny? Was it here that this strange man came to revive himself, basking in historical memories, reliving that bygone life, he who had no desire for our modern one? I would have given anything to know his thoughts, to share them, understand them!

We stayed in this place an entire hour, contemplating its vast plains in the lava's glow, which sometimes took on a startling intensity. Inner boilings sent quick shivers running through the mountain's crust. Noises from deep underneath, clearly transmitted by the liquid medium, reverberated with majestic amplitude.

Just then the moon appeared for an instant through the watery mass, casting a few pale rays over this submerged continent. It was only a fleeting glimmer, but its effect was indescribable. The captain stood up and took one last look at these immense plains; then his hand signaled me to follow him.

We went swiftly down the mountain. Once past the petrified forest, I could see the Nautilus's beacon twinkling like a star. The captain walked straight toward it, and we were back on board just as the first glimmers of dawn were whitening the surface of the ocean.

CHAPTER 10
The Underwater Coalfields

THE NEXT DAY, February 20, I overslept. I was so exhausted from the night before, I didn't get up until eleven o'clock. I dressed quickly. I hurried to find out the Nautilus's heading. The instruments indicated that it was running southward at a speed of twenty miles per hour and a depth of 100 meters.

Conseil entered. I described our nocturnal excursion to him, and since the panels were open, he could still catch a glimpse of this submerged continent.

In fact, the Nautilus was skimming only ten meters over the soil of these Atlantis plains. The ship scudded along like an air balloon borne by the wind over some prairie on land; but it would be more accurate to say that we sat in the lounge as if we were riding in a coach on an express train. As for the foregrounds passing before our eyes, they were fantastically carved rocks, forests of trees that had crossed over from the vegetable kingdom into the mineral kingdom, their motionless silhouettes sprawling beneath the waves. There also were stony masses buried beneath carpets of axidia and sea anemone, bristling with long, vertical water plants, then strangely contoured blocks of lava that testified to all the fury of those plutonic developments.

While this bizarre scenery was glittering under our electric beams, I told Conseil the story of the Atlanteans, who had inspired the old French scientist Jean Bailly to write so many entertaining-- albeit utterly fictitious--pages.* I told the lad about the wars of these heroic people. I discussed the question of Atlantis with the fervor of a man who no longer had any doubts. But Conseil was so distracted he barely heard me, and his lack of interest in any commentary on this historical topic was soon explained.

*Bailly believed that Atlantis was located at the North Pole! Ed.

In essence, numerous fish had caught his eye, and when fish pass by, Conseil vanishes into his world of classifying and leaves real life behind. In which case I could only tag along and resume our ichthyological research.

Even so, these Atlantic fish were not noticeably different from those we had observed earlier. There were rays of
gigantic size, five meters long and with muscles so powerful they could leap above the waves, sharks of various species including a fifteen-foot glaucous shark with sharp triangular teeth and so transparent it was almost invisible amid the waters, brown lantern sharks, prism-shaped humanitn sharks armored with protuberant hides, sturgeons resembling their relatives in the Mediterranean, trumpet-snouted pipefish a foot and a half long, yellowish brown with small gray fins and no teeth or tongue, unreeling like slim, supple snakes.

Among bony fish, Conseil noticed some blackish marlin three meters long with a sharp sword jutting from the upper jaw, bright-colored weevers known in Aristotle's day as sea dragons and whose dorsal stingers make them quite dangerous to pick up, then dolphinfish with brown backs striped in blue and edged in gold, handsome dorados, moonlike opahs that look like azure disks but which the sun's rays turn into spots of silver, finally eight-meter swordfish from the genus Xiphias, swimming in schools, sporting yellowish sickle-shaped fins and six-foot broadswords, stalwart animals, plant eaters rather than fish eaters, obeying the tiniest signals from their females like henpecked husbands.

But while observing these different specimens of marine fauna, I didn't stop examining the long plains of Atlantis. Sometimes an unpredictable irregularity in the seafloor would force the Nautilus to slow down, and then it would glide into the narrow channels between the hills with a cetacean's dexterity. If the labyrinth became hopelessly tangled, the submersible would rise above it like an airship, and after clearing the obstacle, it would resume its speedy course just a few meters above the ocean floor. It was an enjoyable and impressive way of navigating that did indeed recall the maneuvers of an airship ride, with the major difference that the Nautilus faithfully obeyed the hands of its helmsman.

The terrain consisted mostly of thick slime mixed with petrified branches, but it changed little by little near four o'clock in the afternoon; it grew rockier and seemed to be strewn with pudding stones and a basaltic gravel called "tuff," together with bits of lava and sulfurous obsidian. I expected these long plains to change into mountain regions, and in fact, as the Nautilus was executing certain turns, I noticed that the southerly horizon was blocked by a high wall that seemed to close off every exit. Its summit obviously poked above the level of the ocean. It had to be a continent or at least an island, either one of the Canaries or one of the Cape Verde Islands. Our bearings hadn't been marked on the chart--perhaps deliberately--and I had no idea what our position was. In any case this wall seemed to signal the end of Atlantis, of which, all in all, we had crossed only a small part.

Nightfall didn't interrupt my observations. I was left to myself. Conseil had repaired to his cabin. The Nautilus slowed down, hovering above the muddled masses on the seafloor, sometimes grazing them as if wanting to come to rest, sometimes rising unpredictably to the surface of the waves. Then I glimpsed a few bright constellations through the crystal waters, specifically five or six of those zodiacal stars trailing from the tail end of Orion.

I would have stayed longer at my window, marveling at these beauties of sea and sky, but the panels closed. Just then the Nautilus had arrived at the perpendicular face of that high wall. How the ship would maneuver I hadn't a guess. I repaired to my stateroom. The Nautilus did not stir. I fell asleep with the firm intention of waking up in just a few hours.

But it was eight o'clock the next day when I returned to the lounge. I stared at the pressure gauge. It told me that the Nautilus was afloat on the surface of the ocean. Furthermore, I heard the sound of footsteps on the platform. Yet there were no rolling movements to indicate the presence of waves undulating above me.

I climbed as far as the hatch. It was open. But instead of the broad daylight I was expecting, I found that I was surrounded by total darkness. Where were we? Had I been mistaken? Was it still night? No! Not one star was twinkling, and nighttime is never so utterly black.

I wasn't sure what to think, when a voice said to me:
"Is that you, professor?"

"Ah, Captain Nemo!" I replied. "Where are we?"

"Underground, professor."

"Underground!" I exclaimed. "And the Nautilus is still floating?"

"It always floats."

"But I don't understand!"

"Wait a little while. Our beacon is about to go on, and if you want some light on the subject, you'll be satisfied."

I set foot on the platform and waited. The darkness was so profound I couldn't see even Captain Nemo. However, looking at the zenith directly overhead, I thought I caught sight of a feeble glimmer, a sort of twilight filtering through a circular hole. Just then the beacon suddenly went on, and its intense brightness made that hazy light vanish.

This stream of electricity dazzled my eyes, and after momentarily shutting them, I looked around. The Nautilus was stationary. It was floating next to an embankment shaped like a wharf. As for the water now buoying the ship, it was a lake completely encircled by an inner wall about two miles in diameter, hence six miles around. Its level--as
indicated by the pressure gauge—would be the same as the outside level, because some connection had to exist between this lake and the sea. Slanting inward over their base, these high walls converged to form a vault shaped like an immense upside-down funnel that measured 500 or 600 meters in height. At its summit there gaped the circular opening through which I had detected that faint glimmer, obviously daylight.

Before more carefully examining the interior features of this enormous cavern, and before deciding if it was the work of nature or humankind, I went over to Captain Nemo.

"Where are we?" I said.

"In the very heart of an extinct volcano," the captain answered me, "a volcano whose interior was invaded by the sea after some convulsion in the earth. While you were sleeping, professor, the Nautilus entered this lagoon through a natural channel that opens ten meters below the surface of the ocean. This is our home port, secure, convenient, secret, and sheltered against winds from any direction! Along the coasts of your continents or islands, show me any offshore mooring that can equal this safe refuge for withstanding the fury of hurricanes."

"Indeed," I replied, "here you're in perfect safety, Captain Nemo. Who could reach you in the heart of a volcano? But don't I see an opening at its summit?"

"Yes, its crater, a crater formerly filled with lava, steam, and flames, but which now lets in this life-giving air we're breathing."

"But which volcanic mountain is this?" I asked.

"It's one of the many islets with which this sea is strewn. For ships a mere reef, for us an immense cavern. I discovered it by chance, and chance served me well."

"But couldn't someone enter through the mouth of its crater?"

"No more than I could exit through it. You can climb about 100 feet up the inner base of this mountain, but then the walls overhang, they lean too far in to be scaled."

"I can see, captain, that nature is your obedient servant, any time or any place. You're safe on this lake, and nobody else can visit its waters. But what's the purpose of this refuge? The Nautilus doesn't need a harbor."

"No, professor, but it needs electricity to run, batteries to generate its electricity, sodium to feed its batteries, coal to make its sodium, and coalfields from which to dig its coal. Now then, right at this spot the sea covers entire forests that sank underwater in prehistoric times; today, turned to stone, transformed into carbon fuel, they offer me inexhaustible coal mines."

"So, captain, your men practice the trade of miners here?"

"Precisely. These mines extend under the waves like the coalfields at Newcastle. Here, dressed in diving suits, pick and mattock in hand, my men go out and dig this carbon fuel for which I don't need a single mine on land. When I burn this combustible to produce sodium, the smoke escaping from the mountain's crater gives it the appearance of a still-active volcano."

"And will we see your companions at work?"

"No, at least not this time, because I'm eager to continue our underwater tour of the world. Accordingly, I'll rest content with drawing on my reserve stock of sodium. We'll stay here long enough to load it on board, in other words, a single workday, then we'll resume our voyage. So, Professor Aronnax, if you'd like to explore this cavern and circle its lagoon, seize the day."

I thanked the captain and went to look for my two companions, who hadn't yet left their cabin. I invited them to follow me, not telling them where we were.

They climbed onto the platform. Conseil, whom nothing could startle, saw it as a perfectly natural thing to fall asleep under the waves and wake up under a mountain. But Ned Land had no idea in his head other than to see if this cavern offered some way out.

After breakfast near ten o'clock, we went down onto the embankment.

"So here we are, back on shore," Conseil said.

"I'd hardly call this shore," the Canadian replied. "And besides, we aren't on it but under it."

A sandy beach unfolded before us, measuring 500 feet at its widest point between the waters of the lake and the foot of the mountain's walls. Via this strand you could easily circle the lake. But the base of these high walls consisted of broken soil over which there lay picturesque piles of volcanic blocks and enormous pumice stones. All these crumbling masses were covered with an enamel polished by the action of underground fires, and they glistened under the stream of electric light from our beacon. Stirred up by our footsteps, the mica-rich dust on this beach flew into the air like a cloud of sparks.

The ground rose appreciably as it moved away from the sand flats by the waves, and we soon arrived at some long, winding gradients, genuinely steep paths that allowed us to climb little by little; but we had to tread cautiously in the midst of pudding stones that weren't cemented together, and our feet kept skidding on glassy trachyte, made of feldspar and quartz crystals.
The volcanic nature of this enormous pit was apparent all around us. I ventured to comment on it to my companions.

"Can you picture," I asked them, "what this funnel must have been like when it was filled with boiling lava, and the level of that incandescent liquid rose right to the mountain's mouth, like cast iron up the insides of a furnace?"

"I can picture it perfectly," Conseil replied. "But will master tell me why this huge smelter suspended operations, and how it is that an oven was replaced by the tranquil waters of a lake?"

"In all likelihood, Conseil, because some convulsion created an opening below the surface of the ocean, the opening that serves as a passageway for the Nautilus. Then the waters of the Atlantic rushed inside the mountain. There ensued a dreadful struggle between the elements of fire and water, a struggle ending in King Neptune's favor. But many centuries have passed since then, and this submerged volcano has changed into a peaceful cavern."

"That's fine," Ned Land answered. "I accept the explanation, but in our personal interests, I'm sorry this opening the professor mentions wasn't made above sea level."

"But Ned my friend," Conseil answered, "if it weren't an underwater passageway, the Nautilus couldn't enter it!"

"And I might add, Mr. Land," I said, "that the waters wouldn't have rushed under the mountain, and the volcano would still be a volcano. So you have nothing to be sorry about."

Our climb continued. The gradients got steeper and narrower. Sometimes they were cut across by deep pits that had to be cleared. Masses of overhanging rock had to be gotten around. You slid on your knees, you crept on your belly. But helped by the Canadian's strength and Conseil's dexterity, we overcame every obstacle.

At an elevation of about thirty meters, the nature of the terrain changed without becoming any easier. Pudding stones and trachyte gave way to black basaltic rock: here, lying in slabs all swollen with blisters; there, shaped like actual prisms and arranged into a series of columns that supported the springings of this immense vault, a wonderful sample of natural architecture. Then, among this basaltic rock, there snaked long, hardened lava flows inlaid with veins of bituminous coal and in places covered by wide carpets of sulfur. The sunshine coming through the crater had grown stronger, shedding a hazy light over all the volcanic waste forever buried in the heart of this extinct mountain.

But when we had ascended to an elevation of about 250 feet, we were stopped by insurmountable obstacles. The converging inside walls changed into overhangs, and our climb into a circular stroll. At this topmost level the vegetable kingdom began to challenge the mineral kingdom. Shrubs, and even a few trees, emerged from crevices in the walls. I recognized some spurges that let their caustic, purgative sap trickle out. There were heliotropes, very remiss at living up to their sun-worshipping reputations since no sunlight ever reached them; their clusters of flowers drooped sadly, their colors and scents were faded. Here and there chrysanthemums sprouted timidly at the feet of aloes with long, sad, sickly leaves. But between these lava flows I spotted little violets that still gave off a subtle fragrance, and I confess that I inhaled it with delight. The soul of a flower is its scent, and those splendid water plants, flowers of the sea, have no souls!

We had arrived at the foot of a sturdy clump of dragon trees, which were splitting the rocks with exertions of their muscular roots, when Ned Land exclaimed:

"Oh, sir, a hive!"

"A hive?" I answered, with a gesture of utter disbelief.

"Yes, a hive," the Canadian repeated, "with bees buzzing around!"

I went closer and was forced to recognize the obvious. At the mouth of a hole cut in the trunk of a dragon tree, there swarmed thousands of these ingenious insects so common to all the Canary Islands, where their output is especially prized.

Naturally enough, the Canadian wanted to lay in a supply of honey, and it would have been ill-mannered of me to say no. He mixed sulfur with some dry leaves, set them on fire with a spark from his tinderbox, and proceeded to smoke the bees out. Little by little the buzzing died down and the disemboweled hive yielded several pounds of sweet honey. Ned Land stuffed his haversack with it.

"When I've mixed this honey with our breadfruit batter," he told us, "I'll be ready to serve you a delectable piece of cake."

"But of course," Conseil put in, "it will be gingerbread!"

"I'm all for gingerbread," I said, "but let's resume this fascinating stroll."

At certain turns in the trail we were going along, the lake appeared in its full expanse. The ship's beacon lit up that whole placid surface, which experienced neither ripples nor undulations. The Nautilus lay perfectly still. On its platform and on the embankment, crewmen were bustling around, black shadows that stood out clearly in the midst of the luminous air.

Just then we went around the highest ridge of these rocky foothills that supported the vault. Then I saw that bees weren't the animal kingdom's only representatives inside this volcano. Here and in the shadows, birds of prey soared...
and whirled, flying away from nests perched on tips of rock. There were sparrow hawks with white bellies, and screeching kestrels. With all the speed their stiltlike legs could muster, fine fat bustards scampered over the slopes. I'll let the reader decide whether the Canadian's appetite was aroused by the sight of this tasty game, and whether he regretted having no rifle in his hands. He tried to make stones do the work of bullets, and after several fruitless attempts, he managed to wound one of these magnificent bustards. To say he risked his life twenty times in order to capture this bird is simply the unadulterated truth; but he fared so well, the animal went into his sack to join the honeycombs.

By then we were forced to go back down to the beach because the ridge had become impossible. Above us, the yawning crater looked like the wide mouth of a well. From where we stood, the sky was pretty easy to see, and I watched clouds race by, disheveled by the west wind, letting tatters of mist trail over the mountain's summit. Proof positive that those clouds kept at a moderate altitude, because this volcano didn't rise more than 1,800 feet above the level of the ocean.

Half an hour after the Canadian's latest exploits, we were back on the inner beach. There the local flora was represented by a wide carpet of samphire, a small umbelliferous plant that keeps quite nicely, which also boasts the names glasswort, saxifrage, and sea fennel. Conseil picked a couple bunches. As for the local fauna, it included thousands of crustaceans of every type: lobsters, hermit crabs, prawns, mysid shrimps, daddy longlegs, rock crabs, and a prodigious number of seashells, such as cowries, murex snails, and limpets.

In this locality there gaped the mouth of a magnificent cave. My companions and I took great pleasure in stretching out on its fine-grained sand. Fire had polished the sparkling enamel of its inner walls, sprinkled all over with mica-rich dust. Ned Land tapped these walls and tried to probe their thickness. I couldn't help smiling. Our conversation then turned to his everlasting escape plans, and without going too far, I felt I could offer him this hope: Captain Nemo had gone down south only to replenish his sodium supplies. So I hoped he would now hug the coasts of Europe and America, which would allow the Canadian to try again with a greater chance of success.

We were stretched out in this delightful cave for an hour. Our conversation, lively at the outset, then languished. A definite drowsiness overcame us. Since I saw no good reason to resist the call of sleep, I fell into a heavy doze. I dreamed--one doesn't choose his dreams--that my life had been reduced to the vegetating existence of a simple mollusk. It seemed to me that this cave made up my double-valved shell. . . .

Suddenly Conseil's voice startled me awake.

"Get up! Get up!" shouted the fine lad.

"What is it?" I asked, in a sitting position.

"The water's coming up to us!"

I got back on my feet. Like a torrent the sea was rushing into our retreat, and since we definitely were not mollusks, we had to clear out.

In a few seconds we were safe on top of the cave.

"What happened?" Conseil asked. "Some new phenomenon?"

"Not quite, my friends!" I replied. "It was the tide, merely the tide, which wellnigh caught us by surprise just as it did Sir Walter Scott's hero! The ocean outside is rising, and by a perfectly natural law of balance, the level of this lake is also rising. We've gotten off with a mild dunking. Let's go change clothes on the Nautilus."

Three-quarters of an hour later, we had completed our circular stroll and were back on board. Just then the crewmen finished loading the sodium supplies, and the Nautilus could have departed immediately.

But Captain Nemo gave no orders. Would he wait for nightfall and exit through his underwater passageway in secrecy? Perhaps.

Be that as it may, by the next day the Nautilus had left its home port and was navigating well out from any shore, a few meters beneath the waves of the Atlantic.

CHAPTER 11
The Sargasso Sea

THE NAUTILUS didn't change direction. For the time being, then, we had to set aside any hope of returning to European seas. Captain Nemo kept his prow pointing south. Where was he taking us? I was afraid to guess.

That day the Nautilus crossed an odd part of the Atlantic Ocean. No one is unaware of the existence of that great warm-water current known by name as the Gulf Stream. After emerging from channels off Florida, it heads toward
Spitzbergen. But before entering the Gulf of Mexico near latitude 44 degrees north, this current divides into two arms; its chief arm makes for the shores of Ireland and Norway while the second flexes southward at the level of the Azores; then it hits the coast of Africa, sweeps in a long oval, and returns to the Caribbean Sea.

Now then, this second arm—more accurately, a collar—forms a ring of warm water around a section of cool, tranquil, motionless ocean called the Sargasso Sea. This is an actual lake in the open Atlantic, and the great current's waters take at least three years to circle it.

Properly speaking, the Sargasso Sea covers every submerged part of Atlantis. Certain authors have even held that the many weeds strewn over this sea were torn loose from the prairies of that ancient continent. But it's more likely that these grasses, algae, and fucus plants were carried off from the beaches of Europe and America, then taken as far as this zone by the Gulf Stream. This is one of the reasons why Christopher Columbus assumed the existence of a New World. When the ships of that bold investigator arrived in the Sargasso Sea, they had great difficulty navigating in the midst of these weeds, which, much to their crews' dismay, slowed them down to a halt; and they wasted three long weeks crossing this sector.

Such was the region our Nautilus was visiting just then: a genuine prairie, a tightly woven carpet of algae, gulfweed, and bladder wrack so dense and compact a craft's stempost couldn't tear through it without difficulty. Accordingly, not wanting to entangle his propeller in this weed-choked mass, Captain Nemo stayed at a depth some meters below the surface of the waves.

The name Sargasso comes from the Spanish word "sargazo," meaning gulfweed. This gulfweed, the swimming gulfweed or berry carrier, is the chief substance making up this immense shoal. And here's why these water plants collect in this placid Atlantic basin, according to the expert on the subject, Commander Maury, author of The Physical Geography of the Sea.

The explanation he gives seems to entail a set of conditions that everybody knows: "Now," Maury says, "if bits of cork or chaff, or any floating substance, be put into a basin, and a circular motion be given to the water, all the light substances will be found crowding together near the center of the pool, where there is the least motion. Just such a basin is the Atlantic Ocean to the Gulf Stream, and the Sargasso Sea is the center of the whirl."

I share Maury's view, and I was able to study the phenomenon in this exclusive setting where ships rarely go. Above us, huddled among the brown weeds, there floated objects originating from all over: tree trunks ripped from the Rocky Mountains or the Andes and sent floating down the Amazon or the Mississippi, numerous pieces of wreckage, remnants of keels or undersides, bulwarks staved in and so weighed down with seashells and barnacles, they couldn't rise to the surface of the ocean. And the passing years will someday bear out Maury's other view that by collecting in this way over the centuries, these substances will be turned to stone by the action of the waters and will then form inexhaustible coalfields. Valuable reserves prepared by farseeing nature for that time when man will have exhausted his mines on the continents.

In the midst of this hopelessly tangled fabric of weeds and fucus plants, I noted some delightful pink-colored, star-shaped alcyon coral, sea anemone trailing the long tresses of their tentacles, some green, red, and blue jellyfish, and especially those big rhizostome jellyfish that Cuvier described, whose bluish parasols are trimmed with violet festoons.

We spent the whole day of February 22 in the Sargasso Sea, where fish that dote on marine plants and crustaceans find plenty to eat. The next day the ocean resumed its usual appearance.

From this moment on, for nineteen days from February 23 to March 12, the Nautilus stayed in the middle of the Atlantic, hustling us along at a constant speed of 100 leagues every twenty-four hours. It was obvious that Captain Nemo wanted to carry out his underwater program, and I had no doubt that he intended, after doubling Cape Horn, to return to the Pacific South Seas.

So Ned Land had good reason to worry. In these wide seas empty of islands, it was no longer feasible to jump ship. Nor did we have any way to counter Captain Nemo's whims. We had no choice but to acquiesce; but if we couldn't attain our end through force or cunning, I liked to think we might achieve it through persuasion. Once this voyage was over, might not Captain Nemo consent to set us free in return for our promise never to reveal his existence? Our word of honor, which we sincerely would have kept. However, this delicate question would have to be negotiated with the captain. But how would he receive our demands for freedom? At the very outset and in no uncertain terms, hadn't he declared that the secret of his life required that we be permanently imprisoned on board the Nautilus? Wouldn't he see my four-month silence as a tacit acceptance of this situation? Would my returning to this subject arouse suspicions that could jeopardize our escape plans, if we had promising circumstances for trying again later on? I weighed all these considerations, turned them over in my mind, submitted them to Conseil, but he was as baffled as I was. In short, although I'm not easily discouraged, I realized that my chances of ever seeing my fellow men again were shrinking by the day, especially at a time when Captain Nemo was recklessly racing toward the south Atlantic!
During those nineteen days just mentioned, no unique incidents distinguished our voyage. I saw little of the
captain. He was at work. In the library I often found books he had left open, especially books on natural history. He
had thumbed through my work on the great ocean depths, and the margins were covered with his notes, which
sometimes contradicted my theories and formulations. But the captain remained content with this method of refining
my work, and he rarely discussed it with me. Sometimes I heard melancholy sounds reverberating from the organ,
which he played very expressively, but only at night in the midst of the most secretive darkness, while the Nautilus
slumbered in the wilderness of the ocean.

During this part of our voyage, we navigated on the surface of the waves for entire days. The sea was nearly
deserted. A few sailing ships, laden for the East Indies, were heading toward the Cape of Good Hope. One day we
were chased by the longboats of a whaling vessel, which undoubtedly viewed us as some enormous baleen whale of
great value. But Captain Nemo didn't want these gallant gentlemen wasting their time and energy, so he ended the
hunt by diving beneath the waters. This incident seemed to fascinate Ned Land intensely. I'm sure the Canadian was
sorry that these fishermen couldn't harpoon our sheet-iron cetacean and mortally wound it.

During this period the fish Conseil and I observed differed little from those we had already studied in other
latitudes. Chief among them were specimens of that dreadful cartilaginous genus that's divided into three subgenera
numbering at least thirty-two species: striped sharks five meters long, the head squat and wider than the body, the
caudal fin curved, the back with seven big, black, parallel lines running lengthwise; then porpoises, ash gray,
pierced with seven gill openings, furnished with a single dorsal fin placed almost exactly in the middle of the body.

Some big dogfish also passed by, a voracious species of shark if there ever was one. With some justice,
fishermen's yarns aren't to be trusted, but here's what a few of them relate. Inside the corpse of one of these animals
there were found a buffalo head and a whole calf; in another, two tuna and a sailor in uniform; in yet another, a
soldier with his saber; in another, finally, a horse with its rider. In candor, none of these sounds like divinely
inspired truth. But the fact remains that not a single dogfish let itself get caught in the Nautilus's nets, so I can't
vouch for their voracity.

Schools of elegant, playful dolphin swam alongside for entire days. They went in groups of five or six, hunting
in packs like wolves over the countryside; moreover, they're just as voracious as dogfish, if I can believe a certain
Copenhagen professor who says that from one dolphin's stomach, he removed thirteen porpoises and fifteen seals.
True, it was a killer whale, belonging to the biggest known species, whose length sometimes exceeds twenty-four
feet. The family Delphinia numbers ten genera, and the dolphins I saw were akin to the genus Delphinorhynchus,
remarkable for an extremely narrow muzzle four times as long as the cranium. Measuring three meters, their bodies
were black on top, underneath a pinkish white strewn with small, very scattered spots.

From these seas I'll also mention some unusual specimens of croakers, fish from the order Acanthopterygia,
family Scienidea. Some authors-- more artistic than scientific--claim that these fish are melodious singers, that their
voices in unison put on concerts unmatched by human choristers. I don't say nay, but to my regret these croakers
didn't serenade us as we passed.

Finally, to conclude, Conseil classified a large number of flying fish. Nothing could have made a more unusual
sight than the marvelous timing with which dolphins hunt these fish. Whatever the range of its flight, however
evasive its trajectory (even up and over the Nautilus), the hapless flying fish always found a dolphin to welcome it
with open mouth. These were either flying gurnards or kitelike sea robins, whose lips glowed in the dark, at night
scrawling fiery streaks in the air before plunging into the murky waters like so many shooting stars.

Our navigating continued under these conditions until March 13. That day the Nautilus was put to work in some
depth-sounding experiments that fascinated me deeply.

By then we had fared nearly 13,000 leagues from our starting point in the Pacific high seas. Our position fix
placed us in latitude 45 degrees 37' south and longitude 37 degrees 53' west. These were the same waterways where
Captain Denham, aboard the Herald, paid out 14,000 meters of sounding line without finding bottom. It was here
too that Lieutenant Parker, aboard the American frigate Congress, was unable to reach the underwater soil at 15,149
meters.

Captain Nemo decided to take his Nautilus down to the lowest depths in order to double-check these different
soundings. I got ready to record the results of this experiment. The panels in the lounge opened, and maneuvers
began for reaching those strata so prodigiously far removed.

It was apparently considered out of the question to dive by filling the ballast tanks. Perhaps they wouldn't
sufficiently increase the Nautilus's specific gravity. Moreover, in order to come back up, it would be necessary to
expel the excess water, and our pumps might not have been strong enough to overcome the outside pressure.

Captain Nemo decided to make for the ocean floor by submerging on an appropriately gradual diagonal with the
help of his side fins, which were set at a 45 degrees angle to the Nautilus's waterline. Then the propeller was brought
to its maximum speed, and its four blades churned the waves with indescribable violence.
Under this powerful thrust the Nautilus's hull quivered like a resonating chord, and the ship sank steadily under the waters. Stationed in the lounge, the captain and I watched the needle swerving swiftly over the pressure gauge. Soon we had gone below the livable zone where most fish reside. Some of these animals can thrive only at the surface of seas or rivers, but a minority can dwell at fairly great depths. Among the latter I observed a species of dogfish called the cow shark that's equipped with six respiratory slits, the telescope fish with its enormous eyes, the armored gurnard with gray thoracic fins plus black pectoral fins and a breastplate protected by pale red slabs of bone, then finally the grenadier, living at a depth of 1,200 meters, by that point tolerating a pressure of 120 atmospheres.

I asked Captain Nemo if he had observed any fish at more considerable depths.

"Fish? Rarely!" he answered me. "But given the current state of marine science, who are we to presume, what do we really know of these depths?"

"Just this, captain. In going toward the ocean's lower strata, we know that vegetable life disappears more quickly than animal life. We know that moving creatures can still be encountered where water plants no longer grow. We know that oysters and pilgrim scallops live in 2,000 meters of water, and that Admiral McClintock, England's hero of the polar seas, pulled in a live sea star from a depth of 2,500 meters. We know that the crew of the Royal Navy's Bulldog fished up a starfish from 2,620 fathoms, hence from a depth of more than one vertical league. Would you still say, Captain Nemo, that we really know nothing?"

"No, professor," the captain replied, "I wouldn't be so discourteous. Yet I'll ask you to explain how these creatures can live at such depths?"

"I explain it on two grounds," I replied. "In the first place, because vertical currents, which are caused by differences in the water's salinity and density, can produce enough motion to sustain the rudimentary lifestyles of sea lilies and starfish."

"True," the captain put in.

"In the second place, because oxygen is the basis of life, and we know that the amount of oxygen dissolved in salt water increases rather than decreases with depth, that the pressure in these lower strata helps to concentrate their oxygen content."

"Oho! We know that, do we?" Captain Nemo replied in a tone of mild surprise. "Well, professor, we have good reason to know it because it's the truth. I might add, in fact, that the air bladders of fish contain more nitrogen than oxygen when these animals are caught at the surface of the water, and conversely, more oxygen than nitrogen when they're pulled up from the lower depths. Which bears out your formulation. But let's continue our observations."

My eyes flew back to the pressure gauge. The instrument indicated a depth of 6,000 meters. Our submergence had been going on for an hour. The Nautilus slid downward on its slanting fins, still sinking. These deserted waters were wonderfully clear, with a transparency impossible to convey. An hour later we were at 13,000 meters-- about three and a quarter vertical leagues--and the ocean floor was nowhere in sight.

However, at 14,000 meters I saw blackish peaks rising in the midst of the waters. But these summits could have belonged to mountains as high or even higher than the Himalayas or Mt. Blanc, and the extent of these depths remained incalculable.

Despite the powerful pressures it was undergoing, the Nautilus sank still deeper. I could feel its sheet-iron plates trembling down to their riveted joints; metal bars arched; bulkheads groaned; the lounge windows seemed to be warping inward under the water's pressure. And this whole sturdy mechanism would surely have given way, if, as its captain had said, it weren't capable of resisting like a solid block.

While grazing these rocky slopes lost under the waters, I still spotted some seashells, tube worms, lively annelid worms from the genus Spirorbis, and certain starfish specimens.

But soon these last representatives of animal life vanished, and three vertical leagues down, the Nautilus passed below the limits of underwater existence just as an air balloon rises above the breathable zones in the sky. We reached a depth of 16,000 meters-- four vertical leagues--and by then the Nautilus's plating was tolerating a pressure of 1,600 atmospheres, in other words, 1,600 kilograms per each square centimeter on its surface!

"What an experience!" I exclaimed. "Traveling these deep regions where no man has ever ventured before! Look, captain! Look at these magnificent rocks, these uninhabited caves, these last global haunts where life is no longer possible! What unheard-of scenery, and why are we reduced to preserving it only as a memory?"

"Would you like," Captain Nemo asked me, "to bring back more than just a memory?"

"What do you mean?"

"I mean that nothing could be easier than taking a photograph of this underwater region!"

Before I had time to express the surprise this new proposition caused me, a camera was carried into the lounge at Captain Nemo's request. The liquid setting, electrically lit, unfolded with perfect clarity through the wide-open panels. No shadows, no blurs, thanks to our artificial light. Not even sunshine could have been better for our
purposes. With the thrust of its propeller curbed by the slant of its fins, the Nautilus stood still. The camera was aimed at the scenery on the ocean floor, and in a few seconds we had a perfect negative.

I attach a print of the positive. In it you can view these primordial rocks that have never seen the light of day, this nether granite that forms the powerful foundation of our globe, the deep caves cut into the stony mass, the outlines of incomparable distinctness whose far edges stand out in black as if from the brush of certain Flemish painters. In the distance is a mountainous horizon, a wondrously undulating line that makes up the background of this landscape. The general effect of these smooth rocks is indescribable: black, polished, without moss or other blemish, carved into strange shapes, sitting firmly on a carpet of sand that sparkled beneath our streams of electric light.

Meanwhile, his photographic operations over, Captain Nemo told me:
"Let's go back up, professor. We mustn't push our luck and expose the Nautilus too long to these pressures."
"Let's go back up!" I replied.
"Hold on tight."
Before I had time to realize why the captain made this recommendation, I was hurled to the carpet.
Its fins set vertically, its propeller thrown in gear at the captain's signal, the Nautilus rose with lightning speed, shooting upward like an air balloon into the sky. Vibrating resonantly, it knifed through the watery mass. Not a single detail was visible. In four minutes it had cleared the four vertical leagues separating it from the surface of the ocean, and after emerging like a flying fish, it fell back into the sea, making the waves leap to prodigious heights.

CHAPTER 12
Sperm Whales and Baleen Whales

DURING THE NIGHT of March 13-14, the Nautilus resumed its southward heading. Once it was abreast of Cape Horn, I thought it would strike west of the cape, make for Pacific seas, and complete its tour of the world. It did nothing of the sort and kept moving toward the southernmost regions. So where was it bound? The pole? That was insanity. I was beginning to think that the captain's recklessness more than justified Ned Land's worst fears.

For a good while the Canadian had said nothing more to me about his escape plans. He had become less sociable, almost sullen. I could see how heavily this protracted imprisonment was weighing on him. I could feel the anger building in him. Whenever he encountered the captain, his eyes would flicker with dark fire, and I was in constant dread that his natural vehemence would cause him to do something rash.

That day, March 14, he and Conseil managed to find me in my stateroom. I asked them the purpose of their visit.
"To put a simple question to you, sir," the Canadian answered me.
"Go on, Ned."
"How many men do you think are on board the Nautilus?"
"I'm unable to say, my friend."
"It seems to me," Ned Land went on, "that it wouldn't take much of a crew to run a ship like this one."
"Correct," I replied. "Under existing conditions some ten men at the most should be enough to operate it."
"All right," the Canadian said, "then why should there be any more than that?"
"Why?" I answered.
I stared at Ned Land, whose motives were easy to guess.
"Because," I said, "if I can trust my hunches, if I truly understand the captain's way of life, his Nautilus isn't simply a ship. It's meant to be a refuge for people like its commander, people who have severed all ties with the shore."
"Perhaps," Conseil said, "but in a nutshell, the Nautilus can hold only a certain number of men, so couldn't master estimate their maximum?"
"How, Conseil?"
"By calculating it. Master is familiar with the ship's capacity, hence the amount of air it contains; on the other hand, master knows how much air each man consumes in the act of breathing, and he can compare this data with the fact that the Nautilus must rise to the surface every twenty-four hours..."
Conseil didn't finish his sentence, but I could easily see what he was driving at.
"I follow you," I said. "But while they're simple to do, such calculations can give only a very uncertain figure."
"No problem," the Canadian went on insistently.
"Then here's how to calculate it," I replied. "In one hour each man consumes the oxygen contained in 100 liters of air, hence during twenty-four hours the oxygen contained in 2,400 liters. Therefore, we must look for the multiple of 2,400 liters of air that gives us the amount found in the Nautilus."

"Precisely," Conseil said.

"Now then," I went on, "the Nautilus's capacity is 1,500 metric tons, and that of a ton is 1,000 liters, so the Nautilus holds 1,500,000 liters of air, which, divided by 2,400 . . . ."

I did a quick pencil calculation.

". . . gives us the quotient of 625. Which is tantamount to saying that the air contained in the Nautilus would be exactly enough for 625 men over twenty-four hours."

"625!" Ned repeated.

"But rest assured," I added, "that between passengers, seamen, or officers, we don't total one-tenth of that figure."

"Which is still too many for three men!" Conseil muttered.

"So, my poor Ned, I can only counsel patience."

"And," Conseil replied, "even more than patience, resignation."

Conseil had said the true word.

"Even so," he went on, "Captain Nemo can't go south forever! He'll surely have to stop, if only at the Ice Bank, and he'll return to the seas of civilization! Then it will be time to resume Ned Land's plans."

The Canadian shook his head, passed his hand over his brow, made no reply, and left us.

"With master's permission, I'll make an observation to him," Conseil then told me. "Our poor Ned broods about all the things he can't have. He's haunted by his former life. He seems to miss everything that's denied us. He's obsessed by his old memories and it's breaking his heart. We must understand him. What does he have to occupy him here? Nothing. He isn't a scientist like master, and he doesn't share our enthusiasm for the sea's wonders. He would risk anything just to enter a tavern in his own country!"

To be sure, the monotony of life on board must have seemed unbearable to the Canadian, who was accustomed to freedom and activity. It was a rare event that could excite him. That day, however, a development occurred that reminded him of his happy years as a harpooner.

Near eleven o'clock in the morning, while on the surface of the ocean, the Nautilus fell in with a herd of baleen whales. This encounter didn't surprise me, because I knew these animals were being hunted so relentlessly that they took refuge in the ocean basins of the high latitudes.

In the maritime world and in the realm of geographic exploration, whales have played a major role. This is the animal that first dragged the Basques in its wake, then Asturian Spaniards, Englishmen, and Dutchmen, emboldening them against the ocean's perils, and leading them to the ends of the earth. Baleen whales like to frequent the southernmost and northernmost seas. Old legends even claim that these cetaceans led fishermen to within a mere seven leagues of the North Pole. Although this feat is fictitious, it will someday come true, because it's likely that by hunting whales in the Arctic or Antarctic regions, man will finally reach this unknown spot on the globe.

We were seated on the platform next to a tranquil sea. The month of March, since it's the equivalent of October in these latitudes, was giving us some fine autumn days. It was the Canadian-- on this topic he was never mistaken--who sighted a baleen whale on the eastern horizon. If you looked carefully, you could see its blackish back alternately rise and fall above the waves, five miles from the Nautilus.

"Wow!" Ned Land exclaimed. "If I were on board a whaler, there's an encounter that would be great fun! That's one big animal! Look how high its blowholes are spouting all that air and steam! Damnation! Why am I chained to this hunk of sheet iron!"

"Why, Ned!" I replied. "You still aren't over your old fishing urges?"

"How could a whale fisherman forget his old trade, sir? Who could ever get tired of such exciting hunting?"

"You've never fished these seas, Ned?"

"Never, sir. Just the northernmost seas, equally in the Bering Strait and the Davis Strait."

"So the southern right whale is still unknown to you. Until now it's the bowhead whale you've hunted, and it won't risk going past the warm waters of the equator."

"Oh, professor, what are you feeding me?" the Canadian answered in a tolerably skeptical tone.

"I'm feeding you the facts."

"By thunder! In '65, just two and a half years ago, I to whom you speak, I myself stepped onto the carcass of a whale near Greenland, and its flank still carried the marked harpoon of a whaling ship from the Bering Sea. Now I ask you, after it had been wounded west of America, how could this animal be killed in the east, unless it had cleared the equator and doubled Cape Horn or the Cape of Good Hope?"
"I agree with our friend Ned," Conseil said, "and I'm waiting to hear how master will reply to him."

"Master will reply, my friends, that baleen whales are localized, according to species, within certain seas that they never leave. And if one of these animals went from the Bering Strait to the Davis Strait, it's quite simply because there's some passageway from the one sea to the other, either along the coasts of Canada or Siberia."

"You expect us to fall for that?" the Canadian asked, tipping me a wink.

"If master says so," Conseil replied.

"Which means," the Canadian went on, "since I've never fished these waterways, I don't know the whales that frequent them?"

"That's what I've been telling you, Ned."

"All the more reason to get to know them," Conseil answered.

"Look! Look!" the Canadian exclaimed, his voice full of excitement. "It's approaching! It's coming toward us! It's thumbing its nose at me! It knows I can't do a blessed thing to it!"

Ned stamped his foot. Brandishing an imaginary harpoon, his hands positively trembled.

"These cetaceans," he asked, "are they as big as the ones in the northernmost seas?"

"Pretty nearly, Ned."

"Because I've seen big baleen whales, sir, whales measuring up to 100 feet long! I've even heard that those rorqual whales off the Aleutian Islands sometimes get over 150 feet."

"That strikes me as exaggerated," I replied. "Those animals are only members of the genus Balaenoptera furnished with dorsal fins, and like sperm whales, they're generally smaller than the bowhead whale."

"Oh!" exclaimed the Canadian, whose eyes hadn't left the ocean. "It's getting closer, it's coming into the Nautilus's waters!"

Then, going on with his conversation:

"You talk about sperm whales," he said, "as if they were little beasts! But there are stories of gigantic sperm whales. They're shrewd cetaceans. I hear that some will cover themselves with algae and fucus plants. People mistake them for islets. They pitch camp on top, make themselves at home, light a fire--"

"Build houses," Conseil said.

"Yes, funny man," Ned Land replied. "Then one fine day the animal dives and drags all its occupants down into the depths."

"Like in the voyages of Sinbad the Sailor," I answered, laughing. "Oh, Mr. Land, you're addicted to tall tales! What sperm whales you're handing us! I hope you don't really believe in them!"

"Mr. Naturalist," the Canadian replied in all seriousness, "when it comes to whales, you can believe anything! (Look at that one move! Look at it stealing away!) People claim these animals can circle around the world in just fifteen days."

"I don't say nay."

"But what you undoubtedly don't know, Professor Aronnax, is that at the beginning of the world, whales traveled even quicker."

"Oh really, Ned! And why so?"

"Because in those days their tails moved side to side, like those on fish, in other words, their tails were straight up, thrashing the water from left to right, right to left. But spotting that they swam too fast, our Creator twisted their tails, and ever since they've been thrashing the waves up and down, at the expense of their speed."

"Fine, Ned," I said, then resurrected one of the Canadian's expressions. "You expect us to fall for that?"

"Not too terribly," Ned Land replied, "and no more than if I told you there are whales that are 300 feet long and weigh 1,000,000 pounds."

"That's indeed considerable," I said. "But you must admit that certain cetaceans do grow to significant size, since they're said to supply as much as 120 metric tons of oil."

"That I've seen," the Canadian said.

"I can easily believe it, Ned, just as I can believe that certain baleen whales equal 100 elephants in bulk. Imagine the impact of such a mass if it were launched at full speed!"

"Is it true," Conseil asked, "that they can sink ships?"

"Ships? I doubt it," I replied. "However, they say that in 1820, right in these southern seas, a baleen whale rushed at the Essex and pushed it backward at a speed of four meters per second. Its stern was flooded, and the Essex went down fast."

Ned looked at me with a bantering expression.

"Speaking for myself," he said, "I once got walloped by a whale's tail-- in my longboat, needless to say. My companions and I were launched to an altitude of six meters. But next to the professor's whale, mine was just a baby."
"Do these animals live a long time?" Conseil asked.
"A thousand years," the Canadian replied without hesitation.
"And how, Ned," I asked, "do you know that's so?"
"Because people say so."
"And why do people say so?"
"Because people know so."
"No, Ned! People don't know so, they suppose so, and here's the logic with which they back up their beliefs. When fishermen first hunted whales 400 years ago, these animals grew to bigger sizes than they do today. Reasonably enough, it's assumed that today's whales are smaller because they haven't had time to reach their full growth. That's why the Count de Buffon's encyclopedia says that cetaceans can live, and even must live, for a thousand years. You understand?"

Ned Land didn't understand. He no longer even heard me. That baleen whale kept coming closer. His eyes devoured it.

"Oh!" he exclaimed. "It's not just one whale, it's ten, twenty, a whole gam! And I can't do a thing! I'm tied hand and foot!"

"But Ned my friend," Conseil said, "why not ask Captain Nemo for permission to hunt--"

Before Conseil could finish his sentence, Ned Land scooted down the hatch and ran to look for the captain. A few moments later, the two of them reappeared on the platform.

Captain Nemo observed the herd of cetaceans cavorting on the waters a mile from the Nautilus.
"They're southern right whales," he said. "There goes the fortune of a whole whaling fleet."
"Well, sir," the Canadian asked, "couldn't I hunt them, just so I don't forget my old harpooning trade?"
"Hunt them? What for?" Captain Nemo replied. "Simply to destroy them? We have no use for whale oil on this ship."

"But, sir," the Canadian went on, "in the Red Sea you authorized us to chase a dugong!"

"There it was an issue of obtaining fresh meat for my crew. Here it would be killing for the sake of killing. I'm well aware that's a privilege reserved for mankind, but I don't allow such murderous pastimes. When your peers, Mr. Land, destroy decent, harmless creatures like the southern right whale or the bowhead whale, they commit a reprehensible offense. Thus they've already depopulated all of Baffin Bay, and they'll wipe out a whole class of useful animals. So leave these poor cetaceans alone. They have quite enough natural enemies, such as sperm whales, swordfish, and sawfish, without you meddling with them."

I'll let the reader decide what faces the Canadian made during this lecture on hunting ethics. Furnishing such arguments to a professional harpooner was a waste of words. Ned Land stared at Captain Nemo and obviously missed his meaning. But the captain was right. Thanks to the mindless, barbaric bloodthirstiness of fishermen, the last baleen whale will someday disappear from the ocean.

Ned Land whistled "Yankee Doodle" between his teeth, stuffed his hands in his pockets, and turned his back on us.

Meanwhile Captain Nemo studied the herd of cetaceans, then addressed me:
"I was right to claim that baleen whales have enough natural enemies without counting man. These specimens will soon have to deal with mighty opponents. Eight miles to leeward, Professor Aronnax, can you see those blackish specks moving about?"

"Yes, captain," I replied.
"Those are sperm whales, dreadful animals that I've sometimes encountered in herds of 200 or 300! As for them, they're cruel, destructive beasts, and they deserve to be exterminated."

The Canadian turned swiftly at these last words.
"Well, captain," I said, "on behalf of the baleen whales, there's still time--"

"It's pointless to run any risks, professor. The Nautilus will suffice to disperse these sperm whales. It's armed with a steel spur quite equal to Mr. Land's harpoon, I imagine."

The Canadian didn't even bother shrugging his shoulders. Attacking cetaceans with thrusts from a spur! Who ever heard of such malarkey!

"Wait and see, Professor Aronnax," Captain Nemo said. "We'll show you a style of hunting with which you aren't yet familiar. We'll take no pity on these ferocious cetaceans. They're merely mouth and teeth!"

Mouth and teeth! There's no better way to describe the long-skulled sperm whale, whose length sometimes exceeds twenty-five meters. The enormous head of this cetacean occupies about a third of its body. Better armed than a baleen whale, whose upper jaw is adorned solely with whalebone, the sperm whale is equipped with twenty-five huge teeth that are twenty centimeters high, have cylindrical, conical summits, and weigh two pounds each. In the top part of this enormous head, inside big cavities separated by cartilage, you'll find 300 to 400 kilograms of that
valuable oil called "spermaceti." The sperm whale is an awkward animal, more tadpole than fish, as Professor Frédol has noted. It's poorly constructed, being "defective," so to speak, over the whole left side of its frame, with good eyesight only in its right eye.

Meanwhile that monstrous herd kept coming closer. It had seen the baleen whales and was preparing to attack. You could tell in advance that the sperm whales would be victorious, not only because they were better built for fighting than their harmless adversaries, but also because they could stay longer underwater before returning to breathe at the surface.

There was just time to run to the rescue of the baleen whales. The Nautilus proceeded to midwater. Conseil, Ned, and I sat in front of the lounge windows. Captain Nemo made his way to the helmsman's side to operate his submersible as an engine of destruction. Soon I felt the beats of our propeller getting faster, and we picked up speed.

The battle between sperm whales and baleen whales had already begun when the Nautilus arrived. It maneuvered to cut into the herd of long-skulled predators. At first the latter showed little concern at the sight of this new monster meddling in the battle. But they soon had to sidestep its thrusts.

What a struggle! Ned Land quickly grew enthusiastic and even ended up applauding. Brandished in its captain's hands, the Nautilus was simply a fearsome harpoon. He hurled it at those fleshy masses and ran them clean through, leaving behind two squirming animal halves. As for those daunting strokes of the tail hitting our sides, the ship never felt them. No more than the collisions it caused. One sperm whale exterminated, it ran at another, tackled on the spot so as not to miss its prey, went ahead or astern, obeyed its rudder, dived when the cetacean sank to deeper strata, rose with it when it returned to the surface, struck it head-on or slantwise, hacked at it or tore it, and from every direction and at any speed, skewered it with its dreadful spur.

What bloodshed! What a hubbub on the surface of the waves! What sharp hisses and snorts unique to these frightened animals! Their tails churned the normally peaceful strata into actual billows.

This Homeric slaughter dragged on for an hour, and the long-skulled predators couldn't get away. Several times ten or twelve of them teamed up, trying to crush the Nautilus with their sheer mass. Through the windows you could see their enormous mouths paved with teeth, their fearsome eyes. Losing all self-control, Ned Land hurled threats and insults at them. You could feel them clinging to the submersible like hounds atop a wild boar in the underbrush. But by forcing the pace of its propeller, the Nautilus carried them off, dragged them under, or brought them back to the upper level of the waters, untroubled by their enormous weight or their powerful grip.

Finally this mass of sperm whales thinned out. The waves grew tranquil again. I felt us rising to the surface of the ocean. The hatch opened and we rushed onto the platform.

The sea was covered with mutilated corpses. A fearsome explosion couldn't have slashed, torn, or shredded these fleshy masses with greater violence. We were floating in the midst of gigantic bodies, bluish on the back, whitish on the belly, and all deformed by enormous protuberances. A few frightened sperm whales were fleeing toward the horizon. The waves were dyed red over an area of several miles, and the Nautilus was floating in the middle of a sea of blood.

Captain Nemo rejoined us.
"Well, Mr. Land?" he said.
"Well, sir," replied the Canadian, whose enthusiasm had subsided, "it's a dreadful sight for sure. But I'm a hunter not a butcher, and this is plain butchery."
"It was a slaughter of destructive animals," the captain replied, "and the Nautilus is no butcher knife."
"I prefer my harpoon," the Canadian answered.
"To each his own," the captain replied, staring intently at Ned Land.

I was in dread the latter would give way to some violent outburst that might have had deplorable consequences. But his anger was diverted by the sight of a baleen whale that the Nautilus had pulled alongside of just then.

This animal had been unable to escape the teeth of those sperm whales. I recognized the southern right whale, its head squat, its body dark all over. Anatomically, it's distinguished from the white whale and the black right whale by the fusion of its seven cervical vertebrae, and it numbers two more ribs than its relatives. Floating on its side, its belly riddled with bites, the poor cetacean was dead. Still hanging from the tip of its mutilated fin was a little baby whale that it had been unable to rescue from the slaughter. Its open mouth let water flow through its whalebone like a murmuring surf.

Captain Nemo guided the Nautilus next to the animal's corpse. Two of his men climbed onto the whale's flank, and to my astonishment, I saw them draw from its udders all the milk they held, in other words, enough to fill two or three casks.

The captain offered me a cup of this still-warm milk. I couldn't help showing my distaste for such a beverage. He assured me that this milk was excellent, no different from cow's milk.

I sampled it and agreed. So this milk was a worthwhile reserve ration for us, because in the form of salt butter or
cheese, it would provide a pleasant change of pace from our standard fare.

From that day on, I noted with some uneasiness that Ned Land's attitudes toward Captain Nemo grew worse and worse, and I decided to keep a close watch on the Canadian's movements and activities.

CHAPTER 13
The Ice Bank

THE NAUTILUS resumed its unruffled southbound heading. It went along the 50th meridian with considerable speed. Would it go to the pole? I didn't think so, because every previous attempt to reach this spot on the globe had failed. Besides, the season was already quite advanced, since March 13 on Antarctic shores corresponds with September 13 in the northernmost regions, which marks the beginning of the equinoctial period.

On March 14 at latitude 55 degrees, I spotted floating ice, plain pale bits of rubble twenty to twenty-five feet long, which formed reefs over which the sea burst into foam. The Nautilus stayed on the surface of the ocean. Having fished in the Arctic seas, Ned Land was already familiar with the sight of icebergs. Conseil and I were marveling at them for the first time.

In the sky toward the southern horizon, there stretched a dazzling white band. English whalers have given this the name "ice blink." No matter how heavy the clouds may be, they can't obscure this phenomenon. It announces the presence of a pack, or shoal, of ice.

Indeed, larger blocks of ice soon appeared, their brilliance varying at the whim of the mists. Some of these masses displayed green veins, as if scrawled with undulating lines of copper sulfate. Others looked like enormous amethysts, letting the light penetrate their insides. The latter reflected the sun's rays from the thousand facets of their crystals. The former, tinted with a bright limestone sheen, would have supplied enough building material to make a whole marble town.

The farther down south we went, the more these floating islands grew in numbers and prominence. Polar birds nested on them by the thousands. These were petrels, cape pigeons, or puffins, and their calls were deafening. Mistaking the Nautilus for the corpse of a whale, some of them alighted on it and prodded its resonant sheet iron with pecks of their beaks.

During this navigating in the midst of the ice, Captain Nemo often stayed on the platform. He observed these deserted waterways carefully. I saw his calm eyes sometimes perk up. In these polar seas forbidden to man, did he feel right at home, the lord of these unreachable regions? Perhaps. But he didn't say. He stood still, reviving only when his pilot's instincts took over. Then, steering his Nautilus with consummate dexterity, he skillfully dodged the masses of ice, some of which measured several miles in length, their heights varying from seventy to eighty meters. Often the horizon seemed completely closed off. Abreast of latitude 60 degrees, every passageway had disappeared. Searching with care, Captain Nemo soon found a narrow opening into which he brazenly slipped, well aware, however, that it would close behind him.

Guided by his skillful hands, the Nautilus passed by all these different masses of ice, which are classified by size and shape with a precision that enraptured Conseil: "icebergs," or mountains; "ice fields," or smooth, limitless tracts; "drift ice," or floating floes; "packs," or broken tracts, called "patches" when they're circular and "streams" when they form long strips.

The temperature was fairly low. Exposed to the outside air, the thermometer marked -2 degrees to -3 degrees centigrade. But we were warmly dressed in furs, for which seals and aquatic bears had paid the price. Evenly heated by all its electric equipment, the Nautilus's interior defied the most intense cold. Moreover, to find a bearable temperature, the ship had only to sink just a few meters beneath the waves.

Two months earlier we would have enjoyed perpetual daylight in this latitude; but night already fell for three or four hours, and later it would cast six months of shadow over these circumpolar regions.

On March 15 we passed beyond the latitude of the South Shetland and South Orkney Islands. The captain told me that many tribes of seals used to inhabit these shores; but English and American whalers, in a frenzy of destruction, slaughtered all the adults, including pregnant females, and where life and activity once existed, those fishermen left behind only silence and death.

Going along the 55th meridian, the Nautilus cut the Antarctic Circle on March 16 near eight o'clock in the morning. Ice completely surrounded us and closed off the horizon. Nevertheless, Captain Nemo went from passageway to passageway, always proceeding south.

"But where's he going?" I asked.

"Straight ahead," Conseil replied. "Ultimately, when he can't go any farther, he'll stop."
"I wouldn't bet on it!" I replied.

And in all honesty, I confess that this venturesome excursion was far from displeasing to me. I can't express the intensity of my amazement at the beauties of these new regions. The ice struck superb poses. Here, its general effect suggested an oriental town with countless minarets and mosques. There, a city in ruins, flung to the ground by convulsions in the earth. These views were varied continuously by the sun's oblique rays, or were completely swallowed up by gray mists in the middle of blizzards. Then explosions, cave-ins, and great iceberg somersaults would occur all around us, altering the scenery like the changing landscape in a diorama.

If the Nautilus was submerged during these losses of balance, we heard the resulting noises spread under the waters with frightful intensity, and the collapse of these masses created daunting eddies down to the ocean's lower strata. The Nautilus then rolled and pitched like a ship left to the fury of the elements.

Often, no longer seeing any way out, I thought we were imprisoned for good, but Captain Nemo, guided by his instincts, discovered new passageways from the tiniest indications. He was never wrong when he observed slender threads of bluish water streaking through these ice fields. Accordingly, I was sure that he had already risked his Nautilus in the midst of the Antarctic seas.

However, during the day of March 16, these tracts of ice completely barred our path. It wasn't the Ice Bank as yet, just huge ice fields cemented together by the cold. This obstacle couldn't stop Captain Nemo, and he launched his ship against the ice fields with hideous violence. The Nautilus went into these brittle masses like a wedge, splitting them with dreadful cracklings. It was an old-fashioned battering ram propelled with infinite power. Hurled aloft, ice rubble fell back around us like hail. Through brute force alone, the submersible carved out a channel for itself. Carried away by its momentum, the ship sometimes mounted on top of these tracts of ice and crushed them with its weight, or at other times, when cooped up beneath the ice fields, it split them with simple pitching movements, creating wide punctures.

Violent squalls assaulted us during the daytime. Thanks to certain heavy mists, we couldn't see from one end of the platform to the other. The wind shifted abruptly to every point on the compass. The snow was piling up in such packed layers, it had to be chipped loose with blows from picks. Even in a temperature of merely -5 degrees centigrade, every outside part of the Nautilus was covered with ice. A ship's rigging would have been unusable, because all its tackle would have jammed in the grooves of the pulleys. Only a craft without sails, driven by an electric motor that needed no coal, could face such high latitudes.

Under these conditions the barometer generally stayed quite low. It fell as far as 73.5 centimeters. Our compass indications no longer offered any guarantees. The deranged needles would mark contradictory directions as we approached the southern magnetic pole, which doesn't coincide with the South Pole proper. In fact, according to the astronomer Hansteen, this magnetic pole is located fairly close to latitude 70 degrees and longitude 130 degrees, or abiding by the observations of Louis-Isidore Duperrey, in longitude 135 degrees and latitude 70 degrees 30'. Hence we had to transport compasses to different parts of the ship, take many readings, and strike an average. Often we could chart our course only by guesswork, a less than satisfactory method in the midst of these winding passageways whose landmarks change continuously.

At last on March 18, after twenty futile assaults, the Nautilus was decisively held in check. No longer was it an ice stream, patch, or field—it was an endless, immovable barrier formed by ice mountains fused to each other.

"The Ice Bank!" the Canadian told me.

For Ned Land, as well as for every navigator before us, I knew that this was the great insurmountable obstacle. When the sun appeared for an instant near noon, Captain Nemo took a reasonably accurate sight that gave our position as longitude 51 degrees 30' and latitude 67 degrees 39' south. This was a position already well along in these Antarctic regions.

As for the liquid surface of the sea, there was no longer any semblance of it before our eyes. Before the Nautilus's spur there lay vast broken plains, a tangle of confused chunks with all the helter-skelter unpredictability typical of a river's surface a short while before its ice breakup; but in this case the proportions were gigantic. Here and there stood sharp peaks, lean spires that rose as high as 200 feet; farther off, a succession of steeply cut cliffs sporting a grayish tint, huge mirrors that reflected the sparse rays of a sun half drowned in mist. Beyond, a stark silence reigned in this desolate natural setting, a silence barely broken by the flapping wings of petrels or puffins. By this point everything was frozen, even sound.

So the Nautilus had to halt in its venturesome course among these tracts of ice.

"Sir," Ned Land told me that day, "if your captain goes any farther..."

"Yes?"

"He'll be a superman."

"How so, Ned?"

"Because nobody can clear the Ice Bank. Your captain's a powerful man, but damnation, he isn't more powerful
than nature. If she draws a boundary line, there you stop, like it or not!"

"Correct, Ned Land, but I still want to know what's behind this Ice Bank! Behold my greatest source of irritation—a wall!"

"Master is right," Conseil said. "Walls were invented simply to frustrate scientists. All walls should be banned."

"Fine!" the Canadian put in. "But we already know what's behind this Ice Bank."

"What?" I asked.

"Ice, ice, and more ice."

"You may be sure of that, Ned," I answered, "but I'm not. That's why I want to see for myself."

"Well, professor," the Canadian replied, "you can just drop that idea! You've made it to the Ice Bank, which is already far enough, but you won't get any farther, neither your Captain Nemo or his Nautilus. And whether he wants to or not, we'll head north again, in other words, to the land of sensible people."

I had to agree that Ned Land was right, and until ships are built to navigate over tracts of ice, they'll have to stop at the Ice Bank.

Indeed, despite its efforts, despite the powerful methods it used to split this ice, the Nautilus was reduced to immobility. Ordinarily, when someone can't go any farther, he still has the option of returning in his tracks. But here it was just as impossible to turn back as to go forward, because every passageway had closed behind us, and if our submersible remained even slightly stationary, it would be frozen in without delay. Which is exactly what happened near two o'clock in the afternoon, and fresh ice kept forming over the ship's sides with astonishing speed. I had to admit that Captain Nemo's leadership had been most injudicious.

Just then I was on the platform. Observing the situation for some while, the captain said to me:

"Well, professor! What think you?"

"I think we're trapped, captain."

"Trapped! What do you mean?"

"I mean we can't go forward, backward, or sideways. I think that's the standard definition of 'trapped,' at least in the civilized world."

"So, Professor Aronnax, you think the Nautilus won't be able to float clear?"

"Only with the greatest difficulty, captain, since the season is already too advanced for you to depend on an ice breakup."

"Oh, professor," Captain Nemo replied in an ironic tone, "you never change! You see only impediments and obstacles! I promise you, not only will the Nautilus float clear, it will go farther still!"

"Farther south?" I asked, gaping at the captain.

"Yes, sir, it will go to the pole."

"To the pole!" I exclaimed, unable to keep back a movement of disbelief.

"Yes," the captain replied coolly, "the Antarctic pole, that unknown spot crossed by every meridian on the globe. As you know, I do whatever I like with my Nautilus."

Yes, I did know that! I knew this man was daring to the point of being foolhardy. But to overcome all the obstacles around the South Pole—even more unattainable than the North Pole, which still hadn't been reached by the boldest navigators—wasn't this an absolutely insane undertaking, one that could occur only in the brain of a madman?

It then dawned on me to ask Captain Nemo if he had already discovered this pole, which no human being had ever trod underfoot.

"No, sir," he answered me, "but we'll discover it together. Where others have failed, I'll succeed. Never before has my Nautilus cruised so far into these southermost seas, but I repeat: it will go farther still."

"I'd like to believe you, captain," I went on in a tone of some sarcasm. "Oh I do believe you! Let's forge ahead! There are no obstacles for us! Let's shatter this Ice Bank! Let's blow it up, and if it still resists, let's put wings on the Nautilus and fly over it!"

"Over it, professor?" Captain Nemo replied serenely. "No, not over it, but under it."

"Under it!" I exclaimed.

A sudden insight into Captain Nemo's plans had just flashed through my mind. I understood. The marvelous talents of his Nautilus would be put to work once again in this superhuman undertaking!

"I can see we're starting to understand each other, professor," Captain Nemo told me with a half smile. "You already glimpse the potential—myself, I'd say the success—of this attempt. Maneuvers that aren't feasible for an ordinary ship are easy for the Nautilus. If a continent emerges at the pole, we'll stop at that continent. But on the other hand, if open sea washes the pole, we'll go to that very place!"

"Right," I said, carried away by the captain's logic. "Even though the surface of the sea has solidified into ice, its lower strata are still open, thanks to that divine justice that puts the maximum density of salt water one degree above
its freezing point. And if I'm not mistaken, the submerged part of this Ice Bank is in a four-to-one ratio to its emerging part."

"Very nearly, professor. For each foot of iceberg above the sea, there are three more below. Now then, since these ice mountains don't exceed a height of 100 meters, they sink only to a depth of 300 meters. And what are 300 meters to the Nautilus?"

"A mere nothing, sir."

"We could even go to greater depths and find that temperature layer common to all ocean water, and there we'd brave with impunity the -30 degrees or -40 degrees cold on the surface."

"True, sir, very true," I replied with growing excitement.

"Our sole difficulty," Captain Nemo went on, "lies in our staying submerged for several days without renewing our air supply."

"That's all?" I answered. "The Nautilus has huge air tanks; we'll fill them up and they'll supply all the oxygen we need."

"Good thinking, Professor Aronnax," the captain replied with a smile. "But since I don't want to be accused of foolhardiness, I'm giving you all my objections in advance."

"You have more?"

"Just one. If a sea exists at the South Pole, it's possible this sea may be completely frozen over, so we couldn't come up to the surface!"

"My dear sir, have you forgotten that the Nautilus is armed with a fearsome spur? Couldn't it be launched diagonally against those tracts of ice, which would break open from the impact?"

"Ah, professor, you're full of ideas today!"

"Besides, captain," I added with still greater enthusiasm, "why wouldn't we find open sea at the South Pole just as at the North Pole? The cold-temperature poles and the geographical poles don't coincide in either the northern or southern hemispheres, and until proof to the contrary, we can assume these two spots on the earth feature either a continent or an ice-free ocean."

"I think as you do, Professor Aronnax," Captain Nemo replied. "I'll only point out that after raising so many objections against my plan, you're now crushing me under arguments in its favor."

Captain Nemo was right. I was outdoing him in daring! It was I who was sweeping him to the pole. I was leading the way, I was out in front . . . but no, you silly fool! Captain Nemo already knew the pros and cons of this question, and it amused him to see you flying off into impossible fantasies!

Nevertheless, he didn't waste an instant. At his signal, the chief officer appeared. The two men held a quick exchange in their incomprehensible language, and either the chief officer had been alerted previously or he found the plan feasible, because he showed no surprise.

But as unemotional as he was, he couldn't have been more impeccably emotionless than Conseil when I told the fine lad our intention of pushing on to the South Pole. He greeted my announcement with the usual "As master wishes," and I had to be content with that. As for Ned Land, no human shoulders ever executed a higher shrug than the pair belonging to our Canadian.

"Honestly, sir," he told me. "You and your Captain Nemo, I pity you both!"

"But we will go to the pole, Mr. Land."

"Maybe, but you won't come back!"

And Ned Land reentered his cabin, "to keep from doing something desperate," he said as he left me.

Meanwhile preparations for this daring attempt were getting under way. The Nautilus's powerful pumps forced air down into the tanks and stored it under high pressure. Near four o'clock Captain Nemo informed me that the platform hatches were about to be closed. I took a last look at the dense Ice Bank we were going to conquer. The weather was fair, the skies reasonably clear, the cold quite brisk, namely -12 degrees centigrade; but after the wind had lulled, this temperature didn't seem too unbearable.

Equipped with picks, some ten men climbed onto the Nautilus's sides and cracked loose the ice around the ship's lower plating, which was soon set free. This operation was swiftly executed because the fresh ice was still thin. We all reentered the interior. The main ballast tanks were filled with the water that hadn't yet congealed at our line of flotation. The Nautilus submerged without delay.

I took a seat in the lounge with Conseil. Through the open window we stared at the lower strata of this southernmost ocean. The thermometer rose again. The needle on the pressure gauge swerved over its dial.

About 300 meters down, just as Captain Nemo had predicted, we cruised beneath the undulating surface of the Ice Bank. But the Nautilus sank deeper still. It reached a depth of 800 meters. At the surface this water gave a temperature of -12 degrees centigrade, but now it gave no more than -10 degrees. Two degrees had already been gained. Thanks to its heating equipment, the Nautilus's temperature, needless to say, stayed at a much higher degree.
Every maneuver was accomplished with extraordinary precision.

"With all due respect to master," Conseil told me, "we'll pass it by."

"I fully expect to!" I replied in a tone of deep conviction.

Now in open water, the Nautilus took a direct course to the pole without veering from the 52nd meridian. From 67 degrees 30' to 90 degrees, twenty-two and a half degrees of latitude were left to cross, in other words, slightly more than 500 leagues. The Nautilus adopted an average speed of twenty-six miles per hour, the speed of an express train. If it kept up this pace, forty hours would do it for reaching the pole.

For part of the night, the novelty of our circumstances kept Conseil and me at the lounge window. The sea was lit by our beacon's electric rays. But the depths were deserted. Fish didn't linger in these imprisoned waters. Here they found merely a passageway for going from the Antarctic Ocean to open sea at the pole. Our progress was swift. You could feel it in the vibrations of the long steel hull.

Near two o'clock in the morning, I went to snatch a few hours of sleep. Conseil did likewise. I didn't encounter Captain Nemo while going down the gangways. I assumed that he was keeping to the pilothouse.

The next day, March 19, at five o'clock in the morning, I was back at my post in the lounge. The electric log indicated that the Nautilus had reduced speed. By then it was rising to the surface, but cautiously, while slowly emptying its ballast tanks.

My heart was pounding. Would we emerge into the open and find the polar air again?

No. A jolt told me that the Nautilus had bumped the underbelly of the Ice Bank, still quite thick to judge from the hollowness of the accompanying noise. Indeed, we had "struck bottom," to use nautical terminology, but in the opposite direction and at a depth of 3,000 feet. That gave us 4,000 feet of ice overhead, of which 1,000 feet emerged above water. So the Ice Bank was higher here than we had found it on the outskirts. A circumstance less than encouraging.

Several times that day, the Nautilus repeated the same experiment and always it bumped against this surface that formed a ceiling above it. At certain moments the ship encountered ice at a depth of 900 meters, denoting a thickness of 1,200 meters, of which 300 meters rose above the level of the ocean. This height had tripled since the moment the Nautilus had dived beneath the waves.

I meticulously noted these different depths, obtaining the underwater profile of this upside-down mountain chain that stretched beneath the sea.

By evening there was still no improvement in our situation. The ice stayed between 400 and 500 meters deep. It was obviously shrinking, but what a barrier still lay between us and the surface of the ocean!

By then it was eight o'clock. The air inside the Nautilus should have been renewed four hours earlier, following daily practice on board. But I didn't suffer very much, although Captain Nemo hadn't yet made demands on the supplementary oxygen in his air tanks.

That night my sleep was fitful. Hope and fear besieged me by turns. I got up several times. The Nautilus continued groping. Near three o'clock in the morning, I observed that we encountered the Ice Bank's underbelly at a depth of only fifty meters. So only 150 feet separated us from the surface of the water. Little by little the Ice Bank was turning into an ice field again. The mountains were changing back into plains.

My eyes didn't leave the pressure gauge. We kept rising on a diagonal, going along this shiny surface that sparkled beneath our electric rays. Above and below, the Ice Bank was subsiding in long gradients. Mile after mile it was growing thinner.

Finally, at six o'clock in the morning on that memorable day of March 19, the lounge door opened. Captain Nemo appeared.

"Open sea!" he told me.

CHAPTE 14
The South Pole
I RUSHED UP onto the platform. Yes, open sea! Barely a few sparse floes, some moving icebergs; a sea stretching into the distance; hosts of birds in the air and myriads of fish under the waters, which varied from intense blue to olive green depending on the depth. The thermometer marked 3 degrees centigrade. It was as if a comparative springtime had been locked up behind that Ice Bank, whose distant masses were outlined on the northern horizon.
"Are we at the pole?" I asked the captain, my heart pounding.
"I've no idea," he answered me. "At noon we'll fix our position."
"But will the sun show through this mist?" I said, staring at the grayish sky.
"No matter how faintly it shines, it will be enough for me," the captain replied.

To the south, ten miles from the Nautilus, a solitary islet rose to a height of 200 meters. We proceeded toward it, but cautiously, because this sea could have been strewn with reefs.

In an hour we had reached the islet. Two hours later we had completed a full circle around it. It measured four to five miles in circumference. A narrow channel separated it from a considerable shore, perhaps a continent whose limits we couldn't see. The existence of this shore seemed to bear out Commander Maury's hypotheses. In essence, this ingenious American has noted that between the South Pole and the 60th parallel, the sea is covered with floating ice of dimensions much greater than any found in the north Atlantic. From this fact he drew the conclusion that the Antarctic Circle must contain considerable shores, since icebergs can't form on the high seas but only along coastlines. According to his calculations, this frozen mass enclosing the southernmost pole forms a vast ice cap whose width must reach 4,000 kilometers.

Meanwhile, to avoid running aground, the Nautilus halted three cable lengths from a strand crowned by superb piles of rocks. The skiff was launched to sea. Two crewmen carrying instruments, the captain, Conseil, and I were on board. It was ten o'clock in the morning. I hadn't seen Ned Land. No doubt, in the presence of the South Pole, the Canadian hated having to eat his words.

A few strokes of the oar brought the skiff to the sand, where it ran aground. Just as Conseil was about to jump ashore, I held him back.

"Sir," I told Captain Nemo, "to you belongs the honor of first setting foot on this shore."
"Yes, sir," the captain replied, "and if I have no hesitation in treading this polar soil, it's because no human being until now has left a footprint here."

So saying, he leaped lightly onto the sand. His heart must have been throbbing with intense excitement. He scaled an overhanging rock that ended in a small promontory and there, mute and motionless, with crossed arms and blazing eyes, he seemed to be laying claim to these southernmost regions. After spending five minutes in this trance, he turned to us.

"Whenever you're ready, sir," he called to me.

I got out, Conseil at my heels, leaving the two men in the skiff.

Over an extensive area, the soil consisted of that igneous gravel called "tuff," reddish in color as if made from crushed bricks. The ground was covered with slag, lava flows, and pumice stones. Its volcanic origin was unmistakable. In certain localities thin smoke holes gave off a sulfurous odor, showing that the inner fires still kept their wide-ranging power. Nevertheless, when I scaled a high escarpment, I could see no volcanoes within a radius of several miles. In these Antarctic districts, as is well known, Sir James Clark Ross had found the craters of Mt. Erebus and Mt. Terror in fully active condition on the 167th meridian at latitude 77 degrees 32'.

The vegetation on this desolate continent struck me as quite limited. A few lichens of the species Usnea melanoxantha sprawled over the black rocks. The whole meager flora of this region consisted of certain microscopic buds, rudimentary diatoms made up of a type of cell positioned between two quartz-rich shells, plus long purple and crimson fucus plants, buoyed by small air bladders and washed up on the coast by the surf.

The beach was strewn with mollusks: small mussels, limpets, smooth heart-shaped cockles, and especially some sea butterflies with oblong, membrane-filled bodies whose heads are formed from two rounded lobes. I also saw myriads of those northernmost sea butterflies three centimeters long, which a baleen whale can swallow by the thousands in one gulp. The open waters at the shoreline were alive with these delightful pteropods, true butterflies of the sea.

Among other zoophytes present in these shallows, there were a few coral tree forms that, according to Sir James Clark Ross, live in these Antarctic seas at depths as great as 1,000 meters; then small alcyon coral belonging to the species Procellaria pelagica, also a large number of starfish unique to these climes, plus some feather stars spangling the sand.

Among other fowl I noted some sheathbills from the wading-bird family, the size of pigeons, white in color, the beak short and conical, the eyes framed by red circles. Conseil laid in a supply of them, because when they're properly cooked, these winged creatures make a pleasant dish. In the air there passed sooty albatross with four-meter
wingspans, birds aptly dubbed “vultures of the ocean,” also gigantic petrels including several with arching wings, enthusiastic eaters of seal that are known as quebrantahuesos,* and cape pigeons, a sort of small duck, the tops of their bodies black and white—in short, a whole series of petrels, some whitish with wings trimmed in brown, others blue and exclusive to these Antarctic seas, the former "so oily," I told Conseil, "that inhabitants of the Faroe Islands simply fit the bird with a wick, then light it up."

*Spanish: "ospreys." Ed.

"With that minor addition," Conseil replied, "these fowl would make perfect lamps! After this, we should insist that nature equip them with wicks in advance!"

Half a mile farther on, the ground was completely riddled with penguin nests, egg-laying burrows from which numerous birds emerged. Later Captain Nemo had hundreds of them hunted because their black flesh is highly edible. They brayed like donkeys. The size of a goose with slate-colored bodies, white undersides, and lemon-colored neck bands, these animals let themselves be stoned to death without making any effort to get away.

Meanwhile the mists didn't clear, and by eleven o'clock the sun still hadn't made an appearance. Its absence disturbed me. Without it, no sights were possible. Then how could we tell whether we had reached the pole?

When I rejoined Captain Nemo, I found him leaning silently against a piece of rock and staring at the sky. He seemed impatient, baffled. But what could we do? This daring and powerful man couldn't control the sun as he did the sea.

Noon arrived without the orb of day appearing for a single instant. You couldn't even find its hiding place behind the curtain of mist. And soon this mist began to condense into snow.

"Until tomorrow," the captain said simply; and we went back to the Nautilus, amid flurries in the air.

During our absence the nets had been spread, and I observed with fascination the fish just hauled on board. The Antarctic seas serve as a refuge for an extremely large number of migratory fish that flee from storms in the subpolar zones, in truth only to slide down the gullets of porpoises and seals. I noted some one-decimeter southern bullhead, a species of whitish cartilaginous fish overrun with bluish gray stripes and armed with stings, then some Antarctic rabbitfish three feet long, the body very slender, the skin a smooth silver white, the head rounded, the topside furnished with three fins, the snout ending in a trunk that curved back toward the mouth. I sampled its flesh but found it tasteless, despite Conseil's views, which were largely approving.

The blizzard lasted until the next day. It was impossible to stay on the platform. From the lounge, where I was writing up the incidents of this excursion to the polar continent, I could hear the calls of petrel and albatross cavorting in the midst of the turmoil. The Nautilus didn't stay idle, and cruising along the coast, it advanced some ten miles farther south amid the half light left by the sun as it skimmed the edge of the horizon.

The next day, March 20, it stopped snowing. The cold was a little more brisk. The thermometer marked -2 degrees centigrade. The mist had cleared, and on that day I hoped our noon sights could be accomplished.

Since Captain Nemo hadn't yet appeared, only Conseil and I were taken ashore by the skiff. The soil's nature was still the same: volcanic. Traces of lava, slag, and basaltic rock were everywhere, but I couldn't find the crater that had vomited them up. There as yonder, myriads of birds enlivened this part of the polar continent. But they had to share their dominion with huge herds of marine mammals that looked at us with gentle eyes. These were seals of various species, some stretched out on the ground, others lying on drifting ice floes, several leaving or reentering the sea. Having never dealt with man, they didn't run off at our approach, and I counted enough of them thereabouts to provision a couple hundred ships.

"Ye gods," Conseil said, "it's fortunate that Ned Land didn't come with us!"

"Why so, Conseil?"

"Because that madcap hunter would kill every animal here."

"Every animal may be overstating it, but in truth I doubt we could keep our Canadian friend from harpooning some of these magnificent cetaceans. Which would be an affront to Captain Nemo, since he hates to slay harmless beasts needlessly."

"He's right."

"Certainly, Conseil. But tell me, haven't you finished classifying these superb specimens of marine fauna?"

"Master is well aware," Conseil replied, "that I'm not seasoned in practical application. When master has told me these animals' names . . ."

"They're seals and walruses."

"Two genera," our scholarly Conseil hastened to say, "that belong to the family Pinnipedia, order Carnivora, group Unguiculata, subclass Monodelphia, class Mammalia, branch Vertebrata."

"Very nice, Conseil," I replied, "but these two genera of seals and walruses are each divided into species, and if I'm not mistaken, we now have a chance to actually look at them. Let's."

It was eight o'clock in the morning. We had four hours to ourselves before the sun could be productively
observed. I guided our steps toward a huge bay that made a crescent-shaped incision in the granite cliffs along the beach.

There, all about us, I swear that the shores and ice floes were crowded with marine mammals as far as the eye could see, and I involuntarily looked around for old Proteus, that mythological shepherd who guarded King Neptune's immense flocks. To be specific, these were seals. They formed distinct male-and-female groups, the father watching over his family, the mother suckling her little ones, the stronger youngsters emancipated a few paces away. When these mammals wanted to relocate, they moved in little jumps made by contracting their bodies, clumsily helped by their imperfectly developed flippers, which, as with their manatee relatives, form actual forearms. In the water, their ideal element, I must say these animals swim wonderfully thanks to their flexible backbones, narrow pelvises, close-cropped hair, and webbed feet. Resting on shore, they assumed extremely graceful positions. Consequently, their gentle features, their sensitive expressions equal to those of the loveliest women, their soft, limpid eyes, their charming poses, led the ancients to glorify them by metamorphosing the males into sea gods and the females into mermaids.

I drew Conseil's attention to the considerable growth of the cerebral lobes found in these intelligent cetaceans. No mammal except man has more abundant cerebral matter. Accordingly, seals are quite capable of being educated; they make good pets, and together with certain other naturalists, I think these animals can be properly trained to perform yeoman service as hunting dogs for fishermen.

Most of these seals were sleeping on the rocks or the sand. Among those properly termed seals—which have no external ears, unlike sea lions whose ears protrude—I observed several varieties of the species stenorhynchus, three meters long, with white hair, bulldog heads, and armed with ten teeth in each jaw: four incisors in both the upper and lower, plus two big canines shaped like the fleur-de-lis. Among them slithered some sea elephants, a type of seal with a short, flexible trunk; these are the giants of the species, with a circumference of twenty feet and a length of ten meters. They didn't move as we approached.

"Are these animals dangerous?" Conseil asked me.

"Only if they're attacked," I replied. "But when these giant seals defend their little ones, their fury is dreadful, and it isn't rare for them to smash a fisherman's longboat to bits."

"They're within their rights," Conseil answered.

"I don't say nay."

Two miles farther on, we were stopped by a promontory that screened the bay from southerly winds. It dropped straight down to the sea, and surf foamed against it. From beyond this ridge there came fearsome bellows, such as a herd of cattle might produce.

"Gracious," Conseil put in, "a choir of bulls?"

"No," I said, "a choir of walruses."

"Are they fighting with each other?"

"Either fighting or playing."

"With all due respect to master, this we must see."

"Then see it we must, Conseil."

And there we were, climbing these blackish rocks amid sudden landslides and over stones slippery with ice. More than once I took a tumble at the expense of my backside. Conseil, more cautious or more stable, barely faltered and would help me up, saying:

"If master's legs would kindly adopt a wider stance, master will keep his balance."

Arriving at the topmost ridge of this promontory, I could see vast white plains covered with walruses. These animals were playing among themselves. They were howling not in anger but in glee.

Walruses resemble seals in the shape of their bodies and the arrangement of their limbs. But their lower jaws lack canines and incisors, and as for their upper canines, they consist of two tusks eighty centimeters long with a circumference of thirty-three centimeters at the socket. Made of solid ivory, without striations, harder than elephant tusks, and less prone to yellowing, these teeth are in great demand. Accordingly, walruses are the victims of a mindless hunting that soon will destroy them all, since their hunters indiscriminately slaughter pregnant females and youngsters, and over 4,000 individuals are destroyed annually.

Passing near these unusual animals, I could examine them at my leisure since they didn't stir. Their hides were rough and heavy, a tan color leaning toward a reddish brown; their coats were short and less than abundant. Some were four meters long. More tranquil and less fearful than their northern relatives, they posted no sentinels on guard duty at the approaches to their campsite.

After examining this community of walruses, I decided to return in my tracks. It was eleven o'clock, and if Captain Nemo found conditions favorable for taking his sights, I wanted to be present at the operation. But I held no hopes that the sun would make an appearance that day. It was hidden from our eyes by clouds squeezed together on
the horizon. Apparently the jealous orb didn't want to reveal this inaccessible spot on the globe to any human being.

Yet I decided to return to the Nautilus. We went along a steep, narrow path that ran over the cliff's summit. By 11:30 we had arrived at our landing place. The beached skiff had brought the captain ashore. I spotted him standing on a chunk of basalt. His instruments were beside him. His eyes were focused on the northern horizon, along which the sun was sweeping in its extended arc.

I found a place near him and waited without speaking. Noon arrived, and just as on the day before, the sun didn't put in an appearance.

It was sheer bad luck. Our noon sights were still lacking. If we couldn't obtain them tomorrow, we would finally have to give up any hope of fixing our position.

In essence, it was precisely March 20. Tomorrow, the 21st, was the day of the equinox; the sun would disappear below the horizon for six months not counting refraction, and after its disappearance the long polar night would begin. Following the September equinox, the sun had emerged above the northerly horizon, rising in long spirals until December 21. At that time, the summer solstice of these southernmost districts, the sun had started back down, and tomorrow it would cast its last rays.

I shared my thoughts and fears with Captain Nemo.

"You're right, Professor Aronnax," he told me. "If I can't take the sun's altitude tomorrow, I won't be able to try again for another six months. But precisely because sailors' luck has led me into these seas on March 21, it will be easy to get our bearings if the noonday sun does appear before our eyes."

"Why easy, captain?"

"Because when the orb of day sweeps in such long spirals, it's difficult to measure its exact altitude above the horizon, and our instruments are open to committing serious errors."

"Then what can you do?"

"I use only my chronometer," Captain Nemo answered me. "At noon tomorrow, March 21, if, after accounting for refraction, the sun's disk is cut exactly in half by the northern horizon, that will mean I'm at the South Pole."

"Right," I said. "Nevertheless, it isn't mathematically exact proof, because the equinox needn't fall precisely at noon."

"No doubt, sir, but the error will be under 100 meters, and that's close enough for us. Until tomorrow then."

Captain Nemo went back on board. Conseil and I stayed behind until five o'clock, surveying the beach, observing and studying. The only unusual object I picked up was an auk's egg of remarkable size, for which a collector would have paid more than 1,000 francs. Its cream-colored tint, plus the streaks and markings that decorated it like so many hieroglyphics, made it a rare trinket. I placed it in Conseil's hands, and holding it like precious porcelain from China, that cautious, sure-footed lad got it back to the Nautilus in one piece.

There I put this rare egg inside one of the glass cases in the museum. I ate supper, feasting with appetite on an excellent piece of seal liver whose flavor reminded me of pork. Then I went to bed; but not without praying, like a good Hindu, for the favors of the radiant orb.

The next day, March 21, bright and early at five o'clock in the morning, I climbed onto the platform. I found Captain Nemo there.

"The weather is clearing a bit," he told me. "I have high hopes. After breakfast we'll make our way ashore and choose an observation post."

This issue settled, I went to find Ned Land. I wanted to take him with me. The obstinate Canadian refused, and I could clearly see that his tight-lipped mood and his bad temper were growing by the day. Under the circumstances I ultimately wasn't sorry that he refused. In truth, there were too many seals ashore, and it would never do to expose this impulsive fisherman to such temptations.

Breakfast over, I made my way ashore. The Nautilus had gone a few more miles during the night. It lay well out, a good league from the coast, which was crowned by a sharp peak 400 to 500 meters high. In addition to me, the skiff carried Captain Nemo, two crewmen, and the instruments—in other words, a chronometer, a spyglass, and a barometer.

During our crossing I saw numerous baleen whales belonging to the three species unique to these southernmost seas: the bowhead whale (or "right whale," according to the English), which has no dorsal fin; the humpback whale from the genus Balaenoptera (in other words, "winged whales"), beasts with wrinkled bellies and huge whitish fins that, genus name regardless, do not yet form wings; and the finback whale, yellowish brown, the swiftest of all cetaceans. This powerful animal is audible from far away when it sends up towering spouts of air and steam that resemble swirls of smoke. Herds of these different mammals were playing about in the tranquil waters, and I could easily see that this Antarctic polar basin now served as a refuge for those cetaceans too relentlessly pursued by hunters.

I also noted long, whitish strings of salps, a type of mollusk found in clusters, and some jellyfish of large size
that swayed in the eddies of the billows.

By nine o'clock we had pulled up to shore. The sky was growing brighter. Clouds were fleeing to the south. Mists were rising from the cold surface of the water. Captain Nemo headed toward the peak, which he no doubt planned to make his observatory. It was an arduous climb over sharp lava and pumice stones in the midst of air often reeking with sulfurous fumes from the smoke holes. For a man out of practice at treading land, the captain scaled the steepest slopes with a supple agility I couldn't equal, and which would have been envied by hunters of Pyrenees mountain goats.

It took us two hours to reach the summit of this half-crystal, half-basalt peak. From there our eyes scanned a vast sea, which scrawled its boundary line firmly against the background of the northern sky. At our feet: dazzling tracts of white. Over our heads: a pale azure, clear of mists. North of us: the sun's disk, like a ball of fire already cut into by the edge of the horizon. From the heart of the waters: jets of liquid rising like hundreds of magnificent bouquets. Far off, like a sleeping cetacean: the Nautilus. Behind us to the south and east: an immense shore, a chaotic heap of rocks and ice whose limits we couldn't see.

Arriving at the summit of this peak, Captain Nemo carefully determined its elevation by means of his barometer, since he had to take this factor into account in his noon sights.

At 11:45 the sun, by then seen only by refraction, looked like a golden disk, dispersing its last rays over this deserted continent and down to these seas not yet plowed by the ships of man.

Captain Nemo had brought a spyglass with a reticular eyepiece, which corrected the sun's refraction by means of a mirror, and he used it to observe the orb sinking little by little along a very extended diagonal that reached below the horizon. I held the chronometer. My heart was pounding mightily. If the lower half of the sun's disk disappeared just as the chronometer said noon, we were right at the pole.

"Noon!" I called.

"The South Pole!" Captain Nemo replied in a solemn voice, handing me the spyglass, which showed the orb of day cut into two exactly equal parts by the horizon.

I stared at the last rays wreathing this peak, while shadows were gradually climbing its gradients.

Just then, resting his hand on my shoulder, Captain Nemo said to me:

"In 1600, sir, the Dutchman Gheritk was swept by storms and currents, reaching latitude 64 degrees south and discovering the South Shetland Islands. On January 17, 1773, the famous Captain Cook went along the 38th meridian, arriving at latitude 67 degrees 30'; and on January 30, 1774, along the 109th meridian, he reached latitude 71 degrees 15'. In 1819 the Russian Bellinghausen lay on the 69th parallel, and in 1821 on the 66th at longitude 111 degrees west. In 1820 the Englishman Bransfield stopped at 65 degrees. That same year the American Morrel, whose reports are dubious, went along the 42nd meridian, finding open sea at latitude 70 degrees 14'. In 1825 the Englishman Powell was unable to get beyond 62 degrees. That same year a humble seal fisherman, the Englishman Weddell, went as far as latitude 72 degrees 14' on the 35th meridian, and as far as 74 degrees 15' on the 36th. In 1829 the Englishman Forster, commander of the Chanticleer, laid claim to the Antarctic continent in latitude 63 degrees 26' and longitude 66 degrees 26'. On February 1, 1831, the Englishman Biscoe discovered Enderby Land at latitude 68 degrees 50', Adelaide Land at latitude 67 degrees 45', and Graham Land at latitude 64 degrees 45' on February 21. In 1838 the Frenchman Dumont d'Urville stopped at the Ice Bank in latitude 62 degrees 57', sighting the Louis-Philippe Peninsula; on January 21 two years later, at a new southerly position of 66 degrees 30', he named the Adèle Coast and eight days later, the Clarie Coast at 64 degrees 40'. In 1838 the American Wilkes advanced as far as the 69th parallel on the 100th meridian. In 1839 the Englishman Balleny discovered the Sabrina Coast at the edge of the polar circle. Lastly, on January 12, 1842, with his ships, the Erebus and the Terror, the Englishman Sir James Clark Ross found Victoria Land in latitude 70 degrees 56' and longitude 171 degrees 7' east; on the 23rd of that same month, he reached the 74th parallel, a position denoting the Farthest South attained until then; on the 27th he lay at 76 degrees 8'; on the 28th at 77 degrees 32'; on February 2 at 78 degrees 4'; and late in 1842 he returned to 71 degrees but couldn't get beyond it. Well now! In 1868, on this 21st day of March, I myself, Captain Nemo, have reached the South Pole at 90 degrees, and I hereby claim this entire part of the globe, equal to one-sixth of the known continents."

"In the name of which sovereign, captain?"

"In my own name, sir!"

So saying, Captain Nemo unfurled a black flag bearing a gold "N" on its quartered bunting. Then, turning toward the orb of day, whose last rays were licking at the sea's horizon:

"Farewell, O sun!" he called. "Disappear, O radiant orb! Retire beneath this open sea, and let six months of night spread their shadows over my new domains!"
CHAPTER 15
Accident or Incident?

THE NEXT DAY, March 22, at six o'clock in the morning, preparations for departure began. The last gleams of twilight were melting into night. The cold was brisk. The constellations were glittering with startling intensity. The wonderful Southern Cross, polar star of the Antarctic regions, twinkled at its zenith.

The thermometer marked -12 degrees centigrade, and a fresh breeze left a sharp nip in the air. Ice floes were increasing over the open water. The sea was starting to congeal everywhere. Numerous blackish patches were spreading over its surface, announcing the imminent formation of fresh ice. Obviously this southernmost basin froze over during its six-month winter and became utterly inaccessible. What happened to the whales during this period? No doubt they went beneath the Ice Bank to find more feasible seas. As for seals and walruses, they were accustomed to living in the harshest climates and stayed on in these icy waterways. These animals know by instinct how to gouge holes in the ice fields and keep them continually open; they go to these holes to breathe. Once the birds have migrated northward to escape the cold, these marine mammals remain as sole lords of the polar continent.

Meanwhile the ballast tanks filled with water and the Nautilus sank slowly. At a depth of 1,000 feet, it stopped. Its propeller churned the waves and it headed due north at a speed of fifteen miles per hour. Near the afternoon it was already cruising under the immense frozen carapace of the Ice Bank.

As a precaution, the panels in the lounge stayed closed, because the Nautilus's hull could run afield of some submerged block of ice. So I spent the day putting my notes into final form. My mind was completely wrapped up in my memories of the pole. We had reached that inaccessible spot without facing exhaustion or danger, as if our seagoing passenger carriage had glided there on railroad tracks. And now we had actually started our return journey. Did it still have comparable surprises in store for me? I felt sure it did, so inexhaustible is this series of underwater wonders! As it was, in the five and a half months since fate had brought us on board, we had cleared 14,000 leagues, and over this track longer than the earth's equator, so many fascinating or frightening incidents had beguiled our voyage: that hunting trip in the Crespo forests, our running aground in the Torres Strait, the coral cemetery, the pearl fisheries of Ceylon, the Arabic tunnel, the fires of Santorini, those millions in the Bay of Vigo, Atlantis, the South Pole! During the night all these memories crossed over from one dream to the next, not giving my brain a moment's rest.

At three o'clock in the morning, I was awakened by a violent collision. I sat up in bed, listening in the darkness, and then was suddenly hurled into the middle of my stateroom. Apparently the Nautilus had gone aground, then heeled over sharply.

Leaning against the walls, I dragged myself down the gangways to the lounge, whose ceiling lights were on. The furniture had been knocked over. Fortunately the glass cases were solidly secured at the base and had stood fast. Since we were no longer vertical, the starboard pictures were glued to the tapestries, while those to port had their lower edges hanging a foot away from the wall. So the Nautilus was lying on its starboard side, completely stationary to boot.

In its interior I heard the sound of footsteps and muffled voices. But Captain Nemo didn't appear. Just as I was about to leave the lounge, Ned Land and Conseil entered.

"What happened?" I instantly said to them.
"I came to ask master that," Conseil replied.
"Damnation!" the Canadian exclaimed. "I know full well what happened! The Nautilus has gone aground, and judging from the way it's listing, I don't think it'll pull through like that first time in the Torres Strait."
"But," I asked, "are we at least back on the surface of the sea?"
"We have no idea," Conseil replied.
"It's easy to find out," I answered.

I consulted the pressure gauge. Much to my surprise, it indicated a depth of 360 meters.
"What's the meaning of this?" I exclaimed.
"We must confer with Captain Nemo," Conseil said.
"But where do we find him?" Ned Land asked.
"Follow me," I told my two companions.

We left the lounge. Nobody in the library. Nobody by the central companionway or the crew's quarters. I assumed that Captain Nemo was stationed in the pilothouse. Best to wait. The three of us returned to the lounge.

I'll skip over the Canadian's complaints. He had good grounds for an outburst. I didn't answer him back, letting
him blow off all the steam he wanted.

We had been left to ourselves for twenty minutes, trying to detect the tiniest noises inside the Nautilus, when Captain Nemo entered. He didn't seem to see us. His facial features, usually so emotionless, revealed a certain uneasiness. He studied the compass and pressure gauge in silence, then went and put his finger on the world map at a spot in the sector depicting the southernmost seas.

I hesitated to interrupt him. But some moments later, when he turned to me, I threw back at him a phrase he had used in the Torres Strait:

"An incident, captain?"

"No, sir," he replied, "this time an accident."

"Serious?"

"Perhaps."

"Is there any immediate danger?"

"No."

"The Nautilus has run aground?"

"Yes."

"And this accident came about . . . ?"

"Through nature's unpredictability not man's incapacity. No errors were committed in our maneuvers. Nevertheless, we can't prevent a loss of balance from taking its toll. One may defy human laws, but no one can withstand the laws of nature."

Captain Nemo had picked an odd time to philosophize. All in all, this reply told me nothing.

"May I learn, sir," I asked him, "what caused this accident?"

"An enormous block of ice, an entire mountain, has toppled over," he answered me. "When an iceberg is eroded at the base by warmer waters or by repeated collisions, its center of gravity rises. Then it somersaults, it turns completely upside down. That's what happened here. When it overturned, one of these blocks hit the Nautilus as it was cruising under the waters. Sliding under our hull, this block then raised us with irresistible power, lifting us into less congested strata where we now lie on our side."

"But can't we float the Nautilus clear by emptying its ballast tanks, to regain our balance?"

"That, sir, is being done right now. You can hear the pumps working. Look at the needle on the pressure gauge. It indicates that the Nautilus is rising, but this block of ice is rising with us, and until some obstacle halts its upward movement, our position won't change."

Indeed, the Nautilus kept the same heel to starboard. No doubt it would straighten up once the block came to a halt. But before that happened, who knew if we might not hit the underbelly of the Ice Bank and be hideously squeezed between two frozen surfaces?

I mused on all the consequences of this situation. Captain Nemo didn't stop studying the pressure gauge. Since the toppling of this iceberg, the Nautilus had risen about 150 feet, but it still stayed at the same angle to the perpendicular.

Suddenly a slight movement could be felt over the hull. Obviously the Nautilus was straightening a bit. Objects hanging in the lounge were visibly returning to their normal positions. The walls were approaching the vertical. Nobody said a word. Hearts pounding, we could see and feel the ship righting itself. The floor was becoming horizontal beneath our feet. Ten minutes went by.

"Finally, we're upright!" I exclaimed.

"Yes," Captain Nemo said, heading to the lounge door.

"But will we float off?" I asked him.

"Certainly," he replied, "since the ballast tanks aren't yet empty, and when they are, the Nautilus must rise to the surface of the sea."

The captain went out, and soon I saw that at his orders, the Nautilus had halted its upward movement. In fact, it soon would have hit the underbelly of the Ice Bank, but it had stopped in time and was floating in midwater.

"That was a close call!" Conseil then said.

"Yes. We could have been crushed between these masses of ice, or at least imprisoned between them. And then, with no way to renew our air supply. . . . Yes, that was a close call!"

"If it's over with!" Ned Land muttered.

I was unwilling to get into a pointless argument with the Canadian and didn't reply. Moreover, the panels opened just then, and the outside light burst through the uncovered windows.

We were fully afloat, as I have said; but on both sides of the Nautilus, about ten meters away, there rose dazzling walls of ice. There also were walls above and below. Above, because the Ice Bank's underbelly spread over us like an immense ceiling. Below, because the somersaulting block, shifting little by little, had found points of purchase on
both side walls and had gotten jammed between them. The Nautilus was imprisoned in a genuine tunnel of ice about twenty meters wide and filled with quiet water. So the ship could easily exit by going either ahead or astern, sinking a few hundred meters deeper, and then taking an open passageway beneath the Ice Bank.

The ceiling lights were off, yet the lounge was still brightly lit. This was due to the reflecting power of the walls of ice, which threw the beams of our beacon right back at us. Words cannot describe the effects produced by our galvanic rays on these huge, whimsically sculpted blocks, whose every angle, ridge, and facet gave off a different glow depending on the nature of the veins running inside the ice. It was a dazzling mine of gems, in particular sapphires and emeralds, whose jets of blue and green crisscrossed. Here and there, opaline hues of infinite subtlety raced among sparks of light that were like so many fiery diamonds, their brilliance more than any eye could stand. The power of our beacon was increased a hundredfold, like a lamp shining through the biconvex lenses of a world-class lighthouse.

"How beautiful!" Conseil exclaimed.
"Yes," I said, "it's a wonderful sight! Isn't it, Ned?"
"Oh damnation, yes!" Ned Land shot back. "It's superb! I'm furious that I have to admit it. Nobody has ever seen the like. But this sight could cost us dearly. And in all honesty, I think we're looking at things God never intended for human eyes."

Ned was right. It was too beautiful. All at once a yell from Conseil made me turn around.
"What is it?" I asked.
"Master must close his eyes! Master mustn't look!"
With that, Conseil clapped his hands over his eyes.
"But what's wrong, my boy?"
"I've been dazzled, struck blind!"

Involuntarily my eyes flew to the window, but I couldn't stand the fire devouring it.

I realized what had happened. The Nautilus had just started off at great speed. All the tranquil glimmers of the ice walls had then changed into blazing streaks. The sparkles from these myriads of diamonds were merging with each other. Swept along by its propeller, the Nautilus was traveling through a sheath of flashing light.

Then the panels in the lounge closed. We kept our hands over our eyes, which were utterly saturated with those concentric gleams that swirl before the retina when sunlight strikes it too intensely. It took some time to calm our troubled vision.

Finally we lowered our hands.
"Ye gods, I never would have believed it," Conseil said.
"And I still don't believe it!" the Canadian shot back.
"When we return to shore, jaded from all these natural wonders," Conseil added, "think how we'll look down on those pitiful land masses, those puny works of man! No, the civilized world won't be good enough for us!"

Such words from the lips of this emotionless Flemish boy showed that our enthusiasm was near the boiling point. But the Canadian didn't fail to throw his dram of cold water over us.
"The civilized world!" he said, shaking his head. "Don't worry, Conseil my friend, we're never going back to that world!"

By this point it was five o'clock in the morning. Just then there was a collision in the Nautilus's bow. I realized that its spur had just bumped a block of ice. It must have been a faulty maneuver because this underwater tunnel was obstructed by such blocks and didn't make for easy navigating. So I had assumed that Captain Nemo, in adjusting his course, would go around each obstacle or would hug the walls and follow the windings of the tunnel. In either case our forward motion wouldn't receive an absolute check. Nevertheless, contrary to my expectations, the Nautilus definitely began to move backward.

"We're going astern?" Conseil said.
"Yes," I replied. "Apparently the tunnel has no way out at this end."
"And so...?"
"So," I said, "our maneuvers are quite simple. We'll return in our tracks and go out the southern opening. That's all."

As I spoke, I tried to sound more confident than I really felt. Meanwhile the Nautilus accelerated its backward movement, and running with propeller in reverse, it swept us along at great speed.
"This'll mean a delay," Ned said.
"What are a few hours more or less, so long as we get out."
"Yes," Ned Land repeated, "so long as we get out!"

I strolled for a little while from the lounge into the library. My companions kept their seats and didn't move. Soon I threw myself down on a couch and picked up a book, which my eyes skimmed mechanically.
A quarter of an hour later, Conseil approached me, saying:

"Is it deeply fascinating, this volume master is reading?"

"Tremendously fascinating," I replied.

"I believe it. Master is reading his own book!"

"My own book?"

Indeed, my hands were holding my own work on the great ocean depths. I hadn't even suspected. I closed the book and resumed my strolling. Ned and Conseil stood up to leave.

"Stay here, my friends," I said, stopping them. "Let's stay together until we're out of this blind alley."

"As master wishes," Conseil replied.

The hours passed. I often studied the instruments hanging on the lounge wall. The pressure gauge indicated that the Nautilus stayed at a constant depth of 300 meters, the compass that it kept heading south, the log that it was traveling at a speed of twenty miles per hour, an excessive speed in such a cramped area. But Captain Nemo knew that by this point there was no such thing as too fast, since minutes were now worth centuries.

At 8:25 a second collision took place. This time astern. I grew pale. My companions came over. I clutched Conseil's hand. Our eyes questioned each other, and more directly than if our thoughts had been translated into words.

Just then the captain entered the lounge. I went to him.

"Our path is barred to the south?" I asked him.

"Yes, sir. When it overturned, that iceberg closed off every exit."

"We're boxed in?"

"Yes."

CHAPTER 16
Shortage of Air

CONSEQUENTLY, above, below, and around the Nautilus, there were impenetrable frozen walls. We were the Ice Bank's prisoners! The Canadian banged a table with his fearsome fist. Conseil kept still. I stared at the captain. His face had resumed its usual emotionlessness. He crossed his arms. He pondered. The Nautilus did not stir.

The captain then broke into speech:

"Gentlemen," he said in a calm voice, "there are two ways of dying under the conditions in which we're placed."

This inexplicable individual acted like a mathematics professor working out a problem for his pupils.

"The first way," he went on, "is death by crushing. The second is death by asphyxiation. I don't mention the possibility of death by starvation because the Nautilus's provisions will certainly last longer than we will. Therefore, let's concentrate on our chances of being crushed or asphyxiated."

"As for asphyxiation, captain," I replied, "that isn't a cause for alarm, because the air tanks are full."

"True," Captain Nemo went on, "but they'll supply air for only two days. Now then, we've been buried beneath the waters for thirty-six hours, and the Nautilus's heavy atmosphere already needs renewing. In another forty-eight hours, our reserve air will be used up."

"Well then, captain, let's free ourselves within forty-eight hours!"

"We'll try to at least, by cutting through one of these walls surrounding us."

"Which one?" I asked.

"Borings will tell us that. I'm going to ground the Nautilus on the lower shelf, then my men will put on their diving suits and attack the thinnest of these ice walls."

"Can the panels in the lounge be left open?"
"Without ill effect. We're no longer in motion."

Captain Nemo went out. Hissing sounds soon told me that water was being admitted into the ballast tanks. The Nautilus slowly settled and rested on the icy bottom at a depth of 350 meters, the depth at which the lower shelf of ice lay submerged.

"My friends," I said, "we're in a serious predicament, but I'm counting on your courage and energy."

"Sir," the Canadian replied, "this is no time to bore you with my complaints. I'm ready to do anything I can for the common good."

"Excellent, Ned," I said, extending my hand to the Canadian.

"I might add," he went on, "that I'm as handy with a pick as a harpoon. If I can be helpful to the captain, he can use me any way he wants."

"He won't turn down your assistance. Come along, Ned."

I led the Canadian to the room where the Nautilus's men were putting on their diving suits. I informed the captain of Ned's proposition, which was promptly accepted. The Canadian got into his underwater costume and was ready as soon as his fellow workers. Each of them carried on his back a Rouquayrol device that the air tanks had supplied with a generous allowance of fresh oxygen. A considerable but necessary drain on the Nautilus's reserves. As for the Ruhmkorff lamps, they were unnecessary in the midst of these brilliant waters saturated with our electric rays.

After Ned was dressed, I reentered the lounge, whose windows had been uncovered; stationed next to Conseil, I examined the strata surrounding and supporting the Nautilus.

Some moments later, we saw a dozen crewmen set foot on the shelf of ice, among them Ned Land, easily recognized by his tall figure. Captain Nemo was with them.

Before digging into the ice, the captain had to obtain borings, to insure working in the best direction. Long bores were driven into the side walls; but after fifteen meters, the instruments were still impeded by the thickness of those walls. It was futile to attack the ceiling since that surface was the Ice Bank itself, more than 400 meters high. Captain Nemo then bored into the lower surface. There we were separated from the sea by a ten-meter barrier. That's how thick the iceberg was. From this point on, it was an issue of cutting out a piece equal in surface area to the Nautilus's waterline. This meant detaching about 6,500 cubic meters, to dig a hole through which the ship could descend below this tract of ice.

Work began immediately and was carried on with tireless tenacity. Instead of digging all around the Nautilus, which would have entailed even greater difficulties, Captain Nemo had an immense trench outlined on the ice, eight meters from our port quarter. Then his men simultaneously staked it off at several points around its circumference. Soon their picks were vigorously attacking this compact matter, and huge chunks were loosened from its mass. These chunks weighed less than the water, and by an unusual effect of specific gravity, each chunk took wing, as it were, to the roof of the tunnel, which thickened above by as much as it diminished below. But this hardly mattered so long as the lower surface kept growing thinner.

After two hours of energetic work, Ned Land reentered, exhausted. He and his companions were replaced by new workmen, including Conseil and me. The Nautilus's chief officer supervised us.

The water struck me as unusually cold, but I warmed up promptly while wielding my pick. My movements were quite free, although they were executed under a pressure of thirty atmospheres.

After two hours of work, reentering to snatch some food and rest, I found a noticeable difference between the clean elastic fluid supplied me by the Rouquayrol device and the Nautilus's atmosphere, which was already charged with carbon dioxide. The air hadn't been renewed in forty-eight hours, and its life-giving qualities were considerably weakened. Meanwhile, after twelve hours had gone by, we had removed from the outlined surface area a slice of ice one meter thick, hence about 600 cubic meters. Assuming the same work would be accomplished every twelve hours, it would still take five nights and four days to see the undertaking through to completion.

"Five nights and four days!" I told my companions. "And we have oxygen in the air tanks for only two days."

"Without taking into account," Ned answered, "that once we're out of this damned prison, we'll still be cooped up beneath the Ice Bank, without any possible contact with the open air!"

An apt remark. For who could predict the minimum time we would need to free ourselves? Before the Nautilus could return to the surface of the waves, couldn't we all die of asphyxiation? Were this ship and everyone on board doomed to perish in this tomb of ice? It was a dreadful state of affairs. But we faced it head-on, each one of us determined to do his duty to the end.

During the night, in line with my forecasts, a new one-meter slice was removed from this immense socket. But in the morning, wearing my diving suit, I was crossing through the liquid mass in a temperature of -6 degrees to -7 degrees centigrade, when I noted that little by little the side walls were closing in on each other. The liquid strata farthest from the trench, not warmed by the movements of workmen and tools, were showing a tendency to solidify.
In the face of this imminent new danger, what would happen to our chances for salvation, and how could we prevent this liquid medium from solidifying, then cracking the Nautilus's hull like glass?

I didn't tell my two companions about this new danger. There was no point in dampening the energy they were putting into our arduous rescue work. But when I returned on board, I mentioned this serious complication to Captain Nemo.

"I know," he told me in that calm tone the most dreadful outlook couldn't change. "It's one more danger, but I don't know any way of warding it off. Our sole chance for salvation is to work faster than the water solidifies. We've got to get there first, that's all."

Get there first! By then I should have been used to this type of talk!

For several hours that day, I wielded my pick doggedly. The work kept me going. Besides, working meant leaving the Nautilus, which meant breathing the clean oxygen drawn from the air tanks and supplied by our equipment, which meant leaving the thin, foul air behind.

Near evening one more meter had been dug from the trench. When I returned on board, I was wellnigh asphyxiated by the carbon dioxide saturating the air. Oh, if only we had the chemical methods that would enable us to drive out this noxious gas! There was no lack of oxygen. All this water contained a considerable amount, and after it was decomposed by our powerful batteries, this life-giving elastic fluid could have been restored to us. I had thought it all out, but to no avail because the carbon dioxide produced by our breathing permeated every part of the ship. To absorb it, we would need to fill containers with potassium hydroxide and shake them continually. But this substance was missing on board and nothing else could replace it.

That evening Captain Nemo was forced to open the spigots of his air tanks and shoot a few spouts of fresh oxygen through the Nautilus's interior. Without this precaution we wouldn't have awakened the following morning.

The next day, March 26, I returned to my miner's trade, working to remove the fifth meter. The Ice Bank's side walls and underbelly had visibly thickened. Obviously they would come together before the Nautilus could break free. For an instant I was gripped by despair. My pick nearly slipped from my hands. What was the point of this digging if I was to die smothered and crushed by this water turning to stone, a torture undreamed of by even the wildest savages! I felt like I was lying in the jaws of a fearsome monster, jaws irresistibly closing.

Supervising our work, working himself, Captain Nemo passed near me just then. I touched him with my hand and pointed to the walls of our prison. The starboard wall had moved forward to a point less than four meters from the Nautilus's hull.

The captain understood and gave me a signal to follow him. We returned on board. My diving suit removed, I went with him to the lounge.

"Professor Aronnax," he told me, "this calls for heroic measures, or we'll be sealed up in this solidified water as if it were cement."

"Yes!" I said. "But what can we do?"

"Oh," he exclaimed, "if only my Nautilus were strong enough to stand that much pressure without being crushed!"

"Well?" I asked, not catching the captain's meaning.

"Don't you understand," he went on, "that the congealing of this water could come to our rescue? Don't you see that by solidifying, it could burst these tracts of ice imprisoning us, just as its freezing can burst the hardest stones? Aren't you aware that this force could be the instrument of our salvation rather than our destruction?"

"Yes, captain, maybe so. But whatever resistance to crushing the Nautilus may have, it still couldn't stand such dreadful pressures, and it would be squashed as flat as a piece of sheet iron."

"I know it, sir. So we can't rely on nature to rescue us, only our own efforts. We must counteract this solidification. We must hold it in check. Not only are the side walls closing in, but there aren't ten feet of water ahead or astern of the Nautilus. All around us, this freeze is gaining fast."

"How long," I asked, "will the oxygen in the air tanks enable us to breathe on board?"

The captain looked me straight in the eye.

"After tomorrow," he said, "the air tanks will be empty!"

I broke out in a cold sweat. But why should I have been startled by this reply? On March 22 the Nautilus had dived under the open waters at the pole. It was now the 26th. We had lived off the ship's stores for five days! And all remaining breathable air had to be saved for the workmen. Even today as I write these lines, my sensations are so intense that an involuntary terror sweeps over me, and my lungs still seem short of air!

Meanwhile, motionless and silent, Captain Nemo stood lost in thought. An idea visibly crossed his mind. But he seemed to brush it aside. He told himself no. At last these words escaped his lips:

"Boiling water!" he muttered.

"Boiling water?" I exclaimed.
"Yes, sir. We're shut up in a relatively confined area. If the Nautilus's pumps continually injected streams of boiling water into this space, wouldn't that raise its temperature and delay its freezing?"

"It's worth trying!" I said resolutely.

"So let's try it, professor."

By then the thermometer gave -7 degrees centigrade outside. Captain Nemo led me to the galley where a huge distilling mechanism was at work, supplying drinking water via evaporation. The mechanism was loaded with water, and the full electric heat of our batteries was thrown into coils awash in liquid. In a few minutes the water reached 100 degrees centigrade. It was sent to the pumps while new water replaced it in the process. The heat generated by our batteries was so intense that after simply going through the mechanism, water drawn cold from the sea arrived boiling hot at the body of the pump.

The steaming water was injected into the icy water outside, and after three hours had passed, the thermometer gave the exterior temperature as -6 degrees centigrade. That was one degree gained. Two hours later the thermometer gave only -4 degrees.

After I monitored the operation's progress, double-checking it with many inspections, I told the captain, "It's working."

"I think so," he answered me. "We've escaped being crushed. Now we have only asphyxiation to fear."

During the night the water temperature rose to -1 degrees centigrade. The injections couldn't get it to go a single degree higher. But since salt water freezes only at -2 degrees, I was finally assured that there was no danger of it solidifying.

By the next day, March 27, six meters of ice had been torn from the socket. Only four meters were left to be removed. That still meant forty-eight hours of work. The air couldn't be renewed in the Nautilus's interior. Accordingly, that day it kept getting worse.

An unbearable heaviness weighed me down. Near three o'clock in the afternoon, this agonizing sensation affected me to an intense degree. Yawns dislocated my jaws. My lungs were gasping in their quest for that enkindling elastic fluid required for breathing, now growing scarcer and scarcer. My mind was in a daze. I lay outstretched, strength gone, nearly unconscious. My gallant Conseil felt the same symptoms, suffered the same sufferings, yet never left my side. He held my hand, he kept encouraging me, and I even heard him mutter: "Oh, if only I didn't have to breathe, to leave more air for master!"

It brought tears to my eyes to hear him say these words.

Since conditions inside were universally unbearable, how eagerly, how happily, we put on our diving suits to take our turns working! Picks rang out on that bed of ice. Arms grew weary, hands were rubbed raw, but who cared about exhaustion, what difference were wounds? Life-sustaining air reached our lungs! We could breathe! We could breathe!

And yet nobody prolonged his underwater work beyond the time allotted him. His shift over, each man surrendered to a gasping companion the air tank that would revive him. Captain Nemo set the example and was foremost in submitting to this strict discipline. When his time was up, he yielded his equipment to another and reentered the foul air on board, always calm, unflinching, and uncomplaining.

That day the usual work was accomplished with even greater energy. Over the whole surface area, only two meters were left to be removed. Only two meters separated us from the open sea. But the ship's air tanks were nearly empty. The little air that remained had to be saved for the workmen. Not an atom for the Nautilus!

When I returned on board, I felt half suffocated. What a night! I'm unable to depict it. Such sufferings are indescribable. The next day I was short-winded. Headaches and staggering fits of dizziness made me reel like a drunk. My companions were experiencing the same symptoms. Some crewmen were at their last gasp.

That day, the sixth of our imprisonment, Captain Nemo concluded that picks and mattocks were too slow to deal with the ice layer still separating us from open water—and he decided to crush this layer. The man had kept his energy and composure. He had subdued physical pain with moral strength. He could still think, plan, and act.

At his orders the craft was eased off, in other words, it was raised from its icy bed by a change in its specific gravity. When it was afloat, the crew towed it, leading it right above the immense trench outlined to match the ship's waterline. Next the ballast tanks filled with water, the boat sank, and was fitted into its socket.

Just then the whole crew returned on board, and the double outside door was closed. By this point the Nautilus was resting on a bed of ice only one meter thick and drilled by bores in a thousand places.

The stopcocks of the ballast tanks were then opened wide, and 100 cubic meters of water rushed in, increasing the Nautilus's weight by 100,000 kilograms.

We waited, we listened, we forgot our sufferings, we hoped once more. We had staked our salvation on this one last gamble.

Despite the buzzing in my head, I soon could hear vibrations under the Nautilus's hull. We tilted. The ice
cracked with an odd ripping sound, like paper tearing, and the Nautilus began settling downward.

"We're going through!" Conseil muttered in my ear.

I couldn't answer him. I clutched his hand. I squeezed it in an involuntary convulsion.

All at once, carried away by its frightful excess load, the Nautilus sank into the waters like a cannonball, in other words, dropping as if in a vacuum!

Our full electric power was then put on the pumps, which instantly began to expel water from the ballast tanks. After a few minutes we had checked our fall. The pressure gauge soon indicated an ascending movement. Brought to full speed, the propeller made the sheet-iron hull tremble down to its rivets, and we sped northward.

But how long would it take to navigate under the Ice Bank to the open sea? Another day? I would be dead first!

Half lying on a couch in the library, I was suffocating. My face was purple, my lips blue, my faculties in abeyance. I could no longer see or hear. I had lost all sense of time. My muscles had no power to contract.

I'm unable to estimate the hours that passed in this way. But I was aware that my death throes had begun. I realized that I was about to die . . .

Suddenly I regained consciousness. A few whiffs of air had entered my lungs. Had we risen to the surface of the waves? Had we cleared the Ice Bank?

No! Ned and Conseil, my two gallant friends, were sacrificing themselves to save me. A few atoms of air were still left in the depths of one Rouquayrol device. Instead of breathing it themselves, they had saved it for me, and while they were suffocating, they poured life into me drop by drop! I tried to push the device away. They held my hands, and for a few moments I could breathe luxuriously.

My eyes flew toward the clock. It was eleven in the morning. It had to be March 28. The Nautilus was traveling at the frightful speed of forty miles per hour. It was writhing in the waters.

Where was Captain Nemo? Had he perished? Had his companions died with him?

Just then the pressure gauge indicated we were no more than twenty feet from the surface. Separating us from the open air was a mere tract of ice. Could we break through it?

Perhaps! In any event the Nautilus was going to try. In fact, I could feel it assuming an oblique position, lowering its stern and raising its spur. The admission of additional water was enough to shift its balance. Then, driven by its powerful propeller, it attacked this ice field from below like a fearsome battering ram. It split the barrier little by little, backing up, then putting on full speed against the punctured tract of ice; and finally, carried away by its supreme momentum, it lunged through and onto this frozen surface, crushing the ice beneath its weight.

The hatches were opened--or torn off, if you prefer--and waves of clean air were admitted into every part of the Nautilus.

CHAPTER 17
From Cape Horn to the Amazon

HOW I GOT ONTO the platform I'm unable to say. Perhaps the Canadian transferred me there. But I could breathe, I could inhale the life-giving sea air. Next to me my two companions were getting tipsy on the fresh oxygen particles. Poor souls who have suffered from long starvation mustn't pounce heedlessly on the first food given them. We, on the other hand, didn't have to practice such moderation: we could suck the atoms from the air by the lungful, and it was the breeze, the breeze itself, that poured into us this luxurious intoxication!

"Ahhh!" Conseil was putting in. "What fine oxygen! Let master have no fears about breathing. There's enough for everyone."

As for Ned Land, he didn't say a word, but his wide-open jaws would have scared off a shark. And what powerful inhalations! The Canadian "drew" like a furnace going full blast.

Our strength returned promptly, and when I looked around, I saw that we were alone on the platform. No crewmen. Not even Captain Nemo. Those strange seamen on the Nautilus were content with the oxygen circulating inside. Not one of them had come up to enjoy the open air.

The first words I pronounced were words of appreciation and gratitude to my two companions. Ned and Conseil had kept me alive during the final hours of our long death throes. But no expression of thanks could repay them fully for such devotion.
"Good lord, professor," Ned Land answered me, "don't mention it! What did we do that's so praiseworthy? Not a thing. It was a question of simple arithmetic. Your life is worth more than ours. So we had to save it."

"No, Ned," I replied, "it isn't worth more. Nobody could be better than a kind and generous man like yourself!"

"All right, all right!" the Canadian repeated in embarrassment.

"And you, my gallant Conseil, you suffered a great deal."

"Not too much, to be candid with master. I was lacking a few throatfuls of air, but I would have gotten by. Besides, when I saw master fainting, it left me without the slightest desire to breathe. It took my breath away, in a manner of . . ."

Confounded by this lapse into banality, Conseil left his sentence hanging.

"My friends," I replied, very moved, "we're bound to each other forever, and I'm deeply indebted to you--"

"Which I'll take advantage of," the Canadian shot back.

"Eh?" Conseil put in.

"Yes," Ned Land went on. "You can repay your debt by coming with me when I leave this infernal Nautilus."

"By the way," Conseil said, "are we going in a favorable direction?"

"Yes," I replied, "because we're going in the direction of the sun, and here the sun is due north."

"Sure," Ned Land went on, "but it remains to be seen whether we'll make for the Atlantic or the Pacific, in other words, whether we'll end up in well-traveled or deserted seas."

I had no reply to this, and I feared that Captain Nemo wouldn't take us homeward but rather into that huge ocean washing the shores of both Asia and America. In this way he would complete his underwater tour of the world, going back to those seas where the Nautilus enjoyed the greatest freedom. But if we returned to the Pacific, far from every populated shore, what would happen to Ned Land's plans?

We would soon settle this important point. The Nautilus traveled swiftly. Soon we had cleared the Antarctic Circle plus the promontory of Cape Horn. We were abreast of the tip of South America by March 31 at seven o'clock in the evening.

By then all our past sufferings were forgotten. The memory of that imprisonment under the ice faded from our minds. We had thoughts only of the future. Captain Nemo no longer appeared, neither in the lounge nor on the platform. The positions reported each day on the world map were put there by the chief officer, and they enabled me to determine the Nautilus's exact heading. Now then, that evening it became obvious, much to my satisfaction, that we were returning north by the Atlantic route.

I shared the results of my observations with the Canadian and Conseil.

"That's good news," the Canadian replied, "but where's the Nautilus going?"

"I'm unable to say, Ned."

"After the South Pole, does our captain want to tackle the North Pole, then go back to the Pacific by the notorious Northwest Passage?"

"I wouldn't double dare him," Conseil replied.

"Oh well," the Canadian said, "we'll give him the slip long before then."

"In any event," Conseil added, "he's a superman, that Captain Nemo, and we'll never regret having known him."

"Especially once we've left him," Ned Land shot back.

The next day, April 1, when the Nautilus rose to the surface of the waves a few minutes before noon, we raised land to the west. It was Tierra del Fuego, the Land of Fire, a name given it by early navigators after they saw numerous curls of smoke rising from the natives' huts. This Land of Fire forms a huge cluster of islands over thirty leagues long and eighty leagues wide, extending between latitude 53 degrees and 56 degrees south, and between longitude 67 degrees 50' and 77 degrees 15' west. Its coastline looked flat, but high mountains rose in the distance. I even thought I glimpsed Mt. Sarmiento, whose elevation is 2,070 meters above sea level: a pyramid-shaped block of shale with a very sharp summit, which, depending on whether it's clear or veiled in vapor, "predicts fair weather or foul," as Ned Land told me.

"A first-class barometer, my friend."

"Yes, sir, a natural barometer that didn't let me down when I navigated the narrows of the Strait of Magellan."

Just then its peak appeared before us, standing out distinctly against the background of the skies. This forecast fair weather. And so it proved.

Going back under the waters, the Nautilus drew near the coast, cruising along it for only a few miles. Through the lounge windows I could see long creepers and gigantic fucus plants, bulb-bearing seaweed of which the open sea at the pole had revealed a few specimens; with their smooth, viscous filaments, they measured as much as 300 meters long; genuine cables more than an inch thick and very tough, they're often used as mooring lines for ships. Another weed, known by the name velp and boasting four-foot leaves, was crammed into the coral concretions and carpeted the ocean floor. It served as both nest and nourishment for myriads of crustaceans and mollusks, for crabs
and cuttlefish. Here seals and otters could indulge in a sumptuous meal, mixing meat from fish with vegetables from the sea, like the English with their Irish stews.

The Nautilus passed over these luscious, luxuriant depths with tremendous speed. Near evening it approached the Falkland Islands, whose rugged summits I recognized the next day. The sea was of moderate depth. So not without good reason, I assumed that these two islands, plus the many islets surrounding them, used to be part of the Magellan coastline. The Falkland Islands were probably discovered by the famous navigator John Davis, who gave them the name Davis Southern Islands. Later Sir Richard Hawkins called them the Maidenland, after the Blessed Virgin. Subsequently, at the beginning of the 18th century, they were named the Malouines by fishermen from Saint-Malo in Brittany, then finally dubbed the Falklands by the English, to whom they belong today.

In these waterways our nets brought up fine samples of algae, in particular certain fucus plants whose roots were laden with the world's best mussels. Geese and duck alighted by the dozens on the platform and soon took their places in the ship's pantry. As for fish, I specifically observed some bony fish belonging to the goby genus, especially some gudgeon two decimeters long, sprinkled with whitish and yellow spots.

I likewise marveled at the numerous medusas, including the most beautiful of their breed, the compass jellyfish, unique to the Falkland seas. Some of these jellyfish were shaped like very smooth, semispheric parasols with russet stripes and fringes of twelve neat festoons. Others looked like upside-down baskets from which wide leaves and long red twigs were gracefully trailing. They swam with quiverings of their four leaflike arms, letting the opulent tresses of their tentacles dangle in the drift. I wanted to preserve a few specimens of these delicate zoophytes, but they were merely clouds, shadows, illusions, melting and evaporating outside their native element.

When the last tips of the Falkland Islands had disappeared below the horizon, the Nautilus submerged to a depth between twenty and twenty-five meters and went along the South American coast. Captain Nemo didn't put in an appearance.

We didn't leave these Patagonian waterways until April 3, sometimes cruising under the ocean, sometimes on its surface. The Nautilus passed the wide estuary formed by the mouth of the Rio de la Plata, and on April 4 we lay abreast of Uruguay, albeit fifty miles out. Keeping to its northerly heading, it followed the long windings of South America. By then we had fared 16,000 leagues since coming on board in the seas of Japan.

Near eleven o'clock in the morning, we cut the Tropic of Capricorn on the 37th meridian, passing well out from Cape Frio. Much to Ned Land's displeasure, Captain Nemo had no liking for the neighborhood of Brazil's populous shores, because he shot by with dizzying speed. Not even the swiftest fish or birds could keep up with us, and the natural curiosities in these seas completely eluded our observation.

This speed was maintained for several days, and on the evening of April 9, we raised South America's easternmost tip, Cape São Roque. But then the Nautilus veered away again and went looking for the lowest depths of an underwater valley gouged between this cape and Sierra Leone on the coast of Africa. Abreast of the West Indies, this valley forks into two arms, and to the north it ends in an enormous depression 9,000 meters deep. From this locality to the Lesser Antilles, the ocean's geologic profile features a steeply cut cliff six kilometers high, and abreast of the Cape Verde Islands, there's another wall just as imposing; together these two barricades confine the whole submerged continent of Atlantis. The floor of this immense valley is made picturesque by mountains that furnish these underwater depths with scenic views. This description is based mostly on certain hand-drawn charts kept in the Nautilus's library, charts obviously rendered by Captain Nemo himself from his own personal observations.

For two days we visited these deep and deserted waters by means of our slanting fins. The Nautilus would do long, diagonal dives that took us to every level. But on April 11 it rose suddenly, and the shore reappeared at the mouth of the Amazon River, a huge estuary whose outflow is so considerable, it desalts the sea over an area of several leagues.

We cut the Equator. Twenty miles to the west lay Guiana, French territory where we could easily have taken refuge. But the wind was blowing a strong gust, and the furious billows would not allow us to face them in a mere skiff. No doubt Ned Land understood this because he said nothing to me. For my part, I made no allusion to his escape plans because I didn't want to push him into an attempt that was certain to misfire.

I was readily compensated for this delay by fascinating research. During those two days of April 11-12, the Nautilus didn't leave the surface of the sea, and its trawl brought up a simply miraculous catch of zoophytes, fish, and reptiles.

Some zoophytes were dredged up by the chain of our trawl. Most were lovely sea anemone belonging to the family Actinidia, including among other species, the Phyctalis protexta, native to this part of the ocean: a small cylindrical trunk adorned with vertical lines, mottled with red spots, and crowned by a wondrous blossoming of tentacles. As for mollusks, they consisted of exhibits I had already observed: turret snails, olive shells of the "tent olive" species with neatly intersecting lines and russet spots standing out sharply against a flesh-colored background,
fanciful spider conchs that looked like petrified scorpions, transparent glass snails, argonauts, some highly edible cuttlefish, and certain species of squid that the naturalists of antiquity classified with the flying fish, which are used chiefly as bait for catching cod.

As for the fish in these waterways, I noted various species that I hadn't yet had the opportunity to study. Among cartilaginous fish: some brook lamprey, a type of eel fifteen inches long, head greenish, fins violet, back bluish gray, belly a silvery brown strewn with bright spots, iris of the eye encircled in gold, unusual animals that the Amazon's current must have swept out to sea because their natural habitat is fresh water; sting rays, the snout pointed, the tail long, slender, and armed with an extensive jagged sting; small one-meter sharks with gray and whitish hides, their teeth arranged in several backward-curving rows, fish commonly known by the name carpet shark; batfish, a sort of reddish isosceles triangle half a meter long, whose pectoral fins are attached by fleshy extensions that make these fish look like bats, although an appendage made of horn, located near the nostrils, earns them the nickname of sea unicorns; lastly, a couple species of triggerfish, the cucuyo whose stippled flanks glitter with a sparkling gold color, and the bright purple leatherjacket whose hues glisten like a pigeon's throat.

I'll finish up this catalog, a little dry but quite accurate, with the series of bony fish I observed: eels belonging to the genus Apteronotus whose snow-white snout is very blunt, the body painted a handsome black and armed with a very long, slender, fleshy whip; long sardines from the genus Odontognathus, like three-decimeter pike, shining with a bright silver glow; Guaranian mackerel furnished with two anal fins; black-tinted ruddervfish that you catch by using torches, fish measuring two meters and boasting white, firm, plump meat that, when fresh, tastes like eel, when dried, like smoked salmon; semired wrasse sporting scales only at the bases of their dorsal and anal fins; grunts on which gold and silver mingle their luster with that of ruby and topaz; yellow-tailed gilthead whose flesh is extremely dainty and whose phosphorescent properties give them away in the midst of the waters; porgies tinted orange, with slender tongues; croakers with gold caudal fins; black surgenfish; four-eyed fish from Surinam, etc.

This "et cetera" won't keep me from mentioning one more fish that Conseil, with good reason, will long remember.

One of our nets had hauled up a type of very flat ray that weighed some twenty kilograms; with its tail cut off, it would have formed a perfect disk. It was white underneath and reddish on top, with big round spots of deep blue encircled in black, its hide quite smooth and ending in a double-lobed fin. Laid out on the platform, it kept struggling with convulsive movements, trying to turn over, making such efforts that its final lunge was about to flip it into the sea. But Conseil, being very possessive of his fish, rushed at it, and before I could stop him, he seized it with both hands.

Instantly there he was, thrown on his back, legs in the air, his body half paralyzed, and yelling:

"Oh, sir, sir! Will you help me!"

For once in his life, the poor lad didn't address me "in the third person."

The Canadian and I sat him up; we massaged his contracted arms, and when he regained his five senses, that eternal classifier mumbled in a broken voice:

"Class of cartilaginous fish, order Chondropterygia with fixed gills, suborder Selacia, family Rajiforma, genus electric ray."

"Yes, my friend," I answered, "it was an electric ray that put you in this deplorable state."

"Oh, master can trust me on this," Conseil shot back. "I'll be revenged on that animal!"

"How?"

"I'll eat it."

Which he did that same evening, but strictly as retaliation. Because, frankly, it tasted like leather.

Poor Conseil had assaulted an electric ray of the most dangerous species, the cumana. Living in a conducting medium such as water, this bizarre animal can electrocute other fish from several meters away, so great is the power of its electric organ, an organ whose two chief surfaces measure at least twenty-seven square feet.

During the course of the next day, April 12, the Nautilus drew near the coast of Dutch Guiana, by the mouth of the Maroni River. There several groups of sea cows were living in family units. These were manatees, which belong to the order Sirenia, like the dugong and Steller's sea cow. Harmless and unaggressive, these fine animals were six to seven meters long and must have weighed at least 4,000 kilograms each. I told Ned Land and Conseil that farseeing nature had given these mammals a major role to play. In essence, manatees, like seals, are designed to graze the underwater prairies, destroying the clusters of weeds that obstruct the mouths of tropical rivers.

"And do you know," I added, "what happened since man has almost completely wiped out these beneficial races? Rotting weeds have poisoned the air, and this poisoned air causes the yellow fever that devastates these wonderful countries. This toxic vegetation has increased beneath the seas of the Torrid Zone, so the disease spreads unchecked from the mouth of the Rio de la Plata to Florida!"

And if Professor Toussenel is correct, this plague is nothing compared to the scourge that will strike our
descendants once the seas are depopulated of whales and seals. By then, crowded with jellyfish, squid, and other
devilfish, the oceans will have become huge centers of infection, because their waves will no longer possess "these
huge stomachs that God has entrusted with scouring the surface of the sea."

Meanwhile, without scorning these theories, the Nautilus's crew captured half a dozen manatees. In essence, it
was an issue of stocking the larder with excellent red meat, even better than beef or veal. Their hunting was not a
fascinating sport. The manatees let themselves be struck down without offering any resistance. Several thousand
kilos of meat were hauled below, to be dried and stored.

The same day an odd fishing practice further increased the Nautilus's stores, so full of game were these seas. Our
trawl brought up in its meshes a number of fish whose heads were topped by little oval slabs with fleshy edges.
These were suckerfish from the third family of the subbrachian Malacopterygia. These flat disks on their heads
consist of crosswise plates of movable cartilage, between which the animals can create a vacuum, enabling them to
stick to objects like suction cups.

The remoras I had observed in the Mediterranean were related to this species. But the creature at issue here was
an Echeneis osteochara, unique to this sea. Right after catching them, our seamen dropped them in buckets of water.

Its fishing finished, the Nautilus drew nearer to the coast. In this locality a number of sea turtles were sleeping
on the surface of the waves. It would have been difficult to capture these valuable reptiles, because they wake up at
the slightest sound, and their solid carapaces are harpoon-proof. But our suckerfish would effect their capture with
extraordinary certainty and precision. In truth, this animal is a living fishhook, promising wealth and happiness to
the greenest fisherman in the business.

The Nautilus's men attached to each fish's tail a ring that was big enough not to hamper its movements, and to
this ring a long rope whose other end was moored on board.

Thrown into the sea, the suckerfish immediately began to play their roles, going and fastening themselves onto
the breastplates of the turtles. Their tenacity was so great, they would rip apart rather than let go. They were hauled
in, still sticking to the turtles that came aboard with them.

In this way we caught several loggerheads, reptiles a meter wide and weighing 200 kilos. They're extremely
valuable because of their carapaces, which are covered with big slabs of horn, thin, brown, transparent, with white
and yellow markings. Besides, they were excellent from an edible viewpoint, with an exquisite flavor comparable to
the green turtle.

This fishing ended our stay in the waterways of the Amazon, and that evening the Nautilus took to the high seas
once more.

CHAPTER 18
The Devilfish

FOR SOME DAYS the Nautilus kept veering away from the American coast. It obviously didn't want to
frequent the waves of the Gulf of Mexico or the Caribbean Sea. Yet there was no shortage of water under its keel,
since the average depth of these seas is 1,800 meters; but these waterways, strewn with islands and plowed by
steamers, probably didn't agree with Captain Nemo.

On April 16 we raised Martinique and Guadalupe from a distance of about thirty miles. For one instant I could
see their lofty peaks.

The Canadian was quite disheartened, having counted on putting his plans into execution in the gulf, either by
reaching shore or by pulling alongside one of the many boats plying a coastal trade from one island to another. An
escape attempt would have been quite feasible, assuming Ned Land managed to seize the skiff without the captain's
knowledge. But in midocean it was unthinkable.

The Canadian, Conseil, and I had a pretty long conversation on this subject. For six months we had been
prisoners aboard the Nautilus. We had fared 17,000 leagues, and as Ned Land put it, there was no end in sight. So he
made me a proposition I hadn't anticipated. We were to ask Captain Nemo this question straight out: did the captain
mean to keep us on board his vessel permanently?

This measure was distasteful to me. To my mind it would lead nowhere. We could hope for nothing from the
Nautilus's commander but could depend only on ourselves. Besides, for some time now the man had been gloomier,
more withdrawn, less sociable. He seemed to be avoiding me. I encountered him only at rare intervals. He used to
take pleasure in explaining the underwater wonders to me; now he left me to my research and no longer entered the
much about, which can drag ships down into the depths. Those beasts go by the name of krake-- "

"No," I said, "devilfish of large dimensions. But friend Land is no doubt mistaken, because I don't see a thing."

"That's regrettable," Conseil answered. "I'd like to come face to face with one of those devilfish I've heard so much about, which can drag ships down into the depths. Those beasts go by the name of krake--"

"Fake is more like it," the Canadian replied sarcastically.

"Krakens!" Conseil shot back, finishing his word without wincing at his companion's witticism. 

lounge.

What changes had come over him? From what cause? I had no reason to blame myself. Was our presence on board perhaps a burden to him? Even so, I cherished no hopes that the man would set us free.

So I begged Ned to let me think about it before taking action. If this measure proved fruitless, it could arouse the captain's suspicions, make our circumstances even more arduous, and jeopardize the Canadian's plans. I might add that I could hardly use our state of health as an argument. Except for that grueling ordeal under the Ice Bank at the South Pole, we had never felt better, neither Ned, Conseil, nor I. The nutritious food, life-giving air, regular routine, and uniform temperature kept illness at bay; and for a man who didn't miss his past existence on land, for a Captain Nemo who was at home here, who went where he wished, who took paths mysterious to others if not himself in attaining his ends, I could understand such a life. But we ourselves hadn't severed all ties with humanity. For my part, I didn't want my new and unusual research to be buried with my bones. I had now earned the right to pen the definitive book on the sea, and sooner or later I wanted that book to see the light of day.

There once more, through the panels opening into these Caribbean waters ten meters below the surface of the waves, I found so many fascinating exhibits to describe in my daily notes! Among other zoophytes there were Portuguese men-of-war known by the name Physalia pelagica, like big, oblong bladders with a pearly sheen, spreading their membranes to the wind, letting their blue tentacles drift like silken threads; to the eye delightful jellyfish, to the touch actual nettles that ooze a corrosive liquid. Among the articulates there were annelid worms one and a half meters long, furnished with a pink proboscis, equipped with 1,700 organs of locomotion, snaking through the waters, and as they went, throwing off every gleam in the solar spectrum. From the fish branch there were manta rays, enormous cartilaginous fish ten feet long and weighing 600 pounds, their pectoral fin triangular, their midback slightly arched, their eyes attached to the edges of the face at the front of the head; they floated like wreckage from a ship, sometimes fastening onto our windows like opaque shutters. There were American triggerfish for which nature has ground only black and white pigments, feather-shaped gobies that were long and plump with yellow fins and jutting jaws, sixteen-decimeter mackerel with short, sharp teeth, covered with small scales, and related to the albacore species. Next came swarms of red mullet corseted in gold stripes from head to tail, their shining fins all aquiver, genuine masterpieces of jewelry, formerly sacred to the goddess Diana, much in demand by rich Romans, and about which the old saying goes: "He who catches them doesn't eat them!" Finally, adorned with emerald ribbons and dressed in velvet and silk, golden angelfish passed before our eyes like courtiers in the paintings of Veronese; spurred gilthead stole by with their swift thoracic fins; thread herring fifteen inches long were wrapped in their phosphorescent glimmers; gray mullet thrashed the sea with their big fleshy tails; red salmon seemed to mow the waves with their slicing pectorals; and silver moonfish, worthy of their name, rose on the horizon of the waters like the whitish reflections of many moons.

How many other marvelous new specimens I still could have observed if, little by little, the Nautilus hadn't settled to the lower strata! Its slanting fins drew it to depths of 2,000 and 3,500 meters. There animal life was represented by nothing more than sea lilies, starfish, delightful crinoids with bell-shaped heads like little chalices on straight stems, top-shell snails, blood-red tooth shells, and fissurella snails, a large species of coastal mollusk. By April 20 we had risen to an average level of 1,500 meters. The nearest land was the island group of the Bahamas, scattered like a batch of cobblestones over the surface of the water. There high underwater cliffs reared up, straight walls made of craggy chunks arranged like big stone foundations, among which there gaped black caves so deep our electric rays couldn't light them to the far ends.

These rocks were hung with huge weeds, immense sea tangle, gigantic fucus-- a genuine trellis of water plants fit for a world of giants.

In discussing these colossal plants, Conseil, Ned, and I were naturally led into mentioning the sea's gigantic animals. The former were obviously meant to feed the latter. However, through the windows of our almost motionless Nautilus, I could see nothing among these long filaments other than the chief articulates of the division Brachyura: long-legged spider crabs, violet crabs, and sponge crabs unique to the waters of the Caribbean.

It was about eleven o'clock when Ned Land drew my attention to a fearsome commotion out in this huge seaweed.

"Well," I said, "these are real devilfish caverns, and I wouldn't be surprised to see some of those monsters hereabouts."

"What!" Conseil put in. "Squid, ordinary squid from the class Cephalopoda?"

"No," I said, "devilfish of large dimensions. But friend Land is no doubt mistaken, because I don't see a thing."

"That's regrettable," Conseil answered. "I'd like to come face to face with one of those devilfish I've heard so much about, which can drag ships down into the depths. Those beasts go by the name of krake--"

"Fake is more like it," the Canadian replied sarcastically.

"Krakens!" Conseil shot back, finishing his word without wincing at his companion's witticism.
"Nobody will ever make me believe," Ned Land said, "that such animals exist."
"Why not?" Conseil replied. "We sincerely believed in master's narwhale."
"We were wrong, Conseil."
"No doubt, but there are others with no doubts who believe to this day!"
"Probably, Conseil. But as for me, I'm bound and determined not to accept the existence of any such monster till I've dissected it with my own two hands."
"Yet," Conseil asked me, "doesn't master believe in gigantic devilfish?"
"Yikes! Who in Hades ever believed in them?" the Canadian exclaimed.
"Many people, Ned my friend," I said.
"No fishermen. Scientists maybe!"
"Pardon me, Ned. Fishermen and scientists!"
"Why, I to whom you speak," Conseil said with the world's straightest face, "I recall perfectly seeing a large boat dragged under the waves by the arms of a cephalopod."
"You saw that?" the Canadian asked.
"Yes, Ned."
"With your own two eyes?"
"With my own two eyes."
"Where, may I ask?"
"In Saint-Malo," Conseil returned unflappably.
"In the harbor?" Ned Land said sarcastically.
"No, in a church," Conseil replied.
"In a church!" the Canadian exclaimed.
"Yes, Ned my friend. It had a picture that portrayed the devilfish in question."
"Oh good!" Ned Land exclaimed with a burst of laughter. "Mr. Conseil put one over on me!"
"Actually he's right," I said. "I've heard about that picture. But the subject it portrays is taken from a legend, and you know how to rate legends in matters of natural history! Besides, when it's an issue of monsters, the human imagination always tends to run wild. People not only claimed these devilfish could drag ships under, but a certain Olaus Magnus tells of a cephalopod a mile long that looked more like an island than an animal. There's also the story of how the Bishop of Trondheim set up an altar one day on an immense rock. After he finished saying mass, this rock started moving and went back into the sea. The rock was a devilfish."
"And that's everything we know?" the Canadian asked.
"No," I replied, "another bishop, Pontoppidan of Bergen, also tells of a devilfish so large a whole cavalry regiment could maneuver on it."
"They sure did go on, those oldtime bishops!" Ned Land said.
"Finally, the naturalists of antiquity mention some monsters with mouths as big as a gulf, which were too huge to get through the Strait of Gibraltar."
"Good work, men!" the Canadian put in.
"But in all these stories, is there any truth?" Conseil asked.
"None at all, my friends, at least in those that go beyond the bounds of credibility and fly off into fable or legend. Yet for the imaginings of these storytellers there had to be, if not a cause, at least an excuse. It can't be denied that some species of squid and other devilfish are quite large, though still smaller than cetaceans. Aristotle put the dimensions of one squid at five cubits, or 3.1 meters. Our fishermen frequently see specimens over 1.8 meters long. The museums in Trieste and Montpellier have preserved some devilfish carcasses measuring two meters. Besides, according to the calculations of naturalists, one of these animals only six feet long would have tentacles as long as twenty-seven. Which is enough to make a fearsome monster."
"Does anybody fish for 'em nowadays?" the Canadian asked.
"If they don't fish for them, sailors at least sight them. A friend of mine, Captain Paul Bos of Le Havre, has often sworn to me that he encountered one of these monsters of colossal size in the seas of the East Indies. But the most astonishing event, which proves that these gigantic animals undeniably exist, took place a few years ago in 1861."
"What event was that?" Ned Land asked.
"Just this. In 1861, to the northeast of Tenerife and fairly near the latitude where we are right now, the crew of the gunboat Alecto spotted a monstrous squid swimming in their waters. Commander Bouguer approached the animal and attacked it with blows from harpoons and blasts from rifles, but without much success because bullets and harpoons crossed its soft flesh as if it were semiliquid jelly. After several fruitless attempts, the crew managed to slip a noose around the mollusk's body. This noose slid as far as the caudal fins and came to a halt. Then they tried to haul the monster on board, but its weight was so considerable that when they tugged on the rope, the animal
parted company with its tail; and deprived of this adornment, it disappeared beneath the waters."

"Finally, an actual event," Ned Land said.

"An indisputable event, my gallant Ned. Accordingly, people have proposed naming this devilfish Bouguer's Squid."

"And how long was it?" the Canadian asked.

"Didn't it measure about six meters?" said Conseil, who was stationed at the window and examining anew the crevices in the cliff.

"Precisely," I replied.

"Wasn't its head," Conseil went on, "crowned by eight tentacles that quivered in the water like a nest of snakes?"

"Precisely."

"Weren't its eyes prominently placed and considerably enlarged?"

"Yes, Conseil."

"And wasn't its mouth a real parrot's beak but of fearsome size?"

"Correct, Conseil."

"Well, with all due respect to master," Conseil replied serenely, "if this isn't Bouguer's Squid, it's at least one of his close relatives!"

I stared at Conseil. Ned Land rushed to the window.

"What an awful animal!" he exclaimed.

I stared in my turn and couldn't keep back a movement of revulsion. Before my eyes there quivered a horrible monster worthy of a place among the most farfetched teratological legends.

It was a squid of colossal dimensions, fully eight meters long. It was traveling backward with tremendous speed in the same direction as the Nautilus. It gazed with enormous, staring eyes that were tinted sea green. Its eight arms (or more accurately, feet) were rooted in its head, which has earned these animals the name cephalopod; its arms stretched a distance twice the length of its body and were writhing like the serpentine hair of the Furies. You could plainly see its 250 suckers, arranged over the inner sides of its tentacles and shaped like semispheric capsules. Sometimes these suckers fastened onto the lounge window by creating vacuums against it. The monster's mouth—a beak made of horn and shaped like that of a parrot—opened and closed vertically. Its tongue, also of horn substance and armed with several rows of sharp teeth, would flicker out from between these genuine shears. What a freak of nature! A bird's beak on a mollusk! Its body was spindle-shaped and swollen in the middle, a fleshy mass that must have weighed 20,000 to 25,000 kilograms. Its unstable color would change with tremendous speed as the animal grew irritated, passing successively from bluish gray to reddish brown.

What was irritating this mollusk? No doubt the presence of the Nautilus, even more fearsome than itself, and which it couldn't grip with its mandibles or the suckers on its arms. And yet what monsters these devilfish are, what vitality our Creator has given them, what vigor in their movements, thanks to their owning a triple heart!

Sheer chance had placed us in the presence of this squid, and I didn't want to lose this opportunity to meticulously study such a cephalopod specimen. I overcame the horror that its appearance inspired in me, picked up a pencil, and began to sketch it.

"Perhaps this is the same as the Alecto's," Conseil said.

"Can't be," the Canadian replied, "because this one's complete while the other one lost its tail!"

"That doesn't necessarily follow," I said. "The arms and tails of these animals grow back through regeneration, and in seven years the tail on Bouguer's Squid has surely had time to sprout again."

"Anyhow," Ned shot back, "if it isn't this fellow, maybe it's one of those!"

Indeed, other devilfish had appeared at the starboard window. I counted seven of them. They provided the Nautilus with an escort, and I could hear their beaks gnashing on the sheet-iron hull. We couldn't have asked for a more devoted following.

I continued sketching. These monsters kept pace in our waters with such precision, they seemed to be standing still, and I could have traced their outlines in miniature on the window. But we were moving at a moderate speed.

All at once the Nautilus stopped. A jolt made it tremble through its entire framework.

"Did we strike bottom?" I asked.

"In any event we're already clear," the Canadian replied, "because we're afloat."

The Nautilus was certainly afloat, but it was no longer in motion. The blades of its propeller weren't churning the waves. A minute passed. Followed by his chief officer, Captain Nemo entered the lounge.

I hadn't seen him for a good while. He looked gloomy to me. Without speaking to us, without even seeing us perhaps, he went to the panel, stared at the devilfish, and said a few words to his chief officer.

The latter went out. Soon the panels closed. The ceiling lit up.

I went over to the captain.
"An unusual assortment of devilfish," I told him, as carefree as a collector in front of an aquarium.
"Correct, Mr. Naturalist," he answered me, "and we're going to fight them at close quarters."
I gaped at the captain. I thought my hearing had gone bad.
"At close quarters?" I repeated.
"Yes, sir. Our propeller is jammed. I think the horn-covered mandibles of one of these squid are entangled in the blades. That's why we aren't moving."
"And what are you going to do?"
"Rise to the surface and slaughter the vermin."
"A difficult undertaking."
"Correct. Our electric bullets are ineffective against such soft flesh, where they don't meet enough resistance to go off. But we'll attack the beasts with axes."
"And harpoons, sir," the Canadian said, "if you don't turn down my help."
"I accept it, Mr. Land."
"We'll go with you," I said. And we followed Captain Nemo, heading to the central companionway.
There some ten men were standing by for the assault, armed with boarding axes. Conseil and I picked up two more axes. Ned Land seized a harpoon.
By then the Nautilus had returned to the surface of the waves. Stationed on the top steps, one of the seamen undid the bolts of the hatch. But he had scarcely unscrewed the nuts when the hatch flew up with tremendous violence, obviously pulled open by the suckers on a devilfish's arm.
Instantly one of those long arms glided like a snake into the opening, and twenty others were quivering above. With a sweep of the ax, Captain Nemo chopped off this fearsome tentacle, which slid writhing down the steps.
Just as we were crowding each other to reach the platform, two more arms lashed the air, swooped on the seaman stationed in front of Captain Nemo, and carried the fellow away with irresistible violence.
Captain Nemo gave a shout and leaped outside. We rushed after him.
What a scene! Seized by the tentacle and glued to its suckers, the unfortunate man was swinging in the air at the mercy of this enormous appendage. He gasped, he choked, he yelled: "Help! Help!" These words, pronounced in French, left me deeply stunned! So I had a fellow countryman on board, perhaps several! I'll hear his harrowing plea the rest of my life!
The poor fellow was done for. Who could tear him from such a powerful grip? Even so, Captain Nemo rushed at the devilfish and with a sweep of the ax hewed one more of its arms. His chief officer struggled furiously with other monsters crawling up the Nautilus's sides. The crew battled with flailing axes. The Canadian, Conseil, and I sank our weapons into these fleshy masses. An intense, musky odor filled the air. It was horrible.
For an instant I thought the poor man entwined by the devilfish might be torn loose from its powerful suction. Seven arms out of eight had been chopped off. Brandishing its victim like a feather, one lone tentacle was writhing in the air. But just as Captain Nemo and his chief officer rushed at it, the animal shot off a spout of blackish liquid, secreted by a pouch located in its abdomen. It blinded us. When this cloud had dispersed, the squid was gone, and so was my poor fellow countryman!
What rage then drove us against these monsters! We lost all self-control. Ten or twelve devilfish had overrun the Nautilus's platform and sides. We piled helter-skelter into the thick of these sawed-off snakes, which darted over the platform amid waves of blood and sepia ink. It seemed as if these viscous tentacles grew back like the many heads of Hydra. At every thrust Ned Land's harpoon would plunge into a squid's sea-green eye and burst it. But my daring companion was suddenly toppled by the tentacles of a monster he could not avoid.
Oh, my heart nearly exploded with excitement and horror! The squid's fearsome beak was wide open over Ned Land. The poor man was about to be cut in half. I ran to his rescue. But Captain Nemo got there first. His ax disappeared between the two enormous mandibles, and the Canadian, miraculously saved, stood and plunged his harpoon all the way into the devilfish's triple heart.
"Tit for tat," Captain Nemo told the Canadian. "I owed it to myself!"
Ned bowed without answering him.
This struggle had lasted a quarter of an hour. Defeated, mutilated, battered to death, the monsters finally yielded to us and disappeared beneath the waves.
Red with blood, motionless by the beacon, Captain Nemo stared at the sea that had swallowed one of his companions, and large tears streamed from his eyes.
CHAPTER 19
The Gulf Stream

THIS DREADFUL SCENE on April 20 none of us will ever be able to forget. I wrote it up in a state of intense excitement. Later I reviewed my narrative. I read it to Conseil and the Canadian. They found it accurate in detail but deficient in impact. To convey such sights, it would take the pen of our most famous poet, Victor Hugo, author of The Toilers of the Sea.

As I said, Captain Nemo wept while staring at the waves. His grief was immense. This was the second companion he had lost since we had come aboard. And what a way to die! Smashed, strangled, crushed by the fearsome arms of a devilfish, ground between its iron mandibles, this friend would never rest with his companions in the placid waters of their coral cemetery!

As for me, what had harrowed my heart in the thick of this struggle was the despairing yell given by this unfortunate man. Forgetting his regulation language, this poor Frenchman had reverted to speaking his own mother tongue to fling out one supreme plea! Among the Nautilus’s crew, allied body and soul with Captain Nemo and likewise fleeing from human contact, I had found a fellow countryman! Was he the only representative of France in this mysterious alliance, obviously made up of individuals from different nationalities? This was just one more of those insoluble problems that kept welling up in my mind!

Captain Nemo reentered his stateroom, and I saw no more of him for a good while. But how sad, despairing, and irresolute he must have felt, to judge from this ship whose soul he was, which reflected his every mood! The Nautilus no longer kept to a fixed heading. It drifted back and forth, riding with the waves like a corpse. Its propeller had been disentangled but was barely put to use. It was navigating at random. It couldn't tear itself away from the setting of this last struggle, from this sea that had devoured one of its own!

Ten days went by in this way. It was only on May 1 that the Nautilus openly resumed its northbound course, after raising the Bahamas at the mouth of Old Bahama Channel. We then went with the current of the sea's greatest river, which has its own banks, fish, and temperature. I mean the Gulf Stream.

It is indeed a river that runs independently through the middle of the Atlantic, its waters never mixing with the ocean’s waters. It’s a salty river, saltier than the sea surrounding it. Its average depth is 3,000 feet, its average width sixty miles. In certain localities its current moves at a speed of four kilometers per hour. The unchanging volume of its waters is greater than that of all the world's rivers combined.

As discovered by Commander Maury, the true source of the Gulf Stream, its starting point, if you prefer, is located in the Bay of Biscay. There its waters, still weak in temperature and color, begin to form. It goes down south, skirts equatorial Africa, warms its waves in the rays of the Torrid Zone, crosses the Atlantic, reaches Cape São Roque on the coast of Brazil, and forks into two branches, one going to the Caribbean Sea for further saturation with heat particles. Then, entrusted with restoring the balance between hot and cold temperatures and with mixing tropical and northern waters, the Gulf Stream begins to play its stabilizing role. Attaining a white heat in the Gulf of Mexico, it heads north up the American coast, advances as far as Newfoundland, swerves away under the thrust of a cold current from the Davis Strait, and resumes its ocean course by going along a great circle of the earth on a rhumb line; it then divides into two arms near the 43rd parallel; one, helped by the northeast trade winds, returns to the Bay of Biscay and the Azores; the other washes the shores of Ireland and Norway with lukewarm water, goes beyond Spitzbergen, where its temperature falls to 4 degrees centigrade, and fashions the open sea at the pole.

It was on this oceanic river that the Nautilus was then navigating. Leaving Old Bahama Channel, which is fourteen leagues wide by 350 meters deep, the Gulf Stream moves at the rate of eight kilometers per hour. Its speed steadily decreases as it advances northward, and we must pray that this steadiness continues, because, as experts agree, if its speed and direction were to change, the climates of Europe would undergo disturbances whose consequences are incalculable.

Near noon I was on the platform with Conseil. I shared with him the relevant details on the Gulf Stream. When my explanation was over, I invited him to dip his hands into its current.

Conseil did so, and he was quite astonished to experience no sensation of either hot or cold.

"That comes," I told him, "from the water temperature of the Gulf Stream, which, as it leaves the Gulf of Mexico, is barely different from your blood temperature. This Gulf Stream is a huge heat generator that enables the coasts of Europe to be decked in eternal greenery. And if Commander Maury is correct, were one to harness the full warmth of this current, it would supply enough heat to keep molten a river of iron solder as big as the Amazon or the Missouri."

Just then the Gulf Stream's speed was 2.25 meters per second. So distinct is its current from the surrounding sea, its confined waters stand out against the ocean and operate on a different level from the colder waters. Murky as well, and very rich in saline material, their pure indigo contrasts with the green waves surrounding them. Moreover, their line of demarcation is so clear that abreast of the Carolinas, the Nautilus's spur cut the waves of the Gulf
Stream while its propeller was still churning those belonging to the ocean. This current swept along with it a whole host of moving creatures. Argonauts, so common in the Mediterranean, voyaged here in schools of large numbers. Among cartilaginous fish, the most remarkable were rays whose ultra slender tails made up nearly a third of the body, which was shaped like a huge diamond twenty-five feet long; then little one-meter sharks, the head large, the snout short and rounded, the teeth sharp and arranged in several rows, the body seemingly covered with scales.

Among bony fish, I noted grizzled wrasse unique to these seas, deep-water gilthead whose iris has a fiery gleam, one-meter croakers whose large mouths bristle with small teeth and which let out thin cries, black rudderrfish like those I've already discussed, blue dorados accented with gold and silver, rainbow-hued parrotfish that can rival the loveliest tropical birds in coloring, banded blennies with triangular heads, bluish flounder without scales, toadfish covered with a crosswise yellow band in the shape of a Greek t, swarms of little freckled gobies stippled with brown spots, lungfish with silver heads and yellow tails, various specimens of salmon, mullet with slim figures and a softly glowing radiance that Lacépède dedicated to the memory of his wife, and finally the American cavalla, a handsome fish decorated by every honorary order, bedizened with their every ribbon, frequenting the shores of this great nation where ribbons and orders are held in such low esteem.

I might add that during the night, the Gulf Stream's phosphorescent waters rivaled the electric glow of our beacon, especially in the stormy weather that frequently threatened us.

On May 8, while abreast of North Carolina, we were across from Cape Hatteras once more. There the Gulf Stream is seventy-five miles wide and 210 meters deep. The Nautilus continued to wander at random. Seemingly, all supervision had been jettisoned. Under these conditions I admit that we could easily have gotten away. In fact, the populous shores offered ready refuge everywhere. The sea was plowed continuously by the many steamers providing service between the Gulf of Mexico and New York or Boston, and it was crossed night and day by little schooners engaged in coastal trade over various points on the American shore. We could hope to be picked up. So it was a promising opportunity, despite the thirty miles that separated the Nautilus from these Union coasts.

But one distressing circumstance totally thwarted the Canadian's plans. The weather was thoroughly foul. We were approaching waterways where storms are commonplace, the very homeland of tornadoes and cyclones specifically engendered by the Gulf Stream's current. To face a frequently raging sea in a frail skiff was a race to certain disaster. Ned Land conceded this himself. So he champed at the bit, in the grip of an intense homesickness that could be cured only by our escape.

"Sir," he told me that day, "it's got to stop. I want to get to the bottom of this. Your Nemo's veering away from shore and heading up north. But believe you me, I had my fill at the South Pole and I'm not going with him to the North Pole."

"What can we do, Ned, since it isn't feasible to escape right now?"

"I keep coming back to my idea. We've got to talk to the captain. When we were in your own country's seas, you didn't say a word. Now that we're in mine, I intend to speak up. Before a few days are out, I figure the Nautilus will lie abreast of Nova Scotia, and from there to Newfoundland is the mouth of a large gulf, and the St. Lawrence empties into that gulf, and the St. Lawrence is my own river, the river running by Quebec, my hometown-- and when I think about all this, my gorge rises and my hair stands on end! Honestly, sir, I'd rather jump overboard! I can't stay here any longer! I'm suffocating!"

The Canadian was obviously at the end of his patience. His vigorous nature couldn't adapt to this protracted imprisonment. His facial appearance was changing by the day. His moods grew gloomier and gloomier. I had a sense of what he was suffering because I also was gripped by homesickness. Nearly seven months had gone by without our having any news from shore. Moreover, Captain Nemo's reclusiveness, his changed disposition, and especially his total silence since the battle with the devilfish all made me see things in a different light. I no longer felt the enthusiasm of our first days on board. You needed to be Flemish like Conseil to accept these circumstances, living in a habitat designed for cetaceans and other denizens of the deep. Truly, if that gallant lad had owned gills instead of lungs, I think he would have made an outstanding fish!

"Well, sir?" Ned Land went on, seeing that I hadn't replied.

"Well, Ned, you want me to ask Captain Nemo what he intends to do with us?"

"Yes, sir."

"Even though he has already made that clear?"

"Yes. I want it settled once and for all. Speak just for me, strictly on my behalf, if you want."

"But I rarely encounter him. He positively avoids me."

"All the more reason you should go look him up."

"I'll confer with him, Ned."

"When?" the Canadian asked insistently.
"When I encounter him."

"Professor Aronnax, would you like me to go find him myself?"

"No, let me do it. Tomorrow--"


"So be it. I'll see him today," I answered the Canadian, who, if he took action himself, would certainly have ruined everything.

I was left to myself. His request granted, I decided to dispose of it immediately. I like things over and done with.

I reentered my stateroom. From there I could hear movements inside Captain Nemo's quarters. I couldn't pass up this chance for an encounter. I knocked on his door. I received no reply. I knocked again, then tried the knob. The door opened.

I entered. The captain was there. He was bending over his worktable and hadn't heard me. Determined not to leave without questioning him, I drew closer. He looked up sharply, with a frowning brow, and said in a pretty stern tone:

"Oh, it's you! What do you want?"

"To speak with you, captain."

"But I'm busy, sir, I'm at work. I give you the freedom to enjoy your privacy, can't I have the same for myself?"

This reception was less than encouraging. But I was determined to give as good as I got.

"Sir," I said coolly, "I need to speak with you on a matter that simply can't wait."

"Whatever could that be, sir?" he replied sarcastically. "Have you made some discovery that has escaped me? Has the sea yielded up some novel secret to you?"

We were miles apart. But before I could reply, he showed me a manuscript open on the table and told me in a more serious tone:

"Here, Professor Aronnax, is a manuscript written in several languages. It contains a summary of my research under the sea, and God willing, it won't perish with me. Signed with my name, complete with my life story, this manuscript will be enclosed in a small, unsinkable contrivance. The last surviving man on the Nautilus will throw this contrivance into the sea, and it will go wherever the waves carry it."

The man's name! His life story written by himself! So the secret of his existence might someday be unveiled? But just then I saw this announcement only as a lead-in to my topic.

"Captain," I replied, "I'm all praise for this idea you're putting into effect. The fruits of your research must not be lost. But the methods you're using strike me as primitive. Who knows where the winds will take that contrivance, into whose hands it may fall? Can't you find something better? Can't you or one of your men--"

"Never, sir," the captain said, swiftly interrupting me.

"But my companions and I would be willing to safeguard this manuscript, and if you give us back our freedom--"

"Your freedom!" Captain Nemo put in, standing up.

"Yes, sir, and that's the subject on which I wanted to confer with you. For seven months we've been aboard your vessel, and I ask you today, in the name of my companions as well as myself, if you intend to keep us here forever."

"Professor Aronnax," Captain Nemo said, "I'll answer you today just as I did seven months ago: whoever boards the Nautilus must never leave it."

"What you're inflicting on us is outright slavery!"

"Call it anything you like."

"But every slave has the right to recover his freedom! By any worthwhile, available means!"

"Who has denied you that right?" Captain Nemo replied. "Did I ever try to bind you with your word of honor?"

The captain stared at me, crossing his arms.

"Sir," I told him, "to take up this subject a second time would be distasteful to both of us. So let's finish what we've started. I repeat: it isn't just for myself that I raise this issue. To me, research is a relief, a potent diversion, an enticement, a passion that can make me forget everything else. Like you, I'm a man neglected and unknown, living in the faint hope that someday I can pass on to future generations the fruits of my labors--figuratively speaking, by means of some contrivance left to the luck of winds and waves. In short, I can admire you and comfortably go with you while playing a role I only partly understand; but I still catch glimpses of other aspects of your life that are surrounded by involvements and secrets that, alone on board, my companions and I can't share. And even when our hearts could beat with yours, moved by some of your griefs or stirred by your deeds of courage and genius, we've had to stifle even the slightest token of that sympathy that arises at the sight of something fine and good, whether it comes from friend or enemy. All right then! It's this feeling of being alien to your deepest concerns that makes our situation unacceptable, impossible, even impossible for me but especially for Ned Land. Every man, by virtue of his very humanity, deserves fair treatment. Have you considered how a love of freedom and hatred of slavery could lead
to plans of vengeance in a temperament like the Canadian's, what he might think, attempt, endeavor . . . ?"

I fell silent. Captain Nemo stood up.

"Ned Land can think, attempt, or endeavor anything he wants, what difference is it to me? I didn't go looking for him! I don't keep him on board for my pleasure! As for you, Professor Aronnax, you're a man able to understand anything, even silence. I have nothing more to say to you. Let this first time you've come to discuss this subject also be the last, because a second time I won't even listen."

I withdrew. From that day forward our position was very strained. I reported this conversation to my two companions.

"Now we know," Ned said, "that we can't expect a thing from this man. The Nautilus is nearing Long Island. We'll escape, no matter what the weather."

But the skies became more and more threatening. There were conspicuous signs of a hurricane on the way. The atmosphere was turning white and milky. Slender sheaves of cirrus clouds were followed on the horizon by layers of nimbocumulus. Other low clouds fled swiftly. The sea grew towering, inflated by long swells. Every bird had disappeared except a few petrels, friends of the storms. The barometer fell significantly, indicating a tremendous tension in the surrounding haze. The mixture in our stormglass decomposed under the influence of the electricity charging the air. A struggle of the elements was approaching.

The storm burst during the daytime of May 13, just as the Nautilus was cruising abreast of Long Island, a few miles from the narrows to Upper New York Bay. I'm able to describe this struggle of the elements because Captain Nemo didn't flee into the ocean depths; instead, from some inexplicable whim, he decided to brave it out on the surface.

The wind was blowing from the southwest, initially a stiff breeze, in other words, with a speed of fifteen meters per second, which built to twenty-five meters near three o'clock in the afternoon. This is the figure for major storms.

Unshaken by these squalls, Captain Nemo stationed himself on the platform. He was lashed around the waist to withstand the monstrous breakers foaming over the deck. I hoisted and attached myself to the same place, dividing my wonderment between the storm and this incomparable man who faced it head-on.

The raging sea was swept with huge tattered clouds drenched by the waves. I saw no more of the small intervening billows that form in the troughs of the big crests. Just long, soot-colored undulations with crests so compact they didn't foam. They kept growing taller. They were spurring each other on. The Nautilus, sometimes lying on its side, sometimes standing on end like a mast, rolled and pitched frightfully.

Near five o'clock a torrential rain fell, but it lulled neither wind nor sea. The hurricane was unleashed at a speed of forty-five meters per second, hence almost forty leagues per hour. Under these conditions houses topple, roof tiles puncture doors, iron railings snap in two, and twenty-four-pounder cannons relocate. And yet in the midst of this turmoil, the Nautilus lived up to that saying of an expert engineer: "A well-constructed hull can defy any sea!" This submersible was no resisting rock that waves could demolish; it was a steel spindle, obediently in motion, without rigging or masting, and able to brave their fury with impunity.

Meanwhile I was carefully examining these unleashed breakers. They measured up to fifteen meters in height over a length of 150 to 175 meters, and the speed of their propagation (half that of the wind) was fifteen meters per second. Their volume and power increased with the depth of the waters. I then understood the role played by these waves, which trap air in their flanks and release it in the depths of the sea where its oxygen brings life. Their utmost pressure—it has been calculated—can build to 3,000 kilograms on every square foot of surface they strike. It was such waves in the Hebrides that repositioned a stone block weighing 84,000 pounds. It was their relatives in the tidal wave on December 23, 1854, that toppled part of the Japanese city of Tokyo, then went that same day at 700 kilometers per hour to break on the beaches of America.

After nightfall the storm grew in intensity. As in the 1860 cyclone on Réunion Island, the barometer fell to 710 millimeters. At the close of day, I saw a big ship passing on the horizon, struggling painfully. It lay to at half steam in an effort to hold steady on the waves. It must have been a steamer on one of those lines out of New York to Liverpool or Le Havre. It soon vanished into the shadows.

At ten o'clock in the evening, the skies caught on fire. The air was streaked with violent flashes of lightning. I couldn't stand this brightness, but Captain Nemo stared straight at it, as if to inhale the spirit of the storm. A dreadful noise filled the air, a complicated noise made up of the roar of crashing breakers, the howl of the wind, claps of thunder. The wind shifted to every point of the horizon, and the cyclone left the east to return there after passing through north, west, and south, moving in the opposite direction of revolving storms in the southern hemisphere.

Oh, that Gulf Stream! It truly lives up to its nickname, the Lord of Storms! All by itself it creates these fearsome cyclones through the difference in temperature between its currents and the superimposed layers of air.

The rain was followed by a downpour of fire. Droplets of water changed into exploding tufts. You would have thought Captain Nemo was courting a death worthy of himself, seeking to be struck by lightning. In one hideous
pitching movement, the Nautilus reared its steel spur into the air like a lightning rod, and I saw long sparks shoot
down it.

Shattered, at the end of my strength, I slid flat on my belly to the hatch. I opened it and went below to the
lounge. By then the storm had reached its maximum intensity. It was impossible to stand upright inside the Nautilus.

Captain Nemo reentered near midnight. I could hear the ballast tanks filling little by little, and the Nautilus sank
gently beneath the surface of the waves.

Through the lounge's open windows, I saw large, frightened fish passing like phantoms in the fiery waters. Some
were struck by lightning right before my eyes!

The Nautilus kept descending. I thought it would find calm again at fifteen meters down. No. The upper strata
were too violently agitated. It needed to sink to fifty meters, searching for a resting place in the bowels of the sea.

But once there, what tranquility we found, what silence, what peace all around us! Who would have known that
a dreadful hurricane was then unleashed on the surface of this ocean?

CHAPTER 20

In Latitude 47 degrees 24' and Longitude 17 degrees 28'  
IN THE AFTERMATH of this storm, we were thrown back to the east. Away went any hope of

escaping to the landing places of New York or the St. Lawrence. In despair, poor Ned went into seclusion like
Captain Nemo. Conseil and I no longer left each other.

As I said, the Nautilus veered to the east. To be more accurate, I should have said to the northeast. Sometimes on
the surface of the waves, sometimes beneath them, the ship wandered for days amid these mists so feared by
navigators. These are caused chiefly by melting ice, which keeps the air extremely damp. How many ships have
perished in these waterways as they tried to get directions from the hazy lights on the coast! How many casualties
have been caused by these opaque mists! How many collisions have occurred with these reefs, where the breaking
surf is covered by the noise of the wind! How many vessels have rammed each other, despite their running lights,
despite the warnings given by their bosun's pipes and alarm bells!

So the floor of this sea had the appearance of a battlefield where every ship defeated by the ocean still lay, some
already old and encrusted, others newer and reflecting our beacon light on their ironwork and copper undersides.
Among these vessels, how many went down with all hands, with their crews and hosts of immigrants, at these
trouble spots so prominent in the statistics: Cape Race, St. Paul Island, the Strait of Belle Isle, the St. Lawrence
estuary! And in only a few years, how many victims have been furnished to the obituary notices by the Royal Mail,
Inman, and Montreal lines; by vessels named the Solway, the Isis, the Paramatta, the Hungarian, the Canadian, the
Anglo-Saxon, the Humboldt, and the United States, all run aground; by the Arctic and the Lyonnais, sunk in
collisions; by the President, the Pacific, and the City of Glasgow, lost for reasons unknown; in the midst of their
gloomy rubble, the Nautilus navigated as if passing the dead in review!

By May 15 we were off the southern tip of the Grand Banks of Newfoundland. These banks are the result of
marine sedimentation, an extensive accumulation of organic waste brought either from the equator by the Gulf
Stream's current, or from the North Pole by the countercurrent of cold water that skirts the American coast. Here,
too, erratically drifting chunks collect from the ice breakup. Here a huge boneyard forms from fish, mollusks, and
zoophytes dying over it by the billions.
The sea is of no great depth at the Grand Banks. A few hundred fathoms at best. But to the south there is a deep, suddenly occurring depression, a 3,000-meter pit. Here the Gulf Stream widens. Its waters come to full bloom. It loses its speed and temperature, but it turns into a sea.

Among the fish that the Nautilus startled on its way, I'll mention a one-meter lumpfish, blackish on top with orange on the belly and rare among its brethren in that it practices monogamy, a good-sized eelpout, a type of emerald moray whose flavor is excellent, wolfish with big eyes in a head somewhat resembling a canine's, viviparous blennies whose eggs hatch inside their bodies like those of snakes, bloated gobio (or black gudgeon) measuring two decimeters, grenadiers with long tails and gleaming with a silvery glow, speedy fish venturing far from their High Arctic seas.

Our nets also hauled in a bold, daring, vigorous, and muscular fish armed with prickles on its head and stings on its fins, a real scorpion measuring two to three meters, the ruthless enemy of cod, blennies, and salmon; it was the bullhead of the northerly seas, a fish with red fins and a brown body covered with nodules. The Nautilus's fishermen had some trouble getting a grip on this animal, which, thanks to the formation of its gill covers, can protect its respiratory organs from any parching contact with the air and can live out of water for a good while.

And I'll mention—for the record—some little banded blennies that follow ships into the northernmost seas, sharp-nosed carp exclusive to the north Atlantic, scorpionfish, and lastly the gadoid family, chiefly the cod species, which I detected in their waters of choice over these inexhaustible Grand Banks.

Because Newfoundland is simply an underwater peak, you could call these cod mountain fish. While the Nautilus was clearing a path through their tight ranks, Conseil couldn't refrain from making this comment: "Mercy, look at these cod!" he said. "Why, I thought cod were flat, like dab or sole!"

"Innocent boy!" I exclaimed. "Cod are flat only at the grocery store, where they're cut open and spread out on display. But in the water they're like mullet, spindle-shaped and perfectly built for speed."

"I can easily believe master," Conseil replied. "But what crowds of them! What swarms!"

"Bah! My friend, there'd be many more without their enemies, scorpionfish and human beings! Do you know how many eggs have been counted in a single female?"

"I'll go all out," Conseil replied. "500,000."

"11,000,000, my friend."

"11,000,000! I refuse to accept that until I count them myself."

"So count them, Conseil. But it would be less work to believe me. Besides, Frenchmen, Englishmen, Americans, Danes, and Norwegians catch these cod by the thousands. They're eaten in prodigious quantities, and without the astonishing fertility of these fish, the seas would soon be depopulated of them. Accordingly, in England and America alone, 5,000 ships manned by 75,000 seamen go after cod. Each ship brings back an average catch of 4,400 fish, making 22,000,000. Off the coast of Norway, the total is the same."

"Fine," Conseil replied, "I'll take master's word for it. I won't count them."

"Count what?"

"Those 11,000,000 eggs. But I'll make one comment."

"What's that?"

"If all their eggs hatched, just four codfish could feed England, America, and Norway."

As we skimmed the depths of the Grand Banks, I could see perfectly those long fishing lines, each armed with 200 hooks, that every boat dangled by the dozens. The lower end of each line dragged the bottom by means of a small grappling iron, and at the surface it was secured to the buoy-ropes of a cork float. The Nautilus had to maneuver shrewdly in the midst of this underwater spiderweb.

But the ship didn't stay long in these heavily traveled waterways. It went up to about latitude 42 degrees. This brought it abreast of St. John's in Newfoundland and Heart's Content, where the Atlantic Cable reaches its end point. Instead of continuing north, the Nautilus took an easterly heading, as if to go along this plateau on which the telegraph cable rests, where multiple soundings have given the contours of the terrain with the utmost accuracy.

It was on May 17, about 500 miles from Heart's Content and 2,800 meters down, that I spotted this cable lying on the seafloor. Conseil, whom I hadn't alerted, mistook it at first for a gigantic sea snake and was gearing up to classify it in his best manner. But I enlightened the fine lad and let him down gently by giving him various details on the laying of this cable.

The first cable was put down during the years 1857-1858; but after transmitting about 400 telegrams, it went dead. In 1863 engineers built a new cable that measured 3,400 kilometers, weighed 4,500 metric tons, and was shipped aboard the Great Eastern. This attempt also failed.

Now then, on May 25 while submerged to a depth of 3,836 meters, the Nautilus lay in precisely the locality where this second cable suffered the rupture that ruined the undertaking. It happened 638 miles from the coast of Ireland. At around two o'clock in the afternoon, all contact with Europe broke off. The electricians on board decided
to cut the cable before fishing it up, and by eleven o'clock that evening they had retrieved the damaged part. They repaired the joint and its splice; then the cable was resubmerged. But a few days later it snapped again and couldn't be recovered from the ocean depths.

These Americans refused to give up. The daring Cyrus Field, who had risked his whole fortune to promote this undertaking, called for a new bond issue. It sold out immediately. Another cable was put down under better conditions. Its sheaves of conducting wire were insulated within a gutta-percha covering, which was protected by a padding of textile material enclosed in a metal sheath. The Great Eastern put back to sea on July 13, 1866.

The operation proceeded apace. Yet there was one hitch. As they gradually unrolled this third cable, the electricians observed on several occasions that someone had recently driven nails into it, trying to damage its core. Captain Anderson, his officers, and the engineers put their heads together, then posted a warning that if the culprit were detected, he would be thrown overboard without a trial. After that, these villainous attempts were not repeated.

By July 23 the Great Eastern was lying no farther than 800 kilometers from Newfoundland when it received telegraphed news from Ireland of an armistice signed between Prussia and Austria after the Battle of Sadowa. Through the mists on the 27th, it sighted the port of Heart's Content. The undertaking had ended happily, and in its first dispatch, young America addressed old Europe with these wise words so rarely understood: "Glory to God in the highest, and peace on earth to men of good will."

I didn't expect to find this electric cable in mint condition, as it looked on leaving its place of manufacture. The long snake was covered with seashell rubble and bristling with foraminifera; a crust of caked gravel protected it from any mollusks that might bore into it. It rested serenely, sheltered from the sea's motions, under a pressure favorable to the transmission of that electric spark that goes from America to Europe in 32/100 of a second. This cable will no doubt last indefinitely because, as observers note, its gutta-percha casing is improved by a stay in salt water.

Besides, on this well-chosen plateau, the cable never lies at depths that could cause a break. The Nautilus followed it to its lowest reaches, located 4,431 meters down, and even there it rested without any stress or strain. Then we returned to the locality where the 1863 accident had taken place.

There the ocean floor formed a valley 120 kilometers wide, into which you could fit Mt. Blanc without its summit poking above the surface of the waves. This valley is closed off to the east by a sheer wall 2,000 meters high. We arrived there on May 28, and the Nautilus lay no farther than 150 kilometers from Ireland.

Would Captain Nemo head up north and beach us on the British Isles? No. Much to my surprise, he went back down south and returned to European seas. As we swung around the Emerald Isle, I spotted Cape Clear for an instant, plus the lighthouse on Fastnet Rock that guides all those thousands of ships setting out from Glasgow or Liverpool.

An important question then popped into my head. Would the Nautilus dare to tackle the English Channel? Ned Land (who promptly reappeared after we hugged shore) never stopped questioning me. What could I answer him? Captain Nemo remained invisible. After giving the Canadian a glimpse of American shores, was he about to show me the coast of France?

But the Nautilus kept gravitating southward. On May 30, in sight of Land's End, it passed between the lowermost tip of England and the Scilly Islands, which it left behind to starboard.

If it was going to enter the English Channel, it clearly needed to head east. It did not.

All day long on May 31, the Nautilus swept around the sea in a series of circles that had me deeply puzzled. It seemed to be searching for a locality that it had some trouble finding. At noon Captain Nemo himself came to take our bearings. He didn't address a word to me. He looked gloomier than ever. What was filling him with such sadness? Was it our proximity to these European shores? Was he reliving his memories of that country he had left behind? If so, what did he feel? Remorse or regret? For a good while these thoughts occupied my mind, and I had a hunch that fate would soon give away the captain's secrets.

The next day, June 1, the Nautilus kept to the same tack. It was obviously trying to locate some precise spot in the ocean. Just as on the day before, Captain Nemo came to take the altitude of the sun. The sea was smooth, the skies clear. Eight miles to the east, a big steamship was visible on the horizon line. No flag was flapping from the gaff of its fore-and-aft sail, and I couldn't tell its nationality.

A few minutes before the sun passed its zenith, Captain Nemo raised his sextant and took his sights with the utmost precision. The absolute calm of the waves facilitated this operation. The Nautilus lay motionless, neither rolling nor pitching.

I was on the platform just then. After determining our position, the captain pronounced only these words: "It's right here!"

He went down the hatch. Had he seen that vessel change course and seemingly head toward us? I'm unable to say.
I returned to the lounge. The hatch closed, and I heard water hissing in the ballast tanks. The Nautilus began to sink on a vertical line, because its propeller was in check and no longer furnished any forward motion.

Some minutes later it stopped at a depth of 833 meters and came to rest on the seafloor.

The ceiling lights in the lounge then went out, the panels opened, and through the windows I saw, for a half-mile radius, the sea brightly lit by the beacon's rays.

I looked to port and saw nothing but the immenseness of these tranquil waters.

To starboard, a prominent bulge on the sea bottom caught my attention. You would have thought it was some ruin enshrouded in a crust of whitened seashells, as if under a mantle of snow. Carefully examining this mass, I could identify the swollen outlines of a ship shorn of its masts, which must have sunk bow first. This casualty certainly dated from some far-off time. To be so caked with the limestone of these waters, this wreckage must have spent many a year on the ocean floor.

What ship was this? Why had the Nautilus come to visit its grave? Was it something other than a maritime accident that had dragged this craft under the waters?

I wasn't sure what to think, but next to me I heard Captain Nemo's voice slowly say:

"Originally this ship was christened the Marseillais. It carried seventy-four cannons and was launched in 1762. On August 13, 1778, commanded by La Poyje-Vertrieux, it fought valiantly against the Preston. On July 4, 1779, as a member of the squadron under Admiral d'Estaing, it assisted in the capture of the island of Grenada. On September 5, 1781, under the Count de Grasse, it took part in the Battle of Chesapeake Bay. In 1794 the new Republic of France changed the name of this ship. On April 16 of that same year, it joined the squadron at Brest under Rear Admiral Villaret de Joyeuse, who was entrusted with escorting a convoy of wheat coming from America under the command of Admiral Van Stabel. In this second year of the French Revolutionary Calendar, on the 11th and 12th days in the Month of Pasture, this squadron fought an encounter with English vessels. Sir, today is June 1, 1868, or the 13th day in the Month of Pasture. Seventy-four years ago to the day, at this very spot in latitude 47 degrees 24' and longitude 17 degrees 28', this ship sank after a heroic battle; its three masts gone, water in its hold, a third of its crew out of action, it preferred to go to the bottom with its 356 seamen rather than surrender; and with its flag nailed up on the afterdeck, it disappeared beneath the waves to shouts of 'Long live the Republic!'"

"This is the Avenger!" I exclaimed.

"Yes, sir! The Avenger! A splendid name!" Captain Nemo murmured, crossing his arms.

CHAPTER 21
A Mass Execution

THE WAY HE SAID THIS, the unexpectedness of this scene, first the biography of this patriotic ship, then the excitement with which this eccentric individual pronounced these last words--the name Avenger whose significance could not escape me--all this, taken together, had a profound impact on my mind. My eyes never left the captain. Hands outstretched toward the sea, he contemplated the proud wreck with blazing eyes. Perhaps I would never learn who he was, where he came from or where he was heading, but more and more I could see a distinction between the man and the scientist. It was no ordinary misanthropy that kept Captain Nemo and his companions sequestered inside the Nautilus's plating, but a hate so monstrous or so sublime that the passing years could never weaken it.

Did this hate also hunger for vengeance? Time would soon tell.

Meanwhile the Nautilus rose slowly to the surface of the sea, and I watched the Avenger's murky shape disappearing little by little. Soon a gentle rolling told me that we were afloat in the open air.

Just then a hollow explosion was audible. I looked at the captain. The captain did not stir.

"Captain?" I said.

He didn't reply.

I left him and climbed onto the platform. Conseil and the Canadian were already there.

"What caused that explosion?" I asked.


I stared in the direction of the ship I had spotted. It was heading toward the Nautilus, and you could tell it had put on steam. Six miles separated it from us.

"What sort of craft is it, Ned?"

"From its rigging and its low masts," the Canadian replied, "I bet it's a warship. Here's hoping it pulls up and
sinks this damned Nautilus!"

"Ned my friend," Conseil replied, "what harm could it do the Nautilus? Will it attack us under the waves? Will it
cannonade us at the bottom of the sea?"

"Tell me, Ned," I asked, "can you make out the nationality of that craft?"

Creasing his brow, lowering his lids, and puckering the corners of his eyes, the Canadian focused the full power
of his gaze on the ship for a short while.

"No, sir," he replied. "I can't make out what nation it's from. It's flying no flag. But I'll swear it's a warship,
because there's a long pennant streaming from the peak of its mainmast."

For a quarter of an hour, we continued to watch the craft bearing down on us. But it was inconceivable to me
that it had discovered the Nautilus at such a distance, still less that it knew what this underwater machine really was.

Soon the Canadian announced that the craft was a big battleship, a double-decker ironclad complete with ram.
Dark, dense smoke burst from its two funnels. Its furled sails merged with the lines of its yardarms. The gaff of its
fore-and-aft sail flew no flag. Its distance still kept us from distinguishing the colors of its pennant, which was
fluttering like a thin ribbon.

It was coming on fast. If Captain Nemo let it approach, a chance for salvation might be available to us.

"Sir," Ned Land told me, "if that boat gets within a mile of us, I'm jumping overboard, and I suggest you follow
suit."

I didn't reply to the Canadian's proposition but kept watching the ship, which was looming larger on the horizon.
Whether it was English, French, American, or Russian, it would surely welcome us aboard if we could just get to it.

"Master may recall," Conseil then said, "that we have some experience with swimming. He can rely on me to
tow him to that vessel, if he's agreeable to going with our friend Ned."

Before I could reply, white smoke streamed from the battleship's bow. Then, a few seconds later, the waters
splashed astern of the Nautilus, disturbed by the fall of a heavy object. Soon after, an explosion struck my ears.

"What's this? They're firing at us!" I exclaimed.

"Good lads!" the Canadian muttered.

"That means they don't see us as castaways clinging to some wreckage!"

"With all due respect to master--gracious!" Conseil put in, shaking off the water that had sprayed over him from
another shell.

"But it must be clear to them," I exclaimed, "that they're dealing with human beings."

"Maybe that's why!" Ned Land replied, staring hard at me.

The full truth dawned on me. Undoubtedly people now knew where they stood on the existence of this so-called
monster. Undoubtedly the latter's encounter with the Abraham Lincoln, when the Canadian hit it with his harpoon,
had led Commander Farragut to recognize the narwhale as actually an underwater boat, more dangerous than any
unearthly cetacean!

Yes, this had to be the case, and undoubtedly they were now chasing this dreadful engine of destruction on every
sea!

Dreadful indeed, if, as we could assume, Captain Nemo had been using the Nautilus in works of vengeance!
That night in the middle of the Indian Ocean, when he imprisoned us in the cell, hadn't he attacked some ship? That
man now buried in the coral cemetery, wasn't he the victim of some collision caused by the Nautilus? Yes, I repeat:
this had to be the case. One part of Captain Nemo's secret life had been unveiled. And now, even though his identity
was still unknown, at least the nations allied against him knew they were no longer hunting some fairy-tale monster,
but a man who had sworn an implacable hate toward them!

This whole fearsome sequence of events appeared in my mind's eye. Instead of encountering friends on this
approaching ship, we would find only pitiless enemies.

Meanwhile shells fell around us in increasing numbers. Some, meeting the liquid surface, would ricochet and
vanish into the sea at considerable distances. But none of them reached the Nautilus.

By then the ironclad was no more than three miles off. Despite its violent cannonade, Captain Nemo hadn't
appeared on the platform. And yet if one of those conical shells had scored a routine hit on the Nautilus's hull, it
could have been fatal to him.

The Canadian then told me:

"Sir, we've got to do everything we can to get out of this jam! Let's signal them! Damnation! Maybe they'll
realize we're decent people!"

Ned Land pulled out his handkerchief to wave it in the air. But he had barely unfolded it when he was felled by
an iron fist, and despite his great strength, he tumbled to the deck.

"Scum!" the captain shouted. "Do you want to be nailed to the Nautilus's spur before it charges that ship?"

Dreadful to hear, Captain Nemo was even more dreadful to see. His face was pale from some spasm of his heart,
which must have stopped beating for an instant. His pupils were hideously contracted. His voice was no longer speaking, it was bellowing. Bending from the waist, he shook the Canadian by the shoulders.

Then, dropping Ned and turning to the battleship, whose shells were showering around him:

"O ship of an accursed nation, you know who I am!" he shouted in his powerful voice. "And I don't need your colors to recognize you! Look! I'll show you mine!"

And in the bow of the platform, Captain Nemo unfurled a black flag, like the one he had left planted at the South Pole.

Just then a shell hit the Nautilus's hull obliquely, failed to breach it, ricocheted near the captain, and vanished into the sea.

Captain Nemo shrugged his shoulders. Then, addressing me:

"Go below!" he told me in a curt tone. "You and your companions, go below!"

"Sir," I exclaimed, "are you going to attack this ship?"

"Sir, I'm going to sink it."

"You wouldn't!"

"I will," Captain Nemo replied icily. "You're ill-advised to pass judgment on me, sir. Fate has shown you what you weren't meant to see. The attack has come. Our reply will be dreadful. Get back inside!"

"From what country is that ship?"

"You don't know? Fine, so much the better! At least its nationality will remain a secret to you. Go below!"

The Canadian, Conseil, and I could only obey. Some fifteen of the Nautilus's seamen surrounded their captain and stared with a feeling of implacable hate at the ship bearing down on them. You could feel the same spirit of vengeance enkindling their every soul.

I went below just as another projectile scraped the Nautilus's hull, and I heard the captain exclaim:

"Shoot, you demented vessel! Shower your futile shells! You won't escape the Nautilus's spur! But this isn't the place where you'll perish! I don't want your wreckage mingling with that of the Avenger!"

I repaired to my stateroom. The captain and his chief officer stayed on the platform. The propeller was set in motion. The Nautilus swiftly retreated, putting us outside the range of the vessel's shells. But the chase continued, and Captain Nemo was content to keep his distance.

Near four o'clock in the afternoon, unable to control the impatience and uneasiness devouring me, I went back to the central companionway. The hatch was open. I ventured onto the platform. The captain was still strolling there, his steps agitated. He stared at the ship, which stayed to his leeward five or six miles off. He was circling it like a wild beast, drawing it eastward, letting it chase after him. Yet he didn't attack. Was he, perhaps, still undecided?

I tried to intervene one last time. But I had barely queried Captain Nemo when the latter silenced me:

"I'm the law, I'm the tribunal! I'm the oppressed, and there are my oppressors! Thanks to them, I've witnessed the destruction of everything I loved, cherished, and venerated--homeland, wife, children, father, and mother! There lies everything I hate! Not another word out of you!"

I took a last look at the battleship, which was putting on steam. Then I rejoined Ned and Conseil.

"We'll escape!" I exclaimed.

"Good," Ned put in. "Where's that ship from?"

"I've no idea. But wherever it's from, it will sink before nightfall. In any event, it's better to perish with it than be accomplices in some act of revenge whose merits we can't gauge."


Night fell. A profound silence reigned on board. The compass indicated that the Nautilus hadn't changed direction. I could hear the beat of its propeller, churning the waves with steady speed. Staying on the surface of the water, it rolled gently, sometimes to one side, sometimes to the other.

My companions and I had decided to escape as soon as the vessel came close enough for us to be heard--or seen, because the moon would wax full in three days and was shining brightly. Once we were aboard that ship, if we couldn't ward off the blow that threatened it, at least we could do everything that circumstances permitted. Several times I thought the Nautilus was about to attack. But it was content to let its adversary approach, and then it would quickly resume its retreating ways.

Part of the night passed without incident. We kept watch for an opportunity to take action. We talked little, being too keyed up. Ned Land was all for jumping overboard. I forced him to wait. As I saw it, the Nautilus would attack the double-decker on the surface of the waves, and then it would be not only possible but easy to escape.

At three o'clock in the morning, full of uneasiness, I climbed onto the platform. Captain Nemo hadn't left it. He stood in the bow next to his flag, which a mild breeze was unfurling above his head. His eyes never left that vessel. The extraordinary intensity of his gaze seemed to attract it, beguile it, and draw it more surely than if he had it in tow!
The moon then passed its zenith. Jupiter was rising in the east. In the midst of this placid natural setting, sky and ocean competed with each other in tranquility, and the sea offered the orb of night the loveliest mirror ever to reflect its image.

And when I compared this deep calm of the elements with all the fury seething inside the plating of this barely perceptible Nautilus, I shivered all over.

The vessel was two miles off. It drew nearer, always moving toward the phosphorescent glow that signaled the Nautilus’s presence. I saw its green and red running lights, plus the white lantern hanging from the large stay of its foremast. Hazy flickerings were reflected on its rigging and indicated that its furnaces were pushed to the limit. Showers of sparks and cinders of flaming coal escaped from its funnels, spangling the air with stars.

I stood there until six o’clock in the morning, Captain Nemo never seeming to notice me. The vessel lay a mile and a half off, and with the first glimmers of daylight, it resumed its cannonade. The time couldn't be far away when the Nautilus would attack its adversary, and my companions and I would leave forever this man I dared not judge.

I was about to go below to alert them, when the chief officer climbed onto the platform. Several seamen were with him. Captain Nemo didn't see them, or didn't want to see them. They carried out certain procedures that, on the Nautilus, you could call “clearing the decks for action.” They were quite simple. The manropes that formed a handrail around the platform were lowered. Likewise the pilothouse and the beacon housing were withdrawn into the hull until they lay exactly flush with it. The surface of this long sheet-iron cigar no longer offered a single protrusion that could hamper its maneuvers.

I returned to the lounge. The Nautilus still emerged above the surface. A few morning gleams infiltrated the liquid strata. Beneath the undulations of the billows, the windows were enlivened by the blushing of the rising sun.

That dreadful day of June 2 had dawned.

At seven o'clock the log told me that the Nautilus had reduced speed. I realized that it was letting the warship approach. Moreover, the explosions grew more intensely audible. Shells furrowed the water around us, drilling through it with an odd hissing sound.

"My friends," I said, "it's time. Let's shake hands, and may God be with us!"

Ned Land was determined, Conseil calm, I myself nervous and barely in control.

We went into the library. Just as I pushed open the door leading to the well of the central companionway, I heard the hatch close sharply overhead.

The Canadian leaped up the steps, but I stopped him. A well-known hissing told me that water was entering the ship's ballast tanks. Indeed, in a few moments the Nautilus had submerged some meters below the surface of the waves.

I understood this maneuver. It was too late to take action. The Nautilus wasn't going to strike the double-decker where it was clad in impenetrable iron armor, but below its waterline, where the metal carapace no longer protected its planking.

We were prisoners once more, unwilling spectators at the performance of this gruesome drama. But we barely had time to think. Taking refuge in my stateroom, we stared at each other without pronouncing a word. My mind was in a total daze. My mental processes came to a dead stop. I hovered in that painful state that predominates during the period of anticipation before some frightful explosion. I waited, I listened, I lived only through my sense of hearing!

Meanwhile the Nautilus's speed had increased appreciably. So it was gathering momentum. Its entire hull was vibrating.

Suddenly I let out a yell. There had been a collision, but it was comparatively mild. I could feel the penetrating force of the steel spur. I could hear scratchings and scrapings. Carried away with its driving power, the Nautilus had passed through the vessel's mass like a sailmaker's needle through canvas!

I couldn't hold still. Frantic, going insane, I leaped out of my stateroom and rushed into the lounge.

Captain Nemo was there. Mute, gloomy, implacable, he was staring through the port panel.

An enormous mass was sinking beneath the waters, and the Nautilus, missing none of its death throes, was descending into the depths with it. Ten meters away, I could see its gaping hull, into which water was rushing with a sound of thunder, then its double rows of cannons and railings. Its deck was covered with dark, quivering shadows.

The water was rising. Those poor men leaped up into the shrouds, clung to the masts, writhed beneath the waters. It was a human anthill that an invading sea had caught by surprise!

Paralyzed, rigid with anguish, my hair standing on end, my eyes popping out of my head, short of breath, suffocating, speechless, I stared-- I too! I was glued to the window by an irresistible allure!

The enormous vessel settled slowly. Following it down, the Nautilus kept watch on its every movement. Suddenly there was an eruption. The air compressed inside the craft sent its decks flying, as if the powder stores had been ignited. The thrust of the waters was so great, the Nautilus swerved away.
The poor ship then sank more swiftly. Its mastheads appeared, laden with victims, then its crosstrees bending under clusters of men, finally the peak of its mainmast. Then the dark mass disappeared, and with it a crew of corpses dragged under by fearsome eddies.

I turned to Captain Nemo. This dreadful executioner, this true archangel of hate, was still staring. When it was all over, Captain Nemo headed to the door of his stateroom, opened it, and entered. I followed him with my eyes.

On the rear paneling, beneath the portraits of his heroes, I saw the portrait of a still-youthful woman with two little children. Captain Nemo stared at them for a few moments, stretched out his arms to them, sank to his knees, and melted into sobs.

CHAPTER 22
The Last Words of Captain Nemo

THE PANELS CLOSED over this frightful view, but the lights didn't go on in the lounge. Inside the Nautilus all was gloom and silence. It left this place of devastation with prodigious speed, 100 feet beneath the waters. Where was it going? North or south? Where would the man flee after this horrible act of revenge?

I reentered my stateroom, where Ned and Conseil were waiting silently. Captain Nemo filled me with insurmountable horror. Whatever he had once suffered at the hands of humanity, he had no right to mete out such punishment. He had made me, if not an accomplice, at least an eyewitness to his vengeance! Even this was intolerable.

At eleven o'clock the electric lights came back on. I went into the lounge. It was deserted. I consulted the various instruments. The Nautilus was fleeing northward at a speed of twenty-five miles per hour, sometimes on the surface of the sea, sometimes thirty feet beneath it.

After our position had been marked on the chart, I saw that we were passing into the mouth of the English Channel, that our heading would take us to the northernmost seas with incomparable speed.

I could barely glimpse the swift passing of longnose sharks, hammerhead sharks, spotted dogfish that frequent these waters, big eagle rays, swarms of seahorse looking like knights on a chessboard, eels quivering like fireworks serpents, armies of crab that fled obliquely by crossing their pincers over their carapaces, finally schools of porpoise that held contests of speed with the Nautilus. But by this point observing, studying, and classifying were out of the question.

By evening we had cleared 200 leagues up the Atlantic. Shadows gathered and gloom overran the sea until the moon came up.

I repaired to my stateroom. I couldn't sleep. I was assaulted by nightmares. That horrible scene of destruction kept repeating in my mind's eye.

From that day forward, who knows where the Nautilus took us in the north Atlantic basin? Always at incalculable speed! Always amid the High Arctic mists! Did it call at the capes of Spitzbergen or the shores of Novaya Zemlya? Did it visit such uncharted seas as the White Sea, the Kara Sea, the Gulf of Oh, the Lyakhov Islands, or those unknown beaches on the Siberian coast? I'm unable to say. I lost track of the passing hours. Time was in abeyance on the ship's clocks. As happens in the polar regions, it seemed that night and day no longer followed their normal sequence. I felt myself being drawn into that strange domain where the overwrought imagination of Edgar Allan Poe was at home. Like his fabled Arthur Gordon Pym, I expected any moment to see that "shrouded human figure, very far larger in its proportions than any dweller among men," thrown across the catacatac that protects the outskirts of the pole!

I estimate--but perhaps I'm mistaken--that the Nautilus's haphazard course continued for fifteen or twenty days, and I'm not sure how long this would have gone on without the catastrophe that ended our voyage. As for Captain Nemo, he was no longer in the picture. As for his chief officer, the same applied. Not one crewman was visible for a single instant. The Nautilus cruised beneath the waters almost continuously. When it rose briefly to the surface to renew our air, the hatches opened and closed as if automated. No more positions were reported on the world map. I didn't know where we were.

I'll also mention that the Canadian, at the end of his strength and patience, made no further appearances. Conseil couldn't coax a single word out of him and feared that, in a fit of delirium while under the sway of a ghastly
homesickness, Ned would kill himself. So he kept a devoted watch on his friend every instant.

You can appreciate that under these conditions, our situation had become untenable.

One morning—whose date I'm unable to specify—I was slumbering near the first hours of daylight, a painful, sickly slumber. Waking up, I saw Ned Land leaning over me, and I heard him tell me in a low voice:

"We're going to escape!"

I sat up.

"When?" I asked.

"Tonight. There doesn't seem to be any supervision left on the Nautilus. You'd think a total daze was reigning on board. Will you be ready, sir?"

"Yes. Where are we?"

"In sight of land. I saw it through the mists just this morning, twenty miles to the east."

"What land is it?"

"I've no idea, but whatever it is, there we'll take refuge."

"Yes, Ned! We'll escape tonight even if the sea swallows us up!"

"The sea's rough, the wind's blowing hard, but a twenty-mile run in the Nautilus's nimble longboat doesn't scare me. Unknown to the crew, I've stowed some food and flasks of water inside."

"I'm with you."

"What's more," the Canadian added, "if they catch me, I'll defend myself, I'll fight to the death."

"Then we'll die together, Ned my friend."

My mind was made up. The Canadian left me. I went out on the platform, where I could barely stand upright against the jolts of the billows. The skies were threatening, but land lay inside those dense mists, and we had to escape. Not a single day, or even a single hour, could we afford to lose.

I returned to the lounge, dreading yet desiring an encounter with Captain Nemo, wanting yet not wanting to see him. What would I say to him? How could I hide the involuntary horror he inspired in me? No! It was best not to meet him face to face! Best to try and forget him! And yet . . . !

How long that day seemed, the last I would spend aboard the Nautilus! I was left to myself. Ned Land and Conseil avoided speaking to me, afraid they would give themselves away.

At six o'clock I ate supper, but I had no appetite. Despite my revulsion, I forced it down, wanting to keep my strength up.

At 6:30 Ned Land entered my stateroom. He told me:

"We won't see each other again before we go. At ten o'clock the moon won't be up yet. We'll take advantage of the darkness. Come to the skiff. Conseil and I will be inside waiting for you."

The Canadian left without giving me time to answer him.

I wanted to verify the Nautilus's heading. I made my way to the lounge. We were racing north-northeast with frightful speed, fifty meters down.

I took one last look at the natural wonders and artistic treasures amassed in the museum, this unrivaled collection doomed to perish someday in the depths of the seas, together with its curator. I wanted to establish one supreme impression in my mind. I stayed there an hour, basking in the aura of the ceiling lights, passing in review the treasures shining in their glass cases. Then I returned to my stateroom.

There I dressed in sturdy seafaring clothes. I gathered my notes and packed them tenderly about my person. My heart was pounding mightily. I couldn't curb its pulsations. My anxiety and agitation would certainly have given me away if Captain Nemo had seen me.

What was he doing just then? I listened at the door to his stateroom. I heard the sound of footsteps. Captain Nemo was inside. He hadn't gone to bed. With his every movement I imagined he would appear and ask me why I wanted to escape! I felt in a perpetual state of alarm. My imagination magnified this sensation. The feeling became so acute, I wondered whether it wouldn't be better to enter the captain's stateroom, dare him face to face, brave it out with word and deed!

It was an insane idea. Fortunately I controlled myself and stretched out on the bed to soothe my bodily agitation. My nerves calmed a little, but with my brain so aroused, I did a swift review of my whole existence aboard the Nautilus, every pleasant or unpleasant incident that had crossed my path since I went overboard from the Abraham Lincoln: the underwater hunting trip, the Torres Strait, our running aground, the savages of Papua, the coral cemetery, the Suez passageway, the island of Santorini, the Cretan diver, the Bay of Vigo, Atlantis, the Ice Bank, the South Pole, our imprisonment in the ice, the battle with the devilfish, the storm in the Gulf Stream, the Avenger, and that horrible scene of the vessel sinking with its crew . . . ! All these events passed before my eyes like backdrops unrolling upstage in a theater. In this strange setting Captain Nemo then grew fantastically. His features were accentuated, taking on superhuman proportions. He was no longer my equal, he was the Man of the Waters, the
Spirit of the Seas.

By then it was 9:30. I held my head in both hands to keep it from bursting. I closed my eyes. I no longer wanted to think. A half hour still to wait! A half hour of nightmares that could drive me insane!

Just then I heard indistinct chords from the organ, melancholy harmonies from some undefinable hymn, actual pleadings from a soul trying to sever its earthly ties. I listened with all my senses at once, barely breathing, immersed like Captain Nemo in this musical trance that was drawing him beyond the bounds of this world.

Then a sudden thought terrified me. Captain Nemo had left his stateroom. He was in the same lounge I had to cross in order to escape. There I would encounter him one last time. He would see me, perhaps speak to me! One gesture from him could obliterate me, a single word shackle me to his vessel!

Even so, ten o'clock was about to strike. It was time to leave my stateroom and rejoin my companions.

I dared not hesitate, even if Captain Nemo stood before me. I opened the door cautiously, but as it swung on its hinges, it seemed to make a frightful noise. This noise existed, perhaps, only in my imagination!

I crept forward through the Nautilus's dark gangways, pausing after each step to curb the pounding of my heart.

I arrived at the corner door of the lounge. I opened it gently. The lounge was plunged in profound darkness. Chords from the organ were reverberating faintly. Captain Nemo was there. He didn't see me. Even in broad daylight I doubt that he would have noticed me, so completely was he immersed in his trance.

I inched over the carpet, avoiding the tiniest bump whose noise might give me away. It took me five minutes to reach the door at the far end, which led into the library.

I was about to open it when a gasp from Captain Nemo nailed me to the spot. I realized that he was standing up. I even got a glimpse of him because some rays of light from the library had filtered into the lounge. He was coming toward me, arms crossed, silent, not walking but gliding like a ghost. His chest was heaving, swelling with sobs.

And I heard him murmur these words, the last of his to reach my ears:

"O almighty God! Enough! Enough!"

Was it a vow of repentance that had just escaped from this man's conscience . . . ?

Frantic, I rushed into the library. I climbed the central companionway, and going along the upper gangway, I arrived at the skiff. I went through the opening that had already given access to my two companions.

"Let's go, let's go!" I exclaimed.

"Right away!" the Canadian replied.

First, Ned Land closed and bolted the opening cut into the Nautilus's sheet iron, using the monkey wrench he had with him. After likewise closing the opening in the skiff, the Canadian began to unscrew the nuts still bolting us to the underwater boat.

Suddenly a noise from the ship's interior became audible. Voices were answering each other hurriedly. What was it? Had they spotted our escape? I felt Ned Land sliding a dagger into my hand.

"Yes," I muttered, "we know how to die!"

The Canadian paused in his work. But one word twenty times repeated, one dreadful word, told me the reason for the agitation spreading aboard the Nautilus. We weren't the cause of the crew's concern.

"Maelstrom! Maelstrom!" they were shouting.

The Maelstrom! Could a more frightening name have rung in our ears under more frightening circumstances? Were we lying in the dangerous waterways off the Norwegian coast? Was the Nautilus being dragged into this whirlpool just as the skiff was about to detach from its plating?

As you know, at the turn of the tide, the waters confined between the Faroe and Lofoten Islands rush out with irresistible violence. They form a vortex from which no ship has ever been able to escape. Monstrous waves race together from every point of the horizon. They form a whirlpool aptly called "the ocean's navel," whose attracting power extends a distance of fifteen kilometers. It can suck down not only ships but whales, and even polar bears from the northernmost regions.

This was where the Nautilus had been sent accidentally-- or perhaps deliberately--by its captain. It was sweeping around in a spiral whose radius kept growing smaller and smaller. The skiff, still attached to the ship's plating, was likewise carried around at dizzying speed. I could feel us whirling. I was experiencing that accompanying nausea that follows such continuous spinning motions. We were in dread, in the last stages of sheer horror, our blood frozen in our veins, our nerves numb, drenched in cold sweat as if from the throes of dying! And what a noise around our frail skiff! What roars echoing from several miles away! What crashes from the waters breaking against sharp rocks on the seafloor, where the hardest objects are smashed, where tree trunks are worn down and worked into "a shaggy fur," as Norwegians express it!

What a predicament! We were rocking frightfully. The Nautilus defended itself like a human being. Its steel muscles were cracking. Sometimes it stood on end, the three of us along with it!

"We've got to hold on tight," Ned said, "and screw the nuts down again! If we can stay attached to the Nautilus,
we can still make it...!"

He hadn't finished speaking when a cracking sound occurred. The nuts gave way, and ripped out of its socket, the skiff was hurled like a stone from a sling into the midst of the vortex.

My head struck against an iron timber, and with this violent shock I lost consciousness.

CHAPTER 23
Conclusion
WE COME TO the conclusion of this voyage under the seas. What happened that night, how the skiff escaped from the Maelstrom's fearsome eddies, how Ned Land, Conseil, and I got out of that whirlpool, I'm unable to say. But when I regained consciousness, I was lying in a fisherman's hut on one of the Lofoten Islands. My two companions, safe and sound, were at my bedside clasping my hands. We embraced each other heartily.

Just now we can't even dream of returning to France. Travel between upper Norway and the south is limited. So I have to wait for the arrival of a steamboat that provides bimonthly service from North Cape.

So it is here, among these gallant people who have taken us in, that I'm reviewing my narrative of these adventures. It is accurate. Not a fact has been omitted, not a detail has been exaggerated. It's the faithful record of this inconceivable expedition into an element now beyond human reach, but where progress will someday make great inroads.

Will anyone believe me? I don't know. Ultimately it's unimportant. What I can now assert is that I've earned the right to speak of these seas, beneath which in less than ten months, I've cleared 20,000 leagues in this underwater tour of the world that has shown me so many wonders across the Pacific, the Indian Ocean, the Red Sea, the Mediterranean, the Atlantic, the southernmost and northernmost seas!

But what happened to the Nautilus? Did it withstand the Maelstrom's clutches? Is Captain Nemo alive? Is he still under the ocean pursuing his frightful program of revenge, or did he stop after that latest mass execution? Will the waves someday deliver that manuscript that contains his full life story? Will I finally learn the man's name? Will the nationality of the stricken warship tell us the nationality of Captain Nemo?

I hope so. I likewise hope that his powerful submersible has defeated the sea inside its most dreadful whirlpool, that the Nautilus has survived where so many ships have perished! If this is the case and Captain Nemo still inhabits the ocean-- his adopted country--may the hate be appeased in that fierce heart! May the contemplation of so many wonders extinguish the spirit of vengeance in him! May the executioner pass away, and the scientist continue his peaceful exploration of the seas! If his destiny is strange, it's also sublime. Haven't I encompassed it myself? Didn't I lead ten months of this otherworldly existence? Thus to that question asked 6,000 years ago in the Book of Ecclesiastes--"Who can fathom the soundless depths?"-- two men out of all humanity have now earned the right to reply. Captain Nemo and I.

END OF THE SECOND PART
JOURNEY TO THE CENTER OF THE EARTH
By Jules Verne

PREFACE

THE "Voyages Extraordinaires" of M. Jules Verne deserve to be made widely known in English-speaking countries by means of carefully prepared translations. Witty and ingenious adaptations of the researches and discoveries of modern science to the popular taste, which demands that these should be presented to ordinary readers in the lighter form of cleverly mingled truth and fiction, these books will assuredly be read with profit and delight, especially by English youth. Certainly no writer before M. Jules Verne has been so happy in weaving together in
judicious combination severe scientific truth with a charming exercise of playful imagination.

Iceland, the starting point of the marvellous underground journey imagined in this volume, is invested at the present time with a painful interest in consequence of the disastrous eruptions last Easter Day, which covered with lava and ashes the poor and scanty vegetation upon which four thousand persons were partly dependent for the means of subsistence. For a long time to come the natives of that interesting island, who cleave to their desert home with all that _amor patriae_ which is so much more easily understood than explained, will look, and look not in vain, for the help of those on whom fall the smiles of a kindlier sun in regions not torn by earthquakes nor blasted and ravaged by volcanic fires. Will the readers of this little book, who, are gifted with the means of indulging in the luxury of extended beneficence, remember the distress of their brethren in the far north, whom distance has not barred from the claim of being counted our "neighbours"? And whatever their humane feelings may prompt them to bestow will be gladly added to the Mansion-House Iceland Relief Fund.

In his desire to ascertain how far the picture of Iceland, drawn in the work of Jules Verne is a correct one, the translator hopes in the course of a mail or two to receive a communication from a leading man of science in the island, which may furnish matter for additional information in a future edition.

The scientific portion of the French original is not without a few errors, which the translator, with the kind assistance of Mr. Cameron of H. M. Geological Survey, has ventured to point out and correct. It is scarcely to be expected in a work in which the element of amusement is intended to enter more largely than that of scientific instruction, that any great degree of accuracy should be arrived at. Yet the translator hopes that what trifling deviations from the text or corrections in foot notes he is responsible for, will have done a little towards the increased usefulness of the work.

F. A. M.
The Vicarage,
Broughton-in-Furness

CHAPTER I.

THE PROFESSOR AND HIS FAMILY

On the 24th of May, 1863, my uncle, Professor Liedenbrock, rushed into his little house, No. 19 Königstrasse, one of the oldest streets in the oldest portion of the city of Hamburg.

Martha must have concluded that she was very much behindhand, for the dinner had only just been put into the oven.

"Well, now," said I to myself, "if that most impatient of men is hungry, what a disturbance he will make!"

"M. Liedenbrock so soon!" cried poor Martha in great alarm, half opening the dining-room door.

"Yes, Martha; but very likely the dinner is not half cooked, for it is not two yet. Saint Michael's clock has only just struck half-past one."

"Then why has the master come home so soon?"

"Perhaps he will tell us that himself."

"Here he is, Monsieur Axel; I will run and hide myself while you argue with him."

And Martha retreated in safety into her own dominions.

I was left alone. But how was it possible for a man of my undecided turn of mind to argue successfully with so irascible a person as the Professor? With this persuasion I was hurrying away to my own little retreat upstairs, when the street door creaked upon its hinges; heavy feet made the whole flight of stairs to shake; and the master of the house, passing rapidly through the dining-room, threw himself in haste into his own sanctum.

But on his rapid way he had found time to fling his hazel stick into a corner, his rough broadbrim upon the table, and these few emphatic words at his nephew:

"Axel, follow me!"

I had scarcely had time to move when the Professor was again shouting after me:

"What! not come yet?"

And I rushed into my redoubtable master's study.

Otto Liedenbrock had no mischief in him, I willingly allow that; but unless he very considerably changes as he grows older, at the end he will be a most original character.

He was professor at the Johanneum, and was delivering a series of lectures on mineralogy, in the course of every one of which he broke into a passion once or twice at least. Not at all that he was over-anxious about the
improvement of his class, or about the degree of attention with which they listened to him, or the success which might eventually crown his labours. Such little matters of detail never troubled him much. His teaching was as the German philosophy calls it, ‘subjective’; it was to benefit himself, not others. He was a learned egotist. He was a well of science, and the pulleys worked uneasily when you wanted to draw anything out of it. In a word, he was a learned miser.

Germany has not a few professors of this sort.

To his misfortune, my uncle was not gifted with a sufficiently rapid utterance; not, to be sure, when he was talking at home, but certainly in his public delivery; this is a want much to be deplored in a speaker. The fact is, that during the course of his lectures at the Johannaum, the Professor often came to a complete standstill; he fought with wilful words that refused to pass his struggling lips, such words as resist and distend the cheeks, and at last break out into the unasked-for shape of a round and most unscientific oath: then his fury would gradually abate.

Now in mineralogy there are many half-Greek and half-Latin terms, very hard to articulate, and which would be most trying to a poet's measures. I don't wish to say a word against so respectable a science, far be that from me. True, in the august presence of rhombohedral crystals, retinasphalitic resins, gehlenites, Fassaites, molybdïnetes, tungstates of manganeese, and titanite of zirconium, why, the most facile of tongues may make a slip now and then.

It therefore happened that this venial fault of my uncle's came to be pretty well understood in time, and an unfair advantage was taken of it; the students laid wait for him in dangerous places, and when he began to stumble, loud was the laughter, which is not in good taste, not even in Germans. And if there was always a full audience to honour the Liedenbrock courses, I should be sorry to conjecture how many came to make merry at my uncle's expense.

Nevertheless my good uncle was a man of deep learning - a fact I am most anxious to assert and reassert. Sometimes he might irretrievably injure a specimen by his too great ardour in handling it; but still he united the genius of a true geologist with the keen eye of the mineralogist. Armed with his hammer, his steel pointer, his magnetic needles, his blowpipe, and his bottle of nitric acid, he was a powerful man of science. He would refer any mineral to its proper place among the six hundred [1] elementary substances now enumerated, by its fracture, its appearance, its hardness, its fusibility, its sonorousness, its smell, and its taste.

The name of Liedenbrock was honourably mentioned in colleges and learned societies. Humphry Davy, [2] Humboldt, Captain Sir John Franklin, General Sabine, never failed to call upon him on their way through Hamburg. Becquerel, Ebelman, Brewster, Dumas, Milne-Edwards, Saint-Claire-Deville frequently consulted him upon the most difficult problems in chemistry, a science which was indebted to him for considerable discoveries, for in 1853 there had appeared at Leipzig an imposing folio by Otto Liedenbrock, entitled, "A Treatise upon Transcendental Chemistry," with plates; a work, however, which failed to cover its expenses.

To all these titles to honour let me add that my uncle was the curator of the museum of mineralogy formed by M. Struve, the Russian ambassador; a most valuable collection, the fame of which is European.

Such was the gentleman who addressed me in that impetuous manner. Fancy a tall, spare man, of an iron constitution, and with a fair complexion which took off a good ten years from the fifty he must own to. His restless eyes were in incessant motion behind his full-sized spectacles. His long, thin nose was like a knife blade. Boys have been heard to remark that that organ was magnetised and attracted iron filings. But this was merely a mischievous report; it had no attraction except for snuff, which it seemed to draw to itself in great quantities.

When I have added, to complete my portrait, that my uncle walked by mathematical strides of a yard and a half, and that in walking he kept his fists firmly closed, a sure sign of an irritable temperament, I think I shall have said enough to disenchant any one who should by mistake have coveted much of his company.

He lived in his own little house in Königstrasse, a structure half brick and half wood, with a gable cut into steps; it looked upon one of those winding canals which intersect each other in the middle of the ancient quarter of Hamburg, and which the great fire of 1842 had fortunately spared.

[1] Sixty-three. (Tr.)

[2] As Sir Humphry Davy died in 1829, the translator must be pardoned for pointing out here an anachronism, unless we are to assume that the learned Professor's celebrity dawned in his earliest years. (Tr.)

It is true that the old house stood slightly off the perpendicular, and bulged out a little towards the street; its roof sloped a little to one side, like the cap over the left ear of a Tugendbund student; its lines wanted accuracy; but after all, it stood firm, thanks to an old elm which buttressed it in front, and which often in spring sent its young sprays through the window panes.

My uncle was tolerably well off for a German professor. The house was his own, and everything in it. The living contents were his god-daughter Gräuben, a young Virlandaise of seventeen, Martha, and myself. As his nephew and an orphan, I became his laboratory assistant.

I freely confess that I was exceedingly fond of geology and all its kindred sciences; the blood of a mineralogist was in my veins, and in the midst of my specimens I was always happy.
In a word, a man might live happily enough in the little old house in the Königstrasse, in spite of the restless impatience of its master, for although he was a little too excitable - he was very fond of me. But the man had no notion how to wait; nature herself was too slow for him. In April, after a had planted in the terra-cotta pots outside his window seedling plants of mignonette and convolvulus, he would go and give them a little pull by their leaves to make them grow faster. In dealing with such a strange individual there was nothing for it but prompt obedience. I therefore rushed after him.

CHAPTER II.

A MYSTERY TO BE SOLVED AT ANY PRICE

That study of his was a museum, and nothing else. Specimens of everything known in mineralogy lay there in their places in perfect order, and correctly named, divided into inflammable, metallic, and lithoid minerals.

How well I knew all these bits of science! Many a time, instead of enjoying the company of lads of my own age, I had preferred dusting these graphites, anthracites, coals, lignites, and peats! And there were bitumens, resins, organic salts, to be protected from the least grain of dust; and metals, from iron to gold, metals whose current value altogether disappeared in the presence of the republican equality of scientific specimens; and stones too, enough to rebuild entirely the house in Königstrasse, even with a handsome additional room, which would have suited me admirably.

But on entering this study now I thought of none of all these wonders; my uncle alone filled my thoughts. He had thrown himself into a velvet easy-chair, and was grasping between his hands a book over which he bent, pondering with intense admiration.

"Here's a remarkable book! What a wonderful book!" he was exclaiming.

These ejaculations brought to my mind the fact that my uncle was liable to occasional fits of bibliomania; but no old book had any value in his eyes unless it had the virtue of being nowhere else to be found, or, at any rate, of being illegible.

"Well, now; don't you see it yet? Why I have got a priceless treasure, that I found his morning, in rummaging in old Hevelius's shop, the Jew."

"Magnificent!" I replied, with a good imitation of enthusiasm.

What was the good of all this fuss about an old quarto, bound in rough calf, a yellow, faded volume, with a ragged seal depending from it?

But for all that there was no lull yet in the admiring exclamations of the Professor.

"See," he went on, both asking the questions and supplying the answers. "Isn't it a beauty? Yes; splendid! Did you ever see such a binding? Doesn't the book open easily? Yes; it stops open anywhere. But does it shut equally well? Yes; for the binding and the leaves are flush, all in a straight line, and no gaps or openings anywhere. And look at its back, after seven hundred years. Why, Bozerian, Closs, or Purgold might have been proud of such a binding!"

While rapidly making these comments my uncle kept opening and shutting the old tome. I really could do no less than ask a question about its contents, although I did not feel the slightest interest.

"And what is the title of this marvellous work?" I asked with an affected eagerness which he must have been very blind not to see through.

"This work," replied my uncle, firing up with renewed enthusiasm, "this work is the Heims Kringla of Snorre Turlleson, the most famous Icelandic author of the twelfth century! It is the chronicle of the Norwegian princes who ruled in Iceland."

"Indeed;" I cried, keeping up wonderfully, "of course it is a German translation?"

"What!" sharply replied the Professor, "a translation! What should I do with a translation? This _is_ the Icelandic original, in the magnificent idiomatic vernacular, which is both rich and simple, and admits of an infinite variety of grammatical combinations and verbal modifications."

"Like German." I happily ventured.

"Yes," replied my uncle, shrugging his shoulders; "but, in addition to all this, the Icelandic has three numbers like the Greek, and irregular declensions of nouns proper like the Latin."
"Ah!" said I, a little moved out of my indifference; "and is the type good?"
"Type! What do you mean by talking of type, wretched Axel? Type! Do you take it for a printed book, you ignorant fool? It is a manuscript, a Runic manuscript."
"Runic?"
"Yes. Do you want me to explain what that is?"
"Of course not," I replied in the tone of an injured man. But my uncle persevered, and told me, against my will, of many things I cared nothing about.

"Runic characters were in use in Iceland in former ages. They were invented, it is said, by Odin himself. Look there, and wonder, impious young man, and admire these letters, the invention of the Scandinavian god!"

Well, well! not knowing what to say, I was going to prostrate myself before this wonderful book, a way of answering equally pleasing to gods and kings, and which has the advantage of never giving them any embarrassment, when a little incident happened to divert conversation into another channel.

This was the appearance of a dirty slip of parchment, which slipped out of the volume and fell upon the floor.

My uncle pounced upon this shred with incredible avidity. An old document, enclosed an immemorial time within the folds of this old book, had for him an immeasurable value.

"What's this?" he cried.
And he laid out upon the table a piece of parchment, five inches by three, and along which were traced certain mysterious characters.

Here is the exact facsimile. I think it important to let these strange signs be publicly known, for they were the means of drawing on Professor Liedenbrock and his nephew to undertake the most wonderful expedition of the nineteenth century.

[Runic glyphs occur here]

The Professor mused a few moments over this series of characters; then raising his spectacles he pronounced:

"These are Runic letters; they are exactly like those of the manuscript of Snorre Turlleson. But, what on earth is their meaning?"

Runic letters appearing to my mind to be an invention of the learned to mystify this poor world, I was not sorry to see my uncle suffering the pangs of mystification. At least, so it seemed to me, judging from his fingers, which were beginning to work with terrible energy.

"It is certainly old Icelandic," he muttered between his teeth.
And Professor Liedenbrock must have known, for he was acknowledged to be quite a polyglot. Not that he could speak fluently in the two thousand languages and twelve thousand dialects which are spoken on the earth, but he knew at least his share of them.

So he was going, in the presence of this difficulty, to give way to all the impetuosity of his character, and I was preparing for a violent outbreak, when two o'clock struck by the little timepiece over the fireplace.

At that moment our good housekeeper Martha opened the study door, saying:

"Dinner is ready!"

I am afraid he sent that soup to where it would boil away to nothing, and Martha took to her heels for safety. I followed her, and hardly knowing how I got there I found myself seated in my usual place.

I waited a few minutes. No Professor came. Never within my remembrance had he missed the important ceremonial of dinner. And yet what a good dinner it was! There was parsley soup, an omelette of ham garnished with spiced sorrel, a fillet of veal with compote of prunes; for dessert, crystallised fruit; the whole washed down with sweet Moselle.

All this my uncle was going to sacrifice to a bit of old parchment. As an affectionate and attentive nephew I considered it my duty to eat for him as well as for myself, which I did conscientiously.

"I have never known such a thing," said Martha. "M. Liedenbrock is not at table!"

"Who could have believed it?" I said, with my mouth full.

"Something serious is going to happen," said the servant, shaking her head.

My opinion was, that nothing more serious would happen than an awful scene when my uncle should have discovered that his dinner was devoured. I had come to the last of the fruit when a very loud voice tore me away from the pleasures of my dessert. With one spring I bounded out of the dining-room into the study.

CHAPTER III.
"Undoubtedly it is Runic," said the Professor, bending his brows; "but there is a secret in it, and I mean to
discover the key."
A violent gesture finished the sentence.
"Sit there," he added, holding out his fist towards the table. "Sit there, and write."
I was seated in a trice.
"Now I will dictate to you every letter of our alphabet which corresponds with each of these Icelandic characters.
We will see what that will give us. But, by St. Michael, if you should dare to deceive me -"

The dictation commenced. I did my best. Every letter was given me one after the other, with the following
remarkable result:
mm.rnlls esrevel sgtsqf niedrke kt,samm arateS saodrrn emtnael nvaect rrlSa Atsaar .nvcrc
ieabs ccmri eevtVI frAntv dt,iac oseibo Kediil

[Redactor: In the original version the initial letter is an 'm' with a superscore over it. It is my supposition that this
is the translator's way of writing 'mm' and I have replaced it accordingly, since our typography does not allow such a
character.]

When this work was ended my uncle tore the paper from me and examined it attentively for a long time.
"What does it all mean?" he kept repeating mechanically.
Upon my honour I could not have enlightened him. Besides he did not ask me, and he went on talking to
himself.
"This is what is called a cryptogram, or cipher," he said, "in which letters are purposely thrown in confusion,
which if properly arranged would reveal their sense. Only think that under this jargon there may lie concealed the
clue to some great discovery!"

As for me, I was of opinion that there was nothing at all, in it; though, of course, I took care not to say so.

Then the Professor took the book and the parchment, and diligently compared them together.
"These two writings are not by the same hand," he said; "the cipher is of later date than the book, an undoubted
proof of which I see in a moment. The first letter is a double m, a letter which is not to be found in Turlleson's book,
and which was only added to the alphabet in the fourteenth century. Therefore there are two hundred years between
the manuscript and the document."

I admitted that this was a strictly logical conclusion.
"I am therefore led to imagine," continued my uncle, "that some possessor of this book wrote these mysterious
letters. But who was that possessor? Is his name nowhere to be found in the manuscript?"

My uncle raised his spectacles, took up a strong lens, and carefully examined the blank pages of the book. On
the front of the second, the title-page, he noticed a sort of stain which looked like an ink blot. But in looking at it
very closely he thought he could distinguish some half-effaced letters. My uncle at once fastened upon this as the
centre of interest, and he laboured at that blot, until by the help of his microscope he ended by making out the
following Runic characters which he read without difficulty.

"Arne Saknussemm!" he cried in triumph. "Why that is the name of another Icelander, a savant of the sixteenth
century, a celebrated alchemist!"

I gazed at my uncle with satisfactory admiration.
"Those alchemists," he resumed, "Avicenna, Bacon, Lully, Paracelsus, were the real and only savants of their
time. They made discoveries at which we are astonished. Has not this Saknussemm concealed under his cryptogram
some surprising invention? It is so; it must be so!"

The Professor's imagination took fire at this hypothesis.
"No doubt," I ventured to reply, "but what interest would he have in thus hiding so marvellous a discovery?"

"Why? Why? How can I tell? Did not Galileo do the same by Saturn? We shall see. I will get at the secret of this
document, and I will neither sleep nor eat until I have found it out."

My comment on this was a half-suppressed "Oh!"
"Nor you either, Axel," he added.
"The deuce!" said I to myself; "then it is lucky I have eaten two dinners to-day!"
"First of all we must find out the key to this cipher; that cannot be difficult."

At these words I quickly raised my head; but my uncle went on soliloquising.
"There's nothing easier. In this document there are a hundred and thirty-two letters, viz., seventy-seven
consonants and fifty-five vowels. This is the proportion found in southern languages, whilst northern tongues are
much richer in consonants; therefore this is in a southern language."

These were very fair conclusions, I thought.

"But what language is it?"

Here I looked for a display of learning, but I met instead with profound analysis.

"This Saknussemm," he went on, "was a very well-informed man; now since he was not writing in his own mother tongue, he would naturally select that which was currently adopted by the choice spirits of the sixteenth century; I mean Latin. If I am mistaken, I can but try Spanish, French, Italian, Greek, or Hebrew. But the savants of the sixteenth century generally wrote in Latin. I am therefore entitled to pronounce this, à priori, to be Latin. It is Latin."

I jumped up in my chair. My Latin memories rose in revolt against the notion that these barbarous words could belong to the sweet language of Virgil.

"Yes, it is Latin," my uncle went on; "but it is Latin confused and in disorder; "pertubata seu inordinata,," as Euclid has it."

"Very well," thought I, "if you can bring order out of that confusion, my dear uncle, you are a clever man."

"Let us examine carefully," said he again, taking up the leaf upon which I had written. "Here is a series of one hundred and thirty-two letters in apparent disorder. There are words consisting of consonants only, as _nrrlls_; others, on the other hand, in which vowels predominate, as for instance the fifth, _uneeief_; or the last but one, _oseibo_. Now this arrangement has evidently not been premeditated; it has arisen mathematically in obedience to the unknown law which has ruled in the succession of these letters. It appears to me a certainty that the original sentence was written in a proper manner, and afterwards distorted by a law which we have yet to discover. Whoever possesses the key of this cipher will read it with fluency. What is that key? Axel, have you got it?"

I answered not a word, and for a very good reason. My eyes had fallen upon a charming picture, suspended against the wall, the portrait of Gräuben. My uncle's ward was at that time at Altona, staying with a relation, and in her absence I was very downhearted; for I may confess it to you now, the pretty Virlandaise and the professor's nephew loved each other with a patience and a calmness entirely German. We had become engaged unknown to my uncle, who was too much taken up with geology to be able to enter into such feelings as ours. Gräuben was a lovely blue-eyed blonde, rather given to gravity and seriousness; but that did not prevent her from loving me very sincerely. As for me, I adored her, if there is such a word in the German language. Thus it happened that the picture of my pretty Virlandaise threw me in a moment out of the world of realities into that of memory and fancy.

There looked down upon me the faithful companion of my labours and my recreations. Every day she helped me to arrange my uncle's precious specimens; she and I labelled them together. Mademoiselle Gräuben was an accomplished mineralogist; she could have taught a few things to a savant. She was fond of investigating abstruse scientific questions. What pleasant hours we have spent in study; and how often I envied the very stones which she handled with her charming fingers.

Then, when our leisure hours came, we used to go out together and turn into the shady avenues by the Alster, and went happily side by side up to the old windmill, which forms such an improvement to the landscape at the head of the lake. On the road we chatted hand in hand; I told her amusing tales at which she laughed heartily. Then we reached the banks of the Elbe, and after having bid good-bye to the swan, sailing gracefully amidst the white water lilies, we returned to the quay by the steamer.

That is just where I was in my dream, when my uncle with a vehement thump on the table dragged me back to the realities of life.

"Come," said he, "the very first idea which would come into any one's head to confuse the letters of a sentence would be to write the words vertically instead of horizontally."

"Indeed!" said I.

"Now we must see what would be the effect of that, Axel; put down upon this paper any sentence you like, only instead of arranging the letters in the usual way, one after the other, place them in succession in vertical columns, so as to group them together in five or six vertical lines."

I caught his meaning, and immediately produced the following literary wonder:

I y l o a u o l w r b o , n G e v w m d r n e e y e a !

"Good," said the professor, without reading them, "now set down those words in a horizontal line."

I obeyed, and with this result:

Iyloauolwrbou,ngdevwmdrneeyea!

"Excellent!" said my uncle, taking the paper hastily out of my hands. "This begins to look just like an ancient document: the vowels and the consonants are grouped together in equal disorder; there are even capitals in the middle of words, and commas too, just as in Saknussemm's parchment."

I considered these remarks very clever.
"Now," said my uncle, looking straight at me, "to read the sentence which you have just written, and with which I am wholly unacquainted, I shall only have to take the first letter of each word, then the second, the third, and so forth."

And my uncle, to his great astonishment, and my much greater, read:
"I love you well, my own dear Gräuben!"
"Hallo!" cried the Professor.
Yes, indeed, without knowing what I was about, like an awkward and unlucky lover, I had compromised myself by writing this unfortunate sentence.
"Aha! you are in love with Gräuben?" he said, with the right look for a guardian.
"Yes; no!" I stammered.
"You love Gräuben," he went on once or twice dreamily. "Well, let us apply the process I have suggested to the document in question."

My uncle, falling back into his absorbing contemplations, had already forgotten my imprudent words. I merely say imprudent, for the great mind of so learned a man of course had no place for love affairs, and happily the grand business of the document gained me the victory.

Just as the moment of the supreme experiment arrived the Professor's eyes flashed right through his spectacles. There was a quivering in his fingers as he grasped the old parchment. He was deeply moved. At last he gave a preliminary cough, and with profound gravity, naming in succession the first, then the second letter of each word, he dictated me the following:

mmessvnkaSenR.icefdoK.segnittamvrtn ecertserrette,rotaisadva,edncsedsadne lacartiniiisiratracSarbmvtabledmek meretarcilvcIsleffenSnI.

I confess I felt considerably excited in coming to the end; these letters named, one at a time, had carried no sense to my mind; I therefore waited for the Professor with great pomp to unfold the magnificent but hidden Latin of this mysterious phrase.

But who could have foretold the result? A violent thump made the furniture rattle, and spilt some ink, and my pen dropped from between my fingers.
"That's not it," cried my uncle, "there's no sense in it."

Then darting out like a shot, bowling down stairs like an avalanche, he rushed into the Königstrasse and fled.

CHAPTER IV.

THE ENEMY TO BE STARVED INTO SUBMISSION
"He is gone!" cried Martha, running out of her kitchen at the noise of the violent slamming of doors.
"Yes," I replied, "completely gone."
"Well; and how about his dinner?" said the old servant.
"He won't have any."
"And his supper?"
"He won't have any."
"What?" cried Martha, with clasped hands.
"No, my dear Martha, he will eat no more. No one in the house is to eat anything at all. Uncle Liedenbrock is going to make us all fast until he has succeeded in deciphering an undecipherable scrawl."

"Oh, my dear! must we then all die of hunger?"
I hardly dared to confess that, with so absolute a ruler as my uncle, this fate was inevitable.

The old servant, visibly moved, returned to the kitchen, moaning piteously.

When I was alone, I thought I would go and tell Gräuben all about it. But how should I be able to escape from the house? The Professor might return at any moment. And suppose he called me? And suppose he tackled me again with this logomachy, which might vainly have been set before ancient Oedipus. And if I did not obey his call, who could answer for what might happen?

The wisest course was to remain where I was. A mineralogist at Besançon had just sent us a collection of siliceous nodules, which I had to classify: so I set to work; I sorted, labelled, and arranged in their own glass case all
these hollow specimens, in the cavity of each of which was a nest of little crystals.

But this work did not succeed in absorbing all my attention. That old document kept working in my brain. My head throbbed with excitement, and I felt an undefined uneasiness. I was possessed with a presentiment of coming evil.

In an hour my nodules were all arranged upon successive shelves. Then I dropped down into the old velvet armchair, my head thrown back and my hands joined over it. I lighted my long crooked pipe, with a painting on it of an idle-looking naiad; then I amused myself watching the process of the conversion of the tobacco into carbon, which was by slow degrees making my naiad into a negress. Now and then I listened to hear whether a well-known step was on the stairs. No. Where could my uncle be at that moment? I fancied him running under the noble trees which line the road to Altona, gesticulating, making shots with his cane, thrashing the long grass, cutting the heads off the thistles, and disturbing the contemplative storks in their peaceful solitude.

Would he return in triumph or in discouragement? Which would get the upper hand, he or the secret? I was thus asking myself questions, and mechanically taking between my fingers the sheet of paper mysteriously disfigured with the incomprehensible succession of letters I had written down; and I repeated to myself "What does it all mean?"

I sought to group the letters so as to form words. Quite impossible! When I put them together by twos, threes, fives or sixes, nothing came of it but nonsense. To be sure the fourteenth, fifteenth and sixteenth letters made the English word 'ice'; the eighty-third and two following made 'sir'; and in the midst of the document, in the second and third lines, I observed the words, 'rots,' "mutable," 'ira,' 'net," "atra."

"Come now," I thought, "these words seem to justify my uncle's view about the language of the document. In the fourth line appeared the word "luco," which means a sacred wood. It is true that in the third line was the word "tablet," which looked like Hebrew, and in the last the purely French words "mer," "arc," "mere."

All this was enough to drive a poor fellow crazy. Four different languages in this ridiculous sentence! What connection could there possibly be between such words as ice, sir, anger, cruel, sacred wood, changeable, mother, bow, and sea? The first and the last might have something to do with each other; it was not at all surprising that in a document written in Iceland there should be mention of a sea of ice; but it was quite another thing to get to the end of this cryptogram with so small a clue. So I was struggling with an insurmountable difficulty; my brain got heated, my eyes watered over that sheet of paper; its hundred and thirty-two letters seemed to flutter and fly around me like those motes of mingled light and darkness which float in the air around the head when the blood is rushing upwards with undue violence. I was a prey to a kind of hallucination; I was stifling; I wanted air. Unconsciously I fanned myself with the bit of paper, the back and front of which successively came before my eyes. What was my surprise when, in one of those rapid revolutions, at the moment when the back was turned to me I thought I caught sight of the Latin words "craterem," "terrestre," and others.

A sudden light burst in upon me; these hints alone gave me the first glimpse of the truth; I had discovered the key to the cipher. To read the document, it would not even be necessary to read it through the paper. Such as it was, just such as it had been dictated to me, so it might be spelt out with ease. All those ingenious professorial combinations were coming right. He was right as to the arrangement of the letters; he was right as to the language. He had been within a hair's breadth of reading this Latin document from end to end; but that hair's breadth, chance had given it to me!

You may be sure I felt stirred up. My eyes were dim, I could scarcely see. I had laid the paper upon the table. At a glance I could tell the whole secret.

At last I became more calm. I made a wise resolve to walk twice round the room quietly and settle my nerves, and then I returned into the deep gulf of the huge armchair.

"Now I'll read it," I cried, after having well distended my lungs with air.

I leaned over the table; I laid my finger successively upon every letter; and without a pause, without one moment's hesitation, I read off the whole sentence aloud.

Stupefaction! terror! I sat overwhelmed as if with a sudden deadly blow. What! that which I read had actually, really been done! A mortal man had had the audacity to penetrate! . . .

"Ah!" I cried, springing up. "But no! no! My uncle shall never know it. He would insist upon doing it too. He would want to know all about it. Ropes could not hold him, such a determined geologist as he is! He would start, he would, in spite of everything and everybody, and he would take me with him, and we should never get back. No, never! never!"

My over-excitement was beyond all description.

"No! no! it shall not be," I declared energetically; "and as it is in my power to prevent the knowledge of it coming into the mind of my tyrant, I will do it. By dint of turning this document round and round, he too might discover the key. I will destroy it."
There was a little fire left on the hearth. I seized not only the paper but Saknussemm's parchment; with a feverish hand I was about to fling it all upon the coals and utterly destroy and abolish this dangerous secret, when the, study door opened, and my uncle appeared.

CHAPTER V.

FAMINE, THEN VICTORY, FOLLOWED BY DISMAY

I had only just time to replace the unfortunate document upon the table.
Professor Liedenbrock seemed to be greatly abstracted.
The ruling thought gave him no rest. Evidently he had gone deep into the matter, analytically and with profound scrutiny. He had brought all the resources of his mind to bear upon it during his walk, and he had come back to apply some new combination.

He sat in his armchair, and pen in hand he began what looked very much like algebraic formula: I followed with my eyes his trembling hands, I took count of every movement. Might not some unhoped-for result come of it? I trembled, too, very unnecessarily, since the true key was in my hands, and no other would open the secret.

For three long hours my uncle worked on without a word, without lifting his head; rubbing out, beginning again, then rubbing out again, and so on a hundred times.

I knew very well that if he succeeded in setting down these letters in every possible relative position, the sentence would come out. But I knew also that twenty letters alone could form two quintillions, four hundred and thirty-two quadrillions, nine hundred and two trillions, eight billions, a hundred and seventy-six millions, six hundred and forty thousand combinations. Now, here were a hundred and thirty-two letters in this sentence, and these hundred and thirty-two letters would give a number of different sentences, each made up of at least a hundred and thirty-three figures, a number which passed far beyond all calculation or conception.

So I felt reassured as far as regarded this heroic method of solving the difficulty.

But time was passing away; night came on; the street noises ceased; my uncle, bending over his task, noticed nothing, not even Martha half opening the door; he heard not a sound, not even that excellent woman saying:

"Will not monsieur take any supper to-night?"

And poor Martha had to go away unanswered. As for me, after long resistance, I was overcome by sleep, and fell off at the end of the sofa, while uncle Liedenbrock went on calculating and rubbing out his calculations.

When I awoke next morning that indefatigable worker was still at his post. His red eyes, his pale complexion, his hair tangled between his feverish fingers, the red spots on his cheeks, revealed his desperate struggle with impossibilities, and the weariness of spirit, the mental wrestlings he must have undergone all through that unhappy night.

To tell the plain truth, I pitied him. In spite of the reproaches which I considered I had a right to lay upon him, a certain feeling of compassion was beginning to gain upon me. The poor man was so entirely taken up with his one idea that he had even forgotten how to get angry. All the strength of his feelings was concentrated upon one point alone; and as their usual vent was closed, it was to be feared lest extreme tension should give rise to an explosion sooner or later.

I might with a word have loosened the screw of the steel vice that was crushing his brain; but that word I would not speak.

Yet I was not an ill-natured fellow. Why was I dumb at such a crisis? Why so insensible to my uncle's interests?

"No, no," I repeated, "I shall not speak. He would insist upon going; nothing on earth could stop him. His imagination is a volcano, and to do that which other geologists have never done he would risk his life. I will preserve silence. I will keep the secret which mere chance has revealed to me. To discover it, would be to kill Professor Liedenbrock! Let him find it out himself if he can. I will never have it laid to my door that I led him to his destruction."

Having formed this resolution, I folded my arms and waited. But I had not reckoned upon one little incident which turned up a few hours after.

When our good Martha wanted to go to Market, she found the door locked. The big key was gone. Who could have taken it out? Assuredly, it was my uncle, when he returned the night before from his hurried walk.
Was this done on purpose? Or was it a mistake? Did he want to reduce us by famine? This seemed like going rather too far! What! should Martha and I be victims of a position of things in which we had not the smallest interest? It was a fact that a few years before this, whilst my uncle was working at his great classification of minerals, he was forty-eight hours without eating, and all his household were obliged to share in this scientific fast. As for me, what I remember is, that I got severe cramps in my stomach, which hardly suited the constitution of a hungry, growing lad.

Now it appeared to me as if breakfast was going to be wanting, just as supper had been the night before. Yet I resolved to be a hero, and not to be conquered by the pangs of hunger. Martha took it very seriously, and, poor woman, was very much distressed. As for me, the impossibility of leaving the house distressed me a good deal more, and for a very good reason. A caged lover's feelings may easily be imagined.

My uncle went on working, his imagination went off rambling into the ideal world of combinations; he was far away from earth, and really far away from earthly wants.

About noon hunger began to stimulate me severely. Martha had, without thinking any harm, cleared out the larder the night before, so that now there was nothing left in the house. Still I held out; I made it a point of honour.

Two o'clock struck. This was becoming ridiculous; worse than that, unbearable. I began to say to myself that I was exaggerating the importance of the document; that my uncle would surely not believe in it, that he would set it down as a mere puzzle; that if it came to the worst, we should lay violent hands on him and keep him at home if he thought on venturing on the expedition that, after all, he might himself discover the key of the cipher, and that then I should be clear at the mere expense of my involuntary abstinence.

These reasons seemed excellent to me, though on the night before I should have rejected them with indignation; I even went so far as to condemn myself for my absurdity in having waited so long, and I finally resolved to let it all out.

I was therefore meditating a proper introduction to the matter, so as not to seem too abrupt, when the Professor jumped up, clapped on his hat, and prepared to go out.

"Uncle!" I cried.

He seemed not to hear me.

"Uncle Liedenbrock!" I cried, lifting up my voice.

"Ay," he answered like a man suddenly waking.

"Uncle, that key!"

"What key? The door key?"

"No, no!" I cried. "The key of the document."

The Professor stared at me over his spectacles; no doubt he saw something unusual in the expression of my countenance; for he laid hold of my arm, and speechlessly questioned me with his eyes. Yes, never was a question more forcibly put.

I nodded my head up and down.

He shook his pityingly, as if he was dealing with a lunatic. I gave a more affirmative gesture. His eyes glistened and sparkled with live fire, his hand was shaken threateningly.

This mute conversation at such a momentous crisis would have riveted the attention of the most indifferent. And the fact really was that I dared not speak now, so intense was the excitement for fear lest my uncle should smother me in his first joyful embraces. But he became so urgent that I was at last compelled to answer.

"Yes, that key, chance -"

"What is that you are saying?" he shouted with indescribable emotion.

"There, read that!" I said, presenting a sheet of paper on which I had written.

"But there is nothing in this," he answered, crumpling up the paper.

"No, nothing until you proceed to read from the end to the beginning."

I had not finished my sentence when the Professor broke out into a cry, nay, a roar. A new revelation burst in upon him. He was transformed!

"Aha, clever Saknussemm!" he cried. "You had first written out your sentence the wrong way."

And darting upon the paper, with eyes bedimmed, and voice choked with emotion, he read the whole document from the last letter to the first. It was conceived in the following terms:

In Sneffels Joculis craterem quem delibat Umbra Scartaris Julii intra calendas descende, Audax viator, et terrestre centrum attinges. Quod feci, Arne Saknussemm. [1]

Which bad Latin may be translated thus:

"Descend, bold traveller, into the crater of the jokul of Sneffels, which the shadow of Scartaris touches before
the kalends of July, and you will attain the centre of the earth; which I have done, Arne Saknussem.

In reading this, my uncle gave a spring as if he had touched a Leyden jar. His audacity, his joy, and his convictions were magnificent to behold. He came and he went; he seized his head between both his hands; he pushed the chairs out of their places, he piled up his books; incredible as it may seem, he rattled his precious nodules of flints together; he sent a kick here, a thump there. At last his nerves calmed down, and like a man exhausted by too lavish an expenditure of vital power, he sank back exhausted into his armchair.

"What o'clock is it?" he asked after a few moments of silence.

"Three o'clock," I replied.

"Is it really? The dinner-hour is past, and I did not know it. I am half dead with hunger. Come on, and after dinner."

[1] In the cipher, _audax_ is written _avdas_, _quod_ and _quem_, _hod_ and _ken_. (Tr.)

"Well?"

"After dinner, pack up my trunk."

"What?" I cried.

"And yours!" replied the indefatigable Professor, entering the dining-room.

CHAPTER VI.

EXCITING DISCUSSIONS ABOUT AN UNPARALLELED ENTERPRISE

At these words a cold shiver ran through me. Yet I controlled myself; I even resolved to put a good face upon it. Scientific arguments alone could have any weight with Professor Liedenbrock. Now there were good ones against the practicability of such a journey. Penetrate to the centre of the earth! What nonsense! But I kept my dialectic battery in reserve for a suitable opportunity, and I interested myself in the prospect of my dinner, which was not yet forthcoming.

It is no use to tell of the rage and imprecations of my uncle before the empty table. Explanations were given, Martha was set at liberty, ran off to the market, and did her part so well that in an hour afterwards my hunger was appeased, and I was able to return to the contemplation of the gravity of the situation.

During all dinner time my uncle was almost merry; he indulged in some of those learned jokes which never do anybody any harm. Dessert over, he beckoned me into his study.

I obeyed; he sat at one end of his table, I at the other.

"Axel," said he very mildly; "you are a very ingenious young man, you have done me a splendid service, at a moment when, wearied out with the struggle, I was going to abandon the contest. Where should I have lost myself? None can tell. Never, my lad, shall I forget it; and you shall have your share in the glory to which your discovery will lead."

"Oh, come!" thought I, "he is in a good way. Now is the time for discussing that same glory."

"Before all things," my uncle resumed, "I enjoin you to preserve the most inviolable secrecy: you understand? There are not a few in the scientific world who envy my success, and many would be ready to undertake this enterprise, to whom our return should be the first news of it."

"Do you really think there are many people bold enough?" said I.

"Certainly; who would hesitate to acquire such renown? If that document were divulged, a whole army of geologists would be ready to rush into the footsteps of Arne Saknussem."

"I don't feel so very sure of that, uncle," I replied; "for we have no proof of the authenticity of this document."

"What! not of the book, inside which we have discovered it?"

"Granted. I admit that Saknussem may have written these lines. But does it follow that he has really accomplished such a journey? And may it not be that this old parchment is intended to mislead?"

I almost regretted having uttered this last word, which dropped from me in an unguarded moment. The Professor bent his shaggy brows, and I feared I had seriously compromised my own safety. Happily no great harm came of it. A smile flitted across the lip of my severe companion, and he answered:

"That is what we shall see."

"Ah!" said I, rather put out. "But do let me exhaust all the possible objections against this document."
"Speak, my boy, don't be afraid. You are quite at liberty to express your opinions. You are no longer my nephew only, but my colleague. Pray go on."

"Well, in the first place, I wish to ask what are this Jokul, this Sneffels, and this Scartaris, names which I have never heard before?"

"Nothing easier. I received not long ago a map from my friend, Augustus Petermann, at Liepzig. Nothing could be more apropos. Take down the third atlas in the second shelf in the large bookcase, series Z, plate 4."

I rose, and with the help of such precise instructions could not fail to find the required atlas. My uncle opened it and said:

"Here is one of the best maps of Iceland, that of Handersen, and I believe this will solve the worst of our difficulties."

I bent over the map.

"You see this volcanic island," said the Professor; "observe that all the volcanoes are called jokuls, a word which means glacier in Icelandic, and under the high latitude of Iceland nearly all the active volcanoes discharge through beds of ice. Hence this term of jokul is applied to all the eruptive mountains in Iceland."

"Very good," said I; "but what of Sneffels?"

I was hoping that this question would be unanswerable; but I was mistaken. My uncle replied:

"Follow my finger along the west coast of Iceland. Do you see Rejkiavik, the capital? You do. Well; ascend the innumerable fiords that indent those sea-beaten shores, and stop at the sixty-fifth degree of latitude. What do you see there?"

"I see a peninsula looking like a thigh bone with the knee bone at the end of it."

"A very fair comparison, my lad. Now do you see anything upon that knee bone?"

"Yes; a mountain rising out of the sea."

"Right. That is Snæfell."

"That Snæfell?"

"It is. It is a mountain five thousand feet high, one of the most remarkable in the world, if its crater leads down to the centre of the earth."

"But that is impossible," I said shrugging my shoulders, and disgusted at such a ridiculous supposition.

"Impossible?" said the Professor severely; "and why, pray?"

"Because this crater is evidently filled with lava and burning rocks, and therefore -"

"But suppose it is an extinct volcano?"

"Extinct?"

"Yes; the number of active volcanoes on the surface of the globe is at the present time only about three hundred. But there is a very much larger number of extinct ones. Now, Snæfell is one of these. Since historic times there has been but one eruption of this mountain, that of 1219; from that time it has quieted down more and more, and now it is no longer reckoned among active volcanoes."

To such positive statements I could make no reply. I therefore took refuge in other dark passages of the document.

"What is the meaning of this word Scartaris, and what have the kalends of July to do with it?"

My uncle took a few minutes to consider. For one short moment I felt a ray of hope, speedily to be extinguished. For he soon answered thus:

"What darkness to you is light to me. This proves the ingenious care with which Saknussemm guarded and defined his discovery. Sneffels, or Snæfell, has several craters. It was therefore necessary to point out which of these leads to the centre of the globe. What did the Icelandic sage do? He observed that at the approach of the kalends of July, that is to say in the last days of June, one of the peaks, called Scartaris, flung its shadow down the mouth of that particular crater, and he committed that fact to his document. Could there possibly have been a more exact guide? As soon as we have arrived at the summit of Snæfell we shall have no hesitation as to the proper road to take."

Decidedly, my uncle had answered every one of my objections. I saw that his position on the old parchment was impregnable. I therefore ceased to press him upon that part of the subject, and as above all things he must be convinced, I passed on to scientific objections, which in my opinion were far more serious.

"Well, then," I said, "I am forced to admit that Saknussemm's sentence is clear, and leaves no room for doubt. I will even allow that the document bears every mark and evidence of authenticity. That learned philosopher did get to the bottom of Sneffels, he has seen the shadow of Scartaris touch the edge of the crater before the kalends of July; he may even have heard the legendary stories told in his day about that crater reaching to the centre of the world; but as for reaching it himself, as for performing the journey, and returning, if he ever went, I say no - he never, never did that."
"Now for your reason?" said my uncle ironically.

"All the theories of science demonstrate such a feat to be impracticable."

"The theories say that, do they?" replied the Professor in the tone of a meek disciple. "Oh! unpleasant theories! How the theories will hinder us, won't they?"

I saw that he was only laughing at me; but I went on all the same.

"Yes; it is perfectly well known that the internal temperature rises one degree for every 70 feet in depth; now, admitting this proportion to be constant, and the radius of the earth being fifteen hundred leagues, there must be a temperature of 360,032 degrees at the centre of the earth. Therefore, all the substances that compose the body of this earth must exist there in a state of incandescent gas; for the metals that most resist the action of heat, gold, and platinum, and the hardest rocks, can never be either solid or liquid under such a temperature. I have therefore good reason for asking if it is possible to penetrate through such a medium.

"So, Axel, it is the heat that troubles you?"

"Of course it is. Were we to reach a depth of thirty miles we should have arrived at the limit of the terrestrial crust, for there the temperature will be more than 2372 degrees."

"Are you afraid of being put into a state of fusion?"

"I will leave you to decide that question," I answered rather sullenly. "This is my decision," replied Professor Liedenbrock, putting on one of his grandest airs. "Neither you nor anybody else knows with any certainty what is going on in the interior of this globe, since not the twelve thousandth part of its radius is known; science is eminently perfectible; and every new theory is soon routed by a newer. Was it not always believed until Fourier that the temperature of the interplanetary spaces decreased perpetually? and is it not known at the present time that the greatest cold of the ethereal regions is never lower than 40 degrees below zero Fahr.? Why should it not be the same with the internal heat? Why should it not, at a certain depth, attain an impassable limit, instead of rising to such a point as to fuse the most infusible metals?"

As my uncle was now taking his stand upon hypotheses, of course, there was nothing to be said.

"Well, I will tell you that true savants, amongst them Poisson, have demonstrated that if a heat of 360,000 degrees [1] existed in the interior of the globe, the fiery gases arising from the fused matter would acquire an elastic force which the crust of the earth would be unable to resist, and that it would explode like the plates of a bursting boiler."

"That is Poisson's opinion, my uncle, nothing more."

"Granted. But it is likewise the creed adopted by other distinguished geologists, that the interior of the globe is neither gas nor water, nor any of the heaviest minerals known, for in none of these cases would the earth weigh what it does."

"Oh, with figures you may prove anything!"

"But is it the same with facts! Is it not known that the number of volcanoes has diminished since the first days of creation? and if there is central heat may we not thence conclude that it is in process of diminution?"

"My good uncle, if you will enter into the legion of speculation, I can discuss the matter no longer."

"But I have to tell you that the highest names have come to the support of my views. Do you remember a visit paid to me by the celebrated chemist, Humphry Davy, in 1825?"

"Not at all, for I was not born until nineteen years afterwards."

"Well, Humphry Davy did call upon me on his way through Hamburg. We were long engaged in discussing, amongst other problems, the hypothesis of the liquid structure of the terrestrial nucleus. We were agreed that it could not be in a liquid state, for a reason which science has never been able to confute."

[1] The degrees of temperature are given by Jules Verne according to the centigrade system, for which we will in each case substitute the Fahrenheit measurement. (Tr.)

"What is that reason?" I said, rather astonished.

"Because this liquid mass would be subject, like the ocean, to the lunar attraction, and therefore twice every day there would be internal tides, which, upheaving the terrestrial crust, would cause periodical earthquakes!"

"Yet it is evident that the surface of the globe has been subject to the action of fire," I replied, "and it is quite reasonable to suppose that the external crust cooled down first, whilst the heat took refuge down to the centre."

"Quite a mistake," my uncle answered. "The earth has been heated by combustion on its surface, that is all. Its surface was composed of a great number of metals, such as potassium and sodium, which have the peculiar property of igniting at the mere contact with air and water; these metals kindled when the atmospheric vapours fell in rain upon the soil; and by and by, when the waters penetrated into the fissures of the crust of the earth, they broke out into fresh combustion with explosions and eruptions. Such was the cause of the numerous volcanoes at the origin of the earth."

"Upon my word, this is a very clever hypothesis," I exclaimed, in spite rather of myself.
"And which Humphry Davy demonstrated to me by a simple experiment. He formed a small ball of the metals which I have named, and which was a very fair representation of our globe; whenever he caused a fine dew of rain to fall upon its surface, it heaved up into little monticules, it became oxydized and formed miniature mountains; a crater broke open at one of its summits; the eruption took place, and communicated to the whole of the ball such a heat that it could not be held in the hand."

In truth, I was beginning to be shaken by the Professor's arguments, besides which he gave additional weight to them by his usual ardour and fervent enthusiasm.

"You see, Axel," he added, "the condition of the terrestrial nucleus has given rise to various hypotheses among geologists; there is no proof at all for this internal heat; my opinion is that there is no such thing, it cannot be; besides we shall see for ourselves, and, like Arne Saknussemm, we shall know exactly what to hold as truth concerning this grand question."

"Very well, we shall see," I replied, feeling myself carried off by his contagious enthusiasm. "Yes, we shall see; that is, if it is possible to see anything there."

"And why not? May we not depend upon electric phenomena to give us light? May we not even expect light from the atmosphere, the pressure of which may render it luminous as we approach the centre?"

"Yes, yes," said I; "that is possible, too."

"It is certain," exclaimed my uncle in a tone of triumph. "But silence, do you hear me? silence upon the whole subject; and let no one get before us in this design of discovering the centre of the earth."

CHAPTER VII.

A WOMAN'S COURAGE

Thus ended this memorable seance. That conversation threw me into a fever. I came out of my uncle's study as if I had been stunned, and as if there was not air enough in all the streets of Hamburg to put me right again. I therefore made for the banks of the Elbe, where the steamer lands her passengers, which forms the communication between the city and the Hamburg railway.

Was I convinced of the truth of what I had heard? Had I not bent under the iron rule of the Professor Liedenbrock? Was I to believe him in earnest in his intention to penetrate to the centre of this massive globe? Had I been listening to the mad speculations of a lunatic, or to the scientific conclusions of a lofty genius? Where did truth stop? Where did error begin?

I was all adrift amongst a thousand contradictory hypotheses, but I could not lay hold of one.

Yet I remembered that I had been convinced, although now my enthusiasm was beginning to cool down; but I felt a desire to start at once, and not to lose time and courage by calm reflection. I had at that moment quite courage enough to strap my knapsack to my shoulders and start.

But I must confess that in another hour this unnatural excitement abated, my nerves became unstrung, and from the depths of the abysses of this earth I ascended to its surface again.

"It is quite absurd!" I cried, "there is no sense about it. No sensible young man should for a moment entertain such a proposal. The whole thing is non-existent. I have had a bad night, I have been dreaming of horrors."

But I had followed the banks of the Elbe and passed the town. After passing the port too, I had reached the Altona road. I was led by a presentiment, soon to be realised; for shortly I espied my little Gräuben bravely returning with her light step to Hamburg.

"Gräuben!" I cried from afar off.

The young girl stopped, rather frightened perhaps to hear her name called after her on the high road. Ten yards more, and I had joined her.

"Axel!" she cried surprised. "What! have you come to meet me? Is this why you are here, sir?"

But when she had looked upon me, Gräuben could not fail to see the uneasiness and distress of my mind.

"What is the matter?" she said, holding out her hand.

"What is the matter, Gräuben?" I cried.

In a couple of minutes my pretty Virlandaise was fully informed of the position of affairs. For a time she was silent. Did her heart palpitate as mine did? I don't know about that, but I know that her hand did not tremble in mine.
We went on a hundred yards without speaking.

At last she said, "Axel!"

"My dear Gräuben."

"That will be a splendid journey!"

I gave a bound at these words.

"Yes, Axel, a journey worthy of the nephew of a savant; it is a good thing for a man to be distinguished by some great enterprise."

"What, Gräuben, won’t you dissuade me from such an undertaking?"

"No, my dear Axel, and I would willingly go with you, but that a poor girl would only be in your way."

"Is that quite true?"

"It is true."

Ah! women and young girls, how incomprehensible are your feminine hearts! When you are not the timidiest, you are the bravest of creatures. Reason has nothing to do with your actions. What! did this child encourage me in such an expedition! Would she not be afraid to join it herself? And she was driving me to it, one whom she loved!

I was disconcerted, and, if I must tell the whole truth, I was ashamed.

"Gräuben, we will see whether you will say the same thing tomorrow."

"To-morrow, dear Axel, I will say what I say to-day."

Gräuben and I, hand in hand, but in silence, pursued our way. The emotions of that day were breaking my heart.

After all, I thought, the kalends of July are a long way off, and between this and then many things may take place which will cure my uncle of his desire to travel underground.

It was night when we arrived at the house in Königstrasse. I expected to find all quiet there, my uncle in bed as was his custom, and Martha giving her last touches with the feather brush.

But I had not taken into account the Professor's impatience. I found him shouting- and working himself up amidst a crowd of porters and messengers who were all depositing various loads in the passage. Our old servant was at her wits' end.

"Come, Axel, come, you miserable wretch," my uncle cried from as far off as he could see me. "Your boxes are not packed, and my papers are not arranged; where's the key of my carpet bag? and what have you done with my gaiters?"

I stood thunderstruck. My voice failed. Scarcely could my lips utter the words:

"Are we really going?"

"Of course, you unhappy boy! Could I have dreamed that yon would have gone out for a walk instead of hurrying your preparations forward?"

"Are we to go?" I asked again, with sinking hopes.

"Yes; the day after to-morrow, early."

I could hear no more. I fled for refuge into my own little room.

All hope was now at an end. My uncle had been all the morning making purchases of a part of the tools and apparatus required for this desperate undertaking. The passage was encumbered with rope ladders, knotted cords, torches, flasks, grappling irons, alpenstocks, pickaxes, iron shod sticks, enough to load ten men.

I spent an awful night. Next morning I was called early. I had quite decided I would not open the door. But how was I to resist the sweet voice which was always music to my ears, saying, "My dear Axel?"

I came out of my room. I thought my pale countenance and my red and sleepless eyes would work upon Gräuben's sympathies and change her mind.

"Ah! my dear Axel," she said. "I see you are better. A night's rest has done you good."

"Done me good!" I exclaimed.

I rushed to the glass. Well, in fact I did look better than I had expected. I could hardly believe my own eyes.

"Axel," she said, "I have had a long talk with my guardian. He is a bold philosopher, a man of immense courage, and you must remember that his blood flows in your veins. He has confided to me his plans, his hopes, and why and how he hopes to attain his object. He will no doubt succeed. My dear Axel, it is a grand thing to devote yourself to science! What honour will fall upon Herr Liedenbrock, and so be reflected upon his companion! When you return, Axel, you will be a man, his equal, free to speak and to act independently, and free to --"

The dear girl only finished this sentence by blushing. Her words revived me. Yet I refused to believe we should start. I drew Gräuben into the Professor's study.

"Uncle, is it true that we are to go?"

"Why do you doubt?"

"Well, I don't doubt," I said, not to vex him; "but, I ask, what need is there to hurry?"

"Time, time, flying with irreparable rapidity."
"But it is only the 16th May, and until the end of June --"

"What, you monument of ignorance! do you think you can get to Iceland in a couple of days? If you had not deserted me like a fool I should have taken you to the Copenhagen office, to Liffender & Co., and you would have learned then that there is only one trip every month from Copenhagen to Rejkiavik, on the 22nd."

"Well?"

"Well, if we waited for the 22nd June we should be too late to see the shadow of Scartaris touch the crater of Sneffels. Therefore we must get to Copenhagen as fast as we can to secure our passage. Go and pack up."

There was no reply to this. I went up to my room. Gräuben followed me. She undertook to pack up all things necessary for my voyage. She was no more moved than if I had been starting for a little trip to Lübeck or Heligoland. Her little hands moved without haste. She talked quietly. She supplied me with sensible reasons for our expedition. She delighted me, and yet I was angry with her. Now and then I felt I ought to break out into a passion, but she took no notice and went on her way as methodically as ever.

Finally the last strap was buckled; I came downstairs. All that day the philosophical instrument makers and the electricians kept coming and going. Martha was distracted.

"Is master mad?" she asked.

I nodded my head.

"And is he going to take you with him?"

I nodded again.

"Where to?"

I pointed with my finger downward.

"Down into the cellar?" cried the old servant.

"No," I said. "Lower down than that."

Night came. But I knew nothing about the lapse of time.

"To-morrow morning at six precisely," my uncle decreed "we start."

At ten o'clock I fell upon my bed, a dead lump of inert matter. All through the night terror had hold of me. I spent it dreaming of abysses. I was a prey to delirium. I felt myself grasped by the Professor's sinewy hand, dragged along, hurled down, shattered into little bits. I dropped down unfathomable precipices with the accelerating velocity of bodies falling through space. My life had become an endless fall. I awoke at five with shattered nerves, trembling and weary. I came downstairs. My uncle was at table, devouring his breakfast. I stared at him with horror and disgust. But dear Gräuben was there; so I said nothing, and could eat nothing.

At half-past five there was a rattle of wheels outside. A large carriage was there to take us to the Altona railway station. It was soon piled up with my uncle's multifarious preparations.

"Where's your box?" he cried.

"It is ready," I replied, with faltering voice.

"Then make haste down, or we shall lose the train."

It was now manifestly impossible to maintain the struggle against destiny. I went up again to my room, and rolling my portmanteaus downstairs I darted after him.

At that moment my uncle was solemnly investing Gräuben with the reins of government. My pretty Virlandaise was as calm and collected as was her wont. She kissed her guardian; but could not restrain a tear in touching my cheek with her gentle lips.

"Gräuben!" I murmured.

"Go, my dear Axel, go! I am now your betrothed; and when you come back I will be your wife."

I pressed her in my arms and took my place in the carriage. Martha and the young girl, standing at the door, waved their last farewell. Then the horses, roused by the driver's whistling, darted off at a gallop on the road to Altona.

CHAPTER VIII.

SERIOUS PREPARATIONS FOR VERTICAL DESCENT

Altona, which is but a suburb of Hamburg, is the terminus of the Kiel railway, which was to carry us to the
Belts. In twenty minutes we were in Holstein.

At half-past six the carriage stopped at the station; my uncle's numerous packages, his voluminous _impedimenta_ were unloaded, removed, labelled, weighed, put into the luggage vans, and at seven we were seated face to face in our compartment. The whistle sounded, the engine started, we were off.

Was I resigned? No, not yet. Yet the cool morning air and the scenes on the road, rapidly changed by the swiftness of the train, drew me away somewhat from my sad reflections.

As for the Professor's reflections, they went far in advance of the swiftest express. We were alone in the carriage, but we sat in silence. My uncle examined all his pockets and his travelling bag with the minutest care. I saw that he had not forgotten the smallest matter of detail.

Amongst other documents, a sheet of paper, carefully folded, bore the heading of the Danish consulate with the signature of W. Christiensen, consul at Hamburg and the Professor's friend. With this we possessed the proper introductions to the Governor of Iceland.

I also observed the famous document most carefully laid up in a secret pocket in his portfolio. I bestowed a malediction upon it, and then proceeded to examine the country.

It was a very long succession of uninteresting loamy and fertile flats, a very easy country for the construction of railways, and propitious for the laying-down of these direct level lines so dear to railway companies.

I had no time to get tired of the monotony; for in three hours we stopped at Kiel, close to the sea.

The luggage being labelled for Copenhagen, we had no occasion to look after it. Yet the Professor watched every article with jealous vigilance, until all were safe on board. There they disappeared in the hold.

My uncle, notwithstanding his hurry, had so well calculated the relations between the train and the steamer that we had a whole day to spare. The steamer _Ellenora_ did not start until night. Thence sprang a feverish state of excitement in which the impatient irascible traveller devoted to perdition the railway directors and the steamboat companies and the governments which allowed such intolerable slowness. I was obliged to act chorus to him when he attacked the captain of the _Ellenora_ upon this subject. The captain disposed of us summarily.

At Kiel, as elsewhere, we must do something to while away the time. What with walking on the verdant shores of the bay within which nestles the little town, exploring the thick woods which make it look like a nest embowered amongst thick foliage, admiring the villas, each provided with a little bathing house, and moving about and grumbling, at last ten o'clock came.

The heavy coils of smoke from the _Ellenora's_ funnel unrolled in the sky, the bridge shook with the quivering of the struggling steam; we were on board, and owners for the time of two berths, one over the other, in the only saloon cabin on board.

At a quarter past the moorings were loosed and the throbbing steamer pursued her way over the dark waters of the Great Belt.

The night was dark; there was a sharp breeze and a rough sea, a few lights appeared on shore through the thick darkness; later on, I cannot tell when, a dazzling light from some lighthouse threw a bright stream of fire along the waves; and this is all I can remember of this first portion of our sail.

At seven in the morning we landed at Korsor, a small town on the west coast of Zealand. There we were transferred from the boat to another line of railway, which took us by just as flat a country as the plain of Holstein.

Three hours' travelling brought us to the capital of Denmark. My uncle had not shut his eyes all night. In his impatience I believe he was trying to accelerate the train with his feet.

At last he discerned a stretch of sea.

"The Sound!" he cried.

At our left was a huge building that looked like a hospital.

"That's a lunatic asylum," said one of our travelling companions.

Very good! thought I, just the place we want to end our days in; and great as it is, that asylum is not big enough to contain all Professor Liedenbrock's madness!

At ten in the morning, at last, we set our feet in Copenhagen; the luggage was put upon a carriage and taken with ourselves to the Phoenix Hotel in Breda Gate. This took half an hour, for the station is out of the town. Then my uncle, after a hasty toilet, dragged me after him. The porter at the hotel could speak German and English; but the Professor, as a polyglot, questioned him in good Danish, and it was in the same language that that personage directed him to the Museum of Northern Antiquities.

The curator of this curious establishment, in which wonders are gathered together out of which the ancient history of the country might be reconstructed by means of its stone weapons, its cups and its jewels, was a learned savant, the friend of the Danish consul at Hamburg, Professor Thomsen.

My uncle had a cordial letter of introduction to him. As a general rule one savant greets another with coolness. But here the case was different. M. Thomsen, like a good friend, gave the Professor Liedenbrock a cordial greeting,
and he even vouchsafed the same kindness to his nephew. It is hardly necessary to say the secret was sacredly kept from the excellent curator; we were simply disinterested travellers visiting Iceland out of harmless curiosity.

M. Thomsen placed his services at our disposal, and we visited the quays with the object of finding out the next vessel to sail.

I was yet in hopes that there would be no means of getting to Iceland. But there was no such luck. A small Danish schooner, the _Valkyria_, was to set sail for Rejkavik on the 2nd of June. The captain, M. Bjarne, was on board. His intending passenger was so joyful that he almost squeezed his hands till they ached. That good man was rather surprised at his energy. To him it seemed a very simple thing to go to Iceland, as that was his business; but to my uncle it was sublime. The worthy captain took advantage of his enthusiasm to charge double fares; but we did not trouble ourselves about mere trifles.

"You must be on board on Tuesday, at seven in the morning," said Captain Bjarne, after having pocketed more dollars than were his due.

Then we thanked M. Thomsen for his kindness, "and we returned to the Phoenix Hotel.

"It's all right, it's all right," my uncle repeated. "How fortunate we are to have found this boat ready for sailing. Now let us have some breakfast and go about the town."

We went first to Kongens-nye-Torw, an irregular square in which are two innocent-looking guns, which need not alarm any one. Close by, at No. 5, there was a French "restaurant," kept by a cook of the name of Vincent, where we had an ample breakfast for four marks each (2_s_. 4_d_.).

Then I took a childish pleasure in exploring the city; my uncle let me take him with me, but he took notice of nothing, neither the insignificant king's palace, nor the pretty seventeenth century bridge, which spans the canal before the museum, nor that immense cenotaph of Thorwaldsen's, adorned with horrible mural painting, and containing within it a collection of the sculptor's works, nor in a fine park the toylike chateau of Rosenberg, nor the beautiful renaissance edifice of the Exchange, nor its spire composed of the twisted tails of four bronze dragons, nor the great windmill on the ramparts, whose huge arms dilated in the sea breeze like the sails of a ship.

What delicious walks we should have had together, my pretty Virlandaise and I, along the harbour where the two-deckers and the frigate slept peaceably by the red roofing of the warehouse, by the green banks of the strait, through the deep shades of the trees amongst which the fort is half concealed, where the guns are thrusting out their black throats between branches of alder and willow.

But, alas! Gräuben was far away; and I never hoped to see her again.

But if my uncle felt no attraction towards these romantic scenes he was very much struck with the aspect of a certain church spire situated in the island of Amak, which forms the south-west quarter of Copenhagen.

I was ordered to direct my feet that way; I embarked on a small steamer which plies on the canals, and in a few minutes she touched the quay of the dockyard.

After crossing a few narrow streets where some convicts, in trousers half yellow and half grey, were at work under the orders of the gangers, we arrived at the Vor Frelsers Kirk. There was nothing remarkable about the church; but there was a reason why its tall spire had attracted the Professor's attention. Starting from the top of the tower, an external staircase wound around the spire, the spirals circling up into the sky.

"Let us get to the top," said my uncle.

"I shall be dizzy," I said.

"The more reason why we should go up; we must get used to it."

"But..."

"Come, I tell you; don't waste our time."

I had to obey. A keeper who lived at the other end of the street handed us the key, and the ascent began.

My uncle went ahead with a light step. I followed him not without alarm, for my head was very apt to feel dizzy; I possessed neither the equilibrium of an eagle nor his fearless nature.

As long as we were protected on the inside of the winding staircase up the tower, all was well enough; but after toiling up a hundred and fifty steps the fresh air came to salute my face, and we were on the leads of the tower. There the aerial staircase began its gyrations, only guarded by a thin iron rail, and the narrowing steps seemed to ascend into infinite space!

"Never shall I be able to do it," I said.

"Don't be a coward; come up, sir"; said my uncle with the coldest cruelty.

I had to follow, clutching at every step. The keen air made me giddy; I felt the spire rocking with every gust of wind; my knees began to fail; soon I was crawling on my knees, then creeping on my stomach; I closed my eyes; I seemed to be lost in space.

At last I reached the apex, with the assistance of my uncle dragging me up by the collar.

"Look down!" he cried. "Look down well! You must take a lesson
in abysses."

I opened my eyes. I saw houses squashed flat as if they had all fallen down from the skies; a smoke fog seemed to drown them. Over my head ragged clouds were drifting past, and by an optical inversion they seemed stationary, while the steeple, the ball and I were all spinning along with fantastic speed. Far away on one side was the green country, on the other the sea sparkled, bathed in sunlight. The Sound stretched away to Elsinore, dotted with a few white sails, like sea-gulls' wings; and in the misty east and away to the north-east lay outstretched the faintly-shadowed shores of Sweden. All this immensity of space whirled and wavered, fluctuating beneath my eyes.

But I was compelled to rise, to stand up, to look. My first lesson in dizziness lasted an hour. When I got permission to come down and feel the solid street pavements I was afflicted with severe lumbago.

"To-morrow we will do it again," said the Professor.

And it was so; for five days in succession, I was obliged to undergo this anti-vertiginous exercise; and whether I would or not, I made some improvement in the art of "lofty contemplations."

CHAPTER IX.

ICELAND! BUT WHAT NEXT?

The day for our departure arrived. The day before it our kind friend M. Thomsen brought us letters of introduction to Count Trampe, the Governor of Iceland, M. Picturssen, the bishop's suffragan, and M. Finsen, mayor of Rejkiavik. My uncle expressed his gratitude by tremendous compressions of both his hands.

On the 2nd, at six in the evening, all our precious baggage being safely on board the _Valkyria,_ the captain took us into a very narrow cabin.

"Is the wind favourable?" my uncle asked.

"Excellent," replied Captain Bjarne; "a sou'-easter. We shall pass down the Sound full speed, with all sails set."

In a few minutes the schooner, under her mizen, brigantine, topsail, and topgallant sail, loosed from her moorings and made full sail through the straits. In an hour the capital of Denmark seemed to sink below the distant waves, and the _Valkyria_ was skirting the coast by Elsinore. In my nervous frame of mind I expected to see the ghost of Hamlet wandering on the legendary castle terrace.

"Sublime madman!" I said, "no doubt you would approve of our expedition. Perhaps you would keep us company to the centre of the globe, to find the solution of your eternal doubts."

But there was no ghostly shape upon the ancient walls. Indeed, the castle is much younger than the heroic prince of Denmark. It now answers the purpose of a sumptuous lodge for the doorkeeper of the straits of the Sound, before which every year there pass fifteen thousand ships of all nations.

The castle of Kronberg soon disappeared in the mist, as well as the tower of Helsingborg, built on the Swedish coast, and the schooner passed lightly on her way urged by the breezes of the Cattegat.

The _Valkyria_ was a splendid sailer, but on a sailing vessel you can place no dependence. She was taking to Rejkiavik coal, household goods, earthenware, woollen clothing, and a cargo of wheat. The crew consisted of five men, all Danes.

"How long will the passage take?" my uncle asked.

"Ten days," the captain replied, "if we don't meet a nor'-wester in passing the Faroes."

"But are you not subject to considerable delays?"

"No, M. Liedenbrock, don't be uneasy, we shall get there in very good time."

At evening the schooner doubled the Skaw at the northern point of Denmark, in the night passed the Skager Rack, skirted Norway by Cape Lindness, and entered the North Sea.

In two days more we sighted the coast of Scotland near Peterhead, and the _Valkyria_ turned her lead towards the Faroe Islands, passing between the Orkneys and Shetlands.

Soon the schooner encountered the great Atlantic swell; she had to tack against the north wind, and reached the Faroes only with some difficulty. On the 8th the captain made out Myganness, the southernmost of these islands, and from that moment took a straight course for Cape Portland, the most southerly point of Iceland.

The passage was marked by nothing unusual. I bore the troubles of the sea pretty well; my uncle, to his own intense disgust, and his greater shame, was ill all through the voyage.
He therefore was unable to converse with the captain about Snæfell, the way to get to it, the facilities for transport, he was obliged to put off these inquiries until his arrival, and spent all his time at full length in his cabin, of which the timbers creaked and shook with every pitch she took. It must be confessed he was not undeserving of his punishment.

On the 11th we reached Cape Portland. The clear open weather gave us a good view of Myrdals jökul, which overhangs it. The cape is merely a low hill with steep sides, standing lonely by the beach.

The _Valkyria_ kept at some distance from the coast, taking a westerly course amidst great shoals of whales and sharks. Soon we came in sight of an enormous perforated rock, through which the sea dashed furiously. The Westman islets seemed to rise out of the ocean like a group of rocks in a liquid plain. From that time the schooner took a wide berth and swept at a great distance round Cape Rejkianess, which forms the western point of Iceland.

The rough sea prevented my uncle from coming on deck to admire these shattered and surf-beaten coasts.

Forty-eight hours after, coming out of a storm which forced the schooner to scud under bare poles, we sighted east of us the beacon on Cape Skagen, where dangerous rocks extend far away seaward. An Icelandic pilot came on board, and in three hours the _Valkyria_ dropped her anchor before Rejkiavik, in Faxya Bay.

The Professor at last emerged from his cabin, rather pale and wretched-looking, but still full of enthusiasm, and with ardent satisfaction shining in his eyes.

The population of the town, wonderfully interested in the arrival of a vessel from which every one expected something, formed in groups upon the quay.

My uncle left in haste his floating prison, or rather hospital. But before quitting the deck of the schooner he dragged me forward, and pointing with outstretched finger north of the bay at a distant mountain terminating in a double peak, a pair of cones covered with perpetual snow, he cried:

"Snæfell! Snæfell!"

Then recommending me, by an impressive gesture, to keep silence, he went into the boat which awaited him. I followed, and presently we were treading the soil of Iceland.

The first man we saw was a good-looking fellow enough, in a general's uniform. Yet he was not a general but a magistrate, the Governor of the island, M. le Baron Trampe himself. The Professor was soon aware of the presence he was in. He delivered him his letters from Copenhagen, and then followed a short conversation in the Danish language, the purport of which I was quite ignorant of, and for a very good reason. But the result of this first conversation was, that Baron Trampe placed himself entirely at the service of Professor Liedenbrock.

My uncle was just as courteously received by the mayor, M. Finsen, whose appearance was as military, and disposition and office as pacific, as the Governor's.

As for the bishop's suffragan, M. Picturssen, he was at that moment engaged on an episcopal visitation in the north. For the time we must be resigned to wait for the honour of being presented to him. But M. Fridrikssen, professor of natural sciences at the school of Rejkiavik, was a delightful man, and his friendship became very precious to me. This modest philosopher spoke only Danish and Latin. He came to proffer me his good offices in the language of Horace, and I felt that we were made to understand each other. In fact he was the only person in Iceland with whom I could converse at all.

This good-natured gentleman made over to us two of the three rooms which his house contained, and we were soon installed in it with all our luggage, the abundance of which rather astonished the good people of Rejkiavik.

"Well, Axel," said my uncle, "we are getting on, and now the worst is over."

"The worst!" I said, astonished.

"To be sure, now we have nothing to do but go down."

"Oh, if that is all, you are quite right; but after all, when we have gone down, we shall have to get up again, I suppose?"

"Oh I don't trouble myself about that. Come, there's no time to lose; I am going to the library. Perhaps there is some manuscript of Saknussemm's there, and I should be glad to consult it."

"Well, while you are there I will go into the town. Won't you?"

"Oh, that is very uninteresting to me. It is not what is upon this island, but what is underneath, that interests me."

I went out, and wandered wherever chance took me.

It would not be easy to lose your way in Rejkiavik. I was therefore under no necessity to inquire the road, which exposes one to mistakes when the only medium of intercourse is gesture.

The town extends along a low and marshy level, between two hills. An immense bed of lava bounds it on one side, and falls gently towards the sea. On the other extends the vast bay of Faxya, shut in at the north by the enormous glacier of the Snæfell, and of which the _Valkyria_ was for the time the only occupant. Usually the English and French conservators of fisheries moor in this bay, but just then they were cruising about the western coasts of the island.
The longest of the only two streets that Rejkiavik possesses was parallel with the beach. Here live the merchants and traders, in wooden cabins made of red planks set horizontally; the other street, running west, ends at the little lake between the house of the bishop and other non-commercial people.

I had soon explored these melancholy ways; here and there I got a glimpse of faded turf, looking like a worn-out bit of carpet, or some appearance of a kitchen garden, the sparse vegetables of which (potatoes, cabbages, and lettuces), would have figured appropriately upon a Lilliputian table. A few sickly wallflowers were trying to enjoy the air and sunshine.

About the middle of the tin-commercial street I found the public cemetery, inclosed with a mud wall, and where there seemed plenty of room.

Then a few steps brought me to the Governor's house, a but compared with the town hall of Hamburg, a palace in comparison with the cabins of the Icelandic population.

Between the little lake and the town the church is built in the Protestant style, of calcined stones extracted out of the volcanoes by their own labour and at their own expense; in high westerly winds it was manifest that the red tiles of the roof would be scattered in the air, to the great danger of the faithful worshippers.

On a neighbouring hill I perceived the national school, where, as I was informed later by our host, were taught Hebrew, English, French, and Danish, four languages of which, with shame I confess it, I don't know a single word; after an examination I should have had to stand last of the forty scholars educated at this little college, and I should have been held unworthy to sleep along with them in one of those little double closets, where more delicate youths would have died of suffocation the very first night.

In three hours I had seen not only the town but its environs. The general aspect was wonderfully dull. No trees, and scarcely any vegetation. Everywhere bare rocks, signs of volcanic action. The Icelandic buts are made of earth and turf, and the walls slope inward; they rather resemble roofs placed on the ground. But then these roofs are meadows of comparative fertility. Thanks to the internal heat, the grass grows on them to some degree of perfection. It is carefully mown in the hay season; if it were not, the horses would come to pasture on these green abodes.

In my excursion I met but few people. On returning to the main street I found the greater part of the population busied in drying, salting, and putting on board codfish, their chief export. The men looked like robust but heavy, blond Germans with pensive eyes, conscious of being far removed from their fellow creatures, poor exiles relegated to this land of ice, poor creatures who should have been Esquimaux, since nature had condemned them to live only just outside the arctic circle! In vain did I try to detect a smile upon their lips; sometimes by a spasmodic and involuntary contraction of the muscles they seemed to laugh, but they never smiled.

Their costume consisted of a coarse jacket of black woollen cloth called in Scandinavian lands a 'vadmel,' a hat with a very broad brim, trousers with a narrow edge of red, and a bit of leather rolled round the foot for shoes.

The women looked as sad and as resigned as the men; their faces were agreeable but expressionless, and they wore gowns and petticoats of dark 'vadmel'; as maidens, they wore over their braided hair a little knitted brown cap; when married, they put around their heads a coloured handkerchief, crowned with a peak of white linen.

After a good walk I returned to M. Fridrikssen's house, where I found my uncle already in his host's company.

CHAPTER X.

INTERESTING CONVERSATIONS WITH ICELANDIC SAVANTS

Dinner was ready. Professor Liedenbrock devoured his portion voraciously, for his compulsory fast on board had converted his stomach into a vast unfathomable gulf. There was nothing remarkable in the meal itself; but the hospitality of our host, more Danish than Icelandic, reminded me of the heroes of old. It was evident that we were more at home than he was himself.

The conversation was carried on in the vernacular tongue, which my uncle mixed with German and M. Fridrikssen with Latin for my benefit. It turned upon scientific questions as befits philosophers; but Professor Liedenbrock was excessively reserved, and at every sentence spoke to me with his eyes, enjoining the most absolute silence upon our plans.

In the first place M. Fridrikssen wanted to know what success my uncle had had at the library.

"Your library! why there is nothing but a few tattered books upon almost deserted shelves."
"Indeed!" replied M. Fridrikssen, "why we possess eight thousand volumes, many of them valuable and scarce, works in the old Scandinavian language, and we have all the novelties that Copenhagen sends us every year."

"Where do you keep your eight thousand volumes? For my part -"

"Oh, M. Liedenbrock, they are all over the country. In this icy region we are fond of study. There is not a farmer nor a fisherman that cannot read and does not read. Our principle is, that books, instead of growing mouldy behind an iron grating, should be worn out under the eyes of many readers. Therefore, these volumes are passed from one to another, read over and over, referred to again and again; and it often happens that they find their way back to their shelves only after an absence of a year or two."

"And in the meantime," said my uncle rather spitefully, "strangers --"

"Well, what would you have? Foreigners have their libraries at home, and the first essential for labouring people is that they should be educated. I repeat to you the love of reading runs in Icelandic blood. In 1816 we founded a prosperous literary society; learned strangers think themselves honoured in becoming members of it. It publishes books which educate our fellow-countrymen, and do the country great service. If you will consent to be a corresponding member, Herr Liedenbrock, you will be giving us great pleasure."

My uncle, who had already joined about a hundred learned societies, accepted with a grace which evidently touched M. Fridrikssen.

"Now," said he, "will you be kind enough to tell me what books you hoped to find in our library and I may perhaps enable you to consult them?"

My uncle's eyes and mine met. He hesitated. This direct question went to the root of the matter. But after a moment's reflection he decided on speaking.

"Monsieur Fridrikssen, I wished to know if amongst your ancient books you possessed any of the works of Arne Saknussemm?"

"Arne Saknussemm!" replied the Rejkjavik professor. "You mean that learned sixteenth century savant, a naturalist, a chemist, and a traveller?"

"Just so!"

"One of the glories of Icelandic literature and science?"

"That's the man."

"An illustrious man anywhere!"

"Quite so."

"And whose courage was equal to his genius!"

"I see that you know him well."

My uncle was bathed in delight at hearing his hero thus described. He feasted his eyes upon M. Fridrikssen's face.

"Well," he cried, "where are his works?"

"His works, we have them not."

"What - not in Iceland?"

"They are neither in Iceland nor anywhere else."

"Why is that?"

"Because Arne Saknussemm was persecuted for heresy, and in 1573 his books were burned by the hands of the common hangman."

"Very good! Excellent!" cried my uncle, to the great scandal of the professor of natural history.

"What!" he cried.

"Yes, yes; now it is all clear, now it is all unravelled; and I see why Saknussemm, put into the Index Expurgatorius, and compelled to hide the discoveries made by his genius, was obliged to bury in an incomprehensible cryptogram the secret -"

"What secret?" asked M. Fridrikssen, starting.

"Oh, just a secret which -" my uncle stammered.

"Have you some private document in your possession?" asked our host.

"No; I was only supposing a case."

"Oh, very well," answered M. Fridrikssen, who was kind enough not to pursue the subject when he had noticed the embarrassment of his friend. "I hope you will not leave our island until you have seen some of its mineralogical wealth."

"Certainly," replied my uncle; "but I am rather late; or have not others been here before me?"

"Yes, Herr Liedenbrock; the labours of MM. Olafsen and Povelsen, pursued by order of the king, the researches of Troil the scientific mission of MM. Gaimard and Robert on the French corvette _La Recherche,_ [1] and lately the observations of scientific men who came in the _Reine Hortense,_ have added materially to our knowledge of
Iceland. But I assure you there is plenty left."

"Do you think so?" said my uncle, pretending to look very modest, and trying to hide the curiosity was flashing out of his eyes.

"Oh, yes; how many mountains, glaciers, and volcanoes there are to study, which are as yet but imperfectly known! Then, without going any further, that mountain in the horizon. That is Snæfell."

"Ah!" said my uncle, as coolly as he was able, "is that Snæfell?"

"Yes; one of the most curious volcanoes, and the crater of which has scarcely ever been visited."

"Is it extinct?"

"Oh, yes; more than five hundred years."

"Well," replied my uncle, who was frantically locking his legs together to keep himself from jumping up in the air, "that is where I mean to begin my geological studies, there on that Seffel - Fessel - what do you call it?"

"Snæfell," replied the excellent M. Fridrikssen.

This part of the conversation was in Latin; I had understood every word of it, and I could hardly conceal my amusement at seeing my uncle trying to keep down the excitement and satisfaction which were brimming over in every limb and every feature. He tried hard to put on an innocent little expression of simplicity; but it looked like a diabolical grin.

[1] _Recherche_ was sent out in 1835 by Admiral Duperré to learn the fate of the lost expedition of M. de Blosseville in the _Lilloise_ which has never been heard of.

"Yes," said he, "your words decide me. We will try to scale that Snæfell; perhaps even we may pursue our studies in its crater!"

"I am very sorry," said M. Fridrikssen, "that my engagements will not allow me to absent myself, or I would have accompanied you myself with both pleasure and profit."

"Oh, no, no!" replied my uncle with great animation, "we would not disturb any one for the world, M. Fridrikssen. Still, I thank you with all my heart: the company of such a talented man would have been very serviceable, but the duties of your profession."

I am glad to think that our host, in the innocence of his Icelandic soul, was blind to the transparent artifices of my uncle.

"I very much approve of your beginning with that volcano, M. Liedenbrock. You will gather a harvest of interesting observations. But, tell me, how do you expect to get to the peninsula of Snæfell?"

"By sea, crossing the bay. That's the most direct way."

"No doubt; but it is impossible."

"Why?"

"Because we don't possess a single boat at Rejkiavik."

"You don't mean to say so?"

"You will have to go by land, following the shore. It will be longer, but more interesting."

"Very well, then; and now I shall have to see about a guide."

"I have one to offer you."

"A safe, intelligent man."

"Yes; an inhabitant of that peninsula. He is an eiderdown hunter, and very clever. He speaks Danish perfectly."

"When can I see him?"

"To-morrow, if you like."

"Why not to-day?"

"Because he won't be here till to-morrow." "To-morrow, then," added my uncle with a sigh.

This momentous conversation ended in a few minutes with warm acknowledgments paid by the German to the Icelandic Professor. At this dinner my uncle had just elicited important facts, amongst others, the history of Saksussemm, the reason of the mysterious document, that his host would not accompany him in his expedition, and that the very next day a guide would be waiting upon him.

CHAPTER XI.

A GUIDE FOUND TO THE CENTRE OF THE EARTH
In the evening I took a short walk on the beach and returned at night to my plank-bed, where I slept soundly all night.

When I awoke I heard my uncle talking at a great rate in the next room. I immediately dressed and joined him.

He was conversing in the Danish language with a tall man, of robust build. This fine fellow must have been possessed of great strength. His eyes, set in a large and ingenuous face, seemed to me very intelligent; they were of a dreamy sea-blue. Long hair, which would have been called red even in England, fell in long meshes upon his broad shoulders. The movements of this native were lithe and supple; but he made little use of his arms in speaking, like a man who knew nothing or cared nothing about the language of gestures. His whole appearance bespoke perfect calmness and self-possession, not indolence but tranquillity. It was felt at once that he would be beholden to nobody, that he worked for his own convenience, and that nothing in this world could astonish or disturb his philosophic calmness.

I caught the shades of this Icelander's character by the way in which he listened to the impassioned flow of words which fell from the Professor. He stood with arms crossed, perfectly unmoved by my uncle's incessant gesticulations. A negative was expressed by a slow movement of the head from left to right, an affirmative by a slight bend, so slight that his long hair scarcely moved. He carried economy of motion even to parsimony.

Certainly I should never have dreamt in looking at this man that he was a hunter; he did not look likely to frighten his game, nor did he seem as if he would even get near it. But the mystery was explained when M. Fridrikssen informed me that this tranquil personage was only a hunter of the eider duck, whose under plumage constitutes the chief wealth of the island. This is the celebrated eider down, and it requires no great rapidity of movement to get it.

Early in summer the female, a very pretty bird, goes to build her nest among the rocks of the fiords with which the coast is fringed. After building the nest she feathers it with down plucked from her own breast. Immediately the hunter, or rather the trader, comes and robs the nest, and the female recommences her work. This goes on as long as she has any down left. When she has stripped herself bare the male takes his turn to pluck himself. But as the coarse and hard plumage of the male has no commercial value, the hunter does not take the trouble to rob the nest of this; the female therefore lays her eggs in the spoils of her mate, the young are hatched, and next year the harvest begins again.

Now, as the eider duck does not select steep cliffs for her nest, but rather the smooth terraced rocks which slope to the sea, the Icelandic hunter might exercise his calling without any inconvenient exertion. He was a farmer who was not obliged either to sow or reap his harvest, but merely to gather it in.

This grave, phlegmatic, and silent individual was called Hans Bjelke; and he came recommended by M. Fridrikssen. He was our future guide. His manners were a singular contrast with my uncle's.

Nevertheless, they soon came to understand each other. Neither looked at the amount of the payment: the one was ready to accept whatever was offered; the other was ready to give whatever was demanded. Never was bargain more readily concluded.

The result of the treaty was, that Hans engaged on his part to conduct us to the village of Stapi, on the south shore of the Snæfell peninsula, at the very foot of the volcano. By land this would be about twenty-two miles, to be done, said my uncle, in two days.

But when he learnt that the Danish mile was 24,000 feet long, he was obliged to modify his calculations and allow seven or eight days for the march.

Four horses were to be placed at our disposal - two to carry him and me, two for the baggage. Hams, as was his custom, would go on foot. He knew that part of the coast perfectly, and promised to take us the shortest way.

His engagement was not to terminate with our arrival at Stapi; he was to continue in my uncle's service for the whole period of his scientific researches, for the remuneration of three rixdales a week (about twelve shillings), but it was an express article of the covenant that his wages should be counted out to him every Saturday at six o'clock in the evening, which, according to him, was one indispensable part of the engagement.

The start was fixed for the 16th of June. My uncle wanted to pay the hunter a portion in advance, but he refused with one word:

"_Efter_," said he.
"After," said the Professor for my edification.

The treaty concluded, Hans silently withdrew.

"A famous fellow," cried my uncle; "but he little thinks of the marvellous part he has to play in the future."
"So he is to go with us as far as --"?
"As far as the centre of the earth, Axel."

Forty-eight hours were left before our departure; to my great regret I had to employ them in preparations; for all our ingenuity was required to pack every article to the best advantage; instruments here, arms there, tools in this
package, provisions in that: four sets of packages in all.

The instruments were:

1. An Eigel's centigrade thermometer, graduated up to 150 degrees (302 degrees Fahr.), which seemed to me too much or too little. Too much if the internal heat was to rise so high, for in this case we should be baked, not enough to measure the temperature of springs or any matter in a state of fusion.
2. An aneroid barometer, to indicate extreme pressures of the atmosphere. An ordinary barometer would not have answered the purpose, as the pressure would increase during our descent to a point which the mercurial barometer [1] would not register.
4. Two compasses, viz., a common compass and a dipping needle.
5. A night glass.
6. Two of Ruhmkorff's apparatus, which, by means of an electric current, supplied a safe and handy portable light [2]

The arms consisted of two of Purdy's rifles and two brace of pistols. But what did we want arms for? We had neither savages nor wild beasts to fear, I supposed. But my uncle seemed to believe in his arsenal as in his instruments, and more especially in a considerable quantity of gun cotton, which is unaffected by moisture, and the explosive force of which exceeds that of gunpowder.

[1] In M. Verne's book a 'manometer' is the instrument used, of which very little is known. In a complete list of philosophical instruments the translator cannot find the name. As he is assured by a first-rate instrument maker, Chadburn, of Liverpool, that an aneroid can be constructed to measure any depth, he has thought it best to furnish the adventurous professor with this more familiar instrument. The 'manometer' is generally known as a pressure gauge. - TRANS.

[2] Ruhmkorff's apparatus consists of a Bunsen pile worked with bichromate of potash, which makes no smell; an induction coil carries the electricity generated by the pile into communication with a lantern of peculiar construction; in this lantern there is a spiral glass tube from which the air has been excluded, and in which remains only a residuum of carbonic acid gas or of nitrogen. When the apparatus is put in action this gas becomes luminous, producing a white steady light. The pile and coil are placed in a leathern bag which the traveller carries over his shoulders; the lantern outside of the bag throws sufficient light into deep darkness; it enables one to venture without fear of explosions into the midst of the most inflammable gases, and is not extinguished even in the deepest waters. M. Ruhmkorff is a learned and most ingenious man of science; his great discovery is his induction coil, which produces a powerful stream of electricity. He obtained in 1864 the quinquennial prize of 50,000 franc reserved by the French government for the most ingenious application of electricity.

The tools comprised two pickaxes, two spades, a silk ropeladder, three iron-tipped sticks, a hatchet, a hammer, a dozen wedges and iron spikes, and a long knotted rope. Now this was a large load, for the ladder was 300 feet long.

And there were provisions too: this was not a large parcel, but it was comforting to know that of essence of beef and biscuits there were six months' consumption. Spirits were the only liquid, and of water we took none; but we had flasks, and my uncle depended on springs from which to fill them. Whatever objections I hazarded as to their quality, temperature, and even absence, remained ineffectual.

To complete the exact inventory of all our travelling accompaniments, I must not forget a pocket medicine chest, containing blunt scissors, splints for broken limbs, a piece of tape of unbleached linen, bandages and compresses, lint, a lancet for bleeding, all dreadful articles to take with one. Then there was a row of phials containing dextrine, alcoholic ether, liquid acetate of lead, vinegar, and ammonia drugs which afforded me no comfort. Finally, all the articles needful to supply Ruhmkorff's apparatus.

My uncle did not forget- a supply of tobacco, coarse grained powder, and amadou, nor a leathern belt in which he carried a sufficient quantity of gold, silver, and paper money. Six pairs of boots and shoes, made waterproof with a composition of indiarubber and naphtha, were packed amongst the tools.

"Clothed, shod, and equipped like this," said my uncle, "there is no telling how far we may go."

The 14th was wholly spent in arranging all our different articles. In the evening we dined with Baron Tramps; the mayor of Rejkiavik, and Dr. Hyaltalin, the first medical man of the place, being of the party. M. Fridrikssen was not there. I learned afterwards that he and the Governor disagreed upon some question of administration, and did not speak to each other. I therefore knew not a single word of all that was said at this semi-official dinner; but I could not help noticing that my uncle talked the whole time.

On the 15th our preparations were all made. Our host gave the Professor very great pleasure by presenting him with a map of Iceland far more complete than that of Hendersen. It was the map of M. Olaf Nikolas Olsen, in the proportion of 1 to 480,000 of the actual size of the island, and published by the Icelandic Literary Society. It was a precious document for a mineralogist.
Our last evening was spent in intimate conversation with M. Fridrikssen, with whom I felt the liveliest sympathy; then, after the talk, succeeded, for me, at any rate, a disturbed and restless night.

At five in the morning I was awoke by the neighing and pawing of four horses under my window. I dressed hastily and came down into the street. Hans was finishing our packing, almost as it were without moving a limb; and yet he did his work cleverly. My uncle made more noise than execution, and the guide seemed to pay very little attention to his energetic directions.

At six o'clock our preparations were over. M. Fridrikssen shook hands with us. My uncle thanked him heartily for his extreme kindness. I constructed a few fine Latin sentences to express my cordial farewell. Then we bestrode our steeds and with his last adieu M. Fridrikssen treated me to a line of Virgil eminently applicable to such uncertain wanderers as we were likely to be:

"Et quacumque viam dedent fortuna sequamur."

"Therever fortune clears a way,
Thither our ready footsteps stray."

CHAPTER XII.

A BARREN LAND

We had started under a sky overcast but calm. There was no fear of heat, none of disastrous rain. It was just the weather for tourists.

The pleasure of riding on horseback over an unknown country made me easy to be pleased at our first start. I threw myself wholly into the pleasure of the trip, and enjoyed the feeling of freedom and satisfied desire. I was beginning to take a real share in the enterprise.

"Besides," I said to myself, "where's the risk? Here we are travelling all through a most interesting country! We are about to climb a very remarkable mountain; at the worst we are going to scramble down an extinct crater. It is evident that Saknussemm did nothing more than this. As for a passage leading to the centre of the globe, it is mere rubbish! perfectly impossible! Very well, then; let us get all the good we can out of this expedition, and don't let us haggle about the chances."

This reasoning having settled my mind, we got out of Rejkiavik.

Hans moved steadily on, keeping ahead of us at an even, smooth, and rapid pace. The baggage horses followed him without giving any trouble. Then came my uncle and myself, looking not so very ill-mounted on our small but hardy animals.

Iceland is one of the largest islands in Europe. Its surface is 14,000 square miles, and it contains but 16,000 inhabitants. Geographers have divided it into four quarters, and we were crossing diagonally the south-west quarter, called the 'Sudvester Fjordungr.'

On leaving Rejkiavik Hans took us by the seashore. We passed lean pastures which were trying very hard, but in vain, to look green; yellow came out best. The rugged peaks of the trachyte rocks presented faint outlines on the eastern horizon; at times a few patches of snow, concentrating the vague light, glittered upon the slopes of the distant mountains; certain peaks, boldly uprising, passed through the grey clouds, and reappeared above the moving mists, like breakers emerging in the heavens.

Often these chains of barren rocks made a dip towards the sea, and encroached upon the scanty pasturage: but there was always enough room to pass. Besides, our horses instinctively chose the easiest places without ever slackening their pace. My uncle was refused even the satisfaction of stirring up his beast with whip or voice. He had no excuse for being impatient. I could not help smiling to see so tall a man on so small a pony, and as his long legs nearly touched the ground he looked like a six-legged centaur.

"Good horse! good horse!" he kept saying. "You will see, Axel, that there is no more sagacious animal than the Icelandic horse. He is stopped by neither snow, nor storm, nor impassable roads, nor rocks, glaciers, or anything. He is courageous, sober, and surefooted. He never makes a false step, never shies. If there is a river or fiord to cross (and we shall meet with many) you will see him plunge in at once, just as if he were amphibious, and gain the opposite bank. But we must not hurry him; we must let him have his way, and we shall get on at the rate of thirty miles a day."
"We may; but how about our guide?"

"Oh, never mind him. People like him get over the ground without a thought. There is so little action in this man that he will never get tired; and besides, if he wants it, he shall have my horse. I shall get cramped if I don't have a little action. The arms are all right, but the legs want exercise."

We were advancing at a rapid pace. The country was already almost a desert. Here and there was a lonely farm, called a boër built either of wood, or of sods, or of pieces of lava, looking like a poor beggar by the wayside. These ruinous huts seemed to solicit charity from passers-by; and on very small provocation we should have given alms for the relief of the poor inmates. In this country there were no roads and paths, and the poor vegetation, however slow, would soon efface the rare travellers' footsteps.

Yet this part of the province, at a very small distance from the capital, is reckoned among the inhabited and cultivated portions of Iceland. What, then, must other tracts be, more desert than this desert? In the first half mile we had not seen one farmer standing before his cabin door, nor one shepherd tending a flock less wild than himself, nothing but a few cows and sheep left to themselves. What then would be those convulsed regions upon which we were advancing, regions subject to the dire phenomena of eruptions, the offspring of volcanic explosions and subterranean convulsions?

We were to know them before long, but on consulting Olsen's map, I saw that they would be avoided by winding along the seashore. In fact, the great plutonic action is confined to the central portion of the island; there, rocks of the trappean and volcanic class, including trachyte, basalt, and tuffs and agglomerates associated with streams of lava, have made this a land of supernatural horrors. I had no idea of the spectacle which was awaiting us in the peninsula of Snæfell, where these ruins of a fiery nature have formed a frightful chaos.

In two hours from Rejkiavik we arrived at the burgh of Gufunes, called Aolkirkja, or principal church. There was nothing remarkable here but a few huts, scarcely enough for a German hamlet.

Hans stopped here half an hour. He shared with us our frugal breakfast; answering my uncle's questions about the road and our resting place that night with merely yes or no, except when he said "Gardär."

I consulted the map to see where Gardär was. I saw there was a small town of that name on the banks of the Hvalfiord, four miles from Rejkiavik. I showed it to my uncle.

"Four miles only!" he exclaimed; "four miles out of twenty-eight. What a nice little walk!"

He was about to make an observation to the guide, who without answering resumed his place at the head, and went on his way.

Three hours later, still treading on the colourless grass of the pasture land, we had to work round the Kolla fiord, a longer way but an easier one than across that inlet. We soon entered into a 'pingstaœr' or parish called Ejulberg, from whose steeple twelve o'clock would have struck, if Icelandic churches were rich enough to possess clocks. But they are like the parishioners who have no watches and do without.

There our horses were baited; then taking the narrow path to left between a chain of hills and the sea, they carried us to our next stage, the aolkirkja of Brantär and one mile farther on, to Saurboër 'Annexia,' a chapel of ease built on the south shore of the Hvalfiord.

It was now four o'clock, and we had gone four Icelandic miles, or twenty-four English miles.

In that place the fiord was at least three English miles wide; the waves rolled with a rushing din upon the sharp-pointed rocks; this inlet was confined between walls of rock, precipices crowned by sharp peaks 2,000 feet high, and remarkable for the brown strata which separated the beds of reddish tuff. However much I might respect the intelligence of our quadrupeds, I hardly cared to put it to the test by trusting myself to it on horseback across an arm of the sea.

If they are as intelligent as they are said to be, I thought, they won't try it. In any case, I will tax my intelligence to direct theirs.

But my uncle would not wait. He spurred on to the edge. His steed lowered his head to examine the nearest waves and stopped. My uncle, who had an instinct of his own, too, applied pressure, and was again refused by the animal significantly shaking his head. Then followed strong language, and the whip; but the brute answered these arguments with kicks and endeavours to throw his rider. At last the clever little pony, with a bend of his knees, started from under the Professor's legs, and left him standing upon two boulders on the shore just like the colossus of Rhodes.

"Confounded brute!" cried the unhorsed horseman, suddenly degraded into a pedestrian, just as ashamed as a cavalry officer degraded to a foot soldier.

"_Färja,_" said the guide, touching his shoulder.

"What! a boat?"

"_Der,_" replied Hans, pointing to one.

"Yes," I cried; "there is a boat."
"Why did not you say so then? Well, let us go on."
"_Tidvatten,_" said the guide.
"What is he saying?"
"He says tide," said my uncle, translating the Danish word.
"No doubt we must wait for the tide."
"_Förbida,_" said my uncle.
"_Ja,_" replied Hans.

My uncle stamped with his foot, while the horses went on to the boat.

I perfectly understood the necessity of abiding a particular moment of the tide to undertake the crossing of the fiord, when, the sea having reached its greatest height, it should be slack water. Then the ebb and flow have no sensible effect, and the boat does not risk being carried either to the bottom or out to sea.

That favourable moment arrived only with six o'clock; when my uncle, myself, the guide, two other passengers and the four horses, trusted ourselves to a somewhat fragile raft. Accustomed as I was to the swift and sure steamers on the Elbe, I found the oars of the rowers rather a slow means of propulsion. It took us more than an hour to cross the fiord; but the passage was effected without any mishap.

In another half hour we had reached the aolkirkja of Gardär

CHAPTER XIII.

HOSPITALITY UNDER THE ARCTIC CIRCLE

It ought to have been night-time, but under the 65th parallel there was nothing surprising in the nocturnal polar light. In Iceland during the months of June and July the sun does not set.

But the temperature was much lower. I was cold and more hungry than cold. Welcome was the sight of the boër which was hospitably opened to receive us.

It was a peasant's house, but in point of hospitality it was equal to a king's. On our arrival the master came with outstretched hands, and without more ceremony he beckoned us to follow him.

To accompany him down the long, narrow, dark passage, would have been impossible. Therefore, we followed, as he bid us. The building was constructed of roughly squared timbers, with rooms on both sides, four in number, all opening out into the one passage: these were the kitchen, the weaving shop, the badstofa, or family sleeping-room, and the visitors' room, which was the best of all. My uncle, whose height had not been thought of in building the house, of course hit his head several times against the beams that projected from the ceilings.

We were introduced into our apartment, a large room with a floor of earth stamped hard down, and lighted by a window, the panes of which were formed of sheep's bladder, not admitting too much light. The sleeping accommodation consisted of dry litter, thrown into two wooden frames painted red, and ornamented with Icelandic sentences. I was hardly expecting so much comfort; the only discomfort proceeded from the strong odour of dried fish, hung meat, and sour milk, of which my nose made bitter complaints.

When we had laid aside our travelling wraps the voice of the host was heard inviting us to the kitchen, the only room where a fire was lighted even in the severest cold.

My uncle lost no time in obeying the friendly call, nor was I slack in following.

The kitchen chimney was constructed on the ancient pattern; in the middle of the room was a stone for a hearth, over it in the roof a hole to let the smoke escape. The kitchen was also a dining-room.

At our entrance the host, as if he had never seen us, greeted us with the word "_Sællvertu,_" which means "be happy," and came and kissed us on the cheek.

After him his wife pronounced the same words, accompanied with the same ceremonial; then the two placing their hands upon their hearts, inclined profoundly before us.

I hasten to inform the reader that this Icelandic lady was the mother of nineteen children, all, big and little, swarming in the midst of the dense wreaths of smoke with which the fire on the hearth filled the chamber. Every moment I noticed a fair-haired and rather melancholy face peeping out of the rolling volumes of smoke - they were a perfect cluster of unwashed angels.

My uncle and I treated this little tribe with kindness; and in a very short time we each had three or four of these
brats on our shoulders, as many on our laps, and the rest between our knees. Those who could speak kept repeating "_Sællvertu,_
" in every conceivable tone; those that could not speak made up for that want by shrill cries.

This concert was brought to a close by the announcement of dinner. At that moment our hunter returned, who had been seeing his horses provided for; that is to say, he had economically let them loose in the fields, where the poor beasts had to content themselves with the scanty moss they could pull off the rocks and a few meagre sea weeds, and the next day they would not fail to come of themselves and resume the labours of the previous day.

"_Sællvertu,_
" said Hans.

Then calmly, automatically, and dispassionately he kissed the host, the hostess, and their nineteen children.

This ceremony over, we sat at table, twenty-four in number, and therefore one upon another. The luckiest had only two urchins upon their knees.

But silence reigned in all this little world at the arrival of the soup, and the national taciturnity resumed its empire even over the children. The host served out to us a soup made of lichen and by no means unpleasant, then an immense piece of dried fish floating in butter rancid with twenty years’ keeping, and, therefore, according to Icelandic gastronomy, much preferable to fresh butter. Along with this, we had ‘skye,’ a sort of clotted milk, with biscuits, and a liquid prepared from juniper berries; for beverage we had a thin milk mixed with water, called in this country 'blanda.' It is not for me to decide whether this diet is wholesome or not; all I can say is, that I was desperately hungry, and that at dessert I swallowed to the very last gulp of a thick broth made from buckwheat.

As soon as the meal was over the children disappeared, and their elders gathered round the peat fire, which also burnt such miscellaneous fuel as briars, cow-dung, and fishbones. After this little pinch of warmth the different groups retired to their respective rooms. Our hostess hospitably offered us her assistance in undressing, according to Icelandic usage; but on our gracefully declining, she insisted no longer, and I was able at last to curl myself up in my mossy bed.

At five next morning we bade our host farewell, my uncle with difficulty persuading him to accept a proper remuneration; and Hans signalled the start.

At a hundred yards from Gardär the soil began to change its aspect; it became boggy and less favourable to progress. On our right the chain of mountains was indefinitely prolonged like an immense system of natural fortifications, of which we were following the counter-scarp or lesser steep; often we were met by streams, which we had to ford with great care, not to wet our packages.

The desert became wider and more hideous; yet from time to time we seemed to descry a human figure that fled at our approach, sometimes a sharp turn would bring us suddenly within a short distance of one of these spectres, and I was filled with loathing at the sight of a huge deformed head, the skin shining and hairless, and repulsive sores visible through the gaps in the poor creature’s wretched rags.

The unhappy being forbore to approach us and offer his misshapen hand. He fled away, but not before Hans had saluted him with the customary "_Sællvertu,_
"

"_Spetelsk,_
" said he.

"A leper!" my uncle repeated.

This word produced a repulsive effect. The horrible disease of leprosy is too common in Iceland; it is not contagious, but hereditary, and lepers are forbidden to marry.

These apparitions were not cheerful, but did not throw any charm over the less and less attractive landscapes. The last tufts of grass had disappeared from beneath our feet. Not a tree was to be seen, unless we except a few dwarf birches as low as brushwood. Not an animal but a few wandering ponies that their owners would not feed. Sometimes we could see a hawk balancing himself on his wings under the grey cloud, and then darting away south with rapid flight. I felt melancholy under this savage aspect of nature, and my thoughts went away to the cheerful scenes I had left in the far south.

We had to cross a few narrow fiords, and at last quite a wide gulf; the tide, then high, allowed us to pass over without delay, and to reach the hamlet of Alftanes, one mile beyond.

That evening, after having forded two rivers full of trout and pike, called Alfa and Heta, we were obliged to spend the night in a deserted building worthy to be haunted by all the elfins of Scandinavia. The ice king certainly held court here, and gave us all night long samples of what he could do.

No particular event marked the next day. Bogs, dead levels, melancholy desert tracks, wherever we travelled. By nightfall we had accomplished half our journey, and we lay at Krösolbt.

On the 19th of June, for about a mile, that is an Icelandic mile, we walked upon hardened lava; this ground is called in the country 'hraun'; the written surface presented the appearance of distorted, twisted cables, sometimes stretched in length, sometimes contorted together; an immense torrent, once liquid, now solid, ran from the nearest mountains, now extinct volcanoes, but the ruins around revealed the violence of the past eruptions. Yet here and there were a few jets of steam from hot springs.
We had no time to watch these phenomena; we had to proceed on our way. Soon at the foot of the mountains the boggy land reappeared, intersected by little lakes. Our route now lay westward; we had turned the great bay of Faxa, and the twin peaks of Snæfell rose white into the cloudy sky at the distance of at least five miles.

The horses did their duty well, no difficulties stopped them in their steady career. I was getting tired; but my uncle was as firm and straight as he was at our first start. I could not help admiring his persistency, as well as the hunter's, who treated our expedition like a mere promenade.

June 20. At six p.m. we reached Büdir, a village on the sea shore; and the guide there claiming his due, my uncle settled with him. It was Hans' own family, that is, his uncles and cousins, who gave us hospitality; we were kindly received, and without taxing too much the goodness of these folks, I would willingly have tarried here to recruit after my fatigues. But my uncle, who wanted no recruiting, would not hear of it, and the next morning we had to bestride our beasts again.

The soil told of the neighbourhood of the mountain, whose granite foundations rose from the earth like the knotted roots of some huge oak. We were rounding the immense base of the volcano. The Professor hardly took his eyes off it. He tossed up his arms and seemed to defy it, and to declare, "There stands the giant that I shall conquer." After about four hours' walking the horses stopped of their own accord at the door of the priest's house at Stapi.

CHAPTER XIV.

BUT ARCTICS CAN BE INHOSPITABLE, TOO

Stapi is a village consisting of about thirty huts, built of lava, at the south side of the base of the volcano. It extends along the inner edge of a small fiord, inclosed between basaltic walls of the strangest construction.

Basalt is a brownish rock of igneous origin. It assumes regular forms, the arrangement of which is often very surprising. Here nature had done her work geometrically, with square and compass and plummet. Everywhere else her art consists alone in throwing down huge masses together in disorder. You see cones imperfectly formed, irregular pyramids, with a fantastic disarrangement of lines; but here, as if to exhibit an example of regularity, though in advance of the very earliest architects, she has created a severely simple order of architecture, never surpassed either by the splendours of Babylon or the wonders of Greece.

I had heard of the Giant's Causeway in Ireland, and Fingal's Cave in Staffa, one of the Hebrides; but I had never yet seen a basaltic formation.

At Stapi I beheld this phenomenon in all its beauty.

The wall that confined the fiord, like all the coast of the peninsula, was composed of a series of vertical columns thirty feet high. These straight shafts, of fair proportions, supported an architrave of horizontal slabs, the overhanging portion of which formed a semi-arch over the sea. At intervals, under this natural shelter, there spread out vaulted entrances in beautiful curves, into which the waves came dashing with foam and spray. A few shafts of basalt, torn from their hold by the fury of tempests, lay along the soil like remains of an ancient temple, in ruins for ever fresh, and over which centuries passed without leaving a trace of age upon them.

This was our last stage upon the earth. Hans had exhibited great intelligence, and it gave me some little comfort to think then that he was not going to leave us.

On arriving at the door of the rector's house, which was not different from the others, I saw a man shoeing a horse, hammer in hand, and with a leathern apron on.

"Sællvertu," said the hunter.

"God dag," said the blacksmith in good Danish.

"Kyrkoherde," said Hans, turning round to my uncle.

"The rector," repeated the Professor. "It seems, Axel, that this good man is the rector."

Our guide in the meanwhile was making the 'kyrkoherde' aware of the position of things; when the latter, suspending his labours for a moment, uttered a sound no doubt understood between horses and farriers, and immediately a tall and ugly hag appeared from the hut. She must have been six feet at the least. I was in great alarm lest she should treat me to the Icelandic kiss; but there was no occasion to fear, nor did she do the honours at all too gracefully.

The visitors' room seemed to me the worst in the whole cabin. It was close, dirty, and evil smelling. But we had
to be content. The rector did not to go in for antique hospitality. Very far from it. Before the day was over I saw that we had to do with a blacksmith, a fisherman, a hunter, a joiner, but not at all with a minister of the Gospel. To be sure, it was a week-day; perhaps on a Sunday he made amends.

I don't mean to say anything against these poor priests, who after all are very wretched. They receive from the Danish Government a ridiculously small pittance, and they get from the parish the fourth part of the tithe, which does not come to sixty marks a year (about £4). Hence the necessity to work for their livelihood; but after fishing, hunting, and shoeing horses for any length of time, one soon gets into the ways and manners of fishermen, hunters, and farriers, and other rather rude and uncultivated people; and that evening I found out that temperance was not among the virtues that distinguished my host.

My uncle soon discovered what sort of a man he had to do with; instead of a good and learned man he found a rude and coarse peasant. He therefore resolved to commence the grand expedition at once, and to leave this inhospitable parsonage. He cared nothing about fatigue, and resolved to spend some days upon the mountain.

The preparations for our departure were therefore made the very day after our arrival at Stapi. Hans hired the services of three Icelanders to do the duty of the horses in the transport of the burdens; but as soon as we had arrived at the crater these natives were to turn back and leave us to our own devices. This was to be clearly understood.

My uncle now took the opportunity to explain to Hans that it was his intention to explore the interior of the volcano to its farthest limits.

Hans merely nodded. There or elsewhere, down in the bowels of the earth, or anywhere on the surface, all was alike to him. For my own part the incidents of the journey had hitherto kept me amused, and made me forgetful of coming evils; but now my fears again were beginning to get the better of me. But what could I do? The place to resist the Professor would have been Hamburg, not the foot of Snæfell.

One thought, above all others, harassed and alarmed me; it was one calculated to shake firmer nerves than mine.

So, at last, when I could hold out no longer, I resolved to lay the case before my uncle, as prudently and as cautiously as possible, just under the form of an almost impossible hypothesis.

I went to him. I communicated my fears to him, and drew back a step to give him room for the explosion which I knew must follow. But I was mistaken.

"I was thinking of that," he replied with great simplicity.

What could those words mean? - Was he actually going to listen to reason? Was he contemplating the abandonment of his plans? This was too good to be true.

After a few moments' silence, during which I dared not question him, he resumed:

"I was thinking of that. Ever since we arrived at Stapi I have been occupied with the important question you have just opened, for we must not be guilty of imprudence."

"No, indeed!" I replied with forcible emphasis.

"For six hundred years Snæfell has been dumb; but he may speak again. Now, eruptions are always preceded by certain well-known phenomena. I have therefore examined the natives, I have studied external appearances, and I can assure you, Axel, that there will be no eruption."

"Am I to believe that?" I cried.
"Understand this clearly," added the Professor. "At the approach of an eruption these jets would redouble their activity, but disappear altogether during the period of the eruption. For the elastic fluids, being no longer under pressure, go off by way of the crater instead of escaping by their usual passages through the fissures in the soil. Therefore, if these vapours remain in their usual condition, if they display no augmentation of force, and if you add to this the observation that the wind and rain are not ceasing and being replaced by a still and heavy atmosphere, then you may affirm that no eruption is preparing."

"But -"

'No more; that is sufficient. When science has uttered her voice, let babblers hold their peace.'

I returned to the parsonage, very crestfallen. My uncle had beaten me with the weapons of science. Still I had one hope left, and this was, that when we had reached the bottom of the crater it would be impossible, for want of a passage, to go deeper, in spite of all the Saknussemm's in Iceland.

I spent that whole night in one constant nightmare; in the heart of a volcano, and from the deepest depths of the earth I saw myself tossed up amongst the interplanetary spaces under the form of an eruptive rock.

The next day, June 23, Hans was awaiting us with his companions carrying provisions, tools, and instruments; two iron pointed sticks, two rifles, and two shot belts were for my uncle and myself. Hans, as a cautious man, had added to our luggage a leathern bottle full of water, which, with that in our flasks, would ensure us a supply of water for eight days.

It was nine in the morning. The priest and his tall Megæra were awaiting us at the door. We supposed they were standing there to bid us a kind farewell. But the farewell was put in the unexpected form of a heavy bill, in which everything was charged, even to the very air we breathed in the pastoral house, infected as it was. This worthy couple were fleecing us just as a Swiss innkeeper might have done, and estimated their imperfect hospitality at the highest price.

My uncle paid without a remark: a man who is starting for the centre of the earth need not be particular about a few rix dollars.

This point being settled, Hans gave the signal, and we soon left Stapi behind us.

CHAPTER XV.

SNÆFELL AT LAST

Snæfell is 5,000 feet high. Its double cone forms the limit of a trachytic belt which stands out distinctly in the mountain system of the island. From our starting point we could see the two peaks boldly projected against the dark grey sky; I could see an enormous cap of snow coming low down upon the giant's brow.

We walked in single file, headed by the hunter, who ascended by narrow tracks, where two could not have gone abreast. There was therefore no room for conversation.

After we had passed the basaltic wall of the fiord of Stapi we passed over a vegetable fibrous peat bog, left from the ancient vegetation of this peninsula. The vast quantity of this unworked fuel would be sufficient to warm the whole population of Iceland for a century; this vast turbary measured in certain ravines had in many places a depth of seventy feet, and presented layers of carbonized remains of vegetation alternating with thinner layers of tufaceous pumice.

As a true nephew of the Professor Liedenbrock, and in spite of my dismal prospects, I could not help observing with interest the mineralogical curiosities which lay about me as in a vast museum, and I constructed for myself a complete geological account of Iceland.

This most curious island has evidently been projected from the bottom of the sea at a comparatively recent date. Possibly, it may still be subject to gradual elevation. If this is the case, its origin may well be attributed to subterranean fires. Therefore, in this case, the theory of Sir Humphry Davy, Saknussemm's document, and my uncle's theories would all go off in smoke. This hypothesis led me to examine with more attention the appearance of the surface, and I soon arrived at a conclusion as to the nature of the forces which presided at its birth.

Iceland, which is entirely devoid of alluvial soil, is wholly composed of volcanic tufa, that is to say, an agglomeration of porous rocks and stones. Before the volcanoes broke out it consisted of trap rocks slowly upraised to the level of the sea by the action of central forces. The internal fires had not yet forced their way through.
But at a later period a wide chasm formed diagonally from south-west to north-east, through which was gradually forced out the trachyte which was to form a mountain chain. No violence accompanied this change; the matter thrown out was in vast quantities, and the liquid material oozing out from the abysses of the earth slowly spread in extensive plains or in hillocky masses. To this period belong the felspar, syenites, and porphyries.

But with the help of this outflow the thickness of the crust of the island increased materially, and therefore also its powers of resistance. It may easily be conceived what vast quantities of elastic gases, what masses of molten matter accumulated beneath its solid surface whilst no exit was practicable after the cooling of the trachytic crust. Therefore a time would come when the elastic and explosive forces of the imprisoned gases would upheave this ponderous cover and drive out for themselves openings through tall chimneys. Hence then the volcano would distend and lift up the crust, and then burst through a crater suddenly formed at the summit or thinnest part of the volcano.

To the eruption succeeded other volcanic phenomena. Through the outlets now made first escaped the ejected basalt of which the plain we had just left presented such marvellous specimens. We were moving over grey rocks of dense and massive formation, which in cooling had formed into hexagonal prisms. Everywhere around us we saw truncated cones, formerly so many fiery mouths.

After the exhaustion of the basalt, the volcano, the power of which grew by the extinction of the lesser craters, supplied an egress to lava, ashes, and scoriae, of which I could see lengthened screes streaming down the sides of the mountain like flowing hair.

Such was the succession of phenomena which produced Iceland, all arising from the action of internal fire; and to suppose that the mass within did not still exist in a state of liquid incandescence was absurd; and nothing could surpass the absurdity of fancying that it was possible to reach the earth's centre.

So I felt a little comforted as we advanced to the assault of Snæfell.

The way was growing more and more arduous, the ascent steeper and steeper; the loose fragments of rock trembled beneath us, and the utmost care was needed to avoid dangerous falls.

Hans went on as quietly as if he were on level ground; sometimes he disappeared altogether behind the huge blocks, then a shrill whistle would direct us on our way to him. Sometimes he would halt, pick up a few bits of stone, build them up into a recognisable form, and thus made landmarks to guide us in our way back. A very wise precaution in itself, but, as things turned out, quite useless.

Three hours' fatiguing march had only brought us to the base of the mountain. There Hans bid us come to a halt, and a hasty breakfast was served out. My uncle swallowed two mouthfuls at a time to get on faster. But, whether he liked it or not, this was a rest as well as a breakfast hour and he had to wait till it pleased our guide to move on, which came to pass in an hour. The three Icelanders, just as taciturn as their comrade the hunted, never spoke, and ate their breakfasts in silence.

We were now beginning to scale the steep sides of Snæfell. Its snowy summit, by an optical illusion not unfrequent in mountains, seemed close to us, and yet how many weary hours it took to reach it! The stones, adhering by no soil or fibrous roots of vegetation, rolled away from under our feet, and rushed down the precipice below with the swiftness of an avalanche.

At some places the flanks of the mountain formed an angle with the horizon of at least 36 degrees; it was impossible to climb them, and these stony cliffs had to be tacked round, not without great difficulty. Then we helped each other with our sticks.

I must admit that my uncle kept as close to me as he could; he never lost sight of me, and in many straits his arm furnished me with a powerful support. He himself seemed to possess an instinct for equilibrium, for he never stumbled. The Icelanders, though burdened with our loads, climbed with the agility of mountaineers.

To judge by the distant appearance of the summit of Snæfell, it would have seemed too steep to ascend on our side. Fortunately, after an hour of fatigue and athletic exercises, in the midst of the vast surface of snow presented by the hollow between the two peaks, a kind of staircase appeared unexpectedly which greatly facilitated our ascent. It was formed by one of those torrents of stones flung up by the eruptions, called 'sting' by the Icelanders. If this torrent had not been arrested in its fall by the formation of the sides of the mountain, it would have gone on to the sea and formed more islands.

Such as it was, it did us good service. The steepness increased, but these stone steps allowed us to rise with facility, and even with such rapidity that, having rested for a moment while my companions continued their ascent, I perceived them already reduced by distance to microscopic dimensions.

At seven we had ascended the two thousand steps of this grand staircase, and we had attained a bulge in the mountain, a kind of bed on which rested the cone proper of the crater.

Three thousand two hundred feet below us stretched the sea. We had passed the limit of perpetual snow, which, on account of the moisture of the climate, is at a greater elevation in Iceland than the high latitude would give reason
to suppose. The cold was excessively keen. The wind was blowing violently. I was exhausted. The Professor saw
that my limbs were refusing to perform their office, and in spite of his impatience he decided on stopping. He
therefore spoke to the hunter, who shook his head, saying:
"Ofvanför."
"It seems we must go higher," said my uncle.
Then he asked Hans for his reason.
"Mistour," replied the guide.
"Ja Mistour," said one of the Icelanders in a tone of alarm.
"What does that word mean?" I asked uneasily.
"Look!" said my uncle.
I looked down upon the plain. An immense column of pulverized pumice, sand and dust was rising with a
whirling circular motion like a waterspout; the wind was lashing it on to that side of Snæfell where we were holding
on; this dense veil, hung across the sun, threw a deep shadow over the mountain. If that huge revolving pillar sloped
down, it would involve us in its whirling eddies. This phenomenon, which is not unfrequent when the wind blows
from the glaciers, is called in Icelandic 'mistour.'
"Hastigt! hastigt!" cried our guide.
Without knowing Danish I understood at once that we must follow Hans at the top of our speed. He began to
circle round the cone of the crater, but in a diagonal direction so as to facilitate our progress. Presently the dust
storm fell upon the mountain, which quivered under the shock; the loose stones, caught with the irresistible blasts of
wind, flew about in a perfect hail as in an eruption. Happily we were on the opposite side, and sheltered from all
harm. But for the precaution of our guide, our mangled bodies, torn and pounded into fragments, would have been
carried afar like the ruins hurled along by some unknown meteor.
Yet Hans did not think it prudent to spend the night upon the sides of the cone. We continued our zigzag climb.
The fifteen hundred remaining feet took us five hours to clear; the circuitous route, the diagonal and the counter
marches, must have measured at least three leagues. I could stand it no longer. I was yielding to the effects of hunger
and cold. The rarefied air scarcely gave play to the action of my lungs.
At last, at eleven in the sunlight night, the summit of Snæfell was reached, and before going in for shelter into
the crater I had time to observe the midnight sun, at his lowest point, gilding with his pale rays the island that slept at
my feet.

CHAPTER XVI.

BOLDLY DOWN THE CRATER

Supper was rapidly devoured, and the little company housed themselves as best they could. The bed was hard,
the shelter not very substantial, and our position an anxious one, at five thousand feet above the sea level. Yet I slept
particularly well; it was one of the best nights I had ever had, and I did not even dream.

Next morning we awoke half frozen by the sharp keen air, but with the light of a splendid sun. I rose from my
granite bed and went out to enjoy the magnificent spectacle that lay unrolled before me.
I stood on the very summit of the southernmost of Snæfell's peaks. The range of the eye extended over the whole
island. By an optical law which obtains at all great heights, the shores seemed raised and the centre depressed. It
seemed as if one of Helbesmer's raised maps lay at my feet. I could see deep valleys intersecting each other in every
direction, precipices like low walls, lakes reduced to ponds, rivers abbreviated into streams. On my right were
numberless glaciers and innumerable peaks, some plumed with feathery clouds of smoke. The undulating surface of
these endless mountains, crested with sheets of snow, reminded one of a stormy sea. If I looked westward, there the
ocean lay spread out in all its magnificence, like a mere continuation of those flock-like summits. The eye could
hardly tell where the snowy ridges ended and the foaming waves began.
I was thus steeped in the marvellous ecstasy which all high summits develop in the mind; and now without
giddiness, for I was beginning to be accustomed to these sublime aspects of nature. My dazzled eyes were bathed in
the bright flood of the solar rays. I was forgetting where and who I was, to live the life of elves and sylphs, the
fanciful creation of Scandinavian superstitions. I felt intoxicated with the sublime pleasure of lofty elevations
without thinking of the profound abysses into which I was shortly to be plunged. But I was brought back to the realities of things by the arrival of Hans and the Professor, who joined me on the summit.

My uncle pointed out to me in the far west a light steam or mist, a semblance of land, which bounded the distant horizon of waters.

"Greenland!" said he.
"Greenland?" I cried.
"Yes; we are only thirty-five leagues from it; and during thaws the white bears, borne by the ice fields from the north, are carried even into Iceland. But never mind that. Here we are at the top of Snæfell and here are two peaks, one north and one south. Hans will tell us the name of that on which we are now standing."

The question being put, Hans replied:
"Scartaris."
My uncle shot a triumphant glance at me.
"Now for the crater!" he cried.

The crater of Snæfell resembled an inverted cone, the opening of which might be half a league in diameter. Its depth appeared to be about two thousand feet. Imagine the aspect of such a reservoir, brim full and running over with liquid fire amid the rolling thunder. The bottom of the funnel was about 250 feet in circuit, so that the gentle slope allowed its lower brim to be reached without much difficulty. Involuntarily I compared the whole crater to an enormous erected mortar, and the comparison put me in a terrible fright.

"What madness," I thought, "to go down into a mortar, perhaps a loaded mortar, to be shot up into the air at a moment's notice!"

But I did not try to back out of it. Hans with perfect coolness resumed the lead, and I followed him without a word.

In order to facilitate the descent, Hans wound his way down the cone by a spiral path. Our route lay amidst eruptive rocks, some of which, shaken out of their loosened beds, rushed bounding down the abyss, and in their fall awoke echoes remarkable for their loud and well-defined sharpness.

In certain parts of the cone there were glaciers. Here Hans advanced only with extreme precaution, sounding his way with his iron-pointed pole, to discover any crevasses in it. At particularly dubious passages we were obliged to connect ourselves with each other by a long cord, in order that any man who missed his footing might be held up by his companions. This solid formation was prudent, but did not remove all danger.

Yet, notwithstanding the difficulties of the descent, down steeps unknown to the guide, the journey was accomplished without accidents, except the loss of a coil of rope, which escaped from the hands of an Icelander, and took the shortest way to the bottom of the abyss.

At mid-day we arrived. I raised my head and saw straight above me the upper aperture of the cone, framing a bit of sky of very small circumference, but almost perfectly round. Just upon the edge appeared the snowy peak of Saris, standing out sharp and clear against endless space.

At the bottom of the crater were three chimneys, through which, in its eruptions, Snæfell had driven forth fire and lava from its central furnace. Each of these chimneys was a hundred feet in diameter. They gaped before us right in our path. I had not the courage to look down either of them. But Professor Liedenbrock had hastily surveyed all three; he was panting, running from one to the other, gesticulating, and uttering incoherent expressions. Hans and his comrades, seated upon loose lava rocks, looked at him with as much wonder as they knew how to express, and perhaps taking him for an escaped lunatic.

Suddenly my uncle uttered a cry. I thought his foot must have slipped and that he had fallen down one of the holes. But, no; I saw him, with arms outstretched and legs straddling wide apart, erect before a granite rock that stood in the centre of the crater, just like a pedestal made ready to receive a statue of Pluto. He stood like a man stupefied, but the stupefaction soon gave way to delirious rapture.

"Axel, Axel," he cried. "Come, come!"
I ran. Hans and the Icelanders never stirred.
"Look!" cried the Professor.

And, sharing his astonishment, but I think not his joy, I read on the western face of the block, in Runic characters, half mouldered away with lapse of ages, this thrice-accursed name:

[At this point a Runic text appears]

"Arne Saknussemm!" replied my uncle. "Do you yet doubt?"
I made no answer; and I returned in silence to my lava seat in a state of utter speechless consternation. Here was crushing evidence.

How long I remained plunged in agonizing reflections I cannot tell; all that I know is, that on raising my head again, I saw only my uncle and Hans at the bottom of the crater. The Icelanders had been dismissed, and they were
now descending the outer slopes of Snæfell to return to Stapí.

Hans slept peaceably at the foot of a rock, in a lava bed, where he had found a suitable couch for himself; but my uncle was pacing around the bottom of the crater like a wild beast in a cage. I had neither the wish nor the strength to rise, and following the guide’s example I went off into an unhappy slumber, fancying I could hear ominous noises or feel tremblings within the recesses of the mountain.

Thus the first night in the crater passed away.

The next morning, a grey, heavy, cloudy sky seemed to droop over the summit of the cone. I did not know this first from the appearances of nature, but I found it out by my uncle’s impetuous wrath.

I soon found out the cause, and hope dawned again in my heart. For this reason.

Of the three ways open before us, one had been taken by Saknussemm. The indications of the learned Icelander hinted at in the cryptogram, pointed to this fact that the shadow of Scartaris came to touch that particular way during the latter days of the month of June.

That sharp peak might hence be considered as the gnomon of a vast sun dial, the shadow projected from which on a certain day would point out the road to the centre of the earth.

Now, no sun no shadow, and therefore no guide. Here was June 25. If the sun was clouded for six days we must postpone our visit till next year.

My limited powers of description would fail, were I to attempt a picture of the Professor’s angry impatience. The day wore on, and no shadow came to lay itself along the bottom of the crater. Hans did not move from the spot he had selected; yet he must be asking himself what were we waiting for, if he asked himself anything at all. My uncle spoke not a word to me. His gaze, ever directed upwards, was lost in the grey and misty space beyond.

On the 26th nothing yet. Rain mingled with snow was falling all day long. Hans built a hut of pieces of lava. I felt a malicious pleasure in watching the thousand rills and cascades that came tumbling down the sides of the cone, and the deafening continuous din awaked by every stone against which they bounded.

My uncle’s rage knew no bounds. It was enough to irritate a meeker man than he; for it was foundering almost within the port.

But Heaven never sends unmixed grief, and for Professor Liedenbrock there was a satisfaction in store proportioned to his desperate anxieties.

The next day the sky was again overcast; but on the 29th of June, the last day but one of the month, with the change of the moon came a change of weather. The sun poured a flood of light down the crater. Every hillock, every rock and stone, every projecting surface, had its share of the beaming torrent, and threw its shadow on the ground. Amongst them all, Scartaris laid down his sharp-pointed angular shadow which began to move slowly in the opposite direction to that of the radiant orb.

My uncle turned too, and followed it.

At noon, being at its least extent, it came and softly fell upon the edge of the middle chimney.

"There it is! there it is!" shouted the Professor.

"Now for the centre of the globe!" he added in Danish.

I looked at Hans, to hear what he would say.

"Forút!" was his tranquil answer.

"Forward!" replied my uncle.

It was thirteen minutes past one.

CHAPTER XVII.

VERTICAL DESCENT

Now began our real journey. Hitherto our toil had overcome all difficulties, now difficulties would spring up at every step.

I had not yet ventured to look down the bottomless pit into which I was about to take a plunge. The supreme hour had come. I might now either share in the enterprise or refuse to move forward. But I was ashamed to recoil in the presence of the hunter. Hans accepted the enterprise with such calmness, such indifference, such perfect disregard of any possible danger that I blushed at the idea of being less brave than he. If I had been alone I might have once more
tried the effect of argument; but in the presence of the guide I held my peace; my heart flew back to my sweet Virlandaise, and I approached the central chimney.

I have already mentioned that it was a hundred feet in diameter, and three hundred feet round. I bent over a projecting rock and gazed down. My hair stood on end with terror. The bewildering feeling of vacuity laid hold upon me. I felt my centre of gravity shifting its place, and giddiness mounting into my brain like drunkenness. There is nothing more treacherous than this attraction down deep abysses. I was just about to drop down, when a hand laid hold of me. It was that of Hans. I suppose I had not taken as many lessons on gulf exploration as I ought to have done in the Frelsers Kirk at Copenhagen.

But, however short was my examination of this well, I had taken some account of its conformation. Its almost perpendicular walls were bristling with innumerable projections which would facilitate the descent. But if there was no want of steps, still there was no rail. A rope fastened to the edge of the aperture might have helped us down. But how were we to unfasten it, when arrived at the other end?

My uncle employed a very simple expedient to obviate this difficulty. He uncoiled a cord of the thickness of a finger, and four hundred feet long; first he dropped half of it down, then he passed it round a lava block that projected conveniently, and threw the other half down the chimney. Each of us could then descend by holding with the hand both halves of the rope, which would not be able to unroll itself from its hold; when two hundred feet down, it would be easy to get possession of the whole of the rope by letting one end go and pulling down by the other. Then the exercise would go on again _ad infinitum_.

"Now," said my uncle, after having completed these preparations, "now let us look to our loads. I will divide them into three lots; each of us will strap one upon his back. I mean only fragile articles."

Of course, we were not included under that head.

"Hans," said he, "will take charge of the tools and a portion of the provisions; you, Axel, will take another third of the provisions, and the arms; and I will take the rest of the provisions and the delicate instruments."

"But," said I, "the clothes, and that mass of ladders and ropes, what is to become of them?"

"They will go down by themselves."

"How so?" I asked.

"You will see presently."

My uncle was always willing to employ magnificent resources. Obeying orders, Hans tied all the non-fragile articles in one bundle, corded them firmly, and sent them bodily down the gulf before us.

I listened to the dull thuds of the descending bale. My uncle, leaning over the abyss, followed the descent of the luggage with a satisfied nod, and only rose erect when he had quite lost sight of it.

"Very well, now it is our turn."

Now I ask any sensible man if it was possible to hear those words without a shudder.

The Professor fastened his package of instruments upon his shoulders; Hans took the tools; I took the arms: and the descent commenced in the following order; Hans, my uncle, and myself. It was effected in profound silence, broken only by the descent of loosened stones down the dark gulf.

I dropped as it were, frantically clutching the double cord with one hand and buttressing myself from the wall with the other by means of my stick. One idea overpowered me almost, fear lest the rock should give way from which I was hanging. This cord seemed a fragile thing for three persons to be suspended from. I made as little use of it as possible, performing wonderful feats of equilibrium upon the lava projections which my foot seemed to catch hold of like a hand.

When one of these slippery steps shook under the heavier form of Hans, he said in his tranquil voice:

"_Gif akt!_"

"Attention!" repeated my uncle.

In half an hour we were standing upon the surface of a rock jammed in across the chimney from one side to the other.

Hans pulled the rope by one of its ends, the other rose in the air; after passing the higher rock it came down again, bringing with it a rather dangerous shower of bits of stone and lava.

Leaning over the edge of our narrow standing ground, I observed that the bottom of the hole was still invisible.

The same manœuvre was repeated with the cord, and half an hour after we had descended another two hundred feet.

I don't suppose the maddest geologist under such circumstances would have studied the nature of the rocks that we were passing. I am sure I did trouble my head about them. Pliocene, miocene, eocene, cretaceous, jurassic, triassic, permian, carboniferous, devonian, silurian, or primitive was all one to me. But the Professor, no doubt, was pursuing his observations or taking notes, for in one of our halts he said to me:

"The farther I go the more confidence I feel. The order of these volcanic formations affords the strongest
confirmation to the theories of Davy. We are now among the primitive rocks, upon which the chemical operations took place which are produced by the contact of elementary bases of metals with water. I repudiate the notion of central heat altogether. We shall see further proof of that very soon."

No variation, always the same conclusion. Of course, I was not inclined to argue. My silence was taken for consent and the descent went on.

Another three hours, and I saw no bottom to the chimney yet. When I lifted my head I perceived the gradual contraction of its aperture. Its walls, by a gentle incline, were drawing closer to each other, and it was beginning to grow darker.

Still we kept descending. It seemed to me that the falling stones were meeting with an earlier resistance, and that the concussion gave a more abrupt and deadened sound.

As I had taken care to keep an exact account of our manœuvres with the rope, which I knew that we had repeated fourteen times, each descent occupying half an hour, the conclusion was easy that we had been seven hours, plus fourteen quarters of rest, making ten hours and a half. We had started at one, it must therefore now be eleven o'clock; and the depth to which we had descended was fourteen times 200 feet, or 2,800 feet.

At this moment I heard the voice of Hans.

"Halt!" he cried.

I stopped short just as I was going to place my feet upon my uncle's head.

"We are there," he cried.

"Where?" said I, stepping near to him.

"At the bottom of the perpendicular chimney," he answered.

"Is there no way farther?"

"Yes; there is a sort of passage which inclines to the right. We will see about that to-morrow. Let us have our supper, and go to sleep."

The darkness was not yet complete. The provision case was opened; we refreshed ourselves, and went to sleep as well as we could upon a bed of stones and lava fragments.

When lying on my back, I opened my eyes and saw a bright sparkling point of light at the extremity of the gigantic tube 3,000 feet long, now a vast telescope.

It was a star which, seen from this depth, had lost all scintillation, and which by my computation should be 46; _Ursa minor._ Then I fell fast asleep.

CHAPTER XVIII.

THE WONDERS OF TERRESTRIAL DEPTHS

At eight in the morning a ray of daylight came to wake us up. The thousand shining surfaces of lava on the walls received it on its passage, and scattered it like a shower of sparks.

There was light enough to distinguish surrounding objects.

"Well, Axel, what do you say to it?" cried my uncle, rubbing his hands. "Did you ever spend a quieter night in our little house at Königsberg? No noise of cart wheels, no cries of basket women, no boatmen shouting!"

"No doubt it is very quiet at the bottom of this well, but there is something alarming in the quietness itself."

"Now come!" my uncle cried; "if you are frightened already, what will you be by and by? We have not gone a single inch yet into the bowels of the earth."

"What do you mean?"

"I mean that we have only reached the level of the island. long vertical tube, which terminates at the mouth of the crater, has its lower end only at the level of the sea."

"Are you sure of that?"

"Quite sure. Consult the barometer."

In fact, the mercury, which had risen in the instrument as fast as we descended, had stopped at twenty-nine inches.

"You see," said the Professor, "we have now only the pressure of our atmosphere, and I shall be glad when the aneroid takes the place of the barometer."

And in truth this instrument would become useless as soon as the weight of the atmosphere should exceed the pressure ascertained at the level of the sea.
"But," I said, "is there not reason to fear that this ever-increasing pressure will become at last very painful to
bear?"

"No; we shall descend at a slow rate, and our lungs will become inured to a denser atmosphere. Aeronauts find
the want of air as they rise to high elevations, but we shall perhaps have too much: of the two, this is what I should
prefer. Don't let us lose a moment. Where is the bundle we sent down before us?"

I then remembered that we had searched for it in vain the evening before. My uncle questioned Hans, who, after
having examined attentively with the eye of a huntsman, replied:

"_Der huppe!_"

"Up there."

And so it was. The bundle had been caught by a projection a hundred feet above us. Immediately the Icelander
climbed up like a cat, and in a few minutes the package was in our possession.

"Now," said my uncle, "let us breakfast; but we must lay in a good stock, for we don't know how long we may
have to go on."

The biscuit and extract of meat were washed down with a draught of water mingled with a little gin.

Breakfast over, my uncle drew from his pocket a small notebook, intended for scientific observations. He
consulted his instruments, and recorded:

"Monday, July 1.

'Chromometer, 8.17 a.m.; barometer, 297 in.; thermometer, 6° (43° F.). Direction, E.S.E.'"

This last observation applied to the dark gallery, and was indicated by the compass.

"Now, Axel," cried the Professor with enthusiasm, "now we are really going into the interior of the earth. At this
precise moment the journey commences."

So saying, my uncle took in one hand Ruhmkorff's apparatus, which was hanging from his neck; and with the
other he formed an electric communication with the coil in the lantern, and a sufficiently bright light dispersed the
darkness of the passage.

Hans carried the other apparatus, which was also put into action. This ingenious application of electricity would
enable us to go on for a long time by creating an artificial light even in the midst of the most inflammable gases.

"Now, march!" cried my uncle.

Each shouldered his package. Hans drove before him the load of cords and clothes; and, myself walking last, we
entered the gallery.

At the moment of becoming engulfed in this dark gallery, I raised my head, and saw for the last time through the
length of that vast tube the sky of Iceland, which I was never to behold again.

The lava, in the last eruption of 1229, had forced a passage through this tunnel. It still lined the walls with a thick
and glistening coat. The electric light was here intensified a hundredfold by reflection.

The only difficulty in proceeding lay in not sliding too fast down an incline of about forty-five degrees; happily
certain asperities and a few blisterings here and there formed steps, and we descended, letting our baggage slip
before us from the end of a long rope.

But that which formed steps under our feet became stalactites overhead. The lava, which was porous in many
places, had formed a surface covered with small rounded blisters; crystals of opaque quartz, set with limpid tears
of glass, and hanging like clustered chandeliers from the vaulted roof, seemed as it were to kindle and form a sudden
illumination as we passed on our way. It seemed as if the genii of the depths were lighting up their palace to receive
their terrestrial guests.

"It is magnificent!" I cried spontaneously. "My uncle, what a sight! Don't you admire those blending hues of
lava, passing from reddish brown to bright yellow by imperceptible shades? And these crystals are just like globes of
light."

"Ali, you think so, do you, Axel, my boy? Well, you will see greater splendours than these, I hope. Now let us
march: march!"

He had better have said slide, for we did nothing but drop down the steep inclines. It was the facis _descensus
Averni_ of Virgil. The compass, which I consulted frequently, gave our direction as southeast with inflexible
steadiness. This lava stream deviated neither to the right nor to the left.

Yet there was no sensible increase of temperature. This justified Davy's theory, and more than once I consulted
the thermometer with surprise. Two hours after our departure it only marked 10° (50° Fahr.), an increase of only 4°.
This gave reason for believing that our descent was more horizontal than vertical. As for the exact depth reached, it
was very easy to ascertain that; the Professor measured accurately the angles of deviation and inclination on the
road, but he kept the results to himself.

About eight in the evening he signalled to stop. Hans sat down at once. The lamps were hung upon a projection
in the lava; we were in a sort of cavern where there was plenty of air. Certain puffs of air reached us. What
atmospheric disturbance was the cause of them? I could not answer that question at the moment. Hunger and fatigue
made me incapable of reasoning. A descent of seven hours consecutively is not made without considerable
expenditure of strength. I was exhausted. The order to 'halt' therefore gave me pleasure. Hans laid our provisions
upon a block of lava, and we ate with a good appetite. But one thing troubled me, our supply of water was half
consumed. My uncle reckoned upon a fresh supply from subterranean sources, but hitherto we had met with none. I
could not help bringing his attention to this circumstance.

"Are you surprised at this want of springs?" he said.
"More than that, I am anxious about it; we have only water enough for five days."
"Don't be uneasy, Axel, we shall find more than we want."
"When?"
"When we have left this bed of lava behind us. How could springs break through such walls as these?"
"But perhaps this passage runs to a very great depth. It seems to me that we have made no great progress
vertically."
"Why do you suppose that?"
"Because if we had gone deep into the crust of earth, we should have encountered greater heat."
"According to your system," said my uncle. "But what does the thermometer say?"
"Hardly fifteen degrees (59° Fahr), nine degrees only since our departure."
"Well, what is your conclusion?"
"This is my conclusion. According to exact observations, the increase of temperature in the interior of the globe
advances at the rate of one degree (1 4/5° Fahr.) for every hundred feet. But certain local conditions may modify this
rate. Thus at Yakoutsk in Siberia the increase of a degree is ascertained to be reached every 36 feet. This difference
depends upon the heat-conducting power of the rocks. Moreover, in the neighbourhood of an extinct volcano,
through gneiss, it has been observed that the increase of a degree is only attained at every 125 feet. Let us therefore
assume this last hypothesis as the most suitable to our situation, and calculate."
"Well, do calculate, my boy."
"Nothing is easier," said I, putting down figures in my note book. "Nine times a hundred and twenty-five feet
gives a depth of eleven hundred and twenty-five feet."
"Very accurate indeed."
"Well?"
"By my observation we are at 10,000 feet below the level of the sea."
"Is that possible?"
"Yes, or figures are of no use."

The Professor's calculations were quite correct. We had already attained a depth of six thousand feet beyond that
hitherto reached by the foot of man, such as the mines of Kitz Bahl in Tyrol, and those of Wuttembourg in Bohemia.
The temperature, which ought to have been 81° (178° Fahr.) was scarcely 15° (59° Fahr.). Here was cause for
reflection.

CHAPTER XIX.

GEOLOGICAL STUDIES IN SITU

Next day, Tuesday, June 30, at 6 a.m., the descent began again.

We were still following the gallery of lava, a real natural staircase, and as gently sloping as those inclined planes
which in some old houses are still found instead of flights of steps. And so we went on until 12.17, the, precise
moment when we overtook Hans, who had stopped.

"Ah! here we are," exclaimed my uncle, "at the very end of the chimney."
I looked around me. We were standing at the intersection of two roads, both dark and narrow. Which were we to
take? This was a difficulty.

Still my uncle refused to admit an appearance of hesitation, either before me or the guide; he pointed out the
Eastern tunnel, and we were soon all three in it.

Besides there would have been interminable hesitation before this choice of roads; for since there was no
indication whatever to guide our choice, we were obliged to trust to chance.

The slope of this gallery was scarcely perceptible, and its sections very unequal. Sometimes we passed a series of arches succeeding each other like the majestic arcades of a gothic cathedral. Here the architects of the middle ages might have found studies for every form of the sacred art which sprang from the development of the pointed arch. A mile farther we had to bow or heads under corniced elliptic arches in the romanesque style; and massive pillars standing out from the wall bent under the spring of the vault that rested heavily upon them. In other places this magnificence gave way to narrow channels between low structures which looked like beaver's huts, and we had to creep along through extremely narrow passages.

The heat was perfectly bearable. Involuntarily I began to think of its heat when the lava thrown out by Snæfell was boiling and working through this now silent road. I imagined the torrents of fire hurled back at every angle in the gallery, and the accumulation of intensely heated vapours in the midst of this confined channel.

I only hope, thought I, that this so-called extinct volcano won't take a fancy in his old age to begin his sports again!

I abstained from communicating these fears to Professor Liedenbrock. He would never have understood them at all. He had but one idea - forward! He walked, he slid, he scrambled, he tumbled, with a persistency which one could not but admire.

By six in the evening, after a not very fatiguing walk, we had gone two leagues south, but scarcely a quarter of a mile down.

My uncle said it was time to go to sleep. We ate without talking, and went to sleep without reflection.

Our arrangements for the night were very simple; a railway rug each, into which we rolled ourselves, was our sole covering. We had neither cold nor intrusive visits to fear. Travellers who penetrate into the wilds of central Africa, and into the pathless forests of the New World, are obliged to watch over each other by night. But we enjoyed absolute safety and utter seclusion; no savages or wild beasts infested these silent depths.

Next morning, we awoke fresh and in good spirits. The road was resumed. As the day before, we followed the path of the lava. It was impossible to tell what rocks we were passing: the tunnel, instead of tending lower, approached more and more nearly to a horizontal direction, I even fancied a slight rise. But about ten this upward tendency became so evident, and therefore so fatiguing, that I was obliged to slacken my pace.

"Well, Axel?" demanded the Professor impatiently.

"Well, I cannot stand it any longer," I replied.

"What! after three hours' walk over such easy ground."

"It may be easy, but it is tiring all the same."

"What, when we have nothing to do but keep going down!"

"Going up, if you please."

"Going up!" said my uncle, with a shrug.

"No doubt, for the last half-hour the inclines have gone the other way, and at this rate we shall soon arrive upon the level soil of Iceland."

The Professor nodded slowly and uneasily like a man that declines to be convinced. I tried to resume the conversation. He answered not a word, and gave the signal for a start. I saw that his silence was nothing but ill-humour.

Still I had courageously shouldered my burden again, and was rapidly following Hans, whom my uncle preceded. I was anxious not to be left behind. My greatest care was not to lose sight of my companions. I shuddered at the thought of being lost in the mazes of this vast subterranean labyrinth.

Besides, if the ascending road did become steeper, I was comforted with the thought that it was bringing us nearer to the surface. There was hope in this. Every step confirmed me in it, and I was rejoicing at the thought of meeting my little Gräuben again.

By midday there was a change in the appearance of this wall of the gallery. I noticed it by a diminution of the amount of light reflected from the sides; solid rock was appearing in the place of the lava coating. The mass was composed of inclined and sometimes vertical strata. We were passing through rocks of the transition or silurian [l] system.

"It is evident," I cried, "the marine deposits formed in the second period, these shales, limestones, and sandstones. We are turning away from the primary granite. We are just as if we were people of Hamburg going to Lubeck by way of Hanover!"

I had better have kept my observations to myself. But my geological instinct was stronger than my prudence, and uncle Liedenbrock heard my exclamation.

"What's that you are saying?" he asked.

"See," I said, pointing to the varied series of sandstones and limestones, and the first indication of slate.
'Well?'
"We are at the period when the first plants and animals appeared."
"Do you think so?"
"Look close, and examine."
I obliged the Professor to move his lamp over the walls of the gallery. I expected some signs of astonishment; but he spoke not a word, and went on.

Had he understood me or not? Did he refuse to admit, out of self-love as an uncle and a philosopher, that he had mistaken his way when he chose the eastern tunnel? or was he determined to examine this passage to its farthest extremity? It was evident that we had left the lava path, and that this road could not possibly lead to the extinct furnace of Snæfell.

Yet I asked myself if I was not depending too much on this change in the rock. Might I not myself be mistaken? Were we really crossing the layers of rock which overlie the granite foundation?

[1]The name given by Sir Roderick Murchison to a vast series of fossiliferous strata, which lies between the non-fossiliferous slaty schists below and the old red sandstone above. The system is well developed in the region of Shropshire, etc., once inhabited by the Silures under Caractacus, or Caradoc. (Tr.)

If I am right, I thought, I must soon find some fossil remains of primitive life; and then we must yield to evidence. I will look.

I had not gone a hundred paces before incontestable proofs presented themselves. It could not be otherwise, for in the Silurian age the seas contained at least fifteen hundred vegetable and animal species. My feet, which had become accustomed to the indurated lava floor, suddenly rested upon a dust composed of the _debris_ of plants and shells. In the walls were distinct impressions of fucoids and lycopodites.

Professor Liedenbrock could not be mistaken, I thought, and yet he pushed on, with, I suppose, his eyes resolutely shut.

This was only invincible obstinacy. I could hold out no longer. I picked up a perfectly formed shell, which had belonged to an animal not unlike the woodlouse: then, joining my uncle, I said:
"Look at this!"
"Very well," said he quietly, "it is the shell of a crustacean, of an extinct species called a trilobite. Nothing more."
"But don't you conclude --?"
"Just what you conclude yourself. Yes; I do, perfectly. We have left the granite and the lava. It is possible that I may be mistaken. But I cannot be sure of that until I have reached the very end of this gallery."
"You are right in doing this, my uncle, and I should quite approve of your determination, if there were not a danger threatening us nearer and nearer."
"What danger?"
"The want of water."
"Well, Axel, we will put ourselves upon rations."

CHAPTER XX.

THE FIRST SIGNS OF DISTRESS
In fact, we had to ration ourselves. Our provision of water could not last more than three days. I found that out for certain when supper-time came. And, to our sorrow, we had little reason to expect to find a spring in these transition beds.

The whole of the next day the gallery opened before us its endless arcades. We moved on almost without a word. Hans' silence seemed to be infecting us.

The road was now not ascending, at least not perceptibly. Sometimes, even, it seemed to have a slight fall. But this tendency, which was very trifling, could not do anything to reassure the Professor; for there was no change in the beds, and the transitional characteristics became more and more decided.

The electric light was reflected in sparkling splendour from the schist, limestone, and old red sandstone of the walls. It might have been thought that we were passing through a section of Wales, of which an ancient people gave
its name to this system. Specimens of magnificent marbles clothed the walls, some of a greyish agate fantastically veined with white, others of rich crimson or yellow dashed with splotches of red; then came dark cherry-coloured marbles relieved by the lighter tints of limestone.

The greater part of these bore impressions of primitive organisms. Creation had evidently advanced since the day before. Instead of rudimentary trilobites, I noticed remains of a more perfect order of beings, amongst others ganoid fishes and some of those sauroids in which palaeontologists have discovered the earliest reptile forms. The Devonian seas were peopled by animals of these species, and deposited them by thousands in the rocks of the newer formation.

It was evident that we were ascending that scale of animal life in which man fills the highest place. But Professor Liedenbrock seemed not to notice it.

He was awaiting one of two events, either the appearance of a vertical well opening before his feet, down which our descent might be resumed, or that of some obstacle which should effectually turn us back on our own footsteps. But evening came and neither wish was gratified.

On Friday, after a night during which I felt pangs of thirst, our little troop again plunged into the winding passages of the gallery.

After ten hours’ walking I observed a singular deadening of the reflection of our lamps from the side walls. The marble, the schist, the limestone, and the sandstone were giving way to a dark and lustreless lining. At one moment, the tunnel becoming very narrow, I leaned against the wall.

When I removed my hand it was black. I looked nearer, and found we were in a coal formation.

"A coal mine!" I cried.

"A mine without miners," my uncle replied.

"Who knows?" I asked.

"I know," the Professor pronounced decidedly, "I am certain that this gallery driven through beds of coal was never pierced by the hand of man. But whether it be the hand of nature or not does not matter. Supper time is come; let us sup."

Hans prepared some food. I scarcely ate, and I swallowed down the few drops of water rationed out to me. One flask half full was all we had left to slake the thirst of three men.

After their meal my two companions laid themselves down upon their rugs, and found in sleep a solace for their fatigue. But I could not sleep, and I counted every hour until morning.

On Saturday, at six, we started afresh. In twenty minutes we reached a vast open space; I then knew that the hand of man had not hollowed out this mine; the vaults would have been shored up, and, as it was, they seemed to be held up by a miracle of equilibrium.

This cavern was about a hundred feet wide and a hundred and fifty in height. A large mass had been rent asunder by a subterranean disturbance. Yielding to some vast power from below it had broken asunder, leaving this great hollow into which human beings were now penetrating for the first time.

The whole history of the carboniferous period was written upon these gloomy walls, and a geologist might with ease trace all its diverse phases. The beds of coal were separated by strata of sandstone or compact clays, and appeared crushed under the weight of overlying strata.

At the age of the world which preceded the secondary period, the earth was clothed with immense vegetable forms, the product of the double influence of tropical heat and constant moisture; a vapoury atmosphere surrounded the earth, still veiling the direct rays of the sun.

Thence arises the conclusion that the high temperature then existing was due to some other source than the heat of the sun. Perhaps even the orb of day may not have been ready yet to play the splendid part he now acts. There were no 'climates' as yet, and a torrid heat, equal from pole to equator, was spread over the whole surface of the globe. Whence this heat? Was it from the interior of the earth?

Notwithstanding the theories of Professor Liedenbrock, a violent heat did at that time brood within the body of the spheroid. Its action was felt to the very last coats of the terrestrial crust; the plants, unacquainted with the beneficent influences of the sun, yielded neither flowers nor scent. But their roots drew vigorous life from the burning soil of the early days of this planet.

There were but few trees. Herbaceous plants alone existed. There were tall grasses, ferns, lycopods, besides sigillaria, asterophyllites, now scarce plants, but then the species might be counted by thousands.

The coal measures owe their origin to this period of profuse vegetation. The yet elastic and yielding crust of the earth obeyed the fluid forces beneath. Thence innumerable fissures and depressions. The plants, sunk underneath the waters, formed by degrees into vast accumulated masses.

Then came the chemical action of nature; in the depths of the seas the vegetable accumulations first became peat; then, acted upon by generated gases and the heat of fermentation, they underwent a process of complete mineralization.
Thus were formed those immense coalfields, which nevertheless, are not inexhaustible, and which three centuries at the present accelerated rate of consumption will exhaust unless the industrial world will devise a remedy.

These reflections came into my mind whilst I was contemplating the mineral wealth stored up in this portion of the globe. These no doubt, I thought, will never be discovered; the working of such deep mines would involve too large an outlay, and where would be the use as long as coal is yet spread far and wide near the surface? Such as my eyes behold these virgin stores, such they will be when this world comes to an end.

But still we marched on, and I alone was forgetting the length of the way by losing myself in the midst of geological contemplations. The temperature remained what it had been during our passage through the lava and schists. Only my sense of smell was forcibly affected by an odour of protocarburet of hydrogen. I immediately recognised in this gallery the presence of a considerable quantity of the dangerous gas called by miners firedamp, the explosion of which has often occasioned such dreadful catastrophes.

Happily, our light was from Ruhmkorff's ingenious apparatus. If unfortunately we had explored this gallery with torches, a terrible explosion would have put an end to travelling and travellers at one stroke.

This excursion through the coal mine lasted till night. My uncle scarcely could restrain his impatience at the horizontal road. The darkness, always deep twenty yards before us, prevented us from estimating the length of the gallery; and I was beginning to think it must be endless, when suddenly at six o'clock a wall very unexpectedly stood before us. Right or left, top or bottom, there was no road farther; we were at the end of a blind alley. "Very well, it's all right!" cried my uncle, "now, at any rate, we shall know what we are about. We are not in Saknussemm's road, and all we have to do is to go back. Let us take a night's rest, and in three days we shall get to the fork in the road."

"Yes," said I, "if we have any strength left." "Why not?" "Because to-morrow we shall have no water." "Nor courage either?" asked my uncle severely. I dared make no answer.

CHAPTER XXI.

COMPASSION FUSES THE PROFESSOR'S HEART

Next day we started early. We had to hasten forward. It was a three days' march to the cross roads.

I will not speak of the sufferings we endured in our return. My uncle bore them with the angry impatience of a man obliged to own his weakness; Hans with the resignation of his passive nature; I, I confess, with complaints and expressions of despair. I had no spirit to oppose this ill fortune.

As I had foretold, the water failed entirely by the end of the first day's retrograde march. Our fluid aliment was now nothing but gin; but this infernal fluid burned my throat, and I could not even endure the sight of it. I found the temperature and the air stifling. Fatigue paralysed my limbs. More than once I dropped down motionless. Then there was a halt; and my uncle and the Icelander did their best to restore me. But I saw that the former was struggling painfully against excessive fatigue and the tortures of thirst.

At last, on Tuesday, July 8, we arrived on our hands and knees, and half dead, at the junction of the two roads. There I dropped like a lifeless lump, extended on the lava soil. It was ten in the morning.

Hans and my uncle, clinging to the wall, tried to nibble a few bits of biscuit. Long moans escaped from my swollen lips.

After some time my uncle approached me and raised me in his arms.

"Poor boy!" said he, in genuine tones of compassion.

I was touched with these words, not being accustomed to see the excitable Professor in a softened mood. I grasped his trembling hands in mine. He let me hold them and looked at me. His eyes were moistened.

Then I saw him take the flask that was hanging at his side. To my amazement he placed it on my lips.

"Drink!" said he.

Had I heard him? Was my uncle beside himself? I stared at, him stupidly, and felt as if I could not understand him.

"Drink!" he said again.

And raising his flask he emptied it every drop between my lips.

Oh! infinite pleasure! a slender sip of water came to moisten my burning mouth. It was but one sip but it was
enough to recall my ebbing life.

I thanked my uncle with clasped hands.

"Yes," he said, "a draught of water; but it is the very last - you hear! - the last. I had kept it as a precious treasure
at the bottom of my flask. Twenty times, nay, a hundred times, have I fought against a frightful impulse to drink it
off. But no, Axel, I kept it for you."

"My dear uncle," I said, whilst hot tears trickled down my face.

"Yes, my poor boy, I knew that as soon as you arrived at these cross roads you would drop half dead, and I kept
my last drop of water to reanimate you."

"Thank you, thank you," I said. Although my thirst was only partially quenched, yet some strength had returned.
The muscles of my throat, until then contracted, now relaxed again; and the inflammation of my lips abated
somewhat; and I was now able to speak.

"Let us see," I said, "we have now but one thing to do. We have no water; we must go back."

While I spoke my uncle avoided looking at me; he hung his head down; his eyes avoided mine.

"We must return," I exclaimed vehemently; "we must go back on our way to Snæfell. May God give us strength
to climb up the crater again!"

"Return!" said my uncle, as if he was rather answering himself than me.

"Yes, return, without the loss of a minute."

A long silence followed.

"So then, Axel," replied the Professor ironically, "you have found no courage or energy in these few drops of
water?"

"Courage?"

"I see you just as feeble-minded as you were before, and still expressing only despair!"

What sort of a man was this I had to do with, and what schemes was he now revolving in his fearless mind?

"What! you won't go back?"

"Should I renounce this expedition just when we have the fairest chance of success! Never!"

"Then must we resign ourselves to destruction?"

"No, Axel, no; go back. Hans will go with you. Leave me to myself!"

"Leave you here!"

"Leave me, I tell you. I have undertaken this expedition. I will carry it out to the end, and I will not return. Go,
Axel, go!"

My uncle was in high state of excitement. His voice, which had for a moment been tender and gentle, had now
become hard and threatening. He was struggling with gloomy resolutions against impossibilities. I would not leave
him in this bottomless abyss, and on the other hand the instinct of self-preservation prompted me to fly.

The guide watched this scene with his usual phlegmatic unconcern. Yet he understood perfectly well what was
going on between his two companions. The gestures themselves were sufficient to show that we were each bent on
taking a different road; but Hans seemed to take no part in a question upon which depended his life. He was ready to
start at a given signal, or to stay, if his master so willed it.

How I wished at this moment I could have made him understand me. My words, my complaints, my sorrow
would have had some influence over that frigid nature. Those dangers which our guide could not understand I could
have demonstrated and proved to him. Together we might have over-ruled the obstinate Professor; if it were needed,
we might perhaps have compelled him to regain the heights of Snæfell.

I drew near to Hans. I placed my hand upon his. He made no movement. My parted lips sufficiently revealed my
sufferings. The Icelander slowly moved his head, and calmly pointing to my uncle said:

"Master."

"Master!" I shouted; "you madman! no, he is not the master of our life; we must fly, we must drag him. Do you
hear me? Do you understand?"

I had seized Hans by the arm. I wished to oblige him to rise. I strove with him. My uncle interposed.

"Be calm, Axel! you will get nothing from that immovable servant. Therefore, listen to my proposal."

I crossed my arms, and confronted my uncle boldly.

"The want of water," he said, "is the only obstacle in our way. In this eastern gallery made up of lavas, schists,
and coal, we have not met with a single particle of moisture. Perhaps we shall be more fortunate if we follow the
western tunnel."

I shook my head incredulously.

"Hear me to the end," the Professor went on with a firm voice. "Whilst you were lying there motionless, I went
to examine the conformation of that gallery. It penetrates directly downward, and in a few hours it will bring us to
the granite rocks. There we must meet with abundant springs. The nature of the rock assures me of this, and instinct
agrees with logic to support my conviction. Now, this is my proposal. When Columbus asked of his ships' crews for three days more to discover a new world, those crews, disheartened and sick as they were, recognised the justice of the claim, and he discovered America. I am the Columbus of this nether world, and I only ask for one more day. If in a single day I have not met with the water that we want, I swear to you we will return to the surface of the earth."

In spite of my irritation I was moved with these words, as well as with the violence my uncle was doing to his own wishes in making so hazardous a proposal.

"Well," I said, "do as you will, and God reward your superhuman energy. You have now but a few hours to tempt fortune. Let us start!"

CHAPTER XXII.

TOTAL FAILURE OF WATER

This time the descent commenced by the new gallery. Hans walked first as was his custom.

We had not gone a hundred yards when the Professor, moving his lantern along the walls, cried:

"Here are primitive rocks. Now we are in the right way. Forward!"

When in its early stages the earth was slowly cooling, its contraction gave rise in its crust to disruptions, distortions, fissures, and chasms. The passage through which we were moving was such a fissure, through which at one time granite poured out in a molten state. Its thousands of windings formed an inextricable labyrinth through the primeval mass.

As fast as we descended, the succession of beds forming the primitive foundation came out with increasing distinctness. Geologists consider this primitive matter to be the base of the mineral crust of the earth, and have ascertained it to be composed of three different formations, schist, gneiss, and mica schist, resting upon that unchangeable foundation, the granite.

Never had mineralogists found themselves in so marvellous a situation to study nature in situ. What the boring machine, an insensible, inert instrument, was unable to bring to the surface of the inner structure of the globe, we were able to peruse with our own eyes and handle with our own hands.

Through the beds of schist, coloured with delicate shades of green, ran in winding course threads of copper and manganese, with traces of platinum and gold. I thought, what riches are here buried at an unapproachable depth in the earth, hidden for ever from the covetous eyes of the human race! These treasures have been buried at such a profound depth by the convulsions of primeval times that they run no chance of ever being molested by the pickaxe or the spade.

To the schists succeeded gneiss, partially stratified, remarkable for the parallelism and regularity of its lamina, then mica schists, laid in large plates or flakes, revealing their lamellated structure by the sparkle of the white shining mica.

The light from our apparatus, reflected from the small facets of quartz, shot sparkling rays at every angle, and I seemed to be moving through a diamond, within which the quickly darting rays broke across each other in a thousand flashing coruscations.

About six o'clock this brilliant fete of illuminations underwent a sensible abatement of splendour, then almost ceased. The walls assumed a crystallised though sombre appearance; mica was more closely mingled with the feldspar and quartz to form the proper rocky foundations of the earth, which bears without distortion or crushing the weight of the four terrestrial systems. We were immured within prison walls of granite.

It was eight in the evening. No signs of water had yet appeared. I was suffering horribly. My uncle strode on. He refused to stop. He was listening anxiously for the murmur of distant springs. But, no, there was dead silence.

And now my limbs were failing beneath me. I resisted pain and torture, that I might not stop my uncle, which would have driven him to despair, for the day was drawing near to its end, and it was his last.

At last I failed utterly; I uttered a cry and fell.

"Come to me, I am dying."

My uncle retraced his steps. He gazed upon me with his arms crossed; then these muttered words passed his lips:

"It's all over!"

The last thing I saw was a fearful gesture of rage, and my eyes closed.
When I reopened them I saw my two companions motionless and rolled up in their coverings. Were they asleep? As for me, I could not get one moment's sleep. I was suffering too keenly, and what embittered my thoughts was that there was no remedy. My uncle's last words echoed painfully in my ears: "it's all over!" For in such a fearful state of debility it was madness to think of ever reaching the upper world again.

We had above us a league and a half of terrestrial crust. The weight of it seemed to be crushing down upon my shoulders. I felt weighed down, and I exhausted myself with imaginary violent exertions to turn round upon my granite couch.

A few hours passed away. A deep silence reigned around us, the silence of the grave. No sound could reach us through walls, the thinnest of which were five miles thick.

Yet in the midst of my stupefaction I seemed to be aware of a noise. It was dark down the tunnel, but I seemed to see the Icelander vanishing from our sight with the lamp in his hand.

Why was he leaving us? Was Hans going to forsake us? My uncle was fast asleep. I wanted to shout, but my voice died upon my parched and swollen lips. The darkness became deeper, and the last sound died away in the far distance.

"Hans has abandoned us," I cried. "Hans! Hans!"

But these words were only spoken within me. They went no farther. Yet after the first moment of terror I felt ashamed of suspecting a man of such extraordinary faithfulness. Instead of ascending he was descending the gallery. An evil design would have taken him up not down. This reflection restored me to calmness, and I turned to other thoughts. None but some weighty motive could have induced so quiet a man to forfeit his sleep. Was he on a journey of discovery? Had he during the silence of the night caught a sound, a murmuring of something in the distance, which had failed to affect my hearing?

CHAPTER XXIII.

WATER DISCOVERED

For a whole hour I was trying to work out in my delirious brain the reasons which might have influenced this seemingly tranquil huntsman. The absurdest notions ran in utter confusion through my mind. I thought madness was coming on!

But at last a noise of footsteps was heard in the dark abyss. Hans was approaching. A flickering light was beginning to glimmer on the wall of our darksome prison; then it came out full at the mouth of the gallery. Hans appeared.

He drew close to my uncle, laid his hand upon his shoulder, and gently woke him. My uncle rose up.

"What is the matter?" he asked.

"_Watten!_" replied the huntsman.

No doubt under the inspiration of intense pain everybody becomes endowed with the gift of divers tongues. I did not know a word of Danish, yet instinctively I understood the word he had uttered.

"Water! water!" I cried, clapping my hands and gesticulating like a madman.

"Water!" repeated my uncle. "Hvar?" he asked, in Icelandic.

"_Nedat._" replied Hans.

"Where? Down below!" I understood it all. I seized the hunter's hands, and pressed them while he looked on me without moving a muscle of his countenance.

The preparations for our departure were not long in making, and we were soon on our way down a passage inclining two feet in seven. In an hour we had gone a mile and a quarter, and descended two thousand feet.

Then I began to hear distinctly quite a new sound of something running within the thickness of the granite wall, a kind of dull, dead rumbling, like distant thunder. During the first part of our walk, not meeting with the promised spring, I felt my agony returning; but then my uncle acquainted me with the cause of the strange noise.

"Hans was not mistaken," he said. "What you hear is the rushing of a torrent."

"A torrent?" I exclaimed.

"There can be no doubt; a subterranean river is flowing around us."

We hurried forward in the greatest excitement. I was no longer sensible of my fatigue. This murmuring of waters
close at hand was already refreshing me. It was audibly increasing. The torrent, after having for some time flowed over our heads, was now running within the left wall, roaring and rushing. Frequently I touched the wall, hoping to feel some indications of moisture: But there was no hope here.

Yet another half hour, another half league was passed.

Then it became clear that the hunter had gone no farther. Guided by an instinct peculiar to mountaineers he had as it were felt this torrent through the rock; but he had certainly seen none of the precious liquid; he had drunk nothing himself.

Soon it became evident that if we continued our walk we should widen the distance between ourselves and the stream, the noise of which was becoming fainter.

We returned. Hans stopped where the torrent seemed closest. I sat near the wall, while the waters were flowing past me at a distance of two feet with extreme violence. But there was a thick granite wall between us and the object of our desires.

Without reflection, without asking if there were any means of procuring the water, I gave way to a movement of despair.

Hans glanced at me with, I thought, a smile of compassion.

He rose and took the lamp. I followed him. He moved towards the wall. I looked on. He applied his ear against the dry stone, and moved it slowly to and fro, listening intently. I perceived at once that he was examining to find the exact place where the torrent could be heard the loudest. He met with that point on the left side of the tunnel, at three feet from the ground.

I was stirred up with excitement. I hardly dared guess what the hunter was about to do. But I could not but understand, and applaud and cheer him on, when I saw him lay hold of the pickaxe to make an attack upon the rock.

"We are saved!" I cried.

"Yes," cried my uncle, almost frantic with excitement. "Hans is right. Capital fellow! Who but he would have thought of it?"

Yes; who but he? Such an expedient, however simple, would never have entered into our minds. True, it seemed most hazardous to strike a blow of the hammer in this part of the earth's structure. Suppose some displacement should occur and crush us all! Suppose the torrent, bursting through, should drown us in a sudden flood! There was nothing vain in these fancies. But still no fears of falling rocks or rushing floods could stay us now; and our thirst was so intense that, to satisfy it, we would have dared the waves of the north Atlantic.

Hans set about the task which my uncle and I together could not have accomplished. If our impatience had armed our hands with power, we should have shattered the rock into a thousand fragments. Not so Hans. Full of self possession, he calmly wore his way through the rock with a steady succession of light and skilful strokes, working through an aperture six inches wide at the outside. I could hear a louder noise of flowing waters, and I fancied I could feel the delicious fluid refreshing my parched lips.

The pick had soon penetrated two feet into the granite partition, and our man had worked for above an hour. I was in an agony of impatience. My uncle wanted to employ stronger measures, and I had some difficulty in dissuading him; still he had just taken a pickaxe in his hand, when a sudden hissing was heard, and a jet of water spurted out with violence against the opposite wall.

Hans, almost thrown off his feet by the violence of the shock, uttered a cry of grief and disappointment, of which I soon understood the cause, when plunging my hands into the spouting torrent, I withdrew them in haste, for the water was scalding hot.

"The water is at the boiling point," I cried.

"Well, never mind, let it cool," my uncle replied.

The tunnel was filling with steam, whilst a stream was forming, which by degrees wandered away into subterranean windings, and soon we had the satisfaction of swallowing our first draught.

Could anything be more delicious than the sensation that our burning intolerable thirst was passing away, and leaving us to enjoy comfort and pleasure? But where was this water from? No matter. It was water; and though still warm, it brought life back to the dying. I kept drinking without stopping, and almost without tasting.

At last after a most delightful time of reviving energy, I cried, "Why, this is a chalybeate spring!"

"Nothing could be better for the digestion," said my uncle. "It is highly impregnated with iron. It will be as good for us as going to the Spa, or to Töplitz."

"Well, it is delicious!"

"Of course it is, water should be, found six miles underground. It has an inky flavour, which is not at all unpleasant. What a capital source of strength Hans has found for us here. We will call it after his name."

"Agreed," I cried.

And Hansbach it was from that moment.
Hans was none the prouder. After a moderate draught, he went quietly into a corner to rest.

"Now," I said, "we must not lose this water."

"What is the use of troubling ourselves?" my uncle, replied. "I fancy it will never fail."

"Never mind, we cannot be sure; let us fill the water bottle and our flasks, and then stop up the opening."

My advice was followed so far as getting in a supply; but the stopping up of the hole was not so easy to accomplish. It was in vain that we took up fragments of granite, and stuffed them in with tow, we only scalded our hands without succeeding. The pressure was too great, and our efforts were fruitless.

"It is quite plain," said I, "that the higher body of this water is at a considerable elevation. The force of the jet shows that."

"No doubt," answered my uncle. "If this column of water is 32,000 feet high - that is, from the surface of the earth, it is equal to the weight of a thousand atmospheres. But I have got an idea."

"Well?"

"Why should we trouble ourselves to stop the stream from coming out at all?"

"Because --" Well, I could not assign a reason.

"When our flasks are empty, where shall we fill them again? Can we tell that?"

No; there was no certainty.

"Well, let us allow the water to run on. It will flow down, and will both guide and refresh us."

"That is well planned," I cried. "With this stream for our guide, there is no reason why we should not succeed in our undertaking."

"Ah, my boy! you agree with me now," cried the Professor, laughing.

"I agree with you most heartily."

"Well, let us rest awhile; and then we will start again."

I was forgetting that it was night. The chronometer soon informed me of that fact; and in a very short time, refreshed and thankful, we all three fell into a sound sleep.

CHAPTER XXIV.

WELL SAID, OLD MOLE! CANST THOU WORK I' THE GROUND SO FAST?

By the next day we had forgotten all our sufferings. At first, I was wondering that I was no longer thirsty, and I was for asking for the reason. The answer came in the murmuring of the stream at my feet.

We breakfasted, and drank of this excellent chalybeate water. I felt wonderfully stronger, and quite decided upon pushing on. Why should not so firmly convinced a man as my uncle, furnished with so industrious a guide as Hans, and accompanied by so determined a nephew as myself, go on to final success? Such were the magnificent plans which struggled for mastery within me. If it had been proposed to me to return to the summit of Snæfell, I should have indignantly declined.

Most fortunately, all we had to do was to descend.

"Let us start!" I cried, awakening by my shouts the echoes of the vaulted hollows of the earth.

On Thursday, at 8 a.m., we started afresh. The granite tunnel winding from side to side, seemed almost to form a labyrinth; but, on the whole, its direction seemed to be south-easterly. My uncle never ceased to consult his compass, to keep account of the ground gone over.

The gallery dipped down a very little way from the horizontal, scarcely more than two inches in a fathom, and the stream ran gently murmuring at our feet. I compared it to a friendly genius guiding us underground, and caressed with my hand the soft naiad, whose comforting voice accompanied our steps. With my reviving spirits these mythological notions seemed to come unbidden.

As for my uncle, he was beginning to storm against the horizontal road. He loved nothing better than a vertical path; but this way seemed indefinitely prolonged, and instead of sliding along the hypothenuse as we were now doing, he would willingly have dropped down the terrestrial radius. But there was no help for it, and as long as we were approaching the centre at all we felt that we must not complain.

From time to time, a steeper path appeared; our naiad then began to tumble before us with a hoarser murmur,
and we went down with her to a greater depth.

On the whole, that day and the next we made considerable way horizontally, very little vertically.

On Friday evening, the 10th of July, according to our calculations, we were thirty leagues south-east of Rejkjavik, and at a depth of two leagues and a half.

At our feet there now opened a frightful abyss. My uncle, however, was not to be daunted, and he clapped his hands at the steepness of the descent.

"This will take us a long way," he cried, "and without much difficulty; for the projections in the rock form quite a staircase."

The ropes were so fastened by Hans as to guard against accident, and the descent commenced. I can hardly call it perilous, for I was beginning to be familiar with this kind of exercise.

This well, or abyss, was a narrow cleft in the mass of the granite, called by geologists a ‘fault,’ and caused by the unequal cooling of the globe of the earth. If it had at one time been a passage for eruptive matter thrown out by Snæfell, I still could not understand why no trace was left of its passage. We kept going down a kind of winding staircase, which seemed almost to have been made by the hand of man.

Every quarter of an hour we were obliged to halt, to take a little necessary repose and restore the action of our limbs. We then sat down upon a fragment of rock, and we talked as we ate and drank from the stream.

Of course, down this fault the Hansbach fell in a cascade, and lost some of its volume; but there was enough and to spare to slake our thirst. Besides, when the incline became more gentle, it would of course resume its peaceable course. At this moment it reminded me of my worthy uncle, in his frequent fits of impatience and anger, while below it ran with the calmness of the Icelandic hunter.

On the 6th and 7th of July we kept following the spiral curves of this singular well, penetrating in actual distance no more than two leagues; but being carried to a depth of five leagues below the level of the sea. But on the 8th, about noon, the fault took, towards the south-east, a much gentler slope, one of about forty-five degrees.

Then the road became monotonously easy. It could not be otherwise, for there was no landscape to vary the stages of our journey.

On Wednesday, the 15th, we were seven leagues underground, and had travelled fifty leagues away from Snæfell. Although we were tired, our health was perfect, and the medicine chest had not yet had occasion to be opened.

My uncle noted every hour the indications of the compass, the chronometer, the aneroid, and the thermometer--the very same which he has published in his scientific report of our journey. It was therefore not difficult to know exactly our whereabouts. When he told me that we had gone fifty leagues horizontally, I could not repress an exclamation of astonishment, at the thought that we had now long left Iceland behind us.

"What is the matter?" he cried.

"I was reflecting that if your calculations are correct we are no longer under Iceland."

"Do you think so?"

"I am not mistaken," I said, and examining the map, I added, "We have passed Cape Portland, and those fifty leagues bring us under the wide expanse of ocean."

"Under the sea," my uncle repeated, rubbing his hands with delight.

"Can it be?" I said. "Is the ocean spread above our heads?"

"Of course, Axel. What can be more natural? At Newcastle are there not coal mines extending far under the sea?"

It was all very well for the Professor to call this so simple, but I could not feel quite easy at the thought that the boundless ocean was rolling over my head. And yet it really mattered very little whether it was the plains and mountains that covered our heads, or the Atlantic waves, as long as we were arched over by solid granite. And, besides, I was getting used to this idea; for the tunnel, now running straight, now winding as capriciously in its inclines as in its turnings, but constantly preserving its south-easterly direction, and always running deeper, was gradually carrying us to very great depths indeed.

Four days later, Saturday, the 18th of July, in the evening, we arrived at a kind of vast grotto; and here my uncle paid Hans his weekly wages, and it was settled that the next day, Sunday, should be a day of rest.
DE PROFUNDIS

I therefore awoke next day relieved from the preoccupation of an immediate start. Although we were in the very deepest of known depths, there was something not unpleasant about it. And, besides, we were beginning to get accustomed to this troglodyte [1] life. I no longer thought of sun, moon, and stars, trees, houses, and towns, nor of any of those terrestrial superfluities which are necessaries of men who live upon the earth's surface. Being fossils, we looked upon all those things as mere jokes.

The grotto was an immense apartment. Along its granite floor ran our faithful stream. At this distance from its spring the water was scarcely tepid, and we drank of it with pleasure.

After breakfast the Professor gave a few hours to the arrangement of his daily notes.

"First," said he, "I will make a calculation to ascertain our exact position. I hope, after our return, to draw a map of our journey, which will be in reality a vertical section of the globe, containing the track of our expedition."

"That will be curious, uncle; but are your observations sufficiently accurate to enable you to do this correctly?"

"Yes; I have everywhere observed the angles and the inclines. I am sure there is no error. Let us see where we are now. Take your compass, and note the direction."

I looked, and replied carefully:

[1] tpwgl, a hole; dnw, to creep into. The name of an Ethiopian tribe who lived in caves and holes. ??????, a hole, and ???, to creep into.

"South-east by east."

"Well," answered the Professor, after a rapid calculation, "I infer that we have gone eighty-five leagues since we started."

"Therefore we are under mid-Atlantic?"

"To be sure we are."

"And perhaps at this very moment there is a storm above, and ships over our heads are being rudely tossed by the tempest."

"Quite probable."

"And whales are lashing the roof of our prison with their tails?"

"It may be, Axel, but they won't shake us here. But let us go back to our calculation. Here we are eighty-five leagues south-east of Snæfell, and I reckon that we are at a depth of sixteen leagues."

"Sixteen leagues?" I cried.

"No doubt."

"Why, this is the very limit assigned by science to the thickness of the crust of the earth."

"I don't deny it."

"And here, according to the law of increasing temperature, there ought to be a heat of 2,732° Fahr."

"So there should, my lad."

"And all this solid granite ought to be running in fusion."

"You see that it is not so, and that, as so often happens, facts come to overthrow theories."

"I am obliged to agree; but, after all, it is surprising."

"What does the thermometer say?"

"Twenty-seven, six tenths (82° Fahr.)."

"Therefore the savants are wrong by 2,705°, and the proportional increase is a mistake. Therefore Humphry Davy was right, and I am not wrong in following him. What do you say now?"

"Nothing."

In truth, I had a good deal to say. I gave way in no respect to Davy's theory. I still held to the central heat, although I did not feel its effects. I preferred to admit in truth, that this chimney of an extinct volcano, lined with lavas, which are non-conductors of heat, did not suffer the heat to pass through its walls.

But without stopping to look up new arguments I simply took up our situation such as it was.

"Well, admitting all your calculations to be quite correct, you must allow me to draw one rigid result therefrom."

"What is it. Speak freely."

"At the latitude of Iceland, where we now are, the radius of the earth, the distance from the centre to the surface is about 1,583 leagues; let us say in round numbers 1,600 leagues, or 4,800 miles. Out of 1,600 leagues we have gone twelve!"

"So you say."

"And these twelve at a cost of 85 leagues diagonally?"

"Exactly so."
"In twenty days?"
"Yes."

"Now, sixteen leagues are the hundredth part of the earth's radius. At this rate we shall be two thousand days, or nearly five years and a half, in getting to the centre."

No answer was vouchsafed to this rational conclusion. "Without reckoning, too, that if a vertical depth of sixteen leagues can be attained only by a diagonal descent of eighty-four, it follows that we must go eight thousand miles in a south-easterly direction; so that we shall emerge from some point in the earth's circumference instead of getting to the centre!"

"Confusion to all your figures, and all your hypotheses besides," shouted my uncle in a sudden rage. "What is the basis of them all? How do you know that this passage does not run straight to our destination? Besides, there is a precedent. What one man has done, another may do."

"I hope so; but, still, I may be permitted -"
"You shall have my leave to hold your tongue, Axel, but not to talk in that irrational way."

I could see the awful Professor bursting through my uncle's skin, and I took timely warning.

"Now look at your aneroid. What does that say?"
"It says we are under considerable pressure."

"Very good; so you see that by going gradually down, and getting accustomed to the density of the atmosphere, we don't suffer at all."

"Nothing, except a little pain in the ears."
"That's nothing, and you may get rid of even that by quick breathing whenever you feel the pain."

"Exactly so," I said, determined not to say a word that might cross my uncle's prejudices. "There is even positive pleasure in living in this dense atmosphere. Have you observed how intense sound is down here?"

"No doubt it is. A deaf man would soon learn to hear perfectly."

"But won't this density augment?"

"Yes; according to a rather obscure law. It is well known that the weight of bodies diminishes as fast as we descend. You know that it is at the surface of the globe that weight is most sensibly felt, and that at the centre there is no weight at all."

"I am aware of that; but, tell me, will not air at last acquire the density of water?"

"Of course, under a pressure of seven hundred and ten atmospheres."

"And how, lower down still?"

"Lower down the density will still increase."

"But how shall we go down then."

"Why, we must fill our pockets with stones."

"Well, indeed, my worthy uncle, you are never at a loss for an answer."

I dared venture no farther into the region of probabilities, for I might presently have stumbled upon an impossibility, which would have brought the Professor on the scene when he was not wanted.

Still, it was evident that the air, under a pressure which might reach that of thousands of atmospheres, would at last reach the solid state, and then, even if our bodies could resist the strain, we should be stopped, and no reasonings would be able to get us on any farther.

But I did not advance this argument. My uncle would have met it with his inevitable Saknussemm, a precedent which possessed no weight with me; for even if the journey of the learned Icelander were really attested, there was one very simple answer, that in the sixteenth century there was neither barometer or aneroid and therefore Saknussemm could not tell how far he had gone.

But I kept this objection to myself, and waited the course of events.

The rest of the day was passed in calculations and in conversations. I remained a steadfast adherent of the opinions of Professor Liedenbrock, and I envied the stolid indifference of Hans, who, without going into causes and effects, went on with his eyes shut wherever his destiny guided him.
THE WORST PERIL OF ALL

It must be confessed that hitherto things had not gone on so badly, and that I had small reason to complain. If our difficulties became no worse, we might hope to reach our end. And to what a height of scientific glory we should then attain! I had become quite a Liedenbrock in my reasonings; seriously I had. But would this state of things last in the strange place we had come to? Perhaps it might.

For several days steeper inclines, some even frightfully near to the perpendicular, brought us deeper and deeper into the mass of the interior of the earth. Some days we advanced nearer to the centre by a league and a half, or nearly two leagues. These were perilous descents, in which the skill and marvellous coolness of Hans were invaluable to us. That unimpassioned Icelander devoted himself with incomprehensible deliberation; and, thanks to him, we crossed many a dangerous spot which we should never have cleared alone.

But his habit of silence gained upon him day by day, and was infecting us. External objects produce decided effects upon the brain. A man shut up between four walls soon loses the power to associate words and ideas together. How many prisoners in solitary confinement become idiots, if not mad, for want of exercise for the thinking faculty!

During the fortnight following our last conversation, no incident occurred worthy of being recorded. But I have good reason for remembering one very serious event which took place at this time, and of which I could scarcely now forget the smallest details.

By the 7th of August our successive descents had brought us to a depth of thirty leagues; that is, that for a space of thirty leagues there were over our heads solid beds of rock, ocean, continents, and towns. We must have been two hundred leagues from Iceland.

On that day the tunnel went down a gentle slope. I was ahead of the others. My uncle was carrying one of Ruhmkorff's lamps and I the other. I was examining the beds of granite.

Suddenly turning round I observed that I was alone.

Well, well, I thought; I have been going too fast, or Hans and my uncle have stopped on the way. Come, this won't do; I must join them. Fortunately there is not much of an ascent.

I retraced my steps. I walked for a quarter of an hour. I gazed into the darkness. I shouted. No reply: my voice was lost in the midst of the cavernous echoes which alone replied to my call.

I began to feel uneasy. A shudder ran through me.

"Calmly!" I said aloud to myself, "I am sure to find my companions again. There are not two roads. I was too far ahead. I will return!"

For half an hour I climbed up. I listened for a call, and in that dense atmosphere a voice could reach very far. But there was a dreary silence in all that long gallery. I stopped. I could not believe that I was lost. I was only bewildered for a time, not lost. I was sure I should find my way again.

"Come," I repeated, "since there is but one road, and they are on it, I must find them again. I have but to ascend still. Unless, indeed, missing me, and supposing me to be behind, they too should have gone back. But even in this case I have only to make the greater haste. I shall find them, I am sure."

I repeated these words in the fainter tones of a half-convinced man. Besides, to associate even such simple ideas with words, and reason with them, was a work of time.

A doubt then seized upon me. Was I indeed in advance when we became separated? Yes, to be sure I was. Hans was after me, preceding my uncle. He had even stopped for a while to strap his baggage better over his shoulders. I could remember this little incident. It was at that very moment that I must have gone on.

Besides, I thought, have not I a guarantee that I shall not lose my way, a clue in the labyrinth, that cannot be broken, my faithful stream? I have but to trace it back, and I must come upon them.

This conclusion revived my spirits, and I resolved to resume my march without loss of time.

How I then blessed my uncle's foresight in preventing the hunter from stopping up the hole in the granite. This beneficent spring, after having satisfied our thirst on the road, would now be my guide among the windings of the terrestrial crust.

Before starting afresh I thought a wash would do me good. I stooped to bathe my face in the Hansbach.

To my stupefaction and utter dismay my feet trod only - the rough dry granite. The stream was no longer at my feet.

CHAPTER XXVII.
LOST IN THE BOWELS OF THE EARTH

To describe my despair would be impossible. No words could tell it. I was buried alive, with the prospect before me of dying of hunger and thirst.

Mechanically I swept the ground with my hands. How dry and hard the rock seemed to me!

But how had I left the course of the stream? For it was a terrible fact that it no longer ran at my side. Then I understood the reason of that fearful, silence, when for the last time I listened to hear if any sound from my companions could reach my ears. At the moment when I left the right road I had not noticed the absence of the stream. It is evident that at that moment a deviation had presented itself before me, whilst the Hansbach, following the caprice of another incline, had gone with my companions away into unknown depths.

How was I to return? There was not a trace of their footsteps or of my own, for the foot left no mark upon the granite floor. I racked my brain for a solution of this impracticable problem. One word described my position. Lost! Lost at an immeasurable depth! Thirty leagues of rock seemed to weigh upon my shoulders with a dreadful pressure. I felt crushed.

I tried to carry back my ideas to things on the surface of the earth. I could scarcely succeed. Hamburg, the house in the Königstrasse, my poor Gräuben, all that busy world underneath which I was wandering about, was passing in rapid confusion before my terrified memory. I could revive with vivid reality all the incidents of our voyage, Iceland, M. Fridriksen, Snæfell. I said to myself that if, in such a position as I was now in, I was fool enough to cling to one glimpse of hope, it would be madness, and that the best thing I could do was to despair.

What human power could restore me to the light of the sun by rending asunder the huge arches of rock which united over my head, buttressing each other with impregnable strength? Who could place my feet on the right path, and bring me back to my company?

"Oh, my uncle!" burst from my lips in the tone of despair.

It was my only word of reproach, for I knew how much he must be suffering in seeking me, wherever he might be.

When I saw myself thus far removed from all earthly help I had recourse to heavenly succour. The remembrance of my childhood, the recollection of my mother, whom I had only known in my tender early years, came back to me, and I knelt in prayer imploring for the Divine help of which I was so little worthy.

This return of trust in God's providence allayed the turbulence of my fears, and I was enabled to concentrate upon my situation all the force of my intelligence.

I had three days' provisions with me and my flask was full. But I could not remain alone for long. Should I go up or down?

Up, of course; up continually.

I must thus arrive at the point where I had left the stream, that fatal turn in the road. With the stream at my feet, I might hope to regain the summit of Snæfell.

Why had I not thought of that sooner? Here was evidently a chance of safety. The most pressing duty was to find out again the course of the Hansbach. I rose, and leaning upon my iron-pointed stick I ascended the gallery. The slope was rather steep. I walked on without hope but without indecision, like a man who has made up his mind.

For half an hour I met with no obstacle. I tried to recognise my way by the form of the tunnel, by the projections of certain rocks, by the disposition of the fractures. But no particular sign appeared, and I soon saw that this gallery could not bring me back to the turning point. It came to an abrupt end. I struck against an impenetrable wall, and fell down upon the rock.

Unspeakable despair then seized upon me. I lay overwhelmed, aghast! My last hope was shattered against this granite wall.

Lost in this labyrinth, whose windings crossed each other in all directions, it was no use to think of flight any longer. Here I must die the most dreadful of deaths. And, strange to say, the thought came across me that when some day my petrified remains should be found thirty leagues below the surface in the bowels of the earth, the discovery might lead to grave scientific discussions.

I tried to speak aloud, but hoarse sounds alone passed my dry lips. I panted for breath.

In the midst of my agony a new terror laid hold of me. In falling my lamp had got wrong. I could not set it right, and its light was paling and would soon disappear altogether.

I gazed painfully upon the luminous current growing weaker and weaker in the wire coil. A dim procession of moving shadows seemed slowly unfolding down the darkening walls. I scarcely dared to shut my eyes for one moment, for fear of losing the least glimmer of this precious light. Every instant it seemed about to vanish and the
dense blackness to come rolling in palpably upon me.

One last trembling glimmer shot feebly up. I watched it in trembling and anxiety; I drank it in as if I could
preserve it, concentrating upon it the full power of my eyes, as upon the very last sensation of light which they were
ever to experience, and the next moment I lay in the heavy gloom of deep, thick, unfathomable darkness.

A terrible cry of anguish burst from me. Upon earth, in the midst of the darkest night, light never abdicates its
functions altogether. It is still subtle and diffusive, but whatever little there may be, the eye still catches that little.
Here there was not an atom; the total darkness made me totally blind.

Then I began to lose my head. I arose with my arms stretched out before me, attempting painfully to feel my
way. I began to run wildly, hurrying through the inextricable maze, still descending, still running through the
substance of the earth's thick crust, a struggling denizen of geological 'faults,' crying, shouting, yelling, soon bruised
by contact with the jagged rock, falling and rising again bleeding, trying to drink the blood which covered my face,
and even waiting for some rock to shatter my skull against.

I shall never know whither my mad career took me. After the lapse of some hours, no doubt exhausted, I fell like
a lifeless lump at the foot of the wall, and lost all consciousness.

CHAPTER XXVIII.

THE RESCUE IN THE WHISPERING GALLERY

When I returned to partial life my face was wet with tears. How long that state of insensibility had lasted I
cannot say. I had no means now of taking account of time. Never was solitude equal to this, never had any living
being been so utterly forsaken.

After my fall I had lost a good deal of blood. I felt it flowing over me. Ah! how happy I should have been could I
have died, and if death were not yet to be gone through. I would think no longer. I drove away every idea, and,
conquered by my grief, I rolled myself to the foot of the opposite wall.

Already I was feeling the approach of another faint, and was hoping for complete annihilation, when a loud
noise reached me. It was like the distant rumble of continuous thunder, and I could hear its sounding undulations
rolling far away into the remote recesses of the abyss.

Whence could this noise proceed? It must be from some phenomenon proceeding in the great depths amidst
which I lay helpless. Was it an explosion of gas? Was it the fall of some mighty pillar of the globe?

I listened still. I wanted to know if the noise would be repeated. A quarter of an hour passed away. Silence
reigned in this gallery. I could not hear even the beating of my heart.

Suddenly my ear, resting by chance against the wall, caught, or seemed to catch, certain vague, indescribable,
distant, articulate sounds, as of words.

"This is a delusion," I thought.

But it was not. Listening more attentively, I heard in reality a murmuring of voices. But my weakness prevented
me from understanding what the voices said. Yet it was language, I was sure of it.

For a moment I feared the words might be my own, brought back by the echo. Perhaps I had been crying out
unknown to myself. I closed my lips firmly, and laid my ear against the wall again.

"Yes, truly, some one is speaking; those are words!"

Even a few feet from the wall I could hear distinctly. I succeeded in catching uncertain, strange,
undistinguishable words. They came as if pronounced in low murmured whispers. The word '_forlorad_ ' was several
times repeated in a tone of sympathy and sorrow.

"Help!" I cried with all my might. "Help!"

I listened, I watched in the darkness for an answer, a cry, a mere breath of sound, but nothing came. Some
minutes passed. A whole world of ideas had opened in my mind. I thought that my weakened voice could never
penetrate to my companions.

"It is they," I repeated. "What other men can be thirty leagues under ground?"

I again began to listen. Passing my ear over the wall from one place to another, I found the point where the
voices seemed to be best heard. The word '_forlorad_ ' again returned; then the rolling of thunder which had roused
me from my lethargy.
"No," I said, "no; it is not through such a mass that a voice can be heard. I am surrounded by granite walls, and the loudest explosion could never be heard here! This noise comes along the gallery. There must be here some remarkable exercise of acoustic laws!"

I listened again, and this time, yes this time, I did distinctly hear my name pronounced across the wide interval. It was my uncle's own voice! He was talking to the guide. And 'forlorad' is a Danish word.

Then I understood it all. To make myself heard, I must speak along this wall, which would conduct the sound of my voice just as wire conducts electricity.

But there was no time to lose. If my companions moved but a few steps away, the acoustic phenomenon would cease. I therefore approached the wall, and pronounced these words as clearly as possible:

"Uncle Liedenbrock!"

I waited with the deepest anxiety. Sound does not travel with great velocity. Even increased density air has no effect upon its rate of travelling; it merely augments its intensity. Seconds, which seemed ages, passed away, and at last these words reached me:

"Axel! Axel! is it you?"

. . . .
"Yes, yes," I replied.
. . . .
"My boy, where are you?"
. . . .
"Lost, in the deepest darkness."
. . . .
"Where is your lamp?"
. . . .
"It is out."
. . . .
"And the stream?"
. . . .
"Disappeared."
. . . .
"Axel, Axel, take courage!"
. . . .
"Wait! I am exhausted! I can't answer. Speak to me!"
. . . .
"Courage," resumed my uncle. "Don't speak. Listen to me. We have looked for you up the gallery and down the gallery. Could not find you. I wept for you, my poor boy. At last, supposing you were still on the Hansbach, we fired our guns. Our voices are audible to each other, but our hands cannot touch. But don't despair, Axel! It is a great thing that we can hear each other."

. . . .
During this time I had been reflecting. A vague hope was returning to my heart. There was one thing I must know to begin with. I placed my lips close to the wall, saying:

"My uncle!"
. . . .
"My boy!" came to me after a few seconds.
. . . .
"We must know how far we are apart."
. . . .
"That is easy."
. . . .
"You have your chronometer?"
. . . .
"Yes."
. . . .
"Well, take it. Pronounce my name, noting exactly the second when you speak. I will repeat it as soon as it shall come to me, and you will observe the exact moment when you get my answer."

"Yes; and half the time between my call and your answer will exactly indicate that which my voice will take in coming to you."
"Just so, my uncle."

"Are you ready?"

"Yes."

"Now, attention. I am going to call your name."

I put my ear to the wall, and as soon as the name 'Axel' came I immediately replied "Axel," then waited.

"Forty seconds," said my uncle. "Forty seconds between the two words; so the sound takes twenty seconds in coming. Now, at the rate of 1,120 feet in a second, this is 22,400 feet, or four miles and a quarter, nearly."

"Four miles and a quarter!" I murmured.

"It will soon be over, Axel."

"Must I go up or down?"

"Down - for this reason: We are in a vast chamber, with endless galleries. Yours must lead into it, for it seems as if all the clefts and fractures of the globe radiated round this vast cavern. So get up, and begin walking. Walk on, drag yourself along, if necessary slide down the steep places, and at the end you will find us ready to receive you. Now begin moving."

These words cheered me up.

"Good bye, uncle." I cried. "I am going. There will be no more voices heard when once I have started. So good bye!"

"Good bye, Axel, _au revoir!_"

These were the last words I heard.

This wonderful underground conversation, carried on with a distance of four miles and a quarter between us, concluded with these words of hope. I thanked God from my heart, for it was He who had conducted me through those vast solitudes to the point where, alone of all others perhaps, the voices of my companions could have reached me.

This acoustic effect is easily explained on scientific grounds. It arose from the concave form of the gallery and the conducting power of the rock. There are many examples of this propagation of sounds which remain unheard in the intermediate space. I remember that a similar phenomenon has been observed in many places; amongst others on the internal surface of the gallery of the dome of St. Paul's in London, and especially in the midst of the curious caverns among the quarries near Syracuse, the most wonderful of which is called Dionysius' Ear.

These remembrances came into my mind, and I clearly saw that since my uncle's voice really reached me, there could be no obstacle between us. Following the direction by which the sound came, of course I should arrive in his presence, if my strength did not fail me.

I therefore rose; I rather dragged myself than walked. The slope was rapid, and I slid down.

Soon the swiftness of the descent increased horribly, and threatened to become a fall. I no longer had the strength to stop myself.

Suddenly there was no ground under me. I felt myself revolving in air, striking and rebounding against the craggy projections of a vertical gallery, quite a well; my head struck against a sharp corner of the rock, and I became unconscious.

CHAPTER XXIX.
THALATTA! THALATTA!

When I came to myself, I was stretched in half darkness, covered with thick coats and blankets. My uncle was watching over me, to discover the least sign of life. At my first sigh he took my hand; when I opened my eyes he uttered a cry of joy.

"He lives! he lives!" he cried.

"Yes, I am still alive," I answered feebly.

"My dear nephew," said my uncle, pressing me to his breast, "you are saved."

I was deeply touched with the tenderness of his manner as he uttered these words, and still more with the care with which he watched over me. But such trials were wanted to bring out the Professor's tenderer qualities.

At this moment Hans came, he saw my hand in my uncle's, and I may safely say that there was joy in his countenance.

"_God dag,_" said he.

"How do you do, Hans? How are you? And now, uncle, tell me where we are at the present moment?"

"To-morrow, Axel, to-morrow. Now you are too faint and weak. I have bandaged your head with compresses which must not be disturbed. Sleep now, and to-morrow I will tell you all."

"But do tell me what time it is, and what day."

"It is Sunday, the 8th of August, and it is ten at night. You must ask me no more questions until the 10th."

In truth I was very weak, and my eyes involuntarily closed. I wanted a good night's rest; and I therefore went off to sleep, with the knowledge that I had been four long days alone in the heart of the earth.

Next morning, on awakening, I looked round me. My couch, made up of all our travelling gear, was in a charming grotto, adorned with splendid stalactites, and the soil of which was a fine sand. It was half light. There was no torch, no lamp, yet certain mysterious glimpses of light came from without through a narrow opening in the grotto. I heard too a vague and indistinct noise, something like the murmuring of waves breaking upon a shingly shore, and at times I seemed to hear the whistling of wind.

I wondered whether I was awake, whether I dreaming, whether my brain, crazed by my fall, was not affected by imaginary noises. Yet neither eyes, nor ears could be so utterly deceived.

It is a ray of daylight, I thought, sliding in through this cleft in the rock! That is indeed the murmuring of waves! That is the rustling noise of wind. Am I quite mistaken, or have we returned to the surface of the earth? Has my uncle given up the expedition, or is it happily terminated?

I was asking myself these unanswerable questions when the Professor entered.

"Good morning, Axel," he cried cheerily. "I feel sure you are better."

"Yes, I am indeed," said I, sitting up on my couch.

"You can hardly fail to be better, for you have slept quietly. Hans and I watched you by turns, and we have noticed you were evidently recovering."

"Indeed, I do feel a great deal better, and I will give you a proof of that presently if you will let me have my breakfast."

"You shall eat, lad. The fever has left you. Hans rubbed your wounds with some ointment or other of which the Icelanders keep the secret, and they have healed marvellously. Our hunter is a splendid fellow!"

Whilst he went on talking, my uncle prepared a few provisions, which I devoured eagerly, notwithstanding his advice to the contrary. All the while I was overwhelming him with questions which he answered readily.

I then learnt that my providential fall had brought me exactly to the extremity of an almost perpendicular shaft; and as I had landed in the midst of an accompanying torrent of stones, the least of which would have been enough to crush me, the conclusion was that a loose portion of the rock had come down with me. This frightful conveyance had thus carried me into the arms of my uncle, where I fell bruised, bleeding, and insensible.

"Truly it is wonderful that you have not been killed a hundred times over. But, for the love of God, don't let us ever separate again, or we may never see each other more."

"Not separate! Is the journey not over, then?" I opened a pair of astonished eyes, which immediately called for the question:

"What is the matter, Axel?"

"I have a question to ask you. You say that I am safe and sound?"

"No doubt you are."

"And all my limbs unbroken?"

"Certainly."
"And my head?"
"Your head, except for a few bruises, is all right; and it is on your shoulders, where it ought to be."
"Well, I am afraid my brain is affected."
"Your mind affected!"
"Yes, I fear so. Are we again on the surface of the globe?"
"No, certainly not."
"Then I must be mad; for don't I see the light of day, and don't I hear the wind blowing, and the sea breaking on the shore?"
"Ah! is that all?"
"Do tell me all about it."
"I can't explain the inexplicable, but you will soon see and understand that geology has not yet learnt all it has to learn."
"Then let us go," I answered quickly.
"No, Axel; the open air might be bad for you."
"Open air?"
"Yes; the wind is rather strong. You must not expose yourself."
"But I assure you I am perfectly well."
"A little patience, my nephew. A relapse might get us into trouble, and we have no time to lose, for the voyage may be a long one."
"The voyage!"
"Yes, rest to-day, and to-morrow we will set sail."
"Set sail!" - and I almost leaped up. What did it all mean? Had we a river, a lake, a sea to depend upon? Was there a ship at our disposal in some underground harbour?
My curiosity was highly excited, my uncle vainly tried to restrain me. When he saw that my impatience was doing me harm, he yielded.
I dressed in haste. For greater safety I wrapped myself in a blanket, and came out of the grotto.

CHAPTER XXX.

A NEW MARE INTERNUM
At first I could hardly see anything. My eyes, unaccustomed to the light, quickly closed. When I was able to reopen them, I stood more stupefied even than surprised.
"The sea!" I cried.
"Yes," my uncle replied, "the Liedenbrock Sea; and I don't suppose any other discoverer will ever dispute my claim to name it after myself as its first discoverer."
A vast sheet of water, the commencement of a lake or an ocean, spread far away beyond the range of the eye, reminding me forcibly of that open sea which drew from Xenophon's ten thousand Greeks, after their long retreat, the simultaneous cry, "Thalatta! thalatta!" the sea! the sea! The deeply indented shore was lined with a breadth of fine shining sand, softly lapped by the waves, and strewn with the small shells which had been inhabited by the first of created beings. The waves broke on this shore with the hollow echoing murmur peculiar to vast inclosed spaces. A light foam flew over the waves before the breath of a moderate breeze, and some of the spray fell upon my face. On this slightly inclining shore, about a hundred fathoms from the limit of the waves, came down the foot of a huge wall of vast cliffs, which rose majestically to an enormous height. Some of these, dividing the beach with their sharp spurs, formed capes and promontories, worn away by the ceaseless action of the surf. Farther on the eye discerned their massive outline sharply defined against the hazy distant horizon. It was quite an ocean, with the irregular shores of earth, but desert and frightfully wild in appearance.
If my eyes were able to range afar over this great sea, it was because a peculiar light brought to view every detail of it. It was not the light of the sun, with his dazzling shafts of brightness and the splendour of his rays; nor was it the pale and uncertain shimmer of the moonbeams, the dim reflection of a nobler body of light. No; the illuminating
power of this light, its trembling diffusiveness, its bright, clear whiteness, and its low temperature, showed that it must be of electric origin. It was like an aurora borealis, a continuous cosmical phenomenon, filling a cavern of sufficient extent to contain an ocean.

The vault that spanned the space above, the sky, if it could be called so, seemed composed of vast plains of cloud, shifting and variable vapours, which by their condensation must at certain times fall in torrents of rain. I should have thought that under so powerful a pressure of the atmosphere there could be no evaporation; and yet, under a law unknown to me, there were broad tracts of vapour suspended in the air. But then 'the weather was fine.' The play of the electric light produced singular effects upon the upper strata of cloud. Deep shadows reposed upon their lower wreaths; and often, between two separated fields of cloud, there glided down a ray of unspeakable lustre. But it was not solar light, and there was no heat. The general effect was sad, supremely melancholy. Instead of the shining firmament, spangled with its innumerable stars, shining singly or in clusters, I felt that all these subdued and shaded fights were ribbed in by vast walls of granite, which seemed to overpower me with their weight, and that all this space, great as it was, would not be enough for the march of the humblest of satellites.

Then I remembered the theory of an English captain, who likened the earth to a vast hollow sphere, in the interior of which the air became luminous because of the vast pressure that weighed upon it; while two stars, Pluto and Proserpine, rolled within upon the circuit of their mysterious orbits.

We were in reality shut up inside an immeasurable excavation. Its width could not be estimated, since the shore ran widening as far as eye could reach, nor could its length, for the dim horizon bounded the new. As for its height, it must have been several leagues. Where this vault rested upon its granite base no eye could tell; but there was a cloud hanging far above, the height of which we estimated at 12,000 feet, a greater height than that of any terrestrial vapour, and no doubt due to the great density of the air.

The word cavern does not convey any idea of this immense space; words of human tongue are inadequate to describe the discoveries of him who ventures into the deep abysses of earth.

Besides I could not tell upon what geological theory to account for the existence of such an excavation. Had the cooling of the globe produced it? I knew of celebrated caverns from the descriptions of travellers, but had never heard of any of such dimensions as this.

If the grotto of Guachara, in Colombia, visited by Humboldt, had not given up the whole of the secret of its depth to the philosopher, who investigated it to the depth of 2,500 feet, it probably did not extend much farther. The immense mammoth cave in Kentucky is of gigantic proportions, since its vaulted roof rises five hundred feet [1] above the level of an unfathomable lake and travellers have explored its ramifications to the extent of forty miles. But what were these cavities compared to that in which I stood with wonder and admiration, with its sky of luminous vapours, its bursts of electric light, and a vast sea filling its bed? My imagination fell powerless before such immensity.

I gazed upon these wonders in silence. Words failed me to express my feelings. I felt as if I was in some distant planet Uranus or Neptune - and in the presence of phenomena of which my terrestrial experience gave me no cognisance. For such novel sensations, new words were wanted; and my imagination failed to supply them. I gazed, I thought, I admired, with a stupefaction mingled with a certain amount of fear.

The unforeseen nature of this spectacle brought back the colour to my cheeks. I was under a new course of treatment with the aid of astonishment, and my convalescence was promoted by this novel system of therapeutics; besides, the dense and breezy air invigorated me, supplying more oxygen to my lungs.

It will be easily conceived that after an imprisonment of forty seven days in a narrow gallery it was the height of physical enjoyment to breathe a moist air impregnated with saline particles.

[1] One hundred and twenty. (Trans.)

I was delighted to leave my dark grotto. My uncle, already familiar with these wonders, had ceased to feel surprise.

"You feel strong enough to walk a little way now?" he asked.
"Yes, certainly; and nothing could be more delightful."
"Well, take my arm, Axel, and let us follow the windings of the shore."

I eagerly accepted, and we began to coast along this new sea. On the left huge pyramids of rock, piled one upon another, produced a prodigious titanic effect. Down their sides flowed numberless waterfalls, which went on their way in brawling but pellucid streams. A few light vapours, leaping from rock to rock, denoted the place of hot springs; and streams flowed softly down to the common basin, gliding down the gentle slopes with a softer murmur.

Amongst these streams I recognised our faithful travelling companion, the Hansbach, coming to lose its little volume quietly in the mighty sea, just as if it had done nothing else since the beginning of the world.
"We shall see it no more," I said, with a sigh.
"What matters," replied the philosopher, "whether this or another serves to guide us?"

"You feel strong enough to walk a little way now?" he asked.
"Yes, certainly; and nothing could be more delightful."
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"We shall see it no more," I said, with a sigh.
"What matters," replied the philosopher, "whether this or another serves to guide us?"
I thought him rather ungrateful.

But at that moment my attention was drawn to an unexpected sight. At a distance of five hundred paces, at the
turn of a high promontory, appeared a high, tufted, dense forest. It was composed of trees of moderate height,
formed like umbrellas, with exact geometrical outlines. The currents of wind seemed to have had no effect upon
their shape, and in the midst of the windy blasts they stood unmoved and firm, just like a clump of petrified cedars.

I hastened forward. I could not give any name to these singular creations. Were they some of the two hundred
thousand species of vegetables known hitherto, and did they claim a place of their own in the lacustrine flora? No;
when we arrived under their shade my surprise turned into admiration. There stood before me productions of earth,
but of gigantic stature, which my uncle immediately named.

"It is only a forest of mushrooms," said he.

And he was right. Imagine the large development attained by these plants, which prefer a warm, moist climate. I
knew that the _Lycopodon giganteum_ attains, according to Bulliard, a circumference of eight or nine feet; but here
were pale mushrooms, thirty to forty feet high, and crowned with a cap of equal diameter. There they stood in
thousands. No light could penetrate between their huge cones, and complete darkness reigned beneath those giants;
they formed settlements of domes placed in close array like the round, thatched roofs of a central African city.

Yet I wanted to penetrate farther underneath, though a chill fell upon me as soon as I came under those cellular
vaults. For half an hour we wandered from side to side in the damp shades, and it was a comfortable and pleasant
change to arrive once more upon the sea shore.

But the subterranean vegetation was not confined to these fungi. Farther on rose groups of tall trees of colourless
foliage and easy to recognise. They were lowly shrubs of earth, here attaining gigantic size; lycopodiums, a hundred
feet high; the huge sigillaria, found in our coal mines; tree ferns, as tall as our fir-trees in northern latitudes;
lepidodendra, with cylindrical forked stems, terminated by long leaves, and bristling with rough hairs like those of
the cactus.

"Wonderful, magnificent, splendid!" cried my uncle. "Here is the entire flora of the second period of the world -
the transition period. These, humble garden plants with us, were tall trees in the early ages. Look, Axel, and admire
it all. Never had botanist such a feast as this!"

"You are right, my uncle. Providence seems to have preserved in this immense conservatory the antediluvian
plants which the wisdom of philosophers has so sagaciously put together again."

"It is a conservatory, Axel; but is it not also a menagerie?"

"Surely not a menagerie!"

"Yes; no doubt of it. Look at that dust under your feet; see the bones scattered on the ground."

"So there are!" I cried; "bones of extinct animals."

I had rushed upon these remains, formed of indestructible phosphates of lime, and without hesitation I named
these monstrous bones, which lay scattered about like decayed trunks of trees.

"Here is the lower jaw of a mastodon," [1] I said. "These are the molar teeth of the deinotherium; this femur
must have belonged to the greatest of those beasts, the megatherium. It certainly is a menagerie, for these remains
were not brought here by a deluge. The animals to which they belonged roamed on the shores of this subterranean
sea, under the shade of those arborescent trees. Here are entire skeletons. And yet I cannot understand the
appearance of these quadrupeds in a granite cavern."

[1] These animals belonged to a late geological period, the Pliocene, just before the glacial epoch, and therefore
could have no connection with the carboniferous vegetation. (Trans.)

"Why?"

"Because animal life existed upon the earth only in the secondary period, when a sediment of soil had been
deposited by the rivers, and taken the place of the incandescent rocks of the primitive period."

"Well, Axel, there is a very simple answer to your objection that this soil is alluvial."

"What! at such a depth below the surface of the earth?"

"No doubt; and there is a geological explanation of the fact. At a certain period the earth consisted only of an
elastic crust or bark, alternately acted on by forces from above or below, according to the laws of attraction and
gravitation. Probably there were subsidences of the outer crust, when a portion of the sedimentary deposits was
carried down sudden openings."

"That may be," I replied; "but if there have been creatures now extinct in these underground regions, why may
not some of those monsters be now roaming through these gloomy forests, or hidden behind the steep crags?"

And as this unpleasant notion got hold of me, I surveyed with anxious scrutiny the open spaces before me; but
no living creature appeared upon the barren strand.

I felt rather tired, and went to sit down at the end of a promontory, at the foot of which the waves came and beat
themselves into spray. Thence my eye could sweep every part of the bay; within its extremity a little harbour was
formed between the pyramidal cliffs, where the still waters slept untouched by the boisterous winds. A brig and two or three schooners might have moored within it in safety. I almost fancied I should presently see some ship issue from it, full sail, and take to the open sea under the southern breeze.

But this illusion lasted a very short time. We were the only living creatures in this subterranean world. When the wind lulled, a deeper silence than that of the deserts fell upon the arid, naked rocks, and weighed upon the surface of the ocean. I then desired to pierce the distant haze, and to rend asunder the mysterious curtain that hung across the horizon. Anxious queries arose to my lips. Where did that sea terminate? Where did it lead to? Should we ever know anything about its opposite shores?

My uncle made no doubt about it at all; I both desired and feared.

After spending an hour in the contemplation of this marvellous spectacle, we returned to the shore to regain the grotto, and I fell asleep in the midst of the strangest thoughts.

CHAPTER XXXI.

PREPARATIONS FOR A VOYAGE OF DISCOVERY

The next morning I awoke feeling perfectly well. I thought a bathe would do me good, and I went to plunge for a few minutes into the waters of this mediterranean sea, for assuredly it better deserved this name than any other sea.

I came back to breakfast with a good appetite. Hans was a good caterer for our little household; he had water and fire at his disposal, so that he was able to vary our bill of fare now and then. For dessert he gave us a few cups of coffee, and never was coffee so delicious.

"Now," said my uncle, "now is the time for high tide, and we must not lose the opportunity to study this phenomenon."

"What! the tide!" I cried. "Can the influence of the sun and moon be felt down here?"

"Why not? Are not all bodies subject throughout their mass to the power of universal attraction? This mass of water cannot escape the general law. And in spite of the heavy atmospheric pressure on the surface, you will see it rise like the Atlantic itself."

At the same moment we reached the sand on the shore, and the waves were by slow degrees encroaching on the shore.

"Here is the tide rising," I cried.

"Yes, Axel; and judging by these ridges of foam, you may observe that the sea will rise about twelve feet."

"This is wonderful," I said.

"No; it is quite natural."

"You may say so, uncle; but to me it is most extraordinary, and I can hardly believe my eyes. Who would ever have imagined, under this terrestrial crust, an ocean with ebbing and flowing tides, with winds and storms?"

"Well," replied my uncle, "is there any scientific reason against it?"

"No; I see none, as soon as the theory of central heat is given up."

"So then, thus far," he answered, "the theory of Sir Humphry Davy is confirmed."

"Evidently it is; and now there is no reason why there should not be seas and continents in the interior of the earth."

"No doubt," said my uncle; "and inhabited too."

"To be sure," said I; "and why should not these waters yield to us fishes of unknown species?"

"At any rate," he replied, "we have not seen any yet."

"Well, let us make some lines, and see if the bait will draw here as it does in sublunary regions."

"We will try, Axel, for we must penetrate all secrets of these newly discovered regions."

"But where are we, uncle? for I have not yet asked you that question, and your instruments must be able to furnish the answer."

"Horizontally, three hundred and fifty leagues from Iceland."

"So much as that?"

"I am sure of not being a mile out of my reckoning."

"And does the compass still show south-east?"
"Yes; with a westerly deviation of nineteen degrees forty-five minutes, just as above ground. As for its dip, a
curious fact is coming to light, which I have observed carefully: that the needle, instead of dipping towards the pole
as in the northern hemisphere, on the contrary, rises from it."

"Would you then conclude," I said, "that the magnetic pole is somewhere between the surface of the globe and
the point where we are?"

"Exactly so; and it is likely enough that if we were to reach the spot beneath the polar regions, about that
seventy-first degree where Sir James Ross has discovered the magnetic pole to be situated, we should see the needle
point straight up. Therefore that mysterious centre of attraction is at no great depth."

I remarked: "It is so; and here is a fact which science has scarcely suspected."

"Science, my lad, has been built upon many errors; but they are errors which it was good to fall into, for they led
to the truth."

"What depth have we now reached?"

"We are thirty-five leagues below the surface."

"So," I said, examining the map, "the Highlands of Scotland are over our heads, and the Grampians are raising
their rugged summits above us."

"Yes," answered the Professor laughing. "It is rather a heavy weight to bear, but a solid arch spans over our
heads. The great Architect has built it of the best materials; and never could man have given it so wide a stretch.
What are the finest arches of bridges and the arcades of cathedrals, compared with this far reaching vault, with a
radius of three leagues, beneath which a wide and tempest-tossed ocean may flow at its ease?"

"Oh, I am not afraid that it will fall down upon my head. But now what are your plans? Are you not thinking of
returning to the surface now?"

"Return! no, indeed! We will continue our journey, everything having gone on well so far."

"But how are we to get down below this liquid surface?"

"Oh, I am not going to dive head foremost. But if all oceans are properly speaking but lakes, since they are
encompassed by land, of course this internal sea will be surrounded by a coast of granite, and on the opposite shores
we shall find fresh passages opening."

"How long do you suppose this sea to be?"

"Thirty or forty leagues; so that we have no time to lose, and we shall set sail to-morrow."

I looked about for a ship.

"Set sail, shall we? But I should like to see my boat first."

"It will not be a boat at all, but a good, well-made raft."

"Why," I said, "a raft would be just as hard to make as a boat, and I don't see -"

"I know you don't see; but you might hear if you would listen. Don't you hear the hammer at work? Hans is
already busy at it."

"What, has he already felled the trees?"

"Oh, the trees were already down. Come, and you will see for yourself."

After half an hour's walking, on the other side of the promontory which formed the little natural harbour, I
perceived Hans at work. In a few more steps I was at his side. To my great surprise a half-finished raft was already
lying on the sand, made of a peculiar kind of wood, and a great number of planks, straight and bent, and of frames,
were covering the ground, enough almost for a little fleet.

"Uncle, what wood is this?" I cried.

"It is fir, pine, or birch, and other northern coniferae, mineralised by the action of the sea. It is called surturbrand,
a variety of brown coal or lignite, found chiefly in Iceland."

"But surely, then, like other fossil wood, it must be as hard as stone, and cannot float?"

"Sometimes that may happen; some of these woods become true anthracites; but others, such as this, have only
gone through the first stage of fossil transformation. Just look," added my uncle, throwing into the sea one of those
precious waifs.

The bit of wood, after disappearing, returned to the surface and oscillated to and fro with the waves.

"Are you convinced?" said my uncle.

"I am quite convinced, although it is incredible!"

By next evening, thanks to the industry and skill of our guide, the raft was made. It was ten feet by five; the
planks of surturbrand, braced strongly together with cords, presented an even surface, and when launched this
improvised vessel floated easily upon the waves of the Liedenbrock Sea.
CHAPTER XXXII.

WONDERS OF THE DEEP

On the 13th of August we awoke early. We were now to begin to adopt a mode of travelling both more expeditious and less fatiguing than hitherto.

A mast was made of two poles spliced together, a yard was made of a third, a blanket borrowed from our coverings made a tolerable sail. There was no want of cordage for the rigging, and everything was well and firmly made.

The provisions, the baggage, the instruments, the guns, and a good quantity of fresh water from the rocks around, all found their proper places on board; and at six the Professor gave the signal to embark. Hans had fitted up a rudder to steer his vessel. He took the tiller, and unmoored; the sail was set, and we were soon afloat. At the moment of leaving the harbour, my uncle, who was tenaciously fond of naming his new discoveries, wanted to give it a name, and proposed mine amongst others.

"But I have a better to propose," I said: "Grauben. Let it be called Port Gräuben; it will look very well upon the map."

"Port Gräuben let it be then."

And so the cherished remembrance of my Virlandaise became associated with our adventurous expedition.

The wind was from the north-west. We went with it at a high rate of speed. The dense atmosphere acted with great force and impelled us swiftly on.

In an hour my uncle had been able to estimate our progress. At this rate, he said, we shall make thirty leagues in twenty-four hours, and we shall soon come in sight of the opposite shore.

I made no answer, but went and sat forward. The northern shore was already beginning to dip under the horizon. The eastern and western strands spread wide as if to bid us farewell. Before our eyes lay far and wide a vast sea; shadows of great clouds swept heavily over its silver-grey surface; the glistening bluish rays of electric light, here and there reflected by the dancing drops of spray, shot out little sheaves of light from the track we left in our rear. Soon we entirely lost sight of land; no object was left for the eye to judge by, and but for the frothy track of the raft, I might have thought we were standing still.

About twelve, immense shoals of seaweeds came in sight. I was aware of the great powers of vegetation that characterise these plants, which grow at a depth of twelve thousand feet, reproduce themselves under a pressure of four hundred atmospheres, and sometimes form barriers strong enough to impede the course of a ship. But never, I think, were such seaweeds as those which we saw floating in immense waving lines upon the sea of Liedenbrock.

Our raft skirted the whole length of the fuci, three or four thousand feet long, undulating like vast serpents beyond the reach of sight; I found some amusement in tracing these endless waves, always thinking I should come to the end of them, and for hours my patience was vying with my surprise.

What natural force could have produced such plants, and what must have been the appearance of the earth in the first ages of its formation, when, under the action of heat and moisture, the vegetable kingdom alone was developing on its surface?

Evening came, and, as on the previous day, I perceived no change in the luminous condition of the air. It was a constant condition, the permanency of which might be relied upon.

After supper I laid myself down at the foot of the mast, and fell asleep in the midst of fantastic reveries.

Hans, keeping fast by the helm, let the raft run on, which, after all, needed no steering, the wind blowing directly aft.

Since our departure from Port Gräuben, Professor Liedenbrock had entrusted the log to my care; I was to register every observation, make entries of interesting phenomena, the direction of the wind, the rate of sailing, the way we made - in a word, every particular of our singular voyage.

I shall therefore reproduce here these daily notes, written, so to speak, as the course of events directed, in order to furnish an exact narrative of our passage.

_Friday, August 14_. - Wind steady, N.W. The raft makes rapid way in a direct line. Coast thirty leagues to leeward. Nothing in sight before us. Intensity of light the same. Weather fine; that is to say, that the clouds are flying high, are light, and bathed in a white atmosphere resembling silver in a state of fusion. Therm. 89° Fahr.

At noon Hans prepared a hook at the end of a line. He baited it with a small piece of meat and flung it into the sea. For two hours nothing was caught. Are these waters, then, bare of inhabitants? No, there's a pull at the line.
Hans draws it in and brings out a struggling fish.

"A sturgeon," I cried; "a small sturgeon."

The Professor eyes the creature attentively, and his opinion differs from mine.

The head of this fish was flat, but rounded in front, and the anterior part of its body was plated with bony, angular scales; it had no teeth, its pectoral fins were large, and of tail there was none. The animal belonged to the same order as the sturgeon, but differed from that fish in many essential particulars. After a short examination my uncle pronounced his opinion.

"This fish belongs to an extinct family, of which only fossil traces are found in the devonian formations."

"What!" I cried. "Have we taken alive an inhabitant of the seas of primitive ages?"

"Yes; and you will observe that these fossil fishes have no identity with any living species. To have in one's possession a living specimen is a happy event for a naturalist."

"But to what family does it belong?"

"It is of the order of ganoids, of the family of the cephalaspidae; and a species of pterichthys. But this one displays a peculiarity confined to all fishes that inhabit subterranean waters. It is blind, and not only blind, but actually has no eyes at all."

I looked: nothing could be more certain. But supposing it might be a solitary case, we baited afresh, and threw out our line. Surely this ocean is well peopled with fish, for in another couple of hours we took a large quantity of pterichthydes, as well as of others belonging to the extinct family of the dipterides, but of which my uncle could not tell the species; none had organs of sight. This unhoped-for catch recruited our stock of provisions.

Thus it is evident that this sea contains none but species known to us in their fossil state, in which fishes as well as reptiles are the less perfectly and completely organised the farther back their date of creation.

Perhaps we may yet meet with some of those saurians which science has reconstructed out of a bit of bone or cartilage. I took up the telescope and scanned the whole horizon, and found it everywhere a desert sea. We are far away removed from the shores.

I gaze upward in the air. Why should not some of the strange birds restored by the immortal Cuvier again flap their 'sail-broad vans' in this dense and heavy atmosphere? There are sufficient fish for their support. I survey the whole space that stretches overhead; it is as desert as the shore was.

Still my imagination carried me away amongst the wonderful speculations of palaeontology. Though awake I fell into a dream. I thought I could see floating on the surface of the waters enormous chelonia, preadamite tortoises, resembling floating islands. Over the dimly lighted strand there trod the huge mammals of the first ages of the world, the leptothemum (slender beast), found in the caverns of Brazil; the merycotherium (ruminating beast), found in the 'drift' of iceclad Siberia. Farther on, the pachydermatous lophiodon (crested toothed), a gigantic tapir, hides behind the rocks to dispute its prey with the anoplotherium (unarmed beast), a strange creature, which seemed a compound of horse, rhinoceros, camel, and hippopotamus. The colossal mastodon (nipple-toothed) twists and untwists his trunk, and brays and pounds with his huge tusks the fragments of rock that cover the shore; whilst the megatherium (huge beast), buttressed upon his enormous hinder paws, grubs in the soil, awaking the sonorous echoes of the granite rocks with his tremendous roarings. Higher up, the protopitheca - the first monkey that appeared on the globe - is climbing up the steep ascents. Higher yet, the pterodactyle (wing-fingered) darts in irregular zigzags to and fro in the heavy air. In the uppermost regions of the air immense birds, more powerful than the cassowary, and larger than the ostrich, spread their vast breadth of wings and strike with their heads the granite vault that bounds the sky.

All this fossil world rises to life again in my vivid imagination. I return to the scriptural periods or ages of the world, conventionally called 'days,' long before the appearance of man, when the unfinished world was as yet unfitted for his support. Then mydream backed even farther still into the ages before the creation of living beings. The mammals disappear, then the birds vanish, then the reptiles of the secondary period, and finally the fish, the crustaceans, molluscs, and articulated beings. Then the zoophytes of the transition period also return to nothing. I am the only living thing in the world: all life is concentrated in my beating heart alone. There are no more seasons; climates are no more; the heat of the globe continually increases and neutralises that of the sun. Vegetation becomes accelerated. I glide like a shade amongst arborescent ferns, treading with unsteady feet the coloured marls and the particoloured clays; I lean for support against the trunks of immense conifers; I lie in the shade of sphenophylla (wedge-leaved), asterophylla (star-leaved), and lycopods, a hundred feet high.

Ages seem no more than days! I am passed, against my will, in retrograde order, through the long series of terrestrial changes. Plants disappear; granite rocks soften; intense heat converts solid bodies into thick fluids; the waters again cover the face of the earth; they boil, they rise in whirling eddies of steam; white and ghastly mists wrap round the shifting forms of the earth, which by imperceptible degrees dissolves into a gaseous mass, glowing fiery red and white, as large and as shining as the sun.
And I myself am floating with wild caprice in the midst of this nebulous mass of fourteen hundred thousand times the volume of the earth into which it will one day be condensed, and carried forward amongst the planetary bodies. My body is no longer firm and terrestrial; it is resolved into its constituent atoms, subtilised, volatilised. Sublimed into imponderable vapour, I mingle and am lost in the endless foods of those vast globular volumes of vaporous mists, which roll upon their flaming orbits through infinite space.

But is it not a dream? Whither is it carrying me? My feverish hand has vainly attempted to describe upon paper its strange and wonderful details. I have forgotten everything that surrounds me. The Professor, the guide, the raft - are all gone out of my ken. An illusion has laid hold upon me.

"What is the matter?" my uncle breaks in.
My staring eyes are fixed vacantly upon him.
"Take care, Axel, or you will fall overboard."
At that moment I felt the sinewy hand of Hans seizing me vigorously. But for him, carried away by my dream, I should have thrown myself into the sea.
"Is he mad?" cried the Professor.
"What is it all about?" at last I cried, returning to myself.
"Do you feel ill?" my uncle asked.
"No; but I have had a strange hallucination; it is over now. Is all going on right?"
"Yes, it is a fair wind and a fine sea; we are sailing rapidly along, and if I am not out in my reckoning, we shall soon land."
At these words I rose and gazed round upon the horizon, still everywhere bounded by clouds alone.

CHAPTER XXXIII.

A BATTLE OF MONSTERS
___Saturday, August 15__._ - The sea unbroken all round. No land in sight. The horizon seems extremely distant.
My head is still stupefied with the vivid reality of my dream.
My uncle has had no dreams, but he is out of temper. He examines the horizon all round with his glass, and folds his arms with the air of an injured man.
I remark that Professor Liedenbrock has a tendency to relapse into an impatient mood, and I make a note of it in my log. All my danger and sufferings were needed to strike a spark of human feeling out of him; but now that I am well his nature has resumed its sway. And yet, what cause was there for anger? Is not the voyage prospering as favourably as possible under the circumstances? Is not the raft spinning along with marvellous speed?
"-You seem anxious, my uncle," I said, seeing him continually with his glass to his eye.
"Anxious! No, not at all."
"Impatient, then?"
"One might be, with less reason than now."
"Yet we are going very fast."
"What does that signify? I am not complaining that the rate is slow, but that the sea is so wide."
I then remembered that the Professor, before starting, had estimated the length of this underground sea at thirty leagues. Now we had made three times the distance, yet still the southern coast was not in sight.
"We are not descending as we ought to be," the Professor declares. "We are losing time, and the fact is, I have not come all this way to take a little sail upon a pond on a raft."
He called this sea a pond, and our long voyage, taking a little sail!
"But," I remarked, "since we have followed the road that Saknussemm has shown us -"
"That is just the question. Have we followed that road? Did Saknussemm meet this sheet of water? Did he cross it? Has not the stream that we followed led us altogether astray?"
"At any rate we cannot feel sorry to have come so far. This prospect is magnificent, and -"
"But I don't care for prospects. I came with an object, and I mean to attain it. Therefore don't talk to me about views and prospects."
I take this as my answer, and I leave the Professor to bite his lips with impatience. At six in the evening Hans
asks for his wages, and his three rix dollars are counted out to him.

_Sunday, August 16._ Nothing new. Weather unchanged. On awaking, my first thought was to observe the intensity of the light. I was possessed with an apprehension lest the electric light should grow dim, or fail altogether. But there seemed no reason to fear. The shadow of the raft was clearly outlined upon the surface of the waves.

Truly this sea is of infinite width. It must be as wide as the Mediterranean or the Atlantic - and why not?

My uncle took soundings several times. He tied the heaviest of our pickaxes to a long rope which he let down two hundred fathoms. No bottom yet; and we had some difficulty in hauling up our plummet.

But when the pick was shipped again, Hans pointed out on its surface deep prints as if it had been violently compressed between two hard bodies.

I looked at the hunter.

"Tänder," said he.

I could not understand him, and turned to my uncle who was entirely absorbed in his calculations. I had rather not disturb him while he is quiet. I return to the Icelander. He by a snapping motion of his jaws conveys his ideas to me.

"Teeth!" I cried, considering the iron bar with more attention.

Yes, indeed, those are the marks of teeth imprinted upon the metal! The jaws which they arm must be possessed of amazing strength. Is there some monster beneath us belonging to the extinct races, more voracious than the shark, more fearful in vastness than the whale? I could not take my eyes off this indented iron bar. Surely will my last night's dream be realised?

These thoughts agitated me all day, and my imagination scarcely calmed down after several hours' sleep.

_Monday, August 17._ I am trying to recall the peculiar instincts of the monsters of the preadamite world, who, coming next in succession after the molluscs, the crustaceans and le fishes, preceded the animals of mammalian race upon the earth. The world then belonged to reptiles. Those monsters held the mastery in the seas of the secondary period. They possessed a perfect organisation, gigantic proportions, prodigious strength. The saurians of our day, the alligators and the crocodiles, are but feeble reproductions of their forefathers of primitive ages.

I shudder as I recall these monsters to my remembrance. No human eye has ever beheld them living. They burdened this earth a thousand ages before man appeared, but their fossil remains, found in the argillaceous limestone called by the English the lias, have enabled their colossal structure to be perfectly built up again and anatomically ascertained.

I saw at the Hamburg museum the skeleton of one of these creatures thirty feet in length. Am I then fated - I, a denizen of earth - to be placed face to face with these representatives of long extinct families? No; surely it cannot be! Yet the deep marks of conical teeth upon the iron pick are certainly those of the crocodile.

My eyes are fearfully bent upon the sea. I dread to see one of these monsters darting forth from its submarine caverns. I suppose Professor Liedenbrock was of my opinion too, and even shared my fears, for after having examined the pick, his eyes traversed the ocean from side to side. What a very bad notion that was of his, I thought to myself, to take soundings just here! He has disturbed some monstrous beast in its remote den, and if we are not attacked on our voyage -

I look at our guns and see that they are all right. My uncle notices it, and looks on approvingly.

Already widely disturbed regions on the surface of the water indicate some commotion below. The danger is approaching. We must be on the look out.

_Tuesday, August 18._ Evening came, or rather the time came when sleep weighs down the weary eyelids, for there is no night here, and the ceaseless light wearies the eyes with its persistency just as if we were sailing under an arctic sun. Hans was at the helm. During his watch I slept.

Two hours afterwards a terrible shock awoke me. The raft was heaved up on a watery mountain and pitched down again, at a distance of twenty fathoms.

"What is the matter?" shouted my uncle. "Have we struck land?"

Hans pointed with his finger at a dark mass six hundred yards away, rising and falling alternately with heavy plunges. I looked and cried:

"It is an enormous porpoise."

"Yes," replied my uncle, "and there is a sea lizard of vast size."

"And farther on a monstrous crocodile. Look at its vast jaws and its rows of teeth! It is diving down!"

"There's a whale, a whale!" cried the Professor. "I can see its great fins. See how he is throwing out air and water through his blowers."

And in fact two liquid columns were rising to a considerable height above the sea. We stood amazed, thunderstruck, at the presence of such a herd of marine monsters. They were of supernatural dimensions; the
smallest of them would have crunched our raft, crew and all, at one snap of its huge jaws.

Hans wants to tack to get away from this dangerous neighbourhood; but he sees on the other hand enemies not less terrible; a tortoise forty feet long, and a serpent of thirty, lifting its fearful head and gleaming eyes above the flood.

Flight was out of the question now. The reptiles rose; they wheeled around our little raft with a rapidity greater than that of express trains. They described around us gradually narrowing circles. I took up my rifle. But what could a ball do against the scaly armour with which these enormous beasts were clad?

We stood dumb with fear. They approach us close: on one side the crocodile, on the other the serpent. The remainder of the sea monsters have disappeared. I prepare to fire. Hans stops me by a gesture. The two monsters pass within a hundred and fifty yards of the raft, and hurl themselves the one upon the other, with a fury which prevents them from seeing us.

At three hundred yards from us the battle was fought. We could distinctly observe the two monsters engaged in deadly conflict. But it now seems to me as if the other animals were taking part in the fray - the porpoise, the whale, the lizard, the tortoise. Every moment I seem to see one or other of them. I point them to the Icelander. He shakes his head negatively.

"_Tva_," says he.

"What two? Does he mean that there are only two animals?"

"He is right," said my uncle, whose glass has never left his eye.

"Surely you must be mistaken," I cried.

"No: the first of those monsters has a porpoise's snout, a lizard's head, a crocodile's teeth; and hence our mistake.
It is the ichthyosaurus (the fish lizard), the most terrible of the ancient monsters of the deep."

"And the other?"

"The other is a plesiosaurus (almost lizard), a serpent, armoured with the carapace and the paddles of a turtle; he is the dreadful enemy of the other."

Hans had spoken truly. Two monsters only were creating all this commotion; and before my eyes are two reptiles of the primitive world. I can distinguish the eye of the ichthyosaurus glowing like a red-hot coal, and as large as a man's head. Nature has endowed it with an optical apparatus of extreme power, and capable of resisting the pressure of the great volume of water in the depths it inhabits. It has been appropriately called the saurian whale, for it has both the swiftness and the rapid movements of this monster of our own day. This one is not less than a hundred feet long, and I can judge of its size when it sweeps over the waters the vertical coils of its tail. Its jaw is enormous, and according to naturalists it is armed with no less than one hundred and eighty-two teeth.

The plesiosaurus, a serpent with a cylindrical body and a short tail, has four flappers or paddles to act like oars. Its body is entirely covered with a thick armour of scales, and its neck, as flexible as a swan's, rises thirty feet above the waves.

Those huge creatures attacked each other with the greatest animosity. They heaved around them liquid mountains, which rolled even to our raft and rocked it perilously. Twenty times we were near capsizing. Hissings of prodigious force are heard. The two beasts are fast locked together; I cannot distinguish the one from the other. The probable rage of the conqueror inspires us with intense fear.

One hour, two hours, pass away. The struggle continues with unabated ferocity. The combatants alternately approach and recede from our raft. We remain motionless, ready to fire. Suddenly the ichthyosaurus and the plesiosaurus disappear below, leaving a whirlpool eddying in the water. Several minutes pass by while the fight goes on under water.

All at once an enormous head is darted up, the head of the plesiosaurus. The monster is wounded to death. I no longer see his scaly armour. Only his long neck shoots up, drops again, coils and uncoils, droops, lashes the waters like a gigantic whip, and writhes like a worm that you tread on. The water is splashed for a long way around. The spray almost blinds us. But soon the reptile's agony draws to an end; its movements become fainter, its contortions cease to be so violent, and the long serpentine form lies a lifeless log on the labouring deep.

As for the ichthyosaurus - has he returned to his submarine cavern? or will he reappear on the surface of the sea?

CHAPTER XXXIV.
THE GREAT GEYSER

_Wednesday, August 19._ - Fortunately the wind blows violently, and has enabled us to flee from the scene of the late terrible struggle. Hans keeps at his post at the helm. My uncle, whom the absorbing incidents of the combat had drawn away from his contemplations, began again to look impatiently around him.

The voyage resumes its uniform tenor, which I don't care to break with a repetition of such events as yesterday's.

_Thursday, Aug. 20._ - Wind N.N.E., unsteady and fitful. Temperature high. Rate three and a half leagues an hour.

About noon a distant noise is heard. I note the fact without being able to explain it. It is a continuous roar.

"In the distance," says the Professor, "there is a rock or islet, against which the sea is breaking."

Hans climbs up the mast, but sees no breakers. The ocean is smooth and unbroken to its farthest limit.

Three hours pass away. The roarings seem to proceed from a very distant waterfall.

I remark upon this to my uncle, who replies doubtfully: "Yes, I am convinced that I am right." Are we, then, speeding forward to some cataract which will cast us down an abyss? This method of getting on may please the Professor, because it is vertical; but for my part I prefer the more ordinary modes of horizontal progression.

At any rate, some leagues to the windward there must be some noisy phenomenon, for now the roarings are heard with increasing loudness. Do they proceed from the sky or the ocean?

I look up to the atmospheric vapours, and try to fathom their depths. The sky is calm and motionless. The clouds have reached the utmost limit of the lofty vault, and there lie still bathed in the bright glare of the electric light. It is not there that we must seek for the cause of this phenomenon. Then I examine the horizon, which is unbroken and clear of all mist. There is no change in its aspect. But if this noise arises from a fall, a cataract, if all this ocean flows headlong into a lower basin yet, if that deafening roar is produced by a mass of falling water, the current must needs accelerate, and its increasing speed will give me the measure of the peril that threatens us. I consult the current: there is none. I throw an empty bottle into the sea: it lies still.

About four Hans rises, lays hold of the mast, climbs to its top. Thence his eye sweeps a large area of sea, and it is fixed upon a point. His countenance exhibits no surprise, but his eye is immovably steady.

"He sees something," says my uncle.

"I believe he does."

Hans comes down, then stretches his arm to the south, saying:

"_Dere nere!_"

"Down there?" repeated my uncle.

Then, seizing his glass, he gazes attentively for a minute, which seems to me an age.

"Yes, yes!" he cried. "I see a vast inverted cone rising from the surface."

"Is it another sea beast?"

"Perhaps it is."

"Then let us steer farther westward, for we know something of the danger of coming across monsters of that sort."

"Let us go straight on," replied my uncle.

I appealed to Hans. He maintained his course inflexibly.

Yet, if at our present distance from the animal, a distance of twelve leagues at the least, the column of water driven through its blowers may be distinctly seen, it must needs be of vast size. The commonest prudence would counsel immediate flight; but we did not come so far to be prudent.

Impudently, therefore, we pursue our way. The nearer we approach, the higher mounts the jet of water. What monster can possibly fill itself with such a quantity of water, and spurt it up so continuously?

At eight in the evening we are not two leagues distant from it. Its body -dusky, enormous, hillocky - lies spread upon the sea like an islet. Is it illusion or fear? Its length seems to me a couple of thousand yards. What can be this cetacean, which neither Cuvier nor Blumenbach knew anything about? It lies motionless, as if asleep; the sea seems unable to move it in the least; it is the waves that undulate upon its sides. The column of water thrown up to a height of five hundred feet falls in rain with a deafening uproar. And here are we scudding like lunatics before the wind, to get near to a monster that a hundred whales a day would not satisfy!

Terror seizes upon me. I refuse to go further. I will cut the halliards if necessary! I am in open mutiny against the Professor, who vouchsafes no answer.

Suddenly Hans rises, and pointing with his finger at the menacing object, he says:

"_Holm._"

"An island!" cries my uncle.

"That's not an island!" I cried sceptically.

"It's nothing else," shouted the Professor, with a loud laugh.
"But that column of water?"
"Geyser," said Hans.
"No doubt it is a geyser, like those in Iceland."

At first I protest against being so widely mistaken as to have taken an island for a marine monster. But the evidence is against me, and I have to confess my error. It is nothing worse than a natural phenomenon.

As we approach nearer the dimensions of the liquid column become magnificent. The islet resembles, with a most deceiving likeness, an enormous cetacean, whose head dominates the waves at a height of twenty yards. The geyser, a word meaning 'fury,' rises majestically from its extremity. Deep and heavy explosions are heard from time to time, when the enormous jet, possessed with more furious violence, shakes its plumy crest, and springs with a bound till it reaches the lowest stratum of the clouds. It stands alone. No steam vents, no hot springs surround it, and all the volcanic power of the region is concentrated here. Sparks of electric fire mingle with the dazzling sheaf of lighted fluid, every drop of which refracts the prismatic colours.

"Let us land," said the Professor.
"But we must carefully avoid this waterspout, which would sink our raft in a moment."
Hans, steering with his usual skill, brought us to the other extremity of the islet.

I leaped up on the rock; my uncle lightly followed, while our hunter remained at his post, like a man too wise ever to be astonished.

We walked upon granite mingled with siliceous tufa. The soil shivers and shakes under our feet, like the sides of an overheated boiler filled with steam struggling to get loose. We come in sight of a small central basin, out of which the geyser springs. I plunge a register thermometer into the boiling water. It marks an intense heat of 325°, which is far above the boiling point; therefore this water issues from an ardent furnace, which is not at all in harmony with Professor Liedenbrock's theories. I cannot help making the remark.

"Well," he replied, "how does that make against my doctrine?"
"Oh, nothing at all," I said, seeing that I was going in opposition to immovable obstinacy.

Still I am constrained to confess that hitherto we have been wonderfully favoured, and that for some reason unknown to myself we have accomplished our journey under singularly favourable conditions of temperature. But it seems manifest to me that some day we shall reach a region where the central heat attains its highest limits, and goes beyond a point that can be registered by our thermometers.

"That is what we shall see," So says the Professor, who, having named this volcanic islet after his nephew, gives the signal to embark again.

For some minutes I am still contemplating the geyser. I notice that it throws up its column of water with variable force: sometimes sending it to a great height, then again to a lower, which I attribute to the variable pressure of the steam accumulated in its reservoir.

At last we leave the island, rounding away past the low rocks on its southern shore. Hans has taken advantage of the halt to refit his rudder.

But before going any farther I make a few observations, to calculate the distance we have gone over, and note them in my journal. We have crossed two hundred and seventy leagues of sea since leaving Port Gräuben; and we are six hundred and twenty leagues from Iceland, under England. [1]

[1] This distance carries the travellers as far as under the Pyrenees if the league measures three miles. (Trans.)

CHAPTER XXXV.

AN ELECTRIC STORM

Friday, August 21. - On the morrow the magnificent geyser has disappeared. The wind has risen, and has rapidly carried us away from Axel Island. The roarings become lost in the distance.

The weather - if we may use that term - will change before long. The atmosphere is charged with vapours, pervaded with the electricity generated by the evaporation of saline waters. The clouds are sinking lower, and assume an olive hue. The electric light can scarcely penetrate through the dense curtain which has dropped over the theatre on which the battle of the elements is about to be waged.

I feel peculiar sensations, like many creatures on earth at the approach of violent atmospheric changes. The
heavily voluted cumulus clouds lower gloomily and threateningly; they wear that implacable look which I have
sometimes noticed at the outbreak of a great storm. The air is heavy; the sea is calm.

In the distance the clouds resemble great bales of cotton, piled up in picturesque disorder. By degrees they dilate,
and gain in huge size what they lose in number. Such is their ponderous weight that they cannot rise from the
horizon; but, obeying an impulse from higher currents, their dense consistency slowly yields. The gloom upon them
depens; and they soon present to our view a ponderous mass of almost level surface. From time to time a fleecy tuft
of mist, with yet some gleaming light left upon it, drops down upon the dense floor of grey, and loses itself in the
opaque and impenetrable mass.

The atmosphere is evidently charged and surcharged with electricity. My whole body is saturated; my hair
bristles just as when you stand upon an insulated stool under the action of an electrical machine. It seems to me as if
my companions, the moment they touched me, would receive a severe shock like that from an electric eel.

At ten in the morning the symptoms of storm become aggravated. The wind never lulls but to acquire increased
strength; the vast bank of heavy clouds is a huge reservoir of fearful windy gusts and rushing storms.

I am loth to believe these atmospheric menaces, and yet I cannot help muttering:
"Here's some very bad weather coming on."

The Professor made no answer. His temper is awful, to judge from the working of his features, as he sees this
vast length of ocean unrolling before him to an indefinite extent. He can only spare time to shrug his shoulders
viciously.

"There's a heavy storm coming on," I cried, pointing towards the horizon. "Those clouds seem as if they were
going to crush the sea."

A deep silence falls on all around. The lately roaring winds are hushed into a dead calm; nature seems to breathe
no more, and to be sinking into the stillness of death. On the mast already I see the light play of a lambent St. Elmo's
fire; the outstretched sail catches not a breath of wind, and hangs like a sheet of lead. The rudder stands motionless
in a sluggish, waveless sea. But if we have now ceased to advance why do we yet leave that sail loose, which at the
first shock of the tempest may capsize us in a moment?

"Let us reef the sail and cut the mast down!" I cried. "That will be safest."

"No, no! Never!" shouted my impetuous uncle. "Never! Let the wind catch us if it will! What I want is to get the
least glimpse of rock or shore, even if our raft should be smashed into shivers!"

The words were hardly out of his mouth when a sudden change took place in the southern sky. The piled-up
vapours condense into water; and the air, put into violent action to supply the vacuum left by the condensation of the
mists, rouses itself into a whirlwind. It rushes on from the farthest recesses of the vast cavern. The darkness deepens;
scarcely can I jot down a few hurried notes. The helm makes a bound. My uncle falls full length; I creep close to
him. He has laid a firm hold upon a rope, and appears to watch with grim satisfaction this awful display of elemental
strife.

Hans stirs not. His long hair blown by the pelting storm, and laid flat across his immovable countenance, makes
him a strange figure; for the end of each lock of loose flowing hair is tipped with little luminous radiations. This
frightful mask of electric sparks suggests to me, even in this dizzy excitement, a comparison with preadamite man,
the contemporary of the ichthyosaurus and the megatherium. [1]

[1] Rather of the mammoth and the mastodon. (Trans.)

The mast yet holds firm. The sail stretches tight like a bubble ready to burst. The raft flies at a rate that I cannot
reckon, but not so fast as the foaming clouds of spray which it dashes from side to side in its headlong speed.

"The sail! the sail!" I cry, motioning to lower it.

"No!" replies my uncle.

"_Nej!_" repeats Hans, leisurely shaking his head.

But now the rain forms a rushing cataract in front of that horizon toward which we are running with such
maddening speed. But before it has reached us the rain cloud parts asunder, the sea boils, and the electric fires are
brought into violent action by a mighty chemical power that descends from the higher regions. The most vivid
flashes of lightning are mingled with the violent crash of continuous thunder. Ceaseless fiery arrows dart in and out
amongst the flying thunder-clouds; the vapiduous mass soon glows with incandescent heat; hailstones rattle fiercely
down, and as they dash upon our iron tools they too emit gleams and flashes of lurid light. The heaving waves
resemble fiery volcanic hills, each belching forth its own interior flames, and every crest is plumed with dancing
fire. My eyes fail under the dazzling light, my ears are stunned with the incessant crash of thunder. I must be bound
to the mast, which bows like a reed before the mighty strength of the storm.

(Here my notes become vague and indistinct. I have only been able to find a few which I seem to have jotted
down almost unconsciously. But their very brevity and their obscurity reveal the intensity of the excitement which
dominated me, and describe the actual position even better than my memory could do.)
Sunday, 23. - Where are we? Driven forward with a swiftness that cannot be measured.

The night was fearful; no abatement of the storm. The din and uproar are incessant; our ears are bleeding; to exchange a word is impossible.

The lightning flashes with intense brilliancy, and never seems to cease for a moment. Zigzag streams of bluish white fire dash down upon the sea and rebound, and then take an upward flight till they strike the granite vault that overarches our heads. Suppose that solid roof should crumble down upon our heads! Other flashes with incessant play cross their vivid fires, while others again roll themselves into balls of living fire which explode like bombshells, but the music of which scarcely adds to the din of the battle strife that almost deprives us of our senses of hearing and sight; the limit of intense loudness has been passed within which the human ear can distinguish one sound from another. If all the powder magazines in the world were to explode at once, we should hear no more than we do now.

From the under surface of the clouds there are continual emissions of lurid light; electric matter is in continual evolution from their component molecules; the gaseous elements of the air need to be slaked with moisture; for innumerable columns of water rush upwards into the air and fall back again in white foam.

Whither are we flying? My uncle lies full length across the raft.

The heat increases. I refer to the thermometer; it indicates . . . (the figure is obliterated).

_Monday, August 24._ - Will there be an end to it? Is the atmospheric condition, having once reached this density, to become final?

We are prostrated and worn out with fatigue. But Hans is as usual. The raft bears on still to the south-east. We have made two hundred leagues since we left Axel Island.

At noon the violence of the storm redoubles. We are obliged to secure as fast as possible every article that belongs to our cargo. Each of us is lashed to some part of the raft. The waves rise above our heads.

For three days we have never been able to make each other hear a word. Our mouths open, our lips move, but not a word can be heard. We cannot even make ourselves heard by approaching our mouth close to the ear.

My uncle has drawn nearer to me. He has uttered a few words. They seem to be 'We are lost'; but I am not sure.

At last I write down the words: "Let us lower the sail."

He nods his consent.

Scarcely has he lifted his head again before a ball of fire has bounded over the waves and lighted on board our raft. Mast and sail flew up in an instant together, and I saw them carried up to prodigious height, resembling in appearance a pterodactyle, one of those strong birds of the infant world.

We lay there, our blood running cold with unspeakable terror. The fireball, half of it white, half azure blue, and the size of a ten-inch shell, moved slowly about the raft, but revolving on its own axis with astonishing velocity, as if whipped round by the force of the whirlwind. Here it comes, there it glides, but now the ragged stump of the mast, thence it lightly leaps on the provision bag, descends with a light bound, and just skims the powder magazine. Horrible! we shall be blown up; but no, the dazzling disk of mysterious light nimbly leaps aside; it approaches Hans, who fixes his blue eye upon it steadily; it threatens the head of my uncle, who falls upon his knees with his head down to avoid it. And now my turn comes; pale and trembling under the blinding splendour and the melting heat, it drops at my feet, spinning silently round upon the deck; I try to move my foot away, but cannot.

A suffocating smell of nitrogen fills the air, it enters the throat, it fills the lungs. We suffer stifling pains.

Why am I unable to move my foot? Is it riveted to the planks? Alas! the fall upon our fated raft of this electric globe has magnetised every iron article on board. The instruments, the tools, our guns, are clashing and clanking violently in their collisions with each other; the nails of my boots cling tenaciously to a plate of iron let into the timbers, and I cannot move my foot away from the spot. At last by a violent effort I release myself at the instant when the ball in its gyrations was about to seize upon it, and carry me off my feet ....

Ah! what a flood of intense and dazzling light! the globe has burst, and we are deluged with tongues of fire!

Then all the light disappears. I could just see my uncle at full length on the raft, and Hans still at his helm and spitting fire under the action of the electricity which has saturated him.

But where are we going to? Where?

* * * *

_Tuesday, August 25._ - I recover from a long swoon. The storm continues to roar and rage; the lightnings dash hither and thither, like broods of fiery serpents filling all the air. Are we still under the sea? Yes, we are borne at incalculable speed. We have been carried under England, under the channel, under France, perhaps under the whole of Europe.

* * * *

A fresh noise is heard! Surely it is the sea breaking upon the rocks! But then . . . .
CHAPTER XXXVI.

CALM PHILOSOPHIC DISCUSSIONS
Here I end what I may call my log, happily saved from the wreck, and I resume my narrative as before.

What happened when the raft was dashed upon the rocks is more than I can tell. I felt myself hurled into the waves; and if I escaped from death, and if my body was not torn over the sharp edges of the rocks, it was because the powerful arm of Hans came to my rescue.

The brave Icelander carried me out of the reach of the waves, over a burning sand where I found myself by the side of my uncle.

Then he returned to the rocks, against which the furious waves were beating, to save what he could. I was unable to speak. I was shattered with fatigue and excitement; I wanted a whole hour to recover even a little.

But a deluge of rain was still falling, though with that violence which generally denotes the near cessation of a storm. A few overhanging rocks afforded us some shelter from the storm. Hans prepared some food, which I could not touch; and each of us, exhausted with three sleepless nights, fell into a broken and painful sleep.

The next day the weather was splendid. The sky and the sea had sunk into sudden repose. Every trace of the awful storm had disappeared. The exhilarating voice of the Professor fell upon my ears as I awoke; he was ominously cheerful.

"Well, my boy," he cried, "have you slept well?"

Would not any one have thought that we were still in our cheerful little house on the Königstrasse and that I was only just coming down to breakfast, and that I was to be married to Gräuben that day?

Alas! if the tempest had but sent the raft a little more east, we should have passed under Germany, under my beloved town of Hamburg, under the very street where dwelt all that I loved most in the world. Then only forty leagues would have separated us! But they were forty leagues perpendicular of solid granite wall, and in reality we were a thousand leagues asunder!

All these painful reflections rapidly crossed my mind before I could answer my uncle's question.

"Well, now," he repeated, "won't you tell me how you have slept?"

"Oh, very well," I said. "I am only a little knocked up, but I shall soon be better."

"Oh," says my uncle, "that's nothing to signify. You are only a little bit tired."

"But you, uncle, you seem in very good spirits this morning."

"Delighted, my boy, delighted. We have got there."

"To our journey's end?"

"No; but we have got to the end of that endless sea. Now we shall go by land, and really begin to go down! down! down!"

"But, my dear uncle, do let me ask you one question."

"Of course, Axel."

"How about returning?"

"Returning? Why, you are talking about the return before the arrival."

"No, I only want to know how that is to be managed."

"In the simplest way possible. When we have reached the centre of the globe, either we shall find some new way to get back, or we shall come back like decent folks the way we came. I feel pleased at the thought that it is sure not to be shut against us."

"But then we shall have to refit the raft."

"Of course."

"Then, as to provisions, have we enough to last?"

"Yes; to be sure we have. Hans is a clever fellow, and I am sure he must have saved a large part of our cargo. But still let us go and make sure."

We left this grotto which lay open to every wind. At the same time I cherished a trembling hope which was a fear as well. It seemed to me impossible that the terrible wreck of the raft should not have destroyed everything on board. On my arrival on the shore I found Hans surrounded by an assemblage of articles all arranged in good order. My uncle shook hands with him with a lively gratitude. This man, with almost superhuman devotion, had been at work all the while that we were asleep, and had saved the most precious of the articles at the risk of his life.

Not that we had suffered no losses. For instance, our firearms; but we might do without them. Our stock of powder had remained uninjured after having risked blowing up during the storm.
"Well," cried the Professor, "as we have no guns we cannot hunt, that's all."

"Yes, but how about the instruments?"

"Here is the aneroid, the most useful of all, and for which I would have given all the others. By means of it I can calculate the depth and know when we have reached the centre; without it we might very likely go beyond, and come out at the antipodes!"

Such high spirits as these were rather too strong.

"But where is the compass? I asked.

"Here it is, upon this rock, in perfect condition, as well as the thermometers and the chronometer. The hunter is a splendid fellow."

There was no denying it. We had all our instruments. As for tools and appliances, there they all lay on the ground - ladders, ropes, picks, spades, etc.

Still there was the question of provisions to be settled, and I asked - "How are we off for provisions?"

The boxes containing these were in a line upon the shore, in a perfect state of preservation; for the most part the sea had spared them, and what with biscuits, salt meat, spirits, and salt fish, we might reckon on four months' supply.

"Four months!" cried the Professor. "We have time to go and to return; and with what is left I will give a grand dinner to my friends at the Johannæum."

I ought by this time to have been quite accustomed to my uncle’s ways; yet there was always something fresh about him to astonish me.

"Now," said he, "we will replenish our supply of water with the rain which the storm has left in all these granite basins; therefore we shall have no reason to fear anything from thirst. As for the raft, I will recommend Hans to do his best to repair it, although I don't expect it will be of any further use to us."

"How so?" I cried.

"An idea of my own, my lad. I don't think we shall come out by the way that we went in."

I stared at the Professor with a good deal of mistrust. I asked, was he not touched in the brain? And yet there was method in his madness.

"And now let us go to breakfast," said he.

I followed him to a headland, after he had given his instructions to the hunter. There preserved meat, biscuit, and tea made us an excellent meal, one of the best I ever remember. Hunger, the fresh air, the calm quiet weather, after the commotions we had gone through, all contributed to give me a good appetite.

Whilst breakfasting I took the opportunity to put to my uncle the question where we were now.

"That seems to me," I said, "rather difficult to make out."

"Yes, it is difficult," he said, "to calculate exactly; perhaps even impossible, since during these three stormy days I have been unable to keep any account of the rate or direction of the raft; but still we may get an approximation."

"The last observation," I remarked, "was made on the island, when the geyser was -"

"You mean Axel Island. Don't decline the honour of having given your name to the first island ever discovered in the central parts of the globe."

"Well," said I, "let it be Axel Island. Then we had cleared two hundred and seventy leagues of sea, and we were six hundred leagues from Iceland."

"Very well," answered my uncle; "let us start from that point and count four days' storm, during which our rate cannot have been less than eighty leagues in the twenty-four hours."

"That is right; and this would make three hundred leagues more."

"Yes, and the Liedenbrock sea would be six hundred leagues from shore to shore. Surely, Axel, it may vie in size with the Mediterranean itself."

"Especially," I replied, "if it happens that we have only crossed it in its narrowest part. And it is a curious circumstance," I added, "that if my computations are right, and we are nine hundred leagues from Rejkiavik, we have now the Mediterranean above our head."

"That is a good long way, my friend. But whether we are under Turkey or the Atlantic depends very much upon the question in what direction we have been moving. Perhaps we have deviated."

"No, I think not. Our course has been the same all along, and I believe this shore is south-east of Port Grauben."

"Well," replied my uncle, "we may easily ascertain this by consulting the compass. Let us go and see what it says."

The Professor moved towards the rock upon which Hans had laid down the instruments. He was gay and full of spirits; he rubbed his hands, he studied his attitudes. I followed him, curious to know if I was right in my estimate. As soon as we had arrived at the rock my uncle took the compass, laid it horizontally, and questioned the needle, which, after a few oscillations, presently assumed a fixed position. My uncle looked, and looked, and looked again.
He rubbed his eyes, and then turned to me thunderstruck with some unexpected discovery.

"What is the matter?" I asked.

He motioned to me to look. An exclamation of astonishment burst from me. The north pole of the needle was turned to what we supposed to be the south. It pointed to the shore instead of to the open sea! I shook the box, examined it again, it was in perfect condition. In whatever position I placed the box the needle pertinaciously returned to this unexpected quarter. Therefore there seemed no reason to doubt that during the storm there had been a sudden change of wind unperceived by us, which had brought our raft back to the shore which we thought we had left so long a distance behind us.

CHAPTER XXXVII.

THE LIEDENBROCK MUSEUM OF GEOLOGY

How shall I describe the strange series of passions which in succession shook the breast of Professor Liedenbrock? First stupefaction, then incredulity, lastly a downright burst of rage. Never had I seen the man so put out of countenance and so disturbed. The fatigues of our passage across, the dangers met, had all to be begun over again. We had gone backwards instead of forwards!

But my uncle rapidly recovered himself.

"Aha! will fate play tricks upon me? Will the elements lay plots against me? Shall fire, air, and water make a combined attack against me? Well, they shall know what a determined man can do. I will not yield. I will not stir a single foot backwards, and it will be seen whether man or nature is to have the upper hand!"

Erect upon the rock, angry and threatening, Otto Liedenbrock was a rather grotesque fierce parody upon the fierce Achilles defying the lightning. But I thought it my duty to interpose and attempt to lay some restraint upon this unmeasured fanaticism.

"Just listen to me," I said firmly. "Ambition must have a limit somewhere; we cannot perform impossibilities; we are not at all fit for another sea voyage; who would dream of undertaking a voyage of five hundred leagues upon a heap of rotten planks, with a blanket in rags for a sail, a stick for a mast, and fierce winds in our teeth? We cannot steer; we shall be buffeted by the tempests, and we should be fools and madmen to attempt to cross a second time."

I was able to develop this series of unanswerable reasons for ten minutes without interruption; not that the Professor was paying any respectful attention to his nephew's arguments, but because he was deaf to all my eloquence.

"To the raft!" he shouted.

Such was his only reply. It was no use for me to entreat, supplicate, get angry, or do anything else in the way of opposition; it would only have been opposing a will harder than the granite rock.

Hans was finishing the repairs of the raft. One would have thought that this strange being was guessing at my uncle's intentions. With a few more pieces of surturbrand he had refitted our vessel. A sail already hung from the new mast, and the wind was playing in its waving folds.

The Professor said a few words to the guide, and immediately he put everything on board and arranged every necessary for our departure. The air was clear - and the north-west wind blew steadily.

What could I do? Could I stand against the two? It was impossible? If Hans had but taken my side! But no, it was not to be. The Icelander seemed to have renounced all will of his own and made a vow to forget and deny himself. I could get nothing out of a servant so feudalised, as it were, to his master. My only course was to proceed.

I was therefore going with as much resignation as I could find to resume my accustomed place on the raft, when my uncle laid his hand upon my shoulder.

"We shall not sail until to-morrow," he said.

I made a movement intended to express resignation.

"I must neglect nothing," he said; "and since my fate has driven me on this part of the coast, I will not leave it until I have examined it."

To understand what followed, it must be borne in mind that, through circumstances hereafter to be explained, we were not really where the Professor supposed we were. In fact we were not upon the north shore of the sea.

"Now let us start upon fresh discoveries," I said.

And leaving Hans to his work we started off together. The space between the water and the foot of the cliffs was considerable. It took half an hour to bring us to the wall of rock. We trampled under our feet numberless shells of all
the forms and sizes which existed in the earliest ages of the world. I also saw immense carapaces more than fifteen feet in diameter. They had been the coverings of those gigantic glyptodons or armadilloes of the pleiocene period, of which the modern tortoise is but a miniature representative. [1] The soil was besides this scattered with stony fragments, boulders rounded by water action, and ridged up in successive lines. I was therefore led to the conclusion that at one time the sea must have covered the ground on which we were treading. On the loose and scattered rocks, now out of the reach of the highest tides, the waves had left manifest traces of their power to wear their way in the hardest stone.

This might up to a certain point explain the existence of an ocean forty leagues beneath the surface of the globe. But in my opinion this liquid mass would be lost by degrees farther and farther within the interior of the earth, and it certainly had its origin in the waters of the ocean overhead, which had made their way hither through some fissure. Yet it must be believed that that fissure is now closed, and that all this cavern or immense reservoir was filled in a very short time. Perhaps even this water, subjected to the fierce action of central heat, had partly been resolved into vapour. This would explain the existence of those clouds suspended over our heads and the development of that electricity which raised such tempests within the bowels of the earth.

This theory of the phenomena we had witnessed seemed satisfactory to me; for however great and stupendous the phenomena of nature, fixed physical laws will or may always explain them.

We were therefore walking upon sedimentary soil, the deposits of the waters of former ages. The Professor was carefully examining every little fissure in the rocks. Wherever he saw a hole he always wanted to know the depth of it. To him this was important.

We had traversed the shores of the Liedenbrock sea for a mile when we observed a sudden change in the appearance of the soil. It seemed upset, contorted, and convulsed by a violent upheaval of the lower strata. In many places depressions or elevations gave witness to some tremendous power effecting the dislocation of strata.

[1] The glyptodon and armadillo are mammalian; the tortoise is a chelonian, a reptile, distinct classes of the animal kingdom; therefore the latter cannot be a representative of the former. (Trans.)

We moved with difficulty across these granite fissures and chasms mingled with silex, crystals of quartz, and alluvial deposits, when a field, nay, more than a field, a vast plain, of bleached bones lay spread before us. It seemed like an immense cemetery, where the remains of twenty ages mingled their dust together. Huge mounds of bony fragments rose stage after stage in the distance. They undulated away to the limits of the horizon, and melted in the distance in a faint haze. There within three square miles were accumulated the materials for a complete history of the animal life of ages, a history scarcely outlined in the too recent strata of the inhabited world.

But an impatient curiosity impelled our steps; crackling and rattling, our feet were trampling on the remains of prehistoric animals and interesting fossils, the possession of which is a matter of rivalry and contention between the museums of great cities. A thousand Cuviers could never have reconstructed the organic remains deposited in this magnificent and unparalleled collection.

I stood amazed. My uncle had uplifted his long arms to the vault which was our sky; his mouth gaping wide, his eyes flashing behind his shining spectacles, his head balancing with an up-and-down motion, his whole attitude denoted unlimited astonishment. Here he stood facing an immense collection of scattered leptotheria, mericotheria, lophiodia, anoplotheria, mastodons, protopithecæ, pterodactyles, and all sorts of extinct monsters here assembled together for his special satisfaction. Fancy an enthusiastic bibliomaniac suddenly brought into the midst of the famous Alexandrian library burnt by Omar and restored by a miracle from its ashes! just such a crazed enthusiast was my uncle, Professor Liedenbrock.

But more was to come, when, with a rush through clouds of bone dust, he laid his hand upon a bare skull, and cried with a voice trembling with excitement:
"Axel! Axel! a human head!"
"A human skull?" I cried, no less astonished.
"Yes, nephew. Aha! M. Milne-Edwards! Ah! M. de Quatrefages, how I wish you were standing here at the side of Otto Liedenbrock!"

CHAPTER XXXVIII.

THE PROFESSOR IN HIS CHAIR AGAIN
To understand this apostrophe of my uncle's, made to absent French savants, it will be necessary to allude to an
event of high importance in a palæontological point of view, which had occurred a little while before our departure.

On the 28th of March, 1863, some excavators working under the direction of M. Boucher de Perthes, in the stone quarries of Moulin Quignon, near Abbeville, in the department of Somme, found a human jawbone fourteen feet beneath the surface. It was the first fossil of this nature that had ever been brought to light. Not far distant were found stone hatchets and flint arrow-heads stained and encased by lapse of time with a uniform coat of rust.

The noise of this discovery was very great, not in France alone, but in England and in Germany. Several savants of the French Institute, and amongst them MM. Milne-Edwards and de Quatrefages, saw at once the importance of this discovery, proved to demonstration the genuineness of the bone in question, and became the most ardent defendants in what the English called this 'trial of a jawbone.' To the geologists of the United Kingdom, who believed in the certainty of the fact - Messrs. Falconer, Busk, Carpenter, and others - scientific Germans were soon joined, and amongst them the forwardest, the most fiery, and the most enthusiastic, was my uncle Liedenbrock.

Therefore the genuineness of a fossil human relic of the quaternary period seemed to be incontestably proved and admitted.

It is true that this theory met with a most obstinate opponent in M. Elie de Beaumont. This high authority maintained that the soil of Moulin Quignon was not diluvial at all, but was of much more recent formation; and, agreeing in that with Cuvier, he refused to admit that the human species could be contemporary with the animals of the quaternary period. My uncle Liedenbrock, along with the great body of the geologists, had maintained his ground, disputed, and argued, until M. Elie de Beaumont stood almost alone in his opinion.

We knew all these details, but we were not aware that since our departure the question had advanced to farther stages. Other similar maxillaries, though belonging to individuals of various types and different nations, were found in the loose grey soil of certain grottoes in France, Switzerland, and Belgium, as well as weapons, tools, earthen utensils, bones of children and adults. The existence therefore of man in the quaternary period seemed to become daily more certain.

Nor was this all. Fresh discoveries of remains in the pleiocene formation had emboldened other geologists to refer back the human species to a higher antiquity still. It is true that these remains were not human bones, but objects bearing the traces of his handiwork, such as fossil leg-bones of animals, sculptured and carved evidently by the hand of man.

Thus, at one bound, the record of the existence of man receded far back into the history of the ages past; he was a predecessor of the mastodon; he was a contemporary of the southern elephant; he lived a hundred thousand years ago, when, according to geologists, the pleiocene formation was in progress.

Such then was the state of palæontological science, and what we knew of it was sufficient to explain our behaviour in the presence of this stupendous Golgotha. Any one may now understand the frenzied excitement of my uncle, when, twenty yards farther on, he found himself face to face with a primitive man!

It was a perfectly recognisable human body. Had some particular soil, like that of the cemetery St. Michel, at Bordeaux, preserved it thus for so many ages? It might be so. But this dried corpse, with its parchment-like skin drawn tightly over the bony frame, the limbs still preserving their shape, sound teeth, abundant hair, and finger and toe nails of frightful length, this desiccated mummy startled us by appearing just as it had lived countless ages ago. I stood mute before this apparition of remote antiquity. My uncle, usually so garrulous, was struck dumb likewise. We raised the body. We stood it up against a rock. It seemed to stare at us out of its empty orbits. We sounded with our hand the hollow frame.

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After some moments' silence the Professor was himself again. Otto Liedenbrock, yielding to his nature, forgot all the circumstances of our eventful journey, forgot where we were standing, forgot the vaulted cavern which contained us. No doubt he was in mind back again in his Johannæum, holding forth to his pupils, for he assumed his learned air; and addressing himself to an imaginary audience, he proceeded thus:

"Gentlemen, I have the honour to introduce to you a man of the quaternary or post-tertiary system. Eminent geologists have denied his existence, others no less eminent have affirmed it. The St. Thomases of palæontology, if they were here, might now touch him with their fingers, and would be obliged to acknowledge their error. I am quite aware that science has to be on its guard with discoveries of this kind. I know what capital enterprising individuals like Barnum have made out of fossil men. I have heard the tale of the kneepan of Ajax, the pretended body of Orestes claimed to have been found by the Spartans, and of the body of Asterius, ten cubits long, of which Pausanias speaks. I have read the reports of the skeleton of Trapani, found in the fourteenth century, and which was at the time identified as that of Polyphemus; and the history of the giant unearthed in the sixteenth century near Palermo. You know as well as I do, gentlemen, the analysis made at Lucerne in 1577 of those huge bones which the celebrated Dr. Felix Plater affirmed to be those of a giant nineteen feet high. I have gone through the treatises of Cassanion, and all those memoirs, pamphlets, answers, and rejoinders published respecting the skeleton of Teutobochus, the invader of Gaul, dug out of a sandpit in the Dauphiné, in 1613. In the eighteenth century I would have stood up for
Scheuchzer's pre-adamite man against Peter Campet. I have perused a writing, entitled Gigan -

Here my uncle's unfortunate infirmity met him - that of being unable in public to pronounce hard words.

"The pamphlet entitled Gigan -"

He could get no further.

"Giganteo -"

It was not to be done. The unlucky word would not come out. At the Johannæum there would have been a laugh.

"Gigantosteologie," at last the Professor burst out, between two words which I shall not record here.

Then rushing on with renewed vigour, and with great animation:

"Yes, gentlemen, I know all these things, and more. I know that Cuvier and Blumenbach have recognised in
these bones nothing more remarkable than the bones of the mammoth and other mammals of the post-tertiary period.
But in the presence of this specimen to doubt would be to insult science. There stands the body! You may see it, touch it. It is not a mere skeleton; it is an entire body, preserved for a purely anthropological end and purpose."

I was good enough not to contradict this startling assertion.

"If I could only wash it in a solution of sulphuric acid," pursued my uncle, "I should be able to clear it from all
the earthy particles and the shells which are incrusted about it. But I do not possess that valuable solvent. Yet, such
as it is, the body shall tell us its own wonderful story."

Here the Professor laid hold of the fossil skeleton, and handled it with the skill of a dexterous showman.

"You see," he said, "that it is not six feet long, and that we are still separated by a long interval from the
pretended race of giants. As for the family to which it belongs, it is evidently Caucasian. It is the white race, our
own. The skull of this fossil is a regular oval, or rather ovoid. It exhibits no prominent cheekbones, no projecting
jaws. It presents no appearance of that prognathism which diminishes the facial angle. [1] Measure that angle. It is
nearly ninety degrees. But I will go further in my deductions, and I will affirm that this specimen of the human
family is of the Japhetic race, which has since spread from the Indies to the Atlantic. Don't smile, gentlemen."

Nobody was smiling; but the learned Professor was frequently disturbed by the broad smiles provoked by his
learned eccentricities.

"Yes," he pursued with animation, "this is a fossil man, the contemporary of the mastodons whose remains fill
this amphitheatre. But if you ask me how he came there, how those strata on which he lay slipped down into this
enormous hollow in the globe, I confess I cannot answer that question. No doubt in the post-tertiary period
considerable commotions were still disturbing the crust of the earth. The long-continued cooling of the globe
produced chasms, fissures, clefts, and faults, into which, very probably, portions of the upper earth may have fallen.
I make no rash assertions; but there is the man surrounded by his own works, by hatchets, by flint arrow-heads,
which are the characteristics of the stone age. And unless he came here, like myself, as a tourist on a visit and as a
pioneer of science, I can entertain no doubt of the authenticity of his remote origin."

[1] The facial angle is formed by two lines, one touching the brow and the front teeth, the other from the orifice
of the ear to the lower line of the nostrils. The greater this angle, the higher intelligence denoted by the formation of
the skull. Prognathism is that projection of the jaw-bones which sharpens or lessens this angle, and which is
illustrated in the negro countenance and in the lowest savages.

The Professor ceased to speak, and the audience broke out into loud and unanimous applause. For of course my
uncle was right, and wiser men than his nephew would have had some trouble to refute his statements.

Another remarkable thing. This fossil body was not the only one in this immense catacomb. We came upon other
bodies at every step amongst this mortal dust, and my uncle might select the most curious of these specimens to
demolish the incredulity of sceptics.

In fact it was a wonderful spectacle, that of these generations of men and animals commingled in a common
cemetery. Then one very serious question arose presently which we scarcely dared to suggest. Had all those
creatures slipped through a great fissure in the crust of the earth, down to the shores of the Liedenbrock sea, when
they were dead and turning to dust, or had they lived and grown and died here in this subterranean world under a
false sky, just like inhabitants of the upper earth? Until the present time we had seen alive only marine monsters and
fishes. Might not some living man, some native of the abyss, be yet a wanderer below on this desert strand?

CHAPTER XXXIX.

FOREST SCENERY ILLUMINATED BY ELETRICITY
For another half hour we trod upon a pavement of bones. We pushed on, impelled by our burning curiosity. What other marvels did this cavern contain? What new treasures lay here for science to unfold? I was prepared for any surprise, my imagination was ready for any astonishment however astounding.

We had long lost sight of the sea shore behind the hills of bones. The rash Professor, careless of losing his way, hurried me forward. We advanced in silence, bathed in luminous electric fluid. By some phenomenon which I am unable to explain, it lighted up all sides of every object equally. Such was its diffusiveness, there being no central point from which the light emanated, that shadows no longer existed. You might have thought yourself under the rays of a vertical sun in a tropical region at noonday and the height of summer. No vapour was visible. The rocks, the distant mountains, a few isolated clumps of forest trees in the distance, presented a weird and wonderful aspect under these totally new conditions of a universal diffusion of light. We were like Hoffmann's shadowless man.

After walking a mile we reached the outskirts of a vast forest, but not one of those forests of fungi which bordered Port Gräuben.

Here was the vegetation of the tertiary period in its fullest blaze of magnificence. Tall palms, belonging to species no longer living, splendid palmacites, firs, yews, cypress trees, thuja, representatives of the conifers, were linked together by a tangled network of long climbing plants. A soft carpet of moss and hepaticas luxuriously clothed the soil. A few sparkling streams ran almost in silence under what would have been the shade of the trees, but that there was no shadow. On their banks grew tree-ferns similar to those we grow in hothouses. But a remarkable feature was the total absence of colour in all those trees, shrubs, and plants, growing without the life-giving heat and light of the sun. Everything seemed mixed-up and confounded in one uniform silver grey or light brown tint like that of fading and faded leaves. Not a green leaf anywhere, and the flowers - which were abundant enough in the tertiary period, which first gave birth to flowers - looked like brown-paper flowers, without colour or scent.

My uncle Liedenbrock ventured to penetrate under this colossal grove. I followed him, not without fear. Since nature had here provided vegetable nourishment, why should not the terrible mammals be there too? I perceived in the broad clearings left by fallen trees, decayed with age, leguminose plants, acerineæ, rubiceæ and many other eatable shrubs, dear to ruminant animals at every period. Then I observed, mingled together in confusion, trees of countries far apart on the surface of the globe. The oak and the palm were growing side by side, the Australian eucalyptus leaned against the Norwegian pine, the birch-tree of the north mingled its foliage with New Zealand kauris. It was enough to distract the most ingenious classifier of terrestrial botany.

Suddenly I halted. I drew back my uncle.

The diffused light revealed the smallest object in the dense and distant thickets. I had thought I saw - no! I did see, with my own eyes, vast colossal forms moving amongst the trees. They were gigantic animals; it was a herd of mastodons - not fossil remains, but living and resembling those the bones of which were found in the marshes of Ohio in 1801. I saw those huge elephants whose long, flexible trunks were grouting and turning up the soil under the trees like a legion of serpents. I could hear the crashing noise of their long ivory tusks boring into the old decaying trunks. The boughs cracked, and the leaves torn away by cartloads went down the cavernous throats of the vast brutes.

So, then, the dream in which I had had a vision of the prehistoric world, of the tertiary and post-tertiary periods, was now realised. And there we were alone, in the bowels of the earth, at the mercy of its wild inhabitants!

My uncle was gazing with intense and eager interest.

"Come on!" said he, seizing my arm. "Forward! forward!"

"No, I will not!" I cried. "We have no firearms. What could we do in the midst of a herd of these four-footed giants? Come away, uncle - come! No human being may with safety dare the anger of these monstrous beasts."

"No human creature?" replied my uncle in a lower voice. "You are wrong, Axel. Look, look down there! I fancy I see a living creature similar to ourselves: it is a man!"

I looked, shaking my head incredulously. But though at first I was unbelieving I had to yield to the evidence of my senses.

In fact, at a distance of a quarter of a mile, leaning against the trunk of a gigantic kauri, stood a human being, the Proteus of those subterranean regions, a new son of Neptune, watching this countless herd of mastodons.

Immanis pecoris custos, immanior ipse. [1]

[1] "The shepherd of gigantic herds, and huger still himself."

Yes, truly, huger still himself. It was no longer a fossil being like him whose dried remains we had easily lifted up in the field of bones; it was a giant, able to control those monsters. In stature he was at least twelve feet high. His head, huge and unshapely as a buffalo's, was half hidden in the thick and tangled growth of his unkempt hair. It most resembled the mane of the primitive elephant. In his hand he wielded with ease an enormous bough, a staff worthy of this shepherd of the geologic period.
We stood petrified and speechless with amazement. But he might see us! We must fly!

"Come, do come!" I said to my uncle, who for once allowed himself to be persuaded.

In another quarter of an hour our nimble heels had carried us beyond the reach of this horrible monster.

And yet, now that I can reflect quietly, now that my spirit has grown calm again, now that months have slipped by since this strange and supernatural meeting, what am I to think? what am I to believe? I must conclude that it was impossible that our senses had been deceived, that our eyes did not see what we supposed they saw. No human being lives in this subterranean world; no generation of men dwells in those inferior caverns of the globe, unknown to and unconnected with the inhabitants of its surface. It is absurd to believe it!

I had rather admit that it may have been some animal whose structure resembled the human, some ape or baboon of the early geological ages, some protopitheca, or some mesopitheca, some early or middle ape like that discovered by Mr. Lartet in the bone cave of Sansau. But this creature surpassed in stature all the measurements known in modern palæontology. But that a man, a living man, and therefore whole generations doubtless besides, should be buried there in the bowels of the earth, is impossible.

However, we had left behind us the luminous forest, dumb with astonishment, overwhelmed and struck down with a terror which amounted to stupefaction. We kept running on for fear the horrible monster might be on our track. It was a flight, a fall, like that fearful pulling and dragging which is peculiar to nightmare. Instinctively we got back to the Liedenbrock sea, and I cannot say into what vagaries my mind would not have carried me but for a circumstance which brought me back to practical matters.

Although I was certain that we were now treading upon a soil not hitherto touched by our feet, I often perceived groups of rocks which reminded me of those about Port Gräuben. Besides, this seemed to confirm the indications of the needle, and to show that we had against our will returned to the north of the Liedenbrock sea. Occasionally we felt quite convinced. Brooks and waterfalls were tumbling everywhere from the projections in the rocks. I thought I recognised the bed of surturbrand, our faithful Hansbach, and the grotto in which I had recovered life and consciousness. Then a few paces farther on, the arrangement of the cliffs, the appearance of an unrecognised stream, or the strange outline of a rock, came to throw me again into doubt.

I communicated my doubts to my uncle. Like myself, he hesitated; he could recognise nothing again amidst this monotonous scene.

"Evidently," said I, "we have not landed again at our original starting point, but the storm has carried us a little higher, and if we follow the shore we shall find Port Gräuben."

"If that is the case it will be useless to continue our exploration, and we had better return to our raft. But, Axel, are you not mistaken?"

"It is difficult to speak decidedly, uncle, for all these rocks are so very much alike. Yet I think I recognise the promontory at the foot of which Hans constructed our launch. We must be very near the little port, if indeed this is not it," I added, examining a creek which I thought I recognised.

"No, Axel, we should at least find our own traces and I see nothing -"

"But I do see," I cried, darting upon an object lying on the sand.

And I showed my uncle a rusty dagger which I had just picked up.

"Come," said he, "had you this weapon with you?"

"If! No, certainly! But you, perhaps -"

"Not that I am aware," said the Professor. "I have never had this object in my possession."

"Well, this is strange!"

"No, Axel, it is very simple. The Icelanders often wear arms of this kind. This must have belonged to Hans, and he has lost it."

I shook my head. Hans had never had an object like this in his possession.

"Did it not belong to some preadamite warrior?" I cried, "to some living man, contemporary with the huge cattle-driver? But no. This is not a relic of the stone age. It is not even of the iron age. This blade is steel -"

My uncle stopped me abruptly on my way to a dissertation which would have taken me a long way, and said coolly:

"Be calm, Axel, and reasonable. This dagger belongs to the sixteenth century; it is a poniard, such as gentlemen carried in their belts to give the coup de grace. Its origin is Spanish. It was never either yours, or mine, or the hunter's, nor did it belong to any of those human beings who may or may not inhabit this inner world. See, it was never jagged like this by cutting men's throats; its blade is coated with a rust neither a day, nor a year, nor a hundred years old."

The Professor was getting excited according to his wont, and was allowing his imagination to run away with him.

"Axel, we are on the way towards the grand discovery. This blade has been left on the strand for from one to
three hundred years, and has blunted its edge upon the rocks that fringe this subterranean sea!"
"But it has not come alone. It has not twisted itself out of shape; some one has been here before us!
"Yes - a man has."
"And who was that man?"
"A man who has engraved his name somewhere with that dagger. That man wanted once more to mark the way
to the centre of the earth. Let us look about: look about!"
And, wonderfully interested, we peered all along the high wall, peeping into every fissure which might open out
into a gallery.
And so we arrived at a place where the shore was much narrowed. Here the sea came to lap the foot of the steep
cliff, leaving a passage no wider than a couple of yards. Between two boldly projecting rocks appeared the mouth of
a dark tunnel.
There, upon a granite slab, appeared two mysterious graven letters, half eaten away by time. They were the
initials of the bold and daring traveller:
[Runic initials appear here]
"A. S.," shouted my uncle. "Arne Saknussem! Arne Saknussem everywhere!"

CHAPTER XL.

PREPARATIONS FOR BLASTING A PASSAGE TO THE CENTRE OF THE EARTH
Since the start upon this marvellous pilgrimage I had been through so many astonishments that I might well be
excused for thinking myself well hardened against any further surprise. Yet at the sight of these two letters,
engraved on this spot three hundred years ago, I stood aghast in dumb amazement. Not only were the initials of the
learned alchemist visible upon the living rock, but there lay the iron point with which the letters had been engraved.
I could no longer doubt of the existence of that wonderful traveller and of the fact of his unparalleled journey,
without the most glaring incredulity.
Whilst these reflections were occupying me, Professor Liedenbrock had launched into a somewhat rhapsodical
eulogium, of which Arne Saknussem was, of course, the hero.
"Thou marvellous genius!" he cried, "thou hast not forgotten one indication which might serve to lay open to
mortals the road through the terrestrial crust; and thy fellow-creatures may even now, after the lapse of three
centuries, again trace thy footsteps through these deep and darksome ways. You reserved the contemplation of these
wonders for other eyes besides your own. Your name, graven from stage to stage, leads the bold follower of your
footsteps to the very centre of our planet's core, and there again we shall find your own name written with your own
hand. I too will inscribe my name upon this dark granite page. But for ever henceforth let this cape that advances
into the sea discovered by yourself be known by your own illustrious name - Cape Saknussem.
Such were the glowing words of panegyric which fell upon my attentive ear, and I could not resist the sentiment
of enthusiasm with which I too was infected. The fire of zeal kindled afresh in me. I forgot everything. I dismissed
from my mind the past perils of the journey, the future danger of our return. That which another had done I supposed
we might also do, and nothing that was not superhuman appeared impossible to me.
"Forward! forward!" I cried.
I was already darting down the gloomy tunnel when the Professor stopped me; he, the man of impulse,
counseled patience and coolness.
"Let us first return to Hans," he said, "and bring the raft to this spot."
I obeyed, not without dissatisfaction, and passed out rapidly among the rocks on the shore.
I said: "Uncle, do you know it seems to me that circumstances have wonderfully befriended us hitherto?"
"You think so, Axel?"
"No doubt; even the tempest has put us on the right way. Blessings on that storm! It has brought us back to this
coast from which fine weather would have carried us far away. Suppose we had touched with our prow (the prow of
a rudder!) the southern shore of the Liedenbrock sea, what would have become of us? We should never have seen
the name of Saknussem, and we should at this moment be imprisoned on a rockbound, impassable coast."
"Yes, Axel, it is providential that whilst supposing we were steering south we should have just got back north at
Cape Saknussem. I must say that this is astonishing, and that I feel I have no way to explain it."
"What does that signify, uncle? Our business is not to explain facts, but to use them!"
"Certainly; but -"

"Well, uncle, we are going to resume the northern route, and to pass under the north countries of Europe - under Sweden, Russia, Siberia: who knows where? - instead of burrowing under the deserts of Africa, or perhaps the waves of the Atlantic; and that is all I want to know."

"Yes, Axel, you are right. It is all for the best, since we have left that weary, horizontal sea, which led us nowhere. Now we shall go down, down, down! Do you know that it is now only 1,500 leagues to the centre of the globe?"

"Is that all?" I cried. "Why, that's nothing. Let us start: march!"

All this crazy talk was going on still when we met the hunter. Everything was made ready for our instant departure. Every bit of cordage was put on board. We took our places, and with our sail set, Hans steered us along the coast to Cape Saknussemm.

The wind was unfavourable to a species of launch not calculated for shallow water. In many places we were obliged to push ourselves along with iron-pointed sticks. Often the sunken rocks just beneath the surface obliged us to deviate from our straight course. At last, after three hours' sailing, about six in the evening we reached a place suitable for our landing. I jumped ashore, followed by my uncle and the Icelander. This short passage had not served to cool my ardour. On the contrary, I even proposed to burn 'our ship,' to prevent the possibility of return; but my uncle would not consent to that. I thought him singularly lukewarm.

"At least," I said, "don't let us lose a minute."

"Yes, yes, lad," he replied; "but first let us examine this new gallery, to see if we shall require our ladders."

My uncle put his Ruhmkorff's apparatus in action; the raft moored to the shore was left alone; the mouth of the tunnel was not twenty yards from us; and our party, with myself at the head, made for it without a moment's delay.

The aperture, which was almost round, was about five feet in diameter; the dark passage was cut out in the live rock and lined with a coat of the eruptive matter which formerly issued from it; the interior was level with the ground outside, so that we were able to enter without difficulty. We were following a horizontal plane, when, only six paces in, our progress was interrupted by an enormous block just across our way.

"Accursed rock!" I cried in a passion, finding myself suddenly confronted by an impassable obstacle.

Right and left we searched in vain for a way, up and down, side to side; there was no getting any farther. I felt fearfully disappointed, and I would not admit that the obstacle was final. I stopped, I looked underneath the block; no opening. Above: granite still. Hans passed his lamp over every portion of the barrier in vain. We must give up all hope of passing it.

I sat down in despair. My uncle strode from side to side in the narrow passage.

"But how was it with Saknussemm?" I cried.

"Yes," said my uncle, "was he stopped by this stone barrier?"

"No, no," I replied with animation. "This fragment of rock has been shaken down by some shock or convulsion, or by one of those magnetic storms which agitate these regions, and has blocked up the passage which lay open to him. Many years have elapsed since the return of Saknussemm to the surface and the fall of this huge fragment. Is it not evident that this gallery was once the way open to the course of the lava, and that at that time there must have been a free passage? See here are recent fissures grooving and channelling the granite roof. This roof itself is formed of fragments of rock carried down, of enormous stones, as if by some giant's hand; but at one time the expulsive force was greater than usual, and this block, like the falling keystone of a ruined arch, has slipped down to the ground and blocked up the way. It is only an accidental obstruction, not met by Saknussemm, and if we don't destroy it we shall be unworthy to reach the centre of the earth."

Such was my sentence! The soul of the Professor had passed into me. The genius of discovery possessed me wholly. I forgot the past, I scorned the future. I gave not a thought to the things of the surface of this globe into which I had dived; its cities and its sunny plains, Hamburg and the Königstrasse, even poor Gräuben, who must have given us up for lost, all were for the time dismissed from the pages of my memory.

"Well," cried my uncle, "let us make a way with our pickaxes."

"Too hard for the pickaxe."

"Well, then, the spade."

"That would take us too long."

"What, then?"

"Why gunpowder, to be sure! Let us mine the obstacle and blow it up."

"Oh, yes, it is only a bit of rock to blast!"

"Hans, to work!" cried my uncle.

The Icelander returned to the raft and soon came back with an iron bar which he made use of to bore a hole for the charge. This was no easy work. A hole was to be made large enough to hold fifty pounds of guncotton, whose
expansive force is four times that of gunpowder.

I was terribly excited. Whilst Hans was at work I was actively helping my uncle to prepare a slow match of wetted powder encased in linen.

"This will do it," I said.

"It will," replied my uncle.

By midnight our mining preparations were over; the charge was rammed into the hole, and the slow match uncoiled along the gallery showed its end outside the opening.

A spark would now develop the whole of our preparations into activity.

"To-morrow," said the Professor.

I had to be resigned and to wait six long hours.

CHAPTER XLI.

THE GREAT EXPLOSION AND THE RUSH DOWN BELOW

The next day, Thursday, August 27, is a well-remembered date in our subterranean journey. It never returns to my memory without sending through me a shudder of horror and a palpitation of the heart. From that hour we had no further occasion for the exercise of reason, or judgment, or skill, or contrivance. We were henceforth to be hurled along, the playthings of the fierce elements of the deep.

At six we were afoot. The moment drew near to clear a way by blasting through the opposing mass of granite.

I begged for the honour of lighting the fuse. This duty done, I was to join my companions on the raft, which had not yet been unloaded; we should then push off as far as we could and avoid the dangers arising from the explosion, the effects of which were not likely to be confined to the rock itself.

The fuse was calculated to burn ten minutes before setting fire to the mine. I therefore had sufficient time to get away to the raft.

I prepared to fulfil my task with some anxiety.

After a hasty meal, my uncle and the hunter embarked whilst I remained on shore. I was supplied with a lighted lantern to set fire to the fuse. "Now go," said my uncle, "and return immediately to us." "Don't be uneasy," I replied. "I will not play by the way." I immediately proceeded to the mouth of the tunnel. I opened my lantern. I laid hold of the end of the match. The Professor stood, chronometer in hand. "Ready?" he cried.

"Ay."

"Fire!"

I instantly plunged the end of the fuse into the lantern. It spluttered and flamed, and I ran at the top of my speed to the raft.

"Come on board quickly, and let us push off."

Hans, with a vigorous thrust, sent us from the shore. The raft shot twenty fathoms out to sea.

It was a moment of intense excitement. The Professor was watching the hand of the chronometer.

"Five minutes more!" he said. "Four! Three!"

My pulse beat half-seconds.

"Two! One! Down, granite rocks; down with you."

What took place at that moment? I believe I did not hear the dull roar of the explosion. But the rocks suddenly assumed a new arrangement: they rent asunder like a curtain. I saw a bottomless pit open on the shore. The sea, lashed into sudden fury, rose up in an enormous billow, on the ridge of which the unhappy raft was uplifted bodily in the air with all its crew and cargo.

We all three fell down flat. In less than a second we were in deep, unfathomable darkness. Then I felt as if not only myself but the raft also had no support beneath. I thought it was sinking; but it was not so. I wanted to speak to my uncle, but the roaring of the waves prevented him from hearing even the sound of my voice.

In spite of darkness, noise, astonishment, and terror, I then understood what had taken place.

On the other side of the blown-up rock was an abyss. The explosion had caused a kind of earthquake in this fissured and abysmal region; a great gulf had opened; and the sea, now changed into a torrent, was hurryng us along into it.

I gave myself up for lost.

An hour passed away - two hours, perhaps - I cannot tell. We clutched each other fast, to save ourselves from
being thrown off the raft. We felt violent shocks whenever we were borne heavily against the craggy projections. Yet these shocks were not very frequent, from which I concluded that the gully was widening. It was no doubt the same road that Saknussemm had taken; but instead of walking peaceably down it, as he had done, we were carrying a whole sea along with us.

These ideas, it will be understood, presented themselves to my mind in a vague and undetermined form. I had difficulty in associating any ideas together during this headlong race, which seemed like a vertical descent. To judge by the air which was whistling past me and made a whizzing in my ears, we were moving faster than the fastest express trains. To light a torch under these conditions would have been impossible; and our last electric apparatus had been shattered by the force of the explosion.

I was therefore much surprised to see a clear light shining near me. It lighted up the calm and unmoved countenance of Hans. The skilful huntsman had succeeded in lighting the lantern; and although it flickered so much as to threaten to go out, it threw a fitful light across the awful darkness.

I was right in my supposition. It was a wide gallery. The dim light could not show us both its walls at once. The fall of the waters which were carrying us away exceeded that of the swiftest rapids in American rivers. Its surface seemed composed of a sheaf of arrows hurled with inconceivable force; I cannot convey my impressions by a better comparison. The raft, occasionally seized by an eddy, spun round as it still flew along. When it approached the walls of the gallery I threw on them the light of the lantern, and I could judge somewhat of the velocity of our speed by noticing how the jagged projections of the rocks spun into endless ribbons and bands, so that we seemed confined within a network of shifting lines. I supposed we were running at the rate of thirty leagues an hour.

My uncle and I gazed on each other with haggard eyes, clinging to the stump of the mast, which had snapped asunder at the first shock of our great catastrophe. We kept our backs to the wind, not to be stifled by the rapidity of a movement which no human power could check.

Hours passed away. No change in our situation; but a discovery came to complicate matters and make them worse.

In seeking to put our cargo into somewhat better order, I found that the greater part of the articles embarked had disappeared at the moment of the explosion, when the sea broke in upon us with such violence. I wanted to know exactly what we had saved, and with the lantern in my hand I began my examination. Of our instruments none were saved but the compass and the chronometer; our stock of ropes and ladders was reduced to the bit of cord rolled round the stump of the mast! Not a spade, not a pickaxe, not a hammer was left us; and, irreparable disaster! we had only one day's provisions left.

I searched every nook and corner, every crack and cranny in the raft. There was nothing. Our provisions were reduced to one bit of salt meat and a few biscuits.

I stared at our failing supplies stupidly. I refused to take in the gravity of our loss. And yet what was the use of troubling myself. If we had had provisions enough for months, how could we get out of the abyss into which we were being hurled by an irresistible torrent? Why should we fear the horrors of famine, when death was swooping down upon us in a multitude of other forms? Would there be time left to die of starvation?

Yet by an inexplicable play of the imagination I forgot my present dangers, to contemplate the threatening future. Was there any chance of escaping from the fury of this impetuous torrent, and of returning to the surface of the globe? I could not form the slightest conjecture how or when. But one chance in a thousand, or ten thousand, is still a chance; whilst death from starvation would leave us not the smallest hope in the world.

The thought came into my mind to declare the whole truth to my uncle, to show him the dreadful straits to which we were reduced, and to calculate how long we might yet expect to live. But I had the courage to preserve silence. I wished to leave him cool and self-possessed.

At that moment the light from our lantern began to sink by little and little, and then went out entirely. The wick had burnt itself out. Black night reigned again; and there was no hope left of being able to dissipate the palpable darkness. We had yet a torch left, but we could not have kept it alight. Then, like a child, I closed my eyes firmly, not to see the darkness.

After a considerable lapse of time our speed redoubled. I could perceive it by the sharpness of the currents that blew past my face. The descent became steeper. I believe we were no longer sliding, but falling down. I had an impression that we were dropping vertically. My uncle's hand, and the vigorous arm of Hans, held me fast.

Suddenly, after a space of time that I could not measure, I felt a shock. The raft had not struck against any hard resistance, but had suddenly been checked in its fall. A waterspout, an immense liquid column, was beating upon the surface of the waters. I was suffocating! I was drowning!

But this sudden flood was not of long duration. In a few seconds I found myself in the air again, which I inhaled with all the force of my lungs. My uncle and Hans were still holding me fast by the arms; and the raft was still carrying us.
HEADLONG SPEED UPWARD THROUGH THE HORDORS OF DARKNESS

It might have been, as I guessed, about ten at night. The first of my senses which came into play after this last bout was that of hearing. All at once I could hear, and it was a real exercise of the sense of hearing. I could hear the silence in the gallery after the din which for hours had stunned me. At last these words of my uncle's came to me like a vague murmuring:

"We are going up."
"What do you mean?" I cried.
"Yes, we are going up - up!"

I stretched out my arm. I touched the wall, and drew back my hand bleeding. We were ascending with extreme rapidity.
"The torch! The torch!" cried the Professor.

Not without difficulty Hans succeeded in lighting the torch; and the flame, preserving its upward tendency, threw enough light to show us what kind of a place we were in.

"Just as I thought," said the Professor "We are in a tunnel not four-and-twenty feet in diameter The water had reached the bottom of the gulf. It is now rising to its level, and carrying us with it."
"Where to?"

"I cannot tell; but we must be ready for anything. We are mounting at a speed which seems to me of fourteen feet in a second, or ten miles an hour. At this rate we shall get on."
"Yes, if nothing stops us; if this well has an aperture. But suppose it to be stopped. If the air is condensed by the pressure of this column of water we shall be crushed."
"Axel," replied the Professor with perfect coolness, "our situation is almost desperate; but there are some chances of deliverance, and it is these that I am considering. If at every instant we may perish, so at every instant we may be saved. Let us then be prepared to seize upon the smallest advantage."
"But what shall we do now?"
"Recruit our strength by eating."

At these words I fixed a haggard eye upon my uncle. That which I had been so unwilling to confess at last had to be told.
"Eat, did you say?"
"Yes, at once."

The Professor added a few words in Danish, but Hans shook his head mournfully.
"What!" cried my uncle. "Have we lost our provisions?"
"Yes; here is all we have left; one bit of salt meat for the three."

My uncle stared at me as if he could not understand.
"Well," said I, "do you think we have any chance of being saved?"

My question was unanswered.

An hour passed away. I began to feel the pangs of a violent hunger. My companions were suffering too, and not one of us dared touch this wretched remnant of our goodly store.

But now we were mounting up with excessive speed. Sometimes the air would cut our breath short, as is experienced by aeronauts ascending too rapidly. But whilst they suffer from cold in proportion to their rise, we were beginning to feel a contrary effect. The heat was increasing in a manner to cause us the most fearful anxiety, and certainly the temperature was at this moment at the height of 100° Fahr.

What could be the meaning of such a change? Up to this time facts had supported the theories of Davy and of Liedenbrock; until now particular conditions of non-conducting rocks, electricity and magnetism, had tempered the laws of nature, giving us only a moderately warm climate, for the theory of a central fire remained in my estimation the only one that was true and explicable. Were we then turning back to where the phenomena of central heat ruled in all their rigour and would reduce the most refractory rocks to the state of a molten liquid? I feared this, and said to the Professor:

"If we are neither drowned, nor shattered to pieces, nor starved to death, there is still the chance that we may be burned alive and reduced to ashes."
At this he shrugged his shoulders and returned to his thoughts.

Another hour passed, and, except some slight increase in the temperature, nothing new had happened.

"Come," said he, "we must determine upon something."

"Determine on what?" said I.

"Yes, we must recruit our strength by carefully rationing ourselves, and so prolong our existence by a few hours. But we shall be reduced to very great weakness at last."

"And our last hour is not far off."

"Well, if there is a chance of safety, if a moment for active exertion presents itself, where should we find the required strength if we allowed ourselves to be enfeebled by hunger?"

"Well, uncle, when this bit of meat has been devoured what shall we have left?"

"Nothing, Axel, nothing at all. But will it do you any more good to devour it with your eyes than with your teeth? Your reasoning has in it neither sense nor energy."

"Then don't you despair?" I cried irritably.

"No, certainly not," was the Professor's firm reply.

"What! do you think there is any chance of safety left?"

"Yes, I do; as long as the heart beats, as long as body and soul keep together, I cannot admit that any creature endowed with a will has need to despair of life."

Resolute words these! The man who could speak so, under such circumstances, was of no ordinary type.

"Finally, what do you mean to do?" I asked.

"Eat what is left to the last crumb, and recruit our fading strength. This meal will be our last, perhaps: so let it be! But at any rate we shall once more be men, and not exhausted, empty bags."

"Well, let us consume it then," I cried.

My uncle took the piece of meat and the few biscuits which had escaped from the general destruction. He divided them into three equal portions and gave one to each. This made about a pound of nourishment for each. The Professor ate his greedily, with a kind of feverish rage. I ate without pleasure, almost with disgust; Hans quietly, moderately, masticating his small mouthfuls without any noise, and relishing them with the calmness of a man above all anxiety about the future. By diligent search he had found a flask of Hollands; he offered it to us each in turn, and this generous beverage cheered us up slightly.

"Forträfflig," said Hans, drinking in his turn.

"Excellent," replied my uncle.

A glimpse of hope had returned, although without cause. But our last meal was over, and it was now five in the morning.

Man is so constituted that health is a purely negative state. Hunger once satisfied, it is difficult for a man to imagine the horrors of starvation; they cannot be understood without being felt.

Therefore it was that after our long fast these few mouthfuls of meat and biscuit made us triumph over our past agonies.

But as soon as the meal was done, we each of us fell deep into thought. What was Hans thinking of - that man of the far West, but who seemed ruled by the fatalist doctrines of the East?

As for me, my thoughts were made up of remembrances, and they carried me up to the surface of the globe of which I ought never to have taken leave. The house in the Königstrasse, my poor dear Gräuben, that kind soul Martha, flitted like visions before my eyes, and in the dismal moanings which from time to time reached my ears I thought I could distinguish the roar of the traffic of the great cities upon earth.

My uncle still had his eye upon his work. Torch in hand, he tried to gather some idea of our situation from the observation of the strata. This calculation could, at best, be but a vague approximation; but a learned man is always a philosopher when he succeeds in remaining cool, and assuredly Professor Liedenbrock possessed this quality to a surprising degree.

I could hear him murmuring geological terms. I could understand them, and in spite of myself I felt interested in this last geological study.

"Eruptive granite," he was saying. "We are still in the primitive period. But we are going up, up, higher still. Who can tell?"

Ah! who can tell? With his hand he was examining the perpendicular wall, and in a few more minutes he continued:

"This is gneiss! here is mica schist! Ah! presently we shall come to the transition period, and then -"

What did the Professor mean? Could he be trying to measure the thickness of the crust of the earth that lay between us and the world above? Had he any means of making this calculation? No, he had not the aneroid, and no guessing could supply its place.
Still the temperature kept rising, and I felt myself steeped in a broiling atmosphere. I could only compare it to the heat of a furnace at the moment when the molten metal is running into the mould. Gradually we had been obliged to throw aside our coats and waistcoats, the lightest covering became uncomfortable and even painful.

"Are we rising into a fiery furnace?" I cried at one moment when the heat was redoubling.

"No," replied my uncle, "that is impossible - quite impossible!"

"Yet," I answered, feeling the wall, "this well is burning hot."

At the same moment, touching the water, I had to withdraw my hand in haste.

"The water is scalding," I cried.

This time the Professor's only answer was an angry gesture.

Then an unconquerable terror seized upon me, from which I could no longer get free. I felt that a catastrophe was approaching before which the boldest spirit must quail. A dim, vague notion laid hold of my mind, but which was fast hardening into certainty. I tried to repel it, but it would return. I dared not express it in plain terms. Yet a few involuntary observations confirmed me in my view. By the flickering light of the torch I could distinguish contortions in the granite beds; a phenomenon was unfolding in which electricity would play the principal part; then this unbearable heat, this boiling water! I consulted the compass.

The compass had lost its properties! it had ceased to act properly!

CHAPTER XLIII.

SHOT OUT OF A VOLCANO AT LAST!

Yes: our compass was no longer a guide; the needle flew from pole to pole with a kind of frenzied impulse; it ran round the dial, and spun hither and thither as if it were giddy or intoxicated.

I knew quite well that according to the best received theories the mineral covering of the globe is never at absolute rest; the changes brought about by the chemical decomposition of its component parts, the agitation caused by great liquid torrents, and the magnetic currents, are continually tending to disturb it - even when living beings upon its surface may fancy that all is quiet below. A phenomenon of this kind would not have greatly alarmed me, or at any rate it would not have given rise to dreadful apprehensions.

But other facts, other circumstances, of a peculiar nature, came to reveal to me by degrees the true state of the case. There came incessant and continuous explosions. I could only compare them to the loud rattle of a long train of chariots driven at full speed over the stones, or a roar of unintermitting thunder.

Then the disordered compass, thrown out of gear by the electric currents, confirmed me in a growing conviction. The mineral crust of the globe threatened to burst up, the granite foundations to come together with a crash, the fissure through which we were helplessly driven would be filled up, the void would be full of crushed fragments of rock, and we poor wretched mortals were to be buried and annihilated in this dreadful consummation.

"My uncle," I cried, "we are lost now, utterly lost!"

"What are you in a fright about now?" was the calm rejoinder. "What is the matter with you?"

"The matter? Look at those quaking walls! look at those shivering rocks. Don't you feel the burning heat? Don't you see how the water boils and bubbles? Are you blind to the dense vapours and steam growing thicker and denser every minute? See this agitated compass needle. It is an earthquake that is threatening us."

My undaunted uncle calmly shook his head.

"Do you think," said he, "an earthquake is coming?"

"I do."

"Well, I think you are mistaken."

"What! don't you recognise the symptoms?"

"Of an earthquake? no! I am looking out for something better."

"What can you mean? Explain?"

"It is an eruption, Axel."

"An eruption! Do you mean to affirm that we are running up the shaft of a volcano?"

"I believe we are," said the indomitable Professor with an air of perfect self-possession; "and it is the best thing that could possibly happen to us under our circumstances."

The best thing! Was my uncle stark mad? What did the man mean? and what was the use of saying facetious things at a time like this?
"What!" I shouted. "Are we being taken up in an eruption? Our fate has flung us here among burning lavas, molten rocks, boiling waters, and all kinds of volcanic matter; we are going to be pitched out, expelled, tossed up, vomited, spit out high into the air, along with fragments of rock, showers of ashes and scoria, in the midst of a towering rush of smoke and flames; and it is the best thing that could happen to us!"

"Yes," replied the Professor, eyeing me over his spectacles, "I don't see any other way of reaching the surface of the earth."

I pass rapidly over the thousand ideas which passed through my mind. My uncle was right, undoubtedly right; and never had he seemed to me more daring and more confirmed in his notions than at this moment when he was calmly contemplating the chances of being shot out of a volcano!

In the meantime we went; the night passed away in continual ascent; the din and uproar around us became more and more intensified; I was stifled and stunned; I thought my last hour was approaching; and yet imagination is such a strong thing that even in this supreme hour I was occupied with strange and almost childish speculations. But I was the victim, not the master, of my own thoughts.

It was very evident that we were being hurried upward upon the crest of a wave of eruption; beneath our raft were boiling waters, and under these the more sluggish lava was working its way up in a heated mass, together with shoals of fragments of rock which, when they arrived at the crater, would be dispersed in all directions high and low. We were imprisoned in the shaft or chimney of some volcano. There was no room to doubt of that.

But this time, instead of Snæfell, an extinct volcano, we were inside one in full activity. I wondered, therefore, where could this mountain be, and in what part of the world we were to be shot out.

I made no doubt but that it would be in some northern region. Before its disorders set in, the needle had never deviated from that direction. From Cape Saknussemm we had been carried due north for hundreds of leagues. Were we under Iceland again? Were we destined to be thrown up out of Hecla, or by which of the seven other fiery craters in that island? Within a radius of five hundred leagues to the west I remembered under this parallel of latitude only the imperfectly known volcanoes of the north-east coast of America. To the east there was only one in the 80th degree of north latitude, the Esk in Jan Mayen Island, not far from Spitzbergen! Certainly there was no lack of craters, and there were some capacious enough to throw out a whole army! But I wanted to know which of them was to serve us for an exit from the inner world.

Towards morning the ascending movement became accelerated. If the heat increased, instead of diminishing, as we approached nearer to the surface of the globe, this effect was due to local causes alone, and those volcanic. The manner of our locomotion left no doubt in my mind. An enormous force, a force of hundreds of atmospheres, generated by the extreme pressure of confined vapours, was driving us irresistibly forward. But to what numberless dangers it exposed us!

Soon lurid lights began to penetrate the vertical gallery which widened as we went up. Right and left I could see deep channels, like huge tunnels, out of which escaped dense volumes of smoke; tongues of fire lapped the walls, which crackled and sputtered under the intense heat.

"See, see, my uncle!" I cried.

"Well, those are only sulphureous flames and vapours, which one must expect to see in an eruption. They are quite natural."

"But suppose they should wrap us round."

"But they won't wrap us round."

"But we shall be stifled."

"We shall, not be stifled at all. The gallery is widening, and if it becomes necessary, we shall abandon the raft, and creep into a crevice."

"But the water - the rising water?"

"There is no more water, Axel; only a lava paste, which is bearing us up on its surface to the top of the crater."

The liquid column had indeed disappeared, to give place to dense and still boiling eruptive matter of all kinds. The temperature was becoming unbearable. A thermometer exposed to this atmosphere would have marked 150°. The perspiration streamed from my body. But for the rapidity of our ascent we should have been suffocated.

But the Professor gave up his idea of abandoning the raft, and it was well he did. However roughly joined together, those planks afforded us a firmer support than we could have found anywhere else.

About eight in the morning a new incident occurred. The upward movement ceased. The raft lay motionless.

"What is this?" I asked, shaken by this sudden stoppage as if by a shock.

"It is a halt," replied my uncle.

"Is the eruption checked?" I asked.

"I hope not."

I rose, and tried to look around me. Perhaps the raft itself, stopped in its course by a projection, was staying the
volcanic torrent. If this were the case we should have to release it as soon as possible.

But it was not so. The blast of ashes, scorix, and rubbish had ceased to rise.

"Has the eruption stopped?" I cried.

"Ah!" said my uncle between his clenched teeth, "you are afraid. But don't alarm yourself - this lull cannot last long. It has lasted now five minutes, and in a short time we shall resume our journey to the mouth of the crater."

As he spoke, the Professor continued to consult his chronometer, and he was again right in his prognostications. The raft was soon hurried and driven forward with a rapid but irregular movement, which lasted about ten minutes, and then stopped again.

"Very good," said my uncle; "in ten minutes more we shall be off again, for our present business lies with an intermittent volcano. It gives us time now and then to take breath."

This was perfectly true. When the ten minutes were over we started off again with renewed and increased speed. We were obliged to lay fast hold of the planks of the raft, not to be thrown off. Then again the paroxysm was over.

I have since reflected upon this singular phenomenon without being able to explain it. At any rate it was clear that we were not in the main shaft of the volcano, but in a lateral gallery where there were felt recurrent tunes of reaction.

How often this operation was repeated I cannot say. All I know is, that at each fresh impulse we were hurled forward with a greatly increased force, and we seemed as if we were mere projectiles. During the short halts we were stifled with the heat; whilst we were being projected forward the hot air almost stopped my breath. I thought for a moment how delightful it would be to find myself carried suddenly into the arctic regions, with a cold 30° below the freezing point. My overheated brain conjured up visions of white plains of cool snow, where I might roll and allay my feverish heat. Little by little my brain, weakened by so many constantly repeated shocks, seemed to be giving way altogether. But for the strong arm of Hans I should more than once have had my head broken against the granite roof of our burning dungeon.

I have therefore no exact recollection of what took place during the following hours. I have a confused impression left of continuous explosions, loud detonations, a general shaking of the rocks all around us, and of a spinning movement with which our raft was once whirled helplessly round. It rocked upon the lava torrent, amidst a dense fall of ashes. Snorting flames darted their fiery tongues at us. There were wild, fierce puffs of stormy wind from below, resembling the blasts of vast iron furnaces blowing all at one time; and I caught a glimpse of the figure of Hans lighted up by the fire; and all the feeling I had left was just what I imagine must be the feeling of an unhappy criminal doomed to be blown away alive from the mouth of a cannon, just before the trigger is pulled, and the flying limbs and rags of flesh and skin fill the quivering air and spatter the blood-stained ground.

CHAPTER XLIV.

SUNNY LANDS IN THE BLUE MEDITERRANEAN

When I opened my eyes again I felt myself grasped by the belt with the strong hand of our guide. With the other arm he supported my uncle. I was not seriously hurt, but I was shaken and bruised and battered all over. I found myself lying on the sloping side of a mountain only two yards from a gaping gulf, which would have swallowed me up had I leaned at all that way. Hans had saved me from death whilst I lay rolling on the edge of the crater.

"Where are we?" asked my uncle irascibly, as if he felt much injured by being landed upon the earth again.

The hunter shook his head in token of complete ignorance.

"Is it Iceland?" I asked.

"Nej," replied Hans.

"What! Not Iceland?" cried the Professor.

"Hans must be mistaken," I said, raising myself up.

This was our final surprise after all the astonishing events of our wonderful journey. I expected to see a white cone covered with the eternal snow of ages rising from the midst of the barren deserts of the icy north, faintly lighted with the pale rays of the arctic sun, far away in the highest latitudes known; but contrary to all our expectations, my uncle, the Icelander, and myself were sitting half-way down a mountain baked under the burning rays of a southern sun, which was blistering us with the heat, and blinding us with the fierce light of his nearly vertical rays.

I could not believe my own eyes; but the heated air and the sensation of burning left me no room for doubt. We
had come out of the crater half naked, and the radiant orb to which we had been strangers for two months was
lavishing upon us out of his blazing splendours more of his light and heat than we were able to receive with comfort.

When my eyes had become accustomed to the bright light to which they had been so long strangers, I began to
use them to set my imagination right. At least I would have it to be Spitzbergen, and I was in no humour to give up
this notion.

The Professor was the first to speak, and said:
"Well, this is not much like Iceland."
"But is it Jan Mayen?" I asked.
"Nor that either," he answered. "This is no northern mountain; here are no granite peaks capped with snow.
Look, Axel, look!"

Above our heads, at a height of five hundred feet or more, we saw the crater of a volcano, through which, at
intervals of fifteen minutes or so, there issued with loud explosions lofty columns of fire, mingled with pumice
stones, ashes, and flowing lava. I could feel the heaving of the mountain, which seemed to breathe like a huge
whale, and puff out fire and wind from its vast blowholes. Beneath, down a pretty steep declivity, ran streams of
lava for eight or nine hundred feet, giving the mountain a height of about 1,300 or 1,400 feet. But the base of the
mountain was hidden in a perfect bower of rich verdure, amongst which I was able to distinguish the olive, the fig,
and vines, covered with their luscious purple bunches.

I was forced to confess that there was nothing arctic here.

When the eye passed beyond these green surroundings it rested on a wide, blue expanse of sea or lake, which
appeared to enclose this enchanting island, within a compass of only a few leagues. Eastward lay a pretty little white
seaport town or village, with a few houses scattered around it, and in the harbour of which a few vessels of peculiar
rig were gently swayed by the softly swelling waves. Beyond it, groups of islets rose from the smooth, blue waters,
but in such numbers that they seemed to dot the sea like a shoal. To the west distant coasts lined the dim horizon, on
some rose blue mountains of smooth, undulating forms; on a more distant coast arose a prodigious cone crowned on
its summit with a snowy plume of white cloud. To the northward lay spread a vast sheet of water, sparkling and
dancing under the hot, bright rays, the uniformity broken here and there by the topmast of a gallant ship appearing
above the horizon, or a swelling sail moving slowly before the wind.

This unforeseen spectacle was most charming to eyes long used to underground darkness.

"Where are we? Where are we?" I asked faintly.

Hans closed his eyes with lazy indifference. What did it matter to him? My uncle looked round with dumb
surprise.

"Well, whatever mountain this may be," he said at last, "it is very hot here. The explosions are going on still, and
I don't think it would look well to have come out by an eruption, and then to get our heads broken by bits of falling
rock. Let us get down. Then we shall know better what we are about. Besides, I am starving, and parching with
thirst."

Decidedly the Professor was not given to contemplation. For my part, I could for another hour or two have
forgotten my hunger and my fatigue to enjoy the lovely scene before me; but I had to follow my companions.

The slope of the volcano was in many places of great steepness. We slid down screes of ashes, carefully
avoiding the lava streams which glided sluggishly by us like fiery serpents. As we went I chattered and asked all
sorts of questions as to our whereabouts, for L was too much excited not to talk a great deal.

"We are in Asia," I cried, "on the coasts of India, in the Malay Islands, or in Oceania. We have passed through
half the globe, and come out nearly at the antipodes."

"But the compass?" said my uncle.

"Ay, the compass!" I said, greatly puzzled. "According to the compass we have gone northward."

"Has it lied?"

"Surely not. Could it lie?"

"Unless, indeed, this is the North Pole!"

"Oh, no, it is not the Pole; but -"

Well, here was something that baffled us completely. I could not tell what to say.

But now we were coming into that delightful greenery, and I was suffering greatly from hunger and thirst.
Happily, after two hours' walking, a charming country lay open before us, covered with olive trees, pomegranate
trees, and delicious vines, all of which seemed to belong to anybody who pleased to claim them. Besides, in our
state of destitution and famine we were not likely to be particular. Oh, the inexpressible pleasure of pressing those
cool, sweet fruits to our lips, and eating grapes by mouthfuls off the rich, full bunches! Not far off, in the grass,
under the delicious shade of the trees, I discovered a spring of fresh, cool water, in which we luxuriously bathed our
faces, hands, and feet.
Whilst we were thus enjoying the sweets of repose a child appeared out of a grove of olive trees.

"Ah!" I cried, "here is an inhabitant of this happy land!"

It was but a poor boy, miserably ill-clad, a sufferer from poverty, and our aspect seemed to alarm him a great deal; in fact, only half clothed, with ragged hair and beards, we were a suspicious-looking party; and if the people of the country knew anything about thieves, we were very likely to frighten them.

Just as the poor little wretch was going to take to his heels, Hans caught hold of him, and brought him to us, kicking and struggling.

My uncle began to encourage him as well as he could, and said to him in good German:

"_Was heiszt diesen Berg, mein Knablein? Sage mir geschwind!_"

("What is this mountain called, my little friend?")

The child made no answer.

"Very well," said my uncle. "I infer that we are not in Germany."

He put the same question in English.

We got no forwarder. I was a good deal puzzled.

"Is the child dumb?" cried the Professor, who, proud of his knowledge of many languages, now tried French:

"_Comment appelle-t-on cette montagne, mon enfant? _"

Silence still.

"Now let us try Italian," said my uncle; and he said:

"_Dove noi siamo? _"

"Yes, where are we?" I impatiently repeated.

But there was no answer still.

"Will you speak when you are told?" exclaimed my uncle, shaking the urchin by the ears. "_Come si noma questa isola? _"

"STROMBOLI," replied the little herdboy, slipping out of Hans' hands, and scudding into the plain across the olive trees.

We were hardly thinking of that. Stromboli! What an effect this unexpected name produced upon my mind! We were in the midst of the Mediterranean Sea, on an island of the Æolian archipelago, in the ancient Strongyle, where Æolus kept the winds and the storms chained up, to be let loose at his will. And those distant blue mountains in the east were the mountains of Calabria. And that threatening volcano far away in the south was the fierce Etna.

"Stromboli, Stromboli!" I repeated.

My uncle kept time to my exclamations with hands and feet, as well as with words. We seemed to be chanting in chorus!

What a journey we had accomplished! How marvellous! Having entered by one volcano, we had issued out of another more than two thousand miles from Snæfell and from that barren, far-away Iceland! The strange chances of our expedition had carried us into the heart of the fairest region in the world. We had exchanged the bleak regions of perpetual snow and of impenetrable barriers of ice for those of brightness and 'the rich hues of all glorious things.' We had left over our heads the murky sky and cold fogs of the frigid zone to revel under the azure sky of Italy!

After our delicious repast of fruits and cold, clear water we set off again to reach the port of Stromboli. It would not have been wise to tell how we came there. The superstitious Italians would have set us down for fire-devils vomited out of hell; so we presented ourselves in the humble guise of shipwrecked mariners. It was not so glorious, but it was safer.

On my way I could hear my uncle murmuring: "But the compass! that compass! It pointed due north. How are we to explain that fact?"

"My opinion is," I replied disdainfully, "that it is best not to explain it. That is the easiest way to shelve the difficulty."

"Indeed, sir! The occupant of a professorial chair at the Johanneum unable to explain the reason of a cosmical phenomenon! Why, it would be simply disgraceful!"

And as he spoke, my uncle, half undressed, in rags, a perfect scarecrow, with his leathern belt around him, settling his spectacles upon his nose and looking learned and imposing, was himself again, the terrible German professor of mineralogy.

One hour after we had left the grove of olives, we arrived at the little port of San Vicenzo, where Hans claimed his thirteen week's wages, which was counted out to him with a hearty shaking of hands all round.

At that moment, if he did not share our natural emotion, at least his countenance expanded in a manner very unusual with him, and while with the ends of his fingers he lightly pressed our hands, I believe he smiled.
CHAPTER XLV.

ALL'S WELL THAT ENDS WELL

Such is the conclusion of a history which I cannot expect everybody to believe, for some people will believe nothing against the testimony of their own experience. However, I am indifferent to their incredulity, and they may believe as much or as little as they please.

The Stromboliotés received us kindly as shipwrecked mariners. They gave us food and clothing. After waiting forty-eight hours, on the 31st of August, a small craft took us to Messina, where a few days' rest completely removed the effect of our fatigues.

On Friday, September the 4th, we embarked on the steamer Volturno, employed by the French Messageries Impériales, and in three days more we were at Marseilles, having no care on our minds except that abominable deceitful compass, which we had mislaid somewhere and could not now examine; but its inexplicable behaviour exercised my mind fearfully. On the 9th of September, in the evening, we arrived at Hamburg.

I cannot describe to you the astonishment of Martha or the joy of Gräuben.

"Now you are a hero, Axel," said to me my blushing _fiancée_, my betrothed, "you will not leave me again!"

I looked tenderly upon her, and she smiled through her tears.

How can I describe the extraordinary sensation produced by the return of Professor Liedenbrock? Thanks to Martha's ineradicable tattling, the news that the Professor had gone to discover a way to the centre of the earth had spread over the whole civilised world. People refused to believe it, and when they saw him they would not believe him any the more. Still, the appearance of Hans, and sundry pieces of intelligence derived from Iceland, tended to shake the confidence of the unbelievers.

Then my uncle became a great man, and I was now the nephew of a great man—which is not a privilege to be despised.

Hamburg gave a grand fête in our honour. A public audience was given to the Professor at the Johannæum, at which he told all about our expedition, with only one omission, the unexplained and inexplicable behaviour of our compass. On the same day, with much state, he deposited in the archives of the city the now famous document of Saknussemm, and expressed his regret that circumstances over which he had no control had prevented him from following to the very centre of the earth the track of the learned Icelander. He was modest notwithstanding his glory, and he was all the more famous for his humility.

So much honour could not but excite envy. There were those who envied him his fame; and as his theories, resting upon known facts, were in opposition to the systems of science upon the question of the central fire, he sustained with his pen and by his voice remarkable discussions with the learned of every country.

For my part I cannot agree with his theory of gradual cooling: in spite of what I have seen and felt, I believe, and always shall believe, in the central heat. But I admit that certain circumstances not yet sufficiently understood may tend to modify in places the action of natural phenomena.

While these questions were being debated with great animation, my uncle met with a real sorrow. Our faithful Hans, in spite of our entreaties, had left Hamburg; the man to whom we owed all our success and our lives too would not suffer us to reward him as we could have wished. He was seized with the mal de pays, a complaint for which we have not even a name in English.

"_Farval,_" said he one day; and with that simple word he left us and sailed for Rejkiavik, which he reached in safety.

We were strongly attached to our brave eider-down hunter; though far away in the remotest north, he will never be forgotten by those whose lives he protected, and certainly I shall not fail to endeavour to see him once more before I die.

To conclude, I have to add that this 'Journey into the Interior of the Earth' created a wonderful sensation in the world. It was translated into all civilised languages. The leading newspapers extracted the most interesting passages, which were commented upon, picked to pieces, discussed, attacked, and defended with equal enthusiasm and determination, both by believers and sceptics. Rare privilege! my uncle enjoyed during his lifetime the glory he had deservedly won; and he may even boast the distinguished honour of an offer from Mr. Barnum, to exhibit him on most advantageous terms in all the principal cities in the United States!

But there was one 'dead fly' amidst all this glory and honour; one fact, one incident, of the journey remained a mystery. Now to a man eminent for his learning, an unexplained phenomenon is an unbearable hardship. Well! it was yet reserved for my uncle to be completely happy.
One day, while arranging a collection of minerals in his cabinet, I noticed in a corner this unhappy compass, which we had long lost sight of; I opened it, and began to watch it.

It had been in that corner for six months, little mindful of the trouble it was giving.

Suddenly, to my intense astonishment, I noticed a strange fact, and I uttered a cry of surprise.

"What is the matter?" my uncle asked.

"That compass!"

"Well?"

"See, its poles are reversed!"

"Reversed?"

"Yes, they point the wrong way."

My uncle looked, he compared, and the house shook with his triumphant leap of exultation.

A light broke in upon his spirit and mine.

"See there," he cried, as soon as he was able to speak. "After our arrival at Cape Saknussemm the north pole of the needle of this confounded compass began to point south instead of north."

"Evidently!"

"Here, then, is the explanation of our mistake. But what phenomenon could have caused this reversal of the poles?"

"The reason is evident, uncle."

"Tell me, then, Axel."

"During the electric storm on the Liedenbrock sea, that ball of fire, which magnetised all the iron on board, reversed the poles of our magnet!"

"Aha! aha!" shouted the Professor with a loud laugh. "So it was just an electric joke!"

From that day forth the Professor was the most glorious of savants, and I was the happiest of men; for my pretty Virlandaise, resigning her place as ward, took her position in the old house on the Königstrasse in the double capacity of niece to my uncle and wife to a certain happy youth. What is the need of adding that the illustrious Otto Liedenbrock, corresponding member of all the scientific, geographical, and mineralogical societies of all the civilised world, was now her uncle and mine?

AROUND THE WORLD IN EIGHTY DAYS
By Jules Verne

Chapter I
IN WHICH PHILEAS FOGG AND PASSEPARTOUT ACCEPT EACH OTHER, THE ONE AS MASTER, THE OTHER AS MAN

Mr. Phileas Fogg lived, in 1872, at No. 7, Saville Row, Burlington Gardens, the house in which Sheridan died in 1814. He was one of the most noticeable members of the Reform Club, though he seemed always to avoid attracting attention; an enigmatical personage, about whom little was known, except that he was a polished man of the world. People said that he resembled Byron--at least that his head was Byronic; but he was a bearded, tranquil Byron, who might live on a thousand years without growing old.

Certainly an Englishman, it was more doubtful whether Phileas Fogg was a Londoner. He was never seen on 'Change, nor at the Bank, nor in the counting-rooms of the "City"; no ships ever came into London docks of which he was the owner; he had no public employment; he had never been entered at any of the Inns of Court, either at the Temple, or Lincoln's Inn, or Gray's Inn; nor had his voice ever resounded in the Court of Chancery, or in the Exchequer, or the Queen's Bench, or the Ecclesiastical Courts. He certainly was not a manufacturer; nor was he a merchant or a gentleman farmer. His name was strange to the scientific and learned societies, and he never was known to part in the sage deliberations of the Royal Institution or the London Institution, the Artisan's Association, or the Institution of Arts and Sciences. He belonged, in fact, to none of the numerous societies which swarm in the English capital, from the Harmonic to that of the Entomologists, founded mainly for the purpose of abolishing pernicious insects.

Phileas Fogg was a member of the Reform, and that was all.

The way in which he got admission to this exclusive club was simple enough.

He was recommended by the Barings, with whom he had an open credit. His cheques were regularly paid at sight from his account current, which was always flush.

Was Phileas Fogg rich? Undoubtedly. But those who knew him best could not imagine how he had made his fortune, and Mr. Fogg was the last person to whom to apply for the information. He was not lavish, nor, on the contrary, avaricious; for, whenever he knew that money was needed for a noble, useful, or benevolent purpose, he
supplied it quietly and sometimes anonymously. He was, in short, the least communicative of men. He talked very little, and seemed all the more mysterious for his taciturn manner. His daily habits were quite open to observation; but whatever he did was so exactly the same thing that he had always done before, that the wits of the curious were fairly puzzled.

Had he travelled? It was likely, for no one seemed to know the world more familiarly; there was no spot so secluded that he did not appear to have an intimate acquaintance with it. He often corrected, with a few clear words, the thousand conjectures advanced by members of the club as to lost and unheard-of travellers, pointing out the true probabilities, and seeming as if gifted with a sort of second sight, so often did events justify his predictions. He must have travelled everywhere, at least in the spirit.

It was at least certain that Phileas Fogg had not absented himself from London for many years. Those who were honoured by a better acquaintance with him than the rest, declared that nobody could pretend to have ever seen him anywhere else. His sole pastimes were reading the papers and playing whist. He often won at this game, which, as a silent one, harmonised with his nature; but his winnings never went into his purse, being reserved as a fund for his charities. Mr. Fogg played, not to win, but for the sake of playing. The game was in his eyes a contest, a struggle with a difficulty, yet a motionless, unwearying struggle, congenial to his tastes.

Phileas Fogg was not known to have either wife or children, which may happen to the most honest people; either relatives or near friends, which is certainly more unusual. He lived alone in his house in Saville Row, whither none penetrated. A single domestic sufficed to serve him. He breakfasted and dined at the club, at hours mathematically fixed, in the same room, at the same table, never taking his meals with other members, much less bringing a guest with him; and went home at exactly midnight, only to retire at once to bed. He never used the cozy chambers which the Reform provides for its favoured members. He passed ten hours out of the twenty-four in Saville Row, either in sleeping or making his toilet. When he chose to take a walk it was with a regular step in the entrance hall with its mosaic flooring, or in the circular gallery with its dome supported by twenty red porphyry Ionic columns, and illuminated by blue painted windows. When he breakfasted or dined all the resources of the club—its kitchens and pantries, its buttry and dairy—aided to crowd his table with their most succulent stores; he was served by the graviest waiters, in dress coats, and shoes with swan-skin soles, who proffered the viands in special porcelain, and on the finest linen; club decanters, of a lost mould, contained his sherry, his port, and his cinnamon-spiced claret; while his beverages were refreshingly cooled with ice, brought at great cost from the American lakes.

If to live in this style is to be eccentric, it must be confessed that there is something good in eccentricity.

The mansion in Saville Row, though not sumptuous, was exceedingly comfortable. The habits of its occupant were such as to demand but little from the sole domestic, but Phileas Fogg required him to be almost superhumanly prompt and regular. On this very 2nd of October he had dismissed James Forster, because that luckless youth had brought him shaving-water at eighty-four degrees Fahrenheit instead of eighty-six; and he was awaiting his successor, who was due at the house between eleven and half-past.

Phileas Fogg was seated squarely in his armchair, his feet close together like those of a grenadier on parade, his hands resting on his knees, his body straight, his head erect; he was steadily watching a complicated clock which indicated the hours, the minutes, the seconds, the days, the months, and the years. At exactly half-past eleven Mr. Fogg would, according to his daily habit, quit Saville Row, and repair to the Reform.

A rap at this moment sounded on the door of the cozy apartment where Phileas Fogg was seated, and James Forster, the dismissed servant, appeared.

"The new servant," said he.

A young man of thirty advanced and bowed.

"You are a Frenchman, I believe," asked Phileas Fogg, "and your name is John?"

"Jean, if monsieur pleases," replied the newcomer, "Jean Passepartout, a surname which has clung to me because I have a natural aptness for going out of one business into another. I believe I'm honest, monsieur, but, to be outspoken, I've had several trades. I've been an itinerant singer, a circus-rider, when I used to vault like Leotard, and dance on a rope like Blondin. Then I got to be a professor of gymnastics, so as to make better use of my talents; and then I was a sergeant fireman at Paris, and assisted at many a big fire. But I quitte France five years ago, and, wishing to taste the sweets of domestic life, took service as a valet here in England. Finding myself out of place, and hearing that Monsieur Phileas Fogg was the most exact and settled gentleman in the United Kingdom, I have come to monsieur in the hope of living with him a tranquil life, and forgetting even the name of Passepartout."

"Passepartout suits me," responded Mr. Fogg. "You are well recommended to me; I hear a good report of you. You know my conditions?"

"Yes, monsieur."

"Good! What time is it?"

"Twenty-two minutes after eleven," returned Passepartout, drawing an enormous silver watch from the depths of
his pocket.
"You are too slow," said Mr. Fogg.
"Pardon me, monsieur, it is impossible--"
"You are four minutes too slow. No matter; it's enough to mention the error. Now from this moment, twenty-nine minutes after eleven, a.m., this Wednesday, 2nd October, you are in my service."
Phileas Fogg got up, took his hat in his left hand, put it on his head with an automatic motion, and went off without a word.
Passepartout heard the street door shut once; it was his new master going out. He heard it shut again; it was his predecessor, James Forster, departing in his turn. Passepartout remained alone in the house in Saville Row.

Chapter II
IN WHICH PASSEPARTOUT IS CONVINCED THAT HE HAS AT LAST FOUND HIS IDEAL
"Faith," muttered Passepartout, somewhat flurried, "I've seen people at Madame Tussaud's as lively as my new master!"
Madame Tussaud's "people," let it be said, are of wax, and are much visited in London; speech is all that is wanting to make them human.
During his brief interview with Mr. Fogg, Passepartout had been carefully observing him. He appeared to be a man about forty years of age, with fine, handsome features, and a tall, well-shaped figure; his hair and whiskers were light, his forehead compact and unwrinkled, his face rather pale, his teeth magnificent. His countenance possessed in the highest degree what physiognomists call "repose in action," a quality of those who act rather than talk. Calm and phlegmatic, with a clear eye, Mr. Fogg seemed a perfect type of that English composure which Angelica Kauffmann has so skilfully represented on canvas. Seen in the various phases of his daily life, he gave the idea of being perfectly well-balanced, as exactly regulated as a Leroy chronometer. Phileas Fogg was, indeed, exactitude personified, and this was betrayed even in the expression of his very hands and feet; for in men, as well as in animals, the limbs themselves are expressive of the passions.
He was so exact that he was never in a hurry, was always ready, and was economical alike of his steps and his motions. He never took one step too many, and always went to his destination by the shortest cut; he made no superfluous gestures, and was never seen to be moved or agitated. He was the most deliberate person in the world, yet always reached his destination at the exact moment.
He lived alone, and, so to speak, outside of every social relation; and as he knew that in this world account must be taken of friction, and that friction retards, he never rubbed against anybody.
As for Passepartout, he was a true Parisian of Paris. Since he had abandoned his own country for England, taking service as a valet, he had in vain searched for a master after his own heart. Passepartout was by no means one of those pert dunces depicted by Molière with a bold gaze and a nose held high in the air; he was an honest fellow, with a pleasant face, lips a trifle protruding, soft-mannered and serviceable, with a good round head, such as one likes to see on the shoulders of a friend. His eyes were blue, his complexion rubicund, his figure almost portly and well-built, his body muscular, and his physical powers fully developed by the exercises of his younger days. His brown hair was somewhat tumbled; for, while the ancient sculptors are said to have known eighteen methods of arranging Minerva's tresses, Passepartout was familiar with but one of dressing his own: three strokes of a large-tooth comb completed his toilet.
It would be rash to predict how Passepartout's lively nature would agree with Mr. Fogg. It was impossible to tell whether the new servant would turn out as absolutely methodical as his master required; experience alone could solve the question. Passepartout had been a sort of vagrant in his early years, and now yearned for repose; but so far he had failed to find it, though he had already served in ten English houses. But he could not take root in any of these; with chagrin, he found his masters invariably whimsical and irregular, constantly running about the country, or on the look-out for adventure. His last master, young Lord Longferry, Member of Parliament, after passing his nights in the Haymarket taverns, was too often brought home in the morning on policemen's shoulders. Passepartout, desirous of respecting the gentleman whom he served, ventured a mild remonstrance on such conduct; which, being ill-received, he took his leave. Hearing that Mr. Phileas Fogg was looking for a servant, and that his life was one of unbroken regularity, that he neither travelled nor stayed from home overnight, he felt sure that this would be the place he was after. He presented himself, and was accepted, as has been seen.
At half-past eleven, then, Passepartout found himself alone in the house in Saville Row. He begun its inspection without delay, scouring it from cellar to garret. So clean, well-arranged, solemn a mansion pleased him; it seemed to him like a snail's shell, lighted and warmed by gas, which sufficed for both these purposes. When Passepartout reached the second story he recognised at once the room which he was to inhabit, and he was well satisfied with it.
Electric bells and speaking-tubes afforded communication with the lower stories; while on the mantel stood an electric clock, precisely like that in Mr. Fogg's bedchamber, both beating the same second at the same instant. "That's good, that'll do," said Passepartout to himself.

He suddenly observed, hung over the clock, a card which, upon inspection, proved to be a programme of the daily routine of the house. It comprised all that was required of the servant, from eight in the morning, exactly at which hour Phileas Fogg rose, till half-past eleven, when he left the house for the Reform Club—all the details of service, the tea and toast at twenty-three minutes past eight, the shaving-water at thirty-seven minutes past nine, and the toilet at twenty minutes before ten. Everything was regulated and foreseen that was to be done from half-past eleven a.m. till midnight, the hour at which the methodical gentleman retired.

Mr. Fogg's wardrobe was amply supplied and in the best taste. Each pair of trousers, coat, and vest bore a number, indicating the time of year and season at which they were in turn to be laid out for wearing; and the same system was applied to the master's shoes. In short, the house in Saville Row, which must have been a very temple of disorder and unrest under the illustrious but dissipated Sheridan, was cosiness, comfort, and method idealised. There was no study, nor were there books, which would have been quite useless to Mr. Fogg; for at the Reform two libraries, one of general literature and the other of law and politics, were at his service. A moderate-sized safe stood in his bedroom, constructed so as to defy fire as well as burglars; but Passepartout found neither arms nor hunting weapons anywhere; everything betrayed the most tranquil and peaceable habits.

Having scrutinised the house from top to bottom, he rubbed his hands, a broad smile overspread his features, and he said joyfully, "This is just what I wanted! Ah, we shall get on together, Mr. Fogg and I! What a domestic and regular gentleman! A real machine; well, I don't mind serving a machine."

Chapter III
IN WHICH A CONVERSATION TAKES PLACE WHICH SEEMS LIKELY TO COST PHILEAS FOGG DEAR

Phileas Fogg, having shut the door of his house at half-past eleven, and having put his right foot before his left five hundred and seventy-five times, and his left foot before his right five hundred and seventy-six times, reached the Reform Club, an imposing edifice in Pall Mall, which could not have cost less than three millions. He repaired at once to the dining-room, the nine windows of which open upon a tasteful garden, where the trees were already gilded with an autumn colouring; and took his place at the habitual table, the cover of which had already been laid for him. His breakfast consisted of a side-dish, a broiled fish with Reading sauce, a scarlet slice of roast beef garnished with mushrooms, a rhubarb and gooseberry tart, and a morsel of Cheshire cheese, the whole being washed down with several cups of tea, for which the Reform is famous. He rose at thirteen minutes to one, and directed his steps towards the large hall, a sumptuous apartment adorned with lavishly-framed paintings. A flunkey handed him an uncut Times, which he proceeded to cut with a skill which betrayed familiarity with this delicate operation. The perusal of this paper absorbed Phileas Fogg until a quarter before four, whilst the Standard, his next task, occupied him till the dinner hour. Dinner passed as breakfast had done, and Mr. Fogg re-appeared in the reading-room and sat down to the Pall Mall at twenty minutes before six. Half an hour later several members of the Reform came in and drew up to the fireplace, where a coal fire was steadily burning. They were Mr. Fogg's usual partners at whist: Andrew Stuart, an engineer; John Sullivan and Samuel Fallentin, bankers; Thomas Flanagan, a brewer; and Gauthier Ralph, one of the Directors of the Bank of England—all rich and highly respectable personages, even in a club which comprises the princes of English trade and finance.

"Well, Ralph," said Thomas Flanagan, "what about that robbery?"

"Oh," replied Stuart, "the Bank will lose the money."

"On the contrary," broke in Ralph, "I hope we may put our hands on the robber. Skilful detectives have been sent to all the principal ports of America and the Continent, and he'll be a clever fellow if he slips through their fingers."

"But have you got the robber's description?" asked Stuart.

"In the first place, he is no robber at all," returned Ralph, positively.

"What! a fellow who makes off with fifty-five thousand pounds, no robber?"

"No."

"Perhaps he's a manufacturer, then."

"The Daily Telegraph says that he is a gentleman."

It was Phileas Fogg, whose head now emerged from behind his newspapers, who made this remark. He bowed to his friends, and entered into the conversation. The affair which formed its subject, and which was town talk, had occurred three days before at the Bank of England. A package of banknotes, to the value of fifty-five thousand pounds, had been taken from the principal cashier's table, that functionary being at the moment engaged in
registering the receipt of three shillings and sixpence. Of course, he could not have his eyes everywhere. Let it be observed that the Bank of England reposes a touching confidence in the honesty of the public. There are neither guards nor gratings to protect its treasures; gold, silver, banknotes are freely exposed, at the mercy of the first comer. A keen observer of English customs relates that, being in one of the rooms of the Bank one day, he had the curiosity to examine a gold ingot weighing some seven or eight pounds. He took it up, scrutinised it, passed it to his neighbour, he to the next man, and so on until the ingot, going from hand to hand, was transferred to the end of a dark entry; nor did it return to its place for half an hour. Meanwhile, the cashier had not so much as raised his head. But in the present instance things had not gone so smoothly. The package of notes not being found when five o’clock sounded from the ponderous clock in the "drawing office," the amount was passed to the account of profit and loss. As soon as the robbery was discovered, picked detectives hastened off to Liverpool, Glasgow, Havre, Suez, Brindisi, New York, and other ports, inspired by the proffered reward of two thousand pounds, and five per cent. on the sum that might be recovered. Detectives were also charged with narrowly watching those who arrived at or left London by rail, and a judicial examination was at once entered upon.

There were real grounds for supposing, as the Daily Telegraph said, that the thief did not belong to a professional band. On the day of the robbery a well-dressed gentleman of polished manners, and with a well-to-do air, had been observed going to and fro in the paying room where the crime was committed. A description of him was easily procured and sent to the detectives; and some hopeful spirits, of whom Ralph was one, did not despair of his apprehension. The papers and clubs were full of the affair, and everywhere people were discussing the probabilities of a successful pursuit; and the Reform Club was especially agitated, several of its members being Bank officials.

Ralph would not concede that the work of the detectives was likely to be in vain, for he thought that the prize offered would greatly stimulate their zeal and activity. But Stuart was far from sharing this confidence; and, as they placed themselves at the whist-table, they continued to argue the matter. Stuart and Flanagan played together, while Phileas Fogg had Fallentin for his partner. As the game proceeded the conversation ceased, excepting between the rubbers, when it revived again.

"I maintain," said Stuart, "that the chances are in favour of the thief, who must be a shrewd fellow."
"Well, but where can he fly to?" asked Ralph. "No country is safe for him."
"Pshaw!"
"Where could he go, then?"
"Oh, I don't know that. The world is big enough."
"It was once," said Phileas Fogg, in a low tone. "Cut, sir;" he added, handing the cards to Thomas Flanagan. The discussion fell during the rubber, after which Stuart took up its thread.
"What do you mean by 'once'? Has the world grown smaller?"
"Certainly," returned Ralph. "I agree with Mr. Fogg. The world has grown smaller, since a man can now go round it ten times more quickly than a hundred years ago. And that is why the search for this thief will be more likely to succeed."
"And also why the thief can get away more easily."
"Be so good as to play, Mr. Stuart," said Phileas Fogg.

But the incredulous Stuart was not convinced, and when the hand was finished, said eagerly: "You have a strange way, Ralph, of proving that the world has grown smaller. So, because you can go round it in three months--"
"In eighty days," interrupted Phileas Fogg.
"That is true, gentlemen," added John Sullivan. "Only eighty days, now that the section between Rothal and Allahabad, on the Great Indian Peninsula Railway, has been opened. Here is the estimate made by the Daily Telegraph:

<table>
<thead>
<tr>
<th>Route</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>From London to Suez via Mont Cenis and Brindisi, by rail and steamboats</td>
<td>7 days</td>
</tr>
<tr>
<td>From Suez to Bombay, by steamer</td>
<td>13 days</td>
</tr>
<tr>
<td>From Bombay to Calcutta, by rail</td>
<td>3 days</td>
</tr>
<tr>
<td>From Calcutta to Hong Kong, by steamer</td>
<td>13 days</td>
</tr>
<tr>
<td>From Hong Kong to Yokohama (Japan), by steamer</td>
<td>6 days</td>
</tr>
<tr>
<td>From Yokohama to San Francisco, by steamer</td>
<td>22 days</td>
</tr>
<tr>
<td>From San Francisco to New York, by rail</td>
<td>7 days</td>
</tr>
<tr>
<td>From New York to London, by steamer and rail</td>
<td>9 days</td>
</tr>
<tr>
<td>Total</td>
<td>80 days</td>
</tr>
</tbody>
</table>

"Yes, in eighty days!" exclaimed Stuart, who in his excitement made a false deal. "But that doesn't take into account bad weather, contrary winds, shipwrecks, railway accidents, and so on."
"All included," returned Phileas Fogg, continuing to play despite the discussion.
"But suppose the Hindoos or Indians pull up the rails," replied Stuart; "suppose they stop the trains, pillage the luggage-vans, and scalp the passengers!"
"All included," calmly retorted Fogg; adding, as he threw down the cards, "Two trumps."

Stuart, whose turn it was to deal, gathered them up, and went on: "You are right, theoretically, Mr. Fogg, but
practically--"

"Practically also, Mr. Stuart."

"I'd like to see you do it in eighty days."

"It depends on you. Shall we go?"

"Heaven preserve me! But I would wager four thousand pounds that such a journey, made under these conditions, is impossible."

"Quite possible, on the contrary," returned Mr. Fogg.

"Well, make it, then!"

"The journey round the world in eighty days?"

"Yes."

"I should like nothing better."

"When?"

"At once. Only I warn you that I shall do it at your expense."

"It's absurd!" cried Stuart, who was beginning to be annoyed at the persistency of his friend. "Come, let's go on with the game."

"Deal over again, then," said Phileas Fogg. "There's a false deal."

Stuart took up the pack with a feverish hand; then suddenly put them down again.

"Well, Mr. Fogg," said he, "it shall be so: I will wager the four thousand on it."

"Calm yourself, my dear Stuart," said Fallentin. "It's only a joke."

"When I say I'll wager," returned Stuart, "I mean it."

"All right," said Mr. Fogg; and, turning to the others, he continued: "I have a deposit of twenty thousand at Baring's which I will willingly risk upon it."

"Twenty thousand pounds!" cried Sullivan. "Twenty thousand pounds, which you would lose by a single accidental delay!"

"The unforeseen does not exist," quietly replied Phileas Fogg.

"But, Mr. Fogg, eighty days are only the estimate of the least possible time in which the journey can be made."

"A well-used minimum suffices for everything."

"But, in order not to exceed it, you must jump mathematically from the trains upon the steamer, and from the steamers upon the trains again."

"I will jump--mathematically."

"You are joking."

"A true Englishman doesn't joke when he is talking about so serious a thing as a wager," replied Phileas Fogg, solemnly. "I will bet twenty thousand pounds against anyone who wishes that I will make the tour of the world in eighty days or less; in nineteen hundred and twenty hours, or a hundred and fifteen thousand two hundred minutes. Do you accept?"

"We accept," replied Messrs. Stuart, Fallentin, Sullivan, Flanagan, and Ralph, after consulting each other.

"Good," said Mr. Fogg. "The train leaves for Dover at a quarter before nine. I will take it."

"This very evening?" asked Stuart.

"This very evening," returned Phileas Fogg. He took out and consulted a pocket almanac, and added, "As today is Wednesday, the 2nd of October, I shall be due in London in this very room of the Reform Club, on Saturday, the 21st of December, at a quarter before nine p.m.; or else the twenty thousand pounds, now deposited in my name at Baring's, will belong to you, in fact and in right, gentlemen. Here is a cheque for the amount."

A memorandum of the wager was at once drawn up and signed by the six parties, during which Phileas Fogg preserved a stoical composure. He certainly did not bet to win, and had only staked the twenty thousand pounds, half of his fortune, because he foresaw that he might have to expend the other half to carry out this difficult, not to say unattainable, project. As for his antagonists, they seemed much agitated; not so much by the value of their stake, as because they had some scruples about betting under conditions so difficult to their friend.

The clock struck seven, and the party offered to suspend the game so that Mr. Fogg might make his preparations for departure.

"I am quite ready now," was his tranquil response. "Diamonds are trumps: be so good as to play, gentlemen."

Chapter IV
IN WHICH PHILEAS FOGG ASTOUNDS Passepartout, HIS SERVANT

Having won twenty guineas at whist, and taken leave of his friends, Phileas Fogg, at twenty-five minutes past seven, left the Reform Club.

Passepartout, who had conscientiously studied the programme of his duties, was more than surprised to see his
master guilty of the inexactness of appearing at this unaccustomed hour; for, according to rule, he was not due in Saville Row until precisely midnight.

Mr. Fogg repaired to his bedroom, and called out, "Passepartout!"
Passepartout did not reply. It could not be he who was called; it was not the right hour.
"Passepartout!" repeated Mr. Fogg, without raising his voice.
Passepartout made his appearance.
"I've called you twice," observed his master.
"But it is not midnight," responded the other, showing his watch.
"I know it; I don't blame you. We start for Dover and Calais in ten minutes."
A puzzled grin overspread Passepartout's round face; clearly he had not comprehended his master.
"Monsieur is going to leave home?"
"Yes," returned Phileas Fogg. "We are going round the world."
Passepartout opened wide his eyes, raised his eyebrows, held up his hands, and seemed about to collapse, so overcome was he with stupefied astonishment.
"Round the world!" he murmured.
"In eighty days," responded Mr. Fogg. "So we haven't a moment to lose."
"But the trunks?" gasped Passepartout, unconsciously swaying his head from right to left.
"We'll have no trunks; only a carpet-bag, with two shirts and three pairs of stockings for me, and the same for you. We'll buy our clothes on the way. Bring down my mackintosh and traveling-cloak, and some stout shoes, though we shall do little walking. Make haste!"
Passepartout tried to reply, but could not. He went out, mounted to his own room, fell into a chair, and muttered: "That's good, that is! And I, who wanted to remain quiet!"

He mechanically set about making the preparations for departure. Around the world in eighty days! Was his master a fool? No. Was this a joke, then? They were going to Dover; good! To Calais; good again! After all, Passepartout, who had been away from France five years, would not be sorry to set foot on his native soil again. Perhaps they would go as far as Paris, and it would do his eyes good to see Paris once more. But surely a gentleman so chary of his steps would stop there; no doubt—but, then, it was none the less true that he was going away, this so domestic person hitherto!

By eight o'clock Passepartout had packed the modest carpet-bag, containing the wardrobes of his master and himself; then, still troubled in mind, he carefully shut the door of his room, and descended to Mr. Fogg.

Mr. Fogg was quite ready. Under his arm might have been observed a red-bound copy of Bradshaw's Continental Railway Steam Transit and General Guide, with its timetables showing the arrival and departure of steamers and railways. He took the carpet-bag, opened it, and slipped into it a goodly roll of Bank of England notes, which would pass wherever he might go.
"You have forgotten nothing?" asked he.
"Nothing, monsieur."
"My mackintosh and cloak?"
"Here they are."
"Good! Take this carpet-bag," handing it to Passepartout. "Take good care of it, for there are twenty thousand pounds in it."
Passepartout nearly dropped the bag, as if the twenty thousand pounds were in gold, and weighed him down.

Master and man then descended, the street-door was double-locked, and at the end of Saville Row they took a cab and drove rapidly to Charing Cross. The cab stopped before the railway station at twenty minutes past eight. Passepartout jumped off the box and followed his master, who, after paying the cabman, was about to enter the station, when a poor beggar-woman, with a child in her arms, her naked feet smeared with mud, her head covered with a wretched bonnet, from which hung a tattered feather, and her shoulders shrouded in a ragged shawl, approached, and mournfully asked for alms.

Mr. Fogg took out the twenty guineas he had just won at whist, and handed them to the beggar, saying, "Here, my good woman. I'm glad that I met you;" and passed on.

Passepartout had a moist sensation about the eyes; his master's action touched his susceptible heart.
Two first-class tickets for Paris having been speedily purchased, Mr. Fogg was crossing the station to the train, when he perceived his five friends of the Reform.
"Well, gentlemen," said he, "I'm off, you see; and, if you will examine my passport when I get back, you will be able to judge whether I have accomplished the journey agreed upon."
"Oh, that would be quite unnecessary, Mr. Fogg," said Ralph politely. "We will trust your word, as a gentleman of honour."
"You do not forget when you are due in London again?" asked Stuart.

"In eighty days; on Saturday, the 21st of December, 1872, at a quarter before nine p.m. Good-bye, gentlemen."

Phileas Fogg and his servant seated themselves in a first-class carriage at twenty minutes before nine; five minutes later the whistle screamed, and the train slowly glided out of the station.

The night was dark, and a fine, steady rain was falling. Phileas Fogg, snugly ensconced in his corner, did not open his lips. Passepartout, not yet recovered from his stupefaction, clung mechanically to the carpet-bag, with its enormous treasure.

Just as the train was whirling through Sydenham, Passepartout suddenly uttered a cry of despair.

"What's the matter?" asked Mr. Fogg.

"Alas! In my hurry--I--I forgot--"

"What?"

"To turn off the gas in my room!"

"Very well, young man," returned Mr. Fogg, coolly; "it will burn--at your expense."

Chapter V

IN WHICH A NEW SPECIES OF FUNDS, UNKNOWN TO THE MONEYED MEN, APPEARS ON 'CHANGE

Phileas Fogg rightly suspected that his departure from London would create a lively sensation at the West End. The news of the bet spread through the Reform Club, and afforded an exciting topic of conversation to its members. From the club it soon got into the papers throughout England. The boasted "tour of the world" was talked about, disputed, argued with as much warmth as if the subject were another Alabama claim. Some took sides with Phileas Fogg, but the large majority shook their heads and declared against him; it was absurd, impossible, they declared, that the tour of the world could be made, except theoretically and on paper, in this minimum of time, and with the existing means of travelling. The Times, Standard, Morning Post, and Daily News, and twenty other highly respectable newspapers scouted Mr. Fogg's project as madness; the Daily Telegraph alone hesitatingly supported him. People in general thought him a lunatic, and blamed his Reform Club friends for having accepted a wager which betrayed the mental aberration of its proposer.

Articles no less passionate than logical appeared on the question, for geography is one of the pet subjects of the English; and the columns devoted to Phileas Fogg's venture were eagerly devoured by all classes of readers. At first some rash individuals, principally of the gentler sex, espoused his cause, which became still more popular when the Illustrated London News came out with his portrait, copied from a photograph in the Reform Club. A few readers of the Daily Telegraph even dared to say, "Why not, after all? Stranger things have come to pass."

At last a long article appeared, on the 7th of October, in the bulletin of the Royal Geographical Society, which treated the question from every point of view, and demonstrated the utter folly of the enterprise.

Everything, it said, was against the travellers, every obstacle imposed alike by man and by nature. A miraculous agreement of the times of departure and arrival, which was impossible, was absolutely necessary to his success. He might, perhaps, reckon on the arrival of trains at the designated hours, in Europe, where the distances were relatively moderate; but when he calculated upon crossing India in three days, and the United States in seven, could he rely beyond misgiving upon accomplishing his task? There were accidents to machinery, the liability of trains to run off the line, collisions, bad weather, the blocking up by snow--were not all these against Phileas Fogg? Would he not find himself, when travelling by steamer in winter, at the mercy of the winds and fogs? Is it uncommon for the best ocean steamers to be two or three days behind time? But a single delay would suffice to fatally break the chain of communication; should Phileas Fogg once miss, even by an hour; a steamer, he would have to wait for the next, and that would irrevocably render his attempt vain.

This article made a great deal of noise, and, being copied into all the papers, seriously depressed the advocates of the rash tourist.

Everybody knows that England is the world of betting men, who are of a higher class than mere gamblers; to bet is in the English temperament. Not only the members of the Reform, but the general public, made heavy wagers for or against Phileas Fogg, who was set down in the betting books as if he were a race-horse. Bonds were issued, and made their appearance on 'Change; "Phileas Fogg bonds" were offered at par or at a premium, and a great business was done in them. But five days after the article in the bulletin of the Geographical Society appeared, the demand began to subside: "Phileas Fogg" declined. They were offered by packages, at first of five, then of ten, until at last nobody would take less than twenty, fifty, a hundred!

Lord Albemarle, an elderly paralytic gentleman, was now the only advocate of Phileas Fogg left. This noble lord, who was fastened to his chair, would have given his fortune to be able to make the tour of the world, if it took
ten years; and he bet five thousand pounds on Phileas Fogg. When the folly as well as the uselessness of the
adventure was pointed out to him, he contented himself with replying, "If the thing is feasible, the first to do it ought
to be an Englishman."

The Fogg party dwindled more and more, everybody was going against him, and the bets stood a hundred and
fifty and two hundred to one; and a week after his departure an incident occurred which deprived him of backers at
any price.

The commissioner of police was sitting in his office at nine o'clock one evening, when the following telegraphic
dispatch was put into his hands:
Suez to London.
Rowan, Commissioner of Police, Scotland Yard:
I've found the bank robber, Phileas Fogg. Send with out delay warrant of arrest to Bombay.
Fix, Detective.

The effect of this dispatch was instantaneous. The polished gentleman disappeared to give place to the bank
robber. His photograph, which was hung with those of the rest of the members at the Reform Club, was minutely
examined, and it betrayed, feature by feature, the description of the robber which had been provided to the police.
The mysterious habits of Phileas Fogg were recalled; his solitary ways, his sudden departure; and it seemed clear
that, in undertaking a tour round the world on the pretext of a wager, he had had no other end in view than to elude
the detectives, and throw them off his track.

Chapter VI
IN WHICH FIX, THE DETECTIVE, BETRAYS A VERY NATURAL IMPATIENCE

The circumstances under which this telegraphic dispatch about Phileas Fogg was sent were as follows:
The steamer Mongolia, belonging to the Peninsular and Oriental Company, built of iron, of two thousand eight
hundred tons burden, and five hundred horse-power, was due at eleven o'clock a.m. on Wednesday, the 9th of
October, at Suez. The Mongolia plied regularly between Brindisi and Bombay via the Suez Canal, and was one of
the fastest steamers belonging to the company, always making more than ten knots an hour between Brindisi and
Suez, and nine and a half between Suez and Bombay.

Two men were promenading up and down the wharves, among the crowd of natives and strangers who were
sojourning at this once straggling village--now, thanks to the enterprise of M. Lesseps, a fast-growing town. One
was the British consul at Suez, who, despite the prophecies of the English Government, and the unfavourable
predictions of Stephenson, was in the habit of seeing, from his office window, English ships daily passing to and fro
on the great canal, by which the old roundabout route from England to India by the Cape of Good Hope was
abridged by at least a half. The other was a small, slight-built personage, with a nervous, intelligent face, and bright
eyes peering out from under eyebrows which he was incessantly twitching. He was just now manifesting
unmistakable signs of impatience, nervously pacing up and down, and unable to stand still for a moment. This was
Fix, one of the detectives who had been dispatched from England in search of the bank robber; it was his task to
narrowly watch every passenger who arrived at Suez, and to follow up all who seemed to be suspicious characters,
or bore a resemblance to the description of the criminal, which he had received two days before from the police
headquarters at London. The detective was evidently inspired by the hope of obtaining the splendid reward which
would be the prize of success, and awaited with a feverish impatience, easy to understand, the arrival of the steamer
Mongolia.

"So you say, consul," asked he for the twentieth time, "that this steamer is never behind time?"
"No, Mr. Fix," replied the consul. "She was bespoken yesterday at Port Said, and the rest of the way is of no
account to such a craft. I repeat that the Mongolia has been in advance of the time required by the company's
regulations, and gained the prize awarded for excess of speed."
"Does she come directly from Brindisi?"
"Directly from Brindisi; she takes on the Indian mails there, and she left there Saturday at five p.m. Have
patience, Mr. Fix; she will not be late. But really, I don't see how, from the description you have, you will be able to
recognise your man, even if he is on board the Mongolia."
"A man rather feels the presence of these fellows, consul, than recognises them. You must have a scent for them,
and a scent is like a sixth sense which combines hearing, seeing, and smelling. I've arrested more than one of these
genlemen in my time, and, if my thief is on board, I'll answer for it; he'll not slip through my fingers."
"I hope so, Mr. Fix, for it was a heavy robbery."
"A magnificent robbery, consul; fifty-five thousand pounds! We don't often have such windfalls. Burglars are
going to be so contemptible nowadays! A fellow gets hung for a handful of shillings!"
"Mr. Fix," said the consul, "I like your way of talking, and hope you'll succeed; but I fear you will find it far from easy. Don't you see, the description which you have there has a singular resemblance to an honest man?"

"Consul," remarked the detective, dogmatically, "great robbers always resemble honest folks. Fellows who have rascally faces have only one course to take, and that is to remain honest; otherwise they would be arrested off-hand. The artistic thing is, to unmask honest countenances; it's no light task, I admit, but a real art."

Mr. Fix evidently was not wanting in a tinge of self-conceit.

Little by little the scene on the quay became more animated; sailors of various nations, merchants, ship-brokers, porters, fellahs, bustled to and fro as if the steamer were immediately expected. The weather was clear, and slightly chilly. The minarets of the town loomed above the houses in the pale rays of the sun. A jetty pier, some two thousand yards long, extended into the roadstead. A number of fishing-smacks and coasting boats, some retaining the fantastic fashion of ancient galleys, were discernible on the Red Sea.

As he passed among the busy crowd, Fix, according to habit, scrutinised the passers-by with a keen, rapid glance.

It was now half-past ten.
"The steamer doesn't come!" he exclaimed, as the port clock struck.
"She can't be far off now," returned his companion.
"How long will she stop at Suez?"
"Four hours; long enough to get in her coal. It is thirteen hundred and ten miles from Suez to Aden, at the other end of the Red Sea, and she has to take in a fresh coal supply."
"And does she go from Suez directly to Bombay?"
"Without putting in anywhere."
"Good!" said Fix. "If the robber is on board he will no doubt get off at Suez, so as to reach the Dutch or French colonies in Asia by some other route. He ought to know that he would not be safe an hour in India, which is English soil."

"Unless," objected the consul, "he is exceptionally shrewd. An English criminal, you know, is always better concealed in London than anywhere else."

This observation furnished the detective food for thought, and meanwhile the consul went away to his office. Fix, left alone, was more impatient than ever, having a presentiment that the robber was on board the Mongolia. If he had indeed left London intending to reach the New World, he would naturally take the route via India, which was less watched and more difficult to watch than that of the Atlantic. But Fix's reflections were soon interrupted by a succession of sharp whistles, which announced the arrival of the Mongolia. The porters and fellahs rushed down the quay, and a dozen boats pushed off from the shore to go and meet the steamer. Soon her gigantic hull appeared passing along between the banks, and eleven o'clock struck as she anchored in the road. She brought an unusual number of passengers, some of whom remained on deck to scan the picturesque panorama of the town, while the greater part disembarked in the boats, and landed on the quay.

Fix took up a position, and carefully examined each face and figure which made its appearance. Presently one of the passengers, after vigorously pushing his way through the importunate crowd of porters, came up to him and politely asked if he could point out the English consulate, at the same time showing a passport which he wished to have visaed. Fix instinctively took the passport, and with a rapid glance read the description of its bearer. An involuntary motion of surprise nearly escaped him, for the description in the passport was identical with that of the bank robber which he had received from Scotland Yard.

"Is this your passport?" asked he.
"No, it's my master's."
"And your master is--"
"He stayed on board."
"But he must go to the consul's in person, so as to establish his identity."
"Oh, is that necessary?"
"Quite indispensable."
"And where is the consulate?"
"There, on the corner of the square," said Fix, pointing to a house two hundred steps off.
"I'll go and fetch my master, who won't be much pleased, however, to be disturbed."

The passenger bowed to Fix, and returned to the steamer.

Chapter VII
WHICH ONCE MORE DEMONSTRATES THE USELESSNESS OF PASSPORTS AS AIDS TO
DETECTIVES

The detective passed down the quay, and rapidly made his way to the consul's office, where he was at once admitted to the presence of that official.

"Consul," said he, without preamble, "I have strong reasons for believing that my man is a passenger on the Mongolia." And he narrated what had just passed concerning the passport.

"Well, Mr. Fix," replied the consul, "I shall not be sorry to see the rascal's face; but perhaps he won't come here--that is, if he is the person you suppose him to be. A robber doesn't quite like to leave traces of his flight behind him; and, besides, he is not obliged to have his passport countersigned."

"If he is as shrewd as I think he is, consul, he will come."

"To have his passport visaed?"

"Yes. Passports are only good for annoying honest folks, and aiding in the flight of rogues. I assure you it will be quite the thing for him to do; but I hope you will not visa the passport."

"Why not? If the passport is genuine I have no right to refuse."

"Still, I must keep this man here until I can get a warrant to arrest him from London."

"Ah, that's your look-out. But I cannot--"

The consul did not finish his sentence, for as he spoke a knock was heard at the door, and two strangers entered, one of whom was the servant whom Fix had met on the quay. The other, who was his master, held out his passport with the request that the consul would do him the favour to visa it. The consul took the document and carefully read it, whilst Fix observed, or rather devoured, the stranger with his eyes from a corner of the room.

"You are Mr. Phileas Fogg?" said the consul, after reading the passport.

"I am."

"And this man is your servant?"

"He is: a Frenchman, named Passepartout."

"You are from London?"

"Yes."

"And you are going--"

"To Bombay."

"Very good, sir. You know that a visa is useless, and that no passport is required?"

"I know it, sir," replied Phileas Fogg; "but I wish to prove, by your visa, that I came by Suez."

"Very well, sir."

The consul proceeded to sign and date the passport, after which he added his official seal. Mr. Fogg paid the customary fee, coldly bowed, and went out, followed by his servant.

"Well?" queried the detective.

"Well, he looks and acts like a perfectly honest man," replied the consul.

"Possibly; but that is not the question. Do you think, consul, that this phlegmatic gentleman resembles, feature by feature, the robber whose description I have received?"

"I concede that; but then, you know, all descriptions--"

"I'll make certain of it," interrupted Fix. "The servant seems to me less mysterious than the master; besides, he's a Frenchman, and can't help talking. Excuse me for a little while, consul."

Fix started off in search of Passepartout.

Meanwhile Mr. Fogg, after leaving the consulate, repaired to the quay, gave some orders to Passepartout, went off to the Mongolia in a boat, and descended to his cabin. He took up his note-book, which contained the following memoranda:

"Left London, Wednesday, October 2nd, at 8.45 p.m. "Reached Paris, Thursday, October 3rd, at 7.20 a.m. "Left Paris, Thursday, at 8.40 a.m. "Reached Turin by Mont Cenis, Friday, October 4th, at 6.35 a.m. "Left Turin, Friday, at 7.20 a.m. "Arrived at Brindisi, Saturday, October 5th, at 4 p.m. "Sailed on the Mongolia, Saturday, at 5 p.m. "Reached Suez, Wednesday, October 9th, at 11 a.m. "Total of hours spent, 158+; or, in days, six days and a half."

These dates were inscribed in an itinerary divided into columns, indicating the month, the day of the month, and the day for the stipulated and actual arrivals at each principal point Paris, Brindisi, Suez, Bombay, Calcutta, Singapore, Hong Kong, Yokohama, San Francisco, New York, and London--from the 2nd of October to the 21st of December; and giving a space for setting down the gain made or the loss suffered on arrival at each locality. This methodical record thus contained an account of everything needed, and Mr. Fogg always knew whether he was behind-hand or in advance of his time. On this Friday, October 9th, he noted his arrival at Suez, and observed that he had as yet neither gained nor lost. He sat down quietly to breakfast in his cabin, never once thinking of inspecting the town, being one of those Englishmen who are wont to see foreign countries through the eyes of their domestics.
Chapter VIII
IN WHICH PASSEPARTOUT TALKS RATHER MORE, PERHAPS, THAN IS PRUDENT

Fix soon rejoined Passepartout, who was lounging and looking about on the quay, as if he did not feel that he, at least, was obliged not to see anything.

"Well, my friend," said the detective, coming up with him, "is your passport visaed?"

"Ah, it's you, is it, monsieur?" responded Passepartout. "Thanks, yes, the passport is all right."

"And you are looking about you?"

"Yes; but we travel so fast that I seem to be journeying in a dream. So this is Suez?"

"Yes."

"In Egypt?"

"Certainly, in Egypt."

"And in Africa?"

"In Africa."

"In Africa!" repeated Passepartout. "Just think, monsieur, I had no idea that we should go farther than Paris; and all that I saw of Paris was between twenty minutes past seven and twenty minutes before nine in the morning, between the Northern and the Lyons stations, through the windows of a car, and in a driving rain! How I regret not having seen once more Pere la Chaise and the circus in the Champs Elysees!"

"You are in a great hurry, then?"

"I am not, but my master is. By the way, I must buy some shoes and shirts. We came away without trunks, only with a carpet-bag."

"I will show you an excellent shop for getting what you want."

"Really, monsieur, you are very kind."

And they walked off together, Passepartout chatting volubly as they went along.

"Above all," said he; "don't let me lose the steamer."

"You have plenty of time; it's only twelve o'clock."

Passepartout pulled out his big watch. "Twelve!" he exclaimed; "why, it's only eight minutes before ten."

"Your watch is slow."

"My watch? A family watch, monsieur, which has come down from my great-grandfather! It doesn't vary five minutes in the year. It's a perfect chronometer, look you."

"I see how it is," said Fix. "You have kept London time, which is two hours behind that of Suez. You ought to regulate your watch at noon in each country."

"I regulate my watch? Never!"

"Well, then, it will not agree with the sun."

"So much the worse for the sun, monsieur. The sun will be wrong, then!"

And the worthy fellow returned the watch to its fob with a defiant gesture. After a few minutes silence, Fix resumed: "You left London hastily, then?"

"I rather think so! Last Friday at eight o'clock in the evening, Monsieur Fogg came home from his club, and three-quarters of an hour afterwards we were off."

"But where is your master going?"

"Always straight ahead. He is going round the world."

"Round the world?" cried Fix.

"Yes, and in eighty days! He says it is on a wager; but, between us, I don't believe a word of it. That wouldn't be common sense. There's something else in the wind."

"Ah! Mr. Fogg is a character, is he?"

"I should say he was."

"Is he rich?"

"No doubt, for he is carrying an enormous sum in brand new banknotes with him. And he doesn't spare the money on the way, either: he has offered a large reward to the engineer of the Mongolia if he gets us to Bombay well in advance of time."

"And you have known your master a long time?"

"Why, no; I entered his service the very day we left London."

The effect of these replies upon the already suspicious and excited detective may be imagined. The hasty departure from London soon after the robbery; the large sum carried by Mr. Fogg; his eagerness to reach distant countries; the pretext of an eccentric and foolhardy bet—all confirmed Fix in his theory. He continued to pump poor Passepartout, and learned that he really knew little or nothing of his master, who lived a solitary existence in
London, was said to be rich, though no one knew whence came his riches, and was mysterious and impenetrable in
his affairs and habits. Fix felt sure that Phileas Fogg would not land at Suez, but was really going on to Bombay.

"Is Bombay far from here?" asked Passepartout.

"Pretty far. It is a ten days' voyage by sea."

"And in what country is Bombay?"

"India."

"In Asia?"

"Certainly."

"The deuce! I was going to tell you there's one thing that worries me--my burner!"

"What burner?"

"My gas-burner, which I forgot to turn off, and which is at this moment burning at my expense. I have
calculated, monsieur, that I lose two shillings every four and twenty hours, exactly sixpence more than I earn; and
you will understand that the longer our journey--"

Did Fix pay any attention to Passepartout's trouble about the gas? It is not probable. He was not listening, but
was cogitating a project. Passepartout and he had now reached the shop, where Fix left his companion to make his
purchases, after recommending him not to miss the steamer, and hurried back to the consulate. Now that he was
fully convinced, Fix had quite recovered his equanimity.

"Consul," said he, "I have no longer any doubt. I have spotted my man. He passes himself off as an odd stick
who is going round the world in eighty days."

"Then he's a sharp fellow," returned the consul, "and counts on returning to London after putting the police of
the two countries off his track."

"We'll see about that," replied Fix.

"But are you not mistaken?"

"I am not mistaken."

"Why was this robber so anxious to prove, by the visa, that he had passed through Suez?"

"Why? I have no idea; but listen to me."

He reported in a few words the most important parts of his conversation with Passepartout.

"In short," said the consul, "appearances are wholly against this man. And what are you going to do?"

"Send a dispatch to London for a warrant of arrest to be dispatched instantly to Bombay, take passage on board
the Mongolia, follow my rogue to India, and there, on English ground, arrest him politely, with my warrant in my
hand, and my hand on his shoulder."

Having uttered these words with a cool, careless air, the detective took leave of the consul, and repaired to the
telegraph office, whence he sent the dispatch which we have seen to the London police office. A quarter of an hour
later found Fix, with a small bag in his hand, proceeding on board the Mongolia; and, ere many moments longer, the
noble steamer rode out at full steam upon the waters of the Red Sea.

Chapter IX
IN WHICH THE RED SEA AND THE INDIAN OCEAN PROVE PROPITIOUS TO THE DESIGNS OF
PHILEAS FOGG

The distance between Suez and Aden is precisely thirteen hundred and ten miles, and the regulations of the
company allow the steamers one hundred and thirty-eight hours in which to traverse it. The Mongolia, thanks to the
vigorous exertions of the engineer, seemed likely, so rapid was her speed, to reach her destination considerably
within that time. The greater part of the passengers from Brindisi were bound for India some for Bombay, others for
Calcutta by way of Bombay, the nearest route thither, now that a railway crosses the Indian peninsula. Among the
passengers was a number of officials and military officers of various grades, the latter being either attached to the
regular British forces or commanding the Sepoy troops, and receiving high salaries ever since the central
government has assumed the powers of the East India Company: for the sub-lieutenants get 280 pounds, brigadiers,
2,400 pounds, and generals of divisions, 4,000 pounds. What with the military men, a number of rich young
Englishmen on their travels, and the hospitable efforts of the purser, the time passed quickly on the Mongolia. The
best of fare was spread upon the cabin tables at breakfast, lunch, dinner, and the eight o'clock supper, and the ladies
scrupulously changed their toilets twice a day; and the hours were whirled away, when the sea was tranquil, with
music, dancing, and games.

But the Red Sea is full of caprice, and often boisterous, like most long and narrow gulfs. When the wind came
from the African or Asian coast the Mongolia, with her long hull, rolled fearfully. Then the ladies speedily
disappeared below; the pianos were silent; singing and dancing suddenly ceased. Yet the good ship ploughed
straight on, unretarded by wind or wave, towards the straits of Bab-el-Mandeb. What was Phileas Fogg doing all this time? It might be thought that, in his anxiety, he would be constantly watching the changes of the wind, the disorderly raging of the billows—every chance, in short, which might force the Mongolia to slacken her speed, and thus interrupt his journey. But, if he thought of these possibilities, he did not betray the fact by any outward sign.

Always the same impassible member of the Reform Club, whom no incident could surprise, as unvarying as the ship's chronometers, and seldom having the curiosity even to go upon the deck, he passed through the memorable scenes of the Red Sea with cold indifference; did not care to recognise the historic towns and villages which, along its borders, raised their picturesque outlines against the sky; and betrayed no fear of the dangers of the Arabian Gulf, which the old historians always spoke of with horror, and upon which the ancient navigators never ventured without propitiating the gods by ample sacrifices. How did this eccentric personage pass his time on the Mongolia? He made his four hearty meals every day, regardless of the most persistent rolling and pitching on the part of the steamer; and he played whist indefatigably, for he had found partners as enthusiastic in the game as himself. A tax-collector, on the way to his post at Goa; the Rev. Decimus Smith, returning to his parish at Bombay; and a brigadier-general of the English army, who was about to rejoin his brigade at Benares, made up the party, and, with Mr. Fogg, played whist by the hour together in absorbing silence.

As for Passepartout, he, too, had escaped sea-sickness, and took his meals conscientiously in the forward cabin. He rather enjoyed the voyage, for he was well fed and well lodged, took a great interest in the scenes through which they were passing, and consoled himself with the delusion that his master's whim would end at Bombay. He was pleased, on the day after leaving Suez, to find on deck the obliging person with whom he had walked and chatted on the quays.

"If I am not mistaken," said he, approaching this person, with his most amiable smile, "you are the gentleman who so kindly volunteered to guide me at Suez?"

"Ah! I quite recognise you. You are the servant of the strange Englishman—"

"Just so, monsieur—"

"Fix."

"Monsieur Fix," resumed Passepartout, "I'm charmed to find you on board. Where are you bound?"

"Like you, to Bombay."

"That's capital! Have you made this trip before?"

"Several times. I am one of the agents of the Peninsular Company."

"Then you know India?"

"Why yes," replied Fix, who spoke cautiously.

"A curious place, this India?"

"Oh, very curious. Mosques, minarets, temples, fakirs, pagodas, tigers, snakes, elephants! I hope you will have ample time to see the sights."

"I hope so, Monsieur Fix. You see, a man of sound sense ought not to spend his life jumping from a steamer upon a railway train, and from a railway train upon a steamer again, pretending to make the tour of the world in eighty days! No; all these gymnastics, you may be sure, will cease at Bombay."

"And Mr. Fogg is getting on well?" asked Fix, in the most natural tone in the world.

"Quite well, and I too. I eat like a famished ogre; it's the sea air."

"But I never see your master on deck."

"Never; he hasn't the least curiosity."

"Do you know, Mr. Passepartout, that this pretended tour in eighty days may conceal some secret errand—perhaps a diplomatic mission?"

"Faith, Monsieur Fix, I assure you I know nothing about it, nor would I give half a crown to find out."

After this meeting, Passepartout and Fix got into the habit of chatting together, the latter making it a point to gain the worthy man's confidence. He frequently offered him a glass of whiskey or pale ale in the steamer bar-room, which Passepartout never failed to accept with graceful alacrity, mentally pronouncing Fix the best of good fellows.

Meanwhile the Mongolia was pushing forward rapidly; on the 13th, Mocha, surrounded by its ruined walls whereon date-trees were growing, was sighted, and on the mountains beyond were espied vast coffee-fields. Passepartout was ravished to behold this celebrated place, and thought that, with its circular walls and dismantled fort, it looked like an immense coffee-cup and saucer. The following night they passed through the Strait of Bab-el-Mandeb, which means in Arabic The Bridge of Tears, and the next day they put in at Steamer Point, north-west of Aden harbour, to take in coal. This matter of fuelling steamers is a serious one at such distances from the coal-mines; it costs the Peninsular Company some eight hundred thousand pounds a year. In these distant seas, coal is worth three or four pounds sterling a ton.

The Mongolia had still sixteen hundred and fifty miles to traverse before reaching Bombay, and was obliged to
remain four hours at Steamer Point to coal up. But this delay, as it was foreseen, did not affect Phileas Fogg's programme; besides, the Mongolia, instead of reaching Aden on the morning of the 15th, when she was due, arrived there on the evening of the 14th, a gain of fifteen hours.

Mr. Fogg and his servant went ashore at Aden to have the passport again visaged; Fix, unobserved, followed them. The visa procured, Mr. Fogg returned on board to resume his former habits; while Passepartout, according to custom, sauntered among the mixed population of Somalis, Banyans, Parsees, Jews, Arabs, and Europeans who comprise the twenty-five thousand inhabitants of Aden. He gazed with wonder upon the fortifications which make this place the Gibraltar of the Indian Ocean, and the vast cisterns where the English engineers were still at work, two thousand years after the engineers of Solomon.

"Very curious, very curious," said Passepartout to himself, on returning to the steamer. "I see that it is by no means useless to travel, if a man wants to see something new." At six p.m. the Mongolia slowly moved out of the roadstead, and was soon once more on the Indian Ocean. She had a hundred and sixty-eight hours in which to reach Bombay, and the sea was favourable, the wind being in the north-west, and all sails aiding the engine. The steamer rolled but little, the ladies, in fresh toilets, reappeared on deck, and the singing and dancing were resumed. The trip was being accomplished most successfully, and Passepartout was enchanted with the congenial companion which chance had secured him in the person of the delightful Fix. On Sunday, October 20th, towards noon, they came in sight of the Indian coast: two hours later the pilot came on board. A range of hills lay against the sky in the horizon, and soon the rows of palms which adorn Bombay came distinctly into view. The steamer entered the road formed by the islands in the bay, and at half-past four she hauled up at the quays of Bombay.

Phileas Fogg was in the act of finishing the thirty-third rubber of the voyage, and his partner and himself having, by a bold stroke, captured all thirteen of the tricks, concluded this fine campaign with a brilliant victory.

The Mongolia was due at Bombay on the 22nd; she arrived on the 20th. This was a gain to Phileas Fogg of two days since his departure from London, and he calmly entered the fact in the itinerary, in the column of gains.

Chapter X

IN WHICH PASSEPARTOUT IS ONLY TOO GLAD TO GET OFF WITH THE LOSS OF HIS SHOES

Everybody knows that the great reversed triangle of land, with its base in the north and its apex in the south, which is called India, embraces fourteen hundred thousand square miles, upon which is spread unequally a population of one hundred and eighty millions of souls. The British Crown exercises a real and despotic dominion over the larger portion of this vast country, and has a governor-general stationed at Calcutta, governors at Madras, Bombay, and in Bengal, and a lieutenant-governor at Agra.

But British India, properly so called, only embraces seven hundred thousand square miles, and a population of from one hundred to one hundred and ten millions of inhabitants. A considerable portion of India is still free from British authority; and there are certain ferocious rajahs in the interior who are absolutely independent. The celebrated East India Company was all-powerful from 1756, when the English first gained a foothold on the spot where now stands the city of Madras, down to the time of the great Sepoy insurrection. It gradually annexed province after province, purchasing them of the native chiefs, whom it seldom paid, and appointed the governor-general and his subordinates, civil and military. But the East India Company has now passed away, leaving the British possessions in India directly under the control of the Crown. The aspect of the country, as well as the manners and distinctions of race, is daily changing.

Formerly one was obliged to travel in India by the old cumbrous methods of going on foot or on horseback, in palanquins or unwieldy coaches; now fast steamboats ply on the Indus and the Ganges, and a great railway, with branch lines joining the main line at many points on its route, traverses the peninsula from Bombay to Calcutta in three days. This railway does not run in a direct line across India. The distance between Bombay and Calcutta, as the bird flies, is only from one thousand to eleven hundred miles; but the deflections of the road increase this distance by more than a third.

The general route of the Great Indian Peninsula Railway is as follows: Leaving Bombay, it passes through Salcette, crossing to the continent opposite Tannah, goes over the chain of the Western Ghauts, runs thence north-east as far as Burhampoor, skirts the nearly independent territory of Bundelcund, ascends to Allahabad, turns thence eastwardly, meeting the Ganges at Benares, then departs from the river a little, and, descending south-eastward by Burdivan and the French town of Chandernagor, has its terminus at Calcutta.

The passengers of the Mongolia went ashore at half-past four p.m.; at exactly eight the train would start for Calcutta.

Mr. Fogg, after bidding good-bye to his whist partners, left the steamer, gave his servant several errands to do, urged it upon him to be at the station promptly at eight, and, with his regular step, which beat to the second, like an
astronomical clock, directed his steps to the passport office. As for the wonders of Bombay its famous city hall, its splendid library, its forts and docks, its bazaars, mosques, synagogues, its Armenian churches, and the noble pagoda on Malabar Hill, with its two polygonal towers—he cared not a straw to see them. He would not deign to examine even the masterpieces of Elephanta, or the mysterious hypogea, concealed south-east from the docks, or those fine remains of Buddhist architecture, the Kanherian grottoes of the island of Salcette.

Having transacted his business at the passport office, Phileas Fogg repaired quietly to the railway station, where he ordered dinner. Among the dishes served up to him, the landlord especially recommended a certain giblet of "native rabbit," on which he prided himself.

Mr. Fogg accordingly tasted the dish, but, despite its spiced sauce, found it far from palatable. He rang for the landlord, and, on his appearance, said, fixing his clear eyes upon him, "Is this rabbit, sir?"

"Yes, my lord," the rogue boldly replied, "rabbit from the jungles."

"And this rabbit did not mew when he was killed?"

"Mew, my lord! What, a rabbit mew! I swear to you—"

"Be so good, landlord, as not to swear, but remember this: cats were formerly considered, in India, as sacred animals. That was a good time."

"For the cats, my lord?"

"Perhaps for the travellers as well!"

After which Mr. Fogg quietly continued his dinner. Fix had gone on shore shortly after Mr. Fogg, and his first destination was the headquarters of the Bombay police. He made himself known as a London detective, told his business at Bombay, and the position of affairs relative to the supposed robber, and nervously asked if a warrant had arrived from London. It had not reached the office; indeed, there had not yet been time for it to arrive. Fix was sorely disappointed, and tried to obtain an order of arrest from the director of the Bombay police. This the director refused, as the matter concerned the London office, which alone could legally deliver the warrant. Fix did not insist, and was fain to resign himself to await the arrival of the important document; but he was determined not to lose sight of the mysterious rogue as long as he stayed in Bombay. He did not doubt for a moment, any more than Passepartout, that Phileas Fogg would remain there, at least until it was time for the warrant to arrive.

Passepartout, however, had no sooner heard his master's orders on leaving the Mongolia than he saw at once that they were to leave Bombay as they had done Suez and Paris, and that the journey would be extended at least as far as Calcutta, and perhaps beyond that place. He began to ask himself if this bet that Mr. Fogg talked about was not really in good earnest, and whether his fate was not in truth forcing him, despite his love of repose, around the world in eighty days!

Having purchased the usual quota of shirts and shoes, he took a leisurely promenade about the streets, where crowds of people of many nationalities—Europeans, Persians with pointed caps, Banyas with round turbans, Sindes with square bonnets, Parsees with black mitres, and long-robed Armenians—were collected. It happened to be the day of a Parsee festival. These descendants of the sect of Zoroaster—the most thrifty, civilised, intelligent, and austere of the East Indians, among whom are counted the richest native merchants of Bombay—were celebrating a sort of religious carnival, with processions and shows, in the midst of which Indian dancing-girls, clothed in rose-colored gauze, looped up with gold and silver, danced airily, but with perfect modesty, to the sound of viols and the clanging of tambourines. It is needless to say that Passepartout watched these curious ceremonies with staring eyes and gaping mouth, and that his countenance was that of the greenest booby imaginable.

Unhappily for his master, as well as himself, his curiosity drew him unconsciously farther off than he intended to go. At last, having seen the Parsee carnival wind away in the distance, he was turning his steps towards the station, when he happened to espy the splendid pagoda on Malabar Hill, and was seized with an irresistible desire to see its interior. He was quite ignorant that it is forbidden to Christians to enter certain Indian temples, and that even the faithful must not go in without first leaving their shoes outside the door. It may be said here that the wise policy of the British Government severely punishes a disregard of the practices of the native religions.

Passepartout, however, thinking no harm, went in like a simple tourist, and was soon lost in admiration of the splendid Brahmin ornamentation which everywhere met his eyes, when of a sudden he found himself sprawling on the sacred flagging. He looked up to behold three enraged priests, who forthwith fell upon him; tore off his shoes, and began to beat him with loud, savage exclamations. The agile Frenchman was soon upon his feet again, and lost no time in knocking down two of his long-gowned adversaries with his fists and a vigorous application of his toes; then, rushing out of the pagoda as fast as his legs could carry him, he soon escaped the third priest by mingling with the crowd in the streets.

At five minutes before eight, Passepartout, hatless, shoeless, and having in the squabble lost his package of shirts and shoes, rushed breathlessly into the station.

Fix, who had followed Mr. Fogg to the station, and saw that he was really going to leave Bombay, was there,
upon the platform. He had resolved to follow the supposed robber to Calcutta, and farther, if necessary. Passepartout
did not observe the detective, who stood in an obscure corner; but Fix heard him relate his adventures in a few
words to Mr. Fogg.

"I hope that this will not happen again," said Phileas Fogg coldly, as he got into the train. Poor Passepartout,
quite crestfallen, followed his master without a word. Fix was on the point of entering another carriage, when an
idea struck him which induced him to alter his plan.

"No, I'll stay," muttered he. "An offence has been committed on Indian soil. I've got my man."

Just then the locomotive gave a sharp screech, and the train passed out into the darkness of the night.

Chapter XI
IN WHICH PHILEAS FOGG SECURES A CURIOUS MEANS OF CONVEYANCE AT A FABULOUS
PRICE

The train had started punctually. Among the passengers were a number of officers, Government officials, and
opium and indigo merchants, whose business called them to the eastern coast. Passepartout rode in the same carriage
with his master, and a third passenger occupied a seat opposite to them. This was Sir Francis Cromarty, one of Mr.
Fogg's whist partners on the Mongolia, now on his way to join his corps at Benares. Sir Francis was a tall, fair man
of fifty, who had greatly distinguished himself in the last Sepoy revolt. He made India his home, only paying brief
visits to England at rare intervals; and was almost as familiar as a native with the customs, history, and character of
India and its people. But Phileas Fogg, who was not travelling, but only describing a circumference, took no pains to
inquire into these subjects; he was a solid body, traversing an orbit around the terrestrial globe, according to the laws
of rational mechanics. He was at this moment calculating in his mind the number of hours spent since his departure
from London, and, had it been in his nature to make a useless demonstration, would have rubbed his hands for
satisfaction. Sir Francis Cromarty had observed the oddity of his travelling companion--although the only
opportunity he had for studying him had been while he was dealing the cards, and between two rubbers--and
questioned himself whether a human heart really beat beneath this cold exterior, and whether Phileas Fogg had any
sense of the beauties of nature. The brigadier-general was free to mentally confess that, of all the eccentric persons
he had ever met, none was comparable to this product of the exact sciences.

Phileas Fogg had not concealed from Sir Francis his design of going round the world, nor the circumstances
under which he set out; and the general only saw in the wager a useless eccentricity and a lack of sound common
sense. In the way this strange gentleman was going on, he would leave the world without having done any good to
himself or anybody else.

An hour after leaving Bombay the train had passed the viaducts and the Island of Salcette, and had got into the
open country. At Callyan they reached the junction of the branch line which descends towards south-eastern India
by Kandallah and Pounah; and, passing Pauwell, they entered the defiles of the mountains, with their basalt bases,
and their summits crowned with thick and verdant forests. Phileas Fogg and Sir Francis Cromarty exchanged a few
words from time to time, and now Sir Francis, reviving the conversation, observed, "Some years ago, Mr. Fogg, you
would have met with a delay at this point which would probably have lost you your wager."

"How so, Sir Francis?"

"Because the railway stopped at the base of these mountains, which the passengers were obliged to cross in
palanquins or on ponies to Kandallah, on the other side."

"Such a delay would not have deranged my plans in the least," said Mr. Fogg. "I have constantly foreseen the
likelihood of certain obstacles."

"But, Mr. Fogg," pursued Sir Francis, "you run the risk of having some difficulty about this worthy fellow's
adventure at the pagoda." Passepartout, his feet comfortably wrapped in his travelling-blanket, was sound asleep and
did not dream that anybody was talking about him. "The Government is very severe upon that kind of offence. It
takes particular care that the religious customs of the Indians should be respected, and if your servant were caught--"

"Very well, Sir Francis," replied Mr. Fogg: "if he had been caught he would have been condemned and
punished, and then would have quietly returned to Europe. I don't see how this affair could have delayed his master."

The conversation fell again. During the night the train left the mountains behind, and passed Nassik, and the next
day proceeded over the flat, well-cultivated country of the Khandeish, with its straggling villages, above which rose
the minarets of the pagodas. This fertile territory is watered by numerous small rivers and limpid streams, mostly
tributaries of the Godavery.

Passepartout, on waking and looking out, could not realise that he was actually crossing India in a railway train.
The locomotive, guided by an English engineer and fed with English coal, threw out its smoke upon cotton, coffee,
nutmeg, clove, and pepper plantations, while the steam curled in spirals around groups of palm-trees, in the midst of
which were seen picturesque bungalows, viharis (sort of abandoned monasteries), and marvellous temples enriched by the exhaustless ornamentation of Indian architecture. Then they came upon vast tracts extending to the horizon, with jungles inhabited by snakes and tigers, which fled at the noise of the train; succeeded by forests penetrated by the railway, and still haunted by elephants which, with pensive eyes, gazed at the train as it passed. The travellers crossed, beyond Milligaum, the fatal country so often stained with blood by the sectaries of the goddess Kali. Not far off rose Ellora, with its graceful pagodas, and the famous Aurungabad, capital of the ferocious Aureng-Zeb, now the chief town of one of the detached provinces of the kingdom of the Nizam. It was thereabouts that Feringhea, the Thuggee chief, king of the stranglers, held his sway. These ruffians, united by a secret bond, strangled victims of every age in honour of the goddess Death, without ever shedding blood; there was a period when this part of the country could scarcely be travelled over without corpses being found in every direction. The English Government has succeeded in greatly diminishing these murders, though the Thuggees still exist, and pursue the exercise of their horrible rites.

At half-past twelve the train stopped at Burhampoor where Passepartout was able to purchase some Indian slippers, ornamented with false pearls, in which, with evident vanity, he proceeded to encase his feet. The travellers made a hasty breakfast and started off for Assurghur, after skirting for a little the banks of the small river Tapty, which empties into the Gulf of Cambray, near Surat.

Passepartout was now plunged into absorbing reverie. Up to his arrival at Bombay, he had entertained hopes that their journey would end there; but, now that they were plainly whirling across India at full speed, a sudden change had come over the spirit of his dreams. His old vagabond nature returned to him; the fantastic ideas of his youth once more took possession of him. He came to regard his master's project as intended in good earnest, believed in the reality of the bet, and therefore in the tour of the world and the necessity of making it without fail within the designated period. Already he began to worry about possible delays, and accidents which might happen on the way. He recognised himself as being personally interested in the wager, and trembled at the thought that he might have been the means of losing it by his unpardonable folly of the night before. Being much less cool-headed than Mr. Fogg, he was much more restless, counting and recounting the days passed over, uttering maledictions when the train stopped, and accusing it of sluggishness, and mentally blaming Mr. Fogg for not having bribed the engineer. The worthy fellow was ignorant that, while it was possible by such means to hasten the rate of a steamer, it could not be done on the railway.

The train entered the defiles of the Sutpour Mountains, which separate the Khandeish from Bundelcund, towards evening. The next day Sir Francis Cromarty asked Passepartout what time it was; to which, on consulting his watch, he replied that it was three in the morning. This famous timepiece, always regulated on the Greenwich meridian, which was now some seventy-seven degrees westward, was at least four hours slow. Sir Francis corrected Passepartout's time, whereupon the latter made the same remark that he had done to Fix; and upon the general insisting that the watch should be regulated in each new meridian, since he was constantly going eastward, that is in the face of the sun, and therefore the days were shorter by four minutes for each degree gone over, Passepartout obstinately refused to alter his watch, which he kept at London time. It was an innocent delusion which could harm no one.

The train stopped, at eight o'clock, in the midst of a glade some fifteen miles beyond Rothal, where there were several bungalows, and workmen's cabins. The conductor, passing along the carriages, shouted, "Passengers will get out here!"

Phileas Fogg looked at Sir Francis Cromarty for an explanation; but the general could not tell what meant a halt in the midst of this forest of dates and acacias.

Passepartout, not less surprised, rushed out and speedily returned, crying: "Monsieur, no more railway!"

"What do you mean?" asked Sir Francis.

"I mean to say that the train isn't going on."

The general at once stepped out, while Phileas Fogg calmly followed him, and they proceeded together to the conductor.

"Where are we?" asked Sir Francis.

"At the hamlet of Kholby."

"Do we stop here?"

"Certainly. The railway isn't finished."

"What! not finished?"

"No. There's still a matter of fifty miles to be laid from here to Allahabad, where the line begins again."

"But the papers announced the opening of the railway throughout."

"What would you have, officer? The papers were mistaken."

"Yet you sell tickets from Bombay to Calcutta," retorted Sir Francis, who was growing warm.
"No doubt," replied the conductor; "but the passengers know that they must provide means of transportation for themselves from Kholby to Allahabad."

Sir Francis was furious. Passepartout would willingly have knocked the conductor down, and did not dare to look at his master.

"Sir Francis," said Mr. Fogg quietly, "we will, if you please, look about for some means of conveyance to Allahabad."

"Mr. Fogg, this is a delay greatly to your disadvantage."

"No, Sir Francis; it was foreseen."

"What! You knew that the way--"

"Not at all; but I knew that some obstacle or other would sooner or later arise on my route. Nothing, therefore, is lost. I have two days, which I have already gained, to sacrifice. A steamer leaves Calcutta for Hong Kong at noon, on the 25th. This is the 22nd, and we shall reach Calcutta in time."

There was nothing to say to so confident a response.

It was but too true that the railway came to a termination at this point. The papers were like some watches, which have a way of getting too fast, and had been premature in their announcement of the completion of the line. The greater part of the travellers were aware of this interruption, and, leaving the train, they began to engage such vehicles as the village could provide four-wheeled palkigharis, waggons drawn by zebus, carriages that looked like perambulating pagodas, palanquins, ponies, and what not.

Mr. Fogg and Sir Francis Cromarty, after searching the village from end to end, came back without having found anything.

"I shall go afoot," said Phileas Fogg.

Passepartout, who had now rejoined his master, made a wry grimace, as he thought of his magnificent, but too frail Indian shoes. Happily he too had been looking about him, and, after a moment's hesitation, said, "Monsieur, I think I have found a means of conveyance."

"What?"

"An elephant! An elephant that belongs to an Indian who lives but a hundred steps from here."

"Let's go and see the elephant," replied Mr. Fogg.

They soon reached a small hut, near which, enclosed within some high palings, was the animal in question. An Indian came out of the hut, and, at their request, conducted them within the enclosure. The elephant, which its owner had reared, not for a beast of burden, but for warlike purposes, was half domesticated. The Indian had begun already, by often irritating him, and feeding him every three months on sugar and butter, to impart to him a ferocity not in his nature, this method being often employed by those who train the Indian elephants for battle. Happily, however, for Mr. Fogg, the animal's instruction in this direction had not gone far, and the elephant still preserved his natural gentleness. Kiouni--this was the name of the beast--could doubtless travel rapidly for a long time, and, in default of any other means of conveyance, Mr. Fogg resolved to hire him. But elephants are far from cheap in India, where they are becoming scarce, the males, which alone are suitable for circus shows, are much sought, especially as but few of them are domesticated. When therefore Mr. Fogg proposed to the Indian to hire Kiouni, he refused point-blank. Mr. Fogg persisted, offering the excessive sum of ten pounds an hour for the loan of the beast to Allahabad. Refused. Twenty pounds? Refused also. Forty pounds? Still refused. Passepartout jumped at each advance; but the Indian declined to be tempted. Yet the offer was an alluring one, for, supposing it took the elephant fifteen hours to reach Allahabad, his owner would receive no less than six hundred pounds sterling.

Phileas Fogg, without getting in the least flurried, then proposed to purchase the animal outright, and at first offered a thousand pounds for him. The Indian, perhaps thinking he was going to make a great bargain, still refused.

Sir Francis Cromarty took Mr. Fogg aside, and begged him to reflect before he went any further; to which that gentleman replied that he was not in the habit of acting rashly, that a bet of twenty thousand pounds was at stake, that the elephant was absolutely necessary to him, and that he would secure him if he had to pay twenty times his value. Returning to the Indian, whose small, sharp eyes, glistening with avarice, betrayed that with him it was only a question of how great a price he could obtain. Mr. Fogg offered first twelve hundred, then fifteen hundred, eighteen hundred, two thousand pounds. Passepartout, usually so rubicund, was fairly white with suspense.

At two thousand pounds the Indian yielded.

"What a price, good heavens!" cried Passepartout, "for an elephant."

It only remained now to find a guide, which was comparatively easy. A young Parsee, with an intelligent face, offered his services, which Mr. Fogg accepted, promising so generous a reward as to materially stimulate his zeal. The elephant was led out and equipped. The Parsee, who was an accomplished elephant driver, covered his back with a sort of saddle-cloth, and attached to each of his flanks some curiously uncomfortable howdahs. Phileas Fogg paid the Indian with some banknotes which he extracted from the famous carpet-bag, a proceeding that seemed to
deprive poor Passepartout of his vitals. Then he offered to carry Sir Francis to Allahabad, which the brigadier gratefully accepted, as one traveller the more would not be likely to fatigue the gigantic beast. Provisions were purchased at Kholby, and, while Sir Francis and Mr. Fogg took the howdahs on either side, Passepartout got astride the saddle-cloth between them. The Parsee perched himself on the elephant's neck, and at nine o'clock they set out from the village, the animal marching off through the dense forest of palms by the shortest cut.

Chapter XII
IN WHICH PHILEAS FOGG AND HIS COMPANIONS VENTURE ACROSS THE INDIAN FORESTS, AND WHAT ENSUED

In order to shorten the journey, the guide passed to the left of the line where the railway was still in process of being built. This line, owing to the capricious turnings of the Vindhia Mountains, did not pursue a straight course. The Parsee, who was quite familiar with the roads and paths in the district, declared that they would gain twenty miles by striking directly through the forest.

Phileas Fogg and Sir Francis Cromarty, plunged to the neck in the peculiar howdahs provided for them, were horribly jostled by the swift trotting of the elephant, spurred on as he was by the skilful Parsee; but they endured the discomfort with true British phlegm, talking little, and scarcely able to catch a glimpse of each other. As for Passepartout, who was mounted on the beast's back, and received the direct force of each concussion as he trod along, he was very careful, in accordance with his master's advice, to keep his tongue from between his teeth, as it would otherwise have been bitten off short. The worthy fellow bounced from the elephant's neck to his rump, and vaulted like a clown on a spring-board; yet he laughed in the midst of his bouncing, and from time to time took a piece of sugar out of his pocket, and inserted it in Kiouni's trunk, who received it without in the least slackening his regular trot.

After two hours the guide stopped the elephant, and gave him an hour for rest, during which Kiouni, after quenching his thirst at a neighbouring spring, set to devouring the branches and shrubs round about him. Neither Sir Francis nor Mr. Fogg regretted the delay, and both descended with a feeling of relief. "Why, he's made of iron!" exclaimed the general, gazing admiringly on Kiouni.

"Of forged iron," replied Passepartout, as he set about preparing a hasty breakfast.

At noon the Parsee gave the signal of departure. The country soon presented a very savage aspect. Copses of dates and dwarf-palms succeeded the dense forests; then vast, dry plains, dotted with scanty shrubs, and sown with great blocks of syenite. All this portion of Bundelcund, which is little frequented by travellers, is inhabited by a fanatical population, hardened in the most horrible practices of the Hindoo faith. The English have not been able to secure complete dominion over this territory, which is subjected to the influence of rajahs, whom it is almost impossible to reach in their inaccessible mountain fastnesses. The travellers several times saw bands of ferocious Indians, who, when they perceived the elephant striding across-country, made angry and threatening motions. The Parsee avoided them as much as possible. Few animals were observed on the route; even the monkeys hurried from their path with contortions and grimaces which convulsed Passepartout with laughter.

In the midst of his gaiety, however, one thought troubled the worthy servant. What would Mr. Fogg do with the elephant when he got to Allahabad? Would he carry him on with him? Impossible! The cost of transporting him would make him ruinously expensive. Would he sell him, or set him free? The estimable beast certainly deserved some consideration. Should Mr. Fogg choose to make him, Passepartout, a present of Kiouni, he would be very much embarrassed; and these thoughts did not cease worrying him for a long time.

The principal chain of the Vindhias was crossed by eight in the evening, and another halt was made on the northern slope, in a ruined bungalow. They had gone nearly twenty-five miles that day, and an equal distance still separated them from the station of Allahabad.

The night was cold. The Parsee lit a fire in the bungalow with a few dry branches, and the warmth was very grateful, provisions purchased at Kholby sufficed for supper, and the travellers ate ravenously. The conversation, beginning with a few disconnected phrases, soon gave place to loud and steady snores. The guide watched Kiouni, who slept standing, bolstering himself against the trunk of a large tree. Nothing occurred during the night to disturb the slumberers, although occasional growls from panthers and chattering of monkeys broke the silence; the more formidable beasts made no cries or hostile demonstration against the occupants of the bungalow. Sir Francis slept heavily, like an honest soldier overcome with fatigue. Passepartout was wrapped in uneasy dreams of the bouncing of the day before. As for Mr. Fogg, he slumbered as peacefully as if he had been in his serene mansion in Saville Row.

The journey was resumed at six in the morning; the guide hoped to reach Allahabad by evening. In that case, Mr. Fogg would only lose a part of the forty-eight hours saved since the beginning of the tour. Kiouni, resuming his
rapid gait, soon descended the lower spurs of the Vindhias, and towards noon they passed by the village of Kallenger, on the Cani, one of the branches of the Ganges. The guide avoided inhabited places, thinking it safer to keep the open country, which lies along the first depressions of the basin of the great river. Allahabad was now only twelve miles to the north-east. They stopped under a clump of bananas, the fruit of which, as healthy as bread and as succulent as cream, was amply partaken of and appreciated.

At two o'clock the guide entered a thick forest which extended several miles; he preferred to travel under cover of the woods. They had not as yet had any unpleasant encounters, and the journey seemed on the point of being successfully accomplished, when the elephant, becoming restless, suddenly stopped.

It was then four o'clock.

"What's the matter?" asked Sir Francis, putting out his head.

"I don't know, officer," replied the Parsee, listening attentively to a confused murmur which came through the thick branches.

The murmur soon became more distinct; it now seemed like a distant concert of human voices accompanied by brass instruments. Passepartout was all eyes and ears. Mr. Fogg patiently waited without a word. The Parsee jumped to the ground, fastened the elephant to a tree, and plunged into the thicket. He soon returned, saying:

"A procession of Brahmins is coming this way. We must prevent their seeing us, if possible."

The guide unloosed the elephant and led him into a thicket, at the same time asking the travellers not to stir. He held himself ready to bestride the animal at a moment's notice, should flight become necessary; but he evidently thought that the procession of the faithful would pass without perceiving them amid the thick foliage, in which they were wholly concealed.

The discordant tones of the voices and instruments drew nearer, and now droning songs mingled with the sound of the tambourines and cymbals. The head of the procession soon appeared beneath the trees, a hundred paces away; and the strange figures who performed the religious ceremony were easily distinguished through the branches. First came the priests, with mitres on their heads, and clothed in long lace robes. They were surrounded by men, women, and children, who sang a kind of lugubrious psalm, interrupted at regular intervals by the tambourines and cymbals; while behind them was drawn a car with large wheels, the spokes of which represented serpents entwined with each other. Upon the car, which was drawn by four richly caparisoned zebras, stood a hideous statue with four arms, the body coloured a dull red, with haggard eyes, dishevelled hair, protruding tongue, and lips tinted with betel. It stood upright upon the figure of a prostrate and headless giant.

Sir Francis, recognising the statue, whispered, "The goddess Kali; the goddess of love and death."

"Of death, perhaps," muttered back Passepartout, "but of love--that ugly old hag? Never!"

The Parsee made a motion to keep silence.

A group of old fakirs were capering and making a wild ado round the statue; these were striped with ochre, and covered with cuts whence their blood issued drop by drop--stupid fanatics, who, in the great Indian ceremonies, still throw themselves under the wheels of Juggernaut. Some Brahmins, clad in all the sumptuousness of Oriental apparel, and leading a woman who faltered at every step, followed. This woman was young, and as fair as a European. Her head and neck, shoulders, ears, arms, hands, and toes were loaded down with jewels and gems with bracelets, earrings, and rings; while a tunic bordered with gold, and covered with a light muslin robe, betrayed the outline of her form.

The guards who followed the young woman presented a violent contrast to her, armed as they were with naked sabres hung at their waists, and long damascened pistols, and bearing a corpse on a palanquin. It was the body of an old man, gorgeously arrayed in the habiliments of a rajah, wearing, as in life, a turban embroidered with pearls, a robe of tissue of silk and gold, a scarf of cashmere sewed with diamonds, and the magnificent weapons of a Hindoo prince. Next came the musicians and a rearguard of capering fakirs, whose cries sometimes drowned the noise of the instruments; these closed the procession.

Sir Francis watched the procession with a sad countenance, and, turning to the guide, said, "A suttee."

The Parsee nodded, and put his finger to his lips. The procession slowly wound under the trees, and soon its last ranks disappeared in the depths of the wood. The songs gradually died away; occasionally cries were heard in the distance, until at last all was silence again.

Phileas Fogg had heard what Sir Francis said, and, as soon as the procession had disappeared, asked: "What is a suttee?"

"A suttee," returned the general, "is a human sacrifice, but a voluntary one. The woman you have just seen will be burned to-morrow at the dawn of day."

"Oh, the scoundrels!" cried Passepartout, who could not repress his indignation.

"And the corpse?" asked Mr. Fogg.

"Is that of the prince, her husband," said the guide; "an independent rajah of Bundelcund."
"Is it possible," resumed Phileas Fogg, his voice betraying not the least emotion, "that these barbarous customs still exist in India, and that the English have been unable to put a stop to them?"

"These sacrifices do not occur in the larger portion of India," replied Sir Francis; "but we have no power over these savage territories, and especially here in Bundelcund. The whole district north of the Vindhias is the theatre of incessant murders and pillage."

"The poor wretch!" exclaimed Passepartout, "to be burned alive!"

"Yes," returned Sir Francis, "burned alive. And, if she were not, you cannot conceive what treatment she would be obliged to submit to from her relatives. They would shave off her hair, feed her on a scanty allowance of rice, treat her with contempt; she would be looked upon as an unclean creature, and would die in some corner, like a scurvy dog. The prospect of so frightful an existence drives these poor creatures to the sacrifice much more than love or religious fanaticism. Sometimes, however, the sacrifice is really voluntary, and it requires the active interference of the Government to prevent it. Several years ago, when I was living at Bombay, a young widow asked permission of the governor to be burned along with her husband's body; but, as you may imagine, he refused. The woman left the town, took refuge with an independent rajah, and there carried out her self-devoted purpose."

While Sir Francis was speaking, the guide shook his head several times, and now said: "The sacrifice which will take place to-morrow at dawn is not a voluntary one."

"How do you know?"

"Everybody knows about this affair in Bundelcund."

"But the wretched creature did not seem to be making any resistance," observed Sir Francis."

"That was because they had intoxicated her with fumes of hemp and opium."

"But where are they taking her?"

"To the pagoda of Pillaji, two miles from here; she will pass the night there."

"And the sacrifice will take place--""

"To-morrow, at the first light of dawn."

The guide now led the elephant out of the thicket, and leaped upon his neck. Just at the moment that he was about to urge Kiouni forward with a peculiar whistle, Mr. Fogg stopped him, and, turning to Sir Francis Cromarty, said, "Suppose we save this woman."

"Save the woman, Mr. Fogg!"

"I have yet twelve hours to spare; I can devote them to that."

"Why, you are a man of heart!"

"Sometimes," replied Phileas Fogg, quietly; "when I have the time."

Chapter XIII

IN WHICH PASSEPARTOUT RECEIVES A NEW PROOF THAT FORTUNE FAVORS THE BRAVE

The project was a bold one, full of difficulty, perhaps impracticable. Mr. Fogg was going to risk life, or at least liberty, and therefore the success of his tour. But he did not hesitate, and he found in Sir Francis Cromarty an enthusiastic ally.

As for Passepartout, he was ready for anything that might be proposed. His master's idea charmed him; he perceived a heart, a soul, under that icy exterior. He began to love Phileas Fogg.

There remained the guide: what course would he adopt? Would he not take part with the Indians? In default of his assistance, it was necessary to be assured of his neutrality.

Sir Francis frankly put the question to him."

"Officers," replied the guide, "I am a Parsee, and this woman is a Parsee. Command me as you will."

"Excellent!" said Mr. Fogg.

"However," resumed the guide, "it is certain, not only that we shall risk our lives, but horrible tortures, if we are taken."

"That is foreseen," replied Mr. Fogg. "I think we must wait till night before acting."

"I think so," said the guide.

The worthy Indian then gave some account of the victim, who, he said, was a celebrated beauty of the Parsee race, and the daughter of a wealthy Bombay merchant. She had received a thoroughly English education in that city, and, from her manners and intelligence, would be thought an European. Her name was Aouda. Left an orphan, she was married against her will to the old rajah of Bundelcund; and, knowing the fate that awaited her, she escaped, was retaken, and devoted by the rajah's relatives, who had an interest in her death, to the sacrifice from which it seemed she could not escape.

The Parsee's narrative only confirmed Mr. Fogg and his companions in their generous design. It was decided that
the guide should direct the elephant towards the pagoda of Pillaji, which he accordingly approached as quickly as possible. They halted, half an hour afterwards, in a copse, some five hundred feet from the pagoda, where they were well concealed; but they could hear the groans and cries of the fakirs distinctly.

They then discussed the means of getting at the victim. The guide was familiar with the pagoda of Pillaji, in which, as he declared, the young woman was imprisoned. Could they enter any of its doors while the whole party of Indians was plunged in a drunken sleep, or was it safer to attempt to make a hole in the walls? This could only be determined at the moment and the place themselves; but it was certain that the abduction must be made that night, and not when, at break of day, the victim was led to her funeral pyre. Then no human intervention could save her.

As soon as night fell, about six o'clock, they decided to make a reconnaissance around the pagoda. The cries of the fakirs were just ceasing; the Indians were in the act of plunging themselves into the drunkenness caused by liquid opium mingled with hemp, and it might be possible to slip between them to the temple itself.

The Parsee, leading the others, noiselessly crept through the wood, and in ten minutes they found themselves on the banks of a small stream, whence, by the light of the rosin torches, they perceived a pyre of wood, on the top of which lay the embalmed body of the rajah, which was to be burned with his wife. The pagoda, whose minarets loomed above the trees in the deepening dusk, stood a hundred steps away.

"Come!" whispered the guide.

He slipped more cautiously than ever through the brush, followed by his companions; the silence around was only broken by the low murmuring of the wind among the branches.

Soon the Parsee stopped on the borders of the glade, which was lit up by the torches. The ground was covered by groups of the Indians, motionless in their drunken sleep; it seemed a battlefield strewn with the dead. Men, women, and children lay together.

In the background, among the trees, the pagoda of Pillaji loomed distinctly. Much to the guide's disappointment, the guards of the rajah, lighted by torches, were watching at the doors and marching to and fro with naked sabres; probably the priests, too, were watching within.

The Parsee, now convinced that it was impossible to force an entrance to the temple, advanced no farther, but led his companions back again. Phileas Fogg and Sir Francis Cromarty also saw that nothing could be attempted in that direction. They stopped, and engaged in a whispered colloquy.

"It is only eight now," said the brigadier, "and these guards may also go to sleep."

"It is not impossible," returned the Parsee.

They lay down at the foot of a tree, and waited.

The time seemed long; the guide ever and anon left them to take an observation on the edge of the wood, but the guards watched steadily by the glare of the torches, and a dim light crept through the windows of the pagoda.

They waited till midnight; but no change took place among the guards, and it became apparent that their yielding to sleep could not be counted on. The other plan must be carried out; an opening in the walls of the pagoda must be made. It remained to ascertain whether the priests were watching by the side of their victim as assiduously as were the soldiers at the door.

After a last consultation, the guide announced that he was ready for the attempt, and advanced, followed by the others. They took a roundabout way, so as to get at the pagoda on the rear. They reached the walls about half-past twelve, without having met anyone; here there was no guard, nor were there either windows or doors.

The night was dark. The moon, on the wane, scarcely left the horizon, and was covered with heavy clouds; the height of the trees deepened the darkness.

It was not enough to reach the walls; an opening in them must be accomplished, and to attain this purpose the party only had their pocket-knives. Happily the temple walls were built of brick and wood, which could be penetrated with little difficulty; after one brick had been taken out, the rest would yield easily.

They set noiselessly to work, and the Parsee on one side and Passepartout on the other began to loosen the bricks so as to make an aperture two feet wide. They were getting on rapidly, when suddenly a cry was heard in the interior of the temple, followed almost instantly by other cries replying from the outside. Passepartout and the guide stopped. Had they been heard? Was the alarm being given? Common prudence urged them to retire, and they did so, followed by Phileas Fogg and Sir Francis. They again hid themselves in the wood, and waited till the disturbance, whatever it might be, ceased, holding themselves ready to resume their attempt without delay. But, awkwardly enough, the guards now appeared at the rear of the temple, and there installed themselves, in readiness to prevent a surprise.

It would be difficult to describe the disappointment of the party, thus interrupted in their work. They could not now reach the victim; how, then, could they save her? Sir Francis shook his fists, Passepartout was beside himself, and the guide gnashed his teeth with rage. The tranquil Fogg waited, without betraying any emotion.

"We have nothing to do but to go away," whispered Sir Francis.
"Nothing but to go away," echoed the guide.
"Stop," said Fogg. "I am only due at Allahabad tomorrow before noon."
"But what can you hope to do?" asked Sir Francis. "In a few hours it will be daylight, and--"
"The chance which now seems lost may present itself at the last moment."

Sir Francis would have liked to read Phileas Fogg's eyes. What was this cool Englishman thinking of? Was he planning to make a rush for the young woman at the very moment of the sacrifice, and boldly snatch her from her executioners?

This would be utter folly, and it was hard to admit that Fogg was such a fool. Sir Francis consented, however, to remain to the end of this terrible drama. The guide led them to the rear of the glade, where they were able to observe the sleeping groups.

Meanwhile Passepartout, who had perched himself on the lower branches of a tree, was resolving an idea which had at first struck him like a flash, and which was now firmly lodged in his brain.

He had commenced by saying to himself, "What folly!" and then he repeated, "Why not, after all? It's a chance perhaps the only one; and with such sots!" Thinking thus, he slipped, with the suppleness of a serpent, to the lowest branches, the ends of which bent almost to the ground.

The hours passed, and the lighter shades now announced the approach of day, though it was not yet light. This was the moment. The slumbering multitude became animated, the tambourines sounded, songs and cries arose; the hour of the sacrifice had come. The doors of the pagoda swing open, and a bright light escaped from its interior, in the midst of which Mr. Fogg and Sir Francis espied the victim. She seemed, having shaken off the stupor of intoxication, to be striving to escape from her executioner. Sir Francis's heart throbbed; and, convulsively seizing Mr. Fogg's hand, found in it an open knife. Just at this moment the crowd began to move. The young woman had again fallen into a stupor caused by the fumes of hemp, and passed among the fakirs, who escorted her with their wild, religious cries.

Phileas Fogg and his companions, mingling in the rear ranks of the crowd, followed; and in two minutes they reached the banks of the stream, and stopped fifty paces from the pyre, upon which still lay the rajah's corpse. In the semi-obscurity they saw the victim, quite senseless, stretched out beside her husband's body. Then a torch was brought, and the wood, heavily soaked with oil, instantly took fire.

At this moment Sir Francis and the guide seized Phileas Fogg, who, in an instant of mad generosity, was about to rush upon the pyre. But he had quickly pushed them aside, when the whole scene suddenly changed. A cry of terror arose. The whole multitude prostrated themselves, terror-stricken, on the ground.

The old rajah was not dead, then, since he rose of a sudden, like a spectre, took up his wife in his arms, and descended from the pyre in the midst of the clouds of smoke, which only heightened his ghostly appearance.

Fakirs and soldiers and priests, seized with instant terror, lay there, with their faces on the ground, not daring to lift their eyes and behold such a prodigy.

The inanimate victim was borne along by the vigorous arms which supported her, and which she did not seem in the least to burden. Mr. Fogg and Sir Francis stood erect, the Parsee bowed his head, and Passepartout was, no doubt, scarcely less stupefied.

The resuscitated rajah approached Sir Francis and Mr. Fogg, and, in an abrupt tone, said, "Let us be off!"

It was Passepartout himself, who had slipped upon the pyre in the midst of the smoke and, profiting by the still overhanging darkness, had delivered the young woman from death! It was Passepartout who, playing his part with a happy audacity, had passed through the crowd amid the general terror.

A moment after all four of the party had disappeared in the woods, and the elephant was bearing them away at a rapid pace. But the cries and noise, and a ball which whizzed through Phileas Fogg's hat, apprised them that the trick had been discovered.

The old rajah's body, indeed, now appeared upon the burning pyre; and the priests, recovered from their terror, perceived that an abduction had taken place. They hastened into the forest, followed by the soldiers, who fired a volley after the fugitives; but the latter rapidly increased the distance between them, and ere long found themselves beyond the reach of the bullets and arrows.

Chapter XIV
IN WHICH PHILEAS FOGG DESCENDS THE WHOLE LENGTH OF THE BEAUTIFUL VALLEY OF THE GANGES WITHOUT EVER THINKING OF SEEING IT

The rash exploit had been accomplished; and for an hour Passepartout laughed gaily at his success. Sir Francis pressed the worthy fellow's hand, and his master said, "Well done!" which, from him, was high commendation; to which Passepartout replied that all the credit of the affair belonged to Mr. Fogg. As for him, he had only been struck
with a “queer” idea; and he laughed to think that for a few moments he, Passepartout, the ex-gymnast, ex-sergeant fireman, had been the spouse of a charming woman, a venerable, embalmed raja! As for the young Indian woman, she had been unconscious throughout of what was passing, and now, wrapped up in a travelling-blanket, was reposing in one of the howdahs.

The elephant, thanks to the skilful guidance of the Parsee, was advancing rapidly through the still darksome forest, and, an hour after leaving the pagoda, had crossed a vast plain. They made a halt at seven o’clock, the young woman being still in a state of complete prostration. The guide made her drink a little brandy and water, but the drowsiness which stupefied her could not yet be shaken off. Sir Francis, who was familiar with the effects of the intoxication produced by the fumes of hemp, reassured his companions on her account. But he was more disturbed at the prospect of her future fate. He told Phileas Fogg that, should Aouda remain in India, she would inevitably fall again into the hands of her executioners. These fanatics were scattered throughout the county, and would, despite the English police, recover their victim at Madras, Bombay, or Calcutta. She would only be safe by quitting India for ever.

Phileas Fogg replied that he would reflect upon the matter.

The station at Allahabad was reached about ten o’clock, and, the interrupted line of railway being resumed, would enable them to reach Calcutta in less than twenty-four hours. Phileas Fogg would thus be able to arrive in time to take the steamer which left Calcutta the next day, October 25th, at noon, for Hong Kong.

The young woman was placed in one of the waiting-rooms of the station, whilst Passepartout was charged with purchasing for her various articles of toilet, a dress, shawl, and some furs; for which his master gave him unlimited credit. Passepartout started off forthwith, and found himself in the streets of Allahabad, that is, the City of God, one of the most venerated in India, being built at the junction of the two sacred rivers, Ganges and Jumna, the waters of which attract pilgrims from every part of the peninsula. The Ganges, according to the legends of the Ramayana, rises in heaven, whence, owing to Brahma’s agency, it descends to the earth.

Passepartout made it a point, as he made his purchases, to take a good look at the city. It was formerly defended by a noble fort, which has since become a state prison; its commerce has dwindled away, and Passepartout in vain looked about him for such a bazaar as he used to frequent in Regent Street. At last he came upon an elderly, crusty Jew, who sold second-hand articles, and from whom he purchased a dress of Scotch stuff, a large mantle, and a fine otter-skin pelisse, for which he did not hesitate to pay seventy-five pounds. He then returned triumphantly to the station.

The influence to which the priests of Pillaji had subjected Aouda began gradually to yield, and she became more herself, so that her fine eyes resumed all their soft Indian expression.

When the poet-king, Ucaf Uddaul, celebrates the charms of the queen of Ahmehnagara, he speaks thus:

“Her shining tresses, divided in two parts, encircle the harmonious contour of her white and delicate cheeks, brilliant in their glow and freshness. Her ebony brows have the form and charm of the bow of Kama, the god of love, and beneath her long silken lashes the pure reflections and a celestial light swim, as in the sacred lakes of Himalaya, in the black pupils of her great clear eyes. Her teeth, fine, equal, and white, glitter between her smiling lips like dewdrops in a passion-flower’s half-enveloped breast. Her delicately formed ears, her vermilion hands, her little feet, curved and tender as the lotus-bud, glitter with the brilliancy of the loveliest pearls of Ceylon, the most dazzling diamonds of Golconda. Her narrow and supple waist, which a hand may clasp around, sets forth the outline of her rounded figure and the beauty of her bosom, where youth in its flower displays the wealth of its treasures; and beneath the silken folds of her tunic she seems to have been modelled in pure silver by the godlike hand of Vicvarcarma, the immortal sculptor.”

It is enough to say, without applying this poetical rhapsody to Aouda, that she was a charming woman, in all the European acception of the phrase. She spoke English with great purity, and the guide had not exaggerated in saying that the young Parsee had been transformed by her bringing up.

The train was about to start from Allahabad, and Mr. Fogg proceeded to pay the guide the price agreed upon for his service, and not a farthing more; which astonished Passepartout, who remembered all that his master owed to the guide’s devotion. He had, indeed, risked his life in the adventure at Pillaji, and, if he should be caught afterwards by the Indians, he would with difficulty escape their vengeance. Kiouni, also, must be disposed of. What should be done with the elephant, which had been so dearly purchased? Phileas Fogg had already determined this question.

“Parsee,” said he to the guide, “you have been serviceable and devoted. I have paid for your service, but not for your devotion. Would you like to have this elephant? He is yours.”

The guide’s eyes glistened.

“Your honour is giving me a fortune!” cried he.

“Take him, guide,” returned Mr. Fogg, “and I shall still be your debtor.”

“Good!” exclaimed Passepartout. “Take him, friend. Kiouni is a brave and faithful beast.” And, going up to the
elephant, he gave him several lumps of sugar, saying, "Here, Kiouni, here, here."

The elephant grunted out his satisfaction, and, clasping Passepartout around the waist with his trunk, lifted him as high as his head. Passepartout, not in the least alarmed, caressed the animal, which replaced him gently on the ground.

Soon after, Phileas Fogg, Sir Francis Cromarty, and Passepartout, installed in a carriage with Aouda, who had the best seat, were whirling at full speed towards Benares. It was a run of eighty miles, and was accomplished in two hours. During the journey, the young woman fully recovered her senses. What was her astonishment to find herself in this carriage, on the railway, dressed in European habiliments, and with travellers who were quite strangers to her! Her companions first set about fully reviving her with a little liquor, and then Sir Francis narrated to her what had passed, dwelling upon the courage with which Phileas Fogg had not hesitated to risk his life to save her, and recounting the happy sequel of the venture, the result of Passepartout's rash idea. Mr. Fogg said nothing; while Passepartout, abashed, kept repeating that "it wasn't worth telling."

Aouda pathetically thanked her deliverers, rather with tears than words; her fine eyes interpreted her gratitude better than her lips. Then, as her thoughts strayed back to the scene of the sacrifice, and recalled the dangers which still menaced her, she shuddered with terror.

Phileas Fogg understood what was passing in Aouda's mind, and offered, in order to reassure her, to escort her to Hong Kong, where she might remain safely until the affair was hushed up—an offer which she eagerly and gratefully accepted. She had, it seems, a Parsee relation, who was one of the principal merchants of Hong Kong, which is wholly an English city, though on an island on the Chinese coast.

At half-past twelve the train stopped at Benares. The Brahmin legends assert that this city is built on the site of the ancient Casi, which, like Mahomet's tomb, was once suspended between heaven and earth; though the Benares of to-day, which the Orientalists call the Athens of India, stands quite unpoetically on the solid earth, Passepartout caught glimpses of its brick houses and clay huts, giving an aspect of desolation to the place, as the train entered it.

Benares was Sir Francis Cromarty's destination, the troops he was rejoining being encamped some miles northward of the city. He bade adieu to Phileas Fogg, wishing him all success, and expressing the hope that he would come that way again in a less original but more profitable fashion. Mr. Fogg lightly pressed him by the hand. The parting of Aouda, who did not forget what she owed to Sir Francis, betrayed more warmth; and, as for Passepartout, he received a hearty shake of the hand from the gallant general.

The railway, on leaving Benares, passed for a while along the valley of the Ganges. Through the windows of their carriage the travellers had glimpses of the diversified landscape of Behar, with its mountains clothed in verdure, its fields of barley, wheat, and corn, its jungles peopled with green alligators, its neat villages, and its still thickly-leaved forests. Elephants were bathing in the waters of the sacred river, and groups of Indians, despite the advanced season and chilly air, were performing solemnly their pious ablutions. These were fervent Brahmins, the bitterest foes of Buddhism, their deities being Vishnu, the solar god, Shiva, the divine impersonation of natural forces, and Brahma, the supreme ruler of priests and legislators. What would these divinities think of India, anglicised as it is to-day, with steamers whistling and scudding along the Ganges, frightening the gulls which float upon its surface, the turtles swimming along its banks, and the faithful dwelling upon its borders?

The panorama passed before their eyes like a flash, save when the steam concealed it fitfully from the view; the travellers could scarcely discern the fort of Chupenie, twenty miles south-westward from Benares, the ancient stronghold of the rajahs of Behar; or Ghazipur and its famous rose-water factories; or the tomb of Lord Cornwallis, rising on the left bank of the Ganges; the fortified town of Buxar, or Patna, a large manufacturing and trading-place, where is held the principal opium market of India; or Monghir, a more than European town, for it is as English as Manchester or Birmingham, with its iron foundries, edgetool factories, and high chimneys puffing clouds of black smoke heavenward.

Night came on; the train passed on at full speed, in the midst of the roaring of the tigers, bears, and wolves which fled before the locomotive; and the marvels of Bengal, Golconda ruined Gour, Murshedabad, the ancient capital, Burdwan, Hugly, and the French town of Chandernagor, where Passepartout would have been proud to see his country's flag flying, were hidden from their view in the darkness.

Calcutta was reached at seven in the morning, and the packet left for Hong Kong at noon; so that Phileas Fogg had five hours before him.

According to his journal, he was due at Calcutta on the 25th of October, and that was the exact date of his actual arrival. He was therefore neither behind-hand nor ahead of time. The two days gained between London and Bombay had been lost, as has been seen, in the journey across India. But it is not to be supposed that Phileas Fogg regretted them.
Chapter XV
IN WHICH THE BAG OF BANKNOTES DISGORGES SOME THOUSANDS OF POUNDS MORE

The train entered the station, and Passepartout jumping out first, was followed by Mr. Fogg, who assisted his fair companion to descend. Phileas Fogg intended to proceed at once to the Hong Kong steamer, in order to get Aouda comfortably settled for the voyage. He was unwilling to leave her while they were still on dangerous ground.

Just as he was leaving the station a policeman came up to him, and said, "Mr. Phileas Fogg?"
"I am he."
"Is this man your servant?" added the policeman, pointing to Passepartout.
"Yes."
"Be so good, both of you, as to follow me."

Mr. Fogg betrayed no surprise whatever. The policeman was a representative of the law, and law is sacred to an Englishman. Passepartout tried to reason about the matter, but the policeman tapped him with his stick, and Mr. Fogg made him a signal to obey.

"May this young lady go with us?" asked he.
"She may," replied the policeman.

Mr. Fogg, Aouda, and Passepartout were conducted to a palkigahri, a sort of four-wheeled carriage, drawn by two horses, in which they took their places and were driven away. No one spoke during the twenty minutes which elapsed before they reached their destination. They first passed through the "black town," with its narrow streets, its miserable, dirty huts, and squalid population; then through the "European town," which presented a relief in its bright brick mansions, shaded by coconut-trees and bristling with masts, where, although it was early morning, elegantly dressed horsemen and handsome equipages were passing back and forth.

The carriage stopped before a modest-looking house, which, however, did not have the appearance of a private mansion. The policeman having requested his prisoners for so, truly, they might be called-to descend, conducted them into a room with barred windows, and said: "You will appear before Judge Obadiah at half-past eight."

He then retired, and closed the door.

"Why, we are prisoners!" exclaimed Passepartout, falling into a chair.
Aouda, with an emotion she tried to conceal, said to Mr. Fogg: "Sir, you must leave me to my fate! It is on my account that you receive this treatment, it is for having saved me!"

Phileas Fogg contented himself with saying that it was impossible. It was quite unlikely that he should be arrested for preventing a suttee. The complainants would not dare present themselves with such a charge. There was some mistake. Moreover, he would not, in any event, abandon Aouda, but would escort her to Hong Kong.

"But the steamer leaves at noon!" observed Passepartout, nervously.
"We shall be on board by noon," replied his master, placidly.

It was said so positively that Passepartout could not help muttering to himself, "Parbleu that's certain! Before noon we shall be on board." But he was by no means reassured.

At half-past eight the door opened, the policeman appeared, and, requesting them to follow him, led the way to an adjoining hall. It was evidently a court-room, and a crowd of Europeans and natives already occupied the rear of the apartment.

Mr. Fogg and his two companions took their places on a bench opposite the desks of the magistrate and his clerk. Immediately after, Judge Obadiah, a fat, round man, followed by the clerk, entered. He proceeded to take down a wig which was hanging on a nail, and put it hurriedly on his head.

"The first case," said he. Then, putting his hand to his head, he exclaimed, "Heh! This is not my wig!"
"No, your worship," returned the clerk, "it is mine."
"My dear Mr. Oysterpuff, how can a judge give a wise sentence in a clerk's wig?"

The wigs were exchanged.

Passepartout was getting nervous, for the hands on the face of the big clock over the judge seemed to go around with terrible rapidity.

"The first case," repeated Judge Obadiah.
"Phileas Fogg?" demanded Oysterpuff.
"I am here," replied Mr. Fogg.
"Passepartout?"
"Present," responded Passepartout.
"Good," said the judge. "You have been looked for, prisoners, for two days on the trains from Bombay."
"But of what are we accused?" asked Passepartout, impatiently.
"You are about to be informed."
"I am an English subject, sir," said Mr. Fogg, "and I have the right--"
"Have you been ill-treated?"
"Not at all."
"Very well; let the complainants come in."
A door was swung open by order of the judge, and three Indian priests entered.
"That's it," muttered Passepartout; "these are the rogues who were going to burn our young lady."
The priests took their places in front of the judge, and the clerk proceeded to read in a loud voice a complaint of
sacrilege against Phileas Fogg and his servant, who were accused of having violated a place held consecrated by the
Brahmin religion.
"You hear the charge?" asked the judge.
"Yes, sir," replied Mr. Fogg, consulting his watch, "and I admit it."
"You admit it?"
"I admit it, and I wish to hear these priests admit, in their turn, what they were going to do at the pagoda of
Pillaji."
The priests looked at each other; they did not seem to understand what was said.
"Yes," cried Passepartout, warmly; "at the pagoda of Pillaji, where they were on the point of burning their
victim."
The judge stared with astonishment, and the priests were stupefied.
"What victim?" said Judge Obadiah. "Burn whom? In Bombay itself?"
"Bombay?" cried Passepartout.
"Certainly. We are not talking of the pagoda of Pillaji, but of the pagoda of Malabar Hill, at Bombay."
"And as a proof," added the clerk, "here are the desecrator's very shoes, which he left behind him."
Whereupon he placed a pair of shoes on his desk.
"My shoes!" cried Passepartout, in his surprise permitting this imprudent exclamation to escape him.
The confusion of master and man, who had quite forgotten the affair at Bombay, for which they were now
detained at Calcutta, may be imagined.
Fix the detective, had foreseen the advantage which Passepartout's escapade gave him, and, delaying his
departure for twelve hours, had consulted the priests of Malabar Hill. Knowing that the English authorities dealt
very severely with this kind of misdemeanour, he promised them a goodly sum in damages, and sent them forward
to Calcutta by the next train. Owing to the delay caused by the rescue of the young widow, Fix and the priests
reached the Indian capital before Mr. Fogg and his servant, the magistrates having been already warned by a
dispatch to arrest them should they arrive. Fix's disappointment when he learned that Phileas Fogg had not made his
appearance in Calcutta may be imagined. He made up his mind that the robber had stopped somewhere on the route
and taken refuge in the southern provinces. For twenty-four hours Fix watched the station with feverish anxiety; at
last he was rewarded by seeing Mr. Fogg and Passepartout arrive, accompanied by a young woman, whose presence
he was wholly at a loss to explain. He hastened for a policeman; and this was how the party came to be arrested and
brought before Judge Obadiah.
Had Passepartout been a little less preoccupied, he would have espied the detective ensconced in a corner of the
court-room, watching the proceedings with an interest easily understood; for the warrant had failed to reach him at
Calcutta, as it had done at Bombay and Suez.
Judge Obadiah had unfortunately caught Passepartout's rash exclamation, which the poor fellow would have
given the world to recall.
"The facts are admitted?" asked the judge.
"Admitted," replied Mr. Fogg, coldly.
"Inasmuch," resumed the judge, "as the English law protects equally and sternly the religions of the Indian
people, and as the man Passepartout has admitted that he violated the sacred pagoda of Malabar Hill, at Bombay, on
the 20th of October, I condemn the said Passepartout to imprisonment for fifteen days and a fine of three hundred
pounds."
"Three hundred pounds!" cried Passepartout, startled at the largeness of the sum.
"Silence!" shouted the constable.
"And inasmuch," continued the judge, "as it is not proved that the act was not done by the connivance of the
master with the servant, and as the master in any case must be held responsible for the acts of his paid servant, I
condemn Phileas Fogg to a week's imprisonment and a fine of one hundred and fifty pounds."
Fix rubbed his hands softly with satisfaction; if Phileas Fogg could be detained in Calcutta a week, it would be
more than time for the warrant to arrive. Passepartout was stupefied. This sentence ruined his master. A wager of
twenty thousand pounds lost, because he, like a precious fool, had gone into that abominable pagoda!
Phileas Fogg, as self-composed as if the judgment did not in the least concern him, did not even lift his eyebrows
while it was being pronounced. Just as the clerk was calling the next case, he rose, and said, "I offer bail."

"You have that right," returned the judge.

Fix's blood ran cold, but he resumed his composure when he heard the judge announce that the bail required for each prisoner would be one thousand pounds.

"I will pay it at once," said Mr. Fogg, taking a roll of bank-bills from the carpet-bag, which Passepartout had by him, and placing them on the clerk's desk.

"This sum will be restored to you upon your release from prison," said the judge. "Meanwhile, you are liberated on bail."

"Come!" said Phileas Fogg to his servant.

"But let them at least give me back my shoes!" cried Passepartout angrily.

"Ah, these are pretty dear shoes!" he muttered, as they were handed to him. "More than a thousand pounds apiece; besides, they pinch my feet."

Mr. Fogg, offering his arm to Aouda, then departed, followed by the crestfallen Passepartout. Fix still nourished hopes that the robber would not, after all, leave the two thousand pounds behind him, but would decide to serve out his week in jail, and issued forth on Mr. Fogg's traces. That gentleman took a carriage, and the party were soon landed on one of the quays.

The Rangoon was moored half a mile off in the harbour, its signal of departure hoisted at the mast-head. Eleven o'clock was striking; Mr. Fogg was an hour in advance of time. Fix saw them leave the carriage and push off in a boat for the steamer, and stamped his feet with disappointment.

"The rascal is off, after all!" he exclaimed. "Two thousand pounds sacrificed! He's as prodigal as a thief! I'll follow him to the end of the world if necessary; but, at the rate he is going on, the stolen money will soon be exhausted."

The detective was not far wrong in making this conjecture. Since leaving London, what with travelling expenses, bribes, the purchase of the elephant, bails, and fines, Mr. Fogg had already spent more than five thousand pounds on the way, and the percentage of the sum recovered from the bank robber promised to the detectives, was rapidly diminishing.

Chapter XVI
IN WHICH FIX DOES NOT SEEM TO UNDERSTAND IN THE LEAST WHAT IS SAID TO HIM

The Rangoon--one of the Peninsular and Oriental Company's boats plying in the Chinese and Japanese seas--was a screw steamer, built of iron, weighing about seventeen hundred and seventy tons, and with engines of four hundred horse-power. She was as fast, but not as well fitted up, as the Mongolia, and Aouda was not as comfortably provided for on board of her as Phileas Fogg could have wished. However, the trip from Calcutta to Hong Kong only comprised some three thousand five hundred miles, occupying from ten to twelve days, and the young woman was not difficult to please.

During the first days of the voyage Aouda became better acquainted with her protector, and constantly gave evidence of her deep gratitude for what he had done. The phlegmatic gentleman listened to her, apparently at least, with coldness, neither his voice nor his manner betraying the slightest emotion; but he seemed to be always on the watch that nothing should be wanting to Aouda's comfort. He visited her regularly each day at certain hours, not so much to talk himself, as to sit and hear her talk. He treated her with the strictest politeness, but with the precision of an automaton, the movements of which had been arranged for this purpose. Aouda did not quite know what to make of him, though Passepartout had given her some hints of his master's eccentricity, and made her smile by telling her of the wager which was sending him round the world. After all, she owed Phileas Fogg her life, and she always regarded him through the exalting medium of her gratitude.

Aouda confirmed the Parsee guide's narrative of her touching history. She did, indeed, belong to the highest of the native races of India. Many of the Parsee merchants have made great fortunes there by dealing in cotton; and one of them, Sir Jametsee Jeejeebhoy, was made a baronet by the English government. Aouda was a relative of this great man, and it was his cousin, Jeejeeh, whom she hoped to join at Hong Kong. Whether she would find a protector in him she could not tell; but Mr. Fogg essayed to calm her anxieties, and to assure her that everything would be mathematically--he used the very word--arranged. Aouda fastened her great eyes, "clear as the sacred lakes of the Himalaya," upon him; but the intractable Fogg, as reserved as ever, did not seem at all inclined to throw himself into this lake.

The first few days of the voyage passed prosperously, amid favourable weather and propitious winds, and they soon came in sight of the great Andaman, the principal of the islands in the Bay of Bengal, with its picturesque Saddle Peak, two thousand four hundred feet high, looming above the waters. The steamer passed along near the
shores, but the savage Papuans, who are in the lowest scale of humanity, but are not, as has been asserted, cannibals, did not make their appearance.

The panorama of the islands, as they steamed by them, was superb. Vast forests of palms, arecs, bamboo, teakwood, of the gigantic mimosa, and tree-like ferns covered the foreground, while behind, the graceful outlines of the mountains were traced against the sky; and along the coasts swarmed by thousands the precious swallows whose nests furnish a luxurious dish to the tables of the Celestial Empire. The varied landscape afforded by the Andaman Islands was soon passed, however, and the Rangoon rapidly approached the Straits of Malacca, which gave access to the China seas.

What was detective Fix, so unluckily drawn on from country to country, doing all this while? He had managed to embark on the Rangoon at Calcutta without being seen by Passepartout, after leaving orders that, if the warrant should arrive, it should be forwarded to him at Hong Kong; and he hoped to conceal his presence to the end of the voyage. It would have been difficult to explain why he was on board without awakening Passepartout's suspicions, who thought him still at Bombay. But necessity impelled him, nevertheless, to renew his acquaintance with the worthy servant, as will be seen.

All the detective's hopes and wishes were now centred on Hong Kong; for the steamer's stay at Singapore would be too brief to enable him to take any steps there. The arrest must be made at Hong Kong, or the robber would probably escape him for ever. Hong Kong was the last English ground on which he would set foot; beyond, China, Japan, America offered to Fogg an almost certain refuge. If the warrant should at last make its appearance at Hong Kong, Fix could arrest him and give him into the hands of the local police, and there would be no further trouble. But beyond Hong Kong, a simple warrant would be of no avail; an extradition warrant would be necessary, and that would result in delays and obstacles, of which the rascal would take advantage to elude justice.

Fix thought over these probabilities during the long hours which he spent in his cabin, and kept repeating to himself, "Now, either the warrant will be at Hong Kong, in which case I shall arrest my man, or it will not be there; and this time it is absolutely necessary that I should delay his departure. I have failed at Bombay, and I have failed at Calcutta; if I fail at Hong Kong, my reputation is lost: Cost what it may, I must succeed! But how shall I prevent his departure, if that should turn out to be my last resource?"

Fix made up his mind that, if worst came to worst, he would make a confidant of Passepartout, and tell him what kind of a fellow his master really was. That Passepartout was not Fogg's accomplice, he was very certain. The servant, enlightened by his disclosure, and afraid of being himself implicated in the crime, would doubtless become an ally of the detective. But this method was a dangerous one, only to be employed when everything else had failed. A word from Passepartout to his master would ruin all. The detective was therefore in a sore strait. But suddenly a new idea struck him. The presence of Aouda on the Rangoon, in company with Phileas Fogg, gave him new material for reflection.

Who was this woman? What combination of events had made her Fogg's travelling companion? They had evidently met somewhere between Bombay and Calcutta; but where? Had they met accidentally, or had Fogg gone into the interior purposely in quest of this charming damsel? Fix was fairly puzzled. He asked himself whether there had not been a wicked elopement; and this idea so impressed itself upon his mind that he determined to make use of the supposed intrigue. Whether the young woman were married or not, he would be able to create such difficulties for Mr. Fogg at Hong Kong that he could not escape by paying any amount of money.

But could he even wait till they reached Hong Kong? Fogg had an abominable way of jumping from one boat to another, and, before anything could be effected, might get full under way again for Yokohama.

Fix decided that he must warn the English authorities, and signal the Rangoon before her arrival. This was easy to do, since the steamer stopped at Singapore, whence there is a telegraphic wire to Hong Kong. He finally resolved, moreover, before acting more positively, to question Passepartout. It would not be difficult to make him talk; and, as there was no time to lose, Fix prepared to make himself known.

It was now the 30th of October, and on the following day the Rangoon was due at Singapore.

Fix emerged from his cabin and went on deck. Passepartout was promenading up and down in the forward part of the steamer. The detective rushed forward with every appearance of extreme surprise, and exclaimed, "You here, on the Rangoon?"

"What, Monsieur Fix, are you on board?" returned the really astonished Passepartout, recognising his crony of the Mongolia. "Why, I left you at Bombay, and here you are, on the way to Hong Kong! Are you going round the world too?"

"No, no," replied Fix; "I shall stop at Hong Kong--at least for some days."

"Hum!" said Passepartout, who seemed for an instant perplexed. "But how is it I have not seen you on board since we left Calcutta?"

"Oh, a trifle of sea-sickness--I've been staying in my berth. The Gulf of Bengal does not agree with me as well as
the Indian Ocean. And how is Mr. Fogg?"

"As well and as punctual as ever, not a day behind time! But, Monsieur Fix, you don't know that we have a young lady with us."

"A young lady?" replied the detective, not seeming to comprehend what was said.

Passepartout thereupon recounted Aouda's history, the affair at the Bombay pagoda, the purchase of the elephant for two thousand pounds, the rescue, the arrest, and sentence of the Calcutta court, and the restoration of Mr. Fogg and himself to liberty on bail. Fix, who was familiar with the last events, seemed to be equally ignorant of all that Passepartout related; and the later was charmed to find so interested a listener.

"But does your master propose to carry this young woman to Europe?"

"Not at all. We are simply going to place her under the protection of one of her relatives, a rich merchant at Hong Kong."

"Nothing to be done there," said Fix to himself, concealing his disappointment. "A glass of gin, Mr. Passepartout?"

"Willingly, Monsieur Fix. We must at least have a friendly glass on board the Rangoon."

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Chapter XVII

SHOWING WHAT HAPPENED ON THE VOYAGE FROM SINGAPORE TO HONG KONG

The detective and Passepartout met often on deck after this interview, though Fix was reserved, and did not attempt to induce his companion to divulge any more facts concerning Mr. Fogg. He caught a glimpse of that mysterious gentleman once or twice; but Mr. Fogg usually confined himself to the cabin, where he kept Aouda company, or, according to his inveterate habit, took a hand at whist.

Passepartout began very seriously to conjecture what strange chance kept Fix still on the route that his master was pursuing. It was really worth considering why this certainly very amiable and complacent person, whom he had first met at Suez, had then encountered on board the Mongolia, who disembarked at Bombay, which he announced as his destination, and now turned up so unexpectedly on the Rangoon, was following Mr. Fogg's tracks step by step. What was Fix's object? Passepartout was ready to wager his Indian shoes—which he religiously preserved—that Fix would also leave Hong Kong at the same time with them, and probably on the same steamer.

Passepartout might have cudgelled his brain for a century without hitting upon the real object which the detective had in view. He never could have imagined that Phileas Fogg was being tracked as a robber around the globe. But, as it is in human nature to attempt the solution of every mystery, Passepartout suddenly discovered an explanation of Fix's movements, which was in truth far from unreasonable. Fix, he thought, could only be an agent of Mr. Fogg's friends at the Reform Club, sent to follow him up, and to ascertain that he really went round the world as had been agreed upon.

"It's clear!" repeated the worthy servant to himself, proud of his shrewdness. "He's a spy sent to keep us in view! That isn't quite the thing, either, to be spying Mr. Fogg, who is so honourable a man! Ah, gentlemen of the Reform, this shall cost you dear!"

Passepartout, enchanted with his discovery, resolved to say nothing to his master, lest he should be justly offended at this mistrust on the part of his adversaries. But he determined to chaff Fix, when he had the chance, with mysterious allusions, which, however, need not betray his real suspicions.

During the afternoon of Wednesday, 30th October, the Rangoon entered the Strait of Malacca, which separates the peninsula of that name from Sumatra. The mountainous and craggy islets intercepted the beauties of this noble island from the view of the travellers. The Rangoon weighed anchor at Singapore the next day at four a.m., to receive coal, having gained half a day on the prescribed time of her arrival. Phileas Fogg noted this gain in his journal, and then, accompanied by Aouda, who betrayed a desire for a walk on shore, disembarked.

Fix, who suspected Mr. Fogg's every movement, followed them cautiously, without being himself perceived; while Passepartout, laughing in his sleeve at Fix's manoeuvres, went about his usual errands.

The island of Singapore is not imposing in aspect, for there are no mountains; yet its appearance is not without attractions. It is a park checkered by pleasant highways and avenues. A handsome carriage, drawn by a sleek pair of New Holland horses, carried Phileas Fogg and Aouda into the midst of rows of palms with brilliant foliage, and of clove-trees, whereof the cloves form the heart of a half-open flower. Pepper plants replaced the prickly hedges of European fields; sago-bushes, large ferns with gorgeous branches, varied the aspect of this tropical clime; while nutmeg-trees in full foliage filled the air with a penetrating perfume. Agile and grinning bands of monkeys skipped about in the trees, nor were tigers wanting in the jungles.

After a drive of two hours through the country, Aouda and Mr. Fogg returned to the town, which is a vast collection of heavy-looking, irregular houses, surrounded by charming gardens rich in tropical fruits and plants; and
at ten o’clock they re-embarked, closely followed by the detective, who had kept them constantly in sight.

Passepartout, who had been purchasing several dozen mangoes—a fruit as large as good-sized apples, of a dark-brown colour outside and a bright red within, and whose white pulp, melting in the mouth, affords gourmands a delicious sensation—was waiting for them on deck. He was only too glad to offer some mangoes to Aouda, who thanked him very gracefully for them.

At eleven o’clock the Rangoon rode out of Singapore harbour, and in a few hours the high mountains of Malacca, with their forests, inhabited by the most beautifully-furred tigers in the world, were lost to view. Singapore is distant some thirteen hundred miles from the island of Hong Kong, which is a little English colony near the Chinese coast. Phileas Fogg hoped to accomplish the journey in six days, so as to be in time for the steamer which would leave on the 6th of November for Yokohama, the principal Japanese port.

The Rangoon had a large quota of passengers, many of whom disembarked at Singapore, among them a number of Indians, Ceylonese, Chinsens, Malays, and Portuguese, mostly second-class travellers.

The weather, which had hitherto been fine, changed with the last quarter of the moon. The sea rolled heavily, and the wind at intervals rose almost to a storm, but happily blew from the south-west, and thus aided the steamer’s progress. The captain as often as possible put up his sails, and under the double action of steam and sail the vessel made rapid progress along the coasts of Anam and Cochin China. Owing to the defective construction of the Rangoon, however, unusual precautions became necessary in unfavourable weather; but the loss of time which resulted from this cause, while it nearly drove Passepartout out of his senses, did not seem to affect his master in the least. Passepartout blamed the captain, the engineer, and the crew, and consigned all who were connected with the ship to the land where the pepper grows. Perhaps the thought of the gas, which was remorselessly burning at his expense in Saville Row, had something to do with his hot impatience.

“You are in a great hurry, then,” said Fix to him one day, “to reach Hong Kong?”

“A very great hurry!”

“Mr. Fogg, I suppose, is anxious to catch the steamer for Yokohama?”

“Terribly anxious.”

“You believe in this journey around the world, then?”

“Absolutely. Don’t you, Mr. Fix?”

“? I don’t believe a word of it.”

“You’re a sly dog!” said Passepartout, winking at him.

This expression rather disturbed Fix, without his knowing why. Had the Frenchman guessed his real purpose? He knew not what to think. But how could Passepartout have discovered that he was a detective? Yet, in speaking as he did, the man evidently meant more than he expressed.

Passepartout went still further the next day; he could not hold his tongue.

“Mr. Fix,” said he, in a bantering tone, “shall we be so unfortunate as to lose you when we get to Hong Kong?”

“Why,” responded Fix, a little embarrassed, “I don’t know; perhaps—”

“Ah, if you would only go on with us! An agent of the Peninsular Company, you know, can’t stop on the way! You were only going to Bombay, and here you are in China. America is not far off, and from America to Europe is only a step.”

Fix looked intently at his companion, whose countenance was as serene as possible, and laughed with him. But Passepartout persisted in chaffing him by asking him if he made much by his present occupation.

“Yes, and no,” returned Fix; “there is good and bad luck in such things. But you must understand that I don’t travel at my own expense.”

“Oh, I am quite sure of that!” cried Passepartout, laughing heartily.

Fix, fairly puzzled, descended to his cabin and gave himself up to his reflections. He was evidently suspected; somehow or other the Frenchman had found out that he was a detective. But had he told his master? What part was he playing in all this: was he an accomplice or not? Was the game, then, up? Fix spent several hours turning these things over in his mind, sometimes thinking that all was lost, then persuading himself that Fogg was ignorant of his presence, and then undecided what course it was best to take.

Nevertheless, he preserved his coolness of mind, and at last resolved to deal plainly with Passepartout. If he did not find it practicable to arrest Fogg at Hong Kong, and if Fogg made preparations to leave that last foothold of English territory, he, Fix, would tell Passepartout all. Either the servant was the accomplice of his master, and in this case the master knew of his operations, and he should fail; or else the servant knew nothing about the robbery, and then his interest would be to abandon the robber.

Such was the situation between Fix and Passepartout. Meanwhile Phileas Fogg moved about above them in the most majestic and unconscious indifference. He was passing methodically in his orbit around the world, regardless of the lesser stars which gravitated around him. Yet there was near by what the astronomers would call a disturbing
star, which might have produced an agitation in this gentleman's heart. But no! the charms of Aouda failed to act, to Passepartout's great surprise; and the disturbances, if they existed, would have been more difficult to calculate than those of Uranus which led to the discovery of Neptune.

It was every day an increasing wonder to Passepartout, who read in Aouda's eyes the depths of her gratitude to his master. Phileas Fogg, though brave and gallant, must be, he thought, quite heartless. As to the sentiment which this journey might have awakened in him, there was clearly no trace of such a thing; while poor Passepartout existed in perpetual reveries.

One day he was leaning on the railing of the engine-room, and was observing the engine, when a sudden pitch of the steamer threw the screw out of the water. The steam came hissing out of the valves; and this made Passepartout indignant.

"The valves are not sufficiently charged!" he exclaimed. "We are not going. Oh, these English! If this was an American craft, we should blow up, perhaps, but we should at all events go faster!"

Chapter XVIII

IN WHICH PHILEAS FOGG, PASSEPARTOUT, AND FIX GO EACH ABOUT HIS BUSINESS

The weather was bad during the latter days of the voyage. The wind, obstinately remaining in the north-west, blew a gale, and retarded the steamer. The Rangoon rolled heavily and the passengers became impatient of the long, monstrous waves which the wind raised before their path. A sort of tempest arose on the 3rd of November, the squall knocking the vessel about with fury, and the waves running high. The Rangoon reefed all her sails, and even the rigging proved too much, whistling and shaking amid the squall. The steamer was forced to proceed slowly, and the captain estimated that she would reach Hong Kong twenty hours behind time, and more if the storm lasted.

Phileas Fogg gazed at the tempestuous sea, which seemed to be struggling especially to delay him, with his habitual tranquillity. He never changed countenance for an instant, though a delay of twenty hours, by making him too late for the Yokohama boat, would almost inevitably cause the loss of the wager. But this man of nerve manifested neither impatience nor annoyance; it seemed as if the storm were a part of his programme, and had been foreseen. Aouda was amazed to find him as calm as he had been from the first time she saw him.

Fix did not look at the state of things in the same light. The storm greatly pleased him. His satisfaction would have been complete had the Rangoon been forced to retreat before the violence of wind and waves. Each delay filled him with hope, for it became more and more probable that Fogg would be obliged to remain some days at Hong Kong; and now the heavens themselves became his allies, with the gusts and squalls. It mattered not that they made him sea-sick--he made no account of this inconvenience; and, whilst his body was writhing under their effects, his spirit bounded with hopeful exultation.

Passepartout was enraged beyond expression by the unpropitious weather. Everything had gone so well till now! Earth and sea had seemed to be at his master's service; steamers and railways obeyed him; wind and steam united to speed his journey. Had the hour of adversity come? Passepartout was as much excited as if the twenty thousand pounds were to come from his own pocket. The storm exasperated him, the gale made him furious, and he longed to lash the obstinate sea into obedience. Poor fellow! Fix carefully concealed from him his own satisfaction, for, had he betrayed it, Passepartout could scarcely have restrained himself from personal violence.

Passepartout remained on deck as long as the tempest lasted, being unable to remain quiet below, and taking it into his head to aid the progress of the ship by lending a hand with the crew. He overwhelmed the captain, officers, and sailors, who could not help laughing at his impatience, with all sorts of questions. He wanted to know exactly how long the storm was going to last; whereupon he was referred to the barometer, which seemed to have no intention of rising. Passepartout shook it, but with no perceptible effect; for neither shaking nor maledictions could prevail upon it to change its mind.

On the 4th, however, the sea became more calm, and the storm lessen its violence; the wind veered southward, and was once more favourable. Passepartout cleared up with the weather. Some of the sails were unfurled, and the Rangoon resumed its most rapid speed. The time lost could not, however, be regained. Land was not signalled until five o'clock on the morning of the 6th; the steamer was due on the 5th. Phileas Fogg was twenty-four hours behind-hand, and the Yokohama steamer would, of course, be missed.

The pilot went on board at six, and took his place on the bridge, to guide the Rangoon through the channels to the port of Hong Kong. Passepartout longed to ask him if the steamer had left for Yokohama; but he dared not, for he wished to preserve the spark of hope, which still remained till the last moment. He had confided his anxiety to Fix who--the sly rascal!--tried to console him by saying that Mr. Fogg would be in time if he took the next boat; but this only put Passepartout in a passion.

Mr. Fogg, bolder than his servant, did not hesitate to approach the pilot, and tranquilly ask him if he knew when
a steamer would leave Hong Kong for Yokohama.
"At high tide to-morrow morning," answered the pilot.
"Ah!" said Mr. Fogg, without betraying any astonishment.
Passepartout, who heard what passed, would willingly have embraced the pilot, while Fix would have been glad to twist his neck.
"What is the steamer's name?" asked Mr. Fogg.
"The Carnatic."
"Ought she not to have gone yesterday?"
"Yes, sir; but they had to repair one of her boilers, and so her departure was postponed till to-morrow."
"Thank you," returned Mr. Fogg, descending mathematically to the saloon.
Passepartout clasped the pilot's hand and shook it heartily in his delight, exclaiming, "Pilot, you are the best of good fellows!"
The pilot probably does not know to this day why his responses won him this enthusiastic greeting. He remounted the bridge, and guided the steamer through the flotilla of junks, tankas, and fishing boats which crowd the harbour of Hong Kong.
At one o'clock the Rangoon was at the quay, and the passengers were going ashore.
Chance had strangely favoured Phileas Fogg, for had not the Carnatic been forced to lie over for repairing her boilers, she would have left on the 6th of November, and the passengers for Japan would have been obliged to await for a week the sailing of the next steamer. Mr. Fogg was, it is true, twenty-four hours behind his time; but this could not seriously imperil the remainder of his tour.
The steamer which crossed the Pacific from Yokohama to San Francisco made a direct connection with that from Hong Kong, and it could not sail until the latter reached Yokohama; and if Mr. Fogg was twenty-four hours late on reaching Yokohama, this time would no doubt be easily regained in the voyage of twenty-two days across the Pacific. He found himself, then, about twenty-four hours behind-hand, thirty-five days after leaving London.
The Carnatic was announced to leave Hong Kong at five the next morning. Mr. Fogg had sixteen hours in which to attend to his business there, which was to deposit Aouda safely with her wealthy relative.
On landing, he conducted her to a palanquin, in which they repaired to the Club Hotel. A room was engaged for the young woman, and Mr. Fogg, after seeing that she wanted for nothing, set out in search of her cousin Jeejeeh. He instructed Passepartout to remain at the hotel until his return, that Aouda might not be left entirely alone.
Mr. Fogg repaired to the Exchange, where, he did not doubt, every one would know so wealthy and considerable a personage as the Parsee merchant. Meeting a broker, he made the inquiry, to learn that Jeejeeh had left China two years before, and, retiring from business with an immense fortune, had taken up his residence in Europe—in Holland the broker thought, with the merchants of which country he had principally traded. Phileas Fogg returned to the hotel, begged a moment's conversation with Aouda, and without more ado, apprised her that Jeejeeh was no longer at Hong Kong, but probably in Holland.
Aouda at first said nothing. She passed her hand across her forehead, and reflected a few moments. Then, in her sweet, soft voice, she said: "What ought I to do, Mr. Fogg?"
"It is very simple," responded the gentleman. "Go on to Europe."
"But I cannot intrude—"
"You do not intrude, nor do you in the least embarrass my project. Passepartout!"
"Monsieur."
"Go to the Carnatic, and engage three cabins."
Passepartout, delighted that the young woman, who was very gracious to him, was going to continue the journey with them, went off at a brisk gait to obey his master's order.

Chapter XIX
IN WHICH PASSEPARTOUT TAKES A TOO GREAT INTEREST IN HIS MASTER, AND WHAT COMES OF IT
Hong Kong is an island which came into the possession of the English by the Treaty of Nankin, after the war of 1842; and the colonising genius of the English has created upon it an important city and an excellent port. The island is situated at the mouth of the Canton River, and is separated by about sixty miles from the Portuguese town of Macao, on the opposite coast. Hong Kong has beaten Macao in the struggle for the Chinese trade, and now the greater part of the transportation of Chinese goods finds its depot at the former place. Docks, hospitals, wharves, a Gothic cathedral, a government house, macadamised streets, give to Hong Kong the appearance of a town in Kent or Surrey transferred by some strange magic to the antipodes.
Passepartout wandered, with his hands in his pockets, towards the Victoria port, gazing as he went at the curious palanquins and other modes of conveyance, and the groups of Chinese, Japanese, and Europeans who passed to and fro in the streets. Hong Kong seemed to him not unlike Bombay, Calcutta, and Singapore, since, like them, it betrayed everywhere the evidence of English supremacy. At the Victoria port he found a confused mass of ships of all nations: English, French, American, and Dutch, men-of-war and trading vessels, Japanese and Chinese junks, sempas, tankas, and flower-boats, which formed so many floating parterres. Passepartout noticed in the crowd a number of the natives who seemed very old and were dressed in yellow. On going into a barber's to get shaved he learned that these ancient men were all at least eighty years old, at which age they are permitted to wear yellow, which is the Imperial colour. Passepartout, without exactly knowing why, thought this very funny.

On reaching the quay where they were to embark on the Carnatic, he was not astonished to find Fix walking up and down. The detective seemed very much disturbed and disappointed.

"This is bad," muttered Passepartout, "for the gentlemen of the Reform Club!" He accosted Fix with a merry smile, as if he had not perceived that gentleman's chagrin. The detective had, indeed, good reasons to inveigh against the bad luck which pursued him. The warrant had not come! It was certainly on the way, but as certainly it could not now reach Hong Kong for several days; and, this being the last English territory on Mr. Fogg's route, the robber would escape, unless he could manage to detain him.

"Well, Monsieur Fix," said Passepartout, "have you decided to go with us so far as America?"

"Yes," returned Fix, through his set teeth.

"Good!" exclaimed Passepartout, laughing heartily. "I knew you could not persuade yourself to separate from us. Come and engage your berth."

They entered the steamer office and secured cabins for four persons. The clerk, as he gave them the tickets, informed them that, the repairs on the Carnatic having been completed, the steamer would leave that very evening, and not next morning, as had been announced.

"That will suit my master all the better," said Passepartout. "I will go and let him know."

Fix now decided to make a bold move; he resolved to tell Passepartout all. It seemed to be the only possible means of keeping Phileas Fogg several days longer at Hong Kong. He accordingly invited his companion into a tavern which caught his eye on the quay. On entering, they found themselves in a large room handsomely decorated, at the end of which was a large camp-bed furnished with cushions. Several persons lay upon this bed in a deep sleep. At the small tables which were arranged about the room some thirty customers were drinking English beer, porter, gin, and brandy; smoking, the while, long red clay pipes stuffed with little balls of opium mingled with essence of rose. From time to time one of the smokers, overcome with the narcotic, would slip under the table, whereupon the waiters, taking him by the head and feet, carried and laid him upon the bed. The bed already supported twenty of these stupefied sots.

Fix and Passepartout saw that they were in a smoking-house haunted by those wretched, cadaverous, idiotic creatures to whom the English merchants sell every year the miserable drug called opium, to the amount of one million four hundred thousand pounds--thousands devoted to one of the most despicable vices which afflict humanity! The Chinese government has in vain attempted to deal with the evil by stringent laws. It passed gradually from the rich, to whom it was at first exclusively reserved, to the lower classes, and then its ravages could not be arrested. Opium is smoked everywhere, at all times, by men and women, in the Celestial Empire; and, once accustomed to it, the victims cannot dispense with it, except by suffering horrible bodily contortions and agonies. A great smoker can smoke as many as eight pipes a day; but he dies in five years. It was in one of these dens that Fix and Passepartout, in search of a friendly glass, found themselves. Passepartout had no money, but willingly accepted Fix's invitation in the hope of returning the obligation at some future time.

They ordered two bottles of port, to which the Frenchman did ample justice, whilst Fix observed him with close attention. They chatted about the journey, and Passepartout was especially merry at the idea that Fix was going to continue it with them. When the bottles were empty, however, he rose to go and tell his master of the change in the time of the sailing of the Carnatic.

Fix caught him by the arm, and said, "Wait a moment."

"What for, Mr. Fix?"

"I want to have a serious talk with you."

"A serious talk!" cried Passepartout, drinking up the little wine that was left in the bottom of his glass. "Well, we'll talk about it to-morrow; I haven't time now."

"Stay! What I have to say concerns your master."

Passepartout, at this, looked attentively at his companion. Fix's face seemed to have a singular expression. He resumed his seat.

"What is it that you have to say?"
Fix placed his hand upon Passepartout's arm, and, lowering his voice, said, "You have guessed who I am?"
"Parbleu!" said Passepartout, smiling.
"Then I'm going to tell you everything--"
"Now that I know everything, my friend! Ah! that's very good. But go on, go on. First, though, let me tell you that those gentlemen have put themselves to a useless expense."
"Useless!" said Fix. "You speak confidently. It's clear that you don't know how large the sum is."
"Of course I do," returned Passepartout. "Twenty thousand pounds."
"Fifty-five thousand!" answered Fix, pressing his companion's hand.
"What!" cried the Frenchman. "Has Monsieur Fogg dared--fifty-five thousand pounds! Well, there's all the more reason for not losing an instant," he continued, getting up hastily.

Fix pushed Passepartout back in his chair, and resumed: "Fifty-five thousand pounds; and if I succeed, I get two thousand pounds. If you'll help me, I'll let you have five hundred of them."
"Help you?" cried Passepartout, whose eyes were standing wide open.
"Yes; help me keep Mr. Fogg here for two or three days."
"Why, what are you saying? Those gentlemen are not satisfied with following my master and suspecting his honour, but they must try to put obstacles in his way! I blush for them!"
"What do you mean?"
"I mean that it is a piece of shameful trickery. They might as well waylay Mr. Fogg and put his money in their pockets!"
"That's just what we count on doing."
"It's a conspiracy, then," cried Passepartout, who became more and more excited as the liquor mounted in his head, for he drank without perceiving it. "A real conspiracy! And gentlemen, too. Bah!"

Fix began to be puzzled.
"Members of the Reform Club!" continued Passepartout. "You must know, Monsieur Fix, that my master is an honest man, and that, when he makes a wager, he tries to win it fairly!"
"But who do you think I am?" asked Fix, looking at him intently.
"Parbleu! An agent of the members of the Reform Club, sent out here to interrupt my master's journey. But, though I found you out some time ago, I've taken good care to say nothing about it to Mr. Fogg."
"He knows nothing, then?"
"Nothing," replied Passepartout, again emptying his glass.

The detective passed his hand across his forehead, hesitating before he spoke again. What should he do? Passepartout's mistake seemed sincere, but it made his design more difficult. It was evident that the servant was not the master's accomplice, as Fix had been inclined to suspect.
"Well," said the detective to himself, "as he is not an accomplice, he will help me."

He had no time to lose: Fogg must be kept at Hong Kong, so he resolved to make a clean breast of it.
"Listen to me," said Fix abruptly. "I am not, as you think, an agent of the members of the Reform Club--"
"Bah!" retorted Passepartout, with an air of rillery.
"I am a police detective, sent out here by the London office."
"You, a detective?"
"I will prove it. Here is my commission."

Passepartout was speechless with astonishment when Fix displayed this document, the genuineness of which could not be doubted.
"Mr. Fogg's wager," resumed Fix, "is only a pretext, of which you and the gentlemen of the Reform are dupes. He had a motive for securing your innocent complicity."
"But why?"

"Listen. On the 28th of last September a robbery of fifty-five thousand pounds was committed at the Bank of England by a person whose description was fortunately secured. Here is his description; it answers exactly to that of Mr. Phileas Fogg."
"What nonsense!" cried Passepartout, striking the table with his fist. "My master is the most honourable of men!"
"How can you tell? You know scarcely anything about him. You went into his service the day he came away; and he came away on a foolish pretext, without trunks, and carrying a large amount in banknotes. And yet you are bold enough to assert that he is an honest man!"
"Yes, yes," repeated the poor fellow, mechanically.
"Would you like to be arrested as his accomplice?"

Passepartout, overcome by what he had heard, held his head between his hands, and did not dare to look at the detective. Phileas Fogg, the saviour of Aouda, that brave and generous man, a robber! And yet how many
presumptions there were against him! Passepartout essayed to reject the suspicions which forced themselves upon his mind; he did not wish to believe that his master was guilty.

"Well, what do you want of me?" said he, at last, with an effort.

"See here," replied Fix; "I have tracked Mr. Fogg to this place, but as yet I have failed to receive the warrant of arrest for which I sent to London. You must help me to keep him here in Hong Kong--"

"I! But I--"

"I will share with you the two thousand pounds reward offered by the Bank of England."

"Never!" replied Passepartout, who tried to rise, but fell back, exhausted in mind and body.

"Mr. Fix," he stammered, "even should what you say be true--if my master is really the robber you are seeking for--which I deny--I have been, am, in his service; I have seen his generosity and goodness; and I will never betray him--not for all the gold in the world. I come from a village where they don't eat that kind of bread!"

"You refuse?"

"I refuse."

"Consider that I've said nothing," said Fix; "and let us drink."

"Yes; let us drink!"

Passepartout felt himself yielding more and more to the effects of the liquor. Fix, seeing that he must, at all hazards, be separated from his master, wished to entirely overcome him. Some pipes full of opium lay upon the table. Fix slipped one into Passepartout's hand. He took it, put it between his lips, lit it, drew several puffs, and his head, becoming heavy under the influence of the narcotic, fell upon the table.

"At last!" said Fix, seeing Passepartout unconscious. "Mr. Fogg will not be informed of the Carnatic's departure; and, if he is, he will have to go without this cursed Frenchman!"

And, after paying his bill, Fix left the tavern.

Chapter XX
IN WHICH FIX COMES FACE TO FACE WITH PHILEAS FOGG

While these events were passing at the opium-house, Mr. Fogg, unconscious of the danger he was in of losing the steamer, was quietly escorting Aouda about the streets of the English quarter, making the necessary purchases for the long voyage before them. It was all very well for an Englishman like Mr. Fogg to make the tour of the world with a carpet-bag; a lady could not be expected to travel comfortably under such conditions. He acquitted his task with characteristic serenity, and invariably replied to the remonstrances of his fair companion, who was confused by his patience and generosity:

"It is in the interest of my journey--a part of my programme."

The purchases made, they returned to the hotel, where they dined at a sumptuously served table-d'hôte; after which Aouda, shaking hands with her protector after the English fashion, retired to her room for rest. Mr. Fogg absorbed himself throughout the evening in the perusal of The Times and Illustrated London News.

Had he been capable of being astonished at anything, it would have been not to see his servant return at bedtime. But, knowing that the steamer was not to leave for Yokohama until the next morning, he did not disturb himself about the matter. When Passepartout did not appear the next morning to answer his master's bell, Mr. Fogg, not betraying the least vexation, contented himself with taking his carpet-bag, calling Aouda, and sending for a palanquin.

It was then eight o'clock; at half-past nine, it being then high tide, the Carnatic would leave the harbour. Mr. Fogg and Aouda got into the palanquin, their luggage being brought after on a wheelbarrow, and half an hour later stepped upon the quay whence they were to embark. Mr. Fogg then learned that the Carnatic had sailed the evening before. He had expected to find not only the steamer, but his domestic, and was forced to give up both; but no sign of disappointment appeared on his face, and he merely remarked to Aouda, "It is an accident, madam; nothing more."

At this moment a man who had been observing him attentively approached. It was Fix, who, bowing, addressed Mr. Fogg: "Were you not, like me, sir, a passenger by the Rangoon, which arrived yesterday?"

"I was, sir," replied Mr. Fogg coldly. "But I have not the honour--"

"Pardon me; I thought I should find your servant here."

"Do you know where he is, sir?" asked Aouda anxiously.

"What!" responded Fix, feigning surprise. "Is he not with you?"

"No," said Aouda. "He has not made his appearance since yesterday. Could he have gone on board the Carnatic without us?"

"Without you, madam?" answered the detective. "Excuse me, did you intend to sail in the Carnatic?"
"Yes, sir."

"So did I, madam, and I am excessively disappointed. The Carnatic, its repairs being completed, left Hong Kong twelve hours before the stated time, without any notice being given; and we must now wait a week for another steamer."

As he said "a week" Fix felt his heart leap for joy. Fogg detained at Hong Kong for a week! There would be time for the warrant to arrive, and fortune at last favoured the representative of the law. His horror may be imagined when he heard Mr. Fogg say, in his placid voice, "But there are other vessels besides the Carnatic, it seems to me, in the harbour of Hong Kong."

And, offering his arm to Aouda, he directed his steps toward the docks in search of some craft about to start. Fix, stupefied, followed; it seemed as if he were attached to Mr. Fogg by an invisible thread. Chance, however, appeared really to have abandoned the man it had hitherto served so well. For three hours Phileas Fogg wandered about the docks, with the determination, if necessary, to charter a vessel to carry him to Yokohama; but he could only find vessels which were loading or unloading, and which could not therefore set sail. Fix began to hope again.

But Mr. Fogg, far from being discouraged, was continuing his search, resolved not to stop if he had to resort to Macao, when he was accosted by a sailor on one of the wharves.

"Is your honour looking for a boat?"

"Have you a boat ready to sail?"

"Yes, your honour; a pilot-boat--No. 43--the best in the harbour."

"Does she go fast?"

"Between eight and nine knots the hour. Will you look at her?"

"Yes."

"Your honour will be satisfied with her. Is it for a sea excursion?"

"No; for a voyage."

"A voyage?"

"Yes, will you agree to take me to Yokohama?"

The sailor leaned on the railing, opened his eyes wide, and said, "Is your honour joking?"

"No. I have missed the Carnatic, and I must get to Yokohama by the 14th at the latest, to take the boat for San Francisco."

"I am sorry," said the sailor; "but it is impossible."

"I offer you a hundred pounds per day, and an additional reward of two hundred pounds if I reach Yokohama in time."

"Are you in earnest?"

"Very much so."

The pilot walked away a little distance, and gazed out to sea, evidently struggling between the anxiety to gain a large sum and the fear of venturing so far. Fix was in mortal suspense.

Mr. Fogg turned to Aouda and asked her, "You would not be afraid, would you, madam?"

"Not with you, Mr. Fogg," was her answer.

The pilot now returned, shuffling his hat in his hands.

"Well, pilot?" said Mr. Fogg.

"Well, your honour," replied he, "I could not risk myself, my men, or my little boat of scarcely twenty tons on so long a voyage at this time of year. Besides, we could not reach Yokohama in time, for it is sixteen hundred and sixty miles from Hong Kong."

"Only sixteen hundred," said Mr. Fogg.

"It's the same thing."

Fix breathed more freely.

"But," added the pilot, "it might be arranged another way."

Fix ceased to breathe at all.

"How?" asked Mr. Fogg.

"By going to Nagasaki, at the extreme south of Japan, or even to Shanghai, which is only eight hundred miles from here. In going to Shanghai we should not be forced to sail wide of the Chinese coast, which would be a great advantage, as the currents run northward, and would aid us."

"Pilot," said Mr. Fogg, "I must take the American steamer at Yokohama, and not at Shanghai or Nagasaki."

"Why not?" returned the pilot. "The San Francisco steamer does not start from Yokohama. It puts in at Yokohama and Nagasaki, but it starts from Shanghai."

"You are sure of that?"

"Perfectly."
"And when does the boat leave Shanghai?"
"On the 11th, at seven in the evening. We have, therefore, four days before us, that is ninety-six hours; and in that time, if we had good luck and a south-west wind, and the sea was calm, we could make those eight hundred miles to Shanghai."
"And you could go--"
"In an hour; as soon as provisions could be got aboard and the sails put up."
"It is a bargain. Are you the master of the boat?"
"Yes; John Bunsby, master of the Tankadere."
"Would you like some earnest-money?"
"If it would not put your honour out--"
"Here are two hundred pounds on account sir," added Phileas Fogg, turning to Fix, "if you would like to take advantage--"
"Thanks, sir; I was about to ask the favour."
"Very well. In half an hour we shall go on board."
"But poor Passepartout?" urged Aouda, who was much disturbed by the servant's disappearance.
"I shall do all I can to find him," replied Phileas Fogg.
While Fix, in a feverish, nervous state, repaired to the pilot-boat, the others directed their course to the police-station at Hong Kong. Phileas Fogg there gave Passepartout's description, and left a sum of money to be spent in the search for him. The same formalities having been gone through at the French consulate, and the palanquin having stopped at the hotel for the luggage, which had been sent back there, they returned to the wharf.
It was now three o'clock; and pilot-boat No. 43, with its crew on board, and its provisions stored away, was ready for departure.
The Tankadere was a neat little craft of twenty tons, as gracefully built as if she were a racing yacht. Her shining copper sheathing, her galvanised iron-work, her deck, white as ivory, betrayed the pride taken by John Bunsby in making her presentable. Her two masts leaned a trifle backward; she carried brigantine, foresail, storm-jib, and standing-jib, and was well rigged for running before the wind; and she seemed capable of brisk speed, which, indeed, she had already proved by gaining several prizes in pilot-boat races. The crew of the Tankadere was composed of John Bunsby, the master, and four hardy mariners, who were familiar with the Chinese seas. John Bunsby, himself, a man of forty-five or thereabouts, vigorous, sunburnt, with a sprightly expression of the eye, and energetic and self-reliant countenance, would have inspired confidence in the most timid.
Phileas Fogg and Aouda went on board, where they found Fix already installed. Below deck was a square cabin, of which the walls bulged out in the form of cots, above a circular divan; in the centre was a table provided with a swinging lamp. The accommodation was confined, but neat.
"I am sorry to have nothing better to offer you," said Mr. Fogg to Fix, who bowed without responding.
The detective had a feeling akin to humiliation in profiting by the kindness of Mr. Fogg.
"It's certain," thought he, "though rascal as he is, he is a polite one!"
The sails and the English flag were hoisted at ten minutes past three. Mr. Fogg and Aouda, who were seated on deck, cast a last glance at the quay, in the hope of espying Passepartout. Fix was not without his fears lest chance should direct the steps of the unfortunate servant, whom he had so badly treated, in this direction; in which case an explanation the reverse of satisfactory to the detective must have ensued. But the Frenchman did not appear, and, without doubt, was still lying under the stupefying influence of the opium.
John Bunsby, master, at length gave the order to start, and the Tankadere, taking the wind under her brigantine, foresail, and standing-jib, bounded briskly forward over the waves.

Chapter XXI
IN WHICH THE MASTER OF THE "TANKADERE" RUNS GREAT RISK OF LOSING A REWARD OF TWO HUNDRED POUNDS
This voyage of eight hundred miles was a perilous venture on a craft of twenty tons, and at that season of the year. The Chinese seas are usually boisterous, subject to terrible gales of wind, and especially during the equinoxes; and it was now early November.
It would clearly have been to the master's advantage to carry his passengers to Yokohama, since he was paid a certain sum per day; but he would have been rash to attempt such a voyage, and it was imprudent even to attempt to reach Shanghai. But John Bunsby believed in the Tankadere, which rode on the waves like a seagull; and perhaps he was not wrong.
Late in the day they passed through the capricious channels of Hong Kong, and the Tankadere, impelled by
favourable winds, conducted herself admirably.

"I do not need, pilot," said Phileas Fogg, when they got into the open sea, "to advise you to use all possible speed."

"Trust me, your honour. We are carrying all the sail the wind will let us. The poles would add nothing, and are only used when we are going into port."

"Its your trade, not mine, pilot, and I confide in you."

Phileas Fogg, with body erect and legs wide apart, standing like a sailor, gazed without staggering at the swelling waters. The young woman, who was seated aft, was profoundly affected as she looked out upon the ocean, darkening now with the twilight, on which she had ventured in so frail a vessel. Above her head rustled the white sails, which seemed like great white wings. The boat, carried forward by the wind, seemed to be flying in the air.

Night came. The moon was entering her first quarter, and her insufficient light would soon die out in the mist on the horizon. Clouds were rising from the east, and already overcast a part of the heavens.

The pilot had hung out his lights, which was very necessary in these seas crowded with vessels bound landward; for collisions are not uncommon occurrences, and, at the speed she was going, the least shock would shatter the gallant little craft.

Fix, seated in the bow, gave himself up to meditation. He kept apart from his fellow-travellers, knowing Mr. Fogg's taciturn tastes; besides, he did not quite like to talk to the man whose favours he had accepted. He was thinking, too, of the future. It seemed certain that Fogg would not stop at Yokohama, but would at once take the boat for San Francisco; and the vast extent of America would ensure him impunity and safety. Fogg's plan appeared to him the simplest in the world. Instead of sailing directly from England to the United States, like a common villain, he had traversed three quarters of the globe, so as to gain the American continent more surely; and there, after throwing the police off his track, he would quietly enjoy himself with the fortune stolen from the bank. But, once in the United States, what should he, Fix, do? Should he abandon this man? No, a hundred times no! Until he had secured his extradition, he would not lose sight of him for an hour. It was his duty, and he would fulfil it to the end. At all events, there was one thing to be thankful for; Passepartout was not with his master; and it was above all important, after the confidences Fix had imparted to him, that the servant should never have speech with his master.

Phileas Fogg was also thinking of Passepartout, who had so strangely disappeared. Looking at the matter from every point of view, it did not seem to him impossible that, by some mistake, the man might have embarked on the Carnatic at the last moment; and this was Aouda's opinion, who regretted very much the loss of the worthy fellow to whom she owed so much. They might then find him at Yokohama; for, if the Carnatic was carrying him thither, it would be easy to ascertain if he had been on board.

A brisk breeze arose about ten o'clock; but, though it might have been prudent to take in a reef, the pilot, after carefully examining the heavens, let the craft remain rigged as before. The Tankadere bore sail admirably, as she drew a great deal of water, and everything was prepared for high speed in case of a gale.

Mr. Fogg and Aouda descended into the cabin at midnight, having been already preceded by Fix, who had lain down on one of the cots. The pilot and crew remained on deck all night.

At sunrise the next day, which was 8th November, the boat had made more than one hundred miles. The log indicated a mean speed of between eight and nine miles. The Tankadere still carried all sail, and was accomplishing her greatest capacity of speed. If the wind held as it was, the chances would be in her favour. During the day she kept along the coast, where the currents were favourable; the coast, irregular in profile, and visible sometimes across the clearings, was at most five miles distant. The sea was less boisterous, since the wind came off land—a fortunate circumstance for the boat, which would suffer, owing to its small tonnage, by a heavy surge on the sea.

The breeze subsided a little towards noon, and set in from the south-west. The pilot put up his poles, and took them down again within two hours, as the wind freshened up anew.

Mr. Fogg and Aouda, happily unaffected by the roughness of the sea, ate with a good appetite, Fix being invited to share their repast, which he accepted with secret chagrin. To travel at this man's expense and live upon his provisions was not palatable to him. Still, he was obliged to eat, and so he ate.

When the meal was over, he took Mr. Fogg apart, and said, "sir"—this "sir" scorched his lips, and he had to control himself to avoid collaring this "gentleman"—"sir, you have been very kind to give me a passage on this boat. But, though my means will not admit of my expending them as freely as you, I must ask to pay my share—"

"Let us not speak of that, sir," replied Mr. Fogg.

"But, if I insist—"

"No, sir," repeated Mr. Fogg, in a tone which did not admit of a reply. "This enters into my general expenses."

Fix, as he bowed, had a stifled feeling, and, going forward, where he ensconced himself, did not open his mouth for the rest of the day.

Meanwhile they were progressing famously, and John Bunsby was in high hope. He several times assured Mr.
Fogg that they would reach Shanghai in time; to which that gentleman responded that he counted upon it. The crew set to work in good earnest, inspired by the reward to be gained. There was not a sheet which was not tightened not a sail which was not vigorously hoisted; not a lurch could be charged to the man at the helm. They worked as desperately as if they were contesting in a Royal yacht regatta.

By evening, the log showed that two hundred and twenty miles had been accomplished from Hong Kong, and Mr. Fogg might hope that he would be able to reach Yokohama without recording any delay in his journal; in which case, the many misadventures which had overtaken him since he left London would not seriously affect his journey.

The Tankadere entered the Straits of Fo-Kien, which separate the island of Formosa from the Chinese coast, in the small hours of the night, and crossed the Tropic of Cancer. The sea was very rough in the straits, full of eddies formed by the counter-currents, and the chopping waves broke her course, whilst it became very difficult to stand on deck.

At daybreak the wind began to blow hard again, and the heavens seemed to predict a gale. The barometer announced a speedy change, the mercury rising and falling capriciously; the sea also, in the south-east, raised long surges which indicated a tempest. The sun had set the evening before in a red mist, in the midst of the phosphorescent scintillations of the ocean.

John Bunsby long examined the threatening aspect of the heavens, muttering indistinctly between his teeth. At last he said in a low voice to Mr. Fogg, "Shall I speak out to your honour?"

"Of course."
"Well, we are going to have a squall."
"Is the wind north or south?" asked Mr. Fogg quietly.
"South. Look! a typhoon is coming up."
"Glad it's a typhoon from the south, for it will carry us forward."
"Oh, if you take it that way," said John Bunsby, "I've nothing more to say." John Bunsby's suspicions were confirmed. At a less advanced season of the year the typhoon, according to a famous meteorologist, would have passed away like a luminous cascade of electric flame; but in the winter equinox it was to be feared that it would burst upon them with great violence.

The pilot took his precautions in advance. He reefed all sail, the pole-masts were dispensed with; all hands went forward to the bows. A single triangular sail, of strong canvas, was hoisted as a storm-jib, so as to hold the wind from behind. Then they waited.

John Bunsby had requested his passengers to go below; but this imprisonment in so narrow a space, with little air, and the boat bouncing in the gale, was far from pleasant. Neither Mr. Fogg, Fix, nor Aouda consented to leave the deck.

The storm of rain and wind descended upon them towards eight o'clock. With but its bit of sail, the Tankadere was lifted like a feather by a wind, an idea of whose violence can scarcely be given. To compare her speed to four times that of a locomotive going on full steam would be below the truth.

The boat scudded thus northward during the whole day, borne on by monstrous waves, preserving always, fortunately, a speed equal to theirs. Twenty times she seemed almost to be submerged by these mountains of water which rose behind her; but the adroit management of the pilot saved her. The passengers were often bathed in spray, but they submitted to it philosophically. Fix cursed it, no doubt; but Aouda, with her eyes fastened upon her protector, whose coolness amazed her, showed herself worthy of him, and bravely weathered the storm. As for Phileas Fogg, it seemed just as if the typhoon were a part of his programme.

Up to this time the Tankadere had always held her course to the north; but towards evening the wind, veering three quarters, bore down from the north-west. The boat, now lying in the trough of the waves, shook and rolled terribly; the sea struck her with fearful violence. At night the tempest increased in violence. John Bunsby saw the approach of darkness and the rising of the storm with dark misgivings. He thought awhile, and then asked his crew if it was not time to slacken speed. After a consultation he approached Mr. Fogg, and said, "I think, your honour, that we should do well to make for one of the ports on the coast."

"I think so too."
"Ah!" said the pilot. "But which one?"
"I know of but one," returned Mr. Fogg tranquilly.
"And that is--"
"Shanghai."

The pilot, at first, did not seem to comprehend; he could scarcely realise so much determination and tenacity. Then he cried, "Well--yes! Your honour is right. To Shanghai!"

So the Tankadere kept steadily on her northward track.

The night was really terrible; it would be a miracle if the craft did not founder. Twice it could have been all over
with her if the crew had not been constantly on the watch. Aouda was exhausted, but did not utter a complaint. More than once Mr. Fogg rushed to protect her from the violence of the waves.

Day reappeared. The tempest still raged with undiminished fury; but the wind now returned to the south-east. It was a favourable change, and the Tankadere again bounded forward on this mountainous sea, though the waves crossed each other, and imparted shocks and counter-shocks which would have crushed a craft less solidly built. From time to time the coast was visible through the broken mist, but no vessel was in sight. The Tankadere was alone upon the sea.

There were some signs of a calm at noon, and these became more distinct as the sun descended toward the horizon. The tempest had been as brief as terrific. The passengers, thoroughly exhausted, could now eat a little, and take some repose.

The wind grew decidedly calmer, and happily the sea fell with it. All sails were now hoisted, and at noon the Tankadere was within forty-five miles of Shanghai. There remained yet six hours in which to accomplish that distance. All on board feared that it could not be done, and every one--Phileas Fogg, no doubt, excepted--felt his heart beat with impatience. The boat must keep up an average of nine miles an hour, and the wind was becoming calmer every moment! It was a capricious breeze, coming from the coast, and after it passed the sea became smooth. Still, the Tankadere was so light, and her fine sails caught the fickle zephyrs so well, that, with the aid of the currents John Bunsby found himself at six o'clock not more than ten miles from the mouth of Shanghai River. Shanghai itself is situated at least twelve miles up the stream. At seven they were still three miles from Shanghai. The pilot swore an angry oath; the reward of two hundred pounds was evidently on the point of escaping him. He looked at Mr. Fogg. Mr. Fogg was perfectly tranquil; and yet his whole fortune was at this moment at stake.

At this moment, also, a long black funnel, crowned with wreaths of smoke, appeared on the edge of the waters. It was the American steamer, leaving for Yokohama at the appointed time.

"Confound her!" cried John Bunsby, pushing back the rudder with a desperate jerk.

"Signal her!" said Phileas Fogg quietly.

A small brass cannon stood on the forward deck of the Tankadere, for making signals in the fogs. It was loaded to the muzzle; but just as the pilot was about to apply a red-hot coal to the touchhole, Mr. Fogg said, "Hoist your flag!"

The flag was run up at half-mast, and, this being the signal of distress, it was hoped that the American steamer, perceiving it, would change her course a little, so as to succour the pilot-boat.

"Fire!" said Mr. Fogg. And the booming of the little cannon resounded in the air.

Chapter XXII

IN WHICH PASSEPARTOUT FINDS OUT THAT, EVEN AT THE ANTIPODES, IT IS CONVENIENT TO HAVE SOME MONEY IN ONE’S POCKET

The Carnatic, setting sail from Hong Kong at half-past six on the 7th of November, directed her course at full steam towards Japan. She carried a large cargo and a well-filled cabin of passengers. Two state-rooms in the rear were, however, unoccupied--those which had been engaged by Phileas Fogg.

The next day a passenger with a half-stupefied eye, staggering gait, and disordered hair, was seen to emerge from the second cabin, and to totter to a seat on deck.

It was Passepartout; and what had happened to him was as follows: Shortly after Fix left the opium den, two waiters had lifted the unconscious Passepartout, and had carried him to the bed reserved for the smokers. Three hours later, pursued even in his dreams by a fixed idea, the poor fellow awoke, and struggled against the stupefying influence of the narcotic. The thought of a duty unfulfilled shook off his torpor, and he hurried from the abode of drunkenness. Staggering and holding himself up by keeping against the walls, falling down and creeping up again, and irresistibly impelled by a kind of instinct, he kept crying out, "The Carnatic! the Carnatic!"

The steamer lay puffing alongside the quay, on the point of starting. Passepartout had but few steps to go; and, rushing upon the plank, he crossed it, and fell unconscious on the deck, just as the Carnatic was moving off. Several sailors, who were evidently accustomed to this sort of scene, carried the poor Frenchman down into the second cabin, and Passepartout did not wake until they were one hundred and fifty miles away from China. Thus he found himself the next morning on the deck of the Carnatic, and eagerly inhaling the exhilarating sea-breeze. The pure air
sobered him. He began to collect his sense, which he found a difficult task; but at last he recalled the events of the evening before, Fix's revelation, and the opium-house.

"It is evident," said he to himself, "that I have been abominably drunk! What will Mr. Fogg say? At least I have not missed the steamer, which is the most important thing."

Then, as Fix occurred to him: "As for that rascal, I hope we are well rid of him, and that he has not dared, as he proposed, to follow us on board the Carnatic. A detective on the track of Mr. Fogg, accused of robbing the Bank of England! Pshaw! Mr. Fogg is no more a robber than I am a murderer."

Should he divulge Fix's real errand to his master? Would it do to tell the part the detective was playing. Would it not be better to wait until Mr. Fogg reached London again, and then impart to him that an agent of the metropolitan police had been following him round the world, and have a good laugh over it? No doubt; at least, it was worth considering. The first thing to do was to find Mr. Fogg, and apologise for his singular behaviour.

Passepartout got up and proceeded, as well as he could with the rolling of the steamer, to the after-deck. He saw no one who resembled either his master or Aouda. "Good!" muttered he; "Aouda has not got up yet, and Mr. Fogg has probably found some partners at whist."

He descended to the saloon. Mr. Fogg was not there. Passepartout had only, however, to ask the purser the number of his master's state-room. The purser replied that he did not know any passenger by the name of Fogg.

"I beg your pardon," said Passepartout persistently. "He is a tall gentleman, quiet, and not very talkative, and has with him a young lady--"

"There is no young lady on board," interrupted the purser. "Here is a list of the passengers; you may see for yourself."

Passepartout scanned the list, but his master's name was not upon it. All at once an idea struck him.

"Ah! am I on the Carnatic?"

"Yes."

"On the way to Yokohama?"

"Certainly."

Passepartout had an instant feared that he was on the wrong boat; but, though he was really on the Carnatic, his master was not there.

He fell thunderstruck on a seat. He saw it all now. He remembered that the time of sailing had been changed, that he should have informed his master of that fact, and that he had not done so. It was his fault, then, that Mr. Fogg and Aouda had missed the steamer. Yes, but it was still more the fault of the traitor who, in order to separate him from his master, and detain the latter at Hong Kong, had inveigled him into getting drunk! He now saw the detective's trick; and at this moment Mr. Fogg was certainly ruined, his bet was lost, and he himself perhaps arrested and imprisoned! At this thought Passepartout tore his hair. Ah, if Fix ever came within his reach, what a settling of accounts there would be!

After his first depression, Passepartout became calmer, and began to study his situation. It was certainly not an enviable one. He found himself on the way to Japan, and what should he do when he got there? His pocket was empty; he had not a solitary shilling, not so much as a penny. His passage had fortunately been paid for in advance; and he had five or six days in which to decide upon his future course. He fell to at meals with an appetite, and ate for Mr. Fogg, Aouda, and himself. He helped himself as generously as if Japan were a desert, where nothing to eat was to be looked for.

At dawn on the 13th the Carnatic entered the port of Yokohama. This is an important port of call in the Pacific, where all the mail-steamers, and those carrying travellers between North America, China, Japan, and the Oriental islands put in. It is situated in the bay of Yeddo, and at but a short distance from that second capital of the Japanese Empire, and the residence of the Tycoon, the civil Emperor, before the Mikado, the spiritual Emperor, absorbed his office in his own. The Carnatic anchored at the quay near the custom-house, in the midst of a crowd of ships bearing the flags of all nations.

Passepartout went timidly ashore on this so curious territory of the Sons of the Sun. He had nothing better to do than, taking chance for his guide, to wander aimlessly through the streets of Yokohama. He found himself at first in a thoroughly European quarter, the houses having low fronts, and being adorned with verandas, beneath which he caught glimpses of neat peristyles. This quarter occupied, with its streets, squares, docks, and warehouses, all the space between the 'promontory of the Treaty' and the river. Here, as at Hong Kong and Calcutta, were mixed crowds of all races, Americans and English, Chinenmen and Dutchmen, mostly merchants ready to buy or sell anything. The Frenchman felt himself as much alone among them as if he had dropped down in the midst of Hottentots.

He had, at least, one resource to call on the French and English consuls at Yokohama for assistance. But he shrank from telling the story of his adventures, intimately connected as it was with that of his master; and, before
doing so, he determined to exhaust all other means of aid. As chance did not favour him in the European quarter, he penetrated that inhabited by the native Japanese, determined, if necessary, to push on to Yeddo.

The Japanese quarter of Yokohama is called Benten, after the goddess of the sea, who is worshipped on the islands round about. There Passepartout beheld beautiful fir and cedar groves, sacred gates of a singular architecture, bridges half hid in the midst of bamboos and reeds, temples shaded by immense cedar-trees, holy retreats where were sheltered Buddhist priests and sectaries of Confucius, and interminable streets, where a perfect harvest of rose-tinted and red-cheeked children, who looked as if they had been cut out of Japanese screens, and who were playing in the midst of short-legged poodles and yellowish cats, might have been gathered.

The streets were crowded with people. Priests were passing in processions, beating their dreary tambourines; police and custom-house officers with pointed hats encrusted with lac and carrying two sabres hung to their waists; soldiers, clad in blue cotton with white stripes, and bearing guns; the Mikado's guards, enveloped in silken doubles, hauberks and coats of mail; and numbers of military folk of all ranks--for the military profession is as much respected in Japan as it is despised in China--went hither and thither in groups and pairs. Passepartout saw, too, begging friars, long-robed pilgrims, and simple civilians, with their warped and jet-black hair, big heads, long busts, slender legs, short stature, and complexions varying from copper-colour to a dead white, but never yellow, like the Chinese, from whom the Japanese widely differ. He did not fail to observe the curious equipages--carriages and palanquins, barrows supplied with sails, and litters made of bamboo; nor the women--whom he thought not especially handsome--who took little steps with their little feet, whereon they wore canvas shoes, straw sandals, and clogs of worked wood, and who displayed tight-looking eyes, flat chests, teeth fashionably blackened, and gowns crossed with silken scarfs, tied in an enormous knot behind an ornament which the modern Parisian ladies seem to have borrowed from the dames of Japan.

Passepartout wandered for several hours in the midst of this motley crowd, looking in at the windows of the rich and curious shops, the jewellery establishments glittering with quaint Japanese ornaments, the restaurants decked with streamers and banners, the tea-houses, where the odorous beverage was being drunk with saki, a liquor concocted from the fermentation of rice, and the comfortable smoking-houses, where they were puffing, not opium, which is almost unknown in Japan, but a very fine, strong tobacco. He went on till he found himself in the fields, in the midst of vast rice plantations. There he saw dazzling camellias expanding themselves, with flowers which were giving forth their last colours and perfumes, not on bushes, but on rice, and among bamboo enclosures, cherry, plum, and apple trees, which the Japanese cultivate rather for their blossoms than their fruit, and which queerly-fashioned, grinning scarecrows protected from the sparrows, pigeons, ravens, and other voracious birds. On the branches of the cedars were perched large eagles; amid the foliage of the weeping willows were herons, solemnly standing on one leg; and on every hand were crows, ducks, hawks, wild birds, and a multitude of cranes, which the Japanese consider sacred, and which to their minds symbolise long life and prosperity.

As he was strolling along, Passepartout espied some violets among the shrubs.

"Good!" said he; "I'll have some supper."

But, on smelling them, he found that they were odourless.

"No chance there," thought he.

The worthy fellow had certainly taken good care to eat as heartily a breakfast as possible before leaving the Carnatic; but, as he had been walking about all day, the demands of hunger were becoming importunate. He observed that the butchers stalls contained neither mutton, goat, nor pork; and, knowing also that it is a sacrilege to kill cattle, which are preserved solely for farming, he made up his mind that meat was far from plentiful in Yokohama--nor was he mistaken; and, in default of butcher's meat, he could have wished for a quarter of wild boar or deer, a partridge, or some game or fish, which, with rice, the Japanese eat almost exclusively. But he found it necessary to keep up a stout heart, and to postpone the meal he craved till the following morning. Night came, and Passepartout re-entered the native quarter, where he wandered through the streets, lit by vari-coloured lanterns, looking on at the dancers, who were executing skilful steps and boundings, and the astrologers who stood in the open air with their telescopes. Then he came to the harbour, which was lit up by the resin torches of the fishermen, who were fishing from their boats.

The streets at last became quiet, and the patrol, the officers of which, in their splendid costumes, and surrounded by their suites, Passepartout thought seemed like ambassadors, succeeded the bustling crowd. Each time a company passed, Passepartout chuckled, and said to himself: "Good! another Japanese embassy departing for Europe!"

Chapter XXIII
IN WHICH PASSEPARTOUT'S NOSE BECOMES OUTRAGEOUSLY LONG

The next morning poor, jaded, famished Passepartout said to himself that he must get something to eat at all
hazards, and the sooner he did so the better. He might, indeed, sell his watch; but he would have starved first. Now or never he must use the strong, if not melodious voice which nature had bestowed upon him. He knew several French and English songs, and resolved to try them upon the Japanese, who must be lovers of music, since they were for ever pounding on their cymbals, tam-tams, and tambourines, and could not but appreciate European talent.

It was, perhaps, rather early in the morning to get up a concert, and the audience prematurely aroused from their slumbers, might not possibly pay their entertainer with coin bearing the Mikado's features. Passepartout therefore decided to wait several hours; and, as he was sauntering along, it occurred to him that he would seem rather too well dressed for a wandering artist. The idea struck him to change his garments for clothes more in harmony with his project; by which he might also get a little money to satisfy the immediate cravings of hunger. The resolution taken, it remained to carry it out.

It was only after a long search that Passepartout discovered a native dealer in old clothes, to whom he applied for an exchange. The man liked the European costume, and ere long Passepartout issued from his shop accoutred in an old Japanese coat, and a sort of one-sided turban, faded with long use. A few small pieces of silver, moreover, jingled in his pocket.

"Good!" thought he. "I will imagine I am at the Carnival!"

His first care, after being thus "Japanesed," was to enter a tea-house of modest appearance, and, upon half a bird and a little rice, to breakfast like a man for whom dinner was as yet a problem to be solved.

"Now," thought he, when he had eaten heartily, "I mustn't lose my head. I can't sell this costume again for one still more Japanese. I must consider how to leave this country of the Sun, of which I shall not retain the most delightful of memories, as quickly as possible."

It occurred to him to visit the steamers which were about to leave for America. He would offer himself as a cook or servant, in payment of his passage and meals. Once at San Francisco, he would find some means of going on. The difficulty was, how to traverse the four thousand seven hundred miles of the Pacific which lay between Japan and the New World.

Passepartout was not the man to let an idea go begging, and directed his steps towards the docks. But, as he approached them, his project, which at first had seemed so simple, began to grow more and more formidable to his mind. What need would they have of a cook or servant on an American steamer, and what confidence would they put in him, dressed as he was? What references could he give?

As he was reflecting in this wise, his eyes fell upon an immense placard which a sort of clown was carrying through the streets. This placard, which was in English, read as follows:

ACROBATIC JAPANESE TROUPE, HONOURABLE WILLIAM BATULCAR, PROPRIETOR, LAST REPRESENTATIONS, PRIOR TO THEIR DEPARTURE TO THE UNITED STATES, OF THE LONG NOSES! LONG NOSES! UNDER THE DIRECT PATRONAGE OF THE GOD TINGOU! GREAT ATTRACTION!

"The United States!" said Passepartout; "that's just what I want!"

He followed the clown, and soon found himself once more in the Japanese quarter. A quarter of an hour later he stopped before a large cabin, adorned with several clusters of streamers, the exterior walls of which were designed to represent, in violent colours and without perspective, a company of jugglers.

This was the Honourable William Batulcar's establishment. That gentleman was a sort of Barnum, the director of a troupe of mountebanks, jugglers, clowns, acrobats, equilibrists, and gymnasts, who, according to the placard, was giving his last performances before leaving the Empire of the Sun for the States of the Union.

Passepartout entered and asked for Mr. Batulcar, who straightway appeared in person.

"What do you want?" said he to Passepartout, whom he at first took for a native.

"Would you like a servant, sir?" asked Passepartout.

"A servant!" cried Mr. Batulcar, caressing the thick grey beard which hung from his chin. "I already have two who are obedient and faithful, have never left me, and serve me for their nourishment and here they are," added he, holding out his two robust arms, furrowed with veins as large as the strings of a bass-viol.

"So I can be of no use to you?"

"None."

"The devil! I should so like to cross the Pacific with you!"

"Ah!" said the Honourable Mr. Batulcar. "You are no more a Japanese than I am a monkey! Who are you dressed up in that way?"

"A man dresses as he can."

"That's true. You are a Frenchman, aren't you?"

"Yes; a Parisian of Paris."

"Then you ought to know how to make grimaces?"

"Why," replied Passepartout, a little vexed that his nationality should cause this question, "we Frenchmen know
how to make grimaces, it is true but not any better than the Americans do."

"True. Well, if I can't take you as a servant, I can as a clown. You see, my friend, in France they exhibit foreign clowns, and in foreign parts French clowns."

"Ah!"

"You are pretty strong, eh?"

"Especially after a good meal."

"And you can sing?"

"Yes," returned Passepartout, who had formerly been wont to sing in the streets.

"But can you sing standing on your head, with a top spinning on your left foot, and a sabre balanced on your right?"

"Humph! I think so," replied Passepartout, recalling the exercises of his younger days.

"Well, that's enough," said the Honourable William Batulcar.

The engagement was concluded there and then.

Passepartout had at last found something to do. He was engaged to act in the celebrated Japanese troupe. It was not a very dignified position, but within a week he would be on his way to San Francisco.

The performance, so noisily announced by the Honourable Mr. Batulcar, was to commence at three o'clock, and soon the deafening instruments of a Japanese orchestra resounded at the door. Passepartout, though he had not been able to study or rehearse a part, was designated to lend the aid of his sturdy shoulders in the great exhibition of the "human pyramid," executed by the Long Noses of the god Tingou. This "great attraction" was to close the performance.

Before three o'clock the large shed was invaded by the spectators, comprising Europeans and natives, Chinese and Japanese, men, women and children, who precipitated themselves upon the narrow benches and into the boxes opposite the stage. The musicians took up a position inside, and were vigorously performing on their gongs, tam-tams, flutes, bones, tambourines, and immense drums.

The performance was much like all acrobatic displays; but it must be confessed that the Japanese are the first equilibrists in the world.

One, with a fan and some bits of paper, performed the graceful trick of the butterflies and the flowers; another traced in the air, with the odorous smoke of his pipe, a series of blue words, which composed a compliment to the audience; while a third juggled with some lighted candles, which he extinguished successively as they passed his lips, and relit again without interrupting for an instant his juggling. Another reproduced the most singular combinations with a spinning-top; in his hands the revolving tops seemed to be animated with a life of their own in their interminable whirling; they ran over pipe-stems, the edges of sabres, wires and even hairs stretched across the stage; they turned around on the edges of large glasses, crossed bamboo ladders, dispersed into all the corners, and produced strange musical effects by the combination of their various pitches of tone. The jugglers tossed them in the air, threw them like shuttlecocks with wooden battledores, and yet they kept on spinning; they put them into their pockets, and took them out still whirling as before.

It is useless to describe the astonishing performances of the acrobats and gymnasts. The turning on ladders, poles, balls, barrels, &c., was executed with wonderful precision.

But the principal attraction was the exhibition of the Long Noses, a show to which Europe is as yet a stranger.

The Long Noses form a peculiar company, under the direct patronage of the god Tingou. Attired after the fashion of the Middle Ages, they bore upon their shoulders a splendid pair of wings; but what especially distinguished them was the long noses which were fastened to their faces, and the uses which they made of them. These noses were made of bamboo, and were five, six, and even ten feet long, some straight, others curved, some ribboned, and some having imitation warts upon them. It was upon these appendages, fixed tightly on their real noses, that they performed their gymnastic exercises. A dozen of these sectaries of Tingou lay flat upon their backs, while others, dressed to represent lightning-rods, came and frolicked on their noses, jumping from one to another, and performing the most skilful leaping and somersaults.

As a last scene, a "human pyramid" had been announced, in which fifty Long Noses were to represent the Car of Juggernaut. But, instead of forming a pyramid by mounting each other's shoulders, the artists were to group themselves on top of the noses. It happened that the performer who had hitherto formed the base of the Car had quitted the troupe, and as, to fill this part, only strength and adroitness were necessary, Passepartout had been chosen to take his place.

The poor fellow really felt sad when—melancholy reminiscence of his youth!—he donned his costume, adorned with vari-coloured wings, and fastened to his natural feature a false nose six feet long. But he cheered up when he thought that this nose was winning him something to eat.

He went upon the stage, and took his place beside the rest who were to compose the base of the Car of
Juggernaut. They all stretched themselves on the floor, their noses pointing to the ceiling. A second group of artists disposed themselves on these long appendages, then a third above these, then a fourth, until a human monument reaching to the very cornices of the theatre soon arose on top of the noses. This elicited loud applause, in the midst of which the orchestra was just striking up a deafening air, when the pyramid tottered, the balance was lost, one of the lower noses vanished from the pyramid, and the human monument was shattered like a castle built of cards!

It was Passepartout's fault. Abandoning his position, clearing the footlights without the aid of his wings, and, clambering up to the right-hand gallery, he fell at the feet of one of the spectators, crying, "Ah, my master! my master!"

"You here?"
"Myself."
"Very well; then let us go to the steamer, young man!"

Mr. Fogg, Aouda, and Passepartout passed through the lobby of the theatre to the outside, where they encountered the Honourable Mr. Batulcar, furious with rage. He demanded damages for the "breakage" of the pyramid; and Phileas Fogg appeased him by giving him a handful of banknotes.

At half-past six, the very hour of departure, Mr. Fogg and Aouda, followed by Passepartout, who in his hurry had retained his wings, and nose six feet long, stepped upon the American steamer.

Chapter XXIV
DURING WHICH MR. FOGG AND PARTY CROSS THE PACIFIC OCEAN

What happened when the pilot-boat came in sight of Shanghai will be easily guessed. The signals made by the Tankadere had been seen by the captain of the Yokohama steamer, who, espying the flag at half-mast, had directed his course towards the little craft. Phileas Fogg, after paying the stipulated price of his passage to John Busby, and rewarding that worthy with the additional sum of five hundred and fifty pounds, ascended the steamer with Aouda and Fix; and they started at once for Nagasaki and Yokohama.

They reached their destination on the morning of the 14th of November. Phileas Fogg lost no time in going on board the Carnatic, where he learned, to Aouda's great delight—and perhaps to his own, though he betrayed no emotion—that Passepartout, a Frenchman, had really arrived on her the day before.

The San Francisco steamer was announced to leave that very evening, and it became necessary to find Passepartout, if possible, without delay. Mr. Fogg applied in vain to the French and English consuls, and, after wandering through the streets a long time, began to despair of finding his missing servant. Chance, or perhaps a kind of presentiment, at last led him into the Honourable Mr. Batulcar's theatre. He certainly would not have recognised Passepartout in the eccentric mountebank's costume; but the latter, lying on his back, perceived his master in the gallery. He could not help starting, which so changed the position of his nose as to bring the "pyramid" pell-mell upon the stage.

All this Passepartout learned from Aouda, who recounted to him what had taken place on the voyage from Hong Kong to Shanghai on the Tankadere, in company with one Mr. Fix.

Passepartout did not change countenance on hearing this name. He thought that the time had not yet arrived to divulge to his master what had taken place between the detective and himself; and, in the account he gave of his absence, he simply excused himself for having been overtaken by drunkenness, in smoking opium at a tavern in Hong Kong.

Mr. Fogg heard this narrative coldly, without a word; and then furnished his man with funds necessary to obtain clothing more in harmony with his position. Within an hour the Frenchman had cut off his nose and parted with his wings, and retained nothing about him which recalled the sectary of the god Tingou.

The steamer which was about to depart from Yokohama to San Francisco belonged to the Pacific Mail Steamship Company, and was named the General Grant. She was a large paddle-wheel steamer of two thousand five hundred tons; well equipped and very fast. The massive walking-beam rose and fell above the deck; at one end a piston-rod worked up and down; and at the other was a connecting-rod which, in changing the rectilinear motion to a circular one, was directly connected with the shaft of the paddles. The General Grant was rigged with three masts, giving a large capacity for sails, and thus materially aiding the steam power. By making twelve miles an hour, she would cross the ocean in twenty-one days. Phileas Fogg was therefore justified in hoping that he would reach San Francisco by the 2nd of December, New York by the 11th, and London on the 20th—thus gaining several hours on the fatal date of the 21st of December.

There was a full complement of passengers on board, among them English, many Americans, a large number of coolies on their way to California, and several East Indian officers, who were spending their vacation in making the tour of the world. Nothing of moment happened on the voyage; the steamer, sustained on its large paddles, rolled but
little, and the Pacific almost justified its name. Mr. Fogg was as calm and taciturn as ever. His young companion felt herself more and more attached to him by other ties than gratitude; his silent but generous nature impressed her more than she thought; and it was almost unconsciously that she yielded to emotions which did not seem to have the least effect upon her protector. Aouda took the keenest interest in his plans, and became impatient at any incident which seemed likely to retard his journey.

She often chatted with Passepartout, who did not fail to perceive the state of the lady's heart; and, being the most faithful of domestics, he never exhausted his eulogies of Phileas Fogg's honesty, generosity, and devotion. He took pains to calm Aouda's doubts of a successful termination of the journey, telling her that the most difficult part of it had passed, that now they were beyond the fantastic countries of Japan and China, and were fairly on their way to civilised places again. A railway train from San Francisco to New York, and a transatlantic steamer from New York to Liverpool, would doubtless bring them to the end of this impossible journey round the world within the period agreed upon.

On the ninth day after leaving Yokohama, Phileas Fogg had traversed exactly one half of the terrestrial globe. The General Grant passed, on the 23rd of November, the one hundred and eighthieth meridian, and was at the very antipodes of London. Mr. Fogg had, it is true, exhausted fifty-two of the eighty days in which he was to complete the tour, and there were only twenty-eight left. But, though he was only half-way by the difference of meridians, he had really gone over two-thirds of the whole journey; for he had been obliged to make long circuits from London to Aden, from Aden to Bombay, from Calcutta to Singapore, and from Singapore to Yokohama. Could he have followed without deviation the fiftieth parallel, which is that of London, the whole distance would only have been about twelve thousand miles; whereas he would be forced, by the irregular methods of locomotion, to traverse twenty-six thousand, of which he had, on the 23rd of November, accomplished seventeen thousand five hundred. And now the course was a straight one, and Fix was no longer there to put obstacles in their way!

It happened also, on the 23rd of November, that Passepartout made a joyful discovery. It will be remembered that the obstinate fellow had insisted on keeping his famous family watch at London time, and on regarding that of the countries he had passed through as quite false and unreliable. Now, on this day, though he had not changed the hands, he found that his watch exactly agreed with the ship's chronometers. His triumph was hilarious. He would have liked to know what Fix would say if he were aboard!

"The rogue told me a lot of stories," repeated Passepartout, "about the meridians, the sun, and the moon! Moon, indeed! moonshine more likely! If one listened to that sort of people, a pretty sort of time one would keep! I was sure that the sun would some day regulate itself by my watch!"

Passepartout was ignorant that, if the face of his watch had been divided into twenty-four hours, like the Italian clocks, he would have no reason for exultation; for the hands of his watch would then, instead of as now indicating nine o'clock in the morning, indicate nine o'clock in the evening, that is, the twenty-first hour after midnight precisely the difference between London time and that of the one hundred and eighthieth meridian. But if Fix had been able to explain this purely physical effect, Passepartout would not have admitted, even if he had comprehended it. Moreover, if the detective had been on board at that moment, Passepartout would have joined issue with him on a quite different subject, and in an entirely different manner.

Where was Fix at that moment?

He was actually on board the General Grant.

On reaching Yokohama, the detective, leaving Mr. Fogg, whom he expected to meet again during the day, had repaired at once to the English consulate, where he at last found the warrant of arrest. It had followed him from Bombay, and had come by the Carnatic, on which steamer he himself was supposed to be. Fix's disappointment may be imagined when he reflected that the warrant was now useless. Mr. Fogg had left English ground, and it was now necessary to procure his extradition!

"Well," thought Fix, after a moment of anger, "my warrant is not good here, but it will be in England. The rogue evidently intends to return to his own country, thinking he has thrown the police off his track. Good! I will follow him across the Atlantic. As for the money, heaven grant there may be some left! But the fellow has already spent in travelling, rewards, trials, bail, elephants, and all sorts of charges, more than five thousand pounds. Yet, after all, the Bank is rich!"

His course decided on, he went on board the General Grant, and was there when Mr. Fogg and Aouda arrived. To his utter amazement, he recognised Passepartout, despite his theatrical disguise. He quickly concealed himself in his cabin, to avoid an awkward explanation, and hoped--thanks to the number of passengers--to remain unperceived by Mr. Fogg's servant.

On that very day, however, he met Passepartout face to face on the forward deck. The latter, without a word, made a rush for him, grasped him by the throat, and, much to the amusement of a group of Americans, who immediately began to bet on him, administered to the detective a perfect volley of blows, which proved the great
superiority of French over English pugilistic skill.

When Passepartout had finished, he found himself relieved and comforted. Fix got up in a somewhat rumpled condition, and, looking at his adversary, coldly said, "Have you done?"

"For this time--yes."

"Then let me have a word with you."

"But I--"

"In your master's interests."

Passepartout seemed to be vanquished by Fix's coolness, for he quietly followed him, and they sat down aside from the rest of the passengers.

"You have given me a thrashing," said Fix. "Good, I expected it. Now, listen to me. Up to this time I have been Mr. Fogg's adversary. I am now in his game."

"Aha!" cried Passepartout; "you are convinced he is an honest man?"

"No," replied Fix coldly, "I think him a rascal. Sh! don't budge, and let me speak. As long as Mr. Fogg was on English ground, it was for my interest to detain him there until my warrant of arrest arrived. I did everything I could to keep him back. I sent the Bombay priests after him, I got you intoxicated at Hong Kong, I separated you from him, and I made him miss the Yokohama steamer."

Passepartout listened, with closed fists.

"Now," resumed Fix, "Mr. Fogg seems to be going back to England. Well, I will follow him there. But hereafter I will do as much to keep obstacles out of his way as I have done up to this time to put them in his path. I've changed my game, you see, and simply because it was for my interest to change it. Your interest is the same as mine; for it is only in England that you will ascertain whether you are in the service of a criminal or an honest man."

Passepartout listened very attentively to Fix, and was convinced that he spoke with entire good faith.

"Are we friends?" asked the detective.

"Friends?--no," replied Passepartout; "but allies, perhaps. At the least sign of treason, however, I'll twist your neck for you."

"Agreed," said the detective quietly.

Eleven days later, on the 3rd of December, the General Grant entered the bay of the Golden Gate, and reached San Francisco.

Mr. Fogg had neither gained nor lost a single day.

Chapter XXV
IN WHICH A SLIGHT GLIMPSE IS HAD OF SAN FRANCISCO

It was seven in the morning when Mr. Fogg, Aouda, and Passepartout set foot upon the American continent, if this name can be given to the floating quay upon which they disembarked. These quays, rising and falling with the tide, thus facilitate the loading and unloading of vessels. Alongside them were clippers of all sizes, steamers of all nationalities, and the steamboats, with several decks rising one above the other, which ply on the Sacramento and its tributaries. There were also heaped up the products of a commerce which extends to Mexico, Chili, Peru, Brazil, Europe, Asia, and all the Pacific islands.

Passepartout, in his joy on reaching at last the American continent, thought he would manifest it by executing a perilous vault in fine style; but, tumbling upon some worm-eaten planks, he fell through them. Put out of countenance by the manner in which he thus "set foot" upon the New World, he uttered a loud cry, which so frightened the innumerable cormorants and pelicans that are always perched upon these movable quays, that they flew noisily away.

Mr. Fogg, on reaching shore, proceeded to find out at what hour the first train left for New York, and learned that this was at six o'clock p.m.; he had, therefore, an entire day to spend in the Californian capital. Taking a carriage at a charge of three dollars, he and Aouda entered it, while Passepartout mounted the box beside the driver, and they set out for the International Hotel.

From his exalted position Passepartout observed with much curiosity the wide streets, the low, evenly ranged houses, the Anglo-Saxon Gothic churches, the great docks, the palatial wooden and brick warehouses, the numerous conveyances, omnibuses, horse-cars, and upon the side-walks, not only Americans and Europeans, but Chinese and Indians. Passepartout was surprised at all he saw. San Francisco was no longer the legendary city of 1849—a city of banditti, assassins, and incendiaries, who had flocked hither in crowds in pursuit of plunder; a paradise of outlaws, where they gambled with gold-dust, a revolver in one hand and a bowie-knife in the other: it was now a great commercial emporium.

The lofty tower of its City Hall overlooked the whole panorama of the streets and avenues, which cut each other
at right-angles, and in the midst of which appeared pleasant, verdant squares, while beyond appeared the Chinese quarter, seemingly imported from the Celestial Empire in a toy-box. Sombreros and red shirts and plumed Indians were rarely to be seen; but there were silk hats and black coats everywhere worn by a multitude of nervously active, gentlemanly-looking men. Some of the streets--especially Montgomery Street, which is to San Francisco what Regent Street is to London, the Boulevard des Italiens to Paris, and Broadway to New York--were lined with splendid and spacious stores, which exposed in their windows the products of the entire world.

When Passepartout reached the International Hotel, it did not seem to him as if he had left England at all. The ground floor of the hotel was occupied by a large bar, a sort of restaurant freely open to all passers-by, who might partake of dried beef, oyster soup, biscuits, and cheese, without taking out their purses. Payment was made only for the ale, porter, or sherry which was drunk. This seemed "very American" to Passepartout. The hotel refreshment-rooms were comfortable, and Mr. Fogg and Aouda, installing themselves at a table, were abundantly served on diminutive plates by negroes of darkest hue.

After breakfast, Mr. Fogg, accompanied by Aouda, started for the English consulate to have his passport visaed. As he was going out, he met Passepartout, who asked him if it would not be well, before taking the train, to purchase some dozens of Enfield rifles and Colt's revolvers. He had been listening to stories of attacks upon the trains by the Sioux and Pawnees. Mr. Fogg thought it a useless precaution, but told him to do as he thought best, and went on to the consulate.

He had not proceeded two hundred steps, however, when, "by the greatest chance in the world," he met Fix. The detective seemed wholly taken by surprise. What! Had Mr. Fogg and himself crossed the Pacific together, and not met on the steamer! At least Fix felt honoured to behold once more the gentleman to whom he owed so much, and, as his business recalled him to Europe, he should be delighted to continue the journey in such pleasant company.

Mr. Fogg replied that the honour would be his; and the detective--who was determined not to lose sight of him--begged permission to accompany them in their walk about San Francisco--a request which Mr. Fogg readily granted.

They soon found themselves in Montgomery Street, where a great crowd was collected; the side-walks, street, horsecar rails, the shop-doors, the windows of the houses, and even the roofs, were full of people. Men were going about carrying large posters, and flags and streamers were floating in the wind; while loud cries were heard on every hand.

"Hurrah for Camerfield!"
"Hurrah for Mandiboy!"

It was a political meeting; at least so Fix conjectured, who said to Mr. Fogg, "Perhaps we had better not mingle with the crowd. There may be danger in it."

"Yes," returned Mr. Fogg; "and blows, even if they are political are still blows."

Fix smiled at this remark; and, in order to be able to see without being jostled about, the party took up a position on the top of a flight of steps situated at the upper end of Montgomery Street. Opposite them, on the other side of the street, between a coal wharf and a petroleum warehouse, a large platform had been erected in the open air, towards which the current of the crowd seemed to be directed.

For what purpose was this meeting? What was the occasion of this excited assemblage? Phileas Fogg could not imagine. Was it to nominate some high official--a governor or member of Congress? It was not improbable, so agitated was the multitude before them.

Just at this moment there was an unusual stir in the human mass. All the hands were raised in the air. Some, tightly closed, seemed to disappear suddenly in the midst of the cries--an energetic way, no doubt, of casting a vote. The crowd swayed back, the banners and flags waved, disappeared an instant, then reappeared in tatters. The undulations of the human surge reached the steps, while all the heads floundered on the surface like a sea agitated by a squall. Many of the black hats disappeared, and the greater part of the crowd seemed to have diminished in height.

"It is evidently a meeting," said Fix, "and its object must be an exciting one. I should not wonder if it were about the Alabama, despite the fact that that question is settled."

"Perhaps," replied Mr. Fogg, simply.

"At least, there are two champions in presence of each other, the Honourable Mr. Camerfield and the Honourable Mr. Mandiboy."

Aouda, leaning upon Mr. Fogg's arm, observed the tumultuous scene with surprise, while Fix asked a man near him what the cause of it all was. Before the man could reply, a fresh agitation arose; hurrahs and excited shouts were heard; the staffs of the banners began to be used as offensive weapons; and fists flew about in every direction. Thumps were exchanged from the tops of the carriages and omnibuses which had been blocked up in the crowd. Boots and shoes went whirling through the air, and Mr. Fogg thought he even heard the crack of revolvers mingling in the din, the rout approached the stairway, and flowed over the lower step. One of the parties had evidently been repulsed; but the mere lookers-on could not tell whether Mandiboy or Camerfield had gained the upper hand.
"It would be prudent for us to retire," said Fix, who was anxious that Mr. Fogg should not receive any injury, at least until they got back to London. "If there is any question about England in all this, and we were recognised, I fear it would go hard with us."

"An English subject--" began Mr. Fogg.

He did not finish his sentence; for a terrific hubbub now arose on the terrace behind the flight of steps where they stood, and there were frantic shouts of, "Hurrah for Mandiboy! Hip, hip, hurrah!"

It was a band of voters coming to the rescue of their allies, and taking the Camerfield forces in flank. Mr. Fogg, Aouda, and Fix found themselves between two fires; it was too late to escape. The torrent of men, armed with loaded canes and sticks, was irresistible. Phileas Fogg and Fix were roughly hustled in their attempts to protect their fair companion; the former, as cool as ever, tried to defend himself with the weapons which nature has placed at the end of every Englishman's arm, but in vain. A big brawny fellow with a red beard, flushed face, and broad shoulders, who seemed to be the chief of the band, raised his clenched fist to strike Mr. Fogg, whom he would have given a crushing blow, had not Fix rushed in and received it in his stead. An enormous bruise immediately made its appearance under the detective's silk hat, which was completely smashed in.

"Yankee!" exclaimed Mr. Fogg, darting a contemptuous look at the ruffian.

"Englishman!" returned the other. "We will meet again!"

"When you please."

"What is your name?"

"Phileas Fogg. And yours?"

"Colonel Stamp Proctor."

The human tide now swept by, after overturning Fix, who speedily got upon his feet again, though with tattered clothes. Happily, he was not seriously hurt. His travelling overcoat was divided into two unequal parts, and his trousers resembled those of certain Indians, which fit less compactly than they are easy to put on. Aouda had escaped unharmed, and Fix alone bore marks of the fray in his black and blue bruise.

"Thanks," said Mr. Fogg to the detective, as soon as they were out of the crowd.

"No thanks are necessary," replied. Fix; "but let us go."

"Where?"

"To a tailor's."

Such a visit was, indeed, opportune. The clothing of both Mr. Fogg and Fix was in rags, as if they had themselves been actively engaged in the contest between Camerfield and Mandiboy. An hour after, they were once more suitably attired, and with Aouda returned to the International Hotel.

Passepartout was waiting for his master, armed with half a dozen six-barrelled revolvers. When he perceived Fix, he knit his brows; but Aouda having, in a few words, told him of their adventure, his countenance resumed its placid expression. Fix evidently was no longer an enemy, but an ally; he was faithfully keeping his word.

Dinner over, the coach which was to convey the passengers and their luggage to the station drew up to the door. As he was getting in, Mr. Fogg said to Fix, "You have not seen this Colonel Proctor again?"

"No."

"I will come back to America to find him," said Phileas Fogg calmly. "It would not be right for an Englishman to permit himself to be treated in that way, without retaliating."

The detective smiled, but did not reply. It was clear that Mr. Fogg was one of those Englishmen who, while they do not tolerate duelling at home, fight abroad when their honour is attacked.

At a quarter before six the travellers reached the station, and found the train ready to depart. As he was about to enter it, Mr. Fogg called a porter, and said to him: "My friend, was there not some trouble to-day in San Francisco?"

"It was a political meeting, sir," replied the porter.

"But I thought there was a great deal of disturbance in the streets."

"It was only a meeting assembled for an election."

"The election of a general-in-chief, no doubt?" asked Mr. Fogg.

"No, sir; of a justice of the peace."

Phileas Fogg got into the train, which started off at full speed.

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Chapter XXVI

IN WHICH PHILEAS FOGG AND PARTY TRAVEL BY THE PACIFIC RAILROAD

"From ocean to ocean"--so say the Americans; and these four words compose the general designation of the "great trunk line" which crosses the entire width of the United States. The Pacific Railroad is, however, really divided into two distinct lines: the Central Pacific, between San Francisco and Ogden, and the Union Pacific,
between Ogden and Omaha. Five main lines connect Omaha with New York.

New York and San Francisco are thus united by an uninterrupted metal ribbon, which measures no less than three thousand seven hundred and eighty-six miles. Between Omaha and the Pacific the railway crosses a territory which is still infested by Indians and wild beasts, and a large tract which the Mormons, after they were driven from Illinois in 1845, began to colonise.

The journey from New York to San Francisco consumed, formerly, under the most favourable conditions, at least six months. It is now accomplished in seven days.

It was in 1862 that, in spite of the Southern Members of Congress, who wished a more southerly route, it was decided to lay the road between the forty-first and forty-second parallels. President Lincoln himself fixed the end of the line at Omaha, in Nebraska. The work was at once commenced, and pursued with true American energy; nor did the rapidity with which it went on injuriously affect its good execution. The road grew, on the prairies, a mile and a half a day. A locomotive, running on the rails laid down the evening before, brought the rails to be laid on the morrow, and advanced upon them as fast as they were put in position.

The Pacific Railroad is joined by several branches in Iowa, Kansas, Colorado, and Oregon. On leaving Omaha, it passes along the left bank of the Platte River as far as the junction of its northern branch, follows its southern branch, crosses the Laramie territory and the Wahsatch Mountains, turns the Great Salt Lake, and reaches Salt Lake City, the Mormon capital, plunges into the Tuilla Valley, across the American Desert, Cedar and Humboldt Mountains, the Sierra Nevada, and descends, via Sacramento, to the Pacific--its grade, even on the Rocky Mountains, never exceeding one hundred and twelve feet to the mile.

Such was the road to be traversed in seven days, which would enable Phileas Fogg--at least, so he hoped--to take the Atlantic steamer at New York on the 11th for Liverpool.

The car which he occupied was a sort of long omnibus on eight wheels, and with no compartments in the interior. It was supplied with two rows of seats, perpendicular to the direction of the train on either side of an aisle which conducted to the front and rear platforms. These platforms were found throughout the train, and the passengers were able to pass from one end of the train to the other. It was supplied with saloon cars, balcony cars, restaurants, and smoking-cars; theatre cars alone were wanting, and they will have these some day.

Book and news dealers, sellers of edibles, drinkables, and cigars, who seemed to have plenty of customers, were continually circulating in the aisles.

The train left Oakland station at six o'clock. It was already night, cold and cheerless, the heavens being overcast with clouds which seemed to threaten snow. The train did not proceed rapidly; counting the stoppages, it did not run more than twenty miles an hour, which was a sufficient speed, however, to enable it to reach Omaha within its designated time.

There was but little conversation in the car, and soon many of the passengers were overcome with sleep. Passepartout found himself beside the detective; but he did not talk to him. After recent events, their relations with each other had grown somewhat cold; there could no longer be mutual sympathy or intimacy between them. Fix's manner had not changed; but Passepartout was very reserved, and ready to strangle his former friend on the slightest provocation.

Snow began to fall an hour after they started, a fine snow, however, which happily could not obstruct the train; nothing could be seen from the windows but a vast, white sheet, against which the smoke of the locomotive had a greyish aspect.

At eight o'clock a steward entered the car and announced that the time for going to bed had arrived; and in a few minutes the car was transformed into a dormitory. The backs of the seats were thrown back, bedsteads carefully packed were rolled out by an ingenious system, berths were suddenly improvised, and each traveller had soon at his disposition a comfortable bed, protected from curious eyes by thick curtains. The sheets were clean and the pillows soft. It only remained to go to bed and sleep which everybody did--while the train sped on across the State of California.

The country between San Francisco and Sacramento is not very hilly. The Central Pacific, taking Sacramento for its starting-point, extends eastward to meet the road from Omaha. The line from San Francisco to Sacramento runs in a north-easterly direction, along the American River, which empties into San Pablo Bay. The one hundred and twenty miles between these cities were accomplished in six hours, and towards midnight, while fast asleep, the travellers passed through Sacramento; so that they saw nothing of that important place, the seat of the State government, with its fine quays, its broad streets, its noble hotels, squares, and churches.

The train, on leaving Sacramento, and passing the junction, Roclin, Auburn, and Colfax, entered the range of the Sierra Nevada. 'Cisco was reached at seven in the morning; and an hour later the dormitory was transformed into an ordinary car, and the travellers could observe the picturesque beauties of the mountain region through which they were steaming. The railway track wound in and out among the passes, now approaching the mountain-sides, now
suspended over precipices, avoiding abrupt angles by bold curves, plunging into narrow defiles, which seemed to have no outlet. The locomotive, its great funnel emitting a weird light, with its sharp bell, and its cow-catcher extended like a spur, mingled its shrieks and bellowings with the noise of torrents and cascades, and twined its smoke among the branches of the gigantic pines.

There were few or no bridges or tunnels on the route. The railway turned around the sides of the mountains, and did not attempt to violate nature by taking the shortest cut from one point to another.

The train entered the State of Nevada through the Carson Valley about nine o'clock, going always northeasterly; and at midday reached Reno, where there was a delay of twenty minutes for breakfast.

From this point the road, running along Humboldt River, passed northward for several miles by its banks; then it turned eastward, and kept by the river until it reached the Humboldt Range, nearly at the extreme eastern limit of Nevada.

Having breakfasted, Mr. Fogg and his companions resumed their places in the car, and observed the varied landscape which unfolded itself as they passed along the vast prairies, the mountains lining the horizon, and the creeks, with their frothy, foaming streams. Sometimes a great herd of buffaloes, massing together in the distance, seemed like a moveable dam. These innumerable multitudes of ruminating beasts often form an insurmountable obstacle to the passage of the trains; thousands of them have been seen passing over the track for hours together, in compact ranks. The locomotive is then forced to stop and wait till the road is once more clear.

This happened, indeed, to the train in which Mr. Fogg was travelling. About twelve o'clock a troop of ten or twelve thousand head of buffalo encumbered the track. The locomotive, slackening its speed, tried to clear the way with its cow-catcher; but the mass of animals was too great. The buffaloes marched along with a tranquil gait, uttering now and then deafening bellowings. There was no use of interrupting them, for, having taken a particular direction, nothing can moderate and change their course; it is a torrent of living flesh which no dam could contain.

The travellers gazed on this curious spectacle from the platforms; but Phileas Fogg, who had the most reason of all to be in a hurry, remained in his seat, and waited philosophically until it should please the buffaloes to get out of the way.

Passepartout was furious at the delay they occasioned, and longed to discharge his arsenal of revolvers upon them.

"What a country!" cried he. "Mere cattle stop the trains, and go by in a procession, just as if they were not impeding travel! Parbleu! I should like to know if Mr. Fogg foresaw this mishap in his programme! And here's an engineer who doesn't dare to run the locomotive into this herd of beasts!"

The engineer did not try to overcome the obstacle, and he was wise. He would have crushed the first buffaloes, no doubt, with the cow-catcher; but the locomotive, however powerful, would soon have been checked, the train would inevitably have been thrown off the track, and would then have been helpless.

The best course was to wait patiently, and regain the lost time by greater speed when the obstacle was removed. The procession of buffaloes lasted three full hours, and it was night before the track was clear. The last ranks of the herd were now passing over the rails, while the first had already disappeared below the southern horizon.

It was eight o'clock when the train passed through the defiles of the Humboldt Range, and half-past nine when it penetrated Utah, the region of the Great Salt Lake, the singular colony of the Mormons.

Chapter XXVII

IN WHICH PASSEPARTOUT UNDERGOES, AT A SPEED OF TWENTY MILES AN HOUR, A COURSE OF MORMON HISTORY

During the night of the 5th of December, the train ran south-easterly for about fifty miles; then rose an equal distance in a north-easterly direction, towards the Great Salt Lake.

Passepartout, about nine o'clock, went out upon the platform to take the air. The weather was cold, the heavens grey, but it was not snowing. The sun's disc, enlarged by the mist, seemed an enormous ring of gold, and Passepartout was amusing himself by calculating its value in pounds sterling, when he was diverted from this interesting study by a strange-looking personage who made his appearance on the platform.

This personage, who had taken the train at Elko, was tall and dark, with black moustache, black stockings, a black silk hat, a black waistcoat, black trousers, a white cravat, and dogskin gloves. He might have been taken for a clergyman. He went from one end of the train to the other, and affixed to the door of each car a notice written in manuscript.

Passepartout approached and read one of these notices, which stated that Elder William Hitch, Mormon missionary, taking advantage of his presence on train No. 48, would deliver a lecture on Mormonism in car No. 117, from eleven to twelve o'clock; and that he invited all who were desirous of being instructed concerning the mysteries
of the religion of the "Latter Day Saints" to attend.

"I'll go," said Passepartout to himself. He knew nothing of Mormonism except the custom of polygamy, which is its foundation.

The news quickly spread through the train, which contained about one hundred passengers, thirty of whom, at most, attracted by the notice, ensconced themselves in car No. 117. Passepartout took one of the front seats. Neither Mr. Fogg nor Fix cared to attend.

At the appointed hour Elder William Hitch rose, and, in an irritated voice, as if he had already been contradicted, said, "I tell you that Joe Smith is a martyr, that his brother Hiram is a martyr, and that the persecutions of the United States Government against the prophets will also make a martyr of Brigham Young. Who dares to say the contrary?"

No one ventured to gainsay the missionary, whose excited tone contrasted curiously with his naturally calm visage. No doubt his anger arose from the hardships to which the Mormons were actually subjected. The government had just succeeded, with some difficulty, in reducing these independent fanatics to its rule. It had made itself master of Utah, and subjected that territory to the laws of the Union, after imprisoning Brigham Young on a charge of rebellion and polygamy. The disciples of the prophet had since redoubled their efforts, and resisted, by words at least, the authority of Congress. Elder Hitch, as is seen, was trying to make proselytes on the very railway trains.

Then, emphasising his words with his loud voice and frequent gestures, he related the history of the Mormons from Biblical times: how that, in Israel, a Mormon prophet of the tribe of Joseph published the annals of the new religion, and bequeathed them to his son Mormon; how, many centuries later, a translation of this precious book, which was written in Egyptian, was made by Joseph Smith, junior, a Vermont farmer, who revealed himself as a mystical prophet in 1825; and how, in short, the celestial messenger appeared to him in an illuminated forest, and gave him the annals of the Lord.

Several of the audience, not being much interested in the missionary's narrative, here left the car; but Elder Hitch, continuing his lecture, related how Smith, junior, with his father, two brothers, and a few disciples, founded the church of the "Latter Day Saints," which, adopted not only in America, but in England, Norway and Sweden, and Germany, counts many artisans, as well as men engaged in the liberal professions, among its members; how a colony was established in Ohio, a temple erected there at a cost of two hundred thousand dollars, and a town built at Kirkland; how Smith became an enterprising banker, and received from a simple mummy showman a papyrus scroll written by Abraham and several famous Egyptians.

The Elder's story became somewhat wearisome, and his audience grew gradually less, until it was reduced to twenty passengers. But this did not disconcert the enthusiast, who proceeded with the story of Joseph Smith's bankruptcy in 1837, and how his ruined creditors gave him a coat of tar and feathers; his reappearance some years afterwards, more honourable and honoured than ever, at Independence, Missouri, the chief of a flourishing colony of three thousand disciples, and his pursuit thence by outraged Gentiles, and retirement into the Far West.

Ten hearers only were now left, among them honest Passepartout, who was listening with all his ears. Thus he learned that, after long persecutions, Smith reappeared in Illinois, and in 1839 founded a community at Nauvoo, on the Mississippi, numbering twenty-five thousand souls, of which he became mayor, chief justice, and general-in-chief; that he announced himself, in 1843, as a candidate for the Presidency of the United States; and that finally, being drawn into ambuscade at Carthage, he was thrown into prison, and assassinated by a band of men disguised in masks.

Passepartout was now the only person left in the car, and the Elder, looking him full in the face, reminded him that, two years after the assassination of Joseph Smith, the inspired prophet, Brigham Young, his successor, left Nauvoo for the banks of the Great Salt Lake, where, in the midst of that fertile region, directly on the route of the emigrants who crossed Utah on their way to California, the new colony, thanks to the polygamy practised by the Mormons, had flourished beyond expectations.

"And this," added Elder William Hitch, "this is why the jealousy of Congress has been aroused against us! Why have the soldiers of the Union invaded the soil of Utah? Why has Brigham Young, our chief, been imprisoned, in contempt of all justice? Shall we yield to force? Never! Driven from Vermont, driven from Illinois, driven from Ohio, driven from Missouri, driven from Utah, we shall yet find some independent territory on which to plant our tents. And you, my brother," continued the Elder, fixing his angry eyes upon his single auditor, "will you not plant yours there, too, under the shadow of our flag?"

"No!" replied Passepartout courageously, in his turn retiring from the car, and leaving the Elder to preach to vacancy.

During the lecture the train had been making good progress, and towards half-past twelve it reached the northwest border of the Great Salt Lake. Thence the passengers could observe the vast extent of this interior sea, which is also called the Dead Sea, and into which flows an American Jordan. It is a picturesque expanse, framed in
lofty crags in large strata, encrusted with white salt—a superb sheet of water, which was formerly of larger extent than now, its shores having encroached with the lapse of time, and thus at once reduced its breadth and increased its depth.

The Salt Lake, seventy miles long and thirty-five wide, is situated three miles eight hundred feet above the sea. Quite different from Lake Asphaltite, whose depression is twelve hundred feet below the sea, it contains considerable salt, and one quarter of the weight of its water is solid matter, its specific weight being 1,170, and, after being distilled, 1,000. Fishes are, of course, unable to live in it, and those which descend through the Jordan, the Weber, and other streams soon perish.

The country around the lake was well cultivated, for the Mormons are mostly farmers; while ranches and pens for domesticated animals, fields of wheat, corn, and other cereals, luxuriant prairies, hedges of wild rose, clumps of acacias and milk-wort, would have been seen six months later. Now the ground was covered with a thin powdering of snow.

The train reached Ogden at two o’clock, where it rested for six hours, Mr. Fogg and his party had time to pay a visit to Salt Lake City, connected with Ogden by a branch road; and they spent two hours in this strikingly American town, built on the pattern of other cities of the Union, like a checker-board, “with the sombre sadness of right-angles,” as Victor Hugo expresses it. The founder of the City of the Saints could not escape from the taste for symmetry which distinguishes the Anglo-Saxons. In this strange country, where the people are certainly not up to the level of their institutions, everything is done “squarely”—cities, houses, and follies.

The travellers, then, were promenading, at three o’clock, about the streets of the town built between the banks of the Jordan and the spurs of the Wahsatch Range. They saw few or no churches, but the prophet’s mansion, the court-house, and the arsenal, blue-brick houses with verandas and porches, surrounded by gardens bordered with acacias, palms, and locusts. A clay and pebble wall, built in 1853, surrounded the town; and in the principal street were the market and several hotels adorned with pavilions. The place did not seem thickly populated. The streets were almost deserted, except in the vicinity of the temple, which they only reached after having traversed several quarters surrounded by palisades. There were many women, which was easily accounted for by the “peculiar institution” of the Mormons; but it must not be supposed that all the Mormons are polygamists. They are free to marry or not, as they please; but it is worth noting that it is mainly the female citizens of Utah who are anxious to marry, as, according to the Mormon religion, maiden ladies are not admitted to the possession of its highest joys. These poor creatures seemed to be neither well off nor happy. Some—the more well-to-do, no doubt—wore short, open, black silk dresses, under a hood or modest shawl; others were habited in Indian fashion.

Passepartout could not behold without a certain fright these women, charged, in groups, with conferring happiness on a single Mormon. His common sense pitied, above all, the husband. It seemed to him a terrible thing to have to guide so many wives at once across the vicissitudes of life, and to conduct them, as it were, in a body to the Mormon paradise with the prospect of seeing them in the company of the glorious Smith, who doubtless was the chief ornament of that delightful place, to all eternity. He felt decidedly repelled from such a vocation, and he imagined—perhaps he was mistaken—that the fair ones of Salt Lake City cast rather alarming glances on his person. Happily, his stay there was but brief. At four the party found themselves again at the station, took their places in the train, and the whistle sounded for starting. Just at the moment, however, that the locomotive wheels began to move, cries of “Stop! stop!” were heard.

Trains, like time and tide, stop for no one. The gentleman who uttered the cries was evidently a belated Mormon. He was breathless with running. Happily for him, the station had neither gates nor barriers. He rushed along the track, jumped on the rear platform of the train, and fell, exhausted, into one of the seats.

Passepartout, who had been anxiously watching this amateur gymnast, approached him with lively interest, and learned that he had taken flight after an unpleasant domestic scene.

When the Mormon had recovered his breath, Passepartout ventured to ask him politely how many wives he had; for, from the manner in which he had decamped, it might be thought that he had twenty at least.

“One, sir,” replied the Mormon, raising his arms heavenward—“one, and that was enough!”

Chapter XXVIII
IN WHICH PASSEPARTOUT DOES NOT SUCCEED IN MAKING ANYBODY LISTEN TO REASON

The train, on leaving Great Salt Lake at Ogden, passed northward for an hour as far as Weber River, having completed nearly nine hundred miles from San Francisco. From this point it took an easterly direction towards the jagged Wahsatch Mountains. It was in the section included between this range and the Rocky Mountains that the American engineers found the most formidable difficulties in laying the road, and that the government granted a subsidy of forty-eight thousand dollars per mile, instead of sixteen thousand allowed for the work done on the
plains. But the engineers, instead of violating nature, avoided its difficulties by winding around, instead of penetrating the rocks. One tunnel only, fourteen thousand feet in length, was pierced in order to arrive at the great basin.

The track up to this time had reached its highest elevation at the Great Salt Lake. From this point it described a long curve, descending towards Bitter Creek Valley, to rise again to the dividing ridge of the waters between the Atlantic and the Pacific. There were many creeks in this mountainous region, and it was necessary to cross Muddy Creek, Green Creek, and others, upon culverts.

Passepartout grew more and more impatient as they went on, while Fix longed to get out of this difficult region, and was more anxious than Phileas Fogg himself to be beyond the danger of delays and accidents, and set foot on English soil.

At ten o'clock at night the train stopped at Fort Bridger station, and twenty minutes later entered Wyoming Territory, following the valley of Bitter Creek throughout. The next day, 7th December, they stopped for a quarter of an hour at Green River station. Snow had fallen abundantly during the night, but, being mixed with rain, it had half melted, and did not interrupt their progress. The bad weather, however, annoyed Passepartout; for the accumulation of snow, by blocking the wheels of the cars, would certainly have been fatal to Mr. Fogg's tour.

"What an idea!" he said to himself. "Why did my master make this journey in winter? Couldn't he have waited for the good season to increase his chances?"

While the worthy Frenchman was absorbed in the state of the sky and the depression of the temperature, Aouda was experiencing fears from a totally different cause.

Several passengers had got off at Green River, and were walking up and down the platforms; and among these Aouda recognised Colonel Stamp Proctor, the same who had so grossly insulted Phileas Fogg at the San Francisco meeting. Not wishing to be recognised, the young woman drew back from the window, feeling much alarm at her discovery. She was attached to the man who, however coldly, gave her daily evidences of the most absolute devotion. She did not comprehend, perhaps, the depth of the sentiment with which her protector inspired her, which she called gratitude, but which, though she was unconscious of it, was really more than that. Her heart sank within her when she recognised the man whom Mr. Fogg desired, sooner or later, to call to account for his conduct. Chance alone, it was clear, had brought Colonel Proctor on this train; but there he was, and it was necessary, at all hazards, that Phileas Fogg should not perceive his adversary.

Aouda seized a moment when Mr. Fogg was asleep to tell Fix and Passepartout whom she had seen.

"That Proctor on this train!" cried Fix. "Well, reassure yourself, madam; before he settles with Mr. Fogg; he has got to deal with me! It seems to me that I was the more insulted of the two."

"And, besides," added Passepartout, "I'll take charge of him, colonel as he is."

"Mr. Fix," resumed Aouda, "Mr. Fogg will allow no one to avenge him. He said that he would come back to America to find this man. Should he perceive Colonel Proctor, we could not prevent a collision which might have terrible results. He must not see him."

"You are right, madam," replied Fix; "a meeting between them might ruin all. Whether he were victorious or beaten, Mr. Fogg would be delayed, and--"

"And," added Passepartout, "that would play the game of the gentlemen of the Reform Club. In four days we shall be in New York. Well, if my master does not leave this car during those four days, we may hope that chance will not bring him face to face with this confounded American. We must, if possible, prevent his stirring out of it."

The conversation dropped. Mr. Fogg had just woke up, and was looking out of the window. Soon after Passepartout, without being heard by his master or Aouda, whispered to the detective, "Would you really fight for him?"

"I would do anything," replied Fix, in a tone which betrayed determined will, "to get him back living to Europe!"

Passepartout felt something like a shudder shoot through his frame, but his confidence in his master remained unbroken.

Was there any means of detaining Mr. Fogg in the car, to avoid a meeting between him and the colonel? It ought not to be a difficult task, since that gentleman was naturally sedentary and little curious. The detective, at least, seemed to have found a way; for, after a few moments, he said to Mr. Fogg, "These are long and slow hours, sir, that we are passing on the railway."

"Yes," replied Mr. Fogg; "but they pass."

"You were in the habit of playing whist," resumed Fix, "on the steamers."

"Yes; but it would be difficult to do so here. I have neither cards nor partners."

"Oh, but we can easily buy some cards, for they are sold on all the American trains. And as for partners, if madam plays--"

"Certainly, sir," Aouda quickly replied; "I understand whist. It is part of an English education."
"I myself have some pretensions to playing a good game. Well, here are three of us, and a dummy—"

"As you please, sir," replied Phileas Fogg, heartily glad to resume his favourite pastime even on the railway.

Passepartout was dispatched in search of the steward, and soon returned with two packs of cards, some pins, counters, and a shelf covered with cloth.

The game commenced. Aouda understood whist sufficiently well, and even received some compliments on her playing from Mr. Fogg. As for the detective, he was simply an adept, and worthy of being matched against his present opponent.

"Now," thought Passepartout, "we've got him. He won't budge."

At eleven in the morning the train had reached the dividing ridge of the waters at Bridger Pass, seven thousand five hundred and twenty-four feet above the level of the sea, one of the highest points attained by the track in crossing the Rocky Mountains. After going about two hundred miles, the travellers at last found themselves on one of those vast plains which extend to the Atlantic, and which nature has made so propitious for laying the iron road.

On the declivity of the Atlantic basin the first streams, branches of the North Platte River, already appeared. The whole northern and eastern horizon was bounded by the immense semi-circular curtain which is formed by the southern portion of the Rocky Mountains, the highest being Laramie Peak. Between this and the railway extended vast plains, plentifully irrigated. On the right rose the lower spurs of the mountainous mass which extends southward to the sources of the Arkansas River, one of the great tributaries of the Missouri.

At half-past twelve the travellers caught sight for an instant of Fort Halleck, which commands that section; and in a few more hours the Rocky Mountains were crossed. There was reason to hope, then, that no accident would mark the journey through this difficult country. The snow had ceased falling, and the air became crisp and cold. Large birds, frightened by the locomotive, rose and flew off in the distance. No wild beast appeared on the plain. It was a desert in its vast nakedness.

After a comfortable breakfast, served in the car, Mr. Fogg and his partners had just resumed whist, when a violent whistling was heard, and the train stopped. Passepartout put his head out of the door, but saw nothing to cause the delay; no station was in view.

Aouda and Fix feared that Mr. Fogg might take it into his head to get out; but that gentleman contented himself with saying to his servant, "See what is the matter."

Passepartout rushed out of the car. Thirty or forty passengers had already descended, amongst them Colonel Stamp Proctor.

The train had stopped before a red signal which blocked the way. The engineer and conductor were talking excitedly with a signal-man, whom the station-master at Medicine Bow, the next stopping place, had sent on before. The passengers drew around and took part in the discussion, in which Colonel Proctor, with his insolent manner, was conspicuous.

Passepartout, joining the group, heard the signal-man say, "No! you can't pass. The bridge at Medicine Bow is shaky, and would not bear the weight of the train."

This was a suspension-bridge thrown over some rapids, about a mile from the place where they now were. According to the signal-man, it was in a ruinous condition, several of the iron wires being broken; and it was impossible to risk the passage. He did not in any way exaggerate the condition of the bridge. It may be taken for granted that, rash as the Americans usually are, when they are prudent there is good reason for it.

Passepartout, not daring to apprise his master of what he heard, listened with set teeth, immovable as a statue.

"Hum!" cried Colonel Proctor; "but we are not going to stay here, I imagine, and take root in the snow?"

"Colonel," replied the conductor, "we have telegraphed to Omaha for a train, but it is not likely that it will reach Medicine Bow is less than six hours."

"Six hours!" cried Passepartout.

"Certainly," returned the conductor, "besides, it will take us as long as that to reach Medicine Bow on foot."

"But it is only a mile from here," said one of the passengers.

"Yes, but it's on the other side of the river."

"And can't we cross that in a boat?" asked the colonel.

"That's impossible. The creek is swelled by the rains. It is a rapid, and we shall have to make a circuit of ten miles to the north to find a ford."

The colonel launched a volley of oaths, denouncing the railway company and the conductor; and Passepartout, who was furious, was not disinclined to make common cause with him. Here was an obstacle, indeed, which all his master's banknotes could not remove.

There was a general disappointment among the passengers, who, without reckoning the delay, saw themselves compelled to trudge fifteen miles over a plain covered with snow. They grumbled and protested, and would certainly have thus attracted Phileas Fogg's attention if he had not been completely absorbed in his game.
Passepartout found that he could not avoid telling his master what had occurred, and, with hanging head, he was turning towards the car, when the engineer, a true Yankee, named Forster called out, "Gentlemen, perhaps there is a way, after all, to get over."

"On the bridge?" asked a passenger.
"On the bridge."
"With our train?"
"With our train."

Passepartout stopped short, and eagerly listened to the engineer.
"But the bridge is unsafe," urged the conductor.
"No matter," replied Forster; "I think that by putting on the very highest speed we might have a chance of getting over."

"The devil!" muttered Passepartout.

But a number of the passengers were at once attracted by the engineer's proposal, and Colonel Proctor was especially delighted, and found the plan a very feasible one. He told stories about engineers leaping their trains over rivers without bridges, by putting on full steam; and many of those present avowed themselves of the engineer's mind.

"We have fifty chances out of a hundred of getting over," said one.
"Eighty! ninety!"

Passepartout was astounded, and, though ready to attempt anything to get over Medicine Creek, thought the experiment proposed a little too American. "Besides," thought he, "there's a still more simple way, and it does not even occur to any of these people! Sir," said he aloud to one of the passengers, "the engineer's plan seems to me a little dangerous, but--"

"Eighty chances!" replied the passenger, turning his back on him.
"I know it," said Passepartout, turning to another passenger, "but a simple idea--"

"Ideas are no use," returned the American, shrugging his shoulders, "as the engineer assures us that we can pass."
"Doubtless," urged Passepartout, "we can pass, but perhaps it would be more prudent--"
"What! Prudent!" cried Colonel Proctor, whom this word seemed to excite prodigiously. "At full speed, don't you see, at full speed!"
"I know--I see," repeated Passepartout; "but it would be, if not more prudent, since that word displeases you, at least more natural--"

"Who! What! What's the matter with this fellow?" cried several.
The poor fellow did not know to whom to address himself.
"Are you afraid?" asked Colonel Proctor.
"I afraid? Very well; I will show these people that a Frenchman can be as American as they!"
"All aboard!" cried the conductor.
"Yes, all aboard!" repeated Passepartout, and immediately. "But they can't prevent me from thinking that it would be more natural for us to cross the bridge on foot, and let the train come after!"

But no one heard this sage reflection, nor would anyone have acknowledged its justice. The passengers resumed their places in the cars. Passepartout took his seat without telling what had passed. The whist-players were quite absorbed in their game.

The locomotive whistled vigorously; the engineer, reversing the steam, backed the train for nearly a mile--retiring, like a jumper, in order to take a longer leap. Then, with another whistle, he began to move forward; the train increased its speed, and soon its rapidity became frightful; a prolonged screech issued from the locomotive; the piston worked up and down twenty strokes to the second. They perceived that the whole train, rushing on at the rate of a hundred miles an hour, hardly bore upon the rails at all.

And they passed over! It was like a flash. No one saw the bridge. The train leaped, so to speak, from one bank to the other, and the engineer could not stop it until it had gone five miles beyond the station. But scarcely had the train passed the river, when the bridge, completely ruined, fell with a crash into the rapids of Medicine Bow.

Chapter XXIX
IN WHICH CERTAIN INCIDENTS ARE NARRATED WHICH ARE ONLY TO BE MET WITH ON AMERICAN RAILROADS

The train pursued its course, that evening, without interruption, passing Fort Saunders, crossing Cheyne Pass, and reaching Evans Pass. The road here attained the highest elevation of the journey, eight thousand and ninety-two
feet above the level of the sea. The travellers had now only to descend to the Atlantic by limitless plains, levelled by nature. A branch of the "grand trunk" led off southward to Denver, the capital of Colorado. The country round about is rich in gold and silver, and more than fifty thousand inhabitants are already settled there.

Thirteen hundred and eighty-two miles had been passed over from San Francisco, in three days and three nights; four days and nights more would probably bring them to New York. Phileas Fogg was not as yet behind-hand.

During the night Camp Walbach was passed on the left; Lodge Pole Creek ran parallel with the road, marking the boundary between the territories of Wyoming and Colorado. They entered Nebraska at eleven, passed near Sedgwick, and touched at Julesburg, on the southern branch of the Platte River.

It was here that the Union Pacific Railroad was inaugurated on the 23rd of October, 1867, by the chief engineer, General Dodge. Two powerful locomotives, carrying nine cars of invited guests, amongst whom was Thomas C. Durant, vice-president of the road, stopped at this point; cheers were given, the Sioux and Pawnees performed an imitation Indian battle, fireworks were let off, and the first number of the Railway Pioneer was printed by a press brought on the train. Thus was celebrated the inauguration of this great railroad, a mighty instrument of progress and civilisation, thrown across the desert, and destined to link together cities and towns which do not yet exist. The whistle of the locomotive, more powerful than Amphion's lyre, was about to bid them rise from American soil.

Fort McPherson was left behind at eight in the morning, and three hundred and fifty-seven miles had yet to be traversed before reaching Omaha. The road followed the capricious windings of the southern branch of the Platte River, on its left bank. At nine the train stopped at the important town of North Platte, built between the two arms of the river, which rejoin each other around it and form a single artery, a large tributary, whose waters empty into the Missouri a little above Omaha.

The one hundred and first meridian was passed.

Mr. Fogg and his partners had resumed their game; no one—not even the dummy—complained of the length of the trip. Fix had begun by winning several guineas, which he seemed likely to lose; but he showed himself a not less eager whist-player than Mr. Fogg. During the morning, chance distinctly favoured that gentleman. Trumps and honours were showered upon his hands.

Once, having resolved on a bold stroke, he was on the point of playing a spade, when a voice behind him said, "I should play a diamond."

Mr. Fogg, Aouda, and Fix raised their heads, and beheld Colonel Proctor.

Stamp Proctor and Phileas Fogg recognised each other at once.

"Ah! it's you, is it, Englishman?" cried the colonel; "it's you who are going to play a spade!"

"And who plays it," replied Phileas Fogg coolly, throwing down the ten of spades.

"Well, it pleases me to have it diamonds," replied Colonel Proctor, in an insolent tone.

He made a movement as if to seize the card which had just been played, adding, "You don't understand anything about whist."

"Perhaps I do, as well as another," said Phileas Fogg, rising.

"You have only to try, son of John Bull," replied the colonel.

Aouda turned pale, and her blood ran cold. She seized Mr. Fogg's arm and gently pulled him back. Passepartout was ready to pounce upon the American, who was staring insolently at his opponent. But Fix got up, and, going to Colonel Proctor said, "You forget that it is I with whom you have to deal, sir; for it was I whom you not only insulted, but struck!"

"Mr. Fix," said Mr. Fogg, "pardon me, but this affair is mine, and mine only. The colonel has again insulted me, by insisting that I should not play a spade, and he shall give me satisfaction for it."

"When and where you will," replied the American, "and with whatever weapon you choose."

Aouda in vain attempted to retain Mr. Fogg; as vainly did the detective endeavour to make the quarrel his. Passepartout wished to throw the colonel out of the window, but a sign from his master checked him. Phileas Fogg left the car, and the American followed him upon the platform. "Sir," said Mr. Fogg to his adversary, "I am in a great hurry to get back to Europe, and any delay whatever will be greatly to my disadvantage."

"Well, what's that to me?" replied Colonel Proctor.

"Sir," said Mr. Fogg, very politely, "after our meeting at San Francisco, I determined to return to America and find you as soon as I had completed the business which called me to England."

"Really!"

"Will you appoint a meeting for six months hence?"

"Why not ten years hence?"

"I say six months," returned Phileas Fogg; "and I shall be at the place of meeting promptly."

"All this is an evasion," cried Stamp Proctor. "Now or never!"

"Very good. You are going to New York?"
"No."
"To Chicago?"
"No."
"To Omaha?"
"What difference is it to you? Do you know Plum Creek?"
"No," replied Mr. Fogg.
"It's the next station. The train will be there in an hour, and will stop there ten minutes. In ten minutes several revolver-shots could be exchanged."
"Very well," said Mr. Fogg. "I will stop at Plum Creek."
"And I guess you'll stay there too," added the American insolently.
"Who knows?" replied Mr. Fogg, returning to the car as coolly as usual. He began to reassure Aouda, telling her that blusterers were never to be feared, and begged Fix to be his second at the approaching duel, a request which the detective could not refuse. Mr. Fogg resumed the interrupted game with perfect calmness.

At eleven o'clock the locomotive's whistle announced that they were approaching Plum Creek station. Mr. Fogg rose, and, followed by Fix, went out upon the platform. Passepartout accompanied him, carrying a pair of revolvers. Aouda remained in the car, as pale as death.

The door of the next car opened, and Colonel Proctor appeared on the platform, attended by a Yankee of his own stamp as his second. But just as the combatants were about to step from the train, the conductor hurried up, and shouted, "You can't get off, gentlemen!"
"Why not?" asked the colonel.
"We are twenty minutes late, and we shall not stop."
"But I am going to fight a duel with this gentleman."
"I am sorry," said the conductor; "but we shall be off at once. There's the bell ringing now."

The train started.

"I'm really very sorry, gentlemen," said the conductor. "Under any other circumstances I should have been happy to oblige you. But, after all, as you have not had time to fight here, why not fight as we go along?"
"That wouldn't be convenient, perhaps, for this gentleman," said the colonel, in a jeering tone.
"It would be perfectly so," replied Phileas Fogg.
"Well, we are really in America," thought Passepartout, "and the conductor is a gentleman of the first order!"

So muttering, he followed his master.

The two combatants, their seconds, and the conductor passed through the cars to the rear of the train. The last car was only occupied by a dozen passengers, whom the conductor politely asked if they would not be so kind as to leave it vacant for a few moments, as two gentlemen had an affair of honour to settle. The passengers granted the request with alacrity, and straightway disappeared on the platform.

The car, which was some fifty feet long, was very convenient for their purpose. The adversaries might march on each other in the aisle, and fire at their ease. Never was duel more easily arranged. Mr. Fogg and Colonel Proctor, each provided with two six-barrelled revolvers, entered the car. The seconds, remaining outside, shut them in. They were to begin firing at the first whistle of the locomotive. After an interval of two minutes, what remained of the two gentlemen would be taken from the car.

Nothing could be more simple. Indeed, it was all so simple that Fix and Passepartout felt their hearts beating as if they would crack. They were listening for the whistle agreed upon, when suddenly savage cries resounded in the air, accompanied by reports which certainly did not issue from the car where the duellists were. The reports continued in front and the whole length of the train. Cries of terror proceeded from the interior of the cars. The noise was most clamorous. They then perceived that the train was attacked by a band of Sioux.

This was not the first attempt of these daring Indians, for more than once they had waylaid trains on the road. A hundred of them had, according to their habit, jumped upon the steps without stopping the train, with the ease of a clown mounting a horse at full gallop.

The Indians had first mounted the engine, and half stunned the engineer and stoker with blows from their muskets. A Sioux chief, wishing to stop the train, but not knowing how to work the regulator, had opened wide instead of closing the steam-valve, and the locomotive was plunging forward with terrific velocity.

The Sioux had at the same time invaded the cars, skipping like enraged monkeys over the roofs, thrusting open the doors, and fighting hand to hand with the passengers. Penetrating the baggage-car, they pillaged it, throwing the trunks out of the train. The cries and shots were constant. The travellers defended themselves bravely; some of the
cars were barricaded, and sustained a siege, like moving forts, carried along at a speed of a hundred miles an hour.

Aouda behaved courageously from the first. She defended herself like a true heroine with a revolver, which she shot through the broken windows whenever a savage made his appearance. Twenty Sioux had fallen mortally wounded to the ground, and the wheels crushed those who fell upon the rails as if they had been worms. Several passengers, shot or stunned, lay on the seats.

It was necessary to put an end to the struggle, which had lasted for ten minutes, and which would result in the triumph of the Sioux if the train was not stopped. Fort Kearney station, where there was a garrison, was only two miles distant; but, that once passed, the Sioux would be masters of the train between Fort Kearney and the station beyond.

The conductor was fighting beside Mr. Fogg, when he was shot and fell. At the same moment he cried, "Unless the train is stopped in five minutes, we are lost!"

"It shall be stopped," said Phileas Fogg, preparing to rush from the car.

"Stay, monsieur," cried Passepartout; "I will go."

Mr. Fogg had not time to stop the brave fellow, who, opening a door unperceived by the Indians, succeeded in slipping under the car; and while the struggle continued and the balls whizzed across each other over his head, he made use of his old acrobatic experience, and with amazing agility worked his way under the cars, holding on to the chains, aiding himself by the brakes and edges of the sashes, creeping from one car to another with marvellous skill, and thus gaining the forward end of the train.

There, suspended by one hand between the baggage-car and the tender, with the other he loosened the safety chains; but, owing to the traction, he would never have succeeded in unscrewing the yoking-bar, had not a violent concussion jolted this bar out. The train, now detached from the engine, remained a little behind, whilst the locomotive rushed forward with increased speed.

Carried on by the force already acquired, the train still moved for several minutes; but the brakes were worked and at last they stopped, less than a hundred feet from Kearney station.

The soldiers of the fort, attracted by the shots, hurried up; the Sioux had not expected them, and decamped in a body before the train entirely stopped.

But when the passengers counted each other on the station platform several were found missing; among others the courageous Frenchman, whose devotion had just saved them.

Chapter XXX
IN WHICH PHILEAS FOGG SIMPLY DOES HIS DUTY

Three passengers including Passepartout had disappeared. Had they been killed in the struggle? Were they taken prisoners by the Sioux? It was impossible to tell.

There were many wounded, but none mortally. Colonel Proctor was one of the most seriously hurt; he had fought bravely, and a ball had entered his groin. He was carried into the station with the other wounded passengers, to receive such attention as could be of avail.

Aouda was safe; and Phileas Fogg, who had been in the thickest of the fight, had not received a scratch. Fix was slightly wounded in the arm. But Passepartout was not to be found, and tears coursed down Aouda's cheeks.

All the passengers had got out of the train, the wheels of which were stained with blood. From the tyres and spokes hung ragged pieces of flesh. As far as the eye could reach on the white plain behind, red trails were visible. The last Sioux were disappearing in the south, along the banks of Republican River.

Mr. Fogg, with folded arms, remained motionless. He had a serious decision to make. Aouda, standing near him, looked at him without speaking, and he understood her look. If his servant was a prisoner, ought he not to risk everything to rescue him from the Indians? "I will find him, living or dead," said he quietly to Aouda.

"Ah, Mr.--Mr. Fogg!" cried she, clasping his hands and covering them with tears.

"Living," added Mr. Fogg, "if we do not lose a moment."

Phileas Fogg, by this resolution, inevitably sacrificed himself; he pronounced his own doom. The delay of a single day would make him lose the steamer at New York, and his bet would be certainly lost. But as he thought, "It is my duty," he did not hesitate.

The commanding officer of Fort Kearney was there. A hundred of his soldiers had placed themselves in a position to defend the station, should the Sioux attack it.

"Sir," said Mr. Fogg to the captain, "three passengers have disappeared."

"Dead?" asked the captain.

"Dead or prisoners; that is the uncertainty which must be solved. Do you propose to pursue the Sioux?"

"That's a serious thing to do, sir," returned the captain. "These Indians may retreat beyond the Arkansas, and I
cannot leave the fort unprotected."

"The lives of three men are in question, sir," said Phileas Fogg.

"Doubtless; but can I risk the lives of fifty men to save three?"

"I don't know whether you can, sir; but you ought to do so."

"Nobody here," returned the other, "has a right to teach me my duty."

"Very well," said Mr. Fogg, coldly. "I will go alone."

"You, sir!" cried Fix, coming up; "you go alone in pursuit of the Indians?"

"Would you have me leave this poor fellow to perish--him to whom every one present owes his life? I shall go."

"No, sir, you shall not go alone," cried the captain, touched in spite of himself. "No! you are a brave man. Thirty

volunteers!" he added, turning to the soldiers.

The whole company started forward at once. The captain had only to pick his men. Thirty were chosen, and an

old sergeant placed at their head.

"Thanks, captain," said Mr. Fogg.

"Will you let me go with you?" asked Fix.

"Do as you please, sir. But if you wish to do me a favour, you will remain with Aouda. In case anything should

happen to me--"

A sudden pallor overspread the detective's face. Separate himself from the man whom he had so persistently

followed step by step! Leave him to wander about in this desert! Fix gazed attentively at Mr. Fogg, and, despite his

suspicions and of the struggle which was going on within him, he lowered his eyes before that calm and frank look.

"I will stay," said he.

A few moments after, Mr. Fogg pressed the young woman's hand, and, having confided to her his precious

carpet-bag, went off with the sergeant and his little squad. But, before going, he had said to the soldiers, "My

friends, I will divide five thousand dollars among you, if we save the prisoners."

It was then a little past noon.

Aouda retired to a waiting-room, and there she waited alone, thinking of the simple and noble generosity, the

tranquil courage of Phileas Fogg. He had sacrificed his fortune, and was now risking his life, all without hesitation,

from duty, in silence.

Fix did not have the same thoughts, and could scarcely conceal his agitation. He walked feverishly up and down

the platform, but soon resumed his outward composure. He now saw the folly of which he had been guilty in letting

Fogg go alone. What! This man, whom he had just followed around the world, was permitted now to separate

himself from him! He began to accuse and abuse himself, and, as if he were director of police, administered to

himself a sound lecture for his greeness.

"I have been an idiot!" he thought, "and this man will see it. He has gone, and won't come back! But how is it

that I, Fix, who have in my pocket a warrant for his arrest, have been so fascinated by him? Decidedly, I am nothing

but an ass!"

So reasoned the detective, while the hours crept by all too slowly. He did not know what to do. Sometimes he

was tempted to tell Aouda all; but he could not doubt how the young woman would receive his confidences. What

course should he take? He thought of pursuing Fogg across the vast white plains; it did not seem impossible that he

might overtake him. Footsteps were easily printed on the snow! But soon, under a new sheet, every imprint would

be effaced.

Fix became discouraged. He felt a sort of insurmountable longing to abandon the game altogether. He could now

leave Fort Kearney station, and pursue his journey homeward in peace.

Towards two o'clock in the afternoon, while it was snowing hard, long whistles were heard approaching from the

east. A great shadow, preceded by a wild light, slowly advanced, appearing still larger through the mist, which gave

it a fantastic aspect. No train was expected from the east, neither had there been time for the succour asked for by

telegraph to arrive; the train from Omaha to San Francisco was not due till the next day. The mystery was soon

explained.

The locomotive, which was slowly approaching with deafening whistles, was that which, having been detached

from the train, had continued its route with such terrific rapidity, carrying off the unconscious engineer and stoker. It

had run several miles, when, the fire becoming low for want of fuel, the steam had slackened; and it had finally

stopped an hour after, some twenty miles beyond Fort Kearney. Neither the engineer nor the stoker was dead, and,

after remaining for some time in their swoon, had come to themselves. The train had then stopped. The engineer,

when he found himself in the desert, and the locomotive without cars, understood what had happened. He could not

imagine how the locomotive had become separated from the train; but he did not doubt that the train left behind was

in distress.

He did not hesitate what to do. It would be prudent to continue on to Omaha, for it would be dangerous to return
to the train, which the Indians might still be engaged in pillaging. Nevertheless, he began to rebuild the fire in the
furnace; the pressure again mounted, and the locomotive returned, running backwards to Fort Kearney. This it was
which was whistling in the mist.

The travellers were glad to see the locomotive resume its place at the head of the train. They could now continue
the journey so terribly interrupted.

Aouda, on seeing the locomotive come up, hurried out of the station, and asked the conductor, "Are you going to
start?"
"At once, madam."
"But the prisoners, our unfortunate fellow-travellers--"
"I cannot interrupt the trip," replied the conductor. "We are already three hours behind time."
"And when will another train pass here from San Francisco?"
"To-morrow evening, madam."
"To-morrow evening! But then it will be too late! We must wait--"
"It is impossible," responded the conductor. "If you wish to go, please get in."
"I will not go," said Aouda.

Fix had heard this conversation. A little while before, when there was no prospect of proceeding on the journey,
he had made up his mind to leave Fort Kearney; but now that the train was there, ready to start, and he had only to
take his seat in the car, an irresistible influence held him back. The station platform burned his feet, and he could not
stir. The conflict in his mind again began; anger and failure stifled him. He wished to struggle on to the end.

Meanwhile the passengers and some of the wounded, among them Colonel Proctor, whose injuries were serious,
had taken their places in the train. The buzzing of the over-heated boiler was heard, and the steam was escaping
from the valves. The engineer whistled, the train started, and soon disappeared, mingling its white smoke with the
eddies of the densely falling snow.

The detective had remained behind.

Several hours passed. The weather was dismal, and it was very cold. Fix sat motionless on a bench in the station;
he might have been thought asleep. Aouda, despite the storm, kept coming out of the waiting-room, going to the end
of the platform, and peering through the tempest of snow, as if to pierce the mist which narrowed the horizon around
her, and to hear, if possible, some welcome sound. She heard and saw nothing. Then she would return, chilled
through, to issue out again after the lapse of a few moments, but always in vain.

Evening came, and the little band had not returned. Where could they be? Had they found the Indians, and were
they having a conflict with them, or were they still wandering amid the mist? The commander of the fort was
anxious, though he tried to conceal his apprehensions. As night approached, the snow fell less plentifully, but it
became intensely cold. Absolute silence rested on the plains. Neither flight of bird nor passing of beast troubled the
perfect calm.

Throughout the night Aouda, full of sad forebodings, her heart stifled with anguish, wandered about on the verge
of the plains. Her imagination carried her far off, and showed her innumerable dangers. What she suffered through
the long hours it would be impossible to describe.

Fix remained stationary in the same place, but did not sleep. Once a man approached and spoke to him, and the
detective merely replied by shaking his head.

Thus the night passed. At dawn, the half-extinguished disc of the sun rose above a misty horizon; but it was now
possible to recognise objects two miles off. Phileas Fogg and the squad had gone southward; in the south all was still
vacancy. It was then seven o'clock.

The captain, who was really alarmed, did not know what course to take.

Should he send another detachment to the rescue of the first? Should he sacrifice more men, with so few chances
of saving those already sacrificed? His hesitation did not last long, however. Calling one of his lieutenants, he was
on the point of ordering a reconnaissance, when gunshots were heard. Was it a signal? The soldiers rushed out of the
fort, and half a mile off they perceived a little band returning in good order.

Mr. Fogg was marching at their head, and just behind him were Passepartout and the other two travellers,
rescued from the Sioux.

They had met and fought the Indians ten miles south of Fort Kearney. Shortly before the detachment arrived,
Passepartout and his companions had begun to struggle with their captors, three of whom the Frenchman had felled
with his fists, when his master and the soldiers hastened up to their relief.

All were welcomed with joyful cries. Phileas Fogg distributed the reward he had promised to the soldiers, while
Passepartout, not without reason, muttered to himself, "It must certainly be confessed that I cost my master dear!"

Fix, without saying a word, looked at Mr. Fogg, and it would have been difficult to analyse the thoughts which
struggled within him. As for Aouda, she took her protector's hand and pressed it in her own, too much moved to
speak.

Meanwhile, Passepartout was looking about for the train; he thought he should find it there, ready to start for
Omaha, and he hoped that the time lost might be regained.

"The train! the train!" cried he.

"Gone," replied Fix.

"And when does the next train pass here?" said Phileas Fogg.

"Not till this evening."

"Ah!" returned the impassible gentleman quietly.

Chapter XXXI
IN WHICH FIX, THE DETECTIVE, CONSIDERABLY FURTHERS THE INTERESTS OF PHILEAS Fogg
Phileas Fogg found himself twenty hours behind time. Passepartout, the involuntary cause of this delay, was
desperate. He had ruined his master!

At this moment the detective approached Mr. Fogg, and, looking him intently in the face, said:

"Seriously, sir, are you in great haste?"

"Quite seriously."

"I have a purpose in asking," resumed Fix. "Is it absolutely necessary that you should be in New York on the 11th, before nine o'clock in the evening, the time that the steamer leaves for Liverpool?"

"It is absolutely necessary."

"And, if your journey had not been interrupted by these Indians, you would have reached New York on the morning of the 11th?"

"Yes; with eleven hours to spare before the steamer left."

"Good! you are therefore twenty hours behind. Twelve from twenty leaves eight. You must regain eight hours. Do you wish to try to do so?"

"On foot?" asked Mr. Fogg.

"No; on a sledge," replied Fix. "On a sledge with sails. A man has proposed such a method to me."

It was the man who had spoken to Fix during the night, and whose offer he had refused.

Phileas Fogg did not reply at once; but Fix, having pointed out the man, who was walking up and down in front of the station, Mr. Fogg went up to him. An instant after, Mr. Fogg and the American, whose name was Mudge, entered a hut built just below the fort.

There Mr. Fogg examined a curious vehicle, a kind of frame on two long beams, a little raised in front like the runners of a sledge, and upon which there was room for five or six persons. A high mast was fixed on the frame, held firmly by metallic lashings, to which was attached a large brigantine sail. This mast held an iron stay upon which to hoist a jib-sail. Behind, a sort of rudder served to guide the vehicle. It was, in short, a sledge rigged like a sloop. During the winter, when the trains are blocked up by the snow, these sledges make extremely rapid journeys across the frozen plains from one station to another. Provided with more sails than a cutter, and with the wind behind them, they slip over the surface of the prairies with a speed equal if not superior to that of the express trains.

Mr. Fogg readily made a bargain with the owner of this land-craft. The wind was favourable, being fresh, and blowing from the west. The snow had hardened, and Mudge was very confident of being able to transport Mr. Fogg in a few hours to Omaha. Thence the trains eastward run frequently to Chicago and New York. It was not impossible that the lost time might yet be recovered; and such an opportunity was not to be rejected.

Not wishing to expose Aouda to the discomforts of travelling in the open air, Mr. Fogg proposed to leave her with Passepartout at Fort Kearney, the servant taking upon himself to escort her to Europe by a better route and under more favourable conditions. But Aouda refused to separate from Mr. Fogg, and Passepartout was delighted with her decision; for nothing could induce him to leave his master while Fix was with him.

It would be difficult to guess the detective's thoughts. Was this conviction shaken by Phileas Fogg's return, or did he still regard him as an exceedingly shrewd rascal, who, his journey round the world completed, would think himself absolutely safe in England? Perhaps Fix's opinion of Phileas Fogg was somewhat modified; but he was nevertheless resolved to do his duty, and to hasten the return of the whole party to England as much as possible.

At eight o'clock the sledge was ready to start. The passengers took their places on it, and wrapped themselves up closely in their travelling-cloaks. The two great sails were hoisted, and under the pressure of the wind the sledge slid over the hardened snow with a velocity of forty miles an hour.

The distance between Fort Kearney and Omaha, as the birds fly, is at most two hundred miles. If the wind held good, the distance might be traversed in five hours; if no accident happened the sledge might reach Omaha by one o'clock.
What a journey! The travellers, huddled close together, could not speak for the cold, intensified by the rapidity at which they were going. The sledge sped on as lightly as a boat over the waves. When the breeze came skimming the earth the sledge seemed to be lifted off the ground by its sails. Mudge, who was at the rudder, kept in a straight line, and by a turn of his hand checked the lurches which the vehicle had a tendency to make. All the sails were up, and the jib was so arranged as not to screen the brigantine. A top-mast was hoisted, and another jib, held out to the wind, added its force to the other sails. Although the speed could not be exactly estimated, the sledge could not be going at less than forty miles an hour.

"If nothing breaks," said Mudge, "we shall get there!"

Mr. Fogg had made it for Mudge's interest to reach Omaha within the time agreed on, by the offer of a handsome reward.

The prairie, across which the sledge was moving in a straight line, was as flat as a sea. It seemed like a vast frozen lake. The railroad which ran through this section ascended from the south-west to the north-west by Great Island, Columbus, an important Nebraska town, Schuyler, and Fremont, to Omaha. It followed throughout the right bank of the Platte River. The sledge, shortening this route, took a chord of the arc described by the railway. Mudge was not afraid of being stopped by the Platte River, because it was frozen. The road, then, was quite clear of obstacles, and Phileas Fogg had but two things to fear—an accident to the sledge, and a change or calm in the wind.

But the breeze, far from lessening its force, blew as if to bend the mast, which, however, the metallic lashings held firmly. These lashings, like the chords of a stringed instrument, resounded as if vibrated by a violin bow. The sledge slid along in the midst of a plaintively intense melody.

"Those chords give the fifth and the octave," said Mr. Fogg.

These were the only words he uttered during the journey. Aouda, cosily packed in furs and cloaks, was sheltered as much as possible from the attacks of the freezing wind. As for Passepartout, his face was as red as the sun's disc when it sets in the mist, and he laboriously inhaled the biting air. With his natural buoyancy of spirits, he began to hope again. They would reach New York on the evening, if not on the morning, of the 11th, and there was still some chances that it would be before the steamer sailed for Liverpool.

Passepartout even felt a strong desire to grasp his ally, Fix, by the hand. He remembered that it was the detective who procured the sledge, the only means of reaching Omaha in time; but, checked by some presentiment, he kept his usual reserve. One thing, however, Passepartout would never forget, and that was the sacrifice which Mr. Fogg had made, without hesitation, to rescue him from the Sioux. Mr. Fogg had risked his fortune and his life. No! His servant would never forget that!

While each of the party was absorbed in reflections so different, the sledge flew past over the vast carpet of snow. The creeks it passed over were not perceived. Fields and streams disappeared under the uniform whiteness. The plain was absolutely deserted. Between the Union Pacific road and the branch which unites Kearney with Saint Joseph it formed a great uninhabited island. Neither village, station, nor fort appeared. From time to time they sped by some phantom-like tree, whose white skeleton twisted and rattled in the wind. Sometimes flocks of wild birds rose, or bands of gaunt, famished, ferocious prairie-wolves ran howling after the sledge. Passepartout, revolver in hand, held himself ready to fire on those which came too near. Had an accident then happened to the sledge, the travellers, attacked by these beasts, would have been in the most terrible danger; but it held on its even course, soon gained on the wolves, and ere long left the howling band at a safe distance behind.

About noon Mudge perceived by certain landmarks that he was crossing the Platte River. He said nothing, but he felt certain that he was now within twenty miles of Omaha. In less than an hour he left the rudder and furled his sails, whilst the sledge, carried forward by the great impetus the wind had given it, went on half a mile further with its sails unspared.

It stopped at last, and Mudge, pointing to a mass of roofs white with snow, said: "We have got there!"

Arrived! Arrived at the station which is in daily communication, by numerous trains, with the Atlantic seaboard!

Passepartout and Fix jumped off, stretched their stiffened limbs, and aided Mr. Fogg and the young woman to descend from the sledge. Phileas Fogg generously rewarded Mudge, whose hand Passepartout warmly grasped, and the party directed their steps to the Omaha railway station.

The Pacific Railroad proper finds its terminus at this important Nebraska town. Omaha is connected with Chicago by the Chicago and Rock Island Railroad, which runs directly east, and passes fifty stations.

A train was ready to start when Mr. Fogg and his party reached the station, and they only had time to get into the cars. They had seen nothing of Omaha; but Passepartout confessed to himself that this was not to be regretted, as they were not travelling to see the sights.

The train passed rapidly across the State of Iowa, by Council Bluffs, Des Moines, and Iowa City. During the night it crossed the Mississippi at Davenport, and by Rock Island entered Illinois. The next day, which was the 10th, at four o'clock in the evening, it reached Chicago, already risen from its ruins, and more proudly seated than ever on
the borders of its beautiful Lake Michigan.

Nine hundred miles separated Chicago from New York; but trains are not wanting at Chicago. Mr. Fogg passed at once from one to the other, and the locomotive of the Pittsburgh, Fort Wayne, and Chicago Railway left at full speed, as if it fully comprehended that that gentleman had no time to lose. It traversed Indiana, Ohio, Pennsylvania, and New Jersey like a flash, rushing through towns with antique names, some of which had streets and car-tracks, but as yet no houses. At last the Hudson came into view; and, at a quarter-past eleven in the evening of the 11th, the train stopped in the station on the right bank of the river, before the very pier of the Cunard line.

The China, for Liverpool, had started three-quarters of an hour before!

Chapter XXXII

IN WHICH PHILEAS FOGG ENGAGES IN A DIRECT STRUGGLE WITH BAD FORTUNE

The China, in leaving, seemed to have carried off Phileas Fogg's last hope. None of the other steamers were able to serve his projects. The Pereire, of the French Transatlantic Company, whose admirable steamers are equal to any in speed and comfort, did not leave until the 14th; the Hamburg boats did not go directly to Liverpool or London, but to Havre; and the additional trip from Havre to Southampton would render Phileas Fogg's last efforts of no avail. The Inman steamer did not depart till the next day, and could not cross the Atlantic in time to save the wager.

Mr. Fogg learned all this in consulting his Bradshaw, which gave him the daily movements of the trans-Atlantic steamers.

Passepartout was crushed; it overwhelmed him to lose the boat by three-quarters of an hour. It was his fault, for, instead of helping his master, he had not ceased putting obstacles in his path! And when he recalled all the incidents of the tour, when he counted up the sums expended in pure loss and on his own account, when he thought that the immense stake, added to the heavy charges of this useless journey, would completely ruin Mr. Fogg, he overwhelmed himself with bitter self-accusations. Mr. Fogg, however, did not reproach him; and, on leaving the Cunard pier, only said: "We will consult about what is best to-morrow. Come."

The party crossed the Hudson in the Jersey City ferryboat, and drove in a carriage to the St. Nicholas Hotel, on Broadway. Rooms were engaged, and the night passed, briefly to Phileas Fogg, who slept profoundly, but very long to Aouda and the others, whose agitation did not permit them to rest.

The next day was the 12th of December. From seven in the morning of the 12th to a quarter before nine in the evening of the 21st there were nine days, thirteen hours, and forty-five minutes. If Phileas Fogg had left in the China, one of the fastest steamers on the Atlantic, he would have reached Liverpool, and then London, within the period agreed upon.

Mr. Fogg left the hotel alone, after giving Passepartout instructions to await his return, and inform Aouda to be ready at an instant's notice. He proceeded to the banks of the Hudson, and looked about among the vessels moored or anchored in the river, for any that were about to depart. Several had departure signals, and were preparing to put to sea at morning tide; for in this immense and admirable port there is not one day in a hundred that vessels do not set out for every quarter of the globe. But they were mostly sailing vessels, of which, of course, Phileas Fogg could make no use.

He seemed about to give up all hope, when he espied, anchored at the Battery, a cable's length off at most, a trading vessel, with a screw, well-shaped, whose funnel, puffing a cloud of smoke, indicated that she was getting ready for departure.

Phileas Fogg hailed a boat, got into it, and soon found himself on board the Henrietta, iron-hulled, wood-built above. He ascended to the deck, and asked for the captain, who forthwith presented himself. He was a man of fifty, a sort of sea-wolf, with big eyes, a complexion of oxidised copper, red hair and thick neck, and a growling voice.

"The captain?" asked Mr. Fogg.
"I am the captain."
"I am Phileas Fogg, of London."
"And I am Andrew Speedy, of Cardiff."
"You are going to put to sea?"
"In an hour."
"You are bound for--""
"Bordeaux."
"And your cargo?"
"No freight. Going in ballast."
"Have you any passengers?"
"No passengers. Never have passengers. Too much in the way."
"Is your vessel a swift one?"
"Between eleven and twelve knots. The Henrietta, well known."
"Will you carry me and three other persons to Liverpool?"
"To Liverpool? Why not to China?"
"I said Liverpool."
"No!"
"No?"
"No. I am setting out for Bordeaux, and shall go to Bordeaux."
"Money is no object?"
"None."
The captain spoke in a tone which did not admit of a reply.
"But the owners of the Henrietta--" resumed Phileas Fogg.
"The owners are myself," replied the captain. "The vessel belongs to me."
"I will freight it for you."
"No."
"I will buy it of you."
"No."
Phileas Fogg did not betray the least disappointment; but the situation was a grave one. It was not at New York
as at Hong Kong, nor with the captain of the Henrietta as with the captain of the Tankadere. Up to this time money
had smoothed away every obstacle. Now money failed.

Still, some means must be found to cross the Atlantic on a boat, unless by balloon--which would have been
venturesome, besides not being capable of being put in practice. It seemed that Phileas Fogg had an idea, for he said
to the captain, "Well, will you carry me to Bordeaux?"
"No, not if you paid me two hundred dollars."
"I offer you two thousand."
"Apiece?"
"Apiece."
"And there are four of you?"
"Four."
Captain Speedy began to scratch his head. There were eight thousand dollars to gain, without changing his route;
for which it was well worth conquering the repugnance he had for all kinds of passengers. Besides, passenger's at
two thousand dollars are no longer passengers, but valuable merchandise. "I start at nine o'clock," said Captain
Speedy, simply. "Are you and your party ready?"
"We will be on board at nine o'clock," replied, no less simply, Mr. Fogg.

It was half-past eight. To disembark from the Henrietta, jump into a hack, hurry to the St. Nicholas, and return
with Aouda, Passepartout, and even the inseparable Fix was the work of a brief time, and was performed by Mr.
Fogg with the coolness which never abandoned him. They were on board when the Henrietta made ready to weigh
anchor.

When Passepartout heard what this last voyage was going to cost, he uttered a prolonged "Oh!" which extended
throughout his vocal gamut.

As for Fix, he said to himself that the Bank of England would certainly not come out of this affair well
indemnified. When they reached England, even if Mr. Fogg did not throw some handfuls of bank-bills into the sea,
more than seven thousand pounds would have been spent!

Chapter XXXIII
IN WHICH PHILEAS FOGG SHOWS HIMSELF EQUAL TO THE OCCASION

An hour after, the Henrietta passed the lighthouse which marks the entrance of the Hudson, turned the point of
Sandy Hook, and put to sea. During the day she skirted Long Island, passed Fire Island, and directed her course
rapidly eastward.

At noon the next day, a man mounted the bridge to ascertain the vessel's position. It might be thought that this
was Captain Speedy. Not the least in the world. It was Phileas Fogg, Esquire. As for Captain Speedy, he was shut up
in his cabin under lock and key, and was uttering loud cries, which signified an anger at once pardonable and
excessive.

What had happened was very simple. Phileas Fogg wished to go to Liverpool, but the captain would not carry
him there. Then Phileas Fogg had taken passage for Bordeaux, and, during the thirty hours he had been on board,
on the 16th of December was the seventy-fifth day since Phileas Fogg's departure from London, and the Henrietta had so shrewdly managed with his banknotes that the sailors and stokers, who were only an occasional crew, and were not on the best terms with the captain, went over to him in a body. This was why Phileas Fogg was in command instead of Captain Speedy; why the captain was a prisoner in his cabin; and why, in short, the Henrietta was directing her course towards Liverpool. It was very clear, to see Mr. Fogg manage the craft, that he had been a sailor.

How the adventure ended will be seen anon. Aouda was anxious, though she said nothing. As for Passepartout, he thought Mr. Fogg's manoeuvre simply glorious. The captain had said "between eleven and twelve knots," and the Henrietta confirmed his prediction.

If, then—for there were "ifs" still—the sea did not become too boisterous, if the wind did not veer round to the east, if no accident happened to the boat or its machinery, the Henrietta might cross the three thousand miles from New York to Liverpool in the nine days, between the 12th and the 21st of December. It is true that, once arrived, the affair on board the Henrietta, added to that of the Bank of England, might create more difficulties for Mr. Fogg than he imagined or could desire.

During the first days, they went along smoothly enough. The sea was not very unpropitious, the wind seemed stationary in the north-east, the sails were hoisted, and the Henrietta ploughed across the waves like a real trans-Atlantic steamer.

Passepartout was delighted. His master's last exploit, the consequences of which he ignored, enchanted him. Never had the crew seen so jolly and dexterous a fellow. He formed warm friendships with the sailors, and amazed them with his acrobatic feats. He thought they managed the vessel like gentlemen, and that the stokers fired up like heroes. His loquacious good-humour infected everyone. He had forgotten the past, its vexations and delays. He only thought of the end, so nearly accomplished; and sometimes he boiled over with impatience, as if heated by the furnaces of the Henrietta. Often, also, the worthy fellow revolved around Fix, looking at him with a keen, distrustful eye; but he did not speak to him, for their old intimacy no longer existed.

Fix, it must be confessed, understood nothing of what was going on. The conquest of the Henrietta, the bribery of the crew, Fogg managing the boat like a skilled seaman, amazed and confused him. He did not know what to think. For, after all, a man who began by stealing fifty-five thousand pounds might end by stealing a vessel; and Fix was not unnaturally inclined to conclude that the Henrietta under Fogg's command, was not going to Liverpool at all, but to some part of the world where the robber, turned into a pirate, would quietly put himself in safety. The conjecture was at least a plausible one, and the detective began to seriously regret that he had embarked on the affair.

As for Captain Speedy, he continued to howl and growl in his cabin; and Passepartout, whose duty it was to carry him his meals, courageous as he was, took the greatest precautions. Mr. Fogg did not seem even to know that there was a captain on board.

On the 13th they passed the edge of the Banks of Newfoundland, a dangerous locality; during the winter, especially, there are frequent fogs and heavy gales of wind. Ever since the evening before the barometer, suddenly falling, had indicated an approaching change in the atmosphere; and during the night the temperature varied, the cold became sharper, and the wind veered to the south-east.

This was a misfortune. Mr. Fogg, in order not to deviate from his course, furled his sails and increased the force of the steam; but the vessel's speed slackened, owing to the state of the sea, the long waves of which broke against the stern. She pitched violently, and this retarded her progress. The breeze little by little swelled into a tempest, and it was to be feared that the Henrietta might not be able to maintain herself upright on the waves.

Passepartout's visage darkened with the skies, and for two days the poor fellow experienced constant fright. But Phileas Fogg was a bold mariner, and knew how to maintain headway against the sea; and he kept on his course, without even decreasing his steam. The Henrietta, when she could not rise upon the waves, crossed them, swamping her deck, but passing safely. Sometimes the screw rose out of the water, beating its protruding end, when a mountain of water raised the stern above the waves; but the craft always kept straight ahead.

The wind, however, did not grow as boisterous as might have been feared; it was not one of those tempests which burst, and rush on with a speed of ninety miles an hour. It continued fresh, but, unhappily, it remained obstinately in the south-east, rendering the sails useless.

The 16th of December was the seventy-fifth day since Phileas Fogg's departure from London, and the Henrietta had not yet been seriously delayed. Half of the voyage was almost accomplished, and the worst localities had been passed. In summer, success would have been well-nigh certain. In winter, they were at the mercy of the bad season. Passepartout said nothing; but he cherished hope in secret, and comforted himself with the reflection that, if the wind failed them, they might still count on the steam.

On this day the engineer came on deck, went up to Mr. Fogg, and began to speak earnestly with him. Without knowing why it was a presentiment, perhaps Passepartout became vaguely uneasy. He would have given one of his
ears to hear with the other what the engineer was saying. He finally managed to catch a few words, and was sure he heard his master say, "You are certain of what you tell me?"

"Certain, sir," replied the engineer. "You must remember that, since we started, we have kept up hot fires in all our furnaces, and, though we had coal enough to go on short steam from New York to Bordeaux, we haven't enough to go with all steam from New York to Liverpool." "I will consider," replied Mr. Fogg.

Passepartout understood it all; he was seized with mortal anxiety. The coal was giving out! "Ah, if my master can get over that," muttered he, "he'll be a famous man!" He could not help imparting to Fix what he had overheard.

"Then you believe that we really are going to Liverpool?"

"Of course."

"Ass!" replied the detective, shrugging his shoulders and turning on his heel.

Passepartout was on the point of vigorously resenting the epithet, the reason of which he could not for the life of him comprehend; but he reflected that the unfortunate Fix was probably very much disappointed and humiliated in his self-esteem, after having so awkwardly followed a false scent around the world, and refrained.

And now what course would Phileas Fogg adopt? It was difficult to imagine. Nevertheless he seemed to have decided upon one, for that evening he sent for the engineer, and said to him, "Feed all the fires until the coal is exhausted."

A few moments after, the funnel of the Henrietta vomited forth torrents of smoke. The vessel continued to proceed with all steam on; but on the 18th, the engineer, as he had predicted, announced that the coal would give out in the course of the day.

"Do not let the fires go down," replied Mr. Fogg. "Keep them up to the last. Let the valves be filled."

Towards noon Phileas Fogg, having ascertained their position, called Passepartout, and ordered him to go for Captain Speedy. It was as if the honest fellow had been commanded to unchain a tiger. He went to the poop, saying to himself, "He will be like a madman!"

In a few moments, with cries and oaths, a bomb appeared on the poop-deck. The bomb was Captain Speedy. It was clear that he was on the point of bursting. "Where are we?" were the first words his anger permitted him to utter. Had the poor man been an apoplectic, he could never have recovered from his paroxysm of wrath.

"Where are we?" he repeated, with purple face.

"Seven hundred and seven miles from Liverpool," replied Mr. Fogg, with imperturbable calmness.

"Pirate!" cried Captain Speedy.

"I have sent for you, sir--"

"Pickaroon!"

"--sir," continued Mr. Fogg, "to ask you to sell me your vessel."

"No! By all the devils, no!"

"But I shall be obliged to burn her."

"Burn the Henrietta!"

"Yes; at least the upper part of her. The coal has given out."

"Burn my vessel!" cried Captain Speedy, who could scarcely pronounce the words. "A vessel worth fifty thousand dollars!"

"Here are sixty thousand," replied Phileas Fogg, handing the captain a roll of bank-bills. This had a prodigious effect on Andrew Speedy. An American can scarcely remain unmoved at the sight of sixty thousand dollars. The captain forgot in an instant his anger, his imprisonment, and all his grudges against his passenger. The Henrietta was twenty years old; it was a great bargain. The bomb would not go off after all. Mr. Fogg had taken away the match.

"And I shall still have the iron hull," said the captain in a softer tone.

"The iron hull and the engine. Is it agreed?"

"Agreed."

And Andrew Speedy, seizing the banknotes, counted them and consigned them to his pocket.

During this colloquy, Passepartout was as white as a sheet, and Fix seemed on the point of having an apoplectic fit. Nearly twenty thousand pounds had been expended, and Fogg left the hull and engine to the captain, that is, near the whole value of the craft! It was true, however, that fifty-five thousand pounds had been stolen from the Bank.

When Andrew Speedy had pocketed the money, Mr. Fogg said to him, "Don't let this astonish you, sir. You must know that I shall lose twenty thousand pounds, unless I arrive in London by a quarter before nine on the evening of the 21st of December. I missed the steamer at New York, and as you refused to take me to Liverpool--"

"And I did well!" cried Andrew Speedy; "for I have gained at least forty thousand dollars by it!" He added, more sedately, "Do you know one thing, Captain--"

"Fogg."

"Captain Fogg, you've got something of the Yankee about you."
And, having paid his passenger what he considered a high compliment, he was going away, when Mr. Fogg said, "The vessel now belongs to me?"

"Certainly, from the keel to the truck of the masts--all the wood, that is."

"Very well. Have the interior seats, bunks, and frames pulled down, and burn them."

It was necessary to have dry wood to keep the steam up to the adequate pressure, and on that day the poop, cabins, bunks, and the spare deck were sacrificed. On the next day, the 19th of December, the masts, rafts, and spars were burned; the crew worked lustily, keeping up the fires. Passepartout hewed, cut, and sawed away with all his might. There was a perfect rage for demolition.

The railings, fittings, the greater part of the deck, and top sides disappeared on the 20th, and the Henrietta was now only a flat hulk. But on this day they sighted the Irish coast and Fastnet Light. By ten in the evening they were passing Queenstown. Phileas Fogg had only twenty-four hours more in which to get to London; that length of time was necessary to reach Liverpool, with all steam on. And the steam was about to give out altogether!

"Sir," said Captain Speedy, who was now deeply interested in Mr. Fogg's project, "I really commiserate you. Everything is against you. We are only opposite Queenstown."

"Ah," said Mr. Fogg, "is that place where we see the lights Queenstown?"

"Yes."

"Can we enter the harbour?"

"Not under three hours. Only at high tide."

"Stay," replied Mr. Fogg calmly, without betraying in his features that by a supreme inspiration he was about to attempt once more to conquer ill-fortune.

Queenstown is the Irish port at which the trans-Atlantic steamers stop to put off the mails. These mails are carried to Dublin by express trains always held in readiness to start; from Dublin they are sent on to Liverpool by the most rapid boats, and thus gain twelve hours on the Atlantic steamers.

Phileas Fogg counted on gaining twelve hours in the same way. Instead of arriving at Liverpool the next evening by the Henrietta, he would be there by noon, and would therefore have time to reach London before a quarter before nine in the evening.

The Henrietta entered Queenstown Harbour at one o'clock in the morning, it then being high tide; and Phileas Fogg, after being grasped heartily by the hand by Captain Speedy, left that gentleman on the levelled hulk of his craft, which was still worth half what he had sold it for.

The party went on shore at once. Fix was greatly tempted to arrest Mr. Fogg on the spot; but he did not. Why? What struggle was going on within him? Had he changed his mind about "his man"? Did he understand that he had made a grave mistake? He did not, however, abandon Mr. Fogg. They all got upon the train, which was just ready to start, at half-past one; at dawn of day they were in Dublin; and they lost no time in embarking on a steamer which, disdaining to rise upon the waves, invariably cut through them.

Phileas Fogg at last disembarked on the Liverpool quay, at twenty minutes before twelve, 21st December. He was only six hours distant from London.

But at this moment Fix came up, put his hand upon Mr. Fogg's shoulder, and, showing his warrant, said, "You are really Phileas Fogg?"

"I am."

"I arrest you in the Queen's name!"

Chapter XXXIV
IN WHICH PHILEAS FOGG AT LAST REACHES LONDON

Phileas Fogg was in prison. He had been shut up in the Custom House, and he was to be transferred to London the next day.

Passepartout, when he saw his master arrested, would have fallen upon Fix had he not been held back by some policemen. Aouda was thunderstruck at the suddenness of an event which she could not understand. Passepartout explained to her how it was that the honest and courageous Fogg was arrested as a robber. The young woman's heart revolted against so heinous a charge, and when she saw that she could attempt to do nothing to save her protector, she wept bitterly.

As for Fix, he had arrested Mr. Fogg because it was his duty, whether Mr. Fogg were guilty or not.

The thought then struck Passepartout, that he was the cause of this new misfortune! Had he not concealed Fix's errand from his master? When Fix revealed his true character and purpose, why had he not told Mr. Fogg? If the latter had been warned, he would no doubt have given Fix proof of his innocence, and satisfied him of his mistake; at least, Fix would not have continued his journey at the expense and on the heels of his master, only to arrest him...
the moment he set foot on English soil. Passepartout wept till he was blind, and felt like blowing his brains out.

Aouda and he had remained, despite the cold, under the portico of the Custom House. Neither wished to leave the place; both were anxious to see Mr. Fogg again.

That gentleman was really ruined, and that at the moment when he was about to attain his end. This arrest was fatal. Having arrived at Liverpool at twenty minutes before twelve on the 21st of December, he had till a quarter before nine that evening to reach the Reform Club, that is, nine hours and a quarter; the journey from Liverpool to London was six hours.

If anyone, at this moment, had entered the Custom House, he would have found Mr. Fogg seated, motionless, calm, and without apparent anger, upon a wooden bench. He was not, it is true, resigned; but this last blow failed to force him into an outward betrayal of any emotion. Was he being devoured by one of those secret rages, all the more terrible because contained, and which only burst forth, with an irresistible force, at the last moment? No one could tell. There he sat, calmly waiting—for what? Did he still cherish hope? Did he still believe, now that the door of this prison was closed upon him, that he would succeed?

However that may have been, Mr. Fogg carefully put his watch upon the table, and observed its advancing hands. Not a word escaped his lips, but his look was singularly set and stern. The situation, in any event, was a terrible one, and might be thus stated: if Phileas Fogg was honest he was ruined; if he was a knave, he was caught.

Did escape occur to him? Did he examine to see if there were any practicable outlet from his prison? Did he think of escaping from it? Possibly; for once he walked slowly around the room. But the door was locked, and the window heavily barred with iron rods. He sat down again, and drew his journal from his pocket. On the line where these words were written, "21st December, Saturday, Liverpool," he added, "80th day, 11.40 a.m.," and waited.

The Custom House clock struck one. Mr. Fogg observed that his watch was two hours too fast.

Two hours! Admitting that he was at this moment taking an express train, he could reach London and the Reform Club by a quarter before nine, p.m. His forehead slightly wrinkled.

At thirty-three minutes past two he heard a singular noise outside, then a hasty opening of doors. Passepartout's voice was audible, and immediately after that of Fix. Phileas Fogg's eyes brightened for an instant.

The door swung open, and he saw Passepartout, Aouda, and Fix, who hurried towards him.

Fix was out of breath, and his hair was in disorder. He could not speak. "Sir," he stammered, "sir--forgive me--most--unfortunate resemblance--robber arrested three days ago--you are free!"

Phileas Fogg was free! He walked steadily in the face, and with the only rapid motion he had ever made in his life, or which he ever would make, drew back his arms, and with the precision of a machine knocked Fix down.

"Well hit!" cried Passepartout, "Parbleu! that's what you might call a good application of English fists!"

Fix, who found himself on the floor, did not utter a word. He had only received his deserts. Mr. Fogg, Aouda, and Passepartout left the Custom House without delay, got into a cab, and in a few moments descended at the station.

Phileas Fogg asked if there was an express train about to leave for London. It was forty minutes past two. The express train had left thirty-five minutes before. Phileas Fogg then ordered a special train.

There were several rapid locomotives on hand; but the railway arrangements did not permit the special train to leave until three o'clock.

At that hour Phileas Fogg, having stimulated the engineer by the offer of a generous reward, at last set out towards London with Aouda and his faithful servant.

It was necessary to make the journey in five hours and a half; and this would have been easy on a clear road throughout. But there were forced delays, and when Mr. Fogg stepped from the train at the terminus, all the clocks in London were striking ten minutes before nine.

Having made the tour of the world, he was behind-hand five minutes. He had lost the wager!

Chapter XXXV

IN WHICH PHILEAS FOGG DOES NOT HAVE TO REPEAT HIS ORDERS TO PASSEPARTOUT TWICE

The dwellers in Saville Row would have been surprised the next day, if they had been told that Phileas Fogg had returned home. His doors and windows were still closed, no appearance of change was visible.

After leaving the station, Mr. Fogg gave Passepartout instructions to purchase some provisions, and quietly went to his domicile.

He bore his misfortune with his habitual tranquillity. Ruined! And by the blundering of the detective! After having steadily traversed that long journey, overcome a hundred obstacles, braved many dangers, and still found time to do some good on his way, to fail near the goal by a sudden event which he could not have foreseen, and
against which he was unarmed; it was terrible! But a few pounds were left of the large sum he had carried with him. There only remained of his fortune the twenty thousand pounds deposited at Barings, and this amount he owed to his friends of the Reform Club. So great had been the expense of his tour that, even had he won, it would not have enriched him; and it is probable that he had not sought to enrich himself, being a man who rather laid wagers for honour's sake than for the stake proposed. But this wager totally ruined him.

Mr. Fogg's course, however, was fully decided upon; he knew what remained for him to do.

A room in the house in Saville Row was set apart for Aouda, who was overwhelmed with grief at her protector's misfortune. From the words which Mr. Fogg dropped, she saw that he was meditating some serious project.

Knowing that Englishmen governed by a fixed idea sometimes resort to the desperate expedient of suicide, Passepartout kept a narrow watch upon his master, though he carefully concealed the appearance of so doing.

First of all, the worthy fellow had gone up to his room, and had extinguished the gas burner, which had been burning for eighty days. He had found in the letter-box a bill from the gas company, and he thought it more than time to put a stop to this expense, which he had been doomed to bear.

The night passed. Mr. Fogg went to bed, but did he sleep? Aouda did not once close her eyes. Passepartout watched all night, like a faithful dog, at his master's door.

Mr. Fogg called him in the morning, and told him to get Aouda's breakfast, and a cup of tea and a chop for himself. He desired Aouda to excuse him from breakfast and dinner, as his time would be absorbed all day in putting his affairs to rights. In the evening he would ask permission to have a few moment's conversation with the young lady.

Passepartout, having received his orders, had nothing to do but obey them. He looked at his imperturbable master, and could scarcely bring his mind to leave him. His heart was full, and his conscience tortured by remorse; for he accused himself more bitterly than ever of being the cause of the irretrievable disaster. Yes! if he had warned Mr. Fogg, and had betrayed Fix's projects to him, his master would certainly not have given the detective passage to Liverpool, and then--

Passepartout could hold in no longer.

"My master! Mr. Fogg!" he cried, "why do you not curse me? It was my fault that--"

"I blame no one," returned Phileas Fogg, with perfect calmness. "Go!"

Passepartout left the room, and went to find Aouda, to whom he delivered his master's message.

"Madam," he added, "I can do nothing myself--nothing! I have no influence over my master; but you, perhaps--"

"What influence could I have?" replied Aouda. "Mr. Fogg is influenced by no one. Has he ever understood that my gratitude to him is overflowing? Has he ever read my heart? My friend, he must not be left alone an instant! You say he is going to speak with me this evening?"

"Yes, madam; probably to arrange for your protection and comfort in England."

"We shall see," replied Aouda, becoming suddenly pensive.

Throughout this day (Sunday) the house in Saville Row was as if uninhabited, and Phileas Fogg, for the first time since he had lived in that house, did not set out for his club when Westminster clock struck half-past eleven.

Why should he present himself at the Reform? His friends no longer expected him there. As Phileas Fogg had not appeared in the saloon on the evening before (Saturday, the 21st of December, at a quarter before nine), he had lost his wager. It was not even necessary that he should go to his bankers for the twenty thousand pounds; for his antagonists already had his cheque in their hands, and they had only to fill it out and send it to the Barings to have the amount transferred to their credit.

Mr. Fogg, therefore, had no reason for going out, and so he remained at home. He shut himself up in his room, and busied himself putting his affairs in order. Passepartout continually ascended and descended the stairs. The hours were long for him. He listened at his master's door, and looked through the keyhole, as if he had a perfect right so to do, and as if he feared that something terrible might happen at any moment. Sometimes he thought of Fix, but no longer in anger. Fix, like all the world, had been mistaken in Phileas Fogg, and had only done his duty in tracking and arresting him; while he, Passepartout. . . . This thought haunted him, and he never ceased cursing his miserable folly.

Finding himself too wretched to remain alone, he knocked at Aouda's door, went into her room, seated himself, without speaking, in a corner, and looked ruefully at the young woman. Aouda was still pensive.

About half-past seven in the evening Mr. Fogg sent to know if Aouda would receive him, and in a few moments he found himself alone with her.

Phileas Fogg took a chair, and sat down near the fireplace, opposite Aouda. No emotion was visible on his face. Fogg returned was exactly the Fogg who had gone away; there was the same calm, the same impassibility.

He sat several minutes without speaking; then, bending his eyes on Aouda, "Madam," said he, "will you pardon me for bringing you to England?"
"I, Mr. Fogg!" replied Aouda, checking the pulsations of her heart.

"Please let me finish," returned Mr. Fogg. "When I decided to bring you far away from the country which was so unsafe for you, I was rich, and counted on putting a portion of my fortune at your disposal; then your existence would have been free and happy. But now I am ruined."

"I know it, Mr. Fogg," replied Aouda; "and I ask you in my turn, will you forgive me for having followed you, and--who knows?--for having, perhaps, delayed you, and thus contributed to your ruin?"

"Madam, you could not remain in India, and your safety could only be assured by bringing you to such a distance that your persecutors could not take you."

"So, Mr. Fogg," resumed Aouda, "not content with rescuing me from a terrible death, you thought yourself bound to secure my comfort in a foreign land?"

"Yes, madam; but circumstances have been against me. Still, I beg to place the little I have left at your service."

"But what will become of you, Mr. Fogg?"

"As for me, madam," replied the gentleman, coldly, "I have need of nothing."

"But how do you look upon the fate, sir, which awaits you?"

"As I am in the habit of doing."

"At least," said Aouda, "want should not overtake a man like you. Your friends--"

"I have no relatives, madam."

"Your relatives--"

"I have no longer any relatives."

"I pity you, then, Mr. Fogg, for solitude is a sad thing, with no heart to which to confide your griefs. They say, though, that misery itself, shared by two sympathetic souls, may be borne with patience."

"They say so, madam."

"Mr. Fogg," said Aouda, rising and seizing his hand, "do you wish at once a kinswoman and friend? Will you have me for your wife?"

Mr. Fogg, at this, rose in his turn. There was an unwonted light in his eyes, and a slight trembling of his lips. Aouda looked into his face. The sincerity, rectitude, firmness, and sweetness of this soft glance of a noble woman, who could dare all to save him to whom she owed all, at first astonished, then penetrated him. He shut his eyes for an instant, as if to avoid her look. When he opened them again, "I love you!" he said, simply. "Yes, by all that is holiest, I love you, and I am entirely yours!"

"Ah!" cried Aouda, pressing his hand to her heart.

Passepartout was summoned and appeared immediately. Mr. Fogg still held Aouda's hand in his own; Passepartout understood, and his big, round face became as radiant as the tropical sun at its zenith.

Mr. Fogg asked him if it was not too late to notify the Reverend Samuel Wilson, of Marylebone parish, that evening.

Passepartout smiled his most genial smile, and said, "Never too late."

It was five minutes past eight.

"Will it be for to-morrow, Monday?"

"For to-morrow, Monday," said Mr. Fogg, turning to Aouda. "Yes; for to-morrow, Monday," she replied.

Passepartout hurried off as fast as his legs could carry him.

Chapter XXXVI

IN WHICH PHILEAS FOgg'S NAME IS ONCE MORE AT A PREMIUM ON 'CHANGE

It is time to relate what a change took place in English public opinion when it transpired that the real bankrobber, a certain James Strand, had been arrested, on the 17th day of December, at Edinburgh. Three days before, Phileas Fogg had been a criminal, who was being desperately followed up by the police; now he was an honourable gentleman, mathematically pursuing his eccentric journey round the world.

The papers resumed their discussion about the wager; all those who had laid bets, for or against him, revived their interest, as if by magic; the "Phileas Fogg bonds" again became negotiable, and many new wagers were made. Phileas Fogg's name was once more at a premium on 'Change.

His five friends of the Reform Club passed these three days in a state of feverish suspense. Would Phileas Fogg, whom they had forgotten, reappear before their eyes? Where was he at this moment? The 17th of December, the day of James Strand's arrest, was the seventy-sixth since Phileas Fogg's departure, and no news of him had been received. Was he dead? Had he abandoned the effort, or was he continuing his journey along the route agreed upon? And would he appear on Saturday, the 21st of December, at a quarter before nine in the evening, on the threshold of
the Reform Club saloon?

The anxiety in which, for three days, London society existed, cannot be described. Telegrams were sent to America and Asia for news of Phileas Fogg. Messengers were dispatched to the house in Saville Row morning and evening. No news. The police were ignorant what had become of the detective, Fix, who had so unfortunately followed up a false scent. Bets increased, nevertheless, in number and value. Phileas Fogg, like a racehorse, was drawing near his last turning-point. The bonds were quoted, no longer at a hundred below par, but at twenty, at ten, and at five; and paralytic old Lord Albemarle bet even in his favour.

A great crowd was collected in Pall Mall and the neighbouring streets on Saturday evening; it seemed like a multitude of brokers permanently established around the Reform Club. Circulation was impeded, and everywhere disputes, discussions, and financial transactions were going on. The police had great difficulty in keeping back the crowd, and as the hour when Phileas Fogg was due approached, the excitement rose to its highest pitch.

The five antagonists of Phileas Fogg had met in the great saloon of the club. John Sullivan and Samuel Fallentin, the bankers, Andrew Stuart, the engineer, Gauthier Ralph, the director of the Bank of England, and Thomas Flanagan, the brewer, one and all waited anxiously.

When the clock indicated twenty minutes past eight, Andrew Stuart got up, saying, "Gentlemen, in twenty minutes the time agreed upon between Mr. Fogg and ourselves will have expired."

"What time did the last train arrive from Liverpool?" asked Thomas Flanagan.

"At twenty-three minutes past seven," replied Gauthier Ralph; "and the next does not arrive till ten minutes after twelve."

"Well, gentlemen," resumed Andrew Stuart, "if Phileas Fogg had come in the 7:23 train, he would have got here by this time. We can, therefore, regard the bet as won."

"Wait; don't let us be too hasty," replied Samuel Fallentin. "You know that Mr. Fogg is very eccentric. His punctuality is well known; he never arrives too soon, or too late; and I should not be surprised if he appeared before us at the last minute."

"Why," said Andrew Stuart nervously, "if I should see him, I should not believe it was he."

"The fact is," resumed Thomas Flanagan, "Mr. Fogg's project was absurdly foolish. Whatever his punctuality, he could not prevent the delays which were certain to occur; and a delay of only two or three days would be fatal to his tour."

"Observe, too," added John Sullivan, "that we have received no intelligence from him, though there are telegraphic lines all along is route."

"He has lost, gentleman," said Andrew Stuart, "he has a hundred times lost! You know, besides, that the China the only steamer he could have taken from New York to get here in time arrived yesterday. I have seen a list of the passengers, and the name of Phileas Fogg is not among them. Even if we admit that fortune has favoured him, he can scarcely have reached America. I think he will be at least twenty days behind-hand, and that Lord Albemarle will lose a cool five thousand."

"It is clear," replied Gauthier Ralph; "and we have nothing to do but to present Mr. Fogg's cheque at Barings to-morrow."

At this moment, the hands of the club clock pointed to twenty minutes to nine.

"Five minutes more," said Andrew Stuart.

The five gentlemen looked at each other. Their anxiety was becoming intense; but, not wishing to betray it, they readily assented to Mr. Fallentin's proposal of a rubber.

"I wouldn't give up my four thousand of the bet," said Andrew Stuart, as he took his seat, "for three thousand nine hundred and ninety-nine."

The clock indicated eighteen minutes to nine.

The players took up their cards, but could not keep their eyes off the clock. Certainly, however secure they felt, minutes had never seemed so long to them!

"Seventeen minutes to nine," said Thomas Flanagan, as he cut the cards which Ralph handed to him.

Then there was a moment of silence. The great saloon was perfectly quiet; but the murmurs of the crowd outside were heard, with now and then a shrill cry. The pendulum beat the seconds, which each player eagerly counted, as he listened, with mathematical regularity.

"Sixteen minutes to nine!" said John Sullivan, in a voice which betrayed his emotion.

One minute more, and the wager would be won. Andrew Stuart and his partners suspended their game. They left their cards, and counted the seconds.

At the fortieth second, nothing. At the fiftieth, still nothing.

At the fifty-fifth, a loud cry was heard in the street, followed by applause, hurrahs, and some fierce growls.

The players rose from their seats.
At the fifty-seventh second the door of the saloon opened; and the pendulum had not beat the sixtieth second when Phileas Fogg appeared, followed by an excited crowd who had forced their way through the club doors, and in his calm voice, said, "Here I am, gentlemen!"

Chapter XXXVII

IN WHICH IT IS SHOWN THAT PHILEAS FOGG GAINED NOTHING BY HIS TOUR AROUND THE WORLD, UNLESS IT WERE HAPPINESS

Yes; Phileas Fogg in person.

The reader will remember that at five minutes past eight in the evening--about five and twenty hours after the arrival of the travellers in London--Passepartout had been sent by his master to engage the services of the Reverend Samuel Wilson in a certain marriage ceremony, which was to take place the next day.

Passepartout went on his errand enchanted. He soon reached the clergyman's house, but found him not at home. Passepartout waited a good twenty minutes, and when he left the reverend gentleman, it was thirty-five minutes past eight. But in what a state he was! With his hair in disorder, and without his hat, he ran along the street as never man was seen to run before, overturning passers-by, rushing over the sidewalk like a waterspout.

In three minutes he was in Saville Row again, and staggered back into Mr. Fogg's room.

He could not speak.

"What is the matter?" asked Mr. Fogg.

"My master!" gasped Passepartout--"marriage--impossible--"

"Impossible?"

"Impossible--for to-morrow."

"Why so?"

"Because to-morrow--is Sunday!"

"Monday," replied Mr. Fogg.

"No--to-day is Saturday."

"Saturday? Impossible!"

"Yes, yes, yes, yes!" cried Passepartout. "You have made a mistake of one day! We arrived twenty-four hours ahead of time; but there are only ten minutes left!"

Passepartout had seized his master by the collar, and was dragging him along with irresistible force.

Phileas Fogg, thus kidnapped, without having time to think, left his house, jumped into a cab, promised a hundred pounds to the cabman, and, having run over two dogs and overturned five carriages, reached the Reform Club.

The clock indicated a quarter before nine when he appeared in the great saloon.

Phileas Fogg had accomplished the journey round the world in eighty days!

Phileas Fogg had won his wager of twenty thousand pounds!

Phileas Fogg had, without suspecting it, gained one day on his journey, and this merely because he had travelled constantly eastward; he would, on the contrary, have lost a day had he gone in the opposite direction, that is, westward.

In journeying eastward he had gone towards the sun, and the days therefore diminished for him as many times four minutes as he crossed degrees in this direction. There are three hundred and sixty degrees on the circumference of the earth; and these three hundred and sixty degrees, multiplied by four minutes, gives precisely twenty-four hours—that is, the day unconsciously gained. In other words, while Phileas Fogg, going eastward, saw the sun pass the meridian eighty times, his friends in London only saw it pass the meridian seventy-nine times. This is why they awaited him at the Reform Club on Saturday, and not Sunday, as Mr. Fogg thought.

And Passepartout's famous family watch, which had always kept London time, would have betrayed this fact, if it had marked the days as well as the hours and the minutes!

Phileas Fogg, then, had won the twenty thousand pounds; but, as he had spent nearly nineteen thousand on the way, the pecuniary gain was small. His object was, however, to be victorious, and not to win money. He divided the one thousand pounds that remained between Passepartout and the unfortunate Fix, against whom he cherished no grudge. He deducted, however, from Passepartout's share the cost of the gas which had burned in his room for nineteen hundred and twenty hours, for the sake of regularity.
That evening, Mr. Fogg, as tranquil and phlegmatic as ever, said to Aouda: "Is our marriage still agreeable to you?"

"Mr. Fogg," replied she, "it is for me to ask that question. You were ruined, but now you are rich again."

"Pardon me, madam; my fortune belongs to you. If you had not suggested our marriage, my servant would not have gone to the Reverend Samuel Wilson's, I should not have been apprised of my error, and--"

"Dear Mr. Fogg!" said the young woman.

"Dear Aouda!" replied Phileas Fogg.

It need not be said that the marriage took place forty-eight hours after, and that Passepartout, glowing and dazzling, gave the bride away. Had he not saved her, and was he not entitled to this honour?

The next day, as soon as it was light, Passepartout rapped vigorously at his master's door. Mr. Fogg opened it, and asked, "What's the matter, Passepartout?"

"What is it, sir? Why, I've just this instant found out--"

"What?"

"That we might have made the tour of the world in only seventy-eight days."

"No doubt," returned Mr. Fogg, "by not crossing India. But if I had not crossed India, I should not have saved Aouda; she would not have been my wife, and--"

Mr. Fogg quietly shut the door.

Phileas Fogg had won his wager, and had made his journey around the world in eighty days. To do this he had employed every means of conveyance--steamers, railways, carriages, yachts, trading-vessels, sledges, elephants. The eccentric gentleman had throughout displayed all his marvellous qualities of coolness and exactitude. But what then? What had he really gained by all this trouble? What had he brought back from this long and weary journey?

Nothing, say you? Perhaps so; nothing but a charming woman, who, strange as it may appear, made him the happiest of men!

Truly, would you not for less than that make the tour around the world?

THE MYSTERIOUS ISLAND
by Jules Verne

PART 1--DROPPED FROM THE CLOUDS

Chapter 1

"Are we rising again?" "No. On the contrary." "Are we descending?" "Worse than that, captain! we are falling!" "For Heaven's sake heave out the ballast!" "There! the last sack is empty!" "Does the balloon rise?" "No!" "I hear a noise like the dashing of waves. The sea is below the car! It cannot be more than 500 feet from us!" "Overboard with every weight! ... everything!"

Such were the loud and startling words which resounded through the air, above the vast watery desert of the Pacific, about four o'clock in the evening of the 23rd of March, 1865.

Few can possibly have forgotten the terrible storm from the northeast, in the middle of the equinox of that year. The tempest raged without intermission from the 18th to the 26th of March. Its ravages were terrible in America, Europe, and Asia, covering a distance of eighteen hundred miles, and extending obliquely to the equator from the thirty-fifth north parallel to the fortieth south parallel. Towns were overthrown, forests uprooted, coasts devastated by the mountains of water which were precipitated on them, vessels cast on the shore, which the published accounts numbered by hundreds, whole districts leveled by waterspouts which destroyed everything they passed over, several thousand people crushed on land or drowned at sea; such were the traces of its fury, left by this devastating tempest.

It surpassed in disasters those which so frightfully ravaged Havana and Guadalupe, one on the 25th of October, 1810, the other on the 26th of July, 1825.

But while so many catastrophes were taking place on land and at sea, a drama not less exciting was being enacted in the agitated air.

In fact, a balloon, as a ball might be carried on the summit of a waterspout, had been taken into the circling movement of a column of air and had traversed space at the rate of ninety miles an hour, turning round and round as if seized by some aerial maelstrom.

Beneath the lower point of the balloon swung a car, containing five passengers, scarcely visible in the midst of the thick vapor mingled with spray which hung over the surface of the ocean.
Whence, it may be asked, had come thatplaything of the tempest? From what part of the world did it rise? It surely could not have started during the storm. But the storm had raged five days already, and the first symptoms were manifested on the 18th. It cannot be doubted that the balloon came from a great distance, for it could not have traveled less than two thousand miles in twenty-four hours.

At any rate the passengers, destitute of all marks for their guidance, could not have possessed the means of reckoning the route traversed since their departure. It was a remarkable fact that, although in the very midst of the furious tempest, they did not suffer from it. They were thrown about and whirled round and round without feeling the rotation in the slightest degree, or being sensible that they were removed from a horizontal position.

Their eyes could not pierce through the thick mist which had gathered beneath the car. Dark vapor was all around them. Such was the density of the atmosphere that they could not be certain whether it was day or night. No reflection of light, no sound from inhabited land, no roaring of the ocean could have reached them, through the obscurity, while suspended in those elevated zones. Their rapid descent alone had informed them of the dangers which they ran from the waves. However, the balloon, lightened of heavy articles, such as ammunition, arms, and provisions, had risen into the higher layers of the atmosphere, to a height of 4,500 feet. The voyagers, after having discovered that the sea extended beneath them, and thinking the dangers above less dreadful than those below, did not hesitate to throw overboard even their most useful articles, while they endeavored to lose no more of that fluid, the life of their enterprise, which sustained them above the abyss.

The night passed in the midst of alarms which would have been death to less energetic souls. Again the day appeared and with it the tempest began to moderate. From the beginning of that day, the 24th of March, it showed symptoms of abating. At dawn, some of the lighter clouds had risen into the more lofty regions of the air. In a few hours the wind had changed from a hurricane to a fresh breeze, that is to say, the rate of the transit of the atmospheric layers was diminished by half. It was still what sailors call "a close-reefed topsail breeze," but the commotion in the elements had none the less considerably diminished.

Towards eleven o'clock, the lower region of the air was sensibly clearer. The atmosphere threw off that chilly dampness which is felt after the passage of a great meteor. The storm did not seem to have gone farther to the west. It appeared to have exhausted itself. Could it have passed away in electric sheets, as is sometimes the case with regard to the typhoons of the Indian Ocean?

But at the same time, it was also evident that the balloon was again slowly descending with a regular movement. It appeared as if it were, little by little, collapsing, and that its case was lengthening and extending, passing from a spherical to an oval form. Towards midday the balloon was hovering above the sea at a height of only 2,000 feet. It contained 50,000 cubic feet of gas, and, thanks to its capacity, it could maintain itself a long time in the air, although it should reach a great altitude or might be thrown into a horizontal position.

Perceiving their danger, the passengers cast away the last articles which still weighed down the car, the few provisions they had kept, everything, even to their pocket-knives, and one of them, having hoisted himself on to the circles which united the cords of the net, tried to secure more firmly the lower point of the balloon.

It was, however, evident to the voyagers that the gas was failing, and that the balloon could no longer be sustained in the higher regions. They must infallibly perish!

There was not a continent, nor even an island, visible beneath them. The watery expanse did not present a single speck of land, not a solid surface upon which their anchor could hold.

It was the open sea, whose waves were still dashing with tremendous violence! It was the ocean, without any visible limits, even for those whose gaze, from their commanding position, extended over a radius of forty miles. The vast liquid plain, lashed without mercy by the storm, appeared as if covered with herds of furious chargers, whose white and disheveled crests were streaming in the wind. No land was in sight, not a solitary ship could be seen. It was necessary at any cost to arrest their downward course, and to prevent the balloon from being engulfed in the waves. The voyagers directed all their energies to this urgent work. But, notwithstanding their efforts, the balloon still fell, and at the same time shifted with the greatest rapidity, following the direction of the wind, that is to say, from the northeast to the southwest.

Frightful indeed was the situation of these unfortunate men. They were evidently no longer masters of the machine. All their attempts were useless. The case of the balloon collapsed more and more. The gas escaped without any possibility of retaining it. Their descent was visibly accelerated, and soon after midday the car hung within 600 feet of the ocean.

It was impossible to prevent the escape of gas, which rushed through a large rent in the silk. By lightening the car of all the articles which it contained, the passengers had been able to prolong their suspension in the air for a few hours. But the inevitable catastrophe could only be retarded, and if land did not appear before night, voyagers, car, and balloon must to a certainty vanish beneath the waves.

They now resorted to the only remaining expedient. They were truly dauntless men, who knew how to look
death in the face. Not a single murmur escaped from their lips. They were determined to struggle to the last minute, to do anything to retard their fall. The car was only a sort of willow basket, unable to float, and there was not the slightest possibility of maintaining it on the surface of the sea.

Two more hours passed and the balloon was scarcely 400 feet above the water.

At that moment a loud voice, the voice of a man whose heart was inaccessible to fear, was heard. To this voice responded others not less determined. "Is everything thrown out?" "No, here are still 2,000 dollars in gold." A heavy bag immediately plunged into the sea. "Does the balloon rise?" "A little, but it will not be long before it falls again." "What still remains to be thrown out?" "Nothing." "Yes! the car!" "Let us catch hold of the net, and into the sea with the car."

This was, in fact, the last and only mode of lightening the balloon. The ropes which held the car were cut, and the balloon, after its fall, mounted 2,000 feet. The five voyagers had hoisted themselves into the net, and clung to the meshes, gazing at the abyss.

The delicate sensibility of balloons is well known. It is sufficient to throw out the lightest article to produce a difference in its vertical position. The apparatus in the air is like a balance of mathematical precision. It can be thus easily understood that when it is lightened of any considerable weight its movement will be impetuous and sudden. So it happened on this occasion. But after being suspended for an instant aloft, the balloon began to descend, the gas escaping by the rent which it was impossible to repair.

The men had done all that men could do. No human efforts could save them now. They must trust to the mercy of Him who rules the elements.

At four o’clock the balloon was only 500 feet above the surface of the water.

A loud barking was heard. A dog accompanied the voyagers, and was held pressed close to his master in the meshes of the net.

"Top has seen something," cried one of the men. Then immediately a loud voice shouted,—

"Land! land!" The balloon, which the wind still drove towards the southwest, had since daybreak gone a considerable distance, which might be reckoned by hundreds of miles, and a tolerably high land had, in fact, appeared in that direction. But this land was still thirty miles off. It would not take less than an hour to get to it, and then there was the chance of falling to leeward.

An hour! Might not the balloon before that be emptied of all the fluid it yet retained?

Such was the terrible question! The voyagers could distinctly see that solid spot which they must reach at any cost. They were ignorant of what it was, whether an island or a continent, for they did not know to what part of the world the hurricane had driven them. But they must reach this land, whether inhabited or desolate, whether hospitable or not.

It was evident that the balloon could no longer support itself! Several times already had the crests of the enormous billows licked the bottom of the net, making it still heavier, and the balloon only half rose, like a bird with a wounded wing. Half an hour later the land was not more than a mile off, but the balloon, exhausted, flabby, hanging in great folds, had gas in its upper part alone. The voyagers, clinging to the net, were still too heavy for it, and soon, half plunging into the sea, they were beaten by the furious waves. The balloon-case bulged out again, and the wind, taking it, drove it along like a vessel. Might it not possibly thus reach the land?

But, when only two fathoms off, terrible cries resounded from four pairs of lungs at once. The balloon, which had appeared as if it would never again rise, suddenly made an unexpected bound, after having been struck by a tremendous sea. As if it had been at that instant relieved of a new part of its weight, it mounted to a height of 1,500 feet, and here it met a current of wind, which instead of taking it directly to the coast, carried it in a nearly parallel direction.

At last, two minutes later, it reproached obliquely, and finally fell on a sandy beach, out of the reach of the waves.

The voyagers, aiding each other, managed to disengage themselves from the meshes of the net. The balloon, relieved of their weight, was taken by the wind, and like a wounded bird which revives for an instant, disappeared into space.

But the car had contained five passengers, with a dog, and the balloon only left four on the shore.

The missing person had evidently been swept off by the sea, which had just struck the net, and it was owing to this circumstance that the lightened balloon rose the last time, and then soon after reached the land. Scarcely had the four castaways set foot on firm ground, than they all, thinking of the absent one, simultaneously exclaimed, "Perhaps he will try to swim to land! Let us save him! let us save him!"

Chapter 2
Richmond. The engineer's wounds rapidly healed, and it was during his convalescence that he made acquaintance with the New York Herald. He was a first-class engineer, to whom the government had confided, during the war, the direction of the railways, which were so important at that time. A true Northerner, thin, bony, lean, about forty-five years of age; his close-cut hair and his beard, of which he only kept a thick mustache, were already getting gray. He had one-of those finely-developed heads which appear made to be struck on a medal, piercing eyes, a serious mouth, the physiognomy of a clever man of the military school. He was one of those engineers who began by handling the hammer and pickaxe, like generals who first act as common soldiers. Besides mental power, he also possessed great manual dexterity. His muscles exhibited remarkable proofs of tenacity. A man of action as well as a man of thought, all he did was without effort to one of his vigorous and sanguine temperament. Learned, clear-headed, and practical, he fulfilled in all emergencies those three conditions which united ought to insure human success—activity of mind and body, impetuous wishes, and powerful will. He might have taken for his motto that of William of Orange in the 17th century: "I can undertake and persevere even without hope of success." Cyrus Harding was courage personified. He had been in all the battles of that war. After having begun as a volunteer at Illinois, under Ulysses Grant, he fought at Paducah, Belmont, Pittsburg Landing, at the siege of Corinth, Port Gibson, Black River, Chattanooga, the Wilderness, on the Potomac, everywhere and valiantly, a soldier worthy of the general who said, "I never count my dead!" And hundreds of times Captain Harding had almost been among those who were not counted by the terrible Grant; but in these combats where he never spared himself, fortune favored him till the moment when he was wounded and taken prisoner on the field of battle near Richmond. At the same time and on the same day another important personage fell into the hands of the Southerners. This was no other than Gideon Spilen, a reporter for the New York Herald, who had been ordered to follow the changes of the war in the midst of the Northern armies.

Gideon Spilett was one of that race of indomitable English or American chroniclers, like Stanley and others, who stop at nothing to obtain exact information, and transmit it to their journal in the shortest possible time. The newspapers of the Union, such as the New York Herald, are genuine powers, and their reporters are men to be reckoned with. Gideon Spilett ranked among the first of those reporters: a man of great merit, energetic, prompt and ready for anything, full of ideas, having traveled over the whole world, soldier and artist, enthusiastic in council, resolute in action, caring neither for trouble, fatigue, nor danger, when in pursuit of information, for himself first, and then for his journal, a perfect treasury of knowledge on all sorts of curious subjects, of the unpublished, of the unknown, and of the impossible. He was one of those intrepid observers who write under fire, "reporting" among bullets, and to whom every danger is welcome.

He also had been in all the battles, in the first rank, revolver in one hand, note-book in the other; grape-shot never made his pencil tremble. He did not fatigue the wires with incessant telegrams, like those who speak when they have nothing to say, but each of his notes, short, decisive, and clear, threw light on some important point. Besides, he was not wanting in humor. It was he who, after the affair of the Black River, determined at any cost to keep his place at the wicket of the telegraph office, and after having announced to his journal the result of the battle, telegraphed for two hours the first chapters of the Bible. It cost the New York Herald two thousand dollars, but the New York Herald published the first intelligence.

Gideon Spilett was tall. He was rather more than forty years of age. Light whiskers bordering on red surrounded his face. His eye was steady, lively, rapid in its changes. It was the eye of a man accustomed to take in at a glance all the details of a scene. Well built, he was inured to all climates, like a bar of steel hardened in cold water.

For ten years Gideon Spilett had been the reporter of the New York Herald, which he enriched by his letters and drawings, for he was as skilful in the use of the pencil as of the pen. When he was captured, he was in the act of making a description and sketch of the battle. The last words in his note-book were these: "A Southern rifleman has just taken aim at me, but--"

The Southerner notwithstanding missed Gideon Spilett, who, with his usual fortune, came out of this affair without a scratch.

Cyrus Harding and Gideon Spilett, who did not know each other except by reputation, had both been carried to Richmond. The engineer's wounds rapidly healed, and it was during his convalescence that he made acquaintance

Those whom the hurricane had just thrown on this coast were neither aeronauts by profession nor amateurs. They were prisoners of war whose boldness had induced them to escape in this extraordinary manner.

A hundred times they had almost perished! A hundred times had they almost fallen from their torn balloon into the depths of the ocean. But Heaven had reserved them for a strange destiny, and after having, on the 20th of March, escaped from Richmond, besieged by the troops of General Ulysses Grant, they found themselves seven thousand miles from the capital of Virginia, which was the principal stronghold of the South, during the terrible War of Secession. Their aerial voyage had lasted five days.

The curious circumstances which led to the escape of the prisoners were as follows:

That same year, in the month of February, 1865, in one of the coups de main by which General Grant attempted, though in vain, to possess himself of Richmond, several of his officers fell into the power of the enemy and were detained in the town. One of the most distinguished was Captain Cyrus Harding. He was a native of Massachusetts, a first-class engineer, to whom the government had confided, during the war, the direction of the railways, which were so important at that time. A true Northerner, thin, bony, lean, about forty-five years of age; his close-cut hair and his beard, of which he only kept a thick mustache, were already getting gray. He had one-of those finely-developed heads which appear made to be struck on a medal, piercing eyes, a serious mouth, the physiognomy of a clever man of the military school. He was one of those engineers who began by handling the hammer and pickaxe, like generals who first act as common soldiers. Besides mental power, he also possessed great manual dexterity. His muscles exhibited remarkable proofs of tenacity. A man of action as well as a man of thought, all he did was without effort to one of his vigorous and sanguine temperament. Learned, clear-headed, and practical, he fulfilled in all emergencies those three conditions which united ought to insure human success—activity of mind and body, impetuous wishes, and powerful will. He might have taken for his motto that of William of Orange in the 17th century: "I can undertake and persevere even without hope of success." Cyrus Harding was courage personified. He had been in all the battles of that war. After having begun as a volunteer at Illinois, under Ulysses Grant, he fought at Paducah, Belmont, Pittsburg Landing, at the siege of Corinth, Port Gibson, Black River, Chattanooga, the Wilderness, on the Potomac, everywhere and valiantly, a soldier worthy of the general who said, "I never count my dead!" And hundreds of times Captain Harding had almost been among those who were not counted by the terrible Grant; but in these combats where he never spared himself, fortune favored him till the moment when he was wounded and taken prisoner on the field of battle near Richmond. At the same time and on the same day another important personage fell into the hands of the Southerners. This was no other than Gideon Spilen, a reporter for the New York Herald, who had been ordered to follow the changes of the war in the midst of the Northern armies.

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Cyrus Harding and Gideon Spilett, who did not know each other except by reputation, had both been carried to Richmond. The engineer's wounds rapidly healed, and it was during his convalescence that he made acquaintance
with the reporter. The two men then learned to appreciate each other. Soon their common aim had but one object, that of escaping, rejoining Grant's army, and fighting together in the ranks of the Federals.

The two Americans had from the first determined to seize every chance; but although they were allowed to wander at liberty in the town, Richmond was so strictly guarded, that escape appeared impossible. In the meanwhile Captain Harding was rejoined by a servant who was devoted to him in life and in death. This intrepid fellow was a Negro born on the engineer's estate, of a slave father and mother, but to whom Cyrus, who was an Abolitionist from conviction and heart, had long since given his freedom. The once slave, though free, would not leave his master. He would have died for him. He was a man of about thirty, vigorous, active, clever, intelligent, gentle, and calm, sometimes naively, always merry, obliging, and honest. His name was Nebuchadnezzar, but he only answered to the familiar abbreviation of Neb.

When Neb heard that his master had been made prisoner, he left Massachusetts without hesitating an instant, arrived before Richmond, and by dint of stratagem and shrewdness, after having risked his life twenty times over, managed to penetrate into the besieged town. The pleasure of Harding on seeing his servant, and the joy of Neb at finding his master, can scarcely be described.

But though Neb had been able to make his way into Richmond, it was quite another thing to get out again, for the Northern prisoners were very strictly watched. Some extraordinary opportunity was needed to make the attempt with any chance of success, and this opportunity not only did not present itself, but was very difficult to find.

Meanwhile Grant continued his energetic operations. The victory of Petersburg had been very dearly bought. His forces, united to those of Butler, had as yet been unsuccessful before Richmond, and nothing gave the prisoners any hope of a speedy deliverance.

The reporter, to whom his tedious captivity did not offer a single incident worthy of note, could stand it no longer. His usually active mind was occupied with one sole thought—how he might get out of Richmond at any cost. Several times had he even made the attempt, but was stopped by some insurmountable obstacle. However, the siege continued; and if the prisoners were anxious to escape and join Grant's army, certain of the besieged were no less anxious to join the Southern forces. Among them was one Jonathan Forster, a determined Southerner. The truth was, that if the prisoners of the Secessionists could not leave the town, neither could the Secessionists themselves while the Northern army invested it. The Governor of Richmond for a long time had been unable to communicate with General Lee, and he very much wished to make known to him the situation of the town, so as to hasten the march of the army to their relief. Thus Jonathan Forster accordingly conceived the idea of rising in a balloon, so as to pass over the besieging lines, and in that way reach the Secessionist camp.

The Governor authorized the attempt. A balloon was manufactured and placed at the disposal of Forster, who was to be accompanied by five other persons. They were furnished with arms in case they might have to defend themselves when they alighted, and provisions in the event of their aerial voyage being prolonged.

The departure of the balloon was fixed for the 18th of March. It should be effected during the night, with a northwest wind of moderate force, and the aeronauts calculated that they would reach General Lee's camp in a few hours.

But this northwest wind was not a simple breeze. From the 18th it was evident that it was changing to a hurricane. The tempest soon became such that Forster's departure was deferred, for it was impossible to risk the balloon and those whom it carried in the midst of the furious elements.

The balloon, inflated on the great square of Richmond, was ready to depart on the first abatement of the wind, and, as may be supposed, the impatience among the besieged to see the storm moderate was very great.

The 18th, the 19th of March passed without any alteration in the weather. There was even great difficulty in keeping the balloon fastened to the ground, as the squalls dashed it furiously about.

The night of the 19th passed, but the next morning the storm blew with redoubled force. The departure of the balloon was impossible.

On that day the engineer, Cyrus Harding, was accosted in one of the streets of Richmond by a person whom he did not in the least know. This was a sailor named Pencroft, a man of about thirty-five or forty years of age, strongly built, very sunburnt, and possessed of a pair of bright sparkling eyes and a remarkably good physiognomy. Pencroft was an American from the North, who had sailed all the ocean over, and who had gone through every possible and almost impossible adventure that a being with two feet and no wings would encounter. It is needless to say that he was a bold, dashing fellow, ready to dare anything and was astonished at nothing. Pencroft at the beginning of the year had gone to Richmond on business, with a young boy of fifteen from New Jersey, son of a former captain, an orphan, whom he loved as if he had been his own child. Not having been able to leave the town before the first operations of the siege, he found himself shut up, to his great disgust; but, not accustomed to succumb to difficulties, he resolved to escape by some means or other. He knew the engineer-officer by reputation; he knew with what impatience that determined man chafed under his restraint. On this day he did not, therefore, hesitate to accost him,
saying, without circumlocution, "Have you had enough of Richmond, captain?"

The engineer looked fixedly at the man who spoke, and who added, in a low voice,--
"Captain Harding, will you try to escape?"

"When?" asked the engineer quickly, and it was evident that this question was uttered without consideration, for he had not yet examined the stranger who addressed him. But after having with a penetrating eye observed the open face of the sailor, he was convinced that he had before him an honest man.

"Who are you?" he asked briefly.

Pencroft made himself known.

"Well," replied Harding, "and in what way do you propose to escape?"

"By that lazy balloon which is left there doing nothing, and which looks to me as if it was waiting on purpose for us--"

There was no necessity for the sailor to finish his sentence. The engineer understood him at once. He seized Pencroft by the arm, and dragged him to his house. There the sailor developed his project, which was indeed extremely simple. They risked nothing but their lives in its execution. The hurricane was in all its violence, it is true, but so clever and daring an engineer as Cyrus Harding knew perfectly well how to manage a balloon. Had he himself been as well acquainted with the art of sailing in the air as he was with the navigation of a ship, Pencroft would not have hesitated to set out, of course taking his young friend Herbert with him; for, accustomed to brave the fiercest tempests of the ocean, he was not to be hindered on account of the hurricane.

Captain Harding had listened to the sailor without saying a word, but his eyes shone with satisfaction. Here was the long-sought-for opportunity--he was not a man to let it pass. The plan was feasible, though, it must be confessed, dangerous in the extreme. In the night, in spite of their guards, they might approach the balloon, slip into the car, and then cut the cords which held it. There was no doubt that they might be killed, but on the other hand they might succeed, and without this storm!--Without this storm the balloon would have started already and the looked-for opportunity would not have then presented itself.

"I am not alone!" said Harding at last.

"How many people do you wish to bring with you?" asked the sailor.

"Two; my friend Spilett, and my servant Neb."

"That will be three," replied Pencroft; "and with Herbert and me five. But the balloon will hold six--"

"That will be enough, we will go," answered Harding in a firm voice.

This "we" included Spilett, for the reporter, as his friend well knew, was not a man to draw back, and when the project was communicated to him he approved of it unreservedly. What astonished him was, that so simple an idea had not occurred to him before. As to Neb, he followed his master wherever his master wished to go.

"This evening, then," said Pencroft, "we will all meet out there."

"This evening, at ten o'clock," replied Captain Harding; "and Heaven grant that the storm does not abate before our departure."

Pencroft took leave of the two friends, and returned to his lodging, where young Herbert Brown had remained. The courageous boy knew of the sailor's plan, and it was not without anxiety that he awaited the result of the proposal being made to the engineer. Thus five determined persons were about to abandon themselves to the mercy of the tempestuous elements!

No! the storm did not abate, and neither Jonathan Forster nor his companions dreamed of confronting it in that frail car.

It would be a terrible journey. The engineer only feared one thing; it was that the balloon, held to the ground and dashed about by the wind, would be torn into shreds. For several hours he roamed round the nearly-deserted square, surveying the apparatus. Pencroft did the same on his side, his hands in his pockets, yawning now and then like a man who did not know how to kill the time, but really dreading, like his friend, either the escape or destruction of the balloon. Evening arrived. The night was dark in the extreme. Thick mists passed like clouds close to the ground. Rain fell mingled with snow, it was very cold. A mist hung over Richmond. It seemed as if the violent storm had produced a truce between the besiegers and the besieged, and that the cannon were silenced by the louder detonations of the storm. The streets of the town were deserted. It had not even appeared necessary in that horrible weather to place a guard in the square, in the midst of which plunged the balloon. Everything favored the departure of the prisoners, but what might possibly be the termination of the hazardous voyage they contemplated in the midst of the furious elements?--

"Dirty weather!" exclaimed Pencroft, fixing his hat firmly on his head with a blow of his fist; "but pshaw, we shall succeed all the same!"

At half-past nine, Harding and his companions glided from different directions into the square, which the gas-lamps, extinguished by the wind, had left in total obscurity. Even the enormous balloon, almost beaten to the
ground, could not be seen. Independently of the sacks of ballast, to which the cords of the net were fastened, the car was held by a strong cable passed through a ring in the pavement. The five prisoners met by the car. They had not been perceived, and such was the darkness that they could not even see each other.

Without speaking a word, Harding, Spilett, Neb, and Herbert took their places in the car, while Pencroft by the engineer's order detached successively the bags of ballast. It was the work of a few minutes only, and the sailor rejoined his companions.

The balloon was then only held by the cable, and the engineer had nothing to do but to give the word.

At that moment a dog sprang with a bound into the car. It was Top, a favorite of the engineer. The faithful creature, having broken his chain, had followed his master. He, however, fearing that its additional weight might impede their ascent, wished to send away the animal.

"One more will make but little difference, poor beast!" exclaimed Pencroft, heaving out two bags of sand, and as he spoke letting go the cable; the balloon ascending in an oblique direction, disappeared, after having dashed the car against two chimneys, which it threw down as it swept by them.

Then, indeed, the full rage of the hurricane was exhibited to the voyagers. During the night the engineer could not dream of descending, and when day broke, even a glimpse of the earth below was intercepted by fog.

Five days had passed when a partial clearing allowed them to see the wide extending ocean beneath their feet, now lashed into the maddest fury by the gale.

Our readers will recollect what befell these five daring individuals who set out on their hazardous expedition in the balloon on the 20th of March. Five days afterwards four of them were thrown on a desert coast, seven thousand miles from their country! But one of their number was missing, the man who was to be their guide, their leading spirit, the engineer, Captain Harding! The instant they had recovered their feet, they all hurried to the beach in the hopes of rendering him assistance.

Chapter 3

The engineer, the meshes of the net having given way, had been carried off by a wave. His dog also had disappeared. The faithful animal had voluntarily leaped out to help his master. "Forward," cried the reporter; and all four, Spilett, Herbert, Pencroft, and Neb, forgetting their fatigue, began their search. Poor Neb shed bitter tears, giving way to despair at the thought of having lost the only being he loved on earth.

Only two minutes had passed from the time when Cyrus Harding disappeared to the moment when his companions set foot on the ground. They had hopes therefore of arriving in time to save him. "Let us look for him! let us look for him!" cried Neb.

"Yes, Neb," replied Gideon Spilett, "and we will find him too!"

"Living, I trust!"

"Still living!"

"Can he swim?" asked Pencroft.

"Yes," replied Neb, "and besides, Top is there."

The sailor, observing the heavy surf on the shore, shook his head.

The engineer had disappeared to the north of the shore, and nearly half a mile from the place where the castaways had landed. The nearest point of the beach he could reach was thus fully that distance off.

It was then nearly six o'clock. A thick fog made the night very dark. The castaways proceeded toward the north of the land on which chance had thrown them, an unknown region, the geographical situation of which they could not even guess. They were walking upon a sandy soil, mingled with stones, which appeared destitute of any sort of vegetation. The ground, very unequal and rough, was in some places perfectly riddled with holes, making walking extremely painful. From these holes escaped every minute great birds of clumsy flight, which flew in all directions. Others, more active, rose in flocks and passed in clouds over their heads. The sailor thought he recognized gulls and cormorants, whose shrill cries rose above the roaring of the sea.

From time to time the castaways stopped and shouted, then listened for some response from the ocean, for they thought that if the engineer had landed, and they had been near to the place, they would have heard the barking of the dog Top, even should Harding himself have been unable to give any sign of existence. They stopped to listen, but no sound arose above the roaring of the waves and the dashing of the surf. The little band then continued their march forward, searching into every hollow of the shore.

After walking for twenty minutes, the four castaways were suddenly brought to a standstill by the sight of foaming billows close to their feet. The solid ground ended here. They found themselves at the extremity of a sharp point on which the sea broke furiously.

"It is a promontory," said the sailor; "we must retrace our steps, holding towards the right, and we shall thus gain
"But if he is there," said Neb, pointing to the ocean, whose waves shone of a snowy white in the darkness. "Well, let us call again," and all uniting their voices, they gave a vigorous shout, but there came no reply. They waited for a lull, then began again; still no reply.

The castaways accordingly returned, following the opposite side of the promontory, over a soil equally sandy and rugged. However, Pencroft observed that the shore was more equal, that the ground rose, and he declared that it was joined by a long slope to a hill, whose massive front he thought that he could see looming indistinctly through the mist. The birds were less numerous on this part of the shore; the sea was also less tumultuous, and they observed that the agitation of the waves was diminished. The noise of the surf was scarcely heard. This side of the promontory evidently formed a semicircular bay, which the sharp point sheltered from the breakers of the open sea. But to follow this direction was to go south, exactly opposite to that part of the coast where Harding might have landed. After a walk of a mile and a half, the shore presented no curve which would permit them to return to the north. This promontory, of which they had turned the point, must be attached to the mainland. The castaways, although their strength was nearly exhausted, still marched courageously forward, hoping every moment to meet with a sudden angle which would set them in the first direction. What was their disappointment, when, after trudging nearly two miles, having reached an elevated point composed of slippery rocks, they found themselves again stopped by the sea.

"We are on an islet," said Pencroft, "and we have surveyed it from one extremity to the other."

The sailor was right; they had been thrown, not on a continent, not even on an island, but on an islet which was not more than two miles in length, with even a less breadth.

Was this barren spot the desolate refuge of sea-birds, strewn with stones and destitute of vegetation, attached to a more important archipelago? It was impossible to say. When the voyagers from their car saw the land through the mist, they had not been able to reconnoiter it sufficiently. However, Pencroft, accustomed with his sailor eyes to piece through the gloom, was almost certain that he could clearly distinguish in the west confused masses which indicated an elevated coast. But they could not in the dark determine whether it was a single island, or connected with others. They could not leave it either, as the sea surrounded them; they must therefore put off till the next day their search for the engineer, from whom, alas! not a single cry had reached them to show that he was still in existence.

"The silence of our friend proves nothing," said the reporter. "Perhaps he has fainted or is wounded, and unable to reply directly, so we will not despair."

The reporter then proposed to light a fire on a point of the islet, which would serve as a signal to the engineer. But they searched in vain for wood or dry brambles; nothing but sand and stones were to be found. The grief of Neb and his companions, who were all strongly attached to the intrepid Harding, can be better pictured than described. It was too evident that they were powerless to help him. They must wait with what patience they could for daylight. Either the engineer had been able to save himself, and had already found a refuge on some point of the coast, or he was lost for ever! The long and painful hours passed by. The cold was intense. The castaways suffered cruelly, but they scarcely perceived it. They did not even think of taking a minute's rest. Forgetting everything but their chief, hoping or wishing to hope on, they continued to walk up and down on this sterile spot, always returning to its northern point, where they could approach nearest to the scene of the catastrophe. They listened, they called, and then uniting their voices, they endeavored to raise even a louder shout than before, which would be transmitted to a great distance. The wind had now fallen almost to a calm, and the noise of the sea began also to subside. One of Neb's shouts even appeared to produce an echo. Herbert directed Pencroft's attention to it, adding, "That proves that there is a coast to the west, at no great distance." The sailor nodded; besides, his eyes could not deceive him. If he had discovered land, however indistinct it might appear, land was sure to be there. But that distant echo was the only response produced by Neb's shouts, while a heavy gloom hung over all the part east of the island.

Meanwhile, the sky was clearing little by little. Towards midnight the stars shone out, and if the engineer had been there with his companions he would have remarked that these stars did not belong to the Northern Hemisphere. The Polar Star was not visible, the constellations were not those which they had been accustomed to see in the United States; the Southern Cross glittered brightly in the sky.

The night passed away. Towards five o'clock in the morning of the 25th of March, the sky began to lighten; the horizon still remained dark, but with daybreak a thick mist rose from the sea, so that the eye could scarcely penetrate beyond twenty feet or so from where they stood. At length the fog gradually unrolled itself in great heavily moving waves.

It was unfortunate, however, that the castaways could distinguish nothing around them. While the gaze of the reporter and Neb were cast upon the ocean, the sailor and Herbert looked eagerly for the coast in the west. But not a speck of land was visible. "Never mind," said Pencroft, "though I do not see the land, I feel it... it is there... there...
as sure as the fact that we are no longer at Richmond." But the fog was not long in rising. It was only a fine-weather mist. A hot sun soon penetrated to the surface of the island. About half-past six, three-quarters of an hour after sunrise, the mist became more transparent. It grew thicker above, but cleared away below. Soon the isle appeared as if it had descended from a cloud, then the sea showed itself around them, spreading far away towards the east, but bounded on the west by an abrupt and precipitous coast.

Yes! the land was there. Their safety was at least provisionally insured. The islet and the coast were separated by a channel about half a mile in breadth, through which rushed an extremely rapid current.

However, one of the castaways, following the impulse of his heart, immediately threw himself into the current, without consulting his companions, without saying a single word. It was Neb. He was in haste to be on the other side, and to climb towards the north. It had been impossible to hold him back. Pencroft called him in vain. The reporter prepared to follow him, but Pencroft stopped him. "Do you want to cross the channel?" he asked. "Yes," replied Spilett. "All right!" said the seaman; "wait a bit; Neb is well able to carry help to his master. If we venture into the channel, we risk being carried into the open sea by the current, which is running very strong; but, if I'm not wrong, it is ebbing. See, the tide is going down over the sand. Let us have patience, and at low water it is possible we may find a fordable passage." "You are right," replied the reporter, "we will not separate more than we can help."

During this time Neb was struggling vigorously against the current. He was crossing in an oblique direction. His black shoulders could be seen emerging at each stroke. He was carried down very quickly, but he also made way towards the shore. It took more than half an hour to cross from the islet to the land, and he reached the shore several hundred feet from the place which was opposite to the point from which he had started.

Landing at the foot of a high wall of granite, he shook himself vigorously; and then, setting off running, soon disappeared behind a rocky point, which projected to nearly the height of the northern extremity of the islet.

Neb's companions had watched his daring attempt with painful anxiety, and when he was out of sight, they fixed their attention on the land where their hope of safety lay, while eating some shell-fish with which the sand was strewn. It was a wretched repast, but still it was better than nothing. The opposite coast formed one vast bay, terminating on the south by a very sharp point, which was destitute of all vegetation, and was of a very wild aspect. This point abutted on the shore in a grotesque outline of high granite rocks. Towards the north, on the contrary, the bay widened, and a more rounded coast appeared, trending from the southwest to the northeast, and terminating in a slender cape. The distance between these two extremities, which made the bow of the bay, was about eight miles. Half a mile from the shore rose the islet, which somewhat resembled the carcass of a gigantic whale. Its extreme breadth was not more than a quarter of a mile.

Opposite the islet, the beach consisted first of sand, covered with black stones, which were now appearing little by little above the retreating tide. The second level was separated by a perpendicular granite cliff, terminated at the top by an unequal edge at a height of at least 300 feet. It continued thus for a length of three miles, ending suddenly on the right with a precipice which looked as if cut by the hand of man. On the left, above the promontory, this irregular and jagged cliff descended by a long slope of conglomerated rocks till it mingled with the ground of the southern point. On the upper plateau of the coast not a tree appeared. It was a flat tableland like that above Cape Town at the Cape of Good Hope, but of reduced proportions; at least so it appeared seen from the islet. However, verdure was not wanting to the right beyond the precipice. They could easily distinguish a confused mass of great trees, which extended beyond the limits of their view. This verdure relieved the eye, so long wearied by the continued ranges of granite. Lastly, beyond and above the plateau, in a northwesterly direction and at a distance of at least seven miles, glittered a white summit which reflected the sun's rays. It was that of a lofty mountain, capped with snow.

The question could not at present be decided whether this land formed an island, or whether it belonged to a continent. But on beholding the convulsed masses heaped up on the left, no geologist would have hesitated to give them a volcanic origin, for they were unquestionably the work of subterranean convulsions.

Gideon Spilett, Pencroft, and Herbert attentively examined this land, on which they might perhaps have to live many long years; on which indeed they might even die, should it be out of the usual track of vessels, as was likely to be the case.

"Well," asked Herbert, "what do you say, Pencroft?"

"There is some good and some bad, as in everything," replied the sailor. "We shall see. But now the ebb is evidently making. In three hours we will attempt the passage, and once on the other side, we will try to get out of this scrape, and I hope may find the captain." Pencroft was not wrong in his anticipations. Three hours later at low tide, the greater part of the sand forming the bed of the channel was uncovered. Between the islet and the coast there only remained a narrow channel which would no doubt be easy to cross.

About ten o'clock, Gideon Spilett and his companions stripped themselves of their clothes, which they placed in bundles on their heads, and then ventured into the water, which was not more than five feet deep. Herbert, for whom
it was too deep, swam like a fish, and got through capitally. All three arrived without difficulty on the opposite shore. Quickly drying themselves in the sun, they put on their clothes, which they had preserved from contact with the water, and sat down to take counsel together what to do next.

Chapter 4

All at once the reporter sprang up, and telling the sailor that he would rejoin them at that same place, he climbed the cliff in the direction which the Negro Neb had taken a few hours before. Anxiety hastened his steps, for he longed to obtain news of his friend, and he soon disappeared round an angle of the cliff. Herbert wished to accompany him.

"Stop here, my boy," said the sailor; "we have to prepare an encampment, and to try and find rather better grub than these shell-fish. Our friends will want something when they come back. There is work for everybody."

"I am ready," replied Herbert.

"All right," said the sailor; "that will do. We must set about it regularly. We are tired, cold, and hungry; therefore we must have shelter, fire, and food. There is wood in the forest, and eggs in nests; we have only to find a house."

"Very well," returned Herbert, "I will look for a cave among the rocks, and I shall be sure to discover some hole into which we can creep."

"All right," said Pencroft; "go on, my boy."

They both walked to the foot of the enormous wall over the beach, far from which the tide had now retreated; but instead of going towards the north, they went southward. Pencroft had remarked, several hundred feet from the place at which they landed, a narrow cutting, out of which he thought a river or stream might issue. Now, on the one hand it was important to settle themselves in the neighborhood of a good stream of water, and on the other it was possible that the current had thrown Cyrus Harding on the shore there.

The cliff, as has been said, rose to a height of three hundred feet, but the mass was unbroken throughout, and even at its base, scarcely washed by the sea, it did not offer the smallest fissure which would serve as a dwelling. It was a perpendicular wall of very hard granite, which even the waves had not worn away. Towards the summit fluttered myriads of sea-fowl, and especially those of the web-footed species with long, flat, pointed beaks—a clamorous tribe, bold in the presence of man, who probably for the first time thus invaded their domains. Pencroft recognized the skua and other gulls among them, the voracious little sea-mew, which in great numbers nestled in the crevices of the granite. A shot fired among this swarm would have killed a great number, but to fire a shot a gun was needed, and neither Pencroft nor Herbert had one; besides this, gulls and sea-mews are scarcely eatable, and even their eggs have a detestable taste. However, Herbert, who had gone forward a little more to the left, soon came upon rocks covered with sea-weed, which, some hours later, would be hidden by the high tide. On these rocks, in the midst of slippery wrack, abounded bivalve shell-fish, not to be despised by starving people. Herbert called Pencroft, who ran up hastily.

"Here are mussels!" cried the sailor; "these will do instead of eggs!"

"They are not mussels," replied Herbert, who was attentively examining the molluscs attached to the rocks; "they are lithodomes."

"Are they good to eat?" asked Pencroft.

"Perfectly so."

"Then let us eat some lithodomes."

The sailor could rely upon Herbert; the young boy was well up in natural history, and always had had quite a passion for the science. His father had encouraged him in it, by letting him attend the lectures of the best professors in Boston, who were very fond of the intelligent, industrious lad. And his turn for natural history was, more than once in the course of time, of great use, and he was not mistaken in this instance. These lithodomes were oblong shells, suspended in clusters and adhering very tightly to the rocks. They belong to that species of molluscan perforators which excavate holes in the hardest stone; their shell is rounded at both ends, a feature which is not remarked in the common mussel.

Pencroft and Herbert made a good meal of the lithodomes, which were then half opened to the sun. They ate them as oysters, and as they had a strong peppery taste, they were palatable without condiments of any sort.

Their hunger was thus appeased for the time, but not their thirst, which increased after eating these naturally-spiced molluscs. They had then to find fresh water, and it was not likely that it would be wanting in such a capriciously uneven region. Pencroft and Herbert, after having taken the precaution of collecting an ample supply of lithodomes, with which they filled their pockets and handkerchiefs, regained the foot of the cliff.

Two hundred paces farther they arrived at the cutting, through which, as Pencroft had guessed, ran a stream of water, whether fresh or not was to be ascertained. At this place the wall appeared to have been separated by some
violent subterranean force. At its base was hollowed out a little creek, the farthest part of which formed a tolerably sharp angle. The watercourse at that part measured one hundred feet in breadth, and its two banks on each side were scarcely twenty feet high. The river became strong almost directly between the two walls of granite, which began to sink above the mouth; it then suddenly turned and disappeared beneath a wood of stunted trees half a mile off.

"Here is the water, and yonder is the wood we require!" said Pencroft. "Well, Herbert, now we only want the house."

The water of the river was limpid. The sailor ascertained that at this time—that is to say, at low tide, when the rising floods did not reach it—it was sweet. This important point established, Herbert looked for some cavity which would serve them as a retreat, but in vain; everywhere the wall appeared smooth, plain, and perpendicular.

However, at the mouth of the watercourse and above the reach of the high tide, the convulsions of nature had formed, not a grotto, but a pile of enormous rocks, such as are often met with in granite countries and which bear the name of "Chimneys."

Pencroft and Herbert penetrated quite far in among the rocks, by sandy passages in which light was not wanting, for it entered through the openings which were left between the blocks, of which some were only sustained by a miracle of equilibrium; but with the light came also air—a regular corridor-gale—and with the wind the sharp cold from the exterior. However, the sailor thought that by stopping-up some of the openings with a mixture of stones and sand, the Chimneys could be rendered habitable. Their geometrical plan represented the typographical sign "&,

which signifies "et cetera" abridged, but by isolating the upper mouth of the sign, through which the south and west winds blew so strongly, they could succeed in making the lower part of use.

"Here's our work," said Pencroft, "and if we ever see Captain Harding again, he will know how to make something of this labyrinth."

"We shall see him again, Pencroft," cried Herbert, "and when he returns he must find a tolerable dwelling here. It will be so, if we can make a fireplace in the left passage and keep an opening for the smoke."

"So we can, my boy," replied the sailor, "and these Chimneys will serve our turn. Let us set to work, but first come and get a store of fuel. I think some branches will be very useful in stopping up these openings, through which the wind shrieks like so many fiends."

Herbert and Pencroft left the Chimneys, and, turning the angle, they began to climb the left bank of the river. The current here was quite rapid, and drifted down some dead wood. The rising tide—and it could already be perceived—must drive it back with force to a considerable distance. The sailor then thought that they could utilize this ebb and flow for the transport of heavy objects.

After having walked for a quarter of an hour, the sailor and the boy arrived at the angle which the river made in turning towards the left. From this point its course was pursued through a forest of magnificent trees. These trees still retained their verdure, notwithstanding the advanced season, for they belonged to the family of "coniferae," which is spread over all the regions of the globe, from northern climates to the tropics. The young naturalist recognized especially the "deedara," which are very numerous in the Himalayan zone, and which spread around them a most agreeable odor. Between these beautiful trees sprang up clusters of firs, whose opaque open parasol boughs spread wide around. Among the long grass, Pencroft felt that his feet were crushing dry branches which crackled like fireworks.

"Well, my boy," said he to Herbert, "if I don't know the name of these trees, at any rate I reckon that we may call them 'burning wood,' and just now that's the chief thing we want."

"Let us get a supply," replied Herbert, immediately set to work.

The collection was easily made. It was not even necessary to lop the trees, for enormous quantities of dead wood were lying at their feet; but if fuel was not wanting, the means of transporting it was not yet found. The wood, being very dry, would burn rapidly; it was therefore necessary to carry to the Chimneys a considerable quantity, and the loads of two men would not be sufficient. Herbert remarked this.

"Well, my boy," replied the sailor, "there must be some way of carrying this wood; there is always a way of doing everything. If we had a cart or a boat, it would be easy enough."

"But we have the river," said Herbert.

"Right," replied Pencroft; "the river will be to us like a road which carries of itself, and rafts have not been invented for nothing."

"Only," observed Herbert, "at this moment our road is going the wrong way, for the tide is rising!"

"We shall be all right if we wait till it ebbs," replied the sailor, "and then we will trust it to carry our fuel to the Chimneys. Let us get the raft ready."

The sailor, followed by Herbert, directed his steps towards the river. They both carried, each in proportion to his strength, a load of wood bound in fagots. They found on the bank also a great quantity of dead branches in the midst of grass, among which the foot of man had probably never before trod. Pencroft began directly to make his raft. In a
kind of little bay, created by a point of the shore which broke the current, the sailor and the lad placed some good-sized pieces of wood, which they had fastened together with dry creepers. A raft was thus formed, on which they stacked all they had collected, sufficient, indeed, to have loaded at least twenty men. In an hour the work was finished, and the raft moored to the bank, awaited the turning of the tide.

There were still several hours to be occupied, and with one consent Pencroft and Herbert resolved to gain the upper plateau, so as to have a more extended view of the surrounding country.

Exactly two hundred feet behind the angle formed by the river, the wall, terminated by a fall of rocks, died away in a gentle slope to the edge of the forest. It was a natural staircase. Herbert and the sailor began their ascent; thanks to the vigor of their muscles they reached the summit in a few minutes; and proceeded to the point above the mouth of the river.

On attaining it, their first look was cast upon the ocean which not long before they had traversed in such a terrible condition. They observed, with emotion, all that part to the north of the coast on which the catastrophe had taken place. It was there that Cyrus Harding had disappeared. They looked to see if some portion of their balloon, to which a man might possibly cling, yet existed. Nothing! The sea was but one vast watery desert. As to the coast, it was solitary also. Neither the reporter nor Neb could be anywhere seen. But it was possible that at this time they were both too far away to be perceived.

"Something tells me," cried Herbert, "that a man as energetic as Captain Harding would not let himself be drowned like other people. He must have reached some point of the shore; don't you think so, Pencroft?"

The sailor shook his head sadly. He little expected ever to see Cyrus Harding again; but wishing to leave some hope to Herbert: "Doubtless, doubtless," said he; "our engineer is a man who would get out of a scrape to which any one else would yield."

In the meantime he examined the coast with great attention. Stretched out below them was the sandy shore, bounded on the right of the river's mouth by lines of breakers. The rocks which were visible appeared like amphibious monsters reposing in the surf. Beyond the reef, the sea sparkled beneath the sun's rays. To the south a sharp point closed the horizon, and it could not be seen if the land was prolonged in that direction, or if it ran southeast and southwest, which would have made this coast a very long peninsula. At the northern extremity of the bay the outline of the shore was continued to a great distance in a wider curve. There the shore was low, flat, without cliffs, and with great banks of sand, which the tide left uncovered. Pencroft and Herbert then returned towards the west. Their attention was first arrested by the snow-topped mountain which rose at a distance of six or seven miles. From its first declivities to within two miles of the coast were spread vast masses of wood, relieved by large green patches, caused by the presence of evergreen trees. Then, from the edge of this forest to the shore extended a plain, scattered irregularly with groups of trees. Here and there on the left sparkled through glades the waters of the little river; they could trace its winding course back towards the spurs of the mountain, among which it seemed to spring. At the point where the sailor had left his raft of wood, it began to run between the two high granite walls; but if on the left bank the wall remained clear and abrupt, on the right bank, on the contrary, it sank gradually, the massive sides changed to isolated rocks, the rocks to stones, the stones to shingle running to the extremity of the point.

"Are we on an island?" murmured the sailor.

"At any rate, it seems to be big enough," replied the lad.

"An island, ever so big, is an island all the same!" said Pencroft.

But this important question could not yet be answered. A more perfect survey had to be made to settle the point. As to the land itself, island or continent, it appeared fertile, agreeable in its aspect, and varied in its productions.

"This is satisfactory," observed Pencroft; "and in our misfortune, we must thank Providence for it."

"God be praised!" responded Herbert, whose pious heart was full of gratitude to the Author of all things.

Pencroft and Herbert examined for some time the country on which they had been cast; but it was difficult to guess after so hasty an inspection what the future had in store for them.

They then returned, following the southern crest of the granite platform, bordered by a long fringe of jagged rocks, of the most whimsical shapes. Some hundreds of birds lived there nestled in the holes of the stone; Herbert, jumping over the rocks, startled a whole flock of these winged creatures.

"Oh!" cried he, "those are not gulls nor sea-mews!"

"What are they then?" asked Pencroft.

"Upon my word, one would say they were pigeons!"

"Just so, but these are wild or rock pigeons. I recognize them by the double band of black on the wing, by the white tail, and by their slate-colored plumage. But if the rock-pigeon is good to eat, its eggs must be excellent, and we will soon see how many they may have left in their nests!"

"We will not give them time to hatch, unless it is in the shape of an omelet!" replied Pencroft merrily.

"But what will you make your omelet in?" asked Herbert; "in your hat?"
"Well!" replied the sailor, "I am not quite conjuror enough for that; we must come down to eggs in the shell, my boy, and I will undertake to despatch the hardest!"

Pencroft and Herbert attentively examined the cavities in the granite, and they really found eggs in some of the hollows. A few dozen being collected, were packed in the sailor's handkerchief, and as the time when the tide would be full was approaching, Pencroft and Herbert began to descend towards the watercourse. When they arrived there, it was an hour after midday. The tide had already turned. They must now avail themselves of the ebb to take the wood to the mouth. Pencroft did not intend to let the raft go away in the current without guidance, neither did he mean to embark on it himself to steer it. But a sailor is never at a loss when there is a question of cables or ropes, and Pencroft rapidly twisted a cord, a few fathoms long, made of dry creepers. This vegetable cable was fastened to the after-part of the raft, and the sailor held it in his hand while Herbert, pushing off the raft with a long pole, kept it in the current. This succeeded capitally. The enormous load of wood drifted down the current. The bank was very equal; there was no fear that the raft would run aground, and before two o'clock they arrived at the river's mouth, a few paces from the Chimneys.

Chapter 5

Pencroft's first care, after unloading the raft, was to render the cave habitable by stopping up all the holes which made it draughty. Sand, stones, twisted branches, wet clay, closed up the galleries open to the south winds. One narrow and winding opening at the side was kept, to lead out the smoke and to make the fire draw. The cave was thus divided into three or four rooms, if such dark dens with which a donkey would scarcely have been contented deserved the name. But they were dry, and there was space to stand upright, at least in the principal room, which occupied the center. The floor was covered with fine sand, and taking all in all they were well pleased with it for want of a better.

"Perhaps," said Herbert, while he and Pencroft were working, "our companions have found a superior place to ours."

"Very likely," replied the seaman; "but, as we don't know, we must work all the same. Better to have two strings to one's bow than no string at all!"

"Oh!" exclaimed Herbert, "how jolly it will be if they were to find Captain Harding and were to bring him back with them!"

"Yes, indeed!" said Pencroft, "that was a man of the right sort."

"Was!" exclaimed Herbert, "do you despair of ever seeing him again?"

"God forbid!" replied the sailor. Their work was soon done, and Pencroft declared himself very well satisfied.

"Now," said he, "our friends can come back when they like. They will find a good enough shelter."

They now had only to make a fireplace and to prepare the supper--an easy task. Large flat stones were placed on the ground at the opening of the narrow passage which had been kept. This, if the smoke did not take the heat out with it, would be enough to maintain an equal temperature inside. Their wood was stowed away in one of the rooms, and the sailor laid in the fireplace some logs and brushwood. The seaman was busy with this, when Herbert asked him if he had any matches.

"Certainly," replied Pencroft, "and I may say happily, for without matches or tinder we should be in a fix."

"Still we might get fire as the savages do," replied Herbert, "by rubbing two bits of dry stick one against the other."

"All right; try, my boy, and let's see if you can do anything besides exercising your arms."

"Well, it's a very simple proceeding, and much used in the islands of the Pacific."

"I don't deny it," replied Pencroft, "but the savages must know how to do it or employ a peculiar wood, for more than once I have tried to get fire in that way, but I could never manage it. I must say I prefer matches. By the bye, where are my matches?"

Pencroft searched in his waistcoat for the box, which was always there, for he was a confirmed smoker. He could not find it; he rummaged the pockets of his trousers, but, to his horror, he could nowhere discover the box.

"Here's a go!" said he, looking at Herbert. "The box must have fallen out of my pocket and got lost! Surely, Herbert, you must have something--a tinder-box--anything that can possibly make fire!"

"No, I haven't, Pencroft."

The sailor rushed out, followed by the boy. On the sand, among the rocks, near the river's bank, they both searched carefully, but in vain. The box was of copper, and therefore would have been easily seen.

"Pencroft," asked Herbert, "didn't you throw it out of the car?"

"I knew better than that," replied the sailor; "but such a small article could easily disappear in the tumbling about we have gone through. I would rather even have lost my pipe! Confound the box! Where can it be?"
"Look here, the tide is going down," said Herbert; "let's run to the place where we landed."

It was scarcely probable that they would find the box, which the waves had rolled about among the pebbles, at high tide, but it was as well to try. Herbert and Pencroft walked rapidly to the point where they had landed the day before, about two hundred feet from the cave. They hunted there, among the shingle, in the clefts of the rocks, but found nothing. If the box had fallen at this place it must have been swept away by the waves. As the sea went down, they searched every little crevice with no result. It was a grave loss in their circumstances, and for the time irreparable. Pencroft could not hide his vexation; he looked very anxious, but said not a word. Herbert tried to console him by observing, that if they had found the matches, they would, very likely, have been wetted by the sea and useless.

"No, my boy," replied the sailor; "they were in a copper box which shut very tightly; and now what are we to do?"

"We shall certainly find some way of making a fire," said Herbert. "Captain Harding or Mr. Spilett will not be without them."

"Yes," replied Pencroft; "but in the meantime we are without fire, and our companions will find but a sorry repast on their return."

"But," said Herbert quickly, "do you think it possible that they have no tinder or matches?"

"I doubt it," replied the sailor, shaking his head, "for neither Neb nor Captain Harding smoke, and I believe that Mr. Spilett would rather keep his note-book than his match-box."

Herbert did not reply. The loss of the box was certainly to be regretted, but the boy was still sure of procuring fire in some way or other. Pencroft, more experienced, did not think so, although he was not a man to trouble himself about a small or great grievance. At any rate, there was only one thing to be done—to await the return of Neb and the reporter; but they must give up the feast of hard eggs which they had meant to prepare, and a meal of raw flesh was not an agreeable prospect either for themselves or for the others.

Before returning to the cave, the sailor and Herbert, in the event of fire being positively unattainable, collected some more shell-fish, and then silently retraced their steps to their dwelling.

Pencroft, his eyes fixed on the ground, still looked for his box. He even climbed up the left bank of the river from its mouth to the angle where the raft had been moored. He returned to the plateau, went over it in every direction, searched among the high grass on the border of the forest, all in vain.

It was five in the evening when he and Herbert re-entered the cave. It is useless to say that the darkest corners of the passages were ransacked before they were obliged to give it up in despair. Towards six o'clock, when the sun was disappearing behind the high lands of the west, Herbert, who was walking up and down on the strand, signalized the return of Neb and Spilett.

They were returning alone!... The boy's heart sank; the sailor had not been deceived in his forebodings; the engineer, Cyrus Harding, had not been found!

The reporter, on his arrival, sat down on a rock, without saying anything. Exhausted with fatigue, dying of hunger, he had not strength to utter a word.

As to Neb, his red eyes showed how he had cried, and the tears which he could not restrain told too clearly that he had lost all hope.

The reporter recounted all that they had done in their attempt to recover Cyrus Harding. He and Neb had surveyed the coast for a distance of eight miles and consequently much beyond the place where the balloon had fallen the last time but one, a fall which was followed by the disappearance of the engineer and the dog Top. The shore was solitary; not a vestige of a mark. Not even a pebble recently displaced; not a trace on the sand; not a human footstep on all that part of the beach. It was clear that that portion of the shore had never been visited by a human being. The sea was as deserted as the land, and it was there, a few hundred feet from the coast, that the engineer must have found a tomb.

As Spilett ended his account, Neb jumped up, exclaiming in a voice which showed how hope struggled within him, "No! he is not dead! he can't be dead! It might happen to any one else, but never to him! He could get out of anything!" Then his strength forsaking him, "Oh! I can do no more!" he murmured.

"Neb," said Herbert, running to him, "we will find him! God will give him back to us! But in the meantime you are hungry, and you must eat something."

So saying, he offered the poor Negro a few handfuls of shell-fish, which was indeed wretched and insufficient food. Neb had not eaten anything for several hours, but he refused them. He could not, would not live without his master.

As to Gideon Spilett, he devoured the shell-fish, then he laid himself down on the sand, at the foot of a rock. He was very weak, but calm. Herbert went up to him, and taking his hand, "Sir," said he, "we have found a shelter which will be better than lying here. Night is advancing. Come and rest! To-morrow we will search farther."
The reporter got up, and guided by the boy went towards the cave. On the way, Pencroft asked him in the most natural tone, if by chance he happened to have a match or two.

The reporter stopped, felt in his pockets, but finding nothing said, "I had some, but I must have thrown them away."

The seaman then put the same question to Neb and received the same answer.

"Confound it!" exclaimed the sailor.
The reporter heard him and seizing his arm, "Have you no matches?" he asked.

"Not one, and no fire in consequence."

"Ah!" cried Neb, "if my master was here, he would know what to do!"

The four castaways remained motionless, looking uneasily at each other. Herbert was the first to break the silence by saying, "Mr. Spilett, you are a smoker and always have matches about you; perhaps you haven't looked well, try again, a single match will be enough!"

The reporter hunted again in the pockets of his trousers, waistcoat, and great-coat, and at last to Pencroft's great joy, no less to his extreme surprise, he felt a tiny piece of wood entangled in the lining of his waistcoat. He seized it with his fingers through the stuff, but he could not get it out. If this was a match and a single one, it was of great importance not to rub off the phosphorus.

"Will you let me try?" said the boy, and very cleverly, without breaking it, he managed to draw out the wretched yet precious little bit of wood which was of such great importance to these poor men. It was unused.

"Hurrah!" cried Pencroft; "it is as good as having a whole cargo!" He took the match, and, followed by his companions, entered the cave.

This small piece of wood, of which so many in an inhabited country are wasted with indifference and are of no value, must here be used with the greatest caution.

The sailor first made sure that it was quite dry; that done, "We must have some paper," said he.

"Here," replied Spilett, after some hesitation tearing a leaf out of his note-book.

Pencroft took the piece of paper which the reporter held out to him, and knelt down before the fireplace. Some handfuls of grass, leaves, and dry moss were placed under the fagots and disposed in such a way that the air could easily circulate, and the dry wood would rapidly catch fire.

Pencroft then twisted the piece of paper into the shape of a cone, as smokers do in a high wind, and poked it in among the moss. Taking a small, rough stone, he wiped it carefully, and with a beating heart, holding his breath, he gently rubbed the match. The first attempt did not produce any effect. Pencroft had not struck hard enough, fearing to rub off the phosphorus.

"No, I can't do it," said he, "my hand trembles, the match has missed fire; I cannot, I will not!" and rising, he told Herbert to take his place.

Certainly the boy had never in all his life been so nervous. Prometheus going to steal the fire from heaven could not have been more anxious. He did not hesitate, however, but struck the match directly.

A little spluttering was heard and a tiny blue flame sprang up, making a choking smoke. Herbert quickly turned the match so as to augment the flame, and then slipped it into the paper cone, which in a few seconds too caught fire, and then the moss.

A minute later the dry wood crackled and a cheerful flame, assisted by the vigorous blowing of the sailor, sprang up in the midst of the darkness.

"At last!" cried Pencroft, getting up; "I was never so nervous before in all my life!"

The flat stones made a capital fireplace. The smoke went quite easily out at the narrow passage, the chimney drew, and an agreeable warmth was not long in being felt.

They must now take great care not to let the fire go out, and always to keep some embers alight. It only needed care and attention, as they had plenty of wood and could renew their store at any time.

Pencroft's first thought was to use the fire by preparing a more nourishing supper than a dish of shell-fish. Two dozen eggs were brought by Herbert. The reporter leaning up in a corner, watched these preparations without saying anything. A threefold thought weighed on his mind. Was Cyrus still alive? If he was alive, where was he? If he had survived from his fall, how was it that he had not found some means of making known his existence? As to Neb, he was roaming about the shore. He was like a body without a soul.

Pencroft knew fifty ways of cooking eggs, but this time he had no choice, and was obliged to content himself with roasting them under the hot cinders. In a few minutes the cooking was done, and the seaman invited the reporter to take his share of the supper. Such was the first repast of the castaways on this unknown coast. The hard eggs were excellent, and as eggs contain everything indispensable to man's nourishment, these poor people thought themselves well off, and were much strengthened by them. Oh! if only one of them had not been missing at this meal! If the five prisoners who escaped from Richmond had been all there, under the piled-up rocks, before this
clear, crackling fire on the dry sand, what thanksgiving must they have rendered to Heaven! But the most ingenious, the most learned, he who was their unquestioned chief, Cyrus Harding, was, alas! missing, and his body had not even obtained a burial-place.

Thus passed the 25th of March. Night had come on. Outside could be heard the howling of the wind and the monotonous sound of the surf breaking on the shore. The waves rolled the shingle backwards and forwards with a deafening noise.

The reporter retired into a dark corner after having shortly noted down the occurrences of the day; the first appearance of this new land, the loss of their leader, the exploration of the coast, the incident of the matches, etc.; and then overcome by fatigue, he managed to forget his sorrows in sleep. Herbert went to sleep directly. As to the sailor, he passed the night with one eye on the fire, on which he did not spare fuel. But one of the castaways did not sleep in the cave. The inconsolable, despairing Neb, notwithstanding all that his companions could say to induce him to take some rest, wandered all night long on the shore calling on his master.

Chapter 6

The inventory of the articles possessed by these castaways from the clouds, thrown upon a coast which appeared to be uninhabited, was soon made out. They had nothing, save the clothes which they were wearing at the time of the catastrophe. We must mention, however, a note-book and a watch which Gideon Spilett had kept, doubtless by inadvertence, not a weapon, not a tool, not even a pocket-knife; for while in the car they had thrown out everything to lighten the balloon. The imaginary heroes of Daniel Defoe or of Wyss, as well as Selkirk and Raynal shipwrecked on Juan Fernandez and on the archipelago of the Aucklands, were never in such absolute destitution. Either they had abundant resources from their stranded vessels, in grain, cattle, tools, ammunition, or else some things were thrown up on the coast which supplied them with all the first necessities of life. But here, not any instrument whatever, not a utensil. From nothing they must supply themselves with everything.

And yet, if Cyrus Harding had been with them, if the engineer could have brought his practical science, his inventive mind to bear on their situation, perhaps all hope would not have been lost. Alas! they must hope no longer again to see Cyrus Harding. The castaways could expect nothing but from themselves and from that Providence which never abandons those whose faith is sincere.

But ought they to establish themselves on this part of the coast, without trying to know to what continent it belonged, if it was inhabited, or if they were on the shore of a desert island?

It was an important question, and should be solved with the shortest possible delay. From its answer they would know what measures to take. However, according to Pencroft's advice, it appeared best to wait a few days before commencing an exploration. They must, in fact, prepare some provisions and procure more strengthening food than eggs and molluscs. The explorers, before undertaking new fatigues, must first of all recruit their strength.

The Chimneys offered a retreat sufficient for the present. The fire was lighted, and it was easy to preserve some embers. There were plenty of shell-fish and eggs among the rocks and on the beach. It would be easy to kill a few of the pigeons which were flying by hundreds about the summit of the plateau, either with sticks or stones. Perhaps the trees of the neighboring forest would supply them with eatable fruit. Lastly, the sweet water was there.

It was accordingly settled that for a few days they would remain at the Chimneys so as to prepare themselves for an expedition, either along the shore or into the interior of the country. This plan suited Neb particularly. As obstinate in his ideas as in his presentiments, he was in no haste to abandon this part of the coast, the scene of the catastrophe. He did not, he would not believe in the loss of Cyrus Harding. No, it did not seem to him possible that such a man had ended in this vulgar fashion, carried away by a wave, drowned in the floods, a few hundred feet from a shore. As long as the waves had not cast up the body of the engineer, as long as he, Neb, had not seen with his eyes, touched with his hands the corpse of his master, he would not believe in his death! And this idea rooted itself deeper than ever in his determined heart. An illusion perhaps, but still an illusion to be respected, and one which the sailor did not wish to destroy. As for him, he hoped no longer, but there was no use in arguing with Neb. He was like the dog who will not leave the place where his master is buried, and his grief was such that most probably he would not survive him.

This same morning, the 26th of March, at daybreak, Neb had set out on the shore in a northerly direction, and he had returned to the spot where the sea, no doubt, had closed over the unfortunate Harding.

That day's breakfast was composed solely of pigeon's eggs and lithodomes. Herbert had found some salt deposited by evaporation in the hollows of the rocks, and this mineral was very welcome.

The repast ended, Pencroft asked the reporter if he wished to accompany Herbert and himself to the forest, where they were going to try to hunt. But on consideration, it was thought necessary that someone should remain to keep in the fire, and to be at hand in the highly improbable event of Neb requiring aid. The reporter accordingly
remained behind.

"To the chase, Herbert," said the sailor. "We shall find ammunition on our way, and cut our weapons in the
forest." But at the moment of starting, Herbert observed, that since they had no tinder, it would perhaps be prudent
to replace it by another substance.

"What?" asked Pencroft.

"Burnt linen," replied the boy. "That could in case of need serve for tinder."

The sailor thought it very sensible advice. Only it had the inconvenience of necessitating the sacrifice of a piece
of handkerchief. Notwithstanding, the thing was well worth while trying, and a part of Pencroft's large checked
handkerchief was soon reduced to the state of a half-burnt rag. This inflammable material was placed in the central
chamber at the bottom of a little cavity in the rock, sheltered from all wind and damp.

It was nine o'clock in the morning. The weather was threatening and the breeze blew from the southeast. Herbert
and Pencroft turned the angle of the Chimneys, not without having cast a look at the smoke which, just at that place,
curled round a point of rock: they ascended the left bank of the river.

Arrived at the forest, Pencroft broke from the first tree two stout branches which he transformed into clubs, the
ends of which Herbert rubbed smooth on a rock. Oh! what would they not have given for a knife!

The two hunters now advanced among the long grass, following the bank. From the turning which directed its
course to the southwest, the river narrowed gradually and the channel lay between high banks, over which the trees
formed a double arch. Pencroft, lest they should lose themselves, resolved to follow the course of the stream, which
would always lead them back to the point from which they started. But the bank was not without some obstacles:
here, the flexible branches of the trees bent level with the current; there, creepers and thorns which they had to break
down with their sticks. Herbert often glided among the broken stumps with the agility of a young cat, and
disappeared in the underwood. But Pencroft called him back directly, begging him not to wander away. Meanwhile,
the sailor attentively observed the disposition and nature of the surrounding country. On the left bank, the ground,
which was flat and marshy, rose imperceptibly towards the interior. It looked there like a network of liquid threads
which doubtless reached the river by some underground drain. Sometimes a stream ran through the underwood,
which they crossed without difficulty. The opposite shore appeared to be more uneven, and the valley of which the
river occupied the bottom was more clearly visible. The hill, covered with trees disposed in terraces, intercepted the
view. On the right bank walking would have been difficult, for the declivities fell suddenly, and the trees bending
over the water were only sustained by the strength of their roots.

It is needless to add that this forest, as well as the coast already surveyed, was destitute of any sign of human
life. Pencroft only saw traces of quadrupeds, fresh footprints of animals, of which he could not recognize the
species. In all probability, and such was also Herbert's opinion, some had been left by formidable wild beasts which
doubtless would give them some trouble; but nowhere did they observe the mark of an axe on the trees, nor the
ashes of a fire, nor the impression of a human foot. On this they might probably congratulate themselves, for on any
land in the middle of the Pacific the presence of man was perhaps more to be feared than desired. Herbert and
Pencroft speaking little, for the difficulties of the way were great, advanced very slowly, and after walking for an
hour they had scarcely gone more than a mile. As yet the hunt had not been successful. However, some birds sang
and fluttered in the foliage, and appeared very timid, as if man had inspired them with an instinctive fear. Among
others, Herbert described, in a marshy part of the forest, a bird with a long pointed beak, closely resembling the
king-fisher, but its plumage was not fine, though of a metallic brilliancy.

"That must be a jacamar," said Herbert, trying to get nearer.

"This will be a good opportunity to taste jacamar," replied the sailor, "if that fellow is in a humor to be roasted!"

Just then, a stone cleverly thrown by the boy, struck the creature on the wing, but the blow did not disable it, and
the jacamar ran off and disappeared in an instant.

"How clumsy I am!" cried Herbert.

"No, no, my boy!" replied the sailor. "The blow was well aimed; many a one would have missed it altogether!
Come, don't be vexed with yourself. We shall catch it another day!"

As the hunters advanced, the trees were found to be more scattered, many being magnificent, but none bore
tangible fruit. Pencroft searched in vain for some of those precious palm-trees which are employed in so many ways
in domestic life, and which have been found as far as the fortieth parallel in the Northern Hemisphere, and to the
thirty-fifth only in the Southern Hemisphere. But this forest was only composed of coniferæ, such as deodaras,
already recognized by Herbert, and Douglas pine, similar to those which grow on the northwest coast of America,
and splendid firs, measuring a hundred and fifty feet in height.

At this moment a flock of birds, of a small size and pretty plumage, with long glancing tails, dispersed
themselves among the branches strewing their feathers, which covered the ground as with fine down. Herbert picked
up a few of these feathers, and after having examined them,...
"These are couroucous," said he.

"I should prefer a moor-cock or guinea-fowl," replied Pencroft, "still, if they are good to eat--"

"They are good to eat, and also their flesh is very delicate," replied Herbert. "Besides, if I don't mistake, it is easy to approach and kill them with a stick."

The sailor and the lad, creeping among the grass, arrived at the foot of a tree, whose lower branches were covered with little birds. The couroucous were waiting the passage of insects which served for their nourishment. Their feathery feet could be seen clasping the slender twigs which supported them.

The hunters then rose, and using their sticks like scythes, they mowed down whole rows of these couroucous, who never thought of flying away, and stupidly allowed themselves to be knocked off. A hundred were already heaped on the ground, before the others made up their minds to fly.

"Well," said Pencroft, "here is game, which is quite within the reach of hunters like us. We have only to put out our hands and take it!"

The sailor having strung the couroucous like larks on flexible twigs, they then continued their exploration. The stream here made a bend towards the south, but this detour was probably not prolonged for the river must have its source in the mountain, and be supplied by the melting of the snow which covered the sides of the central cone.

The particular object of their expedition was, as has been said, to procure the greatest possible quantity of game for the inhabitants of the Chimneys. It must be acknowledged that as yet this object had not been attained. So the sailor actively pursued his researches, though he exclaimed, when some animal which he had not even time to recognize fled into the long grass, "If only we had had the dog Top!" But Top had disappeared at the same time as his master, and had probably perished with him.

Towards three o'clock new flocks of birds were seen through certain trees, at whose aromatic berries they were pecking, those of the juniper-tree among others. Suddenly a loud trumpet call resounded through the forest. This strange and sonorous cry was produced by a game bird called grouse in the United States. They soon saw several couples, whose plumage was rich chestnut-brown mottled with dark brown, and tail of the same color. Herbert recognized the males by the two wing-like appendages raised on the neck. Pencroft determined to get hold of at least one of these gallinaceae, which were as large as a fowl, and whose flesh is better than that of a pullet. But it was difficult, for they would not allow themselves to be approached. After several fruitless attempts, which resulted in nothing but scaring the grouse, the sailor said to the lad,-

"Decidedly, since we can't kill them on the wing, we must try to take them with a line."

"Like a fish?" cried Herbert, much surprised at the proposal.

"Like a fish," replied the sailor quite seriously. Pencroft had found among the grass half a dozen grouse nests, each having three or four eggs. He took great care not to touch these nests, to which their proprietors would not fail to return. It was around these that he meant to stretch his lines, not snares, but real fishing-lines. He took Herbert to some distance from the nests, and there prepared his singular apparatus with all the care which a disciple of Izaak Walton would have used. Herbert watched the work with great interest, though rather doubting its success. The lines were made of fine creepers, fastened one to the other, of the length of fifteen or twenty feet. Thick, strong thorns, the points bent back (which were supplied from a dwarf acacia bush) were fastened to the ends of the creepers, by way of hooks. Large red worms, which were crawling on the ground, furnished bait.

This done, Pencroft, passing among the grass and concealing himself skilfully, placed the end of his lines armed with hooks near the grouse nests; then he returned, took the other ends and hid with Herbert behind a large tree. There they both waited patiently; though, it must be said, that Herbert did not reckon much on the success of the inventive Pencroft.

A whole half-hour passed, but then, as the sailor had surmised, several couple of grouse returned to their nests. They walked along, pecking the ground, and not suspecting in any way the presence of the hunters, who, besides, had taken care to place themselves to leeward of the gallinaceae.

The lad felt at this moment highly interested. He held his breath, and Pencroft, his eyes staring, his mouth open, his lips advanced, as if about to taste a piece of grouse, scarcely breathed.

Meanwhile, the birds walked about the hooks, without taking any notice of them. Pencroft then gave little tugs which moved the bait as if the worms had been still alive.

The sailor undoubtedly felt much greater anxiety than does the fisherman, for he does not see his prey coming through the water. The jerks attracted the attention of the gallinaceae, and they attacked the hooks with their beaks. Three voracious grouse swallowed at the same moment bait and hook. Suddenly with a smart jerk, Pencroft "struck" his line, and a flapping of wings showed that the birds were taken.

"Hurrah!" he cried, rushing towards the game, of which he made himself master in an instant.

Herbert clapped his hands. It was the first time that he had ever seen birds taken with a line, but the sailor modestly confessed that it was not his first attempt, and that besides he could not claim the merit of invention.
'And at any rate,' added he, 'situated as we are, we must hope to hit upon many other contrivances.'

The grouse were fastened by their claws, and Pencroft, delighted at not having to appear before their companions with empty hands, and observing that the day had begun to decline, judged it best to return to their dwelling.

The direction was indicated by the river, whose course they had only to follow, and, towards six o'clock, tired enough with their excursion, Herbert and Pencroft arrived at the Chimneys.

Chapter 7

Gideon Spilett was standing motionless on the shore, his arms crossed, gazing over the sea, the horizon of which was lost towards the east in a thick black cloud which was spreading rapidly towards the zenith. The wind was already strong, and increased with the decline of day. The whole sky was of a threatening aspect, and the first symptoms of a violent storm were clearly visible.

Herbert entered the Chimneys, and Pencroft went towards the reporter. The latter, deeply absorbed, did not see him approach.

"We are going to have a dirty night, Mr. Spilett!" said the sailor: "Petrels delight in wind and rain."

The reporter, turning at the moment, saw Pencroft, and his first words were,--

"At what distance from the coast would you say the car was, when the waves carried off our companion?"

The sailor had not expected this question. He reflected an instant and replied,--

"Two cables lengths at the most."

"But what is a cable's length?" asked Gideon Spilett.

"About a hundred and twenty fathoms, or six hundred feet."

"Then," said the reporter, "Cyrus Harding must have disappeared twelve hundred feet at the most from the shore?"

"About that," replied Pencroft.

"And his dog also?"

"Also."

"What astonishes me," rejoined the reporter, "while admitting that our companion has perished, is that Top has also met his death, and that neither the body of the dog nor of his master has been cast on the shore!"

"It is not astonishing, with such a heavy sea," replied the sailor. "Besides, it is possible that currents have carried them farther down the coast."

"Then, it is your opinion that our friend has perished in the waves?" again asked the reporter.

"That is my opinion."

"My own opinion," said Gideon Spilett, "with due deference to your experience, Pencroft, is that in the double fact of the absolute disappearance of Cyrus and Top, living or dead, there is something unaccountable and unlikely."

"I wish I could think like you, Mr. Spilett," replied Pencroft; "unhappily, my mind is made up on this point."

Having said this, the sailor returned to the Chimneys. A good fire crackled on the hearth. Herbert had just thrown on an armful of dry wood, and the flame cast a bright light into the darkest parts of the passage.

Pencroft immediately began to prepare the dinner. It appeared best to introduce something solid into the bill of fare, for all needed to get up their strength. The strings of couroucous were kept for the next day, but they plucked a couple of grouse, which were soon spitted on a stick, and roasting before a blazing fire.

At seven in the evening Neb had not returned. The prolonged absence of the Negro made Pencroft very uneasy. It was to be feared that he had met with an accident on this unknown land, or that the unhappy fellow had been driven to some act of despair. But Herbert drew very different conclusions from this absence. According to him, Neb's delay was caused by some new circumstances which had induced him to prolong his search. Also, everything new must be to the advantage of Cyrus Harding. Why had Neb not returned unless hope still detained him? Perhaps he had found some mark, a footstep, a trace which had put him in the right path. Perhaps he was at this moment on a certain track. Perhaps even he was near his master.

Thus the lad reasoned. Thus he spoke. His companions let him talk. The reporter alone approved with a gesture. But what Pencroft thought most probable was, that Neb had pushed his researches on the shore farther than the day before, and that he had not as yet had time to return.

Herbert, however, agitated by vague presentiments, several times manifested an intention to go to meet Neb. But Pencroft assured him that that would be a useless course, that in the darkness and deplorable weather he could not find any traces of Neb, and that it would be much better to wait. If Neb had not made his appearance by the next day, Pencroft would not hesitate to join him in his search.

Gideon Spilett approved of the sailor's opinion that it was best not to divide, and Herbert was obliged to give up his project; but two large tears fell from his eyes.
The reporter could not refrain from embracing the generous boy.

Bad weather now set in. A furious gale from the southeast passed over the coast. The sea roared as it beat over the reef. Heavy rain was dashed by the storm into particles like dust. Ragged masses of vapor drove along the beach, on which the tormented shingles sounded as if poured out in cart-loads, while the sand raised by the wind added as it were mineral dust to that which was liquid, and rendered the united attack insupportable. Between the river’s mouth and the end of the cliff, eddies of wind whirled and gusts from this maelstrom lashed the water which ran through the narrow valley. The smoke from the fireplace was also driven back through the opening, filling the passages and rendering them uninhabitable.

Therefore, as the grouse were cooked, Pencroft let the fire die away, and only preserved a few embers buried under the ashes.

At eight o’clock Neb had not appeared, but there was no doubt that the frightful weather alone hindered his return, and that he must have taken refuge in some cave, to await the end of the storm or at least the return of day. As to going to meet him, or attempting to find him, it was impossible.

The game constituted the only dish at supper; the meat was excellent, and Pencroft and Herbert, whose long excursion had rendered them very hungry, devoured it with infinite satisfaction.

Their meal concluded, each retired to the corner in which he had rested the preceding night, and Herbert was not long in going to sleep near the sailor, who had stretched himself beside the fireplace.

Outside, as the night advanced, the tempest also increased in strength, until it was equal to that which had carried the prisoners from Richmond to this land in the Pacific. The tempests which are frequent during the seasons of the equinox, and which are so prolific in catastrophes, are above all terrible over this immense ocean, which opposes no obstacle to their fury. No description can give an idea of the terrific violence of the gale as it beat upon the unprotected coast.

Happily the pile of rocks which formed the Chimneys was solid. It was composed of enormous blocks of granite, a few of which, insecurely balanced, seemed to tremble on their foundations, and Pencroft could feel rapid quiverings under his head as it rested on the rock. But he repeated to himself, and rightly, that there was nothing to fear, and that their retreat would not give way. However he heard the noise of stones torn from the summit of the plateau by the wind, falling down on to the beach. A few even rolled on to the upper part of the Chimneys, or flew off in fragments when they were projected perpendicularly. Twice the sailor rose and intrenched himself at the opening of the passage, so as to take a look in safety at the outside. But there was nothing to be feared from these showers, which were not considerable, and he returned to his couch before the fireplace, where the embers glowed beneath the ashes.

Notwithstanding the fury of the hurricane, the uproar of the tempest, the thunder, and the tumult, Herbert slept profoundly. Sleep at last took possession of Pencroft, whom a seafaring life had habituated to anything. Gideon Spilett alone was kept awake by anxiety. He reproached himself with not having accompanied Neb. It was evident that he had not abandoned all hope. The presentiments which had troubled Herbert did not cease to agitate him also. His thoughts were concentrated on Neb. Why had Neb not returned? He tossed about on his sandy couch, scarcely giving a thought to the struggle of the elements. Now and then, his eyes, heavy with fatigue, closed for an instant, but some sudden thought reopened them almost immediately.

Meanwhile the night advanced, and it was perhaps two hours from morning, when Pencroft, then sound asleep, was vigorously shaken.

"What's the matter?" he cried, rousing himself, and collecting his ideas with the promptitude usual to seamen.

The reporter was leaning over him, and saying,--

"Listen, Pencroft, listen!"

The sailor strained his ears, but could hear no noise beyond those caused by the storm.

"It is the wind," said he.

"No," replied Gideon Spilett, listening again, "I thought I heard--"

"What?"

"The barking of a dog!"

"A dog!" cried Pencroft, springing up.

"Yes--barking--"

"It's not possible!" replied the sailor. "And besides, how, in the roaring of the storm--"

"Stop--listen--" said the reporter.

Pencroft listened more attentively, and really thought he heard, during a lull, distant barking.

"Well!!" said the reporter, pressing the sailor's hand.

"Yes--yes!!" replied Pencroft.

"It is Top! It is Top!" cried Herbert, who had just awoke; and all three rushed towards the opening of the
Chimneys. They had great difficulty in getting out. The wind drove them back. But at last they succeeded, and could only remain standing by leaning against the rocks. They looked about, but could not speak. The darkness was intense. The sea, the sky, the land were all mingled in one black mass. Not a speck of light was visible.

The reporter and his companions remained thus for a few minutes, overwhelmed by the wind, drenched by the rain, blinded by the sand.

Then, in a pause of the tumult, they again heard the barking, which they found must be at some distance.

It could only be Top! But was he alone or accompanied? He was most probably alone, for, if Neb had been with him, he would have made his way more directly towards the Chimneys. The sailor squeezed the reporter's hand, for he could not make himself heard, in a way which signified "Wait!" then he reentered the passage.

An instant after he issued with a lighted fagot, which he threw into the darkness, whistling shrilly.

It appeared as if this signal had been waited for; the barking immediately came nearer, and soon a dog bounded into the passage. Pencroft, Herbert, and Spilett entered after him.

An armful of dry wood was thrown on the embers. The passage was lighted up with a bright flame.

"It is Top!" cried Herbert.

It was indeed Top, a magnificent Anglo-Norman, who derived from these two races crossed the swiftness of foot and the acuteness of smell which are the preeminent qualities of coursing dogs. It was the dog of the engineer, Cyrus Harding. But he was alone! Neither Neb nor his master accompanied him!

How was it that his instinct had guided him straight to the Chimneys, which he did not know? It appeared inexplicable, above all, in the midst of this black night and in such a tempest! But what was still more inexplicable was, that Top was neither tired, nor exhausted, nor even soiled with mud or sand!--Herbert had drawn him towards him, and was patting his head, the dog rubbing his neck against the lad's hands.

"If the dog is found, the master will be found also!" said the reporter.

"God grant it!" responded Herbert. "Let us set off! Top will guide us!"

Pencroft did not make any objection. He felt that Top's arrival contradicted his conjectures. "Come along then!" said he.

Pencroft carefully covered the embers on the hearth. He placed a few pieces of wood among them, so as to keep in the fire until their return. Then, preceded by the dog, who seemed to invite them by short barks to come with him, and followed by the reporter and the boy, he dashed out, after having put up in his handkerchief the remains of the supper.

The storm was then in all its violence, and perhaps at its height. Not a single ray of light from the moon pierced through the clouds. To follow a straight course was difficult. It was best to rely on Top's instinct. They did so. The reporter and Herbert walked behind the dog, and the sailor brought up the rear. It was impossible to exchange a word. The rain was not very heavy, but the wind was terrific.

However, one circumstance favored the seaman and his two companions. The wind being southeast, consequently blew on their backs. The clouds of sand, which otherwise would have been insupportable, from being received behind, did not in consequence impede their progress. In short, they sometimes went faster than they liked, and had some difficulty in keeping their feet; but hope gave them strength, for it was not at random that they made their way along the shore. They had no doubt that Neb had found his master, and that he had sent them the faithful dog. But was the engineer living, or had Neb only sent for his companions that they might render the last duties to the corpse of the unfortunate Harding?

After having passed the precipice, Herbert, the reporter, and Pencroft prudently stepped aside to stop and take breath. The turn of the rocks sheltered them from the wind, and they could breathe after this walk or rather run of a quarter of an hour.

They could now hear and reply to each other, and the lad having pronounced the name of Cyrus Harding, Top gave a few short barks, as much as to say that his master was saved.

"Saved, isn't he?" repeated Herbert; "saved, Top?"

And the dog barked in reply.

They once more set out. The tide began to rise, and urged by the wind it threatened to be unusually high, as it was a spring tide. Great billows thundered against the reef with such violence that they probably passed entirely over the islet, then quite invisible. The mole no longer protected the coast, which was directly exposed to the attacks of the open sea.

As soon as the sailor and his companions left the precipice, the wind struck them again with renewed fury. Though bent under the gale they walked very quickly, following Top, who did not hesitate as to what direction to take.

They ascended towards the north, having on their left an interminable extent of billows, which broke with a deafening noise, and on their right a dark country, the aspect of which it was impossible to guess. But they felt that it
was comparatively flat, for the wind passed completely over them, without being driven back as it was when it came in contact with the cliff.

At four o'clock in the morning, they reckoned that they had cleared about five miles. The clouds were slightly raised, and the wind, though less damp, was very sharp and cold. Insufficiently protected by their clothing, Pencroft, Herbert and Spilett suffered cruelly, but not a complaint escaped their lips. They were determined to follow Top, wherever the intelligent animal wished to lead them.

Towards five o'clock day began to break. At the zenith, where the fog was less thick, gray shades bordered the clouds; under an opaque belt, a luminous line clearly traced the horizon. The crests of the billows were tipped with a wild light, and the foam regained its whiteness. At the same time on the left the hilly parts of the coast could be seen, though very indistinctly.

At six o'clock day had broken. The clouds rapidly lifted. The seaman and his companions were then about six miles from the Chimneys. They were following a very flat shore bounded by a reef of rocks, whose heads scarcely emerged from the sea, for they were in deep water. On the left, the country appeared to be one vast extent of sandy downs, bristling with thistles. There was no cliff, and the shore offered no resistance to the ocean but a chain of irregular hillocks. Here and there grew two or three trees, inclined towards the west, their branches projecting in that direction. Quite behind, in the southwest, extended the border of the forest.

At this moment, Top became very excited. He ran forward, then returned, and seemed to entreat them to hasten their steps. The dog then left the beach, and guided by his wonderful instinct, without showing the least hesitation, went straight in among the downs. They followed him. The country appeared an absolute desert. Not a living creature was to be seen.

The downs, the extent of which was large, were composed of hillocks and even of hills, very irregularly distributed. They resembled a Switzerland modeled in sand, and only an amazing instinct could have possibly recognized the way.

Five minutes after having left the beach, the reporter and his two companions arrived at a sort of excavation, hollowed out at the back of a high mound. There Top stopped, and gave a loud, clear bark. Spilett, Herbert, and Pencroft dashed into the cave.

Neb was there, kneeling beside a body extended on a bed of grass.

The body was that of the engineer, Cyrus Harding.

Chapter 8

Neb did not move. Pencroft only uttered one word.
"Living?" he cried.

Neb did not reply. Spilett and the sailor turned pale. Herbert clasped his hands, and remained motionless. The poor Negro, absorbed in his grief, evidently had neither seen his companions nor heard the sailor speak.

The reporter knelt down beside the motionless body, and placed his ear to the engineer's chest, having first torn open his clothes.

A minute--an age!--passed, during which he endeavored to catch the faintest throb of the heart.
Neb had raised himself a little and gazed without seeing. Despair had completely changed his countenance. He could scarcely be recognized, exhausted with fatigue, broken with grief. He believed his master was dead.

Gideon Spilett at last rose, after a long and attentive examination.
"He lives!" said he.

Pencroft knelt in his turn beside the engineer, he also heard a throbbing, and even felt a slight breath on his cheek.

Herbert at a word from the reporter ran out to look for water. He found, a hundred feet off, a limpid stream, which seemed to have been greatly increased by the rains, and which filtered through the sand; but nothing in which to put the water, not even a shell among the downs. The lad was obliged to content himself with dipping his handkerchief in the stream, and with it hastened back to the grotto.

Happily the wet handkerchief was enough for Gideon Spilett, who only wished to wet the engineer's lips. The cold water produced an almost immediate effect. His chest heaved and he seemed to try to speak.
"We will save him!" exclaimed the reporter.

At these words hope revived in Neb's heart. He undressed his master to see if he was wounded, but not so much as a bruise was to be found, either on the head, body, or limbs, which was surprising, as he must have been dashed against the rocks; even the hands were uninjured, and it was difficult to explain how the engineer showed no traces of the efforts which he must have made to get out of reach of the breakers.

But the explanation would come later. When Cyrus was able to speak he would say what had happened. For the
present the question was, how to recall him to life, and it appeared likely that rubbing would bring this about; so they set to work with the sailor's jersey.

The engineer, revived by this rude shampooing, moved his arm slightly and began to breathe more regularly. He was sinking from exhaustion, and certainly, had not the reporter and his companions arrived, it would have been all over with Cyrus Harding.

"You thought your master was dead, didn't you?" said the seaman to Neb.

"Yes! quite dead!" replied Neb, "and if Top had not found you, and brought you here, I should have buried my master, and then have lain down on his grave to die!"

It had indeed been a narrow escape for Cyrus Harding!

Neb then recounted what had happened. The day before, after having left the Chimneys at daybreak, he had ascended the coast in a northerly direction, and had reached that part of the shore which he had already visited.

There, without any hope he acknowledged, Neb had searched the beach, among the rocks, on the sand, for the smallest trace to guide him. He examined particularly that part of the beach which was not covered by the high tide, for near the sea the water would have obliterated all marks. Neb did not expect to find his master living. It was for a corpse that he searched, a corpse which he wished to bury with his own hands!

He sought long in vain. This desert coast appeared never to have been visited by a human creature. The shells, those which the sea had not reached, and which might be met with by millions above high-water mark, were untouched. Not a shell was broken.

Neb then resolved to walk along the beach for some miles. It was possible that the waves had carried the body to quite a distant point. When a corpse floats a little distance from a low shore, it rarely happens that the tide does not throw it up, sooner or later. This Neb knew, and he wished to see his master again for the last time.

"I went along the coast for another two miles, carefully examining the beach, both at high and low water, and I had despaired of finding anything, when yesterday, above five in the evening, I saw footprints on the sand."

"Footprints?" exclaimed Pencroft.

"Yes!" replied Neb.

"Did these footprints begin at the water's edge?" asked the reporter.

"No," replied Neb, "only above high-water mark, for the others must have been washed out by the tide."

"Go on, Neb," said Spilett.

"I went half crazy when I saw these footprints. They were very clear and went towards the downs. I followed them for a quarter of a mile, running, but taking care not to destroy them. Five minutes after, as it was getting dark, I heard the barking of a dog. It was Top, and Top brought me here, to my master!"

Neb ended his account by saying what had been his grief at finding the inanimate body, in which he vainly sought for the least sign of life. Now that he had found him dead he longed for him to be alive. All his efforts were useless! Nothing remained to be done but to render the last duties to the one whom he had loved so much! Neb then thought of his companions. They, no doubt, would wish to see the unfortunate man again. Top was there. Could he not rely on the sagacity of the faithful animal? Neb several times pronounced the name of the reporter, the one among his companions whom Top knew best.

Then he pointed to the south, and the dog bounded off in the direction indicated to him.

We have heard how, guided by an instinct which might be looked upon almost as supernatural, Top had found them.

Neb's companions had listened with great attention to this account.

It was unaccountable to them how Cyrus Harding, after the efforts which he must have made to escape from the waves by crossing the rocks, had not received even a scratch. And what could not be explained either was how the engineer had managed to get to this cave in the downs, more than a mile from the shore.

"So, Neb," said the reporter, "it was not you who brought your master to this place."

"No, it was not I," replied the Negro.

"It's very clear that the captain came here by himself," said Pencroft.

"It is clear in reality," observed Spilett, "but it is not credible!"

The explanation of this fact could only be produced from the engineer's own lips, and they must wait for that till speech returned. Rubbing had re-established the circulation of the blood. Cyrus Harding moved his arm again, then his head, and a few incomprehensible words escaped him.

Neb, who was bending over him, spoke, but the engineer did not appear to hear, and his eyes remained closed. Life was only exhibited in him by movement, his senses had not as yet been restored.

Pencroft much regretted not having either fire, or the means of procuring it, for he had, unfortunately, forgotten to bring the burnt linen, which would easily have ignited from the sparks produced by striking together two flints. As to the engineer's pockets, they were entirely empty, except that of his waistcoat, which contained his watch. It
was necessary to carry Harding to the Chimneys, and that as soon as possible. This was the opinion of all.

Meanwhile, the care which was lavished on the engineer brought him back to consciousness sooner than they could have expected. The water with which they wetted his lips revived him gradually. Pencroft also thought of mixing with the water some moisture from the titra's flesh which he had brought. Herbert ran to the beach and returned with two large bivalve shells. The sailor concocted something which he introduced between the lips of the engineer, who eagerly drinking it opened his eyes.

Neb and the reporter were leaning over him.
"My master! my master!" cried Neb.

The engineer heard him. He recognized Neb and Spilett, then his other two companions, and his hand slightly pressed theirs.

A few words again escaped him, which showed what thoughts were, even then, troubling his brain. This time he was understood. Undoubtedly they were the same words he had before attempted to utter.

"Island or continent?" he murmured.

"Bother the continent," cried Pencroft hastily; "there is time enough to see about that, captain! we don't care for anything, provided you are living."

The engineer nodded faintly, and then appeased to sleep.

They respected this sleep, and the reporter began immediately to make arrangements for transporting Harding to a more comfortable place. Neb, Herbert, and Pencroft left the cave and directed their steps towards a high mound crowned with a few distorted trees. On the way the sailor could not help repeating,--

"Island or continent! To think of that, when at one's last gasp! What a man!"

Arrived at the summit of the mound, Pencroft and his two companions set to work, with no other tools than their hands, to despoil of its principal branches a rather sickly tree, a sort of marine fir; with these branches they made a litter, on which, covered with grass and leaves, they could carry the engineer.

This occupied them nearly forty minutes, and it was ten o'clock when they returned to Cyrus Harding whom Spilett had not left.

The engineer was just awaking from the sleep, or rather from the drowsiness, in which they had found him. The color was returning to his cheeks, which till now had been as pale as death. He raised himself a little, looked around him, and appeared to ask where he was.

"Can you listen to me without fatigue, Cyrus?" asked the reporter.

"Yes," replied the engineer.

"It's my opinion," said the sailor, "that Captain Harding will be able to listen to you still better, if he will have some more grouse jelly,—for we have grouse, captain," added he, presenting him with a little of this jelly, to which he this time added some of the flesh.

Cyrus Harding ate a little of the grouse, and the rest was divided among his companions, who found it but a meager breakfast, for they were suffering extremely from hunger.

"Well!" said the sailor, "there is plenty of food at the Chimneys, for you must know, captain, that down there, in the south, we have a house, with rooms, beds, and fireplace, and in the pantry, several dozen of birds, which our Herbert calls couroucous. Your litter is ready, and as soon as you feel strong enough we will carry you home."

"Thanks, my friend," replied the engineer; "wait another hour or two, and then we will set out. And now speak, Spilett."

The reporter then told him all that had occurred. He recounted all the events with which Cyrus was unacquainted, the last fall of the balloon, the landing on this unknown land, which appeared a desert (whatever it was, whether island or continent), the discovery of the Chimneys, the search for him, not forgetting of course Neb's devotion, the intelligence exhibited by the faithful Top, as well as many other matters.

"But," asked Harding, in a still feeble voice, "you did not, then, pick me up on the beach?"

"No," replied the reporter.

"And did you not bring me to this cave?"

"No."

"At what distance is this cave from the sea?"

"About a mile," replied Pencroft; "and if you are astonished, captain, we are not less surprised ourselves at seeing you in this place!"

"Indeed," said the engineer, who was recovering gradually, and who took great interest in these details, "indeed it is very singular!"

"But," resumed the sailor, "can you tell us what happened after you were carried off by the sea?"

Cyrus Harding considered. He knew very little. The wave had torn him from the balloon net. He sank at first several fathoms. On returning to the surface, in the half light, he felt a living creature struggling near him. It was
Top, who had sprung to his help. He saw nothing of the balloon, which, lightened both of his weight and that of the
dog, had darted away like an arrow.

There he was, in the midst of the angry sea, at a distance which could not be less than half a mile from the shore.

He attempted to struggle against the billows by swimming vigorously. Top held him up by his clothes; but a strong
current seized him and drove him towards the north, and after half an hour of exertion, he sank, dragging Top with
him into the depths. From that moment to the moment in which he recovered to find himself in the arms of his
friends he remembered nothing.

"However," remarked Pencroft, "you must have been thrown on to the beach, and you must have had strength to
walk here, since Neb found your footmarks!"

"Yes... of course," replied the engineer, thoughtfully; "and you found no traces of human beings on this coast?"

"Not a trace," replied the reporter; "besides, if by chance you had met with some deliverer there, just in the nick
of time, why should he have abandoned you after having saved you from the waves?"

"You are right, my dear Spilett. Tell me, Neb," added the engineer, turning to his servant, "it was not you who...
you can't have had a moment of unconsciousness... during which no, that's absurd.... Do any of the footsteps still
remain?" asked Harding.

"Yes, master," replied Neb; "here, at the entrance, at the back of the mound, in a place sheltered from the rain
and wind. The storm has destroyed the others."

"Pencroft," said Cyrus Harding, "will you take my shoe and see if it fits exactly to the footprints?"

The sailor did as the engineer requested. While he and Herbert, guided by Neb, went to the place where the
footprints were to be found, Cyrus remarked to the reporter,--

"It is a most extraordinary thing!"

"Perfectly inexplicable!" replied Gideon Spilett.

"But do not dwell upon it just now, my dear Spilett, we will talk about it by-and-by."

A moment after the others entered.

There was no doubt about it. The engineer's shoe fitted exactly to the footmarks. It was therefore Cyrus Harding
who had left them on the sand.

"Come," said he, "I must have experienced this unconsciousness which I attributed to Neb. I must have walked
like a somnambulist, without any knowledge of my steps, and Top must have guided me here, after having dragged
me from the waves... Come, Top! Come, old dog!"

The magnificent animal bounded barking to his master, and caresses were lavished on him. It was agreed that
there was no other way of accounting for the rescue of Cyrus Harding, and that Top deserved all the honor of the
affair.

Towards twelve o'clock, Pencroft having asked the engineer if they could now remove him, Harding, instead of
replying, and by an effort which exhibited the most energetic will, got up. But he was obliged to lean on the sailor,
or he would have fallen.

"Well done!" cried Pencroft; "bring the captain's litter."

The litter was brought; the transverse branches had been covered with leaves and long grass. Harding was laid
on it, and Pencroft, having taken his place at one end and Neb at the other, they started towards the coast. There was
a distance of eight miles to be accomplished; but, as they could not go fast, and it would perhaps be necessary to
stop frequently, they reckoned that it would take at least six hours to reach the Chimneys. The wind was still strong,
but fortunately it did not rain. Although lying down, the engineer, leaning on his elbow, observed the coast,
particularly inland. He did not speak, but he gazed; and, no doubt, the appearance of the country, with its
inequalities of ground, its forests, its various productions, were impressed on his mind. However, after traveling for
two hours, fatigue overcame him, and he slept.

At half-past five the little band arrived at the precipice, and a short time after at the Chimneys.

They stopped, and the litter was placed on the sand; Cyrus Harding was sleeping profoundly, and did not awake.

Pencroft, to his extreme surprise, found that the terrible storm had quite altered the aspect of the place. Important
changes had occurred; great blocks of stone lay on the beach, which was also covered with a thick carpet of sea-
weed, algae, and wrack. Evidently the sea, passing over the islet, had been carried right up to the foot of the
enormous curtain of granite. The soil in front of the cave had been torn away by the violence of the waves. A horrid
presentiment flashed across Pencroft's mind. He rushed into the passage, but returned almost immediately, and stood
motionless, staring at his companions.... The fire was out; the drowned cinders were nothing but mud; the burnt
linen, which was to have served as tinder, had disappeared! The sea had penetrated to the end of the passages, and
everything was overthrown and destroyed in the interior of the Chimneys!
Chapter 9

In a few words, Gideon Spilett, Herbert, and Neb were made acquainted with what had happened. This accident, which appeared so very serious to Pencroft, produced different effects on the companions of the honest sailor.

Neb, in his delight at having found his master, did not listen, or rather, did not care to trouble himself with what Pencroft was saying.

Herbert shared in some degree the sailor's feelings.

As to the reporter, he simply replied,—

"Upon my word, Pencroft, it's perfectly indifferent to me!"

"But, I repeat, that we haven't any fire!"

"Pooh!"

"Nor any means of relighting it!"

"Nonsense!"

"But I say, Mr. Spilett--"

"Isn't Cyrus here?" replied the reporter.

"Is not our engineer alive? He will soon find some way of making fire for us!"

"With what?"

"With nothing."

What had Pencroft to say? He could say nothing, for, in the bottom of his heart he shared the confidence which his companions had in Cyrus Harding. The engineer was to them a microcosm, a compound of every science, a possessor of all human knowledge. It was better to be with Cyrus in a desert island, than without him in the most flourishing town in the United States. With him they could want nothing; with him they would never despair. If these brave men had been told that a volcanic eruption would destroy the land, that this land would be engulfed in the depths of the Pacific, they would have imperturbably replied,—

"Cyrus is here!"

While in the palanquin, however, the engineer had again relapsed into unconsciousness, which the jolting to which he had been subjected during his journey had brought on, so that they could not now appeal to his ingenuity. The deep sleep which had overpowered him would no doubt be more beneficial to him than any nourishment.

Night had closed in, and the temperature, which had modified when the wind shifted to the northwest, again became extremely cold. Also, the sea having destroyed the partitions which Pencroft had put up in certain places in the passages, the Chimneys, on account of the draughts, had become scarcely habitable. The engineer's condition would, therefore, have been bad enough, if his companions had not carefully covered him with their coats and waistcoats.

Supper, this evening, was of course composed of the inevitable lithodomes, of which Herbert and Neb picked up a plentiful supply on the beach. However, to these molluscs, the lad added some edible sea-weed, which he gathered on high rocks, whose sides were only washed by the sea at the time of high tides. This sea-weed, which belongs to the order of Fucaceae, of the genus Sargassum, produces, when dry, a gelatinous matter, rich and nutritious. The reporter and his companions, after having eaten a quantity of lithodomes, sucked the sargassum, of which the taste was very tolerable. It is used in parts of the East very considerably by the natives. "Never mind!" said the sailor, "the captain will help us soon." Meanwhile the cold became very severe, and unhappily they had no means of defending themselves from it.

The sailor, extremely vexed, tried in all sorts of ways to procure fire. Neb helped him in this work. He found some dry moss, and by striking together two pebbles he obtained some sparks, but the moss, not being inflammable enough, did not take fire, for the sparks were really only incandescent, and not at all of the same consistency as those which are emitted from flint when struck in the same manner. The experiment, therefore, did not succeed.

Pencroft, although he had no confidence in the proceeding, then tried rubbing two pieces of dry wood together, as savages do. Certainly, the movement which he and Neb exhibited, if it had been transformed into heat, according to the new theory, would have been enough to heat the boiler of a steamer! It came to nothing. The bits of wood became hot, to be sure, but much less so than the operators themselves.

After working an hour, Pencroft, who was in a complete state of perspiration, threw down the pieces of wood in disgust.

"I can never be made to believe that savages light their fires in this way, let them say what they will," he
exclaimed. "I could sooner light my arms by rubbing them against each other!"

The sailor was wrong to despise the proceeding. Savages often kindle wood by means of rapid rubbing. But every sort of wood does not answer for the purpose, and besides, there is "the knack," following the usual expression, and it is probable that Pencroft had not "the knack."

Pencroft's ill humor did not last long. Herbert had taken the bits of wood which he had turned down, and was exerting himself to rub them. The hardy sailor could not restrain a burst of laughter on seeing the efforts of the lad to succeed where he had failed.

"Rub, my boy, rub!" said he.

"I am rubbing," replied Herbert, laughing, "but I don't pretend to do anything else but warm myself instead of shivering, and soon I shall be as hot as you are, my good Pencroft!"

This soon happened. However, they were obliged to give up, for this night at least, the attempt to procure fire. Gideon Spilett repeated, for the twentieth time, that Cyrus Harding would not have been troubled for so small a difficulty. And, in the meantime, he stretched himself in one of the passages on his bed of sand. Herbert, Neb, and Pencroft did the same, while Top slept at his master's feet.

Next day, the 28th of March, when the engineer awoke, about eight in the morning, he saw his companions around him watching his sleep, and, as on the day before, his first words were:--

"Island or continent?" This was his uppermost thought.

"Well!" replied Pencroft, "we don't know anything about it, captain!"

"You don't know yet?"

"But we shall know," rejoined Pencroft, "when you have guided us into the country."

"I think I am able to try it," replied the engineer, who, without much effort, rose and stood upright.

"That's capital!" cried the sailor.

"I feel dreadfully weak," replied Harding. "Give me something to eat, my friends, and it will soon go off. You have fire, haven't you?"

This question was not immediately replied to. But, in a few seconds--

"Alas! we have no fire," said Pencroft, "or rather, captain, we have it no longer!"

And the sailor recounted all that had passed the day before. He amused the engineer by the history of the single match, then his abortive attempt to procure fire in the savages' way.

"We shall consider," replied the engineer, "and if we do not find some substance similar to tinder--"

"Well?" asked the sailor.

"Well, we will make matches.

"Chemicals?"

"Chemicals!"

"It is not more difficult than that," cried the reporter, striking the sailor on the shoulder.

The latter did not think it so simple, but he did not protest. All went out. The weather had become very fine. The sun was rising from the sea's horizon, and touched with golden spangles the prismatic rugosities of the huge precipice.

Having thrown a rapid glance around him, the engineer seated himself on a block of stone. Herbert offered him a few handfuls of shell-fish and sargassum, saying,--

"It is all that we have, Captain Harding."

"Thanks, my boy," replied Harding; "it will do--for this morning at least."

He ate the wretched food with appetite, and washed it down with a little fresh water, drawn from the river in an immense shell.

His companions looked at him without speaking. Then, feeling somewhat refreshed, Cyrus Harding crossed his arms, and said,--

"So, my friends, you do not know yet whether fate has thrown us on an island, or on a continent?"

"No, captain," replied the boy.

"We shall know to-morrow," said the engineer; "till then, there is nothing to be done."

"Yes," replied Pencroft.

"What?"

"Fire," said the sailor, who, also, had a fixed idea.

"We will make it, Pencroft," replied Harding.

"While you were carrying me yesterday, did I not see in the west a mountain which commands the country?"

"Yes," replied Spilett, "a mountain which must be rather high--"

"Well," replied the engineer, "we will climb to the summit to-morrow, and then we shall see if this land is an island or a continent. Till then, I repeat, there is nothing to be done."
"Yes, fire!" said the obstinate sailor again.
"But he will make us a fire!" replied Gideon Spilett, "only have a little patience, Pencroft!"
The seaman looked at Spilett in a way which seemed to say, "If it depended upon you to do it, we wouldn't taste roast meat very soon"; but he was silent.
Meanwhile Captain Harding had made no reply. He appeared to be very little troubled by the question of fire. For a few minutes he remained absorbed in thought; then again speaking,--
"My friends," he said, "our situation is, perhaps, deplorable; but, at any rate, it is very plain. Either we are on a continent, and then, at the expense of greater or less fatigue, we shall reach some inhabited place, or we are on an island. In the latter case, if the island is inhabited, we will try to get out of the scrape with the help of its inhabitants; if it is desert, we will try to get out of the scrape by ourselves."
"Certainly, nothing could be plainer," replied Pencroft.
"But, whether it is an island or a continent," asked Gideon Spilett, "whereabouts do you think, Cyrus, this storm has thrown us?"
"I cannot say exactly," replied the engineer, "but I presume it is some land in the Pacific. In fact, when we left Richmond, the wind was blowing from the northeast, and its very violence greatly proves that it could not have varied. If the direction has been maintained from the northeast to the southwest, we have traversed the States of North Carolina, of South Carolina, of Georgia, the Gulf of Mexico, Mexico, itself, in its narrow part, then a part of the Pacific Ocean. I cannot estimate the distance traversed by the balloon at less than six to seven thousand miles, and, even supposing that the wind had varied half a quarter, it must have brought us either to the archipelago of Mendava, either on the Pomotous, or even, if it had a greater strength than I suppose, to the land of New Zealand. If the last hypothesis is correct, it will be easy enough to get home again. English or Maoris, we shall always find some one to whom we can speak. If, on the contrary, this is the coast of a desert island in some tiny archipelago, perhaps we shall be able to reconnoiter it from the summit of that peak which overlooks the country, and then we shall see how best to establish ourselves here as if we are never to go away."
"Never?" cried the reporter. "You say 'Never,' my dear Cyrus?"
"Better to put things at the worst at first," replied the engineer, "and reserve the best for a surprise."
"Well said," remarked Pencroft. "It is to be hoped, too, that this island, if it be one, is not situated just out of the course of ships; that would be really unlucky!"
"We shall not know what we have to rely on until we have first made the ascent of the mountain," replied the engineer.
"But to-morrow, captain," asked Herbert, "shall you be in a state to bear the fatigue of the ascent?"
"I hope so," replied the engineer, "provided you and Pencroft, my boy, show yourselves quick and clever hunters."
"Captain," said the sailor, "since you are speaking of game, if on my return, I was as certain of roasting it as I am of bringing it back--"
"Bring it back all the same, Pencroft," replied Harding.
It was then agreed that the engineer and the reporter were to pass the day at the Chimneys, so as to examine the shore and the upper plateau. Neb, Herbert, and the sailor were to return to the forest, renew their store of wood, and lay violent hands on every creature, feathered or hairy, which might come within their reach. They set out accordingly about ten o'clock in the morning, Herbert confident, Neb joyous, Pencroft murmuring aside,--
"If, on my return, I find a fire at the house, I shall believe that the thunder itself came to light it." All three climbed the bank; and arrived at the angle made by the river, the sailor, stopping, said to his two companions,--
"Shall we begin by being hunters or wood-men?"
"Hunters," replied Herbert. "There is Top already in quest."
"We will hunt, then," said the sailor, "and afterwards we can come back and collect our wood."
This agreed to, Herbert, Neb, and Pencroft, after having torn three sticks from the trunk of a young fir, followed Top, who was bounding about among the long grass.
This time, the hunters, instead of following the course of the river, plunged straight into the heart of the forest. There were still the same trees, belonging, for the most part, to the pine family. In certain places, less crowded, growing in clumps, these pines exhibited considerable dimensions, and appeared to indicate, by their development, that the country was situated in a higher latitude than the engineer had supposed. Glades, bristling with stumps worn away by time, were covered with dry wood, which formed an inexhaustible store of fuel. Then, the glade passed, the underwood thickened again, and became almost impenetrable.
It was difficult enough to find the way among the groups of trees, without any beaten track. So the sailor from time to time broke off branches which might be easily recognized. But, perhaps, he was wrong not to follow the
watercourse, as he and Herbert had done on their first excursion, for after walking an hour not a creature had shown itself. Top, running under the branches, only roused birds which could not be approached. Even the couroucous were invisible, and it was probable that the sailor would be obliged to return to the marshy part of the forest, in which he had so happily performed his grouse fishing.

"Well, Pencroft," said Neb, in a slightly sarcastic tone, "if this is all the game which you promised to bring back to my master, it won't need a large fire to roast it!"

"Have patience," replied the sailor, "it isn't the game which will be wanting on our return."

"Have you not confidence in Captain Harding?"

"Yes."

"But you don't believe that he will make fire?"

"I shall believe it when the wood is blazing in the fireplace."

"It will blaze, since my master has said so."

"We shall see!"

Meanwhile, the sun had not reached the highest point in its course above the horizon. The exploration, therefore, continued, and was usefully marked by a discovery which Herbert made of a tree whose fruit was edible. This was the stone-pine, which produces an excellent almond, very much esteemed in the temperate regions of America and Europe. These almonds were in a perfect state of maturity, and Herbert described them to his companions, who feasted on them.

"Come," said Pencroft, "sea-weed by way of bread, raw mussels for meat, and almonds for dessert, that's certainly a good dinner for those who have not a single match in their pocket!"

"We mustn't complain," said Herbert.

"I am not complaining, my boy," replied Pencroft, "only I repeat, that meat is a little too much economized in this sort of meal."

"Top has found something!" cried Neb, who ran towards a thicket, in the midst of which the dog had disappeared, barking. With Top's barking were mingled curious gruntings.

The sailor and Herbert had followed Neb. If there was game there this was not the time to discuss how it was to be cooked, but rather, how they were to get hold of it.

The hunters had scarcely entered the bushes when they saw Top engaged in a struggle with an animal which he was holding by the ear. This quadruped was a sort of pig nearly two feet and a half long, of a blackish brown color, lighter below, having hard scanty hair; its toes, then strongly fixed in the ground, seemed to be united by a membrane. Herbert recognized in this animal the capybara, that is to say, one of the largest members of the rodent order.

Meanwhile, the capybara did not struggle against the dog. It stupidly rolled its eyes, deeply buried in a thick bed of fat. Perhaps it saw men for the first time.

However, Neb having tightened his grasp on his stick, was just going to fell the pig, when the latter, tearing itself from Top's teeth, by which it was only held by the tip of its ear, uttered a vigorous grunt, rushed upon Herbert, almost overthrew him, and disappeared in the wood.

"The rascal!" cried Pencroft.

All three directly darted after Top, but at the moment when they joined him the animal had disappeared under the waters of a large pond shaded by venerable pines.

Neb, Herbert, and Pencroft stopped, motionless. Top plunged into the water, but the capybara, hidden at the bottom of the pond, did not appear.

"Let us wait," said the boy, "for he will soon come to the surface to breathe."

"Won't he drown?" asked Neb.

"No," replied Herbert, "since he has webbed feet, and is almost an amphibious animal. But watch him."

Top remained in the water. Pencroft and his two companions went to different parts of the bank, so as to cut off the retreat of the capybara, which the dog was looking for beneath the water.

Herbert was not mistaken. In a few minutes the animal appeared on the surface of the water. Top was upon it in a bound, and kept it from plunging again. An instant later the capybara, dragged to the bank, was killed by a blow from Neb's stick.

"Hurrah!" cried Pencroft, who was always ready with this cry of triumph.

"Give me but a good fire, and this pig shall be gnawed to the bones!"

Pencroft hoisted the capybara on his shoulders, and judging by the height of the sun that it was about two o'clock, he gave the signal to return.

Top's instinct was useful to the hunters, who, thanks to the intelligent animal, were enabled to discover the road by which they had come. Half an hour later they arrived at the river.
Pencroft soon made a raft of wood, as he had done before, though if there was no fire it would be a useless task, and the raft following the current, they returned towards the Chimneys.

But the sailor had not gone fifty paces when he stopped, and again uttering a tremendous hurrah, pointed towards the angle of the cliff,—

"Herbert! Neb! Look!" he shouted.

Smoke was escaping and curling up among the rocks.

Chapter 10

In a few minutes the three hunters were before a crackling fire. The captain and the reporter were there. Pencroft looked from one to the other, his capybara in his hand, without saying a word.

"Well, yes, my brave fellow," cried the reporter.

"Fire, real fire, which will roast this splendid pig perfectly, and we will have a feast presently!"

"But who lighted it?" asked Pencroft.

"The sun!"

Gideon Spilett was quite right in his reply. It was the sun which had furnished the heat which so astonished Pencroft. The sailor could scarcely believe his eyes, and he was so amazed that he did not think of questioning the engineer.

"Had you a burning-glass, sir?" asked Herbert of Harding.

"No, my boy," replied he, "but I made one."

And he showed the apparatus which served for a burning-glass. It was simply two glasses which he had taken from his own and the reporter's watches. Having filled them with water and rendered their edges adhesive by means of a little clay, he thus fabricated a regular burning-glass, which, concentrating the solar rays on some very dry moss, soon caused it to blaze.

The sailor considered the apparatus; then he gazed at the engineer without saying a word, only a look plainly expressed his opinion that if Cyrus Harding was not a magician, he was certainly no ordinary man. At last speech returned to him, and he cried,—

"Note that, Mr. Spilett, note that down on your paper!"

"It is noted," replied the reporter.

Then, Neb helping him, the seaman arranged the spit, and the capybara, properly cleaned, was soon roasting like a suckling-pig before a clear, crackling fire.

The Chimneys had again become more habitable, not only because the passages were warmed by the fire, but because the partitions of wood and mud had been re-established.

It was evident that the engineer and his companions had employed their day well. Cyrus Harding had almost entirely recovered his strength, and had proved it by climbing to the upper plateau. From this point his eye, accustomed to estimate heights and distances, was fixed for a long time on the cone, the summit of which he wished to reach the next day. The mountain, situated about six miles to the northwest, appeared to him to measure 3,500 feet above the level of the sea. Consequently the gaze of an observer posted on its summit would extend over a radius of at least fifty miles. Therefore it was probable that Harding could easily solve the question of "island or continent," to which he attached so much importance.

They supped capitally. The flesh of the capybara was declared excellent. The sargassum and the almonds of the stone-pine completed the repast, during which the engineer spoke little. He was preoccupied with projects for the next day.

Once or twice Pencroft gave forth some ideas upon what it would be best to do; but Cyrus Harding, who was evidently of a methodical mind, only shook his head without uttering a word.

"To-morrow," he repeated, "we shall know what we have to depend upon, and we will act accordingly."

The meal ended, fresh armfuls of wood were thrown on the fire, and the inhabitants of the Chimneys, including the faithful Top, were soon buried in a deep sleep.

No incident disturbed this peaceful night, and the next day, the 29th of March, fresh and active they awoke, ready to undertake the excursion which must determine their fate.

All was ready for the start. The remains of the capybara would be enough to sustain Harding and his companions for at least twenty-four hours.

Besides, they hoped to find more food on the way. As the glasses had been returned to the watches of the engineer and reporter, Pencroft burned a little linen to serve as tinder. As to flint, that would not be wanting in these regions of Plutonic origin. It was half-past seven in the morning when the explorers, armed with sticks, left the Chimneys. Following Pencroft's advice, it appeared best to take the road already traversed through the forest, and to
return by another route. It was also the most direct way to reach the mountain. They turned the south angle and followed the left bank of the river, which was abandoned at the point where it formed an elbow towards the southwest. The path, already trodden under the evergreen trees, was found, and at nine o'clock Cyrus Harding and his companions had reached the western border of the forest. The ground, till then, very little undulated, boggy at first, dry and sandy afterwards, had a gentle slope, which ascended from the shore towards the interior of the country. A few very timid animals were seen under the forest-trees. Top quickly started them, but his master soon called him back, for the time had not come to commence hunting; that would be attended to later. The engineer was not a man who would allow himself to be diverted from his fixed idea. It might even have been said that he did not observe the country at all, either in its configuration or in its natural productions, his great aim being to climb the mountain before him, and therefore straight towards it he went. At ten o'clock a halt of a few minutes was made. On leaving the forest, the mountain system of the country appeared before the explorers. The mountain was composed of two cones; the first, truncated at a height of about two thousand five hundred feet, was sustained by buttresses, which appeared to branch out like the talons of an immense claw set on the ground. Between these were narrow valleys, bristling with trees, the last clumps of which rose to the top of the lowest cone. There appeared to be less vegetation on that side of the mountain which was exposed to the northeast, and deep fissures could be seen which, no doubt, were watercourses.

On the first cone rested a second, slightly rounded, and placed a little on one side, like a great round hat cocked over the ear. A Scotchman would have said, "His bonnet was a thocht ajee." It appeared formed of bare earth, here and there pierced by reddish rocks.

They wished to reach the second cone, and proceeding along the ridge of the spurs seemed to be the best way by which to gain it.

"We are on volcanic ground," Cyrus Harding had said, and his companions following him began to ascend by degrees on the back of a spur, which, by a winding and consequently more accessible path, joined the first plateau.

The ground had evidently been convulsed by subterranean force. Here and there stray blocks, numerous debris of basalt and pumice-stone, were met with. In isolated groups rose fir-trees, which, some hundred feet lower, at the bottom of the narrow gorges, formed massive shades almost impenetrable to the sun's rays.

During the first part of the ascent, Herbert remarked on the footprints which indicated the recent passage of large animals.

"Perhaps these beasts will not let us pass by willingly," said Pencroft.

"Well," replied the reporter, who had already hunted the tiger in India, and the lion in Africa, "we shall soon learn how successfully to encounter them. But in the meantime we must be upon our guard!"

They ascended but slowly.

The distance, increased by detours and obstacles which could not be surmounted directly, was long. Sometimes, too, the ground suddenly fell, and they found themselves on the edge of a deep chasm which they had to go round. Thus, in retracing their steps so as to find some practicable path, much time was employed and fatigue undergone for nothing. At twelve o'clock, when the small band of adventurers halted for breakfast at the foot of a large group of firs, near a little stream which fell in cascades, they found themselves still half way from the first plateau, which most probably they would not reach till nightfall. From this point the view of the sea was much extended, but on the right the high promontory prevented their seeing whether there was land beyond it. On the left, the sight extended several miles to the north; but, on the northwest, at the point occupied by the explorers, it was cut short by the ridge of a fantastically-shaped spur, which formed a powerful support of the central cone.

At one o'clock the ascent was continued. They slanted more towards the southwest and again entered among thick bushes. There under the shade of the trees fluttered several couples of gallinaceae belonging to the pheasant species. They were tragopans, ornamented by a pendant skin which hangs over their throats, and by two small, round horns, planted behind the eyes. Among these birds, which were about the size of a fowl, the female was uniformly brown, while the male was gorgeous in his red plumage, decorated with white spots. Gideon Spilett, with a stone cleverly and vigorously thrown, killed one of these tragopans, on which Pencroft, made hungry by the fresh air, had cast greedy eyes.

After leaving the region of bushes, the party, assisted by resting on each other's shoulders, climbed for about a hundred feet up a steep acclivity and reached a level place, with very few trees, where the soil appeared volcanic. It was necessary to ascend by zigzags to make the slope more easy, for it was very steep, and the footing being exceedingly precarious required the greatest caution. Neb and Herbert took the lead, Pencroft the rear, the captain and the reporter between them. The animals which frequented these heights—and there were numerous traces of them—must necessarily belong to those races of sure foot and supple spine, chamois or goat. Several were seen, but this was not the name Pencroft gave them, for all of a sudden—"Sheep!" he shouted.

All stopped about fifty feet from half-a-dozen animals of a large size, with strong horns bent back and flattened...
towards the point, with a woolly fleece, hidden under long silky hair of a tawny color.

They were not ordinary sheep, but a species usually found in the mountainous regions of the temperate zone, to which Herbert gave the name of the musmon.

"Have they legs and chops?" asked the sailor.

"Yes," replied Herbert.

"Well, then, they are sheep!" said Pencroft.

The animals, motionless among the blocks of basalt, gazed with an astonished eye, as if they saw human bipeds for the first time. Then their fears suddenly aroused, they disappeared, bounding over the rocks.

"Good-by, till we meet again," cried Pencroft, as he watched them, in such a comical tone that Cyrus Harding, Gideon Spilett, Herbert, and Neb could not help laughing.

The ascent was continued. Here and there were traces of sulphur springs sometimes stopped their way, and they had to go round them. In some places the sulphur had formed crystals among other substances, such as whitish cinders made of an infinity of little feldspar crystals.

In approaching the first plateau formed by the truncating of the lower cone, the difficulties of the ascent were very great. Towards four o'clock the extreme zone of the trees had been passed. There only remained here and there a few twisted, stunted pines, which must have had a hard life in resisting at this altitude the high winds from the open sea. Happily for the engineer and his companions the weather was beautiful, the atmosphere tranquil; for a high breeze at an elevation of three thousand feet would have hindered their proceedings. The purity of the sky at the zenith was felt through the transparent air. A perfect calm reigned around them. They could not see the sun, then hid by the vast screen of the upper cone, which masked the half-horizon of the west, and whose enormous shadow stretching to the shore increased as the radiant luminary sank in its diurnal course. Vapor--mist rather than clouds--began to appear in the east, and assume all the prismatic colors under the influence of the solar rays.

Five hundred feet only separated the explorers from the plateau, which they wished to reach so as to establish there an encampment for the night, but these five hundred feet were increased to more than two miles by the zigzags which they had to describe. The soil, as it were, slid under their feet.

The slope often presented such an angle that they slipped when the stones worn by the air did not give a sufficient support. Evening came on by degrees, and it was almost night when Cyrus Harding and his companions, much fatigued by an ascent of seven hours, arrived at the plateau of the first cone. It was then necessary to prepare an encampment, and to restore their strength by eating first and sleeping afterwards. This second stage of the mountain rose on a base of rocks, among which it would be easy to find a retreat. Fuel was not abundant. However, a fire could be made by means of the moss and dry brushwood, which covered certain parts of the plateau. While the sailor was preparing his hearth with stones which he put to this use, Neb and Herbert occupied themselves with getting a supply of fuel. They soon returned with a load of brushwood. The steel was struck, the burnt linen caught the sparks of flint, and, under Neb's breath, a crackling fire showed itself in a few minutes under the shelter of the rocks. Their object in lighting a fire was only to enable them to withstand the cold temperature of the night, as it was not employed in cooking the bird, which Neb kept for the next day. The remains of the capybara and some dozens of the stone-pine almonds formed their supper. It was not half-past six when all was finished.

Cyrus Harding then thought of exploring in the half-light the large circular layer which supported the upper cone of the mountain. Before taking any rest, he wished to know if it was possible to get round the base of the cone in the case of its sides being too steep and its summit being inaccessible. This question preoccupied him, for it was possible that from the way the hat inclined, that is to say, towards the north, the plateau was not practicable. Also, if the summit of the mountain could not be reached on one side, and if, on the other, they could not get round the base of the cone, it would be impossible to survey the western part of the country, and their object in making the ascent would in part be altogether unattained.

The engineer, accordingly, regardless of fatigue, leaving Pencroft and Neb to arrange the beds, and Gideon Spilett to note the incidents of the day, began to follow the edge of the plateau, going towards the north. Herbert accompanied him.

The night was beautiful and still, the darkness was not yet deep. Cyrus Harding and the boy walked near each other, without speaking. In some places the plateau opened before them, and they passed without hindrance. In others, obstructed by rocks, there was only a narrow path, in which two persons could not walk abreast. After a walk of twenty minutes, Cyrus Harding and Herbert were obliged to stop. From this point the slope of the two cones became one. No shoulder here separated the two parts of the mountain. The slope, being inclined almost seventy degrees, the path became impracticable.

But if the engineer and the boy were obliged to give up thoughts of following a circular direction, in return an opportunity was given for ascending the cone.

In fact, before them opened a deep hollow. It was the rugged mouth of the crater, by which the eruptive liquid
matter had escaped at the periods when the volcano was still in activity. Hardened lava and crusted scoria formed a sort of natural staircase of large steps, which would greatly facilitate the ascent to the summit of the mountain.

Harding took all this in at a glance, and without hesitating, followed by the lad, he entered the enormous chasm in the midst of an increasing obscurity.

There was still a height of a thousand feet to overcome. Would the interior acclivities of the crater be practicable? It would soon be seen. The persevering engineer resolved to continue his ascent until he was stopped. Happily these acclivities wound up the interior of the volcano and favored their ascent.

As to the volcano itself, it could not be doubted that it was completely extinct. No smoke escaped from its sides; not a flame could be seen in the dark hollows; not a roar, not a mutter, no trembling even issued from this black well, which perhaps reached far into the bowels of the earth. The atmosphere inside the crater was filled with no sulphurous vapor. It was more than the sleep of a volcano; it was its complete extinction. Cyrus Harding's attempt would succeed.

Little by little, Herbert and he climbing up the sides of the interior, saw the crater widen above their heads. The radius of this circular portion of the sky, framed by the edge of the cone, increased obviously. At each step, as it were, that the explorers made, fresh stars entered the field of their vision. The magnificent constellations of the southern sky shone resplendently. At the zenith glittered the splendid Antares in the Scorpion, and not far was Alpha Centauri, which is believed to be the nearest star to the terrestrial globe. Then, as the crater widened, appeared Fomalhaut of the Fish, the Southern Triangle, and lastly, nearly at the Antarctic Pole, the glittering Southern Cross, which replaces the Polar Star of the Northern Hemisphere.

It was nearly eight o'clock when Cyrus Harding and Herbert set foot on the highest ridge of the mountain at the summit of the cone.

It was then perfectly dark, and their gaze could not extend over a radius of two miles. Did the sea surround this unknown land, or was it connected in the west with some continent of the Pacific? It could not yet be made out. Towards the west, a cloudy belt, clearly visible at the horizon, increased the gloom, and the eye could not discover if the sky and water were blended together in the same circular line.

But at one point of the horizon a vague light suddenly appeared, which descended slowly in proportion as the cloud mounted to the zenith.

It was the slender crescent moon, already almost disappearing; but its light was sufficient to show clearly the horizontal line, then detached from the cloud, and the engineer could see its reflection trembling for an instant on a liquid surface. Cyrus Harding seized the lad's hand, and in a grave voice,--

"An island!" said he, at the moment when the lunar crescent disappeared beneath the waves.

Chapter 11

Half an hour later Cyrus Harding and Herbert had returned to the encampment. The engineer merely told his companions that the land upon which fate had thrown them was an island, and that the next day they would consult. Then each settled himself as well as he could to sleep, and in that rocky hole, at a height of two thousand five hundred feet above the level of the sea, through a peaceful night, the islanders enjoyed profound repose.

The next day, the 30th of March, after a hasty breakfast, which consisted solely of the roasted tragopan, the engineer wished to climb again to the summit of the volcano, so as more attentively to survey the island upon which he and his companions were imprisoned for life perhaps, should the island be situated at a great distance from any land, or if it was out of the course of vessels which visited the archipelagoes of the Pacific Ocean. This time his companions followed him in the new exploration. They also wished to see the island, on the productions of which they must depend for the supply of all their wants.

It was about seven o'clock in the morning when Cyrus Harding, Herbert, Pencroft, Gideon Spilett, and Neb quitted the encampment. No one appeared to be anxious about their situation. They had faith in themselves, doubtless, but it must be observed that the basis of this faith was not the same with Harding as with his companions. The engineer had confidence, because he felt capable of extorting from this wild country everything necessary for the life of himself and his companions; the latter feared nothing, just because Cyrus Harding was with them. Pencroft especially, since the incident of the relighted fire, would not have despaired for an instant, even if he was on a bare rock, if the engineer was with him on the rock.

"Pshaw," said he, "we left Richmond without permission from the authorities! It will be hard if we don't manage to get away some day or other from a place where certainly no one will detain us!"

Cyrus Harding followed the same road as the evening before. They went round the cone by the plateau which formed the shoulder, to the mouth of the enormous chasm. The weather was magnificent. The sun rose in a pure sky and flooded with his rays all the eastern side of the mountain.
The crater was reached. It was just what the engineer had made it out to be in the dark; that is to say, a vast funnel which extended, widening, to a height of a thousand feet above the plateau. Below the chasm, large thick streaks of lava wound over the sides of the mountain, and thus marked the course of the eruptive matter to the lower valleys which furrowed the northern part of the island.

The interior of the crater, whose inclination did not exceed thirty-five to forty degrees, presented no difficulties nor obstacles to the ascent. Traces of very ancient lava were noticed, which probably had overflowed the summit of the cone, before this lateral chasm had opened a new way to it.

As to the volcanic chimney which established a communication between the subterranean layers and the crater, its depth could not be calculated with the eye, for it was lost in obscurity. But there was no doubt as to the complete extinction of the volcano.

Before eight o'clock Harding and his companions were assembled at the summit of the crater, on a conical mound which swelled the northern edge.

"The sea, the sea everywhere!" they cried, as if their lips could not restrain the words which made islanders of them.

The sea, indeed, formed an immense circular sheet of water all around them! Perhaps, on climbing again to the summit of the cone, Cyrus Harding had had a hope of discovering some coast, some island shore, which he had not been able to perceive in the dark the evening before. But nothing appeared on the farthest verge of the horizon, that is to say over a radius of more than fifty miles. No land in sight. Not a sail. Over all this immense space the ocean alone was visible—the island occupied the center of a circumference which appeared to be infinite.

The engineer and his companions, mute and motionless, surveyed for some minutes every point of the ocean, examining it to its most extreme limits. Even Pencroft, who possessed a marvelous power of sight, saw nothing; and certainly if there had been land at the horizon, if it appeared only as an indistinct vapor, the sailor would undoubtedly have found it out, for nature had placed regular telescopes under his eyebrows.

From the ocean their gaze returned to the island which they commanded entirely, and the first question was put by Gideon Spilett in these terms:

"About what size is this island?"

Truly, it did not appear large in the midst of the immense ocean.

Cyrus Harding reflected a few minutes; he attentively observed the perimeter of the island, taking into consideration the height at which he was placed; then,—

"My friends," said he, "I do not think I am mistaken in giving to the shore of the island a circumference of more than a hundred miles."

"And consequently an area?"

"That is difficult to estimate," replied the engineer, "for it is so uneven."

If Cyrus Harding was not mistaken in his calculation, the island had almost the extent of Malta or Zante, in the Mediterranean, but it was at the same time much more irregular and less rich in capes, promontories, points, bays, or creeks. Its strange form caught the eye, and when Gideon Spilett, on the engineer's advice, had drawn the outline, they found that it resembled some fantastic animal, a monstrous leviathan, which lay sleeping on the surface of the Pacific.

This was in fact the exact shape of the island, which it is of consequence to know, and a tolerably correct map of it was immediately drawn by the reporter.

The east part of the shore, where the castaways had landed, formed a wide bay, terminated by a sharp cape, which had been concealed by a high point from Pencroft on his first exploration. At the northeast two other capes closed the bay, and between them ran a narrow gulf, which looked like the half-open jaws of a formidable dog-fish.

From the northeast to the southwest the coast was rounded, like the flattened cranium of an animal, rising again, forming a sort of protuberance which did not give any particular shape to this part of the island, of which the center was occupied by the volcano.

From this point the shore ran pretty regularly north and south, broken at two-thirds of its perimeter by a narrow creek, from which it ended in a long tail, similar to the caudal appendage of a gigantic alligator.

This tail formed a regular peninsula, which stretched more than thirty miles into the sea, reckoning from the cape southeast of the island, already mentioned; it curled round, making an open roadstead, which marked out the lower shore of this strangely-formed land.

At the narrowest part, that is to say between the Chimneys and the creek on the western shore, which corresponded to it in latitude, the island only measured ten miles; but its greatest length, from the jaws at the northeast to the extremity of the tail of the southwest, was not less than thirty miles.

As to the interior of the island, its general aspect was this, very woody throughout the southern part from the mountain to the shore, and arid and sandy in the northern part. Between the volcano and the east coast Cyrus
Harding and his companions were surprised to see a lake, bordered with green trees, the existence of which they had not suspected. Seen from this height, the lake appeared to be on the same level as the ocean, but, on reflection, the engineer explained to his companions that the altitude of this little sheet of water must be about three hundred feet, because the plateau, which was its basin, was but a prolongation of the coast.

"Is it a freshwater lake?" asked Pencroft.

"Certainly," replied the engineer, "for it must be fed by the water which flows from the mountain."

"I see a little river which runs into it," said Herbert, pointing out a narrow stream, which evidently took its source somewhere in the west.

"Yes," said Harding; "and since this stream feeds the lake, most probably on the side near the sea there is an outlet by which the surplus water escapes. We shall see that on our return."

This little winding watercourse and the river already mentioned constituted the water-system, at least such as it was displayed to the eyes of the explorers. However, it was possible that under the masses of trees which covered two-thirds of the island, forming an immense forest, other rivers ran towards the sea. It might even be inferred that such was the case, so rich did this region appear in the most magnificent specimens of the flora of the temperate zones. There was no indication of running water in the north, though perhaps there might be stagnant water among the marshes in the northeast; but that was all, in addition to the downs, sand, and aridity which contrasted so strongly with the luxuriant vegetation of the rest of the island.

The volcano did not occupy the central part; it rose, on the contrary, in the northwestern region, and seemed to mark the boundary of the two zones. At the southwest, at the south, and the southeast, the first part of the spurs were hidden under masses of verdure. At the north, on the contrary, one could follow their ramifications, which died away on the sandy plains. It was on this side that, at the time when the mountain was in a state of eruption, the discharge had worn away a passage, and a large heap of lava had spread to the narrow jaw which formed the northeastern gulf.

Cyrus Harding and his companions remained an hour at the top of the mountain. The island was displayed under their eyes, like a plan in relief with different tints, green for the forests, yellow for the sand, blue for the water. They viewed it in its tout-ensemble, nothing remained concealed but the ground hidden by verdure, the hollows of the valleys, and the interior of the volcanic chasms.

One important question remained to be solved, and the answer would have a great effect upon the future of the castaways.

Was the island inhabited?

It was the reporter who put this question, to which after the close examination they had just made, the answer seemed to be in the negative.

Nowhere could the work of a human hand be perceived. Not a group of huts, not a solitary cabin, not a fishery on the shore. No smoke curling in the air betrayed the presence of man. It is true, a distance of nearly thirty miles separated the observers from the extreme points, that is, of the tail which extended to the southwest, and it would have been difficult, even to Pencroft's eyes, to discover a habitation there. Neither could the curtain of verdure, which covered three-quarters of the island, be raised to see if it did not shelter some straggling village. But in general the islanders live on the shores of the narrow spaces which emerge above the waters of the Pacific, and this shore appeared to be an absolute desert.

Until a more complete exploration, it might be admitted that the island was uninhabited. But was it frequented, at least occasionally, by the natives of neighboring islands? It was difficult to reply to this question. No land appeared within a radius of fifty miles. But fifty miles could be easily crossed, either by Malay proas or by the large Polynesian canoes. Everything depended on the position of the island, of its isolation in the Pacific, or of its proximity to archipelagoes. Could Cyrus Harding be able to find out their latitude and longitude without instruments? It would be difficult. Since he was in doubt, it was best to take precautions against a possible descent of neighboring natives.

The exploration of the island was finished, its shape determined, its features made out, its extent calculated, the water and mountain systems ascertained. The disposition of the forests and plains had been marked in a general way on the reporter's plan. They had now only to descend the mountain slopes again, and explore the soil, in the triple point of view, of its mineral, vegetable, and animal resources.

But before giving his companions the signal for departure, Cyrus Harding said to them in a calm, grave voice,--

"Here, my friends, is the small corner of land upon which the hand of the Almighty has thrown us. We are going to live here; a long time, perhaps. Perhaps, too, unexpected help will arrive, if some ship passes by chance. I say by chance, because this is an unimportant island; there is not even a port in which ships could anchor, and it is to be feared that it is situated out of the route usually followed, that is to say, too much to the south for the ships which frequent the archipelagoes of the Pacific, and too much to the north for those which go to Australia by doubling Cape Horn. I wish to hide nothing of our position from you--"
"And you are right, my dear Cyrus," replied the reporter, with animation. "You have to deal with men. They have confidence in you, and you can depend upon them. Is it not so, my friends?"

"I will obey you in everything, captain," said Herbert, seizing the engineer's hand.

"My master always, and everywhere!" cried Neb.

"As for me," said the sailor, "if I ever grumble at work, my name's not Jack Pencroft, and if you like, captain, we will make a little America of this island! We will build towns, we will establish railways, start telegraphs, and one fine day, when it is quite changed, quite put in order and quite civilized, we will go and offer it to the government of the Union. Only, I ask one thing."

"What is that?" said the reporter.

"It is, that we do not consider ourselves castaways, but colonists, who have come here to settle." Harding could not help smiling, and the sailor's idea was adopted. He then thanked his companions, and added, that he would rely on their energy and on the aid of Heaven.

"Well, now let us set off to the Chimneys!" cried Pencroft.

"One minute, my friends," said the engineer. "It seems to me it would be a good thing to give a name to this island, as well as to, the capes, promontories, and watercourses, which we can see.

"Very good," said the reporter. "In the future, that will simplify the instructions which we shall have to give and follow."

"Indeed," said the sailor, "already it is something to be able to say where one is going, and where one has come from. At least, it looks like somewhere."

"The Chimneys, for example," said Herbert.

"Exactly!" replied Pencroft. "That name was the most convenient, and it came to me quite of myself. Shall we keep the name of the Chimneys for our first encampment, captain?"

"Yes, Pencroft, since you have so christened it."

"Good! as for the others, that will be easy," returned the sailor, who was in high spirits. "Let us give them names, as the Robinsons did, whose story Herbert has often read to me; Providence Bay, Whale Point, Cape Disappointment!"

"Or, rather, the names of Captain Harding," said Herbert, "of Mr. Spilett, of Neb!—"

"My name!" cried Neb, showing his sparkling white teeth.

"Why not?" replied Pencroft. "Port Neb, that would do very well! And Cape Gideon—"

"I should prefer borrowing names from our country," said the reporter, "which would remind us of America."

"Yes, for the principal ones," then said Cyrus Harding; "for those of the bays and seas, I admit it willingly. We might give to that vast bay on the east the name of Union Bay, for example; to that large hollow on the south, Washington Bay; to the mountain upon which we are standing, that of Mount Franklin; to that lake which is extended under our eyes, that of Lake Grant; nothing could be better, my friends. These names will recall our country, and those of the great citizens who have honored it; but for the rivers, gulfs, capes, and promontories, which we perceive from the top of this mountain, rather let us choose names which will recall their particular shape. They will impress themselves better on our memory, and at the same time will be more practical. The shape of the island is so strange that we shall not be troubled to imagine what it resembles. As to the streams which we do not know as yet, in different parts of the forest which we shall explore later, the creeks which afterwards will he discovered, we can christen them as we find them. What do you think, my friends?"

The engineer's proposal was unanimously agreed to by his companions. The island was spread out under their eyes like a map, and they had only to give names to all its angles and points. Gideon Spilett would write them down, and the geographical nomenclature of the island would be definitely adopted. First, they named the two bays and the mountain, Union Bay, Washington Bay, and Mount Franklin, as the engineer had suggested.

"Now," said the reporter, "to this peninsula at the southwest of the island, I propose to give the name of Serpentine Peninsula, and that of Reptile-end to the bent tail which terminates it, for it is just like a reptile's tail."

"Adopted," said the engineer.

"Now," said Herbert, pointing to the other extremity of the island, "let us call this gulf which is so singularly like a pair of open jaws, Shark Gulf."

"Capital!" cried Pencroft, "and we can complete the resemblance by naming the two parts of the jaws Mandible Cape."

"But there are two capes," observed the reporter.

"Well," replied Pencroft, "we can have North Mandible Cape and South Mandible Cape."

"They are inscribed," said Spilett.

"There is only the point at the southeastern extremity of the island to be named," said Pencroft.

"That is, the extremity of Union Bay?" asked Herbert.
"Claw Cape," cried Neb directly, who also wished to be godfather to some part of his domain.

In truth, Neb had found an excellent name, for this cape was very like the powerful claw of the fantastic animal which this singularly-shaped island represented.

Pencroft was delighted at the turn things had taken, and their imaginations soon gave to the river which furnished the settlers with drinking water and near which the balloon had thrown them, the name of the Mercy, in true gratitude to Providence. To the islet upon which the castaways had first landed, the name of Safety Island; to the plateau which crowned the high granite precipice above the Chimneys, and from whence the gaze could embrace the whole of the vast bay, the name of Prospect Heights.

Lastly, all the masses of impenetrable wood which covered the Serpentine Peninsula were named the forests of the Far West.

The nomenclature of the visible and known parts of the island was thus finished, and later, they would complete it as they made fresh discoveries.

As to the points of the compass, the engineer had roughly fixed them by the height and position of the sun, which placed Union Bay and Prospect Heights to the east. But the next day, by taking the exact hour of the rising and setting of the sun, and by marking its position between this rising and setting, he reckoned to fix the north of the island exactly, for, in consequence of its situation in the Southern Hemisphere, the sun, at the precise moment of its culmination, passed in the north and not in the south, as, in its apparent movement, it seems to do, to those places situated in the Northern Hemisphere.

Everything was finished, and the settlers had only to descend Mount Franklin to return to the Chimneys, when Pencroft cried out,--

"Well! we are preciously stupid!"

"Why?" asked Gideon Spilett, who had closed his notebook and risen to depart.

"Why! our island! we have forgotten to christen it!"

Herbert was going to propose to give it the engineer's name and all his companions would have applauded him, when Cyrus Harding said simply,--

"Let us give it the name of a great citizen, my friend; of him who now struggles to defend the unity of the American Republic! Let us call it Lincoln Island!"

The engineer's proposal was replied to by three hurrahs.

And that evening, before sleeping, the new colonists talked of their absent country; they spoke of the terrible war which stained it with blood; they could not doubt that the South would soon be subdued, and that the cause of the North, the cause of justice, would triumph, thanks to Grant, thanks to Lincoln!

Now this happened the 30th of March, 1865. They little knew that sixteen days afterwards a frightful crime would be committed in Washington, and that on Good Friday Abraham Lincoln would fall by the hand of a fanatic.

Chapter 12

They now began the descent of the mountain. Climbing down the crater, they went round the cone and reached their encampment of the previous night. Pencroft thought it must be breakfast-time, and the watches of the reporter and engineer were therefore consulted to find out the hour.

That of Gideon Spilett had been preserved from the sea-water, as he had been thrown at once on the sand out of reach of the waves. It was an instrument of excellent quality, a perfect pocket chronometer, which the reporter had not forgotten to wind up carefully every day.

As to the engineer's watch, it, of course, had stopped during the time which he had passed on the downs.

The engineer now wound it up, and ascertaining by the height of the sun that it must be about nine o'clock in the morning, he put his watch at that hour.

"No, my dear Spilett, wait. You have kept the Richmond time, have you not?"

"Yes, Cyrus."

"Consequently, your watch is set by the meridian of that town, which is almost that of Washington?"

"Undoubtedly."

"Very well, keep it thus. Content yourself with winding it up very, exactly, but do not touch the hands. This may be of use to us.

"What will be the good of that?" thought the sailor.

They ate, and so heartily, that the store of game and almonds was totally exhausted. But Pencroft was not at all uneasy, they would supply themselves on the way. Top, whose share had been very much to his taste, would know how to find some fresh game among the brushwood. Moreover, the sailor thought of simply asking the engineer to manufacture some powder and one or two fowling-pieces; he supposed there would be no difficulty in that.
On leaving the plateau, the captain proposed to his companions to return to the Chimneys by a new way. He wished to reconnoiter Lake Grant, so magnificently framed in trees. They therefore followed the crest of one of the spurs, between which the creek that supplied the lake probably had its source. In talking, the settlers already employed the names which they had just chosen, which singularly facilitated the exchange of their ideas. Herbert and Pencroft—the one young and the other very boyish—were enchanted, and while walking, the sailor said,

"Hey, Herbert! how capital it sounds! It will be impossible to lose ourselves, my boy, since, whether we follow the way to Lake Grant, or whether we join the Mercy through the woods of the Far West, we shall be certain to arrive at Prospect Heights, and, consequently, at Union Bay!"

It had been agreed, that without forming a compact band, the settlers should not stray away from each other. It was very certain that the thick forests of the island were inhabited by dangerous animals, and it was prudent to be on their guard. In general, Pencroft, Herbert, and Neb walked first, preceded by Top, who poked his nose into every bush. The reporter and the engineer went together, Gideon Spilett ready to note every incident, the engineer silent for the most part, and only stepping aside to pick up one thing or another, a mineral or vegetable substance, which he put into his pocket, without making any remark.

"What can he be picking up?" muttered Pencroft. "I have looked in vain for anything that's worth the trouble of stooping for."

Towards ten o'clock the little band descended the last declivities of Mount Franklin. As yet the ground was scantily strewn with bushes and trees. They were walking over yellowish calcinated earth, forming a plain of nearly a mile long, which extended to the edge of the wood. Great blocks of that basalt, which, according to Bischof, takes three hundred and fifty millions of years to cool, strewed the plain, very confused in some places. However, there were here no traces of lava, which was spread more particularly over the northern slopes.

Cyrus Harding expected to reach, without incident, the course of the creek, which he supposed flowed under the trees at the border of the plain, when he saw Herbert running hastily back, while Neb and the sailor were hiding behind the rocks.

"What's the matter, my boy?" asked Spilett.

"Smoke," replied Herbert. "We have seen smoke among the rocks, a hundred paces from us."

"Men in this place?" cried the reporter.

"We must avoid showing ourselves before knowing with whom we have to deal," replied Cyrus Harding. "I trust that there are no natives on this island; I dread them more than anything else. Where is Top?"

"Top is on before."

"And he doesn't bark?"

"No."

"That is strange. However, we must try to call him back."

In a few moments, the engineer, Gideon Spilett, and Herbert had rejoined their two companions, and like them, they kept out of sight behind the heaps of basalt.

From thence they clearly saw smoke of a yellowish color rising in the air.

Top was recalled by a slight whistle from his master, and the latter, signing to his companions to wait for him, glided away among the rocks. The colonists, motionless, anxiously awaited the result of this exploration, when a shout from the engineer made them hasten forward. They soon joined him, and were at once struck with a disagreeable odor which impregnated the atmosphere.

The odor, easily recognized, was enough for the engineer to guess what the smoke was which at first, not without cause, had startled him.

"This fue," said he, "or rather, this smoke is produced by nature alone. There is a sulphur spring there, which will cure all our sore throats."

"Captain!" cried Pencroft. "What a pity that I haven't got a cold!"

The settlers then directed their steps towards the place from which the smoke escaped. They there saw a sulphur spring which flowed abundantly between the rocks, and its waters discharged a strong sulphuric acid odor, after having absorbed the oxygen of the air.

Cyrus Harding, dipping in his hand, felt the water oily to the touch. He tasted it and found it rather sweet. As to its temperature, that he estimated at ninety-five degrees Fahrenheit. Herbert having asked on what he based this calculation,—

"Its quite simple, my boy," said he, "for, in plunging my hand into the water, I felt no sensation either of heat or cold. Therefore it has the same temperature as the human body, which is about ninety-five degrees."

The sulphur spring not being of any actual use to the settlers, they proceeded towards the thick border of the forest, which began some hundred paces off.

There, as they had conjectured, the waters of the stream flowed clear and limpid between high banks of red
earth, the color of which betrayed the presence of oxide of iron. From this color, the name of Red Creek was immediately given to the watercourse.

It was only a large stream, deep and clear, formed of the mountain water, which, half river, half torrent, here rippling peacefully over the sand, there falling against the rocks or dashing down in a cascade, ran towards the lake, over a distance of a mile and a half, its breadth varying from thirty to forty feet. Its waters were sweet, and it was supposed that those of the lake were so also. A fortunate circumstance, in the event of their finding on its borders a more suitable dwelling than the Chimneys.

As to the trees, which some hundred feet downwards shaded the banks of the creek, they belonged, for the most part, to the species which abound in the temperate zone of America and Tasmania, and no longer to those coniferæ observed in that portion of the island already explored to some miles from Prospect Heights. At this time of the year, the commencement of the month of April, which represents the month of October, in this hemisphere, that is, the beginning of autumn, they were still in full leaf. They consisted principally of casuarinas and eucalypti, some of which next year would yield a sweet manna, similar to the manna of the East. Clumps of Australian cedars rose on the sloping banks, which were also covered with the high grass called “tussac” in New Holland; but the cocoanut, so abundant in the archipelagoes of the Pacific, seemed to be wanting in the island, the latitude, doubtless, being too low.

"What a pity!" said Herbert, "such a useful tree, and which has such beautiful nuts!"

As to the birds, they swarmed among the scanty branches of the eucalypti and casuarinas, which did not hinder the display of their wings. Black, white, or gray cockatoos, paroquets, with plumage of all colors, kingfishers of a sparkling green and crowned with blue lories, and various other birds appeared on all sides, as through a prism, fluttering about and producing a deafening clamor. Suddenly, a strange concert of discordant voices resounded in the midst of a thicket. The settlers heard successively the song of birds, the cry of quadrupeds, and a sort of clacking which they might have believed to have escaped from the lips of a native. Neb and Herbert rushed towards the bush, forgetting even the most elementary principles of prudence. Happily, they found there, neither a formidable wild beast nor a dangerous native, but merely half a dozen mocking and singing birds, known as mountain pheasants. A few skillful blows from a stick soon put an end to their concert, and procured excellent food for the evening's dinner.

Herbert also discovered some magnificent pigeons with bronzed wings, some superbly crested, others draped in green, like their congeners at Port-Macquarie; but it was impossible to reach them, or the crows and magpies which flew away in flocks.

A charge of small shot would have made great slaughter among these birds, but the hunters were still limited to sticks and stones, and these primitive weapons proved very insufficient.

Their insufficiency was still more clearly shown when a troop of quadrupeds, jumping, bounding, making leaps of thirty feet, regular flying mammiferae, fled over the thickets, so quickly and at such a height, that one would have thought that they passed from one tree to another like squirrels.

"Kangaroos!" cried Herbert.

"Are they good to eat?" asked Pencroft.

"Stewed," replied the reporter, "their flesh is equal to the best venison!—"

Gideon Spilett had not finished this exciting sentence when the sailor, followed by Neb and Herbert, darted on the kangaroos tracks. Cyrus Harding called them back in vain. But it was in vain too for the hunters to pursue such agile game, which went bounding away like balls. After a chase of five minutes, they lost their breath, and at the same time all sight of the creatures, which disappeared in the wood. Top was not more successful than his masters.

"Captain," said Pencroft, when the engineer and the reporter had rejoined them, "Captain, you see quite well we can't get on unless we make a few guns. Will that be possible?"

"Perhaps," replied the engineer, "but we will begin by first manufacturing some bows and arrows, and I don't doubt that you will become as clever in the use of them as the Australian hunters."

"Bows and arrows!" said Pencroft scornfully. "That's all very well for children!"

"Don't be proud, friend Pencroft," replied the reporter. "Bows and arrows were sufficient for centuries to stain the earth with blood. Powder is but a thing of yesterday, and war is as old as the human race—unfortunately."

"Faith, that's true, Mr. Spilett," replied the sailor, "and I always speak too quickly. You must excuse me!"

Meanwhile, Herbert constant to his favorite science, Natural History, reverted to the kangaroos, saying,—

"Besides, we had to deal just now with the species which is most difficult to catch. They were giants with long gray fur; but if I am not mistaken, there exist black and red kangaroos, rock kangaroos, and rat kangaroos, which are more easy to get hold of. It is reckoned that there are about a dozen species." "Herbert," replied the sailor sententiously, "there is only one species of kangaroos to me, that is ‘kangaroo on the spit,’ and it's just the one we haven't got this evening!"

They could not help laughing at Master Pencroft's new classification. The honest sailor did not hide his regret at
being reduced for dinner to the singing pheasants, but fortune once more showed itself obliging to him.

In fact, Top, who felt that his interest was concerned went and ferreted everywhere with an instinct doubled by a ferocious appetite. It was even probable that if some piece of game did fall into his clutches, none would be left for the hunters, if Top was hunting on his own account; but Neb watched him and he did well.

Towards three o'clock the dog disappeared in the brushwood and gruntings showed that he was engaged in a struggle with some animal. Neb rushed after him, and soon saw Top eagerly devouring a quadruped, which ten seconds later would have been past recognizing in Top's stomach. But fortunately the dog had fallen upon a brood, and besides the victim he was devouring, two other rodents--the animals in question belonged to that order--lay strangled on the turf.

Neb reappeared triumphantly holding one of the rodents in each hand. Their size exceeded that of a rabbit, their hair was yellow, mingled with green spots, and they had the merest rudiments of tails.

The citizens of the Union were at no loss for the right name of these rodents. They were maras, a sort of agouti, a little larger than their congeners of tropical countries, regular American rabbits, with long ears, jaws armed on each side with five molars, which distinguish the agouti.

"Hurrah!" cried Pencroft, "the roast has arrived! and now we can go home."

The walk, interrupted for an instant, was resumed. The limpid waters of the Red Creek floweth under an arch of casuannas, banksias, and gigantic gum-trees. Superb lilacs rose to a height of twenty feet. Other arborescent species, unknown to the young naturalist, bent over the stream, which could be heard murmuring beneath the bowers of verdure.

Meanwhile the stream grew much wider, and Cyrus Harding supposed that they would soon reach its mouth. In fact, on emerging from beneath a thick clump of beautiful trees, it suddenly appeared before their eyes.

The explorers had arrived on the western shore of Lake Grant. The place was well worth looking at. This extent of water, of a circumference of nearly seven miles and an area of two hundred and fifty acres, reposed in a border of diversified trees. Towards the east, through a curtain of verdure, picturesquely raised in some places, sparkled an horizon of sea. The lake was curved at the north, which contrasted with the sharp outline of its lower part. Numerous aquatic birds frequented the shores of this little Ontario, in which the thousand isles of its American namesake were represented by a rock which emerged from its surface, some hundred feet from the southern shore. There lived in harmony several couples of kingfishers perched on a stone, grave, motionless, watching for fish, then darting down, they plunged in with a sharp cry, and reappeared with their prey in their beaks. On the shores and on the islets, strutted wild ducks, pelicans, water-hens, red-beaks, philedons, furnished with a tongue like a brush, and one or two specimens of the splendid menura, the tail of which expands gracefully like a lyre.

As to the water of the lake, it was sweet, limpid, rather dark, and from certain bubblings, and the concentric circles which crossed each other on the surface, it could not be doubted that it abounded in fish.

"This lake is really beautiful!" said Gideon Spilett. "We could live on its borders!"

"We will live there!" replied Harding.

The settlers, wishing to return to the Chimneys by the shortest way, descended towards the angle formed on the south by the junction of the lake's bank. It was not without difficulty that they broke a path through the thickets and brushwood which had never been put aside by the hand of men, and they thus went towards the shore, so as to arrive at the north of Prospect Heights. Two miles were cleared in this direction, and then, after they had passed the last curtain of trees, appeared the plateau, carpeted with thick turf, and beyond that the infinite sea.

To return to the Chimneys, it was enough to cross the plateau obliquely for the space of a mile, and then to descend to the elbow formed by the first detour of the Mercy. But the engineer desired to know how and where the overplus of the water from the lake escaped, and the exploration was prolonged under the trees for a mile and a half towards the north. It was most probable that an overfall existed somewhere, and doubtless through a cleft in the granite. This lake was only, in short, an immense center basin, which was filled by degrees by the creek, and its waters must necessarily pass to the sea by some fall. If it was so, the engineer thought that it might perhaps be possible to utilize this fall and borrow its power, actually lost without profit to any one. They continued then to follow the shores of Lake Grant by climbing the plateau; but, after having gone a mile in this direction, Cyrus Harding had not been able to discover the overfall, which, however, must exist somewhere.

It was then half-past four. In order to prepare for dinner it was necessary that the settlers should return to their dwelling. The little band retraced their steps, therefore, and by the left bank of the Mercy, Cyrus Harding and his companions arrived at the Chimneys.

The fire was lighted, and Neb and Pencroft, on whom the functions of cooks naturally devolved, to the one in his quality of Negro, to the other in that of sailor, quickly prepared some broiled agouti, to which they did great justice.

The repast at length terminated; at the moment when each one was about to give himself up to sleep, Cyrus Harding drew from his pocket little specimens of different sorts of minerals, and just said,
"My friends, this is iron mineral, this a pyrite, this is clay, this is lime, and this is coal. Nature gives us these things. It is our business to make a right use of them. To-morrow we will commence operations."

Chapter 13

"Well, captain, where are we going to begin?" asked Pencroft next morning of the engineer.

"At the beginning," replied Cyrus Harding.

And in fact, the settlers were compelled to begin "at the very beginning." They did not possess even the tools necessary for making tools, and they were not even in the condition of nature, who, "having time, husbands her strength." They had no time, since they had to provide for the immediate wants of their existence, and though, profiting by acquired experience, they had nothing to invent, still they had everything to make; their iron and their steel were as yet only in the state of minerals, their earthenware in the state of clay, their linen and their clothes in the state of textile material.

It must be said, however, that the settlers were "men" in the complete and higher sense of the word. The engineer Harding could not have been seconded by more intelligent companions, nor with more devotion and zeal. He had tried them. He knew their abilities.

Gideon Spilett, a talented reporter, having learned everything so as to be able to speak of everything, would contribute largely with his head and hands to the colonization of the island. He would not draw back from any task: a determined sportsman, he would make a business of what till then had only been a pleasure to him.

Herbert, a gallant boy, already remarkably well informed in the natural sciences, would render greater service to the common cause.

Neb was devotion personified. Clever, intelligent, indefatigable, robust, with iron health, he knew a little about the work of the forge, and could not fail to be very useful in the colony.

As to Pencroft, he had sailed over every sea, a carpenter in the dockyards in Brooklyn, assistant tailor in the vessels of the state, gardener, cultivator, during his holidays, etc., and like all seamen, fit for anything, he knew how to do everything.

It would have been difficult to unite five men, better fitted to struggle against fate, more certain to triumph over it.

"At the beginning," Cyrus Harding had said. Now this beginning of which the engineer spoke was the construction of an apparatus which would serve to transform the natural substances. The part which heat plays in these transformations is known. Now fuel, wood or coal, was ready for immediate use, an oven must be built to use it.

"What is this oven for?" asked Pencroft.

"To make the pottery which we have need of," replied Harding.

"And of what shall we make the oven?"

"With bricks."

"And the bricks?"

"With clay. Let us start, my friends. To save trouble, we will establish our manufactory at the place of production. Neb will bring provisions, and there will be no lack of fire to cook the food."

"No," replied the reporter; "but if there is a lack of food for want of instruments for the chase?"

"Ah, if we only had a knife!" cried the sailor.

"Well?" asked Cyrus Harding.

"Well! I would soon make a bow and arrows, and then there could be plenty of game in the larder!"

"Yes, a knife, a sharp blade." said the engineer, as if he was speaking to himself.

At this moment his eyes fell upon Top, who was running about on the shore. Suddenly Harding's face became animated.

"Top, here," said he.

The dog came at his master's call. The latter took Top's head between his hands, and unfastening the collar which the animal wore round his neck, he broke it in two, saying,--

"There are two knives, Pencroft!"

Two hurrahs from the sailor was the reply. Top's collar was made of a thin piece of tempered steel. They had only to sharpen it on a piece of sandstone, then to raise the edge on a finer stone. Now sandstone was abundant on the beach, and two hours after the stock of tools in the colony consisted of two sharp blades, which were easily fixed in solid handles.

The production of these their first tools was hailed as a triumph. It was indeed a valuable result of their labor, and a very opportune one. They set out.
Cyrus Harding proposed that they should return to the western shore of the lake, where the day before he had noticed the clayey ground of which he possessed a specimen. They therefore followed the bank of the Mercy, traversed Prospect Heights, and after a walk of five miles or more they reached a glade, situated two hundred feet from Lake Grant.

On the way Herbert had discovered a tree, the branches of which the Indians of South America employ for making their bows. It was the crejimba, of the palm family, which does not bear edible fruit. Long straight branches were cut, the leaves stripped off; it was shaped, stronger in the middle, more slender at the extremities, and nothing remained to be done but to find a plant fit to make the bow-string. This was the "hibiscus heterophyllus," which furnishes fibers of such remarkable tenacity that they have been compared to the tendons of animals. Pencroft thus obtained bows of tolerable strength, for which he only wanted arrows. These were easily made with straight stiff branches, without knots, but the points with which they must be armed, that is to say, a substance to serve in lieu of iron, could not be met with so easily. But Pencroft said, that having done his part of the work, chance would do the rest.

The settlers arrived on the ground which had been discovered the day before. Being composed of the sort of clay which is used for making bricks and tiles, it was very useful for the work in question. There was no great difficulty in it. It was enough to scour the clay with sand, then to mold the bricks and bake them by the heat of a wood fire.

Generally bricks are formed in molds, but the engineer contented himself with making them by hand. All that day and the day following were employed in this work. The clay, soaked in water, was mixed by the feet and hands of the manipulators, and then divided into pieces of equal size. A practiced workman can make, without a machine, about ten thousand bricks in twelve hours; but in their two days work the five brickmakers on Lincoln Island had not made more than three thousand, which were ranged near each other, until the time when their complete desiccation would permit them to be used in building the oven, that is to say, in three or four days.

It was on the 2nd of April that Harding had employed himself in fixing the orientation of the island, or, in other words, the precise spot where the sun rose. The day before he had noted exactly the hour when the sun disappeared beneath the horizon, making allowance for the refraction. This morning he noted, no less exactly, the hour at which it reappeared. Between this setting and rising twelve hours, twenty-four minutes passed. Then, six hours, twelve minutes after its rising, the sun on this day would exactly pass the meridian and the point of the sky which it occupied at this moment would be the north. At the said hour, Cyrus marked this point, and putting in a line with the sun two trees which would serve him for marks, he thus obtained an invariable meridian for his ulterior operations.

The settlers employed the two days before the oven was built in collecting fuel. Branches were cut all round the glade, and they picked up all the fallen wood under the trees. They were also able to hunt with greater success, since Pencroft now possessed some dozen arrows armed with sharp points. It was Top who had famished these points, by bringing in a porcupine, rather inferior eating, but of great value, thanks to the quills with which it bristled. These quills were fixed firmly at the ends of the arrows, the flight of which was made more certain by some cockatoos' feathers. The reporter and Herbert soon became very skilful archers. Game of all sorts in consequence abounded at the Chimneys, capybaras, pigeons, agouties, grouse, etc. The greater part of these animals were killed in the part of the forest on the left bank of the Mercy, to which they gave the name of Jacamar Wood, in remembrance of the bird which Pencroft and Herbert had pursued when on their first exploration.

This game was eaten fresh, but they preserved some capybara hams, by smoking them above a fire of green wood, after having perfumed them with sweet-smelling leaves. However, this food, although very strengthening, was always roasted upon roast, and the party would have been delighted to hear some soup bubbling on the hearth, but they must wait till a pot could be made, and, consequently, till the oven was built.

During these excursions, which were not extended far from the brick-field, the hunters could discern the recent passage of animals of a large size, armed with powerful claws, but they could not recognize the species. Cyrus Harding advised them to be very careful, as the forest probably enclosed many dangerous beasts.

And he did right. Indeed, Gideon Spilett and Herbert one day saw an animal which resembled a jaguar. Happily the creature did not attack them, or they might not have escaped without a severe wound. As soon as he could get a regular weapon, that is to say, one of the guns which Pencroft begged for, Gideon Spilett resolved to make desperate war against the ferocious beasts, and exterminate them from the island.

The Chimneys during these few days was not made more comfortable, for the engineer hoped to discover, or build if necessary, a more convenient dwelling. They contented themselves with spreading moss and dry leaves on the sand of the passages, and on these primitive couches the tired workers slept soundly.

They also reckoned the days they had passed on Lincoln Island, and from that time kept a regular account. The 5th of April, which was Wednesday, was twelve days from the time when the wind threw the castaways on this shore.

On the 6th of April, at daybreak, the engineer and his companions were collected in the glade, at the place where
they were going to perform the operation of baking the bricks. Naturally this had to be in the open air, and not in a kiln, or rather, the agglomeration of bricks made an enormous kiln, which would bake itself. The fuel, made of well-prepared fagots, was laid on the ground and surrounded with several rows of dried bricks, which soon formed an enormous cube, to the exterior of which they contrived air-holes. The work lasted all day, and it was not till the evening that they set fire to the fagots. No one slept that night, all watching carefully to keep up the fire.

The operation lasted forty-eight hours, and succeeded perfectly. It then became necessary to leave the smoking mass to cool, and during this time Neb and Pencroft, guided by Cyrus Harding, brought, on a hurdle made of interlaced branches, loads of carbonate of lime and common stones, which were very abundant, to the north of the lake. These stones, when decomposed by heat, made a very strong quicklime, greatly increased by slacking, at least as pure as if it had been produced by the calcination of chalk or marble. Mixed with sand the lime made excellent mortar.

The result of these different works was, that, on the 9th of April, the engineer had at his disposal a quantity of prepared lime and some thousands of bricks.

Without losing an instant, therefore, they began the construction of a kiln to bake the pottery, which was indispensable for their domestic use. They succeeded without much difficulty. Five days after, the kiln was supplied with coal, which the engineer had discovered lying open to the sky towards the mouth of the Red Creek, and the first smoke escaped from a chimney twenty feet high. The glade was transformed into a manufactory, and Pencroft was not far wrong in believing that from this kiln would issue all the products of modern industry.

In the meantime what the settlers first manufactured was a common pottery in which to cook their food. The chief material was clay, to which Harding added a little lime and quartz. This paste made regular "pipe-clay," with which they manufactured bowls, cups molded on stones of a proper size, great jars and pots to hold water, etc. The shape of these objects was clumsy and defective, but after they had been baked in a high temperature, the kitchen of the Chimneys was provided with a number of utensils, as precious to the settlers as the most beautifully enameled china. We must mention here that Pencroft, desirous to know if the clay thus prepared was worthy of its name of pipe-clay, made some large pipes, which he thought charming, but for which, alas! he had no tobacco, and that was a great privation to Pencroft. "But tobacco will come, like everything else!" he repeated, in a burst of absolute confidence.

This work lasted till the 15th of April, and the time was well employed. The settlers, having become potters, made nothing but pottery. When it suited Cyrus Harding to change them into smiths, they would become smiths. But the next day being Sunday, and also Easter Sunday, all agreed to sanctify the day by rest. These Americans were religious men, scrupulous observers of the precepts of the Bible, and their situation could not but develop sentiments of confidence towards the Author of all things.

On the evening of the 15th of April they returned to the Chimneys, carrying with them the pottery, the furnace being extinguished until they could put it to a new use. Their return was marked by a fortunate incident; the engineer discovered a substance which replaced tinder. It is known that a spongy, velvety flesh is procured from a certain mushroom of the genus polyporous. Properly prepared, it is extremely inflammable, especially when it has been previously saturated with gunpowder, or boiled in a solution of nitrate or chlorate of potash. But, till then, they had not found any of these polypores or even any of the morels which could replace them. On this day, the engineer, seeing a plant belonging to the wormwood genus, the principal species of which are absinthe, balm-mint, tarragon, etc., gathered several tufts, and, presenting them to the sailor, said,—

"Here, Pencroft, this will please you."

Pencroft looked attentively at the plant, covered with long silky hair, the leaves being clothed with soft down.

"What's that, captain?" asked Pencroft. "Is it tobacco?"

"No," replied Harding, "it is wormwood; Chinese wormwood to the learned, but to us it will be tinder."

When the wormwood was properly dried it provided them with a very inflammable substance, especially afterwards when the engineer had impregnated it with nitrate of potash, of which the island possessed several beds, and which is in truth saltpeter.

The colonists had a good supper that evening. Neb prepared some agouti soup, a smoked capybara ham, to which was added the boiled tubercules of the "caladium macrorhizum," an herbaceous plant of the arum family. They had an excellent taste, and were very nutritious, being something similar to the substance which is sold in England under the name of "Portland sago"; they were also a good substitute for bread, which the settlers in Lincoln Island did not yet possess.

When supper was finished, before sleeping, Harding and his companions went to take the air on the beach. It was eight o'clock in the evening; the night was magnificent. The moon, which had been full five days before, had not yet risen, but the horizon was already silvered by those soft, pale shades which might be called the dawn of the moon. At the southern zenith glittered the circumpolar constellations, and above all the Southern Cross, which some
days before the engineer had greeted on the summit of Mount Franklin.

Cyrus Harding gazed for some time at this splendid constellation, which has at its summit and at its base two stars of the first magnitude, at its left arm a star of the second, and at its right arm a star of the third magnitude.

Then, after some minutes thought--
"Herbert," he asked of the lad, "is not this the 15th of April?"
"Yes, captain," replied Herbert.

"Well, if I am not mistaken, to-morrow will be one of the four days in the year in which the real time is identical with average time; that is to say, my boy, that to-morrow, to within some seconds, the sun will pass the meridian just at midday by the clocks. If the weather is fine I think that I shall obtain the longitude of the island with an approximation of some degrees."

"Without instruments, without sextant?" asked Gideon Spilett.

"Yes," replied the engineer. "Also, since the night is clear, I will try, this very evening, to obtain our latitude by calculating the height of the Southern Cross, that is, from the southern pole above the horizon. You understand, my friends, that before undertaking the work of installation in earnest it is not enough to have found out that this land is an island; we must, as nearly as possible, know at what distance it is situated, either from the American continent or Australia, or from the principal archipelagoes of the Pacific."

"In fact," said the reporter, "instead of building a house it would be more important to build a boat, if by chance we are not more than a hundred miles from an inhabited coast."

"That is why," returned Harding, "I am going to try this evening to calculate the latitude of Lincoln Island, and to-morrow, at midday, I will try to calculate the longitude."

If the engineer had possessed a sextant, an apparatus with which the angular distance of objects can be measured with great precision, there would have been no difficulty in the operation. This evening by the height of the pole, the next day by the passing of the sun at the meridian, he would obtain the position of the island. But as they had not one he would have to supply the deficiency.

Harding then entered the Chimneys. By the light of the fire he cut two little flat rulers, which he joined together at one end so as to form a pair of compasses, whose legs could separate or come together. The fastening was fixed with a strong acacia thorn which was found in the wood pile. This instrument finished, the engineer returned to the beach, but as it was necessary to take the height of the pole from above a clear horizon, that is, a sea horizon, and as Claw Cape hid the southern horizon, he was obliged to look for a more suitable station. The best would evidently have been the shore exposed directly to the south; but the Mercy would have to be crossed, and that was a difficulty. Harding resolved, in consequence, to make his observation from Prospect Heights, taking into consideration its height above the level of the sea—a height which he intended to calculate next day by a simple process of elementary geometry.

The settlers, therefore, went to the plateau, ascending the left bank of the Mercy, and placed themselves on the edge which looked northwest and southeast, that is, above the curiously-shaped rocks which bordered the river.

This part of the plateau commanded the heights of the left bank, which sloped away to the extremity of Claw Cape, and to the southern side of the island. No obstacle intercepted their gaze, which swept the horizon in a semi-circle from the cape to Reptile End. To the south the horizon, lighted by the first rays of the moon, was very clearly defined against the sky.

At this moment the Southern Cross presented itself to the observer in an inverted position, the star Alpha marking its base, which is nearer to the southern pole.

This constellation is not situated as near to the antarctic pole as the Polar Star is to the arctic pole. The star Alpha is about twenty-seven degrees from it, but Cyrus Harding knew this and made allowance for it in his calculation. He took care also to observe the moment when it passed the meridian below the pole, which would simplify the operation.

Cyrus Harding pointed one leg of the compasses to the horizon, the other to Alpha, and the space between the two legs gave him the angular distance which separated Alpha from the horizon. In order to fix the angle obtained, he fastened with thorns the two pieces of wood on a third placed transversely, so that their separation should be properly maintained.

That done, there was only the angle to calculate by bringing back the observation to the level of the sea, taking into consideration the depression of the horizon, which would necessitate measuring the height of the cliff. The value of this angle would give the height of Alpha, and consequently that of the pole above the horizon, that is to say, the latitude of the island, since the latitude of a point of the globe is always equal to the height of the pole above the horizon of this point.

The calculations were left for the next day, and at ten o'clock every one was sleeping soundly.
Chapter 14

The next day, the 16th of April, and Easter Sunday, the settlers issued from the Chimneys at daybreak, and proceeded to wash their linen. The engineer intended to manufacture soap as soon as he could procure the necessary materials—soda or potash, fat or oil. The important question of renewing their wardrobe would be treated of in the proper time and place. At any rate their clothes would last at least six months longer, for they were strong, and could resist the wear of manual labor. But all would depend on the situation of the island with regard to inhabited land. This would be settled to-day if the weather permitted.

The sun rising above a clear horizon, announced a magnificent day, one of those beautiful autumn days which are like the last farewells of the warm season.

It was now necessary to complete the observations of the evening before by measuring the height of the cliff above the level of the sea.

"Shall you not need an instrument similar to the one which you used yesterday?" said Herbert to the engineer.

"No, my boy," replied the latter, "we are going to proceed differently, but in as precise a way."

Herbert, wishing to learn everything he could, followed the engineer to the beach. Pencroft, Neb, and the reporter remained behind and occupied themselves in different ways.

Cyrus Harding had provided himself with a straight stick, twelve feet long, which he had measured as exactly as possible by comparing it with his own height, which he knew to a hair. Herbert carried a plumb-line which Harding had given him, that is to say, a simple stone fastened to the end of a flexible fiber. Having reached a spot about twenty feet from the edge of the beach, and nearly five hundred feet from the cliff, which rose perpendicularly, Harding thrust the pole two feet into the sand, and wedging it up carefully, he managed, by means of the plumb-line, to erect it perpendicularly with the plane of the horizon.

That done, he retired the necessary distance, when, lying on the sand, his eye glanced at the same time at the top of the pole and the crest of the cliff. He carefully marked the place with a little stick.

Then addressing Herbert—"Do you know the first principles of geometry?" he asked.

"Slightly, captain," replied Herbert, who did not wish to put himself forward.

"You remember what are the properties of two similar triangles?"

"Yes," replied Herbert; "their homologous sides are proportional."

"Well, my boy, I have just constructed two similar right-angled triangles; the first, the smallest, has for its sides the perpendicular pole, the distance which separates the little stick from the foot of the pole and my visual ray for hypothenuse; the second has for its sides the perpendicular cliff, the height of which we wish to measure, the distance which separates the little stick from the bottom of the cliff, and my visual ray also forms its hypothenuse, which proves to be prolongation of that of the first triangle."

"Ah, captain, I understand!" cried Herbert. "As the distance from the stick to the pole is to the distance from the stick to the base of the cliff, so is the height of the pole to the height of the cliff."

"Just so, Herbert," replied the engineer; "and when we have measured the two first distances, knowing the height of the pole, we shall only have a sum in proportion to do, which will give us the height of the cliff, and will save us the trouble of measuring it directly."

The two horizontal distances were found out by means of the pole, whose length above the sand was exactly ten feet.

The first distance was fifteen feet between the stick and the place where the pole was thrust into the sand.

The second distance between the stick and the bottom of the cliff was five hundred feet.

These measurements finished, Cyrus Harding and the lad returned to the Chimneys.

The engineer then took a flat stone which he had brought back from one of his previous excursions, a sort of slate, on which it was easy to trace figures with a sharp shell. He then proved the following proportions:

15:500::10:x
500 x 10 = 5000
5000 / 15 = 333.3

From which it was proved that the granite cliff measured 333 feet in height.

Cyrus Harding then took the instrument which he had made the evening before, the space between its two legs giving the angular distance between the star Alpha and the horizon. He measured, very exactly, the opening of this angle on a circumference which he divided into 360 equal parts. Now, this angle by adding to it the twenty-seven degrees which separated Alpha from the antarctic pole, and by reducing to the level of the sea the height of the cliff on which the observation had been made, was found to be fifty-three degrees. These fifty-three degrees being subtracted from ninety degrees—the distance from the pole to the equator—there remained thirty-seven degrees. Cyrus Harding concluded, therefore, that Lincoln Island was situated on the thirty-seventh degree of the southern
latitude, or taking into consideration through the imperfection of the performance, an error of five degrees, that it
must be situated between the thirty-fifth and the fortieth parallel.

There was only the longitude to be obtained, and the position of the island would be determined. The engineer
hoped to attempt this the same day, at twelve o'clock, at which moment the sun would pass the meridian.

It was decided that Sunday should be spent in a walk, or rather an exploring expedition, to that side of the island
between the north of the lake and Shark Gulf, and if there was time they would push their discoveries to the northern
side of Cape South Mandible. They would breakfast on the downs, and not return till evening.

At half-past eight the little band was following the edge of the channel. On the other side, on Safety Islet,
numerous birds were gravely strutting. They were divers, easily recognized by their cry, which much resembles
the braying of a donkey. Pencroft only considered them in an eatable point of view, and leant with some satisfaction
that their flesh, though blackish, is not bad food.

Great amphibious creatures could also be seen crawling on the sand; seals, doubtless, who appeared to have
chosen the islet for a place of refuge. It was impossible to think of those animals in an alimentary point of view, for
their oily flesh is detestable; however, Cyrus Harding observed them attentively, and without making known his
idea, he announced to his companions that very soon they would pay a visit to the islet. The beach was strewed
with innumerable shells, some of which would have rejoiced the heart of a conchologist; there were, among others, the
phasianella, the terebratual, etc. But what would be of more use, was the discovery, by Neb, at low tide, of a large
oysterbed among the rocks, nearly five miles from the Chimneys.

"Neb will not have lost his day," cried Pencroft, looking at the spacious oyster-bed.

"It is really a fortunate discovery," said the reporter, "and as is said that each oyster produces yearly from fifty
to sixty thousand eggs, we shall have an inexhaustible supply there."

"Only I believe that the oyster is not very nourishing," said Herbert.

"Capital!" replied Pencroft. "We might swallow dozens and dozens without exhausting the bed. Shall we take
some for breakfast?"

And without waiting for a reply to this proposal, knowing that it would be approved of, the sailor and Neb
detached a quantity of the molluscs. They put them in a sort of net of hibiscus fiber, which Neb had manufactured,
and which already contained food; they then continued to climb the coast between the downs and the sea.

From time to time Harding consulted his watch, so as to be prepared in time for the solar observation, which had
to be made exactly at midday.

All that part of the island was very barren as far as the point which closed Union Bay, and which had received
the name of Cape South Mandible. Nothing could be seen there but sand and shells, mingled with debris of lava. A
few sea-birds frequented this desolate coast, gulls, great albatrosses, as well as wild duck, for which Pencroft had a
great fancy. He tried to knock some over with an arrow, but without result, for they seldom perched, and he could
not hit them on the wing.

This led the sailor to repeat to the engineer,—

"You see, captain, so long as we have not one or two fowling-pieces, we shall never get anything!"

"Doubtless, Pencroft," replied the reporter, "but it depends on you. Procure us some iron for the barrels, steel for
the hammers, saltpeter. coal and sulphur for powder, mercury and nitric acid for the fulminate, and lead for the shot,
and the captain will make us first-rate guns."

"Oh!" replied the engineer, "we might, no doubt, find all these substances on the island, but a gun is a delicate
instrument, and needs very particular tools. However, we shall see later!"

"Why," cried Pencroft, "were we obliged to throw overboard all the weapons we had with us in the car, all our
implements, even our pocket-knives?"

"But if we had not thrown them away, Pencroft, the balloon would have thrown us to the bottom of the sea!" said
Herbert.

"What you say is true, my boy," replied the sailor.

Then passing to another idea,—"Think," said he, "how astounded Jonathan Forster and his companions must have
been when, next morning, they found the place empty, and the machine flown away!"

"I am utterly indifferent about knowing what they may have thought," said the reporter.

"It was all my idea, that!" said Pencroft, with a satisfied air.

"A splendid idea, Pencroft!" replied Gideon Spilett, laughing, "and which has placed us where we are."

"I would rather be here than in the hands of the Southerners," cried the sailor, "especially since the captain has
been kind enough to come and join us again."

"So would I, truly!" replied the reporter. "Besides, what do we want? Nothing."
"If that is not—everything!" replied Pencroft, laughing and shrugging his shoulders. "But, some day or other, we shall find means of going away!"

"Sooner, perhaps, than you imagine, my friends," remarked the engineer, "if Lincoln Island is but a medium distance from an inhabited island, or from a continent. We shall know in an hour. I have not a map of the Pacific, but my memory has preserved a very clear recollection of its southern part. The latitude which I obtained yesterday placed New Zealand to the west of Lincoln Island, and the coast of Chile to the east. But between these two countries, there is a distance of at least six thousand miles. It has, therefore, to be determined what point in this great space the island occupies, and this the longitude will give us presently, with a sufficient approximation, I hope."

"Is not the archipelago of the Pomoutous the nearest point to us in latitude?" asked Herbert.

"Yes," replied the engineer, "but the distance which separates us from it is more than twelve hundred miles."

"And that way?" asked Neb, who followed the conversation with extreme interest, pointing to the south.

"That way, nothing," replied Pencroft.

"Nothing, indeed," added the engineer.

"Well, Cyrus," asked the reporter, "if Lincoln Island is not more than two or three thousand miles from New Zealand or Chile?"

"Well," replied the engineer, "instead of building a house we will build a boat, and Master Pencroft shall be put in command—"

"Well then," cried the sailor, "I am quite ready to be captain—as soon as you can make a craft that's able to keep at sea!"

"We shall do it, if it is necessary," replied Cyrus Harding.

But while these men, who really hesitated at nothing, were talking, the hour approached at which the observation was to be made. What Cyrus Harding was to do to ascertain the passage of the sun at the meridian of the island, without an instrument of any sort, Herbert could not guess.

The observers were then about six miles from the Chimneys, not far from that part of the downs in which the engineer had been found after his enigmatical preservation. They halted at this place and prepared for breakfast, for it was half-past eleven. Herbert went for some fresh water from a stream which ran near, and brought it back in a jug, which Neb had provided.

During these preparations Harding arranged everything for his astronomical observation. He chose a clear place on the shore, which the ebbing tide had left perfectly level. This bed of fine sand was as smooth as ice, not a grain out of place. It was of little importance whether it was horizontal or not, and it did not matter much whether the stick six feet high, which was planted there, rose perpendicularly. On the contrary, the engineer inclined it towards the south, that is to say, in the direction of the coast opposite to the sun, for it must not be forgotten that the settlers in Lincoln Island, as the island was situated in the Southern Hemisphere, saw the radiant planet describe its diurnal arc above the northern, and not above the southern horizon.

Herbert now understood how the engineer was going to proceed to ascertain the culmination of the sun, that is to say its passing the meridian of the island or, in other words, determine due south. It was by means of the shadow cast on the sand by the stick, a way which, for want of an instrument, would give him a suitable approach to the result which he wished to obtain.

In fact, the moment when this shadow would reach its minimum of length would be exactly twelve o'clock, and it would be enough to watch the extremity of the shadow, so as to ascertain the instant when, after having successively diminished, it began to lengthen. By inclining his stick to the side opposite to the sun, Cyrus Harding made the shadow longer, and consequently its modifications would be more easily ascertained. In fact, the longer the needle of a dial is, the more easily can the movement of its point be followed. The shadow of the stick was nothing but the needle of a dial. The moment had come, and Cyrus Harding knelt on the sand, and with little wooden pegs, which he stuck into the sand, he began to mark the successive diminutions of the stick's shadow. His companions, bending over him, watched the operation with extreme interest. The reporter held his chronometer in his hand, ready to tell the hour which it marked when the shadow would be at its shortest. Moreover, as Cyrus Harding was working on the 16th of April, the day on which the true and the average time are identical, the hour given by Gideon Spilett would be the true hour then at Washington, which would simplify the calculation. Meanwhile as the sun slowly advanced, the shadow slowly diminished, and when it appeared to Cyrus Harding that it was beginning to increase, he asked, "What o'clock is it?"

"One minute past five," replied Gideon Spilett directly. They had now only to calculate the operation. Nothing could be easier. It could be seen that there existed, in round numbers, a difference of five hours between the meridian of Washington and that of Lincoln Island, that is to say, it was midday in Lincoln Island when it was already five o'clock in the evening in Washington. Now the sun, in its apparent movement round the earth, traverses one degree in four minutes, or fifteen degrees an hour. Fifteen degrees multiplied by five hours give seventy-five
degrees.

Then, since Washington is 77deg 3' 11" as much as to say seventy-seven degrees counted from the meridian of
Greenwich which the Americans take for their starting-point for longitudes concurrently with the English--it
followed that the island must be situated seventy-seven and seventy-five degrees west of the meridian of Greenwich,
that is to say, on the hundred and fifty-second degree of west longitude.

Cyrus Harding announced this result to his companions, and taking into consideration errors of observation, as
he had done for the latitude, he believed he could positively affirm that the position of Lincoln Island was between
the thirty-fifth and the thirty-seventh parallel, and between the hundred and fiftieth and the hundred and fifty-fifth
meridian to the west of the meridian of Greenwich.

The possible fault which he attributed to errors in the observation was, it may be seen, of five degrees on both
sides, which, at sixty miles to a degree, would give an error of three hundred miles in latitude and longitude for the
exact position.

But this error would not influence the determination which it was necessary to take. It was very evident that
Lincoln Island was at such a distance from every country or island that it would be too hazardous to attempt to reach
one in a frail boat.

In fact, this calculation placed it at least twelve hundred miles from Tahiti and the islands of the archipelago of
the Pomoutous, more than eighteen hundred miles from New Zealand, and more than four thousand five hundred
miles from the American coast!

And when Cyrus Harding consulted his memory, he could not remember in any way that such an island
occupied, in that part of the Pacific, the situation assigned to Lincoln Island.

Chapter 15
The next day, the 17th of April, the sailor's first words were addressed to Gideon Spilett.
"Well, sir," he asked, "what shall we do to-day?"
"What the captain pleases," replied the reporter.

Till then the engineer's companions had been brickmakers and potters, now they were to become metallurgists.

The day before, after breakfast, they had explored as far as the point of Mandible Cape, seven miles distant from
the Chimneys. There, the long series of downs ended, and the soil had a volcanic appearance. There were no longer
high cliffs as at Prospect Heights, but a strange and capricious border which surrounded the narrow gulf between the
two capes, formed of mineral matter, thrown up by the volcano. Arrived at this point the settlers retraced their steps,
and at nightfall entered the Chimneys; but they did not sleep before the question of knowing whether they could
think of leaving Lincoln Island or not was definitely settled.

The twelve hundred miles which separated the island from the Pomoutous Island was a considerable distance. A
boat could not cross it, especially at the approach of the bad season. Pencroft had expressly declared this. Now, to
construct a simple boat even with the necessary tools, was a difficult work, and the colonists not having tools they
must begin by making hammers, axes, adzes, saws, augers, planes, etc., which would take some time. It was
decided, therefore, that they would winter at Lincoln Island, and that they would look for a more comfortable
dwelling than the Chimneys, in which to pass the winter months.

Before anything else could be done it was necessary to make the iron ore, of which the engineer had observed
some traces in the northwest part of the island, fit for use by converting it either into iron or into steel.

Metals are not generally found in the ground in a pure state. For the most part they are combined with oxygen or
sulphur. Such was the case with the two specimens which Cyrus Harding had brought back, one of magnetic iron,
not carbonated, the other a pyrite, also called sulphurite of iron. It was, therefore the first, the oxide of iron, which
they must reduce with coal, that is to say, get rid of the oxygen, to obtain it in a pure state. This reduction is made by
subjecting the ore with coal to a high temperature, either by the rapid and easy Catalan method, which has the
advantage of transforming the ore into iron in a single operation, or by the blast furnace, which first smelts the ore,
then changes it into iron, by carrying away the three to four per cent. of coal, which is combined with it.

Now Cyrus Harding wanted iron, and he wished to obtain it as soon as possible. The ore which he had picked up
was in itself very pure and rich. It was the oxydulous iron, which is found in confused masses of a deep gray color; it
gives a black dust, crystallized in the form of the regular octahedron. Native lodestones consist of this ore, and iron
of the first quality is made in Europe from that with which Sweden and Norway are so abundantly supplied. Not far
from this vein was the vein of coal already made use of by the settlers. The ingredients for the manufacture being
close together would greatly facilitate the treatment of the ore. This is the cause of the wealth of the mines in Great
Britain, where the coal aids the manufacture of the metal extracted from the same soil at the same time as itself.

"Then, captain," said Pencroft, "we are going to work iron ore?"
"Yes, my friend," replied the engineer, "and for that--something which will please you--we must begin by having a seal hunt on the islet."

"A seal hunt!" cried the sailor, turning towards Gideon Spilett. "Are seals needed to make iron?"

"Since Cyrus has said so!" replied the reporter.

But the engineer had already left the Chimneys, and Pencroft prepared for the seal hunt, without having received any other explanation.

Cyrus Harding, Herbert, Gideon Spilett, Neb, and the sailor were soon collected on the shore, at a place where the channel left a ford passable at low tide. The hunters could therefore traverse it without getting wet higher than the knee.

Harding then put his foot on the islet for the first, and his companions for the second time.

On their landing some hundreds of penguins looked fearlessly at them. The hunters, armed with sticks, could have killed them easily, but they were not guilty of such useless massacre, as it was important not to frighten the seals, who were lying on the sand several cable lengths off. They also respected certain innocent-looking birds, whose wings were reduced to the state of stumps, spread out like fins, ornamented with feathers of a scaly appearance. The settlers, therefore, prudently advanced towards the north point, walking over ground riddled with little holes, which formed nests for the sea-birds. Towards the extremity of the islet appeared great black heads floating just above the water, having exactly the appearance of rocks in motion.

These were the seals which were to be captured. It was necessary, however, first to allow them to land, for with their close, short hair, and their fusiform conformation, being excellent swimmers, it is difficult to catch them in the sea, while on land their short, webbed feet prevent their having more than a slow, waddling movement.

Pencroft knew the habits of these creatures, and he advised waiting till they were stretched on the sand, when the sun, before long, would send them to sleep. They must then manage to cut off their retreat and knock them on the head.

The hunters, having concealed themselves behind the rocks, waited silently.

An hour passed before the seals came to play on the sand. They could count half a dozen. Pencroft and Herbert then went round the point of the islet, so as to take them in the rear, and cut off their retreat. During this time Cyrus Harding, Spilett, and Neb, crawling behind the rocks, glided towards the future scene of combat.

All at once the tall figure of the sailor appeared. Pencroft shouted. The engineer and his two companions threw themselves between the sea and the seals. Two of the animals soon lay dead on the sand, but the rest regained the sea in safety.

"Here are the seals required, captain!" said the sailor, advancing towards the engineer.

"Capital," replied Harding. "We will make bellows of them!"

"Bellows!" cried Pencroft. "Well! these are lucky seals!"

It was, in fact, a blowing-machine, necessary for the treatment of the ore that the engineer wished to manufacture with the skins of the amphibious creatures. They were of a medium size, for their length did not exceed six feet. They resembled a dog about the head.

As it was useless to burden themselves with the weight of both the animals, Neb and Pencroft resolved to skin them on the spot, while Cyrus Harding and the reporter continued to explore the islet.

The sailor and the Negro cleverly performed the operation, and three hours afterwards Cyrus Harding had at his disposal two seals' skins, which he intended to use in this state, without subjecting them to any tanning process.

The settlers waited till the tide was again low, and crossing the channel they entered the Chimneys.

The skins had then to be stretched on a frame of wood and sewn by means of fibers so as to preserve the air without allowing too much to escape. Cyrus Harding had nothing but the two steel blades from Top's collar, and yet he was so clever, and his companions aided him with so much intelligence, that three days afterwards the little colony's stock of tools was augmented by a blowing-machine, destined to inject the air into the midst of the ore when it should be subjected to heat--an indispensable condition to the success of the operation.

On the morning of the 20th of April began the "metallic period," as the reporter called it in his notes. The engineer had decided, as has been said, to operate near the veins both of coal and ore. Now, according to his observations, these veins were situated at the foot of the northeast spurs of Mount Franklin, that is to say, a distance of six miles from their home. It was impossible, therefore, to return every day to the Chimneys, and it was agreed that the little colony should camp under a hut of branches, so that the important operation could be followed night and day.

This settled, they set out in the morning. Neb and Pencroft dragged the bellows on a hurdle; also a quantity of vegetables and animals, which they besides could renew on the way.

The road led through Jacamar Wood, which they traversed obliquely from southeast to northwest, and in the thickest part. It was necessary to beat a path, which would in the future form the most direct road to Prospect
Heights and Mount Franklin. The trees, belonging to the species already discovered, were magnificent. Herbert found some new ones, among others some which Pencroft called “sham leeks”; for, in spite of their size, they were of the same liliaceous family as the onion, chive, shallot, or asparagus. These trees produce ligneous roots which, when cooked, are excellent; from them, by fermentation, a very agreeable liquor is made. They therefore made a good store of the roots.

The journey through the wood was long; it lasted the whole day, and so allowed plenty of time for examining the flora and fauna. Top, who took special charge of the fauna, ran through the grass and brushwood, putting up all sorts of game. Herbert and Gideon Spilett killed two kangaroos with bows and arrows, and also an animal which strongly resembled both a hedgehog and an ant-eater. It was like the first because it rolled itself into a ball, and was bristled with spines, and the second because it had sharp claws, a long slender snout which terminated in a bird's beak, and an extendible tongue, covered with little thorns which served to hold the insects.

"And when it is in the pot," asked Pencroft naturally, "what will it be like?"

"An excellent piece of beef," replied Herbert.

"We will not ask more from it," replied the sailor.

During this excursion they saw several wild boars, which however, did not offer to attack the little band, and it appeared as if they would not meet with any dangerous beasts; when, in a thick part of the wood, the reporter thought he saw, some paces from him, among the lower branches of a tree, an animal which he took for a bear, and which he very tranquilly began to draw. Happily for Gideon Spilett, the animal in question did not belong to the redoubtable family of the plantigrades. It was only a koala, better known under the name of the sloth, being about the size of a large dog, and having stiff hair of a dirty color, the paws armed with strong claws, which enabled it to climb trees and feed on the leaves. Having identified the animal, which they did not disturb, Gideon Spilett erased "bear" from the title of his sketch, putting koala in its place, and the journey was resumed.

At five o'clock in the evening, Cyrus Harding gave the signal to halt. They were now outside the forest, at the beginning of the powerful spurs which supported Mount Franklin towards the west. At a distance of some hundred feet flowed the Red Creek, and consequently plenty of fresh water was within their reach.

The camp was soon organized. In less than an hour, on the edge of the forest, among the trees, a hut of branches interlaced with creepers, and pasted over with clay, offered a tolerable shelter. Their geological researches were put off till the next day. Supper was prepared, a good fire blazed before the hut, the roast turned, and at eight o'clock, while one of the settlers watched to keep up the fire, in case any wild beasts should prowl in the neighborhood, the others slept soundly.

The next day, the 21st of April, Cyrus Harding accompanied by Herbert, went to look for the soil of ancient formation, on which he had already discovered a specimen of ore. They found the vein above ground, near the source of the creek, at the foot of one of the northeastern spurs. This ore, very rich in iron, enclosed in its fusible veinstone, was perfectly suited to the mode of reduction which the engineer intended to employ; that is, the Catalan method, but simplified, as it is used in Corsica. In fact, the Catalan method, properly so called, requires the construction of kilns and crucibles, in which the ore and the coal, placed in alternate layers, are transformed and reduced, But Cyrus Harding intended to economize these constructions, and wished simply to form, with the ore and the coal, a cubic mass, to the center of which he would direct the wind from his bellows. Doubtless, it was the proceeding employed by Tubalcain, and the first metallurgists of the inhabited world. Now that which had succeeded with the grandson of Adam, and which still yielded good results in countries which in ore and fuel, could not but succeed with the settlers in Lincoln Island.

The coal, as well as the ore, was collected without trouble on the surface of the ground. They first broke the ore into little pieces, and cleansed them with the hand from the impurities which soiled their surface. Then coal and ore were arranged in heaps and in successive layers, as the charcoal-burner does with the wood which he wishes to carbonize. In this way, under the influence of the air projected by the blowing-machine, the coal would be transformed into carbonic acid, then into oxide of carbon, its use being to reduce the oxide of iron, that is to say, to rid it of the oxygen.

Thus the engineer proceeded. The bellows of sealskin, furnished at its extremity with a nozzle of clay, which had been previously fabricated in the pottery kiln, was established near the heap of ore. Using the mechanism which consisted of a frame, cords of fiber and counterpoise, he threw into the mass an abundance of air, which by raising the temperature also concurred with the chemical transformation to produce in time pure iron.

The operation was difficult. All the patience, all the ingenuity of the settlers was needed; but at last it succeeded, and the result was a lump of iron, reduced to a spongy state, which it was necessary to shingle and fagot, that is to say, to forge so as to expel from it the liquefied veinstone. These amateur smiths had, of course, no hammer; but they were in no worse a situation than the first metallurgist, and therefore did what, no doubt, he had to do.

A handle was fixed to the first lump, and was used as a hammer to forge the second on a granite anvil, and thus
they obtained a coarse but useful metal. At length, after many trials and much fatigue, on the 25th of April several bars of iron were forged, and transformed into tools, crowbars, pincers, pickaxes, spades, etc., which Pencroft and Neb declared to be real jewels. But the metal was not yet in its most serviceable state, that is, of steel. Now steel is a combination of iron and coal, which is extracted, either from the liquid ore, by taking from it the excess of coal, or from the iron by adding to it the coal which was wanting. The first, obtained by the decarburation of the metal, gives natural or puddled steel; the second, produced by the carburation of the iron, gives steel of cementation.

It was the last which Cyrus Harding intended to forge, as he possessed iron in a pure state. He succeeded by heating the metal with powdered coal in a crucible which had previously been manufactured from clay suitable for the purpose.

He then worked this steel, which is malleable both when hot or cold, with the hammer. Neb and Pencroft, cleverly directed, made hatchets, which, heated red-hot, and plunged suddenly into cold water, acquired an excellent temper.

Other instruments, of course roughly fashioned, were also manufactured; blades for planes, axes, hatchets, pieces of steel to be transformed into saws, chisels; then iron for spades, pickaxes, hammers, nails, etc. At last, on the 5th of May, the metallic period ended, the smiths returned to the Chimneys, and new work would soon authorize them to take a fresh title.

Chapter 16

It was the 6th of May, a day which corresponds to the 6th of November in the countries of the Northern Hemisphere. The sky had been obscured for some days, and it was of importance to make preparations for the winter. However, the temperature was not as yet much lower, and a centigrade thermometer, transported to Lincoln Island, would still have marked an average of ten to twelve degrees above zero. This was not surprising, since Lincoln Island, probably situated between the thirty-fifth and fortieth parallel, would be subject, in the Southern Hemisphere, to the same climate as Sicily or Greece in the Northern Hemisphere. But as Greece and Sicily have severe cold, producing snow and ice, so doubtless would Lincoln Island in the severest part of the winter and it was advisable to provide against it.

In any case if cold did not yet threaten them, the rainy season would begin, and on this lonely island, exposed to all the fury of the elements, in mid-ocean, bad weather would be frequent, and probably terrible. The question of a more comfortable dwelling than the Chimneys must therefore be seriously considered and promptly resolved on.

Pencroft, naturally, had some predilection for the retreat which he had discovered, but he well understood that another must be found. The Chimneys had been already visited by the sea, under circumstances which are known, and it would not do to be exposed again to a similar accident.

"Besides," added Cyrus Harding, who this day was talking of these things with his companions, "we have some precautions to take."

"Why? The island is not inhabited," said the reporter.

"That is probable," replied the engineer, "although we have not yet explored the interior; but if no human beings are found, I fear that dangerous animals may abound. It is necessary to guard against a possible attack, so that we shall not be obliged to watch every night, or to keep up a fire. And then, my friends, we must foresee everything. We are here in a part of the Pacific often frequented by Malay pirates--"

"What!" said Herbert, "at such a distance from land?"

"Yes, my boy," replied the engineer. "These pirates are bold sailors as well as formidable enemies, and we must take measures accordingly."

"Well," replied Pencroft, "we will fortify ourselves against savages with two legs as well as against savages with four. But, captain, will it not be best to explore every part of the island before undertaking anything else?"

"That would be best," added Gideon Spilett.

"Who knows if we might not find on the opposite side one of the caverns which we have searched for in vain here?"

"That is true," replied the engineer, "but you forget, my friends, that it will be necessary to establish ourselves in the neighborhood of a watercourse, and that, from the summit of Mount Franklin, we could not see towards the west, either stream or river. Here, on the contrary, we are placed between the Mercy and Lake Grant, an advantage which must not be neglected. And, besides, this side, looking towards the east, is not exposed as the other is to the trade-winds, which in this hemisphere blow from the northwest."

"Then, captain," replied the sailor, "let us build a house on the edge of the lake. Neither bricks nor tools are wanting now. After having been brickmakers, potters, smelters, and smiths, we shall surely know how to be masons!"
"Yes, my friend; but before coming to any decision we must consider the matter thoroughly. A natural dwelling would spare us much work, and would be a surer retreat, for it would be as well defended against enemies from the interior as those from outside."

"That is true, Cyrus," replied the reporter, "but we have already examined all that mass of granite, and there is not a hole, not a cranny!"

"No, not one!" added Pencroft. "Ah, if we were able to dig out a dwelling in that cliff, at a good height, so as to be out of the reach of harm, that would be capital! I can see that on the front which looks seaward, five or six rooms-"

"With windows to light them!" said Herbert, laughing.

"And a staircase to climb up to them!" added Neb.

"You are laughing," cried the sailor, "and why? What is there impossible in what I propose? Haven't we got pickaxes and spades? Won't Captain Harding be able to make powder to blow up the mine? Isn't it true, captain, that you will make powder the very day we want it?"

Cyrus Harding listened to the enthusiastic Pencroft developing his fanciful projects. To attack this mass of granite, even by a mine, was Herculean work, and it was really vexing that nature could not help them at their need. But the engineer did not reply to the sailor except by proposing to examine the cliff more attentively, from the mouth of the river to the angle which terminated it on the north.

They went out, therefore, and the exploration was made with extreme care, over an extent of nearly two miles. But in no place in the bare, straight cliff, could any cavity be found. The nests of the rock pigeons which fluttered at its summit were only, in reality, holes bored at the very top, and on the irregular edge of the granite.

It was a provoking circumstance, and as to attacking this cliff, either with pickaxe or with powder, so as to effect a sufficient excavation, it was not to be thought of. It so happened that, on all this part of the shore, Pencroft had discovered the only habitable shelter, that is to say, the Chimneys, which now had to be abandoned.

The exploration ended, the colonists found themselves at the north angle of the cliff, where it terminated in long slopes which died away on the shore. From this place, to its extreme limit in the west, it only formed a sort of declivity, a thick mass of stones, earth, and sand, bound together by plants, bushes, and grass inclined at an angle of only forty-five degrees. Clumps of trees grew on these slopes, which were also carpeted with thick grass. But the vegetation did not extend far, and a long, sandy plain, which began at the foot of these slopes, reached to the beach.

Cyrus Harding thought, not without reason, that the overplus of the lake must overflow on this side. The excess of water furnished by the Red Creek must also escape by some channel or other. Now the engineer had not yet found this channel on any part of the shore already explored, that is to say, from the mouth of the stream on the west of Prospect Heights.

The engineer now proposed to his companions to climb the slope, and to return to the Chimneys by the heights, while exploring the northern and eastern shores of the lake. The proposal was accepted, and in a few minutes Herbert and Neb were on the upper plateau. Cyrus Harding, Gideon Spilett, and Pencroft followed with more sedate steps.

The beautiful sheet of water glittered through the trees under the rays of the sun. In this direction the country was charming. The eye feasted on the groups of trees. Some old trunks, bent with age, showed black against the verdant grass which covered the ground. Crowds of brilliant cockatoos screamed among the branches, moving prisms, hopping from one bough to another.

The settlers instead of going directly to the north bank of the lake, made a circuit round the edge of the plateau, so as to join the mouth of the creek on its left bank. It was a detour of more than a mile and a half. Walking was easy, for the trees widely spread, left a considerable space between them. The fertile zone evidently stopped at this point, and vegetation would be less vigorous in the part between the course of the Creek and the Mercy.

Cyrus Harding and his companions walked over this new ground with great care. Bows, arrows, and sticks with sharp iron points were their only weapons. However, no wild beast showed itself, and it was probable that these animals frequented rather the thick forests in the south; but the settlers had the disagreeable surprise of seeing Top stop before a snake of great size, measuring from fourteen to fifteen feet in length. Neb killed it by a blow from his stick. Cyrus Harding examined the reptile, and declared it not venomous, for it belonged to that species of diamond serpents which the natives of New South Wales rear. But it was possible that others existed whose bite was mortal such as the deaf vipers with forked tails, which rise up under the feet, or those winged snakes, furnished with two ears, which enable them to proceed with great rapidity. Top, the first moment of surprise over, began a reptile chase with such eagerness, that they feared for his safety. His master called him back directly.

The mouth of the Red Creek, at the place where it entered into the lake, was soon reached. The explorers recognized on the opposite shore the point which they had visited on their descent from Mount Franklin. Cyrus Harding ascertained that the flow of water into it from the creek was considerable. Nature must therefore have
provided some place for the escape of the overplus. This doubtless formed a fall, which, if it could be discovered, would be of great use.

The colonists, walking apart, but not straying far from each other, began to skirt the edge of the lake, which was very steep. The water appeared to be full of fish, and Pencroft resolved to make some fishing-rods, so as to try and catch some.

The northeast point was first to be doubled. It might have been supposed that the discharge of water was at this place, for the extremity of the lake was almost on a level with the edge of the plateau. But no signs of this were discovered, and the colonists continued to explore the bank, which, after a slight bend, descended parallel to the shore.

On this side the banks were less woody, but clumps of trees, here and there, added to the picturesqueness of the country. Lake Grant was viewed from thence in all its extent, and no breath disturbed the surface of its waters. Top, in beating the bushes, put up flocks of birds of different kinds, which Gideon Spilett and Herbert saluted with arrows. One was hit by the lad, and fell into some marshy grass. Top rushed forward, and brought a beautiful swimming bird, of a slate color, short beak, very developed frontal plate, and wings edged with white. It was a "coot," the size of a large partridge, belonging to the group of macrodactyls which form the transition between the order of wading birds and that of palmipeds. Sorry game, in truth, and its flavor is far from pleasant. But Top was not so particular in these things as his masters, and it was agreed that the coot should be for his supper.

The settlers were now following the eastern bank of the lake, and they would not be long in reaching the part which they already knew. The engineer was much surprised at not seeing any indication of the discharge of water. The reporter and the sailor talked with him, and he could not conceal his astonishment.

At this moment Top, who had been very quiet till then, gave signs of agitation. The intelligent animal went backwards and forwards on the shore, stopped suddenly, and looked at the water, one paw raised, as if he was pointing at some invisible game; then he barked furiously, and was suddenly silent.

Neither Cyrus Harding nor his companions had at first paid any attention to Top's behavior; but the dog's barking soon became so frequent that the engineer noticed it.

"What is there, Top?" he asked.

The dog bounded towards his master, seeming to be very uneasy, and then rushed again towards the bank. Then, all at once, he plunged into the lake.

"Here, Top!" cried Cyrus Harding, who did not like his dog to venture into the treacherous water.

"What's happening down there?" asked Pencroft, examining the surface of the lake.

"Top smells some amphibious creature," replied Herbert.

"An alligator, perhaps," said the reporter.

"I do not think so," replied Harding. "Alligators are only met with in regions less elevated in latitude."

Meanwhile Top had returned at his master's call, and had regained the shore: but he could not stay quiet; he plunged in among the tall grass, and guided by instinct, he appeared to follow some invisible being which was slipping along under the surface of the water. However the water was calm; not a ripple disturbed its surface. Several times the settlers stopped on the bank, and observed it attentively. Nothing appeared. There was some mystery there.

The engineer was puzzled.

"Let us pursue this exploration to the end," said he.

Half an hour after they had all arrived at the southeast angle of the lake, on Prospect Heights. At this point the examination of the banks of the lake was considered finished, and yet the engineer had not been able to discover how and where the waters were discharged. "There is no doubt this overflow exists," he repeated, "and since it is not visible it must go through the granite cliff at the west!"

"But what importance do you attach to knowing that, my dear Cyrus?" asked Gideon Spilett.

"Considerable importance," replied the engineer; "for if it flows through the cliff there is probably some cavity, which it would be easy to render habitable after turning away the water."

"But is it not possible, captain, that the water flows away at the bottom of the lake," said Herbert, "and that it reaches the sea by some subterranean passage?"

"That might be," replied the engineer, "and should it be so we shall be obliged to build our house ourselves, since nature has not done it for us."

The colonists were about to begin to traverse the plateau to return to the Chimneys, when Top gave new signs of agitation. He barked with fury, and before his master could restrain him, he had plunged a second time into the lake.

All ran towards the bank. The dog was already more than twenty feet off, and Cyrus was calling him back, when an enormous head emerged from the water, which did not appear to be deep in that place.

Herbert recognized directly the species of amphibian to which the tapering head, with large eyes, and adorned
with long silky mustaches, belonged. "A lamantin!" he cried.

It was not a lamantin, but one of that species of the order of cetaceans, which bear the name of the "dugong," for its nostrils were open at the upper part of its snout. The enormous animal rushed on the dog, who tried to escape by returning towards the shore. His master could do nothing to save him, and before Gideon Spilett or Herbert thought of bending their bows, Top, seized by the dugong, had disappeared beneath the water.

Neb, his iron-tipped spear in his hand, wished to go to Top's help, and attack the dangerous animal in its own element.

"No, Neb," said the engineer, restraining his courageous servant.

Meanwhile, a struggle was going on beneath the water, an inexplicable struggle, for in his situation Top could not possibly resist; and judging by the bubbling of the surface it must be also a terrible struggle, and could not but terminate in the death of the dog! But suddenly, in the middle of a foaming circle, Top reappeared. Thrown in the air by some unknown power, he rose ten feet above the surface of the lake, fell again into the midst of the agitated waters, and then soon gained the shore, without any severe wounds, miraculously saved.

Cyrus Harding and his companions could not understand it. What was not less inexplicable was that the struggle still appeared to be going on. Doubtless, the dugong, attacked by some powerful animal, after having released the dog, was fighting on its own account. But it did not last long. The water became red with blood, and the body of the dugong, emerging from the sheet of scarlet which spread around, soon stranded on a little beach at the south angle of the lake. The colonists ran towards it. The dugong was dead. It was an enormous animal, fifteen or sixteen feet long, and must have weighed from three to four thousand pounds. At its neck was a wound, which appeared to have been produced by a sharp blade.

What could the amphibious creature have been, who, by this terrible blow had destroyed the formidable dugong? No one could tell, and much interested in this incident, Harding and his companions returned to the Chimneys.

Chapter 17

The next day, the 7th of May, Harding and Gideon Spilett, leaving Neb to prepare breakfast, climbed Prospect Heights, while Herbert and Pencroft ascended by the river, to renew their store of wood.

The engineer and the reporter soon reached the little beach on which the dugong had been stranded. Already flocks of birds had attacked the mass of flesh, and had to be driven away with stones, for Cyrus wished to keep the fat for the use of the colony. As to the animal's flesh it would furnish excellent food, for in the islands of the Malay Archipelago and elsewhere, it is especially reserved for the table of the native princes. But that was Neb's affair.

At this moment Cyrus Harding had other thoughts. He was much interested in the incident of the day before. He wished to penetrate the mystery of that submarine combat, and to ascertain what monster could have given the dugong so strange a wound. He remained at the edge of the lake, looking, observing; but nothing appeared under the tranquil waters, which sparkled in the first rays of the rising sun.

At the beach, on which lay the body of the dugong, the water was tolerably shallow, but from this point the bottom of the lake sloped gradually, and it was probable that the depth was considerable in the center. The lake might be considered as a large center basin, which was filled by the water from the Red Creek.

"Well, Cyrus," said the reporter, "there seems to be nothing suspicious in this water."

"No, my dear Spilett," replied the engineer, "and I really do not know how to account for the incident of yesterday."

"I acknowledge," returned Spilett, "that the wound given this creature is, at least, very strange, and I cannot explain either how Top was so vigorously cast up out of the water. One could have thought that a powerful arm hurled him up, and that the same arm with a dagger killed the dugong!"

"Yes," replied the engineer, who had become thoughtful; "there is something there that I cannot understand. But do you better understand either, my dear Spilett, in what way I was saved myself--how I was drawn from the waves, and carried to the downs? No! Is it not true? Now, I feel sure that there is some mystery there, which, doubtless, we shall discover some day. Let us observe, but do not dwell on these singular incidents before our companions. Let us keep our remarks to ourselves, and continue our work."

It will be remembered that the engineer had not as yet been able to discover the place where the surplus water escaped, but he knew it must exist somewhere. He was much surprised to see a strong current at this place. By throwing in some bits of wood he found that it set towards the southern angle. He followed the current, and arrived at the south point of the lake.

There was there a sort of depression in the water, as if it was suddenly lost in some fissure in the ground.

Harding listened; placing his ear to the level of the lake, he very distinctly heard the noise of a subterranean fall.
"There," said he, rising, "is the discharge of the water; there, doubtless, by a passage in the granite cliff, it joins the sea, through cavities which we can use to our profit. Well, I can find it!"

The engineer cut a long branch, stripped it of its leaves, and plunging it into the angle between the two banks, he found that there was a large hole one foot only beneath the surface of the water. This hole was the opening so long looked for in vain, and the force of the current was such that the branch was torn from the engineer's hands and disappeared.

"There is no doubt about it now," repeated Harding. "There is the outlet, and I will lay it open to view!"

"How?" asked Gideon Spilett.

"By lowering the level of the water of the lake three feet." "And how will you lower the level?"

"By opening another outlet larger than this."

"At what place, Cyrus?"

"At the part of the bank nearest the coast."

"But it is a mass of granite!" observed Spilett.

"Well," replied Cyrus Harding, "I will blow up the granite, and the water escaping, will subside, so as to lay bare this opening--"

"And make a waterfall, by falling on to the beach," added the reporter.

"A fall that we shall make use of!" replied Cyrus. "Come, come!"

The engineer hurried away his companion, whose confidence in Harding was such that he did not doubt the enterprise would succeed. And yet, how was this granite wall to be opened without powder, and with imperfect instruments? Was not this work upon which the engineer was so bent above their strength?

When Harding and the reporter entered the Chimneys, they found Herbert and Pencroft unloading their raft of wood.

"The woodmen have just finished, captain." said the sailor, laughing, "and when you want masons--"

"Masons,--no, but chemists," replied the engineer.

"Yes," added the reporter, "we are going to blow up the island--"

"Blow up the island?" cried Pencroft.

"Part of it, at least," replied Spilett.

"Listen to me, my friends," said the engineer. And he made known to them the result of his observations.

According to him, a cavity, more or less considerable, must exist in the mass of granite which supported Prospect Heights, and he intended to penetrate into it. To do this, the opening through which the water rushed must first be cleared, and the level lowered by making a larger outlet. Therefore an explosive substance must be manufactured, which would make a deep trench in some other part of the shore. This was what Harding was going to attempt with the minerals which nature placed at his disposal.

It is useless to say with what enthusiasm all, especially Pencroft, received this project. To employ great means, open the granite, create a cascade, that suited the sailor. And he would just as soon be a chemist as a mason or bootmaker, since the engineer wanted chemicals. He would be all that they liked, "even a professor of dancing and deportment," said he to Neb, if that was ever necessary.

Neb and Pencroft were first of all told to extract the grease from the dugong, and to keep the flesh, which was destined for food. Such perfect confidence had they in the engineer, that they set out directly, without even asking a question. A few minutes after them, Cyrus Harding, Herbert, and Gideon Spilett, dragging the hurdle, went towards the vein of coals, where those shistose pyrites abound which are met with in the most recent transition soil, and of which Harding had already found a specimen. All the day being employed in carrying a quantity of these stones to the Chimneys, by evening they had several tons.

The next day, the 8th of May, the engineer began his manipulations. These shistose pyrites being composed principally of coal, flint, alumina, and sulphuret of iron--the latter in excess--it was necessary to separate the sulphuret of iron, and transform it into sulphate as rapidly as possible. The sulphate obtained, the sulphuric acid could then be extracted.

This was the object to be attained. Sulphuric acid is one of the agents the most frequently employed, and the manufacturing importance of a nation can be measured by the consumption which is made of it. This acid would later be of great use to the settlers, in the manufacturing of candles, tanning skins, etc., but this time the engineer reserved it for another use.

Cyrus Harding chose, behind the Chimneys, a site where the ground was perfectly level. On this ground he placed a layer of branches and chopped wood, on which were piled some pieces of shistose pyrites, buttressed one against the other, the whole being covered with a thin layer of pyrites, previously reduced to the size of a nut.

This done, they set fire to the wood, the heat was communicated to the shist, which soon kindled, since it contains coal and sulphur. Then new layers of bruised pyrites were arranged so as to form an immense heap, the
exterior of which was covered with earth and grass, several air-holes being left, as if it was a stack of wood which was to be carbonized to make charcoal.

They then left the transformation to complete itself, and it would not take less than ten or twelve days for the sulphuret of iron to be changed to sulphate of iron and the alumina into sulphate of alumina, two equally soluble substances, the others, flint, burnt coal, and cinders, not being so.

While this chemical work was going on, Cyrus Harding proceeded with other operations, which were pursued with more than zeal,—it was eagerness.

Neb and Pencroft had taken away the fat from the dugong, and placed it in large earthen pots. It was then necessary to separate the glycerine from the fat by saponifying it. Now, to obtain this result, it had to be treated either with soda or lime. In fact, one or other of these substances, after having attacked the fat, would form a soap by separating the glycerine, and it was just this glycerine which the engineer wished to obtain. There was no want of lime, only treatment by lime would give calcareous soap, insoluble, and consequently useless, while treatment by soda would furnish, on the contrary, a soluble soap, which could be put to domestic use. Now, a practical man, like Cyrus Harding, would rather try to obtain soda. Was this difficult? No; for marine plants abounded on the shore, glass-wort, ficoides, and all those fucaceae which form wrack. A large quantity of these plants was collected, first dried, then burnt in holes in the open air. The combustion of these plants was kept up for several days, and the result was a compact gray mass, which has been long known under the name of "natural soda."

This obtained, the engineer treated the fat with soda, which gave both a soluble soap and that neutral substance, glycerine.

But this was not all. Cyrus Harding still needed, in view of his future preparation, another substance, nitrate of potash, which is better known under the name of salt niter, of salt peter.

Cyrus Harding could have manufactured this substance by treating the carbonate of potash, which would be easily extracted from the cinders of the vegetables, by azotic acid. But this acid was wanting, and he would have been in some difficulty, if nature had not happily furnished the saltpeter, without giving them any other trouble than that of picking it up. Herbert found a vein of it at the foot of Mount Franklin, and they had nothing to do but purify this salt.

These different works lasted a week. They were finished before the transformation of the sulphuret into sulphate of iron had been accomplished. During the following days the settlers had time to construct a furnace of bricks of a particular arrangement, to serve for the distillation of the sulphate or iron when it had been obtained. All this was finished about the 18th of May, nearly at the time when the chemical transformation terminated. Gideon Spilett, Herbert, Neb, and Pencroft, skillfully directed by the engineer, had become most clever workmen. Before all masters, necessity is the one most listened to, and who teaches the best.

When the heap of pyrites had been entirely reduced by fire, the result of the operation, consisting of sulphate of iron, sulphate of alumina, flint, remains of coal, and cinders was placed in a basinful of water. They stirred this mixture, let it settle, then decanted it, and obtained a clear liquid containing in solution sulphate of iron and sulphate of alumina, the other matters remaining solid, since they are insoluble. Lastly, this liquid being partly evaporated, crystals of sulphate of iron were deposited, and the not evaporated liquid, which contained the sulphate of alumina, was thrown away.

Cyrus Harding had now at his disposal a large quantity of these sulphate of iron crystals, from which the sulphuric acid had to be extracted. The making of sulphuric acid is a very expensive manufacture. Considerable works are necessary—a special set of tools, an apparatus of platina, leaden chambers, unassailable by the acid, and in which the transformation is performed, etc. The engineer had none of these at his disposal, but he knew that, in Bohemia especially, sulphuric acid is manufactured by very simple means, which have also the advantage of producing it to a superior degree of concentration. It is thus that the acid known under the name of Nordhausen acid is made.

To obtain sulphuric acid, Cyrus Harding had only one operation to make, to calcine the sulphate of iron crystals in a closed vase, so that the sulphuric acid should distil in vapor, which vapor, by condensation, would produce the acid.

The crystals were placed in pots, and the heat from the furnace would distil the sulphuric acid. The operation was successfully completed, and on the 20th of May, twelve days after commencing it, the engineer was the possessor of the agent which later he hoped to use in so many different ways.

Now, why did he wish for this agent? Simply to produce azotic acid; and that was easy, since saltpeter, attacked by sulphuric acid, gives azotic, or nitric, acid by distillation.

But, after all, how was he going to employ this azotic acid? His companions were still ignorant of this, for he had not informed them of the result at which he aimed.

However, the engineer had nearly accomplished his purpose, and by a last operation he would procure the
Taking some azotic acid, he mixed it with glycerine, which had been previously concentrated by evaporation, subjected to the water-bath, and he obtained, without even employing a refrigerant mixture, several pints of an oily yellow mixture.

This last operation Cyrus Harding had made alone, in a retired place, at a distance from the Chimneys, for he feared the danger of an explosion, and when he showed a bottle of this liquid to his friends, he contented himself with saying,—

"Here is nitro-glycerine!"

It was really this terrible production, of which the explosive power is perhaps tenfold that of ordinary powder, and which has already caused so many accidents. However, since a way has been found to transform it into dynamite, that is to say, to mix with it some solid substance, clay or sugar, porous enough to hold it, the dangerous liquid has been used with some security. But dynamite was not yet known at the time when the settlers worked on Lincoln Island.

"And is it that liquid that is going to blow up our rocks?" said Pencroft incredulously.

"Yes, my friend," replied the engineer, "and this nitro-glycerine will produce so much the more effect, as the granite is extremely hard, and will oppose a greater resistance to the explosion."

"And when shall we see this, captain?"

"To-morrow, as soon as we have dug a hole for the mine, replied the engineer."

The next day, the 21st of May, at daybreak, the miners went to the point which formed the eastern shore of Lake Grant, and was only five hundred feet from the coast. At this place, the plateau inclined downwards from the waters, which were only restrained by their granite case. Therefore, if this case was broken, the water would escape by the opening and form a stream, which, flowing over the inclined surface of the plateau, would rush on to the beach. Consequently, the level of the lake would be greatly lowered, and the opening where the water escaped would be exposed, which was their final aim.

Under the engineer's directions, Pencroft, armed with a pickaxe, which he handled skilfully and vigorously, attacked the granite. The hole was made on the point of the shore, slanting, so that it should meet a much lower level than that of the water of the lake. In this way the explosive force, by scattering the rock, would open a large place for the water to rush out.

The work took some time, for the engineer, wishing to produce a great effect, intended to devote not less than seven quarts of nitro-glycerine to the operation. But Pencroft, relieved by Neb, did so well, that towards four o'clock in the evening, the mine was finished.

Now the question of setting fire to the explosive substance was raised. Generally, nitro-glycerine is ignited by caps of fulminate, which in bursting cause the explosion. A shock is therefore needed to produce the explosion, for, simply lighted, this substance would burn without exploding.

Cyrus Harding could certainly have fabricated a percussion cap. In default of fulminate, he could easily obtain a substance similar to guncotton, since he had azotic acid at his disposal. This substance, pressed in a cartridge, and introduced among the nitro-glycerine, would burst by means of a fuse, and cause the explosion.

But Cyrus Harding knew that nitro-glycerine would explode by a shock. He resolved to employ this means, and try another way, if this did not succeed.

In fact, the blow of a hammer on a few drops of nitro-glycerine, spread out on a hard surface, was enough to create an explosion. But the operator could not be there to give the blow, without becoming a victim to the operation. Harding, therefore, thought of suspending a mass of iron, weighing several pounds, by means of a fiber, to an upright just above the mine. Another long fiber, previously impregnated with sulphur, was attached to the middle of the first, by one end, while the other lay on the ground several feet distant from the mine. The second fiber being set on fire, it would burn till it reached the first. This catching fire in its turn, would break, and the mass of iron would fall on the nitro-glycerine. This apparatus being then arranged, the engineer, after having sent his companions to a distance, filled the hole, so that the nitro-glycerine was on a level with the opening; then he threw a few drops of it on the surface of the rock, above which the mass of iron was already suspended.

This done, Harding lit the end of the sulphured fiber, and leaving the place, he returned with his companions to the Chimneys.

The fiber was intended to burn five and twenty minutes, and, in fact, five and twenty minutes afterwards a most tremendous explosion was heard. The island appeared to tremble to its very foundation. Stones were projected in the air as if by the eruption of a volcano. The shock produced by the displacing of the air was such, that the rocks of the Chimneys shook. The settlers, although they were more than two miles from the mine, were thrown on the ground.

They rose, climbed the plateau, and ran towards the place where the bank of the lake must have been shattered by the explosion.
A cheer escaped them! A large rent was seen in the granite! A rapid stream of water rushed foaming across the plateau and dashed down a height of three hundred feet on to the beach!

Chapter 18

Cyrus Harding's project had succeeded, but, according to his usual habit he showed no satisfaction; with closed lips and a fixed look, he remained motionless. Herbert was in ecstasies, Neb bounded with joy, Pencroft nodded his great head, murmuring these words,--

"Come, our engineer gets on capitally!"

The nitro-glycerine had indeed acted powerfully. The opening which it had made was so large that the volume of water which escaped through this new outlet was at least treble that which before passed through the old one. The result was, that a short time after the operation the level of the lake would be lowered two feet, or more.

The settlers went to the Chimneys to take some pickaxes, iron-tipped spears, string made of fibers, flint and steel; they then returned to the plateau, Top accompanying them.

On the way the sailor could not help saying to the engineer,--

"Don't you think, captain, that by means of that charming liquid you have made, one could blow up the whole of our island?"

"Without any doubt, the island, continents, and the world itself," replied the engineer. "It is only a question of quantity."

"Then could you not use this nitro-glycerine for loading firearms?" asked the sailor.

"No, Pencroft; for it is too explosive a substance. But it would be easy to make some guncotton, or even ordinary powder, as we have azotic acid, saltpeter, sulphur, and coal. Unhappily, it is the guns which we have not got.

"Oh, captain," replied the sailor, "with a little determination--"

Pencroft had erased the word "impossible" from the dictionary of Lincoln Island.

The settlers, having arrived at Prospect Heights, went immediately towards that point of the lake near which was the old opening now uncovered. This outlet had now become practicable, since the water no longer rushed through it, and it would doubtless be easy to explore the interior.

In a few minutes the settlers had reached the lower point of the lake, and a glance showed them that the object had been attained.

In fact, in the side of the lake, and now above the surface of the water, appeared the long-looked-for opening. A narrow ridge, left bare by the retreat of the water, allowed them to approach it. This orifice was nearly twenty feet in width, but scarcely two in height. It was like the mouth of a drain at the edge of the pavement, and therefore did not offer an easy passage to the settlers; but Neb and Pencroft, taking their pickaxes, soon made it of a suitable height.

The engineer then approached, and found that the sides of the opening, in its upper part at least, had not a slope of more than from thirty to thirty-five degrees. It was therefore practicable, and, provided that the declivity did not increase, it would be easy to descend even to the level of the sea. If then, as was probable, some vast cavity existed in the interior of the granite, it might, perhaps, be of great use.

"Well, captain, what are we stopping for?" asked the sailor, impatient to enter the narrow passage. "You see Top has got before us!"

"Very well," replied the engineer. "But we must see our way. Neb, go and cut some resinous branches."

Neb and Herbert ran to the edge of the lake, shaded with pines and other green trees, and soon returned with some branches, which they made into torches. The torches were lighted with flint and steel, and Cyrus Harding leading, the settlers ventured into the dark passage, which the overplus of the lake had formerly filled.

Contrary to what might have been supposed, the diameter of the passage increased as the explorers proceeded, so that they very soon were able to stand upright. The granite, worn by the water for an infinite time, was very slippery, and falls were to be dreaded. But the settlers were all attached to each other by a cord, as is frequently done in ascending mountains. Happily some projections of the granite, forming regular steps, made the descent less perilous. Drops, still hanging from the rocks, shone here and there under the light of the torches, and the explorers guessed that the sides were clothed with innumerable stalactites. The engineer examined this black granite. There was not a stratum, not a break in it. The mass was compact, and of an extremely close grain. The passage dated, then, from the very origin of the island. It was not the water which little by little had hollowed it. Pluto and not Neptune had bored it with his own hand, and on the wall traces of an eruptive work could be distinguished, which all the washing of the water had not been able totally to efface.

The settlers descended very slowly. They could not but feel a certain awe, in this venturing into these unknown depths, for the first time visited by human beings. They did not speak, but they thought; and the thought came to more than one, that some polypus or other gigantic cephalopod might inhabit the interior cavities, which were in
communication with the sea. However, Top kept at the head of the little band, and they could rely on the sagacity of
the dog, who would not fail to give the alarm if there was any need for it.

After having descended about a hundred feet, following a winding road, Harding who was walking on before,
stopped, and his companions came up with him. The place where they had halted was wider, so as to form a cavern
of moderate dimensions. Drops of water fell from the vault, but that did not prove that they oozed through the rock.
They were simply the last traces left by the torrent which had so long thundered through this cavity, and the air there
was pure though slightly damp, but producing no mephitic exhalation.

"Well, my dear Cyrus," said Gideon Spilett, "here is a very secure retreat, well hid in the depths of the rock, but
it is, however, uninhabitable."

"Why uninhabitable?" asked the sailor.

"Because it is too small and too dark."

"Couldn't we enlarge it, hollow it out, make openings to let in light and air?" replied Pencroft, who now thought
nothing impossible.

"Let us go on with our exploration," said Cyrus Harding. "Perhaps lower down, nature will have spared us this
labor."

"We have only gone a third of the way," observed Herbert.

"Nearly a third," replied Harding, "for we have descended a hundred feet from the opening, and it is not
impossible that a hundred feet farther down--"

"Where is Top?" asked Neb, interrupting his master.

They searched the cavern, but the dog was not there.

"Most likely he has gone on," said Pencroft.

"Let us join him," replied Harding.

The descent was continued. The engineer carefully observed all the deviations of the passage, and
notwithstanding so many detours, he could easily have given an account of its general direction, which went towards
the sea.

The settlers had gone some fifty feet farther, when their attention was attracted by distant sounds which came up
from the depths. They stopped and listened. These sounds, carried through the passage as through an acoustic tube,
came clearly to the ear.

"That is Top barking!" cried Herbert.

"Yes," replied Pencroft, "and our brave dog is barking furiously!"

"We have our iron-tipped spears," said Cyrus Harding. "Keep on your guard, and forward!"

"It is becoming more and more interesting," murmured Gideon Spilett in the sailor's ear, who nodded. Harding
and his companions rushed to the help of their dog. Top's barking became more and more perceptible, and it seemed
strangely fierce. Was he engaged in a struggle with some animal whose retreat he had disturbed? Without thinking
of the danger to which they might be exposed, the explorers were now impelled by an irresistible curiosity, and in a
few minutes, sixteen feet lower they rejoined Top.

There the passage ended in a vast and magnificent cavern.

Top was running backwards and forwards, barking furiously. Pencroft and Neb, waving their torches, threw the
light into every crevice; and at the same time, Harding, Gideon Spilett, and Herbert, their spears raised, were ready
for any emergency which might arise. The enormous cavern was empty. The settlers explored it in every direction.
There was nothing there, not an animal, not a human being; and yet Top continued to bark. Neither caresses nor
threats could make him be silent.

"There must be a place somewhere, by which the waters of the lake reached the sea," said the engineer.

"Of course," replied Pencroft, "and we must take care not to tumble into a hole."

"Go, Top, go!" cried Harding.

The dog, excited by his master's words, ran towards the extremity of the cavern, and there redoubled his barking.
They followed him, and by the light of the torches, perceived the mouth of a regular well in the granite. It was by
this that the water escaped; and this time it was not an oblique and practicable passage, but a perpendicular well, into
which it was impossible to venture.

The torches were held over the opening: nothing could be seen. Harding took a lighted branch, and threw it into
the abyss. The blazing resin, whose illuminating power increased still more by the rapidity of its fall, lighted up the
interior of the well, but yet nothing appeared. The flame then went out with a slight hiss, which showed that it had
reached the water, that is to say, the level of the sea.

The engineer, calculating the time employed in its fall, was able to calculate the depth of the well, which was
found to be about ninety feet.

The floor of the cavern must thus be situated ninety feet above the level of the sea.
"Here is our dwelling," said Cyrus Harding.

"But it was occupied by some creature," replied Gideon Spilett, whose curiosity was not yet satisfied.

"Well, the creature, amphibious or otherwise, has made off through this opening," replied the engineer, "and has left the place for us."

"Never mind," added the sailor, "I should like very much to be Top just for a quarter of an hour, for he doesn't bark for nothing!"

Cyrus Harding looked at his dog, and those of his companions who were near him might have heard him murmur these words,--

"Yes, I believe that Top knows more than we do about a great many things."

However, the wishes of the settlers were for the most part satisfied. Chance, aided by the marvelous sagacity of their leader, had done them great service. They had now at their disposal a vast cavern, the size of which could not be properly calculated by the feeble light of their torches, but it would certainly be easy to divide it into rooms, by means of brick partitions, or to use it, if not as a house, at least as a spacious apartment. The water which had left it could not return. The place was free.

Two difficulties remained; firstly, the possibility of lighting this excavation in the midst of solid rock; secondly, the necessity of rendering the means of access more easy. It was useless to think of lighting it from above, because of the enormous thickness of the granite which composed the ceiling; but perhaps the outer wall next the sea might be pierced. Cyrus Harding, during the descent, had roughly calculated its obliqueness, and consequently the length of the passage, and was therefore led to believe that the outer wall could not be very thick. If light was thus obtained, so would a means of access, for it would be as easy to pierce a door as windows, and to establish an exterior ladder.

Harding made known his ideas to his companions.

"Then, captain, let us set to work!" replied Pencroft. "I have my pickaxe, and I shall soon make my way through this wall. Where shall I strike?"

"Here," replied the engineer, showing the sturdy sailor a considerable recess in the side, which would much diminish the thickness.

Pencroft attacked the granite, and for half an hour, by the light of the torches, he made the splinters fly around him. Neb relieved him, then Spilett took Neb's place.

This work had lasted two hours, and they began to fear that at this spot the wall would not yield to the pickaxe, when at a last blow given by Gideon Spilett, the instrument, passing through the rock, fell outside.

"Hurrah! hurrah!" cried Pencroft.

The wall only measured there three feet in thickness.

Harding applied his eye to the aperture, which overlooked the ground from a height of eighty feet. Before him it did not measure more than thirty feet in height and breadth, but on the right it was enormous, and its vaulted roof rose to a height of more than eighty feet.

In some places granite pillars, irregularly disposed, supported the vaulted roof, as those in the nave of a cathedral, here forming lateral piers, there elliptical arches, adorned with pointed moldings, losing themselves in dark bays, amid the fantastic arches of which glimpses could be caught in the shade, covered with a profusion of projections formed like so many pendants. This cavern was a picturesque mixture of all the styles of Byzantine, Roman, or Gothic architecture ever produced by the hand of man. And yet this was only the work of nature. She alone had hollowed this fairy Alhambra in a mass of granite.

The settlers were overwhelmed with admiration. Where they had only expected to find a narrow cavity, they had found a sort of marvelous palace, and Neb had taken off his hat, as if he had been transported into a temple!

Cries of admiration issued from every mouth. Hurrahs resounded, and the echo was repeated again and again till it died away in the dark naves.

"Ah, my friends!" exclaimed Cyrus Harding, "when we have lighted the interior of this place, and have arranged our rooms and storehouses in the left part, we shall still have this splendid cavern, which we will make our study and our museum!"

"And we will call it?--" asked Herbert.

"Granite House," replied Harding; a name which his companions again saluted with a cheer.

The torches were now almost consumed, and as they were obliged to return by the passage to reach the summit of the plateau, it was decided to put off the work necessary for the arrangement of their new dwelling till the next day.

Before departing, Cyrus Harding leaned once more over the dark well, which descended perpendicularly to the level of the sea. He listened attentively. No noise was heard, not even that of the water, which the undulations of the
surge must sometimes agitate in its depths. A flaming branch was again thrown in. The sides of the well were lighted up for an instant, but as at the first time, nothing suspicious was seen.

If some marine monster had been surprised unawares by the retreat of the water, he would by this time have regained the sea by the subterranean passage, before the new opening had been offered to him.

Meanwhile, the engineer was standing motionless, his eyes fixed on the gulf, without uttering a word.

The sailor approached him, and touching his arm, "Captain!" said he.

"What do you want, my friend?" asked the engineer, as if he had returned from the land of dreams.

"The torches will soon go out."

"Forward!" replied Cyrus Harding.

The little band left the cavern and began to ascend through the dark passage. Top closed the rear, still growling every now and then. The ascent was painful enough. The settlers rested a few minutes in the upper grotto, which made a sort of landing-place halfway up the long granite staircase. Then they began to climb again.

Soon fresher air was felt. The drops of water, dried by evaporation, no longer sparkled on the walls. The flaring torches began to grow dim. The one which Neb carried went out, and if they did not wish to find their way in the dark, they must hasten.

This was done, and a little before four o'clock, at the moment when the sailor's torch went out in its turn, Cyrus Harding and his companions passed out of the passage.

Chapter 19

The next day, the 22nd of May, the arrangement of their new dwelling was commenced. In fact, the settlers longed to exchange the insufficient shelter of the Chimneys for this large and healthy retreat, in the midst of solid rock, and sheltered from the water both of the sea and sky. Their former dwelling was not, however, to be entirely abandoned, for the engineer intended to make a manufactory of it for important works. Cyrus Harding's first care was to find out the position of the front of Granite House from the outside. He went to the beach, and as the pickaxe when it escaped from the hands of the reporter must have fallen perpendicularly to the foot of the cliff, the finding it would be sufficient to show the place where the hole had been pierced in the granite.

The pickaxe was easily found, and the hole could be seen in a perpendicular line above the spot where it was stuck in the sand. Some rock pigeons were already flying in and out of the narrow opening; they evidently thought that Granite House had been discovered on purpose for them. It was the engineer's intention to divide the right portion of the cavern into several rooms, preceded by an entrance passage, and to light it by means of five windows and a door, pierced in the front. Pencroft was much pleased with the five windows, but he could not understand the use of the door, since the passage offered a natural staircase, through which it would always be easy to enter Granite House.

"My friend," replied Harding, "if it is easy for us to reach our dwelling by this passage, it will be equally easy for others besides us. I mean, on the contrary, to block up that opening, to seal it hermetically, and, if it is necessary, to completely hide the entrance by making a dam, and thus causing the water of the lake to rise."

"And how shall we get in?" asked the sailor.

"By an outside ladder," replied Cyrus Harding, "a rope ladder, which, once drawn up, will render access to our dwelling impossible."

"But why so many precautions?" asked Pencroft. "As yet we have seen no dangerous animals. As to our island being inhabited by natives, I don't believe it!"

"Are you quite sure of that, Pencroft?" asked the engineer, looking at the sailor.

"Of course we shall not be quite sure, till we have explored it in every direction," replied Pencroft.

"Yes," said Harding, "for we know only a small portion of it as yet. But at any rate, if we have no enemies in the interior, they may come from the exterior, for parts of the Pacific are very dangerous. We must be provided against every contingency."

Cyrus Harding spoke wisely; and without making any further objection, Pencroft prepared to execute his orders.

The front of Granite House was then to be lighted by five windows and a door, besides a large bay window and some smaller oval ones, which would admit plenty of light to enter into the marvelous nave which was to be their chief room. This facade, situated at a height of eighty feet above the ground, was exposed to the east, and the rising sun saluted it with its first rays. It was found to be just at that part of the cliff which was between the projection at the mouth of the Mercy and a perpendicular line traced above the heap of rocks which formed the Chimneys. Thus the winds from the northeast would only strike it obliquely, for it was protected by the projection. Besides, until the window-frames were made, the engineer meant to close the openings with thick shutters, which would prevent either wind or rain from entering, and which could be concealed in need.
The first work was to make the openings. This would have taken too long with the pickaxe alone, and it is known that Harding was an ingenious man. He had still a quantity of nitro-glycerine at his disposal, and he employed it usefully. By means of this explosive substance the rock was broken open at the very places chosen by the engineer. Then, with the pickaxe and spade, the windows and doors were properly shaped, the jagged edges were smoothed off, and a few days after the beginning of the work, Granite House was abundantly lighted by the rising sun, whose rays penetrated into its most secret recesses. Following the plan proposed by Cyrus Harding, the space was to be divided into five compartments looking out on the sea; to the right, an entry with a door, which would meet the ladder; then a kitchen, thirty feet long; a dining-room, measuring forty feet; a sleeping-room, of equal size; and lastly, a "Visitor's room," petitioned for by Pencroft, and which was next to the great hall. These rooms, or rather this suite of rooms, would not occupy all the depth of the cave. There would be also a corridor and a storehouse, in which their tools, provisions, and stores would be kept. All the productions of the island, the flora as well as the fauna, were to be there in the best possible state of preservation, and completely sheltered from the damp. There was no want of space, so that each object could be methodically arranged. Besides, the colonists had still at their disposal the little grotto above the great cavern, which was like the garret of the new dwelling.

This plan settled, it had only to be put into execution. The miners became brickmakers again, then the bricks were brought to the foot of Granite House. Till then, Harding and his companions had only entered the cavern by the long passage. This mode of communication obliged them first to climb Prospect Heights, making a detour by the river's bank, and then to descend two hundred feet through the passage, having to climb as far when they wished to return to the plateau. This was a great loss of time, and was also very fatiguing. Cyrus Harding, therefore, resolved to proceed without any further delay to the fabrication of a strong rope ladder, which, once raised, would render Granite House completely inaccessible.

This ladder was manufactured with extreme care, and its uprights, formed of the twisted fibers of a species of cane, had the strength of a thick cable. As to the rounds, they were made of a sort of red cedar, with light, strong branches; and this apparatus was wrought by the masterly hand of Pencroft.

Other ropes were made with vegetable fibers, and a sort of crane with a tackle was fixed at the door. In this way bricks could easily be raised into Granite House. The transport of the materials being thus simplified, the arrangement of the interior could begin immediately. There was no want of lime, and some thousands of bricks were there ready to be used. The framework of the partitions was soon raised, very roughly at first, and in a short time, the cave was divided into rooms and storehouses, according to the plan agreed upon.

These different works progressed rapidly under the direction of the engineer, who himself handled the hammer and the trowel. No labor came amiss to Cyrus Harding, who thus set an example to his intelligent and zealous companions. They worked with confidence, even gaily, Pencroft always having some joke to crack, sometimes carpenter, sometimes rope-maker, sometimes mason, while he communicated his good humor to all the members of their little world. His faith in the engineer was complete; nothing could disturb it. He believed him capable of undertaking anything and succeeding in everything. The question of boots and clothes—assuredly a serious question,—that of light during the winter months, utilizing the fertile parts of the island, transforming the wild flora into cultivated flora, it all appeared easy to him; Cyrus Harding helping, everything would be done in time. He dreamed of canals facilitating the transport of the riches of the ground; workings of quarries and mines; machines for every industrial manufacture; railroads; yes, railroads! of which a network would certainly one day cover Lincoln Island.

The engineer let Pencroft talk. He did not put down the aspirations of this brave heart. He knew how communicable confidence is; he even smiled to hear him speak, and said nothing of the uneasiness for the future which he felt. In fact, in that part of the Pacific, out of the course of vessels, it was to be feared that no help would ever come to them. It was on themselves, on themselves alone, that the settlers must depend, for the distance of Lincoln Island from all other land was such, that to hazard themselves in a boat, of a necessarily inferior construction, would be a serious and perilous thing.

"But," as the sailor said, "they quite took the wind out of the sails of the Robinsons, for whom everything was done by a miracle."

In fact, they were energetic; an energetic man will succeed where an indolent one would vegetate and inevitably perish.

Herbert distinguished himself in these works. He was intelligent and active; understanding quickly, he performed well; and Cyrus Harding became more and more attached to the boy. Herbert had a lively and reverent love for the engineer. Pencroft saw the close sympathy which existed between the two, but he was not in the least jealous. Neb was Neb: he was what he would be always, courage, zeal, devotion, self-denial personified. He had the same faith in his master that Pencroft had, but he showed it less vehemently. When the sailor was enthusiastic, Neb always looked as if he would say, "Nothing could be more natural." Pencroft and he were great friends.
As to Gideon Spilett, he took part in the common work, and was not less skilful in it than his companions, which always rather astonished the sailor. A "journalist," clever, not only in understanding, but in performing everything.

The ladder was finally fixed on the 28th of May. There were not less than a hundred rounds in this perpendicular height of eighty feet. Harding had been able, fortunately, to divide it in two parts, profiting by an overhanging of the cliff which made a projection forty feet above the ground. This projection, carefully leveled by the pickaxe, made a sort of platform, to which they fixed the first ladder, of which the oscillation was thus diminished one-half, and a rope permitted it to be raised to the level of Granite House. As to the second ladder, it was secured both at its lower part, which rested on the projection, and at its upper end, which was fastened to the door. In short the ascent had been made much easier. Besides, Cyrus Harding hoped later to establish an hydraulic apparatus, which would avoid all fatigue and loss of time, for the inhabitants of Granite House.

The settlers soon became used to the use of this ladder. They were light and active, and Pencroft, as a sailor, accustomed to run up the masts and shrouds, was able to give them lessons. But it was also necessary to give them to Top. The poor dog, with his four paws, was not formed for this sort of exercise. But Pencroft was such a zealous master, that Top ended by properly performing his ascents, and soon mounted the ladder as readily as his brethren in the circus. It need not be said that the sailor was proud of his pupil. However, more than once Pencroft hoisted him on his back, which Top never complained of.

It must be mentioned here, that during these works, which were actively conducted, for the bad season was approaching, the alimentary question was not neglected. Every day, the reporter and Herbert, who had been voted purveyors to the colony, devoted some hours to the chase. As yet, they only hunted in Jacamar Wood, on the left of the river, because, for want of a bridge or boat, the Mercy had not yet been crossed. All the immense woods, to which the name of the Forests of the Far West had been given, were not explored. They reserved this important excursion for the first fine days of the next spring. But Jacamar Wood was full of game; kangaroos and boars abounded, and the hunters iron-tipped spears and bows and arrows did wonders. Besides, Herbert discovered towards the southwest point of the lagoon a natural Warren, a slightly damp meadow, covered with willows and aromatic herbs which scented the air, such as thyme, basil, savory, all the sweet-scented species of the labiated plants, which the rabbits appeared to be particularly fond of.

On the reporter observing that since the table was spread for the rabbits, it was strange that the rabbits themselves should be wanting, the two sportsmen carefully explored the Warren. At any rate, it produced an abundance of useful plants, and a naturalist would have had a good opportunity of studying many specimens of the vegetable kingdom. Herbert gathered several shoots of the basil, rosemary, balm, betony, etc., which possess different medicinal properties, some pectoral, astringent, febrifuge, others anti-spasmodic, or anti-rheumatic. When, afterwards, Pencroft asked the use of this collection of herbs,--

"For medicine," replied the lad, "to treat us when we are ill."

"Why should we be ill, since there are no doctors in the island?" asked Pencroft quite seriously.

There was no reply to be made to that, but the lad went on with his collection all the same, and it was well received at Granite House. Besides these medicinal herbs, he added a plant known in North America as "Oswego tea," which made an excellent beverage.

At last, by searching thoroughly, the hunters arrived at the real site of the Warren. There the ground was perforated like a sieve.

"Here are the burrows!" cried Herbert.

"Yes," replied the reporter, "so I see."

"But are they inhabited?"

"That is the question."

This was soon answered. Almost immediately, hundreds of little animals, similar to rabbits, fled in every direction, with such rapidity that even Top could not overtake them. Hunters and dog ran in vain; these rodents escaped them easily. But the reporter resolved not to leave the place, until he had captured at least half-a-dozen of the quadrupeds. He wished to stock their larder first, and domesticate those which they might take later. It would not have been difficult to do this, with a few snares stretched at the openings of the burrows. But at this moment they had neither snares, nor anything to make them of. They must, therefore, be satisfied with visiting each hole, and rummaging in it with a stick, hoping by dint of patience to do what could not be done in any other way.

At last, after half an hour, four rodents were taken in their holes. They were similar to their European brethren, and are commonly known by the name of American rabbits.

This produce of the chase was brought back to Granite House, and figured at the evening repast. The tenants of the Warren were not at all to be despised, for they were delicious. It was a valuable resource of the colony, and it appeared to be inexhaustible.

On the 31st of May the partitions were finished. The rooms had now only to be furnished, and this would be
work for the long winter days. A chimney was established in the first room, which served as a kitchen. The pipe destined to conduct the smoke outside gave some trouble to these amateur bricklayers. It appeared simplest to Harding to make it of brick clay; as creating an outlet for it to the upper plateau was not to be thought of, a hole was pierced in the granite above the window of the kitchen, and the pipe met it like that of an iron stove. Perhaps the winds which blew directly against the facade would make the chimney smoke, but these winds were rare, and besides, Master Neb, the cook, was not so very particular about that.

When these interior arrangements were finished, the engineer occupied himself in blocking up the outlet by the lake, so as to prevent any access by that way. Masses of rock were rolled to the entrance and strongly cemented together. Cyrus Harding did not yet realize his plan of drowning this opening under the waters of the lake, by restoring them to their former level by means of a dam. He contented himself with hiding the obstruction with grass and shrubs, which were planted in the interstices of the rocks, and which next spring would sprout thickly. However, he used the waterfall so as to lead a small stream of fresh water to the new dwelling. A little trench, made below their level, produced this result; and this derivation from a pure and inexhaustible source yielded twenty-five or thirty gallons a day. There would never be any want of water at Granite House. At last all was finished, and it was time, for the bad season was near. Thick shutters closed the windows of the facade, until the engineer had time to make glass.

Gideon Spilett had very artistically arranged on the rocky projections around the windows plants of different kinds, as well as long streaming grass, so that the openings were picturesquely framed in green, which had a pleasing effect.

The inhabitants of this solid, healthy, and secure dwelling, could not but be charmed with their work. The view from the windows extended over a boundless horizon, which was closed by the two Mandible Capes on the north, and Claw Cape on the south. All Union Bay was spread before them. Yes, our brave settlers had reason to be satisfied, and Pencroft was lavish in his praise of what he humorously called, "his apartments on the fifth floor above the ground!"

Chapter 20

The winter season set in with the month of June, which corresponds with the month of December in the Northern Hemisphere. It began with showers and squalls, which succeeded each other without intermission. The tenants of Granite House could appreciate the advantages of a dwelling which sheltered them from the inclement weather. The chimneys would have been quite insufficient to protect them against the rigor of winter, and it was to be feared that the high tides would make another irruption. Cyrus Harding had taken precautions against this contingency, so as to preserve as much as possible the forge and furnace which were established there.

During the whole of the month of June the time was employed in different occupations, which excluded neither hunting nor fishing, the larder being, therefore, abundantly supplied. Pencroft, so soon as he had leisure, proposed to set some traps, from which he expected great results. He soon made some snares with creepers, by the aid of which the warren henceforth every day furnished its quota of rodents. Neb employed nearly all his time in salting or smoking meat, which insured their always having plenty of provisions. The question of clothes was now seriously discussed, the settlers having no other garments than those they wore when the balloon threw them on the island. These clothes were warm and good; they had taken great care of them as well as of their linen, and they were perfectly whole, but they would soon need to be replaced. Moreover, if the winter was severe, the settlers would suffer greatly from cold.

On this subject the ingenuity of Harding was at fault. They must provide for their most pressing wants, settle their dwelling, and lay in a store of food; thus the cold might come upon them before the question of clothes had been settled. They must therefore make up their minds to pass this first winter without additional clothing. When the fine season came round again, they would regularly hunt those musmons which had been seen on the expedition to Mount Franklin, and the wool once collected, the engineer would know how to make it into strong warm stuff.... How? He would consider.

"Well, we are free to roast ourselves at Granite House!" said Pencroft. "There are heaps of fuel, and no reason for sparing it."

"Besides," added Gideon Spilett, "Lincoln Island is not situated under a very high latitude, and probably the winters here are not severe. Did you not say, Cyrus, that this thirty-fifth parallel corresponded to that of Spain in the other hemisphere?"

"Doubtless," replied the engineer, "but some winters in Spain are very cold! No want of snow and ice; and perhaps Lincoln Island is just as rigorously tried. However, it is an island, and as such, I hope that the temperature will be more moderate."
"Why, captain?" asked Herbert.

"Because the sea, my boy, may be considered as an immense reservoir, in which is stored the heat of the summer. When winter comes, it restores this heat, which insures for the regions near the ocean a medium temperature, less high in summer, but less low in winter."

"We shall prove that," replied Pencroft. "But I don't want to bother myself about whether it will be cold or not. One thing is certain, that is that the days are already short, and the evenings long. Suppose we talk about the question of light."

"Nothing is easier," replied Harding.

"To talk about?" asked the sailor.

"To settle."

"And when shall we begin?"

"To-morrow, by having a seal hunt."

"To make candles?"

"Yes."

Such was the engineer's project; and it was quite feasible, since he had lime and sulphuric acid, while the amphibians of the islet would furnish the fat necessary for the manufacture.

They were now at the 4th of June. It was Whit Sunday and they agreed to observe this feast. All work was suspended, and prayers were offered to Heaven. But these prayers were now thanksgivings. The settlers in Lincoln Island were no longer the miserable castaways thrown on the islet. They asked for nothing more— they gave thanks.

The next day, the 5th of June, in rather uncertain weather, they set out for the islet. They had to profit by the low tide to cross the Channel, and it was agreed that they would construct, for this purpose, as well as they could, a boat which would render communication so much easier, and would also permit them to ascend the Mercy, at the time of their grand exploration of the southwest of the island, which was put off till the first fine days.

The seals were numerous, and the hunters, armed with their iron-tipped spears, easily killed half-a-dozen. Neb and Pencroft skinned them, and only brought back to Granite House their fat and skin, this skin being intended for the manufacture of boots.

The result of the hunt was this: nearly three hundred pounds of fat, all to be employed in the fabrication of candles.

The operation was extremely simple, and if it did not yield absolutely perfect results, they were at least very useful. Cyrus Harding would only have had at his disposal sulphuric acid, but by heating this acid with the neutral fatty bodies he could separate the glycerine; then from this new combination, he easily separated the olein, the margarin, and the stearin, by employing boiling water. But to simplify the operation, he preferred to saponify the fat by means of lime. By this he obtained a calcareous soap, easy to decompose by sulphuric acid, which precipitated the lime into the state of sulphate, and liberated the fatty acids.

From these three acids—oleic, margaric, and stearic—the first, being liquid, was driven out by a sufficient pressure. As to the two others, they formed the very substance of which the candles were to be molded.

This operation did not last more than four and twenty hours. The wicks, after several trials, were made of vegetable fibers, and dipped in the liquefied substance, they formed regular stearic candles, molded by the hand, which only wanted whiteness and polish. They would not doubtless have the advantages of the wicks which are impregnated with boracic acid, and which vitrify as they burn and are entirely consumed, but Cyrus Harding having manufactured a beautiful pair of snuffers, these candles would be greatly appreciated during the long evenings in Granite House.

During this month there was no want of work in the interior of their new dwelling. The joiners had plenty to do. They improved their tools, which were very rough, and added others also.

Scissors were made among other things, and the settlers were at last able to cut their hair, and also to shave, or at least trim their beards. Herbert had none, Neb but little, but their companions were bristling in a way which justified the making of the said scissors.

The manufacture of a hand-saw cost infinite trouble, but at last an instrument was obtained which, when vigorously handled, could divide the ligneous fibers of the wood. They then made tables, seats, cupboards, to furnish the principal rooms, and bedsteads, of which all the bedding consisted of grass mattresses. The kitchen, with its shelves, on which rested the cooking utensils, its brick stove, looked very well, and Neb worked away there as earnestly as if he was in a chemist's laboratory.

But the joiners had soon to be replaced by carpenters. In fact, the waterfall created by the explosion rendered the construction of two bridges necessary, one on Prospect Heights, the other on the shore. Now the plateau and the shore were transversely divided by a watercourse, which had to be crossed to reach the northern part of the island. To avoid it the colonists had been obliged to make a considerable detour, by climbing up to the source of the Red
Creek. The simplest thing was to establish on the plateau, and on the shore, two bridges from twenty to five and twenty feet in length. All the carpenter's work that was needed was to clear some trees of their branches: this was a business of some days. Directly the bridges were established, Neb and Pencroft profited by them to go to the oyster-bed which had been discovered near the downs. They dragged with them a sort of rough cart, which replaced the former inconvenient hurdle, and brought back some thousands of oysters, which soon increased among the rocks and formed a bed at the mouth of the Mercy. These molluscs were of excellent quality, and the colonists consumed some daily.

It has been seen that Lincoln Island, although its inhabitants had as yet only explored a small portion of it, already contributed to almost all their wants. It was probable that if they hunted into its most secret recesses, in all the wooded part between the Mercy and Reptile Point, they would find new treasures.

The settlers in Lincoln Island had still one privation. There was no want of meat, nor of vegetable products; those ligneous roots which they had found, when subjected to fermentation, gave them an acid drink, which was preferable to cold water; they also made sugar, without canes or beet-roots, by collecting the liquor which distils from the "acer saccharinum," a son of maple-tree, which flourishes in all the temperate zones, and of which the island possessed a great number; they made a very agreeable tea by employing the herbs brought from the warren; lastly, they had an abundance of salt, the only mineral which is used in food... but bread was wanting.

Perhaps in time the settlers could replace this want by some equivalent, it was possible that they might find the sago or the breadfruit tree among the forests of the south, but they had not as yet met with these precious trees. However, Providence came directly to their aid, in an infinitesimal proportion it is true, but Cyrus Harding, with all his intelligence, all his ingenuity, would never have been able to produce that which, by the greatest chance, Herbert one day found in the lining of his waistcoat, which he was occupied in setting to rights.

On this day, as it was raining in torrents, the settlers were assembled in the great hall in Granite House, when the lad cried out all at once,--

"Look here, captain--A grain of corn!"

And he showed his companions a grain--a single grain--which from a hole in his pocket had got into the lining of his waistcoat.

The presence of this grain was explained by the fact that Herbert, when at Richmond, used to feed some pigeons, of which Pencroft had made him a present.

"A grain of corn?" said the engineer quickly.

"Yes, captain; but one, only one!"

"Well, my boy," said Pencroft, laughing, "we're getting on capitally, upon my word! What shall we make with one grain of corn?"

"We will make bread of it," replied Cyrus Harding.

"Bread, cakes, tarts!" replied the sailor. "Come, the bread that this grain of corn will make won't choke us very soon!"

Herbert, not attaching much importance to his discovery, was going to throw away the grain in question; but Harding took it, examined it, found that it was in good condition, and looking the sailor full in the face--"Pencroft," he asked quietly, "do you know how many ears one grain of corn can produce?"

"One, I suppose!" replied the sailor, surprised at the question.

"Ten, Pencroft! And do you know how many grains one ear bears?"

"No, upon my word."

"About eighty!" said Cyrus Harding. "Then, if we plant this grain, at the first crop we shall reap eight hundred grains which at the second will produce six hundred and forty thousand; at the third, five hundred and twelve millions; at the fourth, more than four hundred thousands of millions! There is the proportion."

Harding's companions listened without answering. These numbers astonished them. They were exact, however.

"Yes, my friends," continued the engineer, "such are the arithmetical progressions of prolific nature; and yet what is this multiplication of the grain of corn, of which the ear only bears eight hundred grains, compared to the poppy-plant, which bears thirty-two thousand seeds; to the tobacco-plant, which produces three hundred and sixty thousand? In a few years, without the numerous causes of destruction, which arrests their fecundity, these plants would overrun the earth."

But the engineer had not finished his lecture.

"And now, Pencroft," he continued, "do you know how many bushels four hundred thousand millions of grains would make?"

"No," replied the sailor; "but what I do know is, that I am nothing better than a fool!"

"Well, they would make more than three millions, at a hundred and thirty thousand a bushel, Pencroft."

"Three millions!" cried Pencroft.
"Three millions."
"In four years?"
"In four years," replied Cyrus Harding, "and even in two years, if, as I hope, in this latitude we can obtain two
crops a year."
At that, according to his usual custom, Pencroft could not reply otherwise than by a tremendous hurrah.
"So, Herbert," added the engineer, "you have made a discovery of great importance to us. Everything, my
friends, everything can serve us in the condition in which we are. Do not forget that, I beg of you."
"No, captain, no, we shan't forget it," replied Pencroft; "and if ever I find one of those tobacco-seeds, which
multiply by three hundred and sixty thousand, I assure you I won't throw it away! And now, what must we do?"
"We must plant this grain," replied Herbert.
"Yes," added Gideon Spilett, "and with every possible care, for it bears in itself our future harvests."
"Provided it grows!" cried the sailor.
"It will grow," replied Cyrus Harding.
This was the 20th of June. The time was then propitious for sowing this single precious grain of corn. It was first
proposed to plant it in a pot, but upon reflection it was decided to leave it to nature, and confide it to the earth. This
was done that very day, and it is needless to add, that every precaution was taken that the experiment might succeed.
The weather having cleared, the settlers climbed the height above Granite House. There, on the plateau, they
chose a spot, well sheltered from the wind, and exposed to all the heat of the midday sun. The place was cleared,
carefully weeded, and searched for insects and worms; then a bed of good earth, improved with a little lime, was
made; it was surrounded by a railing; and the grain was buried in the damp earth.
Did it not seem as if the settlers were laying the first stone of some edifice? It recalled to Pencroft the day on
which he lighted his only match, and all the anxiety of the operation. But this time the thing was more serious. In
fact, the castaways would have been always able to procure fire, in some mode or other, but no human power could
supply another grain of corn, if unfortunately this should be lost!

Chapter 21
From this time Pencroft did not let a single day pass without going to visit what he gravely called his "corn-
field." And woe to the insects which dared to venture there! No mercy was shown them.
Towards the end of the month of June, after incessant rain, the weather became decidedly colder, and on the 29th
a Fahrenheit thermometer would certainly have announced only twenty degrees above zero, that is considerably
below the freezing-point. The next day, the 30th of June, the day which corresponds to the 31st of December in the
northern year, was a Friday. Neb remarked that the year finished on a bad day, but Pencroft replied that naturally the
next would begin on a good one, which was better.
At any rate it commenced by very severe cold. Ice accumulated at the mouth of the Mercy, and it was not long
before the whole expanse of the lake was frozen.
The settlers had frequently been obliged to renew their store of wood. Pencroft also had wisely not waited till the
river was frozen, but had brought enormous rafts of wood to their destination. The current was an indefatigable
moving power, and it was employed in conveying the floating wood to the moment when the frost enchainet it. To
the fuel which was so abundantly supplied by the forest, they added several cartloads of coal, which had to be
brought from the foot of the spurs of Mount Franklin. The powerful heat of the coal was greatly appreciated in the
low temperature, which on the 4th of July fell to eight degrees of Fahrenheit, that is, thirteen degrees below zero. A
second fireplace had been established in the dining-room, where they all worked together at their different
avocations. During this period of cold, Cyrus Harding had great cause to congratulate himself on having brought to
Granite House the little stream of water from Lake Grant. Taken below the frozen surface, and conducted through
the passage, it preserved its fluidity, and arrived at an interior reservoir which had been hollowed out at the back part
of the storeroom, while the overflow ran through the well to the sea.
About this time, the weather being extremely dry, the colonists, clothed as warmly as possible, resolved to
devote a day to the exploration of that part of the island between the Mercy and Claw Cape. It was a wide extent of
marshy land, and they would probably find good sport, for water-birds ought to swarm there.
They reckoned that it would be about eight or nine miles to go there, and as much to return, so that the whole of
the day would be occupied. As an unknown part of the island was about to be explored, the whole colony took part
in the expedition. Accordingly, on the 5th of July, at six o'clock in the morning, when day had scarcely broken,
Cyrus Harding, Gideon Spilett, Herbert, Neb, and Pencroft, armed with spears, snares, bows and arrows, and
provided with provisions, left Granite House, preceded by Top, who bounded before them.
Their shortest way was to cross the Mercy on the ice, which then covered it.
"But," as the engineer justly observed, "that could not take the place of a regular bridge!" So, the construction of a regular bridge was noted in the list of future works.

It was the first time that the settlers had set foot on the right bank of the Mercy, and ventured into the midst of those gigantic and superb coniferae now sprinkled over with snow.

But they had not gone half a mile when from a thicket a whole family of quadrupeds, who had made a home there, disturbed by Top, rushed forth into the open country.

"Ah! I should say those are foxes!" cried Herbert, when he saw the troop rapidly decamping.

They were foxes, but of a very large size, who uttered a sort of barking, at which Top seemed to be very much astonished, for he stopped short in the chase, and gave the swift animals time to disappear.

The dog had reason to be surprised, as he did not know Natural History. But, by their barking, these foxes, with reddish-gray hair, black tails terminating in a white tuft, had betrayed their origin. So Herbert was able, without hesitating, to give them their real name of "Arctic foxes." They are frequently met with in Chile, in the Falkland Islands, and in all parts of America traversed by the thirtieth and fortieth parallels. Herbert much regretted that Top had not been able to catch one of these carnivora.

"Are they good to eat?" asked Pencroft, who only regarded the representatives of the fauna in the island from one special point of view.

"No," replied Herbert; "but zoologists have not yet found out if the eye of these foxes is diurnal or nocturnal, or whether it is correct to class them in the genus dog, properly so called."

Harding could not help smiling on hearing the lad's reflection, which showed a thoughtful mind. As to the sailor, from the moment when he found that the foxes were not classed in the genus eatsable, they were nothing to him. However, when a poultry-yard was established at Granite House, he observed that it would be best to take some precautions against a probable visit from these four-legged plunderers, and no one disputed this.

After having turned the point, the settlers saw a long beach washed by the open sea. It was then eight o'clock in the morning. The sky was very clear, as it often is after prolonged cold; but warmed by their walk, neither Harding nor his companions felt the sharpness of the atmosphere too severely. Besides there was no wind, which made it much more bearable. A brilliant sun, but without any calorific action, was just issuing from the ocean. The sea was as tranquil and blue as that of a Mediterranean gulf, when the sky is clear. Claw Cape, bent in the form of a yataghan, tapered away nearly four miles to the southeast. To the left the edge of the marsh was abruptly ended by a little point. Certainly, in this part of Union Bay, which nothing sheltered from the open sea, not even a sandbank, ships beaten by the east winds would have found no shelter. They perceived by the tranquility of the sea, in which no shallows troubled the waters, by its uniform color, which was stained by no yellow shades, by the absence of even a reef, that the coast was steep and that the ocean there covered a deep abyss. Behind in the west, but at a distance of four miles, rose the first trees of the forests of the Far West. They might have believed themselves to be on the desolate coast of some island in the Antarctic regions which the ice had invaded. The colonists halted at this place for breakfast. A fire of brushwood and dried seaweed was lighted, and Neb prepared the breakfast of cold meat, to which he added some cups of Oswego tea.

While eating they looked around them. This part of Lincoln Island was very sterile, and contrasted with all the western part. The reporter was thus led to observe that if chance had thrown them at first on the shore, they would have had but a deplorable idea of their future domain.

"I believe that we should not have been able to reach it," replied the engineer, "for the sea is deep, and there is not a rock on which we could have taken refuge. Before Granite House, at least, there were sandbanks, an islet, which multiplied our chances of safety. Here, nothing but the depths!"

"It is singular enough," remarked Spilett, "that this comparatively small island should present such varied ground. This diversity of aspect, logically only belongs to continents of a certain extent. One would really say, that the western part of Lincoln Island, so rich and so fertile, is washed by the warm waters of the Gulf of Mexico, and that its shores to the north and the southeast extend over a sort of Arctic sea."

"You are right, my dear Spilett," replied Cyrus Harding, "I have also observed this. I think the form and also the nature of this island strange. It is a summary of all the aspects which a continent presents, and I should not be surprised if it was a continent formerly."

"What! a continent in the middle of the Pacific?" cried Pencroft.

"Why not?" replied Cyrus Harding. "Why should not Australia, New Ireland, Australasia, united to the archipelagoes of the Pacific, have once formed a sixth part of the world, as important as Europe or Asia, as Africa or the two Americas? To my mind, it is quite possible that all these islands, emerging from this vast ocean, are but the summits of a continent, now submerged, but which was above the waters at a prehistoric period."

"As the Atlantis was formerly," replied Herbert.

"Yes, my boy... if, however, it existed."
"And would Lincoln Island have been a part of that continent?" asked Pencroft.

"It is probable," replied Cyrus Harding, "and that would sufficiently, explain the variety of productions which are seen on its surface."

"And the great number of animals which still inhabit it," added Herbert.

"Yes, my boy," replied the engineer, "and you furnish me with an argument to support my theory. It is certain, after what we have seen, that animals are numerous in this island, and what is more strange, that the species are extremely varied. There is a reason for that, and to me it is that Lincoln Island may have formerly been a part of some vast continent which had gradually sunk below the Pacific."

"Then, some fine day," said Pencroft, who did not appear to be entirely convinced, "the rest of this ancient continent may disappear in its turn, and there will be nothing between America and Asia."

"Yes," replied Harding, "there will be new continents which millions and millions of animalculae are building at this moment."

"And what are these masons?" asked Pencroft.

"Coral insects," replied Cyrus Harding. "By constant work they made the island of Clermont-Tonnerre, and numerous other coral islands in the Pacific Ocean. Forty-seven millions of these insects are needed to weigh a grain, and yet, with the sea-salt they absorb, the solid elements of water which they assimilate, these animalculae produce limestone, and this limestone forms enormous submarine erections, of which the hardness and solidity equal granite. Formerly, at the first periods of creation, nature employing fire, heaved up the land, but now she entrusts to these microscopic creatures the task of replacing this agent, of which the dynamic power in the interior of the globe has evidently diminished--which is proved by the number of volcanoes on the surface of the earth, now actually extinct. And I believe that centuries succeeding to centuries, and insects to insects, this Pacific may one day be changed into a vast continent, which new generations will inhabit and civilize in their turn."

"That will take a long time," said Pencroft.

"Nature has time for it," replied the engineer.

"But what would be the use of new continents?" asked Herbert. "It appears to me that the present extent of habitable countries is sufficient for humanity. Yet nature does nothing uselessly."

"Nothing uselessly, certainly," replied the engineer, "but this is how the necessity of new continents for the future, and exactly on the tropical zone occupied by the coral islands, may be explained. At least to me this explanation appears plausible."

"We are listening, captain," said Herbert.

"This is my idea: philosophers generally admit that some day our globe will end, or rather that animal and vegetable life will no longer be possible, because of the intense cold to which it will be subjected. What they are not agreed upon, is the cause of this cold. Some think that it will arise from the falling of the temperature, which the sun will experience alter millions of years; others, from the gradual extinction of the fires in the interior of our globe, which have a greater influence on it than is generally supposed. I hold to this last hypothesis, grounding it on the fact that the moon is really a cold star, which is no longer habitable, although the sun continues to throw on its surface the same amount of heat. If, then, the moon has become cold, it is because the interior fires to which, as do all the stars of the stellar world, it owes its origin, are completely extinct. Lastly, whatever may be the cause, our globe will become cold some day, but this cold will only operate gradually. What will happen, then? The temperate zones, at a more or less distant period, will not be more habitable than the polar regions now are. Then the population of men, as well as the animals, will flow towards the latitudes which are more directly under the solar influence. An immense emigration will take place. Europe, Central Asia, North America, will gradually be abandoned, as well as Australasia and the lower parts of South America. The vegetation will follow the human emigration. The flora will retreat towards the Equator at the same time as the fauna. The central parts of South America and Africa will be the continents chiefly inhabited. The Laplanders and the Samoides will find the climate of the polar regions on the shores of the Mediterranean. Who can say, that at this period, the equatorial regions will not be too small, to contain and nourish terrestrial humanity? Now, may not provident nature, so as to give refuge to all the vegetable and animal emigration, be at present laying the foundation of a new continent under the Equator, and may she not have entrusted these insects with the construction of it? I have often thought of all these things, my friends, and I seriously believe that the aspect of our globe will some day be completely changed; that by the raising of new continents the sea will cover the old, and that, in future ages, a Columbus will go to discover the islands of Chimborazo, of the Himalayas, or of Mont Blanc, remains of a submerged America, Asia, and Europe. Then these new continents will become, in their turn, uninhabitable; heat will die away, as does the heat from a body when the soul has left it; and life will disappear from the globe, if not for ever, at least for a period. Perhaps then, our spheroid will rest--will be left to death--to revive some day under superior conditions! But all that, my friends, is the secret of the Author of all things; and beginning by the work of the insects, I have perhaps let myself be carried too far, in
investigating the secrets of the future.
"My dear Cyrus," replied Spilett, "these theories are prophecies to me, and they will be accomplished some day."
"That is the secret of God," said the engineer.
"All that is well and good," then said Pencroft, who had listened with all his might, "but will you tell me, captain, if Lincoln Island has been made by your insects?"
"No," replied Harding; "it is of a purely volcanic origin."
"Then it will disappear some day?"
"That is probable."
"I hope we won't be here then."
"No, don't be uneasy, Pencroft; we shall not be here then, as we have no wish to die here, and hope to get away some time."
"In the meantime," replied Gideon Spilett, "let us establish ourselves here as if forever. There is no use in doing things by halves."

This ended the conversation. Breakfast was finished, the exploration was continued, and the settlers arrived at the border of the marshy region. It was a marsh of which the extent, to the rounded coast which terminated the island at the southeast, was about twenty square miles. The soil was formed of clayey flint-earth, mingled with vegetable matter, such as the remains of rushes, reeds, grass, etc. Here and there beds of grass, thick as a carpet, covered it. In many places icy pools sparkled in the sun. Neither rain nor any river, increased by a sudden swelling, could supply these ponds. They therefore naturally concluded that the marsh was fed by the infiltrations of the soil and it was really so. It was also to be feared that during the heat miasmas would arise, which might produce fevers.

Above the aquatic plants, on the surface of the stagnant water, fluttered numbers of birds. Wild duck, teal, snipe lived there in flocks, and those fearless birds allowed themselves to be easily approached.

One shot from a gun would certainly have brought down some dozen of the birds, they were so close together. The explorers were, however, obliged to content themselves with bows and arrows. The result was less, but the silent arrow had the advantage of not frightening the birds, while the noise of firearms would have dispersed them to all parts of the marsh. The hunters were satisfied, for this time, with a dozen ducks, which had white bodies with a band of cinnamon, a green head, wings black, white, and red, and flattened beak. Herbert called them tadorns. Top helped in the capture of these birds, whose name was given to this marshy part of the island. The settlers had here an abundant reserve of aquatic game. At some future time they meant to explore it more carefully, and it was probable that some of the birds there might be domesticated, or at least brought to the shores of the lake, so that they would be more within their reach.

About five o'clock in the evening Cyrus Harding and his companions retraced their steps to their dwelling by traversing Tadorn's Fens, and crossed the Mercy on the ice-bridge.

At eight in the evening they all entered Granite House.

Chapter 22

This intense cold lasted till the 15th of August, without, however, passing the degree of Fahrenheit already mentioned. When the atmosphere was calm, the low temperature was easily borne, but when the wind blew, the poor settlers, insufficiently clothed, felt it severely. Pencroft regretted that Lincoln Island was not the home of a few families of bears rather than of so many foxes and seals.

"Bears," said he, "are generally very well dressed, and I ask no more than to borrow for the winter the warm cloaks which they have on their backs."

"But," replied Neb, laughing, "perhaps the bears would not consent to give you their cloaks, Pencroft. These beasts are not St. Martins."

"We would make them do it, Neb, we would make them," replied Pencroft, in quite an authoritative tone. But these formidable carnivora did not exist in the island, or at any rate they had not yet shown themselves.

In the meanwhile, Herbert, Pencroft, and the reporter occupied themselves with making traps on Prospect Heights and at the border of the forest.

According to the sailor, any animal, whatever it was, would be a lawful prize, and the rodents or carnivora which might get into the new snares would be well received at Granite House.

The traps were besides extremely simple; being pits dug in the ground, a platform of branches and grass above, which concealed the opening, and at the bottom some bait, the scent of which would attract animals. It must be mentioned also, that they had not been dug at random, but at certain places where numerous footprints showed that quadrupeds frequented the ground. They were visited every day, and at three different times, during the first days, specimens of those Antarctic foxes which they had already seen on the right bank of the Mercy were found in them.
"Why, there are nothing but foxes in this country!" cried Pencroft, when for the third time he drew one of the animals out of the pit. Looking at it in great disgust, he added, "beasts which are good for nothing!"

"Yes," said Gideon Spilett, "they are good for something!"

"And what is that?"

"To make bait to attract other creatures!"

The reporter was right, and the traps were henceforward baited with the foxes carcasses.

The sailor had also made snares from the long tough fibers of a certain plant, and they were even more successful than the traps. Rarely a day passed without some rabbits from the warren being caught. It was always rabbit, but Neb knew how to vary his sauces and the settlers did not think of complaining.

However, once or twice in the second week of August, the traps supplied the hunters with other animals more useful than foxes, namely, several of those small wild boars which had already been seen to the north of the lake. Pencroft had no need to ask if these beasts were eatable. He could see that by their resemblance to the pig of America and Europe.

"But these are not pigs," said Herbert to him, "I warn you of that, Pencroft."

"My boy," replied the sailor, bending over the trap and drawing out one of these representatives of the family of sus by the little appendage which served it as a tail. "Let me believe that these are pigs."

"Why?"

"Because that pleases me!"

"Are you very fond of pig then, Pencroft?"

"I am very fond of pig," replied the sailor, "particularly of its feet, and if it had eight instead of four, I should like it twice as much!"

As to the animals in question, they were peccaries belonging to one of the four species which are included in the family, and they were also of the species of Tajacu, recognizable by their deep color and the absence of those long teeth with which the mouths of their congeners are armed. These peccaries generally live in herds, and it was probable that they abounded in the woody parts of the island.

At any rate, they were eatable from head to foot, and Pencroft did not ask more from them.

Towards the 15th of August, the state of the atmosphere was suddenly moderated by the wind shifting to the northwest. The temperature rose some degrees, and the accumulated vapor in the air was not long in resolving into snow. All the island was covered with a sheet of white, and showed itself to its inhabitants under a new aspect. The snow fell abundantly for several days, and it soon reached a thickness of two feet.

The wind also blew with great violence, and at the height of Granite House the sea could be heard thundering against the reefs. In some places, the wind, eddying round the corners, formed the snow into tall whirling columns, resembling those waterspouts which turn round on their base, and which vessels attack with a shot from a gun. However, the storm, coming from the northwest, blew across the island, and the position of Granite House preserved it from a direct attack.

But in the midst of this snow-storm, as terrible as if it had been produced in some polar country, neither Cyrus Harding nor his companions could, notwithstanding their wish for it, venture forth, and they remained shut up for five days, from the 20th to the 25th of August. They could hear the tempest raging in Jacamar Wood, which would surely suffer from it. Many of the trees would no doubt be torn up by the roots, but Pencroft consoled himself by thinking that he would not have the trouble of cutting them down.

"The wind is turning woodman, let it alone," he repeated.

Besides, there was no way of stopping it, if they had wished to do so.

How grateful the inhabitants of Granite House then were to Heaven for having prepared for them this solid and immovable retreat! Cyrus Harding had also his legitimate share of thanks, but after all, it was Nature who had hollowed out this vast cavern, and he had only discovered it. There all were in safety, and the tempest could not reach them. If they had constructed a house of bricks and wood on Prospect Heights, it certainly would not have resisted the fury of this storm. As to the Chimmneys, it must have been absolutely uninhabitable, for the sea, passing over the islet, would beat furiously against it. But here, in Granite House, in the middle of a solid mass, over which neither the sea nor air had any influence, there was nothing to fear.

During these days of seclusion the settlers did not remain inactive.

There was no want of wood, cut up into planks, in the storeroom, and little by little they completed their furnishing; constructing the most solid of tables and chairs, for material was not spared. Neb and Pencroft were very proud of this rather heavy furniture, which they would not have changed on any account.

Then the carpenters became basket-makers, and they did not succeed badly in this new manufacture. At the point of the lake which projected to the north, they had discovered an osier-bed in which grew a large number of purple osiers. Before the rainy season, Pencroft and Herbert had cut down these useful shrubs, and their branches, well
About the 25th, after another change from snow to rain, the wind shifted to the southeast, and the cold became, suddenly, very severe. According to the engineer's calculation, the mercurial column of a Fahrenheit thermometer would not have marked less than eight degrees below zero, and this intense cold, rendered still more painful by a sharp gale, lasted for several days. The colonists were again shut up in Granite House, and as it was necessary to hermetically seal all the openings of the facade, only leaving a narrow passage for renewing the air, the consumption

During the last week of the month of August the weather moderated again. The temperature fell a little, and the tempest abated. The colonists sallied out directly. There was certainly two feet of snow on the shore, but they were able to walk without much difficulty on the hardened surface. Cyrus Harding and his companions climbed Prospect Heights.

What a change! The woods, which they had left green, especially in the part at which the firs predominated, had disappeared under a uniform color. All was white, from the summit of Mount Franklin to the shore, the forests, the plains, the lake, the river. The waters of the Mercy flowed under a roof of ice, which, at each rising and ebbing of the tide, broke up with loud crashes. Numerous birds fluttered over the frozen surface of the lake. Ducks and snipe, teal and guillemots were assembled in thousands. The rocks among which the cascade flowed were bristling with icicles. One might have said that the water escaped by a monstrous gargoyle, shaped with all the imagination of an artist of the Renaissance. As to the damage caused by the storm in the forest, that could not as yet be ascertained; they would have to wait till the snowy covering was dissipated.

Gideon Spilett, Pencroft, and Herbert did not miss this opportunity of going to visit their traps. They did not find them easily, under the snow with which they were covered. They had also to be careful not to fall into one or other of them, which would have been both dangerous and humiliating; to be taken in their own snares! But happily they avoided this unpleasantness, and found their traps perfectly intact. No animal had fallen into them, and yet the footprints in the neighborhood were very numerous, among others, certain very clear marks of claws. Herbert did not hesitate to affirm that some animal of the feline species had passed there, which justified the engineer's opinion that dangerous beasts existed in Lincoln Island. These animals doubtless generally lived in the forests of the Far West, but pressed by hunger, they had ventured as far as Prospect Heights. Perhaps they had smelled out the inhabitants of Granite House. "Now, what are these feline creatures?" asked Pencroft. "They are tigers," replied Herbert. "I thought those beasts were only found in hot countries?"

"On the new continent," replied the lad, "they are found from Mexico to the Pampas of Buenos Aires. Now, as Lincoln Island is nearly under the same latitude as the provinces of La Plata, it is not surprising that tigers are to be met with in it."

"Well, we must look out for them," replied Pencroft.

However, the snow soon disappeared, quickly dissolving under the influence of the rising temperature. Rain fell, and the sheet of white soon vanished. Notwithstanding the bad weather, the settlers renewed their stores of different things, stone-pine almonds, rhizomes, syrup from the maple-tree, for the vegetable part; rabbits from the warren, agouties, and kangaroos for the animal part. This necessitated several excursions into the forest, and they found that a great number of trees had been blown down by the last hurricane. Pencroft and Neb also pushed with the cart as far as the vein of coal, and brought back several tons of fuel. They saw in passing that the pottery kiln had been severely damaged by the wind, at least six feet of it having been blown off.

At the same time as the coal, the store of wood was renewed at Granite House, and they profited by the current of the Mercy having again become free, to float down several rafts. They could see that the cold period was not ended.

A visit was also paid to the Chimneys, and the settlers could not but congratulate themselves on not having been living there during the hurricane. The sea had left unquestionable traces of its ravages. Sweeping over the islet, it had furiously assailed the passages, half filling them with sand, while thick beds of seaweed covered the rocks. While Neb, Herbert, and Pencroft hunted or collected wood, Cyrus Harding and Gideon Spilett busied themselves in putting the Chimneys to rights, and they found the forge and the bellows almost unhurt, protected as they had been from the first by the heaps of sand.

The store of fuel had not been made uselessly. The settlers had not done with the rigorous cold. It is known that, in the Northern Hemisphere, the month of February is principally distinguished by rapid fallings of the temperature. It is the same in the Southern Hemisphere, and the end of the month of August, which is the February of North America, does not escape this climatic law.

About the 25th, after another change from snow to rain, the wind shifted to the southeast, and the cold became, suddenly, very severe. According to the engineer's calculation, the mercurial column of a Fahrenheit thermometer would not have marked less than eight degrees below zero, and this intense cold, rendered still more painful by a sharp gale, lasted for several days. The colonists were again shut up in Granite House, and as it was necessary to hermetically seal all the openings of the facade, only leaving a narrow passage for renewing the air, the consumption
of candles was considerable. To economize them, the cavern was often only lighted by the blazing hearths, on which fuel was not spared. Several times, one or other of the settlers descended to the beach in the midst of ice which the waves heaped up at each tide, but they soon climbed up again to Granite House, and it was not without pain and difficulty that their hands could hold to the rounds of the ladder. In consequence of the intense cold, their fingers felt as if burned when they touched the rounds. To occupy the leisure hours, which the tenants of Granite House now had at their disposal, Cyrus Harding undertook an operation which could be performed indoors.

We know that the settlers had no other sugar at their disposal than the liquid substance which they drew from the maple, by making deep incisions in the tree. They contented themselves with collecting this liquor in jars and employing it in this state for different culinary purposes, and the more so, as on growing old, this liquid began to become white and to be of a syrupy consistence.

But there was something better to be made of it, and one day Cyrus Harding announced that they were going to turn into refiners.

"Refiners!" replied Pencroft. "That is rather a warm trade, I think."

"Very warm," answered the engineer.

"Then it will be seasonable!" said the sailor.

This word refining need not awaken in the mind thoughts of an elaborate manufactory with apparatus and numerous workmen. No! to crystallize this liquor, only an extremely easy operation is required. Placed on the fire in large earthen pots, it was simply subjected to evaporation, and soon a scum arose to its surface. As soon as this began to thicken, Neb carefully removed it with a wooden spatula; this accelerated the evaporation, and at the same time prevented it from contracting an empyreumatic flavor.

After boiling for several hours on a hot fire, which did as much good to the operators as the substance operated upon, the latter was transformed into a thick syrup. This syrup was poured into clay molds, previously fabricated in the kitchen stove, and to which they had given various shapes. The next day this syrup had become cold, and formed cakes and tablets. This was sugar of rather a reddish color, but nearly transparent and of a delicious taste.

The cold continued to the middle of September, and the prisoners in Granite House began to find their captivity rather tedious. Nearly every day they attempted sorties which they could not prolong. They constantly worked at the improvement of their dwelling. They talked while working. Harding instructed his companions in many things, principally explaining to them the practical applications of science. The colonists had no library at their disposal; but the engineer was a book which was always at hand, always open at the page which one wanted, a book which answered all their questions, and which they often consulted. The time thus passed away pleasantly, these brave men not appearing to have any fears for the future.

However, all were anxious to see, if not the fine season, at least the cessation of the insupportable cold. If only they had been clothed in a way to meet it, how many excursions they would have attempted, either to the downs or to Tadorn's Fens! Game would have been easily approached, and the chase would certainly have been most productive. But Cyrus Harding considered it of importance that no one should injure his health, for he had need of all his hands, and his advice was followed.

But it must be said, that the one who was most impatient of this imprisonment, after Pencroft perhaps, was Top. The faithful dog found Granite House very narrow. He ran backwards and forwards from one room to another, showing in his way how weary he was of being shut up. Harding often remarked that when he approached the dark well which communicated with the sea, and of which the orifice opened at the back of the storeroom, Top uttered singular growlings. He ran round and round this hole, which had been covered with a wooden lid. Sometimes even he tried to put his paws under the lid, as if he wished to raise it. He then yelped in a peculiar way, which showed at once anger and uneasiness.

The engineer observed this maneuver several times.

What could there be in this abyss to make such an impression on the intelligent animal? The well led to the sea, that was certain. Could narrow passages spread from it through the foundations of the island? Did some marine monster come from time to time, to breathe at the bottom of this well? The engineer did not know what to think, and could not refrain from dreaming of many strange impossibilities. Accustomed to go far into the regions of scientific reality, he would not allow himself to be drawn into the regions of the strange and almost of the supernatural; but yet how to explain why Top, one of those sensible dogs who never waste their time in barking at the moon, should persist in trying with scent and hearing to fathom this abyss, if there was nothing there to cause his uneasiness? Top's conduct puzzled Cyrus Harding even more than he cared to acknowledge to himself.

At all events, the engineer only communicated his impressions to Gideon Spilett, for he thought it useless to explain to his companions the suspicions which arose from what perhaps was only Top's fancy.

At last the cold ceased. There had been rain, squalls mingled with snow, hailstorms, gusts of wind, but these inclemencies did not last. The ice melted, the snow disappeared; the shore, the plateau, the banks of the Mercy, the
forest, again became practicable. This return of spring delighted the tenants of Granite House, and they soon only passed it in the hours necessary for eating and sleeping.

They hunted much in the second part of September, which led Pencroft to again entreat for the firearms, which he asserted had been promised by Cyrus Harding. The latter, knowing well that without special tools it would be nearly impossible for him to manufacture a gun which would be of any use, still drew back and put off the operation to some future time, observing in his usual dry way, that Herbert and Spilett had become very skilful archers, so that many sorts of excellent animals, agouties, kangaroos, capybaras, pigeons, bustards, wild ducks, snipes, in short, game both with fur and feathers, fell victims to their arrows, and that, consequently, they could wait. But the obstinate sailor would listen to nothing of this, and he would give the engineer no peace till he promised to satisfy his desire. Gideon Spilett, however, supported Pencroft.

"If, which may be doubted," said he, "the island is inhabited by wild beasts, we must think how to fight with and exterminate them. A time may come when this will be our first duty."

But at this period, it was not the question of firearms which occupied Harding, but that of clothes. Those which the settlers wore had passed this winter, but they would not last until next winter. Skins of carnivora or the wool of ruminants must be procured at any price, and since there were plenty of musmons, it was agreed to consult on the means of forming a flock which might be brought up for the use of the colony. An enclosure for the domestic animals, a poultry-yard for the birds, in a word to establish a sort of farm in the island, such were the two important projects for the fine season.

In consequence and in view of these future establishments, it became of much importance that they should penetrate into all the yet unknown parts of Lincoln Island, that is to say, through that thick forest which extended on the right bank of the Mercy, from its mouth to the extremity of the Serpentine Peninsula, as well as on the whole of its western side. But this needed settled weather, and a month must pass before this exploration could be profitably undertaken.

They therefore waited with some impatience, when an incident occurred which increased the desire the settlers had to visit the whole of their domain.

It was the 24th of October. On this day, Pencroft had gone to visit his traps, which he always kept properly baited. In one of them he found three animals which would be very welcome for the larder. They were a female peccary and her two young ones.

Pencroft then returned to Granite House, enchanted with his capture, and, as usual, he made a great show of his game.

"Come, we shall have a grand feast, captain!" he exclaimed. "And you too, Mr. Spilett, you will eat some!"

"I shall be very happy," replied the reporter; "but what is it that I am going to eat?"

"Suckling-pig."

"Oh, indeed, suckling-pig, Pencroft? To hear you, I thought that you were bringing back a young partridge stuffed with truffles!"

"What?" cried Pencroft. "Do you mean to say that you turn up your nose at suckling-pig?"

"No," replied Gideon Spilett, without showing any enthusiasm; "provided one doesn't eat too much."

"That's right, that's right," returned the sailor, who was not pleased whenever he heard his chase made light of. "You like to make objections. Seven months ago, when we landed on the island, you would have been only too glad to have met with such game!"

"Well, well," replied the reporter, "man is never perfect, nor contented."

"Now," said Pencroft, "I hope that Neb will distinguish himself. Look here! These two little peccaries are not more than three months old! They will be as tender as quails! Come along, Neb, come! I will look after the cooking myself."

And the sailor, followed by Neb, entered the kitchen, where they were soon absorbed in their culinary labors.

They were allowed to do it in their own way. Neb, therefore, prepared a magnificent repast—the two little peccaries, kangaroo soup, a smoked ham, stone-pine almonds, Oswego tea; in fact, all the best that they had, but among all the dishes figured in the first rank the savory peccaries.

At five o'clock dinner was served in the dining-room of Granite House. The kangaroo soup was smoking on the table. They found it excellent.

To the soup succeeded the peccaries, which Pencroft insisted on carving himself, and of which he served out monstrous portions to each of the guests.

These suckling-pigs were really delicious, and Pencroft was devouring his share with great gusto, when all at once a cry and an oath escaped him.

"What's the matter?" asked Cyrus Harding.

"The matter? the matter is that I have just broken a tooth!" replied the sailor.
"What, are there pebbles in your peccaries?" said Gideon Spilett.

"I suppose so," replied Pencroft, drawing from his lips the object which had cost him a grinder--!

It was not a pebble--it was a leaden bullet.

PART 2
ABANDONED

Chapter 1

It was now exactly seven months since the balloon voyagers had been thrown on Lincoln Island. During that time, notwithstanding the researches they had made, no human being had been discovered. No smoke even had betrayed the presence of man on the surface of the island. No vestiges of his handiwork showed that either at an early or at a late period had man lived there. Not only did it now appear to be uninhabited by any but themselves, but the colonists were compelled to believe that it never had been inhabited. And now, all this scaffolding of reasonings fell before a simple ball of metal, found in the body of an inoffensive rodent! In fact, this bullet must have issued from a firearm, and who but a human being could have used such a weapon?

When Pencroft had placed the bullet on the table, his companions looked at it with intense astonishment. All the consequences likely to result from this incident, notwithstanding its apparent insignificance, immediately took possession of their minds. The sudden apparition of a supernatural being could not have startled them more completely.

Cyrus Harding did not hesitate to give utterance to the suggestions which this fact, at once surprising and unexpected, could not fail to raise in his mind. He took the bullet, turned it over and over, rolled it between his finger and thumb; then, turning to Pencroft, he asked,--

"Are you sure that the peccary wounded by this bullet was not more than three months old?"

"Not more, captain," replied Pencroft. "It was still sucking its mother when I found it in the trap."

"Well," said the engineer, "that proves that within three months a gun-shot was fired in Lincoln Island."

"And that a bullet," added Gideon Spilett, "wounded, though not mortally, this little animal."

"That is unquestionable," said Cyrus Harding, "and these are the deductions which must be drawn from this incident: that the island was inhabited before our arrival, or that men have landed here within three months. Did these men arrive here voluntarily or involuntarily, by disembarking on the shore or by being wrecked? This point can only be cleared up later. As to what they were, Europeans or Malays, enemies or friends of our race, we cannot possibly guess; and if they still inhabit the island, or if they have left it, we know not. But these questions are of too much importance to be allowed to remain long unsettled."

"No! a hundred times no! a thousand times no!" cried the sailor, springing up from the table. "There are no other men than ourselves on Lincoln Island! By my faith! The island isn't large and if it had been inhabited, we should have seen some of the inhabitants long before this!"

"In fact, the contrary would be very astonishing," said Herbert.

"But it would be much more astonishing, I should think," observed the reporter, "if this peccary had been born with a bullet in its inside!"

"At least," said Neb seriously, "if Pencroft has not had--"

"Look here, Neb," burst out Pencroft. "Do you think I could have a bullet in my jaw for five or six months without finding it out? Where could it be hidden?" he asked, opening his mouth to show the two-and-thirty teeth with which it was furnished. "Look well, Neb, and if you find one hollow tooth in this set, I will let you pull out half a dozen!"

"Neb's supposition is certainly inadmissible," replied Harding, who, notwithstanding the gravity of his thoughts, could not restrain a smile. "It is certain that a gun has been fired in the island, within three months at most. But I am inclined to think that the people who landed on this coast were only here a very short time ago, or that they just touched here; for if, when we surveyed the island from the summit of Mount Franklin, it had been inhabited, we should have seen them or we should have been seen ourselves. It is therefore, probable that within only a few weeks castaways have been thrown by a storm on some part of the coast. However that may be, it is of consequence to us to have this point settled."

"I think that we should act with caution," said the reporter.

"Such is my advice," replied Cyrus Harding, "for it is to be feared that Malay pirates have landed on the island!"
"Captain," asked the sailor, "would it not be a good plan, before setting out, to build a canoe in which we could either ascend the river, or, if we liked, coast round the inland? It will not do to be unprovided."

"Your idea is good, Pencroft," replied the engineer, "but we cannot wait for that. It would take at least a month to build a boat."

"Yes, a real boat," replied the sailor; "but we do not want one for a sea voyage, and in five days at the most, I will undertake to construct a canoe fit to navigate the Mercy."

"Five days," cried Neb, "to build a boat?"

"Yes, Neb; a boat in the Indian fashion."

"Of wood?" asked the Negro, looking still unconvinced.

"Of wood," replied Pencroft, "of rather of bark. I repeat, captain, that in five days the work will be finished!"

"In five days, then, be it," replied the engineer.

"But till that time we must be very watchful," said Herbert.

"Very watchful indeed, my friends," replied Harding; "and I beg you to confine your hunting excursions to the neighborhood of Granite House."

The dinner ended less gaily than Pencroft had hoped.

So, then, the island was, or had been, inhabited by others than the settlers. Proved as it was by the incident of the bullet, it was hereafter an unquestionable fact, and such a discovery could not but cause great uneasiness among the colonists.

Cyrus Harding and Gideon Spilett, before sleeping, conversed long about the matter. They asked themselves if by chance this incident might not have some connection with the inexplicable way in which the engineer had been saved, and the other peculiar circumstances which had struck them at different times. However, Cyrus Harding, after having discussed the pros and cons of the question, ended by saying,--

"In short, would you like to know my opinion, my dear Spilett?"

"Yes, Cyrus."

"Well, then, it is this: however minutely we explore the island, we shall find nothing."

The next day Pencroft set to work. He did not mean to build a boat with boards and planking, but simply a flat-bottomed canoe, which would be well suited for navigating the Mercy--above all, for approaching its source, where the water would naturally be shallow. Pieces of bark, fastened one to the other, would form a light boat; and in case of natural obstacles, which would render a portage necessary, it would be easily carried. Pencroft intended to secure the pieces of bark by means of nails, to insure the canoe being water-tight.

It was first necessary to select the trees which would afford a strong and supple bark for the work. Now the last storm had brought down a number of large birch-trees, the bark of which would be perfectly suited for their purpose. Some of these trees lay on the ground, and they had only to be barked, which was the most difficult thing of all, owing to the imperfect tools which the settlers possessed. However, they overcame all difficulties.

While the sailor, seconded by the engineer, thus occupied himself without losing an hour, Gideon Spilett and Herbert were not idle.

They were made purveyors to the colony. The reporter could not but admire the boy, who had acquired great skill in handling the bow and spear. Herbert also showed great courage and much of that presence of mind which may justly be called "the reasoning of bravery." These two companions of the chase, remembering Cyrus Harding's recommendations, did not go beyond a radius of two miles round Granite House; but the borders of the forest furnished a sufficient tribute of agoutis, capybaras, kangaroos, peccaries, etc.; and if the result from the traps was less than during the cold, still the warren yielded its accustomed quota, which might have fed all the colony in Lincoln Island.

Often during these excursions, Herbert talked with Gideon Spilett on the incident of the bullet, and the deductions which the engineer drew from it, and one day--it was the 26th of October--he said--"But, Mr. Spilett, do you not think it very extraordinary that, if any castaways have landed on the island, they have not yet shown themselves near Granite House?"

"Very astonishing if they are still here," replied the reporter, "but not astonishing at all if they are here no longer!"

"So you think that these people have already quitted the island?" returned Herbert.

"It is more than probable, my boy; for if their stay was prolonged, and above all, if they were still here, some accident would have at last betrayed their presence."

"But if they were able to go away," observed the lad, "they could not have been castaways."

"No, Herbert; or, at least, they were what might be called provisional castaways. It is very possible that a storm may have driven them to the island without destroying their vessel, and that, the storm over, they went away again."

"I must acknowledge one thing," said Herbert, "it is that Captain Harding appears rather to fear than desire the
The presence of human beings on our island."

"In short," responded the reporter, "there are only Malays who frequent these seas, and those fellows are ruffians which it is best to avoid."

"It is not impossible, Mr. Spilett," said Herbert, "that some day or other we may find traces of their landing."

"I do not say no, my boy. A deserted camp, the ashes of a fire, would put us on the track, and this is what we will look for in our next expedition."

The day on which the hunters spoke thus, they were in a part of the forest near the Mercy, remarkable for its beautiful trees. There, among others, rose, to a height of nearly 200 feet above the ground, some of those superb conifers, to which, in New Zealand, the natives give the name of Kauris.

"I have an idea, Mr. Spilett," said Herbert. "If I were to climb to the top of one of these kauris, I could survey the country for an immense distance round."

"The idea is good," replied the reporter; "but could you climb to the top of those giants?"

"I can at least try," replied Herbert.

The light and active boy then sprang on the first branches, the arrangement of which made the ascent of the kauri easy, and in a few minutes he arrived at the summit, which emerged from the immense plain of verdure.

From this elevated situation his gaze extended over all the southern portion of the island, from Claw Cape on the southeast, to Reptile End on the southwest. To the northwest rose Mount Franklin, which concealed a great part of the horizon.

But Herbert, from the height of his observatory, could examine all the yet unknown portion of the island, which might have given shelter to the strangers whose presence they suspected.

The lad looked attentively. There was nothing in sight on the sea, not a sail, neither on the horizon nor near the island. However, as the bank of trees hid the shore, it was possible that a vessel, especially if deprived of her masts, might lie close to the land and thus be invisible to Herbert.

Neither in the forests of the Far West was anything to be seen. The wood formed an impenetrable screen, measuring several square miles, without a break or an opening. It was impossible even to follow the course of the Mercy, or to ascertain in what part of the mountain it took its source. Perhaps other creeks also ran towards the west, but they could not be seen.

But at last, if all indication of an encampment escaped Herbert's sight could he not even catch a glimpse of smoke, the faintest trace of which would be easily discernible in the pure atmosphere?

For an instant Herbert thought he could perceive a slight smoke in the west, but a more attentive examination showed that he was mistaken. He strained his eyes in every direction, and his sight was excellent. No, decidedly there was nothing there.

Herbert descended to the foot of the kauri, and the two sportsmen returned to Granite House. There Cyrus Harding listened to the lad's account, shook his head and said nothing. It was very evident that no decided opinion could be pronounced on this question until after a complete exploration of the island.

Two days after—the 28th of October—another incident occurred, for which an explanation was again required.

While strolling along the shore about two miles from Granite House, Herbert and Neb were fortunate enough to capture a magnificent specimen of the order of chelonia. It was a turtle of the species Midas, the edible green turtle, so called from the color both of its shell and fat.

Herbert caught sight of this turtle as it was crawling among the rocks to reach the sea.

"Help, Neb, help!" he cried.

Neb ran up.

"What a fine animal!" said Neb; "but how are we to catch it?"

"Nothing is easier, Neb," replied Herbert. "We have only to turn the turtle on its back, and it cannot possibly get away. Take your spear and do as I do."

The reptile, aware of danger, had retired between its carapace and plastron. They no longer saw its head or feet, and it was motionless as a rock.

Herbert and Neb then drove their sticks underneath the animal, and by their united efforts managed without difficulty to turn it on its back. The turtle, which was three feet in length, would have weighed at least four hundred pounds.

"Capital!" cried Neb; "this is something which will rejoice friend Pencroft's heart."

In fact, the heart of friend Pencroft could not fail to be rejoiced, for the flesh of the turtle, which feeds on wrackgrass, is extremely savory. At this moment the creature's head could be seen, which was small, flat, but widened behind by the large temporal fossae hidden under the long roof.

"And now, what shall we do with our prize?" said Neb. "We can't drag it to Granite House!"

"Leave it here, since it cannot turn over," replied Herbert, "and we will come back with the cart to fetch it."
"That is the best plan."
However, for greater precaution, Herbert took the trouble, which Neb deemed superfluous, to wedge up the animal with great stones; after which the two hunters returned to Granite House, following the beach, which the tide had left uncovered. Herbert, wishing to surprise Pencroft, said nothing about the "superb specimen of a chelonian" which they had turned over on the sand; but, two hours later, he and Neb returned with the cart to the place where they had left it. The "superb specimen of a chelonian" was no longer there!
Neb and Herbert stared at each other first; then they stared about them. It was just at this spot that the turtle had been left. The lad even found the stones which he had used, and therefore he was certain of not being mistaken.
"Well!" said Neb, "these beasts can turn themselves over, then?"
"It appears so," replied Herbert, who could not understand it at all, and was gazing at the stones scattered on the sand.
"Well, Pencroft will be disgusted!"
"And Captain Harding will perhaps be very perplexed how to explain this disappearance," thought Herbert.
"Look here," said Neb, who wished to hide his ill-luck, "we won't speak about it."
"On the contrary, Neb, we must speak about it," replied Herbert.
And the two, taking the cart, which there was now no use for, returned to Granite House.
Arrived at the dockyard, where the engineer and the sailor were working together, Herbert recounted what had happened.
"Oh! the stupids!" cried the sailor, "to have let at least fifty meals escape!"
"But, Pencroft," replied Neb, "it wasn't our fault that the beast got away; as I tell you, we had turned it over on its back!"
"Then you didn't turn it over enough!" returned the obstinate sailor.
"Not enough!" cried Herbert.
And he told how he had taken care to wedge up the turtle with stones.
"It is a miracle, then!" replied Pencroft.
"I thought, captain," said Herbert, "that turtles, once placed on their backs, could not regain their feet, especially when they are of a large size?"
"That is true, my boy," replied Cyrus Harding.
"Then how did it manage?"
"At what distance from the sea did you leave this turtle?" asked the engineer, who, having suspended his work, was reflecting on this incident.
"Fifteen feet at the most," replied Herbert.
"And the tide was low at the time?"
"Yes, captain."
"Well," replied the engineer, "what the turtle could not do on the sand it might have been able to do in the water. It turned over when the tide overtook it, and then quietly returned to the deep sea."
"Oh! what stupids we were!" cried Neb.
"That is precisely what I had the honor of telling you before!" returned the sailor.
Cyrus Harding had given this explanation, which, no doubt, was admissible. But was he himself convinced of the accuracy of this explanation? It cannot be said that he was.

Chapter 2
On the 9th of October the bark canoe was entirely finished. Pencroft had kept his promise, and a light boat, the shell of which was joined together by the flexible twigs of the crejimba, had been constructed in five days. A seat in the stern, a second seat in the middle to preserve the equilibrium, a third seat in the bows, rowlocks for the two oars, a scull to steer with, completed the little craft, which was twelve feet long, and did not weigh more than two hundred pounds. The operation of launching it was extremely simple. The canoe was carried to the beach and laid on the sand before Granite House, and the rising tide floated it. Pencroft, who leaped in directly, maneuvered it with the scull and declared it to be just the thing for the purpose to which they wished to put it.
"Hurrah!" cried the sailor, who did not disdain to celebrate thus his own triumph. "With this we could go round--"
"The world?" asked Gideon Spilett.
"No, the island. Some stones for ballast, a mast and a sail, which the captain will make for us some day, and we shall go splendidly! Well, captain--and you, Mr. Spilett; and you, Herbert; and you, Neb--aren't you coming to try our new vessel? Come along! we must see if it will carry all five of us!"
This was certainly a trial which ought to be made. Pencroft soon brought the canoe to the shore by a narrow passage among the rocks, and it was agreed that they should make a trial of the boat that day by following the shore as far as the first point at which the rocks of the south ended.

As they embarked, Neb cried,—

"But your boat leaks rather, Pencroft."

"That's nothing, Neb," replied the sailor; "the wood will get seasoned. In two days there won't be a single leak, and our boat will have no more water in her than there is in the stomach of a drunkard. Jump in!"

They were soon all seated, and Pencroft shoved off. The weather was magnificent, the sea as calm as if its waters were contained within the narrow limits of a lake. Thus the boat could proceed with as much security as if it was ascending the tranquil current of the Mercy.

Neb took one of the oars, Herbert the other, and Pencroft remained in the stern in order to use the scull.

The sailor first crossed the channel, and steered close to the southern point of the islet. A light breeze blew from the south. No roughness was found either in the channel or the green sea. A long swell, which the canoe scarcely felt, as it was heavily laden, rolled regularly over the surface of the water. They pulled out about half a mile distant from the shore, that they might have a good view of Mount Franklin.

Pencroft afterwards returned towards the mouth of the river. The boat then skirted the shore, which, extending to the extreme point, hid all Tadorn's Fens.

This point, of which the distance was increased by the irregularity of the coast, was nearly three miles from the Mercy. The settlers resolved to go to its extremity, and only go beyond it as much as was necessary to take a rapid survey of the coast as far as Claw Cape.

The canoe followed the windings of the shore, avoiding the rocks which fringed it, and which the rising tide began to cover. The cliff gradually sloped away from the mouth of the river to the point. This was formed of granite reefs, capriciously distributed, very different from the cliff at Prospect Heights, and of an extremely wild aspect. It might have been said that an immense cartload of rocks had been emptied out there. There was no vegetation on this sharp promontory, which projected two miles from the forest, and it thus represented a giant's arm stretched out from a leafy sleeve.

The canoe, impelled by the two oars, advanced without difficulty. Gideon Spilett, pencil in one hand and notebook in the other, sketched the coast in bold strokes. Neb, Herbert, and Pencroft chatted, while examining this part of their domain, which was new to them, and, in proportion as the canoe proceeded towards the south, the two Mandible Capes appeared to move, and surround Union Bay more closely.

As to Cyrus Harding, he did not speak; he simply gazed, and by the mistrust which his look expressed, it appeared that he was examining some strange country.

In the meantime, after a voyage of three-quarters of an hour, the canoe reached the extremity of the point, and Pencroft was preparing to return, when Herbert, rising, pointed to a black object, saying,—

"What do I see down there on the beach?"

All eyes turned towards the point indicated.

"Why," said the reporter, "there is something. It looks like part of a wreck half buried in the sand."

"Ah!" cried Pencroft, "I see what it is!"

"What?" asked Neb.

"Barrels, barrels, which perhaps are full," replied the sailor.

"Pull to the shore, Pencroft!" said Cyrus.

A few strokes of the oar brought the canoe into a little creek, and its passengers leaped on shore.

Pencroft was not mistaken. Two barrels were there, half buried in the sand, but still firmly attached to a large chest, which, sustained by them, had floated to the moment when it stranded on the beach.

"There has been a wreck, then, in some part of the island," said Herbert.

"Evidently," replied Spilett.

"But what's in this chest?" cried Pencroft, with very natural impatience. "What's in this chest? It is shut up, and nothing to open it with! Well, perhaps a stone—"

And the sailor, raising a heavy block, was about to break in one of the sides of the chest, when the engineer arrested his hand.

"Pencroft," he said, "can you restrain your impatience for one hour only?"

"But, captain, just think! Perhaps there is everything we want in there!"

"We shall find that out, Pencroft," replied the engineer; "but trust to me, and do not break the chest, which may be useful to us. We must convey it to Granite House, where we can open it easily, and without breaking it. It is quite prepared for a voyage; and since it has floated here, it may just as well float to the mouth of the river."

"You are right, captain, and I was wrong, as usual," replied the sailor.
The engineer's advice was good. In fact, the canoe probably would not have been able to contain the articles possibly enclosed in the chest, which doubtless was heavy, since two empty barrels were required to buoy it up. It was, therefore, much better to tow it to the beach at Granite House.

And now, whence had this chest come? That was the important question. Cyrus Harding and his companions looked attentively around them, and examined the shore for several hundred steps. No other articles or pieces of wreck could be found. Herbert and Neb climbed a high rock to survey the sea, but there was nothing in sight--neither a dismasted vessel nor a ship under sail.

However, there was no doubt that there had been a wreck. Perhaps this incident was connected with that of the bullet? Perhaps strangers had landed on another part of the island? Perhaps they were still there? But the thought which came naturally to the settlers was, that these strangers could not be Malay pirates, for the chest was evidently of American or European make.

All the party returned to the chest, which was of an unusually large size. It was made of oak wood, very carefully closed and covered with a thick hide, which was secured by copper nails. The two great barrels, hermetically sealed, but which sounded hollow and empty, were fastened to its sides by strong ropes, knotted with a skill which Pencroft directly pronounced sailors alone could exhibit. It appeared to be in a perfect state of preservation, which was explained by the fact that it had stranded on a sandy beach, and not among rocks. They had no doubt whatever, on examining it carefully, that it had not been long in the water, and that its arrival on this coast was recent. The water did not appear to have penetrated to the inside, and the articles which it contained were no doubt uninjured.

It was evident that this chest had been thrown overboard from some dismasted vessel driven towards the island, and that, in the hope that it would reach the land, where they might afterwards find it, the passengers had taken the precaution to buoy it up by means of this floating apparatus.

"We will tow this chest to Granite House," said the engineer, "where we can make an inventory of its contents; then, if we discover any of the survivors from the supposed wreck, we can return it to those to whom it belongs. If we find no one--"

"We will keep it for ourselves!" cried Pencroft. "But what in the world can there be in it?"

The sea was already approaching the chest, and the high tide would evidently float it. One of the ropes which fastened the barrels was partly unlashed and used as a cable to unite the floating apparatus with the canoe. Pencroft and Neb then dug away the sand with their oars, so as to facilitate the moving of the chest, towing which the boat soon began to double the point, to which the name of Flotsam Point was given.

The chest was heavy, and the barrels were scarcely sufficient to keep it above water. The sailor also feared every instant that it would get loose and sink to the bottom of the sea. But happily his fears were not realized, and an hour and a half after they set out--all that time had been taken up in going a distance of three miles--the boat touched the beach below Granite House.

Canoe and chest were then hauled up on the sands; and as the tide was then going out, they were soon left high and dry. Neb, hurrying home, brought back some tools with which to open the chest in such a way that it might be injured as little as possible, and they proceeded to its inventory. Pencroft did not try to hide that he was greatly excited.

The sailor began by detaching the two barrels, which, being in good condition, would of course be of use. Then the locks were forced with a cold chisel and hammer, and the lid thrown back. A second casing of zinc lined the interior of the chest, which had been evidently arranged that the articles which it enclosed might under any circumstances be sheltered from damp.

"Oh!" cried Neb, "suppose it's jam!"

"I hope not," replied the reporter.

"If only there was--" said the sailor in a low voice.

"What?" asked Neb, who overheard him.

"Nothing!"

The covering of zinc was torn off and thrown back over the sides of the chest, and by degrees numerous articles of very varied character were produced and strewn about on the sand. At each new object Pencroft uttered fresh hurrahs, Herbert clapped his hands, and Neb danced up and down. There were books which made Herbert wild with joy, and cooking utensils which Neb covered with kisses!

In short, the colonists had reason to be extremely satisfied, for this chest contained tools, weapons, instruments, clothes, books; and this is the exact list of them as stated in Gideon Spilett's note-book: --Tools:--3 knives with several blades, 2 woodmen's axes, 2 carpenter's hatchets, 3 planes, 2 adzes, 1 twibil or mattock, 6 chisels, 2 files, 3 hammers, 3 gimlets, 2 augers, 10 bags of nails and screws, 3 saws of different sizes, 2 boxes of needles.

Weapons:--2 flint-lock guns, 2 for percussion caps, 2 breach-loader carbines, 5 boarding cutlasses, 4 sabers, 2
barrels of powder, each containing twenty-five pounds; 12 boxes of percussion caps.

Instruments:--1 sextant, 1 double opera-glass, 1 telescope, 1 box of mathematical instruments, 1 mariner's compass, 1 Fahrenheit thermometer, 1 aneroid barometer, 1 box containing a photographic apparatus, object-glass, plates, chemicals, etc.

Clothes:--2 dozen shirts of a peculiar material resembling wool, but evidently of a vegetable origin; 3 dozen stockings of the same material.

Utensils:--1 iron pot, 6 copper saucepans, 3 iron dishes, 10 metal plates, 2 kettles, 1 portable stove, 6 table-knives.

Books:--1 Bible, 1 atlas, 1 dictionary of the different Polynesian idioms, 1 dictionary of natural science, in six volumes; 3 reams of white paper, 2 books with blank pages.

"It must be allowed," said the reporter, after the inventory had been made, "that the owner of this chest was a practical man! Tools, weapons, instruments, clothes, utensils, books--nothing is wanting! It might really be said that he expected to be wrecked, and had prepared for it beforehand."

"Nothing is wanting, indeed," murmured Cyrus Harding thoughtfully.

"And for a certainty," added Herbert, "the vessel which carried this chest and its owner was not a Malay pirate!"

"Unless," said Pencroft, "the owner had been taken prisoner by pirates--"

"That is not admissible," replied the reporter. "It is more probable that an American or European vessel has been driven into this quarter, and that her passengers, wishing to save necessaries at least, prepared this chest and threw it overboard."

"Is that your opinion, captain?" asked Herbert.

"Yes, my boy," replied the engineer, "that may have been the case. It is possible that at the moment, or in expectation of a wreck, they collected into this chest different articles of the greatest use in hopes of finding it again on the coast--"

"Even the photographic box!" exclaimed the sailor incredulously.

"As to that apparatus," replied Harding, "I do not quite see the use of it; and a more complete supply of clothes or more abundant ammunition would have been more valuable to us as well as to any other castaways!"

"But isn't there any mark or direction on these instruments, tools, or books, which would tell us something about them?" asked Gideon Spilett.

That might be ascertained. Each article was carefully examined, especially the books, instruments and weapons. Neither the weapons nor the instruments, contrary to the usual custom, bore the name of the maker; they were, besides, in a perfect state, and did not appear to have been used. The same peculiarity marked the tools and utensils; all were new, which proved that the articles had not been taken by chance and thrown into the chest, but, on the contrary, that the choice of things had been well considered and arranged with care. This was also indicated by the second case of metal which had preserved them from damp, and which could not have been soldered in a moment of haste.

As to the dictionaries of natural science and Polynesian idioms, both were English; but they neither bore the name of the publisher nor the date of publication.

The same with the Bible printed in English, in quarto, remarkable from a typographic point of view, and which appeared to have been often used.

The atlas was a magnificent work, comprising maps of every country in the world, and several planispheres arranged upon Mercator's projection, and of which the nomenclature was in French--but which also bore neither date nor name of publisher.

There was nothing, therefore, on these different articles by which they could be traced, and nothing consequently of a nature to show the nationality of the vessel which must have recently passed these shores.

But, wherever the chest might have come from, it was a treasure to the settlers on Lincoln Island. Till then, by making use of the productions of nature, they had created everything for themselves, and, thanks to their intelligence, they had managed without difficulty. But did it not appear as if Providence had wished to reward them by sending them these productions of human industry? Their thanks rose unanimously to Heaven.

However, one of them was not quite satisfied: it was Pencroft. It appeared that the chest did not contain something which he evidently held in great esteem, for in proportion as they approached the bottom of the box, his hurrahs diminished in heartiness, and, the inventory finished, he was heard to mutter these words:--"That's all very fine, but you can see that there is nothing for me in that box!"

This led Neb to say,--

"Why, friend Pencroft, what more do you expect?"

"Half a pound of tobacco," replied Pencroft seriously, "and nothing would have been wanting to complete my happiness!"
No one could help laughing at this speech of the sailor's.

But the result of this discovery of the chest was, that it was now more than ever necessary to explore the island thoroughly. It was therefore agreed that the next morning at break of day, they should set out, by ascending the Mercy so as to reach the western shore. If any castaways had landed on the coast, it was to be feared they were without resources, and it was therefore the more necessary to carry help to them without delay.

During the day the different articles were carried to Granite House, where they were methodically arranged in the great hall. This day--the 29th of October--happened to be a Sunday, and, before going to bed, Herbert asked the engineer if he would not read them something from the Gospel.

"Willingly," replied Cyrus Harding.

He took the sacred volume, and was about to open it, when Pencroft stopped him, saying,--"Captain, I am superstitious. Open at random and read the first verse which, your eye falls upon. We will see if it applies to our situation."

Cyrus Harding smiled at the sailor's idea, and, yielding to his wish, he opened exactly at a place where the leaves were separated by a marker.

Immediately his eyes were attracted by a cross which, made with a pencil, was placed against the eighth verse of the seventh chapter of the Gospel of St. Matthew. He read the verse, which was this:--

"For every one that asketh receiveth; and he that seeketh findeth."

Chapter 3

The next day, the 30th of October, all was ready for the proposed exploring expedition, which recent events had rendered so necessary. In fact, things had so come about that the settlers in Lincoln Island no longer needed help for themselves, but were even able to carry it to others.

It was therefore agreed that they should ascend the Mercy as far as the river was navigable. A great part of the distance would thus be traversed without fatigue, and the explorers could transport their provisions and arms to an advanced point in the west of the island.

It was necessary to think not only of the things which they should take with them, but also of those which they might have by chance to bring back to Granite House. If there had been a wreck on the coast, as was supposed, there would be many things cast up, which would be lawfully their prizes. In the event of this, the cart would have been of more use than the light canoe, but it was heavy and clumsy to drag, and therefore more difficult to use; this led Pencroft to express his regret that the chest had not contained, besides "his halfpound of tobacco," a pair of strong New Jersey horses, which would have been very useful to the colony!

The provisions, which Neb had already packed up, consisted of a store of meat and of several gallons of beer, that is to say enough to sustain them for three days, the time which Harding assigned for the expedition. They hoped besides to supply themselves on the road, and Neb took care not to forget the portable stove.

The only tools the settlers took were the two woodmen's axes, which they could use to cut a path through the thick forests, as also the instruments, the telescope and pocket-compass.

For weapons they selected the two flint-lock guns, which were likely to be more useful to them than the percussion fowling-pieces, the first only requiring flints which could be easily replaced, and the latter needing fulminating caps, a frequent use of which would soon exhaust their limited stock. However, they took also one of the carbines and some cartridges. As to the powder, of which there was about fifty pounds in the barrel, a small supply of it had to be taken, but the engineer hoped to manufacture an explosive substance which would allow them to husband it. To the firearms were added the five cutlasses well sheathed in leather, and, thus supplied, the settlers could venture into the vast forest with some chance of success.

It is useless to add that Pencroft, Herbert, and Neb, thus armed, were at the summit of their happiness, although Cyrus Harding made them promise not to fire a shot unless it was necessary.

At six in the morning the canoe put off from the shore; all had embarked, including Top, and they proceeded to the mouth of the Mercy.

The tide had begun to come up half an hour before. For several hours, therefore, there would be a current, which was well to profit by, for later the ebb would make it difficult to ascend the river. The tide was already strong, for in three days the moon would be full, and it was enough to keep the boat in the center of the current, where it floated swiftly along between the high banks without its being necessary to increase its speed by the aid of the oars. In a few minutes the explorers arrived at the angle formed by the Mercy and exactly at the place where, seven months before, Pencroft had made his first raft of wood.

After this sudden angle the river widened and flowed under the shade of great evergreen firs.

The aspect of the banks was magnificent. Cyrus Harding and his companions could not but admire the lovely
effects so easily produced by nature with water and trees. As they advanced the forest element diminished. On the right bank of the river grew magnificent specimens of the ulmaceae tribe, the precious elm, so valuable to builders, and which withstands well the action of water. Then there were numerous groups belonging to the same family, among others one in particular, the fruit of which produces a very useful oil. Further on, Herbert remarked the lardizabala, a twining shrub which, when bruised in water, furnishes excellent cordage; and two or three ebony trees of a beautiful black, crossed with capricious veins.

From time to time, in certain places where the landing was easy, the canoe was stopped, when Gideon Spilett, Herbert, and Pencroft, their guns in their hands, and preceded by Top, jumped on shore. Without expecting game, some useful plant might be met with, and the young naturalist was delighted with discovering a sort of wild spinach, belonging to the order of chenopodiaceae, and numerous specimens of cruciferae, belonging to the cabbage tribe, which it would certainly be possible to cultivate by transplanting. There were cresses, horseradish, turnips, and lastly, little branching hairy stalks, scarcely more than three feet high, which produced brownish grains.

"Do you know what this plant is?" asked Herbert of the sailor.

"Tobacco!" cried Pencroft, who evidently had never seen his favorite plant except in the bowl of his pipe.

"No, Pencroft," replied Herbert; "this is not tobacco, it is mustard."

"Mustard be hanged!" returned the sailor; "but if by chance you happen to come across a tobacco-plant, my boy, pray don't scorn that!"

"We shall find it some day!" said Gideon Spilett.

"Well!" exclaimed Pencroft, "when that day comes, I do not know what more will be wanting in our island!"

These different plants, which had been carefully rooted up, were carried to the canoe, where Cyrus Harding had remained buried in thought.

The reporter, Herbert, and Pencroft in this manner frequently disembarked, sometimes on the right bank, sometimes on the left bank of the Mercy.

The latter was less abrupt, but the former more wooded. The engineer ascertained by consulting his pocket-compass that the direction of the river from the first turn was obviously southwest and northeast, and nearly straight for a length of about three miles. But it was to be supposed that this direction changed beyond that point, and that the Mercy continued to the north-west, towards the spurs of Mount Franklin, among which the river rose.

During one of these excursions, Gideon Spilett managed to get hold of two couples of living gallinaceae. They were birds with long, thin beaks, lengthened necks, short wings, and without any appearance of a tail. Herbert rightly gave them the name of tinamous, and it was resolved that they should be the first tenants of their future poultry-yard.

But till then the guns had not spoken, and the first report which awoke the echoes of the forest of the Far West was provoked by the appearance of a beautiful bird, resembling the kingfisher.

"I recognize him!" cried Pencroft, and it seemed as if his gun went off by itself.

"What do you recognize?" asked the reporter.

"The bird which escaped us on our first excursion, and from which we gave the name to that part of the forest."

"A jacamar!" cried Herbert.

It was indeed a jacamar, of which the plumage shines with a metallic luster. A shot brought it to the ground, and Top carried it to the canoe. At the same time half a dozen lories were brought down. The lory is of the size of a pigeon, the plumage dashed with green, part of the wings crimson, and its crest bordered with white. To the young boy belonged the honor of this shot, and he was proud enough of it. Lories are better food than the jacamar, the flesh of which is rather tough, but it was difficult to persuade Pencroft that he had not killed the king of eatable birds. It was ten o'clock in the morning when the canoe reached a second angle of the Mercy, nearly five miles from its mouth. Here a halt was made for breakfast under the shade of some splendid trees. The river still measured from sixty to seventy feet in breadth, and its bed from five to six feet in depth. The engineer had observed that it was increased by numerous affluents, but they were unnavigable, being simply little streams. As to the forest, including Jacamar Wood, as well as the forests of the Far West, it extended as far as the eye could reach. In no place, either in the depths of the forests or under the trees on the banks of the Mercy, was the presence of man revealed. The explorers could not discover one suspicious trace. It was evident that the woodman's axe had never touched these trees, that the pioneer's knife had never severed the creepers hanging from one trunk to another in the midst of tangled brushwood and long grass. If castaways had landed on the island, they could not have yet quitted the shore, and it was not in the woods that the survivors of the supposed shipwreck should be sought.

The engineer therefore manifested some impatience to reach the western coast of Lincoln Island, which was at least five miles distant according to his estimation.

The voyage was continued, and as the Mercy appeared to flow not towards the shore, but rather towards Mount Franklin, it was decided that they should use the boat as long as there was enough water under its keel to float it. It
was both fatigue spared and time gained, for they would have been obliged to cut a path through the thick wood with their axes. But soon the flow completely failed them, either the tide was going down, and it was about the hour, or it could no longer be felt at this distance from the mouth of the Mercy. They had therefore to make use of the oars. Herbert and Neb each took one, and Pencroft took the scull. The forest soon became less dense, the trees grew further apart and often quite isolated. But the further they were from each other the more magnificent they appeared, profiting, as they did, by the free, pure air which circulated around them.

What splendid specimens of the flora of this latitude! Certainly their presence would have been enough for a botanist to name without hesitation the parallel which traversed Lincoln Island.

"Eucalypti!" cried Herbert.

They were, in fact, those splendid trees, the giants of the extratropical zone, the congeners of the Australian and New Zealand eucalyptus, both situated under the same latitude as Lincoln Island. Some rose to a height of two hundred feet. Their trunks at the base measured twenty feet in circumference, and their bark was covered by a network of farrows containing a red, sweet-smelling gum. Nothing is more wonderful or more singular than those enormous specimens of the order of the myrtaceae, with their leaves placed vertically and not horizontally, so that an edge and not a surface looks upwards, the effect being that the sun’s rays penetrate more freely among the trees.

The ground at the foot of the eucalypti was carpeted with grass, and from the bushes escaped flights of little birds, which glittered in the sunlight like winged rubies.

"These are something like trees!" cried Neb; "but are they good for anything?"

"Pooh!" replied Pencroft. "Of course there are vegetable giants as well as human giants, and they are no good, except to show themselves at fairs!"

"I think that you are mistaken, Pencroft," replied Gideon Spilett, "and that the wood of the eucalyptus has begun to be very advantageously employed in cabinet-making."

"And I may add," said Herbert, "that the eucalyptus belongs to a family which comprises many useful members; the guava-tree, from whose fruit guava jelly is made; the clove-tree, which produces the spice; the pomegranate-tree, which bears pomegranates; the Eugenia Cauliflora, the fruit of which is used in making a tolerable wine; the Ugui myrtle, which contains an excellent alcoholic liquors; the Caryophyllus myrtle, of which the bark forms an esteemed cinnamon; the Eugenia Pimenta, from whence comes Jamaica pepper; the common myrtle, from whose buds and berries spice is sometimes made; the Eucalyptus manifera, which yields a sweet sort of manna; the Guinea Eucalyptus, the sap of which is transformed into beer by fermentation; in short, all those trees known under the name of gum-trees or iron-bark trees in Australia, belong to this family of the myrtaceae, which contains forty-six genera and thirteen hundred species!"

The lad was allowed to run on, and he delivered his little botanical lecture with great animation. Cyrus Harding listened smiling, and Pencroft with an indescribable feeling of pride.

"Very good, Herbert," replied Pencroft, "but I could swear that all those useful specimens you have just told us about are none of them giants like these!"

"That is true, Pencroft."

"That supports what I said," returned the sailor, "namely, that these giants are good for nothing!"

"There you are wrong, Pencroft," said the engineer; "these gigantic eucalypti, which shelter us, are good for something."

"And what is that?"

"To render the countries which they inhabit healthy. Do you know what they are called in Australia and New Zealand?"

"No, captain."

"They are called 'fever trees.'"

"Because they give fevers?"

"No, because they prevent them!"

"Good. I must note that," said the reporter.

"Note it then, my dear Spilett; for it appears proved that the presence of the eucalyptus is enough to neutralize miasmas. This natural antidote has been tried in certain countries in the middle of Europe and the north of Africa where the soil was absolutely unhealthy, and the sanitary condition of the inhabitants has been gradually ameliorated. No more intermittent fevers prevail in the regions now covered with forests of the myrtaceae. This fact is now beyond doubt, and it is a happy circumstance for us settlers in Lincoln Island."

"Ah! what an island! What a blessed island!" cried Pencroft. "I tell you, it wants nothing--unless it is--"

"That will come, Pencroft, that will be found," replied the engineer; "but now we must continue our voyage and push on as far as the river will carry our boat!"

The exploration was therefore continued for another two miles in the midst of country covered with eucalypti,
which predominated in the woods of this portion of the island. The space which they occupied extended as far as the eye could reach on each side of the Mercy, which wound along between high green banks. The bed was often obstructed by long weeds, and even by pointed rocks, which rendered the navigation very difficult. The action of the oars was prevented, and Pencroft was obliged to push with a pole. They found also that the water was becoming shallower and shallower, and that the canoe must soon stop. The sun was already sinking towards the horizon, and the trees threw long shadows on the ground. Cyrus Harding, seeing that he could not hope to reach the western coast of the island in one journey, resolved to camp at the place where any further navigation was prevented by want of water. He calculated that they were still five or six miles from the coast, and this distance was too great for them to attempt during the night in the midst of unknown woods.

The boat was pushed on through the forest, which gradually became thicker again, and appeared also to have more inhabitants; for if the eyes of the sailor did not deceive him, he thought he saw bands of monkeys springing among the trees. Sometimes even two or three of these animals stopped at a little distance from the canoe and gazed at the settlers without manifesting any terror, as if, seeing men for the first time, they had not yet learned to fear them. It would have been easy to bring down one of these quadramani with a gunshot, and Pencroft was greatly tempted to fire, but Harding opposed so useless a massacre. This was prudent, for the monkeys, or apes rather, appearing to be very powerful and extremely active, it was useless to provoke an unnecessary aggression, and the creatures might, ignorant of the power of the explorers’ firearms, have attacked them. It is true that the sailor considered the monkeys from a purely alimentary point of view, for those animals which are herbivorous make very excellent game; but since they had an abundant supply of provisions, it was a pity to waste their ammunition.

Towards four o’clock, the navigation of the Mercy became exceedingly difficult, for its course was obstructed by aquatic plants and rocks. The banks rose higher and higher, and already they were approaching the spurs of Mount Franklin. The source could not be far off, since it was fed by the water from the southern slopes of the mountain.

"In a quarter of an hour," said the sailor, "we shall be obliged to stop, captain."

"Very well, we will stop, Pencroft, and we will make our encampment for the night."

"At what distance are we from Granite House?" asked Herbert.

"About seven miles," replied the engineer, "taking into calculation, however, the detours of the river, which has carried us to the northwest."

"Shall we go on?" asked the reporter.

"Yes, as long as we can," replied Cyrus Harding. "To-morrow, at break of day, we will leave the canoe, and in two hours I hope we shall cross the distance which separates us from the coast, and then we shall have the whole day in which to explore the shore."

"Go ahead!" replied Pencroft.

But soon the boat grated on the stony bottom of the river, which was now not more than twenty feet in breadth. The trees met like a bower overhead, and caused a half-darkness. They also heard the noise of a waterfall, which showed that a few hundred feet up the river there was a natural barrier.

Presently, after a sudden turn of the river, a cascade appeared through the trees. The canoe again touched the bottom, and in a few minutes it was moored to a trunk near the right bank.

It was nearly five o’clock. The last rays of the sun gleamed through the thick foliage and glanced on the little waterfall, making the spray sparkle with all the colors of the rainbow. Beyond that, the Mercy was lost in the bushwood, where it was fed from some hidden source. The different streams which flowed into it increased it to a regular river further down, but here it was simply a shallow, limpid brook.

It was agreed to camp here, as the place was charming. The colonists disembarked, and a fire was soon lighted under a clump of trees, among the branches of which Cyrus Harding and his companions could, if it was necessary, take refuge for the night.

Supper was quickly devoured, for they were very hungry, and then there was only sleeping to think of. But, as roarings of rather a suspicious nature had been heard during the evening, a good fire was made up for the night, so as to protect the sleepers with its crackling flames. Neb and Pencroft also watched by turns, and did not spare fuel. They thought they saw the dark forms of some wild animals prowling round the camp among the bushes, but the night passed without incident, and the next day, the 31st of October, at five o’clock in the morning, all were on foot, ready for a start.

Chapter 4

It was six o’clock in the morning when the settlers, after a hasty breakfast, set out to reach by the shortest way, the western coast of the island. And how long would it take to do this? Cyrus Harding had said two hours, but of course that depended on the nature of the obstacles they might meet with. As it was probable that they would have to
cut a path through the grass, shrubs, and creepers, they marched axe in hand, and with guns also ready, wisely taking warning from the cries of the wild beasts heard in the night.

The exact position of the encampment could be determined by the bearing of Mount Franklin, and as the volcano arose in the north at a distance of less than three miles, they had only to go straight towards the southwest to reach the western coast. They set out, having first carefully secured the canoe. Pencroft and Neb carried sufficient provision for the little band for at least two days. It would not thus be necessary to hunt. The engineer advised his companions to refrain from firing, that their presence might not be betrayed to any one near the shore. The first hatchet blows were given among the brushwood in the midst of some mastic-trees, a little above the cascade; and his compass in his hand, Cyrus Harding led the way.

The forest here was composed for the most part of trees which had already been met with near the lake and on Prospect Heights. There were deodars, Douglas firs, casuarinas, gum trees, eucalypti, hibiscus, cedars, and other trees, generally of a moderate size, for their number prevented their growth.

Since their departure, the settlers had descended the slopes which constituted the mountain system of the island, on to a dry soil, but the luxuriant vegetation of which indicated it to be watered either by some subterranean marsh or by some stream. However, Cyrus Harding did not remember having seen, at the time of his excursion to the crater, any other watercourses but the Red Creek and the Mercy.

During the first part of their excursion, they saw numerous troops of monkeys who exhibited great astonishment at the sight of men, whose appearance was so new to them. Gideon Spilett jokingly asked whether these active and merry quadrupeds did not consider him and his companions as degenerate brothers.

And certainly, pedestrians, hindered at each step by bushes, caught by creepers, barred by trunks of trees, did not shine beside those supple animals, who, bounding from branch to branch, were hindered by nothing on their course. The monkeys were numerous, but happily they did not manifest any hostile disposition.

Several pigs, agoutis, kangaroos, and other rodents were seen, also two or three koalas, at which Pencroft longed to have a shot.

"But," said he, "you may jump and play just now; we shall have one or two words to say to you on our way back!"

At half-past nine the way was suddenly found to be barred by an unknown stream, from thirty to forty feet broad, whose rapid current dashed foaming over the numerous rocks which interrupted its course. This creek was deep and clear, but it was absolutely unnavigable.

"We are cut off!" cried Neb.

"No," replied Herbert, "it is only a stream, and we can easily swim over."

"What would be the use of that?" returned Harding. "This creek evidently runs to the sea. Let us remain on this side and follow the bank, and I shall be much astonished if it does not lead us very quickly to the coast. Forward!"

"One minute," said the reporter. "The name of this creek, my friends? Do not let us leave our geography incomplete."

"All right!" said Pencroft.

"Name it, my boy," said the engineer, addressing the lad.

"Will it not be better to wait until we have explored it to its mouth?" answered Herbert.

"Very well," replied Cyrus Harding. "Let us follow it as fast as we can without stopping."

"Still another minute!" said Pencroft.

"What's the matter?" asked the reporter.

"Though hunting is forbidden, fishing is allowed, I suppose," said the sailor.

"We have no time to lose," replied the engineer.

"Oh! five minutes!" replied Pencroft, "I only ask for five minutes to use in the interest of our breakfast!"

And Pencroft, lying down on the bank, plunged his arm into the water, and soon pulled up several dozen of fine crayfish from among the stones.

"These will be good!" cried Neb, going to the sailor's aid.

"As I said, there is everything in this island, except tobacco!" muttered Pencroft with a sigh.

The fishing did not take five minutes, for the crayfish were swarming in the creek. A bag was filled with the crustacea, whose shells were of a cobalt blue. The settlers then pushed on.

They advanced more rapidly and easily along the bank of the river than in the forest. From time to time they came upon the traces of animals of a large size who had come to quench their thirst at the stream, but none were actually seen, and it was evidently not in this part of the forest that the peccary had received the bullet which had cost Pencroft a grinder.

In the meanwhile, considering the rapid current, Harding was led to suppose that he and his companions were much farther from the western coast than they had at first supposed. In fact, at this hour, the rising tide would have
turned back the current of the creek, if its mouth had only been a few miles distant. Now, this effect was not produced, and the water pursued its natural course. The engineer was much astonished at this, and frequently consulted his compass, to assure himself that some turn of the river was not leading them again into the Far West.

However, the creek gradually widened and its waters became less tumultuous. The trees on the right bank were as close together as on the left bank, and it was impossible to distinguish anything beyond them; but these masses of wood were evidently uninhabited, for Top did not bark, and the intelligent animal would not have failed to signal the presence of any stranger in the neighborhood.

At half-past ten, to the great surprise of Cyrus Harding, Herbert, who was a little in front, suddenly stopped and exclaimed,—

"The sea!"

In a few minutes more, the whole western shore of the island lay extended before the eyes of the settlers.

But what a contrast between this and the eastern coast, upon which chance had first thrown them. No granite cliff, no rocks, not even a sandy beach. The forest reached the shore, and the tall trees bending over the water were beaten by the waves. It was not such a shore as is usually formed by nature, either by extending a vast carpet of sand, or by grouping masses of rock, but a beautiful border consisting of the most splendid trees. The bank was raised a little above the level of the sea, and on this luxuriant soil, supported by a granite base, the fine forest trees seemed to be as firmly planted as in the interior of the island.

The colonists were then on the shore of an unimportant little harbor, which would scarcely have contained even two or three fishing-boats. It served as a neck to the new creek, of which the curious thing was that its waters, instead of joining the sea by a gentle slope, fell from a height of more than forty feet, which explained why the rising tide was not felt up the stream. In fact, the tides of the Pacific, even at their maximum elevation, could never reach the level of the river, and, doubtless, millions of years would pass before the water would have worn away the granite and hollowed a practicable mouth.

It was settled that the name of Falls River should be given to this stream. Beyond, towards the north, the forest border was prolonged for a space of nearly two miles; then the trees became scarcer, and beyond that again the picturesque heights described a nearly straight line, which ran north and south. On the contrary, all the part of the shore between Falls River and Reptile End was a mass of wood, magnificent trees, some straight, others bent, so that the long sea-swell bathed their roots. Now, it was this coast, that is, all the Serpentine Peninsula, that was to be explored, for this part of the shore offered a refuge to castaways, which the other wild and barren side must have refused.

The weather was fine and clear, and from a height of a hillock on which Neb and Pencroft had arranged breakfast, a wide view was obtained. There was, however, not a sail in sight; nothing could be seen along the shore as far as the eye could reach. But the engineer would take nothing for granted until he had explored the coast to the very extremity of the Serpentine Peninsula.

Breakfast was soon despatched, and at half-past eleven the captain gave the signal for departure. Instead of proceeding over the summit of a cliff or along a sandy beach, the settlers were obliged to remain under cover of the trees so that they might continue on the shore.

The distance which separated Falls River from Reptile End was about twelve miles. It would have taken the settlers four hours to do this, on a clear ground and without hurrying themselves; but as it was they needed double the time, for what with trees to go round, bushes to cut down, and creepers to chop away, they were impeded at every step, these obstacles greatly lengthening their journey.

There was, however, nothing to show that a shipwreck had taken place recently. It is true that, as Gideon Spilett observed, any remains of it might have drifted out to sea, and they must not take it for granted that because they could find no traces of it, a ship had not been castaway on the coast.

The reporter's argument was just, and besides, the incident of the bullet proved that a shot must have been fired in Lincoln Island within three months.

It was already five o'clock, and there were still two miles between the settlers and the extremity of the Serpentine Peninsula. It was evident that after having reached Reptile End, Harding and his companions would not have time to return before dark to their encampment near the source of the Mercy. It would therefore be necessary to pass the night on the promontory. But they had no lack of provisions, which was lucky, for there were no animals on the shore, though birds, on the contrary, abound—jacamars, couroucous, tragopans, grouse, lories, parrots, cockatoos, pheasants, pigeons, and a hundred others. There was not a tree without a nest, and not a nest which was not full of flapping wings.

Towards seven o'clock the weary explorers arrived at Reptile End. Here the seaside forest ended, and the shore resumed the customary appearance of a coast, with rocks, reefs, and sands. It was possible that something might be found here, but darkness came on, and the further exploration had to be put off to the next day.
Pencroft and Herbert hastened on to find a suitable place for their camp. Among the last trees of the forest of the Far West, the boy found several thick clumps of bamboos.

"Good," said he; "this is a valuable discovery."

"Valuable?" returned Pencroft.

"Certainly," replied Herbert. "I may say, Pencroft, that the bark of the bamboo, cut into flexible laths, is used for making baskets; that this bark, mashed into a paste, is used for the manufacture of Chinese paper; that the stalks furnish, according to their size, canes and pipes and are used for conducting water; that large bamboos make excellent material for building, being light and strong, and being never attacked by insects. I will add that by sawing the bamboo in two at the joint, keeping for the bottom the part of the transverse film which forms the joint, useful cups are obtained, which are much in use among the Chinese. No! you don't care for that. But--"

"But what?"

"But I can tell you, if you are ignorant of it, that in India these bamboos are eaten like asparagus."

"Asparagus thirty feet high!" exclaimed the sailor. "And are they good?"

"Excellent," replied Herbert. "Only it is not the stems of thirty feet high which are eaten, but the young shoots."

"Perfect, my boy, perfect!" replied Pencroft.

"I will also add that the pith of the young stalks, preserved in vinegar, makes a good pickle."

"Better and better, Herbert!"

"And lastly, that the bamboo exude a sweet liquor which can be made into a very agreeable drink."

"Is that all?" asked the sailor.

"That is all!"

"And they don't happen to do for smoking?"

"No, my poor Pencroft."

Herbert and the sailor had not to look long for a place in which to pass the night. The rocks, which must have been violently beaten by the sea under the influence of the winds of the southwest, presented many cavities in which shelter could be found against the night air. But just as they were about to enter one of these caves a loud roaring arrested them.

"Back!" cried Pencroft. "Our guns are only loaded with small shot, and beasts which can roar as loud as that would care no more for it than for grains of salt!" And the sailor, seizing Herbert by the arm, dragged him behind a rock, just as a magnificent animal showed itself at the entrance of the cavern.

It was a jaguar of a size at least equal to its Asiatic congeners, that is to say, it measured five feet from the extremity of its head to the beginning of its tail. The yellow color of its hair was relieved by streaks and regular oblong spots of black, which contrasted with the white of its chest. Herbert recognized it as the ferocious rival of the tiger, as formidable as the puma, which is the rival of the largest wolf!

The jaguar advanced and gazed around him with blazing eyes, his hair bristling as if this was not the first time he had scented men.

At this moment the reporter appeared round a rock, and Herbert, thinking that he had not seen the jaguar, was about to rush towards him, when Gideon Spilett signed to him to remain where he was. This was not his first tiger, and advancing to within ten feet of the animal he remained motionless, his gun to his shoulder, without moving a muscle. The jaguar collected itself for a spring, but at that moment a shot struck it in the eyes, and it fell dead.

Herbert and Pencroft rushed towards the jaguar. Neb and Harding also ran up, and they remained for some instants contemplating the animal as it lay stretched on the ground, thinking that its magnificent skin would be a great ornament to the hall at Granite House.

"Oh, Mr. Spilett, how I admire and envy you!" cried Herbert, in a fit of very natural enthusiasm.

"Well, my boy," replied the reporter, "you could have done the same."

"I! with such coolness!--"

"Imagine to yourself, Herbert, that the jaguar is only a hare, and you would fire as quietly as possible."

"That is," rejoined Pencroft, "that it is not more dangerous than a hare!"

"And now," said Gideon Spilett, "since the jaguar has left its abode, I do not see, my friends, why we should not take possession of it for the night."

"But others may come," said Pencroft.

"It will be enough to light a fire at the entrance of the cavern," said the reporter, "and no wild beasts will dare to cross the threshold."

"Into the jaguar's house, then!" replied the sailor, dragging after him the body of the animal.

While Neb skinned the jaguar, his companions collected an abundant supply of dry wood from the forest, which they heaped up at the cave.

Cyrus Harding, seeing the clump of bamboos, cut a quantity, which he mingled with the other fuel.
This done, they entered the grotto, of which the floor was strewn with bones, the guns were carefully loaded, in case of a sudden attack, they had supper, and then just before they lay down to rest, the heap of wood piled at the entrance was set fire to. Immediately, a regular explosion, or rather a series of reports, broke the silence! The noise was caused by the bamboos, which, as the flames reached them, exploded like fireworks. The noise was enough to terrify even the boldest of wild beasts.

It was not the engineer who had invented this way of causing loud explosions, for, according to Marco Polo, the Tartars have employed it for many centuries to drive away from their encampments the formidable wild beasts of Central Asia.

Chapter 5
Cyrus Harding and his companions slept like innocent marmots in the cave which the jaguar had so politely left at their disposal.

At sunrise all were on the shore at the extremity of the promontory, and their gaze was directed towards the horizon, of which two-thirds of the circumference were visible. For the last time the engineer could ascertain that not a sail nor the wreck of a ship was on the sea, and even with the telescope nothing suspicious could be discovered.

There was nothing either on the shore, at least, in the straight line of three miles which formed the south side of the promontory, for beyond that, rising ground had the rest of the coast, and even from the extremity of the Serpentine Peninsula Claw Cape could not be seen.

The southern coast of the island still remained to be explored. Now should they undertake it immediately, and devote this day to it?

This was not included in their first plan. In fact, when the boat was abandoned at the sources of the Mercy, it had been agreed that after having surveyed the west coast, they should go back to it, and return to Granite House by the Mercy. Harding then thought that the western coast would have offered refuge, either to a ship in distress, or to a vessel in her regular course; but now, as he saw that this coast presented no good anchorage, he wished to seek on the south what they had not been able to find on the west.

Gideon Spilett proposed to continue the exploration, that the question of the supposed wreck might be completely settled, and he asked at what distance Claw Cape might be from the extremity of the peninsula.

"About thirty miles," replied the engineer, "if we take into consideration the curvings of the coast."

"Thirty miles!" returned Spilett. "That would be a long day's march. Nevertheless, I think that we should return to Granite House by the south coast."

"But," observed Herbert, "from Claw Cape to Granite House there must be at least another ten miles.

"Make it forty miles in all," replied the engineer, "and do not hesitate to do it. At least we should survey the unknown shore, and then we shall not have to begin the exploration again."

"Very good," said Pencroft. "But the boat?"

"The boat has remained by itself for one day at the sources of the Mercy," replied Gideon Spilett; "it may just as well stay there two days! As yet, we have had no reason to think that the island is infested by thieves!"

"Yet," said the sailor, "when I remember the history of the turtle, I am far from confident of that."

"The turtle! the turtle!" replied the reporter. "Don't you know that the sea turned it over?"

"Who knows?" murmured the engineer.

"But,--" said Neb.

Neb had evidently something to say, for he opened his mouth to speak and yet said nothing.

"What do you want to say, Neb?" asked the engineer.

"If we return by the shore to Claw Cape," replied Neb, "after having doubled the Cape, we shall be stopped--"

"By the Mercy! of course," replied Herbert, "and we shall have neither bridge nor boat by which to cross."

"But, captain," added Pencroft, "with a few floating trunks we shall have no difficulty in crossing the river."

"Never mind," said Spilett, "it will be useful to construct a bridge if we wish to have an easy access to the Far West!"

"A bridge!" cried Pencroft. "Well, is not the captain the best engineer in his profession? He will make us a bridge when we want one. As to transporting you this evening to the other side of the Mercy, and that without wetting one thread of your clothes, I will take care of that. We have provisions for another day, and besides we can get plenty of game. Forward!"

The reporter's proposal, so strongly seconded by the sailor, received general approbation, for each wished to have their doubts set at rest, and by returning by Claw Cape the exploration would be ended. But there was not an hour to lose, for forty miles was a long march, and they could not hope to reach Granite House before night.

At six o'clock in the morning the little band set out. As a precaution the guns were loaded with ball, and Top,
who led the van, received orders to beat about the edge of the forest.

From the extremity of the promontory which formed the tail of the peninsula the coast was rounded for a
distance of five miles, which was rapidly passed over, without even the most minute investigations bringing to light
the least trace of any old or recent landings; no debris, no mark of an encampment, no cinders of a fire, nor even a
footprint!

From the point of the peninsula on which the settlers now were their gaze could extend along the southwest.
Twenty-five miles off the coast terminated in the Claw Cape, which loomed dimly through the morning mists, and
which, by the phenomenon of the mirage, appeared as if suspended between land and water.

Between the place occupied by the colonists and the other side of the immense bay, the shore was composed,
first, of a tract of low land, bordered in the background by trees; then the shore became more irregular, projecting
sharp points into the sea, and finally ended in the black rocks which, accumulated in picturesque disorder, formed
Claw Cape.

Such was the development of this part of the island, which the settlers took in at a glance, while stopping for an
instant.

"If a vessel ran in here," said Pencroft, "she would certainly be lost. Sandbanks and reefs everywhere! Bad
quarters!"

"But at least something would be left of the ship," observed the reporter.

"There might be pieces of wood on the rocks, but nothing on the sands," replied the sailor.

"Why?"

"Because the sands are still more dangerous than the rocks, for they swallow up everything that is thrown on
them. In a few days the hull of a ship of several hundred tons would disappear entirely in there!"

"So, Pencroft," asked the engineer, "if a ship has been wrecked on these banks, is it not astonishing that there is
now no trace of her remaining?"

"No, captain, with the aid of time and tempest. However, it would be surprising, even in this case, that some of
the masts or spars should not have been thrown on the beach, out of reach of the waves."

"Let us go on with our search, then," returned Cyrus Harding.

At one o'clock the colonists arrived at the other side of Washington Bay, they having now gone a distance of
twenty miles.

They then halted for breakfast.

Here began the irregular coast, covered with lines of rocks and sandbanks. The long sea-swell could be seen
breaking over the rocks in the bay, forming a foamy fringe. From this point to Claw Cape the beach was very narrow
between the edge of the forest and the reefs.

Walking was now more difficult, on account of the numerous rocks which encumbered the beach. The granite
cliff also gradually increased in height, and only the green tops of the trees which crowned it could be seen.

After half an hour's rest, the settlers resumed their journey, and not a spot among the rocks was left unexamined.
Pencroft and Neb even rushed into the surf whenever any object attracted their attention. But they found nothing,
some curious formations of the rocks having deceived them. They ascertained, however, that eatable shellfish
abounded there, but these could not be of any great advantage to them until some easy means of communication had
been established between the two banks of the Mercy, and until the means of transport had been perfected.

Nothing therefore which threw any light on the supposed wreck could be found on this shore, yet an object of
any importance, such as the hull of a ship, would have been seen directly, or any of her masts and spans would have
been washed on shore, just as the chest had been, which was found twenty miles from here. But there was nothing.

Towards three o'clock Harding and his companions arrived at a snug little creek. It formed quite a natural harbor,
invisible from the sea, and was entered by a narrow channel.

At the back of this creek some violent convulsion had torn up the rocky border, and a cutting, by a gentle slope,
gave access to an upper plateau, which might be situated at least ten miles from Claw Cape, and consequently four
miles in a straight line from Prospect Heights. Gideon Spilett proposed to his companions that they should make a
halt here. They agreed readily, for their walk had sharpened their appetites; and although it was not their usual
dinner-hour, no one refused to strengthen himself with a piece of venison. This luncheon would sustain them until
their supper, which they intended to take at Granite House. In a few minutes the settlers, seated under a clump of
fine sea-pines, were devouring the provisions which Neb produced from his bag.

This spot was raised from fifty to sixty feet above the level of the sea. The view was very extensive, but beyond
the cape it ended in Union Bay. Neither the islet nor Prospect Heights was visible, and could not be from thence, for
the rising ground and the curtain of trees closed the northern horizon.

It is useless to add that notwithstanding the wide extent of sea which the explorers could survey, and though the
engineer swept the horizon with his glass, no vessel could be found.
The shore was of course examined with the same care from the edge of the water to the cliff, and nothing could be discovered even with the aid of the instrument.

"Well," said Gideon Spilett, "it seems we must make up our minds to console ourselves with thinking that no one will come to dispute with us the possession of Lincoln Island!"

"But the bullet," cried Herbert. "That was not imaginary, I suppose!"

"Hang it, no!" exclaimed Pencroft, thinking of his absent tooth.

"Then what conclusion may be drawn?" asked the reporter.

"This," replied the engineer, "that three months or more ago, a vessel, either voluntarily or not, came here."

"What! then you admit, Cyrus, that she was swallowed up without leaving any trace?" cried the reporter.

"No, my dear Spilett; but you see that if it is certain that a human being set foot on the island, it appears no less certain that he has now left it."

"Then, if I understand you right, captain," said Herbert, "the vessel has left again?"

"Evidently."

"And we have lost an opportunity to get back to our country?" said Neb.

"I fear so."

"Very well, since the opportunity is lost, let us go on; it can't be helped," said Pencroft, who felt home-sickness for Granite House.

But just as they were rising, Top was heard loudly barking; and the dog issued from the wood, holding in his mouth a rag soiled with mud.

Neb seized it. It was a piece of strong cloth!

Top still barked, and by his going and coming, seemed to invite his master to follow him into the forest.

"Now there's something to explain the bullet!" exclaimed Pencroft.

"A castaway!" replied Herbert.

"Wounded, perhaps!" said Neb.

"Or dead!" added the reporter.

All ran after the dog, among the tall pines on the border of the forest. Harding and his companions made ready their firearms, in case of an emergency.

They advanced some way into the wood, but to their great disappointment, they as yet saw no signs of any human being having passed that way. Shrubs and creepers were uninjured, and they had even to cut them away with the axe, as they had done in the deepest recesses of the forest. It was difficult to fancy that any human creature had ever passed there, but yet Top went backward and forward, not like a dog who searches at random, but like a dog being endowed with a mind, who is following up an idea.

In about seven or eight minutes Top stopped in a glade surrounded with tall trees. The settlers gazed around them, but saw nothing, neither under the bushes nor among the trees.

"What is the matter, Top?" said Cyrus Harding.

Top barked louder, bounding about at the foot of a gigantic pine. All at once Pencroft shouted, --"Ho, splendid! capital!"

"What is it?" asked Spilett.

"We have been looking for a wreck at sea or on land!"

"Well?"

"Well; and here we've found one in the air!"

And the sailor pointed to a great white rag, caught in the top of the pine, a fallen scrap of which the dog had brought to them.

"But that is not a wreck!" cried Gideon Spilett.

"I beg your pardon!" returned Pencroft.

"Why? is it--?"

"It is all that remains of our airy boat, of our balloon, which has been caught up aloft there, at the top of that tree!"

Pencroft was not mistaken, and he gave vent to his feelings in a tremendous hurrah, adding,--

"There is good cloth! There is what will furnish us with linen for years. There is what will make us handkerchiefs and shirts! Ha, ha, Mr. Spilett, what do you say to an island where shirts grow on the trees?"

It was certainly a lucky circumstance for the settlers in Lincoln Island that the balloon, after having made its last bound into the air, had fallen on the island and thus given them the opportunity of finding it again, whether they kept the case under its present form, or whether they wished to attempt another escape by it, or whether they usefully employed the several hundred yards of cotton, which was of fine quality. Pencroft's joy was therefore shared by all.

But it was necessary to bring down the remains of the balloon from the tree, to place it in security, and this was
no slight task. Neb, Herbert, and the sailor, climbing to the summit of the tree, used all their skill to disengage the
now reduced balloon.

The operation lasted two hours, and then not only the case, with its valve, its springs, its brasswork, lay on the
ground, but the net, that is to say a considerable quantity of ropes and cordage, and the circle and the anchor. The
case, except for the fracture, was in good condition, only the lower portion being torn.

It was a fortune which had fallen from the sky.

"All the same, captain," said the sailor, "if we ever decide to leave the island, it won't be in a balloon, will it?
These airboats won't go where we want them to go, and we have had some experience in that way! Look here, we
will build a craft of some twenty tons, and then we can make a main-sail, a foresail, and a jib out of that cloth. As to
the rest of it, that will help to dress us."

"We shall see, Pencroft," replied Cyrus Harding; "we shall see."

"In the meantime, we must put it in a safe place," said Neb.

They certainly could not think of carrying this load of cloth, ropes, and cordage, to Granite House, for the weight
of it was very considerable, and while waiting for a suitable vehicle in which to convey it, it was of importance that
this treasure should not be left longer exposed to the mercies of the first storm. The settlers, uniting their efforts,
managed to drag it as far as the shore, where they discovered a large rocky cavity, which owing to its position could
not be visited either by the wind or rain.

"We needed a locker, and now we have one," said Pencroft; "but as we cannot lock it up, it will be prudent to
hide the opening. I don't mean from two-legged thieves, but from those with four paws!"

At six o'clock, all was stowed away, and after having given the creek the very suitable name of "Port Balloon,"
the settlers pursued their way along Claw Cape. Pencroft and the engineer talked of the different projects which it
was agreed to put into execution with the briefest possible delay. It was necessary first of all to throw a bridge over
the Mercy, so as to establish an easy communication with the south of the island; then the cart must be taken to bring
back the balloon, for the canoe alone could not carry it, then they would build a decked boat, and Pencroft would rig
it as a cutter, and they would be able to undertake voyages of circumnavigation round the island, etc.

In the meanwhile night came on, and it was already dark when the settlers reached Flotsam Point, where they
had found the precious chest.

The distance between Flotsam Point and Granite House was another four miles, and it was midnight when, after
having followed the shore to the mouth of the Mercy, the settlers arrived at the first angle formed by the Mercy.

There the river was eighty feet in breadth, which was awkward to cross, but as Pencroft had taken upon himself
to conquer this difficulty, he was compelled to do it. The settlers certainly had reason to be pretty tired. The journey
had been long, and the task of getting down the balloon had not rested either their arms or legs. They were anxious
to reach Granite House to eat and sleep, and if the bridge had been constructed, in a quarter of an hour they would
have been at home.

The night was very dark. Pencroft prepared to keep his promise by constructing a sort of raft, on which to make
the passage of the Mercy. He and Neb, armed with axes, chose two trees near the water, and began to attack them at
the base.

Cyrus Harding and Spilett, seated on the bank, waited till their companions were ready for their help, while
Herbert roamed about, though without going to any distance. All at once, the lad, who had strolled by the river,
came running back, and, pointing up the Mercy, exclaimed,--

"What is floating there?"

"A canoe!" cried he.

All approached, and saw to their extreme surprise, a boat floating down the current.

"Boat ahoy!" shouted the sailor, without thinking that perhaps it would be best to keep silence.

No reply. The boat still drifted onward, and it was not more than twelve feet off, when the sailor exclaimed,--

"But it is our own boat! she has broken her moorings, and floated down the current. I must say she has arrived
very opportunely."

"Our boat?" murmured the engineer.

Pencroft was right. It was indeed the canoe, of which the rope had undoubtedly broken, and which had come
alone from the sources of the Mercy. It was very important to seize it before the rapid current should have swept it
away out of the mouth of the river, but Neb and Pencroft cleverly managed this by means of a long pole.

The canoe touched the shore. The engineer leaped in first, and found, on examining the rope, that it had been
really worn through by rubbing against the rocks.

"Well," said the reporter to him, in a low voice, "this is a strange thing."

"Strange indeed!" returned Cyrus Harding.
Strange or not, it was very fortunate. Herbert, the reporter, Neb, and Pencroft, embarked in turn. There was no doubt about the rope having been worn through, but the astonishing part of the affair was, that the boat should arrive just at the moment when the settlers were there to seize it on its way, for a quarter of an hour earlier or later it would have been lost in the sea.

If they had been living in the time of genii, this incident would have given them the right to think that the island was haunted by some supernatural being, who used his power in the service of the castaways!

A few strokes of the oar brought the settlers to the mouth of the Mercy. The canoe was hauled up on the beach near the Chimneys, and all proceeded towards the ladder of Granite House.

But at that moment, Top barked angrily, and Neb, who was looking for the first steps, uttered a cry.

There was no longer a ladder!

Chapter 6

Cyrus Harding stood still, without saying a word. His companions searched in the darkness on the wall, in case the wind should have moved the ladder, and on the ground, thinking that it might have fallen down.... But the ladder had quite disappeared. As to ascertaining if a squall had blown it on the landing-place, half way up, that was impossible in the dark.

"If it is a joke," cried Pencroft, "it is a very stupid one! To come home and find no staircase to go up to your room by—there's nothing for weary men to laugh at."

Neb could do nothing but cry out "Oh! oh! oh!"

"I begin to think that very curious things happen in Lincoln Island!" said Pencroft.

"Curious?" replied Gideon Spilett, "not at all, Pencroft, nothing can be more natural. Some one has come during our absence, taken possession of our dwelling and drawn up the ladder."

"Some one," cried the sailor. "But who?"

"Who but the hunter who fired the bullet?" replied the reporter.

"Well, if there is any one up there," replied Pencroft, who began to lose patience, "I will give them a hail, and they must answer."

And in a stentorian voice the sailor gave a prolonged "Halloo!" which was echoed again and again from the cliff and rocks.

The settlers listened and they thought they heard a sort of chuckling laugh, of which they could not guess the origin. But no voice replied to Pencroft, who in vain repeated his vigorous shouts.

There was something indeed in this to astonish the most apathetic of men, and the settlers were not men of that description. In their situation every incident had its importance, and, certainly, during the seven months which they had spent on the island, they had not before met with anything of so surprising a character.

Be that as it may, forgetting their fatigue in the singularity of the event, they remained below Granite House, not knowing what to think, not knowing what to do, questioning each other without any hope of a satisfactory reply, every one starting some supposition each more unlikely than the last. Neb bewailed himself, much disappointed at not being able to get into his kitchen, for the provisions which they had had on their expedition were exhausted, and they had no means of renewing them.

"My friends," at last said Cyrus Harding, "there is only one thing to be done at present; wait for day, and then act according to circumstances. But let us go to the Chimneys. There we shall be under shelter, and if we cannot eat, we can at least sleep."

"But who is it that has played us this cool trick?" again asked Pencroft, unable to make up his mind to retire from the spot.

Whoever it was, the only thing practicable was to do as the engineer proposed, to go to the Chimneys and there wait for day. In the meanwhile Top was ordered to mount guard below the windows of Granite House, and when Top received an order he obeyed it without any questioning. The brave dog therefore remained at the foot of the cliff while his master with his companions sought a refuge among the rocks.

To say that the settlers, notwithstanding their fatigue, slept well on the sandy floor of the Chimneys would not be true. It was not only that they were extremely anxious to find out the cause of what had happened, whether it was the result of an accident which would be discovered at the return of day, or whether on the contrary it was the work of a human being; but they also had very uncomfortable beds. That could not be helped, however, for in some way or other at that moment their dwelling was occupied, and they could not possibly enter it.

Now Granite House was more than their dwelling, it was their warehouse. There were all the stores belonging to the colony, weapons, instruments, tools, ammunition, provisions, etc. To think that all that might be pillaged and that the settlers would have all their work to do over again, fresh weapons and tools to make, was a serious matter.
Their uneasiness led one or other of them also to go out every few minutes to see if Top was keeping good watch.
Cyrus Harding alone waited with his habitual patience, although his strong mind was exasperated at being confronted with such an inexplicable fact, and he was provoked at himself for allowing a feeling to which he could not give a name, to gain an influence over him. Gideon Spilett shared his feelings in this respect, and the two conversed together in whispers of the inexplicable circumstance which baffled even their intelligence and experience.

"It is a joke," said Pencroft; "it is a trick some one has played us. Well, I don't like such jokes, and the joker had better look out for himself, if he falls into my hands, I can tell him."

As soon as the first gleam of light appeared in the east, the colonists, suitably armed, repaired to the beach under Granite House. The rising sun now shone on the cliff and they could see the windows, the shutters of which were closed, through the curtains of foliage.

All here was in order; but a cry escaped the colonists when they saw that the door, which they had closed on their departure, was now wide open.

Some one had entered Granite House--there could be no more doubt about that.

The upper ladder, which generally hung from the door to the landing, was in its place, but the lower ladder was drawn up and raised to the threshold. It was evident that the intruders had wished to guard themselves against a surprise.

Pencroft hailed again.

No reply.

"The beggars," exclaimed the sailor. "There they are sleeping quietly as if they were in their own house. Hallo there, you pirates, brigands, robbers, sons of John Bull!"

When Pencroft, being a Yankee, treated any one to the epithet of "son of John Bull," he considered he had reached the last limits of insult.

The sun had now completely risen, and the whole facade of Granite House became illuminated by its rays; but in the interior as well as on the exterior all was quiet and calm.

The settlers asked if Granite House was inhabited or not, and yet the position of the ladder was sufficient to show that it was; it was also certain that the inhabitants, whoever they might be, had not been able to escape. But how were they to be got at?

Herbert then thought of fastening a cord to an arrow, and shooting the arrow so that it should pass between the first rounds of the ladder which hung from the threshold. By means of the cord they would then be able to draw down the ladder to the ground, and so re-establish the communication between the beach and Granite House. There was evidently nothing else to be done, and, with a little skill, this method might succeed. Very fortunately bows and arrows had been left at the Chimneys, where they also found a quantity of light hibiscus cord. Pencroft fastened this to a well-feathered arrow. Then Herbert fixing it to his bow, took a careful aim for the lower part of the ladder.

Cyrus Harding, Gideon Spilett, Pencroft, and Neb drew back, so as to see if anything appeared at the windows.

The reporter lifted his gun to his shoulder and covered the door.

The bow was bent, the arrow flew, taking the cord with it, and passed between the two last rounds.

The operation had succeeded.

Herbert immediately seized the end of the cord, but, at that moment when he gave it a pull to bring down the ladder, an arm, thrust suddenly out between the wall and the door, grasped it and dragged it inside Granite House.

"The rascals!" shouted the sailor. "If a ball can do anything for you, you shall not have long to wait for it.

"But who was it?" asked Neb.

"Who was it? Didn't you see?"

"No."

"It was a monkey, a sapajou, an orangoutang, a baboon, a gorilla, a sagoin. Our dwelling has been invaded by monkeys, who climbed up the ladder during our absence."

And, at this moment, as if to bear witness to the truth of the sailor's words, two or three quadrumana showed themselves at the windows, from which they had pushed back the shutters, and saluted the real proprietors of the place with a thousand hideous grimaces.

"I knew that it was only a joke," cried Pencroft; "but one of the jokers shall pay the penalty for the rest."

So saying, the sailor, raising his piece, took a rapid aim at one of the monkeys and fired. All disappeared, except one who fell mortally wounded on the beach. This monkey, which was of a large size, evidently belonged to the first order of the quadrumana. Whether this was a chimpanzee, an orangoutang, or a gorilla, he took rank among the anthropoid apes, who are so called from their resemblance to the human race. However, Herbert declared it to be an orangoutang.

"What a magnificent beast!" cried Neb.
"Magnificent, if you like," replied Pencroft; "but still I do not see how we are to get into our house."

"Herbert is a good marksman," said the reporter, "and his bow is here. He can try again."

"Why, these apes are so cunning," returned Pencroft; "they won't show themselves again at the windows and so we can't kill them; and when I think of the mischief they may do in the rooms and storehouse--"

"Have patience," replied Harding; "these creatures cannot keep us long at bay."

"I shall not be sure of that till I see them down here," replied the sailor. "And now, captain, do you know how many dozens of these fellows are up there?"

It was difficult to reply to Pencroft, and as for the young boy making another attempt, that was not easy; for the lower part of the ladder had been drawn again into the door, and when another pull was given, the line broke and the ladder remained firm. The case was really perplexing. Pencroft stormed. There was a comic side to the situation, but he did not think it funny at all. It was certain that the settlers would end by reinstating themselves in their domicile and driving out the intruders, but when and how? this is what they were not able to say.

Two hours passed, during which the apes took care not to show themselves, but they were still there, and three or four times a nose or a paw was poked out at the door or windows, and was immediately saluted by a gun-shot.

"Let us hide ourselves," at last said the engineer. "Perhaps the apes will think we have gone quite away and will show themselves again. Let Spilett and Herbert conceal themselves behind those rocks and fire on all that may appear."

The engineer's orders were obeyed, and while the reporter and the lad, the best marksmen in the colony, posted themselves in a good position, but out of the monkeys' sight, Neb, Pencroft, and Cyrus climbed the plateau and entered the forest in order to kill some game, for it was now time for breakfast and they had no provisions remaining.

In half an hour the hunters returned with a few rock pigeons, which they roasted as well as they could. Not an ape had appeared. Gideon Spilett and Herbert went to take their share of the breakfast, leaving Top to watch under the windows. They then, having eaten, returned to their post.

Two hours later, their situation was in no degree improved. The quadrupeds gave no sign of existence, and it might have been supposed that they had disappeared; but what seemed more probable was that, terrified by the death of one of their companions, and frightened by the noise of the firearms, they had retreated to the back part of the house or probably even into the store-room. And when they thought of the valuables which this storeroom contained, the patience so much recommended by the engineer, fast changed into great irritation, and there certainly was room for it.

"Decidedly it is too bad," said the reporter; "and the worst of it is, there is no way of putting an end to it."

"But we must drive these vagabonds out somehow," cried the sailor. "We could soon get the better of them, even if there are twenty of the rascals; but for that, we must meet them hand to hand. Come now, is there no way of getting at them?"

"Let us try to enter Granite House by the old opening at the lake," replied the engineer.

"Oh!" shouted the sailor, "and I never thought of that."

This was in reality the only way by which to penetrate into Granite House so as to fight with and drive out the intruders. The opening was, it is true, closed up with a wall of cemented stones, which it would be necessary to sacrifice, but that seemed more probable was that, terrified by the death of one of their companions, and frightened by the noise of the firearms, they had retreated to the back part of the house or probably even into the store-room. And when they thought of the valuables which this storeroom contained, the patience so much recommended by the engineer, fast changed into great irritation, and there certainly was room for it.

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This was in reality the only way by which to penetrate into Granite House so as to fight with and drive out the intruders. The opening was, it is true, closed up with a wall of cemented stones, which it would be necessary to sacrifice, but that could easily be rebuilt. Fortunately, Cyrus Harding had not as yet effected his project of hiding this opening by raising the waters of the lake, for the operation would then have taken some time.

It was already past twelve o'clock, when the colonists, well armed and provided with picks and spades, left the Chimneys, passed beneath the windows of Granite House, after telling Top to remain at his post, and began to ascend the left bank of the Mercy, so as to reach Prospect Heights.

But they had not made fifty steps in this direction, when they heard the dog barking furiously.

And all rushed down the bank again.

Arrived at the turning, they saw that the situation had changed.

In fact, the apes, seized with a sudden panic, from some unknown cause, were trying to escape. Two or three ran and clambered from one window to another with the agility of acrobats. They were not even trying to replace the ladder, by which it would have been easy to descend; perhaps in their terror they had forgotten this way of escape. The colonists, now being able to take aim without difficulty, fired. Some, wounded or killed, fell back into the rooms, uttering piercing cries. The rest, throwing themselves out, were dashed to pieces in their fall, and in a few minutes, so far as they knew, there was not a living quadruped in Granite House.

At this moment the ladder was seen to slip over the threshold, then unroll and fall to the ground.

"Hullo!" cried the sailor, "this is queer!"

"Very strange!" murmured the engineer, leaping first up the ladder.

"Take care, captain!" cried Pencroft, "perhaps there are still some of these rascals.
"We shall soon see," replied the engineer, without stopping however.
All his companions followed him, and in a minute they had arrived at the threshold. They searched everywhere.
There was no one in the rooms nor in the storehouse, which had been respected by the band of quadrumana.

"Well now, and the ladder," cried the sailor; "who can the gentleman have been who sent us that down?"
But at that moment a cry was heard, and a great orang, who had hidden himself in the passage, rushed into the room, pursued by Neb.

"Ah, the robber!" cried Pencroft.
And hatchet in hand, he was about to cleave the head of the animal, when Cyrus Harding seized his arm, saying,-

"Spare him, Pencroft."
"Pardon this rascal?"
"Yes! it was he who threw us the ladder!"
And the engineer said this in such a peculiar voice that it was difficult to know whether he spoke seriously or not.
Nevertheless, they threw themselves on the orang, who defended himself gallantly, but was soon overpowered and bound.

"There!" said Pencroft. "And what shall we make of him, now we've got him?"
"A servant!" replied Herbert.
The lad was not joking in saying this, for he knew how this intelligent race could be turned to account.
The settlers then approached the ape and gazed at it attentively. He belonged to the family of anthropoid apes, of which the facial angle is not much inferior to that of the Australians and Hottentots. It was an orangoutang, and as such, had neither the ferocity of the gorilla, nor the stupidity of the baboon. It is to this family of the anthropoid apes that so many characteristics belong which prove them to be possessed of an almost human intelligence. Employed in houses, they can wait at table, sweep rooms, brush clothes, clean boots, handle a knife, fork, and spoon properly, and even drink wine... doing everything as well as the best servant that ever walked upon two legs. Buffon possessed one of these apes, who served him for a long time as a faithful and zealous servant.
The one which had been seized in the hall of Granite House was a great fellow, six feet high, with an admirably proportioned frame, a broad chest, head of a moderate size, the facial angle reaching sixty-five degrees, round skull, projecting nose, skin covered with soft glossy hair, in short, a fine specimen of the anthropoids. His eyes, rather smaller than human eyes, sparkled with intelligence; his white teeth glittered under his mustache, and he wore a little curly brown beard.

"A handsome fellow!" said Pencroft; "if we only knew his language, we could talk to him."
"But, master," said Neb, "are you serious? Are we going to take him as a servant?"
"Yes, Neb," replied the engineer, smiling. "But you must not be jealous."
"And I hope he will make an excellent servant," added Herbert. "He appears young, and will be easy to educate, and we shall not be obliged to use force to subdue him, nor draw his teeth, as is sometimes done. He will soon grow fond of his masters if they are kind to him."
"And they will be," replied Pencroft, who had forgotten all his rancor against "the jokers."
Then, approaching the orang,--
"Well, old boy!" he asked, "how are you?"
The orang replied by a little grunt which did not show any anger.
"You wish to join the colony?" again asked the sailor. "You are going to enter the service of Captain Cyrus Harding?"
Another respondent grunt was uttered by the ape.
"And you will be satisfied with no other wages than your food?"
Third affirmative grunt.
"This conversation is slightly monotonous," observed Gideon Spilett.
"So much the better," replied Pencroft; "the best servants are those who talk the least. And then, no wages, do you hear, my boy? We will give you no wages at first, but we will double them afterwards if we are pleased with you."

Thus the colony was increased by a new member. As to his name the sailor begged that in memory of another ape which he had known, he might be called Jupiter, and Jup for short.
And so, without more ceremony, Master Jup was installed in Granite House.

Chapter 7
The settlers in Lincoln Island had now regained their dwelling, without having been obliged to reach it by the old opening, and were therefore spared the trouble of mason's work. It was certainly lucky, that at the moment they were about to set out to do so, the apes had been seized with that terror, no less sudden than inexplicable, which had driven them out of Granite House. Had the animals discovered that they were about to be attacked from another direction? This was the only explanation of their sudden retreat.

During the day the bodies of the apes were carried into the wood, where they were buried; then the settlers busied themselves in repairing the disorder caused by the intruders, disorder but not damage, for although they had turned everything in the rooms topsy-turvy, yet they had broken nothing. Neb relighted his stove, and the stores in the larder furnished a substantial repast, to which all did ample justice.

Jup was not forgotten, and he ate with relish some stonemine almonds and rhizome roots, with which he was abundantly supplied. Pencroft had unfastened his arms, but judged it best to have his legs tied until they were more sure of his submission.

Then, before retiring to rest, Harding and his companions seated round their table, discussed those plans, the execution of which was most pressing. The most important and most urgent was the establishment of a bridge over the Mercy, so as to form a communication with the southern part of the island and Granite House; then the making of an enclosure for the musmons or other woolly animals which they wished to capture.

These two projects would help to solve the difficulty as to their clothing, which was now serious. The bridge would render easy the transport of the balloon case, which would furnish them with linen, and the inhabitants of the enclosure would yield wool which would supply them with winter clothes.

As to the enclosure, it was Cyrus Harding's intention to establish it at the sources of the Red Creek, where the ruminants would find fresh and abundant pasture. The road between Prospect Heights and the sources of the stream was already partly beaten, and with a better cart than the first, the material could be easily conveyed to the spot, especially if they could manage to capture some animals to draw it.

But though there might be no inconvenience in the enclosure being so far from Granite House, it would not be the same with the poultry-yard, to which Neb called the attention of the colonists. It was indeed necessary that the birds should be close within reach of the cook, and no place appeared more favorable for the establishment of the said poultry-yard than that portion of the banks of the lake which was close to the old opening.

Water-birds would prosper there as well as others, and the couple of tinamous taken in their last excursion would be the first to be domesticated.

The next day, the 3rd of November, the new works were begun by the construction of the bridge, and all hands were required for this important task. Saws, hatchets, and hammers were shouldered by the settlers, who, now transformed into carpenters, descended to the shore.

There Pencroft observed,—

"Suppose, that during our absence, Master Jup takes it into his head to draw up the ladder which he so politely returned to us yesterday?"

"Let us tie its lower end down firmly," replied Cyrus Harding.

This was done by means of two stakes securely fixed in the sand. Then the settlers, ascending the left bank of the Mercy, soon arrived at the angle formed by the river.

There they halted, in order to ascertain if the bridge could be thrown across. The place appeared suitable.

In fact, from this spot, to Port Balloon, discovered the day before on the southern coast, there was only a distance of three miles and a half, and from the bridge to the Port, it would be easy to make a good cart-road which would render the communication between Granite House and the south of the island extremely easy.

Cyrus Harding now imparted to his companions a scheme for completely isolating Prospect Heights so as to shelter it from the attacks both of quadrupeds and quadrumania. In this way, Granite House, the Chimneys, the poultry-yard, and all the upper part of the plateau which was to be used for cultivation, would be protected against the depredations of animals. Nothing could be easier than to execute this project, and this is how the engineer intended to set to work.

The plateau was already defended on three sides by water-courses, either artificial or natural. On the northwest, by the shores of Lake Grant, from the entrance of the passage to the breach made in the banks of the lake for the escape of the water.

On the north, from this breach to the sea, by the new water-course which had hollowed out a bed for itself across the plateau and shore, above and below the fall, and it would be enough to dig the bed of this creek a little deeper to make it impracticable for animals, on all the eastern border by the sea itself, from the mouth of the aforesaid creek to the mouth of the Mercy.

Lastly, on the south, from the mouth to the turn of the Mercy where the bridge was to be established.

The western border of the plateau now remained between the turn of the river and the southern angle of the lake,
a distance of about a mile, which was open to all comers. But nothing could be easier than to dig a broad deep ditch, which could be filled from the lake, and the overflow of which would throw itself by a rapid fall into the bed of the Mercy. The level of the lake would, no doubt, be somewhat lowered by this fresh discharge of its waters, but Cyrus Harding had ascertained that the volume of water in the Red Creek was considerable enough to allow of the execution of this project.

"So then," added the engineer, "Prospect Heights will become a regular island, being surrounded with water on all sides, and only communicating with the rest of our domain by the bridge which we are about to throw across the Mercy, the two little bridges already established above and below the fall; and, lastly, two other little bridges which must be constructed, one over the canal which I propose to dig, the other across to the left bank of the Mercy. Now, if these bridges can be raised at will, Prospect Heights will be guarded from any surprise."

The bridge was the most urgent work. Trees were selected, cut down, stripped of their branches, and cut into beams, joists, and planks. The end of the bridge which rested on the right bank of the Mercy was to be firm, but the other end on the left bank was to be movable, so that it might be raised by means of a counterpoise, as some canal bridges are managed.

This was certainly a considerable work, and though it was skillfully conducted, it took some time, for the Mercy at this place was eighty feet wide. It was therefore necessary to fix piles in the bed of the river so as to sustain the floor of the bridge and establish a pile-driver to act on the tops of these piles, which would thus form two arches and allow the bridge to support heavy loads.

Happily there was no want of tools with which to shape the wood, nor of iron-work to make it firm, nor of the ingenuity of a man who had a marvelous knowledge of the work, nor lastly, the zeal of his companions, who in seven months had necessarily acquired great skill in the use of their tools; and it must be said that not the least skilful was Gideon Spilett, who in dexterity almost equaled the sailor himself. "Who would ever have expected so much from a newspaper man!" thought Pencroft.

The construction of the Mercy bridge lasted three weeks of regular hard work. They even breakfasted on the scene of their labors, and the weather being magnificent, they only returned to Granite House to sleep.

During this period it may be stated that Master Jup grew more accustomed to his new masters, whose movements he always watched with very inquisitive eyes. However, as a precautionary measure, Pencroft did not as yet allow him complete liberty, rightly wishing to wait until the limits of the plateau should be settled by the projected works. Top and Jup were good friends and played willingly together, but Jup did everything solemnly.

On the 20th of November the bridge was finished. The movable part, balanced by the counterpoise, swung easily, and only a slight effort was needed to rise it; between its hinge and the last cross-bar on which it rested when closed, there existed a space of twenty feet, which was sufficiently wide to prevent any animals from crossing.

The settlers now began to talk of fetching the balloon-case, which they were anxious to place in perfect security; but to bring it, it would be necessary to take a cart to Port Balloon, and consequently, necessary to beat a road through the dense forests of the Far West. This would take some time. Also, Neb and Pencroft having gone to examine into the state of things at Port Balloon, and reported that the stock of cloth would suffer no damage in the grotto where it was stored, it was decided that the work at Prospect Heights should not be discontinued.

"That," observed Pencroft, "will enable us to establish our poultry-yard under better conditions, since we need have no fear of visits from foxes nor the attacks of other beasts."

"Then," added Neb, "we can clear the plateau, and transplant wild plants to it."

"And prepare our second corn-field!" cried the sailor with a triumphant air.

In fact, the first corn-field sown with a single grain had prospered admirably, thanks to Pencroft's care. It had produced the ten ears foretold by the engineer, and each ear containing eighty grains, the colony found itself in possession of eight hundred grains, in six months, which promised a double harvest each year.

These eight hundred grains, except fifty, which were prudently reserved, were to be sown in a new field, but with no less care than was bestowed on the single grain.

The field was prepared, then surrounded with a strong palisade, high and pointed, which quadrupeds would have found difficulty in leaping. As to birds, some scarecrows, due to Pencroft's ingenious brain, were enough to frighten them. The seven hundred and fifty grains deposited in very regular furrows were then left for nature to do the rest.

On the 21st of November, Cyrus Harding began to plan the canal which was to close the plateau on the west, from the south angle of Lake Grant to the angle of the Mercy. There was there two or three feet of vegetable earth, and below that granite. It was therefore necessary to manufacture some more nitro-glycerine, and the nitro-glycerine did its accustomed work. In less than a fortnight a ditch, twelve feet wide and six deep, was dug out in the hard ground of the plateau. A new trench was made by the same means in the rocky border of the lake, forming a small stream, to which they gave the name of Creek Glycerine, and which was thus an affluent of the Mercy. As the engineer had predicted, the level of the lake was lowered, though very slightly. To complete the enclosure the bed of
the stream on the beach was considerably enlarged, and the sand supported by means of stakes.

By the end of the first fortnight of December these works were finished, and Prospect Heights--that is to say, a sort of irregular pentagon, having a perimeter of nearly four miles, surrounded by a liquid belt--was completely protected from depredators of every description.

During the month of December, the heat was very great. In spite of it, however, the settlers continued their work, and as they were anxious to possess a poultry-yard they forthwith commenced it.

It is useless to say that since the enclosing of the plateau had been completed, Master Jup had been set at liberty. He did not leave his masters, and evinced no wish to escape. He was a gentle animal, though very powerful and wonderfully active. He was already taught to make himself useful by drawing loads of wood and carting away the stones which were extracted from the bed of Creek Glycerine.

The poultry-yard occupied an area of two hundred square yards, on the southeastern bank of the lake. It was surrounded by a palisade, and in it were constructed various shelters for the birds which were to populate it. These were simply built of branches and divided into compartments, made ready for the expected guests.

The first were the two tinamous, which were not long in having a number of young ones; they had for companions half a dozen ducks, accustomed to the borders of the lake. Some belonged to the Chinese species, of which the wings open like a fan, and which by the brilliancy of their plumage rival the golden pheasants. A few days afterwards, Herbert snared a couple of gallinaceae, with spreading tails composed of long feathers, magnificent alectors, which soon became tame. As to pelicans, kingfishers, water-hens, they came of themselves to the shores of the poultry-yard, and this little community, after some disputes, cooing, screaming, clucking, ended by settling down peacefully, and increased in encouraging proportion for the future use of the colony.

Cyrus Harding, wishing to complete his performance, established a pigeon-house in a corner of the poultry-yard. There he lodged a dozen of those pigeons which frequented the rocks of the plateau. These birds soon became accustomed to returning every evening to their new dwelling, and showed more disposition to domesticate themselves than their congeners, the wood-pigeons.

Lastly, the time had come for turning the balloon-case to use, by cutting it up to make shirts and other articles; for as to keeping it in its present form, and risking themselves in a balloon filled with gas, above a sea of the limits of which they had no idea, it was not to be thought of.

It was necessary to bring the case to Granite House, and the colonists employed themselves in rendering their heavy cart lighter and more manageable. But though they had a vehicle, the moving power was yet to be found.

But did there not exist in the island some animal which might supply the place of the horse, ass, or ox? That was the question.

"Certainly," said Pencroft, "a beast of burden would be very useful to us until the captain has made a steam cart, or even an engine, for some day we shall have a railroad from Granite House to Port Balloon, with a branch line to Mount Franklin!"

One day, the 23rd of December, Neb and Top were heard shouting and barking, each apparently trying to see who could make the most noise. The settlers, who were busy at the Chimneys, ran, fearing some vexatious incident.

What did they see? Two fine animals of a large size that had imprudently ventured on the plateau, when the bridges were open. One would have said they were horses, or at least donkeys, male and female, of a fine shape, dove-colored, the legs and tail white, striped with black on the head and neck. They advanced quietly without showing any uneasiness, and gazed at the men, in whom they could not as yet recognize their future masters.

"These are onagers!" cried Herbert, "animals something between the zebra and the quagga!"

"Why not donkeys?" asked Neb.

"Because they have not long ears, and their shape is more graceful!"

"Donkeys or horses," interrupted Pencroft, "they are 'moving powers,' as the captain would say, and as such must be captured!"

The sailor, without frightening the animals, crept through the grass to the bridge over Creek Glycerine, lowered it, and the onagers were prisoners.

Now, should they seize them with violence and master them by force? No. It was decided that for a few days they should be allowed to roam freely about the plateau, where there was an abundance of grass, and the engineer immediately began to prepare a stable near the poultry-yard, in which the onagers might find food, with a good litter, and shelter during the night.

This done, the movements of the two magnificent creatures were left entirely free, and the settlers avoided even approaching them so as to terrify them. Several times, however, the onagers appeared to wish to leave the plateau, too confined for animals accustomed to the plains and forests. They were then seen following the water-barrier which everywhere presented itself before them, uttering short neighs, then galloping through the grass, and becoming calmer, they would remain entire hours gazing at the woods, from which they were cut off for ever!
In the meantime harness of vegetable fiber had been manufactured, and some days after the capture of the onagers, not only the cart was ready, but a straight road, or rather a cutting, had been made through the forests of the Far West, from the angle of the Mercy to Port Balloon. The cart might then be driven there, and towards the end of December they tried the onagers for the first time.

Pencroft had already coaxed the animals to come and eat out of his hand, and they allowed him to approach without making any difficulty, but once harnessed they reared and could with difficulty be held in. However, it was not long before they submitted to this new service, for the onager, being less refractory than the zebra, is frequently put in harness in the mountainous regions of Southern Africa, and it has even been acclimatized in Europe, under zones of a relative coolness.

On this day all the colony, except Pencroft who walked at the animals' heads, mounted the cart, and set out on the road to Port Balloon.

Of course they were jolted over the somewhat rough road, but the vehicle arrived without any accident, and was soon loaded with the case and rigging of the balloon.

At eight o'clock that evening the cart, after passing over the Mercy bridge, descended the left bank of the river, and stopped on the beach. The onagers being unharnessed, were thence led to their stable, and Pencroft before going to sleep gave vent to his feelings in a deep sigh of satisfaction that awoke all the echoes of Granite House.

Chapter 8

The first week of January was devoted to the manufacture of the linen garments required by the colony. The needles found in the box were used by sturdy if not delicate fingers, and we may be sure that what was sewn was sewn firmly.

There was no lack of thread, thanks to Cyrus Harding's idea of re-employing that which had been already used in the covering of the balloon. This with admirable patience was all unpicked by Gideon Spilett and Herbert, for Pencroft had been obliged to give this work up, as it irritated him beyond measure; but he had no equal in the sewing part of the business. Indeed, everybody knows that sailors have a remarkable aptitude for tailoring.

The cloth of which the balloon-case was made was then cleaned by means of soda and potash, obtained by the incineration of plants, in such a way that the cotton, having got rid of the varnish, resumed its natural softness and elasticity; then, exposed to the action of the atmosphere, it soon became perfectly white. Some dozen shirts and sock--the latter not knitted, of course, but made of cotton--were thus manufactured. What a comfort it was to the settlers to clothe themselves again in clean linen, which was doubtless rather rough, but they were not troubled about that! and then to go to sleep between sheets, which made the couches at Granite House into quite comfortable beds!

It was about this time also that they made boots of seal-leather, which were greatly needed to replace the shoes and boots brought from America. We may be sure that these new shoes were large enough and never pinched the feet of the wearers.

With the beginning of the year 1866 the heat was very great, but the hunting in the forests did not stand still. Agouties, peccaries, capybaras, kangaroos, game of all sorts, actually swarmed there, and Spilett and Herbert were too good marksmen ever to throw away their shot uselessly.

Cyrus Harding still recommended them to husband the ammunition, and he took measures to replace the powder and shot which had been found in the box, and which he wished to reserve for the future. How did he know where chance might one day cast his companions and himself in the event of their leaving their domain? They should, then, prepare for the unknown future by husbanding their ammunition and by substituting for it some easily renewable substance.

To replace lead, of which Harding had found no traces in the island, he employed granulated iron, which was easy to manufacture. These bullets, not having the weight of leaden bullets, were made larger, and each charge contained less, but the skill of the sportsmen made up this deficiency. As to powder, Cyrus Harding would have been able to make that also, for he had at his disposal saltpeter, sulphur, and coal; but this preparation requires extreme care, and without special tools it is difficult to produce it of a good quality. Harding preferred, therefore, to manufacture pyroxyyle, that is to say gun-cotton, a substance in which cotton is not indispensable, as the elementary tissue of vegetables may be used, and this is found in an almost pure state, not only in cotton, but in the textile fiber of hemp and flax, in paper, the pith of the elder, etc. Now, the elder abounded in the island towards the mouth of Red Creek, and the colonists had already made coffee of the berries of these shrubs, which belong to the family of the caprifoliaceae.

The only thing to be collected, therefore, was elder-pith, for as to the other substance necessary for the manufacture of pyroxyyle, it was only fuming azotic acid. Now, Harding having sulphuric acid at his disposal, had already been easily able to produce azotic acid by attacking the saltpeter with which nature supplied him. He
to the settlers, and which enraptured Pencroft. Perfectly, changing the plates, bringing dishes, pouring out water, all with a gravity which gave intense amusement to any idea of it, he appeared one day, napkin on his arm, ready to wait at table. Quick, attentive, he acquitted himself so well as to exhibit remarkable intelligence in profiting by the lessons he received from his master.

The black showed the greatest patience and even extreme zeal in instructing his pupil, and the pupil appeared to take to the work very much. Jup passed the greatest part of his time in the kitchen, where he endeavored to imitate Neb in all that he saw Neb do. The negro returned all the services he had been taught, and even went so far as to instruct his pupil in the use of the blackboard. The result was that Neb returned all that he could to Jup, and the two negroes became friends.

When Neb returned it. When his services were not required, either for carrying wood or for climbing to the top of some of the trees, Jup passed the greatest part of his time in the kitchen, where he endeavored to imitate Neb in all that he saw him do. The black showed the greatest patience and even extreme zeal in instructing his pupil, and the pupil exhibited remarkable intelligence in profiting by the lessons he received from his master.

Judge then of the pleasure Master Jup gave to the inhabitants of Granite House when, without their having had any idea of it, he appeared one day, napkin on his arm, ready to wait at table. Quick, attentive, he acquitted himself perfectly, changing the plates, bringing dishes, pouring out water, all with a gravity which gave intense amusement to the settlers, and which enraptured Pencroft.

"Jup, some soup!"
"Jup, a little agouti!"
"Jup, a plate!"
"Jup! Good Jup! Honest Jup!"

Nothing was heard but that, and Jup without ever being disconcerted, replied to every one, watched for...
everything, and he shook his head in a knowing way when Pencroft, referring to his joke of the first day, said to him,

"Decidedly, Jup, your wages must be doubled."

It is useless to say that the orang was now thoroughly domesticated at Granite House, and that he often accompanied his masters to the forest without showing any wish to leave them. It was most amusing to see him walking with a stick which Pencroft had given him, and which he carried on his shoulder like a gun. If they wished to gather some fruit from the summit of a tree, how quickly he climbed for it. If the wheel of the cart stuck in the mud, with what energy did Jup with a single heave of his shoulder put it right again.

"What a jolly fellow he is!" cried Pencroft often. "If he was as mischievous as he is good, there would be no doing anything with him!"

It was towards the end of January the colonists began their labors in the center of the island. It had been decided that a corral should be established near the sources of the Red Creek, at the foot of Mount Franklin, destined to contain the ruminants, whose presence would have been troublesome at Granite House, and especially for the musmons, who were to supply the wool for the settlers' winter garments.

Each morning, the colony, sometimes entire, but more often represented only by Harding, Herbert, and Pencroft, proceeded to the sources of the Creek, a distance of not more than five miles, by the newly beaten road to which the name of Corral Road had been given.

There a site was chosen, at the back of the southern ridge of the mountain. It was a meadow land, dotted here and there with clumps of trees, and watered by a little stream, which sprung from the slopes which closed it in on one side. The grass was fresh, and it was not too much shaded by the trees which grew about it. This meadow was to be surrounded by a palisade, high enough to prevent even the most agile animals from leaping over. This enclosure would be large enough to contain a hundred musmons and wild goats, with all the young ones they might produce.

The perimeter of the corral was then traced by the engineer, and they would then have proceeded to fell the trees necessary for the construction of the palisade, but as the opening up of the road had already necessitated the sacrifice of a considerable number, those were brought and supplied a hundred stakes, which were firmly fixed in the ground.

The construction of this corral did not take less than three weeks, for besides the palisade, Cyrus Harding built large sheds, in which the animals could take shelter. These buildings had also to be made very strong, for musmons are powerful animals, and their first fury was to be feared. The stakes, sharpened at their upper end and hardened by fire, had been fixed by means of cross-bars, and at regular distances props assured the solidity of the whole.

The corral finished, a raid had to be made on the pastures frequented by the ruminants. This was done on the 7th of February, on a beautiful summer's day, and every one took part in it. The onagers, already well trained, were ridden by Spilett and Herbert, and were of great use.

The maneuver consisted simply in surrounding the musmons and goats, and gradually narrowing the circle around them. Cyrus Harding, Pencroft, Neb, and Jup, posted themselves in different parts of the wood, while the two cavaliers and Top galloped in a radius of half a mile round the corral.

The musmons were very numerous in this part of the island. These fine animals were as large as deer; their horns were stronger than those of the ram, and their gray-colored fleece was mixed with long hair.

This hunting day was very fatiguing. Such going and coming, and running and riding and shouting! Of a hundred musmons which had been surrounded, more than two-thirds escaped, but at last, thirty of these animals and ten wild goats were gradually driven back towards the corral, the open door of which appearing to offer a means of escape, they rushed in and were prisoners.

In short, the result was satisfactory, and the settlers had no reason to complain. There was no doubt that the flock would prosper, and that at no distant time not only wool but hides would be abundant.

That evening the hunters returned to Granite House quite exhausted. However, notwithstanding their fatigue, they returned the next day to visit the corral. The prisoners had been trying to overthrow the palisade, but of course had not succeeded, and were not long in becoming more tranquil.

During the month of February, no event of any importance occurred. The daily labors were pursued methodically, and, as well as improving the roads to the corral and to Port Balloon, a third was commenced, which, starting from the enclosure, proceeded towards the western coast. The yet unknown portion of Lincoln Island was that of the wood-covered Serpentine Peninsula, which sheltered the wild beasts, from which Gideon Spilett was so anxious to clear their domain.

Before the cold season should appear the most assiduous care was given to the cultivation of the wild plants which had been transplanted from the forest to Prospect Heights. Herbert never returned from an excursion without bringing home some useful vegetable. One day, it was some specimens of the chicory tribe, the seeds of which by pressure yield an excellent oil; another, it was some common sorrel, whose antiscorbutic qualities were not to be despised; then, some of those precious tubers, which have at all times been cultivated in South America, potatoes, of
which more than two hundred species are now known. The kitchen garden, now well stocked and carefully defended from the birds, was divided into small beds, where grew lettuces, kidney potatoes, sorrel, turnips, radishes, and other coneiferae. The soil on the plateau was particularly fertile, and it was hoped that the harvests would be abundant.

They had also a variety of different beverages, and so long as they did not demand wine, the most hard to please would have had no reason to complain. To the Oswego tea, and the fermented liquor extracted from the roots of the dragonnier, Harding had added a regular beer, made from the young shoots of the spruce-fir, which, after having been boiled and fermented, made that agreeable drink called by the Anglo-Americans spring-beer.

Towards the end of the summer, the poultry-yard was possessed of a couple of fine bustards, which belonged to the houbara species, characterized by a sort of feathery mantle; a dozen shovelers, whose upper mandible was prolonged on each side by a membraneous appendage; and also some magnificent cocks, similar to the Mozambique cocks, the comb, caruncle, and epidermis being black. So far, everything had succeeded, thanks to the activity of these courageous and intelligent men. Nature did much for them, doubtless; but faithful to the great precept, they made a right use of what a bountiful Providence gave them.

After the heat of these warm summer days, in the evening when their work was finished and the sea-breeze began to blow, they liked to sit on the edge of Prospect Heights, in a sort of veranda, covered with creepers, which Neb had made with his own hands. There they talked, they instructed each other, they made plans, and the rough good-humor of the sailor always amused this little world, in which the most perfect harmony had never ceased to reign.

They often spoke of their country, of their dear and great America. What was the result of the War of Secession? It could not have been greatly prolonged. Richmond had doubtless soon fallen into the hands of General Grant. The taking of the capital of the Confederates must have been the last action of this terrible struggle. Now the North had triumphed in the good cause, how welcome would have been a newspaper to the exiles in Lincoln Island! For eleven months all communication between them and the rest of their fellow-creatures had been interrupted, and in a short time the 24th of March would arrive, the anniversary of the day on which the balloon had thrown them on this unknown coast. They were then mere castaways, not even knowing how they should preserve their miserable lives from the fury of the elements! And now, thanks to the knowledge of their captain, and their own intelligence, they were regular colonists, furnished with arms, tools, and instruments; they had been able to turn to their profit the animals, plants, and minerals of the island, that is to say, the three kingdoms of Nature.

Yes; they often talked of all these things and formed still more plans.

As to Cyrus Harding he was for the most part silent, and listened to his companions more often than he spoke to them. Sometimes he smiled at Herbert's ideas or Pencroft's nonsense, but always and everywhere he pondered over those inexplicable facts, that strange enigma, of which the secret still escaped him!

Chapter 9

The weather changed during the first week of March. There had been a full moon at the commencement of the month, and the heat was excessive. The atmosphere was felt to be full of electricity, and a period of some length of tempestuous weather was to be feared.

Indeed, on the 2nd, peals of thunder were heard, the wind blew from the east, and hail rattled against the facade of Granite House like volleys of grape-shot. The door and windows were immediately closed, or everything in the rooms would have been drenched. On seeing these hailstones, some of which were the size of a pigeon's egg, Pencroft's first thought was that his cornfield was in serious danger.

He directly rushed to his field, where little green heads were already appearing, and by means of a great cloth, he managed to protect his crop.

This bad weather lasted a week, during which time the thunder rolled without cessation in the depths of the sky.

The colonists, not having any pressing work out of doors, profited by the bad weather to work at the interior of Granite House, the arrangement of which was becoming more complete from day to day. The engineer made a turning-lathe, with which he turned several articles both for the toilet and the kitchen, particularly buttons, the want of which was greatly felt. A gunrack had been made for the firearms, which were kept with extreme care, and neither tables nor cupboards were left incomplete. They sawed, they planed, they filed, they turned; and during the whole of this bad season, nothing was heard but the grinding of tools or the humming of the turning-lathe which responded to the growling of the thunder.

Master Jup had not been forgotten, and he occupied a room at the back, near the storeroom, a sort of cabin with a cot always full of good litter, which perfectly suited his taste.

"With good old Jup there is never any quarreling," often repeated Pencroft, "never any improper reply. What a servant, Neb, what a servant!"
Of course Jup was now well used to service. He brushed their clothes, he turned the spit, he waited at table, he swept the rooms, he gathered wood, and he performed another admirable piece of service which delighted Pencroft—he never went to sleep without first coming to tuck up the worthy sailor in his bed.

As to the health of the members of the colony, bipeds or bimana, quadrumanans or quadrupeds, it left nothing to be desired. With their life in the open air, on this salubrious soil, under that temperate zone, working both with head and hands, they could not suppose that illness would ever attack them.

All were indeed wonderfully well. Herbert had already grown two inches in the year. His figure was forming and becoming more manly, and he promised to be an accomplished man, physically as well as morally. Besides he improved himself during the leisure hours which manual occupations left to him; he read the books found in the case; and after the practical lessons which were taught by the very necessity of their position, he found in the engineer for science, and the reporter for languages, masters who were delighted to complete his education.

The tempest ended about the 9th of March, but the sky remained covered with clouds during the whole of this last summer month. The atmosphere, violently agitated by the electric commotions, could not recover its former purity, and there was almost invariably rain and fog, except for three or four fine days on which several excursions were made. About this time the female onager gave birth to a young one which belonged to the same sex as its mother, and which thrrove capitally. In the corral, the flock of musmons had also increased, and several lambs already bleated in the sheds, to the great delight of Neb and Herbert, who had each their favorite among these newcomers. An attempt was also made for the domestication of the peccaries, which succeeded well. A sty was constructed under the poultry-yard, and soon contained several young ones in the way to become civilized, that is to say, to become fat under Neb's care. Master Jup, entrusted with carrying them their daily nourishment, leavings from the kitchen, etc., acquitted himself conscientiously of his task. He sometimes amused himself at the expense of his little pensioners by tweaking their tails; but this was mischief, and not wickedness, for these little twisted tails amused him like a plaything, and his instinct was that of a child. One day in this month of March, Pencroft, talking to the engineer, reminded Cyrus Harding of a promise which the latter had not as yet had time to fulfil.

"You once spoke of an apparatus which would take the place of the long ladders at Granite House, captain," said he; "won't you make it some day?"

"Nothing will be easier; but is this a really useful thing?"

"Certainly, captain. After we have given ourselves necessaries, let us think a little of luxury. For us it may be luxury, if you like, but for things it is necessary. It isn't very convenient to climb up a long ladder when one is heavily loaded."

"Well, Pencroft, we will try to please you," replied Cyrus Harding.

"But you have no machine at your disposal."

"We will make one."

"A steam machine?"

"No, a water machine."

And, indeed, to work his apparatus there was already a natural force at the disposal of the engineer which could be used without great difficulty. For this, it was enough to augment the flow of the little stream which supplied the interior of Granite House with water. The opening among the stones and grass was then increased, thus producing a strong fall at the bottom of the passage, the overflow from which escaped by the inner well. Below this fall the engineer fixed a cylinder with paddles, which was joined on the exterior with a strong cable rolled on a wheel, supporting a basket. In this way, by means of a long rope reaching to the ground, which enabled them to regulate the motive power, they could rise in the basket to the door of Granite House.

It was on the 17th of March that the lift acted for the first time, and gave universal satisfaction. Henceforward all the loads, wood, coal, provisions, and even the settlers themselves, were hoisted by this simple system, which replaced the primitive ladder, and, as may be supposed, no one thought of regretting the change. Top particularly was enchanted with this improvement, for he had not, and never could have possessed Master Jup's skill in climbing ladders, and often it was on Neb's back, or even on that of the orang that he had been obliged to make the ascent to Granite House. About this time, too, Cyrus Harding attempted to manufacture glass, and he at first put the old pottery-kiln to this new use. There were some difficulties to be encountered; but, after several fruitless attempts, he succeeded in setting up a glass manufactory, which Gideon Spilett and Herbert, his usual assistants, did not leave for several days. As to the substances used in the composition of glass, they are simply sand, chalk, and soda, either carbonate or sulphate. Now the beach supplied sand, lime supplied chalk, sea-weeds supplied soda, pyrites supplied sulphuric acid, and the ground supplied coal to heat the kiln to the wished-for temperature. Cyrus Harding thus soon had everything ready for setting to work.

The tool, the manufacture of which presented the most difficulty, was the pipe of the glass-maker, an iron tube, five or six feet long, which collects on one end the material in a state of fusion. But by means of a long, thin piece of
iron rolled up like the barrel of a gun, Pencroft succeeded in making a tube soon ready for use.

On the 28th of March the tube was heated. A hundred parts of sand, thirty-five of chalk, forty of sulphate of soda, mixed with two or three parts of powdered coal, composed the substance, which was placed in crucibles. When the high temperature of the oven had reduced it to a liquid, or rather a pasty state, Cyrus Harding collected with the tube a quantity of the paste: he turned it about on a metal plate, previously arranged, so as to give it a form suitable for blowing, then he passed the tube to Herbert, telling him to blow at the other extremity.

And Herbert, swelling out his cheeks, blew so much and so well into the tube-taking care to twirl it round at the same time—that his breath dilated the glassy mass. Other quantities of the substance in a state of fusion were added to the first, and in a short time the result was a bubble which measured a foot in diameter. Harding then took the tube out of Herbert's hands, and, giving it a pendulous motion, he ended by lengthening the malleable bubble so as to give it a cylindroconic shape.

The blowing operation had given a cylinder of glass terminated by two hemispheric caps, which were easily detached by means of a sharp iron dipped in cold water; then, by the same proceeding, this cylinder was cut lengthways, and after having been rendered malleable by a second heating, it was extended on a plate and spread out with a wooden roller.

The first pane was thus manufactured, and they had only to perform this operation fifty times to have fifty panes. The windows at Granite House were soon furnished with panes; not very white, perhaps, but still sufficiently transparent.

As to bottles and tumblers, that was only play. They were satisfied with them, besides, just as they came from the end of the tube. Pencroft had asked to be allowed to "blow" in his turn, and it was great fun for him; but he blew so hard that his productions took the most ridiculous shapes, which he admired immensely.

Cyrus Harding and Herbert, while hunting one day, had entered the forest of the Far West, on the left bank of the Mercy, and, as usual, the lad was asking a thousand questions of the engineer, who answered them heartily. Now, as Harding was not a sportsman, and as, on the other side, Herbert was talking chemistry and natural philosophy, numbers of kangaroos, capybaras, and agouties came within range, which, however, escaped the lad's gun; the consequence was that the day was already advanced, and the two hunters were in danger of having made a useless excursion, when Herbert, stopping, and uttering a cry of joy, exclaimed,—

"Oh, Captain Harding, do you see that tree?" and he pointed to a shrub, rather than a tree, for it was composed of a single stem, covered with a scaly bark, which bore leaves streaked with little parallel veins.

"And what is this tree which resembles a little palm?" asked Harding.

"It is a ‘cycas revoluta,’ of which I have a picture in our dictionary of Natural History!" said Herbert.

"But I can't see any fruit on this shrub!" observed his companion.

"No, captain," replied Herbert; "but its stem contains a flour with which nature has provided us all ready ground."

"It is, then, the bread-tree?"

"Yes, the bread-tree."

"Well, my boy," replied the engineer, "this is a valuable discovery, since our wheat harvest is not yet ripe; I hope that you are not mistaken!"

Herbert was not mistaken: he broke the stem of a cycas, which was composed of a glandulous tissue, containing a quantity of floury pith, traversed with woody fiber, separated by rings of the same substance, arranged concentrically. With this fecula was mingled a mucilaginous juice of disagreeable flavor, but which it would be easy to get rid of by pressure. This cellular substance was regular flour of a superior quality, extremely nourishing; its exportation was formerly forbidden by the Japanese laws.

Cyrus Harding and Herbert, after having examined that part of the Far West where the cycas grew, took their bearings, and returned to Granite House, where they made known their discovery.

The next day the settlers went to collect some, and returned to Granite House with an ample supply of cycas stems. The engineer constructed a press, with which to extract the mucilaginous juice mingled with the fecula, and he obtained a large quantity of flour, which Neb soon transformed into cakes and puddings. This was not quite real wheaten bread, but it was very like it.

Now, too, the onager, the goats, and the sheep in the corral furnished daily the milk necessary to the colony. The cart, or rather a sort of light carriole which had replaced it, made frequent journeys to the corral, and when it was Pencroft's turn to go he took Jup, and let him drive, and Jup, cracking his whip, acquitted himself with his customary intelligence.

Everything prospered, as well in the corral as in Granite House, and certainly the settlers, if it had not been that they were so far from their native land, had no reason to complain. They were so well suited to this life, and were, besides, so accustomed to the island, that they could not have left its hospitable soil without regret!
And yet so deeply is the love of his country implanted in the heart of man, that if a ship had unexpectedly come in sight of the island, the colonists would have made signals, would have attracted her attention, and would have departed!

It was the 1st of April, a Sunday, Easter Day, which Harding and his companions sanctified by rest and prayer. The day was fine, such as an October day in the Northern Hemisphere might be.

All, towards the evening after dinner, were seated under the veranda on the edge of Prospect Heights, and they were watching the darkness creeping up from the horizon. Some cups of the infusion of elder-berries, which took the place of coffee, had been served by Neb. They were speaking of the island and of its isolated situation in the Pacific, which led Gideon Spilett to say,--

"My dear Cyrus, have you ever, since you possessed the sextant found in the case, again taken the position of our island?"

"No," replied the engineer.

"But it would perhaps be a good thing to do it with this instrument, which is more perfect than that which you before used."

"What is the good?" said Pencroft. "The island is quite comfortable where it is!"

"Well, who knows," returned the reporter, "who knows but that we may be much nearer inhabited land than we think?"

"We shall know to-morrow," replied Cyrus Harding, "and if it had not been for the occupations which left me no leisure, we should have known it already."

"Good!" said Pencroft. "The captain is too good an observer to be mistaken, and, if it has not moved from its place, the island is just where he put it."

"We shall see."

On the next day, therefore, by means of the sextant, the engineer made the necessary observations to verify the position which he had already obtained, and this was the result of his operation. His first observation had given him the situation of Lincoln Island,--

- In west longitude: from 1500 to 1550;  
- In south latitude: from 300 to 350

The second gave exactly:

- In longitude: 1500 30'
- In south latitude: 340 57'

So then, notwithstanding the imperfection of his apparatus, Cyrus Harding had operated with so much skill that his error did not exceed five degrees.

"Now," said Gideon Spilett, "since we possess an atlas as well as a sextant, let us see, my dear Cyrus, the exact position which Lincoln Island occupies in the Pacific."

Herbert fetched the atlas, and the map of the Pacific was opened, and the engineer, compass in hand, prepared to determine their position.

Suddenly the compasses stopped, and he exclaimed,

"But an island exists in this part of the Pacific already!"

"An island?" cried Pencroft.

"Tabor Island."

"An important island?"

"No, an islet lost in the Pacific, and which perhaps has never been visited."

"Well, we will visit it," said Pencroft.

"We?"

"Yes, captain. We will build a decked boat, and I will undertake to steer her. At what distance are we from this Tabor Island?"

"About a hundred and fifty miles to the northeast," replied Harding.

"A hundred and fifty miles! And what's that?" returned Pencroft. "In forty-eight hours, with a good wind, we should sight it!"

And, on this reply, it was decided that a vessel should be constructed in time to be launched towards the month of next October, on the return of the fine season.

Chapter 10

When Pencroft had once got a plan in his head, he had no peace till it was executed. Now he wished to visit Tabor Island, and as a boat of a certain size was necessary for this voyage, he determined to build one.
What wood should he employ? Elm or fir, both of which abounded in the island? They decided for the fir, as being easy to work, but which stands water as well as the elm.

These details settled, it was agreed that since the fine season would not return before six months, Cyrus Harding and Pencroft should work alone at the boat. Gideon Spilett and Herbert were to continue to hunt, and neither Neb nor Master Jup, his assistant, were to leave the domestic duties which had devolved upon them.

Directly the trees were chosen, they were felled, stripped of their branches, and sawn into planks as well as sawyers would have been able to do it. A week after, in the recess between the Chimneys and the cliff, a dockyard was prepared, and a keel five-and-thirty feet long, furnished with a stern-post at the stern and a stem at the bows, lay along the sand.

Cyrus Harding was not working in the dark at this new trade. He knew as much about ship-building as about nearly everything else, and he had at first drawn the model of his ship on paper. Besides, he was ably seconded by Pencroft, who, having worked for several years in a dockyard in Brooklyn, knew the practical part of the trade. It was not until after careful calculation and deep thought that the timbers were laid on the keel.

Pencroft, as may be believed, was all eagerness to carry out his new enterprise, and would not leave his work for an instant.

A single thing had the honor of drawing him, but for one day only, from his dockyard. This was the second wheat-harvest, which was gathered in on the 15th of April. It was as much a success as the first, and yielded the number of grains which had been predicted.

"Five bushels, captain," said Pencroft, alter having scrupulously measured his treasure.

"Five bushels," replied the engineer; "and a hundred and thirty thousand grains a bushel will make six hundred and fifty thousand grains."

"Well, we will sow them all this time," said the sailor, "except a little in reserve."

"Yes, Pencroft, and if the next crop gives a proportionate yield, we shall have four thousand bushels."

"And shall we eat bread?"

"We shall eat bread."

"But we must have a mill."

"We will make one."

The third corn-field was very much larger than the two first, and the soil, prepared with extreme care, received the precious seed. That done, Pencroft returned to his work.

During this time Spilett and Herbert hunted in the neighborhood, and they ventured deep into the still unknown parts of the Far West, when the reporter, preceding Herbert a few paces, arrived in a sort of clearing, into which the trees more sparsely scattered had permitted a few rays to penetrate. Gideon Spilett was at first surprised at the odor which exhaled from certain plants with straight stalks, round and branchy, bearing grape-like clusters of flowers and very small berries. The reporter broke off one or two of these stalks and returned to the lad, to whom he said,—

"What can this be, Herbert?"

"Well, Mr. Spilett," said Herbert, "this is a treasure which will secure you Pencroft's gratitude forever."

"Is it tobacco?"

"Yes, and though it may not be of the first quality, it is none the less tobacco!"

"Oh, good old Pencroft! Won't he be pleased! But we must not let him smoke it all, he must give us our share."

"Ah! an idea occurs to me, Mr. Spilett," replied Herbert. "Don't let us say anything to Pencroft yet; we will prepare these leaves, and one fine day we will present him with a pipe already filled!"

"All right, Herbert, and on that day our worthy companion will have nothing left to wish for in this world."

The reporter and the lad secured a good store of the precious plant, and then returned to Granite House, where they smuggled it in with as much precaution as if Pencroft had been the most vigilant and severe of custom-house officers.
Cyrus Harding and Neb were taken into confidence, and the sailor suspected nothing during the whole time, necessarily somewhat long, which was required in order to dry the small leaves, chop them up, and subject them to a certain torrefaction on hot stones. This took two months; but all these manipulations were successfully carried on unknown to Pencroft, for, occupied with the construction of his boat, he only returned to Granite House at the hour of rest.

For some days they had observed an enormous animal two or three miles out in the open sea swimming around Lincoln Island. This was a whale of the largest size, which apparently belonged to the southern species, called the "Cape Whale."

"What a lucky chance it would be if we could capture it!" cried the sailor. "Ah! if we only had a proper boat and a good harpoon, I would say 'After the beast,' for he would be well worth the trouble of catching!"

"Well, Pencroft," observed Harding, "I should much like to watch you handling a harpoon. It would be very interesting."

"I am astonished," said the reporter, "to see a whale in this comparatively high latitude."

"Why so, Mr. Spilett?" replied Herbert. "We are exactly in that part of the Pacific which English and American whalers call the whale field, and it is here, between New Zealand and South America, that the whales of the Southern Hemisphere are met with in the greatest numbers."

And Pencroft returned to his work, not without uttering a sigh of regret, for every sailor is a born fisherman, and if the pleasure of fishing is in exact proportion to the size of the animal, one can judge how a whaler feels in sight of a whale. And if this had only been for pleasure! But they could not help feeling how valuable such a prize would have been to the colony, for the oil, fat, and bones would have been put to many uses.

Now it happened that this whale appeared to have no wish to leave the waters of the island. Therefore, whether from the windows of Granite House, or from Prospect Heights, Herbert and Gideon Spilett, when they were not hunting, or Neb, unless presiding over his fires, never left the telescope, but watched all the animal's movements. The cetacean, having entered far into Union Bay, made rapid furrows across it from Mandible Cape to Claw Cape, propelled by its enormously powerful flukes, on which it supported itself, and making its way through the water at the rate little short of twelve knots an hour. Sometimes also it approached so near to the island that it could be clearly distinguished. It was the southern whale, which is completely black, the head being more depressed than that of the northern whale.

They could also see it throwing up from its air-holes to a great height a cloud of vapor, or of water, for, strange as it may appear, naturalists and whalers are not agreed on this subject. Is it air or is it water which is thus driven out? It is generally admitted to be vapor, which, condensing suddenly by contact with the cold air, falls again as rain.

However, the presence of this mammifer preoccupied the colonists. It irritated Pencroft especially, as he could think of nothing else while at work. He ended by longing for it, like a child for a thing which it has been denied. At night he talked about it in his sleep, and certainly if he had had the means of attacking it, if the sloop had been in a fit state to put to sea, he would not have hesitated to set out in pursuit.

But what the colonists could not do for themselves chance did for them, and on the 3rd of May shouts from Neb, who had stationed himself at the kitchen window, announced that the whale was stranded on the beach of the island. Herbert and Gideon Spilett, who were just about to set out hunting, left their guns, Pencroft threw down his ax, and Harding and Neb joining their companions, all rushed towards the scene of action.

The stranding had taken place on the beach of Flotsam Point, three miles from Granite House, and at high tide. It was therefore probable that the cetacean would not be able to extricate itself easily; at any rate it was best to hasten, so as to cut off its retreat if necessary. They ran with pick-axes and iron-tipped poles in their hands, passed over the Mercy bridge, descended the right bank of the river, along the beach, and in less than twenty minutes the settlers were close to the enormous animal, above which flocks of birds already hovered.

"What a monster!" cried Neb.

And the exclamation was natural, for it was a southern whale, eighty feet long, a giant of the species, probably not weighing less than a hundred and fifty thousand pounds!

In the meanwhile, the monster thus stranded did not move, nor attempt by struggling to regain the water while the tide was still high.

It was dead, and a harpoon was sticking out of its left side.

"There are whalers in these quarters, then?" said Gideon Spilett directly.

"Oh, Mr. Spilett, that doesn't prove anything!" replied Pencroft. "Whales have been known to go thousands of miles with a harpoon in the side, and this one might even have been struck in the north of the Atlantic and come to die in the south of the Pacific, and it would be nothing astonishing."

Pencroft, having torn the harpoon from the animal's side, read this inscription on it:

MARIA STELLA, VINEYARD
"A vessel from the Vineyard! A ship from my country!" he cried. "The 'Maria Stella!' A fine whaler, 'pon my word; I know her well! Oh, my friends, a vessel from the Vineyard!--a whaler from the Vineyard!"

And the sailor brandishing the harpoon, repeated, not without emotion, the name which he loved so well—the name of his birthplace.

But as it could not be expected that the "Maria Stella" would come to reclaim the animal harpooned by her, they resolved to begin cutting it up before decomposition should commence. The birds, who had watched this rich prey for several days, had determined to take possession of it without further delay, and it was necessary to drive them off by firing at them repeatedly.

The whale was a female, and a large quantity of milk was taken from it, which, according to the opinion of the naturalist Duffenbach, might pass for cow’s milk, and, indeed, it differs from it neither in taste, color, nor density.

Pencroft had formerly served on board a whaling-ship, and he could methodically direct the operation of cutting up, a sufficiently disagreeable operation lasting three days, but from which the settlers did not flinch, not even Gideon Spilett, who, as the sailor said, would end by making a "real good castaway."

The blubber, cut in parallel slices of two feet and a half in thickness, then divided into pieces which might weigh about a thousand pounds each, was melted down in large earthen pots brought to the spot, for they did not wish to taint the environs of Granite House, and in this fusion it lost nearly a third of its weight.

But there was an immense quantity of it; the tongue alone yielded six thousand pounds of oil, and the lower lip four thousand. Then, besides the fat, which would insure for a long time a store of stearine and glycerine, there were still the bones, for which a use could doubtless be found, although there were neither umbrellas nor stays used at Granite House. The upper part of the mouth of the cetacean was, indeed, provided on both sides with eight hundred horny blades, very elastic, of a fibrous texture, and fringed at the edge like great combs, at which the teeth, six feet long, served to retain the thousands of animalculae, little fish, and molluscs, on which the whale fed.

The operation finished, to the great satisfaction of the operators, the remains of the animal were left to the birds, who would soon make every vestige of it disappear, and their usual daily occupations were resumed by the inmates of Granite House.

However, before returning to the dockyard, Cyrus Harding conceived the idea of fabricating certain machines, which greatly excited the curiosity of his companions. He took a dozen of the whale's bones, cut them into six equal parts, and sharpened their ends.

"This machine is not my own invention, and it is frequently employed by the Aleutian hunters in Russian America. You see these bones, my friends; well, when it freezes, I will bend them, and then wet them with water till they are entirely covered with ice, which will keep them bent, and I will strew them on the snow, having previously covered them with fat. Now, what will happen if a hungry animal swallows one of these baits? Why, the heat of his stomach will melt the ice, and the bone, springing straight, will pierce him with its sharp points."

"Well! I do call that ingenious!" said Pencroft.

"And it will spare the powder and shot," rejoined Cyrus Harding.

"That will be better than traps!" added Neb.

In the meanwhile the boat-building progressed, and towards the end of the month half the planking was completed. It could already be seen that her shape was excellent, and that she would sail well.

Pencroft worked with unparalleled ardor, and only a sturdy frame could have borne such fatigue; but his companions were preparing in secret a reward for his labors, and on the 31st of May he was to meet with one of the greatest joys of his life.

On that day, after dinner, just as he was about to leave the table, Pencroft felt a hand on his shoulder.

It was the hand of Gideon Spilett, who said,—

"One moment, Master Pencroft, you mustn't sneak off like that! You’ve forgotten your dessert."

"Thank you, Mr. Spilett," replied the sailor, "I am going back to my work."

"Well, a cup of coffee, my friend?"

"Nothing more."

"A pipe, then?"

Pencroft jumped up, and his great good-natured face grew pale when he saw the reporter presenting him with a ready-filled pipe, and Herbert with a glowing coal.

The sailor endeavored to speak, but could not get out a word; so, seizing the pipe, he carried it to his lips, then applying the coal, he drew five or six great whiffs. A fragrant blue cloud soon arose, and from its depths a voice was heard repeating excitedly,—

"Tobacco! real tobacco!"

"Yes, Pencroft," returned Cyrus Harding, "and very good tobacco too!"

"O, divine Providence; sacred Author of all things!" cried the sailor. "Nothing more is now wanting to our
island."

And Pencroft smoked, and smoked, and smoked.

"And who made this discovery?" he asked at length. "You, Herbert, no doubt?"

"No, Pencroft, it was Mr. Spilett."

"Mr. Spilett!" exclaimed the sailor, seizing the reporter, and clasping him to his breast with such a squeeze that he had never felt anything like it before.

"Oh Pencroft," said Spilett, recovering his breath at last, "a truce for one moment. You must share your gratitude with Herbert, who recognized the plant, with Cyrus, who prepared it, and with Neb, who took a great deal of trouble to keep our secret."

"Well, my friends, I will repay you some day," replied the sailor. "Now we are friends for life."

Chapter 11

Winter arrived with the month of June, which is the December of the northern zones, and the great business was the making of warm and solid clothing.

The musmons in the corral had been stripped of their wool, and this precious textile material was now to be transformed into stuff.

Of course Cyrus Harding, having at his disposal neither carders, combers, polishers, stretchers, twistors, mule-jenny, nor self-acting machine to spin the wool, nor loom to weave it, was obliged to proceed in a simpler way, so as to do without spinning and weaving. And indeed he proposed to make use of the property which the filaments of wool possess when subjected to a powerful pressure of mixing together, and of manufacturing by this simple process the material called felt. This felt could then be obtained by a simple operation which, if it diminished the flexibility of the stuff, increased its power of retaining heat in proportion. Now the wool furnished by the musmons was composed of very short hairs, and was in a good condition to be felted.

The engineer, aided by his companions, including Pencroft, who was once more obliged to leave his boat, commenced the preliminary operations, the subject of which was to rid the wool of that fat and oily substance with which it is impregnated, and which is called grease. This cleaning was done in vats filled with water, which was maintained at the temperature of seventy degrees, and in which the wool was soaked for four-and-twenty hours; it was then thoroughly washed in baths of soda, and, when sufficiently dried by pressure, it was in a state to be compressed, that is to say, to produce a solid material, rough, no doubt, and such as would have no value in a manufacturing center of Europe or America, but which would be highly esteemed in the Lincoln Island markets.

This sort of material must have been known from the most ancient times, and, in fact, the first woolen stuffs were manufactured by the process which Harding was now about to employ. Where Harding’s engineering qualifications now came into play was in the construction of the machine for pressing the wool; for he knew how to turn ingeniously to profit the mechanical force, hitherto unused, which the waterfall on the beach possessed to move a fulling-mill.

Nothing could be more rudimentary. The wool was placed in troughs, and upon it fell in turns heavy wooden mallets; such was the machine in question, and such it had been for centuries until the time when the mallets were replaced by cylinders of compression, and the material was no longer subjected to beating, but to regular rolling.

The operation, ably directed by Cyrus Harding, was a complete success. The wool, previously impregnated with a solution of soap, intended on the one hand to facilitate the interlacing, the compression, and the softening of the wool, and on the other to prevent its diminution by the beating, issued from the mill in the shape of thick felt cloth. The roughnesses with which the staple of wool is naturally filled were so thoroughly entangled and interlaced together that a material was formed equally suitable either for garments or bedclothes. It was certainly neither merino, muslin, cashmere, rep, satin, alpaca, cloth, nor flannel. It was "Lincolian felt," and Lincoln Island possessed yet another manufacture. The colonists had now warm garments and thick bedclothes, and they could without fear await the approach of the winter of 1866-67.

The severe cold began to be felt about the 20th of June, and, to his great regret, Pencroft was obliged to suspend his boat-building, which he hoped to finish in time for next spring.

The sailor’s great idea was to make a voyage of discovery to Tabor Island, although Harding could not approve of a voyage simply for curiosity’s sake, for there was evidently nothing to be found on this desert and almost arid rock. A voyage of a hundred and fifty miles in a comparatively small vessel, over unknown seas, could not but cause him some anxiety. Suppose that their vessel, once out at sea, should be unable to reach Tabor Island, and could not return to Lincoln Island, what would become of her in the midst of the Pacific, so fruitful of disasters?

Harding often talked over this project with Pencroft, and he found him strangely bent upon undertaking this voyage, for which determination he himself could give no sufficient reason.
"Now," said the engineer one day to him, "I must observe, my friend, that after having said so much, in praise of Lincoln Island, after having spoken so often of the sorrow you would feel if you were obliged to forsake it, you are the first to wish to leave it."

"Only to leave it for a few days," replied Pencroft, "only for a few days, captain. Time to go and come back, and see what that islet is like!"

"But it is not nearly as good as Lincoln Island."

"I know that beforehand."

"Then why venture there?"

"To know what is going on in Tabor Island."

"But nothing is going on there; nothing could happen there."

"Who knows?"

"And if you are caught in a hurricane?"

"There is no fear of that in the fine season," replied Pencroft. "But, captain, as we must provide against everything, I shall ask your permission to take Herbert only with me on this voyage."

"Pencroft," replied the engineer, placing his hand on the sailor's shoulder, "if any misfortune happens to you, or to this lad, whom chance has made our child, do you think we could ever cease to blame ourselves?"

"Captain Harding," replied Pencroft, with unshaken confidence, "we shall not cause you that sorrow. Besides, we will speak further of this voyage, when the time comes to make it. And I fancy, when you have seen our tight-rigged little craft, when you have observed how she behaves at sea, when we sail round our island, for we will do so together--I fancy, I say, that you will no longer hesitate to let me go. I don't conceal from you that your boat will be a masterpiece."

"Say 'our' boat, at least, Pencroft," replied the engineer, disarmed for the moment. The conversation ended thus, to be resumed later on, without convincing either the sailor or the engineer.

The first snow fell towards the end of the month of June. The corral had previously been largely supplied with stores, so that daily visits to it were not requisite; but it was decided that more than a week should never be allowed to pass without someone going to it.

Traps were again set, and the machines manufactured by Harding were tried. The bent whalebones, imprisoned in a case of ice, and covered with a thick outer layer of fat, were placed on the border of the forest at a spot where animals usually passed on their way to the lake.

To the engineer's great satisfaction, this invention, copied from the Aleutian fishermen, succeeded perfectly. A dozen foxes, a few wild boars, and even a jaguar, were taken in this way, the animals being found dead, their stomachs pierced by the unbent bones.

An incident must here be related, not only as interesting in itself, but because it was the first attempt made by the colonists to communicate with the rest of mankind.

Gideon Spilett had already several times pondered whether to throw into the sea a letter enclosed in a bottle, which currents might perhaps carry to an inhabited coast, or to confide it to pigeons.

But how could it be seriously hoped that either pigeons or bottles could cross the distance of twelve hundred miles which separated the island from any inhabited land? It would have been pure folly.

But on the 30th of June the capture was effected, not without difficulty, of an albatross, which a shot from Herbert's gun had slightly wounded in the foot. It was a magnificent bird, measuring ten feet from wing to wing, and which could traverse seas as wide as the Pacific.

Herbert would have liked to keep this superb bird, as its wound would soon heal, and he thought he could tame it; but Spilett explained to him that they should not neglect this opportunity of attempting to communicate by this messenger with the lands of the Pacific; for if the albatross had come from some inhabited region, there was no doubt but that it would return there so soon as it was set free.

Perhaps in his heart Gideon Spilett, in whom the journalist sometimes came to the surface, was not sorry to have the opportunity of sending forth to take its chance an exciting article relating the adventures of the settlers in Lincoln Island. What a success for the authorized reporter of the New York Herald, and for the number which should contain the article, if it should ever reach the address of its editor, the Honorable James Bennett!

Gideon Spilett then wrote out a concise account, which was placed in a strong waterproof bag, with an earnest request to whoever might find it to forward it to the office of the New York Herald. This little bag was fastened to the neck of the albatross, and not to its foot, for these birds are in the habit of resting on the surface of the sea; then liberty was given to this swift courier of the air, and it was not without some emotion that the colonists watched it disappear in the misty west.

"Where is he going to?" asked Pencroft.

"Towards New Zealand," replied Herbert.
"A good voyage to you," shouted the sailor, who himself did not expect any great result from this mode of correspondence.

With the winter, work had been resumed in the interior of Granite House, mending clothes and different occupations, among others making the sails for their vessel, which were cut from the inexhaustible balloon-case.

During the month of July the cold was intense, but there was no lack of either wood or coal. Cyrus Harding had established a second fireplace in the dining-room, and there the long winter evenings were spent. Talking while they worked, reading when the hands remained idle, the time passed with profit to all.

It was real enjoyment to the settlers when in their room, well lighted with candles, well warmed with coal, after a good dinner, elderberry coffee smoking in the cups, the pipes giving forth an odoriferous smoke, they could hear the storm howling without. Their comfort would have been complete, if complete comfort could ever exist for those who are far from their fellow-creatures, and without any means of communication with them. They often talked of their country, of the friends whom they had left, of the grandeur of the American Republic, whose influence could not but increase; and Cyrus Harding, who had been much mixed up with the affairs of the Union, greatly interested his auditors by his recitals, his views, and his prognostics.

It chanced one day that Spilett was led to say--

"But now, my dear Cyrus, all this industrial and commercial movement to which you predict a continual advance, does it not run the danger of being sooner or later completely stopped?"

"Stopped! And by what?"

"By the want of coal, which may justly be called the most precious of minerals."

"Yes, the most precious indeed," replied the engineer; "and it would seem that nature wished to prove that it was so by making the diamond, which is simply pure carbon crystallized."

"You don't mean to say, captain," interrupted Pencroft, "that we burn diamonds in our stoves in the shape of coal?"

"No, my friend," replied Harding.

"However," resumed Gideon Spilett, "you do not deny that some day the coal will be entirely consumed?"

"Oh! the veins of coal are still considerable, and the hundred thousand miners who annually extract from them a hundred millions of hundredweights have not nearly exhausted them."

"With the increasing consumption of coal," replied Gideon Spilett, "it can be foreseen that the hundred thousand workmen will soon become two hundred thousand, and that the rate of extraction will be doubled."

"Doubtless; but after the European mines, which will be soon worked more thoroughly with new machines, the American and Australian mines will for a long time yet provide for the consumption in trade."

"For how long a time?" asked the reporter.

"For at least two hundred and fifty or three hundred years."

"That is reassuring for us, but a bad look-out for our great-grandchildren!" observed Pencroft.

"They will discover something else," said Herbert.

"It is to be hoped so," answered Spilett, "for without coal there would be no machinery, and without machinery there would be no railways, no steamers, no manufactories, nothing of that which is indispensable to modern civilization!"

"But what will they find?" asked Pencroft. "Can you guess, captain?"

"Nearly, my friend."

"And what will they burn instead of coal?"

"Water," replied Harding.

"Water!" cried Pencroft, "water as fuel for steamers and engines! water to heat water!"

"Yes, but water decomposed into its primitive elements," replied Cyrus Harding, "and decomposed doubtless, by electricity, which will then have become a powerful and manageable force, for all great discoveries, by some inexplicable laws, appear to agree and become complete at the same time. Yes, my friends, I believe that water will one day be employed as fuel, that hydrogen and oxygen which constitute it, used singly or together, will furnish an inexhaustible source of heat and light, of an intensity of which coal is not capable. Some day the coalrooms of steamers and the tenders of locomotives will, instead of coal, be stored with these two condensed gases, which will burn in the furnaces with enormous calorific power. There is, therefore, nothing to fear. As long as the earth is inhabited it will supply the wants of its inhabitants, and there will be no want of either light or heat as long as the productions of the vegetable, mineral or animal kingdoms do not fail us. I believe, then, that when the deposits of coal are exhausted we shall heat and warm ourselves with water. Water will be the coal of the future."

"I should like to see that," observed the sailor.

"You were born too soon, Pencroft," returned Neb, who only took part in the discussion by these words.

However, it was not Neb's speech which interrupted the conversation, but Top's barking, which broke out again
with that strange intonation which had before perplexed the engineer. At the same time Top began to run round the mouth of the well, which opened at the extremity of the interior passage.

"What can Top be barking in that way for?" asked Pencroft.

"And Jup be growling like that?" added Herbert.

In fact the orang, joining the dog, gave unequivocal signs of agitation, and, singular to say, the two animals appeared more uneasy than angry.

"It is evident," said Gideon Spilett, "that this well is in direct communication with the sea, and that some marine animal comes from time to time to breathe at the bottom."

"That's evident," replied the sailor, "and there can be no other explanation to give. Quiet there, Top!" added Pencroft, turning to the dog, "and you, Jup, be off to your room!"

The ape and the dog were silent. Jup went off to bed, but Top remained in the room, and continued to utter low growls at intervals during the rest of the evening. There was no further talk on the subject, but the incident, however, clouded the brow of the engineer.

During the remainder of the month of July there was alternate rain and frost. The temperature was not so low as during the preceding winter, and its maximum did not exceed eight degrees Fahrenheit. But although this winter was less cold, it was more troubled by storms and squalls; the sea besides often endangered the safety of the Chimneys. At times it almost seemed as if an under-current raised these monstrous billows which thundered against the wall of Granite House.

When the settlers, leaning from their windows, gazed on the huge watery masses breaking beneath their eyes, they could not but admire the magnificent spectacle of the ocean in its impotent fury. The waves rebouned in dazzling foam, the beach entirely disapppearing under the raging flood, and the cliff appearing to emerge from the sea itself, the spray rising to a height of more than a hundred feet.

During these storms it was difficult and even dangerous to venture out, owing to the frequently falling trees; however, the colonists never allowed a week to pass without having paid a visit to the corral. Happily, this enclosure, sheltered by the southeastern spur of Mount Franklin, did not greatly suffer from the violence of the hurricanes, which spared its trees, sheds, and palisades; but the poultry-yard on Prospect Heights, being directly exposed to the gusts of wind from the east, suffered considerable damage. The pigeon-house was twice unroofed and the paling blown down. All this required to be remade more solidly than before, for, as may be clearly seen, Lincoln Island was situated in one of the most dangerous parts of the Pacific. It really appeared as if it formed the central point of vast cyclones, which beat it perpetually as the whip does the top, only here it was the top which was motionless and the whip which moved. During the first week of the month of August the weather became more moderate, and the atmosphere recovered the calm which it appeared to have lost forever. With the calm the cold again became intense, and the thermometer fell to eight degrees Fahrenheit, below zero.

On the 3rd of August an excursion which had been talked of for several days was made into the southeastern part of the island, towards Tadorn Marsh. The hunters were tempted by the aquatic game which took up their winter quarters there. Wild duck, snipe, teal and grebe abounded there, and it was agreed that a day should be devoted to an expedition against these birds.

Not only Gideon Spilett and Herbert, but Pencroft and Neb also took part in this excursion. Cyrus Harding alone, alleging some work as an excuse, did not join them, but remained at Granite House.

The hunters proceeded in the direction of Port Balloon, in order to reach the marsh, after having promised to be back by the evening. Top and Jup accompanied them. As soon as they had passed over the Mercy Bridge, the engineer raised it and returned, intending to put into execution a project for the performance of which he wished to be alone.

Now this project was to minutely explore the interior well, the mouth of which was on a level with the passage of Granite House, and which communicated with the sea, since it formerly supplied a way to the waters of the lake.

Why did Top so often run round this opening? Why did he utter such strange barks when a sort of uneasiness seemed to draw him towards this well? Why did Jup join Top in a sort of common anxiety? Had this well branches besides the communication with the sea? Did it spread towards other parts of the island? This is what Cyrus Harding wished to know. He had resolved, therefore, to attempt the exploration of the well during the absence of his companions, and an opportunity for doing so had now presented itself.

It was easy to descend to the bottom of the well by employing the rope ladder which had not been used since the establishment of the lift. The engineer drew the ladder to the hole, the diameter of which measured nearly six feet, and allowed it to unroll itself after having securely fastened its upper extremity. Then, having lighted a lantern, taken a revolver, and placed a cutlass in his belt, he began the descent.

The sides were everywhere entire; but points of rock jutted out here and there, and by means of these points it would have been quite possible for an active creature to climb to the mouth of the well.
The engineer remarked this; but although he carefully examined these points by the light of his lantern, he could find no impression, no fracture which could give any reason to suppose that they had either recently or at any former time been used as a staircase. Cyrus Harding descended deeper, throwing the light of his lantern on all sides.

He saw nothing suspicious.

When the engineer had reached the last rounds he came upon the water, which was then perfectly calm. Neither at its level nor in any other part of the well, did any passage open, which could lead to the interior of the cliff. The wall which Harding struck with the hilt of his cutlass sounded solid. It was compact granite, through which no living being could force a way. To arrive at the bottom of the well and then climb up to its mouth it was necessary to pass through the channel under the rocky subsoil of the beach, which placed it in communication with the sea, and this was only possible for marine animals. As to the question of knowing where this channel ended, at what point of the shore, and at what depth beneath the water, it could not be answered.

Then Cyrus Harding, having ended his survey, re-ascended, drew up the ladder, covered the mouth of the well, and returned thoughtfully to the diningroom, saying to himself,--

"I have seen nothing, and yet there is something there!"

Chapter 12

In the evening the hunters returned, having enjoyed good sport, and being literally loaded with game; indeed, they had as much as four men could possibly carry. Top wore a necklace of teal and Jup wreaths of snipe round his body.

"Here, master," cried Neb; "here's something to employ our time! Preserved and made into pies we shall have a welcome store! But I must have some one to help me. I count on you, Pencroft."

"No, Neb," replied the sailor; "I have the rigging of the vessel to finish and to look after, and you will have to do without me."

"And you, Mr. Herbert?"

"I must go to the corral to-morrow, Neb," replied the lad. "It will be you then, Mr. Spilett, who will help me?"

"To oblige you, Neb, I will," replied the reporter; "but I warn you that if you disclose your receipts to me, I shall publish them."

"Whenever you like, Mr. Spilett," replied Neb; "whenever you like."

And so the next day Gideon Spilett became Neb's assistant and was installed in his culinary laboratory. The engineer had previously made known to him the result of the exploration which he had made the day before, and on this point the reporter shared Harding's opinion, that although he had found nothing, a secret still remained to be discovered!

The frost continued for another week, and the settlers did not leave Granite House unless to look after the poultry-yard. The dwelling was filled with appetizing odors, which were emitted from the learned manipulation of Neb and the reporter. But all the results of the chase were not made into preserved provisions; and as the game kept perfectly in the intense cold, wild duck and other fowl were eaten fresh, and declared superior to all other aquatic birds in the known world.

During this week, Pencroft, aided by Herbert, who handled the sailmaker's needle with much skill, worked with such energy that the sails of the vessel were finished. There was no want of cordage. Thanks to the rigging which had been discovered with the case of the balloon, the ropes and cables from the net were all of good quality, and the sailor turned them all to account. To the sails were attached strong bolt ropes, and there still remained enough from which to make the halyards, shrouds, and sheets, etc. The blocks were manufactured by Cyrus Harding under Pencroft's directions by means of the turning lathe. It therefore happened that the rigging was entirely prepared before the vessel was finished. Pencroft also manufactured a flag, that flag so dear to every true American, containing the stars and stripes of their glorious Union. The colors for it were supplied from certain plants used in dyeing, and which were very abundant in the island; only to the thirty-seven stars, representing the thirty-seven States of the Union, which shine on the American flag, the sailor added a thirty-eighth, the star of "the State of Lincoln," for he considered his island as already united to the great republic. "And," said he, "it is so already in heart, if not in deed!"

In the meantime, the flag was hoisted at the central window of Granite House, and the settlers saluted it with three cheers.

The cold season was now almost at an end, and it appeared as if this second winter was to pass without any unusual occurrence, when on the night of the 11th of August, the plateau of Prospect Heights was menaced with complete destruction.
After a busy day the colonists were sleeping soundly, when towards four o'clock in the morning they were suddenly awakened by Top's barking.

The dog was not this time barking near the mouth of the well, but at the threshold of the door, at which he was scratching as if he wished to burst it open. Jup was also uttering piercing cries.

"Hello, Top!" cried Neb, who was the first awake. But the dog continued to bark more furiously than ever.

"What's the matter now?" asked Harding.

And all dressing in haste rushed to the windows, which they opened.

Beneath their eyes was spread a sheet of snow which looked gray in the dim light. The settlers could see nothing, but they heard a singular yelping noise away in the darkness. It was evident that the beach had been invaded by a number of animals which could not be seen.

"What are they?" cried Pencroft.

"Wolves, jaguars, or apes?" replied Neb.

"They have nearly reached the plateau," said the reporter.

"And our poultry-yard," exclaimed Herbert, "and our garden!"

"Where can they have crossed?" asked Pencroft.

"They must have crossed the bridge on the shore," replied the engineer, "which one of us must have forgotten to close."

"True," said Spilett, "I remember having left it open."

"A fine job you have made of it, Mr. Spilett," cried the sailor.

"What is done cannot be undone," replied Cyrus Harding. "We must consult what it will now be best to do."

Such were the questions and answers which were rapidly exchanged between Harding and his companions. It was certain that the bridge had been crossed, that the shore had been invaded by animals, and that whatever they might be they could by ascending the left bank of the Mercy reach Prospect Heights. They must therefore be advanced against quickly and fought with if necessary.

"But what are these beasts?" was asked a second time, as the yelps were again heard more loudly than before. These yelps made Herbert start, and he remembered having heard them before during his first visit to the sources of the Red Creek.

"They are colpeo foxes!" he exclaimed.

"Forward!" shouted the sailor.

And all arming themselves with hatchets, carbines, and revolvers, threw themselves into the lift and soon set foot on the shore.

Colpeos are dangerous animals when in great numbers and irritated by hunger, nevertheless the colonists did not hesitate to throw themselves into the midst of the troop, and their first shots vividly lighting up the darkness made their assailants draw back.

The chief thing was to hinder these plunderers from reaching the plateau, for the garden and the poultry-yard would then have been at their mercy, and immense, perhaps irreparable mischief, would inevitably be the result, especially with regard to the corn-field. But as the invasion of the plateau could only be made by the left bank of the Mercy, it was sufficient to oppose the colpeos on the narrow bank between the river and the cliff of granite.

This was plain to all, and, by Cyrus Harding's orders, they reached the spot indicated by him, while the colpeos rushed fiercely through the gloom. Harding, Gideon Spilett, Herbert, Pencroft and Neb posted themselves in impregnable line. Top, his formidable jaws open, preceded the colonists, and he was followed by Jup, armed with knotty cudgel, which he brandished like a club.

The night was extremely dark, it was only by the flashes from the revolvers as each person fired that they could see their assailants, who were at least a hundred in number, and whose eyes were glowing like hot coals.

"They must not pass!" shouted Pencroft.

"They shall not pass!" returned the engineer.

But if they did not pass it was not for want of having attempted it. Those in the rear pushed on the foremost assailants, and it was an incessant struggle with revolvers and hatchets. Several colpeos already lay dead on the ground, but their number did not appear to diminish, and it might have been supposed that reinforcements were continually arriving over the bridge.

The colonists were soon obliged to fight at close quarters, not without receiving some wounds, though happily very slight ones. Herbert had, with a shot from his revolver, rescued Neb, on whose back a colpeo had sprung like a tiger cat. Top fought with actual fury, flying at the throats of the foxes and strangling them instantaneously. Jup wielded his weapon valiantly, and it was in vain that they endeavored to keep him in the rear. Endowed doubtless with sight which enabled him to pierce the obscurity, he was always in the thick of the fight uttering from time to time—a sharp hissing sound, which was with him the sign of great rejoicing.
At one moment he advanced so far, that by the light from a revolver he was seen surrounded by five or six large colpeos, with whom he was coping with great coolness.

However, the struggle was ended at last, and victory was on the side of the settlers, but not until they had fought for two long hours! The first signs of the approach of day doubtless determined the retreat of their assailants, who scampered away towards the North, passing over the bridge, which Neb ran immediately to raise. When day had sufficiently lighted up the field of battle, the settlers counted as many as fifty dead bodies scattered about on the shore.

"And Jup!" cried Pencroft; "where is Jup?" Jup had disappeared. His friend Neb called him, and for the first time Jup did not reply to his friend's call.

Everyone set out in search of Jup, trembling lest he should be found among the slain; they cleared the place of the bodies which stained the snow with their blood. Jup was found in the midst of a heap of colpeos whose broken jaws and crushed bodies showed that they had to do with the terrible club of the intrepid animal.

Poor Jup still held in his hand the stump of his broken cudgel, but deprived of his weapon he had been overpowered by numbers, and his chest was covered with severe wounds.

"He is living," cried Neb, who was bending over him.

"And we will save him," replied the sailor. "We will nurse him as if he was one of ourselves."

It appeared as if Jup understood, for he leaned his head on Pencroft's shoulder as if to thank him. The sailor was wounded himself, but his wound was insignificant, as were those of his companions; for thanks to their firearms they had been almost always able to keep their assailants at a distance. It was therefore only the orang whose condition was serious.

Jup, carried by Neb and Pencroft, was placed in the lift, and only a slight moan now and then escaped his lips. He was gently drawn up to Granite House. There he was laid on a mattress taken from one of the beds, and his wounds were bathed with the greatest care. It did not appear that any vital part had been reached, but Jup was very weak from loss of blood, and a high fever soon set in after his wounds had been dressed. He was laid down, strict diet was imposed, "just like a real person," as Neb said, and they made him swallow several cups of a cooling drink, for which the ingredients were supplied from the vegetable medicine chest of Granite House. Jup was at first restless, but his breathing gradually became more regular, and he was left sleeping quietly. From time to time Top, walking on tip-toe, as one might say, came to visit his friend, and seemed to approve of all the care that had been taken of him. One of Jup's hands hung over the side of his bed, and Top licked it with a sympathizing air.

They employed the day in interring the dead, who were dragged to the forest of the Far West, and there buried deep.

This attack, which might have had such serious consequences, was a lesson to the settlers, who from this time never went to bed until one of their number had made sure that all the bridges were raised, and that no invasion was possible.

However, Jup, after having given them serious anxiety for several days, began to recover. His constitution brought him through, the fever gradually subsided, and Gideon Spilett, who was a bit of a doctor, pronounced him quite out of danger. On the 16th of August, Jup began to eat. Neb made him nice little sweet dishes, which the invalid devoured with great relish, for if he had a pet failing it was that of being somewhat of a gourmend, and Neb had never done anything to cure him of this fault.

"What would you have?" said he to Gideon Spilett, who sometimes expostulated with him for spoiling the ape. "Poor Jup has no other pleasure than that of the palate, and I am only too glad to be able to reward his services in this way!"

Ten days after taking to his bed, on the 21st of August, Master Jup arose. His wounds were healed, and it was evident that he would not be long in regaining his usual strength and agility. Like all convalescents, he was tremendously hungry, and the reporter allowed him to eat as much as he liked, for he trusted to that instinct, which is too often wanting in reasoning beings, to keep the orang from any excess. Neb was delighted to see his pupil's appetite returning.

"Eat away, my Jup," said he, "and don't spare anything; you have shed your blood for us, and it is the least I can do to make you strong again!"

On the 25th of August Neb's voice was heard calling to his companions.

"Captain, Mr. Spilett, Mr. Herbert, Pencroft, come! come!"

The colonists, who were together in the dining-room, rose at Neb's call, who was then in Jup's room.

"What's the matter?" asked the reporter.

"Look," replied Neb, with a shout of laughter. And what did they see? Master Jup smoking calmly and seriously, sitting cross-legged like a Turk at the entrance to Granite House!

"My pipe," cried Pencroft. "He has taken my pipe! Hello, my honest Jup, I make you a present of it! Smoke
away, old boy, smoke away!"

And Jup gravely puffed out clouds of smoke which seemed to give him great satisfaction. Harding did not appear to be much astonished at this incident, and he cited several examples of tame apes, to whom the use of tobacco had become quite familiar.

But from this day Master Jup had a pipe of his own, the sailor's ex-pipe, which was hung in his room near his store of tobacco. He filled it himself, lighted it with a glowing coal, and appeared to be the happiest of quadruped. It may readily be understood that this similarity of tastes of Jup and Pencroft served to tighten the bonds of friendship which already existed between the honest ape and the worthy sailor.

"Perhaps he is really a man," said Pencroft sometimes to Neb. "Should you be surprised to hear him beginning to speak to us some day?"

"My word, no," replied Neb. "What astonishes me is that he hasn't spoken to us before, for now he wants nothing but speech!"

"It would amuse me all the same," resumed the sailor, "if some fine day he said to me, 'Suppose we change pipes, Pencroft.'"

"Yes," replied Neb, "what a pity he was born dumb!"

With the month of September the winter ended, and the works were again eagerly commenced. The building of the vessel advanced rapidly, she was already completely decked over, and all the inside parts of the hull were firmly united with ribs bent by means of steam, which answered all the purposes of a mold.

As there was no want of wood, Pencroft proposed to the engineer to give a double lining to the hull, to insure the strength of the vessel.

Harding, not knowing what the future might have in store for them, approved the sailor's idea of making the craft as strong as possible. The interior and deck of the vessel was entirely finished towards the 15th of September. For calking the seams they made oakum of dry seaweed, which was hammered in between the planks; then these seams were covered with boiling tar, which was obtained in great abundance from the pines in the forest.

The management of the vessel was very simple. She had from the first been ballasted with heavy blocks of granite walled up, in a bed of lime, twelve thousand pounds of which they stowed away.

A deck was placed over this ballast, and the interior was divided into two cabins; two benches extended along them, and served also as lockers. The foot of the mast supported the partition which separated the two cabins, which were reached by two hatchways let into the deck.

Pencroft had no trouble in finding a tree suitable for the mast. He chose a straight young fir, with no knots, and which he had only to square at the step, and round off at the top. The ironwork of the mast, the rudder and the hull had been roughly but strongly forged at the Chimneys. Lastly, yards, masts, boom, spars, oars, etc. were all furnished by the first week in October, and it was agreed that a trial trip should be taken round the island, so as to ascertain how the vessel would behave at sea, and how far they might depend upon her.

During all this time the necessary works had not been neglected. The corral was enlarged, for the flock of musmons and goats had been increased by a number of young ones, who had to be housed and fed. The colonists had paid visits also to the oyster bed, the warren, the coal and iron mines, and to the till then unexplored districts of the Far West forest, which abounded in game. Certain indigenous plants were discovered, and those fit for immediate use contributed to vary the vegetable stores of Granite House.

They were a species of ficoide, some similar to those of the Cape, with eatable fleshy leaves, others bearing seeds containing a sort of flour.

On the 10th of October the vessel was launched. Pencroft was radiant with joy, the operation was perfectly successful; the boat completely rigged, having been pushed on rollers to the water's edge, was floated by the rising tide, amid the cheers of the colonists, particularly of Pencroft, who showed no modesty on this occasion. Besides his importance was to last beyond the finishing of the vessel, since, after having built her, he was to command her. The grade of captain was bestowed upon him with the approbation of all. To satisfy Captain Pencroft, it was now necessary to give a name to the vessel, and, after many propositions had been discussed, the votes were all in favor of the "Bonadventure." As soon as the "Bonadventure" had been lifted by the rising tide, it was seen that she lay evenly in the water, and would be easily navigated. However, the trial trip was to be made that very day, by an excursion off the coast. The weather was fine, the breeze fresh, and the sea smooth, especially towards the south coast, for the wind was blowing from the northwest.

"All hands on board," shouted Pencroft; but breakfast was first necessary, and it was thought best to take provisions on board, in the event of their excursion being prolonged until the evening.

Cyrus Harding was equally anxious to try the vessel, the model of which had originated with him, although on the sailor's advice he had altered some parts of it, but he did not share Pencroft's confidence in her, and as the latter had not again spoken of the voyage to Tabor Island, Harding hoped he had given it up. He would have indeed great
reluctance in letting two or three of his companions venture so far in so small a boat, which was not of more than fifteen tons' burden.

At half-past ten everybody was on board, even Top and Jup, and Herbert weighed the anchor, which was fast in the sand near the mouth of the Mercy. The sail was hoisted, the Lincolanian flag floated from the masthead, and the "Bonadventure," steered by Pencroft, stood out to sea.

The wind blowing out of Union Bay she ran before it, and thus showed her owners, much to their satisfaction, that she possessed a remarkably fast pair of heels, according to Pencroft's mode of speaking. After having doubled Flotsam Point and Claw Cape, the captain kept her close hauled, so as to sail along the southern coast of the island, when it was found she sailed admirably within five points of the wind. All hands were enchanted, they had a good vessel, which, in case of need, would be of great service to them, and with fine weather and a fresh breeze the voyage promised to be charming.

Pencroft now stood off the shore, three or four miles across from Port Balloon. The island then appeared in all its extent and under a new aspect, with the varied panorama of its shore from Claw Cape to Reptile End, the forests in which dark firs contrasted with the young foliage of other trees and overlooked the whole, and Mount Franklin whose lofty head was still whitened with snow.

"How beautiful it is!" cried Herbert.

"Yes, our island is beautiful and good," replied Pencroft. "I love it as I loved my poor mother. It received us poor and destitute, and now what is wanting to us five fellows who fell on it from the sky?"

"Nothing," replied Neb; "nothing, captain."

And the two brave men gave three tremendous cheers in honor of their island!

During all this time Gideon Spilett, leaning against the mast, sketched the panorama which was developed before his eyes.

Cyrus Harding gazed on it in silence.

"Well, Captain Harding," asked Pencroft, "what do you think of our vessel?"

"She appears to behave well," replied the engineer.

"Good! And do you think now that she could undertake a voyage of some extent?"

"What voyage, Pencroft?"

"One to Tabor Island, for instance."

"My friend," replied Harding, "I think that in any pressing emergency we need not hesitate to trust ourselves to the 'Bonadventure' even for a longer voyage; but you know I should see you set off to Tabor Island with great uneasiness, since nothing obliges you to go there."

"One likes to know one's neighbors," returned the sailor, who was obstinate in his idea. "Tabor Island is our neighbor, and the only one! Politeness requires us to go at least to pay a visit."

"By Jove," said Spilett, "our friend Pencroft has become very particular about the proprieties all at once!"

"I am not particular about anything at all," retorted the sailor, who was rather vexed by the engineer's opposition, but who did not wish to cause him anxiety.

"Consider, Pencroft," resumed Harding, "you cannot go alone to Tabor Island."

"One companion will be enough for me."

"Even so," replied the engineer, "you will risk depriving the colony of Lincoln Island of two settlers out of five."

"Out of six," answered Pencroft; "you forget Jup."

"Out of seven," added Neb; "Top is quite worth another."

"There is no risk at all in it, captain," replied Pencroft.

"That is possible, Pencroft; but I repeat it is to expose ourselves uselessly."

The obstinate sailor did not reply, and let the conversation drop, quite determined to resume it again. But he did not suspect that an incident would come to his aid and change into an act of humanity that which was at first only a doubtful whim.

After standing off the shore the "Bonadventure" again approached it in the direction of Port Balloon. It was important to ascertain the channels between the sandbanks and reefs, that buoys might be laid down since this little creek was to be the harbor.

They were not more than half a mile from the coast, and it was necessary to tack to beat against the wind. The "Bonadventure" was then going at a very moderate rate, as the breeze, partly intercepted by the high land, scarcely swelled her sails, and the sea, smooth as glass, was only rippled now and then by passing gusts.

Herbert had stationed himself in the bows that he might indicate the course to be followed among the channels, when all at once he shouted,--

"Luff, Pencroft, luff!"

"What's the matter," replied the sail; "a rock?"
"No--wait," said Herbert; "I don't quite see. Luff again--right--now."

So saying, Herbert, leaning over the side, plunged his arm into the water, and pulled it out, exclaiming--

"A bottle!"

He held in his hand a corked bottle which he had just seized a few cables' length from the shore.

Cyrus Harding took the bottle. Without uttering a single word he drew the cork, and took from it a damp paper, on which were written these words:--

"Castaway.... Tabor island: 153deg W. long., 37deg 11' S. lat."

Chapter 13

"A castaway!" exclaimed Pencroft; "left on this Tabor Island not two hundred miles from us! Ah, Captain Harding, you won't now oppose my going."

"No, Pencroft," replied Cyrus Harding; "and you shall set out as soon as possible."

"To-morrow?"

"To-morrow!"

The engineer still held in his hand the paper which he had taken from the bottle. He contemplated it for some instants, then resumed,

"From this document, my friends, from the way in which it is worded, we may conclude this: first, that the castaway on Tabor Island is a man possessing a considerable knowledge of navigation, since he gives the latitude and longitude of the island exactly as we ourselves found it, and to a second of approximation; secondly, that he is either English or American, as the document is written in the English language."

"That is perfectly logical," answered Spilett; "and the presence of this castaway explains the arrival of the case on the shores of our island. There must have been a wreck, since there is a castaway. As to the latter, whoever he may be, it is lucky for him that Pencroft thought of building this boat and of trying her this very day, for a day later and this bottle might have been broken on the rocks."

"Indeed," said Herbert, "it is a fortunate chance that the 'Bonadventure' passed exactly where the bottle was still floating!"

"Does not this appear strange to you?" asked Harding of Pencroft.

"It appears fortunate, that's all," answered the sailor. "Do you see anything extraordinary in it, captain? The bottle must go somewhere, and why not here as well as anywhere else?"

"Perhaps you are right, Pencroft," replied the engineer; "and yet--"

"But," observed Herbert, "there's nothing to prove that this bottle has been floating long in the sea."

"Nothing," replied Gideon Spilett, "and the document appears even to have been recently written. What do you think about it, Cyrus?"

During this conversation Pencroft had not remained inactive. He had put the vessel about, and the "Bonadventure," all sails set, was running rapidly towards Claw Cape.

Every one was thinking of the castaway on Tabor Island. Should they be in time to save him? This was a great event in the life of the colonists! They themselves were but castaways, but it was to be feared that another might not have been so fortunate, and their duty was to go to his succor.

Claw Cape was doubled, and about four o'clock the "Bonadventure" dropped her anchor at the mouth of the Mercy.

That same evening the arrangements for the new expedition were made. It appeared best that Pencroft and Herbert, who knew how to work the vessel, should undertake the voyage alone. By setting out the next day, the 10th of October, they would arrive on the 13th, for with the present wind it would not take more than forty-eight hours to make this passage of a hundred and fifty miles. One day in the island, three or four to return, they might hope therefore that on the 17th they would again reach Lincoln Island. The weather was fine, the barometer was rising, the wind appeared settled, everything then was in favor of these brave men whom an act of humanity was taking far from their island.

Thus it had been agreed that Cyrus Harding, Neb, and Gideon Spilett should remain at Granite House, but an objection was raised, and Spilett, who had not forgotten his business as reporter to the New York Herald, having declared that he would go by swimming rather than lose such an opportunity, he was admitted to take a part in the voyage.

The evening was occupied in transporting on board the "Bonadventure," articles of bedding, utensils, arms, ammunition, a compass, provisions for a week; this being rapidly done, the colonists ascended to Granite House.

The next day, at five o'clock in the morning, the farewells were said, not without some emotion on both sides, and Pencroft setting sail made towards Claw Cape, which had to be doubled in order to proceed to the southwest.
The "Bonadventure" was already a quarter of a mile from the coast when the passengers perceived on the heights of Granite House two men waving their farewells; they were Cyrus Harding and Neb.

"Our friends," exclaimed Spilett, "this is our first separation in fifteen months."

Pencroft, the reporter and Herbert waved in return, and Granite House soon disappeared behind the high rocks of the Cape.

During the first part of the day the "Bonadventure" was still in sight of the southern coast of Lincoln Island, which soon appeared just like a green basket, with Mount Franklin rising from the center. The heights, diminished by distance, did not present an appearance likely to tempt vessels to touch there. Reptile End was passed in about an hour, though at a distance of about ten miles.

At this distance it was no longer possible to distinguish anything of the Western Coast, which stretched away to the ridges of Mount Franklin, and three hours after the last of Lincoln Island sank below the horizon.

The "Bonadventure" behaved capitally. Bounding over the waves she proceeded rapidly on her course. Pencroft had hoisted the foresail, and steering by the compass followed a rectilinear direction. From time to time Herbert relieved him at the helm, and the lad's hand was so firm that the sailor had not a point to find fault with.

Gideon Spilett chatted sometimes with one, sometimes with the other, if wanted he lent a hand with the ropes, and Captain Pencroft was perfectly satisfied with his crew.

In the evening the crescent moon, which would not be in its first quarter until the 16th, appeared in the twilight and soon set again. The night was dark but starry, and the next day again promised to be fine.

Pencroft prudently lowered the foresail, not wishing to be caught by a sudden gust while carrying too much canvas; it was perhaps an unnecessary precaution on such a calm night, but Pencroft was a prudent sailor and cannot be blamed for it.

The reporter slept part of the night. Pencroft and Herbert took turns for a spell of two hours each at the helm. The sailor trusted Herbert as he would himself, and his confidence was justified by the coolness and judgment of the lad. Pencroft gave him his directions as a commander to his steersman, and Herbert never allowed the "Bonadventure" to swerve even a point. The night passed quickly, as did the day of the 12th of October. A south-easterly direction was strictly maintained. Unless the "Bonadventure" fell in with some unknown current she would come exactly within sight of Tabor Island.

As to the sea over which the vessel was then sailing, it was absolutely deserted. Now and then a great albatross or frigate bird passed within gunshot, and Gideon Spilett wondered if it was to one of them that he had confided his last letter addressed to the New York Herald. These birds were the only beings that appeared to frequent this part of the ocean between Tabor and Lincoln Islands.

"And yet," observed Herbert, "this is the time that whalers usually proceed towards the southern part of the Pacific. Indeed I do not think there could be a more deserted sea than this."

"It is not quite so deserted as all that," replied Pencroft.

"What do you mean?" asked the reporter.

"We are on it. Do you take our vessel for a wreck and us for porpoises?"

And Pencroft laughed at his joke.

By the evening, according to calculation, it was thought that the "Bonadventure" had accomplished a distance of a hundred and twenty miles since her departure from Lincoln Island, that is to say in thirty-six hours, which would give her a speed of between three and four knots an hour. The breeze was very slight and might soon drop altogether. However, it was hoped that the next morning by break of day, if the calculation had been correct and the course true, they would sight Tabor Island.

Neither Gideon Spilett, Herbert, nor Pencroft slept that night. In the expectation of the next day they could not but feel some emotion. There was so much uncertainty in their enterprise! Were they near Tabor Island? Was the island still inhabited by the castaway to whose succor they had come? Who was this man? Would not his presence disturb the little colony till then so united? Besides, would he be content to exchange his prison for another? All these questions, which would no doubt be answered the next day, kept them in suspense, and at the dawn of day they all fixed their gaze on the western horizon.

"Land!" shouted Pencroft at about six o'clock in the morning.

And it was impossible that Pencroft should be mistaken, it was evident that land was there. Imagine the joy of the little crew of the "Bonadventure." In a few hours they would land on the beach of the island!

The low coast of Tabor Island, scarcely emerging from the sea, was not more than fifteen miles distant. The head of the "Bonadventure," which was a little to the south of the island, was set directly towards it, and as the sun mounted in the east, its rays fell upon one or two headlands.

"This is a much less important isle than Lincoln Island," observed Herbert, "and is probably due like ours to some submarine convulsion."
At eleven o'clock the "Bonadventure" was not more than two miles off, and Pencroft, while looking for a suitable place at which to land, proceeded very cautiously through the unknown waters. The whole of the island could now be surveyed, and on it could be seen groups of gum and other large trees, of the same species as those growing on Lincoln Island. But the astonishing thing was that no smoke arose to show that the island was inhabited, no signal whatever appeared on the shore!

And yet the document was clear enough; there was a castaway, and this castaway should have been on the watch.

In the meanwhile the "Bonadventure" entered the winding channels among the reefs, and Pencroft observed every turn with extreme care. He had put Herbert at the helm, posting himself in the bows, inspecting the water, while he held the halliard in his hand, ready to lower the sail at a moment's notice. Gideon Spilett with his glass eagerly scanned the shore, though without perceiving anything.

However, at about twelve o'clock the keel of the "Bonadventure" grated on the bottom. The anchor was let go, the sails furled, and the crew of the little vessel landed.

And there was no reason to doubt that this was Tabor Island, since according to the most recent charts there was no island in this part of the Pacific between New Zealand and the American Coast.

The vessel was securely moored, so that there should be no danger of her being carried away by the receding tide; then Pencroft and his companions, well armed, ascended the shore, so as to gain an elevation of about two hundred and fifty or three hundred feet which rose at a distance of half a mile.

"From the summit of that hill," said Spilett, "we can no doubt obtain a complete view of the island, which will greatly facilitate our search."

"So as to do here," replied Herbert, "that which Captain Harding did the very first thing on Lincoln Island, by climbing Mount Franklin."

"Exactly so," answered the reporter, "and it is the best plan."

While thus talking the explorers had advanced along a clearing which terminated at the foot of the hill. Flocks of rock-pigeons and sea-swallows, similar to those of Lincoln Island, fluttered around them. Under the woods which skirted the glade on the left they could hear the bushes rustling and see the grass waving, which indicated the presence of timid animals, but still nothing to show that the island was inhabited.

Arrived at the foot of the hill, Pencroft, Spilett, and Herbert climbed it in a few minutes, and gazed anxiously round the horizon.

They were on an islet, which did not measure more than six miles in circumference, its shape not much bordered by capes or promontories, bays or creeks, being a lengthened oval. All around, the lonely sea extended to the limits of the horizon. No land nor even a sail was in sight.

This woody islet did not offer the varied aspects of Lincoln Island, arid and wild in one part, but fertile and rich in the other. On the contrary this was a uniform mass of verdure, out of which rose two or three hills of no great height. Obliquely to the oval of the island ran a stream through a wide meadow falling into the sea on the west by a narrow mouth.

"The domain is limited," said Herbert.

"Yes," rejoined Pencroft: "It would have been too small for us."

"And moreover," said the reporter, "it appears to be uninhabited."

"Indeed," answered Herbert, "nothing here betrays the presence of man."

"Let us go down," said Pencroft, "and search."

The sailor and his two companions returned to the shore, to the place where they had left the "Bonadventure."

They had decided to make the tour of the island on foot, before exploring the interior; so that not a spot should escape their investigations. The beach was easy to follow, and only in some places was their way barred by large rocks, which, however, they easily passed round. The explorers proceeded towards the south, disturbing numerous flocks of sea-birds and herds of seals, which threw themselves into the sea as soon as they saw the strangers at a distance.

"Those beasts yonder," observed the reporter, "do not see men for the first time. They fear them, therefore they must know them."

An hour after their departure they arrived on the southern point of the islet, terminated by a sharp cape, and proceeded towards the north along the western coast, equally formed by sand and rocks, the background bordered with thick woods.

There was not a trace of a habitation in any part, not the print of a human foot on the shore of the island, which after four hours' walking had been gone completely round.

It was to say the least very extraordinary, and they were compelled to believe that Tabor Island was not or was no longer inhabited. Perhaps, after all the document was already several months or several years old, and it was
possible in this case, either that the castaway had been enabled to return to his country, or that he had died of misery.
Pencroft, Spilett, and Herbert, forming more or less probable conjectures, dined rapidly on board the "Bonadventure" so as to be able to continue their excursion until nightfall. This was done at five o'clock in the evening, at which hour they entered the wood.
Numerous animals fled at their approach, being principally, one might say, only goats and pigs, which were obviously European species.
Doubtless some whaler had landed them on the island, where they had rapidly increased. Herbert resolved to catch one or two living, and take them back to Lincoln Island.
It was no longer doubtful that men at some period or other had visited this islet, and this became still more evident when paths appeared trodden through the forest, felled trees, and everywhere traces of the hand of man; but the trees were becoming rotten, and had been felled many years ago; the marks of the axe were velveted with moss, and the grass grew long and thick on the paths, so that it was difficult to find them.
"But," observed Gideon Spilett, "this not only proves that men have landed on the island, but also that they lived on it for some time. Now, who were these men? How many of them remain?"
"The document," said Herbert, "only spoke of one castaway."
"Well, if he is still on the island," replied Pencroft, "it is impossible but that we shall find him."
The exploration was continued. The sailor and his companions naturally followed the route which cut diagonally across the island, and they were thus obliged to follow the stream which flowed towards the sea.
If the animals of European origin, if works due to a human hand, showed incontestably that men had already visited the island, several specimens of the vegetable kingdom did not prove it less. In some places, in the midst of clearings, it was evident that the soil had been planted with culinary plants, at probably the same distant period.
What, then, was Herbert's joy, when he recognized potatoes, chicory, sorrel, carrots, cabbages, and turnips, of which it was sufficient to collect the seed to enrich the soil of Lincoln Island.
"Capital, jolly!" exclaimed Pencroft. "That will suit Neb as well as us. Even if we do not find the castaway, at least our voyage will not have been useless, and God will have rewarded us."
"Doubtless," replied Gideon Spilett, "but to see the state in which we find these plantations, it is to be feared that the island has not been inhabited for some time."
"Indeed," answered Herbert, "an inhabitant, whoever he was, could not have neglected such an important culture!"
"Yes," said Pencroft, "the castaway has gone."
"We must suppose so."
"It must then be admitted that the document has already a distant date?"
"Evidently."
"And that the bottle only arrived at Lincoln Island after having floated in the sea a long time."
"Why not?" returned Pencroft. "But night is coming on," added he, "and I think that it will be best to give up the search for the present."
"Let us go on board, and to-morrow we will begin again," said the reporter.
This was the wisest course, and it was about to be followed when Herbert, pointing to a confused mass among the trees, exclaimed,--
"A hut!"
All three immediately ran towards the dwelling. In the twilight it was just possible to see that it was built of planks and covered with a thick tarpaulin.
The half-closed door was pushed open by Pencroft, who entered with a rapid step.
The hut was empty!

Chapter 14
Pencroft, Herbert, and Gideon Spilett remained silent in the midst of the darkness.
Pencroft shouted loudly.
No reply was made.
The sailor then struck a light and set fire to a twig. This lighted for a minute a small room, which appeared perfectly empty. At the back was a rude fireplace, with a few cold cinders, supporting an armful of dry wood. Pencroft threw the blazing twig on it, the wood crackled and gave forth a bright light.
The sailor and his two companions then perceived a disordered bed, of which the damp and yellow coverlets proved that it had not been used for a long time. In the corner of the fireplace were two kettles, covered with rust, and an overthrown pot. A cupboard, with a few moldy sailor's clothes; on the table a tin plate and a Bible, eaten
away by damp; in a corner a few tools, a spade, pickaxe, two fowling-pieces, one of which was broken; on a plank, forming a shelf, stood a barrel of powder, still untouched, a barrel of shot, and several boxes of caps, all thickly covered with dust, accumulated, perhaps, by many long years.

"There is no one here," said the reporter.

"No one," replied Pencroft.

"It is a long time since this room has been inhabited," observed Herbert.

"Yes, a very long time!" answered the reporter.

"Mr. Spilett," then said Pencroft, "instead of returning on board, I think that it would be well to pass the night in this hut."

"You are right, Pencroft," answered Gideon Spilett, "and if its owner returns, well! perhaps he will not be sorry to find the place taken possession of."

"He will not return," said the sailor, shaking his head.

"You think that he has quitted the island?" asked the reporter.

"If he had quitted the island he would have taken away his weapons and his tools," replied Pencroft. "You know the value which castaways set on such articles as these the last remains of a wreck. No! no!" repeated the sailor, in a tone of conviction; "no, he has not left the island! If he had escaped in a boat made by himself, he would still less have left these indispensable and necessary articles. No! he is on the island!"

"Living?" asked Herbert.

"Living or dead. But if he is dead, I suppose he has not buried himself, and so we shall at least find his remains!"

It was then agreed that the night should be passed in the deserted dwelling, and a store of wood found in a corner was sufficient to warm it. The door closed, Pencroft, Herbert and Spilett remained there, seated on a bench, talking little but wondering much. They were in a frame of mind to imagine anything or expect anything. They listened eagerly for sounds outside. The door might have opened suddenly, and a man presented himself to them without their being in the least surprised, notwithstanding all that the hut revealed of abandonment, and they had their hands ready to press the hands of this man, this castaway, this unknown friend, for whom friends were waiting.

But no voice was heard, the door did not open. The hours thus passed away.

How long the night appeared to the sailor and his companions! Herbert alone slept for two hours, for at his age sleep is a necessity. They were all three anxious to continue their exploration of the day before, and to search the most secret recesses of the islet! The inferences deduced by Pencroft were perfectly reasonable, and it was nearly certain that, as the hut was deserted, and the tools, utensils, and weapons were still there, the owner had succumbed. It was agreed, therefore, that they should search for his remains, and give them at least Christian burial.

Day dawned; Pencroft and his companions immediately proceeded to survey the dwelling. It had certainly been built in a favorable situation, at the back of a little hill, sheltered by five or six magnificent gum-trees. Before its front and through the trees the axe had prepared a wide clearing, which allowed the view to extend to the sea. Beyond a lawn, surrounded by a wooden fence falling to pieces, was the shore, on the left of which was the mouth of the stream.

The hut had been built of planks, and it was easy to see that these planks had been obtained from the hull or deck of a ship. It was probable that a disabled vessel had been cast on the coast of the island, that one at least of the crew had been saved, and that by means of the wreck this man, having tools at his disposal, had built the dwelling.

And this became still more evident when Gideon Spilett, after having walked around the hut, saw on a plank, probably one of those which had formed the armor of the wrecked vessel, these letters already half effaced:

BR--TAN--A

"Britannia," exclaimed Pencroft, whom the reporter had called; "it is a common name for ships, and I could not say if she was English or American!"

"It matters very little, Pencroft!"

"Very little indeed," answered the sailor, "and we will save the survivor of her crew if he is still living, to whatever country he may belong. But before beginning our search again let us go on board the 'Bonadventure'."

A sort of uneasiness had seized Pencroft upon the subject of his vessel. Should the island be inhabited after all, and should some one have taken possession of her? But he shrugged his shoulders at such an unreasonable supposition. At any rate the sailor was not sorry to go to breakfast on board. The road already trodden was not long, scarcely a mile. They set out on their walk, gazing into the wood and thickets through which goats and pigs fled in hundreds.

Twenty minutes after leaving the hut Pencroft and his companions reached the western coast of the island, and saw the "Bonadventure" held fast by her anchor, which was buried deep in the sand.

Pencroft could not restrain a sigh of satisfaction. After all this vessel was his child, and it is the right of fathers to be often uneasy when there is no occasion for it.
They returned on board, breakfasted, so that it should not be necessary to dine until very late; then the repast being ended, the exploration was continued and conducted with the most minute care. Indeed, it was very probable that the only inhabitant of the island had perished. It was therefore more for the traces of a dead than of a living man that Pencroft and his companions searched. But their searches were vain, and during the half of that day they sought to no purpose among the thickets of trees which covered the islet. There was then scarcely any doubt that, if the castaway was dead, no trace of his body now remained, but that some wild beast had probably devoured it to the last bone.

"We will set off to-morrow at daybreak," said Pencroft to his two companions, as about two o’clock they were resting for a few minutes under the shade of a clump of firs.

"I should think that we might without scruple take the utensils which belonged to the castaway," added Herbert.

"I think so, too," returned Gideon Spilett, "and these arms and tools will make up the stores of Granite House. The supply of powder and shot is also most important."

"Yes," replied Pencroft, "but we must not forget to capture a couple or two of those pigs, of which Lincoln Island is destitute."

"Nor to gather those seeds," added Herbert, "which will give us all the vegetables of the Old and the New Worlds."

"Then perhaps it would be best," said the reporter, "to remain a day longer on Tabor Island, so as to collect all that may be useful to us."

"No, Mr. Spilett," answered Pencroft, "I will ask you to set off to-morrow at daybreak. The wind seems to me to be likely to shift to the west, and after having had a fair wind for coming we shall have a fair wind for going back."

"Then do not let us lose time," said Herbert, rising.

"We won’t waste time," returned Pencroft. "You, Herbert, go and gather the seeds, which you know better than we do. While you do that, Mr. Spilett and I will go and have a pig hunt, and even without Top I hope we shall manage to catch a few!"

Herbert accordingly took the path which led towards the cultivated part of the islet, while the sailor and the reporter entered the forest.

Many specimens of the porcine race fled before them, and these animals, which were singularly active, did not appear to be in a humor to allow themselves to be approached.

However, after an hour’s chase, the hunters had just managed to get hold of a couple lying in a thicket, when cries were heard resounding from the north part of the island, with the cries were mingled terrible yells, in which there was nothing human.

Pencroft and Gideon Spilett were at once on their feet, and the pigs by this movement began to run away, at the moment when the sailor was getting ready the rope to bind them.

"That’s Herbert’s voice," said the reporter.

"Run!" exclaimed Pencroft.

And the sailor and Spilett immediately ran at full speed towards the spot from whence the cries proceeded.

They did well to hasten, for at a turn of the path near a clearing they saw the lad thrown on the ground, and in the grasp of a savage being, apparently a gigantic ape, who was about to do him some great harm.

To rush on this monster, throw him on the ground in his turn, snatch Herbert from him, then bind him securely, was the work of a minute for Pencroft and Gideon Spilett. The sailor was of Herculean strength, the reporter also very powerful, and in spite of the monster’s resistance he was firmly tied so that he could not even move.

"You are not hurt, Herbert?" asked Spilett.

"No, no!"

"Oh, if this ape had wounded him!" exclaimed Pencroft.

"But he is not an ape," answered Herbert.

At these words Pencroft and Gideon Spilett looked at the singular being who lay on the ground. Indeed it was not an ape; it was a human being, a man. But what a man! A savage in all the horrible acceptation of the word, and so much the more frightful that he seemed fallen to the lowest degree of brutishness!

Shaggy hair, untrimmed beard descending to the chest, the body almost naked except a rag round the waist, wild eyes, enormous hands with immensely long nails, skin the color of mahogany, feet as hard as if made of horn, such was the miserable creature who yet had a claim to be called a man. But it might justly be asked if there were yet a soul in this body, or if the brute instinct alone survived in it!

"Are you quite sure that this is a man, or that he has ever been one?" said Pencroft to the reporter.

"Alas! there is no doubt about it," replied Spilett.

"Then this must be the castaway?" asked Herbert.

"Yes," replied Gideon Spilett, "but the unfortunate man has no longer anything human about him!"
The reporter spoke the truth. It was evident that if the castaway had ever been a civilized being, solitude had made him a savage, or worse, perhaps a regular man of the woods. Hoarse sounds issued from his throat between his teeth, which were sharp as the teeth of a wild beast made to tear raw flesh.

Memory must have deserted him long before, and for a long time also he had forgotten how to use his gun and tools, and he no longer knew how to make a fire! It could be seen that he was active and powerful, but the physical qualities had been developed in him to the injury of the moral qualities. Gideon Spilett spoke to him. He did not appear to understand or even to hear. And yet on looking into his eyes, the reporter thought he could see that all reason was not extinguished in him. However, the prisoner did not struggle, nor even attempt to break his bonds. Was he overwhelmed by the presence of men whose fellow he had once been? Had he found in some corner of his brain a fleeting remembrance which recalled him to humanity? If free, would he attempt to fly, or would he remain? They could not tell, but they did not make the experiment; and after gazing attentively at the miserable creature,—

"Whoever he may be," remarked Gideon Spilett, "whoever he may have been, and whatever he may become, it is our duty to take him with us to Lincoln Island."

"Yes, yes!" replied Herbert, "and perhaps with care we may arouse in him some gleam of intelligence."

"The soul does not die," said the reporter, "and it would be a great satisfaction to rescue one of God's creatures from brutishness."

Pencroft shook his head doubtfully.

"We must try at any rate," returned the reporter; "humanity commands us."

It was indeed their duty as Christians and civilized beings. All three felt this, and they well knew that Cyrus Harding would approve of their acting thus.

"Shall we leave him bound?" asked the sailor.

"Perhaps he would walk if his feet were unfastened," said Herbert.

"Let us try," replied Pencroft.

The cords which shackled the prisoner's feet were cut off, but his arms remained securely fastened. He got up by himself and did not manifest any desire to run away. His hard eyes darted a piercing glance at the three men, who walked near him, but nothing denoted that he recollected being their fellow, or at least having been so. A continual hissing sound issued from his lips, his aspect was wild, but he did not attempt to resist.

By the reporter's advice the unfortunate man was taken to the hut. Perhaps the sight of the things that belonged to him would make some impression on him! Perhaps a spark would be sufficient to revive his obscured intellect, to rekindle his dulled soul. The dwelling was not far off. In a few minutes they arrived there, but the prisoner remembered nothing, and it appeared that he had lost consciousness of everything.

What could they think of the degree of brutishness into which this miserable being had fallen, unless that his imprisonment on the islet dated from a very distant period and after having arrived there a rational being solitude had reduced him to this condition.

The reporter then thought that perhaps the sight of fire would have some effect on him, and in a moment one of those beautiful flames, that attract even animals, blazed up on the hearth. The sight of the flame seemed at first to fix the attention of the unhappy object, but soon he turned away and the look of intelligence faded. Evidently there was nothing to be done, for the time at least, but to take him on board the "Bonadventure." This was done, and he remained there in Pencroft's charge.

Herbert and Spilett returned to finish their work; and some hours after they came back to the shore, carrying the utensils and guns, a store of vegetables, of seeds, some game, and two couple of pigs.

All was embarked, and the "Bonadventure" was ready to weigh anchor and sail with the morning tide.

The prisoner had been placed in the fore-cabin, where he remained quiet, silent, apparently deaf and dumb.

Pencroft offered him something to eat, but he pushed away the cooked meat that was presented to him and which doubtless did not suit him. But on the sailor showing him one of the ducks which Herbert had killed, he pounced on it like a wild beast, and devoured it greedily.

"You think that he will recover his senses?" asked Pencroft. "It is not impossible that our care will have an effect upon him, for it is solitude that has made him what he is, and from this time forward he will be no longer alone."

"The poor man must no doubt have been in this state for a long time," said Herbert.

"Perhaps," answered Gideon Spilett.

"About what age is he?" asked the lad.

"It is difficult to say," replied the reporter, "for it is impossible to see his features under the thick beard which covers his face, but he is no longer young, and I suppose he might be about fifty."

"Have you noticed, Mr. Spilett, how deeply sunk his eyes are?" asked Herbert.

"Yes, Herbert, but I must add that they are more human than one could expect from his appearance."

"However, we shall see," replied Pencroft, "and I am anxious to know what opinion Captain Harding will have
of our savage. We went to look for a human creature, and we are bringing back a monster! After all, we did what we could."

The night passed, and whether the prisoner slept or not could not be known, but at any rate, although he had been unbound, he did not move. He was like a wild animal, which appears stunned at first by its capture, and becomes wild again afterwards.

At daybreak the next morning, the 15th of October, the change of weather predicted by Pencroft occurred. The wind having shifted to the northwest favored the return of the "Bonadventure," but at the same time it freshened, which might render navigation more difficult.

At five o'clock in the morning the anchor was weighed. Pencroft took a reef in the mainsail, and steered towards the north-east, so as to sail straight for Lincoln Island.

The first day of the voyage was not marked by any incident. The prisoner remained quiet in the fore-cabin, and as he had been a sailor it appeared that the motion of the vessel might produce on him a salutary reaction. Did some recollection of his former calling return to him? However that might be, he remained tranquil, astonished rather than depressed.

The next day the wind increased, blowing more from the north, consequently in a less favorable direction for the "Bonadventure." Pencroft was soon obliged to sail close-hauled, and without saying anything about it he began to be uneasy at the state of the sea, which frequently broke over the bows. Certainly, if the wind did not moderate, it would take a longer time to reach Lincoln Island than it had taken to make Tabor Island.

Indeed, on the morning of the 17th, the "Bonadventure" had been forty-eight hours at sea, and nothing showed that she was near the island. It was impossible, besides, to estimate the distance traversed, or to trust to the reckoning for the direction, as the speed had been very irregular.

Twenty-four hours after there was yet no land in sight. The wind was right ahead and the sea very heavy. The sails were close-reefed, and they tacked frequently. On the 18th, a wave swept completely over the "Bonadventure"; and if the crew had not taken the precaution of lashing themselves to the deck, they would have been carried away.

On this occasion Pencroft and his companions, who were occupied with loosing themselves, received unexpected aid from the prisoner, who emerged from the hatchway as if his sailor's instinct had suddenly returned, broke a piece out of the bulwarks with a spar so as to let the water which filled the deck escape. Then the vessel being clear, he descended to his cabin without having uttered a word. Pencroft, Gideon Spilett, and Herbert, greatly astonished, let him proceed.

Their situation was truly serious, and the sailor had reason to fear that he was lost on the wide sea without any possibility of recovering his course.

The night was dark and cold. However, about eleven o'clock, the wind fell, the sea went down, and the speed of the vessel, as she labored less, greatly increased.

Neither Pencroft, Spilett, nor Herbert thought of taking an hour's sleep. They kept a sharp look-out, for either Lincoln Island could not be far distant and would be sighted at daybreak, or the "Bonadventure," carried away by currents, had drifted so much that it would be impossible to rectify her course. Pencroft, uneasy to the last degree, yet did not despair, for he had a gallant heart, and grasping the tiller he anxiously endeavored to pierce the darkness which surrounded them.

About two o'clock in the morning he started forward,--
"A light! a light!" he shouted.

Indeed, a bright light appeared twenty miles to the northeast. Lincoln Island was there, and this fire, evidently lighted by Cyrus Harding, showed them the course to be followed. Pencroft, who was bearing too much to the north, altered his course and steered towards the fire, which burned brightly above the horizon like a star of the first magnitude.

Chapter 15

The next day, the 20th of October, at seven o'clock in the morning, after a voyage of four days, the "Bonadventure" gently glided up to the beach at the mouth of the Mercy.

Cyrus Harding and Neb, who had become very uneasy at the bad weather and the prolonged absence of their companions, had climbed at daybreak to the plateau of Prospect Heights, and they had at last caught sight of the vessel which had been so long in returning.

"God be praised! there they are!" exclaimed Cyrus Harding.

As to Neb in his joy, he began to dance, to twirl round, clapping his hands and shouting, "Oh! my master!" A more touching pantomime than the finest discourse.

The engineer's first idea, on counting the people on the deck of the "Bonadventure," was that Pencroft had not
found the castaway of Tabor Island, or at any rate that the unfortunate man had refused to leave his island and change one prison for another.

Indeed Pencroft, Gideon Spilett, and Herbert were alone on the deck of the "Bonadventure."

The moment the vessel touched, the engineer and Neb were waiting on the beach, and before the passengers had time to leap on to the sand, Harding said: "We have been very uneasy at your delay, my friends! Did you meet with any accident?"

"No," replied Gideon Spilett; "on the contrary, everything went wonderfully well. We will tell you all about it."

"However," returned the engineer, "your search has been unsuccessful, since you are only three, just as you went!"

"Excuse me, captain," replied the sailor, "we are four."

"You have found the castaway?"

"Yes."

"And you have brought him?"

"Yes."

"Living?"

"Yes."

"Where is he? Who is he?"

"He is," replied the reporter, "or rather he was a man! There, Cyrus, that is all we can tell you!"

The engineer was then informed of all that had passed during the voyage, and under what conditions the search had been conducted; how the only dwelling in the island had long been abandoned; how at last a castaway had been captured, who appeared no longer to belong to the human species.

"And that's just the point," added Pencroft, "I don't know if we have done right to bring him here."

"Certainly you have, Pencroft," replied the engineer quickly.

"But the wretched creature has no sense!"

"That is possible at present," replied Cyrus Harding, "but only a few months ago the wretched creature was a man like you and me. And who knows what will become of the survivor of us after a long solitude on this island? It is a great misfortune to be alone, my friends; and it must be believed that solitude can quickly destroy reason, since you have found this poor creature in such a state!"

"But, captain," asked Herbert, "what leads you to think that the brutishness of the unfortunate man began only a few months back?"

"Because the document we found had been recently written," answered the engineer, "and the castaway alone can have written it."

"Always supposing," observed Gideon Spilett, "that it had not been written by a companion of this man, since dead."

"That is impossible, my dear Spilett."

"Why so?" asked the reporter.

"Because the document would then have spoken of two castaways," replied Harding, "and it mentioned only one."

Herbert then in a few words related the incidents of the voyage, and dwelt on the curious fact of the sort of passing gleam in the prisoner's mind, when for an instant in the height of the storm he had become a sailor.

"Well, Herbert," replied the engineer, "you are right to attach great importance to this fact. The unfortunate man cannot be incurable, and despair has made him what he is; but here he will find his fellow-men, and since there is still a soul in him, this soul we shall save!"

The castaway of Tabor Island, to the great pity of the engineer and the great astonishment of Neb, was then brought from the cabin which he occupied in the fore part of the "Bonadventure"; when once on land he manifested a wish to run away.

But Cyrus Harding approaching, placed his hand on his shoulder with a gesture full of authority, and looked at him with infinite tenderness. Immediately the unhappy man, submitting to a superior will, gradually became calm, his eyes fell, his head bent, and he made no more resistance.

"Poor fellow!" murmured the engineer.

Cyrus Harding had attentively observed him. To judge by his appearance this miserable being had no longer anything human about him, and yet Harding, as had the reporter already, observed in his look an indefinable trace of intelligence.

It was decided that the castaway, or rather the stranger as he was thenceforth termed by his companions, should live in one of the rooms of Granite House, from which, however, he could not escape. He was led there without difficulty, and with careful attention, it might, perhaps, be hoped that some day he would be a companion to the
settlers in Lincoln Island.

Cyrus Harding, during breakfast, which Neb had hastened to prepare, as the reporter, Herbert, and Pencroft were dying of hunger, heard in detail all the incidents which had marked the voyage of exploration to the islet. He agreed with his friends on this point, that the stranger must be either English or American, the name Britannia leading them to suppose this, and, besides, through the bushy beard, and under the shaggy, matted hair, the engineer thought he could recognize the characteristic features of the Anglo-Saxon.

"But, by the bye," said Gideon Spilett, addressing Herbert, "you never told us how you met this savage, and we know nothing, except that you would have been strangled, if we had not happened to come up in time to help you!"

"Upon my word," answered Herbert, "it is rather difficult to say how it happened. I was, I think, occupied in collecting my plants, when I heard a noise like an avalanche falling from a very tall tree. I scarcely had time to look round. This unfortunate man, who was without doubt concealed in a tree, rushed upon me in less time than I take to tell you about it, and unless Mr. Spilett and Pencroft--"

"My boy!" said Cyrus Harding, "you ran a great danger, but, perhaps, without that, the poor creature would have still hidden himself from your search, and we should not have had a new companion."

"You hope, then, Cyrus, to succeed in reforming the man?" asked the reporter.

"Yes," replied the engineer.

Breakfast over, Harding and his companions left Granite House and returned to the beach. They there occupied themselves in unloading the "Bonadventure," and the engineer, having examined the arms and tools, saw nothing which could help them to establish the identity of the stranger.

The capture of pigs, made on the islet, was looked upon as being very profitable to Lincoln Island, and the animals were led to the sty, where they soon became at home.

The two barrels, containing the powder and shot, as well as the box of caps, were very welcome. It was agreed to establish a small powder-magazine, either outside Granite House or in the Upper Cavern, where there would be no fear of explosion. However, the use of pyroxyle was to be continued, for this substance giving excellent results, there was no reason for substituting ordinary powder.

When the unloading of the vessel was finished,--

"Captain," said Pencroft, "I think it would be prudent to put our 'Bonadventure' in a safe place."

"Is she not safe at the mouth of the Mercy?" asked Cyrus Harding.

"No, captain," replied the sailor. "Half of the time she is stranded on the sand, and that works her. She is a famous craft, you see, and she behaved admirably during the squall which struck us on our return."

"Could she not float in the river?"

"No doubt, captain, she could; but there is no shelter there, and in the east winds, I think that the 'Bonadventure' would suffer much from the surf."

"Well, where would you put her, Pencroft?"

"In Port Balloon," replied the sailor. "That little creek, shut in by rocks, seems to me to be just the harbor we want."

"Is it not rather far?"

"Pooh! it is not more than three miles from Granite House, and we have a fine straight road to take us there!"

"Do it then, Pencroft, and take your 'Bonadventure' there," replied the engineer, "and yet I would rather have her under our more immediate protection. When we have time, we must make a little harbor for her."

"Famous!" exclaimed Pencroft. "A harbor with a lighthouse, a pier, and dock! Ah! really with you, captain, everything becomes easy."

"Yes, my brave Pencroft," answered the engineer, "but on condition, however, that you help me, for you do as much as three men in all our work."

Herbert and the sailor then re-embarked on board the "Bonadventure," the anchor was weighed, the sail hoisted, and the wind drove her rapidly towards Claw Cape. Two hours after, she was reposing on the tranquil waters of Port Balloon.

During the first days passed by the stranger in Granite House, had he already given them reason to think that his savage nature was becoming tamed? Did a brighter light burn in the depths of that obscured mind? In short, was the soul returning to the body?

Yes, to a certainty, and to such a degree, that Cyrus Harding and the reporter wondered if the reason of the unfortunate man had ever been totally extinguished. At first, accustomed to the open air, to the unrestrained liberty which he had enjoyed on Tabor Island, the stranger manifested a sullen fury, and it was feared that he might throw himself onto the beach, out of one of the windows of Granite House. But gradually he became calmer, and more freedom was allowed to his movements.

They had reason to hope, and to hope much. Already, forgetting his carnivorous instincts, the stranger accepted a
less bestial nourishment than that on which he fed on the islet, and cooked meat did not produce in him the same sentiment of repulsion which he had showed on board the "Bonadventure." Cyrus Harding had profited by a moment when he was sleeping, to cut his hair and matted beard, which formed a sort of mane and gave him such a savage aspect. He had also been clothed more suitably, after having got rid of the rag which covered him. The result was that, thanks to these attentions, the stranger resumed a more human appearance, and it even seemed as if his eyes had become milder. Certainly, when formerly lighted up by intelligence, this man's face must have had a sort of beauty.

Every day, Harding imposed on himself the task of passing some hours in his company. He came and worked near him, and occupied himself in different things, so as to fix his attention. A spark, indeed, would be sufficient to reillumine that soul, a recollection crossing that brain to recall reason. That had been seen, during the storm, on board the "Bonadventure!" The engineer did not neglect either to speak aloud, so as to penetrate at the same time by the organs of hearing and sight the depths of that torpid intelligence. Sometimes one of his companions, sometimes another, sometimes all joined him. They spoke most often of things belonging to the navy, which must interest a sailor.

At times, the stranger gave some slight attention to what was said, and the settlers were soon convinced that he partly understood them. Sometimes the expression of his countenance was deeply sorrowful, a proof that he suffered mentally, for his face could not be mistaken; but he did not speak, although at different times, however, they almost thought that words were about to issue from his lips. At all events, the poor creature was quite quiet and sad!

But was not his calm only apparent? Was not his sadness only the result of his seclusion? Nothing could yet be ascertained. Seeing only certain objects and in a limited space, always in contact with the colonists, to whom he would soon become accustomed, having no desires to satisfy, better fed, better clothed, it was natural that his physical nature should gradually improve; but was he penetrated with the sense of a new life? or rather, to employ a word which would be exactly applicable to him, was he not becoming tamed, like an animal in company with his master? This was an important question, which Cyrus Harding was anxious to answer, and yet he did not wish to treat his invalid roughly! Would he ever be a convalescent?

How the engineer observed him every moment! How he was on the watch for his soul, if one may use the expression! How he was ready to grasp it! The settlers followed with real sympathy all the phases of the cure undertaken by Harding. They aided him also in this work of humanity, and all, except perhaps the incredulous Pencroft, soon shared both his hope and his faith.

The calm of the stranger was deep, as has been said, and he even showed a sort of attachment for the engineer, whose influence he evidently felt. Cyrus Harding resolved then to try him, by transporting him to another scene, from that ocean which formerly his eyes had been accustomed to contemplate, to the border of the forest, which might perhaps recall those where so many years of his life had been passed!

"But," said Gideon Spilett, "can we hope that he will not escape, if once set at liberty?"
"The experiment must be tried," replied the engineer.
"Well!" said Pencroft. "When that fellow is outside, and feels the fresh air, he will be off as fast as his legs can carry him!"

"I do not think so," returned Harding.
"Let us try," said Spilett.
"We will try," replied the engineer.

This was on the 30th of October, and consequently the castaway of Tabor Island had been a prisoner in Granite House for nine days. It was warm, and a bright sun darted its rays on the island. Cyrus Harding and Pencroft went to the room occupied by the stranger, who was found lying near the window and gazing at the sky.

"Come, my friend," said the engineer to him.

The stranger rose immediately. His eyes were fixed on Cyrus Harding, and he followed him, while the sailor marched behind them, little confident as to the result of the experiment.

Arrived at the door, Harding and Pencroft made him take his place in the lift, while Neb, Herbert, and Gideon Spilett waited for them before Granite House. The lift descended, and in a few moments all were united on the beach.

The settlers went a short distance from the stranger, so as to leave him at liberty.

He then made a few steps toward the sea, and his look brightened with extreme animation, but he did not make the slightest attempt to escape. He was gazing at the little waves which, broken by the islet, rippled on the sand.

"This is only the sea," observed Gideon Spilett, "and possibly it does not inspire him with any wish to escape!"
"Yes," replied Harding, "we must take him to the plateau, on the border of the forest. There the experiment will be more conclusive."
"Besides, he could not run away," said Neb, "since the bridge is raised."
"Oh!" said Pencroft, "that isn't a man to be troubled by a stream like Creek Glycerine! He could cross it directly, at a single bound!"

"We shall soon see," Harding contented himself with replying, his eyes not quitting those of his patient.

The latter was then led towards the mouth of the Mercy, and all climbing the left bank of the river, reached Prospect Heights.

Arrived at the spot on which grew the first beautiful trees of the forest, their foliage slightly agitated by the breeze, the stranger appeared greedily to drink in the penetrating odor which filled the atmosphere, and a long sigh escaped from his chest.

The settlers kept behind him, ready to seize him if he made any movement to escape!

And, indeed, the poor creature was on the point of springing into the creek which separated him from the forest, and his legs were bent for an instant as if for a spring, but almost immediately he stepped back, half sank down, and a large tear fell from his eyes.

"Ah!" exclaimed Cyrus Harding, "you have become a man again, for you can weep!"

Chapter 16
Yes! the unfortunate man had wept! Some recollection doubtless had flashed across his brain, and to use Cyrus Harding's expression, by those tears he was once more a man.

The colonists left him for some time on the plateau, and withdrew themselves to a short distance, so that he might feel himself free; but he did not think of profiting by this liberty, and Harding soon brought him back to Granite House. Two days after this occurrence, the stranger appeared to wish gradually to mingle with their common life. He evidently heard and understood, but no less evidently was he strangely determined not to speak to the colonists; for one evening, Pencroft, listening at the door of his room, heard these words escape from his lips:--

"No! here! I! never!"

The sailor reported these words to his companions.

"There is some painful mystery there!" said Harding.

The stranger had begun to use the laboring tools, and he worked in the garden. When he stopped in his work, as was often the case, he remained retired within himself, but on the engineer's recommendation, they respected the reserve which he apparently wished to keep. If one of the settlers approached him, he drew back, and his chest heaved with sobs, as if overburdened!

Was it remorse that overwhelmed him thus? They were compelled to believe so, and Gideon Spilett could not help one day making this observation,--

"If he does not speak it is because he has, I fear, things too serious to be told!"

They must be patient and wait.

A few days later, on the 3rd of November, the stranger, working on the plateau, had stopped, letting his spade drop to the ground, and Harding, who was observing him from a little distance, saw that tears were again flowing from his eyes. A sort of irresistible pity led him towards the unfortunate man, and he touched his arm lightly.

"My friend!" said he.

The stranger tried to avoid his look, and Cyrus Harding having endeavored to take his hand, he drew back quickly.

"My friend," said Harding in a firmer voice, "look at me, I wish it!"

The stranger looked at the engineer, and seemed to be under his power, as a subject under the influence of a mesmerist. He wished to run away. But then his countenance suddenly underwent a transformation. His eyes flashed. Words struggled to escape from his lips. He could no longer contain himself! At last he folded his arms; then, in a hollow voice,--"Who are you?" he asked Cyrus Harding.

"Castaways, like you," replied the engineer, whose emotion was deep. "We have brought you here, among your fellow-men."

"My fellow-men!.... I have none!"

"You are in the midst of friends."

"Friends!--for me! friends!" exclaimed the stranger, hiding his face in his hands. "No--never--leave me! leave me!"

Then he rushed to the side of the plateau which overlooked the sea, and remained there a long time motionless. Harding rejoined his companions and related to them what had just happened.

"Yes! there is some mystery in that man's life," said Gideon Spilett, "and it appears as if he had only re-entered society by the path of remorse."

"I don't know what sort of a man we have brought here," said the sailor. "He has secrets--"
"Which we will respect," interrupted Cyrus Harding quickly. "If he has committed any crime, he has most fearfully expiated it, and in our eyes he is absolved."

For two hours the stranger remained alone on the shore, evidently under the influence of recollections which recalled all his past life—a melancholy life doubtless—and the colonists, without losing sight of him, did not attempt to disturb his solitude. However, after two hours, appearing to have formed a resolution, he came to find Cyrus Harding. His eyes were red with the tears he had shed, but he wept no longer. His countenance expressed deep humility. He appeared anxious, timorous, ashamed, and his eyes were constantly fixed on the ground.

"Sir," said he to Harding, "your companions and you, are you English?"

"No," answered the engineer, "we are Americans."

"Ah!" said the stranger, and he murmured, "I prefer that!"

"And you, my friend?" asked the engineer.

"English," replied he hastily.

And as if these few words had been difficult to say, he retreated to the beach, where he walked up and down between the cascade and the mouth of the Mercy, in a state of extreme agitation.

Then, passing one moment close to Herbert, he stopped and in a stifled voice,--

"What month?" he asked.

"December," replied Herbert.

"What year?"

"1866."

"Twelve years! twelve years!" he exclaimed.

Then he left him abruptly.

Herbert reported to the colonists the questions and answers which had been made.

"This unfortunate man," observed Gideon Spilett, "was no longer acquainted with either months or years!"

"Yes!" added Herbert, "and he had been twelve years already on the islet when we found him there!"

"Twelve years!" rejoined Harding. "Ah! twelve years of solitude, after a wicked life, perhaps, may well impair a man’s reason!"

"I am induced to think," said Pencroft, "that this man was not wrecked on Tabor Island, but that in consequence of some crime he was left there."

"You must be right, Pencroft," replied the reporter, "and if it is so it is not impossible that those who left him on the island may return to fetch him some day!"

"And they will no longer find him," said Herbert.

"But then," added Pencroft, "they must return, and—"

"My friends," said Cyrus Harding, "do not let us discuss this question until we know more about it. I believe that the unhappy man has suffered, that he has severely expiated his faults, whatever they may have been, and that the wish to unburden himself stifles him. Do not let us press him to tell us his history! He will tell it to us doubtless, and when we know it, we shall see what course it will be best to follow. He alone besides can tell us, if he has more than a hope, a certainty, of returning some day to his country, but I doubt it!"

"And why?" asked the reporter.

"Because that, in the event of his being sure of being delivered at a certain time, he would have waited the hour of his deliverance and would not have thrown this document into the sea. No, it is more probable that he was condemned to die on that islet, and that he never expected to see his fellow-creatures again!"

"But," observed the sailor, "there is one thing which I cannot explain."

"What is it?"

"If this man had been left for twelve years on Tabor Island, one may well suppose that he had been several years already in the wild state in which we found him!"

"That is probable," replied Cyrus Harding.

"It must then be many years since he wrote that document!"

"No doubt," and yet the document appears to have been recently written!

"Besides, how do you know that the bottle which enclosed the document may not have taken several years to come from Tabor Island to Lincoln Island?"

"That is not absolutely impossible," replied the reporter.

"Might it not have been a long time already on the coast of the island?"

"No," answered Pencroft, "for it was still floating. We could not even suppose that after it had stayed for any length of time on the shore, it would have been swept off by the sea, for the south coast is all rocks, and it would certainly have been smashed to pieces there!"

"That is true," rejoined Cyrus Harding thoughtfully.
"And then," continued the sailor, "if the document was several years old, if it had been shut up in that bottle for several years, it would have been injured by damp. Now, there is nothing of the kind, and it was found in a perfect state of preservation."

The sailor's reasoning was very just, and pointed out an incomprehensible fact, for the document appeared to have been recently written, when the colonists found it in the bottle. Moreover, it gave the latitude and longitude of Tabor Island correctly, which implied that its author had a more complete knowledge of hydrography than could be expected of a common sailor.

"There is in this, again, something unaccountable," said the engineer, "but we will not urge our companions to speak. When he likes, my friends, then we shall be ready to hear him!"

During the following days the stranger did not speak a word, and did not once leave the precincts of the plateau. He worked away, without losing a moment, without taking a minute's rest, but always in a retired place. At meal times he never came to Granite House, although invited several times to do so, but contented himself with eating a few raw vegetables. At nightfall he did not return to the room assigned to him, but remained under some clump of trees, or when the weather was bad crouched in some cleft of the rocks. Thus he lived in the same manner as when he had no other shelter than the forests of Tabor Island, and as all persuasion to induce him to improve his life was in vain, the colonists waited patiently. And the time was near, when, as it seemed, almost involuntarily urged by his conscience, a terrible confession escaped him.

On the 10th of November, about eight o'clock in the evening, as night was coming on, the stranger appeared unexpectedly before the settlers, who were assembled under the veranda. His eyes burned strangely, and he had quite resumed the wild aspect of his worst days.

Cyrus Harding and his companions were astounded on seeing that, overcome by some terrible emotion, his teeth chattered like those of a person in a fever. What was the matter with him? Was the sight of his fellow-creatures insupportable to him? Was he weary of this return to a civilized mode of existence? Was he pining for his former savage life? It appeared so, as soon he was heard to express himself in these incoherent sentences:

"Why am I here?... By what right have you dragged me from my islet?.... Do you think there could be any tie between you and me?.... Do you know who I am--what I have done--why I was there--alone? And who told you that I was not abandoned there--that I was not condemned to die there?.... Do you know my past?.... How do you know that I have not stolen, murdered--that I am not a wretch--an accursed being--only fit to live like a wild beast, far from all--speak--do you know it?"

The colonists listened without interrupting the miserable creature, from whom these broken confessions escaped, as it were, in spite of himself. Harding wishing to calm him, approached him, but he hastily drew back.

"No! no!" he exclaimed; "one word only--an I free?"

"You are free," answered the engineer.

"Farewell, then!" he cried, and fled like a madman.

Neb, Pencroft, and Herbert ran also towards the edge of the wood--but they returned alone.

"We must let him alone!" said Cyrus Harding.

"He will never come back!" exclaimed Pencroft.

"He will come back," replied the engineer.

Many days passed; but Harding--was it a sort of presentiment?--presentiment in the fixed idea that sooner or later the unhappy man would return.

"It is the last revolt of his wild nature," said he, "which remorse has touched, and which renewed solitude will terrify."

In the meanwhile, works of all sorts were continued, as well on Prospect Heights as at the corral, where Harding intended to build a farm. It is unnecessary to say that the seeds collected by Herbert on Tabor Island had been carefully sown. The plateau thus formed one immense kitchen-garden, well laid out and carefully tended, so that the arms of the settlers were never in want of work. There was always something to be done. As the esculents increased in number, it became necessary to enlarge the simple beds, which threatened to grow into regular fields and replace the meadows. But grass abounded in other parts of the island, and there was no fear of the onagers being obliged to go on short allowance. It was well worth while, besides, to turn Prospect Heights into a kitchen-garden, defended by its deep belt of creeks, and to remove them to the meadows, which had no need of protection against the depredations of quadrupeds. On the 15th of November, the third harvest was gathered in. How wonderfully had the field increased in extent, since eighteen months ago, when the first grain of wheat was sown! The second crop of six hundred thousand grains produced this time four thousand bushels, or five hundred millions of grains!

The colony was rich in corn, for ten bushels alone were sufficient for sowing every year to produce an ample crop for the food both of men and beasts. The harvest was completed, and the last fortnight of the month of
November was devoted to the work of converting it into food for man. In fact, they had corn, but not flour, and the establishment of a mill was necessary. Cyrus Harding could have utilized the second fall which flowed into the Mercy to establish his motive power, the first being already occupied with moving the felting mill, but, after some consultation, it was decided that a simple windmill should be built on Prospect Heights. The building of this presented no more difficulty than the building of the former, and it was moreover certain that there would be no want of wind on the plateau, exposed as it was to the sea breezes.

"Not to mention," said Pencroft, "that the windmill will be more lively and will have a good effect in the landscape!"

They set to work by choosing timber for the frame and machinery of the mill. Some large stones, found at the north of the lake, could be easily transformed into millstones, and as to the sails, the inexhaustible case of the balloon furnished the necessary material.

Cyrus Harding made his model, and the site of the mill was chosen a little to the right of the poultry-yard, near the shore of the lake. The frame was to rest on a pivot supported with strong timbers, so that it could turn with all the machinery it contained according as the wind required it. The work advanced rapidly. Neb and Pencroft had become very skilful carpenters, and had nothing to do but to copy the models provided by the engineer.

Soon a sort of cylindrical box, in shape like a pepper-pot, with a pointed roof, rose on the spot chosen. The four frames which formed the sails had been firmly fixed in the center beam, so as to form a certain angle with it, and secured with iron clamps. As to the different parts of the internal mechanism, the box destined to contain the two millstones, the fixed stone and the moving stone, the hopper, a sort of large square trough, wide at the top, narrow at the bottom, which would allow the grain to fall on the stones, the oscillating spout intended to regulate the passing of the grain, and lastly the bolting machine, which by the operation of sifting, separates the bran from the flour, were made without difficulty. The tools were good, and the work not difficult, for in reality, the machinery of a mill is very simple. This was only a question of time.

Every one had worked at the construction of the mill, and on the 1st of December it was finished. As usual, Pencroft was delighted with his work, and had no doubt that the apparatus was perfect.

"Now for a good wind," said he, "and we shall grind our first harvest splendidly!"

"A good wind, certainly," answered the engineer, "but not too much, Pencroft."

"Pooh! our mill would only go the faster!"

"There is no need for it to go so very fast," replied Cyrus Harding. "It is known by experience that the greatest quantity of work is performed by a mill when the number of turns made by the sails in a minute is six times the number of feet traversed by the wind in a second. A moderate breeze, which passes over twenty-four feet to the second, will give sixteen turns to the sails during a minute, and there is no need of more."

"Exactly!" cried Herbert, "a fine breeze is blowing from the northeast, which will soon do our business for us."

There was no reason for delaying the inauguration of the mill, for the settlers were eager to taste the first piece of bread in Lincoln Island. On this morning two or three bushels of wheat were ground, and the next day at breakfast a magnificent loaf, a little heavy perhaps, although raised with yeast, appeared on the table at Granite House. Every one munched away at it with a pleasure which may be easily understood.

In the meanwhile, the stranger had not reappeared. Several times Gideon Spilett and Herbert searched the forest in the neighborhood of Granite House, without meeting or finding any trace of him. They became seriously uneasy at this prolonged absence. Certainly, the former savage of Tabor island could not be perplexed how to live in the forest, abounding in game, but was it not to be feared that he had resumed his habits, and that this freedom would revive in him his wild instincts? However, Harding, by a sort of presentiment, doubtless, always persisted in saying that the fugitive would return.

"Yes, he will return!" he repeated with a confidence which his companions could not share. "When this unfortunate man was on Tabor Island, he knew himself to be alone! Here, he knows that fellow-men are awaiting him! Since he has partially spoken of his past life, the poor penitent will return to tell the whole, and from that day he will belong to us!"

The event justified Cyrus Harding's predictions. On the 3rd of December, Herbert had left the plateau to go and fish on the southern bank of the lake. He was unarmed, and till then had never taken any precautions for defense, as dangerous animals had not shown themselves on that part of the island.

Meanwhile, Pencroft and Neb were working in the poultry-yard, while Harding and the reporter were occupied at the Chimneys in making soda, the store of soap being exhausted.

Suddenly cries resounded,--

"Help! help!"

Cyrus Harding and the reporter, being at too great a distance, had not been able to hear the shouts. Pencroft and Neb, leaving the poultry-yard in all haste, rushed towards the lake.
But before then, the stranger, whose presence at this place no one had suspected, crossed Creek Glycerine, which separated the plateau from the forest, and bounded up the opposite bank.

Herbert was there face to face with a fierce jaguar, similar to the one which had been killed on Reptile End. Suddenly surprised, he was standing with his back against a tree, while the animal gathering itself together was about to spring.

But the stranger, with no other weapon than a knife, rushed on the formidable animal, who turned to meet this new adversary.

The struggle was short. The stranger possessed immense strength and activity. He seized the jaguar's throat with one powerful hand, holding it as in a vise, without heeding the beast's claws which tore his flesh, and with the other he plunged his knife into its heart.

The jaguar fell. The stranger kicked away the body, and was about to fly at the moment when the settlers arrived on the field of battle, but Herbert, clinging to him, cried,--

"No, no! you shall not go!"

Harding advanced towards the stranger, who frowned when he saw him approaching. The blood flowed from his shoulder under his torn shirt, but he took no notice of it.

"My friend," said Cyrus Harding, "we have just contracted a debt of gratitude to you. To save our boy you have risked your life!"

"My life!" murmured the stranger. "What is that worth? Less than nothing!"

"You are wounded?"

"It is no matter."

"Will you give me your hand?"

And as Herbert endeavored to seize the hand which had just saved him, the stranger folded his arms, his chest heaved, his look darkened, and he appeared to wish to escape, but making a violent effort over himself, and in an abrupt tone,--

"Who are you?" he asked, "and what do you claim to be to me?"

It was the colonists' history which he thus demanded, and for the first time. Perhaps this history recounted, he would tell his own.

In a few words Harding related all that had happened since their departure from Richmond; how they had managed, and what resources they now had at their disposal.

The stranger listened with extreme attention.

Then the engineer told who they all were, Gideon Spilett, Herbert, Pencroft, Neb, himself, and, he added, that the greatest happiness they had felt since their arrival in Lincoln Island was on the return of the vessel from Tabor Island, when they had been able to include among them a new companion.

At these words the stranger's face flushed, his head sunk on his breast, and confusion was depicted on his countenance.

"And now that you know us," added Cyrus Harding, "will you give us your hand?"

"No," replied the stranger in a hoarse voice; "no! You are honest men! And I--"

Chapter 17

These last words justified the colonists' presentiment. There had been some mournful past, perhaps expiated in the sight of men, but from which his conscience had not yet absolved him. At any rate the guilty man felt remorse, he repented, and his new friends would have cordially pressed the hand which they sought; but he did not feel himself worthy to extend it to honest men! However, after the scene with the jaguar, he did not return to the forest, and from that day did not go beyond the enclosure of Granite House.

What was the mystery of his life? Would the stranger one day speak of it? Time alone could show. At any rate, it was agreed that his secret should never be asked from him, and that they would live with him as if they suspected nothing.

For some days their life continued as before. Cyrus Harding and Gideon Spilett worked together, sometimes chemists, sometimes experimentalists. The reporter never left the engineer except to hunt with Herbert, for it would not have been prudent to allow the lad to ramble alone in the forest; and it was very necessary to be on their guard. As to Neb and Pencroft, one day at the stables and poultry-yard, another at the corral, without reckoning work in Granite House, they were never in want of employment.

The stranger worked alone, and he had resumed his usual life, never appearing at meals, sleeping under the trees in the plateau, never mingling with his companions. It really seemed as if the society of those who had saved him was insupportable to him!
"But then," observed Pencroft, "why did he entreat the help of his fellow-creatures? Why did he throw that paper into the sea?"

"He will tell us why," invariably replied Cyrus Harding.

"When?"

"Perhaps sooner than you think, Pencroft."

And, indeed, the day of confession was near.

On the 10th of December, a week after his return to Granite House, Harding saw the stranger approaching, who, in a calm voice and humble tone, said to him: "Sir, I have a request to make of you."

"Speak," answered the engineer, "but first let me ask you a question."

At these words the stranger reddened, and was on the point of withdrawing. Cyrus Harding understood what was passing in the mind of the guilty man, who doubtless feared that the engineer would interrogate him on his past life.

Harding held him back.

"Comrade," said he, "we are not only your companions but your friends. I wish you to believe that, and now I will listen to you."

The stranger pressed his hand over his eyes. He was seized with a sort of trembling, and remained a few moments without being able to articulate a word.

"Sir," said he at last, "I have come to beg you to grant me a favor."

"What is it?"

"You have, four or five miles from here, a corral for your domesticated animals. These animals need to be taken care of. Will you allow me to live there with them?"

Cyrus Harding gazed at the unfortunate man for a few moments with a feeling of deep commiseration; then,—

"My friend," said he, "the corral has only stables hardly fit for animals."

"It will be good enough for me, sir."

"My friend," answered Harding, "we will not constrain you in anything. You wish to live at the corral, so be it. You will, however, be always welcome at Granite House. But since you wish to live at the corral we will make the necessary arrangements for your being comfortably established there."

"Never mind that, I shall do very well."

"My friend," answered Harding, who always intentionally made use of this cordial appellation, "you must let us judge what it will be best to do in this respect."

"Thank you, sir," replied the stranger as he withdrew.

The engineer then made known to his companions the proposal which had been made to him, and it was agreed that they should build a wooden house at the corral, which they would make as comfortable as possible.

That very day the colonists repaired to the corral with the necessary tools, and a week had not passed before the house was ready to receive its tenant. It was built about twenty feet from the sheds, and from there it was easy to overlook the flock of sheep, which then numbered more than eighty. Some furniture, a bed, table, bench, cupboard, and chest were manufactured, and a gun, ammunition, and tools were carried to the corral.

The stranger, however, had seen nothing of his new dwelling, and he had allowed the settlers to work there without him, while he occupied himself on the plateau, wishing, doubtless, to put the finishing stroke to his work. Indeed, thanks to him, all the ground was dug up and ready to be sown when the time came.

It was on the 20th of December that all the arrangements at the corral were completed. The engineer announced to the stranger that his dwelling was ready to receive him, and the latter replied that he would go and sleep there that very evening.

On this evening the colonists were gathered in the diningroom of Granite House. It was then eight o'clock, the hour at which their companion was to leave them. Not wishing to trouble him by their presence, and thus imposing on him the necessity of saying farewells which might perhaps be painful to him, they had left him alone and ascended to Granite House.

Now, they had been talking in the room for a few minutes, when a light knock was heard at the door. Almost immediately the stranger entered, and without preamble,—

"Gentlemen," said he, "before I leave you, it is right that you should know my history. I will tell it you."

These simple words profoundly impressed Cyrus Harding and his companions. The engineer rose.

"We ask you nothing, my friend," said he; "it is your right to be silent."

"It is my duty to speak."

"Sit down, then."

"No, I will stand."

"We are ready to hear you," replied Harding.

The stranger remained standing in a corner of the room, a little in the shade. He was bareheaded, his arms folded
across his chest, and it was in this posture that in a hoarse voice, speaking like some one who obliges himself to speak, he gave the following recital, which his auditors did not once interrupt:--

"On the 20th of December, 1854, a steam-yacht, belonging to a Scotch nobleman, Lord Glenarvan, anchored off Cape Bernouilli, on the western coast of Australia, in the thirty-seventh parallel. On board this yacht were Lord Glenarvan and his wife, a major in the English army, a French geographer, a young girl, and a young boy. These two last were the children of Captain Grant, whose ship, the 'Britannia,' had been lost, crew and cargo, a year before. The 'Duncan' was commanded by Captain John Mangles, and manned by a crew of fifteen men.

"This is the reason the yacht at this time lay off the coast of Australia. Six months before, a bottle, enclosing a document written in English, German, and French, had been found in the Irish Sea, and picked up by the 'Duncan.' This document stated in substance that there still existed three survivors from the wreck of the 'Britannia,' that these survivors were Captain Grant and two of his men, and that they had found refuge on some land, of which the document gave the latitude, but of which the longitude, effaced by the sea, was no longer legible.

"This latitude was 37deg 11' south; therefore, the longitude being unknown, if they followed the thirty-seventh parallel over continents and seas, they would be certain to reach the spot inhabited by Captain Grant and his two companions. The English Admiralty having hesitated to undertake this search, Lord Glenarvan resolved to attempt everything to find the captain. He communicated with Mary and Robert Grant, who joined him. The 'Duncan' yacht was equipped for the distant voyage, in which the nobleman's family and the captain's children wished to take part, and the 'Duncan,' leaving Glasgow, proceeded towards the Atlantic, passed through the Straits of Magellan, and ascended the Pacific as far as Patagonia, where, according to a previous interpretation of the document, they supposed that Captain Grant was a prisoner among the Indians.

"The 'Duncan' disembarked her passengers on the western coast of Patagonia, and sailed to pick them up again on the eastern coast at Cape Corrientes. Lord Glenarvan traversed Patagonia, following the thirty-seventh parallel, and having found no trace of the captain, he re-embarked on the 13th of November, so as to pursue his search through the Ocean.

"After having unsuccessfully visited the islands of Tristan d'Acunha and Amsterdam, situated in her course, the 'Duncan,' as I have said, arrived at Cape Bernouilli, on the Australian coast, on the 20th of December, 1854.

"It was Lord Glenarvan's intention to traverse Australia as he had traversed America, and he disembarked. A few miles from the coast was established a farm, belonging to an Irishman, who offered hospitality to the travelers. Lord Glenarvan made known to the Irishman the cause which had brought him to these parts, and asked if he knew whether a three-masted English vessel, the 'Britannia,' had been lost less than two years before on the west coast of Australia.

"The Irishman had never heard of this wreck, but, to the great surprise of the bystanders, one of his servants came forward and said,--

"'My lord, praise and thank God! If Captain Grant is still living, he is living on the Australian shores.'

"'Who are you?' asked Lord Glenarvan.

"'A Scotchman like yourself, my lord,' replied the man; 'I am one of Captain Grant's crew--one of the castaways of the 'Britannia.'"

"This man was called Ayrton. He was, in fact, the boatswain's mate of the 'Britannia,' as his papers showed. But, separated from Captain Grant at the moment when the ship struck upon the rocks, he had till then believed that the captain with all his crew had perished, and that he, Ayrton, was the sole survivor of the 'Britannia.'

"'Only,' he added, 'it was not on the west coast, but on the east coast of Australia that the vessel was lost, and if Captain Grant is still living, as his document indicates, he is a prisoner among the natives, and it is on the other coast that he must be looked for.'

"This man spoke in a frank voice and with a confident look; his words could not be doubted. The Irishman, in whose service he had been for more than a year, answered for his trustworthiness. Lord Glenarvan, therefore, believed in the fidelity of this man and, by his advice, resolved to cross Australia, following the thirty-seventh parallel. Lord Glenarvan, his wife, the two children, the major, the Frenchman, Captain Mangles, and a few sailors composed the little band under the command of Ayrton, while the 'Duncan,' under charge of the mate, Tom Austin, proceeded to Melbourne, there to await Lord Glenarvan's instructions.

"They set out on the 23rd of December, 1854.

"It is time to say that Ayrton was a traitor. He was, indeed, the boatswain's mate of the 'Britannia,' but, after some dispute with his captain, he endeavored to incite the crew to mutiny and seize the ship, and Captain Grant had landed him, on the 8th of April, 1852, on the west coast of Australia, and then sailed, leaving him there, as was only just.

"Therefore this wretched man knew nothing of the wreck of the 'Britannia'; he had just heard of it from Glenarvan's account. Since his abandonment, he had become, under the name of Ben Joyce, the leader of the
escaped convicts; and if he boldly maintained that the wreck had taken place on the east coast, and led Lord Glenarvan to proceed in that direction, it was that he hoped to separate him from his ship, seize the 'Duncan,' and make the yacht a pirate in the Pacific."

Here the stranger stopped for a moment. His voice trembled, but he continued,—

"The expedition set out and proceeded across Australia. It was inevitably unfortunate, since Ayrton, or Ben Joyce, as he may be called, guided it, sometimes preceded, sometimes followed by his band of convicts, who had been told what they had to do.

"Meanwhile, the 'Duncan' had been sent to Melbourne for repairs. It was necessary, then, to get Lord Glenarvan to order her to leave Melbourne and go to the east coast of Australia, where it would be easy to seize her. After having led the expedition near enough to the coast, in the midst of vast forests with no resources, Ayrton obtained a letter, which he was charged to carry to the mate of the 'Duncan'--a letter which ordered the yacht to repair immediately to the east coast, to Twofold Bay, that is to say a few days' journey from the place where the expedition had stopped. It was there that Ayrton had agreed to meet his accomplices, and two days after gaining possession of the letter, he arrived at Melbourne.

"So far the villain had succeeded in his wicked design. He would be able to take the 'Duncan' into Twofold Bay, where it would be easy for the convicts to seize her, and her crew massacred, Ben Joyce would become master of the seas. But it pleased God to prevent the accomplishment of these terrible projects.

"Ayrton, arrived at Melbourne, delivered the letter to the mate, Tom Austin, who read it and immediately set sail, but judge of Ayrton's rage and disappointment, when the next day he found that the mate was taking the vessel, not to the east coast of Australia, to Twofold Bay, but to the east coast of New Zealand. He wished to stop him, but Austin showed him the letter!... And indeed, by a providential error of the French geographer, who had written the letter, the east coast of New Zealand was mentioned as the place of destination.

"All Ayrton's plans were frustrated! He became outrageous. They put him in irons. He was then taken to the coast of New Zealand, not knowing what would become of his accomplices, or what would become of Lord Glenarvan.

"The 'Duncan' cruised about on this coast until the 3rd of March. On that day Ayrton heard the report of guns. The guns on the 'Duncan' were being fired, and soon Lord Glenarvan and his companions came on board.

"This is what had happened.

"After a thousand hardships, a thousand dangers, Lord Glenarvan had accomplished his journey, and arrived on the east coast of Australia, at Twofold Bay. 'Not "Duncan!" He telegraphed to Melbourne. They answered, "Duncan" sailed on the 18th instant. Destination unknown.'

"Lord Glenarvan could only arrive at one conclusion; that his honest yacht had fallen into the hands of Ben Joyce, and had become a pirate vessel!

"However, Lord Glenarvan would not give up. He was a bold and generous man. He embarked in a merchant vessel, sailed to the west coast of New Zealand, traversed it along the thirty-seventh parallel, without finding any trace of Captain Grant; but on the other side, to his great surprise, and by the will of Heaven, he found the 'Duncan,' under command of the mate, who had been waiting for him for five weeks!

"This was on the 3rd of March, 1855. Lord Glenarvan was now on board the 'Duncan,' but Ayrton was there also. He appeared before the nobleman, who wished to extract from him all that the villain knew about Captain Grant. Ayrton refused to speak. Lord Glenarvan then told him, that at the first port they put into, he would be delivered up to the English authorities. Ayrton remained mute.

"The 'Duncan' continued her voyage along the thirty-seventh parallel. In the meanwhile, Lady Glenarvan undertook to vanquish the resistance of the ruffian.

"At last, her influence prevailed, and Ayrton, in exchange for what he could tell, proposed that Lord Glenarvan should leave him on some island in the Pacific, instead of giving him up to the English authorities. Lord Glenarvan, resolving to do anything to obtain information about Captain Grant, consented.

"Ayrton then related all his life, and it was certain that he knew nothing from the day on which Captain Grant had landed him on the Australian coast.

"Nevertheless, Lord Glenarvan kept the promise which he had given. The 'Duncan' continued her voyage and arrived at Tabor Island. It was there that Ayrton was to be landed, and it was there also that, by a veritable miracle, they found Captain Grant and two men, exactly on the thirty-seventh parallel.

"The convict, then, went to take their place on this desert islet, and at the moment he left the yacht these words were pronounced by Lord Glenarvan:--

"Here, Ayrton, you will be far from any land, and without any possible communication with your fellow-creatures. You can not escape from this islet on which the 'Duncan' leaves you. You will be alone, under the eye of a God who reads the depths of the heart, but you will be neither lost nor forgotten, as was Captain Grant. Unworthy as
you are to be remembered by men, men will remember you. I know where you are Ayrton, and I know where to find you. I will never forget it!

"And the 'Duncan,' making sail, soon disappeared. This was 18th of March, 1855.

(The events which have just been briefly related are taken from a work which some of our readers have no doubt read, and which is entitled, "Captain Grant's children." They will remark on this occasion, as well as later, some discrepancy in the dates; but later again, they will understand why the real dates were not at first given.)

"Ayrton was alone, but he had no want of either ammunition, weapons, tools, or seeds.

"At his, the convict's disposal, was the house built by honest Captain Grant. He had only to live and expiate in solitude the crimes which he had committed.

"Gentlemen, he repented, he was ashamed of his crimes and was very miserable! He said to himself, that if men came some day to take him from that islet, he must be worthy to return among them! How he suffered, that wretched man! How he labored to recover himself by work! How he prayed to be reformed by prayer! For two years, three years, this went on, but Ayrton, humbled by solitude, always looking for some ship to appear on the horizon, asking himself if the time of expiation would soon be complete, suffered as none other suffered! Oh! how dreadful was this solitude, to a heart tormented by remorse!

"But doubtless Heaven had not sufficiently punished this unhappy man, for he felt that he was gradually becoming a savage! He felt that brutishness was gradually gaining on him!

"He could not say if it was after two or three years of solitude, but at last he became the miserable creature you found!

"I have no need to tell you, gentlemen, that Ayrton, Ben Joyce, and I, are the same."

Cyrus Harding and his companions rose at the end of this account. It is impossible to say how much they were moved! What misery, grief, and despair lay revealed before them!

"Ayrton," said Harding, rising, "you have been a great criminal, but Heaven must certainly think that you have expiated your crimes! That has been proved by your having been brought again among your fellow-creatures. Ayrton, you are forgiven! And now you will be our companion?"

Ayrton drew back.

"Here is my hand!" said the engineer.

Ayrton grasped the hand which Harding extended to him, and great tears fell from his eyes.

"Will you live with us?" asked Cyrus Harding.

"Captain Harding, leave me some time longer," replied Ayrton, "leave me alone in the hut in the corral!"

"As you like, Ayrton," answered Cyrus Harding. Ayrton was going to withdraw, when the engineer addressed one more question to him:--

"One word more, my friend. Since it was your intention to live alone, why did you throw into the sea the document which put us on your track?"

"A document?" repeated Ayrton, who did not appear to know what he meant.

"Yes, the document which we found enclosed in a bottle, giving us the exact position of Tabor Island!"

Ayrton passed his hand over his brow, then after having thought, "I never threw any document into the sea!" he answered.

"Never?" exclaimed Pencroft.

"Never!"

And Ayrton, bowing, reached the door and departed.

Chapter 18

"Poor man!" said Herbert, who had rushed to the door, but returned, having seen Ayrton slide down the rope on the lift and disappear in the darkness.

"He will come back," said Cyrus Harding.

"Come, now, captain," exclaimed Pencroft, "what does that mean? What! wasn't it Ayrton who threw that bottle into the sea? Who was it then?"

Certainly, if ever a question was necessary to be made, it was that one!

"It was he," answered Neb, "only the unhappy man was half-mad."

"Yes!" said Herbert, "and he was no longer conscious of what he was doing."

"It can only be explained in that way, my friends," replied Harding quickly, "and I understand now how Ayrton was able to point out exactly the situation of Tabor Island, since the events which had preceded his being left on the island had made it known to him."

"However," observed Pencroft, "if he was not yet a brute when he wrote that document, and if he threw it into
the sea seven or eight years ago, how is it that the paper has not been injured by damp?"

"That proves," answered Cyrus Harding, "that Ayrton was deprived of intelligence at a more recent time than he thinks."

"Of course it must be so," replied Pencroft, "without that the fact would be unaccountable."

"Unaccountable indeed," answered the engineer, who did not appear desirous to prolong the conversation.

"But has Ayrton told the truth?" asked the sailor.

"Yes," replied the reporter. "The story which he has told is true in every point. I remember quite well the account in the newspapers of the yacht expedition undertaken by Lord Glenarvan, and its result."

"Ayrton has told the truth," added Harding. "Do not doubt it, Pencroft, for it was painful to him. People tell the truth when they accuse themselves like that!"

The next day—the 21st of December—the colonists descended to the beach, and having climbed the plateau they found nothing of Ayrton. He had reached his house in the corral during the night and the settlers judged it best not to agitate him by their presence. Time would doubtless perform what sympathy had been unable to accomplish.

Herbert, Pencroft, and Neb resumed their ordinary occupations. On this day the same work brought Harding and the reporter to the workshop at the Chimneys.

"Do you know, my dear Cyrus," said Gideon Spilett, "that the explanation you gave yesterday on the subject of the bottle has not satisfied me at all! How can it be supposed that the unfortunate man was able to write that document and throw the bottle into the sea without having the slightest recollection of it?"

"Nor was it he who threw it in, my dear Spilett."

"You think then—"

"I think nothing, I know nothing!" interrupted Cyrus Harding. "I am content to rank this incident among those which I have not been able to explain to this day!"

"Indeed, Cyrus," said Spilett, "these things are incredible! Your rescue, the case stranded on the sand, Top's adventure, and lastly this bottle... Shall we never have the answer to these enigmas?"

"Yes!" replied the engineer quickly, "yes, even if I have to penetrate into the bowels of this island!"

"Chance will perhaps give us the key to this mystery!"

"Chance! Spilett! I do not believe in chance, any more than I believe in mysteries in this world. There is a reason for everything unaccountable which has happened here, and that reason I shall discover. But in the meantime we must work and observe."

The month of January arrived. The year 1867 commenced. The summer occupations were assiduously continued. During the days which followed, Herbert and Spilett having gone in the direction of the corral, ascertained that Ayrton had taken possession of the habitation which had been prepared for him. He busied himself with the numerous flock confided to his care, and spared his companions the trouble of coming every two or three days to visit the corral. Nevertheless, in order not to leave Ayrton in solitude for too long a time, the settlers often paid him a visit.

It was not unimportant either, in consequence of some suspicions entertained by the engineer and Gideon Spilett, that this part of the island should be subject to a surveillance of some sort, and that Ayrton, if any incident occurred unexpectedly, should not neglect to inform the inhabitants of Granite House of it.

Nevertheless it might happen that something would occur which it would be necessary to bring rapidly to the engineer's knowledge. Independently of facts bearing on the mystery of Lincoln Island, many others might happen, which would call for the prompt interference of the colonists,—such as the sighting of a vessel, a wreck on the western coast, the possible arrival of pirates, etc.

Therefore Cyrus Harding resolved to put the corral in instantaneous communication with Granite House.

It was on the 10th of January that he made known his project to his companions.

"Why! how are you going to manage that, captain?" asked Pencroft. "Do you by chance happen to think of establishing a telegraph?"

"Exactly so," answered the engineer.

"Electric?" cried Herbert.

"Electric," replied Cyrus Harding. "We have all the necessary materials for making a battery, and the most difficult thing will be to stretch the wires, but by means of a drawplate I think we shall manage it."

"Well, after that," returned the sailor, "I shall never despair of seeing ourselves some day rolling along on a railway!"

They then set to work, beginning with the most difficult thing, for, if they failed in that, it would be useless to manufacture the battery and other accessories.

The iron of Lincoln Island, as has been said, was of excellent quality, and consequently very fit for being drawn out. Harding commenced by manufacturing a drawplate, that is to say, a plate of steel, pierced with conical holes of
different sizes, which would successively bring the wire to the wished-for tenacity. This piece of steel, after having been tempered, was fixed in as firm a way as possible in a solid framework planted in the ground, only a few feet from the great fall, the motive power of which the engineer intended to utilize. In fact as the fulling-mill was there, although not then in use, its beam moved with extreme power would serve to stretch out the wire by rolling it round itself. It was a delicate operation, and required much care. The iron, prepared previously in long thin rods, the ends of which were sharpened with the file, having been introduced into the largest hole of the drawplate, was drawn out by the beam which wound it round itself, to a length of twenty-five or thirty feet, then unrolled, and the same operation was performed successively through the holes of a less size. Finally, the engineer obtained wires from forty to fifty feet long, which could be easily fastened together and stretched over the distance of five miles, which separated the corral from the bounds of Granite House.

It did not take more than a few days to perform this work, and indeed as soon as the machine had been commenced, Cyrus Harding left his companions to follow the trade of wiredrawers, and occupied himself with manufacturing his battery.

It was necessary to obtain a battery with a constant current. It is known that the elements of modern batteries are generally composed of retort coal, zinc, and copper. Copper was absolutely wanting to the engineer, who, notwithstanding all his researches, had never been able to find any trace of it in Lincoln Island, and was therefore obliged to do without it. Retort coal, that is to say, the hard graphite which is found in the retorts of gas manufactories, after the coal has been dehydrogenized, could have been obtained, but it would have been necessary to establish a special apparatus, involving great labor. As to zinc, it may be remembered that the case found at Flotsam Point was lined with this metal, which could not be better utilized than for this purpose.

Cyrus Harding, after mature consideration, decided to manufacture a very simple battery, resembling as nearly as possible that invented by Becquerel in 1820, and in which zinc only is employed. The other substances, azotic acid and potash, were all at his disposal.

The way in which the battery was composed was as follows, and the results were to be attained by the reaction of acid and potash on each other. A number of glass bottles were made and filled with azotic acid. The engineer corked them by means of a stopper through which passed a glass tube, bored at its lower extremity, and intended to be plunged into the acid by means of a clay stopper secured by a rag. Into this tube, through its upper extremity, he poured a solution of potash, previously obtained by burning and reducing to ashes various plants, and in this way the acid and potash could act on each other through the clay.

Cyrus Harding then took two slips of zinc, one of which was plunged into azotic acid, the other into a solution of potash. A current was immediately produced, which was transmitted from the slip of zinc in the bottle to that in the tube, and the two slips having been connected by a metallic wire the slip in the tube became the positive pole, and that in the bottle the negative pole of the apparatus. Each bottle, therefore, produced as many currents as united would be sufficient to produce all the phenomena of the electric telegraph. Such was the ingenious and very simple apparatus constructed by Cyrus Harding, an apparatus which would allow them to establish a telegraphic communication between Granite House and the corral.

On the 6th of February was commenced the planting along the road to the corral, of posts furnished with glass insulators, and intended to support the wire. A few days after, the wire was extended, ready to produce the electric current at a rate of twenty thousand miles a second.

Two batteries had been manufactured, one for Granite House, the other for the corral; for if it was necessary the corral should be able to communicate with Granite House it might also be useful that Granite House should be able to communicate with the corral.

As to the receiver and manipulator, they were very simple. At the two stations the wire was wound round a magnet, that is to say, round a piece of soft iron surrounded with a wire. The communication was thus established between the two poles; the current, starting from the positive pole, traversed the wire, passed through the magnet which was temporarily magnetized, and returned through the earth to the negative pole. If the current was interrupted, the magnet immediately became unmagnetized. It was sufficient to place a plate of soft iron before the magnet, which, attracted during the passage of the current, would fall back when the current was interrupted. This movement of the plate thus obtained, Harding could easily fasten to it a needle arranged on a dial, bearing the letters of the alphabet, and in this way communicate from one station to the other.

All was completely arranged by the 12th of February. On this day, Harding, having sent the current through the wire, asked if all was going on well at the corral, and received in a few moments a satisfactory reply from Ayrton. Pencroft was wild with joy, and every morning and evening he sent a telegram to the corral, which always received an answer.

This mode of communication presented two very real advantages: firstly, because it enabled them to ascertain that Ayrton was at the corral; and secondly, that he was thus not left completely isolated. Besides, Cyrus Harding
never allowed a week to pass without going to see him, and Ayrton came from time to time to Granite House, where he always found a cordial welcome.

The fine season passed away in the midst of the usual work. The resources of the colony, particularly in vegetables and corn, increased from day to day, and the plants brought from Tabor Island had succeeded perfectly.

The plateau of Prospect Heights presented an encouraging aspect. The fourth harvest had been admirable and it may be supposed that no one thought of counting whether the four hundred thousand millions of grains duly appeared in the crop. However, Pencroft had thought of doing so, but Cyrus Harding having told him that even if he managed to count three hundred grains a minute, or nine thousand an hour, it would take him nearly five thousand five-hundred years to finish his task, the honest sailor considered it best to give up the idea.

The weather was splendid, the temperature very warm in the day time, but in the evening the sea-breezes tempered the heat of the atmosphere and procured cool nights for the inhabitants of Granite House. There were, however, a few storms, which, although they were not of long duration, swept over Lincoln Island with extraordinary fury. The lightning blazed and the thunder continued to roll for some hours.

At this period the little colony was extremely prosperous.

The tenants of the poultry-yard swarmed, and they lived on the surplus, but it became necessary to reduce the population to a more moderate number. The pigs had already produced young, and it may be understood that their care for these animals absorbed a great part of Neb and Pencroft's time. The onagers, who had two pretty colts, were most often mounted by Gideon Spilett and Herbert, who had become an excellent rider under the reporter's instruction, and they also harnessed them to the cart either for carrying wood and coal to Granite House, or different mineral productions required by the engineer.

Several expeditions were made about this time into the depths of the Far West Forests. The explorers could venture there without having anything to fear from the heat, for the sun's rays scarcely penetrated through the thick foliage spreading above their heads. They thus visited all the left bank of the Mercy, along which ran the road from the corral to the mouth of Falls River.

But in these excursions the settlers took care to be well armed, for they met with savage wild boars, with which they often had a tussle. They also, during this season, made fierce war against the jaguars. Gideon Spilett had vowed a special hatred against them, and his pupil Herbert seconded him well. Armed as they were, they no longer feared to meet one of those beasts. Herbert's courage was superb, and the reporter's sang-froid astonishing. Already twenty magnificent skins ornamented the dining-room of Granite House, and if this continued, the jaguar race would soon be extinct in the island, the object aimed at by the hunters.

The engineer sometimes took part in the expeditions made to the unknown parts of the island, which he surveyed with great attention. It was for other traces than those of animals that he searched the thickets of the vast forest, but nothing suspicious ever appeared. Neither Top nor Jup, who accompanied him, ever betrayed by their behavior that there was anything strange there, and yet more than once again the dog barked at the mouth of the well, which the engineer had before explored without result.

At this time Gideon Spilett, aided by Herbert, took several views of the most picturesque parts of the island, by means of the photographic apparatus found in the cases, and of which they had not as yet made any use.

This apparatus, provided with a powerful object-glass, was very complete. Substances necessary for the photographic reproduction, collodion for preparing the glass plate, nitrate of silver to render it sensitive, hyposulfate of soda to fix the prints obtained, chloride of ammonium in which to soak the paper destined to give the positive proof, acetate of soda and chloride of gold in which to immerse the paper, nothing was wanting. Even the papers were there, all prepared, and before laying in the printing-frame upon the negatives, it was sufficient to soak them for a few minutes in the solution of nitrate of silver.

The reporter and his assistant became in a short time very skilful operators, and they obtained fine views of the country, such as the island, taken from Prospect Heights with Mount Franklin in the distance, the mouth of the Mercy, so picturesquely framed in high rocks, the glade and the corral, with the spurs of the mountain in the background, the curious development of Claw Cape, Flotsam Point, etc.

Nor did the photographers forget to take the portraits of all the inhabitants of the island, leaving out no one.

"It multiplies us," said Pencroft.

And the sailor was enchanted to see his own countenance, faithfully reproduced, ornamenting the walls of Granite House, and he stopped as willingly before this exhibition as he would have done before the richest shop-windows in Broadway.

But it must be acknowledged that the most successful portrait was incontestably that of Master Jup. Master Jup had sat with a gravity not to be described, and his portrait was lifelike!

"He looks as if he was just going to grin!" exclaimed Pencroft.

And if Master Jup had not been satisfied, he would have been very difficult to please; but he was quite contented
and contemplated his own countenance with a sentimental air which expressed some small amount of conceit.

The summer heat ended with the month of March. The weather was sometimes rainy, but still warm. The month of March, which corresponds to the September of northern latitudes, was not so fine as might have been hoped. Perhaps it announced an early and rigorous winter.

It might have been supposed one morning—the 21st—that the first snow had already made its appearance. In fact Herbert looking early from one of the windows of Granite House, exclaimed,—

"Hallo! the islet is covered with snow!"

"Snow at this time?" answered the reporter, joining the boy.

Their companions were soon beside them, but could only ascertain one thing, that not only the islet but all the beach below Granite House was covered with one uniform sheet of white.

"It must be snow!" said Pencroft.

"Or rather it's very like it!" replied Neb.

"But the thermometer marks fifty-eight degrees!" observed Gideon Spilett.

Cyrus Harding gazed at the sheet of white without saying anything, for he really did not know how to explain this phenomenon, at this time of year and in such a temperature.

"By Jove!" exclaimed Pencroft, "all our plants will be frozen!"

And the sailor was about to descend, when he was preceded by the nimble Jup, who slid down to the sand.

But the orang had not touched the ground, when the snowy sheet arose and dispersed in the air in such innumerable flakes that the light of the sun was obscured for some minutes.

"Birds!" cried Herbert.

They were indeed swarms of sea-birds, with dazzling white plumage. They had perched by thousands on the islet and on the shore, and they disappeared in the distance, leaving the colonists amazed as if they had been present at some transformation scene, in which summer succeeded winter at the touch of a fairy's wand. Unfortunately the change had been so sudden, that neither the reporter nor the lad had been able to bring down one of these birds, of which they could not recognize the species.

A few days after came the 26th of March, the day on which, two years before, the castaways from the air had been thrown upon Lincoln Island.

Chapter 19

Two years already! and for two years the colonists had had no communication with their fellow-creatures! They were without news from the civilized world, lost on this island, as completely as if they had been on the most minute star of the celestial hemisphere!

What was now happening in their country? The picture of their native land was always before their eyes, the land torn by civil war at the time they left it, and which the Southern rebellion was perhaps still staining with blood! It was a great sorrow to them, and they often talked together of these things, without ever doubting however that the cause of the North must triumph, for the honor of the American Confederation.

During these two years not a vessel had passed in sight of the island; or, at least, not a sail had been seen. It was evident that Lincoln Island was out of the usual track, and also that it was unknown,—as was besides proved by the maps,—for though there was no port, vessels might have visited it for the purpose of renewing their store of water. But the surrounding ocean was deserted as far as the eye could reach, and the colonists must rely on themselves for regaining their native land.

However, one chance of rescue existed, and this chance was discussed one day on the first week of April, when the colonists were gathered together in the dining-room of Granite House.

They had been talking of America, of their native country, which they had so little hope of ever seeing again.

"Decidedly we have only one way," said Spilett, "one single way for leaving Lincoln Island, and that is, to build a vessel large enough to sail several hundred miles. It appears to me, that when one has built a boat it is just as easy to build a ship!"

"And in which we might go to the Pomoutous," added Herbert, "just as easily as we went to Tabor Island."

"I do not say no," replied Pencroft, who had always the casting vote in maritime questions; "I do not say no, although it is not exactly the same thing to make a long as a short voyage! If our little craft had been caught in any heavy gale of wind during the voyage to Tabor Island, we should have known that land was at no great distance either way; but twelve hundred miles is a pretty long way, and the nearest land is at least that distance!"

"Would you not, in that case, Pencroft, attempt the adventure?" asked the reporter.

"I will attempt anything that is desired, Mr. Spilett," answered the sailor, "and you know well that I am not a man to flinch!"
"Remember, besides, that we number another sailor amongst us now," remarked Neb.

"Who is that?" asked Pencroft.

"Ayrton."

"If he will consent to come," said Pencroft.

"Nonsense!" returned the reporter; "do you think that if Lord Glenarvan's yacht had appeared at Tabor Island, while he was still living there, Ayrton would have refused to depart?"

"You forget, my friends," then said Cyrus Harding, "that Ayrton was not in possession of his reason during the last years of his stay there. But that is not the question. The point is to know if we may count among our chances of being rescued, the return of the Scotch vessel. Now, Lord Glenarvan promised Ayrton that he would return to take him off from Tabor Island when he considered that his crimes were expiated, and I believe that he will return."

"Yes," said the reporter, "and I will add that he will return soon, for it is twelve years since Ayrton was abandoned."

"Well!" answered Pencroft, "I agree with you that the nobleman will return, and soon too. But where will he touch? At Tabor Island, and not at Lincoln Island."

"That is the more certain," replied Herbert, "as Lincoln Island is not even marked on the map."

"Therefore, my friends," said the engineer, "we ought to take the necessary precautions for making our presence and that of Ayrton on Lincoln Island known at Tabor Island."

"Certainly," answered the reporter, "and nothing is easier than to place in the hut, which was Captain Grant's and Ayrton's dwelling, a notice which Lord Glenarvan and his crew cannot help finding, giving the position of our island."

"It is a pity," remarked the sailor, "that we forgot to take that precaution on our first visit to Tabor Island."

"And why should we have done it?" asked Herbert. "At that time we did not know Ayrton's history; we did not know that any one was likely to come some day to fetch him, and when we did know his history, the season was too advanced to allow us to return then to Tabor Island."

"Yes," replied Harding, "it was too late, and we must put off the voyage until next spring."

"But suppose the Scotch yacht comes before that," said Pencroft.

"That is not probable," replied the engineer, "for Lord Glenarvan would not choose the winter season to venture into these seas. Either he has already returned to Tabor Island, since Ayrton has been with us, that is to say, during the last five months and has left again; or he will not come till later, and it will be time enough in the first fine October days to go to Tabor Island, and leave a notice there."

"We must allow," said Neb, "that it will be very unfortunate if the 'Duncan' has returned to these parts only a few months ago!"

"I hope that it is not so," replied Cyrus Harding, "and that Heaven has not deprived us of the best chance which remains to us."

"I think," observed the reporter, "that at any rate we shall know what we have to depend on when we have been to Tabor Island, for if the yacht has returned there, they will necessarily have left some traces of their visit."

"That is evident," answered the engineer. "So then, my friends, since we have this chance of returning to our country, we must wait patiently, and if it is taken from us we shall see what will be best to do."

"At any rate," remarked Pencroft, "it is well understood that if we do leave Lincoln Island, it will not be because we were uncomfortable there!"

"No, Pencroft," replied the engineer, "it will be because we are far from all that a man holds dearest in the world, his family, his friends, his native land!"

Matters being thus decided, the building of a vessel large enough to sail either to the Archipelagoes in the north, or to New Zealand in the west, was no longer talked of, and they busied themselves in their accustomed occupations, with a view to wintering a third time in Granite House.

However, it was agreed that before the stormy weather came on, their little vessel should be employed in making a voyage round the island. A complete survey of the coast had not yet been made, and the colonists had but an imperfect idea of the shore to the west and north, from the mouth of Falls River to the Mandible Capes, as well as of the narrow bay between them, which opened like a shark's jaws.

The plan of this excursion was proposed by Pencroft, and Cyrus Harding fully acquiesced in it, for he himself wished to see this part of his domain.

The weather was variable, but the barometer did not fluctuate by sudden movements, and they could therefore count on tolerable weather. However, during the first week of April, after a sudden barometrical fall, a renewed rise was marked by a heavy gale of wind, lasting five or six days; then the needle of the instrument remained stationary at a height of twenty-nine inches and nine-tenths, and the weather appeared propitious for an excursion.

The departure was fixed for the 16th of April, and the "Bonadventure," anchored in Port Balloon, was
provisioned for a voyage which might be of some duration.

Cyrus Harding informed Ayrton of the projected expedition, and proposed that he should take part in it, but Ayrton preferring to remain on shore, it was decided that he should come to Granite House during the absence of his companions. Master Jup was ordered to keep him company, and made no remonstrance.

On the morning of the 16th of April all the colonists, including Top, embarked. A fine breeze blew from the south-west, and the "Bonadventure" tacked on leaving Port Balloon so as to reach Reptile End. Of the ninety miles which the perimeter of the island measured, twenty included the south coast between the port and the promontory. The wind being right ahead it was necessary to hug the shore.

It took the whole day to reach the promontory, for the vessel on leaving port had only two hours of ebb tide and had therefore to make way for six hours against the flood. It was nightfall before the promontory was doubled.

The sailor then proposed to the engineer that they should continue sailing slowly with two reefs in the sail. But Harding preferred to anchor a few cable-lengths from the shore, so as to survey that part of the coast during the day. It was agreed also that as they were anxious for a minute exploration of the coast they should not sail during the night, but would always, when the weather permitted it, be at anchor near the shore.

The night was passed under the promontory, and the wind having fallen, nothing disturbed the silence. The passengers, with the exception of the sailor, scarcely slept as well on board the "Bonadventure" as they would have done in their rooms at Granite House, but they did sleep however. Pencroft set sail at break of day, and by going on the larboard tack they could keep close to the shore.

The colonists knew this beautiful wooded coast, since they had already explored it on foot, and yet it again excited their admiration. They coasted along as close in as possible, so as to notice everything, avoiding always the trunks of trees which floated here and there. Several times also they anchored, and Gideon Spilett took photographs of the superb scenery.

About noon the "Bonadventure" arrived at the mouth of Falls River. Beyond, on the left bank, a few scattered trees appeared, and three miles further even these dwindled into solitary groups among the western spurs of the mountain, whose arid ridge sloped down to the shore.

What a contrast between the northern and southern part of the coast! In proportion as one was woody and fertile so was the other rugged and barren! It might have been designated as one of those iron coasts, as they are called in some countries, and its wild confusion appeared to indicate that a sudden crystallization had been produced in the yet liquid basalt of some distant geological sea. These stupendous masses would have terrified the settlers if they had been cast at first on this part of the island! They had not been able to perceive the sinister aspect of this shore from the summit of Mount Franklin, for they overlooked it from too great a height, but viewed from the sea it presented a wild appearance which could not perhaps be equaled in any corner of the globe.

The "Bonadventure" sailed along this coast for the distance of half a mile. It was easy to see that it was composed of blocks of all sizes, from twenty to three hundred feet in height, and of all shapes, round like towers, prismatic like steeples, pyramidal like obelisks, conical like factory chimneys. An iceberg of the Polar seas could not have been more capricious in its terrible sublimity! Here, bridges were thrown from one rock to another; there, arches like those of a wave, into the depths of which the eye could not penetrate; in one place, large vaulted excavations presented a monumental aspect; in another, a crowd of columns, spires, and arches, such as no Gothic cathedral ever possessed. Every caprice of nature, still more varied than those of the imagination, appeared on this grand coast, which extended over a length of eight or nine miles.

Cyrus Harding and his companions gazed, with a feeling of surprise bordering on stupefaction. But, although they remained silent, Top, not being troubled with feelings of this sort, uttered barks which were repeated by the thousand echoes of the basaltic cliff. The engineer even observed that these barks had something strange in them, like those which the dog had uttered at the mouth of the well in Granite House.

"Let us go close in," said he.

And the "Bonadventure" sailed as near as possible to the rocky shore. Perhaps some cave, which it would be advisable to explore, existed there? But Harding saw nothing, not a cavern, not a cleft which could serve as a retreat to any being whatever, for the foot of the cliff was washed by the surf. Soon Top's barks ceased, and the vessel continued her course at a few cables-length from the coast.

In the northwest part of the island the shore became again flat and sandy. A few trees here and there rose above a low, marshy ground, which the colonists had already surveyed, and in violent contrast to the other desert shore, life was again manifested by the presence of myriads of water-fowl. That evening the "Bonadventure" anchored in a small bay to the north of the island, near the land, such was the depth of water there. The night passed quietly, for the breeze died away with the last light of day, and only rose again with the first streaks of dawn.

As it was easy to land, the usual hunters of the colony, that is to say, Herbert and Gideon Spilett, went for a ramble of two hours or so, and returned with several strings of wild duck and snipe. Top had done wonders, and not
a bird had been lost, thanks to his zeal and cleverness.

At eight o'clock in the morning the "Bonadventure" set sail, and ran rapidly towards North Mandible Cape, for the wind was right astern and freshening rapidly.

"However," observed Pencroft, "I should not be surprised if a gale came up from the west. Yesterday the sun set in a very red-looking horizon, and now, this morning, those mares-tails don't forbode anything good."

These mares-tails are cirrus clouds, scattered in the zenith, their height from the sea being less than five thousand feet. They look like light pieces of cotton wool, and their presence usually announces some sudden change in the weather.

"Well," said Harding, "let us carry as much sail as possible, and run for shelter into Shark Gulf. I think that the 'Bonadventure' will be safe there."

"Perfectly," replied Pencroft, "and besides, the north coast is merely sand, very uninteresting to look at."

"I shall not be sorry," resumed the engineer, "to pass not only to-night but to-morrow in that bay, which is worth being carefully explored."

"I think that we shall be obliged to do so, whether we like it or not," answered Pencroft, "for the sky looks very threatening towards the west. Dirty weather is coming on!"

"At any rate we have a favorable wind for reaching Cape Mandible," observed the reporter.

"A very fine wind," replied the sailor; "but we must tack to enter the gulf, and I should like to see my way clear in these unknown quarters."

"Quarters which appear to be filled with rocks," added Herbert, "if we judge by what we saw on the south coast of Shark Gulf."

"Pencroft," said Cyrus Harding, "do as you think best, we will leave it to you."

"Don't make your mind uneasy, captain," replied the sailor, "I shall not expose myself needlessly! I would rather a knife were run into my ribs than a sharp rock into those of my 'Bonadventure'!"

That which Pencroft called ribs was the pan of his vessel under water, and he valued it more than his own skin.

"What o'clock is it?" asked Pencroft.

"Ten o'clock," replied Gideon Spilett.

"And what distance is it to the Cape, captain?"

"About fifteen miles," replied the engineer.

"That's a matter of two hours and a half," said the sailor, "and we shall be off the Cape between twelve and one o'clock. Unluckily, the tide will be turning at that moment, and will be ebbing out of the gulf. I am afraid that it will be very difficult to get in, having both wind and tide against us."

"And the more so that it is a full moon to-day," remarked Herbert, "and these April tides are very strong."

"Well, Pencroft," asked Harding, "can you not anchor off the Cape?"

"Anchor near land, with bad weather coming on!" exclaimed the sailor. "What are you thinking of, captain? We should run aground, of a certainty!"

"What will you do then?"

"I shall try to keep in the offing until the flood, that is to say, till about seven in the evening, and if there is still light enough I will try to enter the gulf; if not, we must stand off and on during the night, and we will enter tomorrow at sunrise."

"As I told you, Pencroft, we will leave it to you," answered Harding.

"Ah!" said Pencroft, "if there was only a lighthouse on the coast, it would be much more convenient for sailors."

"Yes," replied Herbert, "and this time we shall have no obliging engineer to light a fire to guide us into port!"

"Why, indeed, my dear Cyrus," said Spilett, "we have never thanked you; but frankly, without that fire we should never have been able--"

"A fire?" asked Harding, much astonished at the reporter's words.

"We mean, captain," answered Pencroft, "that on board the 'Bonadventure' we were very anxious during the few hours before our return, and we should have passed to windward of the island, if it had not been for the precaution you took of lighting a fire the night of the 19th of October, on Prospect Heights."

"Yes, yes! That was a lucky idea of mine!" replied the engineer.

"And this time," continued the sailor, "unless the idea occurs to Ayrton, there will be no one to do us that little service!"

"No! No one!" answered Cyrus Harding.

A few minutes after, finding himself alone in the bows of the vessel, with the reporter, the engineer bent down and whispered,--

"If there is one thing certain in this world, Spilett, it is that I never lighted any fire during the night of the 19th of October, neither on Prospect Heights nor on any other part of the island!"
Chapter 20

Things happened as Pencroft had predicted, he being seldom mistaken in his prognostications. The wind rose, and from a fresh breeze it soon increased to a regular gale; that is to say, it acquired a speed of from forty to forty-five miles an hour, before which a ship in the open sea would have run under close-reefed topsails. Now, as it was nearly six o'clock when the "Bonadventure" reached the gulf, and as at that moment the tide turned, it was impossible to enter. They were therefore compelled to stand off, for even if he had wished to do so, Pencroft could not have gained the mouth of the Mercy. Hoisting the jib to the mainmast by way of a storm-sail, he hove to, putting the head of the vessel towards the land.

Fortunately, although the wind was strong the sea, being sheltered by the land, did not run very high. They had then little to fear from the waves, which always endanger small craft. The "Bonadventure" would doubtlessly not have capsized, for she was well ballasted, but enormous masses of water falling on the deck might injure her if her timbers could not sustain them. Pencroft, as a good sailor, was prepared for anything. Certainly, he had great confidence in his vessel, but nevertheless he awaited the return of day with some anxiety.

During the night, Cyrus Harding and Gideon Spilett had no opportunity for talking together, and yet the words pronounced in the reporter's ear by the engineer were well worth being discussed, together with the mysterious influence which appeared to reign over Lincoln Island. Gideon Spilett did not cease from pondering over this new and inexplicable incident, the appearance of a fire on the coast of the island. The fire had actually been seen! His companions, Herbert and Pencroft, had seen it with him! The fire had served to signalize the position of the island during that dark night, and they had not doubted that it was lighted by the engineer's hand; and here was Cyrus Harding expressly declaring that he had never done anything of the sort! Spilett resolved to recur to this incident as soon as the "Bonadventure" returned, and to urge Cyrus Harding to acquaint their companions with these strange facts. Perhaps it would be decided to make in common a complete investigation of every part of Lincoln Island.

However that might be, on this evening no fire was lighted on these yet unknown shores, which formed the entrance to the gulf, and the little vessel stood off during the night.

When the first streaks of dawn appeared in the western horizon, the wind, which had slightly fallen, shifted two points, and enabled Pencroft to enter the narrow gulf with greater ease. Towards seven o'clock in the morning, the "Bonadventure," weathering the North Mandible Cape, entered the strait and glided on to the waters, so strangely enclosed in the frame of lava.

"Well," said Pencroft, "this bay would make admirable roads, in which a whole fleet could lie at their ease!"

"What is especially curious," observed Harding, "is that the gulf has been formed by two rivers of lava, thrown out by the volcano, and accumulated by successive eruptions. The result is that the gulf is completely sheltered on all sides, and I believe that even in the stormiest weather, the sea here must be as calm as a lake."

"No doubt," returned the sailor, "since the wind has only that narrow entrance between the two capes to get in by, and, besides, the north cape protects that of the south in a way which would make the entrance of gusts very difficult. I declare our 'Bonadventure' could stay here from one end of the year to the other, without even dragging at her anchor!"

"It is rather large for her!" observed the reporter.

"Well! Mr. Spilett," replied the sailor, "I agree that it is too large for the 'Bonadventure'; but if the fleets of the Union were in want of a harbor in the Pacific, I don't think they would ever find a better place than this!"

"We are in the shark's mouth," remarked Nab, alluding to the form of the gulf.

"Right into its mouth, my honest Nab!" replied Herbert, "but you are not afraid that it will shut upon us, are you?"

"No, Mr. Herbert," answered Neb, "and yet this gulf here doesn't please me much! It has a wicked look!"

"Hallo!" cried Pencroft, "here is Neb turning up his nose at my gulf, just as I was thinking of presenting it to America!"

"But, at any rate, is the water deep enough?" asked the engineer, "for a depth sufficient for the keel of the 'Bonadventure' would not be enough for those of our iron-clads."

"That is easily found out," replied Pencroft.

And the sailor sounded with a long cord, which served him as a lead-line, and to which was fastened a lump of iron. This cord measured nearly fifty fathoms, and its entire length was unrolled without finding any bottom.

"There," exclaimed Pencroft, "our iron-clads can come here after all! They would not run aground!"

"Indeed," said Gideon Spilett, "this gulf is a regular abyss, but, taking into consideration the volcanic origin of the island, it is not astonishing that the sea should offer similar depressions."

"One would say too," observed Herbert, "that these cliffs were perfectly perpendicular; and I believe that at their
foot, even with a line five or six times longer, Pencroft would not find bottom."

"That is all very well," then said the reporter, "but I must point out to Pencroft that his harbor is wanting in one very important respect!"

"And what is that, Mr. Spilett?"

"An opening, a cutting of some sort, to give access to the interior of the island. I do not see a spot on which we could land." And, in fact, the steep lava cliffs did not afford a single place suitable for landing. They formed an insuperable barrier, recalling, but with more wildness, the fiords of Norway. The "Bonadventure," coasting as close as possible along the cliffs, did not discover even a projection which would allow the passengers to leave the deck.

Pencroft consoled himself by saying that with the help of a mine they could soon open out the cliff when that was necessary, and then, as there was evidently nothing to be done in the gulf, he steered his vessel towards the strait and passed out at about two o'clock in the afternoon.

"Ah!" said Nab, uttering a sigh of satisfaction.

One might really say that the honest Negro did not feel at his ease in those enormous jaws.

The distance from Mandible Cape to the mouth of the Mercy was not more than eight miles. The head of the "Bonadventure" was put towards Granite House, and a fair wind filling her sails, she ran rapidly along the coast.

To the enormous lava rocks succeeded soon those capricious sand dunes, among which the engineer had been so singularly recovered, and which seabirds frequented in thousands.

About four o'clock, Pencroft leaving the point of the islet on his left, entered the channel which separated it from the coast, and at five o'clock the anchor of the "Bonadventure" was buried in the sand at the mouth of the Mercy.

The colonists had been absent three days from their dwelling. Ayrton was waiting for them on the beach, and Jup came joyously to meet them, giving vent to deep grunts of satisfaction.

A complete exploration of the coast of the island had now been made, and no suspicious appearances had been observed. If any mysterious being resided on it, it could only be under cover of the impenetrable forest of the Serpentine Peninsula, to which the colonists had not yet directed their investigations.

Gideon Spilett discussed these things with the engineer, and it was agreed that they should direct the attention of their companions to the strange character of certain incidents which had occurred on the island, and of which the last was the most unaccountable.

However, Harding, returning to the fact of a fire having been kindled on the shore by an unknown hand, could not refrain from repeating for the twentieth time to the reporter,--

"But are you quite sure of having seen it? Was it not a partial eruption of the volcano, or perhaps some meteor?"

"No, Cyrus," answered the reporter, "it was certainly a fire lighted by the hand of man. Besides; question Pencroft and Herbert. They saw it as I saw it myself, and they will confirm my words."

In consequence, therefore, a few days after, on the 25th of April, in the evening, when the settlers were all collected on Prospect Heights, Cyrus Harding began by saying,--

"My friends, I think it my duty to call your attention to certain incidents which have occurred in the island, on the subject of which I shall be happy to have your advice. These incidents are, so to speak, supernatural--"

"Supernatural!" exclaimed the sailor, emitting a volume of smoke from his mouth. "Can it be possible that our island is supernatural?"

"No, Pencroft, but mysterious, most certainly," replied the engineer; "unless you can explain that which Spilett and I have until now failed to understand."

"Speak away, captain," answered the sailor.

"Well, have you understood," then said the engineer, "how was it that after falling into the sea, I was found a quarter of a mile into the interior of the island, and that, without my having any consciousness of my removal there?"

"Unless, being unconscious--" said Pencroft.

"That is not admissible," replied the engineer. "But to continue. Have you understood how Top was able to discover your retreat five miles from the cave in which I was lying?"

"The dog's instinct--" observed Herbert.

"Singular instinct!" returned the reporter, "since notwithstanding the storm of rain and wind which was raging during that night, Top arrived at the Chimneys, dry and without a speck of mud!"

"Let us continue," resumed the engineer. "Have you understood how our dog was so strangely thrown up out of the water of the lake, after his struggle with the dugong?"

"No! I confess, not at all," replied Pencroft, "and the wound which the dugong had in its side, a wound which seemed to have been made with a sharp instrument; that can't be understood, either."

"Let us continue again," said Harding. "Have you understood, my friends, how that bullet got into the body of the young peccary; how that case happened to be so fortunately stranded, without there being any trace of a wreck;
how that bottle containing the document presented itself so opportunely, during our first sea-excursion; how our canoe, having broken its moorings, floated down the current of the Mercy and rejoined us at the very moment we needed it; how after the ape invasion the ladder was so obligingly thrown down from Granite House; and lastly, how the document, which Ayrton asserts was never written by him, fell into our hands?"

As Cyrus Harding thus enumerated, without forgetting one, the singular incidents which had occurred in the island, Herbert, Neb, and Pencroft stared at each other, not knowing what to reply, for this succession of incidents, grouped thus for the first time, could not but excite their surprise to the highest degree.

"'Pon my word," said Pencroft at last, "you are right, captain, and it is difficult to explain all these things!"

"Well, my friends," resumed the engineer, "a last fact has just been added to these, and it is no less incomprehensible than the others!"

"What is it, captain?" asked Herbert quickly.

"When you were returning from Tabor Island, Pencroft," continued the engineer, "you said that a fire appeared on Lincoln Island?"

"Certainly," answered the sailor.

"And you are quite certain of having seen this fire?"

"As sure as I see you now."

"You also, Herbert?"

"Why, captain," cried Herbert, "that fire was blazing like a star of the first magnitude!"

"But was it not a star?" urged the engineer.

"No," replied Pencroft, "for the sky was covered with thick clouds, and at any rate a star would not have been so low on the horizon. But Mr. Spilett saw it as well as we, and he will confirm our words."

"I will add," said the reporter, "that the fire was very bright, and that it shot up like a sheet of lightning."

"Yes, yes! exactly," added Herbert, "and it was certainly placed on the heights of Granite House."

"Well, my friends," replied Cyrus Harding, "during the night of the 19th of October, neither Neb nor I lighted any fire on the coast."

"You did not!" exclaimed Pencroft, in the height of his astonishment, not being able to finish his sentence.

"We did not leave Granite House," answered Cyrus Harding, "and if a fire appeared on the coast, it was lighted by another hand than ours!"

Pencroft, Herbert, and Neb were stupefied. No illusion could be possible, and a fire had actually met their eyes during the night of the 19th of October. Yes! they had to acknowledge it, a mystery existed! An inexplicable influence, evidently favorable to the colonists, but very irritating to their curiosity, was executed always in the nick of time on Lincoln Island. Could there be some being hidden in its profoundest recesses? It was necessary at any cost to ascertain this.

Harding also reminded his companions of the singular behavior of Top and Jup when they prowled round the mouth of the well, which placed Granite House in communication with the sea, and he told them that he had explored the well, without discovering anything suspicious. The final resolve taken, in consequence of this conversation, by all the members of the colony, was that as soon as the fine season returned they would thoroughly search the whole of the island.

But from that day Pencroft appeared to be anxious. He felt as if the island which he had made his own personal property belonged to him entirely no longer, and that he shared it with another master, to whom, willing or not, he felt subject. Neb and he often talked of those unaccountable things, and both, their natures inclining them to the marvelous, were not far from believing that Lincoln Island was under the dominion of some supernatural power.

In the meanwhile, the bad weather came with the month of May, the November of the northern zones. It appeared that the winter would be severe and forward. The preparations for the winter season were therefore commenced without delay.

Nevertheless, the colonists were well prepared to meet the winter, however hard it might be. They had plenty of felt clothing, and the musmons, very numerous by this time, had furnished an abundance of wool necessary for the manufacture of this warm material.

It is unnecessary to say that Ayrton had been provided with this comfortable clothing. Cyrus Harding proposed that he should come to spend the bad season with them in Granite House, where he would be better lodged than at the corral, and Ayrton promised to do so, as soon as the last work at the corral was finished. He did this towards the middle of April. From that time Ayrton shared the common life, and made himself useful on all occasions; but still humble and sad, he never took part in the pleasures of his companions.

For the greater part of this, the third winter which the settlers passed in Lincoln Island, they were confined to Granite House. There were many violent storms and frightful tempests, which appeared to shake the rocks to their very foundations. Immense waves threatened to overwhelm the island, and certainly any vessel anchored near the
shore would have been dashed to pieces. Twice, during one of these hurricanes, the Mercy swelled to such a degree as to give reason to fear that the bridges would be swept away, and it was necessary to strengthen those on the shore, which disappeared under the foaming waters, when the sea beat against the beach.

It may well be supposed that such storms, comparable to water-spouts in which were mingled rain and snow, would cause great havoc on the plateau of Prospect Heights. The mill and the poultry-yard particularly suffered. The colonists were often obliged to make immediate repairs, without which the safety of the birds would have been seriously threatened.

During the worst weather, several jaguars and troops of quadrumanas ventured to the edge of the plateau, and it was always to be feared that the most active and audacious would, urged by hunger, manage to cross the stream, which besides, when frozen, offered them an easy passage. Plantations and domestic animals would then have been infallibly destroyed, without a constant watch, and it was often necessary to make use of the guns to keep those dangerous visitors at a respectful distance. Occupation was not wanting to the colonists, for without reckoning their out-door cares, they had always a thousand plans for the fitting up of Granite House.

They had also some fine sporting excursions, which were made during the frost in the vast Tadorn Marsh. Gideon Spilett and Herbert, aided by Jup and Top, did not miss a shot in the midst of myriads of wild-duck, snipe, teal, and others. The access to these hunting-grounds was easy; besides, whether they reached them by the road to Port Balloon, after having passed the Mercy Bridge, or by turning the rocks from Flotsam Point, the hunters were never distant from Granite House more than two or three miles.

Thus passed the four winter months, which were really rigorous, that is to say, June, July, August, and September. But, in short, Granite House did not suffer much from the inclemency of the weather, and it was the same with the corral, which, less exposed than the plateau, and sheltered partly by Mount Franklin, only received the remains of the hurricanes, already broken by the forests and the high rocks of the shore. The damages there were consequently of small importance, and the activity and skill of Ayrton promptly repaired them, when some time in October he returned to pass a few days in the corral.

During this winter, no fresh inexplicable incident occurred. Nothing strange happened, although Pencroft and Neb were on the watch for the most insignificant facts to which they attached any mysterious cause. Top and Jup themselves no longer growled round the well or gave any signs of uneasiness. It appeared, therefore, as if the series of supernatural incidents was interrupted, although they often talked of them during the evenings in Granite House, and they remained thoroughly resolved that the island should be searched, even in those parts the most difficult to explore. But an event of the highest importance, and of which the consequences might be terrible, momentarily diverted from their projects Cyrus Harding and his companions.

It was the month of October. The fine season was swiftly returning. Nature was reviving; and among the evergreen foliage of the coniferae which formed the border of the wood, already appeared the young leaves of the banksias, deodars, and other trees.

It may be remembered that Gideon Spilett and Herbert had, at different times, taken photographic views of Lincoln Island.

Now, on the 17th of this month of October, towards three o'clock in the afternoon, Herbert, enticed by the charms of the sky, thought of reproducing Union Bay, which was opposite to Prospect Heights, from Cape Mandible to Claw Cape.

The horizon was beautifully clear, and the sea, undulating under a soft breeze, was as calm as the waters of a lake, sparkling here and there under the sun's rays.

The apparatus had been placed at one of the windows of the dining-room at Granite House, and consequently overlooked the shore and the bay. Herbert proceeded as he was accustomed to do, and the negative obtained, he went away to fix it by means of the chemicals deposited in a dark nook of Granite House.

Returning to the bright light, and examining it well, Herbert perceived on his negative an almost imperceptible little spot on the sea horizon. He endeavored to make it disappear by reiterated washing, but could not accomplish it.

"It is a flaw in the glass," he thought.

And then he had the curiosity to examine this flaw with a strong magnifier which he unscrewed from one of the telescopes.

But he had scarcely looked at it, when he uttered a cry, and the glass almost fell from his hands.

Immediately running to the room in which Cyrus Harding then was, he extended the negative and magnifier towards the engineer, pointing out the little spot.

Harding examined it; then seizing his telescope he rushed to the window.

The telescope, after having slowly swept the horizon, at last stopped on the looked-for spot, and Cyrus Harding, lowering it, pronounced one word only,

"A vessel!"
And in fact a vessel was in sight, off Lincoln Island!

THE SECRET OF THE ISLAND

Chapter 1

It was now two years and a half since the castaways from the balloon had been thrown on Lincoln Island, and during that period there had been no communication between them and their fellow-creatures. Once the reporter had attempted to communicate with the inhabited world by confiding to a bird a letter which contained the secret of their situation, but that was a chance on which it was impossible to reckon seriously. Ayrton, alone, under the circumstances which have been related, had come to join the little colony. Now, suddenly, on this day, the 17th of October, other men had unexpectedly appeared in sight of the island, on that deserted sea!

There could be no doubt about it! A vessel was there! But would she pass on, or would she put into port? In a few hours the colonists would definitely know what to expect.

Cyrus Harding and Herbert having immediately called Gideon Spilett, Pencroft, and Neb into the dining-room of Granite House, told them what had happened. Pencroft, seizing the telescope, rapidly swept the horizon, and stopping on the indicated point, that is to say, on that which had made the almost imperceptible spot on the photographic negative,--

"I'm blessed but it is really a vessel!" he exclaimed, in a voice which did not express any great amount of satisfaction.

"Is she coming here?" asked Gideon Spilett.

"Impossible to say anything yet," answered Pencroft, "for her rigging alone is above the horizon, and not a bit of her hull can be seen."

"What is to be done?" asked the lad.

"Wait," replied Harding.

And for a considerable time the settlers remained silent, given up to all the thoughts, and the emotions, all the fears, all the hopes, which were aroused by this incident--the most important which had occurred since their arrival in Lincoln Island. Certainly, the colonists were not in the situation of castaways abandoned on a sterile islet, constantly contending against a cruel nature for their miserable existence, and incessantly tormented by the longing to return to inhabited countries. Pencroft and Neb, especially, who felt themselves at once so happy and so rich, would not have left their island without regret. They were accustomed, besides, to this new life in the midst of the domain which their intelligence had as it were civilized. But at any rate this ship brought news from the world, perhaps even from their native land. It was bringing fellow-creatures to them, and it may be conceived how deeply their hearts were moved at the sight!

From time to time Pencroft took the glass and rested himself at the window. From thence he very attentively examined the vessel, which was at a distance of twenty miles to the east. The colonists had as yet, therefore, no means of signalizing their presence. A flag would not have been perceived; a gun would not have been heard; a fire would not have been visible. However, it was certain that the island, overtopped by Mount Franklin, could not escape the notice of the vessel's lookout. But why was the ship coming there? Was it simple chance which brought it to that part of the Pacific, where the maps mentioned no land except Tabor Island, which itself was out of the route usually followed by vessels from the Polynesian Archipelagoes, from New Zealand, and from the American coast? To this question, which each one asked himself, a reply was suddenly made by Herbert.

"Can it be the 'Duncan'?" he cried.

The "Duncan," as has been said, was Lord Glenarvan's yacht, which had left Ayrton on the islet, and which was to return there someday to fetch him. Now, the islet was not so far distant from Lincoln Island, but that a vessel, standing for the one, could pass in sight of the other. A hundred and fifty miles only separated them in longitude, and seventy in latitude.

"We must tell Ayrton," said Gideon Spilett, "and send for him immediately. He alone can say if it is the 'Duncan.'"

This was the opinion of all, and the reporter, going to the telegraphic apparatus which placed the corral in communication with Granite House, sent this telegram:--"Come with all possible speed."

In a few minutes the bell sounded.

"I am coming," replied Ayrton.
Then the settlers continued to watch the vessel.

"If it is the 'Duncan,'" said Herbert, "Ayrton will recognize her without difficulty, since he sailed on board her for some time."

"And if he recognizes her," added Pencroft, "it will agitate him exceedingly!"

"Yes," answered Cyrus Harding; "but now Ayrton is worthy to return on board the 'Duncan,' and pray Heaven that it is indeed Lord Glenarvan's yacht, for I should be suspicious of any other vessel. These are ill-famed seas, and I have always feared a visit from Malay pirates to our island."

"We could defend it," cried Herbert.

"No doubt, my boy," answered the engineer smiling, "but it would be better not to have to defend it."

"A useless observation," said Spilett. "Lincoln Island is unknown to navigators, since it is not marked even on the most recent maps. Do you think, Cyrus, that that is a sufficient motive for a ship, finding herself unexpectedly in sight of new land, to try and visit rather than avoid it?"

"Certainly," replied Pencroft.

"I think so too," added the engineer. "It may even be said that it is the duty of a captain to come and survey any land or island not yet known, and Lincoln Island is in this position."

"Well," said Pencroft, " suppose this vessel comes and anchors there a few cables-lengths from our island, what shall we do?"

This sudden question remained at first without any reply. But Cyrus Harding, after some moments' thought, replied in the calm tone which was usual to him.--

"What we shall do, my friends? What we ought to do is this:--we will communicate with the ship, we will take our passage on board her, and we will leave our island, after having taken possession of it in the name of the United States. Then we will return with any who may wish to follow us to colonize it definitely, and endow the American Republic with a useful station in this part of the Pacific Ocean!"

"Hurrah!" exclaimed Pencroft, "and that will be no small present which we shall make to our country! The colonization is already almost finished; names are given to every part of the island; there is a natural port, fresh water, roads, a telegraph, a dockyard, and manufactories; and there will be nothing to be done but to inscribe Lincoln Island on the maps!"

"But if anyone seizes it in our absence?" observed Gideon Spilett.

"Hang it!" cried the sailor. "I would rather remain all alone to guard it: and trust to Pencroft, they shouldn't steal it from him, like a watch from the pocket of a swell!"

For an hour it was impossible to say with any certainty whether the vessel was or was not standing towards Lincoln Island. She was nearer, but in what direction was she sailing? This Pencroft could not determine. However, as the wind was blowing from the northeast, in all probability the vessel was sailing on the starboard tack. Besides, the wind was favorable for bringing her towards the island, and, the sea being calm, she would not be afraid to approach although the shallows were not marked on the chart.

Towards four o'clock--an hour after he had been sent for--Ayrton arrived at Granite House. He entered the dining-room saying,--

"At your service, gentlemen."

Cyrus Harding gave him his hand, as was his custom to do, and, leading him to the window,--

"Ayrton," said he, "we have begged you to come here for an important reason. A ship is in sight of the island."

Ayrton at first paled slightly, and for a moment his eyes became dim; then, leaning out the window, he surveyed the horizon, but could see nothing.

"Take this telescope," said Spilett, "and look carefully, Ayrton, for it is possible that this ship may be the 'Duncan' come to these seas for the purpose of taking you home again."

"The 'Duncan!'" murmured Ayrton. "Already?" This last word escaped Ayrton's lips as if involuntarily, and his head drooped upon his hands.

Did not twelve years' solitude on a desert island appear to him a sufficient expiation? Did not the penitent yet feel himself pardoned, either in his own eyes or in the eyes of others?

"No," said he, "no! it cannot be the 'Duncan'!"

"Look, Ayrton," then said the engineer, "for it is necessary that we should know beforehand what to expect."

Ayrton took the glass and pointed it in the direction indicated. During some minutes he examined the horizon without moving, without uttering a word. Then,--

"It is indeed a vessel," said he, "but I do not think she is the 'Duncan."

"Why do you not think so?" asked Gideon Spilett.

"Because the 'Duncan' is a steam-yacht, and I cannot perceive any trace of smoke either above or near that vessel."
"Perhaps she is simply sailing," observed Pencroft. "The wind is favorable for the direction which she appears to be taking, and she may be anxious to economize her coal, being so far from land."

"It is possible that you may be right, Mr. Pencroft," answered Ayrton, "and that the vessel has extinguished her fires. We must wait until she is nearer, and then we shall soon know what to expect."

So saying, Ayrton sat down in a corner of the room and remained silent. The colonists again discussed the strange ship, but Ayrton took no part in the conversation. All were in such a mood that they found it impossible to continue their work. Gideon Spilett and Pencroft were particularly nervous, going, coming, not able to remain still in one place. Herbert felt more curiosity. Neb alone maintained his usual calm manner. Was not his country that where his master was? As to the engineer, he remained plunged in deep thought, and in his heart feared rather than desired the arrival of the ship. In the meanwhile, the vessel was a little nearer the island. With the aid of the glass, it was ascertained that she was a brig, and not one of those Malay proas, which are generally used by the pirates of the Pacific. It was, therefore, reasonable to believe that the engineer's apprehensions would not be justified, and that the presence of this vessel in the vicinity of the island was fraught with no danger.

Pencroft, after a minute examination, was able positively to affirm that the vessel was rigged as a brig, and that she was standing obliquely towards the coast, on the starboard tack, under her topsails and top-gallant-sails. This was confirmed by Ayrton. But by continuing in this direction she must soon disappear behind Claw Cape, as the wind was from the southwest, and to watch her it would be then necessary to ascend the height of Washington Bay, near Port Balloon--a provoking circumstance, for it was already five o'clock in the evening, and the twilight would soon make any observation extremely difficult.

"What shall we do when night comes on?" asked Gideon Spilett. "Shall we light a fire, so as to signal our presence on the coast?"

This was a serious question, and yet, although the engineer still retained some of his presentiments, it was answered in the affirmative. During the night the ship might disappear and leave for ever, and, this ship gone, would another ever return to the waters of Lincoln Island? Who could foresee what the future would then have in store for the colonists?

"Yes," said the reporter, "we ought to make known to that vessel, whoever she may be, that the island is inhabited. To neglect the opportunity which is offered to us might be to create everlasting regrets."

It was therefore decided that Neb and Pencroft should go to Port Balloon, and that there, at nightfall, they should light an immense fire, the blaze of which would necessarily attract the attention of the brig.

But at the moment when Neb and the sailor were preparing to leave Granite House, the vessel suddenly altered her course, and stood directly for Union Bay. The brig was a good sailer, for she approached rapidly. Neb and Pencroft put off their departure, therefore, and the glass was put into Ayrton's hands, that he might ascertain for certain whether the ship was or was not the "Duncan." The Scotch yacht was also rigged as a brig. The question was, whether a chimney could be discerned between the two masts of the vessel, which was now at a distance of only five miles.

The horizon was still very clear. The examination was easy, and Ayrton soon let the glass fall again, saying--

"It is not the 'Duncan'! It could not be!"

Pencroft again brought the brig within the range of the telescope, and could see that she was of between three and four hundred tons burden, wonderfully narrow, well-masted, admirably built, and must be a very rapid sailer. But to what nation did she belong? That was difficult to say.

"And yet," added the sailor, "a flag is floating from her peak, but I cannot distinguish the colors of it."

"In half an hour we shall be certain about that," answered the reporter. "Besides, it is very evident that the intention of the captain of this ship is to land, and, consequently, if not today, to-morrow at the latest, we shall make his acquaintance."

"Never mind!" said Pencroft. "It is best to know whom we have to deal with, and I shall not be sorry to recognize that fellow's colors!"

And, while thus speaking, the sailor never left the glass. The day began to fade, and with the day the breeze fell also. The brig's ensign hung in folds, and it became more and more difficult to observe it.

"It is not the American flag," said Pencroft from time to time, "nor the English, the red of which could be easily seen, nor the French or German colors, nor the white flag of Russia, nor the yellow of Spain. One would say it was all one color. Let's see: in these seas, what do we generally meet with? The Chilean flag?--but that is tri-color. Brazilian?--it is green. Japanese?--it is yellow and black, while this--"

At that moment the breeze blew out the unknown flag. Ayrton seizing the telescope which the sailor had put down, put it to his eye, and in a hoarse voice,--

"The black flag!" he exclaimed.

And indeed the somber bunting was floating from the mast of the brig, and they had now good reason for
considering her to be a suspicious vessel!

Had the engineer, then, been right in his presentiments? Was this a pirate vessel? Did she scour the Pacific, competing with the Malay proas which still infest it? For what had she come to look at the shores of Lincoln Island? Was it to them an unknown island, ready to become a magazine for stolen cargoes? Had she come to find on the coast a sheltered port for the winter months? Was the settlers' honest domain destined to be transformed into an infamous refuge—the headquarters of the piracy of the Pacific?

All these ideas instinctively presented themselves to the colonists' imaginations. There was no doubt, besides, of the signification which must be attached to the color of the hoisted flag. It was that of pirates! It was that which the "Duncan" would have carried, had the convicts succeeded in their criminal design! No time was lost before discussing it.

"My friends," said Cyrus Harding, "perhaps this vessel only wishes to survey the coast of the island. Perhaps her crew will not land. There is a chance of it. However that may be, we ought to do everything we can to hide our presence here. The windmill on Prospect Heights is too easily seen. Let Ayrton and Neb go and take down the sails. We must also conceal the windows of Granite House with thick branches. All the fires must be extinguished, so that nothing may betray the presence of men on the island."

"And our vessel?" said Herbert.

"Oh," answered Pencroft, "she is sheltered in Port Balloon, and I defy any of those rascals there to find her!"

The engineer's orders were immediately executed. Neb and Ayrton ascended the plateau, and took the necessary precautions to conceal any indication of a settlement. While they were thus occupied, their companions went to the border of Jacamar Wood, and brought back a large quantity of branches and creepers, which would at some distance appear as natural foliage, and thus disguise the windows in the granite cliff. At the same time, the ammunition and guns were placed ready so as to be at hand in case of an unexpected attack.

When all these precautions had been taken,—

"My friends," said Harding, and his voice betrayed some emotion, "if the wretches endeavor to seize Lincoln Island, we shall defend it—shall we not?"

"Yes, Cyrus," replied the reporter, "and if necessary we will die to defend it!"

The engineer extended his hand to his companions, who pressed it warmly. Ayrton remained in his corner, not joining the colonists. Perhaps he, the former convict, still felt himself unworthy to do so!

Cyrus Harding understood what was passing in Ayrton's mind, and going to him—

"And you, Ayrton," he asked, "what will you do?"

"My duty," answered Ayrton.

He then took up his station near the window and gazed through the foliage.

It was now half-past seven. The sun had disappeared twenty minutes ago behind Granite House. Consequently the Eastern horizon was becoming obscured. In the meanwhile the brig continued to advance towards Union Bay. She was now not more than two miles off, and exactly opposite the plateau of Prospect Heights, for after having tacked off Claw Cape, she had drifted towards the north in the current of the rising tide. One might have said that at this distance she had already entered the vast bay, for a straight line drawn from Claw Cape to Cape Mandible would have rested on her starboard quarter.

Was the brig about to penetrate far into the bay? That was the first question. When once in the bay, would she anchor there? That was the second. Would she not content herself with only surveying the coast, and stand out to sea again without landing her crew? They would know this in an hour. The colonists could do nothing but wait.

Cyrus Harding had not seen the suspected vessel hoist the black flag without deep anxiety. Was it not a direct menace against the work which he and his companions had till now conducted so successfully? Had these pirates—for the sailors of the brig could be nothing else—already visited the island, since on approaching it they had hoisted their colors. Had they formerly invaded it, so that certain unaccountable peculiarities might be explained in this way? Did there exist in the as yet unexplored parts some accomplice ready to enter into communication with them?

To all these questions which he mentally asked himself, Harding knew not what to reply; but he felt that the safety of the colony could not but be seriously threatened by the arrival of the brig.

However, he and his companions were determined to fight to the last gasp. It would have been very important to know if the pirates were numerous and better armed than the colonists. But how was this information to be obtained?

Night fell. The new moon had disappeared. Profound darkness enveloped the island and the sea. No light could pierce through the heavy piles of clouds on the horizon. The wind had died away completely with the twilight. Not a leaf rustled on the trees, not a ripple murmured on the shore. Nothing could be seen of the ship, all her lights being extinguished, and if she was still in sight of the island, her whereabouts could not be discovered.

"Well! who knows?" said Pencroft. "Perhaps that cursed craft will stand off during the night, and we shall see
nothing of her at daybreak."
As if in reply to the sailor's observation, a bright light flashed in the darkness, and a cannon-shot was heard.
The vessel was still there and had guns on board.
Six seconds elapsed between the flash and the report.
Therefore the brig was about a mile and a quarter from the coast.
At the same time, the chains were heard rattling through the hawse-holes.
The vessel had just anchored in sight of Granite House!

Chapter 2

There was no longer any doubt as to the pirates' intentions. They had dropped anchor at a short distance from the island, and it was evident that the next day by means of their boats they purposed to land on the beach!
Cyrus Harding and his companions were ready to act, but, determined though they were, they must not forget to be prudent. Perhaps their presence might still be concealed in the event of the pirates contenting themselves with landing on the shore without examining the interior of the island. It might be, indeed, that their only intention was to obtain fresh water from the Mercy, and it was not impossible that the bridge, thrown across a mile and a half from the mouth, and the manufactory at the Chimneys might escape their notice.

But why was that flag hoisted at the brig's peak? What was that shot fired for? Pure bravado doubtless, unless it was a sign of the act of taking possession. Harding knew now that the vessel was well armed. And what had the colonists of Lincoln Island to reply to the pirates' guns? A few muskets only.

"However," observed Cyrus Harding, "here we are in an impregnable position. The enemy cannot discover the mouth of the outlet, now that it is hidden under reeds and grass, and consequently it would be impossible for them to penetrate into Granite House."

"But our plantations, our poultry-yard, our corral, all, everything!" exclaimed Pencroft, stamping his foot. "They may spoil everything, destroy everything in a few hours!"
"Everything, Pencroft," answered Harding, "and we have no means of preventing them."
"Are they numerous? that is the question," said the reporter. "If they are not more than a dozen, we shall be able to stop them, but forty, fifty, more perhaps!"
"Captain Harding," then said Ayrton, advancing towards the engineer, "will you give me leave?"
"For what, my friend?"
"To go to that vessel to find out the strength of her crew."
"But Ayrton--" answered the engineer, hesitating, "you will risk your life--"
"Why not, sir?"
"That is more than your duty."
"I have more than my duty to do," replied Ayrton.
"Will you go to the ship in the boat?" asked Gideon Spilett.
"No, sir, but I will swim. A boat would be seen where a man may glide between wind and water."
"Do you know that the brig is a mile and a quarter from the shore?" said Herbert.
"I am a good swimmer, Mr. Herbert."
"I tell you it is risking your life," said the engineer.
"That is no matter," answered Ayrton. "Captain Harding, I ask this as a favor. Perhaps it will be a means of raising me in my own eyes!"
"Go, Ayrton," replied the engineer, who felt sure that a refusal would have deeply wounded the former convict, now become an honest man.
"I will accompany you," said Pencroft.
"You mistrust me!" said Ayrton quickly.
Then more humbly,--
"Alas!"
"No! no!" exclaimed Harding with animation, "no, Ayrton, Pencroft does not mistrust you. You interpret his words wrongly."
"Indeed," returned the sailor, "I only propose to accompany Ayrton as far as the islet. It may be, although it is scarcely possible, that one of these villains has landed, and in that case two men will not be too many to hinder him from giving the alarm. I will wait for Ayrton on the islet, and he shall go alone to the vessel, since he has proposed to do so." These things agreed to, Ayrton made preparations for his departure. His plan was bold, but it might succeed, thanks to the darkness of the night. Once arrived at the vessel's side, Ayrton, holding on to the main chains, might reconnoiter the number and perhaps overhear the intentions of the pirates.
Ayrton and Pencroft, followed by their companions, descended to the beach. Ayrton undressed and rubbed himself with grease, so as to suffer less from the temperature of the water, which was still cold. He might, indeed, be obliged to remain in it for several hours.

Pencroft and Neb, during this time, had gone to fetch the boat, moored a few hundred feet higher up, on the bank of the Mercy, and by the time they returned, Ayrton was ready to start. A coat was thrown over his shoulders, and the settlers all came round him to press his hand.

Ayrton then shoved off with Pencroft in the boat.

It was half-past ten in the evening when the two adventurers disappeared in the darkness. Their companions returned to wait at the Chimneys.

The channel was easily traversed, and the boat touched the opposite shore of the islet. This was not done without precaution, for fear lest the pirates might be roaming about there. But after a careful survey, it was evident that the islet was deserted. Ayrton then, followed by Pencroft, crossed it with a rapid step, scaring the birds nestled in the holes of the rocks; then, without hesitating, he plunged into the sea, and swam noiselessly in the direction of the ship, in which a few lights had recently appeared, showing her exact situation. As to Pencroft, he crouched down in a cleft of the rock, and awaited the return of his companion.

In the meanwhile, Ayrton, swimming with a vigorous stroke, glided through the sheet of water without producing the slightest ripple. His head just emerged above it and his eyes were fixed on the dark hull of the brig, from which the lights were reflected in the water. He thought only of the duty which he had promised to accomplish, and nothing of the danger which he ran, not only on board the ship, but in the sea, often frequented by sharks. The current bore him along and he rapidly receded from the shore.

Half an hour afterwards, Ayrton, without having been either seen or heard, arrived at the ship and caught hold of the main-chains. He took breath, then, hoisting himself up, he managed to reach the extremity of the cutwater. There were drying several pairs of sailors' trousers. He put on a pair. Then settling himself firmly, he listened. They were not sleeping on board the brig. On the contrary, they were talking, singing, laughing. And these were the sentences, accompanied with oaths, which principally struck Ayrton:

"Our brig is a famous acquisition."
"She sails well, and merits her name of the 'Speedy.'"
"She would show all the navy of Norfolk a clean pair of heels."
"Hurrah for her captain!"
"Hurrah for Bob Harvey!"

What Ayrton felt when he overheard this fragment of conversation may be understood when it is known that in this Bob Harvey he recognized one of his old Australian companions, a daring sailor, who had continued his criminal career. Bob Harvey had seized, on the shores of Norfolk Island this brig, which was loaded with arms, ammunition, utensils, and tools of all sorts, destined for one of the Sandwich Islands. All his gang had gone on board, and pirates after having been convicts, these wretches, more ferocious than the Malays themselves, scoured the Pacific, destroying vessels, and massacring their crews.

The convicts spoke loudly, they recounted their deeds, drinking deeply at the same time, and this is what Ayrton gathered. The actual crew of the "Speedy" was composed solely of English prisoners, escaped from Norfolk Island.

Here it may be well to explain what this island was. In 29deg 2' south latitude, and 165deg 42' east longitude, to the east of Australia, is found a little island, six miles in circumference, overlooked by Mount Pitt, which rises to a height of 1,100 feet above the level of the sea. This is Norfolk Island, once the seat of an establishment in which were lodged the most intractable convicts from the English penitentiaries. They numbered 500, under an iron discipline, threatened with terrible punishments, and were guarded by 150 soldiers, and 150 employed under the orders of the governor. It would be difficult to imagine a collection of greater ruffians. Sometimes,--although very rarely,--notwithstanding the extreme surveillance of which they were the object, many managed to escape, and seizing vessels which they surprised, they infested the Polynesian Archipelagoes.

Thus had Bob Harvey and his companions done. Thus had Ayrton formerly wished to do. Bob Harvey had seized the brig "Speedy," anchored in sight of Norfolk Island; the crew had been massacred; and for a year this ship had scoured the Pacific, under the command of Harvey, now a pirate, and well known to Ayrton!

The convicts were, for the most part, assembled under the poop; but a few, stretched on the deck, were talking loudly.

The conversation still continued amid shouts and libations. Ayrton learned that chance alone had brought the "Speedy" in sight of Lincoln Island; Bob Harvey had never yet set foot on it; but, as Cyrus Harding had conjectured, finding this unknown land in his course, its position being marked on no chart, he had formed the project of visiting it, and, if he found it suitable, of making it the brig's headquarters.

As to the black flag hoisted at the "Speedy's" peak, and the gun which had been fired, in imitation of men-of-war
when they lower their colors, it was pure piratical bravado. It was in no way a signal, and no communication yet existed between the convicts and Lincoln Island.

The settlers' domain was now menaced with terrible danger. Evidently the island, with its water, its harbor, its resources of all kinds so increased in value by the colonists, and the concealment afforded by Granite House, could not but be convenient for the convicts; in their hands it would become an excellent place of refuge, and, being unknown, it would assure them, for a long time perhaps, impunity and security. Evidently, also, the lives of the settlers would not be respected, and Bob Harvey and his accomplices' first care would be to massacre them without mercy. Harding and his companions had, therefore, not even the choice of flying and hiding themselves in the island, since the convicts intended to reside there, and since, in the event of the "Speedy" departing on an expedition, it was probable that some of the crew would remain on shore, so as to settle themselves there. Therefore, it would be necessary to fight, to destroy every one of these scoundrels, unworthy of pity, and against whom any means would be right. So thought Ayrton, and he well knew that Cyrus Harding would be of his way of thinking.

But was resistance and, in the last place, victory possible? That would depend on the equipment of the brig, and the number of men which she carried.

This Ayrton resolved to learn at any cost, and as an hour after his arrival the vociferations had begun to die away, and as a large number of the convicts were already buried in a drunken sleep, Ayrton did not hesitate to venture onto the "Speedy's" deck, which the extinguished lanterns now left in total darkness. He hoisted himself onto the cutwater, and by the bowsprit arrived at the forecastle. Then, gliding among the convicts stretched here and there, he made the round of the ship, and found that the "Speedy" carried four guns, which would throw shot of from eight to ten pounds in weight. He found also, on touching them that these guns were breech-loaders. They were therefore, of modern make, easily used, and of terrible effect.

As to the men lying on the deck, they were about ten in number, but it was to be supposed that more were sleeping down below. Besides, by listening to them, Ayrton had understood that there were fifty on board. That was a large number for the six settlers of Lincoln Island to contend with! But now, thanks to Ayrton's devotion, Cyrus Harding would not be surprised, he would know the strength of his adversaries, and would make his arrangements accordingly.

There was nothing more for Ayrton to do but to return, and render to his companions an account of the mission with which he had charged himself, and he prepared to regain the bows of the brig, so that he might let himself down into the water. But to this man, whose wish was, as he had said, to do more than his duty, there came an heroic thought. This was to sacrifice his own life, but save the island and the colonists. Cyrus Harding evidently could not resist fifty ruffians, all well armed, who, either by penetrating by main force into Granite House, or by starving out the besieged, could obtain from them what they wanted. And then he thought of his preservers--those who had made him again a man, and an honest mm, those to whom he owed all--murdered without pity, their works destroyed, their island turned into a pirates' den! He said to himself that he, Ayrton, was the principal cause of so many disasters, since his old companion, Bob Harvey, had but realized his own plans, and a feeling of horror took possession of him. Then he was seized with an irresistible desire to blow up the brig and with her, all whom she had on board. He would perish in the explosion, but he would have done his duty.

Ayrton did not hesitate. To reach the powder-room, which is always situated in the after-part of a vessel, was easy. There would be no want of powder in a vessel which followed such a trade, and a spark would be enough to destroy it in an instant.

Ayrton stole carefully along the between-decks, strewn with numerous sleepers, overcome more by drunkenness than sleep. A lantern was lighted at the foot of the mainmast, round which was hung a gun-rack, furnished with weapons of all sorts.

Ayrton took a revolver from the rack, and assured himself that it was loaded and primed. Nothing more was needed to accomplish the work of destruction. He then glided towards the stern, so as to arrive under the brig's poop at the powder-magazine.

It was difficult to proceed along the dimly lighted deck without stumbling over some half-sleeping convict, who retorted by oaths and kicks. Ayrton was, therefore, more than once obliged to halt. But at last he arrived at the partition dividing the aftercabin, and found the door opening into the magazine itself.

Ayrton, compelled to force it open, set to work. It was a difficult operation to perform without noise, for he had to break a padlock. But under his vigorous hand, the padlock broke, and the door was open.

At that moment a hand was laid on Ayrton's shoulder.

"What are you doing here?" asked a tall man, in a harsh voice, who, standing in the shadow, quickly threw the light of a lantern in Ayrton's face.

Ayrton drew back. In the rapid flash of the lantern, he had recognized his former accomplice, Bob Harvey, who could not have known him, as he must have thought Ayrton long since dead.
"What are you doing here?" again said Bob Harvey, seizing Ayrton by the waistband.

But Ayrton, without replying, wrenched himself from his grasp and attempted to rush into the magazine. A shot fired into the midst of the powder-casks, and all would be over!

"Help, lads!" shouted Bob Harvey.

At his shout two or three pirates awoke, jumped up, and, rushing on Ayrton, endeavored to throw him down. He soon extricated himself from their grasp. He fired his revolver, and two of the convicts fell, but a blow from a knife which he could not ward off made a gash in his shoulder.

Ayrton perceived that he could no longer hope to carry out his project. Bob Harvey had reclosed the door of the powder-magazine, and a movement on the deck indicated a general awakening of the pirates. Ayrton must reserve himself to fight at the side of Cyrus Harding. There was nothing for him but flight!

But was flight still possible? It was doubtful, yet Ayrton resolved to dare everything in order to rejoin his companions.

Four barrels of the revolver were still undischarged. Two were fired--one, aimed at Bob Harvey, did not wound him, or at any rate only slightly, and Ayrton, profiting by the momentary retreat of his adversaries, rushed towards the companion-ladder to gain the deck. Passing before the lantern, he smashed it with a blow from the butt of his revolver. A profound darkness ensued, which favored his flight. Two or three pirates, awakened by the noise, were descending the ladder at the same moment.

A fifth shot from Ayrton laid one low, and the others drew back, not understanding what was going on. Ayrton was on deck in two bounds, and three seconds later, having discharged his last barrel in the face of a pirate who was about to seize him by the throat, he leaped over the bulwarks into the sea.

Ayrton had not made six strokes before shots were splashing around him like hail.

What were Pencroft's feelings, sheltered under a rock on the islet! What were those of Harding, the reporter, Herbert, and Neb, crouched in the Chimneys, when they heard the reports on board the brig! They rushed out on to the beach, and, their guns shouldered, they stood ready to repel any attack.

They had no doubt about it themselves! Ayrton, surprised by the pirates, had been murdered, and, perhaps, the wretches would profit by the night to make a descent on the island!

Half an hour was passed in terrible anxiety. The firing had ceased, and yet neither Ayrton nor Pencroft had reappeared. Was the islet invaded? Ought they not to fly to the help of Ayrton and Pencroft? But how? The tide being high at that time, rendered the channel impassable. The boat was not there! We may imagine the horrible anxiety which took possession of Harding and his companions!

At last, towards half-past twelve, a boat, carrying two men, touched the beach. It was Ayrton, slightly wounded in the shoulder, and Pencroft, safe and sound, whom their friends received with open arms.

All immediately took refuge in the Chimneys. There Ayrton recounted all that had passed, even to his plan for blowing up the brig, which he had attempted to put into execution.

All hands were extended to Ayrton, who did not conceal from them that their situation was serious. The pirates had been alarmed. They knew that Lincoln Island was inhabited. They would land upon it in numbers and well armed. They would respect nothing. Should the settlers fall into their hands, they must expect no mercy!

"Well, we shall know how to die!" said the reporter.

"Let us go in and watch," answered the engineer.

"Have we any chance of escape, captain?" asked the sailor.

"Yes, Pencroft."

"Hum! six against fifty!"

"Yes! six! without counting--"

"Who?" asked Pencroft.

Cyrus did not reply, but pointed upwards.

Chapter 3

The night passed without incident. The colonists were on the qui vive, and did not leave their post at the Chimneys. The pirates, on their side, did not appear to have made any attempt to land. Since the last shots fired at Ayrton not a report, not even a sound, had betrayed the presence of the brig in the neighborhood of the island. It might have been fancied that she had weighed anchor, thinking that she had to deal with her match, and had left the coast.

But it was no such thing, and when day began to dawn the settlers could see a confused mass through the morning mist. It was the "Speedy."

"These, my friends," said the engineer, "are the arrangements which appear to me best to make before the fog
completely clears away. It hides us from the eyes of the pirates, and we can act without attracting their attention. The most important thing is, that the convicts should believe that the inhabitants of the island are numerous, and consequently capable of resisting them. I therefore propose that we divide into three parties. The first of which shall be posted at the Chimneys, the second at the mouth of the Mercy. As to the third, I think it would be best to place it on the islet, so as to prevent, or at all events delay, any attempt at landing. We have the use of two rifles and four muskets. Each of us will be armed, and, as we are amply provided with powder and shot, we need not spare our fire. We have nothing to fear from the muskets nor even from the guns of the brig. What can they do against these rocks? And, as we shall not fire from the windows of Granite House, the pirates will not think of causing irreparable damage by throwing shell against it. What is to be feared is, the necessity of meeting hand-to-hand, since the convicts have numbers on their side. We must therefore try to prevent them from landing, but without discovering ourselves. Therefore, do not economize the ammunition. Fire often, but with a sure aim. We have each eight or ten enemies to kill, and they must be killed!"

Cyrus Harding had clearly represented their situation, although he spoke in the calmest voice, as if it was a question of directing a piece of work and not ordering a battle. His companions approved these arrangements without even uttering a word. There was nothing more to be done but for each to take his place before the fog should be completely dissipated. Neb and Pencroft immediately ascended to Granite House and brought back a sufficient quantity of ammunition. Gideon Spilett and Ayrton, both very good marksmen, were armed with the two rifles, which carried nearly a mile. The four other muskets were divided among Harding, Neb, Pencroft, and Herbert.

The posts were arranged in the following manner:--

Cyrus Harding and Herbert remained in ambush at the Chimneys, thus commanding the shore to the foot of Granite House.

Gideon Spilett and Neb crouched among the rocks at the mouth of the Mercy, from which the drawbridges had been raised, so as to prevent any one from crossing in a boat or landing on the opposite shore.

As to Ayrton and Pencroft, they shoved off in the boat, and prepared to cross the channel and to take up two separate stations on the islet. In this way, shots being fired from four different points at once, the convicts would be led to believe that the island was both largely peopled and strongly defended.

In the event of a landing being effected without their having been able to prevent it, and also if they saw that they were on the point of being cut off by the brig's boat, Ayrton and Pencroft were to return in their boat to the shore and proceed towards the threatened spot.

Before starting to occupy their posts, the colonists for the last time wrung each other's hands.

Pencroft succeeded in controlling himself sufficiently to suppress his emotion when he embraced Herbert, his boy! and then they separated.

In a few moments Harding and Herbert on one side, the reporter and Neb on the other, had disappeared behind the rocks, and five minutes later Ayrton and Pencroft, having without difficulty crossed the channel, disembarked on the islet and concealed themselves in the clefts of its eastern shore.

None of them could have been seen, for they themselves could scarcely distinguish the brig in the fog.

It was half-past six in the morning.

Soon the fog began to clear away, and the topmasts of the brig issued from the vapor. For some minutes great masses rolled over the surface of the sea, then a breeze sprang up, which rapidly dispelled the mist.

The "Speedy" now appeared in full view, with a spring on her cable, her head to the north, presenting her larboard side to the island. Just as Harding had calculated, she was not more than a mile and a quarter from the coast.

The sinister black flag floated from the peak.

The engineer, with his telescope, could see that the four guns on board were pointed at the island. They were evidently ready to fire at a moment's notice.

In the meanwhile the "Speedy" remained silent. About thirty pirates could be seen moving on the deck. A few more on the poop; two others posted in the shrouds, and armed with spyglasses, were attentively surveying the island.

Certainly, Bob Harvey and his crew would not be able easily to give an account of what had happened during the night on board the brig. Had this half-naked man, who had forced the door of the powder-magazine, and with whom they had struggled, who had six times discharged his revolver at them, who had killed one and wounded two others, escaped their shot? Had he been able to swim to shore? Whence did he come? What had been his object? Had his design really been to blow up the brig, as Bob Harvey had thought? All this must be confused enough to the convicts' minds. But what they could no longer doubt was that the unknown island before which the "Speedy" had cast anchor was inhabited, and that there was, perhaps, a numerous colony ready to defend it. And yet no one was to be seen, neither on the shore, nor on the heights. The beach appeared to be absolutely deserted. At any rate, there
was no trace of dwellings. Had the inhabitants fled into the interior? Thus probably the pirate captain reasoned, and
doubtless, like a prudent man, he wished to reconnoiter the locality before he allowed his men to venture there.

During an hour and a half, no indication of attack or landing could be observed on board the brig. Evidently Bob
Harvey was hesitating. Even with his strongest telescopes he could not have perceived one of the settlers crouched
among the rocks. It was not even probable that his attention had been awakened by the screen of green branches
and creepers hiding the windows of Granite House, and showing rather conspicuously on the bare rock. Indeed, how
could he imagine that a dwelling was hollowed out, at that height, in the solid granite? From Claw Cape to the
Mandible Capes, in all the extent of Union Bay, there was nothing to lead him to suppose that the island was or
could be inhabited.

At eight o'clock, however, the colonists observed a movement on board the "Speedy." A boat was lowered, and
seven men jumped into her. They were armed with muskets; one took the yoke-lines, four others the oars, and the
two others, kneeling in the bows, ready to fire, reconnoitered the island. Their object was no doubt to make an
examination but not to land, for in the latter case they would have come in larger numbers. The pirates from their
look-out could have seen that the coast was sheltered by an islet, separated from it by a channel half a mile in width.
However, it was soon evident to Cyrus Harding, on observing the direction followed by the boat, that they would not
attempt to penetrate into the channel, but would land on the islet.

Pencroft and Ayrton, each hidden in a narrow cleft of the rock, saw them coming directly towards them, and
waited till they were within range.

The boat advanced with extreme caution. The oars only dipped into the water at long intervals. It could now be
seen that one of the convicts held a lead-line in his hand, and that he wished to fathom the depth of the channel
hollowed out by the current of the Mercy. This showed that it was Bob Harvey's intention to bring his brig as near as
possible to the coast. About thirty pirates, scattered in the rigging, followed every movement of the boat, and took
the bearings of certain landmarks which would allow them to approach without danger. The boat was not more than
two cables-lengths off the islet when she stopped. The man at the tiller stood up and looked for the best place at
which to land.

At that moment two shots were heard. Smoke curled up from among the rocks of the islet. The man at the helm
and the man with the lead-line fell backwards into the boat. Ayrton's and Pencroft's balls had struck them both at the
same moment.

Almost immediately a louder report was heard, a cloud of smoke issued from the brig's side, and a ball, striking
the summit of the rock which sheltered Ayrton and Pencroft, made it fly in splinters, but the two marksmen
remained unhurt.

Horrible imprecations burst from the boat, which immediately continued its way. The man who had been at the
tiller was replaced by one of his comrades, and the oars were rapidly plunged into the water. However, instead of
returning on board as might have been expected, the boat coasted along the islet, so as to round its southern point.
The pirates pulled vigorously at their oars that they might get out of range of the bullets.

They advanced to within five cables-lengths of that part of the shore terminated by Flotsam Point, and after
having rounded it in a semicircular line, still protected by the brig's guns, they proceeded towards the mouth of the
Mercy.

Their evident intention was to penetrate into the channel, and cut off the colonists posted on the islet, in such a
way, that whatever their number might be, being placed between the fire from the boat and the fire from the brig,
they would find themselves in a very disadvantageous position.

A quarter of an hour passed while the boat advanced in this direction. Absolute silence, perfect calm reigned in
the air and on the water.

Pencroft and Ayrton, although they knew they ran the risk of being cut off, had not left their post, both that they
did not wish to show themselves as yet to their assailants, and expose themselves to the "Speedy's" guns, and that
they relied on Neb and Gideon Spieltt, watching at the mouth of the river, and on Cyrus Harding and Herbert, in
ambush among the rocks at the Chimneys.

Twenty minutes after the first shots were fired, the boat was less than two cables-lengths off the Mercy. As the
tide was beginning to rise with its accustomed violence, caused by the narrowness of the straits, the pirates were
drawn towards the river, and it was only by dint of hard rowing that they were able to keep in the middle of the
channel. But, as they were passing within good range of the mouth of the Mercy, two balls saluted them, and two
more of their number were laid in the bottom of the boat. Neb and Spieltt had not missed their aim.

The brig immediately sent a second ball on the post betrayed by the smoke, but without any other result than that
of splintering the rock.

The boat now contained only three able men. Carried on by the current, it shot through the channel with the
rapidity of an arrow, passed before Harding and Herbert, who, not thinking it within range, withheld their fire, then,
rounding the northern point of the islet with the two remaining oars, they pulled towards the brig. Hitherto the settlers had nothing to complain of. Their adversaries had certainly had the worst of it. The latter already counted four men seriously wounded if not dead; they, on the contrary, unwounded, had not missed a shot. If the pirates continued to attack them in this way, if they renewed their attempt to land by means of a boat, they could be destroyed one by one.

It was now seen how advantageous the engineer's arrangements had been. The pirates would think that they had to deal with numerous and well-armed adversaries, whom they could not easily get the better of.

Half an hour passed before the boat, having to pull against the current, could get alongside the "Speedy." Frightful cries were heard when they returned on board with the wounded, and two or three guns were fired with no results.

But now about a dozen other convicts, maddened with rage, and possibly by the effect of the evening's potations, threw themselves into the boat. A second boat was also lowered, in which eight men took their places, and while the first pulled straight for the islet, to dislodge the colonists from thence the second maneuvered so as to force the entrance of the Mercy.

The situation was evidently becoming very dangerous for Pencroft and Ayrton, and they saw that they must regain the mainland.

However, they waited till the first boat was within range, when two well-directed balls threw its crew into disorder. Then, Pencroft and Ayrton, abandoning their posts, under fire from the dozen muskets, ran across the islet at full speed, jumped into their boat, crossed the channel at the moment the second boat reached the southern end, and ran to hide themselves in the Chimneys.

They had scarcely rejoined Cyrus Harding and Herbert, before the islet was overrun with pirates in every direction. Almost at the same moment, fresh reports resounded from the Mercy station, to which the second boat was rapidly approaching. Two, out of the eight men who manned her, were mortally wounded by Gideon Spilett and Neb, and the boat herself, carried irresistibly onto the reefs, was stove in at the mouth of the Mercy. But the six survivors, holding their muskets above their heads to preserve them from contact with the water, managed to land on the right bank of the river. Then, finding they were exposed to the fire of the ambush there, they fled in the direction of Flotsam Point, out of range of the balls.

The actual situation was this: on the islet were a dozen convicts, of whom some were no doubt wounded, but who had still a boat at their disposal; on the island were six, but who could not by any possibility reach Granite House, as they could not cross the river, all the bridges being raised.

"Hallo," exclaimed Pencroft as he rushed into the Chimneys, "hallo, captain! What do you think of it, now?"

"I think," answered the engineer, "that the combat will now take a new form, for it cannot be supposed that the convicts will be so foolish as to remain in a position so unfavorable for them!"

"They won't cross the channel," said the sailor. "Ayrton and Mr. Spilett's rifles are there to prevent them. You know that they carry more than a mile!"

"No doubt," replied Herbert; "but what can two rifles do against the brig's guns?"

"Well, the brig isn't in the channel yet, I fancy!" said Pencroft.

"But suppose she does come there?" said Harding.

"That's impossible, for she would risk running aground and being lost!"

"It is possible," said Ayrton. "The convicts might profit by the high tide to enter the channel, with the risk of grounding at low tide, it is true; but then, under the fire from her guns, our posts would be no longer tenable."

"Confound them!" exclaimed Pencroft, "it really seems as if the blackguards were preparing to weigh anchor."

"Perhaps we shall be obliged to take refuge in Granite House!" observed Herbert.

"We must wait!" answered Cyrus Harding.

"But Mr. Spilett and Neb?" said Pencroft.

"They will know when it is best to rejoin us. Be ready, Ayrton. It is yours and Spilett's rifles which must speak now."

It was only too true. The "Speedy" was beginning to weigh her anchor, and her intention was evidently to approach the islet. The tide would be rising for an hour and a half, and the ebb current being already weakened, it would be easy for the brig to advance. But as to entering the channel, Pencroft, contrary to Ayrton's opinion, could not believe that she would dare to attempt it.

In the meanwhile, the pirates who occupied the islet had gradually advanced to the opposite shore, and were now only separated from the mainland by the channel.

Being armed with muskets alone, they could do no harm to the settlers, in ambush at the Chimneys and the mouth of the Mercy; but, not knowing the latter to be supplied with long-range rifles, they on their side did not believe themselves to be exposed. Quite uncovered, therefore, they surveyed the islet, and examined the shore.
Their illusion was of short duration. Ayrton's and Gideon Spilett's rifles then spoke, and no doubt imparted some very disagreeable intelligence to two of the convicts, for they fell backwards.

Then there was a general helter-skelter. The ten others, not even stopping to pick up their dead or wounded companions, fled to the other side of the islet, tumbled into the boat which had brought them, and pulled away with all their strength.

"Eight less!" exclaimed Pencroft. "Really, one would have thought that Mr. Spilett and Ayrton had given the word to fire together!"

"Gentlemen," said Ayrton, as he reloaded his gun, "this is becoming more serious. The brig is making sail!"

"The anchor is weighed!" exclaimed Pencroft.

"Yes, and she is already moving."

In fact, they could distinctly hear the creaking of the windlass. The "Speedy" was at first held by her anchor; then, when that had been raised, she began to drift towards the shore. The wind was blowing from the sea; the jib and the foretopsail were hoisted, and the vessel gradually approached the island.

From the two posts of the Mercy and the Chimneys they watched her without giving a sign of life, but not without some emotion. What could be more terrible for the colonists than to be exposed, at a short distance, to the brig's guns, without being able to reply with any effect? How could they then prevent the pirates from landing?

Cyrus Harding felt this strongly, and he asked himself what it would be possible to do. Before long, he would be called upon for his determination. But what was it to be? To shut themselves up in Granite House, to be besieged there, to remain there for weeks, for months even, since they had an abundance of provisions? So far good! But after that? The pirates would not the less be masters of the island, which they would ravage at their pleasure, and in time, they would end by having their revenge on the prisoners in Granite House.

However, one chance yet remained; it was that Bob Harvey, after all, would not venture his ship into the channel, and that he would keep outside the islet. He would be still separated from the coast by half a mile, and at that distance his shot could not be very destructive.

"Never!" repeated Pencroft, "Bob Harvey will never, if he is a good seaman, enter that channel! He knows well that it would risk the brig, if the sea got up ever so little! And what would become of him without his vessel?"

In the meanwhile the brig approached the islet, and it could be seen that she was endeavoring to make the lower end. The breeze was light, and as the current had then lost much of its force, Bob Harvey had absolute command over his vessel.

The route previously followed by the boats had allowed her to reconnoiter the channel, and she boldly entered it. The pirate's design was now only too evident; he wished to bring her broadside to bear on the Chimneys and from there to reply with shell and ball to the shot which had till then decimated her crew.

Soon the "Speedy" reached the point of the islet; she rounded it with ease; the mainsail was braced up, and the brig hugging the wind, stood across the mouth of the Mercy.

"The scoundrels! they are coming!" said Pencroft.

At that moment, Cyrus Harding, Ayrton, the sailor, and Herbert, were rejoined by Neb and Gideon Spilett.

The reporter and his companion had judged it best to abandon the post at the Mercy, from which they could do nothing against the ship, and they had acted wisely. It was better that the colonists should be together at the moment when they were about to engage in a decisive action. Gideon Spilett and Neb had arrived by dodging behind the rocks, though not without attracting a shower of bullets, which had not, however, reached them.

"Spilett! Neb!" cried the engineer. "You are not wounded?"

"No," answered the reporter, "a few bruises only from the ricochet! But that cursed brig has entered the channel!"

"Yes," replied Pencroft, "and in ten minutes she will have anchored before Granite House!"

"Have you formed any plan, Cyrus?" asked the reporter.

"We must take refuge in Granite House while there is still time, and the convicts cannot see us."

"That is, my opinion, too," replied Gideon Spilett, "but once shut up--"

"We must be guided by circumstances," said the engineer.

"Let us be off, then, and make haste!" said the reporter.

"Would you not wish, captain, that Ayrton and I should remain here?" asked the sailor.

"What would be the use of that, Pencroft?" replied Harding. "No. We will not separate!"

There was not a moment to be lost. The colonists left the Chimneys. A bend of the cliff prevented them from being seen by those in the brig, but two or three reports, and the crash of bullets on the rock, told them that the "Speedy" was at no great distance.

To spring into the lift, hoist themselves up to the door of Granite House, where Top and Jup had been shut up since the evening before, to rush into the large room, was the work of a minute only.
It was quite time, for the settlers, through the branches, could see the "Speedy," surrounded with smoke, gliding up the channel. The firing was incessant, and shot from the four guns struck blindly, both on the Mercy post, although it was not occupied, and on the Chimneys. The rocks were splintered, and cheers accompanied each discharge. However, they were hoping that Granite House would be spared, thanks to Harding’s precaution of concealing the windows when a shot, piercing the door, penetrated into the passage.

"We are discovered!" exclaimed Pencroft.

The colonists had not, perhaps, been seen, but it was certain that Bob Harvey had thought proper to send a ball through the suspected foliage which concealed that part of the cliff. Soon he redoubled his attack, when another ball having torn away the leafy screen, disclosed a gaping aperture in the granite.

The colonists’ situation was desperate. Their retreat was discovered. They could not oppose any obstacle to these missiles, nor protect the stone, which flew in splinters around them. There was nothing to be done but to take refuge in the upper passage of Granite House, and leave their dwelling to be devastated, when a deep roar was heard, followed by frightful cries!

Cyrus Harding and his companions rushed to one of the windows--

The brig, irresistibly raised on a sort of water-spout, had just split in two, and in less than ten seconds she was swallowed up with all her criminal crew!

Chapter 4

"She has blown up!" cried Herbert.

"Yes! blown up, just as if Ayrton had set fire to the powder!" returned Pencroft, throwing himself into the lift together with Neb and the lad.

"But what has happened?" asked Gideon Spilett, quite stunned by this unexpected catastrophe.

"Oh! this time, we shall know--" answered the engineer quickly.

"What shall we know?--"

"Later! later! Come, Spilett. The main point is that these pirates have been exterminated!"

And Cyrus Harding, hurrying away the reporter and Ayrton, joined Pencroft, Neb, and Herbert on the beach.

Nothing could be seen of the brig, not even her masts. After having been raised by the water-spout, she had fallen on her side, and had sunk in that position, doubtless in consequence of some enormous leak. But as in that place the channel was not more than twenty feet in depth, it was certain that the sides of the submerged brig would reappear at low water.

A few things from the wreck floated on the surface of the water, a raft could be seen consisting of spare spars, coops of poultry with their occupants still living, boxes and barrels, which gradually came to the surface, after having escaped through the hatchways, but no pieces of the wreck appeared, neither planks from the deck, nor timber from the hull,--which rendered the sudden disappearance of the "Speedy" perfectly inexplicable.

However, the two masts, which had been broken and escaped from the shrouds and stays came up, and with their sails, some furled and the others spread. But it was not necessary to wait for the tide to bring up these riches, and Ayrton and Pencroft jumped into the boat with the intention of towing the pieces of wreck either to the beach or to the islet. But just as they were shoving off, an observation from Gideon Spilett arrested them.

"What about those six convicts who disembarked on the right bank of the Mercy?" said he.

In fact, it would not do to forget that the six men whose boat had gone to pieces on the rocks had landed at Flotsam Point.

They looked in that direction. None of the fugitives were visible. It was probable that, having seen their vessel engulfed in the channel, they had fled into the interior of the island.

"We will deal with them later," said Harding. "As they are armed, they will still be dangerous; but as it is six against six, the chances are equal. To the most pressing business first."

Ayrton and Pencroft pulled vigorously towards the wreck.

The sea was calm and the tide very high, as there had been a new moon but two days before. A whole hour at least would elapse before the hull of the brig could emerge from the water of the channel.

Ayrton and Pencroft were able to fasten the masts and spars by means of ropes, the ends of which were carried to the beach. There, by the united efforts of the settlers the pieces of wreck were hauled up. Then the boat picked up all that was floating, coops, barrels, and boxes, which were immediately carried to the Chimneys.

Several bodies floated also. Among them, Ayrton recognized that of Bob Harvey, which he pointed out to his companion, saying with some emotion,--

"That is what I have been, Pencroft."

"But what you are no longer, brave Ayrton!" returned the sailor warmly.
It was singular enough that so few bodies floated. Only five or six were counted, which were already being carried by the current towards the open sea. Very probably the convicts had not had time to escape, and the ship lying over on her side, the greater number of them had remained below. Now the current, by carrying the bodies of these miserable men out to sea, would spare the colonists the sad task of burying them in some corner of their island.

For two hours, Cyrus Harding and his companions were solely occupied in hauling up the spars on to the sand, and then in spreading the sails which were perfectly uninjured, to dry. They spoke little, for they were absorbed in their work, but what thoughts occupied their minds!

The possession of this brig, or rather all that she contained, was a perfect mine of wealth. In fact, a ship is like a little world in miniature, and the stores of the colony would be increased by a large number of useful articles. It would be, on a large scale, equivalent to the chest found at Flotsam Point.

"And besides," thought Pencroft, "why should it be impossible to refloat the brig? If she has only a leak, that may be stopped up; a vessel from three to four hundred tons, why she is a regular ship compared to our 'Bonadventure'! And we could go a long distance in her! We could go anywhere we liked! Captain Harding, Ayrton and I must examine her! She would be well worth the trouble!"

In fact, if the brig was still fit to navigate, the colonists' chances of returning to their native land were singularly increased. But, to decide this important question, it was necessary to wait until the tide was quite low, so that every part of the brig's hull might be examined.

When their treasures had been safely conveyed on shore, Harding and his companions agreed to devote some minutes to breakfast. They were almost famished; fortunately, the larder was not far off, and Neb was noted for being an expeditious cook. They breakfasted, therefore, near the Chimneys, and during their repast, as may be supposed, nothing was talked of but the event which had so miraculously saved the colony.

"Miraculous is the word," repeated Pencroft, "for it must be acknowledged that those rascals blew up just at the right moment! Granite House was beginning to be uncomfortable as a habitation!"

"And can you guess, Pencroft," asked the reporter, "how it happened, or what can have occasioned the explosion?"

"Oh! Mr. Spilett, nothing is more simple," answered Pencroft. "A convict vessel is not disciplined like a man-of-war! Convicts are not sailors. Of course the powder-magazine was open, and as they were firing incessantly, some careless or clumsy fellow just blew up the vessel!"

"Captain Harding," said Herbert, "what astonishes me is that the explosion has not produced more effect. The report was not loud, and besides there are so few planks and timbers torn out. It seems as if the ship had rather foundered than blown up."

"Does that astonish you, my boy?" asked the engineer.

"Yes, captain."

"And it astonishes me also, Herbert," replied he, "but when we visit the hull of the brig, we shall no doubt find the explanation of the matter."

"Why, captain," said Pencroft, "you don't suppose that the 'Speedy' simply foundered like a ship which has struck on a rock?"

"Why not," observed Neb, "if there are rocks in the channel?"

"Nonsense, Neb," answered Pencroft, "you did not look at the right moment. An instant before she sank, the brig, as I saw perfectly well, rose on an enormous wave, and fell back on her larboard side. Now, if she had only struck, she would have sunk quietly and gone to the bottom like an honest vessel."

"It was just because she was not an honest vessel!" returned Neb.

"Well, we shall soon see, Pencroft," said the engineer.

"We shall soon see," rejoined the sailor, "but I would wager my head there are no rocks in the channel. Look here, captain, to speak candidly, do you mean to say that there is anything marvelous in the occurrence?"

Cyrus Harding did not answer.

"At any rate," said Gideon Spilett, "whether rock or explosion, you will agree, Pencroft, that it occurred just in the nick of time!"

"Yes! yes!" replied the sailor, "but that is not the question. I ask Captain Harding if he sees anything supernatural in all this."

"I cannot say, Pencroft," said the engineer. "That is all the answer I can make."

A reply which did not satisfy Pencroft at all. He stuck to "an explosion," and did not wish to give it up. He would never consent to admit that in that channel, with its fine sandy bed, just like the beach, which he had often crossed at low water, there could be an unknown rock.

And besides, at the time the brig foundered, it was high water, that is to say, there was enough water to carry the vessel clear over any rocks which would not be uncovered at low tide. Therefore, there could not have been a
collision. Therefore, the vessel had not struck. So she had blown up.

And it must be confessed that the sailor's arguments were reasonable.

Towards half-past one, the colonists embarked in the boat to visit the wreck. It was to be regretted that the brig's two boats had not been saved; but one, as has been said, had gone to pieces at the mouth of the Mercy, and was absolutely useless; the other had disappeared when the brig went down, and had not again been seen, having doubtless been crushed.

The hull of the "Speedy" was just beginning to issue from the water. The brig was lying right over on her side, for her masts being broken, pressed down by the weight of the ballast displaced by the shock, the keel was visible along her whole length. She had been regularly turned over by the inexplicable but frightful submarine action, which had been at the same time manifested by an enormous water-spout.

The settlers rowed round the hull, and in proportion as the tide went down, they could ascertain, if not the cause which had occasioned the catastrophe, at least the effect produced.

Towards the bows, on both sides of the keel, seven or eight feet from the beginning of the stem, the sides of the brig were frightfully torn. Over a length of at least twenty feet there opened two large leaks, which would be impossible to stop up. Not only had the copper sheathing and the planks disappeared, reduced, no doubt, to powder, but also the ribs, the iron bolts, and treenails which united them. From the entire length of the hull to the stern the false keel had been separated with an unaccountable violence, and the keel itself, torn from the carline in several places, was split in all its length.

"I've a notion!" exclaimed Pencroft, "that this vessel will be difficult to get afloat again."

"It will be impossible," said Ayrton.

"At any rate," observed Gideon Spilett to the sailor, "the explosion, if there has been one, has produced singular effects! It has split the lower part of the hull, instead of blowing up the deck and topsides! These great rents appear rather to have been made by a rock than by the explosion of a powder-magazine."

"There is not a rock in the channel!" answered the sailor. "I will admit anything you like, except the rock."

"Let us try to penetrate into the interior of the brig," said the engineer; "perhaps we shall then know what to think of the cause of her destruction."

This was the best thing to be done, and it was agreed, besides, to take an inventory of all the treasures on board, and to arrange their preservation.

Access to the interior of the brig was now easy. The tide was still going down and the deck was practicable. The ballast, composed of heavy masses of iron, had broken through in several places. The noise of the sea could be heard as it rushed out at the holes in the hull.

Cyrus Harding and his companions, hatchets in hand, advanced along the shattered deck. Cases of all sorts encumbered it, and, as they had been but a very short time in the water, their contents were perhaps uninjured.

They then busied themselves in placing all this cargo in safety. The water would not return for several hours, and these hours must be employed in the most profitable way. Ayrton and Pencroft had, at the entrance made in the hull, discovered tackle, which would serve to hoist up the barrels and chests. The boat received them and transported them to the shore. They took the articles as they came, intending to sort them afterwards.

At any rate, the settlers saw at once, with extreme satisfaction, that the brig possessed a very varied cargo--an assortment of all sorts of articles, utensils, manufactured goods, and tools--such as the ships which make the great coasting-trade of Polynesia are usually laden with. It was probable that they would find a little of everything, and they agreed that it was exactly what was necessary for the colony of Lincoln Island.

However--and Cyrus Harding observed it in silent astonishment--not only, as has been said, had the hull of the brig enormously suffered from the shock, whatever it was, that had occasioned the catastrophe, but the interior arrangements had been destroyed, especially towards the bows. Partitions and stanchions were smashed, as if some tremendous shell had burst in the interior of the brig. The colonists could easily go fore and aft, after having removed the cases as they were extricated. They were not heavy bales, which would have been difficult to remove, but simple packages, of which the stowage, besides, was no longer recognizable.

The colonists then reached the stern of the brig--the part formerly surmounted by the poop. It was there that, following Ayrton's directions, they must look for the powder-magazine. Cyrus Harding thought that it had not exploded; that it was possible some barrels might be saved, and that the powder, which is usually enclosed in metal coverings might not have suffered from contact with the water.

This, in fact, was just what had happened. They extricated from among a large number of shot twenty barrels, the insides of which were lined with copper. Pencroft was convinced by the evidence of his own eyes that the destruction of the "Speedy" could not be attributed to an explosion. That part of the hull in which the magazine was situated was, moreover, that which had suffered least.

"It may be so," said the obstinate sailor; "but as to a rock, there is not one in the channel!!"
"Then, how did it happen?" asked Herbert.

"I don't know," answered Pencroft, "Captain Harding doesn't know, and nobody knows or ever will know!"

Several hours had passed during these researches, and the tide began to flow. Work must be suspended for the present. There was no fear of the brig being carried away by the sea, for she was already fixed as firmly as if moored by her anchors.

They could, therefore, without inconvenience, wait until the next day to resume operations; but, as to the vessel itself, she was doomed, and it would be best to hasten to save the remains of her hull, as she would not be long in disappearing in the quicksands of the channel.

It was now five o'clock in the evening. It had been a hard day's work for the men. They ate with good appetite, and notwithstanding their fatigue, they could not resist, after dinner, their desire of inspecting the cases which composed the cargo of the "Speedy."

Most of them contained clothes, which, as may be believed, was well received. There were enough to clothe a whole colony--linen for every one's use, shoes for every one's feet.

"We are too rich!" exclaimed Pencroft, "But what are we going to do with all this?"

And every moment burst forth the hurrahs of the delighted sailor when he caught sight of the barrels of gunpowder, firearms and sidearms, balls of cotton, implements of husbandry, carpenter's, joiner's, and blacksmith's tools, and boxes of all kinds of seeds, not in the least injured by their short sojourn in the water. Ah, two years before, how these things would have been prized! And now, even though the industrious colonists had provided themselves with tools, these treasures would find their use.

There was no want of space in the store-rooms of Granite House, but that daytime would not allow them to stow away the whole. It would not do also to forget that the six survivors of the "Speedy's" crew had landed on the island, for they were in all probability scoundrels of the deepest dye, and it was necessary that the colonists should be on their guard against them. Although the bridges over the Mercy were raised, the convicts would not be stopped by a river or a stream and, rendered desperate, these wretches would be capable of anything.

They would see later what plan it would be best to follow; but in the meantime it was necessary to mount guard over cases and packages heaped up near the Chimneys, and thus the settlers employed themselves in turn during the night.

The morning came, however, without the convicts having attempted any attack. Master Jup and Top, on guard at the foot of Granite House, would have quickly given the alarm. The three following day--the 19th, 20th, and 21st of October--were employed in saving everything of value, or of any use whatever, either from the cargo or rigging of the brig. At low tide they overhauled the hold--at high tide they stowed away the rescued articles. A great part of the copper sheathing had been torn from the hull, which every day sank lower. But before the sand had swallowed the heavy things which had fallen through the bottom, Ayrton and Pencroft, diving to the bed of the channel, recovered the chains and anchors of the brig, the iron of her ballast, and even four guns, which, floated by means of empty casks, were brought to shore.

It may be seen that the arsenal of the colony had gained by the wreck, as well as the storerooms of Granite House. Pencroft, always enthusiastic in his projects, already spoke of constructing a battery to command the channel and the mouth of the river. With four guns, he engaged to prevent any fleet, "however powerful it might be," from venturing into the waters of Lincoln Island!

In the meantime, when nothing remained of the brig but a useless hulk, bad weather came on, which soon finished her. Cyrus Harding had intended to blow her up, so as to collect the remains on the shore, but a strong gale from the northeast and a heavy sea compelled him to economize his powder.

In fact, on the night of the 23rd, the hull entirely broke up, and some of the wreck was cast up on the beach.

As to the papers on board, it is useless to say that, although he carefully searched the lockers of the poop, Harding did not discover any trace of them. The pirates had evidently destroyed everything that concerned either the captain or the owners of the "Speedy," and, as the name of her port was not painted on her counter, there was nothing which would tell them her nationality. However, by the shape of her boats Ayrton and Pencroft believed that the brig was of English build.

A week after the castrophe--or, rather, after the fortunate, though inexplicable, event to which the colony owed its preservation--nothing more could be seen of the vessel, even at low tide. The wreck had disappeared, and Granite House was enriched by nearly all it had contained.

However, the mystery which enveloped its strange destruction would doubtless never have been cleared away if, on the 30th of November, Neb, strolling on the beach, had not found a piece of a thick iron cylinder, bearing traces of explosion. The edges of this cylinder were twisted and broken, as if they had been subjected to the action of some explosive substance.

Neb brought this piece of metal to his master, who was then occupied with his companions in the workshop of
the Chimneys.

Cyrus Harding examined the cylinder attentively, then, turning to Pencroft,—
"You persist, my friend," said he, "in maintaining that the 'Speedy' was not lost in consequence of a collision?"
"Yes, captain," answered the sailor. "You know as well as I do that there are no rocks in the channel."
"But suppose she had run against this piece of iron?" said the engineer, showing the broken cylinder.
"What, that bit of pipe!" exclaimed Pencroft in a tone of perfect incredulity.
"My friends," resumed Harding, "you remember that before she foundered the brig rose on the summit of a regular waterspout?"
"Yes, captain," replied Herbert.
"Well, would you like to know what occasioned that waterspout? It was this," said the engineer, holding up the broken tube.
"That?" returned Pencroft.
"Yes! This cylinder is all that remains of a torpedo!"
"A torpedo!" exclaimed the engineer's companions.
"And who put the torpedo there?" demanded Pencroft, who did not like to yield.
"All that I can tell you is, that it was not I," answered Cyrus Harding; "but it was there, and you have been able to judge of its incomparable power!"

Chapter 5

So, then, all was explained by the submarine explosion of this torpedo. Cyrus Harding could not be mistaken, as, during the war of the Union, he had had occasion to try these terrible engines of destruction. It was under the action of this cylinder, charged with some explosive substance, nitro-glycerine, picrate, or some other material of the same nature, that the water of the channel had been raised like a dome, the bottom of the brig crushed in, and she had sunk instantly, the damage done to her hull being so considerable that it was impossible to refloat her. The "Speedy" had not been able to withstand a torpedo that would have destroyed an ironclad as easily as a fishing-boat!

Yes! all was explained, everything—except the presence of the torpedo in the waters of the channel!

"My friends, then," said Cyrus Harding, "we can no longer be in doubt as to the presence of a mysterious being, a castaway like us, perhaps, abandoned on our island, and I say this in order that Ayrton may be acquainted with all the strange events which have occurred during these two years. Who this beneficent stranger is, whose intervention has, so fortunately for us, been manifested on many occasions, I cannot imagine. What his object can be in acting thus, in concealing himself after rendering us so many services, I cannot understand: But his services are not the less real, and are of such a nature that only a man possessed of prodigious power, could render them. Ayrton is indebted to him as much as we are, for, if it was the stranger who saved me from the waves after the fall from the balloon, evidently it was he who wrote the document, who placed the bottle in the channel, and who has made known to us the situation of our companion. I will add that it was he who guided that chest, provided with everything we wanted, and stranded it on Flotsam Point; that it was he who lighted that fire on the heights of the island, which permitted you to land; that it was he who fired that bullet found in the body of the peccary; that it was he who plunged that torpedo into the channel, which destroyed the brig; in a word, that all those inexplicable events, for which we could not assign a reason, are due to this mysterious being. Therefore, whoever he may be, whether shipwrecked, or exiled on our island, we shall be ungrateful, if we think ourselves freed from gratitude towards him. We have contracted a debt, and I hope that we shall one day pay it."

"You are right in speaking thus, my dear Cyrus," replied Gideon Spilett. "Yes, there is an almost all-powerful being, hidden in some part of the island, and whose influence has been singularly useful to our colony. I will add that the unknown appears to possess means of action which border on the supernatural, if in the events of practical life the supernatural were recognizable. Is it he who is in secret communication with us by the well in Granite House, and has he thus a knowledge of all our plans? Was it he who threw us that bottle, when the vessel made her first cruise? Was it he who threw Top out of the lake, and killed the dugong? Was it he, who as everything leads us to believe, saved you from the waves, and that under circumstances in which any one else would not have been able to act? If it was he, he possesses a power which renders him master of the elements."

The reporter's reasoning was just, and every one felt it to be so.

"Yes," rejoined Cyrus Harding, "if the intervention of a human being is not more questionable for us, I agree that he has at his disposal means of action beyond those possessed by humanity. There is a mystery still, but if we discover the man, the mystery will be discovered also. The question, then, is, ought we to respect the incognito of this generous being, or ought we to do everything to find him out? What is your opinion on the matter?"

"My opinion," said Pencroft, "is that, whoever he may be, he is a brave man, and he has my esteem!"
"Be it so," answered Harding, "but that is not an answer, Pencroft."

"Master," then said Neb, "my idea is, that we may search as long as we like for this gentleman whom you are talking about, but that we shall not discover him till he pleases."

"That's not bad, what you say, Neb," observed Pencroft.

"I am of Neb's opinion," said Gideon Spilett, "but that is no reason for not attempting the adventure. Whether we find this mysterious being or not, we shall at least have fulfilled our duty towards him."

"And you, my boy, give us your opinion," said the engineer, turning to Herbert.

"Oh," cried Herbert, his countenance full of animation, "how I should like to thank him, he who saved you first, and who has now saved us!"

"Of course, my boy," replied Pencroft, "so would I and all of us. I am not inquisitive, but I would give one of my eyes to see this individual face to face! It seems to me that he must be handsome, tall, strong, with a splendid beard, radiant hair, and that he must be seated on clouds, a great ball in his hands!"

"But, Pencroft," answered Spilett, "you are describing a picture of the Creator."

"Possibly, Mr. Spilett," replied the sailor, "but that is how I imagine him!"

"And you, Ayrton?" asked the engineer.

"Captain Harding," replied Ayrton, "I can give you no better advice in this matter. Whatever you do will be best; when you wish me to join you in your researches, I am ready to follow you.

"I thank you, Ayrton," answered Cyrus Harding, "but I should like a more direct answer to the question I put to you. You are our companion; you have already endangered your life several times for us, and you, as well as the rest, ought to be consulted in the matter of any important decision. Speak, therefore."

"Captain Harding," replied Ayrton, "I think that we ought to do everything to discover this unknown benefactor. Perhaps he is alone. Perhaps he is suffering. Perhaps he has a life to be renewed. I, too, as you said, have a debt of gratitude to pay him. It was he, it could be only he who must have come to Tabor Island, who found there the wretch you knew, and who made known to you that there was an unfortunate man there to be saved. Therefore it is, thanks to him, that I have become a man again. No, I will never forget him!"

"That is settled, then," said Cyrus Harding. "We will begin our researches as soon as possible. We will not leave a corner of the island unexplored. We will search into its most secret recesses, and will hope that our unknown friend will pardon us in consideration of our intentions!"

For several days the colonists were actively employed in haymaking and the harvest. Before putting their project of exploring the yet unknown parts of the island into execution, they wished to get all possible work finished. It was also the time for collecting the various vegetables from the Tabor Island plants. All was stowed away, and happily there was no want of room in Granite House, in which they might have housed all the treasures of the island. The products of the colony were there, methodically arranged, and in a safe place, as may be believed, sheltered as much from animals as from man.

There was no fear of damp in the middle of that thick mass of granite. Many natural excavations situated in the upper passage were enlarged either by pick-axe or mine, and Granite House thus became a general warehouse, containing all the provisions, arms, tools, and spare utensils—in a word, all the stores of the colony.

As to the guns obtained from the brig, they were pretty pieces of ordnance, which, at Pencroft's entreaty, were hoisted by means of tackle and pulleys, right up into Granite House; embrasures were made between the windows, and the shining muzzles of the guns could soon be seen through the granite cliff. From this height they commanded all Union Bay. It was like a little Gibraltar, and any vessel anchored off the islet would inevitably be exposed to the fire of this aerial battery.

"Captain," said Pencroft one day, it was the 8th of November, "now that our fortifications are finished, it would be a good thing if we tried the range of our guns."

"Do you think that is useful?" asked the engineer.

"It is more than useful, it is necessary! Without that how are we to know to what distance we can send one of those pretty shot with which we are provided?"

"Try them, Pencroft," replied the engineer. "However, I think that in making the experiment, we ought to employ, not the ordinary powder, the supply of which, I think, should remain untouched, but the pyroxyle which will never fail us."

"Can the cannon support the shock of the pyroxyle?" asked the reporter, who was not less anxious than Pencroft to try the artillery of Granite House.

"I believe so. However," added the engineer, "we will be prudent." The engineer was right in thinking that the guns were of excellent make. Made of forged steel, and breech-loaders, they ought consequently to be able to bear a considerable charge, and also have an enormous range. In fact, as regards practical effect, the transit described by the ball ought to be as extended as possible, and this tension could only be obtained under the condition that the
projectile should be impelled with a very great initial velocity.

"Now," said Harding to his companions, "the initial velocity is in proportion to the quantity of powder used. In the fabrication of these pieces, everything depends on employing a metal with the highest possible power of resistance, and steel is incontestably that metal of all others which resists the best. I have, therefore, reason to believe that our guns will bear without risk the expansion of the pyroxyle gas, and will give excellent results."

"We shall be a great deal more certain of that when we have tried them!" answered Pencroft.

It is unnecessary to say that the four cannons were in perfect order. Since they had been taken from the water, the sailor had bestowed great care upon them. How many hours he had spent, in rubbing, greasing, and polishing them, and in cleaning the mechanism! And now the pieces were as brilliant as if they had been on board a frigate of the United States Navy.

On this day, therefore, in presence of all the members of the colony, including Master Jup and Top, the four cannon were successively tried. They were charged with pyroxyle, taking into consideration its explosive power, which, as has been said, is four times that of ordinary powder: the projectile to be fired was cylindroconic.

Pencroft, holding the end of the quick-match, stood ready to fire.

At Harding's signal, he fired. The shot, passing over the islet, fell into the sea at a distance which could not be calculated with exactitude.

The second gun was pointed at the rocks at the end of Flotsam Point, and the shot striking a sharp rock nearly three miles from Granite House, made it fly into splinters. It was Herbert who had pointed this gun and fired it, and very proud he was of his first shot. Pencroft only was prouder than he! Such a shot, the honor of which belonged to his dear boy.

The third shot, aimed this time at the downs forming the upper side of Union Bay, struck the sand at a distance of four miles, then having ricocheted: was lost in the sea in a cloud of spray.

For the fourth piece Cyrus Harding slightly increased the charge, so as to try its extreme range. Then, all standing aside for fear of its bursting, the match was lighted by means of a long cord.

A tremendous report was heard, but the piece had held good, and the colonists rushing to the windows, saw the shot graze the rocks of Mandible Cape, nearly five miles from Granite House, and disappear in Shark Gulf.

"Well, captain," exclaimed Pencroft, whose cheeks might have rivaled the reports themselves, "what do you say of our battery? All the pirates in the Pacific have only to present themselves before Granite House! Not one can land there now without our permission!"

"Believe me, Pencroft," replied the engineer, "it would be better not to have to make the experiment."

"Well," said the sailor, "what ought to be done with regard to those six villains who are roaming about the island? Are we to leave them to overrun our forests, our fields, our plantations? These pirates are regular jaguars, and it seems to me we ought not to hesitate to treat them as such! What do you think, Ayrton?" added Pencroft, turning to his companion.

Ayrton hesitated at first to reply, and Cyrus Harding regretted that Pencroft had so thoughtlessly put this question. And he was much moved when Ayrton replied in a humble tone,—

"I have been one of those jaguars, Mr. Pencroft. I have no right to speak."

And with a slow step he walked away.

Pencroft understood.

"What a brute I am!" he exclaimed. "Poor Ayrton! He has as much right to speak here as any one!"

"Yes," said Gideon Spilett, "but his reserve does him honor, and it is right to respect the feeling which he has about his sad past."

"Certainly, Mr. Spilett," answered the sailor, "and there is no fear of my doing so again. I would rather bite my tongue off than cause Ayrton any pain! But to return to the question. It seems to me that these ruffians have no right to any pity, and that we ought to rid the island of them as soon as possible."

"Is that your opinion, Pencroft?" asked the engineer.

"Quite my opinion."

"And before hunting them mercilessly, you would not wait until they had committed some fresh act of hostility against us?"

"Isn't what they have done already enough?" asked Pencroft, who did not understand these scruples.

"They may adopt other sentiments!" said Harding, "and perhaps repent."

"They repent!" exclaimed the sailor, shrugging his shoulders.

"Pencroft, think of Ayrton!" said Herbert, taking the sailor's hand. "He became an honest man again!"

Pencroft looked at his companions one after the other. He had never thought of his proposal being met with any objection. His rough nature could not allow that they ought to come to terms with the rascals who had landed on the island with Bob Harvey's accomplices, the murderers of the crew of the "Speedy," and he looked upon them as wild
beasts which ought to be destroyed without delay and without remorse.

"Come!" said be. "Everybody is against me! You wish to be generous to those villains! Very well; I hope we
mayn't repent it!"

"What danger shall we run," said Herbert, "if we take care to be always on our guard?"

"Hum!" observed the reporter, who had not given any decided opinion. "They are six and well armed. If they
each lay hid in a corner, and each fired at one of us, they would soon be masters of the colony!"

"Why have they not done so?" said Herbert. "No doubt because it was not their interest to do it. Besides, we are
six also."

"Well, well!" replied Pencroft, whom no reasoning could have convinced. "Let us leave these good people to do
what they like, and don't think anything more about them!"

"Come, Pencroft," said Neb, "don't make yourself out so bad as all that! Suppose one of these unfortunate men
were here before you, within good range of your guns, you would not fire."

"I would fire on him as I would on a mad dog, Neb," replied Pencroft coldly.

"Pencroft," said the engineer, "you have always shown much deference to my advice; will you, in this matter, yield to me?"

"I will do as you please, Captain Harding," answered the sailor, who was not at all convinced.

"Very well, wait, and we will not attack them unless we are attacked first."

Thus their behavior towards the pirates was agreed upon, although Pencroft augured nothing good from it. They
were not to attack them, but were to be on their guard. After all, the island was large and fertile. If any sentiment of
honesty yet remained in the bottom of their hearts, these wretches might perhaps be reclaimed. Was it not their
interest in the situation in which they found themselves to begin a new life? At any rate, for humanity's sake alone, it
would be right to wait. The colonists would no longer as before, be able to go and come without fear. Hitherto they
had only wild beasts to guard against, and now six convicts of the worst description, perhaps, were roaming over
their island. It was serious, certainly, and to less brave men, it would have been security lost! No matter! At present,
the colonists had reason on their side against Pencroft. Would they be right in the future? That remained to be seen.

Chapter 6

However, the chief business of the colonists was to make that complete exploration of the island which had been
decided upon, and which would have two objects: to discover the mysterious being whose existence was now
indisputable, and at the same time to find out what had become of the pirates, what retreat they had chosen, what
sort of life they were leading, and what was to be feared from them. Cyrus Harding wished to set out without delay;
but as the expedition would be of some days duration, it appeared best to load the cart with different materials and
tools in order to facilitate the organization of the encampments. One of the onagers, however, having hurt its leg,
could not be harnessed at present, and a few days' rest was necessary. The departure was, therefore, put off for a
week, until the 20th of November. The month of November in this latitude corresponds to the month of May in the
northern zones. It was, therefore, the fine season. The sun was entering the tropic of Capricorn, and gave the longest
days in the year. The time was, therefore, very favorable for the projected expedition, which, if it did not accomplish
its principal object, would at any rate be fruitful in discoveries, especially of natural productions, since Harding
proposed to explore those dense forests of the Far West, which stretched to the extremity of the Serpentine
Peninsula.

During the nine days which preceded their departure, it was agreed that the work on Prospect Heights should be
finished off.

Moreover, it was necessary for Ayrton to return to the corral, where the domesticated animals required his care.
It was decided that he should spend two days there, and return to Granite House after having liberally supplied the
stables.

As he was about to start, Harding asked him if he would not like one of them to accompany him, observing that
the island was less safe than formerly. Ayrton replied that this was unnecessary, as he was enough for the work, and
that besides he apprehended no danger. If anything occurred at the corral, or in the neighborhood, he could instantly
warn the colonists by sending a telegram to Granite House.

Ayrton departed at dawn on the 9th, taking the cart drawn by one onager, and two hours after, the electric wire
announced that he had found all in order at the corral.

During these two days Harding busied himself in executing a project which would completely guard Granite
House against any surprise. It was necessary to completely conceal the opening of the old outlet, which was already
walled up and partly hidden under grass and plants, at the southern angle of Lake Grant. Nothing was easier, since if
the level of the lake was raised two or three feet, the opening would be quite beneath it. Now, to raise this level they
had only to establish a dam at the two openings made by the lake, and by which were fed Creek Glycerine and Falls River.

The colonists worked with a will, and the two dams which besides did not exceed eight feet in width by three in height, were rapidly erected by means of well-cemented blocks of stone.

This work finished, it would have been impossible to guess that at that part of the lake, there existed a subterranean passage through which the overflow of the lake formerly escaped.

Of course the little stream which fed the reservoir of Granite House and worked the lift, had been carefully preserved, and the water could not fail. The lift once raised, this sure and comfortable retreat would be safe from any surprise.

This work had been so quickly done, that Pencroft, Gideon Spilett, and Herbert found time to make an expedition to Port Balloon, The sailor was very anxious to know if the little creek in which the "Bonadventure" was moored, had been visited by the convicts.

"These gentlemen," he observed, "landed on the south coast, and if they followed the shore, it is to be feared that they may have discovered the little harbor, and in that case, I wouldn't give half-a-dollar for our 'Bonadventure.'"

Pencroft's apprehensions were not without foundation, and a visit to Port Balloon appeared to be very desirable. The sailor and his companions set off on the 10th of November, after dinner, well armed. Pencroft, ostentatiously slipping two bullets into each barrel of his rifle, shook his head in a way which betokened nothing good to any one who approached too near him, whether "man or beast," as he said. Gideon Spilett and Herbert also took their guns, and about three o'clock all three left Granite House.

Neb accompanied them to the turn of the Mercy, and after they had crossed, he raised the bridge. It was agreed that a gunshot should announce the colonists' return, and that at the signal Neb should return and reestablish the communication between the two banks of the river.

The little band advanced directly along the road which led to the southern coast of the island. This was only a distance of three miles and a half, but Gideon Spilett and his companions took two hours to traverse it. They examined all the border of the road, the thick forest, as well as Tabor Marsh. They found no trace of the fugitives who, no doubt, not having yet discovered the number of the colonists, or the means of defense which they had at their disposal, had gained the less accessible parts of the island.

Arrived at Port Balloon, Pencroft saw with extreme satisfaction that the "Bonadventure" was tranquilly floating in the narrow creek. However, Port Balloon was so well hidden among high rocks, that it could scarcely be discovered either from the land or the sea.

"Come," said Pencroft, "the blackguards have not been there yet. Long grass suits reptiles best, and evidently we shall find them in the Far West."

"And it's very lucky, for if they had found the 'Bonadventure'," added Herbert, "they would have gone off in her, and we should have been prevented from returning to Tabor Island."

"Indeed," remarked the reporter, "it will be important to take a document there which will make known the situation of Lincoln Island, and Ayrton's new residence, in case the Scotch yacht returns to fetch him."

"Well, the 'Bonadventure' is always there, Mr. Spilett," answered the sailor. "She and her crew are ready to start at a moment's notice!"

"I think, Pencroft, that that is a thing to be done after our exploration of the island is finished. It is possible after all that the stranger, if we manage to find him, may know as much about Tabor Island as about Lincoln Island. Do not forget that he is certainly the author of the document, and he may, perhaps, know how far we may count on the return of the yacht!"

"But!" exclaimed Pencroft, "who in the world can he be? The fellow knows us and we know nothing about him! If he is a simple castaway, why should he conceal himself? We are honest men, I suppose, and the society of honest men isn't unpleasant to any one. Did he come here voluntarily? Can he leave the island if he likes? Is he here still? Will he remain any longer?"

Chatting thus, Pencroft, Gideon Spilett, and Herbert got on board and looked about the deck of the "Bonadventure." All at once, the sailor having examined the bitts to which the cable of the anchor was secured,--

"Hallo," he cried, "this is queer!"

"What is the matter, Pencroft?" asked the reporter.

"The matter is, that it was not I who made this knot!"

And Pencroft showed a rope which fastened the cable to the bitt itself.

"What, it was not you?" asked Gideon Spilett.

"No! I can swear to it. This is a reef knot, and I always make a running bowline."

"You must be mistaken, Pencroft."

"I am not mistaken!" declared the sailor. "My hand does it so naturally, and one's hand is never mistaken!"
"Then can the convicts have been on board?" asked Herbert.

"I know nothing about that," answered Pencroft, "but what is certain, is that some one has weighed the 'Bonadventure's' anchor and dropped it again! And look here, here is another proof! The cable of the anchor has been run out, and its service is no longer at the hawse-hole. I repeat that some one has been using our vessel!"

"But if the convicts had used her, they would have pillaged her, or rather gone off with her."

"Gone off! where to--to Tabor Island?" replied Pencroft. "Do you think, they would risk themselves in a boat of such small tonnage?"

"We must, besides, be sure that they know of the islet," rejoined the reporter.

"However that may be," said the sailor, "as sure as my name is Bonadventure Pencroft, of the Vineyard, our 'Bonadventure' has sailed without us!"

The sailor was positive that neither Gideon Spilett nor Herbert could dispute his statement. It was evident that the vessel had been moved, more or less, since Pencroft had brought her to Port Balloon. As to the sailor, he had not the slightest doubt that the anchor had been raised and then dropped again. Now, what was the use of these two maneuvers, unless the vessel had been employed in some expedition?

"But how was it we did not see the 'Bonadventure' pass in the sight of the island?" observed the reporter, who was anxious to bring forward every possible objection.

"Why, Mr. Spilett," replied the sailor, "they would only have to start in the night with a good breeze, and they would be out of sight of the island in two hours."

"Well," resumed Gideon Spilett, "I ask again, what object could the convicts have had in using the 'Bonadventure,' and why, after they had made use of her, should they have brought her back to port?"

"Why, Mr. Spilett," replied the sailor, "we must put that among the unaccountable things, and not think anything more about it. The chief thing is that the 'Bonadventure' was there, and she is there now. Only, unfortunately, if the convicts take her a second time, we shall very likely not find her again in her place!"

"Then, Pencroft," said Herbert, "would it not be wisest to bring the 'Bonadventure' off to Granite House?"

"Yes and no," answered Pencroft, "or rather no. The mouth of the Mercy is a bad place for a vessel, and the sea is heavy there."

"But by hauling her up on the sand, to the foot of the Chimneys?"

"Perhaps yes," replied Pencroft. "At any rate, since we must leave Granite House for a long expedition, I think the 'Bonadventure' will be safer here during our absence, and we shall do best to leave her here until the island is rid of these blackguards."

"That is exactly my opinion," said the reporter. "At any rate in the event of bad weather, she will not be exposed here as she would be at the mouth of the Mercy."

"But suppose the convicts pay her another visit," said Herbert.

"Well, my boy," replied Pencroft, "not finding her here, they would not be long in finding her on the sands of Granite House, and, during our absence, nothing could hinder them from seizing her! I agree, therefore, with Mr. Spilett, that she must be left in Port Balloon. But, if on our return we have not rid the island of those rascals, it will be prudent to bring our boat to Granite House, until the time when we need not fear any unpleasant visits."

"That's settled. Let us be off," said the reporter.

Pencroft, Herbert, and Gideon Spilett, on their return to Granite House, told the engineer all that had passed, and the latter approved of their arrangements both for the present and the future. He also promised the sailor that he would study that part of the channel situated between the islet and the coast, so as to ascertain if it would not be possible to make an artificial harbor there by means of dams. In this way, the "Bonadventure" would be always within reach, under the eyes of the colonists, and if necessary, under lock and key.

That evening a telegram was sent to Ayrton, requesting him to bring from the corral a couple of goats, which Neb wished to acclimatize to the plateau. Singularly enough, Ayrton did not acknowledge the receipt of the despatch, as he was accustomed to do. This could not but astonish the engineer. But it might be that Ayrton was not at that moment in the corral, or even that he was on his way back to Granite House. In fact, two days had already passed since his departure, and it had been decided that on the evening of the 10th or at the latest the morning of the 11th, he should return. The colonists waited, therefore, for Ayrton to appear on Prospect Heights. Neb and Herbert even watched at the bridge so as to be ready to lower it the moment their companion presented himself.

But up to ten in the evening, there were no signs of Ayrton. It was, therefore, judged best to send a fresh despatch, requiring an immediate reply.

The bell of the telegraph at Granite House remained mute.

The colonists' uneasiness was great. What had happened? Was Ayrton no longer at the corral, or if he was still there, had he no longer control over his movements? Could they go to the corral in this dark night?

They consulted. Some wished to go, the others to remain.
"But," said Herbert, "perhaps some accident has happened to the telegraphic apparatus, so that it works no longer?"

"That may be," said the reporter.

"Wait till to-morrow," replied Cyrus Harding. "It is possible, indeed, that Ayrton has not received our despatch, or even that we have not received his."

They waited, of course not without some anxiety.

At dawn of day, the 11th of November, Harding again sent the electric current along the wire and received no reply.

He tried again: the same result.

"Off to the corral," said he.

"And well armed!" added Pencroft.

It was immediately decided that Granite House should not be left alone and that Neb should remain there. After having accompanied his friends to Creek Glycerine, he raised the bridge; and waiting behind a tree he watched for the return of either his companions or Ayrton.

In the event of the pirates presenting themselves and attempting to force the passage, he was to endeavor to stop them by firing on them, and as a last resource he was to take refuge in Granite House, where, the lift once raised, he would be in safety.

Cyrus Harding, Gideon Spilett, Herbert, and Pencroft were to repair to the corral, and if they did not find Ayrton, search the neighboring woods.

At six o'clock in the morning, the engineer and his three companions had passed Creek Glycerine, and Neb posted himself behind a small mound crowned by several dragon trees, on the left bank of the stream.

The colonists, after leaving the plateau of Prospect Heights, immediately took the road to the corral. They shouldered their guns, ready to fire on the slightest hostile demonstration. The two rifles and the two guns had been loaded with ball.

The wood was thick on each side of the road and might easily have concealed the convicts, who owing to their weapons would have been really formidable.

The colonists walked rapidly and in silence. Top preceded them, sometimes running on the road, sometimes taking a ramble into the wood, but always quiet and not appearing to fear anything unusual. And they could be sure that the faithful dog would not allow them to be surprised, but would bark at the least appearance of danger.

Cyrus Harding and his companions followed beside the road the wire which connected the corral with Granite House. After walking for nearly two miles, they had not as yet discovered any explanation of the difficulty. The posts were in good order, the wire regularly extended. However, at that moment the engineer observed that the wire appeared to be slack, and on arriving at post No. 74, Herbert, who was in advance stopped, exclaiming—

"The wire is broken!"

His companions hurried forward and arrived at the spot where the lad was standing. The post was rooted up and lying across the path. The unexpected explanation of the difficulty was here, and it was evident that the despatches from Granite House had not been received at the corral, nor those from the corral at Granite House.

"It wasn't the wind that blew down this post," observed Pencroft.

"No," replied Gideon Spilett. "The earth has been dug up round its foot, and it has been torn up by the hand of man."

"Besides, the wire is broken," added Herbert, showing that the wire had been snapped.

"Is the fracture recent?" asked Harding.

"Yes," answered Herbert, "it has certainly been done quite lately."

"To the corral! to the corral!" exclaimed the sailor.

The colonists were now half way between Granite House and the corral, having still two miles and a half to go. They pressed forward with redoubled speed.

Indeed, it was to be feared that some serious accident had occurred in the corral. No doubt, Ayrton might have sent a telegram which had not arrived, but this was not the reason why his companions were so uneasy, for, a more unaccountable circumstance, Ayrton, who had promised to return the evening before, had not reappeared. In short, it was not without a motive that all communication had been stopped between the corral and Granite House, and who but the convicts could have any interest in interrupting this communication?

The settlers fastened on, their hearts oppressed with anxiety. They were sincerely attached to their new companion. Were they to find him struck down by the hands of those of whom he was formerly the leader?

Soon they arrived at the place where the road led along the side of the little stream which flowed from the Red Creek and watered the meadows of the corral. They then moderated their pace so that they should not be out of breath at the moment when a struggle might be necessary. Their guns were in their hands ready cocked. The forest
was watched on every side. Top uttered sullen groans which were rather ominous.

At last the palisade appeared through the trees. No trace of any damage could be seen. The gate was shut as usual. Deep silence reigned in the corral. Neither the accustomed bleating of the sheep nor Ayrton's voice could be heard.

"Let us enter," said Cyrus Harding.

And the engineer advanced, while his companions, keeping watch about twenty paces behind him, were ready to fire at a moment's notice.

Harding raised the inner latch of the gate and was about to push it back, when Top barked loudly. A report sounded and was responded to by a cry of pain.

Herbert, struck by a bullet, lay stretched on the ground.

Chapter 7

At Herbert's cry, Pencroft, letting his gun fall, rushed towards him.

"They have killed him!" he cried. "My boy! They have killed him!"

Cyrus Harding and Gideon Spilett ran to Herbert.

The reporter listened to ascertain if the poor lad's heart was still beating.

"He lives," said he, "but he must be carried--"

"To Granite House? that is impossible!" replied the engineer.

"Into the corral, then!" said Pencroft.

"In a moment," said Harding.

And he ran round the left corner of the palisade. There he found a convict, who aiming at him, sent a ball through his hat. In a few seconds, before he had even time to fire his second barrel, he fell, struck to the heart by Harding's dagger, more sure even than his gun.

During this time, Gideon Spilett and the sailor hoisted themselves over the palisade, leaped into the enclosure, threw down the props which supported the inner door, ran into the empty house, and soon, poor Herbert was lying on Ayrton's bed. In a few moments, Harding was by his side.

On seeing Herbert senseless, the sailor's grief was terrible.

He sobbed, he cried, he tried to beat his head against the wall.

Neither the engineer nor the reporter could calm him. They themselves were choked with emotion. They could not speak.

However, they knew that it depended on them to rescue from death the poor boy who was suffering beneath their eyes. Gideon Spilett had not passed through the many incidents by which his life had been checkered without acquiring some slight knowledge of medicine. He knew a little of everything, and several times he had been obliged to attend to wounds produced either by a sword-bayonet or shot. Assisted by Cyrus Harding, he proceeded to render the aid Herbert required.

The reporter was immediately struck by the complete stupor in which Herbert lay, a stupor owing either to the hemorrhage, or to the shock, the ball having struck a bone with sufficient force to produce a violent concussion.

Herbert was deadly pale, and his pulse so feeble that Spilett only felt it beat at long intervals, as if it was on the point of stopping.

These symptoms were very serious.

Herbert's chest was laid bare, and the blood having been stanched with handkerchiefs, it was bathed with cold water.

The contusion, or rather the contused wound appeared,—an oval below the chest between the third and fourth ribs. It was there that Herbert had been hit by the bullet.

Cyrus Harding and Gideon Spilett then turned the poor boy over; as they did so, he uttered a moan so feeble that they almost thought it was his last sigh.

Herbert's back was covered with blood from another contused wound, by which the ball had immediately escaped.

"God be praised!" said the reporter, "the ball is not in the body, and we shall not have to extract it."

"But the heart?" asked Harding.

"The heart has not been touched; if it had been, Herbert would be dead!"

"Dead!" exclaimed Pencroft, with a groan.

The sailor had only heard the last words uttered by the reporter.

"No, Pencroft," replied Cyrus Harding, "no! He is not dead. His pulse still beats. He has even uttered a moan. But for your boy's sake, calm yourself. We have need of all our self-possession."
"Do not make us lose it, my friend."

Pencroft was silent, but a reaction set in, and great tears rolled down his cheeks.

In the meanwhile, Gideon Spilett endeavored to collect his ideas, and proceed methodically. After his examination he had no doubt that the ball, entering in front, between the seventh and eighth ribs, had issued behind between the third and fourth. But what mischief had the ball committed in its passage? What important organs had been reached? A professional surgeon would have had difficulty in determining this at once, and still more so the reporter.

However, he knew one thing, this was that he would have to prevent the inflammatory strangulation of the injured parts, then to contend with the local inflammation and fever which would result from the wound, perhaps mortal! Now, what styptics, what antiphlogistics ought to be employed? By what means could inflammation be prevented?

At any rate, the most important thing was that the two wounds should be dressed without delay. It did not appear necessary to Gideon Spilett that a fresh flow of blood should be caused by bathing them in tepid water, and compressing their lips. The hemorrhage had been very abundant, and Herbert was already too much enfeebled by the loss of blood.

The reporter, therefore, thought it best to simply bathe the two wounds with cold water.

Herbert was placed on his left side, and was maintained in that position.

"He must not be moved." said Gideon Spilett. "He is in the most favorable position for the wounds in his back and chest to suppurate easily, and absolute rest is necessary."

"What! can't we carry him to Granite House?" asked Pencroft.

"No, Pencroft," replied the reporter.

"I'll pay the villains off!" cried the sailor, shaking his fist in a menacing manner.

"Pencroft!" said Cyrus Harding.

Gideon Spilett had resumed his examination of the wounded boy. Herbert was still so frightfully pale, that the reporter felt anxious.

"Cyrus," said he, "I am not a surgeon. I am in terrible perplexity. You must aid me with your advice, your experience!"

"Take courage, my friend," answered the engineer, pressing the reporter's hand. "Judge coolly. Think only of this: Herbert must be saved!"

These words restored to Gideon Spilett that self-possession which he had lost in a moment of discouragement on feeling his great responsibility. He seated himself close to the bed. Cyrus Harding stood near. Pencroft had torn up his shirt, and was mechanically making lint.

Spilett then explained to Cyrus Harding that he thought he ought first of all to stop the hemorrhage, but not close the two wounds, or cause their immediate cicatrization, for there had been internal perforation, and the suppuration must not be allowed to accumulate in the chest.

Harding approved entirely, and it was decided that the two wounds should be dressed without attempting to close them by immediate coaptation.

And now did the colonists possess an efficacious agent to act against the inflammation which might occur?

Yes. They had one, for nature had generously lavished it. They had cold water, that is to say, the most powerful sedative that can be employed against inflammation of wounds, the most efficacious therapeutic agent in grave cases, and the one which is now adopted by all physicians. Cold water has, moreover, the advantage of leaving the wound in absolute rest, and preserving it from all premature dressing, a considerable advantage, since it has been found by experience that contact with the air is dangerous during the first days.

Gideon Spilett and Cyrus Harding reasoned thus with their simple good sense, and they acted as the best surgeon would have done. Compresses of linen were applied to poor Herbert's two wounds, and were kept constantly wet with cold water.

The sailor had at first lighted a fire in the hut, which was not wanting in things necessary for life. Maple sugar, medicinal plants, the same which the lad had gathered on the banks of Lake Grant, enabled them to make some refreshing drinks, which they gave him without his taking any notice of it. His fever was extremely high, and all that day and night passed without his becoming conscious.

Herbert's life hung on a thread, and this thread might break at any moment. The next day, the 12th of November, the hopes of Harding and his companions slightly revived. Herbert had come out of his long stupor. He opened his eyes, he recognized Cyrus Harding, the reporter, and Pencroft. He uttered two or three words. He did not know what had happened. They told him, and Spilett begged him to remain perfectly still, telling him that his life was not in danger, and that his wounds would heal in a few days. However, Herbert scarcely suffered at all, and the cold water with which they were constantly bathed, prevented any inflammation of the wounds. The suppuration was
established in a regular way, the fever did not increase, and it might now be hoped that this terrible wound would not involve any catastrophe. Pencroft felt the swelling of his heart gradually subside. He was like a sister of mercy, like a mother by the bed of her child.

Herbert dozed again, but his sleep appeared more natural.

"Tell me again that you hope, Mr. Spilett," said Pencroft. "Tell me again that you will save Herbert!"

"Yes, we will save him!" replied the reporter. "The wound is serious, and, perhaps, even the ball has traversed the lungs, but the perforation of this organ is not fatal."

"God bless you!" answered Pencroft.

As may be believed, during the four-and-twenty hours they had been in the corral, the colonists had no other thought than that of nursing Herbert. They did not think either of the danger which threatened them should the convicts return, or of the precautions to be taken for the future.

But on this day, while Pencroft watched by the sick-bed, Cyrus Harding and the reporter consulted as to what it would be best to do.

First of all they examined the corral. There was not a trace of Ayrton. Had the unhappy man been dragged away by his former accomplices? Had he resisted, and been overcome in the struggle? This last supposition was only too probable. Gideon Spilett, at the moment he scaled the palisade, had clearly seen some one of the convicts running along the southern spur of Mount Franklin, towards whom Top had sprung. It was one of those whose object had been so completely defeated by the rocks at the mouth of the Mercy. Besides, the one killed by Harding, and whose body was found outside the enclosure, of course belonged to Bob Harvey's crew.

As to the corral, it had not suffered any damage. The gates were closed, and the animals had not been able to disperse in the forest. Nor could they see traces of any struggle, any devastation, either in the hut, or in the palisade. The ammunition only, with which Ayrton had been supplied, had disappeared with him.

"The unhappy man has been surprised," said Harding, "and as he was a man to defend himself, he must have been overpowered."

"Yes, that is to be feared!" said the reporter. "Then, doubtless, the convicts installed themselves in the corral where they found plenty of everything, and only fled when they saw us coming. It is very evident, too, that at this moment Ayrton, whether living or dead, is not here!"

"We shall have to beat the forest," said the engineer, "and rid the island of these wretches. Pencroft's presentiments were not mistaken, when he wished to hunt them as wild beasts. That would have spared us all these misfortunes!"

"Yes," answered the reporter, "but now we have the right to be merciless!"

"At any rate," said the engineer, "we are obliged to wait some time, and to remain at the corral until we can carry Herbert without danger to Granite House."

"But Neb?" asked the reporter.

"Neb is in safety."

"But if, uneasy at our absence, he would venture to come?"

"He must not come!" returned Cyrus Harding quickly. "He would be murdered on the road!"

"It is very probable, however, that he will attempt to rejoin us!"

"Ah, if the telegraph still acted, he might be warned! But that is impossible now! As to leaving Pencroft and Herbert here alone, we could not do it! Well, I will go alone to Granite House."

"No, no! Cyrus," answered the reporter, "you must not expose yourself! Your courage would be of no avail. The villains are evidently watching the corral, they are hidden in the thick woods which surround it, and if you go we shall soon have to regret two misfortunes instead of one!"

"But Neb?" repeated the engineer. "It is now four-and-twenty hours since he has had any news of us! He will be sure to come!"

"And as he will be less on his guard than we should be ourselves," added Spilett, "he will be killed!"

"Is there really no way of warning him?"

While the engineer thought, his eyes fell on Top, who, going backwards and forwards seemed to say,--

"Am not I here?"

"Top!" exclaimed Cyrus Harding.

The animal sprang at his master's call.

"Yes, Top will go," said the reporter, who had understood the engineer.

"Top can go where we cannot! He will carry to Granite House the news of the corral, and he will bring back to us that from Granite House!"

"Quick!" said Harding. "Quick!"

Spilett rapidly tore a leaf from his note-book, and wrote these words:--
"Herbert wounded. We are at the corral. Be on your guard. Do not leave Granite House. Have the convicts appeared in the neighborhood? Reply by Top."

This laconic note contained all that Neb ought to know, and at the same time asked all that the colonists wished to know. It was folded and fastened to Top's collar in a conspicuous position.

"Top, my dog," said the engineer, caressing the animal, "Neb, Top! Neb! Go, go!"

Top bounded at these words. He understood, he knew what was expected of him. The road to the corral was familiar to him. In less than an hour he could clear it, and it might be hoped that where neither Cyrus Harding nor the reporter could have ventured without danger, Top, running among the grass or in the wood, would pass unperceived.

The engineer went to the gate of the corral and opened it.
"Neb, Top! Neb!" repeated the engineer, again pointing in the direction of Granite House.
Top sprang forwards, then almost immediately disappeared.
"He will get there!" said the reporter.
"Yes, and he will come back, the faithful animal!"
"What o'clock is it?" asked Gideon Spilett.
"Ten."
"In an hour he may be here. We will watch for his return."

The gate of the corral was closed. The engineer and the reporter re-entered the house. Herbert was still in a sleep. Pencroft kept the compressor always wet. Spilett, seeing there was nothing he could do at that moment, busied himself in preparing some nourishment, while attentively watching that part of the enclosure against the hill, at which an attack might be expected.

The settlers awaited Top's return with much anxiety. A little before eleven o'clock, Cyrus Harding and the reporter, rifle in hand, were behind the gate, ready to open it at the first bark of their dog.

They did not doubt that if Top had arrived safely at Granite House, Neb would have sent him back immediately. They had both been there for about ten minutes, when a report was heard, followed by repeated barks.

The engineer opened the gate, and seeing smoke a hundred feet off in the wood, he fired in that direction. Almost immediately Top bounded into the corral, and the gate was quickly shut.
"Top, Top!" exclaimed the engineer, taking the dog's great honest head between his hands.

A note was fastened to his neck, and Cyrus Harding read these words, traced in Neb's large writing:--"No pirates in the neighborhood of Granite House. I will not stir. Poor Mr. Herbert!"

Chapter 8

So the convicts were still there, watching the corral, and determined to kill the settlers one after the other. There was nothing to be done but to treat them as wild beasts. But great precautions must be taken, for just now the wretches had the advantage on their side, seeing, and not being seen, being able to surprise by the suddenness of their attack, yet not to be surprised themselves. Harding made arrangements, therefore, for living in the corral, of which the provisions would last for a tolerable length of time. Ayrton's house had been provided with all that was necessary for existence, and the convicts, scared by the arrival of the settlers, had not had time to pillage it. It was probable, as Gideon Spilett observed, that things had occurred as follows:

The six convicts, disembarking on the island, had followed the southern shore, and after having traversed the double shore of the Serpentine Peninsula, not being inclined to venture into the Far West woods, they had reached the mouth of Falls River. From this point, by following the right bank of the watercourse, they would arrive at the spurs of Mount Franklin, among which they would naturally seek a retreat, and they could not have been long in discovering the corral, then uninhabited. There they had regularly installed themselves, awaiting the moment to put their abominable schemes into execution. Ayrton's arrival had surprised them, but they had managed to overpower the unfortunate man, and--the rest may be easily imagined!

Now, the convicts,--reduced to five, it is true, but well armed,--were roaming the woods, and to venture there was to expose themselves to their attacks, which could be neither guarded against nor prevented.
"Wait! There is nothing else to be done!" repeated Cyrus Harding. "When Herbert is cured, we can organize a general battle of the island, and have satisfaction of these convicts. That will be the object of our grand expedition at the same time--"

"As the search for our mysterious protector," added Gideon Spilett, finishing the engineer's sentence. "And it must be acknowledged, my dear Cyrus, that this time his protection was wanting at the very moment when it was most necessary to us!"

"Who knows?" replied the engineer.
"What do you mean?" asked the reporter.

"That we are not at the end of our trouble yet, my dear Spilett, and that his powerful intervention may have another opportunity of exercising itself. But that is not the question now. Herbert's life before everything."

This was the colonists' saddest thought. Several days passed, and the poor boy's state was happily no worse. Cold water, always kept at a suitable temperature, had completely prevented the inflammation of the wounds. It even seemed to the reporter that this water, being slightly sulphurous,—which was explained by the neighborhood of the volcano, had a more direct action on the healing. The suppuration was much less abundant, and thanks to the incessant care by which he was surrounded!—Herbert returned to life, and his fever abated. He was besides subjected to a severe diet, and consequently his weakness was and would be extreme; but there was no want of refreshing drinks, and absolute rest was of the greatest benefit to him. Cyrus Harding, Gideon Spilett, and Pencroft had become very skilful in dressing the lad's wounds. All the linen in the house had been sacrificed. Herbert's wounds, covered with compresses and lint, were pressed neither too much nor too little, so as to cause their cicatrization without effecting any inflammatory reaction. The reporter used extreme care in the dressing, knowing well the importance of it, and repeating to his companions that which most surgeons willingly admit, that it is perhaps rarer to see a dressing well done than an operation well performed.

In ten days, on the 22nd of November, Herbert was considerably better. He had begun to take some nourishment.

The color was returning to his cheeks, and his bright eyes smiled at his nurses. He talked a little, notwithstanding Pencroft's efforts, who talked incessantly to prevent him from beginning to speak, and told him the most improbable stories. Herbert had questioned him on the subject of Ayrton, whom he was astonished not to see near him, thinking that he was at the corral. But the sailor, not wishing to distress Herbert, contented himself by replying that Ayrton had rejoined Neb, so as to defend Granite House.

"Humph!" said Pencroft, "these pirates! they are gentlemen who have no right to any consideration! And the captain wanted to win them by kindness! I'll send them some kindness, but in the shape of a good bullet!"

"And have they not been seen again?" asked Herbert.

"No, my boy," answered the sailor, "but we shall find them, and when you are cured we shall see if the cowards who strike us from behind will dare to meet us face to face!"

"I am still very weak, my poor Pencroft!"

"Well! your strength will return gradually! What's a ball through the chest? Nothing but a joke! I've seen many, and I don't think much of them!"

At last things appeared to be going on well, and if no complication occurred, Herbert's recovery might be regarded as certain. But what would have been the condition of the colonists if his state had been aggravated,—if, for example, the ball had remained in his body, if his arm or his leg had had to be amputated?

"No," said Spilett more than once, "I have never thought of such a contingency without shuddering!"

"And yet, if it had been necessary to operate," said Harding one day to him, "you would not have hesitated?"

"No, Cyrus!" said Gideon Spilett, "but thank God that we have been spared this complication!"

As in so many other conjectures, the colonists had appealed to the logic of that simple good sense of which they were so proud, and to which they had made so much use. But that is not the question now. Herbert's life before everything.

The wellbeing of the colony was therefore complete. Moreover, in certain occurrences an inexplicable influence had come to their aid!... But all that could only be for a time.

In short, Cyrus Harding believed that fortune had turned against them.

In fact, the convicts' ship had appeared in the waters of the island, and if the pirates had been, so to speak, miraculously destroyed, six of them, at least, had escaped the catastrophe. They had disembarked on the island, and it was almost impossible to get at the five who survived. Ayrton had no doubt been murdered by these wretches, who possessed firearms, and at the first use that they had made of them, Herbert had fallen, wounded almost mortally. Were these the first blows aimed by adverse fortune at the colonists? This was often asked by Harding. This was often repeated by the reporter; and it appeared to him also that the intervention, so strange, yet so efficacious, which till then had served them so well, had now failed them. Had this mysterious being, whatever he was, whose existence could not be denied, abandoned the island? Had he in his turn succumbed?

No reply was possible to these questions. But it must not be imagined that because Harding and his companions
spoke of these things, they were men to despair. Far from that. They looked their situation in the face, they analyzed
the chances, they prepared themselves for any event, they stood firm and straight before the future, and if adversity
was at last to strike them, it would find in them men prepared to struggle against it.

Chapter 9

The convalescence of the young invalid was regularly progressing. One thing only was now to be desired, that
his state would allow him to be brought to Granite House. However well built and supplied the corral house was, it
could not be so comfortable as the healthy granite dwelling. Besides, it did not offer the same security, and its
tenants, notwithstanding their watchfulness, were here always in fear of some shot from the convicts. There, on the
contrary, in the middle of that impregnable and inaccessible cliff, they would have nothing to fear, and any attack on
their persons would certainly fail. They therefore waited impatiently for the moment when Herbert might be moved
without danger from his wound, and they were determined to make this move, although the communication through
Jacamar Wood was very difficult.

They had no news from Neb, but were not uneasy on that account. The courageous Negro, well entrenched in the
depths of Granite House, would not allow himself to be surprised. Top had not been sent again to him, as it appeared
useless to expose the faithful dog to some shot which might deprive the settlers of their most useful auxiliary.

They waited, therefore, although they were anxious to be reunited at Granite House. It pained the engineer to see
his forces divided, for it gave great advantage to the pirates. Since Ayrton's disappearance they were only four
against five, for Herbert could not yet be counted, and this was not the least care of the brave boy, who well
understood the trouble of which he was the cause.

The question of knowing how, in their condition, they were to act against the pirates, was thoroughly discussed
on the 29th of November by Cyrus Harding, Gideon Spilett, and Pencroft, at a moment when Herbert was asleep and
could not hear them.

"My friends," said the reporter, after they had talked of Neb and of the impossibility of communicating with him,
"I think,--like you, that to venture on the road to the corral would be to risk receiving a gunshot without being able
to return it. But do you not think that the best thing to be done now is to openly give chase to these wretches?"

"That is just what I was thinking," answered Pencroft. "I believe we're not fellows to be afraid of a bullet, and as
for me, if Captain Harding approves, I'm ready to dash into the forest! Why, hang it, one man is equal to another!"

"But is he equal to five?" asked the engineer.

"I will join Pencroft," said the reporter, "and both of us, well-armed and accompanied by Top--"

"My dear Spilett, and you, Pencroft," answered Harding, "let us reason coolly. If the convicts were hid in one
spot of the island, if we knew that spot, and had only to dislodge them, I would undertake a direct attack; but is there
not occasion to fear, on the contrary, that they are sure to fire the first shot?"

"Well, captain," cried Pencroft, "a bullet does not always reach its mark."

"That which struck Herbert did not miss, Pencroft," replied the engineer. "Besides, observe that if both of you
left the corral I should remain here alone to defend it. Do you imagine that the convicts will not see you leave it, that
they will not allow you to enter the forest, and that they will not attack it during your absence, knowing that there is
no one here but a wounded boy and a man?"

"You are right, captain," replied Pencroft, his chest swelling with sullen anger. "You are right; they will do all
they can to retake the corral, which they know to be well stored; and alone you could not hold it against them."

"Oh, if we were only at Granite House!"

"If we were at Granite House," answered the engineer, "the case would be very different. There I should not be
afraid to leave Herbert with one, while the other three went to search the forests of the island. But we are at the
corral, and it is best to stay here until we can leave it together."

Cyrus Harding's reasoning was unanswerable, and his companions understood it well.

"If only Ayrton was still one of us!" said Gideon Spilett. "Poor fellow! his return to social life will have been but
of short duration."

"If he is dead," added Pencroft, in a peculiar tone.

"Do you hope, then, Pencroft, that the villains have spared him?" asked Gideon Spilett.

"Yes, if they had any interest in doing so."

"What! you suppose that Ayrton finding his old companions, forgetting all that he owes us--"

"Who knows?" answered the sailor, who did not hazard this shameful supposition without hesitating.

"Pencroft," said Harding, taking the sailor's arm, "that is a wicked idea of yours, and you will distress me much
if you persist in speaking thus. I will answer for Ayrton's fidelity."

"And I also," added the reporter quickly.
"Yes, yes, captain, I was wrong," replied Pencroft; "it was a wicked idea indeed that I had, and nothing justifies it. But what can I do? I'm not in my senses. This imprisonment in the corral wearies me horribly, and I have never felt so excited as I do now.

"Be patient, Pencroft," replied the engineer. "How long will it be, my dear Spilett, before you think Herbert may be carried to Granite House?"

"That is difficult to say, Cyrus," answered the reporter, "for any imprudence might involve terrible consequences. But his convalescence is progressing, and if he continues to gain strength, in eight days from now--well, we shall see."

Eight days! That would put off the return to Granite House until the first days of December. At this time two months of spring had already passed. The weather was fine, and the heat began to be great. The forests of the island were in full leaf, and the time was approaching when the usual crops ought to be gathered. The return to the plateau of Prospect Heights would, therefore, be followed by extensive agricultural labors, interrupted only by the projected expedition through the island.

It can, therefore, be well understood how injurious this seclusion in the corral must have been to the colonists. But if they were compelled to bow before necessity, they did not do so without impatience.

Once or twice the reporter ventured out into the road and made the tour of the palisade. Top accompanied him, and Gideon Spilett, his gun cocked, was ready for any emergency.

He met with no misadventure and found no suspicious traces. His dog would have warned him of any danger, and, as Top did not bark, it might be concluded that there was nothing to fear at the moment at least, and that the convicts were occupied in another part of the island.

However, on his second sortie, on the 27th of November, Gideon Spilett, who had ventured a quarter of a mile into the woods, towards the south of the mountain, remarked that Top scented something. The dog had no longer his unconcerned manner; he went backwards and forwards, ferreting among the grass and bushes as if his smell had revealed some suspicious object to him.

Gideon Spilett followed Top, encouraged him, excited him by his voice, while keeping a sharp look-out, his gun ready to fire, and sheltering himself behind the trees. It was not probable that Top scented the presence of man, for in that case, he would have announced it by half-uttered, sullen, angry barks. Now, as he did not growl, it was because danger was neither near nor approaching.

Nearly five minutes passed thus, Top rummaging, the reporter following him prudently when, all at once, the dog rushed towards a thick bush, and drew out a rag.

It was a piece of cloth, stained and torn, which Spilett immediately brought back to the corral. There it was examined by the colonists, who found that it was a fragment of Ayrton's waistcoat, a piece of that felt, manufactured solely by the Granite House factory.

"You see, Pencroft," observed Harding, "there has been resistance on the part of the unfortunate Ayrton. The convicts have dragged him away in spite of himself! Do you still doubt his honesty?"

"No, captain," answered the sailor, "and I repented of my suspicion a long time ago! But it seems to me that something may be learned from the incident."

"What is that?" asked the reporter.

"It is that Ayrton was not killed at the corral! That they dragged him away living, since he has resisted. Therefore, perhaps, he is still living!"

"Perhaps, indeed," replied the engineer, who remained thoughtful.

This was a hope, to which Ayrton's companions could still hold. Indeed, they had before believed that, surprised in the corral, Ayrton had fallen by a bullet, as Herbert had fallen. But if the convicts had not killed him at first, if they had brought him living to another part of the island, might it not be admitted that he was still their prisoner? Perhaps, even, one of them had found in Ayrton his old Australian companion Ben Joyce, the chief of the escaped convicts. And who knows but that they had conceived the impossible hope of bringing back Ayrton to themselves? He would have been very useful to them, if they had been able to make him turn traitor!

This incident was, therefore, favorably interpreted at the corral, and it no longer appeared impossible that they should find Ayrton again. On his side, if he was only a prisoner, Ayrton would no doubt do all he could to escape from the hands of the villains, and this would be a powerful aid to the settlers!

"At any rate," observed Gideon Spilett, "if happily Ayrton did manage to escape, he would go directly to Granite House, for he could not know of the attempted assassination of which Herbert has been a victim, and consequently would never think of our being imprisoned in the corral."

"Oh! I wish that he was there, at Granite House!" cried Pencroft, "and that we were there, too! For, although the rascals can do nothing to our house, they may plunder the plateau, our plantations, our poultry-yard!"

Pencroft had become a thorough farmer, heartily attached to his crops. But it must be said that Herbert was more
anxious than any to return to Granite House, for he knew how much the presence of the settlers was needed there. And it was he who was keeping them at the corral! Therefore, one idea occupied his mind—to leave the corral, and when! He believed he could bear removal to Granite House. He was sure his strength would return more quickly in his room, with the air and sight of the sea!

Several times he pressed Gideon Spilett, but the latter, fearing, with good reason, that Herbert's wounds, half healed, might reopen on the way, did not give the order to start.

However, something occurred which compelled Cyrus Harding and his two friends to yield to the lad's wish, and God alone knew that this determination might cause them grief and remorse.

It was the 29th of November, seven o'clock in the evening. The three settlers were talking in Herbert's room, when they heard Top utter quick barks.

Harding, Pencroft, and Spilett seized their guns and ran out of the house. Top, at the foot of the palisade, was jumping, barking, but it was with pleasure, not anger.

"Some one is coming."
"Yes."
"It is not an enemy!"
"Neb, perhaps?"
"Or Ayrton?"

These words had hardly been exchanged between the engineer and his two companions when a body leaped over the palisade and fell on the ground inside the corral.

It was Jup, Master Jup in person, to whom Top immediately gave a most cordial reception.

"Jup!" exclaimed Pencroft.
"Neb has sent him to us," said the reporter.
"Then," replied the engineer, "he must have some note on him."

Pencroft rushed up to the orang. Certainly if Neb had any important matter to communicate to his master he could not employ a more sure or more rapid messenger, who could pass where neither the colonists could, nor even Top himself.

Cyrus Harding was not mistaken. At Jup's neck hung a small bag, and in this bag was found a little note traced by Neb's hand.

The despair of Harding and his companions may be imagined when they read these words:--
"Friday, six o'clock in the morning.
"Plateau invaded by convicts.
"Neb."

They gazed at each other without uttering a word, then they re-entered the house. What were they to do? The convicts on Prospect Heights! that was disaster, devastation, ruin.

Herbert, on seeing the engineer, the reporter, and Pencroft re-enter, guessed that their situation was aggravated, and when he saw Jup, he no longer doubted that some misfortune menaced Granite House.

"Captain Harding," said he, "I must go; I can bear the journey. I must go."

Gideon Spilett approached Herbert; then, having looked at him,--
"Let us go, then!" said he.

The question was quickly decided whether Herbert should be carried on a litter or in the cart which had brought Ayrton to the corral. The motion of the litter would have been more easy for the wounded lad, but it would have necessitated two bearers, that is to say, there would have been two guns less for defense if an attack was made on the road. Would they not, on the contrary, by employing the cart leave every arm free? Was it impossible to place the mattress on which Herbert was lying in it, and to advance with so much care that any jolt should be avoided? It could be done.

The cart was brought. Pencroft harnessed the onager. Cyrus Harding and the reporter raised Herbert's mattress and placed it on the bottom of the cart. The weather was fine. The sun's bright rays glanced through the trees.

"Are the guns ready?" asked Cyrus Harding.

They were. The engineer and Pencroft, each armed with a double-barreled gun, and Gideon Spilett carrying his rifle, had nothing to do but start.

"Are you comfortable, Herbert?" asked the engineer.

"Ah, captain," replied the lad, "don't be uneasy, I shall not die on the road!"

While speaking thus, it could be seen that the poor boy had called up all his energy, and by the energy of a powerful will had collected his failing strength.

The engineer felt his heart sink painfully. He still hesitated to give the signal for departure; but that would have driven Herbert to despair—killed him perhaps.
"Forward!" said Harding.

The gate of the corral was opened. Jup and Top, who knew when to be silent, ran in advance. The cart came out, the gate was reclosed, and the onager, led by Pencroft, advanced at a slow pace.

Certainly, it would have been safer to have taken a different road than that which led straight from the corral to Granite House, but the cart would have met with great difficulties in moving under the trees. It was necessary, therefore, to follow this way, although it was well known to the convicts.

Cyrus Harding and Gideon Spilett walked one on each side of the cart, ready to answer to any attack. However, it was not probable that the convicts would have yet left the plateau of Prospect Heights.

Neb's note had evidently been written and sent as soon as the convicts had shown themselves there. Now, this note was dated six o'clock in the morning, and the active orang, accustomed to come frequently to the corral, had taken scarcely three quarters of an hour to cross the five miles which separated it from Granite House. They would, therefore, be safe at that time, and if there was any occasion for firing, it would probably not be until they were in the neighborhood of Granite House. However, the colonists kept a strict watch. Top and Jup, the latter armed with his club, sometimes in front, sometimes beating the wood at the sides of the road, signalized no danger.

The cart advanced slowly under Pencroft's guidance. It had left the corral at half-past seven. An hour after, four out of the five miles had been cleared, without any incident having occurred. The road was as deserted as all that part of the Jacamar Wood which lay between the Mercy and the lake. There was no occasion for any warning. The wood appeared as deserted as on the day when the colonists first landed on the island.

They approached the plateau. Another mile and they would see the bridge over Creek Glycerine. Cyrus Harding expected to find it in its place; supposing that the convicts would have crossed it, and that, after having passed one of the streams which enclosed the plateau, they would have taken the precaution to lower it again, so as to keep open a retreat.

At length an opening in the trees allowed the sea-horizon to be seen. But the cart continued its progress, for not one of its defenders thought of abandoning it.

At that moment Pencroft stopped the onager, and in a hoarse voice,—

"Oh! the villains!" he exclaimed.

And he pointed to a thick smoke rising from the mill, the sheds, and the buildings at the poultry-yard.

A man was moving about in the midst of the smoke. It was Neb.

His companions uttered a shout. He heard, and ran to meet them.

The convicts had left the plateau nearly half-an-hour before, having devastated it!

"And Mr. Herbert?" asked Neb.

Gideon Spilett returned to the cart.

Herbert had lost consciousness!

Chapter 10

Of the convicts, the dangers which menaced Granite House, the ruins with which the plateau was covered, the colonists thought no longer. Herbert's critical state outweighed all other considerations. Would the removal prove fatal to him by causing some internal injury? The reporter could not affirm it, but he and his companions almost despaired of the result. The cart was brought to the bend of the river. There some branches, disposed as a liner, received the mattress on which lay the unconscious Herbert. Ten minutes after, Cyrus Harding, Spilett, and Pencroft were at the foot of the cliff, leaving Neb to take the cart on to the plateau of Prospect Heights. The lift was put in motion, and Herbert was soon stretched on his bed in Granite House.

What cares were lavished on him to bring him back to life! He smiled for a moment on finding himself in his room, but could scarcely even murmur a few words, so great was his weakness. Gideon Spilett examined his wounds. He feared to find them reopened, having been imperfectly healed. There was nothing of the sort. From whence, then, came this prostration? why was Herbert so much worse? The lad then fell into a kind of feverish sleep, and the reporter and Pencroft remained near the bed. During this time, Harding told Neb all that had happened at the corral, and Neb recounted to his master the events of which the plateau had just been the theater.

It was only during the preceding night that the convicts had appeared on the edge of the forest, at the approaches to Creek Glycerine. Neb, who was watching near the poultry-yard, had not hesitated to fire at one of the pirates, who was about to cross the stream; but in the darkness he could not tell whether the man had been hit or not. At any rate, it was not enough to frighten away the band, and Neb had only just time to get up to Granite House, where at least he was in safety.

But what was he to do there? How prevent the devastations with which the convicts threatened the plateau? Had Neb any means by which to warn his master? And, besides, in what situation were the inhabitants of the corral
themselves? Cyrus Harding and his companions had left on the 11th of November, and it was now the 29th. It was, therefore, nineteen days since Neb had had other news than that brought by Top—disastrous news: Ayrton disappeared, Herbert severely wounded, the engineer, reporter, and sailor, as it were, imprisoned in the corral!

What was he to do? asked poor Neb. Personally he had nothing to fear, for the convicts could not reach him in Granite House. But the buildings, the plantations, all their arrangements at the mercy of the pirates! Would it not be best to let Cyrus Harding judge of what he ought to do, and to warn him, at least, of the danger which threatened him?

Neb then thought of employing Jup, and confiding a note to him. He knew the orang's great intelligence, which had been often put to the proof. Jup understood the word corral, which had been frequently pronounced before him, and it may be remembered, too, that he had often driven the cart thither in company with Pencroft. Day had not yet dawned. The active orang would know how to pass unperceived through the woods, of which the convicts, besides, would think he was a native.

Neb did not hesitate. He wrote the note, he tied it to Jup's neck, he brought the ape to the door of Granite House, from which he let down a long cord to the ground; then, several times he repeated these words,—

"Jup Jup! corral, corral!"

The creature understood, seized the cord, glided rapidly down the beach, and disappeared in the darkness without the convicts' attention having been in the least excited.

"You did well, Neb," said Harding, "but perhaps in not warning us you would have done still better!"

And, in speaking thus, Cyrus Harding thought of Herbert, whose recovery the removal had so seriously checked.

Neb ended his account. The convicts had not appeared at all on the beach. Not knowing the number of the island's inhabitants, they might suppose that Granite House was defended by a large party. They must have remembered that during the attack by the brig numerous shot had been fired both from the lower and upper rocks, and no doubt they did not wish to expose themselves. But the plateau of Prospect Heights was open to them, and not covered by the fire of Granite House. They gave themselves up, therefore, to their instinct of destruction,—plundering, burning, devastating everything,—and only retiring half an hour before the arrival of the colonists, whom they believed still confined in the corral.

On their retreat, Neb hurried out. He climbed the plateau at the risk of being perceived and fired at, tried to extinguish the fire which was consuming the buildings of the poultry-yard, and had struggled, though in vain, against it until the cart appeared at the edge of the wood.

Such had been these serious events. The presence of the convicts constituted a permanent source of danger to the settlers in Lincoln Island, until then so happy, and who might now expect still greater misfortunes.

Spilett remained in Granite House with Herbert and Pencroft, while Cyrus Harding, accompanied by Neb, proceeded to judge for himself of the extent of the disaster.

It was fortunate that the convicts had not advanced to the foot of Granite House. The workshop at the Chimneys would in that case not have escaped destruction. But after all, this evil would have been more easily reparable than the ruins accumulated on the plateau of Prospect Heights. Harding and Neb proceeded towards the Mercy, and ascended its left bank without meeting with any trace of the convicts; nor on the other side of the river, in the depths of the wood, could they perceive any suspicious indications.

Besides, it might be supposed that in all probability either the convicts knew of the return of the settlers to Granite House, by having seen them pass on the road from the corral, or, after the devastation of the plateau, they had penetrated into Jacamar Wood, following the course of the Mercy, and were thus ignorant of their return.

In the former case, they must have returned towards the corral, now without defenders, and which contained valuable stores.

In the latter, they must have regained their encampment, and would wait on opportunity to recommence the attack.

It was, therefore, possible to prevent them, but any enterprise to clear the island was now rendered difficult by reason of Herbert's condition. Indeed, their whole force would have been barely sufficient to cope with the convicts, and just now no one could leave Granite House.

The engineer and Neb arrived on the plateau. Desolation reigned everywhere. The fields had been trampled over; the ears of wheat, which were nearly full-grown, lay on the ground. The other plantations had not suffered less.

The kitchen-garden was destroyed. Happily, Granite House possessed a store of seed which would enable them to repair these misfortunes.

As to the wall and buildings of the poultry-yard and the onagers stable, the fire had destroyed all. A few terrified creatures roamed over the plateau. The birds, which during the fire had taken refuge on the waters of the lake, had already returned to their accustomed spot, and were dabbling on the banks. Everything would have to be reconstructed.
Cyrus Harding's face, which was paler than usual, expressed an internal anger which he commanded with difficulty, but he did not utter a word. Once more he looked at his devastated fields, and at the smoke which still rose from the ruins, then he returned to Granite House.

The following days were the saddest of any that the colonists had passed on the island! Herbert's weakness visibly increased. It appeared that a more serious malady, the consequence of the profound physiological disturbance he had gone through, threatened to declare itself, and Gideon Spilett feared such an aggravation of his condition that he would be powerless to fight against it!

In fact, Herbert remained in an almost continuous state of drowsiness, and symptoms of delirium began to manifest themselves. Refreshing drinks were the only remedies at the colonists' disposal. The fever was not as yet very high, but it soon appeared that it would probably recur at regular intervals. Gideon Spilett first recognized this on the 6th of December.

The poor boy, whose fingers, nose, and ears had become extremely pale, was at first seized with slight shiverings, horripilations, and tremblings. His pulse was weak and irregular, his skin dry, his thirst intense. To this soon succeeded a hot fit; his face became flushed; his skin reddened; his pulse quick; then a profuse perspiration broke out after which the fever seemed to diminish. The attack had lasted nearly five hours.

Gideon Spilett had not left Herbert, who, it was only too certain, was now seized by an intermittent fever, and this fever must be cured at any cost before it should assume a more serious aspect.

"And in order to cure it," said Spilett to Cyrus Harding, "we need a febrifuge."

"A febrifuge--" answered the engineer. "We have neither Peruvian bark, nor sulphate of quinine."

"No," said Gideon Spilett, "but there are willows on the border of the lake, and the bark of the willow might, perhaps, prove to be a substitute for quinine."

"Let us try it without losing a moment," replied Cyrus Harding.

The bark of the willow has, indeed, been justly considered as a succedaneum for Peruvian bark, as has also that of the horse-chestnut tree, the leaf of the holly, the snake-root, etc. It was evidently necessary to make trial of this substance, although not so valuable as Peruvian bark, and to employ it in its natural state, since they had no means for extracting its essence.

Cyrus Harding went himself to cut from the trunk of a species of black willow, a few pieces of bark; he brought them back to Granite House, and reduced them to a powder, which was administered that same evening to Herbert.

The night passed without any important change. Herbert was somewhat delirious, but the fever did not reappear in the night, and did not return either during the following day.

Pencroft again began to hope. Gideon Spilett said nothing. It might be that the fever was not quotidian, but tertian, and that it would return next day. Therefore, he awaited the next day with the greatest anxiety.

It might have been remarked besides that during this period Herbert remained utterly prostrate, his head weak and giddy. Another symptom alarmed the reporter to the highest degree. Herbert's liver became congested, and soon a more intense delirium showed that his brain was also affected.

Gideon Spilett was overwhelmed by this new complication. He took the engineer aside.

"It is a malignant fever," said he.

"A malignant fever!" cried Harding. "You are mistaken, Spilett. A malignant fever does not declare itself spontaneously; its germ must previously have existed."

"I am not mistaken," replied the reporter. "Herbert no doubt contracted the germ of this fever in the marshes of the island. He has already had one attack; should a second come on and should we not be able to prevent a third, he is lost."

"But the willow bark?"

"That is insufficient," answered the reporter, "and the third attack of a malignant fever, which is not arrested by means of quinine, is always fatal."

Fortunately, Pencroft heard nothing of this conversation or he would have gone mad.

It may be imagined what anxiety the engineer and the reporter suffered during the day of the 7th of December and the following night.

Towards the middle of the day the second attack came on. The crisis was terrible. Herbert felt himself sinking. He stretched his arms towards Cyrus Harding, towards Spilett, towards Pencroft. He was so young to die! The scene was heart-rending. They were obliged to send Pencroft away.

The fit lasted five hours. It was evident that Herbert could not survive a third.

The night was frightful. In his delirium Herbert uttered words which went to the hearts of his companions. He struggled with the convicts, he called to Ayrton, he poured forth entreaties to that mysterious being,—that powerful unknown protector,—whose image was stamped upon his mind; then he again fell into a deep exhaustion which completely prostrated him. Several times Gideon Spilett thought that the poor boy was dead.
The next day, the 8th of December, was but a succession of the fainting fits. Herbert's thin hands clutched the sheets. They had administered further doses of pounded bark, but the reporter expected no result from it.

"If before tomorrow morning we have not given him a more energetic febrifuge," said the reporter, "Herbert will be dead."

Night arrived--the last night, it was too much to be feared, of the good, brave, intelligent boy, so far in advance of his years, and who was loved by all as their own child. The only remedy which existed against this terrible malignant fever, the only specific which could overcome it, was not to be found in Lincoln Island.

During the night of the 8th of December, Herbert was seized by a more violent delirium. His liver was fearfully congested, his brain affected, and already it was impossible for him to recognize any one.

Would he live until the next day, until that third attack which must infallibly carry him off? It was not probable. His strength was exhausted, and in the intervals of fever he lay as one dead.

Towards three o'clock in the morning Herbert uttered a piercing cry. He seemed to be torn by a supreme convulsion. Neb, who was near him, terrified, ran into the next room where his companions were watching.

Top, at that moment, barked in a strange manner.

All rushed in immediately and managed to restrain the dying boy, who was endeavoring to throw himself out of his bed, while Spilett, taking his arm, felt his pulse gradually quicken.

It was five in the morning. The rays of the rising sun began to shine in at the windows of Granite House. It promised to be a fine day, and this day was to be poor Herbert's last!

A ray glanced on the table placed near the bed.

Suddenly Pencroft, uttering a cry, pointed to the table.

On it lay a little oblong box, of which the cover bore these words:--"SULPHATE OF QUININE."

Chapter 11

Gideon Spilett took the box and opened it. It contained nearly two hundred grains of a white powder, a few particles of which he carried to his lips. The extreme bitterness of the substance precluded all doubt; it was certainly the precious extract of quinine, that pre-eminent antifebrile.

This powder must be administered to Herbert without delay. How it came there might be discussed later.

"Some coffee!" said Spilett.

In a few moments Neb brought a cup of the warm infusion. Gideon Spilett threw into it about eighteen grains of quinine, and they succeeded in making Herbert drink the mixture.

There was still time, for the third attack of the malignant fever had not yet shown itself. How they longed to be able to add that it would not return!

Besides, it must be remarked, the hopes of all had now revived. The mysterious influence had been again exerted, and in a critical moment, when they had despaired of it.

In a few hours Herbert was much calmer. The colonists could now discuss this incident. The intervention of the stranger was more evident than ever. But how had he been able to penetrate during the night into Granite House? It was inexplicable, and, in truth, the proceedings of the genius of the island were not less mysterious than was that genius himself. During this day the sulphate of quinine was administered to Herbert every three hours.

The next day some improvement in Herbert's condition was apparent. Certainly, he was not out of danger, intermittent fevers being subject to frequent and dangerous relapses, but the most assiduous care was bestowed on him. And besides, the specific was at hand; nor, doubtless, was he who had brought it far distant! And the hearts of all were animated by returning hope.

This hope was not disappointed. Ten days after, on the 20th of December, Herbert's convalescence commenced.

He was still weak, and strict diet had been imposed upon him, but no access of fever supervened. And then, the poor boy submitted with such docility to all the prescriptions ordered him! He longed so to get well!

Pencroft was as a man who has been drawn up from the bottom of an abyss. Fits of joy approaching delirium seized him. When the time for the third attack had passed by, he nearly suffocated the reporter in his embrace. Since then, he always called him Dr. Spilett.

The real doctor, however, remained undiscovered.

"We will find him!" repeated the sailor.

Certainly, this man, whoever he was, might expect a somewhat too energetic embrace from the worthy Pencroft!

The month of December ended, and with it the year 1867, during which the colonists of Lincoln Island had of late been so severely tried. They commenced the year 1868 with magnificent weather, great heat, and a tropical temperature, delightfully cooled by the sea-breeze. Herbert's recovery progressed, and from his bed, placed near one of the windows of Granite House, he could inhale the fresh air, charged with ozone, which could not fail to restore
his health. His appetite returned, and what numberless delicate, savory little dishes Neb prepared for him!

"It is enough to make one wish to have a fever oneself!" said Pencroft.

During all this time, the convicts did not once appear in the vicinity of Granite House. There was no news of Ayrton, and though the engineer and Herbert still had some hopes of finding him again, their companions did not doubt but that the unfortunate man had perished. However, this uncertainty could not last, and when once the lad should have recovered, the expedition, the result of which must be so important, would be undertaken. But they would have to wait a month, perhaps, for all the strength of the colony must be put into requisition to obtain satisfaction from the convicts.

However, Herbert's convalescence progressed rapidly. The congestion of the liver had disappeared, and his wounds might be considered completely healed.

During the month of January, important work was done on the plateau of Prospect Heights; but it consisted solely in saving as much as was possible from the devastated crops, either of corn or vegetables. The grain and the plants were gathered, so as to provide a new harvest for the approaching half-season. With regard to rebuilding the poultry-yard, wall, or stables, Cyrus Harding preferred to wait. While he and his companions were in pursuit of the convicts, the latter might very probably pay another visit to the plateau, and it would be useless to give them an opportunity of recommencing their work of destruction. When the island should be cleared of these miscreants, they would set about rebuilding. The young convalescent began to get up in the second week of January, at first for one hour a day, then two, then three. His strength visibly returned, so vigorous was his constitution. He was now eighteen years of age. He was tall, and promised to become a man of noble and commanding presence. From this time his recovery, while still requiring care,—and Dr. Spilett was very strict,—made rapid progress. Towards the end of the month, Herbert was already walking about on Prospect Heights, and the beach.

He derived, from several sea-baths, which he took in company with Pencroft and Neb, the greatest possible benefit. Cyrus Harding thought he might now settle the day for their departure, for which the 15th of February was fixed. The nights, very clear at this time of year, would be favorable to the researches they intended to make all over the island.

The necessary preparations for this exploration were now commenced, and were important, for the colonists had sworn not to return to Granite House until their twofold object had been achieved; on the one hand, to exterminate the convicts, and rescue Ayrton, if he was still living; on the other, to discover who it was that presided so effectually over the fortunes of the colony.

Of Lincoln Island, the settlers knew thoroughly all the eastern coast from Claw Cape to the Mandible Capes, the extensive Tadorn Marsh, the neighborhood of Lake Grant, Jacamar Wood, between the road to the corral and the Mercy, the courses of the Mercy and Red Creek, and lastly, the spurs of Mount Franklin, among which the corral had been established.

They had explored, though only in an imperfect manner, the vast shore of Washington Bay from Claw Cape to Reptile End, the woody and marshy border of the west coast, and the interminable downs, ending at the open mouth of Shark Gulf. But they had in no way surveyed the woods which covered the Serpentine Peninsula, all to the right of the Mercy, the left bank of Falls River, and the wilderness of spurs and valleys which supported three quarters of the base of Mount Franklin, to the east, the north, and the west, and where doubtless many secret retreats existed. Consequently, many millions of acres of the island had still escaped their investigations.

It was, therefore, decided that the expedition should be carried through the Far West, so as to include all that region situated on the right of the Mercy.

It might, perhaps, be better worth while to go direct to the corral, where it might be supposed that the convicts had again taken refuge, either to pillage or to establish themselves there. But either the devastation of the corral would have been an accomplished fact by this time, and it would be too late to prevent it, or it had been the convicts' interest to entrench themselves there, and there would be still time to go and turn them out on their return.

Therefore, after some discussion, the first plan was adhered to, and the settlers resolved to proceed through the wood to Reptile End. They would make their way with their hatchets, and thus lay the first draft of a road which would place Granite House in communication with the end of the peninsula for a length of from sixteen to seventeen miles.

The cart was in good condition. The onagers, well rested, could go a long journey. Provisions, camp effects, a portable stove, and various utensils were packed in the cart, as also weapons and ammunition, carefully chosen from the now complete arsenal of Granite House. But it was necessary to remember that the convicts were, perhaps, roaming about the woods, and that in the midst of these thick forests a shot might quickly be fired and received. It was therefore resolved that the little band of settlers should remain together and not separate under any pretext whatever.

It was also decided that no one should remain at Granite House. Top and Jup themselves were to accompany the
expedition; the inaccessible dwelling needed no guard. The 14th of February, eve of the departure, was consecrated entirely to repose, and—thanksgiving addressed by the colonists to the Creator. A place in the cart was reserved for Herbert, who, though thoroughly convalescent, was still a little weak. The next morning, at daybreak, Cyrus Harding took the necessary measures to protect Granite House from any invasion. The ladders, which were formerly used for the ascent, were brought to the Chimneys and buried deep in the sand, so that they might be available on the return of the convicts, for the machinery of the lift had been taken to pieces, and nothing of the apparatus remained. Pencroft stayed the last in Granite House in order to finish this work, and he then lowered himself down by means of a double rope held below, and which, when once hauled down, left no communication between the upper landing and the beach.

The weather was magnificent.
"We shall have a warm day of it," said the reporter, laughing.
"Pooh! Dr. Spilett," answered Pencroft, "we shall walk under the shade of the trees and shan't even see the sun!"
"Forward!" said the engineer.

The cart was waiting on the beach before the Chimneys. The reporter made Herbert take his place in it during the first hours at least of the journey, and the lad was obliged to submit to his doctor's orders. Neb placed himself at the onagers' heads. Cyrus Harding, the reporter, and the sailor, walked in front. Top bounded joyfully along. Herbert offered a seat in his vehicle to Jup, who accepted it without ceremony. The moment for departure had arrived, and the little band set out.

The cart first turned the angle of the mouth of the Mercy, then, having ascended the left bank for a mile, crossed the bridge, at the other side of which commenced the road to Port Balloon, and there the explorers, leaving this road on their left, entered the cover of the immense woods which formed the region of the Far West.

For the first two miles the widely scattered trees allowed the cart to pass with ease; from time to time it became necessary to cut away a few creepers and bushes, but no serious obstacle impeded the progress of the colonists.

The thick foliage of the trees threw a grateful shade on the ground. Deodars, Douglas firs, casuarinas, banksias, gum-trees, dragon-trees, and other well-known species, succeeded each other far as the eye could reach. The feathered tribes of the island were all represented—grouse, jacamars, pheasants, lories, as well as the chattering cockatoos, parrots, and paroquets. Agouties, kangaroos, and capybaras fled swiftly at their approach; and all this feathered tribes of the island were all represented—grouse, jacamars, pheasants, lories, as well as the chattering cockatoos, parrots, and paroquets. Agouties, kangaroos, and capybaras fled swiftly at their approach; and all this

And, in fact, in several places they could distinguish traces, more or less recent, of the passage of a band of men—here branches broken off the trees, perhaps to mark out the way; there the ashes of a fire, and footprints in clayey spots; but nothing which appeared to belong to a settled encampment.

The engineer had recommended his companions to refrain from hunting. The reports of the firearms might give the alarm to the convicts, who were, perhaps, roaming through the forest. Moreover, the hunters would necessarily ramble some distance from the cart, which it was dangerous to leave unguarded.

In the afterpart of the day, when about six miles from Granite House, their progress became much more difficult. In order to make their way through some thickets, they were obliged to cut down trees. Before entering such places Harding was careful to send in Top and Jup, who faithfully accomplished their commission, and when the dog and orang returned without giving any warning, there was evidently nothing to fear, either from convicts or wild beasts, two varieties of the animal kingdom, whose ferocious instincts placed them on the same level. On the evening of the first day the colonists encamped about nine miles from Granite House, on the border of a little stream falling into the Mercy, and of the existence of which they had till then been ignorant; it evidently, however, belonged to the hydrographical system to which the soil owed its astonishing fertility. The settlers made a hearty meal, for their appetites were sharpened, and measures were then taken that the night might be passed in safety. If the engineer had had only to deal with wild beasts, jaguars or others, he would have simply lighted fires all around his camp, which would have sufficed for its defense; but the convicts would be rather attracted than terrified by the flames, and it was, therefore, better to be surrounded by the profound darkness of night.

The watch was, however, carefully organized. Two of the settlers were to watch together, and every two hours it was agreed that they should be relieved by their comrades. And so, notwithstanding his wish to the contrary, Herbert was exempted from guard. Pencroft and Gideon Spilett in one party, the engineer and Neb in another, mounted guard in turns over the camp.

The night, however, was but of few hours. The darkness was due rather to the thickness of the foliage than to the disappearance of the sun. The silence was scarcely disturbed by the howling of jaguars and the chattering of the monkeys, the latter appearing to particularly irritate Master Jup. The night passed without incident, and on the next
day, the 15th of February, the journey through the forest, tedious rather than difficult, was continued. This day they could not accomplish more than six miles, for every moment they were obliged to cut a road with their hatchets. 

Like true settlers, the colonists spared the largest and most beautiful trees, which would besides have cost immense labor to fell, and the small ones only were sacrificed, but the result was that the road took a very winding direction, and lengthened itself by numerous detours.

During the day Herbert discovered several new specimens not before met with in the island, such as the tree-fern, with its leaves spread out like the waters of a fountain, locust-trees, on the long pods of which the onagers browsed greedily, and which supplied a sweet pulp of excellent flavor. There, too, the colonists again found groups of magnificent kauries, their cylindrical trunks, crowded with a cone of verdure, rising to a height of two hundred feet. These were the tree-kings of New Zealand, as celebrated as the cedars of Lebanon.

As to the fauna, there was no addition to those species already known to the hunters. Nevertheless, they saw, though unable to get near them, a couple of those large birds peculiar to Australia, a sort of cassowary, called emu, five feet in height, and with brown plumage, which belong to the tribe of waders. Top darted after them as fast as his four legs could carry him, but the emus distanced him with ease, so prodigious was their speed.

As to the traces left by the convicts, a few more were discovered. Some footprints found near an apparently recently extinguished fire were attentively examined by the settlers. By measuring them one after the other, according to their length and breadth, the marks of five men's feet were easily distinguished. The five convicts had evidently camped on this spot; but, and this was the object of so minute an examination, a sixth footprint could not be discovered, which in that case would have been that of Ayrton.

"Ayrton was not with them!" said Herbert.

"No," answered Pencroft, "and if he was not with them, it was because the wretches had already murdered him! but then these rascals have not a den to which they may be tracked like tigers!"

"No," replied the reporter, "it is more probable that they wander at random, and it is their interest to rove about until the time when they will be masters of the island!"

"The masters of the island!" exclaimed the sailor; "the masters of the island..." he repeated, and his voice was choked, as if his throat was seized in an iron grasp. Then in a calmer tone, "Do you know, Captain Harding," said he, "what the ball is which I have rammed into my gun?"

"No, Pencroft!"

"It is the ball that went through Herbert's chest, and I promise you it won't miss its mark!"

But this just retaliation would not bring Ayrton back to life, and from the examination of the footprints left in the ground, they must, alas! conclude that all hopes of ever seeing him again must be abandoned.

That evening they encamped fourteen miles from Granite House, and Cyrus Harding calculated that they could not be more than five miles from Reptile Point.

And indeed, the next day the extremity of the peninsula was reached, and the whole length of the forest had been traversed; but there was nothing to indicate the retreat in which the convicts had taken refuge, nor that, no less secret, which sheltered the mysterious unknown.

Chapter 12

The next day, the 18th of February, was devoted to the exploration of all that wooded region forming the shore from Reptile End to Falls River. The colonists were able to search this forest thoroughly, for, as it was comprised between the two shores of the Serpentine Peninsula, it was only from three to four miles in breadth. The trees, both by their height and their thick foliage, bore witness to the vegetative power of the soil, more astonishing here than in any other part of the island. One might have said that a corner from the virgin forests of America or Africa had been transported into this temperate zone. This led them to conclude that the superb vegetation found a heat in this soil, damp in its upper layer, but warmed in the interior by volcanic fires, which could not belong to a temperate climate. The most frequently occurring trees were knaries and eucalypti of gigantic dimensions.

But the colonists' object was not simply to admire the magnificent vegetation. They knew already that in this respect Lincoln Island would have been worthy to take the first rank in the Canary group, to which the first name given was that of the Happy Isles. Now, alas! their island no longer belonged to them entirely; others had taken possession of it, miscreants polluted its shores, and they must be destroyed to the last man.

No traces were found on the western coast, although they were carefully sought for. No more footprints, no more broken branches, no more deserted camps.

"This does not surprise me," said Cyrus Harding to his companions. "The convicts first landed on the island in the neighborhood of Flotsam Point, and they immediately plunged into the Far West forests, after crossing Tadorn Marsh. They then followed almost the same route that we took on leaving Granite House. This explains the traces
we found in the wood. But, arriving on the shore, the convicts saw at once that they would discover no suitable retreat there, and it was then that, going northwards again, they came upon the corral."

"Where they have perhaps returned," said Pencroft.

"I do not think so," answered the engineer, "for they would naturally suppose that our researches would be in that direction. The corral is only a storehouse to them, and not a definitive encampment."

"I am of Cyrus' opinion," said the reporter, "and I think that it is among the spurs of Mount Franklin that the convicts will have made their lair."

"Then, captain, straight to the corral!" cried Pencroft. "We must finish them off, and till now we have only lost time!"

"No, my friend," replied the engineer; "you forget that we have a reason for wishing to know if the forests of the Far West do not contain some habitation. Our exploration has a double object, Pencroft. If, on the one hand, we have to chastise crime, we have, on the other, an act of gratitude to perform."

"That was well said, captain," replied the sailor, "but, all the same, it is my opinion that we shall not find the gentleman until he pleases."

And truly Pencroft only expressed the opinion of all. It was probable that the stranger's retreat was not less mysterious than was he himself.

That evening the cart halted at the mouth of Falls River. The camp was organized as usual, and the customary precautions were taken for the night. Herbert, become again the healthy and vigorous lad he was before his illness, derived great benefit from this life in the open air, between the sea breezes and the vivifying air from the forests. His place was no longer in the cart, but at the head of the troop.

The next day, the 19th of February, the colonists, leaving the shore, where, beyond the mouth, basalts of every shape were so picturesquely piled up, ascended the river by its left bank. The road had been already partly cleared in their former excursions made from the corral to the west coast. The settlers were now about six miles from Mount Franklin.

The engineer's plan was this:--To minutely survey the valley forming the bed of the river, and to cautiously approach the neighborhood of the corral; if the corral was occupied, to seize it by force; if it was not, to entrench themselves there and make it the center of the operations which had for their object the exploration of Mount Franklin.

This plan was unanimously approved by the colonists, for they were impatient to regain entire possession of their island.

They made their way then along the narrow valley separating two of the largest spurs of Mount Franklin. The trees, crowded on the river's bank, became rare on the upper slopes of the mountain. The ground was hilly and rough, very suitable for ambushes, and over which they did not venture without extreme precaution. Top and Jup skirmished on the flanks, springing right and left through the thick brushwood, and emulating each other in intelligence and activity. But nothing showed that the banks of the stream had been recently frequented--nothing announced either the presence or the proximity of the convicts. Towards five in the evening the cart stopped nearly 600 feet from the palisade. A semicircular screen of trees still hid it.

It was necessary to reconnoiter the corral, in order to ascertain if it was occupied. To go there openly, in broad daylight, when the convicts were probably in ambush, would be to expose themselves, as poor Herbert had done, to the firearms of the ruffians. It was better, then, to wait until night came on.

However, Gideon Spilett wished without further delay to reconnoiter the approaches to the corral, and Pencroft, who was quite out of patience, volunteered to accompany him.

"No, my friends," said the engineer, "wait till night. I will not allow one of you to expose himself in open day."

"But, captain--" answered the sailor, little disposed to obey.

"I beg of you, Pencroft," said the engineer.

"Very well!" replied the sailor, who vented his anger in another way, by bestowing on the convicts the worst names in his maritime vocabulary.

The colonists remained, therefore, near the cart, and carefully watched the neighboring parts of the forest.

Three hours passed thus. The wind had fallen, and absolute silence reigned under the great trees. The snapping of the smallest twig, a footstep on the dry leaves, the gliding of a body among the grass, would have been heard without difficulty. All was quiet. Besides, Top, lying on the grass, his head stretched out on his paws, gave no sign of uneasiness. At eight o'clock the day appeared far enough advanced for the reconnaissance to be made under favorable conditions. Gideon Spilett declared himself ready to set out accompanied by Pencroft. Cyrus Harding consented. Top and Jup were to remain with the engineer, Herbert, and Neb, for a bark or a cry at a wrong moment would give the alarm.

"Do not be imprudent," said Harding to the reporter and Pencroft, "you have not to gain possession of the corral,
but only to find out whether it is occupied or not."

"All right," answered Pencroft.

And the two departed.

Under the trees, thanks to the thickness of their foliage, the obscurity rendered any object invisible beyond a radius of from thirty to forty feet. The reporter and Pencroft, halting at any suspicious sound, advanced with great caution.

They walked a little distance apart from each other so as to offer a less mark for a shot. And, to tell the truth, they expected every moment to hear a report. Five minutes after leaving the cart, Gideon Spilett and Pencroft arrived at the edge of the wood before the clearing beyond which rose the palisade.

They stopped. A few straggling beams still fell on the field clear of trees. Thirty feet distant was the gate of the corral, which appeared to be closed. This thirty feet, which it was necessary to cross from the wood to the palisade, constituted the dangerous zone, to borrow a ballistic term: in fact, one or more bullets fired from behind the palisade might knock over any one who ventured on to this zone. Gideon Spilett and the sailor were not men to draw back, but they knew that any imprudence on their part, of which they would be the first victims, would fall afterwards on their companions. If they themselves were killed, what would become of Harding, Neb, and Herbert?

But Pencroft, excited at feeling himself so near the corral where he supposed the convicts had taken refuge, was about to press forward, when the reporter held him back with a grasp of iron.

"In a few minutes it will be quite dark," whispered Spilett in the sailor's ear, "then will be the time to act."

Pencroft, convulsively clasping the butt-end of his gun, restrained his energies, and waited, swearing to himself.

Soon the last of the twilight faded away. Darkness, which seemed as if it issued from the dense forest, covered the clearing. Mount Franklin rose like an enormous screen before the western horizon, and night spread rapidly over all, as it does in regions of low latitudes. Now was the time.

The reporter and Pencroft, since posting themselves on the edge of the wood, had not once lost sight of the palisade. The corral appeared to be absolutely deserted. The top of the palisade formed a line, a little darker than the surrounding shadow, and nothing disturbed its distinctness. Nevertheless, if the convicts were there, they must have posted one of their number to guard against any surprise.

Spilett grasped his companion's hand, and both crept towards the corral, their guns ready to fire.

They reached the gate without the darkness being illuminated by a single ray of light.

Pencroft tried to push open the gate, which, as the reporter and he had supposed, was closed. However, the sailor was able to ascertain that the outer bars had not been put up. It might, then, be concluded that the convicts were there in the corral, and that very probably they had fastened the gate in such a way that it could not be forced open.

Gideon Spilett and Pencroft listened.

Not a sound could be heard inside the palisade. The musmons and the goats, sleeping no doubt in their huts, in no way disturbed the calm of night.

The reporter and the sailor hearing nothing, asked themselves whether they had not better scale the palisades and penetrate into the corral. This would have been contrary to Cyrus Harding's instructions.

It is true that the enterprise might succeed, but it might also fail. Now, if the convicts were suspecting nothing, if they knew nothing of the expedition against them, if, lastly, there now existed a chance of surprising them, ought this chance to be lost by inconsiderately attempting to cross the palisades?

This was not the reporter's opinion. He thought it better to wait until all the settlers were collected together before attempting to penetrate into the corral. One thing was certain, that it was possible to reach the palisade without being seen, and also that it did not appear to be guarded. This point settled, there was nothing to be done but to return to the cart, where they would consult.

Pencroft probably agreed with this decision, for he followed the reporter without making any objection when the latter turned back to the wood.

In a few minutes the engineer was made acquainted with the state of affairs.

"Well," said he, after a little thought, "I now have reason to believe that the convicts are not in the corral."

"We shall soon know," said Pencroft, "when we have scaled the palisade."

"To the corral, my friends!" said Cyrus Harding.

"Shall we leave the cart in the wood?" asked Neb.

"No," replied the engineer, "it is our wagon of ammunition and provisions, and, if necessary, it would serve as an entrenchment."

"Forward, then!" said Gideon Spilett.

The cart emerged from the wood and began to roll noiselessly towards the palisade. The darkness was now profound, the silence as complete as when Pencroft and the reporter crept over the ground. The thick grass completely muffled their footsteps. The colonists held themselves ready to fire. Jup, at Pencroft's orders, kept
behind. Neb led Top in a leash, to prevent him from bounding forward.

The clearing soon came in sight. It was deserted. Without hesitating, the little band moved towards the palisade. In a short space of time the dangerous zone was passed. Neb remained at the onagers' heads to hold them. The engineer, the reporter, Herbert, and Pencroft, proceeded to the door, in order to ascertain if it was barricaded inside. It was open!

"What do you say now?" asked the engineer, turning to the sailor and Spilett.

Both were stupefied.

"I can swear," said Pencroft, "that this gate was shut just now!"

The colonists now hesitated. Were the convicts in the corral when Pencroft and the reporter made their reconnaissance? It could not be doubted, as the gate then closed could only have been opened by them. Were they still there, or had one of their number just gone out?

All these questions presented themselves simultaneously to the minds of the colonists, but how could they be answered?

At that moment, Herbert, who had advanced a few steps into the enclosure, drew back hurriedly, and seized Harding's hand.

"What's the matter?" asked the engineer.

"A light!"

"In the house?"

"Yes!"

All five advanced and indeed, through the window fronting them, they saw glimmering a feeble light. Cyrus Harding made up his mind rapidly. "It is our only chance," said he to his companions, "of finding the convicts collected in this house, suspecting nothing! They are in our power! Forward!" The colonists crossed through the enclosure, holding their guns ready in their hands. The cart had been left outside under the charge of Jup and Top, who had been prudently tied to it.

Cyrus Harding, Pencroft, and Gideon Spilett on one side, Herbert and Neb on the other, going along by the palisade, surveyed the absolutely dark and deserted corral.

In a few moments they were near the closed door of the house.

Harding signed to his companions not to stir, and approached the window, then feebly lighted by the inner light.

He gazed into the apartment.

On the table burned a lantern. Near the table was the bed formerly used by Ayrton.

On the bed lay the body of a man.

Suddenly Cyrus Harding drew back, and in a hoarse voice,--"Ayrton!" he exclaimed.

Immediately the door was forced rather than opened, and the colonists rushed into the room.

Ayrton appeared to be asleep. His countenance showed that he had long and cruelly suffered. On his wrists and ankles could be seen great bruises.

Harding bent over him.

"Ayrton!" cried the engineer, seizing the arm of the man whom he had just found again under such unexpected circumstances.

At this exclamation Ayrton opened his eyes, and, gazing at Harding, then at the others,--

"You!" he cried, "you?"

"Ayrton! Ayrton!" repeated Harding.

"Where am I?"

"In the house in the corral!"

"Alone?"

"Yes!"

"But they will come back!" cried Ayrton. "Defend yourselves! defend yourselves!"

And he fell back exhausted.

"Spilett," exclaimed the engineer, "we may be attacked at any moment. Bring the cart into the corral. Then, barricade the door, and all come back here."

Pencroft, Neb, and the reporter hastened to execute the engineer's orders. There was not a moment to be lost. Perhaps even now the cart was in the hands of the convicts!

In a moment the reporter and his two companions had crossed the corral and reached the gate of the palisade behind which Top was heard growling sullenly.

The engineer, leaving Ayrton for an instant, came out ready to fire. Herbert was at his side. Both surveyed the crest of the spur overlooking the corral. If the convicts were lying in ambush there, they might knock the settlers over one after the other.
At that moment the moon appeared in the east, above the black curtain of the forest, and a white sheet of light spread over the interior of the enclosure. The corral, with its clumps of trees, the little stream which watered it, its wide carpet of grass, was suddenly illuminated. From the side of the mountain, the house and a part of the palisade stood out white in the moonlight. On the opposite side towards the door, the enclosure remained dark. A black mass soon appeared. This was the cart entering the circle of light, and Cyrus Harding could hear the noise made by the door, as his companions shut it and fastened the interior bars.

But, at that moment, Top, breaking loose, began to bark furiously and rush to the back of the corral, to the right of the house.

"Be ready to fire, my friends!" cried Harding.

The colonists raised their pieces and waited the moment to fire.

Top still barked, and Jup, running towards the dog, uttered shrill cries.

The colonists followed him, and reached the borders of the little stream, shaded by large trees. And there, in the bright moonlight, what did they see? Five corpses, stretched on the bank!

They were those of the convicts who, four months previously, had landed on Lincoln Island!

Chapter 13

How had it happened? who had killed the convicts? Was it Ayrton? No, for a moment before he was dreading their return.

But Ayrton was now in a profound stupor, from which it was no longer possible to rouse him. After uttering those few words he had again become unconscious, and had fallen back motionless on the bed.

The colonists, a prey to a thousand confused thoughts, under the influence of violent excitement, waited all night, without leaving Ayrton's house, or returning to the spot where lay the bodies of the convicts. It was very probable that Ayrton would not be able to throw any light on the circumstances under which the bodies had been found, since he himself was not aware that he was in the corral. But at any rate he would be in a position to give an account of what had taken place before this terrible execution. The next day Ayrton awoke from his torpor, and his companions cordially manifested all the joy they felt, on seeing him again, almost safe and sound, after a hundred and four days separation.

Ayrton then in a few words recounted what had happened, or, at least, as much as he knew.

The day after his arrival at the corral, on the 10th of last November, at nightfall, he was surprised by the convicts, who had scaled the palisade. They bound and gagged him; then he was led to a dark cavern, at the foot of Mount Franklin, where the convicts had taken refuge.

His death had been decided upon, and the next day the convicts were about to kill him, when one of them recognized him and called him by the name which he bore in Australia. The wretches had no scruples as to murdering Ayrton! They spared Ben Joyce!

But from that moment Ayrton was exposed to the importunities of his former accomplices. They wished him to join them again, and relied upon his aid to enable them to gain possession of Granite House, to penetrate into that hitherto inaccessible dwelling, and to become masters of the island, after murdering the colonists!

Ayrton remained firm. The once convict, now repentant and pardoned, would rather die than betray his companions. Ayrton—bound, gagged, and closely watched—lived in this cave for four months.

Nevertheless the convicts had discovered the corral a short time after their arrival in the island, and since then they had subsisted on Ayrton's stores, but did not live at the corral.

On the 11th of November, two of the villains, surprised by the colonists' arrival, fired at Herbert, and one of them returned, boasting of having killed one of the inhabitants of the island; but he returned alone. His companion, as is known, fell by Cyrus Harding's dagger.

Ayrton's anxiety and despair may be imagined when he learned the news of Herbert's death. The settlers were now only four, and, as it seemed, at the mercy of the convicts. After this event, and during all the time that the colonists, detained by Herbert's illness, remained in the corral, the pirates did not leave their cavern, and even after they had pillaged the plateau of Prospect Heights, they did not think it prudent to abandon it.

The ill-treatment inflicted on Ayrton was now redoubled. His hands and feet still bore the bloody marks of the cords which bound him day and night. Every moment he expected to be put to death, nor did it appear possible that he could escape.

Matters remained thus until the third week of February. The convicts, still watching for a favorable opportunity, rarely quitted their retreat, and only made a few hunting excursions, either to the interior of the island, or the south coast.

Ayrton had no further news of his friends, and relinquished all hope of ever seeing them again. At last, the
unfortunate man, weakened by ill-treatment, fell into a prostration so profound that sight and hearing failed him. From that moment, that is to say, since the last two days, he could give no information whatever of what had occurred.

"But, Captain Harding," he added, "since I was imprisoned in that cavern, how is it that I find myself in the corral?"

"How is it that the convicts are lying yonder dead, in the middle of the enclosure?" answered the engineer.

"Dead!" cried Ayrton, half rising from his bed, notwithstanding his weakness.

His companions supported him. He wished to get up, and with their assistance he did so. They then proceeded together towards the little stream.

It was now broad daylight.

There, on the bank, in the position in which they had been stricken by death in its most instantaneous form, lay the corpses of the five convicts!

Ayrton was astounded. Harding and his companions looked at him without uttering a word. On a sign from the engineer, Neb and Pencroft examined the bodies, already stiffened by the cold.

They bore no apparent trace of any wound.

Only, after carefully examining them, Pencroft found on the forehead of one, on the chest of another, on the back of this one, on the shoulder of that, a little red spot, a sort of scarcely visible bruise, the cause of which it was impossible to conjecture.

"It is there that they have been struck!" said Cyrus Harding.

"But with what weapon?" cried the reporter.

"A weapon, lightning-like in its effects, and of which we have not the secret!"

"And who has struck the blow?" asked Pencroft.

"The avenging power of the island," replied Harding, "he who brought you here, Ayrton, whose influence has once more manifested itself, who does for us all that which we cannot do for ourselves, and who, his will accomplished, conceals himself from us."

"Let us make search for him, then!" exclaimed Pencroft.

"Yes, we will search for him," answered Harding, "but we shall not discover this powerful being who performs such wonders, until he pleases to call us to him!"

This invisible protection, which rendered their own action unavailing, both irritated and piqued the engineer. The relative inferiority which it proved was of a nature to wound a haughty spirit. A generosity evinced in such a manner as to elude all tokens of gratitude, implied a sort of disdain for those on whom the obligation was conferred, which in Cyrus Harding's eyes marred, in some degree, the worth of the benefit.

"Let us search," he resumed, "and God grant that we may some day be permitted to prove to this haughty protector that he has not to deal with ungrateful people! What would I not give could we repay him, by rendering him in our turn, although at the price of our lives, some signal service!"

From this day, the thoughts of the inhabitants of Lincoln Island were solely occupied with the intended search. Everything incited them to discover the answer to this enigma, an answer which would only be the name of a man endowed with a truly inexplicable, and in some degree superhuman power.

In a few minutes, the settlers re-entered the house, where their influence soon restored to Ayrton his moral and physical energy. Neb and Pencroft carried the corpses of the convicts into the forest, some distance from the corral, and buried them deep in the ground.

Ayrton was then made acquainted with the facts which had occurred during his seclusion. He learned Herbert's adventures, and through what various trials the colonists had passed. As to the settlers, they had despaired of ever seeing Ayrton again, and had been convinced that the convicts had ruthlessly murdered him.

"And now," said Cyrus Harding, as he ended his recital, "a duty remains for us to perform. Half of our task is accomplished, but although the convicts are no longer to be feared, it is not owing to ourselves that we are once more masters of the island."

"Well!" answered Gideon Spilett, "let us search all this labyrinth of the spurs of Mount Franklin. We will not leave a hollow, not a hole unexplored! Ah! if ever a reporter found himself face to face with a mystery, it is I who now speak to you, my friends!"

"And we will not return to Granite House until we have found our benefactor," said Herbert.

"Yes," said the engineer, "we will do all that it is humanly possible to do, but I repeat we shall not find him until he himself permits us."

"Shall we stay at the corral?" asked Pencroft.

"We shall stay here," answered Harding. "Provisions are abundant, and we are here in the very center of the circle we have to explore. Besides, if necessary, the cart will take us rapidly to Granite House."
"Good!" answered the sailor. "Only I have a remark to make."

"What is it?"

"Here is the fine season getting on, and we must not forget that we have a voyage to make."

"A voyage?" said Gideon Spilett.

"Yes, to Tabor Island," answered Pencroft. "It is necessary to carry a notice there to point out the position of our island and say that Ayrton is here in case the Scotch yacht should come to take him off. Who knows if it is not already too late?"

"But, Pencroft," asked Ayrton, "how do you intend to make this voyage?"

"In the 'Bonadventure.'"

"The 'Bonadventure'!" exclaimed Ayrton. "She no longer exists."

"My 'Bonadventure' exists no longer!" shouted Pencroft, bounding from his seat.

"No," answered Ayrton. "The convicts discovered her in her little harbor only eight days ago, they put to sea in her--"

"And?" said Pencroft, his heart beating.

"And not having Bob Harvey to steer her, they ran on the rocks, and the vessel went to pieces."

"Oh, the villains, the cutthroats, the infamous scoundrels!" exclaimed Pencroft.

"Pencroft," said Herbert, taking the sailor's hand, "we will build another 'Bonadventure'--a larger one. We have all the ironwork--all the rigging of the brig at our disposal."

"But do you know," returned Pencroft, "that it will take at least five or six months to build a vessel of from thirty to forty tons?"

"We can take our time," said the reporter, "and we must give up the voyage to Tabor Island for this year."

"Oh, my 'Bonadventure!' my poor 'Bonadventure!'" cried Pencroft, almost broken-hearted at the destruction of the vessel of which he was so proud.

The loss of the "Bonadventure" was certainly a thing to be lamented by the colonists, and it was agreed that this loss should be repaired as soon as possible. This settled, they now occupied themselves with bringing their researches to bear on the most secret parts of the island.

The exploration was commenced at daybreak on the 19th of February, and lasted an entire week. The base of the mountain, with its spurs and their numberless ramifications, formed a labyrinth of valleys and elevations. It was evident that there, in the depths of these narrow gorges, perhaps even in the interior of Mount Franklin itself, was the proper place to pursue their researches. No part of the island could have been more suitable to conceal a dwelling whose occupant wished to remain unknown. But so irregular was the formation of the valleys that Cyrus Harding was obliged to conduct the exploration in a strictly methodical manner.

The colonists first visited the valley opening to the south of the volcano, and which first received the waters of Falls River. There Ayrton showed them the cavern where the convicts had taken refuge, and in which he had been imprisoned until his removal to the corral. This cavern was just as Ayrton had left it. They found there a considerable quantity of ammunition and provisions, conveyed thither by the convicts in order to form a reserve.

The whole of the valley bordering on the cave, shaded by fir and other trees, was thoroughly explored, and on turning the point of the southwestern spur, the colonists entered a narrower gorge similar to the picturesque columns of basalt on the coast. Here the trees were fewer. Stones took the place of grass. Goats and musmons gambolled among the rocks. Here began the barren part of the island. It could already be seen that, of the numerous valleys branching off at the base of Mount Franklin, three only were wooded and rich in pasturage like that of the corral, which bordered on the west on the Falls River valley, and on the east on the Red Creek valley. These two streams, which lower down became rivers by the absorption of several tributaries, were formed by all the springs of the mountain and thus caused the fertility of its southern part. As to the Mercy, it was more directly fed from ample springs concealed under the cover of Jacamar Wood, and it was by springs of this nature, spreading in a thousand streamlets, that the soil of the Serpentine Peninsula was watered.

Now, of these three well-watered valleys, either might have served as a retreat to some solitary who would have found there everything necessary for life. But the settlers had already explored them, and in no part had they discovered the presence of man.

Was it then in the depths of those barren gorges, in the midst of the piles of rock, in the rugged northern ravines, among the streams of lava, that this dwelling and its occupant would be found?

The northern part of Mount Franklin was at its base composed solely of two valleys, wide, not very deep, without any appearance of vegetation, strewn with masses of rock, paved with lava, and varied with great blocks of mineral. This region required a long and careful exploration. It contained a thousand cavities, comfortless no doubt, but perfectly concealed and difficult of access.

The colonists even visited dark tunnels, dating from the volcanic period, still black from the passage of the fire,
and penetrated into the depths of the mountain. They traversed these somber galleries, waving lighted torches; they examined the smallest excavations; they sounded the shallowest depths, but all was dark and silent. It did not appear that the foot of man had ever before trodden these ancient passages, or that his arm had ever displaced one of these blocks, which remained as the volcano had cast them up above the waters, at the time of the submersion of the island.

However, although these passages appeared to be absolutely deserted, and the obscurity was complete, Cyrus Harding was obliged to confess that absolute silence did not reign there.

On arriving at the end of one of these gloomy caverns, extending several hundred feet into the interior of the mountain, he was surprised to hear a deep rumbling noise, increased in intensity by the sonorousness of the rocks. Gideon Spilett, who accompanied him, also heard these distant mutterings, which indicated a revivification of the subterranean fires. Several times both listened, and they agreed that some chemical process was taking place in the bowels of the earth.

"Then the volcano is not totally extinct?" said the reporter.
"It is possible that since our exploration of the crater," replied Cyrus Harding, "some change has occurred. Any volcano, although considered extinct, may evidently again burst forth."
"But if an eruption of Mount Franklin occurred," asked Spilett, "would there not be some danger to Lincoln Island?"
"I do not think so," answered the reporter. "The crater, that is to say, the safety-valve, exists, and the overflow of smoke and lava, would escape, as it did formerly, by this customary outlet."
"Unless the lava opened a new way for itself towards the fertile parts of the island!"
"And why, my dear Spilett," answered Cyrus Harding, "should it not follow the road naturally traced out for it?"
"Well, volcanoes are capricious," returned the reporter.
"Notice," answered the engineer, "that the inclination of Mount Franklin favors the flow of water towards the valleys which we are exploring just now. To turn aside this flow, an earthquake would be necessary to change the mountain's center of gravity."
"But an earthquake is always to be feared at these times," observed Gideon Spilett.
"Always," replied the engineer, "especially when the subterranean forces begin to awake, as they risk meeting with some obstruction, after a long rest. Thus, my dear Spilett, an eruption would be a serious thing for us, and it would be better that the volcano should not have the slightest desire to wake up. But we could not prevent it, could we? At any rate, even if it should occur, I do not think Prospect Heights would be seriously threatened. Between them and the mountain, the ground is considerably depressed, and if the lava should ever take a course towards the lake, it would be cast on the downs and the neighboring parts of Shark Gulf."
"We have not yet seen any smoke at the top of the mountain, to indicate an approaching eruption," said Gideon Spilett.
"No," answered Harding, "not a vapor escapes from the crater, for it was only yesterday that I attentively surveyed the summit. But it is probable that at the lower part of the chimney, time may have accumulated rocks, cinders, hardened lava, and that this valve of which I spoke, may at any time become overcharged. But at the first serious effort, every obstacle will disappear, and you may be certain, my dear Spilett, that neither the island, which is the boiler, nor the volcano, which is the chimney, will burst under the pressure of gas. Nevertheless, I repeat, it would be better that there should not be an eruption."
"And yet we are not mistaken," remarked the reporter. "Mutterings can be distinctly heard in the very bowels of the volcano!"
"You are right," said the engineer, again listening attentively. "There can be no doubt of it. A commotion is going on there, of which we can neither estimate the importance nor the ultimate result."
Cyrus Harding and Spilett, on coming out, rejoined their companions, to whom they made known the state of affairs.
"Very well!" cried Pencroft, "The volcano wants to play his pranks! Let him try, if he likes! He will find his master!"
"Who?" asked Neb.
"Our good genius, Neb, our good genius, who will shut his mouth for him, if he so much as pretends to open it!"
As may be seen, the sailor's confidence in the tutelary deity of his island was absolute, and, certainly, the occult power, manifested until now in so many inexplicable ways, appeared to be unlimited; but also it knew how to escape the colonists' most minute researches, for, in spite of all their efforts, in spite of the more than zeal,--the obstinacy,--with which they carried on their exploration, the retreat of the mysterious being could not be discovered.

From the 19th to the 20th of February the circle of investigation was extended to all the northern region of Lincoln Island, whose most secret nooks were explored. The colonists even went the length of tapping every rock.
The search was extended to the extreme verge of the mountain. It was explored thus to the very summit of the truncated cone terminating the first row of rocks, then to the upper ridge of the enormous hat, at the bottom of which opened the crater.

They did more; they visited the gulf, now extinct, but in whose depths the rumbling could be distinctly heard. However, no sign of smoke or vapor, no heating of the rock, indicated an approaching eruption. But neither there, nor in any other part of Mount Franklin, did the colonists find any traces of him of whom they were in search.

Their investigations were then directed to the downs. They carefully examined the high lava-cliffs of Shark Gulf from the base to the crest, although it was extremely difficult to reach even the level of the gulf. No one!--nothing!

Indeed, in these three words was summed up so much fatigue uselessly expended, so much energy producing no results, that somewhat of anger mingled with the discomfiture of Cyrus Harding and his companions.

It was now time to think of returning, for these researches could not be prolonged indefinitely. The colonists were certainly right in believing that the mysterious being did not reside on the surface of the island, and the wildest fancies haunted their excited imaginations. Pencroft and Neb, particularly, were not contented with the mystery, but allowed their imaginations to wander into the domain of the supernatural.

On the 25th of February the colonists re-entered Granite House, and by means of the double cord, carried by an arrow to the threshold of the door, they re-established communication between their habitation and the ground.

A month later they commemorated, on the 25th of March, the third anniversary of their arrival on Lincoln Island.

Chapter 14

Three years had passed away since the escape of the prisoners from Richmond, and how often during those three years had they spoken of their country, always present in their thoughts!

They had no doubt that the civil war was at an end, and to them it appeared impossible that the just cause of the North had not triumphed. But what had been the incidents of this terrible war? How much blood had it not cost? How many of their friends must have fallen in the struggle? They often spoke of these things, without as yet being able to foresee the day when they would be permitted once more to see their country. To return thither, were it but for a few days, to renew the social link with the inhabited world, to establish a communication between their native land and their island, then to pass the longest, perhaps the best, portion of their existence in this colony, founded by them, and which would then be dependent on their country, was this a dream impossible to realize?

There were only two ways of accomplishing it--either a ship must appear off Lincoln Island, or the colonists must themselves build a vessel strong enough to sail to the nearest land.

"Unless," said Pencroft, "our good genius, himself provides us with the means of returning to our country."

And, really, had any one told Pencroft and Neb that a ship of 300 tons was waiting for them in Shark Gulf or at Port Balloon, they would not even have made a gesture of surprise. In their state of mind nothing appeared improbable.

But Cyrus Harding, less confident, advised them to confine themselves to fact, and more especially so with regard to the building of a vessel--a really urgent work, since it was for the purpose of depositing, as soon as possible, at Tabor Island a document indicating Ayrton's new residence.

As the "Bonadventure" no longer existed, six months at least would be required for the construction of a new vessel. Now winter was approaching, and the voyage would not be made before the following spring.

"We have time to get everything ready for the fine season," remarked the engineer, who was consulting with Pencroft about these matters. "I think, therefore, my friend, that since we have to rebuild our vessel it will be best to give her larger dimensions. The arrival of the Scotch yacht at Tabor Island is very uncertain. It may even be that, having arrived several months ago, she has again sailed after having vainly searched for some trace of Ayrton. Will it not then be best to build a ship which, if necessary, could take us either to the Polynesian Archipelago or to New Zealand? What do you think?"

"I think, captain," answered the sailor; "I think that you are as capable of building a large vessel as a small one. Neither the wood nor the tools are wanting. It is only a question of time."

"And how many months would be required to build a vessel of from 250 to 300 tons?" asked Harding.

"Seven or eight months at least," replied Pencroft. "But it must not be forgotten that winter is drawing near, and that in severe frost wood is difficult to work. We must calculate on several weeks delay, and if our vessel is ready by next November we may think ourselves very lucky."

"Well," replied Cyrus Harding, "that will be exactly the most favorable time for undertaking a voyage of any importance, either to Tabor Island or to a more distant land."

"So it will, captain," answered the sailor. "Make out your plans then; the workmen are ready, and I imagine that Ayrton can lend us a good helping hand."
The colonists, having been consulted, approved the engineer's plan, and it was, indeed, the best thing to be done. It is true that the construction of a ship of from two to three hundred tons would be great labor, but the colonists had confidence in themselves, justified by their previous success.

Cyrus Harding then busied himself in drawing the plan of the vessel and making the model. During this time his companions employed themselves in felling and carting trees to furnish the ribs, timbers, and planks. The forest of the Far West supplied the best oaks and elms. They took advantage of the opening already made on their last excursion to form a practicable road, which they named the Far West Road, and the trees were carried to the Chimneys, where the dockyard was established. As to the road in question, the choice of trees had rendered its direction somewhat capricious, but at the same time it facilitated the access to a large part of the Serpentine Peninsula.

It was important that the trees should be quickly felled and cut up, for they could not be used while yet green, and some time was necessary to allow them to get seasoned. The carpenters, therefore, worked vigorously during the month of April, which was troubled only by a few equinoctial gales of some violence. Master Jup aided them dexterously, either by climbing to the top of a tree to fasten the ropes or by lending his stout shoulders to carry the lopped trunks.

All this timber was piled up under a large shed, built near the Chimneys, and there awaited the time for use.

The month of April was tolerably fine, as October often is in the northern zone. At the same time other work was actively continued, and soon all trace of devastation disappeared from the plateau of Prospect Heights. The mill was rebuilt, and new buildings rose in the poultry-yard. It had appeared necessary to enlarge their dimensions, for the feathered population had increased considerably. The stable now contained five onagers, four of which were well broken, and allowed themselves to be either driven or ridden, and a little colt. The colony now possessed a plow, to which the onagers were yoked like regular Yorkshire or Kentucky oxen. The colonists divided their work, and their arms never tired. Then who could have enjoyed better health than these workers, and what good humor enlivened the evenings in Granite House as they formed a thousand plans for the future!

As a matter of course Ayrton shared the common lot in every respect, and there was no longer any talk of his going to live at the corral. Nevertheless he was still sad and reserved, and joined more in the work than in the pleasures of his companions. But he was a valuable workman at need--strong, skilful, ingenious, intelligent. He was esteemed and loved by all, and he could not be ignorant of it.

In the meanwhile the corral was not abandoned. Every other day one of the settlers, driving the cart or mounted on an onager, went to look after the flock of musmons and goats and bring back the supply of milk required by Neb. These excursions at the same time afforded opportunities for hunting. Therefore Herbert and Gideon Spilett, with Top in front, traversed more often than their companions the road to the corral, and with the capital guns which they carried, capybaras, agouties, kangaroos, and wild pigs for large game, ducks, grouse, jacamars, and snipe for small game, were never wanting in the house. The produce of the warren, of the oyster-bed, several turtles which were taken, excellent salmon which came up the Mercy, vegetables from the plateau, wild fruit from the forest, were riches upon riches, and Neb, the head cook, could scarcely by himself store them away.

The telegraphic wire between the corral and Granite House had of course been repaired, and it was worked whenever one or other of the settlers was at the corral and found it necessary to spend the night there. Besides, the island was safe now and no attacks were to be feared, at any rate from men.

However, that which had happened might happen again. A descent of pirates, or even of escaped convicts, was always to be feared. It was possible that companions or accomplices of Bob Harvey had been in the secret of his plans, and might be tempted to imitate him. The colonists, therefore, were careful to observe the sea around the island, and every day their telescope covered the horizon enclosed by Union and Washington Bays. When they went to the corral they examined the sea to the west with no less attention, and by climbing the spur their gaze extended over a large section of the western horizon.

Nothing suspicious was discerned, but still it was necessary for them to be on their guard.

The engineer one evening imparted to his friends a plan which he had conceived for fortifying the corral. It appeared prudent to him to heighten the palisade and to flank it with a sort of blockhouse, which, if necessary, the settlers could hold against the enemy. Granite House might, by its very position, be considered impregnable; therefore the corral with its buildings, its stores, and the animals it contained, would always be the object of pirates, whoever they were, who might land on the island, and should the colonists be obliged to shut themselves up there they ought also to be able to defend themselves without any disadvantage. This was a project which might be left for consideration, and they were, besides, obliged to put off its execution until the next spring.

About the 15th of May the keel of the new vessel lay along the dockyard, and soon the stem and stern-post, mortised at each of its extremities, rose almost perpendicularly. The keel, of good oak, measured 110 feet in length, this allowing a width of five-and-twenty feet to the midship beam. But this was all the carpenters could do before the
arrival of the frosts and bad weather. During the following week they fixed the first of the stern timbers, but were then obliged to suspend work.

During the last days of the month the weather was extremely bad. The wind blew from the east, sometimes with the violence of a tempest. The engineer was somewhat uneasy on account of the dockyard shed--which besides, he could not have established in any other place near to Granite House--for the islet only imperfectly sheltered the shore from the fury of the open sea, and in great storms the waves beat against the very foot of the granite cliff.

But, very fortunately, these fears were not realized. The wind shifted to the southeast, and there the beach of Granite House was completely covered by Flotsam Point.

Pencroft and Ayrton, the most zealous workmen at the new vessel, pursued their labor as long as they could. They were not men to mind the wind tearing at their hair, nor the rain wetting them to the skin, and a blow from a hammer is worth just as much in bad as in fine weather. But when a severe frost succeeded this wet period, the wood, its fibers acquiring the hardness of iron, became extremely difficult to work, and about the 10th of June shipbuilding was obliged to be entirely discontinued.

Cyrus Harding and his companions had not omitted to observe how severe was the temperature during the winters of Lincoln Island. The cold was comparable to that experienced in the States of New England, situated at almost the same distance from the equator. In the northern hemisphere, or at any rate in the part occupied by British America and the north of the United States, this phenomenon is explained by the flat conformation of the territories bordering on the pole, and on which there is no intumescence of the soil to oppose any obstacle to the north winds; here, in Lincoln Island, this explanation would not suffice.

"It has even been observed," remarked Harding one day to his companions, "that in equal latitudes the islands and coast regions are less tried by the cold than inland countries. I have often heard it asserted that the winters of Lombardy, for example, are not less rigorous than those of Scotland, which results from the sea restoring during the winter the heat which it received during the summer. Islands are, therefore, in a better situation for benefiting by this restitution."

"But then, Captain Harding," asked Herbert, "why does Lincoln Island appear to escape the common law?"

"That is difficult to explain," answered the engineer. "However, I should be disposed to conjecture that this peculiarity results from the situation of the island in the Southern Hemisphere, which, as you know, my boy, is colder than the Northern Hemisphere."

"Yes," said Herbert, "and icebergs are met with in lower latitudes in the south than in the north of the Pacific."

"That is true," remarked Pencroft, "and when I have been serving on board whalers I have seen icebergs off Cape Horn."

"The severe cold experienced in Lincoln Island," said Gideon Spilett, "may then perhaps be explained by the presence of floses or icebergs comparatively near to Lincoln Island."

"Your opinion is very admissible indeed, my dear Spilett," answered Cyrus Harding, "and it is evidently to the proximity of icebergs that we owe our rigorous winters. I would draw your attention also to an entirely physical cause, which renders the Southern colder than the Northern Hemisphere. In fact, since the sun is nearer to this hemisphere during the summer, it is necessarily more distant during the winter. This explains then the excess of temperature in the two seasons, for, if we find the winters very cold in Lincoln Island, we must not forget that the summers here, on the contrary, are very hot."

"But why, if you please, captain," asked Pencroft, knitting his brows, "why should our hemisphere, as you say, be so badly divided? It isn't just, that!"

"Friend Pencroft," answered the engineer, laughing, "whether just or not, we must submit to it, and here lies the reason for this peculiarity. The earth does not describe a circle around the sun, but an ellipse, as it must by the laws of rational mechanics. Now, the earth occupies one of the foci of the ellipse, and so at one point in its course is at its apogee, that is, at its farthest from the sun, and at another point it is at its perigee, or nearest to the sun. Now it happens that it is during the winter of the southern countries that it is at its most distant point from the sun, and consequently, in a situation for those regions to feel the greatest cold. Nothing can be done to prevent that, and men, Pencroft, however learned they may be, can never change anything of the cosmographical order established by God Himself."

"And yet," added Pencroft, "the world is very learned. What a big book, captain, might be made with all that is known!"

"And what a much bigger book still with all that is not known!" answered Harding.

At last, for one reason or another, the month of June brought the cold with its accustomed intensity, and the settlers were often confined to Granite House. Ah! how wearisome this imprisonment was to them, and more particularly to Gideon Spilett.

"Look here," said he to Neb one day, "I would give you by notarial deed all the estates which will come to me
some day, if you were a good enough fellow to go, no matter where, and subscribe to some newspaper for me! Decidedly the thing that is most essential to my happiness is the knowing every morning what has happened the day before in other places than this!"

Neb began to laugh.

"'Pon my word," he replied, "the only thing I think about is my daily work!"

The truth was that indoors as well as out there was no want of work.

The colony of Lincoln Island was now at its highest point of prosperity, achieved by three years of continued hard work. The destruction of the brig had been a new source of riches. Without speaking of the complete rig which would serve for the vessel now on the stocks, utensils and tools of all sorts, weapons and ammunition, clothes and instruments, were now piled in the storerooms of Granite House. It had not even been necessary to resort again to the manufacture of the coarse felt materials. Though the colonists had suffered from cold during their first winter, the bad season might now come without their having any reason to dread its severity. Linen was plentiful also, and besides, they kept it with extreme care. From chloride of sodium, which is nothing else than sea salt, Cyrus Harding easily extracted the soda and chlorine. The soda, which it was easy to change into carbonate of soda, and the chlorine, of which he made chloride of lime, were employed for various domestic purposes, and especially in bleaching linen. Besides, they did not wash more than four times a year, as was done by families in the olden times, and it may be added, that Pencroft and Gideon Spilett, while waiting for the postman to bring him his newspaper, distinguished themselves as washermen.

So passed the winter months, June, July, and August. They were severe, and the average observations of the thermometer did not give more than eight degrees of Fahrenheit. It was therefore lower in temperature than the preceding winter. But then, what splendid fires blazed continually on the hearths of Granite House, the smoke marking the granite wall with long, zebra-like streaks! Fuel was not spared, as it grew naturally a few steps from them. Besides, the chips of the wood destined for the construction of the ship enabled them to economize the coal, which required more trouble to transport.

Men and animals were all well. Master Jup was a little chilly, it must be confessed. This was perhaps his only weakness, and it was necessary to make him a well-padded dressing-gown. But what a servant he was, clever, zealous, indefatigable, not indiscreet, not talkative, and he might have been with reason proposed as a model for all his biped brothers in the Old and New Worlds!

"As for that," said Pencroft, "when one has four hands at one's service, of course one's work ought to be done so much the better!"

And indeed the intelligent creature did it well.

During the seven months which had passed since the last researches made round the mountain, and during the month of September, which brought back fine weather, nothing was heard of the genius of the island. His power was not manifested in any way. It is true that it would have been superfluous, for no incident occurred to put the colonists to any painful trial.

Cyrus Harding even observed that if by chance the communication between the unknown and the tenants of Granite House had ever been established through the granite, and if Top's instinct had as it were felt it, there was no further sign of it during this period. The dog's growling had entirely ceased, as well as the uneasiness of the orang. The two friends—for they were such—no longer prowled round the opening of the inner well, nor did they bark or whine in that singular way which from the first the engineer had noticed. But could he be sure that this was all that was to be said about this enigma, and that he should never arrive at a solution? Could he be certain that some conjunction would not occur which would bring the mysterious personage on the scene? who could tell what the future might have in reserve?

At last the winter was ended, but an event, the consequences of which might be serious occurred in the first days of the returning spring.

On the 7th of September, Cyrus Harding, having observed the crater, saw smoke curling round the summit of the mountain. The volcano had awoke, and the vapor had penetrated the mineral layer heaped at the bottom of the crater. But would the subterranean fires provoke any violent eruption? This was an event which could not be foreseen. However, even while admitting the possibility of an eruption, it was not probable that the whole of Lincoln Island would suffer from it. The flow of volcanic matter is not always disastrous, and the island had already undergone this trial, as was shown by the streams of lava hardened on the northern slopes of the mountain. Besides, from the shape
of the crater--the opening broken in the upper edge--the matter would be thrown to the side opposite the fertile regions of the island.

However, the past did not necessarily answer for the future. Often, at the summit of volcanoes, the old craters close and new ones open. This had occurred in the two hemispheres--at Etna, Popocatepetl, at Orizaba and on the eve of an eruption there is everything to be feared. In fact, an earthquake--a phenomenon which often accompanies volcanic eruption--is enough to change the interior arrangement of a mountain, and to open new outlets for the burning lava.

Cyrus Harding explained these things to his companions, and, without exaggerating the state of things, he told them all the pros and cons. After all, they could not prevent it. It did not appear likely that Granite House would be threatened unless the ground was shaken by an earthquake. But the corral would be in great danger should a new crater open in the southern side of Mount Franklin.

From that day the smoke never disappeared from the top of the mountain, and it could even be perceived that it increased in height and thickness, without any flame mingling in its heavy volumes. The phenomenon was still concentrated in the lower part of the central crater.

However, with the fine days work had been continued. The building of the vessel was hastened as much as possible, and, by means of the waterfall on the shore, Cyrus Harding managed to establish an hydraulic sawmill, which rapidly cut up the trunks of trees into planks and joists. The mechanism of this apparatus was as simple as those used in the rustic sawmills of Norway. A first horizontal movement to move the piece of wood, a second vertical movement to move the saw--this was all that was wanted; and the engineer succeeded by means of a wheel, two cylinders, and pulleys properly arranged. Towards the end of the month of September the skeleton of the vessel, which was to be rigged as a schooner, lay in the dockyard. The ribs were almost entirely completed, and, all the timbers having been sustained by a provisional band, the shape of the vessel could already be seen. The schooner, sharp in the bows, very slender in the after-part, would evidently be suitable for a long voyage, if wanted; but laying the planking would still take a considerable time. Very fortunately, the iron work of the pirate brig had been saved after the explosion. From the planks and injured ribs Pencroft and Ayrton had extracted the bolts and a large quantity of copper nails. It was so much work saved for the smiths, but the carpenters had much to do.

Shipbuilding was interrupted for a week for the harvest, the haymaking, and the gathering in of the different crops on the plateau. This work finished, every moment was devoted to finishing the schooner. When night came the workmen were really quite exhausted. So as not to lose any time they had changed the hours for their meals; they dined at twelve o'clock, and only had their supper when daylight failed them. They then ascended to Granite House, when they were always ready to go to bed.

Sometimes, however, when the conversation bore on some interesting subject the hour for sleep was delayed for a time. The colonists then spoke of the future, and talked willingly of the changes which a voyage in the schooner to inhabited lands would make in their situation. But always, in the midst of these plans, prevailed the thought of a subsequent return to Lincoln Island. Never would they abandon this colony, founded with so much labor and with such success, and to which a communication with America would afford a fresh impetus. Pencroft and Neb especially hoped to end their days there.

"Herbert," said the sailor, "you will never abandon Lincoln Island?"

"Never, Pencroft, and especially if you make up your mind to stay there."

"That was made up long ago, my boy," answered Pencroft. "I shall expect you. You will bring me your wife and children, and I shall make jolly chaps of your youngsters!"

"That's agreed," replied Herbert, laughing and blushing at the same time.

"And you, Captain Harding," resumed Pencroft enthusiastically, "you will be still the governor of the island! Ah, how many inhabitants could it support? Ten thousand at least!"

They talked in this way, allowing Pencroft to run on, and at last the reporter actually started a newspaper--the New Lincoln Herald!

So is man's heart. The desire to perform a work which will endure, which will survive him, is the origin of his superiority over all other living creatures here below. It is this which has established his dominion, and this it is which justifies it, over all the world.

After that, who knows if Jup and Top had not themselves their little dream of the future.

Ayrton silently said to himself that he would like to see Lord Glenarvan again and show himself to all restored.

One evening, on the 15th of October, the conversation was prolonged later than usual. It was nine o'clock. Already, long badly concealed yawns gave warning of the hour of rest, and Pencroft was proceeding towards his bed, when the electric bell, placed in the dining-room, suddenly rang.

All were there, Cyrus Harding, Gideon Spilett, Herbert, Ayrton, Pencroft, Neb. Therefore none of the colonists were at the corral.
Cyrus Harding rose. His companions stared at each other, scarcely believing their ears.
"What does that mean?" cried Neb. "Was it the devil who rang it?"
No one answered.
"The weather is stormy," observed Herbert. "Might not its influence of electricity--"
Herbert did not finish his phrase. The engineer, towards whom all eyes were turned, shook his head negatively.
"We must wait," said Gideon Spilett. "If it is a signal, whoever it may be who has made it, he will renew it."
"But who do you think it is?" cried Neb.
"Who?" answered Pencroft, "but he--"
The sailor's sentence was cut short by a new tinkle of the bell.
Harding went to the apparatus, and sent this question to the corral:--
"What do you want?"
A few moments later the needle, moving on the alphabetic dial, gave this reply to the tenants of Granite House:--
"Come to the corral immediately."
"At last!" exclaimed Harding.
Yes! At last! The mystery was about to be unveiled. The colonists' fatigue had disappeared before the tremendous interest which was about to urge them to the corral, and all wish for rest had ceased. Without having uttered a word, in a few moments they had left Granite House, and were standing on the beach. Jup and Top alone were left behind. They could do without them.
The night was black. The new moon had disappeared at the same time as the sun. As Herbert had observed, great stormy clouds formed a lowering and heavy vault, preventing any star rays. A few lightning flashes, reflections from a distant storm, illuminated the horizon.
It was possible that a few hours later the thunder would roll over the island itself. The night was very threatening.
But however deep the darkness was, it would not prevent them from finding the familiar road to the corral.
They ascended the left bank of the Mercy, reached the plateau, passed the bridge over Creek Glycerine, and advanced through the forest.
They walked at a good pace, a prey to the liveliest emotions. There was no doubt but that they were now going to learn the long-searched-for answer to the enigma, the name of that mysterious being, so deeply concerned in their life, so generous in his influence, so powerful in his action! Must not this stranger have indeed mingled with their existence, have known the smallest details, have heard all that was said in Granite House, to have been able always to act in the very nick of time?
Every one, wrapped up in his own reflections, pressed forward. Under the arch of trees the darkness was such that even the edge of the road could not be seen. Not a sound in the forest. Both animals and birds, influenced by the heaviness of the atmosphere, remained motionless and silent. Not a breath disturbed the leaves. The footsteps of the colonists alone resounded on the hardened ground.
During the first quarter of an hour the silence was only interrupted by this remark from Pencroft:--
"We ought to have brought a torch."
And by this reply from the engineer:--
"We shall find one at the corral."
Harding and his companions had left Granite House at twelve minutes past nine. At forty-seven minutes past nine they had traversed three out of the five miles which separated the mouth of the Mercy from the corral.
At that moment sheets of lightning spread over the island and illumined the dark trees. The flashes dazzled and almost blinded them. Evidently the storm would not be long in bursting forth.
The flashes gradually became brighter and more rapid. Distant thunder growled in the sky. The atmosphere was stifling.
The colonists proceeded as if they were urged onwards by some irresistible force.
At ten o'clock a vivid flash showed them the palisade, and as they reached the gate the storm burst forth with tremendous fury.
In a minute the corral was crossed, and Harding stood before the hut.
Probably the house was occupied by the stranger, since it was from thence that the telegram had been sent. However, no light shone through the window.
The engineer knocked at the door.
No answer.
Cyrus Harding opened the door, and the settlers entered the room, which was perfectly dark. A light was struck by Neb, and in a few moments the lantern was lighted and the light thrown into every corner of the room.
There was no one there. Everything was in the state in which it had been left.
"Have we been deceived by an illusion?" murmured Cyrus Harding.

No! that was not possible! The telegram had clearly said,--
"Come to the corral immediately."

They approached the table specially devoted to the use of the wire. Everything was in order--the pile on the box containing it, as well as all the apparatus.

"Who came here the last time?" asked the engineer.

"I did, captain," answered Ayrton.

"And that was--"

"Four days ago."

"Ah! a note!" cried Herbert, pointing to a paper lying on the table.

On this paper were written these words in English:--
"Follow the new wire."

"Forward!" cried Harding, who understood that the despatch had not been sent from the corral, but from the mysterious retreat, communicating directly with Granite House by means of a supplementary wire joined to the old one.

Neb took the lighted lantern, and all left the corral. The storm then burst forth with tremendous violence. The interval between each lightning-flash and each thunder-clap diminished rapidly. The summit of the volcano, with its plume of vapor, could be seen by occasional flashes.

There was no telegraphic communication in any part of the corral between the house and the palisade; but the engineer, running straight to the first post, saw by the light of a flash a new wire hanging from the isolator to the ground.

"There it is!" said he.

This wire lay along the ground, and was surrounded with an isolating substance like a submarine cable, so as to assure the free transmission of the current. It appeared to pass through the wood and the southern spurs of the mountain, and consequently it ran towards the west.

"Follow it!" said Cyrus Harding.

And the settlers immediately pressed forward, guided by the wire.

The thunder continued to roar with such violence that not a word could be heard. However, there was no occasion for speaking, but to get forward as fast as possible.

Cyrus Harding and his companions then climbed the spur rising between the corral valley and that of Falls River, which they crossed at its narrowest part. The wire, sometimes stretched over the lower branches of the trees, sometimes lying on the ground, guided them surely. The engineer had supposed that the wire would perhaps stop at the bottom of the valley, and that the stranger's retreat would be there.

Nothing of the sort. They were obliged to ascend the south-western spur, and re-descend on that arid plateau terminated by the strangely-wild basalt cliff. From time to time one of the colonists stooped down and felt for the wire with his hands; but there was now no doubt that the wire was running directly towards the sea. There, to a certainty, in the depths of those rocks, was the dwelling so long sought for in vain.

The sky was literally on fire. Flash succeeded flash. Several struck the summit of the volcano in the midst of the thick smoke. It appeared there as if the mountain was vomiting flame. At a few minutes to eleven the colonists arrived on the high cliff overlooking the ocean to the west. The wind had risen. The surf roared 500 feet below.

Harding calculated that they had gone a mile and a half from the corral.

At this point the wire entered among the rocks, following the steep side of a narrow ravine. The settlers followed it at the risk of occasioning a fall of the slightly-balanced rocks, and being dashed into the sea. The descent was extremely perilous, but they did not think of the danger; they were no longer masters of themselves, and an irresistible attraction drew them towards this mysterious place as the magnet draws iron.

Thus they almost unconsciously descended this ravine, which even in broad daylight would have been considered impracticable.

The stones rolled and sparkled like fiery balls when they crossed through the gleams of light. Harding was first--Ayrton last. On they went, step by step. Now they slid over the slippery rock; then they struggled to their feet and scrambled on.

At last the wire touched the rocks on the beach. The colonists had reached the bottom of the basalt cliff.

There appeared a narrow ridge, running horizontally and parallel with the sea. The settlers followed the wire along it. They had not gone a hundred paces when the ridge by a moderate incline sloped down to the level of the sea.

The engineer seized the wire and found that it disappeared beneath the waves.

His companions were stupefied.
A cry of disappointment, almost a cry of despair, escaped them! Must they then plunge beneath the water and seek there for some submarine cavern? In their excited state they would not have hesitated to do it.

The engineer stopped them.

He led his companions to a hollow in the rocks, and there--

"We must wait," said he. "The tide is high. At low water the way will be open."

"But what can make you think," asked Pencroft.

"He would not have called us if the means had been wanting to enable us to reach him!"

Cyrus Harding spoke in a tone of such thorough conviction that no objection was raised. His remark, besides, was logical. It was quite possible that an opening, practicable at low water, though hidden now by the high tide, opened at the foot of the cliff.

There was some time to wait. The colonists remained silently crouching in a deep hollow. Rain now began to fall in torrents. The thunder was re-echoed among the rocks with a grand sonorosity.

The colonists' emotion was great. A thousand strange and extraordinary ideas crossed their brains, and they expected some grand and superhuman apparition, which alone could come up to the notion they had formed of the mysterious genius of the island.

At midnight, Harding carrying the lantern, descended to the beach to reconnoiter.

The engineer was not mistaken. The beginning of an immense excavation could be seen under the water. There the wire, bending at a right angle, entered the yawning gulf.

Cyrus Harding returned to his companions, and said simply,--

"In an hour the opening will be practicable."

"It is there, then?" said Pencroft.

"Did you doubt it?" returned Harding.

"But this cavern must be filled with water to a certain height," observed Herbert.

"Either the cavern will be completely dry," replied Harding, "and in that case we can traverse it on foot, or it will not be dry, and some means of transport will be put at our disposal."

An hour passed. All climbed down through the rain to the level of the sea. There was now eight feet of the opening above the water. It was like the arch of a bridge, under which rushed the foaming water.

Leaning forward, the engineer saw a black object floating on the water. He drew it towards him. It was a boat, moored to some interior projection of the cave. This boat was iron-plated. Two oars lay at the bottom.

"Jump in!" said Harding.

In a moment the settlers were in the boat. Neb and Ayrton took the oars, Pencroft the rudder. Cyrus Harding in the bows, with the lantern, lighted the way.

The elliptical roof, under which the boat at first passed, suddenly rose; but the darkness was too deep, and the light of the lantern too slight, for either the extent, length, height, or depth of the cave to be ascertained. Solemn silence reigned in this basaltic cavern. Not a sound could penetrate into it, even the thunder peals could not pierce its thick sides.

Such immense caves exist in various parts of the world, natural crypts dating from the geological epoch of the globe. Some are filled by the sea; others contain entire lakes in their sides. Such is Fingal's Cave, in the island of Staffa, one of the Hebrides; such are the caves of Morgat, in the bay of Douarnenez, in Brittany, the caves of Bonifacio, in Corsica, those of Lyse-Fjord, in Norway; such are the immense Mammoth caverns in Kentucky, 500 feet in height, and more than twenty miles in length! In many parts of the globe, nature has excavated these caverns, and preserved them for the admiration of man.

Did the cavern which the settlers were now exploring extend to the center of the island? For a quarter of an hour the boat had been advancing, making detours, indicated to Pencroft by the engineer in short sentences, when all at once,--

"More to the right!" he commanded.

The boat, altering its course, came up alongside the right wall. The engineer wished to see if the wire still ran along the side.

The wire was there fastened to the rock.

"Forward!" said Harding.

And the two oars, plunging into the dark waters, urged the boat onwards.

On they went for another quarter of an hour, and a distance of half-a-mile must have been cleared from the mouth of the cave, when Harding's voice was again heard.

"Stop!" said he.

The boat stopped, and the colonists perceived a bright light illuminating the vast cavern, so deeply excavated in the bowels of the island, of which nothing had ever led them to suspect the existence.
At a height of a hundred feet rose the vaulted roof, supported on basalt shafts. Irregular arches, strange moldings, appeared on the columns erected by nature in thousands from the first epochs of the formation of the globe. The basalt pillars, fitted one into the other, measured from forty to fifty feet in height, and the water, calm in spite of the tumult outside, washed their base. The brilliant focus of light, pointed out by the engineer, touched every point of rocks, and flooded the walls with light.

By reflection the water reproduced the brilliant sparkles, so that the boat appeared to be floating between two glittering zones. They could not be mistaken in the nature of the irradiation thrown from the glowing nucleus, whose clear rays were shattered by all the angles, all the projections of the cavern. This light proceeded from an electric source, and its white color betrayed its origin. It was the sun of this cave, and it filled it entirely.

At a sign from Cyrus Harding the oars again plunged into the water, causing a regular shower of gems, and the boat was urged forward towards the light, which was now not more than half a cable's length distant.

At this place the breadth of the sheet of water measured nearly 350 feet, and beyond the dazzling center could be seen an enormous basaltic wall, blocking up any issue on that side. The cavern widened here considerably, the sea forming a little lake. But the roof, the side walls, the end cliff, all the prisms, all the peaks, were flooded with the electric fluid, so that the brilliancy belonged to them, and as if the light issued from them.

In the center of the lake a long cigar-shaped object floated on the surface of the water, silent, motionless. The brilliancy which issued from it escaped from its sides as from two kilns heated to a white heat. This apparatus, similar in shape to an enormous whale, was about 250 feet long, and rose about ten or twelve above the water.

The boat slowly approached it, Cyrus Harding stood up in the bows. He gazed, a prey to violent excitement. Then, all at once, seizing the reporter's arm,--

"It is he! It can only be he!" he cried, "he!"--

Then, falling back on the seat, he murmured a name which Gideon Spilett alone could hear.

The reporter evidently knew this name, for it had a wonderful effect upon him, and he answered in a hoarse voice,--

"He! an outlawed man!"

"He!" said Harding.

At the engineer's command the boat approached this singular floating apparatus. The boat touched the left side, from which escaped a ray of light through a thick glass.

Harding and his companions mounted on the platform. An open hatchway was there. All darted down the opening.

At the bottom of the ladder was a deck, lighted by electricity. At the end of this deck was a door, which Harding opened.

A richly-ornamented room, quickly traversed by the colonists, was joined to a library, over which a luminous ceiling shed a flood of light.

At the end of the library a large door, also shut, was opened by the engineer.

An immense saloon—a sort of museum, in which were heaped up, with all the treasures of the mineral world, works of art, marvels of industry—appeared before the eyes of the colonists, who almost thought themselves suddenly transported into a land of enchantment.

Stretched on a rich sofa they saw a man, who did not appear to notice their presence. Then Harding raised his voice, and to the extreme surprise of his companions, he uttered these words,--

"Captain Nemo, you asked for us! We are here.--"
saturated with the electric fluid.

Meanwhile Captain Nemo withdrew his hand, and motioned the engineer and the reporter to be seated.

All regarded him with profound emotion. Before them they beheld that being whom they had styled the "genius of the island," the powerful protector whose intervention, in so many circumstances, had been so efficacious, the benefactor to whom they owed such a debt of gratitude! Their eyes beheld a man only, and a man at the point of death, where Pencroft and Neb had expected to find an almost supernatural being!

But how happened it that Cyrus Harding had recognized Captain Nemo? why had the latter so suddenly risen on hearing this name uttered, a name which he had believed known to none?--

The captain had resumed his position on the divan, and leaning on his arm, he regarded the engineer, seated near him.

"You know the name I formerly bore, sir?" he asked.
"I do," answered Cyrus Harding, "and also that of this wonderful submarine vessel--"
"The 'Nautilus'?" said the captain, with a faint smile.
"The 'Nautilus'."
"But do you--do you know who I am?"
"I do."
"It is nevertheless many years since I have held any communication with the inhabited world; three long years have I passed in the depth of the sea, the only place where I have found liberty! Who then can have betrayed my secret?"
"A man who was bound to you by no tie, Captain Nemo, and who, consequently, cannot be accused of treachery."
"The Frenchman who was cast on board my vessel by chance sixteen years since?"
"The same."
"He and his two companions did not then perish in the maelstrom, in the midst of which the 'Nautilus' was struggling?"
"They escaped, and a book has appeared under the title of 'Twenty Thousand Leagues Under the Sea,' which contains your history."
"The history of a few months only of my life!" interrupted the captain impetuously.
"It is true," answered Cyrus Harding, "but a few months of that strange life have sufficed to make you known."
"As a great criminal, doubtless!" said Captain Nemo, a haughty smile curling his lips. "Yes, a rebel, perhaps an outlaw against humanity!"

The engineer was silent.
"Well, sir?"
"It is not for me to judge you, Captain Nemo," answered Cyrus Harding, "at any rate as regards your past life. I am, with the rest of the world, ignorant of the motives which induced you to adopt this strange mode of existence, and I cannot judge of effects without knowing their causes; but what I do know is, that a beneficent hand has constantly protected us since our arrival on Lincoln Island, that we all owe our lives to a good, generous, and powerful being, and that this being so powerful, good and generous, Captain Nemo, is yourself!"
"It is I," answered the captain simply.

The engineer and the reporter rose. Their companions had drawn near, and the gratitude with which their hearts were charged was about to express itself in their gestures and words.

Captain Nemo stopped them by a sign, and in a voice which betrayed more emotion than he doubtless intended to show.
"Wait till you have heard all," he said.
And the captain, in a few concise sentences, ran over the events of his life.

His narrative was short, yet he was obliged to summon up his whole remaining energy to arrive at the end. He was evidently contending against extreme weakness. Several times Cyrus Harding entreated him to repose for a while, but he shook his head as a man to whom the morrow may never come, and when the reporter offered his assistance,--

"It is useless," he said; "my hours are numbered."

Captain Nemo was an Indian, the Prince Dakkar, son of a rajah of the then independent territory of Bundelkund. His father sent him, when ten years of age, to Europe, in order that he might receive an education in all respects complete, and in the hopes that by his talents and knowledge he might one day take a leading part in raising his long degraded and heathen country to a level with the nations of Europe.

From the age of ten years to that of thirty Prince Dakkar, endowed by Nature with her richest gifts of intellect, accumulated knowledge of every kind, and in science, literature, and art his researches were extensive and profound.
He traveled over the whole of Europe. His rank and fortune caused him to be everywhere sought after; but the pleasures of the world had for him no attractions. Though young and possessed of every personal advantage, he was ever grave—somber even—devoured by an unquenchable thirst for knowledge, and cherishing in the recesses of his heart the hope that he might become a great and powerful ruler of a free and enlightened people.

Still, for long the love of science triumphed over all other feelings. He became an artist deeply impressed by the marvels of art, a philosopher to whom no one of the higher sciences was unknown, a statesman versed in the policy of European courts. To the eyes of those who observed him superficially he might have passed for one of those cosmopolitans, curious of knowledge, but disdaining action; one of those opulent travelers, haughty and cynical, who move incessantly from place to place, and are of no country.

The history of Captain Nemo has, in fact, been published under the title of "Twenty Thousand Leagues Under the Sea." Here, therefore, will apply the observation already made as to the adventures of Ayrton with regard to the discrepancy of dates. Readers should therefore refer to the note already published on this point.

This artist, this philosopher, this man was, however, still cherishing the hope instilled into him from his earliest days.

Prince Dakkar returned to Bundelkund in the year 1849. He married a noble Indian lady, who was imbued with an ambition not less ardent than that by which he was inspired. Two children were born to them, whom they tenderly loved. But domestic happiness did not prevent him from seeking to carry out the object at which he aimed. He waited an opportunity. At length, as he vainly fancied, it presented itself.

Instigated by princes equally ambitious and less sagacious and more unscrupulous than he was, the people of India were persuaded that they might successfully rise against their English rulers, who had brought them out of a state of anarchy and constant warfare and misery, and had established peace and prosperity in their country. Their ignorance and gross superstition made them the facile tools of their designing chiefs.

In 1857 the great sepoy revolt broke out. Prince Dakkar, under the belief that he should thereby have the opportunity of attaining the object of his long-cherished ambition, was easily drawn into it. He forthwith devoted his talents and wealth to the service of this cause. He aided it in person; he fought in the front ranks; he risked his life equally with the humblest of the wretched and misguided fanatics; he was ten times wounded in twenty engagements, seeking death but finding it not, but at length the sanguinary rebels were utterly defeated, and the atrocious mutiny was brought to an end.

Never before had the British power in India been exposed to such danger, and if, as they had hoped, the sepoys had received assistance from without, the influence and supremacy in Asia of the United Kingdom would have been a thing of the past.

The name of Prince Dakkar was at that time well known. He had fought openly and without concealment. A price was set upon his head, but he managed to escape from his pursuers.

Civilization never recedes; the law of necessity ever forces it onwards. The sepoys were vanquished, and the land of the rajahs of old fell again under the rule of England.

Prince Dakkar, unable to find that death he courted, returned to the mountain fastnesses of Bundelkund. There, alone in the world, overcome by disappointment at the destruction of all his vain hopes, a prey to profound disgust for all human beings, filled with hatred of the civilized world, he realized the wreck of his fortune, assembled some score of his most faithful companions, and one day disappeared, leaving no trace behind.

Where, then, did he seek that liberty denied him upon the inhabited earth? Under the waves, in the depths of the ocean, where none could follow.

The warrior became the man of science. Upon a deserted island of the Pacific he established his dockyard, and there a submarine vessel was constructed from his designs. By methods which will at some future day be revealed he had rendered subservient the illimitable forces of electricity, which, extracted from inexhaustible sources, was employed for all the requirements of his floating equipage, as a moving, lighting, and heating agent. The sea, with its countless treasures, its myriads of fish, its numberless wrecks, its enormous mammalia, and not only all that nature supplied, but also all that man had lost in its depths, sufficed for every want of the prince and his crew—and thus was his most ardent desire accomplished, never again to hold communication with the earth. He named his submarine vessel the "Nautilus," called himself simply Captain Nemo, and disappeared beneath the seas.

During many years this strange being visited every ocean, from pole to pole. Outcast of the inhabited earth in these unknown worlds he gathered incalculable treasures. The millions lost in the Bay of Vigo, in 1702, by the galleons of Spain, furnished him with a mine of inexhaustible riches which he devoted always, anonymously, in favor of those nations who fought for the independence of their country.

(This refers to the resurrection of the Candiotes, who were, in fact, largely assisted by Captain Nemo.)

For long, however, he had held no communication with his fellow-creatures, when, during the night of the 6th of November, 1866, three men were cast on board his vessel. They were a French professor, his servant, and a
Canadian fisherman. These three men had been hurled overboard by a collision which had taken place between the "Nautilus" and the United States frigate "Abraham Lincoln," which had chased her.

Captain Nemo learned from this professor that the "Nautilus," taken now for a gigantic mammal of the whale species, now for a submarine vessel carrying a crew of pirates, was sought for in every sea.

He might have returned these three men to the ocean, from whence chance had brought them in contact with his mysterious existence. Instead of doing this he kept them prisoners, and during seven months they were enabled to behold all the wonders of a voyage of twenty thousand leagues under the sea.

One day, the 22nd of June, 1867, these three men, who knew nothing of the past history of Captain Nemo, succeeded in escaping in one of the "Nautilus's" boats. But as at this time the "Nautilus" was drawn into the vortex of the maelstrom, off the coast of Norway, the captain naturally believed that the fugitives, engulfed in that frightful whirlpool, found their death at the bottom of the abyss. He was unaware that the Frenchman and his two companions had been miraculously cast on shore, that the fishermen of the Lofoten Islands had rendered them assistance, and that the professor, on his return to France, had published that work in which seven months of the strange and eventful navigation of the "Nautilus" were narrated and exposed to the curiosity of the public.

For a long time after this, Captain Nemo continued to live thus, traversing every sea. But one by one his companions died, and found their last resting-place in their cemetery of coral, in the bed of the Pacific. At last Captain Nemo remained the solitary survivor of all those who had taken refuge with him in the depths of the ocean.

He was now sixty years of age. Although alone, he succeeded in navigating the "Nautilus" towards one of those submarine caverns which had sometimes served him as a harbor.

One of these ports was hollowed beneath Lincoln Island, and at this moment furnished an asylum to the "Nautilus."

The captain had now remained there six years, navigating the ocean no longer, but awaiting death, and that moment when he should rejoin his former companions, when by chance he observed the descent of the balloon which carried the prisoners of the Confederates. Clad in his diving dress he was walking beneath the water at a few cables' length from the shore of the island, when the engineer had been thrown into the sea. Moved by a feeling of compassion the captain saved Cyrus Harding.

His first impulse was to fly from the vicinity of the five castaways; but his harbor refuge was closed, for in consequence of an elevation of the basalt, produced by the influence of volcanic action, he could no longer pass through the entrance of the vault. Though there was sufficient depth of water to allow a light craft to pass the bar, there was not enough for the "Nautilus," whose draught of water was considerable.

Captain Nemo was compelled, therefore, to remain. He observed these men thrown without resources upon a desert island, but had no wish to be himself discovered by them. By degrees he became interested in their efforts when he saw them honest, energetic, and bound to each other by the ties of friendship. As if despite his wishes, he penetrated all the secrets of their existence. By means of the diving dress he could easily reach the well in the interior of Granite House, and climbing by the projections of rock to its upper orifice he heard the colonists as they recounted the past, and studied the present and future. He learned from them the tremendous conflict of America with America itself, for the abolition of slavery. Yes, these men were worthy to reconcile Captain Nemo with that humanity which they represented so nobly in the island.

Captain Nemo had saved Cyrus Harding. It was he also who had brought back the dog to the Chimneys, who rescued Top from the waters of the lake, who caused to fall at Flotsam Point the case containing so many things useful to the colonists, who conveyed the canoe into the stream of the Mercy, who cast the cord from the top of Granite House at the time of the attack by the baboons, who made known the presence of Ayrton upon Tabor Island, by means of the document enclosed in the bottle, who caused the explosion of the brig by the shock of a torpedo placed at the bottom of the canal, who saved Herbert from certain death by bringing the sulphate of quinine; and finally, it was he who had killed the convicts with the electric balls, of which he possessed the secret, and which he employed in the chase of submarine creatures. Thus were explained so many apparently supernatural occurrences, and which all proved the generosity and power of the captain.

Nevertheless, this noble misanthrope longed to benefit his proteges still further. There yet remained much useful advice to give them, and, his heart being softened by the approach of death, he invited, as we are aware, the colonists of Granite House to visit the "Nautilus," by means of a wire which connected it with the corral. Possibly he would not have done this had he been aware that Cyrus Harding was sufficiently acquainted with his history to address him by the name of Nemo.

The captain concluded the narrative of his life. Cyrus Harding then spoke; he recalled all the incidents which had exercised so beneficent an influence upon the colony, and in the names of his companions and himself thanked the generous being to whom they owed so much.

But Captain Nemo paid little attention; his mind appeared to be absorbed by one idea, and without taking the
proffered hand of the engineer,—

"Now, sir," said he, "now that you know my history, your judgment!"

In saying this, the captain evidently alluded to an important incident witnessed by the three strangers thrown on board his vessel, and which the French professor had related in his work, causing a profound and terrible sensation. Some days previous to the flight of the professor and his two companions, the "Nautilus," being chased by a frigate in the north of the Atlantic had hurled herself as a ram upon this frigate, and sunk her without mercy.

Cyrus Harding understood the captain's allusion, and was silent.

"It was an enemy's frigate," exclaimed Captain Nemo, transformed for an instant into the Prince Dakkar, "an enemy's frigate! It was she who attacked me—I was in a narrow and shallow bay—the frigate barred my way—and I sank her!"

A few moments of silence ensued; then the captain demanded,—

"What think you of my life, gentlemen?"

Cyrus Harding extended his hand to the ci-devant prince and replied gravely, "Sir, your error was in supposing that the past can be resuscitated, and in contending against inevitable progress. It is one of those errors which some admire, others blame; which God alone can judge. He who is mistaken in an action which he sincerely believes to be right may be an enemy, but retains our esteem. Your error is one that we may admire, and your name has nothing to fear from the judgment of history, which does not condemn heroic folly, but its results."

The old man's breast swelled with emotion, and raising his hand to heaven,—

"Was I wrong, or in the right?" he murmured.

Cyrus Harding replied, "All great actions return to God, from whom they are derived. Captain Nemo, we, whom you have succored, shall ever mourn your loss."

Herbert, who had drawn near the captain, fell on his knees and kissed his hand.

A tear glistened in the eyes of the dying man. "My child," he said, "may God bless you!"

Chapter 17

Day had returned. No ray of light penetrated into the profundity of the cavern. It being high-water, the entrance was closed by the sea. But the artificial light, which escaped in long streams from the skylights of the "Nautilus" was as vivid as before, and the sheet of water shone around the floating vessel.

An extreme exhaustion now overcame Captain Nemo, who had fallen back upon the divan. It was useless to contemplate removing him to Granite House, for he had expressed his wish to remain in the midst of those marvels of the "Nautilus" which millions could not have purchased, and to wait there for that death which was swiftly approaching.

During a long interval of prostration, which rendered him almost unconscious, Cyrus Harding and Gideon Spilett attentively observed the condition of the dying man. It was apparent that his strength was gradually diminishing. That frame, once so robust, was now but the fragile tenement of a departing soul. All of life was concentrated in the heart and head.

The engineer and reporter consulted in whispers. Was it possible to render any aid to the dying man? Might his life, if not saved, be prolonged for some days? He himself had said that no remedy could avail, and he awaited with tranquillity that death which had for him no terrors.

"We can do nothing," said Gideon Spilett.

"But of what is he dying?" asked Pencroft.

"Life is simply fading out," replied the reporter.

"Nevertheless," said the sailor, "if we move him into the open air, and the light of the sun, he might perhaps recover."

"No, Pencroft," answered the engineer, "it is useless to attempt it. Besides, Captain Nemo would never consent to leave his vessel. He has lived for a dozen years on board the 'Nautilus,' and on board the 'Nautilus' he desires to die."

Without doubt Captain Nemo heard Cyrus Harding's reply, for he raised himself slightly, and in a voice more feeble, but always intelligible,—

"You are right, sir," he said. "I shall die here—it is my wish; and therefore I have a request to make of you."

Cyrus Harding and his companions had drawn near the divan, and now arranged the cushions in such a manner as to better support the dying man.

They saw his eyes wander over all the marvels of this saloon, lighted by the electric rays which fell from the arabesques of the luminous ceiling. He surveyed, one after the other, the pictures hanging from the splendid tapestries of the partitions, the chef-d'oeuvres of the Italian, Flemish, French, and Spanish masters; the statues of
marble and bronze on their pedestals; the magnificent organ, leaning against the after-partition; the aquarium, in which bloomed the most wonderful productions of the sea—marine plants, zoophytes, chaplets of pearls of inestimable value; and, finally, his eyes rested on this device, inscribed over the pediment of the museum—the motto of the "Nautilus"—
"Mobilis in mobile."

His glance seemed to rest fondly for the last time on these masterpieces of art and of nature, to which he had limited his horizon during a sojourn of so many years in the abysses of the seas.

Cyrus Harding respected the captain's silence, and waited till he should speak.

After some minutes, during which, doubtless, he passed in review his whole life, Captain Nemo turned to the colonists and said,
"You consider yourselves, gentlemen, under some obligations to me?"
"Captain, believe us that we would give our lives to prolong yours."
"Promise, then," continued Captain Nemo, "to carry out my last wishes, and I shall be repaid for all I have done for you."
"We promise," said Cyrus Harding.
And by this promise he bound both himself and his companions.
"Gentlemen," resumed the captain, "to-morrow I shall be dead."
Herbert was about to utter an exclamation, but a sign from the captain arrested him.
"To-morrow I shall die, and I desire no other tomb than the 'Nautilus.' It is my grave! All my friends repose in the depths of the ocean; their resting-place shall be mine."

These words were received with profound silence.
"Pay attention to my wishes," he continued. "The 'Nautilus' is imprisoned in this grotto, the entrance of which is blocked up; but, although egress is impossible, the vessel may at least sink in the abyss, and there bury my remains."
The colonists listened reverently to the words of the dying man.

"To-morrow, after my death, Mr. Harding," continued the captain, "yourself and companions will leave the 'Nautilus,' for all the treasures it contains must perish with me. One token alone will remain with you of Prince Dakkar, with whose history you are now acquainted. That coffer yonder contains diamonds of the value of many millions, most of them mementoes of the time when, husband and father, I thought happiness possible for me, and a collection of pearls gathered by my friends and myself in the depths of the ocean. Of this treasure at a future day, you may make good use. In the hands of such men as yourself and your comrades, Captain Harding, money will never be a source of danger. From on high I shall still participate in your enterprises, and I fear not but that they will prosper."

After a few moments' repose, necessitated by his extreme weakness, Captain Nemo continued,—
"To-morrow you will take the coffer, you will leave the saloon, of which you will close the door; then you will ascend on to the deck of the 'Nautilus,' and you will lower the mainhatch so as entirely to close the vessel."
"It shall be done, captain," answered Cyrus Harding.
"Good. You will then embark in the canoe which brought you hither; but, before leaving the 'Nautilus,' go to the stern and there open two large stop-cocks which you will find upon the water-line. The water will penetrate into the reservoirs, and the 'Nautilus' will gradually sink beneath the water to repose at the bottom of the abyss."
And comprehending a gesture of Cyrus Harding, the captain added,—
"Fear nothing! You will but bury a corpse!"

Neither Cyrus Harding nor his companions ventured to offer any observation to Captain Nemo. He had expressed his last wishes, and they had nothing to do but to conform to them.
"I have your promise, gentlemen?" added Captain Nemo.
"You have, captain," replied the engineer.
The captain thanked the colonists by a sign, and requested them to leave him for some hours. Gideon Spilett wished to remain near him, in the event of a crisis coming on, but the dying man refused, saying, "I shall live until to-morrow, sir."

All left the saloon, passed through the library and the dining-room, and arrived forward, in the machine-room where the electrical apparatus was established, which supplied not only heat and light, but the mechanical power of the "Nautilus."
The "Nautilus" was a masterpiece containing masterpieces with itself, and the engineer was struck with astonishment.
The colonists mounted the platform, which rose seven or eight feet above the water. There they beheld a thick glass lenticular covering, which protected a kind of large eye, from which flashed forth light. Behind this eye was apparently a cabin containing the wheels of the rudder, and in which was stationed the helmsman, when he
navigated the "Nautilus" over the bed of the ocean, which the electric rays would evidently light up to a considerable distance.

Cyrus Harding and his companions remained for a time silent, for they were vividly impressed by what they had just seen and heard, and their hearts were deeply touched by the thought that he whose arm had so often aided them, the protector whom they had known but a few hours, was at the point of death.

Whatever might be the judgment pronounced by posterity upon the events of this, so to speak, extra-human existence, the character of Prince Dakkar would ever remain as one of those whose memory time can never efface.

"What a man!" said Pencroft. "Is it possible that he can have lived at the bottom of the sea? And it seems to me that perhaps he has not found peace there any more than elsewhere!"

"The 'Nautilus,'" observed Ayrton, "might have enabled us to leave Lincoln Island and reach some inhabited country."

"Good Heavens!" exclaimed Pencroft. "I for one would never risk myself in such a craft. To sail on the seas, good, but under the seas, never!"

"I believe, Pencroft," answered the reporter, "that the navigation of a submarine vessel such as the 'Nautilus' ought to be very easy, and that we should soon become accustomed to it. There would be no storms, no lee-shore to fear. At some feet beneath the surface the waters of the ocean are as calm as those of a lake."

"That may be," replied the sailor, "but I prefer a gale of wind on board a well-found craft. A vessel is built to sail on the sea, and not beneath it."

"My friends," said the engineer, "it is useless, at any rate as regards the 'Nautilus,' to discuss the question of submarine vessels. The 'Nautilus' is not ours, and we have not the right to dispose of it. Moreover, we could in no case avail ourselves of it. Independently of the fact that it would be impossible to get it out of this cavern, whose entrance is now closed by the uprising of the basaltic rocks, Captain Nemo's wish is that it shall be buried with him. His wish is our law, and we will fulfil it."

After a somewhat prolonged conversation, Cyrus Harding and his companions again descended to the interior of the "Nautilus." There they took some refreshment and returned to the saloon.

Captain Nemo had somewhat rallied from the prostration which had overcome him, and his eyes shone with their wonted fire. A faint smile even curled his lips.

The colonists drew around him.

"Gentlemen," said the captain, "you are brave and honest men. You have devoted yourselves to the common weal. Often have I observed your conduct. I have esteemed you--I esteem you still! Your hand, Mr. Harding."

Cyrus Harding gave his hand to the captain, who clasped it affectionately.

"It is well!" he murmured.

He resumed,--

"But enough of myself. I have to speak concerning yourselves, and this Lincoln Island, upon which you have taken refuge. You now desire to leave it?"

"To return, captain!" answered Pencroft quickly.

"To return, Pencroft?" said the captain, with a smile. "I know, it is true, your love for this island. You have helped to make it what it now is, and it seems to you a paradise!"

"Our project, captain," interposed Cyrus Harding, "is to annex it to the United States, and to establish for our shipping a port so fortunately situated in this part of the Pacific."

"Your thoughts are with your country, gentlemen," continued the captain; "your toils are for her prosperity and glory. You are right. One's native land!--there should one live! there die! And I die far from all I loved!"

"You have some last wish to transmit," said the engineer with emotion, "some souvenir to send to those friends you have left in the mountains of India?"

"No, Captain Harding; no friends remain to me! I am the last of my race, and to all whom I have known I have long been as are the dead. But to return to yourselves. Solitude, isolation, are painful things, and beyond human endurance. I die of having thought it possible to live alone! You should, therefore, dare all in the attempt to leave Lincoln Island, and see once more the land of your birth. I am aware that those wretches have destroyed the vessel you have built."

"We propose to construct a vessel," said Gideon Spilett, "sufficiently large to convey us to the nearest land; but if we should succeed, sooner or later we shall return to Lincoln Island. We are attached to it by too many recollections ever to forget it."

"It is here that we have known Captain Nemo," said Cyrus Harding.

"It is here only that we can make our home!" added Herbert.

"And here shall I sleep the sleep of eternity, if--" replied the captain.

He paused for a moment, and, instead of completing the sentence, said simply,--
"Mr. Harding, I wish to speak with you--alone!"

The engineer's companions, respecting the wish, retired.

Cyrus Harding remained but a few minutes alone with Captain Nemo, and soon recalled his companions; but he said nothing to them of the private matters which the dying man had confided to him.

Gideon Spilett now watched the captain with extreme care. It was evident that he was no longer sustained by his moral energy, which had lost the power of reaction against his physical weakness.

The day closed without change. The colonists did not quit the "Nautilus" for a moment. Night arrived, although it was impossible to distinguish it from day in the cavern.

Captain Nemo suffered no pain, but he was visibly sinking. His noble features, paled by the approach of death, were perfectly calm. Inaudible words escaped at intervals from his lips, bearing upon various incidents of his chequered career. Life was evidently ebbing slowly and his extremities were already cold.

Once or twice more he spoke to the colonists who stood around him, and smiled on them with that last smile which continues after death.

At length, shortly after midnight, Captain Nemo by a supreme effort succeeded in folding his arms across his breast, as if wishing in that attitude to compose himself for death.

By one o'clock his glance alone showed signs of life. A dying light gleamed in those eyes once so brilliant. Then, murmuring the words, "God and my country!" he quietly expired.

Cyrus Harding, bending low closed the eyes of him who had once been the Prince Dakkar, and was now not even Captain Nemo.

Herbert and Pencroft sobbed aloud. Tears fell from Ayrton's eyes. Neb was on his knees by the reporter's side, motionless as a statue.

Then Cyrus Harding, extending his hand over the forehead of the dead, said solemnly, "May his soul be with God!" Turning to his friends, he added, "Let us pray for him whom we have lost!"

Some hours later the colonists fulfilled the promise made to the captain by carrying out his dying wishes.

Cyrus Harding and his companions quitted the "Nautilus," taking with them the only memento left them by their benefactor, the coffer which contained wealth amounting to millions.

The marvelous saloon, still flooded with light, had been carefully closed. The iron door leading on deck was then securely fastened in such a manner as to prevent even a drop of water from penetrating to the interior of the "Nautilus."

The colonists then descended into the canoe, which was moored to the side of the submarine vessel.

The canoe was now brought around to the stern. There, at the water-line, were two large stop-cocks communicating with the reservoirs employed in the submersion of the vessel.

The stop-cocks were opened, the reservoirs filled, and the "Nautilus," slowly sinking, disappeared beneath the surface of the lake.

But the colonists were yet able to follow its descent through the waves. The powerful light it gave forth lighted up the translucent water, while the cavern became gradually obscure. At length this vast effusion of electric light faded away, and soon after the "Nautilus," now the tomb of Captain Nemo, reposed in its ocean bed.

Chapter 18

At break of day the colonists regained in silence the entrance of the cavern, to which they gave the name of "Dakkar Grotto," in memory of Captain Nemo. It was now low-water, and they passed without difficulty under the arcade, washed on the right by the sea.

The canoe was left here, carefully protected from the waves. As additional precaution, Pencroft, Neb, and Ayrton drew it up on a little beach which bordered one of the sides of the grotto, in a spot where it could run no risk of harm.

The storm had ceased during the night. The last low mutterings of the thunder died away in the west. Rain fell no longer, but the sky was yet obscured by clouds. On the whole, this month of October, the first of the southern spring, was not ushered in by satisfactory tokens, and the wind had a tendency to shift from one point of the compass to another, which rendered it impossible to count upon settled weather.

Cyrus Harding and his companions, on leaving Dakkar Grotto, had taken the road to the corral. On their way Neb and Herbert were careful to preserve the wire which had been laid down by the captain between the corral and the grotto, and which might at a future time be of service.

The colonists spoke but little on the road. The various incidents of the night of October 15th had left a profound impression on their minds. The unknown being whose influence had so effectually protected them, the man whom their imagination had endowed with supernatural powers, Captain Nemo, was no more. His "Nautilus" and he were
buried in the depths of the abyss. To each one of them their existence seemed even more isolated than before. They had been accustomed to count upon the intervention of that power which existed no longer, and Gideon Spilett, and even Cyrus Harding, could not escape this impression. Thus they maintained a profound silence during their journey to the corral.

Towards nine in the morning the colonists arrived at Granite House.

It had been agreed that the construction of the vessel should be actively pushed forward, and Cyrus Harding more than ever devoted his time and labor to this object. It was impossible to divine what future lay before them. Evidently the advantage to the colonists would be great of having at their disposal a substantial vessel, capable of keeping the sea even in heavy weather, and large enough to attempt, in case of need, a voyage of some duration. Even if, when their vessel should be completed, the colonists should not resolve to leave Lincoln Island as yet, in order to gain either one of the Polynesian Archipelagoes of the Pacific or the shores of New Zealand, they might at least, sooner or later, proceed to Tabor Island, to leave there the notice relating to Ayrton. This was a precaution rendered indispensable by the possibility of the Scotch yacht reappearing in those seas, and it was of the highest importance that nothing should be neglected on this point.

The works were then resumed. Cyrus Harding, Pencroft, and Ayrton, assisted by Neb, Gideon Spilett, and Herbert, except when unavoidably called off by other necessary occupations, worked without cessation. It was important that the new vessel should be ready in five months—that is to say, by the beginning of March—if they wished to visit Tabor Island before the equinoctial gales rendered the voyage impracticable. Therefore the carpenters lost not a moment. Moreover, it was unnecessary to manufacture rigging, that of the "Speedy" having been saved entire, so that the hull only of the vessel needed to be constructed.

The end of the year 1868 found them occupied by these important labors, to the exclusion of almost all others. At the expiration of two months and a half the ribs had been set up and the first planks adjusted. It was already evident that the plans made by Cyrus Harding were admirable, and that the vessel would behave well at sea.

Pencroft brought to the task a devouring energy, and would even grumble when one or the other abandoned the carpenter's axe for the gun of the hunter. It was nevertheless necessary to keep up the stores of Granite House, in view of the approaching winter. But this did not satisfy Pencroft. The brave, honest sailor was not content when the workmen were not at the dockyard. When this happened he grumbled vigorously, and, by way of venting his feelings, did the work of six men.

The weather was very unfavorable during the whole of the summer season. For some days the heat was overpowering, and the atmosphere, saturated with electricity, was only cleared by violent storms. It was rarely that the distant growling of the thunder could not be heard, like a low but incessant murmur, such as is produced in the equatorial regions of the globe.

The 1st of January, 1869, was signalized by a storm of extreme violence, and the thunder burst several times over the island. Large trees were struck by the electric fluid and shattered, and among others one of those gigantic nettle-trees which had shaded the poultry-yard at the southern extremity of the lake. Had this meteor any relation to the phenomena going on in the bowels of the earth? Was there any connection between the commotion of the atmosphere and that of the interior of the earth? Cyrus Harding was inclined to think that such was the case, for the development of these storms was attended by the renewal of volcanic symptoms.

It was on the 3rd of January that Herbert, having ascended at daybreak to the plateau of Prospect Heights to harness one of the onagers, perceived an enormous hat-shaped cloud rolling from the summit of the volcano.

"Ah!" exclaimed Pencroft, "those are not vapors this time! It seems to me that the giant is not content with breathing; he must smoke!"

This figure of speech employed by the sailor exactly expressed the changes going on at the mouth of the volcano. Already for three months had the crater emitted vapors more or less dense, but which were as yet produced only by an internal ebullition of mineral substances. But now the vapors were replaced by a thick smoke, rising in the form of a grayish column, more than three hundred feet in width at its base, and which spread like an immense mushroom to a height of from seven to eight hundred feet above the summit of the mountain.

"The fire is in the chimney," observed Gideon Spilett.

"And we can't put it out!" replied Herbert.

"The volcano ought to be swept," observed Neb, who spoke as if perfectly serious.

"Well said, Neb!" cried Pencroft, with a shout of laughter; "and you'll undertake the job, no doubt?"

Cyrus Harding attentively observed the dense smoke emitted by Mount Franklin, and even listened, as if expecting to hear some distant muttering. Then, turning towards his companions, from whom he had gone somewhat apart, he said,—

"The truth is, my friends, we must not conceal from ourselves that an important change is going forward.
volcanic substances are no longer in a state of ebullition, they have caught fire, and we are undoubtedly menaced by an approaching eruption."

"Well, captain," said Pencroft, "we shall witness the eruption; and if it is a good one, we'll applaud it. I don't see that we need concern ourselves further about the matter."

"It may be so," replied Cyrus Harding, "for the ancient track of the lava is still open; and thanks to this, the crater has hitherto overflowed towards the north. And yet--"

"And yet, as we can derive no advantage from an eruption, it might be better it should not take place," said the reporter.

"Who knows?" answered the sailor. "Perhaps there may be some valuable substance in this volcano, which it will spout forth, and which we may turn to good account!"

Cyrus Harding shook his head with the air of a man who augured no good from the phenomenon whose development had been so sudden. He did not regard so lightly as Pencroft the results of an eruption. If the lava, in consequence of the position of the crater, did not directly menace the wooded and cultivated parts of the island, other complications might present themselves. In fact, eruptions are not unfrequently accompanied by earthquakes; and an island of the nature of Lincoln Island, formed of substances so varied, basalt on one side, granite on the other, lava on the north, rich soil on the south, substances which consequently could not be firmly attached to each other, would be exposed to the risk of disintegration. Although, therefore, the spreading of the volcanic matter might not constitute a serious danger, any movement of the terrestrial structure which should shake the island might entail the gravest consequences.

"It seems to me," said Ayrton, who had reclined so as to place his ear to the ground, "it seems to me that I can hear a dull, rumbling sound, like that of a wagon loaded with bars of iron."

The colonists listened with the greatest attention, and were convinced that Ayrton was not mistaken. The rumbling was mingled with a subterranean roar, which formed a sort of rinforzando, and died slowly away, as if some violent storm had passed through the profundities of the globe. But no explosion properly so termed, could be heard. It might therefore be concluded that the vapors and smoke found a free passage through the central shaft; and that the safety-valve being sufficiently large, no convulsion would be produced, no explosion was to be apprehended.

"Well, then!" said Pencroft, "are we not going back to work? Let Mount Franklin smoke, groan, bellow, or spout forth fire and flame as much as it pleases, that is no reason why we should be idle! Come, Ayrton, Neb, Herbert, Captain Harding, Mr. Spilett, every one of us must turn to at our work to-day! We are going to place the keelson, and a dozen pair of hands would not be too many. Before two months I want our new 'Bonadventure'--for we shall keep the old name, shall we not?--to float on the waters of Port Balloon! Therefore there is not an hour to lose!"

All the colonists, their services thus requisitioned by Pencroft, descended to the dockyard, and proceeded to place the keelson, a thick mass of wood which forms the lower portion of a ship and unites firmly the timbers of the hull. It was an arduous undertaking, in which all took part.

They continued their labors during the whole of this day, the 3rd of January, without thinking further of the volcano, which could not, besides, be seen from the shore of Granite House. But once or twice, large shadows, veiling the sun, which described its diurnal arc through an extremely clear sky, indicated that a thick cloud of smoke passed between its disc and the island. The wind, blowing on the shore, carried all these vapors to the westward. Cyrus Harding and Gideon Spilett remarked these somber appearances, and from time to time discussed the evident progress of the volcanic phenomena, but their work went on without interruption. It was, besides, of the first importance from every point of view, that the vessel should be finished with the least possible delay. In presence of the eventualities which might arise, the safety of the colonists would be to a great extent secured by their ship. Who could tell that it might not prove some day their only refuge?

In the evening, after supper, Cyrus Harding, Gideon Spilett, and Herbert again ascended the plateau of Prospect Heights. It was already dark, and the obscurity would permit them to ascertain if flames or incandescent matter thrown up by the volcano were mingled with the vapor and smoke accumulated at the mouth of the crater.

"The crater is on fire!" said Herbert, who, more active than his companion, first reached the plateau.

Mount Franklin, distant about six miles, now appeared like a gigantic torch, around the summit of which turned fuliginous flames. So much smoke, and possibly scoriae and cinders were mingled with them, that their light gleamed but faintly amid the gloom of the night. But a kind of lurid brilliancy spread over the island, against which stood out confusedly the wooded masses of the heights. Immense whirlwinds of vapor obscured the sky, through which glittered a few stars.

"The change is rapid!" said the engineer.

"That is not surprising," answered the reporter. "The reawakening of the volcano already dates back some time. You may remember, Cyrus, that the first vapors appeared about the time we searched the sides of the mountain to
discover Captain Nemo's retreat. It was, if I mistake not, about the 15th of October."

"Yes," replied Herbert, "two months and a half ago!"

"The subterranean fires have therefore been smoldering for ten weeks," resumed Gideon Spilett, "and it is not to
be wondered at that they now break out with such violence!"

"Do you not feel a certain vibration of the soil?" asked Cyrus Harding.

"Yes," replied Gideon Spilett, "but there is a great difference between that and an earthquake."

"I do not affirm that we are menaced with an earthquake," answered Cyrus Harding, "may God preserve us from
that! No; these vibrations are due to the effervescence of the central fire. The crust of the earth is simply the shell of
a boiler, and you know that such a shell, under the pressure of steam, vibrates like a sonorous plate. It is this effect
which is being produced at this moment."

"What magnificent flames!" exclaimed Herbert.

At this instant a kind of bouquet of flames shot forth from the crater, the brilliancy of which was visible even
through the vapors. Thousands of luminous sheets and barbed tongues of fire were cast in various directions. Some,
extending beyond the dome of smoke, dissipated it, leaving behind an incandescent powder. This was accompanied
by successive explosions, resembling the discharge of a battery of machine-guns.

Cyrus Harding, the reporter, and Herbert, after spending an hour on the plateau of Prospect Heights, again
descended to the beach, and returned to Granite House. The engineer was thoughtful and preoccupied, so much so,
indeed, that Gideon Spilett inquired if he apprehended any immediate danger, of which the eruption might directly
or indirectly be the cause.

"Yes, and no," answered Cyrus Harding.

"Nevertheless," continued the reporter, "would not the greatest misfortune which could happen to us be an
earthquake which would overturn the island? Now, I do not suppose that this is to be feared, since the vapors and
lava have found a free outlet."

"True," replied Cyrus Harding, "and I do not fear an earthquake in the sense in which the term is commonly
applied to convulsions of the soil provoked by the expansion of subterranean gases. But other causes may produce
great disasters."

"How so, my dear Cyrus?"

"I am not certain. I must consider. I must visit the mountain. In a few days I shall learn more on this point."

Gideon Spilett said no more, and soon, in spite of the explosions of the volcano, whose intensity increased, and
which were repeated by the echoes of the island, the inhabitants of Granite House were sleeping soundly.

Three days passed by--the 4th, 5th, and 6th of January. The construction of the vessel was diligently continued,
and without offering further explanations the engineer pushed forward the work with all his energy. Mount Franklin
was now hooded by a somber cloud of sinister aspect, and, amid the flames, vomiting forth incandescent rocks,
some of which fell back into the crater itself. This caused Pencroft, who would only look at the matter in the light of
a joke, to exclaim,--

"Ah! the giant is playing at cup and ball; he is a conjurer."

In fact, the substances thrown up fell back again in to the abyss, and it did not seem that the lava, though swollen
by the internal pressure, had yet risen to the orifice of the crater. At any rate, the opening on the northeast, which
was partly visible, poured out no torrent upon the northern slope of the mountain.

Nevertheless, however pressing was the construction of the vessel, other duties demanded the presence of the
colonists on various portions of the island. Before everything it was necessary to go to the corral, where the flocks of
musmons and goats were enclosed, and replenish the provision of forage for those animals. It was accordingly
arranged that Ayrton should proceed thither the next day, the 7th of January; and as he was sufficient for the task, to
which he was accustomed, Pencroft and the rest were somewhat surprised on hearing the engineer say to Ayrton--

"As you are going to-morrow to the corral I will accompany you."

"But, Captain Harding," exclaimed the sailor, "our working days will not be many, and if you go also we shall be
two pair of hands short!"

"We shall return to-morrow," replied Cyrus Harding, "but it is necessary that I should go to the corral. I must
learn how the eruption is progressing."

"The eruption! always the eruption!" answered Pencroft, with an air of discontent. "An important thing, truly,
this eruption! I trouble myself very little about it."

Whatever might be the sailor's opinion, the expedition projected by the engineer was settled for the next day.
Herbert wished to accompany Cyrus Harding, but he would not vex Pencroft by his absence.

The next day, at dawn, Cyrus Harding and Ayrton, mounting the cart drawn by two onagers, took the road to the
corral and set off at a round trot.

Above the forest were passing large clouds, to which the crater of Mount Franklin incessantly added fuliginous
matter. These clouds, which rolled heavily in the air, were evidently composed of heterogeneous substances. It was not alone from the volcano that they derived their strange opacity and weight. Scoriae, in a state of dust, like powdered pumice-stone, and grayish ashes as small as the finest feculae, were held in suspension in the midst of their thick folds. These ashes are so fine that they have been observed in the air for whole months. After the eruption of 1783 in Iceland for upwards of a year the atmosphere was thus charged with volcanic dust through which the rays of the sun were only with difficulty discernible.

But more often this pulverized matter falls, and this happened on the present occasion. Cyrus Harding and Ayrton had scarcely reached the corral when a sort of black snow like fine gunpowder fell, and instantly changed the appearance of the soil. Trees, meadows, all disappeared beneath a covering several inches in depth. But, very fortunately, the wind blew from the northeast, and the greater part of the cloud dissolved itself over the sea.

"This is very singular, Captain Harding," said Ayrton.

"It is very serious," replied the engineer. "This powdered pumice-stone, all this mineral dust, proves how grave is the convulsion going forward in the lower depths of the volcano."

"But can nothing be done?"

"Nothing, except to note the progress of the phenomenon. Do you, therefore, Ayrton, occupy yourself with the necessary work at the corral. In the meantime I will ascend just beyond the source of Red Creek and examine the condition of the mountain upon its northern aspect. Then--"

"Well, Captain Harding?"

"Then we will pay a visit to Dakkar Grotto. I wish to inspect it. At any rate I will come back for you in two hours."

Ayrton then proceeded to enter the corral, and, while awaiting the engineer's return, busied himself with the musmons and goats which seemed to feel a certain uneasiness in presence of these first signs of an eruption.

Meanwhile Cyrus Harding ascended the crest of the eastern spur, passed Red Creek, and arrived at the spot where he and his companions had discovered a sulphurous spring at the time of their first exploration.

How changed was everything! Instead of a single column of smoke he counted thirteen, forced through the soil as if violently propelled by some piston. It was evident that the crust of the earth was subjected in this part of the globe to a frightful pressure. The atmosphere was saturated with gases and carbonic acid, mingled with aqueous vapors. Cyrus Harding felt the volcanic tufa with which the plain was strewn, and which was but pulverized cinders hardened into solid blocks by time, tremble beneath him, but he could discover no traces of fresh lava.

The engineer became more assured of this when he observed all the northern part of Mount Franklin. Pillars of smoke and flame escaped from the crater; a hail of scoriae fell on the ground; but no current of lava burst from the mouth of the volcano, which proved that the volcanic matter had not yet attained the level of the superior orifice of the central shaft.

"But I would prefer that it were so," said Cyrus Harding to himself. "At any rate, I should then know that the lava had followed its accustomed track. Who can say that it may not take a new course? But the danger does not consist in that! Captain Nemo foresaw it clearly! No, the danger does not lie there!"

Cyrus Harding advanced towards the enormous causeway whose prolongation enclosed the narrow Shark Gulf. He could now sufficiently examine on this side the ancient channels of the lava. There was no doubt in his mind that the most recent eruption had occurred at a far-distant epoch.

He then returned by the same way, listening attentively to the subterranean mutterings which rolled like long-continued thunder, interrupted by deafening explosions. At nine in the morning he reached the corral.

Ayrton awaited him.

"The animals are cared for, Captain Harding," said Ayrton.

"Good, Ayrton."

"They seem uneasy, Captain Harding."

"Yes, instinct speaks through them, and instinct is never deceived."

"Are you ready?"

"Take a lamp, Ayrton," answered the engineer; "we will start at once."

Ayrton did as desired. The onagers, unharnessed, roamed in the corral. The gate was secured on the outside, and Cyrus Harding, preceding Ayrton, took the narrow path which led westward to the shore.

The soil they walked upon was choked with the pulverized matter fallen from the cloud. No quadruped appeared in the woods. Even the birds had fled. Sometimes a passing breeze raised the covering of ashes, and the two colonists, enveloped in a whirlwind of dust, lost sight of each other. They were then careful to cover their eyes and mouths with handkerchiefs, for they ran the risk of being blinded and suffocated.

It was impossible for Cyrus Harding and Ayrton, with these impediments, to make rapid progress. Moreover, the atmosphere was close, as if the oxygen had been partly burned up, and had become unfit for respiration. At every
hundred paces they were obliged to stop to take breath. It was therefore past ten o’clock when the engineer and his companion reached the crest of the enormous mass of rocks of basalt and porphyry which composed the northwest coast of the island.

Ayrton and Cyrus Harding commenced the descent of this abrupt declivity, following almost step for step the difficult path which, during that stormy night, had led them to Dakkar Grotto. In open day the descent was less perilous, and, besides, the bed of ashes which covered the polished surface of the rock enabled them to make their footing more secure.

The ridge at the end of the shore, about forty feet in height, was soon reached. Cyrus Harding recollected that this elevation gradually sloped towards the level of the sea. Although the tide was at present low, no beach could be seen, and the waves, thickened by the volcanic dust, beat upon the basaltic rocks.

Cyrus Harding and Ayrton found without difficulty the entrance to Dakkar Grotto, and paused for a moment at the last rock before it.

"The iron boat should be there," said the engineer.

"It is here, Captain Harding," replied Ayrton, drawing towards him the fragile craft, which was protected by the arch of the vault.

"On board, Ayrton!"

The two colonists stepped into the boat. A slight undulation of the waves carried it farther under the low arch of the crypt, and there Ayrton, with the aid of flint and steel, lighted the lamp. He then took the oars, and the lamp having been placed in the bow of the boat, so that its rays fell before them, Cyrus Harding took the helm and steered through the shades of the grotto.

The "Nautilus" was there no longer to illuminate the cavern with its electric light. Possibly it might not yet be extinguished, but no ray escaped from the depths of the abyss in which reposed all that was mortal of Captain Nemo.

The light afforded by the lamp, although feeble, nevertheless enabled the engineer to advance slowly, following the wall of the cavern. A deathlike silence reigned under the vaulted roof, or at least in the anterior portion, for soon Cyrus Harding distinctly heard the rumbling which proceeded from the bowels of the mountain.

"That comes from the volcano," he said.

Besides these sounds, the presence of chemical combinations was soon betrayed by their powerful odor, and the engineer and his companion were almost suffocated by sulphurous vapors.

"This is what Captain Nemo feared," murmured Cyrus Harding, changing countenance. "We must go to the end, notwithstanding."

"Forward!" replied Ayrton, bending to his oars and directing the boat towards the head of the cavern.

Twenty-five minutes after entering the mouth of the grotto the boat reached the extreme end.

Cyrus Harding then, standing up, cast the light of the lamp upon the walls of the cavern which separated it from the central shaft of the volcano. What was the thickness of this wall? It might be ten feet or a hundred feet—it was impossible to say. But the subterranean sounds were too perceptible to allow of the supposition that it was of any great thickness.

The engineer, after having explored the wall at a certain height horizontally, fastened the lamp to the end of an oar, and again surveyed the basaltic wall at a greater elevation.

There, through scarcely visible clefts and joinings, escaped a pungent vapor, which infected the atmosphere of the cavern. The wall was broken by large cracks, some of which extended to within two or three feet of the water’s edge.

Cyrus Harding thought for a brief space. Then he said in a low voice,--

"Yes! the captain was right! The danger lies there, and a terrible danger!"

Ayrton said not a word, but, upon a sign from Cyrus Harding, resumed the oars, and half an hour later the engineer and he reached the entrance of Dakkar Grotto.

Chapter 19

The next day, the 8th day of January, after a day and night passed at the corral, where they left all in order, Cyrus Harding and Ayrton arrived at Granite House.

The engineer immediately called his companions together, and informed them of the imminent danger which threatened Lincoln Island, and from which no human power could deliver them.

"My friends," he said, and his voice betrayed the depth of his emotion, "our island is not among those which will endure while this earth endures. It is doomed to more or less speedy destruction, the cause of which it bears within itself, and from which nothing can save it."

The colonists looked at each other, then at the engineer. They did not clearly comprehend him.
"Explain yourself, Cyrus!" said Gideon Spilett.

"I will do so," replied Cyrus Harding, "or rather I will simply afford you the explanation which, during our few minutes of private conversation, was given me by Captain Nemo."

"Captain Nemo!" exclaimed the colonists.

"Yes, and it was the last service he desired to render us before his death!"

"The last service!" exclaimed Pencroft, "the last service! You will see that though he is dead he will render us others yet!"

"But what did the captain say?" inquired the reporter.

"I will tell you, my friends," said the engineer. "Lincoln Island does not resemble the other islands of the Pacific, and a fact of which Captain Nemo has made me cognizant must sooner or later bring about the subversion of its foundation."

"Nonsense! Lincoln Island, it can't be!" cried Pencroft, who, in spite of the respect he felt for Cyrus Harding, could not prevent a gesture of incredulity.

"Listen, Pencroft," resumed the engineer, "I will tell you what Captain Nemo communicated to me, and which I myself confirmed yesterday, during the exploration of Dakkar Grotto.

"This cavern stretches under the island as far as the volcano, and is only separated from its central shaft by the wall which terminates it. Now, this wall is seamed with fissures and clefts which already allow the sulphurous gases generated in the interior of the volcano to escape."

"Well?" said Pencroft, his brow suddenly contracting.

"Well, then, I saw that these fissures widen under the internal pressure from within, that the wall of basalt is gradually giving way and that after a longer or shorter period it will afford a passage to the waters of the lake which fill the cavern."

"Good!" replied Pencroft, with an attempt at pleasantry. "The sea will extinguish the volcano, and there will be an end of the matter!"

"Not so!" said Cyrus Harding, "should a day arrive when the sea, rushing through the wall of the cavern, penetrates by the central shaft into the interior of the island to the boiling lava, Lincoln Island will that day be blown into the air--just as would happen to the island of Sicily were the Mediterranean to precipitate itself into Mount Etna."

The colonists made no answer to these significant words of the engineer. They now understood the danger by which they were menaced.

It may be added that Cyrus Harding had in no way exaggerated the danger to be apprehended. Many persons have formed an idea that it would be possible to extinguish volcanoes, which are almost always situated on the shores of a sea or lake, by opening a passage for the admission of the water. But they are not aware that this would be to incur the risk of blowing up a portion of the globe, like a boiler whose steam is suddenly expanded by intense heat. The water, rushing into a cavity whose temperature might be estimated at thousands of degrees, would be converted into steam with a sudden energy which no enclosure could resist.

It was not therefore doubtful that the island, menaced by a frightful and approaching convulsion, would endure only so long as the wall of Dakkar Grotto itself should endure. It was not even a question of months, nor of weeks, but of days; it might be of hours.

The first sentiment which the colonists felt was that of profound sorrow. They thought not so much of the peril which menaced themselves personally, but of the destruction of the island which had sheltered them, which they had cultivated, which they loved so well, and had hoped to render so flourishing. So much effort ineffectually expended, so much labor lost.

Pencroft could not prevent a large tear from rolling down his cheek, nor did he attempt to conceal it.

Some further conversation now took place. The chances yet in favor of the colonists were discussed; but finally it was agreed that there was not an hour to be lost, that the building and fitting of the vessel should be pushed forward with their utmost energy, and that this was the sole chance of safety for the inhabitants of Lincoln Island.

All hands, therefore, set to work on the vessel. What could it avail to sow, to reap, to hunt, to increase the stores of Granite House? The contents of the storehouse and outbuildings contained more than sufficient to provide the ship for a voyage, however long might be its duration. But it was imperative that the ship should be ready to receive them before the inevitable catastrophe should arrive.

Their labors were now carried on with feverish ardor. By the 23rd of January the vessel was half-decked over. Up to this time no change had taken place on the summit of the volcano. Vapor and smoke mingled with flames and incandescent stones were thrown up from the crater. But during the night of the 23rd, in consequence of the lava attaining the level of the first stratum of the volcano, the hat-shaped cone which formed over the latter disappeared. A frightful sound was heard. The colonists at first thought the island was rent asunder, and rushed out of Granite
This occurred about two o'clock in the morning.

The sky appeared on fire. The superior cone, a mass of rock a thousand feet in height, and weighing thousands of millions of pounds, had been thrown down upon the island, making it tremble to its foundation. Fortunately, this cone inclined to the north, and had fallen upon the plain of sand and tufa stretching between the volcano and the sea. The aperture of the crater being thus enlarged projected towards the sky a glare so intense that by the simple effect of reflection the atmosphere appeared red-hot. At the same time a torrent of lava, bursting from the new summit, poured out in long cascades, like water escaping from a vase too full, and a thousand tongues of fire crept over the sides of the volcano.

"The corral! the corral!" exclaimed Ayrton.

It was, in fact, towards the corral that the lava was rushing as the new crater faced the east, and consequently the fertile portions of the island, the springs of Red Creek and Jacamar Wood, were menaced with instant destruction.

At Ayrton's cry the colonists rushed to the onagers' stables. The cart was at once harnessed. All were possessed by the same thought—to hasten to the corral and set at liberty the animals it enclosed.

Before three in the morning they arrived at the corral. The cries of the terrified musmons and goats indicated the alarm which possessed them. Already a torrent of burning matter and liquefied minerals fell from the side of the mountain upon the meadows as far as the side of the palisade. The gate was burst open by Ayrton, and the animals, bewildered with terror, fled in all directions.

An hour afterwards the boiling lava filled the corral, converting into vapor the water of the little rivulet which ran through it, burning up the house like dry grass, and leaving not even a post of the palisade to mark the spot where the corral once stood.

To contend against this disaster would have been folly—nay, madness. In presence of Nature's grand convulsions man is powerless.

It was now daylight—the 24th of January. Cyrus Harding and his companions, before returning to Granite House, desired to ascertain the probable direction this inundation of lava was about to take. The soil sloped gradually from Mount Franklin to the east coast, and it was to be feared that, in spite of the thick Jacamar Wood, the torrent would reach the plateau of Prospect Heights.

"The lake will cover us," said Gideon Spilett.

"I hope so!" was Cyrus Harding's only reply.

The colonists were desirous of reaching the plain upon which the superior cone of Mount Franklin had fallen, but the lava arrested their progress. It had followed, on one side, the valley of Red Creek, and on the other that of Falls River, evaporating those watercourses in its passage. There was no possibility of crossing the torrent of lava; on the contrary, the colonists were obliged to retreat before it. The volcano, without its crown, was no longer recognizable, terminated as it was by a sort of flat table which replaced the ancient crater. From two openings in its southern and eastern sides an unceasing flow of lava poured forth, thus forming two distinct streams. Above the new crater a cloud of smoke and ashes, mingled with those of the atmosphere, massed over the island. Loud peals of thunder broke, and could scarcely be distinguished from the rumblings of the mountain, whose mouth vomited forth ignited rocks, which, hurled to more than a thousand feet, burst in the air like shells. Flashes of lightning rivaled in intensity the volcano's eruption.

Towards seven in the morning the position was no longer tenable by the colonists, who accordingly took shelter in the borders of Jacamar Wood. Not only did the projectiles begin to rain around them, but the lava, overflowing the bed of Red Creek, threatened to cut off the road to the corral. The nearest rows of trees caught fire, and their sap, suddenly transformed into vapor, caused them to explode with loud reports, while others, less moist, remained unhurt in the midst of the inundation.

The colonists had again taken the road to the corral. They proceeded but slowly, frequently looking back; but, in consequence of the inclination of the soil, the lava gained rapidly in the east, and as its lower waves became solidified others, at boiling heat, covered them immediately.

Meanwhile, the principal stream of Red Creek Valley became more and more menacing. All this portion of the forest was on fare, and enormous wreaths of smoke rolled over the trees, whose trunks were already consumed by the lava.

The colonists halted near the lake, about half a mile from the mouth of Red Creek. A question of life or death was now to be decided.

Cyrus Harding, accustomed to the consideration of important crises, and aware that he was addressing men capable of hearing the truth, whatever it might be, then said,—

"Either the lake will arrest the progress of the lava, and a part of the island will be preserved from utter destruction, or the stream will overrun the forests of the Far West, and not a tree or plant will remain on the surface
of the soil. We shall have no prospect but that of starvation upon these barren rocks—a death which will probably be anticipated by the explosion of the island."

"In that case," replied Pencroft, folding his arms and stamping his foot, "what's the use of working any longer on the vessel?"

"Pencroft," answered Cyrus Harding, "we must do our duty to the last!"

At this instant the river of lava, after having broken a passage through the noble trees it devoured in its course, reached the borders of the lake. At this point there was an elevation of the soil which, had it been greater, might have sufficed to arrest the torrent.

"To work!" cried Cyrus Harding.

The engineer's thought was at once understood. It might be possible to dam, as it were, the torrent, and thus compel it to pour itself into the lake.

The colonists hastened to the dockyard. They returned with shovels, picks, axes, and by means of banking the earth with the aid of fallen trees they succeeded in a few hours in raising an embankment three feet high and some hundreds of paces in length. It seemed to them, when they had finished, as if they had scarcely been working more than a few minutes.

It was not a moment too soon. The liquefied substances soon after reached the bottom of the barrier. The stream of lava swelled like a river about to overflow its banks, and threatened to demolish the sole obstacle which could prevent it from overrunning the whole Far West. But the dam held firm, and after a moment of terrible suspense the torrent precipitated itself into Grant Lake from a height of twenty feet.

The colonists, without moving or uttering a word, breathlessly regarded this strife of the two elements.

What a spectacle was this conflict between water and fire! What pen could describe the marvelous horror of this scene—what pencil could depict it? The water hissed as it evaporated by contact with the boiling lava. The vapor whirled in the air to an immeasurable height, as if the valves of an immense boiler had been suddenly opened. But, however considerable might be the volume of water contained in the lake, it must eventually be absorbed, because it was not replenished, while the stream of lava, fed from an inexhaustible source, rolled on without ceasing new waves of incandescent matter.

The first waves of lava which fell in the lake immediately solidified and accumulated so as speedily to emerge from it. Upon their surface fell other waves, which in their turn became stone, but a step nearer the center of the lake. In this manner was formed a pier which threatened to gradually fill up the lake, which could not overflow, the water displaced by the lava being evaporated. The hissing of the water rent the air with a deafening sound, and the vapor, blown by the wind, fell in rain upon the sea. The pier became longer and longer, and the blocks of lava piled themselves one on another. Where formerly stretched the calm waters of the lake now appeared an enormous mass of smoking rocks, as if an upheaving of the soil had formed immense shoals. Imagine the waters of the lake aroused by a hurricane, then suddenly solidified by an intense frost, and some conception may be formed of the aspect of the lake three hours alter the eruption of this irresistible torrent of lava.

This time water would be vanquished by fire.

Nevertheless it was a fortunate circumstance for the colonists that the effusion of lava should have been in the direction of Lake Grant. They had before them some days' respite. The plateau of Prospect Heights, Granite House, and the dockyard were for the moment preserved. And these few days it was necessary to employ in planking and carefully calking the vessel, and launching her. The colonists would then take refuge on board the vessel, content to rig her after she should be afloat on the waters. With the danger of an explosion which threatened to destroy the island there could be no security on shore. The walls of Granite House, once so sure a retreat, might at any moment fall in upon them.

During the six following days, from the 25th to the 30th of January, the colonists accomplished as much of the construction of their vessel as twenty men could have done. They hardly allowed themselves a moment's repose, and the glare of the flames which shot from the crater enabled them to work night and day. The flow of lava continued, but perhaps less abundantly. This was fortunate, for Lake Grant was almost entirely choked up, and if more lava should accumulate it would inevitably spread over the plateau of Prospect Heights, and thence upon the beach.

But if the island was thus partially protected on this side, it was not so with the western part.

In fact, the second stream of lava, which had followed the valley of Falls River, a valley of great extent, the land on both sides of the creek being flat, met with no obstacle. The burning liquid had then spread through the forest of the Far West. At this period of the year, when the trees were dried up by a tropical heat, the forest caught fire instantaneously, in such a manner that the conflagration extended itself both by the trunks of the trees and by their higher branches, whose interlacement favored its progress. It even appeared that the current of flame spread more rapidly among the summits of the trees than the current of lava at their bases.

Thus it happened that the wild animals, jaguars, wild boars, capybaras, koalas, and game of every kind, mad
with terror, had fled to the banks of the Mercy and to the Tadorn Marsh, beyond the road to Port Balloon. But the colonists were too much occupied with their task to pay any attention to even the most formidable of these animals. They had abandoned Granite House, and would not even take shelter at the Chimneys, but encamped under a tent, near the mouth of the Mercy.

Each day Cyrus Harding and Gideon Spilett ascended the plateau of Prospect Heights. Sometimes Herbert accompanied them, but never Pencroft, who could not bear to look upon the prospect of the island now so utterly devastated.

It was, in truth, a heart-rending spectacle. All the wooded part of the island was now completely bare. One single clump of green trees raised their heads at the extremity of Serpentine Peninsula. Here and there were a few grotesque blackened and branchless stumps. The side of the devastated forest was even more barren than Tadorn Marsh. The eruption of lava had been complete. Where formerly sprang up that charming verdure, the soil was now nothing but a savage mass of volcanic tufa. In the valleys of the Falls and Mercy rivers no drop of water now flowed towards the sea, and should Lake Grant be entirely dried up, the colonists would have no means of quenching their thirst. But, fortunately the lava had spared the southern corner of the lake, containing all that remained of the drinking water of the island. Towards the northwest stood out the rugged and well-defined outlines of the sides of the volcano, like a gigantic claw hovering over the island. What a sad and fearful sight, and how painful to the colonists, who, from a fertile domain covered with forests, irrigated by watercourses, and enriched by the produce of their toils, found themselves, as it were, transported to a desolate rock, upon which, but for their reserves of provisions, they could not even gather the means of subsistence!

"It is enough to break one's heart!" said Gideon Spilett, one day.

"Yes, Spilett," answered the engineer. "May God grant us the time to complete this vessel, now our sole refuge!"

"Do not you think, Cyrus, that the violence of the eruption has somewhat lessened? The volcano still vomits forth lava, but somewhat less abundantly, if I mistake not."

"It matters little," answered Cyrus Harding. "The fire is still burning in the interior of the mountain, and the sea may break in at any moment. We are in the condition of passengers whose ship is devoured by a conflagration which they cannot extinguish, and who know that sooner or later the flames must reach the powder-magazine. To work, Spilett, to work, and let us not lose an hour!"

During eight days more, that is to say until the 7th of February, the lava continued to flow, but the eruption was confined within the previous limits. Cyrus Harding feared above all lest the liquefied matter should overflow the shore, for in that event the dockyard could not escape. Moreover, about this time the colonists felt in the frame of the island vibrations which alarmed them to the highest degree.

It was the 20th of February. Yet another month must elapse before the vessel would be ready for sea. Would the island hold together till then? The intention of Pencroft and Cyrus Harding was to launch the vessel as soon as the hull should be complete. The deck, the upperworks, the interior woodwork and the rigging might be finished afterwards, but the essential point was that the colonists should have an assured refuge away from the island. Perhaps it might be even better to conduct the vessel to Port Balloon, that is to say, as far as possible from the center of eruption, for at the mouth of the Mercy, between the islet and the wall of granite, it would run the risk of being crushed in the event of any convulsion. All the exertions of the voyagers were therefore concentrated upon the completion of the hull.

Thus the 3rd of March arrived, and they might calculate upon launching the vessel in ten days.

Hope revived in the hearts of the colonists, who had, in this fourth year of their sojourn on Lincoln island, suffered so many trials. Even Pencroft lost in some measure the somber taciturnity occasioned by the devastation and ruin of his domain. His hopes, it is true, were concentrated upon his vessel.

"We shall finish it," he said to the engineer, "we shall finish it, captain, and it is time, for the season is advancing and the equinox will soon be here. Well, if necessary, we must put in to Tabor island to spend the winter. But think of Tabor island after Lincoln Island. Ah, how unfortunate! Who could have believed it possible?"

"Let us get on," was the engineer's invariable reply.

And they worked away without losing a moment.

"Master," asked Neb, a few days later, "do you think all this could have happened if Captain Nemo had been still alive?"

"Certainly, Neb," answered Cyrus Harding.

"I, for one, don't believe it!" whispered Pencroft to Neb.

"Nor I!" answered Neb seriously.

During the first week of March appearances again became menacing. Thousands of threads like glass, formed of fluid lava, fell like rain upon the island. The crater was again boiling with lava which overflowed the back of the volcano. The torrent flowed along the surface of the hardened tufa, and destroyed the few meager skeletons of trees
which had withstood the first eruption. The stream, flowing this time towards the southwest shore of Lake Grant, stretched beyond Creek Glycerine, and invaded the plateau of Prospect Heights. This last blow to the work of the colonists was terrible. The mill, the buildings of the inner court, the stables, were all destroyed. The affrighted poultry fled in all directions. Top and Jup showed signs of the greatest alarm, as if their instinct warned them of an impending catastrophe. A large number of the animals of the island had perished in the first eruption. Those which survived found no refuge but Tadorn Marsh, save a few to which the plateau of Prospect Heights afforded asylum. But even this last retreat was now closed to them, and the lava-torrent, flowing over the edge of the granite wall, began to pour down upon the beach its cataracts of fire. The sublime horror of this spectacle passed all description. During the night it could only be compared to a Niagara of molten fluid, with its incandescent vapors above and its boiling masses below.

The colonists were driven to their last entrenchment, and although the upper seams of the vessel were not yet calked, they decided to launch her at once.

Pencroft and Ayrton therefore set about the necessary preparations for the launching, which was to take place the morning of the next day, the 9th of March.

But during the night of the 8th an enormous column of vapor escaping from the crater rose with frightful explosions to a height of more than three thousand feet. The wall of Dakkar Grotto had evidently given way under the pressure of gases, and the sea, rushing through the central shaft into the igneous gulf, was at once converted into vapor. But the crater could not afford a sufficient outlet for this vapor. An explosion, which might have been heard at a distance of a hundred miles, shook the air. Fragments of mountains fell into the Pacific, and, in a few minutes, the ocean rolled over the spot where Lincoln Island once stood.

**Chapter 20**

An isolated rock, thirty feet in length, twenty in breadth, scarcely ten from the water's edge, such was the only solid point which the waves of the Pacific had not engulfed.

It was all that remained of the structure of Granite House! The wall had fallen headlong and been then shattered to fragments, and a few of the rocks of the large room were piled one above another to form this point. All around had disappeared in the abyss; the inferior cone of Mount Franklin, rent asunder by the explosion; the lava jaws of Shark Gulf, the plateau of Prospect Heights, Safety Islet, the granite rocks of Port Balloon, the basalts of Dakkar Grotto, the long Serpentine Peninsula, so distant nevertheless from the center of the eruption. All that could now be seen of Lincoln Island was the narrow rock which now served as a refuge to the six colonists and their dog Top.

The animals had also perished in the catastrophe; the birds, as well as those representing the fauna of the island—all either crushed or drowned, and the unfortunate Jup himself had, alas! found his death in some crevice of the soil.

If Cyrus Harding, Gideon Spilett, Herbert, Pencroft, Neb, and Ayrton had survived, it was because, assembled under their tent, they had been hurled into the sea at the instant when the fragments of the island rained down on every side.

When they reached the surface they could only perceive, at half a cable's length, this mass of rocks, towards which they swam and on which they found footing.

On this barren rock they had now existed for nine days. A few provisions taken from the magazine of Granite House before the catastrophe, a little fresh water from the rain which had fallen in a hollow of the rock, was all that the unfortunate colonists possessed. Their last hope, the vessel, had been shattered to pieces. They had no means of quitting the reef; no fire, nor any means of obtaining it. It seemed that they must inevitably perish.

This day, the 18th of March, there remained only provisions for two days, although they limited their consumption to the bare necessaries of life. All their science and intelligence could avail them nothing in their present position. They were in the hand of God.

Cyrus Harding was calm, Gideon Spilett more nervous, and Pencroft, a prey to sullen anger, walked to and fro on the rock. Herbert did not for a moment quit the engineer's side, as if demanding from him that assistance he had no power to give. Neb and Ayrton were resigned to their fate.

"Ah, what a misfortune! what a misfortune!" often repeated Pencroft. "If we had but a walnut-shell to take us to Tabor Island! But we have nothing, nothing!"

"Captain Nemo did right to die," said Neb.

During the five ensuing days Cyrus Harding and his unfortunate companions husbanded their provisions with the most extreme care, eating only what would prevent them from dying of starvation. Their weakness was extreme. Herbert and Neb began to show symptoms of delirium.

Under these circumstances was it possible for them to retain even the shadow of a hope? No! What was their sole remaining chance? That a vessel should appear in sight of the rock? But they knew only too well from
experience that no ships ever visited this part of the Pacific. Could they calculate that, by a truly providential
coincidence, the Scotch yacht would arrive precisely at this time in search of Ayrton at Tabor Island? It was scarcely
probable; and, besides, supposing she should come there, as the colonists had not been able to deposit a notice
pointing out Ayrton's change of abode, the commander of the yacht, after having explored Tabor Island without
results, would again set sail and return to lower latitudes.

No! no hope of being saved could be retained, and a horrible death, death from hunger and thirst, awaited them
upon this rock.

Already they were stretched on the rock, inanimate, and no longer conscious of what passed around them.
Ayrton alone, by a supreme effort, from time to time raised his head, and cast a despairing glance over the desert
ocean.

But on the morning of the 24th of March Ayrton's arms were extended toward a point in the horizon; he raised
himself, at first on his knees, then upright, and his hand seemed to make a signal.

A sail was in sight off the rock. She was evidently not without an object. The reef was the mark for which she
was making in a direct line, under all steam, and the unfortunate colonists might have made her out some hours
before if they had had the strength to watch the horizon.

"The 'Duncan!'" murmured Ayrton—and fell back without sign of life.

When Cyrus Harding and his companions recovered consciousness, thanks to the attention lavished upon them,
they found themselves in the cabin of a steamer, without being able to comprehend how they had escaped death.
A word from Ayrton explained everything.

"The 'Duncan!'" he murmured.

"The 'Duncan!'" exclaimed Cyrus Harding. And raising his hand to Heaven, he said, "Oh! Almighty God!
mercifully hast Thou preserved us!"

It was, in fact, the "Duncan," Lord Glenarvan's yacht, now commanded by Robert, son of Captain Grant, who
had been despatched to Tabor Island to find Ayrton, and bring him back to his native land after twelve years of
expiation.

The colonists were not only saved, but already on the way to their native country.

"Captain Grant," asked Cyrus Harding, "who can have suggested to you the idea, after having left Tabor Island,
where you did not find Ayrton, of coming a hundred miles farther northeast?"

"Captain Harding," replied Robert Grant, "it was in order to find, not only Ayrton, but yourself and your
companions."
"My companions and myself?"
"Doubtless, at Lincoln Island."

"At Lincoln Island!" exclaimed in a breath Gideon Spilett, Herbert, Neb, and Pencroft, in the highest degree
astonished.

"How could you be aware of the existence of Lincoln Island?" inquired Cyrus Harding, "it is not even named in
the charts."

"I knew of it from a document left by you on Tabor Island," answered Robert Grant.

"A document!" cried Gideon Spilett.

"Without doubt, and here it is," answered Robert Grant, producing a paper which indicated the longitude and
latitude of Lincoln Island, "the present residence of Ayrton and five American colonists."

"It is Captain Nemo!" cried Cyrus Harding, after having read the notice, and recognized that the handwriting was
similar to that of the paper found at the corral.

"Ah!" said Pencroft, "it was then he who took our 'Bonadventure' and hazarded himself alone to go to Tabor
Island!"

"In order to leave this notice," added Herbert.

"I was then right in saying," exclaimed the sailor, "that even after his death the captain would render us a last
service."

"My friends," said Cyrus Harding, in a voice of the profoundest emotion, "may the God of mercy have had pity
on the soul of Captain Nemo, our benefactor."

The colonists uncovered themselves at these last words of Cyrus Harding, and murmured the name of Captain
Nemo.

Then Ayrton, approaching the engineer, said simply, "Where should this coffer be deposited?"

It was the coffer which Ayrton had saved at the risk of his life, at the very instant that the island had been
gulfed, and which he now faithfully handed to the engineer.

"Ayrton! Ayrton!" said Cyrus Harding, deeply touched. Then, addressing Robert Grant, "Sir," he added, "you
left behind you a criminal; you find in his place a man who has become honest by penitence, and whose hand I am
proud to clasp in mine."

Robert Grant was now made acquainted with the strange history of Captain Nemo and the colonists of Lincoln Island. Then, observation being taken of what remained of this shoal, which must henceforward figure on the charts of the Pacific, the order was given to make all sail.

A few weeks afterwards the colonists landed in America, and found their country once more at peace after the terrible conflict in which right and justice had triumphed.

Of the treasures contained in the coffer left by Captain Nemo to the colonists of Lincoln Island, the larger portion was employed in the purchase of a vast territory in the State of Iowa. One pearl alone, the finest, was reserved from the treasure and sent to Lady Glenarvan in the name of the castaways restored to their country by the "Duncan."

There, upon this domain, the colonists invited to labor, that is to say, to wealth and happiness, all those to whom they had hoped to offer the hospitality of Lincoln Island. There was founded a vast colony to which they gave the name of that island sunk beneath the waters of the Pacific. A river there was called the Mercy, a mountain took the name of Mount Franklin, a small lake was named Lake Grant, and the forests became the forests of the Far West. It might have been an island on terra firma.

There, under the intelligent hands of the engineer and his companions, everything prospered. Not one of the former colonists of Lincoln Island was absent, for they had sworn to live always together. Neb was with his master; Ayrton was there ready to sacrifice himself for all; Pencroft was more a farmer than he had ever been a sailor; Herbert, who completed his studies under the superintendence of Cyrus Harding, and Gideon Spilett, who founded the New Lincoln Herald, the best-informed journal in the world.

There Cyrus Harding and his companions received at intervals visits from Lord and Lady Glenarvan, Captain John Mangles and his wife, the sister of Robert Grant, Robert Grant himself, Major McNab, and all those who had taken part in the history both of Captain Grant and Captain Nemo.

There, to conclude, all were happy, united in the present as they had been in the past; but never could they forget that island upon which they had arrived poor and friendless, that island which, during four years had supplied all their wants, and of which there remained but a fragment of granite washed by the waves of the Pacific, the tomb of him who had borne the name of Captain Nemo.

FROM THE EARTH TO THE MOON

BY

JULES VERNE,

CHAPTER I.

THE GUN CLUB.

During the Federal war in the United States a new and very influential club was established in the city of Baltimore, Maryland. It is well known with what energy the military instinct was developed amongst that nation of shipowners, shopkeepers, and mechanics. Mere tradesmen jumped their counters to become extempore captains, colonels, and generals without having passed the Military School at West Point; they soon rivalled their colleagues of the old continent, and, like them, gained victories by dint of lavishing bullets, millions, and men.

But where Americans singularly surpassed Europeans was in the science of ballistics, or of throwing massive weapons by the use of an engine; not that their arms attained a higher degree of perfection, but they were of unusual dimensions, and consequently of hitherto unknown ranges. The English, French, and Prussians have nothing to learn about flank, running, enfilading, or point-blank firing; but their cannon, howitzers, and mortars are mere pocket-pistols compared with the formidable engines of American artillery.

This fact ought to astonish no one. The Yankees, the first mechanicians in the world, are born engineers, just as Italians are musicians and Germans metaphysicians. Thence nothing more natural than to see them bring their audacious ingenuity to bear on the science of ballistics. Hence those gigantic cannon, much less useful than sewing-machines, but quite as astonishing, and much more admired. The marvels of this style by Parrott, Dahlgren, and Rodman are well known. There was nothing left the Armstrongs, Pallisers, and Treuille de Beaulieux but to bow before their transatlantic rivals.

Therefore during the terrible struggle between Northerners and Southerners, artillerymen were in great request; the Union newspapers published their inventions with enthusiasm, and there was no little tradesman nor _naïf_ "booby" who did not bother his head day and night with calculations about impossible trajectory engines.

Now when an American has an idea he seeks another American to share it. If they are three, they elect a
So the saloons were deserted, the servants slept in the antechambers, the newspapers grew mouldy on the tables, gigantic bombs and unparalleled howitzers. But what was the use of vain theories that could not be put in practice? 

As sorrow, and the Gun Club had nothing whatever to do. Effaced, cotton shrubs grew magnificently on the well-manured fields, mourning garments began to be worn out, as muzzles depressed, were stored in the arsenals, the shots were piled up in the parks, the bloody reminiscences were gradually ceased, the mortars were silent, the howitzers were muzzled for long enough, and the cannon, with battle stated the number of victims at tenfold the quantity of projectiles expended.

Many whose names figured in the book of honour of the Gun Club remained on the field of battle, and of those who had just made their _début_ in the profession of arms, and those who had grown old on their gun-carriage. Formulae, but sacrificed themselves to their theories. Amongst them might be counted officers of every rank, those who had invented, or at least perfected, a cannon; or, in default of a cannon, a firearm of some sort. But, to tell the truth, mere inventors of fifteen-barrelled rifles, revolvers, or sword-pistols did not enjoy much consideration. Artillerymen were always preferred to them in every circumstance. 

"The estimation in which they are held," said one day a learned orator of the Gun Club, "is in proportion to the size of their cannon, and in direct ratio to the square of distance attained by their projectiles!"

A little more and it would have been Newton's law of gravitation applied to moral order.

Once the Gun Club founded, it can be easily imagined its effect upon the inventive genius of the Americans. War-engines took colossal proportions, and projectiles launched beyond permitted distances cut offensive pedestrians to pieces. All these inventions left the timid instruments of European artillery far behind them. This may be estimated by the following figures:--

Formerly, "in the good old times," a thirty-six pounder, at a distance of three hundred feet, would cut up thirty-six horses, attacked in flank, and sixty-eight men. The art was then in its infancy. Projectiles have since made their way. The Rodman gun that sent a projectile weighing half a ton a distance of seven miles could easily have cut up a hundred and fifty horses and three hundred men. These were some talk at the Gun Club of making a solemn experiment with it. But if the horses consented to play their part, the men unfortunately were wanting.

However that may be, the effect of these cannon was very deadly, and at each discharge the combatants fell like ears before a scythe. After such projectiles what signified the famous ball which, at Coutras, in 1587, disabled twenty-five men; and the one which, at Zorndorff, in 1758, killed forty fantassins; and in 1742, Kesseldorf's Austrian cannon, of which every shot levelled seventy enemies with the ground? What was the astonishing firing at Jena or Austerlitz, which decided the fate of the battle? During the Federal war much more wonderful things had been seen. At the battle of Gettysburg, a conical projectile thrown by a rifle-barrel cut up a hundred and seventy-three Confederates, and at the passage of the Potomac a Rodman ball sent two hundred and fifteen Southerners into an evidently better world. A formidable mortar must also be mentioned, invented by J.T. Maston, a distinguished member and perpetual secretary of the Gun Club, the result of which was far more deadly, seeing that, at its trial shot, it killed three hundred and thirty-seven persons—by bursting, it is true.

What can be added to these figures, so eloquent in themselves? Nothing. So the following calculation obtained by the statistician Pitcairn will be admitted without contestation: by dividing the number of victims fallen under the projectiles by that of the members of the Gun Club, he found that each one of them had killed, on his own account, an average of two thousand three hundred and seventy-five persons and a fraction.

By considering such a result it will be seen that the single preoccupation of this learned society was the destruction of humanity philanthropically, and the perfecting of firearms considered as instruments of civilisation. It was a company of Exterminating Angels, at bottom the best fellows in the world.

It must be added that these Yankees, brave as they have ever proved themselves, did not confine themselves to formulae, but sacrificed themselves to their theories. Amongst them might be counted officers of every rank, those who had just made their _début_ in the profession of arms, and those who had grown old on their gun-carriage. Many whose names figured in the book of honour of the Gun Club remained on the field of battle, and of those who came back the greater part bore marks of their indubitable valour. Crutches, wooden legs, articulated arms, hands with hooks, gutta-percha jaws, silver canriums, platinum noses, nothing was wanting to the collection; and the above-mentioned Pitcairn likewise calculated that in the Gun Club there was quite one arm amongst every four persons, and only two legs amongst six.

But these valiant artillerymen paid little heed to such small matters, and felt justly proud when the report of a battle stated the number of victims at tenfold the quantity of projectiles expended.

One day, however, a sad and lamentable day, peace was signed by the survivors of the war, the noise of firing gradually ceased, the mortars were silent, the howitzers were muzzled for long enough, and the cannon, with muzzles depressed, were stored in the arsenals, the shots were piled up in the parks, the bloody reminiscences were effaced, cotton shrubs grew magnificently on the well-manured fields, mourning garments began to be worn out, as well as sorrow, and the Gun Club had nothing whatever to do.

Certain old hands, inveterate workers, still went on with their calculations in ballistics; they still imagined gigantic bombs and unparalleled howitzers. But what was the use of vain theories that could not be put in practice? So the saloons were deserted, the servants slept in the antechambers, the newspapers grew mouldy on the tables,
from dark corners issued sad snores, and the members of the Gun Club, formerly so noisy, now reduced to silence by the disastrous peace, slept the sleep of Platonic artillery!

"This is distressing," said brave Tom Hunter, whilst his wooden legs were carbonising at the fireplace of the smoking-room. "Nothing to do! Nothing to look forward to! What a tiresome existence! Where is the time when cannon awoke you every morning with its joyful reports?"

"That time is over," answered dandy Bilsby, trying to stretch the arms he had lost. "There was some fun then! You invented an howitzer, and it was hardly cast before you ran to try it on the enemy; then you went back to the camp with an encouragement from Sherman, or a shake of the hands from MacClellan! But now the generals have gone back to their counters, and instead of cannon-balls they expedite inoffensive cotton bales! Ah, by Saint Barb! the future of artillery is lost to America!"

"Yes, Bilsby," cried Colonel Blomsberry, "it is too bad! One fine morning you leave your tranquil occupations, you are drilled in the use of arms, you leave Baltimore for the battle-field, you conduct yourself like a hero, and in two years, three years at the latest, you are obliged to leave the fruit of so many fatigues, to go to sleep in deplorable idleness, and keep your hands in your pockets."

The valiant colonel would have found it very difficult to give such a proof of his want of occupation, though it was not the pockets that were wanting.

"And no war in prospect, then," said the famous J.T. Maston, scratching his gutta-percha cranium with his steel hook; "there is not a cloud on the horizon now that there is so much to do in the science of artillery! I myself finished this very morning a diagram with plan, basin, and elevation of a mortar destined to change the laws of warfare!"

"Indeed!" replied Tom Hunter, thinking involuntarily of the Honourable J.T. Maston's last essay.

"Indeed!" answered Maston. "But what is the use of the good results of such studies and so many difficulties conquered? It is mere waste of time. The people of the New World seem determined to live in peace, and our bellicose _Tribune_ has gone as far as to predict approaching catastrophes due to the scandalous increase of population!"

"Yet, Maston," said Colonel Blomsberry, "they are always fighting in Europe to maintain the principle of nationalities!"

"What of that?"

"Why, there might be something to do over there, and if they accepted our services--"

"What are you thinking of?" cried Bilsby. "Work at ballistics for the benefit of foreigners!"

"Perhaps that would be better than not doing it at all," answered the colonel.

"Doubtless," said J.T. Maston, "it would be better, but such an expedient cannot be thought of."

"Why so?" asked the colonel.

"Because their ideas of advancement would be contrary to all our American customs. Those folks seem to think that you cannot be a general-in-chief without having served as second lieutenant, which comes to the same as saying that no one can point a gun that has not cast one. Now that is simply--"

"Absurd!" replied Tom Hunter, whittling the arms of his chair with his bowie-knife; "and as things are so, there is nothing left for us but to plant tobacco or distil whale-oil!"

"What!" shouted J.T. Maston, "shall we not employ these last years of our existence in perfecting firearms? Will not a fresh opportunity present itself to try the ranges of our projectiles? Will the atmosphere be no longer illuminated by the lightning of our cannons? Won't some international difficulty crop up that will allow us to declare war against some transatlantic power? Won't France run down one of our steamers, or won't England, in defiance of the rights of nations, hang up three or four of our countrymen?"

"No, Maston," answered Colonel Blomsberry; "no such luck! No, not one of those incidents will happen; and if one did, it would be of no use to us. American sensitiveness is declining daily, and we are going to the dogs!"

"Yes, we are growing quite humble," replied Bilsby.

"And we are humiliated!" answered Tom Hunter.

"All that is only too true," replied J.T. Maston, with fresh vehemence. "There are a thousand reasons for fighting floating about, and still we don't fight! We economise legs and arms, and that to the profit of folks that don't know what to do with them. Look here, without looking any farther for a motive for war, did not North America formerly belong to the English?"

"Doubtless," answered Tom Hunter, angrily poking the fire with the end of his crutch.

"Well," replied J.T. Maston, "why should not England in its turn belong to the Americans?"

"It would be but justice," answered Colonel Blomsberry.

"Go and propose that to the President of the United States," cried J.T. Maston, "and see what sort of a reception you would get."
"It would not be a bad reception," murmured Bilsby between the four teeth he had saved from battle.

"I'faith," cried J.T. Maston, "they need not count upon my vote in the next elections."

"Nor upon ours," answered with common accord these bellicose invalids.

"In the meantime," continued J.T. Maston, "and to conclude, if they do not furnish me with the opportunity of trying my new mortar on a real battle-field, I shall send in my resignation as member of the Gun Club, and I shall go and bury myself in the backwoods of Arkansas."

"We will follow you there," answered the interlocutors of the enterprising J.T. Maston.

Things had come to that pass, and the club, getting more excited, was menaced with approaching dissolution, when an unexpected event came to prevent so regrettable a catastrophe.

The very day after the foregoing conversation each member of the club received a circular couched in these terms:--

"Baltimore, October 3rd.

The president of the Gun Club has the honour to inform his colleagues that at the meeting on the 5th ultimo he will make them a communication of an extremely interesting nature. He therefore begs that they, to the suspension of all other business, will attend, in accordance with the present invitation,

"Their devoted colleague,

"IMPEY BARBICANE, P.G.C."

CHAPTER II.

PRESIDENT BARBICANE'S COMMUNICATION.

On the 5th of October, at 8 p.m., a dense crowd pressed into the saloons of the Gun Club, 21, Union-square. All the members of the club residing at Baltimore had gone on the invitation of their president. The express brought corresponding members by hundreds, and if the meeting-hall had not been so large, the crowd of _savants_ could not have found room in it; they overflowed into the neighbouring rooms, down the passages, and even into the courtyards; there they ran against the populace who were pressing against the doors, each trying to get into the front rank, all eager to learn the important communication of President Barbicane, all pressing, squeezing, crushing with that liberty of action peculiar to the masses brought up in the idea of self-government.

That evening any stranger who might have chanced to be in Baltimore could not have obtained a place at any price in the large hall; it was exclusively reserved to residing or corresponding members; no one else was admitted; and the city magnates, common councillors, and select men were compelled to mingle with their inferiors in order to catch stray news from the interior.

The immense hall presented a curious spectacle; it was marvellously adapted to the purpose for which it was built. Lofty pillars formed of cannon, superposed upon huge mortars as a base, supported the fine ironwork of the arches--real cast-iron lacework.

Trophies of blunderbusses, matchlocks, arquebuses, carbines, all sorts of ancient or modern firearms, were picturesquely enlaced against the walls. The gas, in full flame, came out of a thousand revolvers grouped in the form of lustres, whilst candlesticks of pistols, and candelabra made of guns done up in sheaves, completed this display of light. Models of cannons, specimens of bronze, targets spotted with shot-marks, plaques broken by the shock of the Gun Club, balls, assortments of rammers and sponges, chaplets of shells, necklaces of projectiles, garlands of howitzers--in a word, all the tools of the artilleryman surprised the eyes by their wonderful arrangement, and induced a belief that their real purpose was more ornamental than deadly.

In the place of honour was seen, covered by a splendid glass case, a piece of breech, broken and twisted under the effort of the powder--a precious fragment of J.T. Maston's cannon.

At the extremity of the hall the president, assisted by four secretarys, occupied a wide platform. His chair, placed on a carved gun-carriage, was modelled upon the powerful proportions of a 32-inch mortar; it was pointed at an angle of 90 degs., and hung upon trunnions so that the president could use it as a rocking-chair, very agreeable in great heat. Upon the desk, a huge iron plate, supported upon six carronades, stood a very tasteful inkstand, made of a beautifully-chased Spanish piece, and a report-bell, which, when required, went off like a revolver. During the vehement discussions this new sort of bell scarcely sufficed to cover the voices of this legion of excited artillerymen.

In front of the desk, benches, arranged in zigzags, like the circumvallations of intrenchment, formed a succession of bastions and curtains where the members of the Gun Club took their seats; and that evening, it may be said, there were plenty on the ramparts. The president was sufficiently known for all to be assured that he would not have called together his colleagues without a very great motive.

Impey Barbicane was a man of forty, calm, cold, austere, of a singularly serious and concentrated mind, as exact as a chronometer, of an imperturbable temperament and immovable character; not very chivalrous, yet adventurous,
and always bringing practical ideas to bear on the wildest enterprises; an essential New-Englander, a Northern colonist, the descendant of those Roundheads so fatal to the Stuarts, and the implacable enemy of the Southern gentlemen, the ancient cavaliers of the mother country—in a word, a Yankee cast in a single mould.

Barbicane had made a great fortune as a timber-merchant; named director of artillery during the war, he showed himself fertile in inventions; enterprising in his ideas, he contributed powerfully to the progress of ballistics, gave an immense impetus to experimental researches.

He was a person of average height, having, by a rare exception in the Gun Club, all his limbs intact. His strongly-marked features seemed to be drawn by square and rule, and if it be true that in order to guess the instincts of a man one must look at his profile, Barbicane seen thus offered the most certain indications of energy, audacity, and _sang-froid_.

At that moment he remained motionless in his chair, mute, absorbed, with an inward look sheltered under his tall hat, a cylinder of black silk, which seems screwed down upon the skull of American men.

His colleagues talked noisily around him without disturbing him; they questioned one another, launched into the field of suppositions, examined their president, and tried, but in vain, to make out the _x_ of his imperturbable physiognomy.

Just as eight o'clock struck from the fulminating clock of the large hall, Barbicane, as if moved by a spring, jumped up; a general silence ensued, and the orator, in a slightly emphatic tone, spoke as follows:--

"Brave colleagues,--It is some time since an unfruitful peace plunged the members of the Gun Club into deplorable inactivity. After a period of some years, so full of incidents, we have been obliged to abandon our works and stop short on the road of progress. I do not fear to proclaim aloud that any war which would put arms in our hands again would be welcome."--

"Yes, war!" cried impetuous J.T. Maston.

"Hear, hear!" was heard on every side.

"But war," said Barbicane, "war is impossible under actual circumstances, and, whatever my honourable interrupter may hope, long years will elapsed before our cannons thunder on a field of battle. We must, therefore, make up our minds to it, and seek in another order of ideas food for the activity by which we are devoured."

The assembly felt that its president was coming to the delicate point; it redoubled its attention.

"A few months ago, my brave colleagues," continued Barbicane, "I asked myself if, whilst still remaining in our speciality, we could not undertake some grand experiment worthy of the nineteenth century, and if the progress of ballistics would not allow us to execute it with success. I have therefore sought, worked, calculated, and the conviction has resulted from my studies that we must succeed in an enterprise that would seem impracticable in any other country. This project, elaborated at length, will form the subject of my communication; it is worthy of you, worthy of the Gun Club's past history, and cannot fail to make a noise in the world!"

"Much noise?" cried a passionate artilleryman.

"Much noise in the true sense of the word," answered Barbicane.

"Don't interrupt!" repeated several voices.

"I therefore beg of you, my brave colleagues," resumed the president, "to grant me all your attention."

A shudder ran through the assembly. Barbicane, having with a rapid gesture firmly fixed his hat on his head, continued his speech in a calm tone:--

"There is not one of you, brave colleagues, who has not seen the moon, or, at least, heard of it. Do not be astonished if I wish to speak to you about the Queen of Night. It is, perhaps, our lot to be the Columbuses of this unknown world. Understand me, and second me as much as you can, I will lead you to its conquest, and its name shall be joined to those of the thirty-six States that form the grand country of the Union!"

"Hurrah for the moon!" cried the Gun Club with one voice.

"The moon has been much studied," resumed Barbicane; "its mass, density, weight, volume, constitution, movements, distance, the part it plays in the solar world, are all perfectly determined; selenographic maps have been drawn with a perfection that equals, if it does not surpass, those of terrestrial maps; photography has given to our satellite proofs of incomparable beauty—in a word, all that the sciences of mathematics, astronomy, geology, and optics can teach is known about the moon; but until now no direct communication with it has ever been established."

A violent movement of interest and surprise welcomed this sentence of the orator.

"Allow me," he resumed, "to recall to you in few words how certain ardent minds, embarked upon imaginary journeys, pretended to have penetrated the secrets of our satellite. In the seventeenth century a certain David Fabricius boasted of having seen the inhabitants of the moon with his own eyes. In 1649 a Frenchman, Jean Baudoin, published his _Journey to the Moon by Dominique Gonzales, Spanish Adventurer_. At the same epoch Cyrano de Bergerac published the celebrated expedition that had so much success in France. Later on, another Frenchman (that nation took a great deal of notice of the moon), named Fontenelle, wrote his _Plurality of Worlds_,

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a masterpiece of his time; but science in its progress crushes even masterpieces! About 1835, a pamphlet, translated from the _New York American_, related that Sir John Herschel, sent to the Cape of Good Hope, there to make astronomical observations, had, by means of a telescope, perfected by interior lighting, brought the moon to within a distance of eighty yards. Then he distinctly perceived caverns in which lived hippopotami, green mountains with golden borders, sheep with ivory horns, white deer, and inhabitants with membraneous wings like those of bats. This treatise, the work of an American named Locke, had a very great success. But it was soon found out that it was a scientific mystification, and Frenchmen were the first to laugh at it."

"Laugh at an American!" cried J.T. Maston; "but that's a _casus belli_!"

"Be comforted, my worthy friend; before Frenchmen laughed they were completely taken in by our countryman. To terminate this rapid history, I may add that a certain Hans Pfaal, of Rotterdam, went up in a balloon filled with a gas made from azote, thirty-seven times lighter than hydrogen, and reached the moon after a journey of nineteen days. This journey, like the preceding attempts, was purely imaginary, but it was the work of a popular American writer of a strange and contemplative genius. I have named Edgar Poe!"

"Hurrah for Edgar Poe!" cried the assembly, electrified by the words of the president.

"I have now come to an end of these attempts which I may call purely literary, and quite insufficient to establish any serious communications with the Queen of Night. However, I ought to add that some practical minds tried to put themselves into serious communication with her. Some years ago a German mathematician proposed to send a commission of _savants_ to the steppes of Siberia. There, on the vast plains, immense geometrical figures were to be traced by means of luminous reflectors; amongst others, the square of the hypothenuse, vulgarly called the 'Ass's Bridge.' 'Any intelligent being,' said the mathematician, 'ought to understand the scientific destination of that figure. The Selenites (inhabitants of the moon), if they exist, will answer by a similar figure, and, communication once established, it will be easy to create an alphabet that will allow us to hold converse with the inhabitants of the moon.' Thus spoke the German mathematician, but his project was not put into execution, and until now no direct communication has existed between the earth and her satellite. But it was reserved to the practical genius of Americans to put itself into communication with the sidereal world. The means of doing so are simple, easy, certain, unfailing, and will make the subject of my proposition."

A hubbub and tempest of exclamations welcomed these words. There was not one of the audience who was not dominated and carried away by the words of the orator.

"Hear, hear! Silence!" was heard on all sides.

When the agitation was calmed down Barbicane resumed, in a graver tone, his interrupted speech.

"You know," said he, "what progress the science of ballistics has made during the last few years, and to what degree of perfection firearms would have been brought if the war had gone on. You are not ignorant in general that the power of resistance of cannons and the expansive force of powder are unlimited. Well, starting from that principle, I asked myself if, by means of sufficient apparatus, established under determined conditions of resistance, it would not be possible to send a cannon-ball to the moon!"

At these words an "Oh!" of stupefaction escaped from a thousand panting breasts; then occurred a moment of silence, like the profound calm that precedes thunder. In fact, the thunder came, but a thunder of applause, cries, and clamour which made the meeting-hall shake again. The president tried to speak; he could not. It was only at the end of ten minutes that he succeeded in making himself heard.

"Let me finish," he resumed coldly. "I have looked at the question in all its aspects, and from my indisputable calculations it results that any projectile, hurled at an initial speed of twelve thousand yards a second, and directed at the moon, must necessarily reach her. I have, therefore, the honour of proposing to you, my worthy colleagues, the attempting of this little experiment."

CHAPTER III.

EFFECT OF PRESIDENT BARBICANE'S COMMUNICATION.

It is impossible to depict the effect produced by the last words of the honourable president. What cries! what vociferations! What a succession of groans, hurrahs, cheers, and all the onomatopoeia of which the American language is so full. It was an indescribable hubbub and disorder. Mouths, hands, and feet made as much noise as they could. All the weapons in this artillery museum going off at once would not have more violently agitated the waves of sound. That is not surprising; there are cannoneers nearly as noisy as their cannons.

Barbicane remained calm amidst these enthusiastic clamours; perhaps he again wished to address some words to his colleagues, for his gestures asked for silence, and his fulminating bell exhausted itself in violent detonations; it was not even heard. He was soon dragged from his chair, carried in triumph, and from the hands of his faithful comrades he passed into those of the no less excited crowd.
Nothing can astonish an American. It has often been repeated that the word "impossible" is not French; the wrong dictionary must have been taken by mistake. In America everything is easy, everything is simple, and as to mechanical difficulties, they are dead before they are born. Between the Barbicane project and its realisation not one true Yankee would have allowed himself to see even the appearance of a difficulty. As soon said as done.

The triumphant march of the president was prolonged during the evening. A veritable torchlight procession--Irish, Germans, Frenchmen, Scotchmen--all the heterogeneous individuals that compose the population of Maryland--shouted in their maternal tongue, and the cheering was unanimous.

Precisely as if she knew it was all about her, the moon shone out then with serene magnificence, eclipsing other lights with her intense irradiation. All the Yankees directed their eyes towards the shining disc; some saluted her with their hands, others called her by the sweetest names; between eight o'clock and midnight an optician in Jones-Fall-street made a fortune by selling field-glasses. The Queen of Night was looked at through them like a lady of high life. The Americans acted in regard to her with the freedom of proprietors. It seemed as if the blonde Phoebe belonged to these enterprising conquerors and already formed part of the Union territory. And yet the only question was that of sending a projectile--a rather brutal way of entering into communication even with a satellite, but much in vogue amongst civilised nations.

Midnight had just struck, and the enthusiasm did not diminish; it was kept up in equal doses in all classes of the population; magistrates, _savants_, merchants, tradesmen, street-porters, intelligent as well as "green" men were moved even in their most delicate fibres. It was a national enterprise; the high town, low town, the quays bathed by the waters of the Patapsco, the ships, imprisoned in their docks, overflowed with crowds intoxicated with joy, gin, and whisky; everybody talked, argued, perorated, disputed, approved, and applauded, from the gentleman comfortably stretched on the bar-room couch before his glass of "sherry-cobbler" to the waterman who got drunk upon "knock-me-down" in the dark taverns of Fell's Point.

However, about 2 a.m. the emotion became calmer. President Barbicane succeeded in getting home almost knocked to pieces. A Hercules could not have resisted such enthusiasm. The crowd gradually abandoned the squares and streets. The four railroads of Ohio, Susquehanna, Philadelphia, and Washington, which converge at Baltimore, took the heterogeneous population to the four corners of the United States, and the town reposed in a relative tranquility.

It would be an error to believe that during this memorable evening Baltimore alone was agitated. The large towns of the Union, New York, Boston, Albany, Washington, Richmond, New Orleans, Charlestown, La Mobile of Texas, Massachusetts, Michigan, and Florida, all shared in the delirium. The thirty thousand correspondents of the Gun Club were acquainted with their president's letter, and awaited with equal impatience the famous communication of the 5th of October. The same evening as the orator uttered his speech it ran along the telegraph wires, across the states of the Union, with a speed of 348,447 miles a second. It may, therefore, be said with absolute certainty that at the same moment the United States of America, ten times as large as France, cheered with a single voice, and twenty-five millions of hearts, swollen with pride, beat with the same pulsation.

The next day five hundred daily, weekly, monthly, or bi-monthly newspapers took up the question; they examined it under its different aspects--physical, meteorological, economical, or moral, from a political or social point of view. They debated whether the month was a finished world, or if she was not still undergoing transformation. Did she resemble the earth in the time when the atmosphere did not yet exist? What kind of spectacle would her hidden hemisphere present to our terrestrial spheroid? Granting that the question at present was simply about sending a projectile to the Queen of Night, every one saw in that the starting-point of a series of experiments; all hoped that one day America would penetrate the last secrets of the mysterious orb, and some even seemed to fear that her conquest would disturb the balance of power in Europe.

The project once under discussion, not one of the papers suggested a doubt of its realisation; all the papers, treatises, bulletins, and magazines published by scientific, literary, or religious societies enlarged upon its advantages, and the "Natural History Society" of Boston, the "Science and Art Society" of Albany, the "Geographical and Statistical Society" of New York, the "American Philosophical Society" of Philadelphia, and the "Smithsonian Institution" of Washington sent in a thousand letters their congratulations to the Gun Club, with immediate offers of service and money.

It may be said that no proposition ever had so many adherents; there was no question of hesitations, doubts, or anxieties. As to the jokes, caricatures, and comic songs that would have welcomed in Europe, and, above all, in France, the idea of sending a projectile to the moon, they would have been turned against their author; all the "life-preservers" in the world would have been powerless to guarantee him against the general indignation. There are things that are not to be laughed at in the New World.

Impey Barbicane became from that day one of the greatest citizens of the United States, something like a Washington of science, and one fact amongst several will serve to show the sudden homage which was paid by a
nation to one man.

Some days after the famous meeting of the Gun Club the manager of an English company announced at the Baltimore Theatre a representation of _Much Ado About Nothing_, but the population of the town, seeing in the title a damaging allusion to the projects of President Barbicane, invaded the theatre, broke the seats, and forced the unfortunate manager to change the play. Like a sensible man, the manager, bowing to public opinion, replaced the offending comedy by _As You Like It_, and for several weeks he had fabulous houses.

CHAPTER IV.

ANSWER FROM THE CAMBRIDGE OBSERVATORY.

In the meantime Barbicane did not lose an instant amidst the enthusiasm of which he was the object. His first care was to call together his colleagues in the board-room of the Gun Club. There, after a debate, they agreed to consult astronomers about the astronomical part of their enterprise. Their answer once known, they would then discuss the mechanical means, and nothing would be neglected to assure the success of their great experiment.

A note in precise terms, containing special questions, was drawn up and addressed to the observatory of Cambridge in Massachusetts. This town, where the first University of the United States was founded, is justly celebrated for its astronomical staff. There are assembled the greatest men of science; there is the powerful telescope which enabled Bond to resolve the nebula of Andromeda and Clarke to discover the satellite of Sirius. This celebrated institution was, therefore, worthy in every way of the confidence of the Gun Club.

After two days the answer, impatiently awaited, reached the hands of President Barbicane.

It ran as follows:--

"The Director of the Cambridge Observatory to the President of the Gun Club at Baltimore.

On the receipt of your favour of the 6th inst., addressed to the Observatory of Cambridge in the name of the members of the Baltimore Gun Club, we immediately called a meeting of our staff, who have deemed it expedient to answer as follows:--

1. Is it possible to send a projectile to the moon?

Yes, it is possible to send a projectile to the moon if it is given an initial velocity of 1,200 yards a second. Calculations prove that this speed is sufficient. In proportion to the distance from the earth the force of gravitation diminishes in an inverse ratio to the square of the distance—that is to say, that for a distance three times greater that force is nine times less. In consequence, the weight of the projectile will decrease rapidly, and will end by being completely annulled at the moment when the attraction of the moon will be equal to that of the earth—that is to say, at the 47/52 of the distance. At that moment the projectile will have no weight at all, and if it clears that point it will fall on to the moon only by the effect of lunar gravitation. The theoretic possibility of the experiment is, therefore, quite demonstrated; as to its success, that depends solely in the power of the engine employed.

2. What is the exact distance that separates the earth and her satellite?

The moon does not describe a circle round the earth, but an ellipse, of which our earth occupies one of the foci; the consequence is, therefore, that at certain times it approaches nearer to, and at others recedes farther from, the earth, or, in astronomical language, it has its apogee and its perigee. At its apogee the moon is at 247,552 miles from the earth, and at its perigee at 218,657 miles only, which makes a difference of 28,895, or more than a ninth of the distance. The perigee distance is, therefore, the one that should give us the basis of all calculations.

3. What would be the duration of the projectile's transit to which a sufficient initial speed had been given, and consequently at what moment should it be hurled so as to reach the moon at a particular point?

If the projectile kept indefinitely the initial speed of 12,000 yards a second, it would only take about nine hours to reach its destination; but as that initial velocity will go on decreasing, it will happen, everything calculated upon, that the projectile will take 300,000 seconds, or 83 hours and 20 minutes, to reach the point where the terrestrial and lunar gravitations are equal, and from that point it will fall upon the moon in 50,000 seconds, or 13 hours, 53 minutes, and 20 seconds. It must, therefore, be hurled 97 hours, 13 minutes, and 20 seconds before the arrival of the
Regarding question No. 4, 'At what moment would the moon present the most favourable position for being reached by the projectile?'

According to what has been said above the epoch of the moon's perigee must first be chosen, and at the moment when she will be crossing her zenith, which will still further diminish the entire distance by a length equal to the terrestrial radius—i.e., 3,919 miles; consequently, the passage to be accomplished will be 214,976 miles. But the moon is not always at her zenith when she reaches her perigee, which is once a month. She is only under the two conditions simultaneously at long intervals of time. This coincidence of perigee and zenith must be waited for. It happens fortunately that on December 4th of next year the moon will offer these two conditions; at midnight she will be at her perigee and her zenith—that is to say, at her shortest distance from the earth and at her zenith at the same time.

Regarding question No. 5, 'At what point in the heavens ought the cannon destined to hurl the projectile be aimed?'

The preceding observations being admitted, the cannon ought to be aimed at the zenith of the place (the zenith is the spot situated vertically above the head of a spectator), so that its range will be perpendicular to the plane of the horizon, and the projectile will pass the soonest beyond the range of terrestrial gravitation. But for the moon to reach the zenith of a place that place must not exceed in latitude the declination of the luminary—i.e., in other words, it must be comprised between 0° and 28° of north or south latitude. In any other place the range must necessarily be oblique, which would seriously affect the success of the experiment.

Regarding question No. 6, 'What place will the moon occupy in the heavens at the moment of the projectile's departure?'

At the moment when the projectile is hurled into space, the moon, which travels forward 13° 10' 35" each day, will be four times as distant from her zenith point—i.e., by 52° 42' 20", a space which corresponds to the distance she will travel during the transit of the projectile. But as the deviation which the rotatory movement of the earth will impart to the shock must also be taken into account, and as the projectile cannot reach the moon until after a deviation equal to sixteen radii of the earth, which, calculated upon the moon's orbit, is equal to about 11°, it is necessary to add these 11° to those caused by the already-mentioned delay of the moon, or, in round numbers, 64°. Thus, at the moment of firing, the visual radius applied to the moon will describe with the vertical line of the place an angle of 64°.

Such are the answers to the questions proposed to the Observatory of Cambridge by the members of the Gun Club.

"To sum up—
'1st. The cannon must be placed in a country situated between 0° and 28° of north or south latitude.
'2nd. It must be aimed at the zenith of the place.
'3rd. The projectile must have an initial speed of 12,000 yards a second.
'4th. It must be hurled on December 1st of next year, at 10hrs. 46mins. 40secs. p.m.
'5th. It will meet the moon four days after its departure on December 4th, at midnight precisely, at the moment she arrives at her zenith.

The members of the Gun Club ought, therefore, at once to commence the labour necessitated by such an enterprise, and be ready to put them into execution at the moment fixed upon, for they will not find the moon in the same conditions of perigee and zenith till eighteen years and eleven days later.

The staff of the Observatory of Cambridge puts itself entirely at their disposition for questions of theoretic astronomy, and begs to join its congratulations to those of the whole of America.

'On behalf of the staff,
"J.M. BELFAST,
"_Director of the Observatory of Cambridge_."
of vague molecules, began to turn on itself whilst progressively condensing; then, following the immutable laws of mechanics, in proportion as its volume became diminished by condensation its movement of rotation was accelerated, and these two effects persisting, there resulted a principal planet, the centre of the nebulous mass.

By watching attentively the spectator would then have seen other molecules in the mass behave like the central planet, and condense in the same manner by a movement of progressively-accelerated rotation, and gravitate round it under the form of innumerable stars. The nebulae, of which astronomers count nearly 5,000 at present, were formed.

Amongst these 5,000 nebulae there is one that men have called the Milky Way, and which contains eighteen millions of stars, each of which has become the centre of a solar world.

If the spectator had then specially examined amongst these eighteen millions of stars one of the most modest and least brilliant, a star of the fourth order, the one that proudly named itself the sun, all the phenomena to which the formation of the universe is due would have successively taken place under his eyes.

In fact, he would have perceived this sun still in its gaseous state, and composed of mobile molecules; he would have perceived it turning on its own axis to finish its work of concentration. This movement, faithful to the laws of mechanics, would have been accelerated by the diminution of volume, and a time would have come when the centrifugal force would have overpowered the centripetal, which causes the molecules all to tend towards the centre.

Then another phenomenon would have passed before the eyes of the spectator, and the molecules situated in the plane of the equator would have formed several concentric rings like that of Saturn round the sun. In their turn these rings of cosmic matter, seized with a movement of rotation round the central mass, would have been broken up into secondary nebulae—thus, for example, into planets.

If the spectator had then concentrated all his attention on these planets he would have seen them behave exactly like the sun and give birth to one or more cosmic rings, origin of those secondary bodies which we call satellites.

Thus, in going up from the atom to the molecule, from the molecule to the nebulae, and from the nebulae to the principal star, from the principal star to the sun, from the sun to the planet, and from the planet to the satellite, we have the whole series of transformations undergone by the celestial powers from the first days of the universe.

The sun seems lost amidst the immensities of the stellar universe, and yet it is related, by actual theories of science, to the nebula of the Milky Way. Centre of a world, and small as it appears amidst the ethereal regions, it is still enormous, for its size is 1,400,000 times that of the earth. Around it gravitate eight planets, struck off from its own mass in the first days of creation. These are, in proceeding from the nearest to the most distant, Mercury, Venus, the Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. Between Mars and Jupiter circulate regularly other smaller bodies, the wandering débris, perhaps, of a star broken up into thousands of pieces, of which the telescope has discovered eighty-two at present. Some of these asteroids are so small that they could be walked round in a single day by going at a gymnastic pace.

Of these attendant bodies which the sun maintains in their elliptical orbit by the great law of gravitation, some possess satellites of their own. Uranus has eight, Saturn eight, Jupiter four, Neptune three perhaps, and the Earth one; this latter, one of the least important of the solar world, is called the Moon, and it is that one that the enterprising genius of the Americans means to conquer.

The Queen of Night, from her relative proximity and the spectacle rapidly renewed of her different phases, at first divided the attention of the inhabitants of the earth with the sun; but the sun tires the eyesight, and the splendour of its light forces its admirers to lower their eyes.

The blonde Phoebe, more humane, graciously allows herself to be seen in her modest grace; she is gentle to the eye, not ambitious, and yet she sometimes eclipses her brother the radiant Apollo, without ever being eclipsed by him. The Mahommedans understood what gratitude they owed to this faithful friend of the earth, and they ruled their months at 29-1/2 days on her revolution.

The first people of the world dedicated particular worship to this chaste goddess. The Egyptians called her Isis, the Phoenicians Astarte, the Greeks Phoebe, daughter of Jupiter and Latona, and they explained her eclipses by the mysterious visits of Diana and the handsome Endymion. The mythological legend relates that the Nemean lion traversed the country of the moon before its apparition upon earth, and the poet Agesianax, quoted by Plutarch, celebrated in his sweet lines its soft eyes, charming nose, and admirable mouth, formed by the luminous parts of the adorable Selene.

But the ancients understood the character, temperament, and, in a word, moral qualities of the moon from a mythological point of view, the most learned amongst them remained very ignorant of selenography.

Several astronomers, however, of ancient times discovered certain particulars now confirmed by science. Though the Arcadians pretended they had inhabited the earth at an epoch before the moon existed, though Simplicius believed her immovable and fastened to the crystal vault, though Tacitus looked upon her as a fragment broken off from the solar orbit, and Cclearch, the disciple of Aristotle, made of her a polished mirror upon which
were reflected the images of the ocean--though, in short, others only saw in her a mass of vapours exhaled by the earth, or a globe half fire and half ice that turned on itself, other _savants_, by means of wise observations and without optical instruments, suspected most of the laws that govern the Queen of Night.

Thus Thales of Miletus, B.C. 460, gave out the opinion that the moon was lighted up by the sun. Aristarchus of Samos gave the right explanation of her phases. Cleomenus taught that she shone by reflected light. Berose the Chaldean discovered that the duration of her movement of rotation was equal to that of her movement of revolution, and he thus explained why the moon always presented the same side. Lastly, Hipparchus, 200 years before the Christian era, discovered some inequalities in the apparent movements of the earth's satellite.

These different observations were afterwards confirmed, and other astronomers profited by them. Ptolemy in the second century, and the Arabian Aboul Wefa in the tenth, completed the remarks of Hipparchus on the inequalities that the moon undergoes whilst following the undulating line of its orbit under the action of the sun. Then Copernicus, in the fifteenth century, and Tycho Brahe, in the sixteenth, completely exposed the system of the world and the part that the moon plays amongst the celestial bodies.

At that epoch her movements were pretty well known, but very little of her physical constitution was known. It was then that Galileo explained the phenomena of light produced in certain phases by the existence of mountains, to which he gave an average height of 27,000 feet.

After him, Hevelius, an astronomer of Dantzig, lowered the highest altitudes to 15,000 feet; but his contemporary, Riccioli, brought them up again to 21,000 feet.

Herschel, at the end of the eighteenth century, armed with a powerful telescope, considerably reduced the preceding measurements. He gave a height of 11,400 feet to the highest mountains, and brought down the average of different heights to little more than 2,400 feet. But Herschel was mistaken too, and the observations of Schroeter, Louville, Halley, Nasmyth, Bianchini, Pastoff, Lohrman, Gruithuysen, and especially the patient studies of MM. Boeer and Moedler, were necessary to definitely resolve the question. Thanks to these _savants_, the elevation of the mountains of the moon is now perfectly known. Boeer and Moedler measured 1,905 different elevations, of which six exceed 15,000 feet and twenty-two exceed 14,400 feet. Their highest summit towers to a height of 22,606 feet above the surface of the lunar disc.

At the same time the survey of the moon was being completed; she appeared riddled with craters, and her essentially volcanic nature was affirmed by each observation. From the absence of refraction in the rays of the planets occulted by her it is concluded that she can have no atmosphere. This absence of air entails absence of water; it therefore became manifest that the Selenites, in order to live under such conditions, must have a special organisation, and differ singularly from the inhabitants of the earth.

Lastly, thanks to new methods, more perfected instruments searched the moon without intermission, leaving not a point of her surface unexplored, and yet her diameter measures 2,150 miles; her surface is one-thirteenth of the surface of the globe, and her volume one-forty-ninth of the volume of the terrestrial spheroid; but none of her secrets could escape the astronomers' eyes, and these clever _savants_ carried their wonderful observations still further.

Thus they remarked that when the moon was at her full the disc appeared in certain places striped with white lines, and during her phases striped with black lines. By prosecuting the study of these with greater precision they succeeded in making out the exact nature of these lines. They are long and narrow furrows sunk between parallel ridges, bordering generally upon the edges of the craters; their length varied from ten to one hundred miles, and their width was about 1,600 yards. Astronomers called them furrows, and that was all they could do; they could not ascertain whether they were the dried-up beds of ancient rivers or not. The Americans hope, some day or other, to determine this geological question. They also undertake to reconnoitre the series of parallel ramparts discovered on the surface of the moon by Gruithuysen, a learned professor of Munich, who considered them to be a system of elevated fortifications raised by Selenite engineers. These two still obscure points, and doubtless many others, can only be definitely settled by direct communication with the moon.

As to the intensity of her light there is nothing more to be learnt; it is 300,000 times weaker than that of the sun, and its heat has no appreciable action upon thermometers; as to the phenomenon known as the "ashy light," it is naturally explained by the effect of the sun's rays transmitted from the earth to the moon, and which seem to complete the lunar disc when it presents a crescent form during its first and last phases.

Such was the state of knowledge acquired respecting the earth's satellite which the Gun Club undertook to perfect under all its aspects, cosmographical, geographical, geological, political, and moral.

CHAPTER VI.
WHAT IT IS IMPOSSIBLE TO IGNORE AND WHAT IS NO LONGER ALLOWED TO BE BELIEVED IN THE UNITED STATES.
The immediate effect of Barbicane's proposition was that of bringing out all astronomical facts relative to the Queen of Night. Everybody began to study her assiduously. It seemed as if the moon had appeared on the horizon for the first time, and that no one had ever seen her in the sky before. She became the fashion; she was the lion of the day, without appearing less modest on that account, and took her place amongst the "stars" without being any the prouder. The newspapers revived old anecdotes in which this "Sun of the wolves" played a part; they recalled the influence which the ignorance of past ages had ascribed to her; they sang about her in every tone; a little more and they would have quoted her witty sayings; the whole of America was filled with selenomania.

The scientific journals treated the question which touched upon the enterprise of the Gun Club more specially; they published the letter from the Observatory of Cambridge, they commented upon it and approved of it without reserve.

In short, even the most ignorant Yankee was no longer allowed to be ignorant of a single fact relative to his satellite, nor, to the oldest women amongst them, to have any superstitions about her left. Science flooded them; it penetrated into their eyes and ears; it was impossible to be an ass—in astronomy.

Until then many people did not know how the distance between the earth and the moon had been calculated. This fact was taken advantage of to explain to them that it was done by measuring the parallax of the moon. If the word "parallax" seemed new to them, they were told it was the angle formed by two straight lines drawn from either extremity of the earth's radius to the moon. If they were in doubt about the perfection of this method, it was immediately proved to them that not only was the mean distance 234,347 miles, but that astronomers were right to within seventy miles.

To those who were not familiar with the movements of the moon, the newspapers demonstrated daily that she possesses two distinct movements, the first being that of rotation upon her axis, the second that of revolution round the earth, accomplishing both in the same time—that is to say, in 27-1/3 days.

The movement of rotation is the one that causes night and day on the surface of the moon, only there is but one day and one night in a lunar month, and they each last 354-1/3 hours. But, happily, the face, turned towards the terrestrial globe, is lighted by it with an intensity equal to the light of fourteen moons. As to the other face, the one always invisible, it has naturally 354 hours of absolute night, tempered only by "the pale light that falls from the stars." This phenomenon is due solely to the peculiarity that the movements of rotation and revolution are accomplished in rigorously equal periods, a phenomenon which, according to Cassini and Herschel, is common to the satellites of Jupiter, and, very probably to the other satellites.

Some well-disposed but rather unyielding minds did not quite understand at first how, if the moon invariably shows the same face to the earth during her revolution, she describes one turn round herself in the same period of time. To such it was answered—"Go into your dining-room, and turn round the table so as always to keep your face towards the centre; when your circular walk is ended you will have described one circle round yourselves, since your eye will have successively traversed every point of the room. Well, then, the room is the heavens, the table is the earth, and you are the moon!"

And they go away delighted with the comparison.

Thus, then, the moon always presents the same face to the earth; still, to be quite exact, it should be added that in consequence of certain fluctuations from north to south and from west to east, called libration, she shows rather more than the half of her disc, about 0.57.

When the ignoramuses knew as much as the director of the Cambridge Observatory about the moon's movement of rotation they began to make themselves uneasy about her movement of revolution round the earth, and twenty scientific reviews quickly gave them the information they wanted. They then learnt that the firmament, with its infinite stars, may be looked upon as a vast dial upon which the moon moves, indicating the time to all the inhabitants of the earth; that it is in this movement that the Queen of Night shows herself in her different phases, that she is full when she is in opposition with the sun—that is to say, when the three bodies are on a line with each other, the earth being in the centre; that the moon is new when she is in conjunction with the sun—that is to say, when she is between the sun and the earth; lastly, that the moon is in her first or last quarter when she makes, with the sun and the earth, a right angle of which she occupies the apex.

Some perspicacious Yankees inferred in consequence that eclipses could only take place at the periods of conjunction or opposition, and their reasoning was just. In conjunction the moon can eclipse the sun, whilst in opposition it is the earth that can eclipse him in her turn; and the reason these eclipses do not happen twice in a lunar month is because the plane upon which the moon moves is elliptical like that of the earth.

As to the height which the Queen of Night can attain above the horizon, the letter from the Observatory of Cambridge contained all that can be said about it. Every one knew that this height varies according to the latitude of the place where the observation is taken. But the only zones of the globe where the moon reaches her zenith—that is to say, where she is directly above the heads of the spectators—are necessarily comprised between the 28th parallels...
and the equator. Hence the important recommendation given to attempt the experiment upon some point in this part of the globe, in order that the projectile may be hurled perpendicularly, and may thus more quickly escape the attraction of gravitation. This was a condition essential to the success of the enterprise, and public opinion was much exercised thereupon.

As to the line followed by the moon in her revolution round the earth, the Observatory of Cambridge had demonstrated to the most ignorant that it is an ellipse of which the earth occupies one of the foci. These elliptical orbits are common to all the planets as well as to all the satellites, and rational mechanism rigorously proves that it could not be otherwise. It was clearly understood that when at her apogee the moon was farthest from the earth, and when at her perigee she was nearest to our planet.

This, therefore, was what every American knew whether he wished to or no, and what no one could decently be ignorant of. But if these true principles rapidly made their way, certain illusive fears and many errors were with difficulty cleared away.

Some worthy people maintained, for instance, that the moon was an ancient comet, which, whilst travelling along its elongated orbit round the sun, passed near to the earth, and was retained in her circle of attraction. The drawing-room astronomers pretended to explain thus the burnt aspect of the moon, a misfortune of which they accused the sun. Only when they were told to notice that comets have an atmosphere, and that the moon has little or none, they did not know what to answer.

Others belonging to the class of "Shakers" manifested certain fears about the moon; they had heard that since the observations made in the times of the Caliphs her movement of revolution had accelerated in a certain proportion; they thence very logically concluded that an acceleration of movement must correspond to a diminution in the distance between the two bodies, and that this double effect going on infinitely the moon would one day end by falling into the earth. However, they were obliged to reassure themselves and cease to fear for future generations when they were told that according to the calculations of Laplace, an illustrious French mathematician, this acceleration of movement was restricted within very narrow limits, and that a proportional diminution will follow it. Thus the equilibrium of the solar world cannot be disturbed in future centuries.

Lastly there was the superstitious class of ignoramuses to be dealt with; these are not content with being ignorant; they know what does not exist, and about the moon they know a great deal. Some of them considered her disc to be a polished mirror by means of which people might see themselves from different points on the earth, and communicate their thoughts to one another. Others pretended that out of 1,000 new moons 950 had brought some notable change, such as cataclysms, revolutions, earthquakes, deluges, &c.; they therefore believed in the mysterious influence of the Queen of Night on human destinies; they think that every Selenite is connected by some sympathetic tie with each inhabitant of the earth; they pretend, with Dr. Mead, that she entirely governs the vital system--that boys are born during the new moon and girls during her last quarter, &c., &c. But at last it became necessary to give up these vulgar errors, to come back to truth; and if the moon, stripped of her influence, lost her prestige in the minds of courtisans of every power, if some turned their backs on her, the immense majority were in her favour. As to the Yankees, they had no other ambition than that of taking possession of this new continent of the sky, and to plant upon its highest summit the star-spangled banner of the United States of America.

CHAPTER VII.
THE HYMN OF THE CANNON-BALL.

The Cambridge Observatory had, in its memorable letter of October 7th, treated the question from an astronomical point of view--the mechanical point had still to be treated. It was then that the practical difficulties would have seemed insurmountable to any other country but America; but there they were looked upon as play.

President Barbicane had, without losing any time, nominated a working committee in the heart of the Gun Club. This committee was in three sittings to elucidate the three great questions of the cannon, the projectile, and the powder. It was composed of four members very learned upon these matters. Barbicane had the casting vote, and with him were associated General Morgan, Major Elphinstone, and, lastly, the inevitable J.T. Maston, to whom were confided the functions of secretary.

On the 8th of October the committee met at President Barbicane's house, No. 3, Republican-street; as it was important that the stomach should not trouble so important a debate, the four members of the Gun Club took their seats at a table covered with sandwiches and teapots. J.T. Maston immediately screwed his pen on to his steel hook and the business began.

Barbicane opened the meeting as follows:--

"Dear colleagues," said he, "we have to solve one of the more important problems in ballistics--that greatest of sciences which treats of the movement of projectiles--that is to say, of bodies hurled into space by some power of
impulsion and then left to themselves."

"Oh, ballistics, ballistics!" cried J.T. Maston in a voice of emotion.

"Perhaps," continued Barbicane, "the most logical thing would be to consecrate this first meeting to discussing the engine."

"Certainly," answered General Morgan.

"Nevertheless," continued Barbicane, "after mature deliberation, it seems to me that the question of the projectile ought to precede that of the cannon, and that the dimensions of the latter ought to depend upon the dimensions of the former."

J.T. Maston here interrupted the president, and was heard with the attention which his magnificent past career deserved.

"My dear friends," said he in an inspired tone, "our president is right to give the question of the projectile the precedence of every other; the cannon-ball we mean to hurl at the moon will be our messenger, our ambassador, and I ask your permission to regard it from an entirely moral point of view."

This new way of looking at a projectile excited the curiosity of the members of the committee; they therefore listened attentively to the words of J.T. Maston.

"My dear colleagues," he continued, "I will be brief. I will lay aside the material projectile--the projectile that kills--in order to take up the mathematical projectile--the moral projectile. A cannon-ball is to me the most brilliant manifestation of human power, and by creating it man has approached nearest to the Creator!"

"Hear, hear!" said Major Elphinstone.

"In fact," cried the orator, "if God has made the stars and the planets, man has made the cannon-ball--that criterion of terrestrial speed--that reduction of bodies wandering in space which are really nothing but projectiles. Let Providence claim the speed of electricity, light, the stars, comets, planets, satellites, sound, and wind! But ours is the speed of the cannon-ball--a hundred times greater than that of trains and the fastest horses!"

J.T. Maston was inspired; his accents became quite lyrical as he chanted the hymn consecrated to the projectile.

"Would you like figures?" continued he; "here are eloquent ones. Take the simple 24 pounder; though it moves 80,000 times slower than electricity, 64,000 times slower than light, 76 times slower than the earth in her movement of translation round the sun, yet when it leaves the cannon it goes quicker than sound; it goes at the rate of 14 miles a minute, 840 miles an hour, 20,100 miles a day--that is to say, at the speed of the points of the equator in the globe's movement of rotation, 7,336,500 miles a year. It would therefore take 11 days to get to the moon, 12 years to get to the sun, 360 years to reach Neptune, at the limits of the solar world. That is what this modest cannon-ball, the work of our hands, can do! What will it be, therefore, when, with twenty times that speed, we shall hurl it with a rapidity of seven miles a second? Ah! splendid shot! superb projectile! I like to think you will be received up there with the honours due to a terrestrial ambassador!"

Cheers greeted this brilliant peroration, and J.T. Maston, overcome with emotion, sat down amidst the felicitations of his colleagues.

"And now," said Barbicane, "that we have given some time to poetry, let us proceed to facts."

"We are ready," answered the members of the committee as they each demolished half-a-dozen sandwiches.

"You know what problem it is we have to solve," continued the president; "it is that of endowing a projectile with a speed of 12,000 yards per second. I have every reason to believe that we shall succeed, but at present let us see what speeds we have already obtained; General Morgan can edify us upon that subject."

"So much the more easily," answered the general, "because during the war I was a member of the Experiment Commission. The 100-pound cannon of Dahlgren, with a range of 5,000 yards, gave their projectiles an initial speed of 500 yards a second."

"Yes; and the Rodman Columbiad?" (the Americans gave the name of "Columbiad" to their enormous engines of destruction) asked the president.

"The Rodman Columbiad, tried at Fort Hamilton, near New York, hurled a projectile, weighing half a ton, a distance of six miles, with a speed of 800 yards a second, a result which neither Armstrong nor Palliser has obtained in England."

"Englishmen are nowhere!" said J.T. Maston, pointing his formidable steel hook eastward.

"Then," resumed Barbicane, "a speed of 800 yards is the maximum obtained at present."

"Yes," answered Morgan.

"I might add, however," replied J.T. Maston, "that if my mortar had not been blown up--"

"Yes, but it was blown up," replied Barbicane with a benevolent gesture. "We must take the speed of 800 yards for a starting point. We must keep till another meeting the discussion of the means used to produce this speed; allow me to call your attention to the dimensions which our projectile must have. Of course it must be something very different to one of half a ton weight."
"Why?" asked the major.

"Because," quickly answered J.T. Maston, "it must be large enough to attract the attention of the inhabitants of the moon, supposing there are any."

"Yes," answered Barbicane, "and for another reason still more important."

"What do you mean, Barbicane?" asked the major.

"I mean that it is not enough to send up a projectile and then to think no more about it; we must follow it in its transit."

"What?" said the general, slightly surprised at the proposition.

"Certainly," replied Barbicane, like a man who knew what he was saying, "or our experiment will be without result."

"But then," replied the major, "you will have to give the projectile enormous dimensions."

"No. Please grant me your attention. You know that optical instruments have acquired great perfection; certain telescopes increase objects six thousand, and bring the moon to within a distance of forty miles. Now at that distance objects sixty feet square are perfectly visible. The power of penetration of the telescope has not been increased, because that power is only exercised to the detriment of their clearness, and the moon, which is only a reflecting mirror, does not send a light intense enough for the telescopes to increase objects beyond that limit."

"Very well, then, what do you mean to do?" asked the general. "Do you intend giving a diameter of sixty feet to your projectile?"

"No." "You are not going to take upon yourself the task of making the moon more luminous?"

"I am, though."

"That's rather strong!" exclaimed Maston.

"Yes, but simple," answered Barbicane. "If I succeed in lessening the density of the atmosphere which the moon's light traverses, shall I not render that light more intense?"

"Evidently."

"In order to obtain that result I shall only have to establish my telescope upon some high mountain. We can do that."

"I give in," answered the major; "you have such a way of simplifying things! What enlargement do you hope to obtain thus?"

"One of 48,000 times, which will bring the moon within five miles only, and objects will only need a diameter of nine feet."

"Perfect!" exclaimed J.T. Maston; "then our projectile will have a diameter of nine feet?"

"Precisely."

"Allow me to inform you, however," returned Major Elphinstone, "that its weight will still be--"

"Oh, major!" answered Barbicane, "before discussing its weight allow me to tell you that our forefathers did marvels in that way. Far be it from me to pretend that ballistics have not progressed, but it is well to know that in the Middle Ages surprising results were obtained, I dare affirm, even more surprising than ours."


"Nothing is easier," answered Barbicane; "I can give you some examples. At the siege of Constantinople by Mahomet II., in 1453, they hurled stone bullets that weighed 1,900 lbs.; at Malta, in the time of its knights, a certain cannon of Fort Saint Elme hurled projectiles weighing 2,500 lbs. According to a French historian, under Louis XI. a mortar hurled a bomb of 500 lbs. only; but that bomb, fired at the Bastille, a place where mad men imprisoned wise ones, fell at Charenton, where wise men imprison mad ones."

"Very well," said J.T. Maston.

"Since, what have we seen, after all? The Armstrong cannons hurl projectiles of 500 lbs., and the Rodman Columbiads projectiles of half a ton! It seems, then, that if projectiles have increased in range they have lost in weight. Now, if we turn our efforts in that direction, we must succeed with the progress of the science in doubling the weight of the projectiles of Mahomet II. and the Knights of Malta."

"That is evident," answered the major; "but what metal do you intend to employ for your own projectile?"

"Simply cast-iron," said General Morgan.

"Cast-iron!" exclaimed J.T. Maston disdainfully, "that's very common for a bullet destined to go to the moon."

"Do not let us exaggerate, my honourable friend," answered Morgan; "cast-iron will be sufficient."

"Then," replied Major Elphinstone, "as the weight of the projectile is in proportion to its volume, a cast-iron bullet, measuring nine feet in diameter, will still be frightfully heavy."

"Yes, if it be solid, but not if it be hollow," said Barbicane.

"Hollow!--then it will be an obus?"
"In which we can put despatches," replied J.T. Maston, "and specimens of our terrestrial productions."

"Yes, an obus," answered Barbicane; "that is what it must be; a solid bullet of 108 inches would weigh more than 200,000 lbs., a weight evidently too great; however, as it is necessary to give the projectile a certain stability, I propose to give it a weight of 20,000 lbs."

"What will be the thickness of the metal?" asked the major.

"If we follow the usual proportions," replied Morgan, "a diameter of 800 inches demands sides two feet thick at least."

"That would be too thick," answered Barbicane; "we do not want a projectile to pierce armour-plate; it only needs sides strong enough to resist the pressure of the powder-gas. This, therefore, is the problem:--What thickness ought an iron obus to have in order to weigh only 20,000 lbs.? Our clever calculator, Mr. Maston, will tell us at once."

"Nothing is easier," replied the honourable secretary.

So saying, he traced some algebraical signs on the paper, amongst which \( n^2 \) and \( x^2 \) frequently appeared. He even seemed to extract from them a certain cubic root, and said--

"The sides must be hardly two inches thick."

"Will that be sufficient?" asked the major doubtfully.

"No," answered the president, "certainly not."

"Then what must be done?" resumed Elphinstone, looking puzzled.

"We must use another metal instead of cast-iron."

"Brass?" suggested Morgan.

"No; that is too heavy too, and I have something better than that to propose."

"What?" asked the major.

"Aluminium," answered Barbicane.

"Aluminium!" cried all the three colleagues of the president.

"Certainly, my friends. You know that an illustrious French chemist, Henry St. Claire Deville, succeeded in 1854 in obtaining aluminium in a compact mass. This precious metal possesses the whiteness of silver, the indestructibility of gold, the tenacity of iron, the fusibility of copper, the lightness of glass; it is easily wrought, and is very widely distributed in nature, as aluminium forms the basis of most rocks; it is three times lighter than iron, and seems to have been created expressly to furnish us with the material for our projectile!"

"Hurrah for aluminium!" cried the secretary, always very noisy in his moments of enthusiasm.

"But, my dear president," said the major, "is not aluminium quoted exceedingly high?"

"It was so," answered Barbicane; "when first discovered a pound of aluminium cost 260 to 280 dollars; then it fell to twenty-seven dollars, and now it is worth nine dollars."

"But nine dollars a pound," replied the major, who did not easily give in; "that is still an enormous price."

"Doubtless, my dear major; but not out of reach."

"What will the projectile weigh, then?" asked Morgan.

"Here is the result of my calculations," answered Barbicane. "A projectile of 108 inches in diameter and 12 inches thick would weigh, if it were made of cast-iron, 67,440 lbs.; cast in aluminium it would be reduced to 19,250 lbs."

"Perfect!" cried Maston; "that suits our programme capitally."

"Yes," replied the major; "but do you not know that at nine dollars a pound the projectile would cost--"

"One hundred seventy-three thousand and fifty dollars. Yes, I know that; but fear nothing, my friends; money for our enterprise will not be wanting, I answer for that."

"It will be showered upon us," replied J.T. Maston.

"Well, what do you say to aluminium?" asked the president.

"Adopted," answered the three members of the committee.

"As to the form of the projectile," resumed Barbicane, "it is of little consequence, since, once the atmosphere cleared, it will find itself in empty space; I therefore propose a round ball, which will turn on itself, if it so pleases."

Thus ended the first committee meeting. The question of the projectile was definitely resolved upon, and J.T. Maston was delighted with the idea of sending an aluminium bullet to the Selenites, "as it will give them no end of an idea of the inhabitants of the earth!"

CHAPTER VIII.
HISTORY OF THE CANNON.

The resolutions passed at this meeting produced a great effect outside. Some timid people grew alarmed at the
idea of a projectile weighing 20,000 lbs. hurled into space. People asked what cannon could ever transmit an initial speed sufficient for such a mass. The report of the second meeting was destined to answer these questions victoriously.

The next evening the four members of the Gun Club sat down before fresh mountains of sandwiches and a veritable ocean of tea. The debate then began.

"My dear colleagues," said Barbicane, "we are going to occupy ourselves with the construction of the engine, its length, form, composition, and weight. It is probable that we shall have to give it gigantic dimensions, but, however great our difficulties might be, our industrial genius will easily overcome them. Will you please listen to me and spare objections for the present? I do not fear them."

An approving murmur greeted this declaration.

"We must not forget," resumed Barbicane, "to what point our yesterday's debate brought us; the problem is now the following: how to give an initial speed of 12,000 yards a second to a shot 108 inches in diameter weighing 20,000 lbs.

"That is the problem indeed," answered Major Elphinstone.

"When a projectile is hurled into space," resumed Barbicane, "what happens? It is acted upon by three independent forces, the resistance of the medium, the attraction of the earth, and the force of impulsion with which it is animated. Let us examine these three forces. The resistance of the medium--that is to say, the resistance of the air--is of little importance. In fact, the terrestrial atmosphere is only forty miles deep. With a rapidity of 12,000 yards the projectile will cross that in five seconds, and this time will be short enough to make the resistance of the medium insignificant. Let us now pass to the attraction of the earth--that is to say, to the weight of the projectile. We know that that weight diminishes in an inverse ratio to the square of distances--in fact, this is what physics teach us: when a body left to itself falls on the surface of the earth, it falls 15 feet in the first second, and if the same body had to fall 257,542 miles--that is to say, the distance between the earth and the moon--its fall would be reduced to half a line in the first second. That is almost equivalent to immobility. The question is, therefore, how progressively to overcome this law of gravitation. How shall we do it? By the force of impulsion?"

"That is the difficulty," answered the major.

"That is it indeed," replied the president. "But we shall triumph over it, for this force of impulsion we want depends on the length of the engine and the quantity of powder employed, the one only being limited by the resistance of the other. Let us occupy ourselves, therefore, to-day with the dimensions to be given to the cannon. It is quite understood that we can make it, as large as we like, seeing it will not have to be moved."

"All that is evident," replied the general.

"Until now," said Barbicane, "the longest cannon, our enormous Columbiads, have not been more than twenty-five feet long; we shall therefore astonish many people by the dimensions we shall have to adopt."

"Certainly," exclaimed J.T. Maston. "For my part, I ask for a cannon half a mile long at least!"

"Half a mile!" cried the major and the general.

"Yes, half a mile, and that will be half too short."

"Come, Maston," answered Morgan, "you exaggerate."

"No, I do not," said the irate secretary; "and I really do not know why you tax me with exaggeration."

"Because you go too far."

"You must know, sir," answered J.T. Maston, looking dignified, "that an artilleryman is like a cannon-ball, he can never go too far."

The debate was getting personal, but the president interfered.

"Be calm, my friends, and let us reason it out. We evidently want a gun of great range, as the length of the engine will increase the detention of gas accumulated behind the projectile, but it is useless to overstep certain limits."

"Perfectly," said the major.

"What are the usual rules in such a case? Ordinarily the length of a cannon is twenty or twenty-five times the diameter of the projectile, and it weighs 235 to 240 times its weight."

"It is not enough," cried J.T. Maston with impetuosity.

"I agree to that, my worthy friend, and in fact by keeping that proportion for a projectile nine feet wide, weighing 30,000 lbs., the engine would only have a length of 225 feet and a weight of 7,200,000 lbs."

"That is ridiculous," resumed J.T. Maston. "You might as well take a pistol."

"I think so too," answered Barbicane; "that is why I propose to quadruple that length, and to construct a cannon 900 feet long."

The general and the major made some objections, but, nevertheless, this proposition, strongly supported by the secretary, was definitely adopted.
"Now," said Elphinstone, "what thickness must we give its sides?"

"A thickness of six feet," answered Barbicane.

"You do not think of raising such a mass upon a gun-carriage?" asked the major.

"That would be superb, however! said J.T. Maston.

"But impracticable," answered Barbicane. "No, I think of casting this engine in the ground itself, binding it up with wrought-iron hoops, and then surrounding it with a thick mass of stone and cement masonry. When it is cast it must be bored with great precision so as to prevent windage, so there will be no loss of gas, and all the expansive force of the powder will be employed in the propulsion."

"Hurrah! hurrah!" said Maston, "we have our cannon."

"Not yet," answered Barbicane, calming his impatient friend with his hand.

"Why not?"

"Because we have not discussed its form. Shall it be a cannon, howitzer, or a mortar?"

"A cannon," replied Morgan.

"A howitzer," said the major.


A fresh discussion was pending, each taking the part of his favourite weapon, when the president stopped it short.

"My friends," said he, "I will soon make you agree. Our Columbiad will be a mixture of all three. It will be a cannon, because the powder-magazine will have the same diameter as the chamber. It will be a howitzer, because it will hurl an obus. Lastly, it will be a mortar, because it will be pointed at an angle of 90°, and that without any chance of recoil; unalterably fixed to the ground, it will communicate to the projectile all the power of impulsion accumulated in its body."

"Adopted, adopted," answered the members of the committee.

"One question," said Elphinstone, "and will this _canobusomortar_ be rifled?"

"No," answered Barbicane. "No, we must have an enormous initial speed, and you know very well that a shot leaves a rifle less rapidly than a smooth-bore."

"True," answered the major.

"Well, we have it this time," repeated J.T. Maston.

"Not quite yet," replied the president.

"Why not?"

"Because we do not yet know of what metal it will be made."

"Let us decide that without delay."

"I was going to propose it to you."

The four members of the committee each swallowed a dozen sandwiches, followed by a cup of tea, and the debate recommenced.

"Our cannon," said Barbicane, "must be possessed of great tenacity, great hardness; it must be insusceptible by heat, indissoluble, and inoxydable by the corrosive action of acids."

"There is no doubt about that," answered the major, "and as we shall have to employ a considerable quantity of metal we shall not have much choice."

"Well, then," said Morgan, "I propose for the fabrication of the Columbiad the best alloy hitherto known—that is to say, 100 parts of copper, 12 of tin, and 6 of brass."

"My friends," answered the president, "I agree that this composition has given excellent results; but in bulk it would be too dear and very hard to work. I therefore think we must adopt an excellent material, but cheap, such as cast-iron. Is not that your opinion, major?"

"Quite," answered Elphinstone.

"In fact," resumed Barbicane, "cast-iron costs ten times less than bronze; it is easily melted, it is readily run into sand moulds, and is rapidly manipulated; it is, therefore, an economy of money and time. Besides, that material is excellent, and I remember that during the war at the siege of Atlanta cast-iron cannon fired a thousand shots each every twenty minutes without being damaged by it."

"Yet cast-iron is very brittle," answered Morgan.

"Yes, but it possesses resistance too. Besides, we shall not let it explode, I can answer for that."

"It is possible to explode and yet be honest," replied J.T. Maston sententiously.

"Evidently," answered Barbicane. "I am, therefore, going to beg our worthy secretary to calculate the weight of a cast-iron cannon 900 feet long, with an inner diameter of nine feet, and sides six feet thick."

"At once," answered J.T. Maston, and, as he had done the day before, he made his calculations with marvellous facility, and said at the end of a minute--
"This cannon will weigh 68,040 tons."
"And how much will that cost at two cents a pound?"
"Two million five hundred and ten thousand seven hundred and one dollars."
J.T. Maston, the major, and the general looked at Barbicane anxiously.
"Well, gentlemen," said the president, "I can only repeat what I said to you yesterday, don't be uneasy; we shall not want for money."

Upon this assurance of its president the committee broke up, after having fixed a third meeting for the next evening.

CHAPTER IX.
THE QUESTION OF POWDERS.

The question of powder still remained to be settled. The public awaited this last decision with anxiety. The size of the projectile and length of the cannon being given, what would be the quantity of powder necessary to produce the impulsion? This terrible agent, of which, however, man has made himself master, was destined to play a part in unusual proportions.

It is generally known and often asserted that gunpowder was invented in the fourteenth century by the monk Schwartz, who paid for his great discovery with his life. But it is nearly proved now that this story must be ranked among the legends of the Middle Ages. Gunpowder was invented by no one; it is a direct product of Greek fire, composed, like it, of sulphur and saltpetre; only since that epoch these mixtures; which were only dissolving, have been transformed into detonating mixtures.

But if learned men know perfectly the false history of gunpowder, few people are aware of its mechanical power. Now this is necessary to be known in order to understand the importance of the question submitted to the committee.

Thus a litre of gunpowder weighs about 2 lbs.; it produces, by burning, about 400 litres of gas; this gas, liberated, and under the action of a temperature of 2,400°, occupies the space of 4,000 litres. Therefore the volume of powder is to the volume of gas produced by its deflagration as 1 to 400. The frightful force of this gas, when it is compressed into a space 4,000 times too small, may be imagined.

This is what the members of the committee knew perfectly when, the next day, they began their sitting. Major Elphinstone opened the debate.

"My dear comrades," said the distinguished chemist, "I am going to begin with some unexceptionable figures, which will serve as a basis for our calculation. The 24-lb. cannon-ball, of which the Hon. J.T. Maston spoke the day before yesterday, is driven out of the cannon by 16 lbs. of powder only."
"You are certain of your figures?" asked Barbicane.
"Absolutely certain," answered the major. "The Armstrong cannon only uses 75 lbs. of powder for a projectile of 800 lbs., and the Rodman Columbiad only expends 160 lbs. of powder to send its half-ton bullet six miles. These facts cannot be doubted, for I found them myself in the reports of the Committee of Artillery."
"That is certain," answered the general.
"Well," resumed the major, "the conclusion to be drawn from these figures is that the quantity of powder does not augment with the weight of the shot; in fact, if a shot of 24 lbs. took 16 lbs. of powder, and, in other terms, if in ordinary cannons a quantity of powder weighing two-thirds of the weight of the projectile is used, this proportion is not always necessary. Calculate, and you will see that for the shot of half a ton weight, instead of 333 lbs. of powder, this quantity has been reduced to 116 lbs. only.
"What are you driving at?" asked the president.
"The extreme of your theory, my dear major," said J.T. Maston, "would bring you to having no powder at all, provided your shot were sufficiently heavy."

"Friend Maston will have his joke even in the most serious things," replied the major; "but he need not be uneasy; I shall soon propose a quantity of powder that will satisfy him. Only I wish to have it understood that during the war, and for the largest guns, the weight of the powder was reduced, after experience, to a tenth of the weight of the shot."

"Nothing is more exact," said Morgan; "but, before deciding the quantity of powder necessary to give the impulsion, I think it would be well to agree upon its nature."
"We shall use a large-grained powder," answered the major; "its deflagration is the most rapid."
"No doubt," replied Morgan; "but it is very brittle, and ends by damaging the chamber of the gun."
"Certainly; but what would be bad for a gun destined for long service would not be so for our Columbiad. We run no danger of explosion, and the powder must immediately take fire to make its mechanical effect complete."
"We might make several touchholes," said J.T. Maston, "so as to set fire to it in several places at the same time."

"No doubt," answered Elphinstone, "but that would make the working of it more difficult. I therefore come back to my large-grained powder that removes these difficulties."

"So be it," answered the general.

"To load his Columbiad," resumed the major, "Rodman used a powder in grains as large as chestnuts, made of willow charcoal, simply rarefied in cast-iron pans. This powder was hard and shining, left no stain on the hands, contained a great proportion of hydrogen and oxygen, deflagrated instantaneously, and, though very brittle, did not much damage the mouthpiece."

"Well, it seems to me," answered J.T. Maston, "that we have nothing to hesitate about, and that our choice is made."

"Unless you prefer gold-powder," replied the major, laughing, which provoked a threatening gesture from the steel hook of his susceptible friend.

Until then Barbicane had kept himself aloof from the discussion; he listened, and had evidently an idea. He contented himself with saying simply--

"Now, my friends, what quantity of powder do you propose?"

The three members of the Gun Club looked at one another for the space of a minute.

"Two hundred thousand pounds," said Morgan at last.

"Five hundred thousand," replied the major.


This, time Elphinstone dared not tax his colleague with exaggeration. In fact, the question was that of sending to the moon a projectile weighing 20,000 lbs., and of giving it an initial force of 2000 yards a second. A moment of silence, therefore, followed the triple proposition made by the three colleagues.

It was at last broken by President Barbicane.

"My brave comrades," said he in a quiet tone, "I start from this principle, that the resistance of our cannon, in the given conditions, is unlimited. I shall, therefore, surprise the Honourable J.T. Maston when I tell him that he has been timid in his calculations, and I propose to double his 800,000 lbs. of powder."

"Sixteen hundred thousand pounds!" shouted J.T. Maston, jumping out of his chair.

"Quite as much as that."

"Then we shall have to come back to my cannon half a mile long."

"It is evident," said the major.

"Sixteen hundred thousand pounds of powder," resumed the Secretary of Committee, "will occupy about a space of 22,000 cubic feet; now, as your cannon will only hold about 54,000 cubic feet, it will be half full, and the chamber will not be long enough to allow the explosion of the gas to give sufficient impulsion to your projectile."

There was nothing to answer. J.T. Maston spoke the truth. They all looked at Barbicane.

"However," resumed the president, "I hold to that quantity of powder. Think! 1,600,000 pounds of powder will give 6,000,000,000 litres of gas."

"Then how is it to be done?" asked the general.

"It is very simple. We must reduce this enormous quantity of powder, keeping at the same time its mechanical power."

"Good! By what means?"

"I will tell you," answered Barbicane simply.

His interlocutors all looked at him.

"Nothing is easier, in fact," he resumed, "than to bring that mass of powder to a volume four times less. You all know that curious cellular matter which constitutes the elementary tissues of vegetables?"

"Ah!" said the major, "I understand you, Barbicane."

"This matter," said the president, "is obtained in perfect purity in different things, especially in cotton, which is nothing but the skin of the seeds of the cotton plant. Now cotton, combined with cold nitric acid, is transformed into a substance eminently insoluble, eminently combustible, eminently explosive. Some years ago, in 1832, a French chemist, Braconnot, discovered this substance, which he called xyloidine. In 1838, another Frenchman, Pelouze, studied its different properties; and lastly, in 1846, Schonbein, professor of chemistry at Basle, proposed it as gunpowder. This powder is nitric cotton."

"Or pyroxyle," answered Elphinstone.

"Or fulminating cotton," replied Morgan.

"Is there not an American name to put at the bottom of this discovery?" exclaimed J.T. Maston, animated by a lively sentiment of patriotism.

"Not one, unfortunately," replied the major.
"Nevertheless, to satisfy Maston," resumed the president, "I may tell him that one of our fellow-citizens may be annexed to the study of the celluosity, for collodion, which is one of the principal agents in photography, is simply pyroxyle dissolved in ether to which alcohol has been added, and it was discovered by Maynard, then a medical student."

"Hurrah for Maynard and fulminating cotton!" cried the noisy secretary of the Gun Club.

"I return to pyroxyle," resumed Barbicane. "You are acquainted with its properties which make it so precious to us. It is prepared with the greatest facility; cotton plunged in smoking nitric acid for fifteen minutes, then washed in water, then dried, and that is all."

"Nothing is more simple, certainty," said Morgan.

"What is more, pyroxyle is not damaged by moisture, a precious quality in our eyes, as it will take several days to load the cannon. Its inflammability takes place at 170° instead of at 240° and its deflagration is so immediate that it may be fired on ordinary gunpowder before the latter has time to catch fire too."

"Perfect," answered the major.

"Only it will cost more."

"What does that matter?" asked J.T. Maston.

"Lastly, it communicates to projectiles a speed four times greater than that of gunpowder. I may even add that if 8/10ths of its weight of nitrate of potash is added its expansive force is still greatly augmented."

"Will that be necessary?" asked the major.

"I do not think so," answered Barbicane. "Thus instead of 1,600,000 lbs. of powder, we shall only have 400,000 lbs. of fulminating cotton, and as we can, without danger, compress 500 lbs. of cotton into 27 cubic feet, that quantity will not take up more than 180 feet in the chamber of the Columbiad. By these means the projectile will have more than 700 feet of chamber to traverse under a force of 6,000,000,000 of litres of gas before taking its flight over the Queen of Night."

Here J.T. Maston could not contain his emotion. He threw himself into the arms of his friend with the violence of a projectile, and he would have been stove in had he not have been bombproof.

This incident ended the first sitting of the committee. Barbicane and his enterprising colleagues, to whom nothing seemed impossible, had just solved the complex question of the projectile, cannon, and powder. Their plan being made, there was nothing left but to put it into execution.

CHAPTER X.

ONE ENEMY AGAINST TWENTY-FIVE MILLIONS OF FRIENDS.

The American public took great interest in the least details of the Gun Club's enterprise. It followed the committee debates day by day. The most simple preparations for this great experiment, the questions of figures it provoked, the mechanical difficulties to be solved, all excited popular opinion to the highest pitch.

More than a year would elapse between the commencement of the work and its completion; but the interval would not be void of excitement. The place to be chosen for the boring, the casting the metal of the Columbiad, its perilous loading, all this was more than necessary to excite public curiosity. The projectile, once fired, would be out of sight in a few seconds; then what would become of it, how it would behave in space, how it would reach the moon, none but a few privileged persons would see with their own eyes. Thus, then, the preparations for the experiment and the precise details of its execution constituted the real source of interest.

In the meantime the purely scientific attraction of the enterprise was all at once heightened by an incident. It is known what numerous legions of admirers and friends the Barbicane project had called round its author. But, notwithstanding the number and importance of the majority, it was not destined to be unanimous. One man, one out of all the United States, protested against the Gun Club. He attacked it violently on every occasion, and--for human nature is thus constituted--Barbicane was more sensitive to this one man's opposition than to the applause of all the others.

Nevertheless he well knew the motive of this antipathy, from whence came this solitary enmity, why it was personal and of ancient date; lastly, in what rivalry it had taken root.

The president of the Gun Club had never seen this persevering enemy. Happily, for the meeting of the two men would certainly have had disastrous consequences. This rival was a savant like Barbicane, a proud, enterprising, determined, and violent character, a pure Yankee. His name was Captain Nicholl. He lived in Philadelphia.

No one is ignorant of the curious struggle which went on during the Federal war between the projectile and ironclad vessels, the former destined to pierce the latter, the latter determined not to be pierced. Thence came a radical transformation in the navies of the two continents. Cannon-balls and iron plates struggled for supremacy, the former getting larger as the latter got thicker. Ships armed with formidable guns went into the fire under shelter of
their invulnerable armour. The Merrimac, Monitor, ram Tennessee, and Wechhausen shot enormous projectiles after having made themselves proof against the projectiles of other ships. They did to others what they would not have others do to them, an immoral principle upon which the whole art of war is based.

Now Barbicane was a great caster of projectiles, and Nicholl was an equally great forger of plate-armour. The one cast night and day at Baltimore, the other forged day and night at Philadelphia. Each followed an essentially different current of ideas.

As soon as Barbicane had invented a new projectile, Nicholl invented a new plate armour. The president of the Gun Club passed his life in piercing holes, the captain in preventing him doing it. Hence a constant rivalry which even touched their persons. Nicholl appeared in Barbicane's dreams as an impenetrable ironclad against which he split, and Barbicane in Nicholl's dreams appeared like a projectile which ripped him up.

Still, although they ran along two diverging lines, these _savants_ would have ended by meeting each other in spite of all the axioms in geometry; but then it would have been on a duel field. Happily for these worthy citizens, so useful to their country, a distance of from fifty to sixty miles separated them, and their friends put such obstacles in the way that they never met.

At present it was not clearly known which of the two inventors held the palm. The results obtained rendered a just decision difficult. It seemed, however, that in the end armour-plate would have to give way to projectiles. Nevertheless, competent men had their doubts. At the latest experiments the cylindro-conical shots of Barbicane had no more effect than pins upon Nicholl's armour-plate. That day the forger of Philadelphia believed himself victorious, and henceforth had nothing but disdain for his rival. But when, later on, Barbicane substituted simple howitzers of 600 lbs. for conical shots, the captain was obliged to go down in his own estimation. It fact, these projectiles, though of mediocre velocity, drilled with holes and broke to pieces armour-plate of the best metal.

Things had reached this point and victory seemed to rest with the projectile, when the war ended the very day that Nicholl terminated a new forged armour-plate. It was a masterpiece of its kind. It defied all the projectiles in the world. The captain had it taken to the Washington Polygon and challenged the president of the Gun Club to pierce it. Barbicane, peace having been made, would not attempt the experiment.

Then Nicholl, in a rage, offered to expose his armour-plate to the shock of any kind of projectile, solid, hollow, round, or conical.

The president, who was determined not to compromise his last success, refused.

Nicholl, excited by this unqualified obstinacy, tried to tempt Barbicane by leaving him every advantage. He proposed to put his plate 200 yards from the gun. Barbicane still refused. At 100 yards? Not even at 75.

"At 50, then," cried the captain, through the newspapers, "at 25 yards from my plate, and I will be behind it."

Barbicane answered that even if Captain Nicholl would be in front of it he would not fire any more.

On this reply, Nicholl could no longer contain himself. He had recourse to personalities; he insinuated cowardice—that the man who refuses to fire a shot from a cannon is very nearly being afraid of it; that, in short, the artillerymen who fight now at six miles distance have prudently substituted mathematical formulae for individual courage, and that there is as much bravery required to quietly wait for a cannon-ball behind armour-plate as to send it according to all the rules of science.

To these insinuations Barbicane answered nothing. Perhaps he never knew about them, for the calculations of his great enterprise absorbed him entirely.

When he made his famous communication to the Gun Club, the anger of Captain Nicholl reached its maximum. Mixed with it was supreme jealousy and a sentiment of absolute powerlessness. How could he invent anything better than a Columbiad 900 feet long? What armour-plate could ever resist a projectile of 30,000 lbs.? Nicholl was at first crushed by this cannon-ball, then he recovered and resolved to crush the proposition by the weight of his best arguments.

He therefore violently attacked the labours of the Gun Club. He sent a number of letters to the newspapers, which they did not refuse to publish. He tried to demolish Barbicane's work scientifically. Once the war begun, he called reasons of every kind to his aid, reasons it must be acknowledged often specious and of bad metal.

Firstly, Barbicane was violently attacked about his figures. Nicholl tried to prove by $A + B$ the falseness of his formulae, and he accused him of being ignorant of the rudimentary principles of ballistics. Amongst other errors, and according to Nicholl's own calculations, it was impossible to give any body a velocity of 12,000 yards a second. He sustained, algebra in hand, that even with that velocity a projectile thus heavy would never pass the limits of the terrestrial atmosphere. It would not even go eight leagues! Better still. Granted the velocity, and taking it as sufficient, the shot would not resist the pressure of the gas developed by the combustion of 1,600,000 pounds of powder, and even if it did resist that pressure, it at least would not support such a temperature; it would melt as it issued from the Columbiad, and would fall in red-hot rain on the heads of the imprudent spectators.

Barbicane paid no attention to these attacks, and went on with his work.
Then Nicholl considered the question in its other aspects. Without speaking of its uselessness from all other points of view, he looked upon the experiment as exceedingly dangerous, both for the citizens who authorised so condemnable a spectacle by their presence, and for the towns near the deplorable cannon. He also remarked that if the projectile did not reach its destination, a result absolutely impossible, it was evident that it would fall on to the earth again, and that the fall of such a mass multiplied by the square of its velocity would singularly damage some point on the globe. Therefore, in such a circumstance, and without any restriction being put upon the rights of free citizens, it was one of those cases in which the intervention of government became necessary, and the safety of all must not be endangered for the good pleasure of a single individual.

It will be seen to what exaggeration Captain Nicholl allowed himself to be carried. He was alone in his opinion. Nobody took any notice of his Cassandra prophecies. They let him exclaim as much as he liked, till his throat was sore if he pleased. He had constituted himself the defender of a cause lost in advance. He was heard but not listened to, and he did not carry off a single admirer from the president of the Gun Club, who did not even take the trouble to refute his rival’s arguments.

Nicholl, driven into his last intrenchments, and not being able to fight for his opinion, resolved to pay for it. He therefore proposed in the _Richmond Inquirer_ a series of bets conceived in these terms and in an increasing proportion.

He bet that--

1. The funds necessary for the Gun Club’s enterprise would not be forthcoming, 1,000 dols.
2. That the casting of a cannon of 900 feet was impracticable and would not succeed, 2,000 dols.
3. That it would be impossible to load the Columbiad, and that the pyroxyle would ignite spontaneously under the weight of the projectile, 3,000 dols.
4. That the Columbiad would burst at the first discharge, 4,000 dols.
5. That the projectile would not even go six miles, and would fall a few seconds after its discharge, 5,000 dols.

It will be seen that the captain was risking an important sum in his invincible obstinacy. No less than 15,000 dols. were at stake.

Notwithstanding the importance of the wager, he received on the 19th of October a sealed packet of superb laconism, couched in these terms:--

"Baltimore, October 18th.
"Done.
"BARBICANE."

CHAPTER XI.

FLORIDA AND TEXAS.

There still remained one question to be decided—a place favourable to the experiment had to be chosen. According to the recommendation of the Cambridge Observatory the gun must be aimed perpendicularly to the plane of the horizon—that is to say, towards the zenith. Now the moon only appears in the zenith in the places situated between 0° and 28° of latitude, or, in other terms, when her declination is only 28°. The question was, therefore, to determine the exact point of the globe where the immense Columbiad should be cast.

On the 20th of October the Gun Club held a general meeting. Barbicane brought a magnificent map of the United States by Z. Belltropp. But before he had time to unfold it J.T. Maston rose with his habitual vehemence, and began to speak as follows:--

"Honourable colleagues, the question we are to settle to-day is really of national importance, and will furnish us with an occasion for doing a great act of patriotism."

The members of the Gun Club looked at each other without understanding what the orator was coming to.

"Not one of you," he continued, "would think of doing anything to lessen the glory of his country, and if there is one right that the Union may claim it is that of harbouring in its bosom the formidable cannon of the Gun Club. Now, under the present circumstances—"

"Will you allow me—" said Barbicane.

"I demand the free discussion of ideas," replied the impetuous J.T. Maston, "and I maintain that the territory from which our glorious projectile will rise ought to belong to the Union."

"Certainly," answered several members.

"Well, then, as our frontiers do not stretch far enough, as on the south the ocean is our limit, as we must seek beyond the United States and in a neighbouring country this 28th parallel, this is all a legitimate _casus belli_, and I demand that war should be declared against Mexico!"

"No, no!" was cried from all parts.
"No!" replied J.T. Maston. "I am much astonished at hearing such a word in these precincts!"

"But listen--"

"Never! never!" cried the fiery orator. "Sooner or later this war will be declared, and I demand that it should be this very day."

"Maston," said Barbicane, making his bell go off with a crash, "I agree with you that the experiment cannot and ought not to be made anywhere but on the soil of the Union, but if I had been allowed to speak before, and you had glanced at this map, you would know that it is perfectly useless to declare war against our neighbours, for certain frontiers of the United States extend beyond the 28th parallel. Look, we have at our disposition all the southern part of Texas and Florida."

This incident had no consequences; still it was not without regret that J.T. Maston allowed himself to be convinced. It was, therefore, decided that the Columbiad should be cast either on the soil of Texas or on that of Florida. But this decision was destined to create an unexampled rivalry between the towns of these two states.

The 28th parallel, when it touches the American coast, crosses the peninsula of Florida, and divides it into two nearly equal portions. Then, plunging into the Gulf of Mexico, it subtends the arc formed by the coasts of Alabama, Mississippi, and Louisiana; then skirting Texas, off which it cuts an angle, it continues its direction over Mexico, crosses the Sonora and Old California, and loses itself in the Pacific Ocean; therefore only the portions of Texas and Florida situated below this parallel fulfilled the requisite conditions of latitude recommended by the Observatory of Cambridge.

The southern portion of Florida contains no important cities. It only bristles with forts raised against wandering Indians. One town only, Tampa Town, could put in a claim in favour of its position.

In Texas, on the contrary, towns are more numerous and more important. Corpus Christi in the county of Nuaces, and all the cities situated on the Rio Bravo, Laredo, Comalites, San Ignacio in Web, Rio Grande city in Starr, Edinburgh in Hidalgo, Santa-Rita, El Panda, and Brownsville in Cameron, formed a powerful league against the pretensions of Florida.

The decision, therefore, was hardly made public before the Floridan and Texican deputies flocked to Baltimore by the shortest way. From that moment President Barbicane and the influential members of the Gun Club were besieged day and night by formidable claims. If seven towns of Greece contended for the honour of being Homer's birthplace, two entire states threatened to fight over a cannon.

These rival parties were then seen marching with weapons about the streets of the town. Every time they met a fight was imminent, which would have had disastrous consequences. Happily the prudence and skill of President Barbicane warded off this danger. Personal demonstrations found an outlet in the newspapers of the different states.

It was thus that the _New York Herald_ and the _Tribune_ supported the claims of Texas, whilst the _Times_ and the _American Review_ took the part of the Floridan deputies. The members of the Gun Club did not know which to listen to.

Texas came up proudly with its twenty-six counties, which it seemed to put in array; but Florida answered that twelve counties proved more than twenty-six in a country six times smaller.

Texas bragged of its 33,000 inhabitants; but Florida, much smaller, boasted of being much more densely populated with 56,000. Besides, Florida accused Texas of being the home of paludian fevers, which carried off, one year with another, several thousands of inhabitants, and Florida was not far wrong.

In its turn Texas replied that Florida need not envy its fevers, and that it was, at least, imprudent to call other countries unhealthy when Florida itself had chronic "vomito negro," and Texas was not far wrong.

"Besides," added the Texicans through the _New York Herald_, "there are rights due to a state that grows the best cotton in all America, a state which produces holm oak for building ships, a state that contains superb coal and mines of iron that yield fifty per cent. of pure ore."

To that the _American Review_ answered that the soil of Florida, though not so rich, offered better conditions for the casting of the Columbiad, as it was composed of sand and clay-ground.

"But," answered the Texicans, "before anything can be cast in a place, it must get to that place; now communication with Florida is difficult, whilst the coast of Texas offers Galveston Bay, which is fourteen leagues round, and could contain all the fleets in the world."

"Why," replied the newspapers devoted to Florida, "your Galveston Bay is situated above the 29th parallel, whilst our bay of Espiritu-Santo opens precisely at the 20th degree of latitude, and by it ships go direct to Tampa Town."

"A nice bay truly!" answered Texas; "it is half-choked up with sand."

"Any one would think, to hear you talk," cried Florida, "that I was a savage country."

"Well, the Seminoles do still wander over your prairies!"

"And what about your Apaches and your Comanches--are they civilised?"
The war had been thus kept up for some days when Florida tried to draw her adversary upon another ground, and one morning the _Times_ insinuated that the enterprise being "essentially American," it ought only to be attempted upon an "essentially American" territory.

At these words Texas could not contain itself.

"American!" it cried, "are we not as American as you? Were not Texas and Florida both incorporated in the Union in 1845?"

"Certainly," answered the _Times_, "but we have belonged to America since 1820."

"Yes," replied the _Tribune_, "after having been Spanish or English for 200 years, you were sold to the United States for 5,000,000 of dollars!"

"What does that matter?" answered Florida. "Need we blush for that? Was not Louisiana bought in 1803 from Napoleon for 16,000,000 of dollars?"

"It is shameful!" then cried the Texican deputies. "A miserable slice of land like Florida to dare to compare itself with Texas, which, instead of being sold, made itself independent, which drove out the Mexicans on the 2nd of March, 1836, which declared itself Federative Republican after the victory gained by Samuel Houston on the banks of the San Jacinto over the troops of Santa-Anna--a country, in short, which voluntarily joined itself to the United States of America!"

"Because it was afraid of the Mexicans!" answered Florida.

"Afraid!" From the day this word, really too cutting, was pronounced, the situation became intolerable. An engagement was expected between the two parties in the streets of Baltimore. The deputies were obliged to be watched.

President Barbicane was half driven wild. Notes, documents, and letters full of threats inundated his house. Which course ought he to decide upon? In the point of view of fitness of soil, facility of communications, and rapidity of transport, the rights of the two states were really equal. As to the political personalities, they had nothing to do with the question.

Now this hesitation and embarrassment had already lasted some time when Barbicane resolved to put an end to it; he called his colleagues together, and the solution he proposed to them was a profoundly wise one, as will be seen from the following:--

"After due consideration," said he, "of all that has just occurred between Florida and Texas, it is evident that the same difficulties will again crop up between the towns of the favoured state. The rivalry will be changed from state to city, and that is all. Now Texas contains eleven towns with the requisite conditions that will dispute the honour of the enterprise, and that will create fresh troubles for us, whilst Florida has but one; therefore I decide for Tampa Town!"

The Texican deputies were thunderstruck at this decision. It put them into a terrible rage, and they sent nominal provocations to different members of the Gun Club. There was only one course for the magistrates of Baltimore to take, and they took it. They had the steam of a special train got up, packed the Texicans into it, whether they would or no, and sent them away from the town at a speed of thirty miles an hour.

But they were not carried off too quickly to hurl a last and threatening sarcasm at their adversaries.

Making allusion to the width of Florida, a simple peninsula between two seas, they pretended it would not resist the shock, and would be blown up the first time the cannon was fired.

"Very well! let it be blown up!" answered the Floridans with a laconism worthy of ancient times.

CHAPTER XII.
"URBI ET ORBI."

The astronomical, mechanical, and topographical difficulties once removed, there remained the question of money. An enormous sum was necessary for the execution of the project. No private individual, no single state even, could have disposed of the necessary millions.

President Barbicane had resolved--although the enterprise was American--to make it a business of universal interest, and to ask every nation for its financial co-operation. It was the bounded right and duty of all the earth to interfere in the business of the satellite. The subscription opened at Baltimore, for this end extended thence to all the world--_urbi et orbi_.

This subscription was destined to succeed beyond all hope; yet the money was to be given, not lent. The operation was purely disinterested, in the literal meaning of the word, and offered no chance of gain.

But the effect of Barbicane's communication had not stopped at the frontiers of the United States; it had crossed the Atlantic and Pacific, had invaded both Asia and Europe, both Africa and Oceania. The observatories of the Union were immediately put into communication with the observatories of foreign countries; some--those of Paris,
St. Petersburg, the Cape, Berlin, Altona, Stockholm, Warsaw, Hamburg, Buda, Bologna, Malta, Lisbon, Benares, Madras, and Pekin—sent their compliments to the Gun Club; the others prudently awaited the result.

As to the Greenwich Observatory, seconded by the twenty-two astronomical establishments of Great Britain, it made short work of it; it boldly denied the possibility of success, and took up Captain Nicholl's theories. Whilst the different scientific societies promised to send deputies to Tampa Town, the Greenwich staff met and contemptuously dismissed the Barbicane proposition. This was pure English jealousy and nothing else.

Generally speaking, the effect upon the world of science was excellent, and from thence it passed to the masses, who, in general, were greatly interested in the question, a fact of great importance, seeing those masses were to be called upon to subscribe a considerable capital.

On the 8th of October President Barbicane issued a manifesto, full of enthusiasm, in which he made appeal to "all persons on the face of the earth willing to help." This document, translated into every language, had great success.

Subscriptions were opened in the principal towns of the Union with a central office at the Baltimore Bank, 9, Baltimore street; then subscriptions were opened in the different countries of the two continents:—At Vienna, by S.M. de Rothschild; St. Petersburg, Stieglitz and Co.; Paris, Crédit Mobilier; Stockholm, Tottie and Arfuredson; London, N.M. de Rothschild and Son; Turin, Ardouin and Co.; Berlin, Mendelssohn; Geneva, Lombard, Odier, and Co.; Constantinople, Ottoman Bank; Brussels, J. Lambert; Madrid, Daniel Weisweller; Amsterdam, Netherlands Credit Co.; Rome, Torlonia and Co.; Lisbon, Lecesne; Copenhagen, Private Bank; Buenos Ayres, Mana Bank; Rio Janeiro, Mana Bank; Monte Video, Mana Bank; Valparaiso, Thomas La Chambre and Co.; Lima, Thomas La Chambre and Co.; Mexico, Martin Daran and Co.

Three days after President Barbicane's manifesto 400,000 dollars were received in the different towns of the Union. With such a sum in hand the Gun Club could begin at once.

But a few days later telegrams informed America that foreign subscriptions were pouring in rapidly. Certain countries were distinguished by their generosity; others let go their money less easily. It was a matter of temperament.

However, figures are more eloquent than words, and the following is an official statement of the sums paid to the credit of the Gun Club when the subscription was closed:—

The contingent of Russia was the enormous sum of 368,733 roubles. This need astonish no one who remembers the scientific taste of the Russians and the impetus which they have given to astronomical studies, thanks to their numerous observatories, the principal of which cost 2,000,000 roubles.

France began by laughing at the pretensions of the Americans. The moon served as an excuse for a thousand stale puns and a score of vaudevilles in which bad taste contested the palm with ignorance. But, as the French formerly paid after singing, they now paid after laughing, and subscribed a sum of 1,258,930 francs. At that price they bought the right to joke a little.

Austria, in the midst of her financial difficulties, was sufficiently generous. Her part in the public subscription amounted to 216,000 florins, which were welcome.

Sweden and Norway contributed 52,000 rix-dollars. The figure was small considering the country; but it would certainly have been higher if a subscription had been opened at Christiania as well as at Stockholm. For some reason or other the Norwegians do not like to send their money to Norway.

Prussia, by sending 250,000 thalers, testified her approbation of the enterprise. Her different observatories contributed an important sum, and were amongst the most ardent in encouraging President Barbicane.

Turkey behaved generously, but she was personally interested in the business; the moon, in fact, rules the course of her years and her Ramadan fast. She could do no less than give 1,372,640 piastres, and she gave them with an ardour that betrayed, however, a certain pressure from the Government of the Porte.

Belgium distinguished herself amongst all the second order of States by a gift of 513,000 francs, about one penny and a fraction for each inhabitant.

Holland and her colonies contributed 110,000 florins, only demanding a discount of five per cent., as she paid ready money.

Denmark, rather confined for room, gave, notwithstanding, 9,000 ducats, proving her love for scientific experiments.

The Germanic Confederation subscribed 34,285 florins; more could not be asked from her; besides, she would not have given more.

Although in embarrassed circumstances, Italy found 2,000,000 francs in her children's pockets, but by turning them well inside out. If she had then possessed Venetia she would have given more, but she did not yet possess Venetia.

The Pontifical States thought they could not send less than 7,040 Roman crowns, and Portugal pushed her
devotion to the extent of 3,000 cruzades.

Mexico sent the widow's mite, 86 piastres; but empires in course of formation are always in rather embarrassed circumstances.

Switzerland sent the modest sum of 257 francs to the American scheme. It must be frankly stated that Switzerland only looked upon the practical side of the operation; the action of sending a bullet to the moon did not seem of a nature sufficient for the establishing of any communication with the Queen of Night, so Switzerland thought it imprudent to engage capital in an enterprise depending upon such uncertain events. After all, Switzerland was, perhaps, right.

As to Spain, she found it impossible to get together more than 110 reals. She gave as an excuse that she had her railways to finish. The truth is that science is not looked upon very favourably in that country; it is still a little behindhand. And then certain Spaniards, and not the most ignorant either, had no clear conception of the size of the projectile compared with that of the moon; they feared it might disturb the satellite from her orbit, and make her fall on to the surface of the terrestrial globe. In that case it was better to have nothing to do with it, which they carried out, with that small exception.

England alone remained. The contemptuous antipathy with which she received Barbicane's proposition is known. The English have but a single mind in their 25,000,000 of bodies which Great Britain contains. They gave it to be understood that the enterprise of the Gun Club was contrary "to the principle of non-intervention," and they did not subscribe a single farthing.

At this news the Gun Club contented itself with shrugging its shoulders, and returned to its great work. When South America--that is to say, Peru, Chili, Brazil, the provinces of La Plata and Columbia--had poured into their hands their quota of 300,000 dollars, it found itself possessed of a considerable capital of which the following is a statement:--

United States subscription, 4,000,000 dollars; foreign subscriptions, 1,446,675 dollars; total, 5,446,675 dollars.

This was the large sum poured by the public into the coffers of the Gun Club.

No one need be surprised at its importance. The work of casting, boring, masonry, transport of workmen, and their installation in an almost uninhabited country, the construction of furnaces and workshops, the manufacturing tools, powder, projectile and incidental expenses would, according to the estimates, absorb nearly the whole. Some of the cannon-shots fired during the war cost 1,000 dollars each; that of President Barbicane, unique in the annals of artillery, might well cost 5,000 times more.

On the 20th of October a contract was made with the Goldspring Manufactory, New York, which during the war had furnished Parrott with his best cast-iron guns.

It was stipulated between the contracting parties that the Goldspring Manufactory should pledge itself to send to Tampa Town, in South Florida, the necessary materials for the casting of the Columbiad.

This operation was to be terminated, at the latest, on the 15th of the next October, and the cannon delivered in good condition, under penalty of 100 dollars a day forfeit until the moon should again present herself under the same conditions--that is to say, during eighteen years and eleven days.

The engagement of the workmen, their pay, and the necessary transports all to be made by the Goldspring Company.

This contract, made in duplicate, was signed by I. Barbicane, president of the Gun Club, and J. Murphison, Manager of the Goldspring Manufactory, who thus signed on the part of the contracting parties.

CHAPTER XIII.

STONY HILL.

Since the choice made by the members of the Gun Club to the detriment of Texas, every one in America--where every one knows how to read--made it his business to study the geography of Florida. Never before had the booksellers sold so many Bertram's Travels in Florida, Roman's Natural History of East and West Florida, Williams' Territory of Florida, and Cleland on the Culture of the Sugar Cane in East Florida. New editions of these works were required. There was quite a rage for them.

Barbicane had something better to do than to read; he wished to see with his own eyes and choose the site of the Columbiad. Therefore, without losing a moment, he put the funds necessary for the construction of a telescope at the disposition of the Cambridge Observatory, and made a contract with the firm of Breadwill and Co., of Albany, for the making of the aluminium projectile; then he left Baltimore accompanied by J.T. Maston, Major Elphinstone, and the manager of the Goldspring Manufactory.

The next day the four travelling companions reached New Orleans. There they embarked on board the _Tampico_, a despatch-boat belonging to the Federal Navy, which the Government had placed at their disposal, and,
with all steam on, they quickly lost sight of the shores of Louisiana.

The passage was not a long one; two days after its departure the _Tampico_ having made four hundred and eighty miles, sighted the Floridian coast. As it approached, Barbicane saw a low, flat coast, looking rather unfertile. After coasting a series of creeks rich in oysters and lobsters, the _Tampico_ entered the Bay of Espiritu-Santo.

This bay is divided into two long roadsteads, those of Tampa and Hillisboro, the narrow entrance to which the steamer soon cleared. A short time afterwards the batteries of Fort Brooke rose above the waves and the town of Tampa appeared, carelessly lying on a little natural harbour formed by the mouth of the river Hillisboro.

There the _Tampico_ anchored on October 22nd, at seven p.m.; the four passengers landed immediately.

Barbicane felt his heart beat violently as he set foot on Floridian soil; he seemed to feel it with his feet like an architect trying the solidity of a house. J.T. Maston scratched the ground with his steel hook.

"Gentlemen," then said Barbicane, "we have no time to lose, and we will set off on horseback to-morrow to survey the country."

The minute Barbicane landed the three thousand inhabitants of Tampa Town went out to meet him, an honour quite due to the president of the Gun Club, who had decided in their favour. They received him with formidable exclamations, but Barbicane escaped an ovation by shutting himself up in his room at the Franklin Hotel and refusing to see any one.

The next day, October 23rd, small horses of Spanish race, full of fire and vigour, pawed the ground under his windows. But, instead of four, there were fifty, with their riders. Barbicane went down accompanied by his three companions, who were at first astonished to find themselves in the midst of such a cavalcade. He remarked besides that each horseman carried a carbine slung across his shoulders and pistols in his holsters. The reason for such a display of force was immediately given him by a young Floridian, who said to him--

"Sir, the Seminoles are there."

"What Seminoles?"

"Savages who frequent the prairies, and we deemed it prudent to give you an escort."

"Pooh!" exclaimed J.T. Maston as he mounted his steed.

"It is well to be on the safe side," answered the Floridian.

"Gentlemen," replied Barbicane, "I thank you for your attention, and now let us be off."

The little troop set out immediately, and disappeared in a cloud of dust. It was five a.m.; the sun shone brilliantly already, and the thermometer indicated 84°, but fresh sea breezes moderated this excessive heat.

Barbicane, on leaving Tampa Town, went down south and followed the coast to Alifia Creek. This small river falls into Hillisboro Bay, twelve miles below Tampa Town. Barbicane and his escort followed its right bank going up towards the east. The waves of the bay disappeared behind an inequality in the ground, and the Floridian country was alone in sight.

Florida is divided into two parts; the one to the north, more populous and less abandoned, has Tallahassee for capital, and Pensacola, one of the principal marine arsenals of the United States; the other, lying between the Atlantic and the Gulf of Mexico, is only a narrow peninsula, eaten away by the current of the Gulf Stream--a little tongue of land lost amidst a small archipelago, which the numerous vessels of the Bahama Channel double continually. It is the advanced sentinel of the Gulf of Tempests. The superficial area of this state measures 38,033,267 acres, amongst which one had to be chosen situated beyond the 28th parallel and suitable for the enterprise. As Barbicane rode along he attentively examined the configuration of the ground and its particular distribution.

Florida, discovered by Juan Ponce de Leon in 1512, on Palm Sunday, was first of all named _Pascha Florida_. It was well worthy of that designation with its dry and arid coasts. But a few miles from the shore the nature of the ground gradually changed, and the country showed itself worthy of its name; the soil was cut up by a network of creeks, rivers, watercourses, ponds, and small lakes; it might have been mistaken for Holland or Guiana; but the ground gradually rose and soon showed its cultivated plains, where all the vegetables of the North and South grow in perfection, its immense fields, where a tropical sun and the water conserved in its clayey texture do all the work of cultivating, and lastly its prairies of pineapples, yams, tobacco, rice, cotton, and sugarcanes, which extended as far as the eye could reach, spreading out their riches with careless prodigality.

Barbicane appeared greatly satisfied on finding the progressive elevation of the ground, and when J.T. Maston questioned him on the subject,

"My worthy friend," said he, "it is greatly to our interest to cast our Columbiad on elevated ground."

"In order to be nearer the moon?" exclaimed the secretary of the Gun Club.

"No," answered Barbicane, smiling. "What can a few yards more or less matter? No, but on elevated ground our work can be accomplished more easily; we shall not have to struggle against water, which will save us long and expensive tubings, and that has to be taken into consideration when a well 900 feet deep has to be sunk."
"You are right," said Murchison, the engineer; "we must, as much as possible, avoid watercourses during the
casting; but if we meet with springs they will not matter much; we can exhaust them with our machines or divert
them from their course. Here we have not to work at an artesian well, narrow and dark, where all the boring
implements have to work in the dark. No; we can work under the open sky, with spade and pickaxe, and, by the help
of blasting, our work will not take long."

"Still," resumed Barbicane, "if by the elevation of the ground or its nature we can avoid a struggle with
subterranean waters, we can do our work more rapidly and perfectly; we must, therefore, make our cutting in ground
situated some thousands of feet above the level of the sea."

"You are right, Mr. Barbicane, and, if I am not mistaken, we shall soon find a suitable spot."

"I should like to see the first spadeful turned up," said the president.

"And I the last!" exclaimed J.T. Maston.

"We shall manage it, gentlemen," answered the engineer; "and, believe me, the Goldspring Company will not
have to pay you any forfeit for delay."

"Faith! it had better not," replied J.T. Maston; "a hundred dollars a day till the moon presents herself in the same
conditions—that is to say, for eighteen years and eleven days—do you know that would make 658,000 dollars?"

"No, sir, we do not know, and we shall not need to learn."

About ten a.m. the little troop had journeyed about twelve miles; to the fertile country succeeded a forest region.
There were the most varied perfumes in tropical profusion. The almost impenetrable forests were made up of
pomegranates, orange, citron, fig, olive, and apricot trees, bananas, huge vines, the blossoms and fruit of which
rivalled each other in colour and perfume. Under the perfumed shade of these magnificent trees sang and fluttered a
world of brilliantly-coloured birds, amongst which the crab-eater deserved a jewel casket, worthy of its feathered
gems, for a nest.

J.T. Maston and the major could not pass through such opulent nature without admiring its splendid beauty.

But President Barbicane, who thought little of these marvels, was in a hurry to hasten onwards; this country, so
fertile, displeased him by its very fertility; without being otherwise hydropical, he felt water under his feet, and
sought in vain the signs of incontestable aridity.

In the meantime they journeyed on. They were obliged to ford several rivers, and not without danger, for they
were infested with alligators from fifteen to eighteen feet long. J.T. Maston threatened them boldly with his
formidable hook, but he only succeeded in frightening the pelicans, phaetons, and teals that frequented the banks,
while the red flamingoes looked on with a stupid stare.

At last these inhabitants of humid countries disappeared in their turn. The trees became smaller and more thinly
scattered in smaller woods; some isolated groups stood amidst immense plains where ranged herds of startled deer.

"At last!" exclaimed Barbicane, rising in his stirrups. "Here is the region of pines."

"And savages," answered the major.

In fact, a few Seminoles appeared on the horizon. They moved about backwards and forwards on their fleet
horses, brandishing long lances or firing their guns with a dull report. However, they confined themselves to these
hostile demonstrations, which had no effect on Barbicane and his companions.

They were then in the middle of a rocky plain, a vast open space of several acres in extent which the sun covered
with burning rays. It was formed by a wide elevation of the soil, and seemed to offer to the members of the Gun
Club all the required conditions for the construction of their Columbiad.

"Halt!" cried Barbicane, stopping. "Has this place any name?"

"It is called Stony Hill," answered the Floridians.

Barbicane, without saying a word, dismounted, took his instruments, and began to fix his position with extreme
precision. The little troop drawn up around him watched him in profound silence.

At that moment the sun passed the meridian. Barbicane, after an interval, rapidly noted the result of his
observation, and said—

"This place is situated 1,800 feet above the sea level in lat. 27° 7' and West long. 5° 7' by the Washington
meridian. It appears to me by its barren and rocky nature to offer every condition favourable to our enterprise; we
will therefore raise our magazines, workshops, furnaces, and workmen's huts here, and it is from this very spot," said
he, stamping upon it with his foot, "the summit of Stony Hill, that our projectile will start for the regions of the solar
world!"

CHAPTER XIV.
PICKAXE AND TROWEL.

That same evening Barbicane and his companions returned to Tampa Town, and Murchison, the engineer, re-
evidently do without hoops. This clause was therefore given up. Hence a great economy of time, for they could then
contract decided that the Columbiad should be hooped with wrought-iron—a useless precaution, for the cannon could
boring easier. There was not one foreman or workman who doubted about the success of the operation.
Margrave Jean of Baden, 600 feet deep! All that was needed was a triple depth and a double width, which made the
which goes down to the level of the Nile itself at a depth of 300 feet! And that other well dug at Coblentz by the
Sultan Saladin at an epoch when machines had not yet appeared to increase the strength of man a hundredfold, and
been brought to a successful termination! Suffice it to mention the well of Father Joseph, made near Cairo by the
work must be done it will be done, and I depend upon your courage as much as upon your skill.
had plenty of elbow-room, but as you will only have a limited space it will be more trouble. Nevertheless as the
feet wide and 900 feet deep. This large work must be terminated in nine months. You have, therefore, 2,543,400
feet in diameter, six feet thick, and with a stone revetment nineteen and a half feet thick; we therefore want a well 60
Barbicane called his foremen together and said to them--
"You all know, my friends, why I have called you together in this part of Florida. We want to cast a cannon nine
feet in diameter, six feet thick, and with a stone revetment nineteen and a half feet thick; we therefore want a well 60
feet wide and 900 feet deep. This large work must be terminated in nine months. You have, therefore, 2,543,400
cubic feet of soil to dig out in 255 days—this is to say, 10,000 cubic feet a day. That would offer no difficulty if you
had plenty of elbow-room, but as you will only have a limited space it will be more trouble. Nevertheless as the
work must be done it will be done, and I depend upon your courage as much as upon your skill."
At 8 a.m. the first spadeful was dug out of the Floridian soil, and from that moment this useful tool did not stop
idle a moment in the hands of the miner. The gangs relieved each other every three hours.
Besides, although the work was colossal it did not exceed the limit of human capability. Far from that. How
many works of much greater difficulty, and in which the elements had to be more directly contended against, had
been brought to a successful termination! Suffice it to mention the well of Father Joseph, made near Cairo by the
Murchison had succeeded in getting together 1,500 workmen. In the evil days of slavery he would have lost his time
and trouble; but since America, the land of liberty, has only contained freemen, they flock wherever they can get
good pay. Now money was not wanting to the Gun Club; it offered a high rate of wages with considerable and
proportionate perquisites. The workman enlisted for Florida could, once the work finished, depend upon a capital
placed in his name in the bank of Baltimore.
Murchison had therefore only to pick and choose, and could be severe about the intelligence and skill of his
workmen. He enrolled in his working legion the pick of mechanics, stokers, iron-founders, lime-burners, miners,
brickmakers, and artisans of every sort, white or black without distinction of colour. Many of them brought their
families with them. It was quite an emigration.
On the 31st of October, at 10 a.m., this troop landed on the quays of Tampa Town. The movement and activity
which reigned in the little town that had thus doubled its population in a single day may be imagined. In fact, Tampa
Town was enormously benefited by this enterprise of the Gun Club, not by the number of workmen who were
immediately drafted to Stony Hill, but by the influx of curious idlers who converged by degrees from all points of
the globe towards the Floridian peninsula.
During the first few days they were occupied in unloading the flotilla of the tools, machines, provisions, and a
large number of plate iron houses made in pieces separately pieced and numbered. At the same time Barbicane laid
the first sleepers of a railway fifteen miles long that was destined to unite Stony Hill and Tampa Town.
It is known how American railways are constructed, with capricious bends, bold slopes, steep hills, and deep
valleys. They do not cost much and are not much in their way, only their trains run off or jump off as they please.
The railway from Tampa Town to Stony Hill was but a trifle, and wanted neither much time nor much money for its
construction.
Barbicane was the soul of this army of workmen who had come at his call. He animated them, communicated to
them his ardour, enthusiasm, and conviction. He was everywhere at once, as if endowed with the gift of ubiquity,
and always followed by J.T. Maston, his bluebottle fly. His practical mind invented a thousand things. With him
there were no obstacles, difficulties, or embarrassment. He was as good a miner, mason, and mechanic as he was an
artilleryman, having an answer to every question, and a solution to every problem. He corresponded actively with
the Gun Club and the Goldspring Manufactory, and day and night the _Tampico_ kept her steam up awaiting his
orders in Hillisboro harbour.
Barbicane, on the 1st of November, left Tampa Town with a detachment of workmen, and the very next day a
small town of workmen's houses rose round Stony Hill. They surrounded it with palisades, and from its movement
and ardour it might soon have been taken for one of the great cities of the Union. Life was regulated at once and
work began in perfect order.
Careful boring had established the nature of the ground, and digging was begun on November 4th. That day
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many works of much greater difficulty, and in which the elements had to be more directly contended against, had
been brought to a successful termination! Suffice it to mention the well of Father Joseph, made near Cairo by the
Sultan Saladin at an epoch when machines had not yet appeared to increase the strength of man a hundredfold, and
which goes down to the level of the Nile itself at a depth of 300 feet! And that other well dug at Coblentz by the
Margrave Jean of Baden, 600 feet deep! All that was needed was a triple depth and a double width, which made the
boring easier. There was not one foreman or workman who doubted about the success of the operation.
An important decision taken by Murchison and approved of by Barbicane accelerated the work. An article in the
contract decided that the Columbiad should be hooped with wrought-iron—a useless precaution, for the cannon could
evidently do without hoops. This clause was therefore given up. Hence a great economy of time, for they could then
employ the new system of boring now used for digging wells, by which the masonry is done at the same time as the boring. Thanks to this very simple operation they were not obliged to prop up the ground; the wall kept it up and went down by its own weight.

This manoeuvre was only to begin when the spade should have reached the solid part of the ground.

On the 4th of November fifty workmen began to dig in the very centre of the inclosure surrounded by palisades—that is to say, the top of Stony Hill—a circular hole sixty feet wide.

The spade first turned up a sort of black soil six inches deep, which it soon carried away. To this soil succeeded two feet of fine sand, which was carefully taken out, as it was to be used for the casting.

After this sand white clay appeared, similar to English chalk, and which was four feet thick.

Then the pickaxes rang upon the hard layer, a species of rock formed by very dry petrified shells. At that point the hole was six and a half feet deep, and the masonry was begun.

At the bottom of that excavation they made an oak wheel, a sort of circle strongly bolted and of enormous strength; in its centre a hole was pierced the size of the exterior diameter of the Columbiad. It was upon this wheel that the foundations of the masonry were placed, the hydraulic cement of which joined the stones solidly together. After the workmen had bricked up the space from the circumference to the centre, they found themselves inclosed in a well twenty-one feet wide.

When this work was ended the miners began again with spade and pickaxe, and set upon the rock under the wheel itself, taking care to support it on extremely strong tressels; every time the hole was two feet deeper they took away the tressels; the wheel gradually sank, taking with it its circle of masonry, at the upper layer of which the masons worked incessantly, taking care to make vent-holes for the escape of gas during the operation of casting.

This kind of work required great skill and constant attention on the part of the workmen; more than one digging under the wheel was dangerous, and some were even mortally wounded by the splinters of stone; but their energy did not slacken for a moment by day nor night; by day, when the sun's rays sent the thermometer up to 99° on the calcined planes; by night, under the white waves of electric light, the noise of the pickaxe on the rock, the blasting and the machines, together with the wreaths of smoke scattered through the air, traced a circle of terror round Stony Hill, which the herds of buffaloes and the detachments of Seminoles never dared to pass.

In the meantime the work regularly advanced; steam-cranes speeded the carrying away of the rubbish; of unexpected obstacles there were none; all the difficulties had been foreseen and guarded against.

When the first month had gone by the well had attained the depth assigned for the time—i.e., 112 feet. In December this depth was doubled, and tripled in January. During February the workmen had to contend against a sheet of water which sprang from the ground. They were obliged to employ powerful pumps and apparatus of compressed air to drain it off, so as to close up the orifice from which it issued, just as leaks are caulked on board ship. At last they got the better of these unwelcome springs, only in consequence of the loosening of the soil the wheel partially gave way, and there was a landslip. The frightful force of this bricked circle, more than 400 feet high, may be imagined! This accident cost the life of several workmen. Three weeks had to be taken up in propping the stone revetment and making the wheel solid again. But, thanks to the skill of the engineer and the power of the machines, it was all set right, and the boring continued.

No fresh incident henceforth stopped the progress of the work, and on the 10th of June, twenty days before the expiration of the delay fixed by Barbicane, the well, quite bricked round, had reached the depth of 900 feet. At the bottom the masonry rested upon a massive block, thirty feet thick, whilst at the top it was on a level with the soil.

President Barbicane and the members of the Gun Club warmly congratulated the engineer Murchison; his cyclopean work had been accomplished with extraordinary rapidity.

During these eight months Barbicane did not leave Stony Hill for a minute; whilst he narrowly watched over the boring operations, he took every precaution to insuire the health and well-being of his workmen, and he was fortunate enough to avoid the epidemics common to large agglomerations of men, and so disastrous in those regions of the globe exposed to tropical influence.

It is true that several workmen paid with their lives for the carelessness engendered by these dangerous occupations; but such deplorable misfortunes cannot be avoided, and these are details that Americans pay very little attention to. They are more occupied with humanity in general than with individuals in particular. However, Barbicane professed the contrary principles, and applied them upon every occasion. Thanks to his care, to his intelligence and respectful intervention in difficult cases, to his prodigious and humane wisdom, the average of catastrophes did not exceed that of cities on the other side of the Atlantic, amongst others those of France, where they count about one accident upon every 200,000 francs of work.

CHAPTER XV.
THE CEREMONY OF THE CASTING.

During the eight months that were employed in the operation of boring the preparatory works of the casting had been conducted simultaneously with extreme rapidity; a stranger arriving at Stony Hill would have been much surprised at what he saw there.

Six hundred yards from the well, and standing in a circle round it as a central point, were 1,200 furnaces, each six feet wide and three yards apart. The line made by these 1,200 furnaces was two miles long. They were all built on the same model, with high quadrangular chimneys, and had a singular effect. J.T. Maston thought the architectural arrangement superb. It reminded him of the monuments at Washington. He thought there was nothing finer in the world, not even in Greece, where he acknowledged never to have been.

It will be remembered that at their third meeting the committee decided to use cast-iron for the Columbiad, and in particular the grey description. This metal is, in fact, the most tenacious, ductile, and malleable, suitable for all moulding operations, and when smelted with pit coal it is of superior quality for engine-cylinders, hydraulic presses, &c.

But cast-iron, if it has undergone a single fusion, is rarely homogeneous enough; and it is by means of a second fusion that it is purified, refined, and dispossessed of its last earthly deposits.

Before being forwarded to Tampa Town, the iron ore, smelted in the great furnaces of Goldspring, and put in contact with coal and silicium heated to a high temperature, was transformed into cast-iron. After this first operation the metal was taken to Stony Hill. But there were 136 millions of pounds of cast-iron, a bulk too expensive to be sent by railway; the price of transport would have doubled that of the raw material. It appeared preferable to freight vessels at New York and to load them with the iron in bars; no less than sixty-eight vessels of 1,000 tons were required, quite a fleet, which on May 3rd left New York, took the Ocean route, coasted the American shores, entered the Bahama Channel, doubled the point of Florida, and on the 10th of the same month entered the Bay of Espiritu-Santo and anchored safely in the port of Tampa Town. There the vessels were unloaded and their cargo carried by railway to Stony Hill, and about the middle of January the enormous mass of metal was delivered at its destination.

It will easily be understood that 1,200 furnaces were not too many to melt these 60,000 tons of iron simultaneously. Each of these furnaces contained about 1,400,000 lbs. of metal; they had been built on the model of those used for the casting of the Rodman gun; they were trapezoidal in form, with a high elliptical arch. The warming apparatus and the chimney were placed at the two extremities of the furnace, so that it was equally heated throughout. These furnaces, built of fireproof brick, were filled with coal-grates and a "sole" for the bars of iron; this sole, inclosed at an angle of 25°, allowed the metal to flow into the receiving-troughs; from thence 1,200 converging trenches carried it down to the central well.

The day following that upon which the works of masonry and casting were terminated, Barbicane set to work upon the interior mould; his object now was to raise in the centre of the well, with a coincident axis, a cylinder 900 feet high and nine in diameter, to exactly fill up the space reserved for the bore of the Columbiad. This cylinder was made of a mixture of clay and sand, with the addition of hay and straw. The space left between the mould and the masonry was to be filled with the molten metal, which would thus make the sides of the cannon six feet thick.

This cylinder, in order to have its equilibrium maintained, had to be consolidated with iron bands and fixed at intervals by means of cross-clamps fastened into the stone lining; after the casting these clamps would be lost in the block of metal, which would not be the worse for them.

This operation was completed on the 8th of July, and the casting was fixed for the 10th.

"The casting will be a fine ceremony," said J.T. Maston to his friend Barbicane.

"Undoubtedly," answered Barbicane, "but it will not be a public one!"

"What! you will not open the doors of the inclosure to all comers?"

"Certainly not; the casting of the Columbiad is a delicate, not to say a dangerous, operation, and I prefer that it should be done with closed doors. When the projectile is discharged you may have a public ceremony if you like, but till then, no!"

The president was right; the operation might be attended with unforeseen danger, which a large concourse of spectators would prevent being averted. It was necessary to preserve complete freedom of movement. No one was admitted into the inclosure except a delegation of members of the Gun Club who made the voyage to Tampa Town. Among them was the brisk Bilsby, Tom Hunter, Colonel Blomsberry, Major Elphinstone, General Morgan, and _tutti quanti_, to whom the casting of the Columbiad was a personal business. J.T. Maston constituted himself their cicerone; he did not excuse them any detail; he led them about everywhere, through the magazines, workshops, amongst the machines, and he forced them to visit the 1,200 furnaces one after the other. At the end of the 1,200th visit they were rather sick of it.

The casting was to take place precisely at twelve o'clock; the evening before each furnace had been charged with 114,000 lbs. of metal in bars disposed crossway to each other so that the warm air could circulate freely amongst
them. Since early morning the 1,200 chimneys had been pouring forth volumes of flames into the atmosphere, and the soil was shaken convulsively. There were as many pounds of coal to be burnt as metal to be melted. There were, therefore, 68,000 tons of coal throwing up before the sun a thick curtain of black smoke.

The heat soon became unbearable in the circle of furnaces, the rambling of which resembled the rolling of thunder; powerful bellows added their continuous blasts, and saturated the incandescent furnaces with oxygen.

The operation of casting in order to succeed must be done rapidly. At a signal given by a cannon-shot each furnace was to pour out the liquid iron and to be entirely emptied.

These arrangements made, foremen and workmen awaited the preconcerted moment with impatience mixed with emotion. There was no longer any one in the inclosure, and each superintendent took his place near the aperture of the run.

Barbicane and his colleagues, installed on a neighbouring eminence, assisted at the operation. Before them a cannon was planted ready to be fired as a sign from the engineer.

A few minutes before twelve the first drops of metal began to run; the reservoirs were gradually filled, and when the iron was all in a liquid state it was left quiet for some instants in order to facilitate the separation of foreign substances.

Twelve o'clock struck. The cannon was suddenly fired, and shot its flame into the air. Twelve hundred tapping-holes were opened simultaneously, and twelve hundred fiery serpents crept along twelve hundred troughs towards the central well, rolling in rings of fire. There they plunged with terrific noise down a depth of 900 feet. It was an exciting and magnificent spectacle. The ground trembled, whilst these waves of iron, throwing into the sky their clouds of smoke, evaporated at the same time the humidity of the mould, and hurled it upwards through the vent-holes of the masonry in the form of impenetrable vapour. These artificial clouds unrolled their thick spirals as they went up to a height of 3,000 feet into the air. Any Red Indian wandering upon the limits of the horizon might have believed in the formation of a new crater in the heart of Florida, and yet it was neither an irruption, nor a typhoon, nor a storm, nor a struggle of the elements, nor one of those terrible phenomena which Nature is capable of producing. No; man alone had produced those reddish vapours, those gigantic flames worthy of a volcano, those tremendous vibrations like the shock of an earthquake, those reverberations, rivals of hurricanes and storms, and it was his hand which hurled into an abyss, dug by himself, a whole Niagara of molten metal!

CHAPTER XVI.

THE COLUMBIAD.

Had the operation of casting succeeded? People were reduced to mere conjecture. However, there was every reason to believe in its success, as the mould had absorbed the entire mass of metal liquefied in the furnaces. Still it was necessarily a long time impossible to be certain.

In fact, when Major Rodman cast his cannon of 160,000 lbs., it took no less than a fortnight to cool. How long, therefore, would the monstrous Columbiad, crowned with its clouds of vapour, and guarded by its intense heat, be kept from the eyes of its admirers? It was difficult to estimate.

The impatience of the members of the Gun Club was put to a rude test during this lapse of time. But it could not be helped. J.T. Maston was nearly roasted through his anxiety. A fortnight after the casting an immense column of smoke was still soaring towards the sky, and the ground burnt the soles of the feet within a radius of 200 feet round the summit of Stony Hill.

The days went by; weeks followed them. There were no means of cooling the immense cylinder. It was impossible to approach it. The members of the Gun Club were obliged to wait with what patience they could muster.

"Here we are at the 10th of August," said J.T. Maston one morning. "It wants hardly four months to the 1st of December! There still remains the interior mould to be taken out, and the Columbiad to be loaded! We never shall be ready! One cannot even approach the cannon! Will it never get cool? That would be a cruel deception!"

They tried to calm the impatient secretary without succeeding. Barbicane said nothing, but his silence covered serious irritation. To see himself stopped by an obstacle that time alone could remove--time, an enemy to be feared under the circumstances--and to be in the power of an enemy was hard for men of war.

However, daily observations showed a certain change in the state of the ground. Towards the 15th of August the vapour thrown off had notably diminished in intensity and thickness. A few days after the earth only exhaled a slight puff of smoke, the last breath of the monster shut up in its stone tomb. By degrees the vibrations of the ground ceased, and the circle of heat contracted; the most impatient of the spectators approached; one day they gained ten feet, the next twenty, and on the 22nd of August Barbicane, his colleagues, and the engineer could take their place on the cast-iron surface which covered the summit of Stony Hill, certainly a very healthy spot, where it was not yet allowed to have cold feet.
"At last!" cried the president of the Gun Club with an immense sigh of satisfaction.

The works were resumed the same day. The extraction of the interior mould was immediately proceeded with in order to clear out the bore; pickaxes, spades, and boring-tools were set to work without intermission; the clay and sand had become exceedingly hard under the action of the heat; but by the help of machines they cleared away the mixture still burning at its contact with the iron; the rubbish was rapidly carted away on the railway, and the work was done with such spirit, Barbicane's intervention was so urgent, and his arguments, presented under the form of dollars, carried so much conviction, that on the 3rd of September all trace of the mould had disappeared.

The operation of boring was immediately begun; the boring-machines were set up without delay, and a few weeks later the interior surface of the immense tube was perfectly cylindrical, and the bore had acquired a high polish.

At last, on the 22nd of September, less than a year after the Barbicane communication, the enormous weapon, raised by means of delicate instruments, and quite vertical, was ready for use. There was nothing but the moon to wait for, but they were sure she would not fail.

J.T. Maston's joy knew no bounds, and he nearly had a frightful fall whilst looking down the tube of 900 feet. Without Colonel Blomsberry's right arm, which he had happily preserved, the secretary of the Gun Club, like a modern Erostratus, would have found a grave in the depths of the Columbiad.

The cannon was then finished; there was no longer any possible doubt as to its perfect execution; so on the 6th of October Captain Nicholl cleared off his debt to President Barbicane, who inscribed in his receipt-column a sum of 2,000 dollars. It may be believed that the captain's anger reached its highest pitch, and cost him an illness. Still there were yet three bets of 3,000, 4,000, and 5,000 dollars, and if he only gained 2,000, his bargain would not be a bad one, though not excellent. But money did not enter into his calculations, and the success obtained by his rival in the casting of a cannon against which iron plates sixty feet thick would not have resisted was a terrible blow to him.

Since the 23rd of September the inclosure on Stony Hill had been quite open to the public, and the concourse of visitors will be readily imagined.

In fact, innumerable people from all points of the United States flocked to Florida. The town of Tampa was prodigiously increased during that year, consecrated entirely to the works of the Gun Club; it then comprised a population of 150,000 souls. After having surrounded Fort Brooke in a network of streets it was now being lengthened out on that tongue of land which separated the two harbours of Espiritu-Santo Bay; new quarters, new squares, and a whole forest of houses had grown up in these formerly-deserted regions under the heat of the American sun. Companies were formed for the erection of churches, schools, private dwellings, and in less than a year the size of the town was increased tenfold.

It is well known that Yankees are born business men; everywhere that destiny takes them, from the glacial to the torrid zone, their instinct for business is usefully exercised. That is why simple visitors to Florida for the sole purpose of following the operations of the Gun Club allowed themselves to be involved in commercial operations as soon as they were installed in Tampa Town. The vessels freighted for the transport of the metal and the workmen had given unparalleled activity to the port. Soon other vessels of every form and tonnage, freighted with provisions and merchandise, ploughed the bay and the two harbours; vast offices of shipbrokers and merchants were established in the town, and the _Shipping Gazette_ each day published fresh arrivals in the port of Tampa.

Whilst roads were multiplied round the town, in consequence of the prodigious increase in its population and commerce, it was joined by railway to the Southern States of the Union. One line of rails connected La Mobile to Pensacola, the great southern maritime arsenal; thence from that important point it ran to Tallahassee. There already existed there a short line, twenty-one miles long, to Saint Marks on the seashore. It was this loop-line that was prolonged as far as Tampa Town, awakening in its passage the dead or sleeping portions of Central Florida. Thus Tampa, thanks to these marvels of industry due to the idea born one line day in the brain of one man, could take as its right the airs of a large town. They surnamed it "Moon-City," and the capital of Florida suffered an eclipse visible from all points of the globe.

Every one will now understand why the rivalry was so great between Texas and Florida, and the irritation of the Texicans when they saw their pretensions set aside by the Gun Club. In their long-sighted sagacity they had foreseen what a country might gain from the experiment attempted by Barbicane, and the wealth that would accompany such a cannon-shot. Texas lost a vast centre of commerce, railways, and a considerable increase of population. All these advantages had been given to that miserable Floridian peninsula, thrown like a pier between the waves of the Gulf and those of the Atlantic Ocean. Barbicane, therefore, divided with General Santa-Anna the Texan antipathy.

However, though given up to its commercial and industrial fury, the new population of Tampa Town took care not to forget the interesting operations of the Gun Club. On the contrary, the least details of the enterprise, every blow of the pickaxe, interested them. There was an incessant flow of people to and from Tampa Town to Stony Hill, a perfect procession, or, better still, a pilgrimage.
It was already easy to foresee that the day of the experiment the concourse of spectators would be counted by millions, for they came already from all points of the earth to the narrow peninsula. Europe was emigrating to America.

But until then, it must be acknowledged, the curiosity of the numerous arrivals had only been moderately satisfied. Many counted upon seeing the casting who only saw the smoke from it. This was not much for hungry eyes, but Barbicane would allow no one to see that operation. Thereupon ensued grumbling, discontent, and murmurs; they blamed the president for what they considered dictatorial conduct. His act was stigmatised as "un-American." There was nearly a riot round Stony Hill, but Barbicane was not to be moved. When, however, the Columbiad was quite finished, this state of closed doors could no longer be kept up; besides, it would have been in bad taste, and even imprudent, to offend public opinion. Barbicane, therefore, opened the inclosure to all comers; but, in accordance with his practical character, he determined to coin money out of the public curiosity.

It was, indeed, something to even be allowed to see this immense Columbiad, but to descend into its depths seemed to the Americans the _ne plus ultra_ of earthly felicity. In consequence there was not one visitor who was not willing to give himself the pleasure of visiting the interior of this metallic abyss. Baskets hung from steam-crane allowed them to satisfy their curiosity. It became a perfect mania. Women, children, and old men all made it their business to penetrate the mysteries of the colossal gun. The price for the descent was fixed at five dollars a head, and, notwithstanding this high charge, during the two months that preceded the experiment, the influx of visitors allowed the Gun Club to pocket nearly 500,000 dollars!

It need hardly be said that the first visitors to the Columbiad were the members of the Gun Club. This privilege was justly accorded to that illustrious body. The ceremony of reception took place on the 25th of September. A basket of honour took down the president, J.T. Maston, Major Elphinstone, General Morgan, Colonel Blomsberry, and other members of the Gun Club, ten in all. How hot they were at the bottom of that long metal tube! They were nearly stifled, but how delightful--how exquisite! A table had been laid for ten on the massive stone which formed the bottom of the Columbiad, and was lighted by a jet of electric light as bright as day itself. Numerous exquisite dishes, that seemed to descend from heaven, were successively placed before the guests, and the richest wines of France flowed profusely during this splendid repast, given 900 feet below the surface of the earth!

The festival was a gay, not to say a noisy one. Toasts were given and replied to. They drank to the earth and her satellite, to the Gun Club, the Union, the Moon, Diana, Phoebe, Selene, "the peaceful courier of the night." All the hurrahs, carried up by the sonorous waves of the immense acoustic tube, reached its mouth with a noise of thunder; then the multitude round Stony Hill heartily united their shouts to those of the ten revellers hidden from sight in the depths of the gigantic Columbiad.

J.T. Maston could contain himself no longer. Whether he shouted or ate, gesticulated or talked most would be difficult to determine. Any way he would not have given up his place for an empire, "not even if the cannon--loaded, primed, and fired at that very moment--were to blow him in pieces into the planetary universe."

CHAPTER XVII.
A TELEGRAM.

The great work undertaken by the Gun Club was now virtually ended, and yet two months would still elapse before the day the projectile would start for the moon. These two months would seem as long as two years to the universal impatience. Until then the smallest details of each operation had appeared in the newspapers every day, and were eagerly devoured by the public, but now it was to be feared that this "interest dividend" would be much diminished, and every one was afraid of no longer receiving his daily share of emotions.

They were all agreeably disappointed: the most unexpected, extraordinary, incredible, and improbable incident happened in time to keep up the general excitement to its highest pitch.

On September 30th, at 3.47 p.m., a telegram, transmitted through the Atlantic Cable, arrived at Tampa Town for President Barbicane.

He tore open the envelope and read the message, and, notwithstanding his great self-control, his lips grew pale and his eyes dim as he read the telegram.

The following is the text of the message stored in the archives of the Gun Club:

"France, Paris,
September 30th, 4 a.m.
Barbicane, Tampa Town, Florida, United States.
Substitute a cylindro-conical projectile for your spherical shell. Shall go inside. Shall arrive by steamer Atlanta.
MICHEL ARDAN."
CHAPTER XVIII.
THE PASSENGER OF THE ATLANTA.

If this wonderful news, instead of coming by telegraph, had simply arrived by post and in a sealed envelope—if the French, Irish, Newfoundland, and American telegraph clerks had not necessarily been acquainted with it—Barbicane would not have hesitated for a moment. He would have been quite silent about it for prudence' sake, and in order not to throw discredit on his work. This telegram might be a practical joke, especially as it came from a Frenchman. What probability could there be that any man should conceive the idea of such a journey? And if the man did exist was he not a madman who would have to be inclosed in a strait-waistcoat instead of in a cannon-ball?

But the message was known, and Michel Ardan's proposition was already all over the States of the Union, so Barbicane had no reason for silence. He therefore called together his colleagues then in Tampa Town, and, without showing what he thought about it or saying a word about the degree of credibility the telegram deserved, he read coldly the laconic text.

"Not possible!"—"Unheard of!"—"They are laughing at us!"—"Ridiculous!"—"Absurd!" Every sort of expression for doubt, incredulity, and folly was heard for some minutes with accompaniment of appropriate gestures. J.T. Maston alone uttered the words:

"That's an idea!" he exclaimed.

"Yes," answered the major, "but if people have such ideas as that they ought not to think of putting them into execution."

"Why not?" quickly answered the secretary of the Gun Club, ready for an argument. But the subject was let drop.

In the meantime Michel Ardan's name was already going about Tampa Town. Strangers and natives talked and joked together, not about the European—evidently a mythical personage—but about J.T. Maston, who had the folly to believe in his existence. When Barbicane proposed to send a projectile to the moon every one thought the enterprise natural and practicable—a simple affair of ballistics. But that a reasonable being should offer to go the journey inside the projectile was a farce, or, to use a familiar Americanism, it was all "humbug."

This laughter lasted till evening throughout the Union, an unusual thing in a country where any impossible enterprise finds adepts and partisans.

Still Michel Ardan's proposition did not fail to awaken a certain emotion in many minds. "They had not thought of such a thing." How many things denied one day had become realities the next! Why should not this journey be accomplished one day or another? But, any way, the man who would run such a risk must be a madman, and certainly, as his project could not be taken seriously, he would have done better to be quiet about it, instead of troubling a whole population with such ridiculous trash.

But, first of all, did this personage really exist? That was the great question. The name of "Michel Ardan" was not altogether unknown in America. It belonged to a European much talked about for his audacious enterprises. Then the telegram sent all across the depths of the Atlantic, the designation of the ship upon which the Frenchman had declared he had taken his passage, the date assigned for his arrival—all these circumstances gave to the proposition a certain air of probability. They were obliged to disburden their minds about it. Soon these isolated individuals formed into groups, the groups became condensed under the action of curiosity like atoms by virtue of molecular attraction, and the result was a compact crowd going towards President Barbicane's dwelling.

The president, since the arrival of the message, had not said what he thought about it; he had let J.T. Maston express his opinions without manifesting either approbation or blame. He kept quiet, proposing to await events, but he had not taken public impatience into consideration, and was not very pleased at the sight of the population of Tampa Town assembled under his windows. Murmurs, cries, and vociferations soon forced him to appear. It will be seen that he had all the disagreeables as well as the duties of a public man.

He therefore appeared; silence was made, and a citizen asked him the following question:--"Is the person designated in the telegram as Michel Ardan on his way to America or not?"

"Gentlemen," answered Barbicane, "I know no more than you."

"We must get to know," exclaimed some impatient voices.

"Time will inform us," answered the president coldly.

"Time has no right to keep a whole country in suspense," answered the orator. "Have you altered your plans for the projectile as the telegram demanded?"

"Not yet, gentlemen; but you are right, we must have recourse to the telegraph that has caused all this emotion."

"To the telegraph-office!" cried the crowd.

Barbicane descended into the street, and, heading the immense assemblage, he went towards the telegraph-office.
A few minutes afterwards a telegram was on its way to the underwriters at Liverpool, asking for an answer to the following questions:--

"What sort of vessel is the _Atlanta_? When did she leave Europe? Had she a Frenchman named Michel Ardan on board?"

Two hours afterwards Barbicane received such precise information that doubt was no longer possible.

"The steamer _Atlanta_, from Liverpool, set sail on October 2nd for Tampa Town, having on board a Frenchman inscribed in the passengers' book as Michel Ardan."

At this confirmation of the first telegram the eyes of the president were lighted up with a sudden flame; he clenched his hands, and was heard to mutter--

"It is true, then! It is possible, then! the Frenchman does exist! and in a fortnight he will be here! But he is a madman! I never can consent."

And yet the very same evening he wrote to the firm of Breadwill and Co. begging them to suspend the casting of the projectile until fresh orders.

Now how can the emotion be described which took possession of the whole of America? The effect of the Barbicane proposition was surpassed tenfold; what the newspapers of the Union said, the way they accepted the news, and how they chanted the arrival of this hero from the old continent; how to depict the feverish agitation in which every one lived, counting the hours, minutes, and seconds; how to give even a feeble idea of the effect of one idea upon so many heads; how to show every occupation being given up for a single preoccupation, work stopped, commerce suspended, vessels, ready to start, waiting in the ports so as not to miss the arrival of the _Atlanta_, every species of conveyance arriving full and returning empty, the bay of Espiritu-Santo incessantly ploughed by steamers, packet-boats, pleasure-yachts, and fly-boats of all dimensions; how to denominate in numbers the thousands of curious people who in a fortnight increased the population of Tampa Town fourfold, and were obliged to encamp under tents like an army in campaign--all this is a task above human force, and could not be undertaken without rashness.

At 9 a.m. on the 20th of October the semaphores of the Bahama Channel signalled thick smoke on the horizon. Two hours later a large steamer exchanged signals with them. The name _Atlanta_ was immediately sent to Tampa Town. At 4 p.m. the English vessel entered the bay of Espiritu-Santo. At 5 p.m. she passed the entrance to Hillsboro Harbour, and at 6 p.m. weighed anchor in the port of Tampa Town.

The anchor had not reached its sandy bed before 500 vessels surrounded the _Atlanta_ and the steamer was taken by assault. Barbicane was the first on deck, and in a voice the emotion of which he tried in vain to suppress--

"Michel Ardan!" he exclaimed.

"Present!" answered an individual mounted on the poop.

Barbicane, with his arms crossed, questioning eyes, and silent mouth, looked fixedly at the passenger of the _Atlanta_.

He was a man forty-two years of age, tall, but already rather stooping, like caryatides which support balconies on their shoulders. His large head shook every now and then a shock of red hair like a lion's mane; a short face, wide forehead, a moustache bristling like a cat's whiskers, and little bunches of yellow hair on the middle of his cheeks, round and rather wild-looking, short-sighted eyes completed this eminently feline physiognomy. But the nose was boldly cut, the mouth particularly humane, the forehead high, intelligent, and ploughed like a field that was never allowed to remain fallow. Lastly, a muscular body well poised on long limbs, muscular arms, powerful and well-set levers, and a decided gait made a solidly built fellow of this European, "rather wrought than cast," to borrow one of his expressions from metallurgic art.

The disciples of Lavater or Gratiolet would have easily deciphered in the cranium and physiognomy of this personage indisputable signs of combativity— that is to say, of courage in danger and tendency to overcome obstacles, those of benevolence, and a belief in the marvellous, an instinct that makes many natures dwell much on superhuman things; but, on the other hand, the bumps of acquisitiveness, the need of possessing and acquiring, were absolutely wanting.

To put the finishing touches to the physical type of the passenger of the _Atlanta_, his garments wide, loose, and flowing, open cravat, wide collar, and cuffs always unbuttoned, through which came nervous hands. People felt that even in the midst of winter and dangers that man was never cold.

On the deck of the steamer, amongst the crowd, he bustled about, never still for a moment, "dragging his anchors," in nautical speech, gesticulating, making friends with everybody, and biting his nails nervously. He was one of those original beings whom the Creator invents in a moment of fantasy, and of whom He immediately breaks the cast.

In fact, the character of Michel Ardan offered a large field for physiological analysis. This astonishing man lived in a perpetual disposition to hyperbole, and had not yet passed the age of superlatives; objects depicted themselves
on the retina of his eye with exaggerated dimensions; from thence an association of gigantic ideas; he saw everything on a large scale except difficulties and men.

He was besides of a luxuriant nature, an artist by instinct, and witty fellow; he loved arguments _ad hominem_, and defended the weak side tooth and nail.

Amongst other peculiarities he gave himself out as "sublimely ignorant," like Shakspeare, and professed supreme contempt for all _savants_. "people," said he, "who only score our points." He was, in short, a Bohemian of the country of brains, adventurous but not an adventurer, a harebrained fellow, a Phaeton running away with the horses of the sun, a kind of Icarus with relays of wings. He had a wonderful facility for getting into scrapes, and an equally wonderful facility for getting out of them again, falling on his feet like a cat.

In short, his motto was, "Whatever it may cost!" and the love of the impossible his "ruling passion," according to Pope's fine expression.

But this enterprising fellow had the defects of his qualities. Who risks nothing wins nothing, it is said. Ardan often risked much and got nothing. He was perfectly disinterested and chivalric; he would not have signed the death-warrant of his worst enemy, and would have sold himself into slavery to redeem a negro.

In France and Europe everybody knew this brilliant, bustling person. Did he not get talked of ceaselessly by the hundred voices of Fame, hoarse in his service? Did he not live in a glass house, taking the entire universe as confidant of his most intimate secrets? But he also possessed an admirable collection of enemies amongst those he had cuffed and wounded whilst using his elbows to make a passage in the crowd.

Still he was generally liked and treated like a spoiled child. Every one was interested in his bold enterprises, and followed them with uneasy mind. He was known to be so imprudent! When some friend wished to stop him by predicting an approaching catastrophe, "The forest is only burnt by its own trees," he answered with an amiable smile, not knowing that he was quoting the prettiest of Arabian proverbs.

Such was the passenger of the _Atlanta_, always in a bustle, always boiling under the action of inward fire, always moved, not by what he had come to do in America—he did not even think about it—but on account of his feverish organisation. If ever individuals offered a striking contrast they were the Frenchman Michel Ardan and the Yankee Barbicane, both, however, enterprising, bold, and audacious, each in his own way.

Barbicane's contemplation of his rival was quickly interrupted by the cheers of the crowd. These cries became even so frantic and the enthusiasm took such a personal form that Michel Ardan, after having shaken a thousand hands in which he nearly left his ten fingers, was obliged to take refuge in his cabin.

Barbicane followed him without having uttered a word.

"You are Barbicane?" Michel Ardan asked him as soon as they were alone, and in the same tone as he would have spoken to a friend of twenty years' standing.

"Yes," answered the president of the Gun Club.

"Well, good morning, Barbicane. How are you? Very well? That's right! that's right!"

"Then," said Barbicane, without further preliminary, "you have decided to go?"

"Quite decided."

"Nothing will stop you?"

"Nothing. Have you altered your projectile as I told you in my message?"

"I waited till you came. But," asked Barbicane, insisting once more, "you have quite reflected?"

"Reflected! have I any time to lose? I find the occasion to go for a trip to the moon, I profit by it, and that is all. It seems to me that does not want so much reflection."

Barbicane looked eagerly at the man who spoke of his project of journey with so much carelessness, and with such absence of anxiety.

"But at least," he said, "you have some plan, some means of execution?"

"Excellent means. But allow me to tell you one thing. I like to say my say once and for all, and to everybody, and to hear no more about it. Then, unless you can think of something better, call together your friends, your colleagues, all the town, all Florida, all America if you like, and to-morrow I shall be ready to state my means of execution, and answer any objections, whatever they may be. Will that do?"

"Yes, that will do," answered Barbicane.

Whereupon the president left the cabin, and told the crowd about Michel Ardan's proposition. His words were received with great demonstrations of joy. That cut short all difficulties. The next day every one could contemplate the European hero at their ease. Still some of the most obstinate spectators would not leave the deck of the _Atlanta_; they passed the night on board. Amongst others, J.T. Maston had screwed his steel hook into the combing of the poop, and it would have taken the capstan to get it out again.

"He is a hero! a hero!" cried he in every tone, "and we are only old women compared to that European!"

As to the president, after having requested the spectators to withdraw, he re-entered the passenger's cabin, and
CHAPTER XIX.
A MEETING.

The next day the sun did not rise early enough to satisfy public impatience. Barbicane, fearing that indiscreet questions would be put to Michel Ardan, would have reduced his auditors to a small number of adepts, to his colleagues for instance. But it was as easy as to dam up the Falls at Niagara. He was, therefore, obliged to renounce his project, and let his friend run all the risks of a public lecture. The new Town Hall of Tampa Town, notwithstanding its colossal dimensions, was considered insufficient for the occasion, which had assumed the proportions of a public meeting.

The place chosen was a vast plain, situated outside the town. In a few hours they succeeded in sheltering it from the rays of the sun. The ships of the port, rich in canvas, furnished the necessary accessories for a colossal tent. Soon an immense sky of cloth was spread over the calcined plain, and defended it against the heat of the day. There 300,000 persons stood and braved a stifling temperature for several hours whilst awaiting the Frenchman's arrival. Of that crowd of spectators one-third alone could see and hear; a second third saw badly, and did not hear. As to the remaining third, it neither heard nor saw, though it was not the least eager to applaud.

At three o'clock Michel Ardan made his appearance, accompanied by the principal members of the Gun Club. He gave his right arm to President Barbicane, and his left to J.T. Maston, more radiant than the midday sun, and nearly as ruddy.

Ardan mounted the platform, from which his eyes extended over a forest of black hats. He did not seem in the least embarrassed; he did not pose; he was at home there, gay, familiar, and amiable. To the cheers that greeted him he answered by a gracious bow; then with his hand asked for silence, began to speak in English, and expressed himself very correctly in these terms:

"Gentlemen," said he, "although it is very warm, I intend to keep you a few minutes to give you some explanation of the projects which have appeared to interest you. I am neither an orator nor a _savant_, and I did not count upon having to speak in public; but my friend Barbicane tells me it would give you pleasure, so I do it. Then listen to me with your 600,000 ears, and please to excuse the faults of the orator."

This unceremonious beginning was much admired by the audience, who expressed their satisfaction by an immense murmur of applause.

"Gentlemen," said he, "no mark of approbation or dissent is prohibited. That settled, I continue. And, first of all, do not forget that you have to do with an ignorant man, but his ignorance goes far enough to ignore difficulties. It has, therefore, appeared a simple, natural, and easy thing to him to take his passage in a projectile and to start for the moon. That journey would be made sooner or later, and as to the mode of locomotion adopted, it simply follows the law of progress. Man began by travelling on all fours, then one fine day he went on two feet, then in a cart, then in a coach, then on a railway. Well, the projectile is the carriage of the future, and, to speak the truth, planets are only projectiles, simple cannon-balls hurled by the hand of the Creator. But to return to our vehicle. Some of you, gentlemen, may think that the speed it will travel at is excessive—nothing of the kind. All the planets go faster, and the earth itself in its movement round the sun carries us along three times as fast. Here are some examples. Only I ask your permission to express myself in leagues, for American measures are not very familiar to me, and I fear getting muddled in my calculations."

The demand appeared quite simple, and offered no difficulty. The orator resumed his speech.

"The following, gentlemen, is the speed of the different planets. I am obliged to acknowledge that, notwithstanding my ignorance, I know this small astronomical detail exactly, but in two minutes you will be as learned as I. Learn, then, that Neptune goes at the rate of 5,000 leagues an hour; Uranus, 7,000; Saturn, 8,858; Jupiter, 11,675; Mars, 22,011; the earth, 27,500; Venus, 32,190; Mercury, 52,520; some comets, 14,000 leagues in their perihelion! As to us, veritable idlers, people in no hurry, our speed does not exceed 9,900 leagues, and it will go on decreasing! I ask you if there is anything to wonder at, and if it is not evident that it will be surpassed some day by still greater speeds, of which light or electricity will probably be the mechanical agents?"

No one seemed to doubt this affirmation.

"Dear hearers," he resumed, "according to certain narrow minds—that is the best qualification for them—humanity is inclosed in a Popilius circle which it cannot break open, and is condemned to vegetate upon this globe without ever flying towards the planetary shores! Nothing of the kind! We are going to the moon, we shall go to the planets, we shall go to the stars as we now go from Liverpool to New York, easily, rapidly, surely, and the atmospheric ocean will be as soon crossed as the oceans of the earth! Distance is only a relative term, and will end
The assembly, though greatly in favour of the French hero, was rather staggered by this audacious theory. Michel Ardan appeared to see it.

"You do not seem convinced, my worthy hosts," he continued with an amiable smile. "Well, let us reason a little. Do you know how long it would take an express train to reach the moon? Three hundred days. Not more. A journey of 86,410 leagues, but what is that? Not even nine times round the earth, and there are very few sailors who have not done that during their existence. Think, I shall be only ninety-eight hours on the road! Ah, you imagine that the moon is a long way from the earth, and that one must think twice before attempting the adventure! But what would you say if I were going to Neptune, which gravitates at 1,147,000,000 leagues from the sun? That is a journey that very few people could go, even if it only cost a farthing a mile! Even Baron Rothschild would not have enough to take his ticket!"

This argument seemed greatly to please the assembly; besides, Michel Ardan, full of his subject, grew superbly eloquent; he felt he was listened to, and resumed with admirable assurance--

"Well, my friends, this distance from Neptune to the sun is nothing compared to that of the stars, some of which are billions of leagues from the sun! And yet people speak of the distance that separates the planets from the sun! Do you know what I think of this universe that begins with the sun and ends at Neptune? Should you like to know my theory? It is a very simple one. According to my opinion, the solar universe is one solid homogeneous mass; the planets that compose it are close together, crowd one another, and the space between them is only the space that separates the molecules of the most compact metal--silver, iron, or platinum! I have, therefore, the right to affirm, and I will repeat it with a conviction you will all share--distance is a vain word; distance does not exist!"

"Well said! Bravo! Hurrah!" cried the assembly with one voice, electrified by the gesture and accent of the orator, and the boldness of his conceptions.

"No!" cried J.T. Maston, more energetically than the others; "distance does not exist!"

And, carried away by the violence of his movements and emotions he could hardly contain, he nearly fell from the top of the platform to the ground. But he succeeded in recovering his equilibrium, and thus avoided a fall that would have brutally proved distance not to be a vain word. Then the speech of the distinguished orator resumed its course.

"My friends," said he, "I think that this question is now solved. If I have not convinced you all it is because I have been timid in my demonstrations, feeble in my arguments, and you must set it down to my theoretic ignorance. However that may be, I repeat, the distance from the earth to her satellite is really very unimportant and unworthy to occupy a serious mind. I do not think I am advancing too much in saying that soon a service of trains will be established by projectiles, in which the journey from the earth to the moon will be comfortably accomplished. There will be no shocks nor running off the lines to fear, and the goal will be reached rapidly, without fatigue, in a straight line, 'as the crow flies.' Before twenty years are over, half the earth will have visited the moon!"

"Three cheers for Michel Ardan!" cried the assistants, even those least convinced.

"Three cheers for Barbicane!" modestly answered the orator.

This act of gratitude towards the promoter of the enterprise was greeted with unanimous applause.

"Now, my friends," resumed Michel Ardan, "if you have any questions to ask me you will evidently embarrass me, but still I will endeavour to answer you.

Until now the president of the Gun Club had reason to be very satisfied with the discussion. It had rolled upon speculative theories, upon which Michel Ardan, carried away by his lively imagination, had shown himself very brilliant. He must, therefore, be prevented from deviating towards practical questions, which he would doubtless not come out of so well. Barbicane made haste to speak, and asked his new friend if he thought that the moon or the planets were inhabited.

"That is a great problem," answered the orator, smiling; "still, if I am not mistaken, men of great intelligence--Plutarch, Swedenborg, Bernardin de Saint-Pierre, and many others--answered in the affirmative. If I answered from a natural philosophy point of view I should do the same--I should say to myself that nothing useless exists in this world, and, answering your question by another, friend Barbicane, I should affirm that if the planets are inhabited, either they are inhabited, they have been, or they will be."

"Very well," cried the first ranks of spectators, whose opinion had the force of law for the others.

"It is impossible to answer with more logic and justice," said the president of the Gun Club. "The question, therefore, comes to this: 'Are the planets inhabitable?' I think so, for my part."

"And I--I am certain of it," answered Michel Ardan.

"Still," replied one of the assistants, "there are arguments against the inhabitability of the worlds. In most of them it is evident that the principles of life must be modified. Thus, only to speak of the planets, the people must be burnt up in some and frozen in others according as they are a long or short distance from the sun."
"I regret," answered Michel Ardan, "not to know my honourable opponent personally. His objection has its value, but I think it may be combated with some success, like all those of which the habitability of worlds has been the object. If I were a physician I should say that if there were less caloric put in motion in the planets nearest to the sun, and more, on the contrary, in the distant planets, this simple phenomenon would suffice to equalise the heat and render the temperature of these worlds bearable to beings organised like we are. If I were an astronomer I should tell him, after many illustrious _savants_, that Nature furnishes us on earth with examples of animals living in very different conditions of habitability; that fish breathe in a medium mortal to the other animals; that amphibians have a double existence difficult to explain; that certain inhabitants of the sea live in the greatest depths, and support there, without being crushed, pressures of fifty or sixty atmospheres; that some aquatic insects, insensible to the temperature, are met with at the same time in springs of boiling water and in the frozen plains of the Polar Ocean—in short, there are in nature many means of action, often incomprehensible, but no less real. If I were a chemist I should say that _aërolites_, bodies evidently formed away from our terrestrial globe—have when analysed, revealed indisputable traces of carbon, a substance that owes its origin solely to organised beings, and which, according to Reichenbach's experiments, must necessarily have been 'animalised.' Lastly, if I were a theologian I should say that Divine Redemption, according to St. Paul, seems applicable not only to the earth but to all the celestial bodies. But I am neither a theologian, chemist, naturalist, nor natural philosopher. So, in my perfect ignorance of the great laws that rule the universe, I can only answer, 'I do not know if the heavenly bodies are inhabited, and, as I do not know, I am going to see!'

Did the adversary of Michel Ardan's theories hazard any further arguments? It is impossible to say, for the frantic cries of the crowd would have prevented any opinion from being promulgated. When silence was again restored, even in the most distant groups, the triumphant orator contented himself with adding the following considerations:

"You will think, gentlemen, that I have hardly touched upon this grave question. I am not here to give you an instructive lecture upon this vast subject. There is another series of arguments in favour of the heavenly bodies being inhabited; I do not look upon that. Allow me only to insist upon one point. To the people who maintain that the planets are not inhabited you must answer, 'You may be right if it is demonstrated that the earth is the best of possible worlds; but it is not so, notwithstanding Voltaire.' It has only one satellite, whilst Jupiter, Uranus, Saturn, and Neptune have several at their service, an advantage that is not to be disdained. But that which now renders the earth an uncomfortable place of abode is the inclination of its axis upon its orbit. Hence the inequality of day and night; hence the unfortunate diversity of seasons. Upon our miserable spheroïd it is always either too warm or too cold; we are frozen in winter and roasted in summer; it is the planet of colds, rheumatism, and consumption, whilst on the surface of Jupiter, for instance, where the axis has only a very slight inclination, the inhabitants can enjoy invariable temperature. There is the perpetual spring, summer, autumn, and winter zone; each 'Jovian' may choose the climate that suits him, and may shelter himself all his life from the variations of the temperature. You will doubtless agree to this superiority of Jupiter over our planet without speaking of its years, which each lasts twelve years! What is more, it is evident to me that, under these auspices, and under such marvellous conditions of existence, the inhabitants of that fortunate world are superior beings—those _savants_ are more learned, artists more artistic, the wicked less wicked, and the good are better. Alas! what is wanting to our spheroïd to reach this perfection is very little!—an axis of rotation less inclined on the plane of its orbit."

"Well!" cried an impetuous voice, "let us unite our efforts, invent machines, and rectify the earth's axis!"

Thunders of applause greeted this proposition, the author of which could be no other than J.T. Maston. It is probable that the fiery secretary had been carried away by his instincts as engineer to venture such a proposition; but it must be said, for it is the truth, many encouraged him with their cries, and doubtless, if they had found the resting-point demanded by Archimedes, the Americans would have constructed a lever capable of raising the world and redressing its axis. But this point was wanting to these bold mechanicians.

Nevertheless, this eminently practical idea had enormous success: the discussion was suspended for a good quarter of an hour, and long, very long afterwards, they talked in the United States of America of the proposition so energetically enunciated by the perpetual secretary of the Gun Club.

CHAPTER XX.

THRUSt AND PARRy.

This incident seemed to have terminated the discussion, but when the agitation had subsided these words were heard uttered in a loud and severe voice:

"Now that the orator has allowed his fancy to roam, perhaps he would kindly go back to his subject, pay less attention to theories, and discuss the practical part of his expedition."
All eyes were turned towards the person who spoke thus. He was a thin, dry-looking man, with an energetic face and an American beard. By taking advantage of the agitation in the assembly from time to time he had gained, by degrees, the front row of spectators. There, with his arms crossed, his eyes brilliant and bold, he stared imperturbably at the hero of the meeting. After having asked his question he kept silence, and did not seem disturbed by the thousands of eyes directed towards him nor by the disapproving murmur excited by his words. The answer being delayed he again put the question with the same clear and precise accent; then he added—

"We are here to discuss the moon, not the earth."

"You are right, sir," answered Michel Ardan, "the discussion has wandered from the point; we will return to the moon."

"Sir," resumed the unknown man, "you pretend that our satellite is inhabited. So far so good; but if Selenites do exist they certainly live without breathing, for—I tell you the fact for your good—there is not the least particle of air on the surface of the moon."

At this affirmation Ardan shook his red mane; he understood that a struggle was coming with this man on the real question. He looked at him fixedly in his turn, and said—

"Ah! there is no air in the moon! And who says so, pray?"

"The _savants_."

"Indeed?"

"Indeed."

"Sir," resumed Michel, "joking apart, I have a profound respect for _savants_ who know, but a profound contempt for _savants_ who do not know."

"Do you know any who belong to the latter category?"

"Yes; in France there is one who maintains that, 'mathematically,' a bird cannot fly, and another who demonstrates that a fish is not made to live in water."

"There is no question of those two, sir, and I can quote in support of my proposition names that you will not object to."

"Then, sir, you would greatly embarrass a poor ignorant man like me!"

"Then why do you meddle with scientific questions which you have never studied?" asked the unknown brutally.

"Why?" answered Ardan; "because the man who does not suspect danger is always brave! I know nothing, it is true, but it is precisely my weakness that makes my strength."

"Your weakness goes as far as madness," exclaimed the unknown in a bad-tempered tone.

"So much the better," replied the Frenchman, "if my madness takes me to the moon!"

Barbicane and his colleagues stared at the intruder who had come so boldly to stand in the way of their enterprise. None of them knew him, and the president, not reassured upon the upshot of such a discussion, looked at his new friend with some apprehension. The assembly was attentive and slightly uneasy, for this struggle called attention to the dangers and impossibilities of the expedition.

"Sir," resumed Michel Ardan's adversary, "the reasons that prove the absence of all atmosphere round the moon are numerous and indisputable. I may say, even, that, _à priori_ if that atmosphere had ever existed, it must have been drawn away by the earth, but I would rather oppose you with incontestable facts."

"Oppose, sir," answered Michel Ardan, with perfect gallantry—oppose as much as you like."

"You know," said the unknown, "that when the sun's rays traverse a medium like air they are deviated from a straight line, or, in other words, they are refracted. Well, when stars are occulted by the moon their rays, on grazing the edge of her disc, do not show the least deviation nor offer the slightest indication of refraction. It follows, therefore, that the moon can have no atmosphere."

Every one looked at the Frenchman, for, this once admitted, the consequences were rigorous.

"In fact," answered Michel Ardan, "that is your best if not only argument, and a _savant_, perhaps, would be embarrassed to answer it. I can only tell you that this argument has no absolute value because it supposes the angular diameter of the moon to be perfectly determined, which it is not. But let us waive that, and tell me, my dear sir, if you admit the existence of volcanoes on the surface of the moon."

"Extinct volcanoes, yes; volcanoes in eruption, no."

"For the sake of argument let us suppose that these volcanoes have been in eruption for a certain period."

"That is certain, but as they can themselves furnish the oxygen necessary for combustion the fact of their eruption does not in the least prove the presence of a lunar atmosphere."

"We will pass on, then," answered Michel Ardan, "and leave this series of argument and arrive at direct observation. But I warn you that I am going to quote names."

"Very well."

"In 1715 the astronomers Louville and Halley, observing the eclipse of the 3rd of May, remarked certain
fulminations of a remarkable nature. These jets of light, rapid and frequent, were attributed by them to storms in the atmosphere of the moon."

"In 1715," replied the unknown, "the astronomers Louville and Halley took for lunar phenomena phenomena purely terrestrial, such as meteoric or other bodies which are generated in our own atmosphere. That was the scientific aspect of these facts, and I go with it."

"Let us pass on again," answered Ardan, without being confused by the reply. "Did not Herschel, in 1787, observe a great number of luminous points on the surface of the moon?"

"Certainly; but without explaining the origin of these luminous points. Herschel himself did not thereby conclude the necessity of a lunar atmosphere."

"Well answered," said Michel Ardan, complimenting his adversary; "I see that you are well up in selenography."

"Yes, sir; and I may add that the most skilful observers, MM. Boeer and Moedler, agree that air is absolutely wanting on the moon's surface."

A movement took place amongst the audience, who appeared struck by the arguments of this singular personage.

"We will pass on again," answered Michel Ardan, with the greatest calmness, "and arrive now at an important fact. A skilful French astronomer, M. Laussedat, whilst observing the eclipse of July 18th, 1860, proved that the horns of the solar crescent were rounded and truncated. Now this appearance could only have been produced by a deviation of the solar rays in traversing the atmosphere of the moon. There is no other possible explanation of the fact."

"But is this fact authenticated?"

"It is absolutely certain."

An inverse movement brought back the audience to the side of their favourite hero, whose adversary remained silent.

Ardan went on speaking without showing any vanity about his last advantage; he said simply--

"You see, therefore, my dear sir, that it cannot be positively affirmed that there is no atmosphere on the surface of the moon. This atmosphere is probably not dense, but science now generally admits that it exists."

"Not upon the mountains," replied the unknown, who would not give in.

"No, but in the depths of the valleys, and it is not more than some hundreds of feet deep."

"Any way you will do well to take your precautions, for the air will be terribly rarefied."

"Oh, there will always be enough for one man. Besides, once delivered up there, I shall do my best to economise it and only to breathe it on great occasions."

A formidable burst of laughter saluted the mysterious interlocutor, who looked round the assembly daring it proudly.

"Then," resumed Michel Ardan, carelessly, "as we are agreed upon the presence of some atmosphere, we are forced to admit the presence of some water--a consequence I am delighted with, for my part. Besides, I have another observation to make. We only know one side of the moon's disc, and if there is little air on that side there may be much on the other."

"How so?"

"Because the moon under the action of terrestrial attraction has assumed the form of an egg, of which we see the small end. Hence the consequence due to the calculations of Hausen, that its centre of gravity is situated in the other hemisphere. Hence this conclusion that all the masses of air and water have been drawn to the other side of our satellite in the first days of the creation."

"Pure fancies," exclaimed the unknown.

"No, pure theories based upon mechanical laws, and it appears difficult to me to refute them. I make appeal to this assembly and put it to the vote to know if life such as it exists upon earth is possible on the surface of the moon?"

Three hundred thousand hearers applauded this proposition. Michel Ardan's adversary wished to speak again, but he could not make himself heard. Cries and threats were hailed upon him.

"Enough, enough!" said some.

"Turn him out!" repeated others.

But he, holding on to the platform, did not move, and let the storm pass by. It might have assumed formidable proportions if Michel Ardan had not appeased it by a gesture. He was too chivalrous to abandon his contradictor in such an extremity.

"You wish to add a few words?" he asked, in the most gracious tone.

"Yes, a hundred! a thousand!" answered the unknown, carried away, "or rather no, one only! To persevere in your enterprise you must be--"

"Imprudent! How can you call me that when I have asked for a cylindro-conical bullet from my friend Barbicane
"But, unfortunate man! the fearful shock will smash you to pieces when you start."
"You have there put your finger upon the real and only difficulty; but I have too good an opinion of the industrial genius of the Americans to believe that they will not overcome that difficulty."
"But the heat developed by the speed of the projectile whilst crossing the beds of air?"
"Oh, its sides are thick, and I shall so soon pass the atmosphere."
"But provisions? water?"
"I have calculated that I could carry enough for one year, and I shall only be four days going."
"But air to breathe on the road?"
"I shall make some by chemical processes."
"But your fall upon the moon, supposing you ever get there?"
"It will be six times less rapid than a fall upon the earth, as attraction is six times less on the surface of the moon."
"But it still will be sufficient to smash you like glass."
"What will prevent me delaying my fall by means of rockets conveniently placed and lighted at the proper time?"
"But lastly, supposing that all difficulties be solved, all obstacles cleared away by uniting every chance in your favour, admitting that you reach the moon safe and well, how shall you come back?"
"I shall not come back."

Upon this answer, which was almost sublime by reason of its simplicity, the assembly remained silent. But its silence was more eloquent than its cries of enthusiasm would have been. The unknown profited by it to protest one last time.

"You will infallibly kill yourself," he cried, "and your death, which will be only a madman's death, will not even be useful to science."
"Go on, most generous of men, for you prophesy in the most agreeable manner."
"Ah, it is too much!" exclaimed Michel Ardan's adversary, "and I do not know why I go on with so childish a discussion. Go on with your mad enterprise as you like. It is not your fault."
"Fire away."
"No, another must bear the responsibility of your acts."
"Who is that, pray?" asked Michel Ardan in an imperious voice.
"The fool who has organised this attempt, as impossible as it is ridiculous."

The attack was direct. Barbicane since the intervention of the unknown had made violent efforts to contain himself and "consume his own smoke," but upon seeing himself so outrageously designated he rose directly and was going to walk towards his adversary, who dared him to his face, when he felt himself suddenly separated from him.

The platform was lifted up all at once by a hundred vigorous arms, and the president of the Gun Club was forced to share the honours of triumph with Michel Ardan. The platform was heavy, but the bearers came in continuous relays, disputing, struggling, even fighting for the privilege of lending the support of their shoulders to this manifestation.

However, the unknown did not take advantage of the tumult to leave the place. He kept in the front row, his arms folded, still staring at President Barbicane.

The president did not lose sight of him either, and the eyes of these two men met like flaming swords.

The cries of the immense crowds kept at their maximum of intensity during this triumphant march. Michel Ardan allowed himself to be carried with evident pleasure.

Sometimes the platform pitched and tossed like a ship beaten by the waves. But the two heroes of the meeting were good sailors, and their vessel safely arrived in the port of Tampa Town.

Michel Ardan happily succeeded in escaping from his vigorous admirers. He fled to the Franklin Hotel, quickly reached his room, and glided rapidly into bed whilst an army of 100,000 men watched under his windows.

In the meanwhile a short, grave, and decisive scene had taken place between the mysterious personage and the president of the Gun Club.

Barbicane, liberated at last, went straight to his adversary.
"Come!" said he in a curt voice.

The stranger followed him on to the quay, and they were soon both alone at the entrance to a wharf opening on to Jones' Fall.

There these enemies, still unknown to one another, looked at each other.
"Who are you?" asked Barbicane.
"Captain Nicholl."
"I thought so. Until now fate has never made you cross my path."
"I crossed it of my own accord."
"You have insulted me."
"Publicly."
"And you shall give me satisfaction for that insult."
"Now, this minute."
"No. I wish everything between us to be kept secret. There is a wood situated three miles from Tampa--Skersnaw Wood. Do you know it?"
"Yes."
"Will you enter it to-morrow morning at five o'clock by one side?"
"Yes, if you will enter it by the other at the same time."
"And you will not forget your rifle?" said Barbicane.
"Not more than you will forget yours," answered Captain Nicholl.
After these words had been coldly pronounced the president of the Gun Club and the captain separated. Barbicane returned to his dwelling; but, instead of taking some hours' rest, he passed the night in seeking means to avoid the shock of the projectile, and to solve the difficult problem given by Michel Ardan at the meeting.

CHAPTER XXI.
HOW A FRENCHMAN SETTLES AN AFFAIR.

Whilst the duel was being discussed between the president and the captain—a terrible and savage duel in which each adversary became a man-hunter—Michel Ardan was resting after the fatigues of his triumph. Resting is evidently not the right expression, for American beds rival in hardness tables of marble or granite.

Ardan slept badly, turning over and over between the _serviettes_ that served him for sheets, and he was thinking of installing a more comfortable bed in his projectile when a violent noise startled him from his slumbers. Thundering blows shook his door. They seemed to be administered with an iron instrument. Shouts were heard in this racket, rather too early to be agreeable.

"Open!" some one cried. "Open, for Heaven's sake!"
There was no reason why Ardan should acquiesce in so peremptory a demand. Still he rose and opened his door at the moment it was giving way under the efforts of the obstinate visitor.

The secretary of the Gun Club bounded into the room. A bomb would not have entered with less ceremony.
"Yesterday evening," exclaimed J.T. Maston _ex abrupto_, "our president was publicly insulted during the meeting! He has challenged his adversary, who is no other than Captain Nicholl! They are going to fight this morning in Skersnaw Wood! I learnt it all from Barbicane himself! If he is killed our project will be at an end! This duel must be prevented! Now one man only can have enough empire over Barbicane to stop it, and that man is Michel Ardan."

Whilst J.T. Maston was speaking thus, Michel Ardan, giving up interrupting him, jumped into his vast trousers, and in less than two minutes after the two friends were rushing as fast as they could go towards the suburbs of Tampa Town.

It was during this rapid course that Maston told Ardan the state of the case. He told him the real causes of the enmity between Barbicane and Nicholl, how that enmity was of old date, why until then, thanks to mutual friends, the president and the captain had never met; he added that it was solely a rivalry between iron-plate and bullet; and, lastly, that the scene of the meeting had only been an occasion long sought by Nicholl to satisfy an old grudge.

There is nothing more terrible than these private duels in America, during which the two adversaries seek each other across thickets, and hunt each other like wild animals. It is then that each must envy those marvellous qualities so natural to the Indians of the prairies, their rapid intelligence, their ingenious ruse, their scent of the enemy. An error, a hesitation, a wrong step, may cause death. In these meetings the Yankees are often accompanied by their dogs, and both sportsmen and game go on for hours.

"What demons you are!" exclaimed Michel Ardan, when his companion had depicted the scene with much energy.
"We are what we are," answered J.T. Maston modestly; "but let us make haste."

In vain did Michel Ardan and he rush across the plain still wet with dew, jump the creeks, take the shortest cuts; they could not reach Skersnaw Wood before half-past five. Barbicane must have entered it half-an-hour before.
There an old bushman was tying up faggots his axe had cut.
Maston ran to him crying—
"Have you seen a man enter the wood armed with a rifle? Barbicane, the president—my best friend?"
The worthy secretary of the Gun Club thought naïvely that all the world must know his president. But the bushman did not seem to understand.

"A sportsman," then said Ardan.
"A sportsman? Yes," answered the bushman.
"Is it long since?"
"About an hour ago."
"Too late!" exclaimed Maston.
"Have you heard any firing?" asked Michel Ardan.
"No."
"Not one shot?"
"Not one. That sportsman does not seem to bag much game!"
"What shall we do?" said Maston.
"Enter the wood at the risk of catching a bullet not meant for us."
"Ah!" exclaimed Maston, with an unmistakable accent, "I would rather have ten bullets in my head than one in Barbicane's head."
"Go ahead, then!" said Ardan, pressing his companion's hand.

A few seconds after the two companions disappeared in a copse. It was a dense thicket made of huge cypresses, sycamores, tulip-trees, olives, tamarinds, oaks, and magnolias. The different trees intermingled their branches in inextricable confusion, and quite hid the view. Michel Ardan and Maston walked on side by side phasing silently through the tall grass, making a road for themselves through the vigorous creepers, looking in all the bushes or branches lost in the sombre shade of the foliage, and expecting to hear a shot at every step. As to the traces that Barbicane must have left of his passage through the wood, it was impossible for them to see them, and they marched blindly on in the hardly-formed paths in which an Indian would have followed his adversary step by step.

After a vain search of about an hour's length the two companions stopped. Their anxiety was redoubled.
"It must be all over," said Maston in despair. "A man like Barbicane would not lay traps or condescend to any manœuvre! He is too frank, too courageous. He has gone straight into danger, and doubtless far enough from the bushman for the wind to carry off the noise of the shot!"
"But we should have heard it!" answered Michel Ardan.
"But what if we came too late?" exclaimed J.T. Maston in an accent of despair.

Michel Ardan did not find any answer to make. Maston and he resumed their interrupted walk. From time to time they shouted; they called either Barbicane or Nicholl; but neither of the two adversaries answered. Joyful flocks of birds, roused by the noise, disappeared amongst the branches, and some frightened deer fled through the copses.

They continued their search another hour. The greater part of the wood had been explored. Nothing revealed the presence of the combatants. They began to doubt the affirmation of the bushman, and Ardan was going to renounce the pursuit as useless, when all at once Maston stopped.
"Hush!" said he. "There is some one yonder!"
"Some one?" answered Michel Ardan.
"Yes! a man! He does not seem to move. His rifle is not in his hand. What can he be doing?"
"But do you recognise him?" asked Michel Ardan.
"Yes, yes! he is turning round," answered Maston.
"Who is it?"
"Captain Nicholl!"
"Nicholl!" cried Michel Ardan, whose heart almost stopped beating.
"Nicholl disarmed! Then he had nothing more to fear from his adversary?"
"Let us go to him," said Michel Ardan; "we shall know how it is."

But his companion and he had not gone fifty steps when they stopped to examine the captain more attentively. They imagined they should find a bloodthirsty and revengeful man. Upon seeing him they remained stupefied.

A net with fine meshes was hung between two gigantic tulip-trees, and in it a small bird, with its wings entangled, was struggling with plaintive cries. The bird-catcher who had hung the net was not a human being but a venomous spider, peculiar to the country, as large as a pigeon's egg, and furnished with enormous legs. The hideous insect, as he was rushing on his prey, was forced to turn back and take refuge in the high branches of a tulip-tree, for a formidable enemy threatened him in his turn.

In fact, Captain Nicholl, with his gun on the ground, forgetting the dangers of his situation, was occupied in delivering as delicately as possible the victim taken in the meshes of the monstrous spider. When he had finished he let the little bird fly away; it fluttered its wings joyfully and disappeared.

Nicholl, touched, was watching it fly through the copse when he heard these words uttered in a voice full of
emotion:--

"You are a brave man, you are!"

He turned. Michel Ardan was in front of him, repeating in every tone--

"And a kind one!"

"Michel Ardan!" exclaimed the captain, "what have you come here for, sir?"

"To shake hands with you, Nicholl, and prevent you killing Barbicane or being killed by him."

"Barbicane!" cried the captain, "I have been looking for him these two hours without finding him! Where is he hiding himself?"

"Nicholl!" said Michel Ardan, "this is not polite! You must always respect your adversary; don't be uneasy; if Barbicane is alive we shall find him, and so much the more easily that if he has not amused himself with protecting birds he must be looking for you too. But when you have found him--and Michel Ardan tells you this--there will be no duel between you."

"Between President Barbicane and me," answered Nicholl gravely, "there is such rivalry that the death of one of us--"

"Come, come!" resumed Michel Ardan, "brave men like you may detest one another, but they respect one another too. You will not fight."

"I shall fight, sir."

"No you won't."

"Captain," then said J.T. Maston heartily, "I am the president's friend, his _alter ego_; if you must absolutely kill some one kill me; that will be exactly the same thing."

"Sir," said Nicholl, convulsively seizing his rifle, "this joking--"

"Friend Maston is not joking," answered Michel Ardan, "and I understand his wanting to be killed for the man he loves; but neither he nor Barbicane will fall under Captain Nicholl's bullets, for I have so tempting a proposition to make to the two rivals that they will hasten to accept it."

"But what is it, pray?" asked Nicholl, with visible incredulity.

"Patience," answered Ardan; "I can only communicate it in Barbicane's presence."

"Let us look for him, then," cried the captain.

The three men immediately set out; the captain, having discharged his rifle, threw it on his shoulder and walked on in silence.

During another half-hour the search was in vain. Maston was seized with a sinister presentiment. He observed Captain Nicholl closely, asking himself if, once the captain's vengeance satisfied, the unfortunate Barbicane had not been left lying in some bloody thicket. Michel Ardan seemed to have the same thought, and they were both looking questioningly at Captain Nicholl when Maston suddenly stopped.

The motionless bust of a man leaning against a gigantic catalpa appeared twenty feet off half hidden in the grass.

"It is he!" said Maston.

Barbicane did not move. Ardan stared at the captain, but he did not wince. Ardan rushed forward, crying--

"Barbicane! Barbicane!"

No answer. Ardan was about to seize his arm; he stopped short, uttering a cry of surprise.

Barbicane, with a pencil in his hand, was tracing geometrical figures upon a memorandum-book, whilst his unloaded gun lay on the ground.

Absorbed in his work, the _savant_, forgetting in his turn his duel and his vengeance, had neither seen nor heard anything.

But when Michel Ardan placed his hand on that of the president, he got up and looked at him with astonishment.

"Ah!" cried he at last; "you here! I have found it, my friend, I have found it!"

"What?"

"The way to do it."

"The way to do what?"

"To counteract the effect of the shock at the departure of the projectile."

"Really?" said Michel, looking at the captain out of the corner of his eye.

"Yes, water! simply water, which will act as a spring. Ah, Maston!" cried Barbicane, "you too!"

"Himself," answered Michel Ardan; "and allow me to introduce at the same time the worthy Captain Nicholl."

"Nicholl!" cried Barbicane, up in a moment. "Excuse me, captain," said he; "I had forgotten. I am ready."

Michel Ardan interfered before the two enemies had time to recriminate.

"Faith," said he, "it is fortunate that brave fellows like you did not meet sooner. We should now have to mourn for one or other of you; but, thanks to God, who has prevented it, there is nothing more to fear. When one forgets his hatred to plunge into mechanical problems and the other to play tricks on spiders, their hatred cannot be dangerous
And Michel Ardan related the captain's story to the president.

"I ask you now," said he as he concluded, "if two good beings like you were made to break each other's heads with gunshots?"

There was in this rather ridiculous situation something so unexpected, that Barbicane and Nicholl did not know how to look at one another. Michel Ardan felt this, and resolved to try for a reconciliation.

"My brave friends," said he, smiling in his most fascinating manner, "it has all been a mistake between you, nothing more. Well, to prove that all is ended between you, and as you are men who risk your lives, frankly accept the proposition that I am going to make to you."

"Speak," said Nicholl.

"Friend Barbicane believes that his projectile will go straight to the moon."

"Yes, certainly," replied the president.

"And friend Nicholl is persuaded that it will fall back on the earth."

"I am certain of it," cried the captain.

"Good," resumed Michel Ardan. "I do not pretend to make you agree; all I say to you is, 'Come with me, and see if we shall stop on the road.'"

"What?" said J.T. Maston, stupefied.

The two rivals at this sudden proposition had raised their eyes and looked at each other attentively. Barbicane waited for Captain Nicholl's answer; Nicholl awaited the president's reply.

"Well," said Michel in his most engaging tone, "as there is now no shock to fear----"

"Accepted!" cried Barbicane.

But although this word was uttered very quickly, Nicholl had finished it at the same time.

"Hurrah! bravo!" cried Michel Ardan, holding out his hands to the two adversaries. "And now that the affair is arranged, my friends, allow me to treat you French fashion. _Allons déjeuner_."

CHAPTER XXII.

THE NEW CITIZEN OF THE UNITED STATES.

That day all America heard about the duel and its singular termination. The part played by the chivalrous European, his unexpected proposition which solved the difficulty, the simultaneous acceptance of the two rivals, that conquest of the lunar continent to which France and the United States were going to march in concert—everything tended to increase Michel Ardan's popularity. It is well known how enthusiastic the Yankees will get about an individual. In a country where grave magistrates harness themselves to a dancer's carriage and draw it in triumph, it may be judged how the bold Frenchman was treated. If they did not take out his horses it was probably because he had none, but all other marks of enthusiasm were showered upon him. There was no citizen who did not join him heart and mind:—_Ex pluribus unam_, according to the motto of the United States.

From that day Michel Ardan had not a minute's rest. Deputations from all parts of the Union worried him incessantly. He was forced to receive them whether he would or no. The hands he shook could not be counted; he was soon completely worn out, his voice became hoarse in consequence of his innumerable speeches, and only escaped from his lips in unintelligible sounds, and he nearly caught a gastro-enterite after the toasts he proposed to the Union. This success would have intoxicated another man from the first, but he managed to stay in a _spirituelle_ and charming demi-inebriety.

Amongst the deputations of every sort that assailed him, that of the "Lunatics" did not forget what they owed to the future conqueror of the moon. One day some of these poor creatures, numerous enough in America, went to him and asked to return with him to their native country. Some of them pretended to speak "Selenite," and wished to teach it to Michel Ardan, who willingly lent himself to their innocent mania, and promised to take their messages to their friends in the moon.

"Singular folly!" said he to Barbicane, after having dismissed them; "and a folly that often takes possession of men of great intelligence. One of our most illustrious _savants_, Arago, told me that many very wise and reserved people in their conceptions became much excited and gave way to incredible singularities every time the moon occupied them. Do you believe in the influence of the moon upon maladies?"

"Very little," answered the president of the Gun Club.

"I do not either, and yet history has preserved some facts that, to say the least, are astonishing. Thus in 1693, during an epidemic, people perished in the greatest numbers on the 21st of January, during an eclipse. The celebrated Bacon fainted during the moon eclipses, and only came to himself after its entire emersion. King Charles VI. relapsed six times into madness during the year 1399, either at the new or full moon. Physicians have ranked
epilepsy amongst the maladies that follow the phases of the moon. Nervous maladies have often appeared to be influenced by it. Mead speaks of a child who had convulsions when the moon was in opposition. Gall remarked that insane persons underwent an accession of their disorder twice in every month, at the epochs of the new and full moon. Lastly, a thousand observations of this sort made upon malignant fevers and somnambulism tend to prove that the Queen of Night has a mysterious influence upon terrestrial maladies."

"But how? why?" asked Barbicane.

"Why?" answered Ardan. "Why, the only thing I can tell you is what Arago repeated nineteen centuries after Plutarch. Perhaps it is because it is not true."

In the height of his triumph Michel Ardan could not escape any of the annoyances incidental to a celebrated man. Managers of entertainments wished to exhibit him. Barnum offered him a million dollars to show him as a curious animal in the different towns of the United States.

Still, though he refused to satisfy public curiosity in that way, his portraits went all over the world, and occupied the place of honour in albums; proofs were made of all sizes from life size to medallions. Every one could possess the hero in all positions--head, bust, standing, full-face, profile, three-quarters, back. Fifteen hundred thousand copies were taken, and it would have been a fine occasion to get money by relics, but he did not profit by it. If he had sold his hairs for a dollar apiece there would have remained enough to make his fortune!

To tell the truth, this popularity did not displease him. On the contrary, he put himself at the disposition of the public, and corresponded with the entire universe. They repeated his witticisms, especially those he did not perpetrate.

Not only had he all the men for him, but the women too. What an infinite number of good marriages he might have made if he had taken a fancy to "settle!" Old maids especially dreamt before his portraits day and night.

It is certain that he would have found female companions by hundreds, even if he had imposed the condition of following him up into the air. Women are intrepid when they are not afraid of everything. But he had no intention of transplanting a race of Franco-Americans upon the lunar continent, so he refused.

"I do not mean," said he, "to play the part of Adam with a daughter of Eve up there. I might meet with serpents!"

As soon as he could withdraw from the joys of triumph, too often repeated, he went with his friends to pay a visit to the Columbiad. He owed it that. Besides, he was getting very learned in ballistics since he had lived with Barbicane, J.T. Maston, and _tutti quanti_. His greatest pleasure consisted in repeating to these brave artillerymen that they were only amiable and learned murderers. He was always joking about it. The day he visited the Columbiad he greatly admired it, and went down to the bore of the gigantic mortar that was soon to hurl him towards the Queen of Night.

"At least," said he, "that cannon will not hurt anybody, which is already very astonishing on the part of a cannon. But as to your engines that destroy, burn, smash, and kill, don't talk to me about them!"

It is necessary to report here a proposition made by J.T. Maston. When the secretary of the Gun Club heard Barbicane and Nicholl accept Michel Ardan's proposition he resolved to join them, and make a party of four. One day he asked to go. Barbicane, grieved at having to refuse, made him understand that the projectile could not carry so many passengers. J.T. Maston, in despair, went to Michel Ardan, who advised him to be resigned, adding one or two arguments _ad hominem._

"You see, old fellow," he said to him, "you must not be offended, but really, between ourselves, you are too incomplete to present yourself in the moon."

"Incomplete!" cried the valiant cripple.

"Yes, my brave friend. Suppose we should meet with inhabitants up there. Do you want to give them a sorry idea of what goes on here, teach them what war is, show them that we employ the best part of our time in devouring each other and breaking arms and limbs, and that upon a globe that could feed a hundred thousand millions of inhabitants, and where there are hardly twelve hundred millions? Why, my worthy friend, you would have us shown to the door!"

"But if you arrive smashed to pieces," replied J.T. Maston, "you will be as incomplete as I."

"Certainly," answered Michel Ardan, "but we shall not arrive in pieces."

In fact, a preparatory experiment, tried on the 18th of October, had been attended with the best results, and given rise to the most legitimate hopes. Barbicane, wishing to know the effect of the shock at the moment of the projectile's departure, sent for a 32-inch mortar from Pensacola Arsenal. It was installed upon the quay of Hillisboro Harbour, in order that the bomb might fall into the sea, and the shock of its fall be deadened. He only wished to experiment upon the shock of its departure, not that of its arrival.

A hollow projectile was prepared with the greatest care for this curious experiment. A thick wadding put upon a network of springs made of the best steel lined it inside. It was quite a wadded nest.

"What a pity one can't go in it!" said J.T. Maston, regretting that his size did not allow him to make the venture.
Into this charming bomb, which was closed by means of a lid, screwed down, they put first a large cat, then a squirrel belonging to the perpetual secretary of the Gun Club, which J.T. Maston was very fond of. But they wished to know how this little animal, not likely to be giddy, would support this experimental journey.

The mortar was loaded with 160 lbs. of powder and the bomb. It was then fired.

The projectile immediately rose with rapidity, described a majestic parabola, attained a height of about a thousand feet, and then with a graceful curve fell into the waves.

Without losing an instant, a vessel was sent to the spot where it fell; skilful divers sank under water and fastened cable-chains to the handles of the bomb, which was rapidly hoisted on board. Five minutes had not elapsed between the time the animals were shut up and the unscrewing of their prison lid.

Ardan, Barbicane, Maston, and Nicholl were upon the vessel, and they assisted at the operation with a sentiment of interest easy to understand. The bomb was hardly opened before the cat sprang out, rather bruised but quite lively, and not looking as if it had just returned from an aërial expedition. But nothing, was seen of the squirrel. The truth was then discovered. The cat had eaten its travelling companion.

J.T. Maston was very grieved at the loss of his poor squirrel, and proposed to inscribe it in the martyrology of science.

However that may be, after this experiment all hesitation and fear were at an end; besides, Barbicane's plans were destined further to perfect the projectile, and destroy almost entirely the effect of the shock. There was nothing more to do but to start.

Two days later Michel Ardan received a message from the President of the Union, an honour which he much appreciated.

After the example of his chivalrous countryman, La Fayette, the government had bestowed upon him the title of "Citizen of the United States of America."

CHAPTER XXIII.
THE PROJECTILE COMPARTMENT.

After the celebrated Columbiad was completed public interest immediately centred upon the projectile, the new vehicle destined to transport the three bold adventurers across space. No one had forgotten that in his despatch of September 30th Michel Ardan asked for a modification of the plans laid out by the members of the committee.

President Barbicane then thought with reason that the form of the projectile was of slight importance, for, after crossing the atmosphere in a few seconds, it would meet with vacuum. The committee had therefore chosen the round form, so that the ball might turn over and over and do as it liked. But as soon as it had to be made into a vehicle, that was another thing. Michel Ardan did not want to travel squirrel-fashion; he wished to go up head up and feet down with as much dignity as in the car of a balloon, quicker of course, but without unseemly gambols.

New plans were, therefore, sent to the firm of Breadwill and Co., of Albany, with the recommendation to execute them without delay. The projectile, thus modified, was cast on the 2nd of November, and sent immediately to Stony Hill by the Eastern Railway.

On the 10th it arrived without accident at its place of destination. Michel Ardan, Barbicane, and Nicholl awaited with the most lively impatience this "projectile compartment" in which they were to take their passage for the discovery of a new world.

It must be acknowledged that it was a magnificent piece of metal, a metallurgic production that did the greatest honour to the industrial genius of the Americans. It was the first time that aluminium had been obtained in so large a mass, which result might be justly regarded as prodigious. This precious projectile sparkled in the rays of the sun. Seeing it in its imposing shape with its conical top, it might easily have been taken for one of those extinguisher-shaped towers that architects of the Middle Ages put at the angles of their castles. It only wanted loopholes and a weathercock.

"I expect," exclaimed Michel Ardan, "to see a man armed _cap-à-pie_ come out of it. We shall be like feudal lords in there; with a little artillery we could hold our own against a whole army of Selenites--that is, if there are any in the moon!"

"Then the vehicle pleases you?" asked Barbicane.

"Yes, yes! certainly," answered Michel Ardan, who was examining it as an artist. "I only regret that its form is not a little more slender, its cone more graceful; it ought to be terminated by a metal group, some Gothic ornament, a salamander escaping from it with outspread wings and open beak."

"What would be the use?" said Barbicane, whose positive mind was little sensitive to the beauties of art.

"Ah, friend Barbicane, I am afraid you will never understand the use, or you would not ask!"

"Well, tell me, at all events, my brave companion."
"Well, my friend, I think we ought always to put a little art in all we do. Do you know an Indian play called _The Child's Chariot_?"

"Not even by name," answered Barbicane.

"I am not surprised at that," continued Michel Ardan. "Learn, then, that in that play there is a robber who, when in the act of piercing the wall of a house, stops to consider whether he shall make his hole in the shape of a lyre, a flower, or a bird. Well, tell me, friend Barbicane, if at that epoch you had been his judge would you have condemned that robber?"

"Without hesitation," answered the president of the Gun Club, "and as a burglar too."

"Well, I should have acquitted him, friend Barbicane. That is why you could never understand me."

"I will not even try, my valiant artist."

"But, at least," continued Michel Ardan, "as the exterior of our projectile compartment leaves much to be desired, I shall be allowed to furnish the inside as I choose, and with all luxury suitable to ambassadors from the earth."

"About that, my brave Michel," answered Barbicane, "you can do entirely as you please."

But before passing to the agreeable the president of the Gun Club had thought of the useful, and the means he had invented for lessening the effects of the shock were applied with perfect intelligence.

Barbicane had said to himself, not unreasonably, that no spring would be sufficiently powerful to deaden the shock, and during his famous promenade in Skersnaw Wood he had ended by solving this great difficulty in an ingenious fashion. He depended upon water to render him this signal service. This is how:--

The projectile was to be filled to the depth of three feet with water destined to support a water-tight wooden disc, which easily worked within the walls of the projectile. It was upon this raft that the travellers were to take their place. As to the liquid mass, it was divided by horizontal partitions which the departing shock would successively break; then each sheet of water, from the lowest to the highest, escaping by valves in the upper part of the projectile, thus making a spring, and the disc, itself furnished with extremely powerful buffers, could not strike the bottom until it had successively broken the different partitions. The travellers would doubtless feel a violent recoil after the complete escape of the liquid mass, but the first shock would be almost entirely deadened by so powerful a spring.

It is true that three feet on a surface of 541 square feet would weigh nearly 11,500 lbs; but the escape of gas accumulated in the Columbiad would suffice, Barbicane thought to conquer that increase of weight; besides, the shock would send out all that water in less than a second, and the projectile would soon regain its normal weight.

This is what the president of the Gun Club had imagined, and how he thought he had solved the great question of the recoil. This work, intelligently comprehended by the engineers of the Breadwill firm, was marvellously executed; the effect once produced and the water gone, the travellers could easily get rid of the broken partitions and take away the mobile disc that bore them at the moment of departure.

As to the upper sides of the projectile, they were lined with a thick wadding of leather, put upon the best steel springs as supple as watch-springs. The escape-pipes hidden under this wadding were not even seen.

All imaginable precautions for deadening the first shock having been taken, Michel Ardan said they must be made of "very bad stuff" to be crushed.

The projectile outside was nine feet wide and twelve feet high. In order not to pass the weight assigned the sides had been made a little less thick and the bottom thicker, as it would have to support all the violence of the gases developed by the deflagration of the pyroxyle. Bombs and cylindro-conical howitzers are always made with thicker bottoms.

The entrance to this tower of metal was a narrow opening in the wall of the cone, like the "man-hole" of steam boilers. It closed hermetically by means of an aluminium plate fastened inside by powerful screw pressure. The travellers could therefore leave their mobile prison at will as soon as they had reached the Queen of Night.

But going was not everything; it was necessary to see on the road. Nothing was easier. In fact, under the wadding were four thick lenticular footlights, two let into the circular wall of the projectile, the third in its lower part, and the fourth in its cone. The travellers could, therefore, observe during their journey the earth they were leaving, the moon they were approaching, and the constellated spaces of the sky. These skylights were protected against the shocks of departure by plates let into solid grooves, which it was easy to move by unscrewing them. By that means the air contained in the projectile could not escape, and it was possible to make observations.

All these mechanical appliances, admirably set, worked with the greatest ease, and the engineers had not shown themselves less intelligent in the arrangement of the projectile compartment.

Lockers solidly fastened were destined to contain the water and provisions necessary for the three travellers; they could even procure themselves fire and light by means of gas stored up in a special case under a pressure of several atmospheres. All they had to do was to turn a tap, and the gas would light and warm this comfortable vehicle for six days. It will be seen that none of the things essential to life, or even to comfort, were wanting. More, thanks
to the instincts of Michel Ardan, the agreeable was joined to the useful under the form of objects of art; he would have made a veritable artist's studio of his projectile if room had not been wanting. It would be mistaken to suppose that three persons would be restricted for space in that metal tower. It had a surface of 54 square feet, and was nearly 10 feet high, and allowed its occupiers a certain liberty of movement. They would not have been so much at their ease in the most comfortable railway compartment of the United States.

The question of provisions and lighting having been solved, there remained the question of air. It was evident that the air confined in the projectile would not be sufficient for the travellers' respiration for four days; each man, in fact, consumes in one hour all the oxygen contained in 100 litres of air. Barbicane, his two companions, and two dogs that he meant to take, would consume every twenty-four hours 2,400 litres of oxygen, or a weight equal to 7 lbs. The air in the projectile must, therefore, be renewed. How? By a very simple method, that of Messrs. Reiset and Regnault, indicated by Michel Ardan during the discussion of the meeting.

It is known that the air is composed principally of twenty-one parts of oxygen and seventy-nine parts of azote. Now what happens in the act of respiration? A very simple phenomenon: Man absorbs the oxygen of the air, eminently adapted for sustaining life, and throws out the azote intact. The air breathed out has lost nearly five per cent, of its oxygen, and then contains a nearly equal volume of carbonic acid, the definitive product of the combustion of the elements of the blood by the oxygen breathed in it. It happens, therefore, that in a confined space and after a certain time all the oxygen of the air is replaced by carbonic acid, an essentially deleterious gas.

The question was then reduced to this, the azote being conserved intact—1. To remake the oxygen absorbed; 2. To destroy the carbonic acid breathed out. Nothing easier to do by means of chlorate of potash and caustic potash. The former is a salt which appears under the form of white crystals; when heated to a temperature of 400° it is transformed into chlorine of potassium, and the oxygen which it contains is given off freely. Now 18 lbs. of chlorate of potash give 7 lbs of oxygen—that is to say, the quantity necessary to the travellers for twenty-four hours.

As to caustic potash, it has a great affinity for carbonic acid mixed in air, and it is sufficient to shake it in order for it to seize upon the acid and form bicarbonate of potash. So much for the absorption of carbonic acid.

By combining these two methods they were certain of giving back to vitiated air all its life-giving qualities. The two chemists, Messrs. Reiset and Regnault, had made the experiment with success.

But it must be said the experiment had only been made _in anima vili_. Whatever its scientific accuracy might be, no one knew how man could bear it.

Such was the observation made at the meeting where this grave question was discussed. Michel Ardan meant to leave no doubt about the possibility of living by means of this artificial air, and he offered to make the trial before the departure.

But the honour of putting it to the proof was energetically claimed by J.T. Maston.

"As I am not going with you," said the brave artilleryman, "the least I can do will be to live in the projectile for a week."

It would have been ungracious to refuse him. His wish was complied with. A sufficient quantity of chlorate of potash and caustic potash was placed at his disposition, with provisions for a week; then having shaken hands with his friends, on the 12th of November at 6 a.m., after having expressly recommended them not to open his prison before the 20th at 6 p.m., he crept into the projectile, the iron plate of which was hermetically shut.

What happened during that week? It was impossible to ascertain. The thickness of the projectile's walls prevented any interior noise from reaching the outside.

On the 20th of November, at six o'clock precisely, the plate was removed; the friends of J.T. Maston were rather uneasy. But they were promptly reassured by hearing a joyful voice shouting a formidable hurrah!

The secretary of the Gun Club appeared on the summit of the cone in a triumphant attitude.

He had grown fat!

CHAPTER XXIV.

THE TELESCOPE OF THE ROCKY MOUNTAINS.

On the 20th of October of the preceding year, after the subscription list was closed, the president of the Gun Club had credited the Cambridge Observatory with the sums necessary for the construction of a vast optical instrument. This telescope was to be powerful enough to render visible on the surface of the moon an object being at least nine feet wide.

There is an important difference between a field-glass and a telescope, which it is well to recall here. A field-glass is composed of a tube which carries at its upper extremity a convex glass called an object-glass, and at its lower extremity a second glass called ocular, to which the eye of the observer is applied. The rays from the luminous object traverse the first glass, and by refraction form an image upside down at its focus. This image is looked at with
the ocular, which magnifies it. The tube of the field-glass is, therefore, closed at each extremity by the object and the ocular glasses.

The telescope, on the contrary, is open at its upper extremity. The rays from the object observed penetrate freely into it, and strike a concave metallic mirror—that is to say, they are focussed. From thence their reflected rays meet with a little mirror, which sends them back to the ocular in such a way as to magnify the image produced.

Thus in field-glasses refraction plays the principal part, and reflection does in the telescope. Hence the name of refractors given to the former, and reflectors given to the latter. All the difficulty in the execution of these optical instruments lies in the making of the object-glass, whether they be made of glass or metallic mirrors.

Still at the epoch when the Gun Club made its great experiment these instruments were singularly perfected and gave magnificent results. The time was far distant when Galileo observed the stars with his poor glass, which magnified seven times at the most. Since the 16th century optical instruments had widened and lengthened in considerable proportions, and they allowed the stellar spaces to be gauged to a depth unknown before. Amongst the refracting instruments at work at that period were the glass of the Poulkowa Observatory in Russia, the object-glass of which measured 15 inches in width, that of the French optician Lerebours, furnished with an object-glass equally large, and lastly that of the Cambridge Observatory, furnished with an object-glass 19 inches in diameter.

Amongst telescopes, two were known of remarkable power and gigantic dimensions. The first, constructed by Herschel, was 36 feet in length, and had an object-glass of 4 feet 6 inches; it magnified 6,000 times; the second, raised in Ireland, at Birrcastle, in Parsonstown Park, belonged to Lord Rosse; the length of its tube was 48 feet and the width of its mirror 6 feet; it magnified 6,400 times, and it had required an immense erection of masonry on which to place the apparatus necessary for working the instrument, which weighed 12-1/2 tons.

But it will be seen that notwithstanding these colossal dimensions the magnifying power obtained did not exceed 6,000 times in round numbers; now that power would only bring the moon within 39 miles, and would only allow objects 60 feet in diameter to be perceived unless these objects were very elongated.

Now in space they had to deal with a projectile 9 feet wide and 15 long, so the moon had to be brought within five miles at least, and for that a magnifying power of 48,000 times was necessary.

Such was the problem propounded to the Cambridge Observatory. They were not to be stopped by financial difficulties, so there only remained material difficulties.

First of all they had to choose between telescopes and field-glasses. The latter had some advantages. With equal object-glasses they have a greater magnifying power, because the luminous rays that traverse the glasses lose less by absorption than the reflection on the metallic mirror of telescopes; but the thickness that can be given to glass is limited, for too thick it does not allow the luminous rays to pass. Besides, the construction of these vast glasses is excessively difficult, and demands a considerable time, measured by years.

Therefore, although images are better given by glasses, an inappreciable advantage when the question is to observe the moon, the light of which is simply reflected they decided to employ the telescope, which is prompter in execution and is capable of a greater magnifying power; only as the luminous rays lose much of their intensity by traversing the atmosphere, the Gun Club resolved to set up the instrument on one of the highest mountains of the Union, which would diminish the depth of the aërial strata.

In telescopes it has been seen that the glass placed at the observer's eye produces the magnifying power, and the object-glass which bears this power the best is the one that has the largest diameter and the greatest focal distance. In order to magnify 48,000 times it must be much larger than those of Herschel and Lord Rosse. There lay the difficulty, for the casting of these mirrors is a very delicate operation.

Happily, some years before a _savant_ of the _Institut de France_, Léon Foucault, had just invented means by which the polishing of object-glasses became very prompt and easy by replacing the metallic mirror by taking a piece of glass the size required and plating it.

It was to be fixed according to the method invented by Herschel for telescopes. In the great instrument of the astronomer at Slough, the image of objects reflected by the mirror inclined at the bottom of the tube was formed at the other extremity where the eyeglass was placed. Thus the observer, instead of being placed at the lower end of the tube, was hoisted to the upper end, and there with his eyeglass he looked down into the enormous cylinder. This combination had the advantage of doing away with the little mirror destined to send back the image to the ocular glass, which thus only reflected once instead of twice; therefore there were fewer luminous rays extinguished, the image was less feeble, and more light was obtained, a precious advantage in the observation that was to be made.

This being resolved upon, the work was begun. According to the calculations of the Cambridge Observatory staff, the tube of the new reflector was to be 280 feet long and its mirror 16 feet in diameter. Although it was so colossal it was not comparable to the telescope 10,000 feet long which the astronomer Hooke proposed to construct some years ago. Nevertheless the setting up of such an apparatus presented great difficulties.

The question of its site was promptly settled. It must be upon a high mountain, and high mountains are not
numerous in the States.

In fact, the orographical system of this great country only contains two chains of average height, amongst which flows the magnificent Mississippi, which the Americans would call the "king of rivers" if they admitted any royalty whatever.

On the east rise the Apalachians, the very highest point of which, in New Hampshire, does not exceed the very moderate altitude of 5,600 feet.

On the west are, however, the Rocky Mountains, that immense chain which begins at the Straits of Magellan, follows the west coast of South America under the name of the Andes or Cordilleras, crosses the Isthmus of Panama, and runs up the whole of North America to the very shores of the Polar Sea.

These mountains are not very high, and the Alps or Himalayas would look down upon them with disdain. In fact, their highest summit is only 10,701 feet high, whilst Mont Blanc is 14,439, and the highest summit of the Himalayas is 26,776 feet above the level of the sea.

But as the Gun Club wished that its telescope, as well as the Columbiad, should be set up in the States of the Union, they were obliged to be content with the Rocky Mountains, and all the necessary material was sent to the summit of Long's Peak in the territory of Missouri.

Neither pen nor language could relate the difficulties of every kind that the American engineers had to overcome, and the prodigies of audacity and skill that they accomplished. Enormous stones, massive pieces of wrought-iron, heavy corner-clamps, and huge portions of cylinder had to be raised with an object-glass, weighing nearly 30,000 lbs., above the line of perpetual snow for more than 10,000 feet in height, after crossing desert prairies, impenetrable forests, fearful rapids far from all centres of population, and in the midst of savage regions in which every detail of life becomes an insoluble problem, and, nevertheless, American genius triumphed over all these obstacles. Less than a year after beginning the works in the last days of the month of September, the gigantic reflector rose in the air to a height of 280 feet. It was hung from an enormous iron scaffolding; an ingenious arrangement allowed it to be easily moved towards every point of the sky, and to follow the stars from one horizon to the other during their journey across space.

It had cost more than 400,000 dollars. The first time it was pointed at the moon the observers felt both curious and uneasy. What would they discover in the field of this telescope which magnified objects 48,000 times? Populations, flocks of lunar animals, towns, lakes, and oceans? No, nothing that science was not already acquainted with, and upon all points of her disc the volcanic nature of the moon could be determined with absolute precision.

But the telescope of the Rocky Mountains, before being used by the Gun Club, rendered immense services to astronomy. Thanks to its power of penetration, the depths of the sky were explored to their utmost limits, the apparent diameter of a great number of stars could be rigorously measured, and Mr. Clarke, of the Cambridge staff, resolved the Crab nebula in Taurus, which Lord Rosse's reflector had never been able to do.

CHAPTER XXV.
FINAL DETAILS.

It was the 22nd of November. The supreme departure was to take place ten days later. One operation still remained to bring it to a happy termination, a delicate and perilous operation exacting infinite precautions, and against the success of which Captain Nicholl had laid his third bet. It was, in fact, nothing less than the loading of the gun and the introduction into it of 400,000 lbs. of gun-cotton. Nicholl had thought, not without reason, perhaps, that the handling of so large a quantity of pyroxyle would cause grave catastrophes, and that in any case this eminently explosive mass would ignite of itself under the pressure of the projectile.

There were also grave dangers increased by the carelessness of the Americans, who, during the Federal war, used to load their cannon cigar in mouth. But Barbicane had set his heart on succeeding, and did not mean to founder in port; he therefore chose his best workmen, made them work under his superintendence, and by dint of prudence and precautions he managed to put all the chances of success on his side.

First he took care not to bring all his charge at once to the inclosure of Stony Hill. He had it brought little by little carefully packed in sealed cases. The 400,000 lbs. of pyroxyle had been divided into packets of 500 lbs., which made 800 large cartridges made carefully by the cleverest artisans of Pensacola. Each case contained ten, and they arrived one after the other by the railroad of Tampa Town; by that means there were never more than 500 lbs. of pyroxyle at once in the inclosure. As soon as it arrived each case was unloaded by workmen walking barefoot, and each cartridge transported to the orifice of the Columbiad, into which they lowered them by means of cranes worked by the men. Every steam-engine had been excluded, and the least fires extinguished for two miles round. Even in November it was necessary to preserve this gun-cotton from the ardour of the sun. So they worked at night by light produced in a vacuum by means of Rühmkorff's apparatus, which threw an artificial brightness into the depths of the
Columbiad. There the cartridges were arranged with the utmost regularity, fastened together by a wire destined to communicate the electric spark to them all simultaneously.

In fact, it was by means of electricity that fire was to be set to this mass of gun-cotton. All these single wires, surrounded by isolating material, were rolled into a single one at a narrow hole pierced at the height the projectile was to be placed; there they crossed the thick metal wall and came up to the surface by one of the vent-holes in the masonry made on purpose. Once arrived at the summit of Stony Hill, the wire supported on poles for a distance of two miles met a powerful pile of Bunsen passing through a non-conducting apparatus. It would, therefore, be enough to press with the finger the knob of the apparatus for the electric current to be at once established, and to set fire to the 400,000 lbs. of gun-cotton. It is hardly necessary to say that this was only to be done at the last moment.

On the 28th of November the 800 cartridges were placed at the bottom of the Columbiad. That part of the operation had succeeded. But what worry, anxiety, and struggles President Barbicane had to undergo! In vain had he forbidden entrance to Stony Hill; every day curious sightseers climbed over the palisading, and some, pushing imprudence to folly, came and smoked amongst the bales of gun-cotton. Barbicane put himself into daily rages. J.T. Maston seconded him to the best of his ability, chasing the intruders away and picking up the still-lighted cigar-ends which the Yankees threw about—a rude task, for more than 300,000 people pressed round the palisades. Michel Ardan had offered himself to escort the cases to the mouth of the gun, but having caught him with a cigar in his mouth whilst he drove out the intruders to whom he was giving this unfortunate example, the president of the Gun Club saw that he could not depend upon this intrepid smoker, and was obliged to have him specially watched.

At last, there being a Providence even for artillerymen, nothing blew up, and the loading was happily terminated. The third bet of Captain Nicholl was therefore much imperilled. There still remained the work of introducing the projectile into the Columbiad and placing it on the thick bed of gun-cotton.

But before beginning this operation the objects necessary for the journey were placed with order in the wagon-compartment. There were a good many of them, and if they had allowed Michel Ardan to do as he pleased he would soon have filled up all the space reserved for the travellers. No one can imagine all that the amiable Frenchman wished to carry to the moon—a heap of useless trifles. But Barbicane interfered, and refused all but the strictly necessary.

Several thermometers, barometers, and telescopes were placed in the instrument-case.

The travellers were desirous of examining the moon during their transit, and in order to facilitate the survey of this new world they took an excellent map by Boeer and Moedler, the _Mappa Selenographica_, published in four plates, which is justly looked upon as a masterpiece of patience and observation. It represented with scrupulous exactitude the slightest details of that portion of the moon turned towards the earth. Mountains, valleys, craters, peaks, watersheds, were depicted on it in their exact dimensions, faithful positions, and names, from Mounts Doerfel and Leibnitz, whose highest summits rise on the eastern side of the disc, to the _Mare Frigoris_, which extends into the North Polar regions.

It was, therefore, a precious document for the travellers, for they could study the country before setting foot upon it.

They took also three rifles and three fowling-pieces with powder and shot in great quantity.

"We do not know with whom we may have to deal," said Michel Ardan. "Both men and beasts may be displeased at our visit; we must, therefore, take our precautions."

The instruments of personal defence were accompanied by pickaxes, spades, saws, and other indispensable tools, without mentioning garments suitable to every temperature, from the cold of the polar regions to the heat of the torrid zone.

Michel Ardan would have liked to take a certain number of animals of different sorts, not male and female of every species, as he did not see the necessity of acclimatising serpents, tigers, alligators, or any other noxious beasts in the moon.

"No," said he to Barbicane, "but some useful animals, ox or cow, ass or horse, would look well in the landscape and be of great use."

"I agree with you, my dear Ardan," answered the president of the Gun Club; "but our projectile is not Noah's Ark. It differs both in dimensions and object, so let us remain in the bounds of possibility."

At last after long discussions it was agreed that the travellers should be content to take with them an excellent sporting dog belonging to Nicholl and a vigorous Newfoundland of prodigious strength. Several cases of the most useful seeds were included amongst the indispensable objects. If they had allowed him, Michel Ardan would have taken several sacks of earth to sow them in. Any way he took a dozen little trees, which were carefully enveloped in straw and placed in a corner of the projectile.

Then remained the important question of provisions, for they were obliged to provide against finding the moon absolutely barren. Barbicane managed so well that he took enough for a year. But it must be added, to prevent
astonishment, that these provisions consisted of meat and vegetable compressed to their smallest volume by hydraulic pressure, and included a great quantity of nutritive elements; there was not much variety, but it would not do to be too particular in such an expedition. There was also about fifty gallons of brandy and water for two months only, for, according to the latest observations of astronomers, no one doubted the presence of a large quantity of water in the moon. As to provisions, it would have been insane to believe that the inhabitants of the earth would not find food up there. Michel Ardan had no doubt about it. If he had he would not have gone.

"Besides," said he one day to his friends, "we shall not be completely abandoned by our friends on earth, and they will take care not to forget us."

"No, certainly," answered J.T. Maston.

"What do you mean?" asked Nicholl.

"Nothing more simple," answered Ardan. "Will not our Columbiad be still there? Well, then, every time that the moon is in favourable conditions of zenith, if not of perigee--that is to say, about once a year--could they not send us a projectile loaded with provisions which we should expect by a fixed date?"

"Hurrah!" cried J.T. Maston. "That is not at all a bad idea. Certainly we will not forget you."

"I depend upon you. Thus you see we shall have news regularly from the globe, and for our part we shall be very awkward if we do not find means to communicate with our good friends on earth."

These words inspired such confidence that Michel Ardan with his superb assurance would have carried the whole Gun Club with him. What he said seemed simple, elementary, and sure of success, and it would have been sordid attachment to this earth to hesitate to follow the three travellers upon their lunar expedition.

When the different objects were placed in the projectile the water was introduced between the partitions and the gas for lighting purposes laid in. Barbicane took enough chlorate of potash and caustic potash for two months, as he feared unforeseen delay. An extremely ingenious machine working automatically put the elements for good air in motion. The projectile, therefore, was ready, and the only thing left to do was to lower it into the gun, an operation full of perils and difficulty.

The enormous projectile was taken to the summit of Stony Hill. There enormous cranes seized it and held it suspended over the metal well.

This was an anxious moment. If the chains were to break under the enormous weight the fall of such a mass would inevitably ignite the gun-cotton.

Happily nothing of the sort happened, and a few hours afterwards the projectile-compartment rested on its pyroxyle bed, a veritable fulminating pillow. The only effect of its pressure was to ram the charge of the gun more strongly.

"I have lost," said the captain, handing the sum of 3,000 dollars to President Barbicane.

Barbicane did not wish to receive this money from his travelling companion, but he was obliged to give way to Nicholl, who wished to fulfill all his engagements before leaving the earth.

"Then," said Michel Ardan, "there is but one thing I wish for you now, captain."

"What is that?" asked Nicholl.

"It is that you may lose your other two wagers. By that means we shall be sure not to be stopped on the road."

CHAPTER XXVI.

FIRE!

The 1st of December came, the fatal day, for if the projectile did not start that very evening at 10h. 46m. and 40s. p.m., more than eighteen years would elapse before the moon would present the same simultaneous conditions of zenith and perigee.

The weather was magnificent; notwithstanding the approach of winter the sun shone brightly and bathed in its radiance that earth which three of its inhabitants were about to leave for a new world.

How many people slept badly during the night that preceded the ardently-longed-for day! How many breasts were oppressed with the heavy burden of waiting! All hearts beat with anxiety except only the heart of Michel Ardan. This impassible person went and came in his usual business-like way, but nothing in him denoted any unusual preoccupation. His sleep had been peaceful--it was the sleep of Turenne upon a gun-carriage the night before the battle.

From early dawn an innumerable crowd covered the prairie, which extended as far as the eye could reach round Stony Hill. Every quarter of an hour the railroad of Tampa brought fresh sightseers. According to the _Tampa Town Observer_, five millions of spectators were that day upon Floridian soil.

The greater part of this crowd had been living in tents round the inclosure, and laid the foundations of a town which has since been called "Ardan's Town." The ground bristled with huts, cabins, and tents, and these ephemeral
habitations sheltered a population numerous enough to rival the largest cities of Europe.

Every nation upon earth was represented; every language was spoken at the same time. It was like the confusion of tongues at the Tower of Babel. There the different classes of American society mixed in absolute equality. Bankers, cultivators, sailors, agents, merchants, cotton-planters, and magistrates elbowed each other with primitive ease. The creoles of Louisiana fraternised with the farmers of Indiana; the gentlemen of Kentucky and Tennessee, the elegant and haughty Virginians, joked with the half-savage trappers of the Lakes and the butchers of Cincinnati. They appeared in broad-brimmed white beavers and Panamas, blue cotton trousers, from the Opelousa manufactories, draped in elegant blouses of écru cloth, in boots of brilliant colours, and extravagant shirt-frills; upon shirt-fronts, cuffs, cravats, on their ten fingers, even in their ears, an assortment of rings, pins, diamonds, chains, buckles, and trinkets, the cost of which equalled the bad taste. Wife, children, servants, in no less rich dress, accompanied, followed, preceded, and surrounded their husbands, fathers, and masters, who resembled the patriarchs amidst their innumerable families.

At meal-times it was a sight to see all these people devour the dishes peculiar to the Southern States, and eat, with an appetite menacing to the provisioning of Florida, the food that would be repugnant to a European stomach, such as fricasseed frogs, monkey-flesh, fish-chowder, underdone opossum, and raccoon steaks.

The liquors that accompanied this indigestible food were numerous. Shouts and vociferations to buy resounded through the bar-rooms or taverns, decorated with glasses, tankards, decanters, and bottles of marvellous shapes, mortars for pounding sugar, and bundles of straws.

"Mint-julep!" roars out one of the salesmen.
"Claret sangaree!" shouts another through his nose.
"Gin-sling!" shouts one.
"Cocktail! Brandy-smash!" cries another.
"Who'll buy real mint-julep in the latest style?" shouted these skilful salesmen, rapidly passing from one glass to another the sugar, lemon, green mint, crushed ice, water, cognac, and fresh pine-apple which compose this refreshing drink.

Generally these sounds, addressed to throats made thirsty by the spices they consumed, mingled into one deafening roar. But on this 1st of December these cries were rare. No one thought of eating and drinking, and at 4 p.m. there were many spectators in the crowd who had not taken their customary lunch! A much more significant fact, even the national passion for gaming was allayed by the general emotion. Thimbles, skittles, and cards were left in their wrappings, and testified that the great event of the day absorbed all attention.

Until nightfall a dull, noiseless agitation like that which precedes great catastrophes ran through the anxious crowd. An indescribable uneasiness oppressed all minds, and stopped the beating of all hearts. Every one wished it over.

However, about seven o'clock this heavy silence was suddenly broken. The moon rose above the horizon. Several millions of hurrahs saluted her apparition. She was punctual to the appointment. Shouts of welcome broke from all parts, whilst the blonde Phoebe shone peacefully in a clear sky, and caressed the enraptured crowd with her most affectionate rays.

At that moment the three intrepid travellers appeared. When they appeared the cries redoubled in intensity. Unanimously, instantaneously, the national song of the United States escaped from all the spectators, and "Yankee Doodle," sung by 5,000,000 of hearty throats, rose like a roaring tempest to the farthest limits of the atmosphere.

Then, after this irresistible outburst, the hymn was ended, the last harmonies died away by degrees, and a silent murmur floated over the profoundly-excited crowd.

In the meantime the Frenchman and the two Americans had stepped into the inclosure round which the crowd was pressing. They were accompanied by the members of the Gun Club, and deputations sent by the European observatories. Barbicane was coolly and calmly giving his last orders. Nicholl, with compressed lips and hands crossed behind his back, walked with a firm and measured step. Michel Ardan, always at his ease, clothed in a perfect travelling suit, with leather gaiters on his legs, pouch at his side, in vast garment of maroon velvet, a cigar in his mouth, distributed shakes of the hand with princely prodigality. He was full of inexhaustible gaiety, laughing, joking, playing pranks upon the worthy J.T. Maston, and was, in a word, "French," and, what is worse, "Parisian," till the last second.

Ten o'clock struck. The moment had come to take their places in the projectile; the necessary mechanism for the descent the door-plate to screw down, the removal of the cranes and scaffolding hung over the mouth of the Columbiad, took some time.

Barbicane had set his chronometer to the tenth of a second by that of the engineer Murchison, who was entrusted with setting fire to the powder by means of the electric spark; the travellers shut up in the projectile could thus watch the impassive needle which was going to mark the precise instant of their departure.
The moment for saying farewell had come. The scene was touching; in spite of his gaiety Michel Ardan felt touched. J.T. Maston had found under his dry eyelids an ancient tear that he had, doubtless, kept for the occasion. He shed it upon the forehead of his dear president.

"Suppose I go too?" said he. "There is still time!"

"Impossible, old fellow," answered Barbicane.

A few moments later the three travelling companions were installed in the projectile, and had screwed down the door-plate, and the mouth of the Columbiad, entirely liberated, rose freely towards the sky.

Nicholl, Barbicane, and Michel Ardan were definitively walled up in their metal vehicle.

Who could predict the universal emotion then at its paroxysm?

The moon was rising in a firmament of limpid purity, outshining on her passage the twinkling fire of the stars; she passed over the constellation of the Twins, and was now nearly halfway between the horizon and the zenith.

A frightful silence hung over all that scene. There was not a breath of wind on the earth! Not a sound of breathing from the crowd! Hearts dared not beat. Every eye was fixed on the gaping mouth of the Columbiad.

Murchison watched the needle of his chronometer. Hardly forty seconds had to elapse before the moment of departure struck, and each one lasted a century!

At the twentieth there was a universal shudder, and the thought occurred to all the crowd that the audacious travellers shut up in the vehicle were likewise counting these terrible seconds! Some isolated cries were heard.

"Thirty-five!--thirty-six!--thirty-seven!--thirty-eight!--thirty-nine! --forty! Fire!!!"

Murchison immediately pressed his finger upon the electric knob and hurled the electric spark into the depths of the Columbiad.

A fearful, unheard-of, superhuman report, of which nothing could give an idea, not even thunder or the eruption of volcanoes, was immediately produced. An immense spout of fire sprang up from the bowels of the earth as if from a crater. The soil heaved and very few persons caught a glimpse of the projectile victoriously cleaving the air amidst the flaming smoke.

CHAPTER XXVII.
CLOUDY WEATHER.

At the moment when the pyramid of flame rose to a prodigious height in the air it lighted up the whole of Florida, and for an incalculable moment day was substituted for night over a considerable extent of country. This immense column of fire was perceived for a hundred miles out at sea, from the Gulf and from the Atlantic, and more than one ship's captain noted the apparition of this gigantic meteor in his log-book.

The discharge of the Columbiad was accompanied by a veritable earthquake. Florida was shaken to its very depths. The gases of the powder, expanded by heat, forced back the atmospheric strata with tremendous violence, passing like a waterspout through the air.

Not one spectator remained on his legs; men, women, and children were thrown down like ears of wheat in a storm; there was a terrible tumult, and a large number of people were seriously injured. J.T. Maston, who had very imprudently kept to the fore, was thrown twenty yards backwards like a bullet over the heads of his fellow-citizens. Three hundred thousand people were temporarily deafened and as though thunderstruck.

The atmospheric current, after throwing over huts and cabins, uprooting trees within a radius of twenty miles, throwing the trains off the railway as far as Tampa, burst upon the town like an avalanche and destroyed a hundred houses, amongst others the church of St. Mary and the new edifice of the Exchange. Some of the vessels in the port were run against each other and sunk, and ten of them were stranded high and dry after breaking their chains like threads of cotton.

But the circle of these devastations extended farther still, and beyond the limits of the United States. The recoil, aided by the westerly winds, was felt on the Atlantic at more than 300 miles from the American shores. An unexpected tempest, which even Admiral Fitzroy could not have foreseen, broke upon the ships with unheard-of violence. Several vessels, seized by a sort of whirlwind before they had time to furl their sails, were sunk, amongst others the _Childe Harold_ of Liverpool, a regrettable catastrophe which was the object of lively recriminations.

Lastly--although the fact is not warranted except by the affirmation of a few natives--half-an-hour after the departure of the projectile the inhabitants of Sierra-Leone pretended that they heard a dull noise, the last displacement of the sonorous waves, which, after crossing the Atlantic, died away on the African coast.

But to return to Florida. The tumult once lessened, the wounded and deaf--in short, all the crowd--rose and shouted in a sort of frenzy, "Hurrah for Ardan! Hurrah for Barbicane! Hurrah for Nicholl!!" Several millions of men, nose in air, armed with telescopes and every species of field-glass, looked into space, forgetting contusions and feelings, in order to look at the projectile. But they sought in vain; it was not to be seen, and they resolved to await
the telegrams from Long's Peak. The director of the Cambridge Observatory, M. Belfast, was at his post in the Rocky Mountains, and it was to this skilful and persevering astronomer that the observations had been entrusted.

But an unforeseen phenomenon, against which nothing could be done, soon came to put public impatience to a rude test.

The weather, so fine before, suddenly changed; the sky became covered with clouds. It could not be otherwise after so great a displacement of the atmospheric strata and the dispersion of the enormous quantity of gases from the combustion of 200,000 lbs. of pyroxyle. All natural order had been disturbed. There is nothing astonishing in that, for in sea-fights it has been noticed that the state of the atmosphere has been suddenly changed by the artillery discharge.

The next day the sun rose upon an horizon covered with thick clouds, a heavy and an impenetrable curtain hung between earth and sky, and which unfortunately extended as far as the regions of the Rocky Mountains. It was a fatality. A concert of complaints rose from all parts of the globe. But Nature took no notice, and as men had chosen to disturb the atmosphere with their gun, they must submit to the consequences.

During this first day every one tried to pierce the thick veil of clouds, but no one was rewarded for the trouble; besides, they were all mistaken in supposing they could see it by looking up at the sky, for on account of the diurnal movement of the globe the projectile was then, of course, shooting past the line of the antipodes.

However that might be, when night again enveloped the earth—a dark, impenetrable night—it was impossible to see the moon above the horizon; it might have been thought that she was hiding on purpose from the bold beings who had shot at her. No observation was, therefore, possible, and the despatches from Long's Peak confirmed the disastrous intelligence.

However, if the experiment had succeeded, the travellers, who had started on the 1st of December, at 10h. 46m. 40s. p.m., were due at their destination on the 4th at midnight; so that as up to that time it would, after all, have been difficult to observe a body so small, people waited with all the patience they could muster.

On the 4th of December, from 8 p.m. till midnight, it would have been possible to follow the trace of the projectile, which would have appeared like a black speck on the shining disc of the moon. But the weather remained imperturbably cloudy, and exasperated the public, who swore at the moon for not showing herself. _Sic transit gloria mundi!_

J.T. Maston, in despair, set out for Long's Peak. He wished to make an observation himself. He did not doubt that his friends had arrived at the goal of their journey. No one had heard that the projectile had fallen upon any continent or island upon earth, and J.T. Maston did not admit for a moment that it could have fallen into any of the oceans with which the earth is three parts covered.

On the 5th the same weather. The large telescopes of the old world—those of Herschel, Rosse, and Foucault—were invariably fixed upon the Queen of Night, for the weather was magnificent in Europe, but the relative weakness of these instruments prevented any useful observation.

On the 6th the same weather reigned. Impatience devoured three parts of the globe. The most insane means were proposed for dissipating the clouds accumulated in the air.

On the 7th the sky seemed to clear a little. Hopes revived but did not last long, and in the evening thick clouds defended the starry vault against all eyes.

Things now became grave. In fact, on the 11th, at 9.11 a.m., the moon would enter her last quarter. After this delay she would decline every day, and even if the sky should clear the chances of observation would be considerably lessened—in fact, the moon would then show only a constantly-decreasing portion of her disc, and would end by becoming new—that is to say, she would rise and set with the sun, whose rays would make her quite invisible. They would, therefore, be obliged to wait till the 3rd of January, at 12.43 p.m., till she would be full again and ready for observation.

The newspapers published these reflections with a thousand commentaries, and did not fail to tell the public that it must arm itself with angelic patience.

On the 8th no change. On the 9th the sun appeared for a moment, as if to jeer at the Americans. It was received with hisses, and wounded, doubtless, by such a reception, it was very miserly of its rays.

On the 10th no change. J.T. Maston nearly went mad, and fears were entertained for his brain until then so well preserved in its gutta-percha cranium.

But on the 11th one of those frightful tempests peculiar to tropical regions was let loose in the atmosphere. Terrific east winds swept away the clouds which had been so long there, and in the evening the half-disc of the moon rode majestically amidst the limpid constellations of the sky.

CHAPTER XXVIII.
A NEW STAR.

That same night the news so impatiently expected burst like a thunderbolt over the United States of the Union, and thence darting across the Atlantic it ran along all the telegraphic wires of the globe. The projectile had been perceived, thanks to the gigantic reflector of Long's Peak.

The following is the notice drawn up by the director of the Cambridge Observatory. It resumes the scientific conclusion of the great experiment made by the Gun Club:

"Long's Peak, December 12th.
"To the Staff of the Cambridge Observatory.
"The projectile hurled by the Columbiad of Stony Hill was perceived by Messrs. Belfast and J.T. Maston on the 12th of December at 8.47 p.m., the moon having entered her last quarter.
"The projectile has not reached its goal. It has deviated to the side, but near enough to be detained by lunar attraction.
"There its rectilinear movement changed to a circular one of extreme velocity, and it has been drawn round the moon in an elliptical orbit, and has become her satellite.
"We have not yet been able to determine the elements of this new star. Neither its speed of translation or rotation is known. The distance which separates it from the surface of the moon may be estimated at about 2,833 miles.
"Now two hypotheses may be taken into consideration as to a modification in this state of things:--
"Either the attraction of the moon will end by drawing it towards her, and the travellers will reach the goal of their journey,
"Or the projectile, maintained in an immutable orbit, will gravitate round the lunar disc till the end of time.
"Observation will settle this point some day, but until now the experiment of the Gun Club has had no other result than that of providing our solar system with a new star.
"J BELFAST."

What discussions this unexpected _dénouement_ gave rise to! What a situation full of mystery the future reserved for the investigations of science! Thanks to the courage and devotion of three men, this enterprise of sending a bullet to the moon, futile enough in appearance, had just had an immense result, the consequences of which are incalculable. The travellers imprisoned in a new satellite, if they have not attained their end, form at least part of the lunar world; they gravitate around the Queen of Night, and for the first time human eyes can penetrate all her mysteries. The names of Nicholl, Barbicane, and Michel Ardan would be for ever celebrated in astronomical annals, for these bold explorers, desireous of widening the circle of human knowledge, had audaciously rushed into space, and had risked their lives in the strangest experiment of modern times.

The notice from Long's Peak once made known, there spread throughout the universe a feeling of surprise and horror. Was it possible to go to the aid of these bold inhabitants of the earth? Certainly not, for they had put themselves outside of the pale of humanity by crossing the limits imposed by the Creator on His terrestrial creatures. They could procure themselves air for two months; they had provisions for one year; but after? The hardest hearts palpitated at this terrible question.

One man alone would not admit that the situation was desperate. One alone had confidence, and it was their friend--devoted, audacious, and resolute as they--the brave J.T. Maston.

He resolved not to lose sight of them. His domicile was henceforth the post of Long's Peak--his horizon the immense reflector. As soon as the moon rose above the horizon he immediately framed her in the field of his telescope; he did not lose sight of her for an instant, and assiduously followed her across the stellar spaces; he watched with eternal patience the passage of the projectile over her disc of silver, and in reality the worthy man remained in perpetual communication with his three friends, whom he did not despair of seeing again one day.

"We will correspond with them," said he to any one who would listen, "as soon as circumstances will allow. We shall have news from them, and they will have news from us. Besides, I know them--they are ingenious men. Those three carry with them into space all the resources of art, science, and industry. With those everything can be accomplished, and you will see that they will get out of the difficulty."

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ROUND THE MOON.

By Jules Verne
INTRODUCTION.
PRELIMINARY CHAPTER.
CONTAINING A SHORT ACCOUNT OF THE FIRST PART OF THIS WORK TO SERVE AS PREFACE TO THE SECOND.

During the course of the year 186---- the entire world was singularly excited by a scientific experiment without precedent in the annals of science. The members of the Gun Club, a circle of artillerymen established at Baltimore after the American war, had the idea of putting themselves in communication with the moon--yes, with the moon--by sending a bullet to her. Their president, Barbicane, the promoter of the enterprise, having consulted the astronomers of the Cambridge Observatory on this subject, took all the precautions necessary for the success of the extraordinary enterprise, declared practicable by the majority of competent people. After having solicited a public subscription which produced nearly 30,000,000 of francs, it began its gigantic labours.

According to the plan drawn up by the members of the observatory, the cannon destined to hurl the projectile was to be set up in some country situated between the 0° and 28° of north or south latitude in order to aim at the moon at the zenith. The bullet was to be endowed with an initial velocity of 12,000 yards a second. Hurling on the 1st of December at thirteen minutes and twenty seconds to eleven in the evening, it was to get to the moon four days after its departure on the 5th of December at midnight precisely, at the very instant she would be at her perigee--that is to say, nearest to the earth, or at exactly 86,410 leagues' distance.

The principal members of the Gun Club, the president, Barbicane, Major Elphinstone, the secretary, J.T. Maston, and other _savants_, held several meetings, in which the form and composition of the bullet were discussed, as well as the disposition and nature of the cannon, and the quality and quantity of the powder to be employed. It was decided--1, that the projectile should be an obus of aluminium, with a diameter of 800 inches; its sides were to be 12 inches thick, and it was to weigh 19,250 lbs.; 2, that the cannon should be a cast-iron Columbiad 900 feet long, and should be cast at once in the ground; 3, that the charge should consist of 400,000 lbs. of gun-cotton, which, by developing 6,000,000,000 litres of gas under the projectile, would carry it easily towards the Queen of Night.

These questions settled, President Barbicane, aided by the engineer, Murchison, chose a site in Florida in 27° 7' north lat. and 5° 7' west long. It was there that after marvels of labour the Columbiad was cast quite successfully.

Things were at that pass when an incident occurred which increased the interest attached to this great enterprise. A Frenchman, a regular Parisian, an artist as witty as audacious, asked leave to shut himself up in the bullet in order to reach the moon and make a survey of the terrestrial satellite. This intrepid adventurer's name was Michel Ardan. He arrived in America, was received with enthusiasm, held meetings, was carried in triumph, reconciled President Barbicane to his mortal enemy, Captain Nicholl, and in pledge of the reconciliation he persuaded them to embark with him in the projectile.

The proposition was accepted. The form of the bullet was changed. It became cylindro-conical. They furnished this species of aerial compartment with powerful springs and breakable partitions to break the departing shock. It was filled with provisions for one year, water for some months, and gas for some days. An automatic apparatus made and gave out the air necessary for the respiration of the three travellers. At the same time the Gun Club had a gigantic telescope set up on one of the highest summits of the Rocky Mountains, through which the projectile could be followed during its journey through space. Everything was then ready.

On the 30th of November, at the time fixed, amidst an extraordinary concourse of spectators, the departure took place, and for the first time three human beings left the terrestrial globe for the interplanetary regions with almost the certainty of reaching their goal.

These audacious travellers, Michel Ardan, President Barbicane, and Captain Nicholl were to accomplish their journey in ninety-seven hours thirteen minutes and twenty seconds; consequently they could not reach the lunar disc until the 5th of December, at midnight, at the precise moment that the moon would be full, and not on the 4th, as some wrongly-informed newspapers had given out.

But an unexpected circumstance occurred; the detonation produced by the Columbiad had the immediate effect of disturbing the terrestrial atmosphere, where an enormous quantity of vapour accumulated. This phenomenon excited general indignation, for the moon was hidden during several nights from the eyes of her contemplators.

The worthy J.T. Maston, the greatest friend of the three travellers, set out for the Rocky Mountains in the company of the Honourable J. Belfast, director of the Cambridge Observatory, and reached the station of Long's Peak, where the telescope was set up which brought the moon, apparently, to within two leagues. The honourable secretary of the Gun Club wished to observe for himself the vehicle that contained his audacious friends.

The accumulation of clouds in the atmosphere prevented all observation during the 5th, 6th, 7th, 8th, 9th, and 10th of December. It was even thought that no observation could take place before the 3rd of January in the following year, for the moon, entering her last quarter on the 11th, would after that not show enough of her surface to allow the trace of the projectile to be followed.
But at last, to the general satisfaction, a strong tempest during the night between the 11th and 12th of December cleared the atmosphere, and the half-moon was distinctly visible on the dark background of the sky.

That same night a telegram was sent from Long's Peak Station by J.T. Maston and Belfast to the staff of the Cambridge Observatory.

This telegram announced that on the 11th of December, at 8.47 p.m., the projectile hurled by the Columbiad of Stony Hill had been perceived by Messrs. Belfast and J.T. Maston, that the bullet had deviated from its course through some unknown cause, and had not reached its goal, but had gone near enough to be retained by lunar attraction; that its rectilinear movement had been changed to a circular one, and that it was describing an elliptical orbit round the moon, and had become her satellite.

The telegram added that the elements of this new star had not yet been calculated—in fact, three observations, taking a star in three different positions, are necessary to determine them. Then it stated that the distance separating the projectile from the lunar surface "might be" estimated at about 2,833 leagues, or 4,500 miles.

It ended with the following double hypothesis:—Either the attraction of the moon would end by carrying the day, and the travellers would reach their goal; or the projectile, fixed in an immutable orbit, would gravitate around the lunar disc to the end of time.

In either of these alternatives what would be the travellers' fate? It is true they had provisions enough for some time. But even supposing that their bold enterprise were crowned with success, how would they return? Could they ever return? Would news of them ever reach the earth? These questions, debated upon by the most learned writers of the time, intensely interested the public.

A remark may here be made which ought to be meditated upon by too impatient observers. When a _savant_ announces a purely speculative discovery to the public he cannot act with too much prudence. No one is obliged to discover either a comet or a satellite, and those who make a mistake in such a case expose themselves justly to public ridicule. Therefore it is better to wait; and that is what impatient J.T. Maston ought to have done before sending to the world the telegram which, according to him, contained the last communication about this enterprise.

In fact, the telegram contained errors of two sorts, verified later:—1. Errors of observation concerning the distance of the projectile from the surface of the moon, for upon the date of the 11th of December it was impossible to perceive it, and that which J.T. Maston had seen, or thought he saw, could not be the bullet from the Columbiad. 2. A theoretic error as to the fate of the said projectile, for making it a satellite of the moon was an absolute contradiction of the laws of rational mechanics.

One hypothesis only made by the astronomers of Long's Peak might be realised, the one that foresaw the case when the travellers—if any yet existed—should unite their efforts with the lunar attraction so as to reach the surface of the disc.

Now these men, as intelligent as they were bold, had survived the terrible shock at departure, and their journey in their bullet-carriage will be related in its most dramatic as well as in its most singular details. This account will put an end to many illusions and previsions, but it will give a just idea of the various circumstances incidental to such an enterprise, and will set in relief Barbicane's scientific instincts, Nicholl's industrial resources, and the humorous audacity of Michel Ardan.

Besides, it will prove that their worthy friend J.T. Maston was losing his time when, bending over the gigantic telescope, he watched the course of the moon across the planetary regions.

CHAPTER I.
FROM 10.20 P.M. TO 10.47 P.M.

When ten o'clock struck, Michel Ardan, Barbicane, and Nicholl said good-bye to the numerous friends they left upon the earth. The two dogs, destined to acclimatise the canine race upon the lunar continents, were already imprisoned in the projectile. The three travellers approached the orifice of the enormous iron tube, and a crane lowered them to the conical covering of the bullet.

There an opening made on purpose let them down into the aluminium vehicle. The crane's tackling was drawn up outside, and the mouth of the Columbiad instantly cleared of its last scaffolding.

As soon as Nicholl and his companions were in the projectile he closed the opening by means of a strong plate screwed down inside. Other closely-fitting plates covered the lenticular glasses of the skylights. The travellers, hermetically inclosed in their metal prison, were in profound darkness.

"And now, my dear companions," said Michel Ardan, "let us make ourselves at home. I am a domestic man myself, and know how to make the best of any lodgings. First let us have a light; gas was not invented for moles!"

Saying which the light-hearted fellow struck a match on the sole of his boot and then applied it to the burner of the receptacle, in which there was enough carbonised hydrogen, stored under strong pressure, for lighting and
heating the bullet for 144 hours, or six days and six nights.

Once the gas lighted, the projectile presented the aspect of a comfortable room with padded walls, furnished with circular divans, the roof of which was in the shape of a dome.

The objects in it, weapons, instruments, and utensils, were solidly fastened to the sides in order to bear the parting shock with impunity. Every possible precaution had been taken to insure the success of so bold an experiment.

Michel Ardan examined everything, and declared himself quite satisfied with his quarters.

"It is a prison," said he, "but a travelling prison, and if I had the right to put my nose to the window I would take it on a hundred years' lease! You are smiling, Barbicane. You are thinking of something you do not communicate. Do you say to yourself that this prison may be our coffin? Our coffin let it be; I would not change it for Mahomet's, which only hangs in space, and does not move!"

Whilst Michel Ardan was talking thus, Barbicane and Nicholl were making their last preparations.

It was 10.20 p.m. by Nicholl's chronometer when the three travellers were definitely walled up in their bullet. This chronometer was regulated to the tenth of a second by that of the engineer, Murchison. Barbicane looked at it.

"My friends," said he, "it is twenty minutes past ten; at thirteen minutes to eleven Murchison will set fire to the Columbiad; at that minute precisely we shall leave our spheroid. We have, therefore, still seven-and-twenty minutes to remain upon earth."

"Twenty-six minutes and thirteen seconds," answered the methodical Nicholl.

"Very well!" cried Michel Ardan good-humouredly; "in twenty-six minutes lots of things can be done. We can discuss grave moral or political questions, and even solve them. Twenty-six minutes well employed are worth more than twenty-six years of doing nothing. A few seconds of a Pascal or a Newton are more precious than the whole existence of a crowd of imbeciles."

"And what do you conclude from that, talker eternal?" asked President Barbicane.

"I conclude that we have twenty-six minutes," answered Ardan.

"Twenty-four only," said Nicholl.

"Twenty-four, then, if you like, brave captain," answered Ardan; "twenty-four minutes, during which we might investigate--"

"Michel," said Barbicane, "during our journey we shall have plenty of time to investigate the deepest questions. Now we must think of starting."

"Are we not ready?"

"Certainly. But there are still some precautions to be taken to deaden the first shock as much as possible!"

"Have we not water-cushions placed between movable partitions elastic enough to protect us sufficiently?"

"I hope so, Michel," answered Barbicane gently; "but I am not quite sure!"

"Ah, the joker!" exclaimed Michel Ardan. "He hopes! He is not quite sure! And he waits till we are encased to make this deplorable acknowledgment! I ask to get out."

"By what means?" asked Barbicane.

"Well!" said Michel Ardan, "it would be difficult. We are in the train, and the guard's whistle will be heard in twenty-four minutes."

"Twenty!" ejaculated Nicholl.

The three travellers looked at one another for a few seconds. Then they examined all the objects imprisoned with them.

"Everything is in its place," said Barbicane. "The question now is where we can place ourselves so as best to support the departing shock. The position we assume must be important too--we must prevent the blood rushing too violently to our heads."

"That is true," said Nicholl.

"Then," answered Michel Ardan, always ready to suit the action to the word, "we will stand on our heads like the clowns at the circus."

"No," said Barbicane; "but let us lie on our sides; we shall thus resist the shock better. When the bullet starts it will not much matter whether we are inside or in front."

"If it comes to 'not much matter' I am more reassured," answered Michel Ardan.

"Do you approve of my idea, Nicholl?" asked Barbicane.

"Entirely," answered the captain. "Still thirteen minutes and a-half."

"Nicholl is not a man," exclaimed Michel; "he is a chronometer marking the seconds, and with eight holes in--"

But his companions were no longer listening to him, and they were making their last preparations with all the coolness imaginable. They looked like two methodical travellers taking their places in the train and making themselves as comfortable as possible. One wonders, indeed, of what materials these American hearts are made, to
which the approach of the most frightful danger does not add a single pulsation.

Three beds, thick and solidly made, had been placed in the projectile. Nicholl and Barbicane placed them in the centre of the disc that formed the movable flooring. There the three travellers were to lie down a few minutes before their departure.

In the meanwhile Ardan, who could not remain quiet, turned round his narrow prison like a wild animal in a cage, talking to his friends and his dogs, Diana and Satellite, to whom it will be noticed he had some time before given these significant names.

"Up, Diana! up, Satellite!" cried he, exciting them. "You are going to show to the Selenite dogs how well-behaved the dogs of the earth can be! That will do honour to the canine race. If we ever come back here I will bring back a cross-breed of 'moon-dogs' that will become all the rage."

"If there are any dogs in the moon," said Barbicane.

"There are some," affirmed Michel Ardan, "the same as there are horses, cows, asses, and hens. I wager anything we shall find some hens."

"I bet a hundred dollars we find none," said Nicholl.

"Done, captain," answered Ardan, shaking hands with Nicholl. "But, by-the-bye, you have lost three bets with the president, for the funds necessary for the enterprise were provided, the casting succeeded, and lastly, the Columbiad was loaded without accident—that makes six thousand dollars."

"Yes," answered Nicholl. "Twenty-three minutes and six seconds to eleven."

"I hear, captain. Well, before another quarter of an hour is over you will have to make over another nine thousand dollars to the president, four thousand because the Columbiad will not burst, and five thousand because the bullet will rise higher than six miles into the air."

"I have the dollars," answered Nicholl, striking his coat pocket, "and I only want to pay."

"Come, Nicholl, I see you are a man of order, what I never could be; but allow me to tell you that your series of bets cannot be very advantageous to you."

"Why?" asked Barbicane.

"Because if you win the first the Columbiad will have burst, and the bullet with it, and Barbicane will not be there to pay you your dollars."

"My wager is deposited in the Baltimore Bank," answered Barbicane simply; "and in default of Nicholl it will go to his heirs."

"What practical men you are!" cried Michel Ardan. "I admire you as much as I do not understand you."

"Eighteen minutes to eleven," said Nicholl.

"Only five minutes more," answered Barbicane.

"Yes, five short minutes!" replied Michel Ardan. "And we are shut up in a bullet at the bottom of a cannon 900 feet long! and under this bullet there are 400,000 lbs. of gun-cotton, worth more than 1,600,000 lbs. of ordinary powder! And friend Murchison, with his chronometer in hand and his eye fixed on the hand and his finger on the electric knob, is counting the seconds to hurl us into the planetary regions."

"Enough, Michel, enough!" said Barbicane in a grave tone. "Let us prepare ourselves. A few seconds only separate us from a supreme moment. Your hands, my friends."

"Yes," cried Michel Ardan, more moved than he wished to appear.

The three bold companions shook hands.

"God help us!" said the religious president.

Michel Ardan and Nicholl lay down on their beds in the centre of the floor.

"Thirteen minutes to eleven," murmured the captain.

Twenty seconds more! Barbicane rapidly put out the gas, and lay down beside his companions.

The profound silence was only broken by the chronometer beating the seconds.

Suddenly a frightful shock was felt, and the projectile, under the impulsion of 6,000,000,000 litres of gas developed by the deflagration of the pyroxyle, rose into space.

CHAPTER II.

THE FIRST HALF-HOUR.

What had happened? What was the effect of the frightful shock? Had the ingenuity of the constructors of the projectile been attended by a happy result? Was the effect of the shock deadened, thanks to the springs, the four buffers, the water-cushions, and the movable partitions? Had they triumphed over the frightful impulsion of the initial velocity of 11,000 metres a second? This was evidently the question the thousands of witnesses of the exciting scene asked themselves. They forgot the object of the journey, and only thought of the travellers! Suppose one of
them--J.T. Maston, for instance--had been able to get a glimpse of the interior of the projectile, what would he have seen?

Nothing then. The obscurity was profound in the bullet. Its cylindro-conical sides had resisted perfectly. There was not a break, a crack, or a dint in them. The admirable projectile was not hurt by the intense deflagration of the powders, instead of being liquefied, as it was feared, into a shower of aluminium.

In the interior there was very little disorder on the whole. A few objects had been violently hurled up to the roof, but the most important did not seem to have suffered from the shock. Their fastenings were intact.

On the movable disc, crushed down to the bottom by the smashing of the partitions and the escape of the water, three bodies lay motionless. Did Barbicane, Nicholl, and Michel Ardan still breathe? Was the projectile nothing but a metal coffin carrying three corpses into space?

A few minutes after the departure of the bullet one of these bodies moved, stretched out its arms, lifted up its head, and succeeded in getting upon its knees. It was Michel Ardan. He felt himself, uttered a sonorous "Hum," then said--

"Michel Ardan, complete. Now for the others!"

The courageous Frenchman wanted to get up, but he could not stand. His head vacillated; his blood, violently sent up to his head, blinded him. He felt like a drunken man.

"Brrr!" said he. "I feel as though I had been drinking two bottles of Corton, only that was not so agreeable to swallow!"

Then passing his hand across his forehead several times, and rubbing his temples, he called out in a firm voice--

"Nicholl! Barbicane!"

He waited anxiously. No answer. Not even a sigh to indicate that the hearts of his companions still beat. He reiterated his call. Same silence.

"The devil!" said he. "They seem as though they had fallen from the fifth story upon their heads! Bah!" he added with the imperturbable confidence that nothing could shake, "if a Frenchman can get upon his knees, two Americans will have no difficulty in getting upon their feet. But, first of all, let us have a light on the subject."

Ardan felt life come back to him in streams. His blood became calm, and resumed its ordinary circulation. Fresh efforts restored his equilibrium. He succeeded in getting up, took a match out of his pocket, and struck it; then putting it to the burner he lighted the gas. The meter was not in the least damaged. The gas had not escaped. Besides, the smell would have betrayed it, and had this been the case, Michel Ardan could not with impunity have lighted a match in a medium filled with hydrogen. The gas, mixed in the air, would have produced a detonating mixture, and an explosion would have finished what a shock had perhaps begun.

As soon as the gas was lighted Ardan bent down over his two companions. Their bodies were thrown one upon the other, Nicholl on the top, Barbicane underneath.

Ardan raised the captain, propped him up against a divan, and rubbed him vigorously. This friction, administered skilfully, reanimated Nicholl, who opened his eyes, instantly recovered his presence of mind, seized Ardan's hand, and then looking round him--

"And Barbicane?" he asked.

"Each in turn," answered Michel Ardan tranquilly. "I began with you, Nicholl, because you were on the top. Now I'll go to Barbicane."

That said, Ardan and Nicholl raised the president of the Gun Club and put him on a divan. Barbicane seemed to have suffered more than his companions. He was bleeding, but Nicholl was glad to find that the hemorrhage only came from a slight wound in his shoulder. It was a simple scratch, which he carefully closed.

Nevertheless, Barbicane was some time before he came to himself, which frightened his two friends, who did not spare their friction.

"He is breathing, however," said Nicholl, putting his ear to the breast of the wounded man.

"Yes," answered Ardan, "he is breathing like a man who is in the habit of doing it daily. Rub, Nicholl, rub with all your might."

And the two improvised practitioners set to work with such a will and managed so well that Barbicane at last came to his senses. He opened his eyes, sat up, took the hands of his two friends, and his first words were--

"Nicholl, are we going on?"

Nicholl and Ardan looked at one another. They had not yet thought about the projectile. Their first anxiety had been for the travellers, not for the vehicle.

"Well, really, are we going on?" repeated Michel Ardan.

"Or are we tranquilly resting on the soil of Florida?" asked Nicholl.

"Or at the bottom of the Gulf of Mexico?" added Michel Ardan.

"Impossible!" cried President Barbicane.
This double hypothesis suggested by his two friends immediately recalled him to life and energy.
They could not yet decide the question. The apparent immovability of the bullet and the want of communication
with the exterior prevented them finding it out. Perhaps the projectile was falling through space. Perhaps after rising
a short distance it had fallen upon the earth, or even into the Gulf of Mexico, a fall which the narrowness of the
Floridian peninsula rendered possible.
The case was grave, the problem interesting. It was necessary to solve it as soon as possible. Barbicane, excited,
and by his moral energy triumphing over his physical weakness, stood up and listened. A profound silence reigned
outside. But the thick padding was sufficient to shut out all the noises on earth; However, one circumstance struck
Barbicane. The temperature in the interior of the projectile was singularly high. The president drew out a
thermometer from the envelope that protected it and consulted it. The instrument showed 81° Fahr.
"Yes!" he then exclaimed—"yes, we are moving! This stifling heat oozes through the sides of our projectile. It is
produced by friction against the atmosphere. It will soon diminish; because we are already moving in space, and
after being almost suffocated we shall endure intense cold."
"What!" asked Michel Ardan, "do you mean to say that we are already beyond the terrestrial atmosphere?"
"Without the slightest doubt, Michel. Listen to me. It now wants but five minutes to eleven. It is already eight
minutes since we started. Now, if our initial velocity has not been diminished by friction, six seconds would be
enough for us to pass the sixteen leagues of atmosphere which surround our spheroid."
"Just so," answered Nicholl; "but in what proportion do you reckon the diminution of speed by friction?"
"In the proportion of one-third," answered Barbicane. "This diminution is considerable, but it is so much
according to my calculations. If, therefore, we have had an initial velocity of 11,000 metres, when we get past the
atmosphere it will be reduced to 7,332 metres. However that may be, we have already cleared that space, and--"
"And then," said Michel Ardan, "friend Nicholl has lost his two bets--four thousand dollars because the
Columbiad has not burst, five thousand dollars because the projectile has risen to a greater height than six miles;
therefore, Nicholl, shell out."
"We must prove it first," answered the captain, "and pay afterwards. It is quite possible that Barbicane's
calculations are exact, and that I have lost my nine thousand dollars. But another hypothesis has come into my mind,
and it may cancel the wager."
"What is that?" asked Barbicane quickly.
"The supposition that for some reason or other the powder did not catch fire, and we have not started."
"Good heavens! captain," cried Michel Ardan, "that is a supposition worthy of me! It is not serious! Have we not
been half stunned by the shock? Did I not bring you back to life? Does not the president's shoulder still bleed from
the blow?"
"Agreed, Michel," replied Nicholl, "but allow me to ask one question."
"Ask it, captain."
"Did you hear the detonation, which must certainly have been formidable?"
"No," answered Ardan, much surprised, "I certainly did not hear it."
"And you, Barbicane?"
"I did not either."
"What do you make of that?" asked Nicholl.
"What indeed!" murmured the president; "why did we not hear the detonation?"
The three friends looked at one another rather disconcertedly. Here was an inexplicable phenomenon. The
projectile had been fired, however, and there must have been a detonation.
"We must know first where we are," said Barbicane, "so let us open the panel."
This simple operation was immediately accomplished. The screws that fastened the bolts on the outer plates of
the right-hand skylight yielded to the coach-wrench. These bolts were driven outside, and obturators wadded with
indiarubber corked up the hole that let them through. The exterior plate immediately fell back upon its hinges like a
port-hole, and the lenticular glass that covered the hole appeared. An identical light-port had been made in the other
side of the projectile, another in the dome, and a fourth in the bottom. The firmament could therefore be observed in
four opposite directions—the firmament through the lateral windows, and the earth or the moon more directly
through the upper or lower opening of the bullet.
Barbicane and his companions immediately rushed to the uncovered port-hole. No ray of light illuminated it.
Profound darkness surrounded the projectile. This darkness did not prevent Barbicane exclaiming—
"No, my friends, we have not fallen on the earth again! No, we are not immersed at the bottom of the Gulf of
Mexico! Yes, we are going up through space! Look at those stars that are shining in the darkness, and the
impenetrable darkness that lies between the earth and us!"
"Hurrah! hurrah!" cried Michel Ardan and Nicholl with one voice.
In fact, the thick darkness proved that the projectile had left the earth, for the ground, then brilliantly lighted by the moon, would have appeared before the eyes of the travellers if they had been resting upon it. This darkness proved also that the projectile had passed beyond the atmosphere, for the diffused light in the air would have been reflected on the metallic sides of the projectile, which reflection was also wanting. This light would have shone upon the glass of the light-port, and that glass was in darkness. Doubt was no longer possible. The travellers had quitted the earth.

"I have lost." said Nicholl.
"I congratulate you upon it," answered Ardan.
"Here are nine thousand dollars," said the captain, taking a bundle of notes out of his pocket.
"Will you have a receipt?" asked Barbicane as he took the money.
"If you do not mind," answered Nicholl; "it is more regular."

And as seriously and phlegmatically as if he had been in his counting-house, President Barbicane drew out his memorandum-book and tore out a clear page, wrote a receipt in pencil, dated it, signed it, and gave it to the captain, who put it carefully into his pocket-book.

Michel Ardan took off his hat and bowed to his two companions without speaking a word. Such formality under such circumstances took away his power of speech. He had never seen anything so American.

Once their business over, Barbicane and Nicholl went back to the light-port and looked at the constellations. The stars stood out clearly upon the dark background of the sky. But from this side the moon could not be seen, as she moves from east to west, rising gradually to the zenith. Her absence made Ardan say--

"And the moon? Is she going to fail us?"
"Do not frighten yourself," answered Barbicane, "Our spheroid is at her post, but we cannot see her from this side. We must open the opposite light-port."

At the very moment when Barbicane was going to abandon one window to set clear the opposite one, his attention was attracted by the approach of a shining object. It was an enormous disc the colossal dimensions of which could not be estimated. Its face turned towards the earth was brilliantly lighted. It looked like a small moon reflecting the light of the large one. It advanced at prodigious speed, and seemed to describe round the earth an orbit right across the passage of the projectile. To the movement of translation of this object was added a movement of rotation upon itself. It was therefore behaving like all celestial bodies abandoned in space.

"Eh!" cried Michel Ardan. "Whatever is that? Another projectile?"

Barbicane did not answer. The apparition of this enormous body surprised him and made him uneasy. A collision was possible which would have had deplorable results, either by making the projectile deviate from its route and fall back upon the earth, or be caught up by the attractive power of the asteroid.

President Barbicane had rapidly seized the consequences of these three hypotheses, which in one way or other would fatally prevent the success of his attempt. His companions were silently watching the object, which grew prodigiously larger as it approached, and through a certain optical illusion it seemed as if the projectile were rushing upon it.

"Ye gods!" cried Michel Ardan; "there will be a collision on the line!"

The three travellers instinctively drew back. Their terror was extreme, but it did not last long, hardly a few seconds. The asteroid passed at a distance of a few hundred yards from the projectile and disappeared, not so much on account of the rapidity of its course, but because its side opposite to the moon was suddenly confounded with the absolute darkness of space.

"A good journey to you!" cried Michel Ardan, uttering a sigh of satisfaction. "Is not infinitude large enough to allow a poor little bullet to go about without fear? What was that pretentious globe which nearly knocked against us?"

"I know!" answered Barbicane.
"Of course! you know everything."
"It is a simple asteroid," said Barbicane; "but so large that the attraction of the earth has kept it in the state of a satellite."

"Is it possible!" exclaimed Michel Ardan. "Then the earth has two moons like Neptune?"

"Yes, my friend, two moons, though she is generally supposed to have but one. But this second moon is so small and her speed so great that the inhabitants of the earth cannot perceive her. It was by taking into account certain perturbations that a French astronomer, M. Petit, was able to determine the existence of this second satellite and calculate its elements. According to his observations, this asteroid accomplishes its revolution round the earth in three hours and twenty minutes only. That implies prodigious speed."

"Do all astronomers admit the existence of this satellite?" asked Nicholl.
"No," answered Barbicane; "but if they had met it like we have they could not doubt any longer. By-the-bye, this
asteroid, which would have much embarrassed us had it knocked against us, allows us to determine our position in space."

"How?" said Ardan.

"Because its distance is known, and where we met it we were exactly at 8,140 kilometres from the surface of the terrestrial globe."

"More than 2,000 leagues!" cried Michel Ardan. "That beats the express trains of the pitiable globe called the earth!"

"I should think it did," answered Nicholl, consulting his chronometer; "it is eleven o'clock, only thirteen minutes since we left the American continent."

"Only thirteen minutes?" said Barbicane.

"That is all," answered Nicholl; "and if our initial velocity were constant we should make nearly 10,000 leagues an hour."

"That is all very well, my friends," said the president; "but one insoluble question still remains--why did we not hear the detonation of the Columbiad?"

For want of an answer the conversation stopped, and Barbicane, still reflecting, occupied himself with lowering the covering of the second lateral light-port. His operation succeeded, and through the glass the moon filled the interior of the projectile with brilliant light. Nicholl, like an economical man, put out the gas that was thus rendered useless, and the brilliance of which obstructed the observation of planetary space.

The lunar disc then shone with incomparable purity. Her rays, no longer filtered by the vapoury atmosphere of the terrestrial globe, shone clearly through the glass and saturated the interior air of the projectile with silvery reflections. The black curtain of the firmament really doubled the brilliancy of the moon, which in this void of ether unfavourable to diffusion did not eclipse the neighbouring stars. The sky, thus seen, presented quite a different aspect—one that no human eye could imagine.

It will be readily understood with what interest these audacious men contemplated the moon, the supreme goal of their journey. The earth's satellite, in her movement of translation, insensibly neared the zenith, a mathematical point which she was to reach about ninety-six hours later. Her mountains and plains, or any object in relief, were not seen more plainly than from the earth; but her light across the void was developed with incomparable intensity. The disc shone like a platinum mirror. The travellers had already forgotten all about the earth which was flying beneath their feet.

It was Captain Nicholl who first drew attention to the vanished globe.

"Yes!" answered Michel Ardan. "We must not be ungrateful to it. As we are leaving our country let our last looks reach it. I want to see the earth before it disappears completely from our eyes!"

Barbicane, to satisfy the desires of his companion, occupied himself with clearing the window at the bottom of the projectile, the one through which they could observe the earth directly. The movable floor which the force of projection had sent to the bottom was taken to pieces, not without difficulty; its pieces, carefully placed against the sides, might still be of use. Then appeared a circular bay window, half a yard wide, cut in the lower part of the bullet. It was filled with glass five inches thick, strengthened with brass settings. Under it was an aluminium plate, held down by bolts. The screws taken out and the bolts withdrawn, the plate fell back, and visual communication was established between interior and exterior.

Michel Ardan knelt upon the glass. It was dark, and seemed opaque.

"Well," cried he, "but where's the earth?"

"There it is," said Barbicane.

"What!" cried Ardan, "that thin streak, that silvery crescent?"

"Certainly, Michel. In four days' time, when the moon is full, at the very minute we shall reach her, the earth will be new. She will only appear to us under the form of a slender crescent, which will soon disappear, and then she will be buried for some days in impenetrable darkness."

"That the earth!" repeated Michel Ardan, staring at the thin slice of his natal planet.

The explanation given by President Barbicane was correct. The earth, looked at from the projectile, was entering her last quarter. She was in her ocult, and her crescent was clearly outlined on the dark background of the sky. Her light, made bluish by the thickness of her atmosphere, was less intense than that of the lunar crescent. This crescent then showed itself under considerable dimensions. It looked like an enormous arch stretched across the firmament. Some points, more vividly lighted, especially in its concave part, announced the presence of high mountains; but they disappeared sometimes under black spots, which are never seen on the surface of the lunar disc. They were rings of clouds placed concentrically round the terrestrial spheroid.

However, by dint of a natural phenomenon, identical with that produced on the moon when she is in her octants, the contour of the terrestrial globe could be traced. Its entire disc appeared slightly visible through an effect of pale
light, less appreciable than that of the moon. The reason of this lessened intensity is easy to understand. When this
reflection is produced on the moon it is caused by the solar rays which the earth reflects upon her satellite. Here it
was caused by the solar rays reflected from the moon upon the earth. Now terrestrial light is thirteen times more
intense than lunar light on account of the difference of volume in the two bodies. Hence it follows that in the
phenomenon of the pale light the dark part of the earth's disc is less clearly outlined than that of the moon's disc,
because the intensity of the phenomenon is in proportion to the lighting power of the two stars. It must be added that
the terrestrial crescent seems to form a more elongated curve than that of the disc—a pure effect of irradiation.

Whilst the travellers were trying to pierce the profound darkness of space, a brilliant shower of falling stars
shone before their eyes. Hundreds of meteors, inflamed by contact with the atmosphere, streaked the darkness with
luminous trails, and lined the cloudy part of the disc with their fire. At that epoch the earth was in her perihelion, and
the month of December is so propitious to these shooting stars that astronomers have counted as many as 24,000 an
hour. But Michel Ardan, disdaining scientific reasoning, preferred to believe that the earth was saluting with her
finest fireworks the departure of her three children.

This was all they saw of the globe lost in the darkness, an inferior star of the solar world, which for the grand
planets rises or sets as a simple morning or evening star! Imperceptible point in space, it was now only a fugitive
crescent, this globe where they had left all their affections.

For a long time the three friends, not speaking, yet united in heart, watched while the projectile went on with
uniformly decreasing velocity. Then irresistible sleep took possession of them. Was it fatigue of body and mind?
Doubtless, for after the excitement of the last hours passed upon earth, reaction must inevitably set in.

"Well," said Michel, "as we must sleep, let us go to sleep."

Stretched upon their beds, all three were soon buried in profound slumber.

But they had not been unconscious for more than a quarter of an hour when Barbicane suddenly rose, and,
waking his companions, in a loud voice cried--

"I've found it!"

"What have you found?" asked Michel Ardan, jumping out of bed.

"The reason we did not hear the detonation of the Columbiad!"

"Well?" said Nicholl.

"It was because our projectile went quicker than sound."

CHAPTER III.
TAKING POSSESSION.

This curious but certainly correct explanation once given, the three friends fell again into a profound sleep.
Where would they have found a calmer or more peaceful place to sleep in? Upon earth, houses in the town or
cottages in the country feel every shock upon the surface of the globe. At sea, ships, rocked by the waves, are in
perpetual movement. In the air, balloons incessantly oscillate upon the fluid strata of different densities. This
projectile alone, travelling in absolute void amidst absolute silence, offered absolute repose to its inhabitants.

The sleep of the three adventurers would have, perhaps, been indefinitely prolonged if an unexpected noise had
not awakened them about 7 a.m. on the 2nd of December, eight hours after their departure.

This noise was a very distinct bark.

"The dogs! It is the dogs!" cried Michel Ardan, getting up immediately.

"They are hungry," said Nicholl.

"I should think so," answered Michel; "we have forgotten them."

"Where are they?" asked Barbicane.

One of the animals was found cowering under the divan. Terrified and stunned by the first shock, it had
remained in a corner until the moment it had recovered its voice along with the feeling of hunger.

It was Diana, still rather sheepish, that came from the retreat, not without urging. Michel Ardan encouraged her
with his most gracious words.

"Come, Diana," he said--"come, my child; your destiny will be noted in cynetic annals! Pagans would have
made you companion to the god Anubis, and Christians friend to St. Roch! You are worthy of being carved in
bronze for the king of hell, like the puppy that Jupiter gave beautiful Europa as the price of a kiss! Your celebrity
will efface that of the Montargis and St. Bernard heroes. You are rushing through interplanetary space, and will,
perhaps, be the Eve of Selenite dogs! You will justify up there Toussenel's saying, 'In the beginning God created
man, and seeing how weak he was, gave him the dog!' Come, Diana, come here!"

Diana, whether flattered or not, came out slowly, uttering plaintive moans.

"Good!" said Barbicane. "I see Eve, but where is Adam?"
"Adam," answered Michel Ardan, "can't be far off. He is here somewhere. He must be called! Satellite! here, Satellite!"

But Satellite did not appear. Diana continued moaning. It was decided, however, that she was not wounded, and an appetising dish was set before her to stop her complaining.

As to Satellite, he seemed lost. They were obliged to search a long time before discovering him in one of the upper compartments of the projectile, where a rather inexplicable rebound had hurled him violently. The poor animal was in a pitiable condition.

"The devil!" said Michel. "Our acclimatisation is in danger!"

The unfortunate dog was carefully lowered. His head had been fractured against the roof, and it seemed difficult for him to survive such a shock. Nevertheless, he was comfortably stretched on a cushion, where he sighed once.

"We will take care of you," said Michel; "we are responsible for your existence. I would rather lose an arm than a paw of my poor Satellite."

So saying he offered some water to the wounded animal, who drank it greedily.

These attentions bestowed, the travellers attentively watched the earth and the moon. The earth only appeared like a pale disc terminated by a crescent smaller than that of the previous evening, but its volume compared with that of the moon, which was gradually forming a perfect circle, remained enormous.

"_Parbleu_!" then said Michel Ardan; "I am really sorry we did not start when the earth was at her full--that is to say, when our globe was in opposition to the sun!"

"Why?" asked Nicholl.

"Because we should have seen our continents and seas under a new aspect--the continents shining under the solar rays, the seas darker, like they figure upon certain maps of the world! I should like to have seen those poles of the earth upon which the eye of man has never yet rested!"

"I daresay," answered Barbicane, "but if the earth had been full the moon would have been new--that is to say, invisible amidst the irradiation of the sun. It is better for us to see the goal we want to reach than the place we started from."

"You are right, Barbicane," answered Captain Nicholl; "and besides, when we have reached the moon we shall have plenty of time during the long lunar nights to consider at leisure the globe that harbours men like us."

"Men like us!" cried Michel Ardan. "But now they are not more like us than the Selenites. We are inhabitants of a new world peopled by us alone--the projectile! I am a man like Barbicane, and Barbicane is a man like Nicholl. Beyond us and outside of us humanity ends, and we are the only population of this microcosm until the moment we become simple Selenites."

"In about eighty-eight hours," replied the captain.

"Which means?" asked Michel Ardan.

"That it is half-past eight," answered Nicholl.

"Very well," answered Michel, "I fail to find the shadow of a reason why we should not breakfast _illico_."

In fact, the inhabitants of the new star could not live in it without eating, and their stomachs then submitted to the imperious laws of hunger. Michel Ardan, in his quality of Frenchman, declared himself chief cook, an important function that no one disputed with him. The gas gave the necessary degrees of heat for cooking purposes, and the provision-locker furnished the elements of this first banquet.

The breakfast began with three cups of excellent broth, due to the liquefaction in hot water of three precious Liebig tablets, prepared from the choicest morsels of the Pampas ruminants. Some slices of beefsteak succeeded them, compressed by the hydraulic press, as tender and succulent as if they had just come from the butchers of the Paris Café Anglais. Michel, an imaginative man, would have it they were even rosy.

Preserved vegetables, "fresher than the natural ones," as the amiable Michel observed, succeeded the meat, and were followed by some cups of tea and slices of bread and butter, American fashion. This beverage, pronounced excellent, was made from tea of the first quality, of which the Emperor of Russia had put some cases at the disposition of the travellers.

Lastly, as a worthy ending to the meal, Ardan ferreted out a fine bottle of "Nuits" burgundy that "happened" to be in the provision compartment. The three friends drank it to the union of the earth and her satellite.

And as if the generous wine it had distilled upon the hill-sides of Burgundy were not enough, the sun was determined to help in the feast. The projectile at that moment emerged from the cone of shadow cast by the terrestrial globe, and the sun's rays fell directly upon the lower disc of the bullet, on account of the angle which the orbit of the moon makes with that of the earth.

"The sun!" exclaimed Michel Ardan.

"Of course," answered Barbicane; "I expected it."

"But," said Michel, "the cone of shadow thrown by the earth into space extends beyond the moon."
"Much beyond if you do not take the atmospheric refraction into account," said Barbicane. "But when the moon is enveloped in that shadow the centres of the three heavenly bodies--the sun, the earth, and the moon--are in a straight line. Then the nodes coincide with the full moon and there is an eclipse. If, therefore, we had started during an eclipse of the moon all our journey would have been accomplished in the dark, which would have been a pity."

"Why?"

"Because, although we are journeying in the void, our projectile, bathed in the solar rays, will gather their light and heat; therefore there will be economy of gas, a precious economy in every way."

In fact, under these rays, the temperature and brilliancy of which there was no atmosphere to soften, the projectile was lighted and warmed as if it had suddenly passed from winter to summer. The moon above and the sun below inundated it with their rays.

"It is pleasant here now," said Nicholl.

"I believe you!" cried Michel Ardan. "With a little vegetable soil spread over our aluminium planet we could grow green peas in twenty-four hours. I have only one fear, that is that the walls of our bullet will melt."

"You need not alarm yourself, my worthy friend," answered Barbicane. "The projectile supported a much higher temperature while it was travelling through the atmosphere. I should not even wonder if it looked to the eyes of the spectators like a fiery meteor."

"Then J.T. Maston must think we are roasted!"

"What I am astonished at," answered Barbicane, "is that we are not. It was a danger we did not foresee."

"I feared it," answered Nicholl simply.

"And you did not say anything about it, sublime captain!" cried Michel Ardan, shaking his companion's hand.

In the meantime Barbicane was making his arrangements in the projectile as though he was never going to leave it. It will be remembered that the base of the aërial vehicle was fifty-four feet square. It was twelve feet high, and admirably fitted up in the interior. It was not much encumbered by the instruments and travelling utensils, which were all in special places, and it left some liberty of movement to its three inhabitants. The thick glass let into a part of the floor could bear considerable weight with impunity. Barbicane and his companions walked upon it as well as upon a solid floor; but the sun, which struck it directly with its rays, lighting the interior of the projectile from below, produced singular effects of light.

They began by examining the state of the water and provision receptacles. They were not in the least damaged, thanks to the precautions taken to deaden the shock. The provisions were abundant, and sufficient for one year's food. Barbicane took this precaution in case the projectile should arrive upon an absolutely barren part of the moon. There was only enough water and brandy for two months. But according to the latest observations of astronomers, the moon had a dense low and thick atmosphere, at least in its deepest valleys, and there streams and watercourses could not fail. Therefore the adventurous explorers would not suffer from hunger or thirst during the journey, and the first year of their installation upon the lunar continent.

The question of air in the interior of the projectile also offered all security. The Reiset and Regnault apparatus, destined to produce oxygen, was furnished with enough chlorate of potash for two months. It necessarily consumed a large quantity of gas, for it was obliged to keep the productive matter up to 100°. But there was abundance of that also. The apparatus wanted little looking after. It worked automatically. At that high temperature the chlorate of potash changed into chlorine of potassium, and gave out all the oxygen it contained. The eighteen pounds of chlorate of potash gave out the seven pounds of oxygen necessary for the daily consumption of the three travellers.

But it was not enough to renew the oxygen consumed; the carbonic acid gas produced by expiration must also be absorbed. Now for the last twelve hours the atmosphere of the bullet had become loaded with this deleterious gas, the product of the combustion of the elements of blood by the oxygen taken into the lungs. Nicholl perceived this state of the air by seeing Diana palpitate painfully. In fact, carbonic acid gas--through a phenomenon identical with the one to be noticed in the famous Dog's Grotto--accumulated at the bottom of the projectile by reason of its weight. Poor Diana, whose head was low down, therefore necessarily suffered from it before her masters. But Captain Nicholl made haste to remedy this state of things. He placed on the floor of the projectile several receptacles containing caustic potash which he shook about for some time, and this matter, which is very greedy of carbonic acid, completely absorbed it, and thus purified the interior air.

An inventory of the instruments was then begun. The thermometers and barometers were undamaged, with the exception of a minimum thermometer the glass of which was broken. An excellent aneroid was taken out of its padded box and hung upon the wall. Of course it was only acted upon by and indicated the pressure of the air inside the projectile; but it also indicated the quantity of moisture it contained. At that moment its needle oscillated between 25.24 and 25.08. It was at "set fair."

Barbicane had brought several compasses, which were found intact. It will be easily understood that under those circumstances their needles were acting at random, without any constant direction. In fact, at the distance the
projectile was from the earth the magnetic pole could not exercise any sensible action upon the apparatus. But these compasses, taken upon the lunar disc, might show particular phenomena. In any case it would be interesting to verify whether the earth's satellite, like the earth herself, submitted to magnetical influence.

A hypsometer to measure the altitude of the lunar mountains, a sextant to take the height of the sun, a theodolite, an instrument for surveying, telescopes to be used as the moon approached--all these instruments were carefully inspected and found in good condition, notwithstanding the violence of the initial shock.

As to the utensils--pickaxes, spades, and different tools--of which Nicholl had made a special collection, the sacks of various kinds of grain, and the shrubs which Michel Ardan counted upon transplanting into Selenite soil, they were in their places in the upper corners of the projectile. There was made a sort of granary, which the prodigal Frenchman had filled. What was in it was very little known, and the merry fellow did not enlighten anybody. From time to time he climbed up the cramp-irons riveted in the walls to this store-room, the inspection of which he had reserved to himself. He arranged and re-arranged, plunged his hand rapidly into certain mysterious boxes, singing all the time in a voice very out of tune some old French song to enliven the situation.

Barbicane noticed with interest that his rockets and other fireworks were not damaged. These were important, for, powerfully loaded, they were meant to slacken the speed with which the projectile would, when attracted by the moon after passing the point of neutral attraction, fall upon her surface. This fall besides would be six times less rapid than it would have been upon the surface of the earth, thanks to the difference of volume in the two bodies.

The inspection ended, therefore, in general satisfaction. Then they all returned to their posts of observation at the lateral and lower port-lights.

The same spectacle was spread before them. All the extent of the celestial sphere swarmed with stars and constellations of marvellous brilliancy, enough to make an astronomer wild! On one side the sun, like the mouth of a fiery furnace, shone upon the dark background of the heavens. On the other side the moon, reflecting back his fires, seemed motionless amidst the starry world. Then a large spot, like a hole in the firmament, bordered still by a slight thread of silver--it was the earth. Here and there nebulous masses like large snow-flakes, and from zenith to nadir an immense ring, formed of an impalpable dust of stars--that milky way amidst which the sun only counts as a star of the fourth magnitude!

The spectators could not take their eyes off a spectacle so new, of which no description could give any idea. What reflections it suggested! What unknown emotions it aroused in the soul! Barbicane wished to begin the recital of his journey under the empire of these impressions, and he noted down hourly all the events that signalised the beginning of his enterprise. He wrote tranquilly in his large and rather commercial-looking handwriting.

During that time the calculating Nicholl looked over the formulae of trajectories, and worked away at figures with unparalleled dexterity. Michel Ardan talked sometimes to Barbicane, who did not answer much, to Nicholl, who did not hear, and to Diana, who did not understand his theories, and lastly to himself, making questions and answers, going and coming, occupying himself with a thousand details, sometimes leaning over the lower port-light, sometimes roosting in the heights of the projectile, singing all the time. In this microcosm he represented the French agitation and loquacity, and it was worthily represented.

The day, or rather--for the expression is not correct--the lapse of twelve hours which makes a day upon earth--was ended by a copious supper carefully prepared. No incident of a nature to shake the confidence of the travellers had happened, so, full of hope and already sure of success, they went to sleep peacefully, whilst the projectile, at a uniformly increasing speed, made its way in the heavens.

CHAPTER IV.
A LITTLE ALGEBRA.

The night passed without incident. Correctly speaking, the word "night" is an improper one. The position of the projectile in regard to the sun did not change. Astronomically it was day on the bottom of the bullet, and night on the top. When, therefore, in this recital these two words are used they express the lapse of time between the rising and setting of the sun upon earth.

The travellers' sleep was so much the more peaceful because, notwithstanding its excessive speed, the projectile seemed absolutely motionless. No movement indicated its journey through space. However rapidly change of place may be effected, it cannot produce any sensible effect upon the organism when it takes place in the void, or when the mass of air circulates along with the travelling body. What inhabitant of the earth perceives the speed which carries him along at the rate of 68,000 miles an hour? Movement under such circumstances is not felt more than repose. Every object is indifferent to it. When a body is in repose it remains so until some foreign force puts it in movement. When in movement it would never stop if some obstacle were not in its road. This indifference to movement or repose is inertia.
Barbicane and his companions could, therefore, imagine themselves absolutely motionless, shut up in the interior of the projectile. The effect would have been the same if they had placed themselves on the outside. Without the moon, which grew larger above them, and the earth that grew smaller below, they would have sworn they were suspended in a complete stagnation.

That morning, the 3rd of December, they were awakened by a joyful but unexpected noise. It was the crowing of a cock in the interior of their vehicle.

Michel Ardan was the first to get up; he climbed to the top of the projectile and closed a partly-open case.

"Be quiet," said he in a whisper. "That animal will spoil my plan!"

In the meantime Nicholl and Barbicane awoke.

"Was that a cock?" said Nicholl.

"No, my friends," answered Michel quickly. "I wished to awake you with that rural sound."

So saying he gave vent to a cock-a-doodle-do which would have done honour to the proudest of gallinaceans.

The two Americans could not help laughing.

"A fine accomplishment that," said Nicholl, looking suspiciously at his companion.

"Yes," answered Michel, "a joke common in my country. It is very Gallic. We perpetrate it in the best society."

Then turning the conversation--

"Barbicane, do you know what I have been thinking about all night?"

"No," answered the president.

"About our friends at Cambridge. You have already remarked how admirably ignorant I am of mathematics. I find it, therefore, impossible to guess how our _savants_ of the observatory could calculate what initial velocity the projectile ought to be endowed with on leaving the Columbiad in order to reach the moon."

"You mean," replied Barbicane, "in order to reach that neutral point where the terrestrial and lunar attractions are equal; for beyond this point, situated at about 0.9 of the distance, the projectile will fall upon the moon by virtue of its own weight merely."

"Very well," answered Michel; "but once more; how did they calculate the initial velocity?"

"Nothing is easier," said Barbicane.

"And could you have made the calculation yourself?" asked Michel Ardan.

"Certainly; Nicholl and I could have determined it if the notice from the observatory had not saved us the trouble."

"Well, old fellow," answered Michel, "they might sooner cut off my head, beginning with my feet, than have made me solve that problem!"

"Because you do not know algebra," replied Barbicane tranquilly.

"Ah, that's just like you dealers in _x_! You think you have explained everything when you have said 'algebra.'"

"Michel," replied Barbicane, "do you think it possible to forge without a hammer, or to plough without a ploughshare?"

"It would be difficult."

"Well, then, algebra is a tool like a plough or a hammer, and a good tool for any one who knows how to use it."

"Seriously?"

"Quite."

"Could you use that tool before me?"

"If it would interest you."

"And could you show me how they calculated the initial speed of our vehicle?"

"Yes, my worthy friend. By taking into account all the elements of the problem, the distance from the centre of the earth to the centre of the moon, of the radius of the earth, the volume of the earth and the volume of the moon, I can determine exactly what the initial speed of the projectile ought to be, and that by a very simple formula."

"Show me the formula."

"You shall see it. Only I will not give you the curve really traced by the bullet between the earth and the moon, by taking into account their movement of translation round the sun. No. I will consider both bodies to be motionless, and that will be sufficient for us."

"Why?"

"Because that would be seeking to solve the problem called 'the problem of the three bodies,' for which the integral calculus is not yet far enough advanced."

"Indeed," said Michel Ardan in a bantering tone; "then mathematics have not said their last word."

"Certainly not," answered Barbicane.

"Good! Perhaps the Selenites have pushed the integral calculus further than you! By-the-bye, what is the integral calculus?"
"It is the inverse of the differential calculus," answered Barbicane seriously.
"Much obliged."
"To speak otherwise, it is a calculus by which you seek finished quantities of what you know the differential quantities."
"That is clear at least," answered Barbicane with a quite satisfied air.
"And now," continued Barbicane, "for a piece of paper and a pencil, and in half-an-hour I will have found the required formula."
That said, Barbicane became absorbed in his work, whilst Nicholl looked into space, leaving the care of preparing breakfast to his companion.

Half-an-hour had not elapsed before Barbicane, raising his head, showed Michel Ardan a page covered with algebratal signs, amidst which the following general formula was discernible:--

$$1 2 2 \cdot r m' r - (v - v') = gr \{ \frac{-1}{x \cdot m \cdot d-x \cdot d-r} \} 2 0 x m d-x-d-r$$

"And what does that mean?" asked Nicholl.
"That means," answered Nicholl, "that the half of _v_ minus _v_ zero square equals _gr_ multiplied by _r_ upon _x_ minus 1 plus _m_ prime upon _m_ multiplied by _r_ upon _d_ minus _x_, minus _r_ upon _d_ minus _x_ minus _r_--"

"X_ upon _y_ galloping upon _z_ and rearing upon _p_." cried Michel Ardan, bursting out laughing. "Do you mean to say you understand that, captain?"
"Nothing is clearer."
"Then," said Michel Ardan, "it is as plain as a pikestaff, and I want nothing more."
"Everlasting laugh," said Barbicane, "you wanted algebra, and now you shall have it over head and ears."
"I would rather be hung!"

"That appears a good solution, Barbicane," said Nicholl, who was examining the formula like a _connaisseur_.
"It is the integral of the equation of 'vis viva,' and I do not doubt that it will give us the desired result."
"But I should like to understand!" exclaimed Michel. "I would give ten years of Nicholl's life to understand!"
"Then listen," resumed Barbicane. "The half of _v_ minus _v_ zero square is the formula that gives us the demi-variation of the 'vis viva.'"

"Good; and does Nicholl understand what that means?"
"Certainly, Michel," answered the captain. "All those signs that look so cabalistic to you form the clearest and most logical language for those who know how to read it."
"And do you pretend, Nicholl," asked Michel, "that by means of these hieroglyphics, more incomprehensible than the Egyptian ibis, you can find the initial speed necessary to give to the projectile?"
"Incontestably," answered Nicholl; "and even by that formula I could always tell you what speed it is going at on any point of the journey."
"Upon your word of honour?"
"Yes."
"Then you are as clever as our president."
"No, Michel, all the difficulty consists in what Barbicane has done. It is to establish an equation which takes into account all the conditions of the problem. The rest is only a question of arithmetic, and requires nothing but a knowledge of the four rules."

"That's something," answered Michel Ardan, who had never been able to make a correct addition in his life, and who thus defined the rule: "A Chinese puzzle, by which you can obtain infinitely various results."

Still Barbicane answered that Nicholl would certainly have found the formula had he thought about it.
"I do not know if I should," said Nicholl, "for the more I study it the more marvellously correct I find it."
"Now listen," said Barbicane to his ignorant comrade, "and you will see that all these letters have a signification."
"I am listening," said Michel, looking resigned.
"d_," said Barbicane, "is the distance from the centre of the earth to the centre of the moon, for we must take the centres to calculate the attraction."
"That I understand."
"_r_ is the radius of the earth."
"_r_, radius; admitted."
"_m_ is the volume of the earth; _m_ prime that of the moon. We are obliged to take into account the volume of the two attracting bodies, as the attraction is in proportion to the volume.
"I understand that."
"_g_ represents gravity, the speed acquired at the end of a second by a body falling on the surface of the earth. Is
"A mountain stream!" answered Michel.

"Now I represent by \( x \) the variable distance that separates the projectile from the centre of the earth, and by \( v \), the velocity the projectile has at that distance."

"Good."

"Lastly, the expression \( v \) zero which figures in the equation is the speed the bullet possesses when it emerges from the atmosphere."

"Yes," said Nicholl, "you were obliged to calculate the velocity from that point, because we knew before that the velocity at departure is exactly equal to \( 3/2 \) of the velocity upon emerging from the atmosphere."

"Don't understand any more!" said Michel.

"Yet it is very simple," said Barbicane.

"I do not find it very simple," replied Michel.

"It means that when our projectile reached the limit of the terrestrial atmosphere it had already lost one-third of its initial velocity."

"As much as that?"

"Yes, my friend, simply by friction against the atmosphere. You will easily understand that the greater its speed the more resistance it would meet with from the air."

"That I admit," answered Michel, "and I understand it, although your \( v \) zero two and your \( v \) zero square shake about in my head like nails in a sack."

"First effect of algebra," continued Barbicane. "And now to finish we are going to find the numerical known quantity of these different expressions—that is to say, find out their value."

"You will finish me first!" answered Michel.

"Some of these expressions," said Barbicane, "are known; the others have to be calculated."

"I will calculate those," said Nicholl.

"And \( r \)," resumed Barbicane, "\( r \) is the radius of the earth under the latitude of Florida, our point of departure, \( d \)—that is to say, the distance from the centre of the earth to the centre of the moon equals fifty-six terrestrial radii—"

Nicholl rapidly calculated.

"That makes 356,720,000 metres when the moon is at her perigee—that is to say, when she is nearest to the earth."

"Very well," said Barbicane, "now \( m \) prime upon \( m \)—that is to say, the proportion of the moon's volume to that of the earth equals \( 1/81 \)."

"Perfect," said Michel.

"And \( g \), the gravity, is to Florida 9-1/81 metres. From whence it results that \( g r \) equals—"

"Sixty-two million four hundred and twenty-six thousand square metres," answered Nicholl.

"What next?" asked Michel Ardan.

"Now that the expressions are reduced to figures, I am going to find the velocity \( v \) zero—that is to say, the velocity that the projectile ought to have on leaving the atmosphere to reach the point of equal attraction with no velocity. The velocity at that point I make equal \( v \) zero, and \( x \), the distance where the neutral point is, will be represented by the nine-tenths of \( d \)—that is to say, the distance that separates the two centres."

"I have some vague idea that it ought to be so," said Michel.

"I shall then have, \( x \) equals nine-tenths of \( d \), and \( v \) equals zero, and my formula will become—"

Barbicane wrote rapidly on the paper—

\[
2 \times 10r + 1 \times 10r r v = 2 \times g r \left\{ 1 - \frac{10r}{9d} \right\},
\]

Nicholl read it quickly.

"That's it! that is it!" he cried.

"Is it clear?" asked Barbicane.

"It is written in letters of fire!" answered Nicholl.

"Clever fellows!" murmured Michel.

"Do you understand now?" asked Barbicane.

"If I understand!" cried Michel Ardan. "My head is bursting with it."

"Thus," resumed Barbicane, "\( v \) zero square equals \( 2 \times g r \) multiplied by 1 minus 10 \( r \) upon 9 \( d \) minus 1/81 multiplied by 10 \( r \) upon \( d \) minus \( r \) upon \( d \) minus \( r \)."

"And now," said Nicholl, "in order to obtain the velocity of the bullet as it emerges from the atmosphere I have only to calculate."

The captain, like a man used to overcome all difficulties, began to calculate with frightful rapidity. Divisions and
multiplications grew under his fingers. Figures dotted the page. Barbicane followed him with his eyes, whilst Michel Ardan compressed a coming headache with his two hands.

"Well, what do you make it?" asked Barbicane after several minutes' silence.

"I make it 11,051 metres in the first second."

"What do you say?" said Barbicane, starting.

"Eleven thousand and fifty-one metres."

"Malediction!" cried the president with a gesture of despair.

"What's the matter with you?" asked Michel Ardan, much surprised.

"The matter! why if at this moment the velocity was already diminished one-third by friction, the initial speed ought to have been--"

"Sixteen thousand five hundred and seventy-six metres!" answered Nicholl.

"But the Cambridge Observatory declared that 11,000 metres were enough at departure, and our bullet started with that velocity only!"

"Well?" asked Nicholl.

"Why it was not enough!"

"No."

"We shall not reach the neutral point."

"The devil!"

"We shall not even go half way!"

"Nom d'un boulet!" exclaimed Michel Ardan, jumping up as if the projectile were on the point of striking against the terrestrial globe.

"And we shall fall back upon the earth!"

CHAPTER V.
THE TEMPERATURE OF SPACE.

This revelation acted like a thunderbolt. Who could have expected such an error in calculation? Barbicane would not believe it. Nicholl went over the figures again. They were correct. The formula which had established them could not be mistrusted, and, when verified, the initial velocity of 16,576 metres, necessary for attaining the neutral point, was found quite right.

The three friends looked at one another in silence. No one thought about breakfast after that. Barbicane, with set teeth, contracted brow, and fists convulsively closed, looked through the port-light. Nicholl folded his arms and examined his calculations. Michel Ardan murmured--

"That's just like savants! That's the way they always do! I would give twenty pistoles to fall upon the Cambridge Observatory and crush it, with all its stupid staff inside!"

All at once the captain made a reflection which struck Barbicane at once.

"Why," said he, "it is seven o'clock in the morning, so we have been thirty-two hours on the road. We have come more than half way, and we are not falling yet that I know of!"

Barbicane did not answer, but after a rapid glance at the captain he took a compass, which he used to measure the angular distance of the terrestrial globe. Then through the lower port-light he made a very exact observation from the apparent immobility of the projectile. Then rising and wiping the perspiration from his brow, he put down some figures upon paper. Nicholl saw that the president wished to find out from the length of the terrestrial diameter the distance of the bullet from the earth. He looked at him anxiously.

"No!" cried Barbicane in a few minutes' time, "we are not falling! We are already more than 50,000 leagues from the earth! We have passed the point the projectile ought to have stopped at if its speed had been only 11,000 metres at our departure! We are still ascending!"

"That is evident," answered Nicholl; "so we must conclude that our initial velocity, under the propulsion of the 400,000 lbs. of gun-cotton, was greater than the 11,000 metres. I can now explain to myself why we met with the second satellite, that gravitates at more than 2,000 leagues from the earth, in less than thirteen minutes."

"That explanation is so much the more probable," added Barbicane, "because by throwing out the water in our movable partitions the projectile was made considerably lighter all at once."

"That is true," said Nicholl.

"Ah, my brave Nicholl," cried Barbicane, "we are saved!"

"Very well then," answered Michel Ardan tranquilly, "as we are saved, let us have breakfast."

Nicholl was not mistaken. The initial speed had happily been greater than that indicated by the Cambridge Observatory, but the Cambridge Observatory had no less been mistaken.
The travellers, recovered from their false alarm, sat down to table and breakfasted merrily. Though they ate much they talked more. Their confidence was greater after the "algebra incident."

"Why should we not succeed?" repeated Michel Ardan. "Why should we not arrive? We are on the road; there are no obstacles before us, and no stones on our route. It is free--freer than that of a ship that has to struggle with the sea, or a balloon with the wind against it! Now if a ship can go where it pleases, or a balloon ascend where it pleases, why should not our projectile reach the goal it was aimed at?"

"It will reach it," said Barbicane.

"If only to honour the American nation," added Michel Ardan, "the only nation capable of making such an enterprise succeed--the only one that could have produced a President Barbicane! Ah! now I think of it, now that all our anxieties are over, what will become of us? We shall be as dull as stagnant water."

Barbicane and Nicholl made gestures of repudiation.

"But I foresaw this, my friends," resumed Michel Ardan. "You have only to say the word. I have chess, backgammon, cards, and dominoes at your disposition. We only want a billiard-table!"

"What?" asked Barbicane, "did you bring such trifles as those?"

"Certainly," answered Michel; "not only for our amusement, but also in the praiseworthy intention of bestowing them upon Selenite inns."

"My friend," said Barbicane, "if the moon is inhabited its inhabitants appeared some thousands of years before those of the earth, for it cannot be doubted that the moon is older than the earth. If, therefore, the Selenites have existed for thousands of centuries--if their brains are organised like that of human beings--they have invented all that we have invented, already, and even what we shall only invent in the lapse of centuries. They will have nothing to learn from us, and we shall have everything to learn from them."

"What!" answered Michel, "do you think they have had artists like Phidias, Michael Angelo, or Raphael?"

"Yes."

"Poets like Homer, Virgil, Milton, Lamartine, and Hugo?"

"I am sure of it."

"Philosophers like Plato, Aristotle, Descartes, and Kant?"

"I have no doubt of it."

"_Savants_ like Archimedes, Euclid, Pascal, and Newton?"

"I could swear it."

"Clowns like Arnal, and photographers like--Nadar?"

"I am certain of it."

"Then, friend Barbicane, if these Selenites are as learned as we, and even more so, why have they not hurled a lunar projectile as far as the terrestrial regions?"

"Who says they have not done it?" answered Barbicane seriously.

"In fact," added Nicholl, "it would have been easier to them than to us, and that for two reasons--the first because the attraction is six times less on the surface of the moon than on the surface of the earth, which would allow a projectile to go up more easily; secondly the projectile would only have 8,000 leagues to travel instead of 80,000, which would require a force of propulsion ten times less."

"Then," resumed Michel, "I repeat--why have they not done it?"

"And I," replied Barbicane, "I repeat--who says they have not done it?"

"When?"

"Hundreds of centuries ago, before man's appearance upon earth."

"And the bullet? Where is the bullet? I ask to see the bullet!"

"My friend," answered Barbicane, "the sea covers five-sixths of our globe, hence there are five good reasons for supposing that the lunar projectile, if it has been fired, is now submerged at the bottom of the Atlantic or Pacific, unless it was buried down some abyss at the epoch when the earth's crust was not sufficiently formed."

"Old fellow," answered Michel, "you have an answer to everything, and I bow before your wisdom. There is one hypothesis I would rather believe than the others, and that is that the Selenites being older than we are wiser, and have not invented gunpowder at all."

At that moment Diana claimed her share in the conversation by a sonorous bark. She asked for her breakfast.

"Ah!" said Michel Ardan, "our arguments make us forget Diana and Satellite!"

A good dish of food was immediately offered to the dog, who devoured it with great appetite.

"Do you know, Barbicane," said Michel, "we ought to have made this projectile a sort of Noah's Ark, and have taken a couple of all the domestic animals with us to the moon."

"No doubt," answered Barbicane, "but we should not have had room enough."

"Oh, we might have been packed a little tighter!"
"The fact is," answered Nicholl, "that oxen, cows, bulls, and horses, all those ruminants would be useful on the lunar continent. Unfortunately we cannot make our projectile either a stable or a cowshed."

"But at least," said Michel Ardan, "we might have brought an ass, nothing but a little ass, the courageous and patient animal old Silenus loved to exhibit. I am fond of those poor asses! They are the least favoured animals in creation. They are not only beaten during their lifetime, but are still beaten after their death!"

"What do you mean by that?" asked Barbicane.

"Why, don't they use his skin to make drums of?"

Barbicane and Nicholl could not help laughing at this absurd reflection. But a cry from their merry companion stopped them; he was bending over Satellite's niche, and rose up saying--

"Good! Satellite is no longer ill."

"Ah!" said Nicholl.

"No!" resumed Michel, "he is dead. Now," he added in a pitiful tone, "this will be embarrassing! I very much fear, poor Diana, that you will not leave any of your race in the lunar regions!"

The unfortunate Satellite had not been able to survive his wounds. He was dead, stone dead. Michel Ardan, much put out of countenance, looked at his friends.

"This makes another difficulty," said Barbicane. "We can't keep the dead body of this dog with us for another eight-and-forty hours."

"No, certainly not," answered Nicholl, "but our port-lights are hung upon hinges. They can be let down. We will open one of them, and throw the body into space."

The president reflected for a few minutes, and then said--

"Yes, that is what we must do, but we must take the most minute precautions."

"Why?" asked Michel.

"For two reasons that I will explain to you," answered Barbicane. "The first has reference to the air in the projectile, of which we must lose as little as possible."

"But we can renew the air!"

"Not entirely. We can only renew the oxygen, Michel; and, by-the-bye, we must be careful that the apparatus do not furnish us with this oxygen in an immoderate quantity, for an excess of it would cause grave physiological consequences. But although we can renew the oxygen we cannot renew the azote, that medium which the lungs do not absorb, and which ought to remain intact. Now the azote would rapidly escape if the port-lights were opened."

"Not just the time necessary to throw poor Satellite out."

"Agreed; but we must do it quickly."

"And what is the second reason?" asked Michel.

"The second reason is that we must not allow the exterior cold, which is excessive, to penetrate into our projectile lest we should be frozen alive."

"Still the sun--"

"The sun warms our projectile because it absorbs its rays, but it does not warm the void we are in now. When there is no air there is no more heat than there is diffused light, and where the sun's rays do not reach directly it is both dark and cold. The temperature outside is only that produced by the radiation of the stars--that is to say, the same as the temperature of the terrestrial globe would be if one day the sun were to be extinguished."

"No fear of that," answered Nicholl.

"Who knows?" said Michel Ardan. "And even supposing that the sun be not extinguished, it might happen that the earth will move farther away from it."

"Good!" said Nicholl; "that's one of Michel's ideas!"

"Well," resumed Michel, "it is well known that in 1861 the earth went through the tail of a comet. Now suppose there was a comet with a power of attraction greater than that of the sun, the terrestrial globe might make a curve towards the wandering star, and the earth would become its satellite, and would be dragged away to such a distance that the rays of the sun would have no action on its surface."

"That might happen certainly," answered Barbicane, "but the consequences would not be so redoubtable as you would suppose."

"How so?"

"Because heat and cold would still be pretty well balanced upon our globe. It has been calculated that if the earth had been carried away by the comet of 1861, it would only have felt, when at its greatest distance from the sun, a heat sixteen times greater than that sent to us by the moon--a heat which, when focussed by the strongest lens, produces no appreciable effect."

"Well?" said Michel.

"Wait a little," answered Barbicane. "It has been calculated that at its perihelion, when nearest to the sun, the
earth would have borne a heat equal to 28,000 times that of summer. But this heat, capable of vitrifying terrestrial matters, and of evaporating water, would have formed a thick circle of clouds which would have lessened the excessive heat, hence there would be compensation between the cold of the aphelion and the heat of the perihelion, and an average probably supportable."

"At what number of degrees do they estimate the temperature of the planetary space?"

"Formerly," answered Barbicane, "it was believed that this temperature was exceedingly low. By calculating its thermometric diminution it was fixed at millions of degrees below zero. It was Fourier, one of Michel's countrymen, an illustrious _savant_ of the _Académie des Sciences_, who reduced these numbers to a juster estimation. According to him, the temperature of space does not get lower than 60° Centigrade."

Michel whistled.

"It is about the temperature of the polar regions," answered Barbicane, "at Melville Island or Fort Reliance--about 56° Centigrade below zero."

"It remains to be proved," said Nicholl, "that Fourier was not mistaken in his calculations. If I am not mistaken, another Frenchman, M. Pouillet, estimates the temperature of space at 160° below zero. We shall be able to verify that."

"Not now," answered Barbicane, "for the solar rays striking directly upon our thermometer would give us, on the contrary, a very elevated temperature. But when we get upon the moon, during the nights, a fortnight long, which each of its faces endures alternately, we shall have leisure to make the experiment, for our satellite moves in the void."

"What do you mean by the void?" asked Michel; "is it absolute void?"

"It is absolutely void of air."

"Is there nothing in its place?"

"Yes, ether," answered Barbicane.

"Ah! and what is ether?"

"Ether, my friend, is an agglomeration of imponderable particles, which, relatively to their dimensions, are as far removed from each other as the celestial bodies are in space, so say works on molecular physics. It is these atoms that by their vibrating movement produce light and heat by making four hundred and thirty billions of oscillations a second."

"Millions of millions!" exclaimed Michel Ardan; "then _savants_ have measured and counted these oscillations! All these figures, friend Barbicane, are _savants'_ figures, which reach the ear but say nothing to the mind."

"But they are obliged to have recourse to figures."

"No. It would be much better to compare. A billion signifies nothing. An object of comparison explains everything. Example--When you tell me that Uranus is 76 times larger than the earth, Saturn 900 times larger, Jupiter 1,300 times larger, the sun 1,300,000 times larger, I am not much wiser. So I much prefer the old comparisons of the _Double Liégoise_ that simply tells you, 'The sun is a pumpkin two feet in diameter, Jupiter an orange, Saturn a Blenheim apple, Neptune a large cherry, Uranus a smaller cherry, the earth a pea, Venus a green pea, Mars the head of a large pin, Mercury a grain of mustard, and Juno, Ceres, Vesta, and Pallas fine grains of sand!' Then I know what it means!"

After this tirade of Michel Ardan's against _savants_ and their billions, which he delivered without stopping to take breath, they set about burying Satellite. He was to be thrown into space like sailors throw a corpse into the sea. As President Barbicane had recommended, they had to act quickly so as to lose as little air as possible. The bolts upon the right-hand port-hole were carefully unscrewed, and an opening of about half a yard made, whilst Michel prepared to hurl his dog into space. The window, worked by a powerful lever, which conquered the pressure of air in the interior upon the sides of the projectile, moved upon its hinges, and Satellite was thrown out. Scarcely a particle of air escaped, and the operation succeeded so well that later on Barbicane did not fear to get rid of all the useless rubbish that encumbered the vehicle in the same way.

CHAPTER VI.

QUESTIONS AND ANSWERS.

On the 4th of December, at 5 a.m. by terrestrial reckoning, the travellers awoke, having been fifty-four hours on their journey. They had only been five hours and forty minutes more than half the time assigned for the accomplishment of their journey, but they had come more than seven-tenths of the distance. This peculiarity was due to their regularly-decreasing speed.

When they looked at the earth through the port-light at the bottom, it only looked like a black spot drowned in the sun's rays. No crescent or pale light was now to be seen. The next day at midnight the earth would be new at the
precise moment when the moon would be full. Above, the Queen of Night was nearing the line followed by the projectile, so as to meet it at the hour indicated. All around the dark vault was studded with brilliant specks which seemed to move slowly; but through the great distance they were at their relative size did not seem to alter much. The sun and the stars appeared exactly as they do from the earth. The moon was considerably enlarged; but the travellers' not very powerful telescopes did not as yet allow them to make very useful observations on her surface, or to reconnoitre the topographical or geological details.

The time went by in interminable conversations. The talk was especially about the moon. Each brought his contingent of particular knowledge. Barbicane's and Nicholl's were always serious, Michel Ardan's always fanciful. The projectile, its situation and direction, the incidents that might arise, the precautions necessitated by its fall upon the moon, all this afforded inexhaustible material for conjecture.

Whilst breakfasting a question of Michel's relative to the projectile provoked a rather curious answer from Barbicane, and one worthy of being recorded.

Michel, supposing the bullet to be suddenly stopped whilst still endowed with its formidable initial velocity, wished to know what the consequences would have been.

"But," answered Barbicane, "I don't see how the projectile could have been stopped."

"But let us suppose it," answered Nicholl.

"It is an impossible supposition," replied the practical president, "unless the force of impulsion had failed. But in that case its speed would have gradually decreased, and would not have stopped abruptly."

"Admit that it had struck against some body in space."

"What body?"

"The enormous meteor we met."

"Then," said Nicholl, "the projectile would have been broken into a thousand pieces, and we with it."

"More than that," answered Barbicane, "we should have been burnt alive."

"Burnt!" exclaimed Michel. "I regret it did not happen for us just to see."

"And you would have seen with a vengeance," answered Barbicane. "It is now known that heat is only a modification of movement when water is heated—that is to say, when heat is added to it—that means the giving of movement to its particles."

"That is an ingenious theory!" said Michel.

"And a correct one, my worthy friend, for it explains all the phenomena of caloric. Heat is only molecular movement, a single oscillation of the particles of a body. When the break is put on a train it stops. But what becomes of the movement which animated it? Why do they grease the axles of the wheels? In order to prevent them catching fire from the movement lost by transformation. Do you understand?"

"Admirably," answered Michel. "For example, when I have been running some time, and am covered with sweat, why am I forced to stop? Simply because my movement has been transformed into heat."

Barbicane could not help laughing at this _rétapartie_ of Michel's. Then resuming his theory—

"Thus," said he, "in case of a collision, it would have happened to our projectile as it does to the metal cannon-ball after striking armour-plate; it would fall burning, because its movement had been transformed into heat. In consequence, I affirm that if our bullet had struck against the asteroid, its speed, suddenly annihilated, would have produced heat enough to turn it immediately into vapour."

"Then," asked Nicholl, "what would happen if the earth were to be suddenly stopped in her movement of translation?"

"Her temperature would be carried to such a point," answered Barbicane, "that she would be immediately reduced to vapour."

"Good," said Michel; "that means of ending the world would simplify many things."

"And suppose the earth were to fall upon the sun?" said Nicholl.

"According to calculations," answered Barbicane, "that would develop a heat equal to that produced by 1,600 globes of coal, equal in volume to the terrestrial globe."

"A good increase of temperature for the sun," replied Michel Ardan, "of which the inhabitants of Uranus or Neptune will probably not complain, for they must be dying of cold on their planet."

"Thus, then, my friends, any movement suddenly stopped produces heat. This theory makes it supposed that the sun is constantly fed by an incessant fall of bodies upon its surface. It has been calculated—"

"Now I shall be crushed," murmured Michel, "for figures are coming."

"It has been calculated," continued Barbicane imperturbably, "that the shock of each asteroid upon the sun must produce heat equal to that of 4,000 masses of coal of equal volume."

"And what is the heat of the sun?" asked Michel.

"It is equal to that which would be produced by a stratum of coal surrounding the sun to a depth of twenty-seven
kilometres."
"And that heat--"
"Could boil 2,900,000,000 of cubic myriametres of water an hour." (A myriametre is equal to rather more than 6.2138 miles, or 6 miles 1 furlong 28 poles.)
"And we are not roasted by it?" cried Michel.
"No," answered Barbicane, "because the terrestrial atmosphere absorbs four-tenths of the solar heat. Besides, the quantity of heat intercepted by the earth is only two thousand millionth of the total."
"I see that all is for the best," replied Michel, "and that our atmosphere is a useful invention, for it not only allows us to breathe, but actually prevents us roasting."
"Yes," said Nicholl, "but, unfortunately, it will not be the same on the moon."
"Bah!" said Michel, always confident. "If there are any inhabitants they breathe. If there are no longer any they will surely have left enough oxygen for three people, if only at the bottom of those ravines where it will have accumulated by reason of its weight! Well, we shall not climb the mountains! That is all."
And Michel, getting up, went to look at the lunar disc, which was shining with intolerable brilliancy.
"Faith!" said he, "it must be hot up there."
"Without reckoning," answered Nicholl, "that daylight lasts 360 hours."
"And by way of compensation night has the same duration," said Barbicane, "and as heat is restored by radiation, their temperature must be that of planetary space."
"A fine country truly!" said Nicholl.
"Never mind! I should like to be there already! It will be comical to have the earth for a moon, to see it rise on the horizon, to recognise the configuration of its continents, to say to oneself, 'There's America and there's Europe;' then to follow it till it is lost in the rays of the sun! By-the-bye, Barbicane, have the Selenites any eclipses?"
"Yes, eclipses of the sun," answered Barbicane, "when the centres of the three stars are on the same line with the earth in the middle. But they are merely annular eclipses, during which the earth, thrown like a screen across the solar disc, allows the greater part to be seen."
"Why is there no total eclipse?" asked Nicholl. "Is it because the cone of shade thrown by the earth does not extend beyond the moon?"
"Yes, if you do not take into account the refraction produced by the terrestrial atmosphere, not if you do take that refraction into account. Thus, let \( \delta \) be the horizontal parallax and \( p \) the apparent semidiameter--"
"Ouf!" said Michel, "half of \( \sqrt{v} \) zero square! Do speak the vulgar tongue, man of algebra!"
"Well, then, in popular language," answered Barbicane, "the mean distance between the moon and the earth being sixty terrestrial radii, the length of the cone of shadow, by dint of refraction, is reduced to less than forty-two radii. It follows, therefore, that during the eclipses the moon is beyond the cone of pure shade, and the sun sends it not only rays from its edges, but also rays from its centre."
"Then," said Michel in a grumbling tone, "why is there any eclipse when there ought to be none?"
"Solely because the solar rays are weakened by the refraction, and the atmosphere which they traverse extinguishes the greater part of them."
"That reason satisfies me," answered Michel; "besides, we shall see for ourselves when we get there. Now, Barbicane, do you believe that the moon is an ancient comet?"
"What an idea!"
"Yes," replied Michel, with amiable conceit, "I have a few ideas of that kind."
"But that idea does not originate with Michel," answered Nicholl.
"Then I am only a plagiarist."
"Without doubt," answered Nicholl. "According to the testimony of the ancients, the Arcadians pretended that their ancestors inhabited the earth before the moon became her satellite. Starting from this fact, certain savants think the moon was a comet which its orbit one day brought near enough to the earth to be retained by terrestrial attraction."
"And what truth is there in that hypothesis?" asked Michel.
"None," answered Barbicane, "and the proof is that the moon has not kept a trace of the gaseous envelope that always accompanies comets."
"But," said Nicholl, "might not the moon, before becoming the earth's satellite, have passed near enough to the sun to leave all her gaseous substances by evaporation?"
"It might, friend Nicholl, but it is not probable."
"Why?"
"Because--because, I really don't know."
"Ah, what hundreds of volumes we might fill with what we don't know!" exclaimed Michel. "But I say," he
continued, "what time is it?"

"Three o'clock," answered Nicholl.

"How the time goes," said Michel, "in the conversation of _savants_ like us! Decidedly I feel myself getting too learned! I feel that I am becoming a well of knowledge!"

So saying, Michel climbed to the roof of the projectile, "in order better to observe the moon," he pretended. In the meanwhile his companions watched the vault of space through the lower port-light. There was nothing fresh to signalise.

When Michel Ardan came down again he approached the lateral port-light, and suddenly uttered an exclamation of surprise.

"What is the matter now?" asked Barbicane.

The president approached the glass and saw a sort of flattened sack floating outside at some yards' distance from the projectile. This object seemed motionless like the bullet, and was consequently animated with the same ascensional movement.

"Whatever can that machine be?" said Michel Ardan. "Is it one of the corpuscles of space which our projectile holds in its radius of attraction, and which will accompany it as far as the moon?"

"What I am astonished at," answered Nicholl, "is that the specific weight of this body, which is certainly superior to that of the bullet, allows it to maintain itself so rigorously on its level."

"Nicholl," said Barbicane, after a moment's reflection, "I do not know what that object is, but I know perfectly why it keeps on a level with the projectile."

"Why, pray?"

"Because we are floating in the void where bodies fall or move—which is the same thing—with equal speed whatever their weight or form may be. It is the air which, by its resistance, creates differences in weight. When you pneumatically create void in a tube, the objects you throw down it, either lead or feathers, fall with the same rapidity. Here in space you have the same cause and the same effect."

"True," said Nicholl, "and all we throw out of the projectile will accompany us to the moon."

"Ah! what fools we are!" cried Michel.

"Why this qualification?" asked Barbicane.

"Because we ought to have filled the projectile with useful objects, books, instruments, tools, &c. We could have thrown them all out, and they would all have followed in our wake! But, now I think of it, why can't we take a walk outside this? Why can't we go into space through the port-light? What delight it would be to be thus suspended in ether, more favoured even than birds that are forced to flap their wings to sustain them!"

"Agreed," said Barbicane, "but how are we to breathe?"

"Confounded air to fail so inopportune!"

"But if it did not fail, Michel, your density being inferior to that of the projectile, you would soon remain behind."

"Then it is a vicious circle."

"All that is most vicious."

"And we must remain imprisoned in our vehicle."

"Yes, we must."

"Ah!" cried Michel in a formidable voice.

"What is the matter with you?" asked Nicholl.

"I know, I guess what this pretended asteroid is! It is not a broken piece of planet!"

"What is it, then?" asked Nicholl.

"It is our unfortunate dog! It is Diana's husband!"

In fact, this deformed object, reduced to nothing, and quite unrecognisable, was the body of Satellite flattened like a bagpipe without wind, and mounting, for ever mounting!

CHAPTER VII.
A MOMENT OF INTOXICATION.

Thus a curious but logical, strange yet logical phenomenon took place under these singular conditions. Every object thrown out of the projectile would follow the same trajectory and only stop when it did. That furnished a text for conversation which the whole evening could not exhaust. The emotion of the three travellers increased as they approached the end of their journey. They expected unforeseen incidents, fresh phenomena, and nothing would have astonished them under present circumstances. Their excited imagination outdistanced the projectile, the speed of which diminished notably without their feeling it. But the moon grew larger before their eyes, and they thought they
had only to stretch out their hands to touch it.

The next day, the 5th of December, they were all wide awake at 5 a.m. That day was to be the last of their journey if the calculations were exact. That same evening, at midnight, within eighteen hours, at the precise moment of full moon, they would reach her brilliant disc. The next midnight would bring them to the goal of their journey, the most extraordinary one of ancient or modern times. At early dawn, through the windows made silvery with her rays, they saluted the Queen of Night with a confident and joyful hurrah.

The moon was sailing majestically across the starry firmament. A few more degrees and she would reach that precise point in space where the projectile was to meet her. According to his own observations, Barbicane thought that he should accost her in her northern hemisphere, where vast plains extend and mountains are rare—a favourable circumstance if the lunar atmosphere was, according to received opinion, stored up in deep places only.

"Besides," observed Michel Ardan, "a plain is more suitable for landing upon than a mountain. A Selenite landed in Europe on the summit of Mont Blanc, or in Asia on a peak of the Himalayas, would not be precisely at his destination!"

"What is more," added Nicholl, "on a plain the projectile will remain motionless after it has touched the ground, whilst it would roll down a hill like an avalanche, and as we are not squirrels we should not come out safe and sound. Therefore all is for the best."

In fact, the success of the audacious enterprise no longer appeared doubtful. Still one reflection occupied Barbicane; but not wishing to make his two companions uneasy, he kept silence upon it.

The direction of the projectile towards the northern hemisphere proved that its trajectory had been slightly modified. The aim, mathematically calculated, ought to have sent the bullet into the very centre of the lunar disc. If it did not arrive there it would be because it had deviated. What had caused it? Barbicane could not imagine nor determine the importance of this deviation, for there was no datum to go upon. He hoped, however, that the only result would be to take them towards the upper edge of the moon, a more suitable region for landing.

Barbicane, therefore, without saying anything to his friends, contented himself with frequently observing the moon, trying to see if the direction of the projectile would not change. For the situation would have been so terrible had the bullet, missing its aim, been dragged beyond the lunar disc and fallen into interplanetary space.

At that moment the moon, instead of appearing flat like a disc, already showed her convexity. If the sun's rays had reached her obliquely the shadow then thrown would have made the high mountains stand out. They could have seen the gaping craters and the capricious furrows that cut up the immense plains. But all relief was levelled in the intense brilliancy. Those large spots that give the appearance of a human face to the moon were scarcely distinguishable.

"It may be a face," said Michel Ardan, "but I am sorry for the amiable sister of Apollo, her face is so freckled!"

In the meantime the travellers so near their goal ceaselessly watched this new world. Their imagination made them take walks over these unknown countries. They climbed the elevated peaks. They descended to the bottom of the large amphitheatres. Here and there they thought they saw vast seas scarcely kept together under an atmosphere so rarefied, and streams of water that poured them their tribute from the mountains. Leaning over the abyss they hoped to catch the noise of this orb for ever mute in the solitudes of the void.

This last day left them the liveliest remembrances. They noted down the least details. A vague uneasiness took possession of them as they approached their goal. This uneasiness would have been doubled if they had felt how slight their speed was. It appeared quite insufficient to take them to the end of their journey. This was because the projectile scarcely "weighed" anything. Its weight constantly decreased, and would be entirely annihilated on that line where the lunar and terrestrial attractions neutralise each other, causing surprising effects.

Nevertheless, in spite of his preoccupations, Michel Ardan did not forget to prepare the morning meal with his habitual punctuality. They ate heartily. Nothing was more excellent than their broth liquefied by the heat of the gas. Nothing better than these preserved meats. A few glasses of good French wine crowned the repast, and caused Michel Ardan to remark that the lunar vines, warmed by this ardent sun, ought to distil the most generous wines—that is, if they existed. Any way, the far-seeing Frenchman had taken care not to forget in his collection some precious cuttings of the Médoc and Côte d'Or, upon which he counted particularly.

The Reiset and Regnault apparatus always worked with extreme precision. The air was kept in a state of perfect purity. Not a particle of carbonic acid resisted the potash, and as to the oxygen, that, as Captain Nicholl said, was of "first quality." The small amount of humidity in the projectile mixed with this air and tempered its dryness, and many Paris, London, or New York apartments and many theatres do not certainly fulfil hygienic conditions so well.

But in order to work regularly this apparatus had to be kept going regularly. Each morning Michel inspected the escape regulators, tried the taps, and fixed by the pyrometer the heat of the gas. All had gone well so far, and the travellers, imitating the worthy J.T. Maston, began to get so stout that they would not be recognisable if their imprisonment lasted several months. They behaved like chickens in a cage—they fattened.
Looking through the port lights Barbicane saw the spectre of the dog, and the different objects thrown out of the projectile, which obstinately accompanied it. Diana howled lamentably when she perceived the remains of Satellite. All the things seemed as motionless as if they had rested upon solid ground.

"Do you know, my friends," said Michel Ardan, "that if one of us had succumbed to the recoil shock at departure we should have been much embarrassed as to how to get rid of him? You see the accusing corpse would have followed us in space like remorse!"

"That would have been sad," said Nicholl.

"Ah!" continued Michel, "what I regret is our not being able to take a walk outside. What delight it would be to float in this radiant ether, to bathe in these pure rays of the sun! If Barbicane had only thought of furnishing us with diving-dresses and air-pumps I should have ventured outside, and have assumed the attitude of a flying-horse on the summit of the projectile."

"Ah, old fellow!" answered Barbicane, "you would not have stayed there long in spite of your diving-dress; you would have burst like an obus by the expansion of air inside you, or rather like a balloon that goes up too high. So regret nothing, and do not forget this: while we are moving in the void you must do without any sentimental promenade out of the projectile."

Michel Ardan allowed himself to be convinced in a certain measure. He agreed that the thing was difficult, but not "impossible;" that was a word he never uttered.

The conversation passed from this subject to another, and never languished an instant. It seemed to the three friends that under these conditions ideas came into their heads like leaves in the first warm days of spring.

Amidst the questions and answers that crossed each other during this morning, Nicholl asked one that did not get an immediate solution.

"I say," said he, "it is all very well to go to the moon, but how shall we get back again?"

"What do you mean by that, Nicholl?" asked Barbicane gravely.

"It seems to me very inopportune to ask about getting away from a country before you get to it," added Michel.

"I don't ask that question because I want to draw back, but I repeat my question, and ask, 'How shall we get back?'"

"I have not the least idea," answered Barbicane.

"And as for me," said Michel, "if I had known how to come back I should not have gone."

"That is what you call answering," cried Nicholl.

"I approve of Michel's words, and add that the question has no actual interest. We will think about that later on, when we want to return. Though the Columbiad will not be there, the projectile will."

"Much good that will be, a bullet without a gun!"

"A gun can be made, and so can powder! Neither metal, saltpetre, nor coal can be wanting in the bowels of the moon. Besides, in order to return you have only the lunar attraction to conquer, and you will only have 8,000 leagues to go so as to fall on the terrestrial globe by the simple laws of weight."

"That is enough," said Michel, getting animated. "Let us hear no more about returning. As to communicating with our ancient colleagues upon earth, that will not be difficult."

"How are we to do that, pray?"

"By means of meteors hurled by the lunar volcanoes."

"A good idea, Michel," answered Barbicane. "Laplace has calculated that a force five times superior to that of our cannons would suffice to send a meteor from the moon to the earth. Now there is no volcano that has not a superior force of propulsion."

"Hurrah!" cried Michel. "Meteors will be convenient postmen and will not cost anything! And how we shall laugh at the postal service! But now I think--"

"What do you think?"

"A superb idea! Why did we not fasten a telegraph wire to our bullet? We could have exchanged telegrams with the earth!"

"And the weight of a wire 86,000 leagues long," answered Nicholl, "does that go for nothing?"

"Yes, for nothing! We should have trebled the charge of the Columbiad! We could have made it four times--five times--greater!" cried Michel, whose voice became more and more violent.

"There is a slight objection to make to your project," answered Barbicane. "It is that during the movement of rotation of the globe our wire would have been rolled round it like a chain round a windlass, and it would inevitably have dragged us down to the earth again."

"By the thirty-nine stars of the Union!" said Michel, "I have nothing but impracticable ideas to-day--ideas worthy of J.T. Maston! But now I think of it, if we do not return to earth J.T. Maston will certainly come to us!"

"Yes! he will come," replied Barbicane; "he is a worthy and courageous comrade. Besides, what could be easier?
Is not the Columbiad still lying in Floridian soil? Is cotton and nitric acid wanting wherewith to manufacture the projectile? Will not the moon again pass the zenith of Florida? In another eighteen years will she not occupy exactly the same place that she occupies to-day?

"Yes," repeated Michel--"yes, Maston will come, and with him our friends Elphinstone, Blomsberry, and all the members of the Gun Club, and they will be welcome! Later on trains of projectiles will be established between the earth and the moon! Hurrah for J.T. Maston!"

It is probable that if the Honourable J.T. Maston did not hear the hurrahs uttered in his honour his ears tingled at least. What was he doing then? He was no doubt stationed in the Rocky Mountains at Long's Peak, trying to discover the invisible bullet gravitating in space. If he was thinking of his dear companions it must be acknowledged that they were not behindhand with him, and that, under the influence of singular exaltation, they consecrated their best thoughts to him.

But whence came the animation that grew visibly greater in the inhabitants of the projectile? Their sobriety could not be questioned. Must this strange erethismus of the brain be attributed to the exceptional circumstances of the time, to that proximity of the Queen of Night from which a few hours only separated them, or to some secret influence of the moon acting on their nervous system? Their faces became as red as if exposed to the reverberation of a furnace; their respiration became more active, and their lungs played like forge-bellows; their eyes shone with extraordinary flame, and their voices became formidably loud, their words escaped like a champagne-cork driven forth by carbonic acid gas; their gestures became disquieting, they wanted so much room to perform them in. And, strange to say, they in no wise perceived this excessive tension of the mind.

"Now," said Nicholl in a sharp tone--"now that I do not know whether we shall come back from the moon, I will know what we are going there for!"

"What are we going there for!" answered Barbicane, stamping as if he were in a fencing-room; "I don't know."

"You don't know!" cried Michel with a shout that provoked a sonorous echo in the projectile.

"No, I have not the least idea!" answered Barbicane, shouting in unison with his interlocutor.

"Well, then, I know," answered Michel.

"Speak, then," said Nicholl, who could no longer restrain the angry tones of his voice.

"I shall speak if it suits me!" cried Michel, violently seizing his companion's arm. "It must suit you!" said Barbicane, with eyes on fire and threatening hands. "It was you who drew us into this terrible journey, and we wish to know why!"

"Yes," said the captain, "now I don't know where I am going, I will know why I am going."

"Why?" cried Michel, jumping a yard high--"why? To take possession of the moon in the name of the United States! To add a fortieth State to the Union! To colonise the lunar regions, to cultivate them, people them, to take them all the wonders of art, science, and industry! To civilise the Selenites, unless they are more civilised than we are, and to make them into a republic if they have not already done it for themselves!"

"If there are any Selenites!" answered Nicholl, who under the empire of this inexplicable intoxication became very contradictory.

"Who says there are no Selenites?" cried Michel in a threatening tone.

"I do!" shouted Nicholl.

"Captain," said Michel, "do not repeat that insult or I will knock your teeth down your throat!"

The two adversaries were about to rush upon one another, and this incoherent discussion was threatening to degenerate into a battle, when Barbicane interfered.

"Stop, unhappy men," said he, putting his two companions back to back, "if there are no Selenites, we will do without them!"

"Yes!" exclaimed Michel, who did not care more about them than that. "We have nothing to do with the Selenites! Bother the Selenites!"

"The empire of the moon shall be ours," said Nicholl. "Let us found a Republic of three!"

"I shall be the Congress," cried Michel.

"And I the Senate," answered Nicholl.

"And Barbicane the President," shouted Michel.

"No President elected by the nation!" answered Barbicane.

"Well, then, a President elected by the Congress," exclaimed Michel; "and as I am the Congress I elect you unanimously."

"Hurrah! hurrah! hurrah for President Barbicane!" exclaimed Nicholl.

"Hip--hip--hip! hurrah!" vociferated Michel Ardan.

Then the President and Senate struck up "Yankee Doodle" as loudly as they could, whilst the Congress shouted the virile "Marseillaise."
Then began a frantic dance with maniacal gestures, mad stamping, and somersaults of boneless clowns. Diana took part in the dance, howling too, and jumped to the very roof of the projectile. An inexplicable flapping of wings and cock-crows of singular sonority were heard. Five or six fowls flew about striking the walls like mad bats.

Then the three travelling companions, whose lungs were disorganised under some incomprehensible influence, more than intoxicated, burnt by the air that had set their breathing apparatus on fire, fell motionless upon the bottom of the projectile.

CHAPTER VIII.
AT SEVENTY-EIGHT THOUSAND ONE HUNDRED AND FOURTEEN LEAGUES.

What had happened? What was the cause of that singular intoxication, the consequences of which might prove so disastrous? Simply carelessness on Michel's part, which Nicholl was able to remedy in time.

After a veritable swoon, which lasted a few minutes, the captain, who was the first to regain consciousness, soon collected his intellectual faculties.

Although he had breakfasted two hours before, he began to feel as hungry as if he had not tasted food for several days. His whole being, his brain and stomach, were excited to the highest point.

He rose, therefore, and demanded a supplementary collation from Michel, who was still unconscious, and did not answer. Nicholl, therefore, proceeded to prepare some cups of tea, in order to facilitate the absorption of a dozen sandwiches. He busied himself first with lighting a fire, and so struck a match.

What was his surprise to see the sulphur burn with extraordinary and almost unbearable brilliancy! From the jet of gas he lighted rose a flame equal to floods of electric light.

A revelation took place in Nicholl's mind. This intensity of light, the physiological disturbance in himself, the extra excitement of all his moral and sensitive faculties--he understood it all.

"The oxygen!" he exclaimed.

And leaning over the air-apparatus, he saw that the tap was giving out a flood of colourless, savourless, and odourless gas, eminently vital, but which in a pure state produces the gravest disorders in the constitution. Through carelessness Michel had left the tap full on. Nicholl made haste to turn off this flow of oxygen with which the atmosphere was saturated, and which would have caused the death of the travellers, not by suffocation, but by combustion.

An hour afterwards the air was relieved, and gave their normal play to the lungs. By degrees the three friends recovered from their intoxication; but they were obliged to recover from their oxygen like a drunkard from his wine.

When Michel knew his share of responsibility in this incident he did not appear in the least disconcerted. This unexpected intoxication broke the monotony of the journey. Many foolish things had been said under its influence, but they had been forgotten as soon as said.

"Then," added the merry Frenchman, "I am not sorry for having experienced the effect of this captious gas. Do you know, my friends, that there might be a curious establishment set up with oxygen-rooms, where people whose constitutions are weak might live a more active life during a few hours at least? Suppose we had meetings where the air could be saturated with this heroic fluid, theatres where the managers would send it out in strong doses, what passion there would be in the souls of actors and spectators, what fire and what enthusiasm! And if, instead of a simple assembly, a whole nation could be saturated with it, what activity, what a supplement of life it would receive! Of an exhausted nation it perhaps would make a great and strong nation, and I know more than one state in old Europe that ought to put itself under the oxygen _régime_ in the interest of its health."

Michel spoke with as much animation as if the tap were still full on. But with one sentence Barbicane damped his enthusiasm.

"All that is very well, friend Michel," he said, "but now perhaps you will tell us where those fowls that joined in our concert came from."

"Those fowls?"

"Yes."

In fact, half-a-dozen hens and a superb cock were flying hither and thither.

"Ah, the stupids!" cried Michel. "It was the oxygen that put them in revolt."

"But what are you going to do with those fowls?" asked Barbicane.

"Acclimatise them in the moon of course! For the sake of a joke, my worthy president; simply a joke that has unhappily come to nothing! I wanted to let them out on the lunar continent without telling you! How astounded you would have been to see these terrestrial poultry pecking the fields of the moon!"

"Ah, _gamin_, you eternal boy!" answered Barbicane, "you don't want oxygen to make you out of your senses! You are always what we were under the influence of this gas! You are always insane!"
"Ah! how do we know we were not wiser then?" replied Michel Ardan.

After this philosophical reflection the three friends repaired the disorder in the projectile. Cock and hens were put back in their cage. But as they were doing this Barbiacne and his two companions distinctly perceived a fresh phenomenon.

Since the moment they had left the earth their own weight, that of the bullet and the objects it contained, had suffered progressive diminution. Though they could not have any experience of this in the projectile, a moment must come when the effect upon themselves and the tools and instruments they used would be felt.

Of course scales would not have indicated this loss of weight, for the weights used would have lost precisely as much as the object itself; but a spring weighing-machine, the tension of which is independent of attraction, would have given the exact valuation of this diminution.

It is well known that attraction, or weight, is in proportion to the bulk, and in inverse proportion to the square of distances. Hence this consequence. If the earth had been alone in space, if the other heavenly bodies were to be suddenly annihilated, the projectile, according to Newton's law, would have weighed less according to its distance from the earth, but without ever losing its weight entirely, for the terrestrial attraction would always have made itself felt, no matter at what distance.

But in the case with which we are dealing, a moment must come when the projectile would not be at all under the law of gravitation, after allowing for the other celestial bodies, whose effect could not be set down as zero.

In fact, the trajectory of the projectile was between the earth and the moon. As it went farther away from the earth terrestrial attraction would be diminished in inverse proportion to the square of distances, but the lunar attraction would be augmented in the same proportion. A point must, therefore, be reached where these two attractions would neutralise each other, and the bullet would have no weight at all. If the volumes of the moon and earth were equal, this point would have been reached at an equal distance between the two bodies. But by taking their difference of bulk into account it was easy to calculate that this point would be situated at 47/52 of the journey, or at 78,114 leagues from the earth.

At this point a body that had no principle of velocity or movement in itself would remain eternally motionless, being equally attracted by the two heavenly bodies, and nothing drawing it more towards one than the other.

Now if the force of impulsion had been exactly calculated the projectile ought to reach that point with no velocity, having lost all weight like the objects it contained.

What would happen then? Three hypotheses presented themselves.

Either the projectile would have kept some velocity, and passing the point of equal attraction, would fall on the moon by virtue of the excess of lunar attraction over terrestrial attraction.

Or velocity sufficient to reach the neutral point being wanting, it would fall back on the earth by virtue of the excess of terrestrial attraction over lunar attraction.

Or lastly, endowed with sufficient velocity to reach the neutral point, but insufficient to pass it, it would remain eternally suspended in the same place, like the pretended coffin of Mahomet, between the zenith and nadir.

Such was the situation, and Barbiacne clearly explained the consequences to his travelling companions. They were interested to the highest degree. How were they to know when they had reached this neutral point, situated at 78,114 leagues from the earth, at the precise moment when neither they nor the objects contained in the projectile should be in any way subject to the laws of weight?

Until now the travellers, though they had remarked that this action diminished little by little, had not yet perceived its total absence. But that day, about 11 a.m., Nicholl having let a tumbler escape from his hand, instead of falling, it remained suspended in the air.

"Ah!" cried Michel Ardan, "this is a little amusing chemistry!"

And immediately different objects, weapons, bottles, &c, left to themselves, hung suspended as if by miracle. Diana, too, lifted up by Michel into space, reproduced, but without trickery, the marvellous suspensions effected by Robert-Houdin and Maskelyne and Cook.

The three adventurous companions, surprised and stupefied in spite of their scientific reasoning, carried into the domain of the marvellous, felt weight go out of their bodies. When they stretched out their arms they felt no inclination to drop them. Their heads vacillated on their shoulders. Their feet no longer kept at the bottom of the projectile. They were like staggering drunkards. Imagination has created men deprived of their reflection, others deprived of their shadows! But here reality, by the neutrality of active forces, made men in whom nothing had any weight, and who weighed nothing themselves.

Suddenly Michel, making a slight spring, left the floor and remained suspended in the air like the good monk in Murillo's _Cuisine des Anges_. His two friends joined him in an instant, and all three, in the centre of the projectile, figured a miraculous ascension.

"Is it believable? Is it likely? Is it possible?" cried Michel. "No. And yet it exists! Ah! if Raphael could have seen..."
us like this what an Assumption he could have put upon canvas!"

"The Assumption cannot last," answered Barbicane. "If the projectile passes the neutral point, the lunar attraction will draw us to the moon."

"Then our feet will rest upon the roof of the projectile,' answered Michel.

"No," said Barbicane, "because the centre of gravity in the projectile is very low, and it will turn over gradually."

"Then all our things will be turned upside down for certain!"

"Do not alarm yourself, Michel," answered Nicholl. "There is nothing of the kind to be feared. Not an object will move; the projectile will turn insensibly."

"In fact," resumed Barbicane, "when it has cleared the point of equal attraction, its bottom, relatively heavier, will drag it perpendicularly down to the moon. But in order that such a phenomenon should take place we must pass the neutral line."

"Passing the neutral line!" cried Michel. "Then let us do like the sailors who pass the equator—let us water our passage!"

A slight side movement took Michel to the padded wall. Thence he took a bottle and glasses, placed them "in space" before his companions, and merrily touching glasses, they saluted the line with a triple hurrah.

This influence of the attractions lasted scarcely an hour. The travellers saw themselves insensibly lowered towards the bottom, and Barbicane thought he remarked that the conical end of the projectile deviated slightly from the normal direction towards the moon. By an inverse movement the bottom side approached it. Lunar attraction was therefore gaining over terrestrial attraction. The fall towards the moon began, insensibly as yet; it could only be that of a millimetre (0.03937 inch), and a third in the first second. But the attractive force would gradually increase, the fall would be more accentuated, the projectile, dragged down by its bottom side, would present its cone to the earth, and would fall with increasing velocity until it reached the Selenite surface. Now nothing could prevent the success of the enterprise, and Nicholl and Michel Ardan shared Barbicane's joy.

Then they chatted about all the phenomena that had astounded them one after another, especially about the neutralisation of the laws of weight. Michel Ardan, always full of enthusiasm, wished to deduce consequences which were only pure imagination.

"Ah! my worthy friends," he cried, "what progress we should make could we but get rid upon earth of this weight, this chain that rivets us to her! It would be the prisoner restored to liberty! There would be no more weariness either in arms or legs. And if it is true that, in order to fly upon the surface of the earth, to sustain yourself in the air by a simple action of the muscles, it would take a force 150 times superior to that we possess, a simple act of will, a caprice, would transport us into space, and attraction would not exist."

"In fact," said Nicholl, laughing, "if they succeeded in suppressing gravitation, like pain is suppressed by anaesthesia, it would change the face of modern society!"

"Yes," cried Michel, full of his subject, "let us destroy weight and have no more burdens! No more cranes, screw-jacks, windlasses, cranks, or other machines will be wanted."

"Well said," replied Barbicane; "but if nothing had any weight nothing would keep in its place, not even the hat on your head, worthy Michel; nor your house, the stones of which only adhere by their weight! Not even ships, whose stability upon the water is only a consequence of weight. Not even the ocean, whose waves would no longer be held in equilibrium by terrestrial attraction. Lastly, not even the atmosphere, the molecules of which, being no longer held together, would disperse into space!"

"That is a pity," replied Michel. "There is nothing like positive people for recalling you brutally to reality!"

"Nevertheless, console yourself, Michel," resumed Barbicane, "for if no star could exist from which the laws of weight were banished, you are at least going to pay a visit where gravity is much less than upon earth."

"The moon?"

"Yes, the moon, on the surface of which objects weigh six times less than upon the surface of the earth, a phenomenon very easy to demonstrate."

"And shall we perceive it?" asked Michel. "Evidently, for 400 lbs. only weigh 60 lbs. on the surface of the moon."

"Will not our muscular strength be diminished?"

"Not at all. Instead of jumping one yard you will be able to rise six."

"Then we shall be Hercules in the moon," cried Michel.

"Yes," replied Nicholl, "and the more so because if the height of the Selenites is in proportion to the bulk of their globe they will be hardly a foot high."

"Liliputians!" replied Michel. "Then I am going to play the rôle of Gulliver! We shall realise the fable of the giants! That is the advantage of leaving one's own planet to visit the solar world!"

"But if you want to play Gulliver," answered Barbicane, "only visit the inferior planets, such as Mercury, Venus,
or Mars, whose bulk is rather less than that of the earth. But do not venture into the big planets, Jupiter, Saturn, Uranus, Neptune, for there the _rôles_ would be inverted, and you would become Liliputian."

"And in the sun?"

"In the sun, though its density is four times less than that of the earth, its volume is thirteen hundred and twenty-four thousand times greater, and gravitation there is twenty-seven times greater than upon the surface of our globe. Every proportion kept, the inhabitants ought on an average to be two hundred feet high."

"The devil!" exclaimed Michel. "I should only be a pigmy!"

"Gulliver amongst the giants," said Nicholl.

"Just so," answered Barbicane.

"It would not have been a bad thing to carry some pieces of artillery to defend oneself with."

"Good," replied Barbicane; "your bullets would have no effect on the sun, and they would fall to the ground in a few minutes."

"That's saying a great deal!"

"It is a fact," answered Barbicane. "Gravitation is so great on that enormous planet that an object weighing 70 lbs. on the earth would weigh 1,930 lbs. on the surface of the sun. Your hat would weigh 20 lbs. your cigar 1/2 lb. Lastly, if you fell on the solar continent your weight would be so great--about 5,000 lbs.--that you could not get up again."

"The devil!" said Michel, "I should have to carry about a portable crane! Well, my friends, let us be content with the moon for to-day. There, at least, we shall cut a great figure! Later on we shall see if we will go to the sun, where you can't drink without a crane to lift the glass to your mouth."

CHAPTER IX.

THE CONSEQUENCES OF DEVIATION.

Barbicane had now no fear, if not about the issue of the journey, at least about the projectile's force of impulsion. Its own speed would carry it beyond the neutral line. Therefore it would not return to the earth nor remain motionless upon the point of attraction. One hypothesis only remained to be realised, the arrival of the bullet at its goal under the action of lunar attraction.

In reality it was a fall of 8,296 leagues upon a planet, it is true, where the gravity is six times less than upon the earth. Nevertheless it would be a terrible fall, and one against which all precautions ought to be taken without delay.

These precautions were of two sorts; some were for the purpose of deadening the shock at the moment the projectile would touch lunar ground; others were to retard the shock, and so make it less violent.

In order to deaden the shock, it was a pity that Barbicane was no longer able to employ the means that had so usefully weakened the shock at departure--that is to say, the water used as a spring and the movable partitions. The partitions still existed, but water was wanting, for they could not use the reserve for this purpose--that would be precious in case the liquid element should fail on the lunar soil.

Besides, this reserve would not have been sufficient for a spring. The layer of water stored in the projectile at their departure, and on which lay the waterproof disc, occupied no less than three feet in depth, and spread over a surface of not less than fifty-four feet square. Now the receptacles did not contain the fifth part of that. They were therefore obliged to give up this effectual means of deadening the shock.

Fortunately Barbicane, not content with employing water, had furnished the movable disc with strong spring buffers, destined to lessen the shock against the bottom, after breaking the horizontal partitions. These buffers were still in existence; they had only to be fitted on and the movable disc put in its place. All these pieces, easy to handle, as they weighed scarcely anything, could be rapidly mounted.

This was done. The different pieces were adjusted without difficulty. It was only a matter of bolts and screws. There were plenty of tools. The disc was soon fixed on its steel buffers like a table on its legs. One inconvenience resulted from this arrangement. The lower port-hole was covered, and it would be impossible for the travellers to observe the moon through that opening whilst they were being precipitated perpendicularly upon her. But they were obliged to give it up. Besides, through the lateral openings they could still perceive the vast lunar regions, like the earth is seen from the car of a balloon.

This placing of the disc took an hour's work. It was more than noon when the preparations were completed. Barbicane made fresh observations on the inclination of the projectile, but to his great vexation it had not turned sufficiently for a fall; it appeared to be describing a curve parallel with the lunar disc. The Queen of Night was shining splendidly in space, whilst opposite the orb of day was setting her on fire with his rays.

This situation soon became an anxious one.

"Shall we get there?" said Nicholl.
"We must act as though we should," answered Barbicane.

"You are faint-hearted fellows," replied Michel Ardan. "We shall get there, and quicker than we want."

This answer recalled Barbicane to his preparations, and he occupied himself with placing the contrivances destined to retard the fall.

It will be remembered that, at the meeting held in Tampa Town, Florida, Captain Nicholl appeared as Barbicane's enemy, and Michel Ardan's adversary. When Captain Nicholl said that the projectile would be broken like glass, Michel answered that he would retard the fall by means of fuses properly arranged.

In fact, powerful fuses, resting upon the bottom, and being fired outside, might, by producing a recoil action, lessen the speed of the bullet. These fuses were to burn in the void it is true, but oxygen would not fail them, for they would furnish that themselves like the lunar volcanoes, the deflagration of which has never been prevented by the want of atmosphere around the moon.

Barbicane had therefore provided himself with fireworks shut up in little cannons of bored steel, which could be screwed on to the bottom of the projectile. Inside these cannons were level with the bottom; outside they went half a foot beyond it. There were twenty of them. An opening in the disc allowed them to light the match with which each was provided. All the effect took place outside. The exploding mixture had been already rammed into each gun. All they had to do, therefore, was to take up the metallic buffers fixed in the base, and to put these cannons in their place, where they fitted exactly.

This fresh work was ended about 3 p.m., and all precaution taken they had now nothing to do but to wait.

In the meantime the projectile visibly drew nearer the moon. It was, therefore, submitted in some proportion to its influence; but its own velocity also inclined it in an oblique line. Perhaps the result of these two influences would be a line that would become a tangent. But it was certain that the projectile was not falling normally upon the surface of the moon, for its base, by reason of its weight, ought to have been turned towards her.

Barbicane's anxiety was increased on seeing that his bullet resisted the influence of gravitation. It was the unknown that was before him—the unknown of the interstellar regions. He, the _savant_, believed that he had foreseen the only three hypotheses that were possible—the return to the earth, the fall upon the moon, or stagnation upon the neutral line! And here a fourth hypothesis, full of all the terrors of the infinite, cropped up inopportunely. To face it without flinching took a resolute _savant_ like Barbicane, a phlegmatic being like Nicholl, or an audacious adventurer like Michel Ardan.

Conversation was started on this subject. Other men would have considered the question from a practical point of view. They would have wondered where the projectile would take them to. Not they, however. They sought the cause that had produced this effect.

"So we are off the line," said Michel. "But how is that?"

"I am very much afraid," answered Nicholl, "that notwithstanding all the precautions that were taken, the Columbiad was not aimed correctly. The slightest error would suffice to throw us outside the pale of lunar attraction."

"Then the cannon was pointed badly?" said Michel.

"I do not think so," answered Barbicane. "The cannon was rigorously perpendicular, and its direction towards the zenith of the place was incontestable. The moon passing the zenith, we ought to have reached her at the full. There is another reason, but it escapes me."

"Perhaps we have arrived too late," suggested Nicholl.

"Too late?" said Barbicane.

"Yes," resumed Nicholl. "The notice from the Cambridge Observatory said that the transit ought to be accomplished in ninety-seven hours thirteen minutes and twenty seconds. That means that before that time the moon would not have reached the point indicated, and after she would have passed it."

"Agreed," answered Barbicane. "But we started on the 1st of December at 11h. 13m. 25s. p.m., and we ought to arrive at midnight on the 5th, precisely as the moon is full. Now this is the 5th of December. It is half-past three, and eight hours and a half ought to be sufficient to take us to our goal. Why are we not going towards it?"

"Perhaps the velocity was greater than it ought to have been," answered Nicholl, "for we know now that the initial velocity was greater than it was supposed to be."

"No! a hundred times no!" replied Barbicane. "An excess of velocity, supposing the direction of the projectile to have been correct, would not have prevented us reaching the moon. No! There has been a deviation. We have deviated!"

"Through whom? through what?" asked Nicholl.

"I cannot tell," answered Barbicane.

"Well, Barbicane," then said Michel, "should you like to know what I think about why we have deviated?"

"Say what you think."
"I would not give half a dollar to know! We have deviated, that is a fact. It does not matter much where we are going. We shall soon find out. As we are being carried along into space we shall end by falling into some centre of attraction or another."

Barbicane could not be contented with this indifference of Michel Ardan's. Not that he was anxious about the future. But what he wanted to know, at any price, was why his projectile had deviated.

In the meantime the projectile kept on its course sideways to the moon, and the objects thrown out along with it. Barbicane could even prove by the landmarks upon the moon, which was only at 2,000 leagues' distance, that its speed was becoming uniform—a fresh proof that they were not falling. Its force of impulsion was prevailing over the lunar attraction, but the trajectory of the projectile was certainly taking them nearer the lunar disc, and it might be hoped that at a nearer point the weight would predominate and provoke a fall.

The three friends, having nothing better to do, went on with their observations. They could not, however, yet determine the topography of the satellite. Every relief was levelled under the action of the solar rays.

They watched thus through the lateral windows until 8 p.m. The moon then looked so large that she hid half the firmament from them. The sun on one side, and the Queen of Night on the other, inundated the projectile with light.

At that moment Barbicane thought he could estimate at 700 leagues only the distance that separated them from their goal. The velocity of the projectile appeared to him to be 200 yards a second, or about 170 leagues an hour. The base of the bullet had a tendency to turn towards the moon under the influence of the centripetal force; but the centrifugal force still predominated, and it became probable that the rectilinear trajectory would change to some curve the nature of which could not be determined.

Barbicane still sought the solution of his insoluble problem. The hours went by without result. The projectile visibly drew nearer to the moon, but it was plain that it would not reach her. The short distance at which it would pass her would be the result of two forces, attractive and repulsive, which acted upon the projectile.

"I only pray for one thing," repeated Michel, "and that is to pass near enough to the moon to penetrate her secrets."

"Confound the cause that made our projectile deviate!" cried Nicholl.

"Then," said Barbicane, as if he had been suddenly struck with an idea, "confound that asteroid that crossed our path!"

"Eh?" said Michel Ardan.

"What do you mean?" exclaimed Nicholl.

"I mean," resumed Barbicane, who appeared convinced, "I mean that our deviation is solely due to the influence of that wandering body."

"But it did not even graze us," continued Michel.

"What does that matter? Its bulk, compared with that of our projectile, was enormous, and its attraction was sufficient to have an influence upon our direction."

"That influence must have been very slight," said Nicholl.

"Yes, Nicholl, but slight as it was," answered Barbicane, "upon a distance of 84,000 leagues it was enough to make us miss the moon!"

CHAPTER X.

THE OBSERVERS OF THE MOON.

Barbicane had evidently found the only plausible reason for the deviation. However slight it had been, it had been sufficient to modify the trajectory of the projectile. It was a fatality. The audacious attempt had miscarried by a fortuitous circumstance, and unless anything unexpected happened, the lunar disc could no longer be reached. Would they pass it near enough to resolve certain problems in physics and geology until then unsolved? This was the only question that occupied the minds of these bold travellers. As to the fate the future held in store for them, they would not even think about it. Yet what was to become of them amidst these infinite solitudes when air failed them? A few more days and they would fall suffocated in this bullet wandering at hazard. But a few days were centuries to these intrepid men, and they consecrated every moment to observing the moon they no longer hoped to reach.

The distance which then separated the projectile from the satellite was estimated at about 200 leagues. Under these conditions, as far as regards the visibility of the details of the disc, the travellers were farther from the moon than are the inhabitants of the earth with their powerful telescopes.

It is, in fact, known that the instrument set up by Lord Rosse at Parsonstown, which magnifies 6,500 times, brings the moon to within sixteen leagues; and the powerful telescope set up at Long's Peak magnifies 48,000 times, and brings the moon to within less than two leagues, so that objects twelve yards in diameter were sufficiently
Thus, then, at that distance the topographical details of the moon, seen without a telescope, were not distinctly determined. The eye caught the outline of those vast depressions inappropriately called "seas," but they could not determine their nature. The prominence of the mountains disappeared under the splendid irradiation produced by the reflection of the solar rays. The eye, dazzled as if leaning over a furnace of molten silver, turned from it involuntarily.

However, the oblong form of the orb was already clearly seen.

It appeared like a gigantic egg, with the small end turned towards the earth. The moon, liquid and pliable in the first days of her formation, was originally a perfect sphere. But soon, drawn within the pale of the earth's gravitation, she became elongated under its influence. By becoming a satellite she lost her native purity of form; her centre of gravity was in advance of the centre of her figure, and from this fact some _savants_ draw the conclusion that air and water might have taken refuge on the opposite side of the moon, which is never seen from the earth.

This alteration in the primitive forms of the satellite was only visible for a few moments. The distance between the projectile and the moon diminished visibly; its velocity was considerably less than its initial velocity, but eight or nine times greater than that of our express trains. The oblique direction of the bullet, from its very obliquity, left Michel Ardan some hope of touching the lunar disc at some point or other. He could not believe that he should not get to it. No, he could not believe it, and this he often repeated. But Barbicane, who was a better judge, always answered him with pitiless logic.

"No, Michel, no. We can only reach the moon by a fall, and we are not falling. The centripetal force keeps us under the moon's influence, but the centrifugal force sends us irresistibly away from it."

This was said in a tone that deprived Michel Ardan of his last hopes.

The portion of the moon the projectile was approaching was the northern hemisphere. The selenographic maps make it the lower one, because they are generally drawn up according to the image given by the telescopes, and we know that they reverse the objects. Such was the _Mappa Selenographica_ of Boer and Moedler which Barbicane consulted. This northern hemisphere presented vast plains, relieved by isolated mountains.

At midnight the moon was full. At that precise moment the travellers ought to have set foot upon her if the unlucky asteroid had not made them deviate from their direction. The orb was exactly in the condition rigorously determined by the Cambridge Observatory. She was mathematically at her perigee, and at the zenith of the twenty-eighth parallel. An observer placed at the bottom of the enormous Columbiad while it is pointed perpendicularly at the horizon would have framed the moon in the mouth of the cannon. A straight line drawn through the axis of the piece would have passed through the centre of the moon.

It need hardly be stated that during the night between the 5th and 6th of December the travellers did not take a minute's rest. Could they have closed their eyes so near to a new world? No. All their feelings were concentrated in one thought—to see! Representatives of the earth, of humanity past and present, all concentrated in themselves, it was through their eyes that the human race looked at these lunar regions and penetrated the secrets of its satellite! A strange emotion filled their hearts, and they went silently from one window to another.

Their observations were noted down by Barbicane, and were made rigorously exact. To make them they had telescopes. To control them they had maps.

The first observer of the moon was Galileo. His poor telescope only magnified thirty times. Nevertheless, in the spots that pitted the lunar disc "like eyes in a peacock's tail," he was the first to recognise mountains, and measure some heights to which he attributed, exaggerating, an elevation equal to the 20th of the diameter of the disc, or 8,000 metres. Galileo drew up no map of his observations.

A few years later an astronomer of Dantzig, Hevelius—by operations which were only exact twice a month, at the first and second quadrature—reduced Galileo's heights to one-twenty-sixth only of the lunar diameter. This was an exaggeration the other way. But it is to this _savant_ that the first map of the moon is due. The light round spots there form circular mountains, and the dark spots indicate vast seas which, in reality, are plains. To these mountains and extents of sea he gave terrestrial denominations. There is a Sinai in the middle of an Arabia, Etna in the centre of Sicily, the Alps, Apennines, Carpathians, the Mediterranean, the Black Sea, the Caspian, &c.—names badly applied, for neither mountains nor seas recalled the configuration of their namesakes on the globe. That large white spot, joined on the south to vaster continents and terminated in a point, could hardly be recognised as the inverted image of the Indian Peninsula, the Bay of Bengal, and Cochin-China. So these names were not kept. Another chartographer, knowing human nature better, proposed a fresh nomenclature, which human vanity made haste to adopt.

This observer was Father Riccioli, a contemporary of Hevelius. He drew up a rough map full of errors. But he gave to the lunar mountains the names of great men of antiquity and _savants_ of his own epoch.

A third map of the moon was executed in the seventeenth century by Dominique Cassini; superior to that of
Riccioli in the execution, it is inexact in the measurements. Several smaller copies were published, but the plate long kept in the _Imprimerie Nationale_ was sold by weight as old brass.

La Hire, a celebrated mathematician and designer, drew up a map of the moon four and a half yards high, which was never engraved.

After him, a German astronomer, Tobie Marger, about the middle of the eighteenth century, began the publication of a magnificent selenographic map, according to lunar measures, which he rigorously verified; but his death, which took place in 1762, prevented the termination of this beautiful work.

It was in 1830 that Messrs. Boeer and Moedler composed their celebrated _Mappa Selenographica_, according to an orthographical projection. This map reproduces the exact lunar disc, such as it appears, only the configurations of the mountains and plains are only correct in the central part; everywhere else—in the northern or southern portions, eastern or western—the configurations foreshortened cannot be compared with those of the centre. This topographical map, one yard high and divided into four parts, is a masterpiece of lunar chartography.

After these _savants_ may be cited the selenographic reliefs of the German astronomer Julius Schmidt, the topographical works of Father Secchi, the magnificent sheets of the English amateur, Waren de la Rue, and lastly a map on orthographical projection of Messrs. Lecouturier and Chapuis, a fine model set up in 1860, of very correct design and clear outlines.

Such is the nomenclature of the different maps relating to the lunar world. Barbicane possessed two, that of Messrs. Boeer and Moedler and that of Messrs. Chapuis and Lecouturier. They were to make his work of observer easier.

They had excellent marine glasses specially constructed for this journey. They magnified objects a hundred times; they would therefore have reduced the distance between the earth and the moon to less than 1,000 leagues. But then at a distance which towards 3 a.m. did not exceed a hundred miles, and in a medium which no atmosphere obstructed, these instruments brought the lunar level to less than fifteen hundred metres.

CHAPTER XI.
IMAGINATION AND REALITY.

"Have you ever seen the moon?" a professor asked one of his pupils ironically.

"No, sir," answered the pupil more ironically still, "but I have heard it spoken of."

In one sense the jocose answer of the pupil might have been made by the immense majority of sublunary beings. How many people there are who have heard the moon spoken of and have never seen it--at least through a telescope! How many even have never examined the map of their satellite!

Looking at a comprehensive selenographic map, one peculiarity strikes us at once. In contrast to the geographical arrangements of the earth and Mars, the continents occupy the more southern hemisphere of the lunar globe. These continents have not such clear and regular boundary-lines as those of South America, Africa, and the Indian Peninsula. Their angular, capricious, and deeply-indented coasts are rich in gulfs and peninsulas. They recall the confusion in the islands of the Sound, where the earth is excessively cut up. If navigation has ever existed upon the surface of the moon it must have been exceedingly difficult and dangerous, and the Selenite mariners and hydrographers were greatly to be pitied, the former when they came upon these perilous coasts, the latter when they were marine surveying on the stormy banks.

It may also be noticed that upon the lunar spheroid the South Pole is much more continental than the North Pole. On the latter there is only a slight strip of land capping it, separated from the other continents by vast seas. (When the word "seas" is used the vast plains probably covered by the sea formerly must be understood.) On the south the land covers nearly the whole hemisphere. It is, therefore, possible that the Selenites have already planted their flag on one of their poles, whilst Franklin, Ross, Kane, Dumont d'Urville, and Lambert have been unable to reach this unknown point on the terrestrial globe.

Islands are numerous on the surface of the moon. They are almost all oblong or circular, as though traced with a compass, and seem to form a vast archipelago, like that charming group lying between Greece and Asia Minor which mythology formerly animated with its most graceful legends. Involutarily the names of Naxos, Tenedos, Milo, and Carpathos come into the mind, and you seek the ship of Ulysses or the "clipper" of the Argonauts. That was what it appeared to Michel Ardan; it was a Grecian Archipelago that he saw on the map. In the eyes of his less imaginative companions the aspect of these shores recalled rather the cut-up lands of New Brunswick and Nova Scotia; and where the Frenchman looked for traces of the heroes of fable, these Americans were noting favourable points for the establishment of mercantile houses in the interest of lunar commerce and industry.

Some remarks on the orographical disposition of the moon must conclude the description of its continents, chains of mountains, isolated mountains, amphitheatres, and watercourses. The moon is like an immense
Switzerland—a continual Norway, where Plutonic influence has done everything. This surface, so profoundly rugged, is the result of the successive contractions of the crust while the orb was being formed. The lunar disc is propitious for the study of great geological phenomena. According to the remarks of some astronomers, its surface, although more ancient than the surface of the earth, has remained newer. There there is no water to deteriorate the primitive relief, the continuous action of which produces a sort of general levelling. No air, the decomposing influence of which modifies orographical profiles. There Pluto's work, unaltered by Neptune's, is in all its native purity. It is the earth as she was before tides and currents covered her with layers of soil.

After having wandered over these vast continents the eye is attracted by still vaster seas. Not only does their formation, situation, and aspect recall the terrestrial oceans, but, as upon earth, these seas occupy the largest part of the globe. And yet these are not liquid tracts, but plains, the nature of which the travellers hoped soon to determine.

Astronomers, it must be owned, have decorated these pretended seas with at least odd names which science has respected at present. Michel Ardan was right when he compared this map to a "map of tenderness," drawn up by Scudery or Cyrano de Bergerac.

"Only," added he, "it is no longer the map of sentiment like that of the 18th century; it is the map of life, clearly divided into two parts, the one feminine, the other masculine. To the women, the right hemisphere; to the men, the left!"

When he spoke thus Michel made his prosaic companions shrug their shoulders. Barbicane and Nicholl looked at the lunar map from another point of view to that of their imaginative friend. However, their imaginative friend had some reason on his side. Judge if he had not.

In the left hemisphere stretches the "Sea of Clouds," where human reason is so often drowned. Not far off appears the "Sea of Rains," fed by all the worries of existence. Near lies the "Sea of Tempests," where man struggles incessantly against his too-often victorious passions. Then, exhausted by deceptions, treasons, infidelities, and all the procession of terrestrial miseries, what does he find at the end of his career? The vast "Sea of Humours," scarcely softened by some drops from the waters of the "Gulf of Dew!" Clouds, rain, tempests, humours, does the life of man contain aught but these? and is it not summed up in these four words?

The right-hand hemisphere dedicated to "the women" contains smaller seas, the significant names of which agree with every incident of feminine existence. There is the "Sea of Serenity," over which bends the young maiden, and the "Lake of Dreams," which reflects her back a happy future. The "Sea of Nectar," with its waves of tenderness and breezes of love! The "Sea of Fecundity," the "Sea of Crises," and the "Sea of Vapours," the dimensions of which are, perhaps, too restricted, and lastly, that vast "Sea of Tranquillity" where all false passions, all useless dreams, all unassuaged desires are absorbed, and the waves of which flow peacefully into the "Lake of Death!"

What a strange succession of names! What a singular division of these two hemispheres of the moon, united to one another like man and woman, and forming a sphere of life, carried through space. And was not the imaginative Michel right in thus interpreting the fancies of the old astronomers?

But whilst his imagination thus ran riot on the "seas," his grave companions were looking at things more geographically. They were learning this new world by heart. They were measuring its angles and diameters.

To Barbicane and Nicholl the "Sea of Clouds" was an immense depression of ground, with circular mountains scattered about on it; covering a great part of the western side of the southern hemisphere, it covered 184,800 square leagues, and its centre was in south latitude 15°, and west longitude 20°. The Ocean of Tempests, _Oceanus Procellarum_, the largest plain on the lunar disc, covered a surface of 328,300 square leagues, its centre being in north latitude 10°, and east longitude 45°. From its bosom emerge the admirable shining mountains of Kepler and Aristarchus.

More to the north, and separated from the Sea of Clouds by high chains of mountains, extends the Sea of Rains, _Mare Imbrium_, having its central point in north latitude 35° and east longitude 20°; it is of a nearly circular form, and covers a space of 193,000 leagues. Not far distant the Sea of Humours, _Mare Humorum_, a little basin of 44,200 square leagues only, was situated in south latitude 25°, and east longitude 40°. Lastly, three gulfs lie on the coast of this hemisphere—the Torrid Gulf, the Gulf of Dew, and the Gulf of Iris, little plains inclosed by high chains of mountains.

The "Feminine" hemisphere, naturally more capricious, was distinguished by smaller and more numerous seas. These were, towards the north, the _Mare Frigoris_, in north latitude 55° and longitude 0°, with 76,000 square leagues of surface, which joined the Lake of Death and Lake of Dreams; the Sea of Serenity, _Mare Serenitatis_, by north latitude 25° and west longitude 20°, comprising a surface of 80,000 square leagues; the Sea of Crises, _Mare Crisium_, round and very compact, in north latitude 17° and west longitude 55°, a surface of 40,000 square leagues, a veritable Caspian buried in a girdle of mountains. Then on the equator, in north latitude 5° and west longitude 25°, appeared the Sea of Tranquillity, _Mare Tranquillitatis_, occupying 121,509 square leagues of surface; this sea communicated on the south with the Sea of Nectar, _Mare Nectaris_, an extent of 28,800 square leagues, in south
latitude 15° and west longitude 35°, and on the east with the Sea of Fecundity, _Mare Fecunditatis_, the vastest in this hemisphere, occupying 219,300 square leagues, in south latitude 3° and west longitude 50°. Lastly, quite to the north and quite to the south lie two more seas, the Sea of Humboldt, _Mare Humboldtianum_, with a surface of 6,500 square leagues, and the Southern Sea, _Mare Australe_, with a surface of 26,000.

In the centre of the lunar disc, across the equator and on the zero meridian, lies the centre gulf, _Sinus Medii_, a sort of hyphen between the two hemispheres.

Thus appeared to the eyes of Nicholl and Barbicane the surface always visible of the earth's satellite. When they added up these different figures they found that the surface of this hemisphere measured 4,738,160 square leagues, 3,317,600 of which go for volcanoes, chains of mountains, amphitheatres, islands--in a word, all that seems to form the solid portion of the globe--and 1,410,400 leagues for the seas, lake, marshes, and all that seems to form the liquid portion, all of which was perfectly indifferent to the worthy Michel.

It will be noticed that this hemisphere is thirteen and a-half times smaller than the terrestrial hemisphere. And yet upon it selenographers have already counted 50,000 craters. It is a rugged surface worthy of the unpoetical qualification of "green cheese" which the English have given it.

When Barbicane pronounced this disobliging name Michel Ardan gave a bound.

"That is how the Anglo-Saxons of the 19th century treat the beautiful Diana, the blonde Phoebe, the amiable Isis, the charming Astarte, the Queen of Night, the daughter of Latona and Jupiter, the younger sister of the radiant Apollo!"

CHAPTER XII.

OROGRAPHICAL DETAILS.

It has already been pointed out that the direction followed by the projectile was taking us towards the northern hemisphere of the moon. The travellers were far from that central point which they ought to have touched if their trajectory had not suffered an irremediable deviation.

It was half-past twelve at night. Barbicane then estimated his distance at 1,400 kilometres, a distance rather greater than the length of the lunar radius, and which must diminish as he drew nearer the North Pole. The projectile was then not at the altitude of the equator, but on the tenth parallel, and from that latitude carefully observed on the map as far as the Pole, Barbicane and his two companions were able to watch the moon under the most favourable circumstances.

In fact, by using telescopes, this distance of 1,400 kilometres was reduced to fourteen miles, or four and a-half leagues. The telescope of the Rocky Mountains brought the moon still nearer, but the terrestrial atmosphere singularly lessened its optical power. Thus Barbicane, in his projectile, by looking through his glass, could already perceive certain details almost imperceptible to observers on the earth.

"My friends," then said the president in a grave voice, "I do not know where we are going, nor whether we shall ever see the terrestrial globe again. Nevertheless, let us do our work as if one day it would be of use to our fellow-creatures. Let us keep our minds free from all preoccupation. We are astronomers. This bullet is the Cambridge Observatory transported into space. Let us make our observations."

That said, the work was begun with extreme precision, and it faithfully reproduced the different aspects of the moon at the variable distances which the projectile reached in relation to that orb.

Whilst the bullet was at the altitude of the 10th north parallel it seemed to follow the 20th degree of east longitude.

Here may be placed an important remark on the subject of the map which they used for their observations. In the selenographic maps, where, on account of the reversal of objects by the telescope, the south is at the top and the north at the bottom, it seems natural that the east should be on the left and the west on the right. However, it is not so. If the map were turned upside down, and showed the moon as she appears, the east would be left and the west right, the inverse of the terrestrial maps. The reason of this anomaly is the following:--Observers situated in the northern hemisphere--in Europe, for example--perceive the moon in the south from them. When they look at her they turn their backs to the north, the opposite position they take when looking at a terrestrial map. Their backs being turned to the north, they have the east to the left and the west to the right. For observers in the southern hemisphere--in Patagonia, for example--the west of the moon would be on their left and the east on their right, for the south would be behind them.

Such is the reason for the apparent reversal of these two cardinal points, and this must be remembered whilst following the observations of President Barbicane.

Helped by the _Mappa Selenographica_ of Boeer and Moedler, the travellers could, without hesitating, survey that portion of the disc in the field of their telescopes.
"What are we looking at now?" asked Michel.
"At the northern portion of the Sea of Clouds," answered Barbicane. "We are too far off to make out its nature. Are those plains composed of dry sand, as the first astronomers believed? Or are they only immense forests, according to the opinion of Mr. Waren de la Rue, who grants a very low but very dense atmosphere to the moon? We shall find that out later on. We will affirm nothing till we are quite certain."

"This Sea of Clouds is rather doubtfully traced upon the maps. It is supposed that this vast plain is strewn with blocks of lava vomited by the neighbouring volcanoes on its right side, Ptolemy, Purbach, and Arzachel. The projectile was drawing sensibly nearer, and the summits which close in this sea on the north were distinctly visible. In front rose a mountain shining gloriously, the top of which seemed drowned in the solar rays."

"That mountain is--?" asked Michel.
"Copernicus," answered Barbicane.

"Let us have a look at Copernicus," said Michel.

This mountain, situated in north latitude 9°, and east longitude 20°, rises to a height of nearly 11,000 feet above the surface of the moon. It is quite visible from the earth, and astronomers can study it with ease, especially during the phase between the last quarter and the new moon, because then shadows are thrown lengthways from east to west, and allow the altitudes to be taken.

Copernicus forms the most important radiating system in the southern hemisphere, according to Tycho Brahe. It rises isolated like a gigantic lighthouse over that of the Sea of Clouds bordering on the Sea of Tempests, and it lights two oceans at once with its splendid rays. Those long luminous trails, so dazzling at full moon, made a spectacle without an equal; they pass the boundary chains on the north, and stretch as far as the Sea of Rains. At 1 a.m., terrestrial time, the projectile, like a balloon carried into space, hung over this superb mountain.

Barbicane could perfectly distinguish its chief features. Copernicus is comprehended in the series of annular mountains of the first order in the division of the large amphitheatres. Like the mountains of Kepler and Aristarchus, which overlook the Ocean of Tempests, it appears sometimes like a brilliant point through the pale light, and used to be taken for a volcano in activity. But it is only an extinct volcano, like those on that side of the moon. Its circumference presented a diameter of about twenty-two leagues. The glasses showed traces of stratifications in it produced by successive eruptions, and its neighbourhood appeared strewn with volcanic remains, which were still seen in the crater.

"There exist," said Barbicane, "several sorts of amphitheatres on the surface of the moon, and it is easy to see that Copernicus belongs to the radiating class. If we were nearer it we should perceive the cones which bristle in the interior, and which were formerly so many fiery mouths. A curious arrangement, and one without exception on the lunar disc, is presented on the interior surface of these amphitheatres, being notably downward from the exterior plane, a contrary form to that which terrestrial craters present. It follows, therefore, that the general curvature at the bottom of these amphitheatres gives us fear of an inferior diameter to that of the moon."

"What is the reason of this special arrangement?" asked Nicholl.

"It is not known," answered Barbicane.

"How splendidly it shines!" said Michel. "I think it would be difficult to see a more beautiful spectacle!"

"What should you say, then," answered Barbicane, "if the chances of our journey should take us towards the southern hemisphere?"

"Well, I should say it is finer still," replied Michel Ardan.

At that moment the projectile hung right over the amphitheatre. The circumference of Copernicus formed an almost perfect circle, and its steep ramparts were clearly defined. A second circular inclosure could even be distinguished. A grey plain of wild aspect spread around on which every relief appeared yellow. At the bottom of the amphitheatre, as if in a jewel-case, sparkled for one instant two or three eruptive cones like enormous dazzling gems. Towards the north the sides of the crater were lowered into a depression which would probably have given access to the interior of the crater.

As they passed above the surrounding plain Barbicane was able to note a large number of mountains of slight importance, amongst others a little circular mountain called "Gay-Lussac," more than twenty-three kilometres wide. Towards the south the plain was very flat, without one elevation or projection of the soil. Towards the north, on the contrary, as far as the place where it borders on the Ocean of Tempests, it was like a liquid surface agitated by a storm, of which the hills and hollows formed a succession of waves suddenly coagulated. Over the whole of this, and in all directions, ran the luminous trails which converged to the summit of Copernicus. Some had a width of thirty kilometres over a length that could not be estimated.

The travellers discussed the origin of these strange rays, but they could not determine their nature any better than terrestrial observers.

"Why," said Nicholl, "may not these rays be simply the spurs of the mountains reflecting the light of the sun
more vividly?"

"No," answered Barbicane, "if it were so in certain conditions of the moon they would throw shadows, which
they do not."

In fact, these rays only appear when the sun is in opposition with the moon, and they disappear as soon as its
rays become oblique.

"But what explanation of these trails of light have been imagined?" asked Michel, "for I cannot believe that
_savants_ would ever stop short for want of explanation."

"Yes," answered Barbicane, "Herschel has uttered an opinion, but he does not affirm it."

"Never mind; what is his opinion?"

"He thought that these rays must be streams of cold lava which shone when the sun struck them normally."

"That may be true, but nothing is less certain. However, if we pass nearer to Tycho we shall be in a better
position to find out the cause of this radiation."

"What do you think that plain is like, seen from the height we are at?" asked Michel.

"I don't know," answered Nicholl.

"Well, with all these pieces of lava, sharpened like spindles, it looks like 'an immense game of spilikins,' thrown
down pell-mell. We only want a hook to draw them up."

"Be serious for once in your life," said Barbicane.

"I will be serious," replied Michel tranquilly, "and instead of spilikins let us say they are bones. This plain would
then be only an immense cemetery upon which would repose the immortal remains of a thousand distinct
generations. Do you like that comparison better?"

"One is as good as the other," answered Barbicane.

"The devil! You are difficult to please," replied Michel.

"My worthy friend," resumed the prosaic Barbicane, "it does not matter what it looks like when we don't know
what it is."

"A good answer," exclaimed Michel; "that will teach me to argue with _savants_."

In the meantime the projectile went with almost uniform speed round the lunar disc. It may be easily imagined
that the travellers did not dream of taking a minute's rest. A fresh landscape lay before their eyes every instant.
About half-past one in the morning they caught a glimpse of the summit of another mountain. Barbicane consulted
his map, and recognised Eratosthenes.

It was a circular mountain 4,500 metres high, one of those amphitheatres so numerous upon the satellite.

Barbicane informed his friends of Kepler's singular opinion upon the formation of these circles. According to the
celebrated mathematician, these crateriform cavities had been dug out by the hand of man.

"What for?" asked Nicholl.

"In order to preserve themselves from the ardour of the solar rays, which strike the moon during fifteen
consecutive days."

"The Selenites were not fools!" said Michel.

"It was a singular idea!" answered Nicholl. "But it is probable that Kepler did not know the real dimensions of
these circles, for digging them would have been giants' labour, impracticable for Selenites."

"Why so, if the weight on the surface of the moon is six times less than upon the surface of the earth?" said
Michel.

"But if the Selenites are six times smaller?" replied Nicholl.

"And if there are no Selenites?" added Barbicane, which terminated the discussion.

Eratosthenes soon disappeared from the horizon without the projectile having been sufficiently near it to allow a
rigorous observation. This mountain separated the Apennines from the Carpathians.

In lunar orography, several chains of mountains have been distinguished which are principally distributed over
the northern hemisphere. Some, however, occupy certain portions of the southern hemisphere.

The following is a list of these different chains, with their latitudes and the height of their highest summits:---

<table>
<thead>
<tr>
<th>Name</th>
<th>Lat.</th>
<th>Long.</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doerfel</td>
<td>84°N</td>
<td>0°W</td>
<td>7,603</td>
</tr>
<tr>
<td>Leibnitz</td>
<td>65°N</td>
<td>0°W</td>
<td>7,600</td>
</tr>
<tr>
<td>Rook</td>
<td>20°N</td>
<td>30°E</td>
<td>1,600</td>
</tr>
<tr>
<td>Altai</td>
<td>17°N</td>
<td>17°E</td>
<td>4,047</td>
</tr>
<tr>
<td>Cordilleras</td>
<td>10°N</td>
<td>20°W</td>
<td>3,898</td>
</tr>
<tr>
<td>Pyrenees</td>
<td>8°N</td>
<td>18°E</td>
<td>3,631</td>
</tr>
<tr>
<td>Oural</td>
<td>5°N</td>
<td>13°E</td>
<td>838</td>
</tr>
<tr>
<td>Alembert</td>
<td>4°N</td>
<td>10°E</td>
<td>5,847</td>
</tr>
<tr>
<td>Hoemus</td>
<td>21°N</td>
<td>20°E</td>
<td>2,021</td>
</tr>
<tr>
<td>Carpathians</td>
<td>15°N</td>
<td>19°E</td>
<td>1,939</td>
</tr>
<tr>
<td>Apennines</td>
<td>14°N</td>
<td>27°E</td>
<td>5,501</td>
</tr>
<tr>
<td>Taurus</td>
<td>21°N</td>
<td>28°E</td>
<td>2,746</td>
</tr>
<tr>
<td>Riphes</td>
<td>25°N</td>
<td>33°E</td>
<td>1,717</td>
</tr>
<tr>
<td>Hercynians</td>
<td>17°N</td>
<td>29°E</td>
<td>1,170</td>
</tr>
<tr>
<td>Caucasus</td>
<td>32°N</td>
<td>41°E</td>
<td>5,567</td>
</tr>
<tr>
<td>Alps</td>
<td>42°N</td>
<td>49°E</td>
<td>3,617</td>
</tr>
</tbody>
</table>

The most important of these different chains is that of the Apennines, the development of which extends 150
leagues, and is yet inferior to that of the great orographical movements of the earth. The Apennines run along the
eastern border of the Sea of Rains, and are continued on the north by the Carpathians, the profile of which measures
about 100 leagues.

The travellers could only catch a glimpse of the summit of these Apennines which lie between west long. 10°
and east long. 16°; but the chain of the Carpathians was visible from 18° to 30° east long., and they could see how they were distributed.

One hypothesis seemed to them very justifiable. Seeing that this chain of the Carpathians was here and there circular in form and with high peaks, they concluded that it anciently formed important amphitheatres. These mountainous circles must have been broken up by the vast cataclysm to which the Sea of Rains was due. These Carpathians looked then what the amphitheatres of Purbach, Arzachel, and Ptolemy would if some cataclysm were to throw down their left ramparts and transform them into continuous chains. They present an average height of 3,200 metres, a height comparable to certain of the Pyrenees. Their southern slopes fall straight into the immense Sea of Rains.

About 2 a.m. Barbicane was at the altitude of the 20th lunar parallel, not far from that little mountain, 1,559 metres high, which bears the name of Pythis. The distance from the projectile to the moon was only 1,200 kilometres, brought by means of telescopes to two and a half leagues.

The "Mare Imbrium" lay before the eyes of the travellers like an immense depression of which the details were not very distinct. Near them on the left rose Mount Lambert, the altitude of which is estimated at 1,813 metres, and farther on, upon the borders of the Ocean of Tempests, in north lat. 23° and east long. 29°, rose the shining mountain of Euler. This mountain, which rises only 1,815 metres above the lunar surface, has been the object of an interesting work by the astronomer Schroeter. This _savant_ trying to find out the origin of the lunar mountains, asked himself whether the volume of the crater always looked equal to the volume of the ramparts that formed it. Now this he found to be generally the case, and he hence concluded that a single eruption of volcanic matter had sufficed to form these ramparts, for successive eruptions would have destroyed the connection. Mount Euler alone was an exception to this general law, and it must have taken several successive eruptions to form it, for the volume of its cavity is double that of its inclosure.

All these hypotheses were allowable to terrestrial observers whose instruments were incomplete; but Barbicane was no longer contented to accept them, and seeing that his projectile drew regularly nearer the lunar disc he did not despair of ultimately reaching it, or at least of finding out the secrets of its formation.

CHAPTER XIII.  
LUNAR LANDSCAPES.  
At half-past two in the morning the bullet was over the 30th lunar parallel at an effective distance of 1,000 kilometres, reduced by the optical instruments to ten. It still seemed impossible that it could reach any point on the disc. Its movement of translation, relatively slow, was inexplicable to President Barbicane. At that distance from the moon it ought to have been fast in order to maintain it against the power of attraction. The reason of that phenomenon was also inexplicable; besides, time was wanting to seek for the cause. The reliefs on the lunar surface flew beneath their eyes, and they did not want to lose a single detail.

The disc appeared through the telescopes at a distance of two and a half leagues. If an aëronaut were taken up that distance from the earth, what would he distinguish upon its surface? No one can tell, as the highest ascensions have not exceeded 8,000 metres.

The following, however, is an exact description of what Barbicane and his companions saw from that height:--

Large patches of different colours appeared on the disc. Selenographers do not agree about their nature. They are quite distinct from each other. Julius Schmidt is of opinion that if the terrestrial oceans were dried up, a Selenite observer could only tell the difference between the terrestrial oceans and continental plains by patches of colour as distinctly varied as those which a terrestrial observer sees upon the moon. According to him, the colour common to the vast plains, known under the name of "seas," is dark grey, intermingled with green and brown. Some of the large craters are coloured in the same way.

Barbicane knew this opinion of the German selenographer; it is shared by Messrs. Boeer and Moedler. He noticed that they were right, whilst certain astronomers, who only allow grey colouring on the surface of the moon, are wrong. In certain places the green colour was very vivid; according to Julius Schmidt, it is so in the Seas of Serenity and Humours. Barbicane likewise remarked the wide craters with no interior cones, which are of a bluish colour, analogous to that of fresh-polished sheets of steel. These colours really belonged to the lunar disc, and did not result, as certain astronomers think, either from some imperfection in the object-glasses of the telescopes or the interposition of the terrestrial atmosphere. Barbicane had no longer any doubt about it. He was looking at it through the void, and could not commit any optical error. He considered that the existence of this different colouring was proved to science. Now were the green shades owing to tropical vegetation, kept up by a low and dense atmosphere? He could not yet be certain.

Farther on he noticed a reddish tinge, quite sufficiently distinct. A similar colour had already been observed
upon the bottom of an isolated inclosure, known under the name of the Lichtenberg Amphitheatre, which is situated near the Hercynian Mountains, on the border of the moon. But he could not make out its nature.

He was not more fortunate about another peculiarity of the disc, for he could not find out its cause. The peculiarity was the following one:--

Michel Ardan was watching near the president when he remarked some long white lines brilliantly lighted up by the direct rays of the sun. It was a succession of luminous furrows, very different from the radiation that Copernicus had presented. They ran in parallel lines.

Michel, with his usual readiness, exclaimed--
"Why, there are cultivated fields!"
"Cultivated fields!" repeated Nicholl, shrugging his shoulders.
"Ploughed fields, at all events," replied Michel Ardan. "But what ploughmen these Selenites must be, and what gigantic oxen they must harness to their ploughs, to make such furrows!"
"They are not furrows, they are crevices!"
"Crevices let them be," answered Michel with docility. "Only what do you mean by crevices in the world of science?" Barbicane soon told his companions all he knew about lunar crevices. He knew that they were furrows observed upon all the non-mountainous parts of the lunar disc; that these furrows, generally isolated, were from four to five leagues only; that their width varies from 1,000 to 1,500 metres, and their edges are rigorously parallel. But he knew nothing more about their formation or their nature.

Barbicane watched these furrows through his telescope very attentively. He noticed that their banks were exceedingly steep. They were long parallel ramparts; with a little imagination they might be taken for long lines of fortifications raised by Selenite engineers.

Some of these furrows were as straight as if they had been cut by line, others were slightly curved through with edges still parallel. Some crossed each other. Some crossed craters. Some furrowed the circular cavities, such as Posidonius or Petavius. Some crossed the seas, notably the Sea of Serenity.

These accidents of Nature had naturally exercised the imagination of terrestrial astronomers. The earliest observations did not discover these furrows. Neither Hevelius, Cassini, La Hire, nor Herschel seems to have known them. It was Schroeter who in 1789 first attracted the attention of savants to them. Others followed who studied them, such as Pastorff, Gruithuysen, Boeer, and Moedler. At present there are seventy-six; but though they have been counted, their nature has not yet been determined. They are not fortifications certainly, anymore than they are beds of dried-up rivers, for water so light on the surface of the moon could not have dug such ditches, and there furrows often cross craters at a great elevation.

It must, however, be acknowledged that Michel Ardan had an idea, and that, without knowing it, he shared it with Julius Schmidt.
"Why," said he, "may not these inexplicable appearances be simply phenomena of vegetation?"
"In what way do you mean?" asked Barbicane.
"Now do not be angry, worthy president," answered Michel, "but may not these black lines be regular rows of trees?"
"Do you want to find some vegetation?" said Barbicane.
"I want to explain what you scientific men do not explain! My hypothesis will at least explain why these furrows disappear, or seem to disappear, at regular epochs."
"Why should they?"
"Because trees might become invisible when they lose their leaves, and visible when they grow again."
"Your explanation is ingenious, old fellow," answered Barbicane, "but it cannot be admitted."
"Why?"
"Because it cannot be said to be any season on the surface of the moon, and, consequently, the phenomena of vegetation on the surface of the moon cannot be produced."

In fact, the slight obliquity of the lunar axis keeps the sun there at an almost equal altitude under every latitude. Above the equatorial regions the radiant orb almost invariably occupies the zenith, and hardly passes the limit of the horizon in the polar regions. Therefore, in each region, according to its position, there reigns perpetual spring, summer, autumn, or winter, as in the planet Jupiter, whose axis is also slightly inclined upon its orbit.

The origin of these furrows is a difficult question to solve. They are certainly posterior to the formation of the craters and amphitheatres, for several have crossed them, and broken their circular ramparts. It may be that they are contemporary with the latest geographical epochs, and are only owing to the expansion of natural forces.

In the meantime the projectile had reached the altitude of the 40th degree of lunar latitude at a distance that could not be greater than 800 kilometres. Objects appeared through the telescopes at two leagues only. At this point rose under their feet the Helicon, 505 metres high, and on the left were the mediocre heights, which inclose a small
portion of the Sea of Rains under the name of the Gulf of Iris.

The terrestrial atmosphere ought to be 170 times more transparent than it is in order to allow astronomers to make complete observations on the surface of the moon. But in the void the projectile was moving in no fluid lay between the eye of the observer and the object observed. What is more, Barbicane was at a less distance than the most powerful telescopes, even that of Lord Rosse or the one on the Rocky Mountains, could give. It was, therefore, in circumstances highly favourable for solving the great question of the habitability of the moon. Yet the solution of this question escaped him still. He could only distinguish the deserted beds of the immense plains, and, towards the north, arid mountains. No labour betrayed the hand of man. No ruin indicated his passage. No agglomeration of animals indicated that life was developed there, even in an inferior degree. There was no movement anywhere, no appearance of vegetation anywhere. Of the three kingdoms represented on the terrestrial globe, one only was represented on that of the moon--viz., the mineral kingdom.

"So," said Michel Ardan, looking rather put out, "there is nobody after all."

"No," answered Nicholl; "we have seen neither man, animal, nor tree as yet. After all, if the atmosphere has taken refuge at the bottom of cavities, in the interior of the amphitheatres, or even on the opposite face of the moon, we cannot decide the question."

"Besides," added Barbicane, "even for the most piercing sight a man is not visible at a distance of more than four miles. Therefore if there are any Selenites they can see our projectile, but we cannot see them."

About 11 a.m., at the altitude of the 50th parallel, the distance was reduced to 300 miles. On the left rose the capricious outlines of a chain of mountains, outlined in full light. Towards the right, on the contrary, was a large black hole like a vast dark and bottomless well bored in the lunar soil.

That black hole was the Black Lake, or Pluto, a deep circle from which the earth could be conveniently studied between the last quarter and the new moon, when the shadows are thrown from west to east.

This black colour is rarely met with on the surface of the satellite. It has, as yet, only been seen in the depths of the circle of Endymion, to the east of the Cold Sea, in the northern hemisphere, and at the bottom of the circle of Grimaldi upon the equator towards the eastern border of the orb.

Pluto is a circular mountain, situated in north lat. 51° and east long. 9°. Its circle is fifty miles long and thirty wide. Barbicane regretted not passing perpendicularly over this vast opening. There was an abyss to see, perhaps some mysterious phenomenon to become acquainted with. But the course of the projectile could not be guided. There was nothing to do but submit. A balloon could not be guided, much less a projectile when you are inside.

About 5 a.m. the northern limit of the Sea of Rains was at last passed. Mounts La Condamine and Fontenelle remained, the one on the left, the other on the right. That part of the disc, starting from the 60th degree, became absolutely mountainous. The telescopes brought it to within one league, an inferior distance to that between the summit of Mont Blanc and the sea level. All this region was bristling with peaks and amphitheatres. Mount Philolaus rose about the 70th degree to a height of 3,700 metres, opening an elliptical crater sixteen leagues long and four wide.

Then the disc, seen from that distance, presented an exceedingly strange aspect. The landscapes were very different to earthly ones, and also very inferior.

The moon having no atmosphere, this absence of vaporous covering had consequences already pointed out. There is no twilight on its surface, night following day and day following night, with the suddenness of a lamp extinguished or lighted in profound darkness. There is no transition from cold to heat: the temperature falls in one instant from boiling water heat to the cold of space.

Another consequence of this absence of air is the following:--Absolute darkness reigns where the sun's rays do not penetrate. What is called diffused light upon the earth, the luminous matter that the air holds in suspension, which creates twilights and dawns, which produces shadows, penumbras, and all the magic of the chiaro-oscuro, does not exist upon the moon. Hence the harshness of contrasts that only admit two colours, black and white. If a Selenite shades his eyes from the solar rays the sky appears absolutely dark, and the stars shine as in the darkest nights.

The impression produced on Barbicane and his two friends by this strange state of things may well be imagined. They did not know how to use their eyes. They could no longer seize the respective distances in perspective. A lunar landscape, which does not soften the phenomenon of the chiaro-oscuro, could not be painted by a landscape-painter of the earth. It would be nothing but blots of ink upon white paper.

This aspect of things did not alter even when the projectile, then at the altitude of the 80th degree, was only separated from the moon by a distance of fifty miles, not even when, at 5 a.m., it passed at less than twenty-five miles from the mountain of Gioja, a distance which the telescopes reduced to half-a-mile. It seemed as if they could have touched the moon. It appeared impossible that before long the projectile should not knock against it, if only at the North Pole, where the brilliant mountains were clearly outlined against the dark background of the sky. Michel
Ardan wanted to open one of the port-lights and jump upon the lunar surface. What was a fall of twelve leagues? He thought nothing of that. It would, however, have been a useless attempt, for if the projectile was not going to reach any point on the satellite, Michel would have been hurled along by its movement, and not have reached it either.

At that moment, 6 a.m., the lunar pole appeared. Only half the disc, brilliantly lighted, appeared to the travellers, whilst the other half disappeared in the darkness. The projectile suddenly passed the line of demarcation between intense light and absolute darkness, and was suddenly plunged into the profoundest night.

CHAPTER XIV.

A NIGHT OF THREE HUNDRED AND FIFTY-FOUR HOURS AND A HALF.

At the moment this phenomenon took place the projectile was grazing the moon's North Pole, at less that twenty-five miles' distance. A few seconds had, therefore, sufficed to plunge it into the absolute darkness of space. The transition had taken place so rapidly, without gradations of light or attenuation of the luminous undulations, that the orb seemed to have been blown out by a powerful gust.

"The moon has melted, disappeared!" cried Michel Ardan, wonder-stricken.

In fact, no ray of light or shade had appeared on the disc, formerly so brilliant. The obscurity was complete, and rendered deeper still by the shining of the stars. It was the darkness of lunar night, which lasts 354 hours and a half on each point of the disc—a long night, the result of the equality of the movements of translation and rotation of the moon, the one upon herself, the other round the earth. The projectile in the satellite's cone of shadow was no longer under the action of the solar rays.

In the interior darkness was, therefore, complete. The travellers could no longer see one another. Hence came the necessity to lighten this darkness. However desirous Barbicane might be to economise the gas, of which he had so small a reserve, he was obliged to have recourse to it for artificial light—an expensive brilliancy which the sun then refused.

"The devil take the radiant orb!" cried Michel Ardan; "he is going to force us to spend our gas instead of giving us his rays for nothing."

"We must not accuse the sun," said Nicholl. "It is not his fault, it is the moon's fault for coming and putting herself like a screen between us and him."

"It's the sun!" said Michel again.

"It's the moon!" retorted Nicholl.

An idle dispute began, which Barbicane put an end to by saying—

"My friends, it is neither the fault of the sun nor the moon. It is the projectile's fault for deviating from its course instead of rigorously following it. Or, to be juster still, it is the fault of that unfortunate asteroid which so deplorably altered our first direction."

"Good!" answered Michel Ardan; "as that business is settled let us have our breakfast. After a night entirely passed in making observations, we want something to set us to rights a little."

This proposition met with no contradiction. Michel prepared the repast in a few minutes. But they ate for the sake of eating. They drank without toasts or hurrahs. The bold travellers, borne away into the darkness of space without their accustomed escort of rays, felt a vague uneasiness invade their hearts. The "farouche" darkness, so dear to the pen of Victor Hugo, surrounded them on all sides.

In the meantime they talked about this interminable night, 354 hours, or nearly 15 days, long, which physical laws have imposed upon the inhabitants of the moon. Barbicane gave his friends some explanation of the causes and consequences of this curious phenomenon.

"Curious it certainly is," said he, "for if each hemisphere of the moon is deprived of solar light for fifteen days, the one over which we are moving at this moment does not even enjoy, during its long night, a sight of the brilliantly-lighted earth. In a word, there is no moon, applying that qualification to our spheroid, except for one side of the disc. Now, if it was the same upon earth—if, for example, Europe never saw the moon, and she was only visible at the antipodes—you can figure to yourselves the astonishment of a European on arriving in Australia."

"They would make the voyage for nothing but to go and see the moon," answered Michel.

"Well," resumed Barbicane, "that astonishment is reserved to the Selenite who inhabits the opposite side of the moon to the earth, a side for ever invisible to our fellow-beings of the terrestrial globe."

"And which we should have seen," added Nicholl, "if we had arrived here at the epoch when the moon is new—that is to say, a fortnight later."

"To make amends," resumed Barbicane, "an inhabitant of the visible face is singularly favoured by Nature to the detriment on the invisible face. The latter, as you see, has dark nights of 354 hours long, without a ray of light to penetrate the obscurity. The other, on the contrary, when the sun, which has lighted him for a fortnight, sets under
the horizon, sees on the opposite horizon a splendid orb rise. It is the earth, thirteen times larger than that moon
which we know--the earth, which is developed to a diameter of two degrees, and which sheds a light thirteen times
greater, which no atmosphere qualifies; the earth, which only disappears when the sun reappears."

"A fine sentence," said Michel Ardan; "rather academic perhaps."

"It follows," resumed Barbicane, nowise put out, "that the visible face of the disc must be very agreeable to
inhabit, as it is always lighted by the sun or the moon."

"But," said Nicholl, "this advantage must be quite compensated by the unbearable heat which this light must
cause."

"This inconvenience is the same under two faces, for the light reflected by the earth is evidently deprived of heat.
However, this invisible face is still more deprived of heat than the visible face. I say that for you, Nicholl; Michel
would probably not understand."

"Thank you," said Michel.

"In fact," resumed Barbicane, "when the invisible face receives the solar light and heat the moon is new--that is
to say, that she is in conjunction, that she is situated between the sun and the earth. She is then, on account of the
situation which she occupies in opposition when she is full, nearer the sun by the double of her distance from the
earth. Now this distance may be estimated at the two-hundredth part of that which separates the sun and the earth;
or, in round numbers, at two hundred thousand leagues. Therefore this visible face is nearer the sun by two hundred
thousand leagues when it receives his rays."

"Quite right," replied Nicholl.

"Whilst--" resumed Barbicane.

"Allow me," said Michel, interrupting his grave companion.

"What do you want?"

"I want to go on with the explanation."

"Why?"

"To prove that I have understood."

"Go on, then," said Barbicane, smiling.

"Whilst," said Michel, imitating the tone and gestures of President Barbicane, "when the visible face of the moon
is lighted by the sun the moon is full--that is to say, situated with regard to the earth the opposite to the sun. The
distance which separates it from the radiant orb is then increased in round numbers by 200,000 leagues, and the heat
which it receives must be rather less."

"Well done!" exclaimed Barbicane. "Do you know, Michel, for an artist you are intelligent."

"Yes," answered Michel carelessly, "we are all intelligent on the Boulevard des Italiens."

Barbicane shook hands gravely with his amiable companion, and went on enumerating the few advantages
reserved to the inhabitants of the visible face.

Amongst others he quoted the observations of the sun's eclipses, which can only be seen from one side of the
lunar disc; because the moon must be in opposition before they can take place. These eclipses, caused by the
interposition of the earth between the sun and the moon, may last two hours, during which, on account of the rays
refracted by its atmosphere, the terrestrial globe can only appear like a black spot upon the sun.

"Then," said Nicholl, "the invisible hemisphere is very ill-treated by Nature."

"Yes," answered Barbicane, "but not the whole of it. By a certain movement of liberation, a sort of balancing on
its centre, the moon presents more than the half of her disc to the earth. She is like a pendulum, the centre of gravity
of which is towards the terrestrial globe, and which oscillates regularly. Whence comes that oscillation? Because her
movement of rotation on her axis is animated with uniform velocity, whilst her movement of translation, following
an elliptical orb round the earth, is not. At the perigee the velocity of translation is greater, and the moon shows a
certain portion of her western border. At her apogee the velocity of rotation is greater, and a morsel of her eastern
border appears. It is a strip of about eight degrees, which appears sometimes on the west, sometimes on the east. The
result is, therefore, that of a thousand parts the moon shows five hundred and sixty-nine."

"No matter," answered Michel; "if we ever become Selenites, we will inhabit the visible face. I like light."

"Unless," replied Nicholl, "the atmosphere should be condensed on the other side, as certain astronomers
pretend."

"That is a consideration," answered Michel simply.

In the meantime breakfast was concluded, and the observers resumed their posts. They tried to see through the
dark port-light by putting out all light in the projectile. But not one luminous atom penetrated the obscurity.

One inexplicable fact preoccupied Barbicane. How was it that though the projectile had been so near the moon,
within a distance of twenty-five miles, it had not fallen upon her? If its speed had been enormous, he would have
understood why it had not fallen. But with a relatively slight speed the resistance to lunar attraction could not be
explained. Was the projectile under the influence of some strange force? Did some body maintain it in the ether? It was henceforth evident that it would not touch any point upon the moon. Where was it going? Was it going farther away from or nearer to the disc? Was it carried along in the gloom across infinitude? How were they to know, how calculate in the dark? All these questions made Barbicane anxious, but he could not solve them.

In fact, the invisible orb was there, perhaps, at a distance of some leagues only, but neither his companions nor he could any longer see it. If any noise was made on its surface they could not hear it. The air, that vehicle of transmission, was wanting to convey to them the groans of that moon which the Arabian legends make "a man already half-granite, but still palpitating."

It will be agreed that it was enough to exasperate the most patient observers. It was precisely the unknown hemisphere that was hidden from their eyes. That face which a fortnight sooner or a fortnight later had been, or would be, splendidly lighted up by the solar rays, was then lost in absolute darkness. Where would the projectile be in another fortnight? Where would the hazards of attraction have taken it? Who could say?

It is generally admitted that the invisible hemisphere of the moon is, by its constitution, absolutely similar to the visible hemisphere. One-seventh of it is seen in those movements of libration Barbicane spoke of. Now upon the surface seen there were only plains and mountains, amphitheatres and craters, like those on the maps. They could there imagine the same arid and dead nature. And yet, supposing the atmosphere to have taken refuge upon that face? Suppose that with the air water had given life to these regenerated continents? Suppose that vegetation still persists there? Suppose that animals people these continents and seas? Suppose that man still lives under those conditions of habitability? How many questions there were it would have been interesting to solve! What solutions might have been drawn from the contemplation of that hemisphere! What delight it would have been to glance at that world which no human eye has seen!

The disappointment of the travellers in the midst of this darkness may be imagined. All observation of the lunar disc was prevented. The constellations alone were visible, and it must be acknowledged that no astronomers, neither Faye, Chacornac, nor the Secchi, had ever been in such favourable conditions to observe them.

In fact, nothing could equal the splendour of this starry world, bathed in limpid ether. Diamonds set in the celestial vault threw out superb flames. One look could take in the firmament from the Southern Cross to the North Star, those two constellations which will in 12,000 years, on account of the succession of equinoxes, resign their _rôles_ of polar stars, the one to Canopus in the southern hemisphere, the other to Wega in the northern. Imagination lost itself in this sublime infinitude, amidst which the projectile was moving like a new star created by the hand of man. From natural causes these constellations shone with a soft lustre; they did not twinkle because there was no atmosphere to intervene with its strata unequally dense, and of different degrees of humidity, which causes this scintillation.

The travellers long watched the constellated firmament, upon which the vast screen of the moon made an enormous black hole. But a painful sensation at length drew them from their contemplation. This was an intense cold, which soon covered the glasses of the port-lights with a thick coating of ice. The sun no longer warmed the projectile with his rays, and it gradually lost the heat stored up in its walls. This heat was by radiation rapidly evaporated into space, and a considerable lowering of the temperature was the result. The interior humidity was changed into ice by contact with the window-panes, and prevented all observation.

Nicholl, consulting the thermometer, said that it had fallen to 17° (centigrade) below zero (1° Fahr). Therefore, notwithstanding every reason for being economical, Barbicane was obliged to seek heat as well as light from gas. The low temperature of the bullet was no longer bearable. Its occupants would have been frozen to death.

"We will not complain about the monotony of the journey," said Michel Ardan. "What variety we have had, in temperature at all events! At times we have been blinded with light, and saturated with heat like the Indians of the Pampas! Now we are plunged into profound darkness amidst boreal cold, like the Esquimaux of the pole! No, indeed! We have no right to complain, and Nature has done many things in our honour!"

"But," asked Nicholl, "what is the exterior temperature?"

"Precisely that of planetary space," answered Barbicane.

"Then," resumed Michel Ardan, "would not this be an opportunity for making that experiment we could not attempt when we were bathed in the solar rays?"

"Now or never," answered Barbicane, "for we are usefully situated in order to verify the temperature of space, and see whether the calculations of Fourier or Pouillet are correct."

"Any way it is cold enough," said Michel. "Look at the interior humidity condensing on the port-lights. If this fall continues the vapour of our respiration will fall around us in snow."

"Let us get a thermometer," said Barbicane.

It will be readily seen that an ordinary thermometer would have given no result under the circumstances in which it was going to be exposed. The mercury would have frozen in its cup, for it does not keep liquid below 44°
below zero. But Barbicane had provided himself with a spirit thermometer, on the Walferdin system, which gives the minima of excessively low temperature.

Before beginning the experiment this instrument was compared with an ordinary thermometer, and Barbicane prepared to employ it.

"How shall we manage it?" asked Nicholl.

"Nothing is easier," answered Michel Ardan, who was never at a loss. "Open the port-light rapidly, throw out the instrument; it will follow the projectile with exemplary docility; a quarter of an hour after take it in."

"With your hand?" asked Barbicane.

"With my hand," answered Michel.

"Well, then, my friend, do not try it," said Barbicane, "for the hand you draw back will be only a stump, frozen and deformed by the frightful cold."

"Really?"

"You would feel the sensation of a terrible burn, like one made with a red-hot iron, for the same thing happens when heat is brutally abstracted from our body as when it is inserted. Besides, I am not sure that objects thrown out still follow us."

"Why?" said Nicholl.

"Because if we are passing through any atmosphere, however slightly dense, these objects will be delayed. Now the darkness prevents us verifying whether they still float around us. Therefore, in order not to risk our thermometer, we will tie something to it, and so easily pull it back into the interior."

Barbicane's advice was followed. Nicholl threw the instrument out of the rapidly-opened port-light, holding it by a very short cord, so that it could be rapidly drawn in. The window was only open one second, and yet that one second was enough to allow the interior of the projectile to become frightfully cold.

"_Mille diables!_" cried Michel Ardan, "it is cold enough here to freeze white bears!"

Barbicane let half-an-hour go by, more than sufficient time to allow the instrument to descend to the level of the temperature of space. The thermometer was then rapidly drawn in.

Barbicane calculated the quantity of mercury spilt into the little phial soldered to the lower part of the instrument, and said--

"One hundred and forty degrees centigrade below zero!" (218° Fahr.)

M. Pouillet was right, not Fourier. Such was the frightful temperature of sidereal space! Such perhaps that of the lunar continents when the orb of night loses by radiation all the heat which she absorbs during the fifteen days of sunshine.

CHAPTER XV.

HYPERBOLA OR PARABOLA.

Our readers will probably be astonished that Barbicane and his companions were so little occupied with the future in store for them in their metal prison, carried along in the infinitude of ether. Instead of asking themselves where they were going, they lost their time in making experiments, just as if they had been comfortably installed in their own studies.

It might be answered that men so strong-minded were above such considerations, that such little things did not make them uneasy, and that they had something else to do than to think about their future.

The truth is that they were not masters of their projectile--that they could neither stop it nor alter its direction. A seaman can direct the head of his ship as he pleases; an aëronaut can give his balloon vertical movement. They, on the contrary, had no authority over their vehicle. No manoeuvre was possible to them. Hence their not troubling themselves, or "let things go" state of mind.

Where were they at that moment, 8 a.m. during that day called upon earth the sixth of December? Certainly in the neighbourhood of the moon, and even near enough for her to appear like a vast black screen upon the firmament. As to the distance which separated them, it was impossible to estimate it. The projectile, kept up by inexplicable forces, has grazed the north pole of the satellite at less than twenty-five miles’ distance. But had that distance increased or diminished since they had been in the cone of shadow? There was no landmark by which to estimate either the direction or the velocity of the projectile. Perhaps it was going rapidly away from the disc and would soon leave the pure shadow. Perhaps, on the contrary, it was approaching it, and would before long strike against some elevated peak in the invisible atmosphere, which would have terminated the journey, doubtless to the detriment of the travellers.

A discussion began upon this subject, and Michel Ardan, always rich in explanations, gave out the opinion that the bullet, restrained by lunar attraction, would end by falling on the moon like an àérolite on to the surface of the
terrestrial globe.

"In the first place," answered Barbicane, "all aërolites do not fall upon the surface of the earth; only a small proportion do so. Therefore, if we are aërolites it does not necessarily follow that we shall fall upon the moon."

"Still," answered Michel, "if we get near enough--"

"Error," replied Barbicane. "Have you not seen shooting stars by thousands in the sky at certain epochs?"

"Yes."

"Well, those stars, or rather corpuscles, only shine by rubbing against the atmospheric strata. Now, if they pass through the atmosphere, they pass at less than 16 miles from our globe, and yet they rarely fall. It is the same with our projectile. It may approach very near the moon, and yet not fall upon it."

"But then," asked Michel, "I am curious to know how our vehicle would behave in space."

"I only see two hypotheses," answered Barbicane, after some minutes' reflection.

"What are they?"

"The projectile has the choice between two mathematical curves, and it will follow the one or the other according to the velocity with which it is animated, and which I cannot now estimate."

"Yes, it will either describe a parabola or an hyperbola."

"Yes," answered Barbicane, "with some speed it will describe a parabola, and with greater speed an hyperbola."

"I like those grand words!" exclaimed Michel Ardan. "I know at once what you mean. And what is your parabola, if you please?"

"My friend," answered the captain, "a parabola is a conic section arising from cutting a cone by a plane parallel to one of its sides."

"Oh!" said Michel in a satisfied tone.

"It is about the same trajectory that the bomb of a howitzer describes."

"Just so. And an hyperbola?" asked Michel.

"It is a curve formed by a section of a cone when the cutting plane makes a greater angle with the base than the side of the cone makes."

"Is it possible?" exclaimed Michel Ardan in the most serious tone, as if he had been informed of a grave event.

"Then remember this, Captain Nicholl, what I like in your definition of the hyperbola--I was going to say of the hyperhumbug--is that it is still less easy to understand than the word you pretend to define."

Nicholl and Barbicane paid no attention to Michel Ardan's jokes. They had launched into a scientific discussion. They were eager about what curve the projectile would take. One was for the hyperbola, the other for the parabola. They gave each other reasons bristling with x's. Their arguments were presented in a language which made Michel Ardan jump. The discussion was lively, and neither of the adversaries would sacrifice his curve of predilection.

This scientific dispute was prolonged until Michel Ardan became impatient, and said--

"I say, Messrs. Cosine, do leave off throwing your hyperbolas and parabolas at one's head. I want to know the only interesting thing about the business. We shall follow one or other of your curves. Very well. But where will they take us to?"

"Nowhere," answered Nicholl.

"How nowhere?"

"Evidently they are unfinished curves, prolonged indefinitely!"

"Ah, _savants_! What does it matter about hyperbola or parabola if they both carry us indefinitely into space?"

Barbicane and Nicholl could not help laughing. They cared for art for its own sake. Never had more useless question been discussed at a more inopportune moment. The fatal truth was that the projectile, whether hyperbolically or parabolically carried along, would never strike against either the earth or the moon.

What would become of these bold travellers in the most immediate future? If they did not die of hunger or thirst, they would in a few days, when gas failed them, die for want of air, if the cold had not killed them first!

Still, although it was so important to economise gas, the excessive lowness of the surrounding temperature forced them to consume a certain quantity. They could not do without either its light or heat. Happily the caloric developed by the Reiset and Regnault apparatus slightly elevated the temperature of the projectile, and without spending much they could raise it to a bearable degree.

In the meantime observation through the port-lights had become very difficult. The steam inside the bullet condensed upon the panes and froze immediately. They were obliged to destroy the opacity of the glass by constant rubbing. However, they could record several phenomena of the highest interest.

In fact, if the invisible disc had any atmosphere, the shooting stars would be seen passing through it. If the projectile itself passed through the fluid strata, might it not hear some noise echoed--a storm, for instance, an avalanche, or a volcano in activity? Should they not see the intense fulgurations of a burning mountain? Such facts,
carefully recorded, would have singularly elucidated the obscure question of the lunar constitution. Thus Barbicane and Nicholl, standing like astronomers at their port-lights, watched with scrupulous patience.

But until then the disc remained mute and dark. It did not answer the multifarious interrogations of these ardent minds.

This provoked from Michel a reflection that seemed correct enough.

"If ever we recommence our journey, we shall do well to choose the epoch when the moon is new."

"True," answered Nicholl, "that circumstance would have been more favourable. I agree that the moon, bathed in sunlight, would not be visible during the passage, but on the other hand the earth would be full. And if we are dragged round the moon like we are now, we should at least have the advantage of seeing the invisible disc magnificently lighted up."

"Well said, Nicholl," replied Michel Ardan. "What do you think about it, Barbicane?"

"I think this," answered the grave president: "if ever we recommence this journey, we shall start at the same epoch, and under the same circumstances. Suppose we had reached our goal, would it not have been better to find the continents in full daylight instead of dark night? Would our first installation have been made under better circumstances? Yes, evidently. As to the invisible side, we could have visited that in our exploring expeditions on the lunar globe. So, therefore, the time of the full moon was well chosen. But we ought to have reached our goal, and in order to have reached it we ought not to have deviated from our road."

"There is no answer to make to that," said Michel Ardan. "Yet we have passed a fine opportunity for seeing the moon! Who knows whether the inhabitants of the other planets are not more advanced than the _savants_ of the earth on the subject of their satellites?"

The following answer might easily have been given to Michel Ardan's remark:--Yes, other satellites, on account of their greater proximity, have made the study of them easier. The inhabitants of Saturn, Jupiter, and Uranus, if they exist, have been able to establish communication with their moons much more easily. The four satellites of Jupiter gravitate at a distance of 108,260 leagues, 172,200 leagues, 274,700 leagues, and 480,130 leagues. But these distances are reckoned from the centre of the planet, and by taking away the radius, which is 17,000 to 18,000 leagues, it will be seen that the first satellite is at a much less distance from the surface of Jupiter than the moon is from the centre of the earth. Of the eight moons of Saturn, four are near. Diana is 84,600 leagues off; Thetys, 62,966 leagues; Enceladus, 48,191 leagues; and lastly, Mimas is at an average distance of 34,500 leagues only. Of the eighteen satellites of Uranus, the first, Ariel, is only 51,520 leagues from the planet.

Therefore, upon the surface of those three stars, an experiment analogous to that of President Barbicane would have presented less difficulties. If, therefore, their inhabitants have attempted the enterprise, they have, perhaps, acquainted themselves with the constitution of the half of the disc which their satellite hides eternally from their eyes. But if they have never left their planet, they do not know more about them than the astronomers of the earth.

In the meantime the bullet was describing in the darkness that incalculable trajectory which no landmark allowed them to find out. Was its direction altered either under the influence of lunar attraction or under the action of some unknown orb? Barbicane could not tell. But a change had taken place in the relative position of the vehicle, and Barbicane became aware of it about 4 a.m.

The change consisted in this, that the bottom of the projectile was turned towards the surface of the moon, and kept itself perpendicular with its axis. The attraction or gravitation had caused this modification. The heaviest part of the bullet inclined towards the invisible disc exactly as if it had fallen towards it.

Was it falling then? Were the travellers at last about to reach their desired goal? No. And the observation of one landmark, inexplicable in itself, demonstrated to Barbicane that his projectile was not nearing the moon, and that it was following an almost concentric curve.

This was a flash of light which Nicholl signalled all at once on the limit of the horizon formed by the black disc. This point could not be mistaken for a star. It was a reddish flame, which grew gradually larger—an incontestable proof that the projectile was getting nearer it, and not falling normally upon the surface of the satellite.

"A volcano! It is a volcano in activity!" exclaimed Nicholl—"an eruption of the interior fires of the moon. That world, then, is not quite extinguished."

"Yes, an eruption!" answered Barbicane, who studied the phenomenon carefully through his night-glass. "What should it be if not a volcano?"

"But then," said Michel Ardan, "air is necessary to feed that combustion, therefore there is some atmosphere on that part of the moon."

"Perhaps so," answered Barbicane, "but not necessarily. A volcano, by the decomposition of certain matters, can furnish itself with oxygen, and so throw up flames into the void. It seems to me, too, that that deflagration has the intensity and brilliancy of objects the combustion of which is produced in pure oxygen. We must not be in a hurry to affirm the existence of a lunar atmosphere."
The burning mountain was situated at the 45th degree of south latitude on the invisible part of the disc. But to the great disappointment of Barbicane the curve that the projectile described dragged it away from the point signalised by the eruption, therefore he could not exactly determine its nature. Half-an-hour after it had first been seen this luminous point disappeared on the horizon. Still the authentication of this phenomenon was a considerable fact in selenographic studies. It proved that all heat had not yet disappeared from the interior of this globe, and where heat exists, who may affirm that the vegetable kingdom, or even the animal kingdom itself, has not until now resisted the destructive influences? The existence of this volcano in eruption, indisputably established by earthly savants, was favourable to the theory of the habitability of the moon.

Barbicane became absorbed in reflection. He forgot himself in a mute reverie, filled with the mysterious destinies of the lunar world. He was trying to connect the facts observed up till then, when a fresh incident recalled him suddenly to the reality.

This incident was more than a cosmic phenomenon; it was a threatening danger, the consequences of which might be disastrous.

Suddenly in the midst of the ether, in the profound darkness, an enormous mass had appeared. It was like a moon, but a burning moon of almost unbearable brilliancy, outlined as it was on the total obscurity of space. This mass, of a circular form, threw such light that it filled the projectile. The faces of Barbicane, Nicholl, and Michel Ardan, bathed in its white waves, looked spectral, livid, blafard, like the appearance produced by the artificial light of alcohol impregnated with salt.

"The devil!" cried Michel Ardan. "How hideous we are! Whatever is that wretched moon?"

"It is a bolis," answered Barbicane.

"A bolis, on fire, in the void?"

"Yes."

This globe of fire was indeed a bolis. Barbicane was not mistaken. But if these cosmic meteors, seen from the earth, present an inferior light to that of the moon, here, in the dark ether, they shine magnificently. These wandering bodies carry in themselves the principle of their own incandescence. The surrounding air is not necessary to the deflagration. And, indeed, if certain of these bodies pass through our atmosphere at two or three leagues from the earth, others describe their trajectory at a distance the atmosphere cannot reach. Some of these meteors are from one to two miles wide, and move at a speed of forty miles a second, following an inverse direction from the movement of the earth.

This shooting star suddenly appeared in the darkness at a distance of at least 100 leagues, and measured, according to Barbicane's estimate, a diameter of 2,000 metres. It moved with the speed of about thirty leagues a minute. It cut across the route of the projectile, and would reach it in a few minutes. As it approached it grew larger in an enormous proportion.

If possible, let the situation of the travellers be imagined! It is impossible to describe it. In spite of their courage, their sang-froid, their carelessness of danger, they were mute, motionless, with stiffened limbs, a prey to fearful terror. Their projectile, the course of which they could not alter, was running straight on to this burning mass, more intense than the open mouth of a furnace. They seemed to be rushing towards an abyss of fire.

Barbicane seized the hands of his two companions, and all three looked through their half-closed eyelids at the red-hot asteroid. If they still thought at all, they must have given themselves up as lost!

Two minutes after the sudden appearance of the bolis, two centuries of agony, the projectile seemed about to strike against it, when the ball of fire burst like a bomb, but without making any noise in the void, where sound, which is only the agitation of the strata of air, could not be made.

Nicholl uttered a cry. His companions and he rushed to the port-lights.

What a spectacle! What pen could describe it, what palette would be rich enough in colours to reproduce its magnificence?

It was like the opening of a crater, or the spreading of an immense fire. Thousands of luminous fragments lit up space with their fires. Every size, colour, and shade were there. There were yellow, red, green, grey, a crown of multi-coloured fireworks. There only remained of the enormous and terrible globe pieces carried in all directions, each an asteroid in its turn, some shining like swords, some surrounded by white vapour, others leaving behind them a trail of cosmic dust.

These incandescent blocks crossed each other, knocked against each other, and were scattered into smaller fragments, of which some struck the projectile. Its left window was even cracked by the violent shock. It seemed to be floating in a shower of bullets, of which the least could annihilate it in an instant.

The light which saturated the ether was of incomparable intensity, for these asteroids dispersed it in every direction. At a certain moment it was so bright that Michel dragged Barbicane and Nicholl to the window, exclaiming--
"The invisible moon is at last visible!"

And all three, across the illumination, saw for a few seconds that mysterious disc which the eye of man perceived for the first time.

What did they distinguish across that distance which they could not estimate? Long bands across the disc, veritable clouds formed in a very restricted atmospheric medium, from which emerged not only all the mountains, but every relief of middling importance, amphitheatres, yawning craters, such as exist on the visible face. Then immense tracts, no longer arid plains, but veritable seas, oceans which reflected in their liquid mirror all the dazzling magic of the fires of space. Lastly, on the surface of the continents, vast dark masses, such as immense forests would resemble under the rapid illumination of a flash of lightning.

Was it an illusion, an error of the eyes, an optical deception? Could they give a scientific affirmation to that observation so superficially obtained? Dared they pronounce upon the question of its habitability after so slight a glimpse of the invisible disc?

By degrees the fulgurations of space gradually died out, its accidental brilliancy lessened, the asteroids fled away by their different trajectories, and went out in the distance. The ether resumed its habitual darkness; the stars, for one moment eclipsed, shone in the firmament, and the disc, of which scarcely a glimpse had been caught, was lost in the impenetrable night.

CHAPTER XVI.

THE SOUTHERN HEMISPHERE.

The projectile had just escaped a terrible danger, a danger quite unforeseen. Who would have imagined such a meeting of asteroids? These wandering bodies might prove serious perils to the travellers. They were to them like so many rocks in the sea of ether, which, less fortunate than navigators, they could not avoid. But did these adventurers of space complain? No, as Nature had given them the splendid spectacle of a cosmic meteor shining by formidable expansion, as this incomparable display of fireworks, which no Ruggieri could imitate, had lighted for a few seconds the invisible nimbus of the moon. During that rapid peep, continents, seas, and forests had appeared to them. Then the atmosphere did give there its life-giving particles? Questions still not solved, eternally asked by American curiosity.

It was then 3.30 p.m. The bullet was still describing its curve round the moon. Had its route again been modified by the meteor? It was to be feared. The projectile ought, however to describe a curve imperturbably determined by the laws of mechanics. Barbicane inclined to the opinion that this curve would be a parabola and not an hyperbola. However, if the parabola was admitted, the bullet ought soon to come out of the cone of shadow thrown into the space on the opposite side to the sun. This cone, in fact, is very narrow, the angular diameter of the moon is so small compared to the diameter of the orb of day. Until now the projectile had moved in profound darkness. Whatever its speed had been—and it could not have been slight—its period of occultation continued. That fact was evident, but perhaps that would not have been the case in a rigidly parabolical course. This was a fresh problem which tormented Barbicane's brain, veritably imprisoned as it was in a web of the unknown which he could not disentangle.

Neither of the travellers thought of taking a minute's rest. Each watched for some unexpected incident which should throw a new light on their uranographic studies. About five o'clock Michel distributed to them, by way of dinner, some morsels of bread and cold meat, which were rapidly absorbed, whilst no one thought of leaving the port-light, the panes of which were becoming incrusted under the condensation of vapour.

About 5.45 p.m., Nicholl, armed with his telescope, signalised upon the southern border of the moon, and in the direction followed by the projectile, a few brilliant points outlined against the dark screen of the sky. They looked like a succession of sharp peaks with profiles in a tremulous line. They were rather brilliant. The terminal line of the moon looks the same when she is in one of her octants.

They could not be mistaken. There was no longer any question of a simple meteor, of which that luminous line had neither the colour nor the mobility, nor of a volcano in eruption. Barbicane did not hesitate to declare what it was.

"The sun!" he exclaimed.

"What! the sun!" answered Nicholl and Michel Ardan.

"Yes, my friends, it is the radiant orb itself, lighting up the summit of the mountains situated on the southern border of the moon. We are evidently approaching the South Pole!"

"After having passed the North Pole," answered Michel. "Then we have been all round our satellite."

"Yes, friend Michel."

"Then we have no more hyperbolas, no more parabolas, no more open curves to fear!"

"No, but a closed curve."
"Which is called--"
"An ellipsis. Instead of being lost in the interplanetary spaces it is possible that the projectile will describe an elliptical orbit round the moon."
"Really!"
"And that it will become its satellite."
"Moon of the moon," exclaimed Michel Ardan.
"Only I must tell you, my worthy friend, that we are none the less lost men on that account!"
"No, but in another and much pleasanter way!" answered the careless Frenchman, with his most amiable smile.

President Barbicane was right. By describing this elliptical orbit the projectile was going to gravitate eternally round the moon like a sub-satellite. It was a new star added to the solar world, a microcosm peopled by three inhabitants, whom want of air would kill before long. Barbicane, therefore, could not rejoice at the position imposed on the bullet by the double influence of the centripetal and centrifugal forces. His companions and he were again going to see the visible face of the disc. Perhaps their existence would last long enough for them to perceive for the last time the full earth superbly lighted up by the rays of the sun! Perhaps they might throw a last adieu to the globe they were never more to see again! Then their projectile would be nothing but an extinct mass, dead like those inert asteroids which circulate in the ether. A single consolation remained to them: it was that of seeing the darkness and returning to light, it was that of again entering the zones bathed by solar irradiation!

In the meantime the mountains recognised by Barbicane stood out more and more from the dark mass. They were Mounts Doerfel and Leibnitz, which stand on the southern circumpolar region of the moon.

All the mountains of the visible hemisphere have been measured with perfect exactitude. This perfection will, no doubt, seem astonishing, and yet the hypsometric methods are rigorous. The altitude of the lunar mountains may be no less exactly determined than that of the mountains of the earth.

The method generally employed is that of measuring the shadow thrown by the mountains, whilst taking into account the altitude of the sun at the moment of observation. This method also allows the calculating of the depth of craters and cavities on the moon. Galileo used it, and since Messrs. Boeer and Moedler have employed it with the greatest success.

Another method, called the tangent radii, may also be used for measuring lunar reliefs. It is applied at the moment when the mountains form luminous points on the line of separation between light and darkness which shine on the dark part of the disc. These luminous points are produced by the solar rays above those which determine the limit of the phase. Therefore the measure of the dark interval which the luminous point and the luminous part of the phase leave between them gives exactly the height of the point. But it will be seen that this method can only be applied to the mountains near the line of separation of darkness and light.

A third method consists in measuring the profile of the lunar mountains outlined on the background by means of a micrometer; but it is only applicable to the heights near the border of the orb.

In any case it will be remarked that this measurement of shadows, intervals, or profiles can only be made when the solar rays strike the moon obliquely in relation to the observer. When they strike her directly—in a word, when she is full—all shadow is imperiously banished from her disc, and observation is no longer possible.

Galileo, after recognising the existence of the lunar mountains, was the first to employ the method of calculating their heights by the shadows they throw. He attributed to them, as it has already been shown, an average of 9,000 yards. Hevelius singularly reduced these figures, which Riccioli, on the contrary, doubled. All these measures were exaggerated. Herschel, with his more perfect instruments, approached nearer the hypsometric truth. But it must be finally sought in the accounts of modern observers.

Messrs. Boeer and Moedler, the most perfect selenographers in the whole world, have measured 1,095 lunar mountains. It results from their calculations that 6 of these mountains rise above 5,800 metres, and 22 above 4,800. The highest summit of the moon measures 7,603 metres; it is, therefore, inferior to those of the earth, of which some are 1,000 yards higher. But one remark must be made. If the respective volumes of the two orbs are compared the lunar mountains are relatively higher than the terrestrial. The lunar ones form 1/70 of the diameter of the moon, and the terrestrial only form 1/140 of the diameter of the earth. For a terrestrial mountain to attain the relative proportions of a lunar mountain, its perpendicular height ought to be 6-1/2 leagues. Now the highest is not four miles.

Thus, then, to proceed by comparison, the chain of the Himalayas counts three peaks higher than the lunar ones, Mount Everest, Kunchinjuga, and Dwalagiri. Mounts Doerfel and Leibnitz, on the moon, are as high as Jewahir in the same chain. Newton, Casatus, Curtius, Short, Tycho, Clavisus, Blancanus, Endymion, the principal summits of Caucasus and the Apennines, are higher than Mont Blanc. The mountains equal to Mont Blanc are Moret, Theophilus, and Catharnia; to Mount Rosa, Piccolomini, Werner, and Harpalus; to Mount Cervin, Macrobus, Eratosthenes, Albateque, and Delambre; to the Peak of Teneriffe, Bacon, Cysatus, Philolaus, and the Alps; to Mount
Such are the points of comparison that allow the appreciation of the altitude of lunar mountains. Now the trajectory followed by the projectile dragged it precisely towards that mountainous region of the southern hemisphere where rise the finest specimens of lunar orography.

CHAPTER XVII.
TYCHO.

At 6 p.m. the projectile passed the South Pole at less than thirty miles, a distance equal to that already reached at the North Pole. The elliptical curve was, therefore, being rigorously described.

At that moment the travellers re-entered the beneficent sunshine. They saw once more the stars moving slowly from east to west. The radiant orb was saluted with a triple hurrah. With its light came also its heat, which soon pierced the middle walls. The windows resumed their accustomed transparency. Their "layer of ice" melted as if by enchantment. The gas was immediately extinguished by way of economy. The air apparatus alone was to consume its habitual quantity.

"Ah!" said Nicholl, "sunshine is good! How impatiently after their long nights the Selenites must await the reappearance of the orb of solay!"

"Yes," answered Michel Ardan, "imbibing, as it were, the brilliant ether, light and heat, all life is in them."

At that moment the bottom of the projectile moved slightly from the lunar surface in order to describe a rather long elliptical orbit. From that point, if the earth had been full, Barbicane and his friends could have seen it again. But, drowned in the sun's irradiation, it remained absolutely invisible. Another spectacle attracted their eyes, presented by the southern region of the moon, brought by the telescopes to within half-a-mile. They left the port-lights no more, and noted all the details of the strange continent.

Mounts Doerfel and Leibnitz formed two separate groups stretching nearly to the South Pole; the former group extends from the Pole to the 84th parallel on the eastern part of the orb; the second, starting from the eastern border, stretches from the 65th degree of latitude to the Pole.

On their capriciously-formed ridge appeared dazzling sheets of light like those signalised by Father Secchi. With more certainty than the illustrious Roman astronomer, Barbicane was enabled to establish their nature.

"It is snow," cried he.

"Snow?" echoed Nicholl.

"Yes, Nicholl, snow, the surface of which is profoundly frozen. Look how it reflects the luminous rays. Cooled lava would not give so intense a reflection. Therefore there is water and air upon the moon, as little as you like, but the fact can no longer be contested."

No, it could not be, and if ever Barbicane saw the earth again his notes would testify to this fact, important in selenographic observations.

These Mounts Doerfel and Leibnitz arose in the midst of plains of moderate extent, bounded by an indefinite succession of amphitheatres and circular ramparts. These two chains are the only ones which are met with in the region of amphitheatres. Relatively they are not very broken, and only throw out here and there some sharp peaks, the highest of which measures 7,603 metres.

The projectile hung high above all this, and the relief disappeared in the intense brilliancy of the disc.

Then reappeared to the eyes of the travellers that original aspect of the lunar landscapes, raw in tone, without gradation of colours, only white and black, for diffused light was wanting. Still the sight of this desolate world was very curious on account of its very strangeness. They were moving above this chaotic region as if carried along by the breath of a tempest, seeing the summits fly under their feet, looking down the cavities, climbing the ramparts, sounding the mysterious holes. But there was no trace of vegetation, no appearance of cities, nothing but stratifications, lava streams, polished like immense mirrors, which reflect the solar rays with unbearable brilliancy. There was no appearance of a living world, everything of a dead one, where the avalanches rolling from the summit of the mountains rushed noiselessly. They had plenty of movement, but noise was wanting still.

Barbicane established the fact, by reiterated observation, that the reliefs on the borders of the disc, although they had been acted upon by different forces to those of the central region, presented a uniform conformation. There was the same circular aggregation, the same accidents of ground. Still it might be supposed that their arrangements were not completely analogous. In the centre the still malleable crust of the moon suffered the double attraction of the moon and the earth acting in inverse ways according to a radius prolonged from one to the other. On the borders of the disc, on the contrary, the lunar attraction has been, thus to say, perpendicular with the terrestrial attraction. It seems, therefore, that the reliefs on the soil produced under these conditions ought to have taken a different form. Yet they had not, therefore the moon had found in herself alone the principle of her formation and constitution.
owed nothing to foreign influences, which justified the remarkable proposition of Arago's, "No action exterior to the moon has contributed to the production of her relief."

However that may be in its actual condition, this world was the image of death without it being possible to say that life had ever animated it.

Michel Ardan, however, thought he recognised a heap of ruins, to which he drew Barbicane's attention. It was situated in about the 80th parallel and 30° longitude. This heap of stones, pretty regularly made, was in the shape of a vast fortress, overlooking one of those long furrows which served as river-beds in ante-historical times. Not far off rose to a height of 5,646 metres the circular mountain called Short, equal to the Asiatic Caucasus. Michel Ardan, with his habitual ardour, maintained "the evidences" of his fortress. Below he perceived the dismantled ramparts of a town; here the arch of a portico, still intact; there two or three columns lying on their side; farther on a succession of archpieces, which must have supported the conduct of an aqueduct; in another part the sunken pillars of a gigantic bridge run into the thickest part of the furrow. He distinguished all that, but with so much imagination in his eyes, through a telescope so fanciful, that his observation cannot be relied upon. And yet who would affirm, who would dare to say, that the amiable fellow had not really seen what his two companions would not see?

The moments were too precious to be sacrificed to an idle discussion. The Selenite city, whether real or pretended, had disappeared in the distance. The projectile began to get farther away from the lunar disc, and the details of the ground began to be lost in a confused jumble. The reliefs, amphitheatres, craters, and plains alone remained, and still showed their boundary-lines distinctly.

At that moment there stretched to the left one of the finest amphitheatres in lunar orography. It was Newton, which Barbicane easily recognised by referring to the _Mappa Selenographica_.

Newton is situated in exactly 77° south lat. and 16° east long. It forms a circular crater, the ramparts of which, 7,264 metres high, seemed to be inaccessible.

Barbicane made his companions notice that the height of that mountain above the surrounding plain was far from being equal to the depth of its crater. This enormous hole was beyond all measurement, and made a gloomy abyss, the bottom of which the sun's rays could never reach. There, according to Humboldt, utter darkness reigns, which the light of the sun and the earth could not break. The mythologists would have made it with justice hell's mouth.

"Newton," said Barbicane, "is the most perfect type of the circular mountains, of which the earth possesses no specimen. They prove that the formation of the moon by cooling was due to violent causes, for whilst under the influence of interior fire the reliefs were thrown up to considerable heights, the bottom dropped in, and became lower than the lunar level."

"I do not say no," answered Michel Ardan.

A few minutes after having passed Newton the projectile stood directly over the circular mountain of Moret. It also passed rather high above the summits of Blancanus, and about 7.30 p.m. it reached the amphitheatre of Clavius.

This circle, one of the most remarkable on the disc, is situated in south lat. 58° and east long. 15°. Its height is estimated at 7,091 metres. The travellers at a distance of 200 miles, reduced to two by the telescopes, could admire the arrangement of this vast crater.

"The terrestrial volcanoes," said Barbicane, "are only molehills compared to the volcanoes of the moon. Measuring the ancient craters formed by the first eruptions of Vesuvius and Etna, they are found to be scarcely 6,000 metres wide. In France the circle of the Cantal measures five miles; at Ceylon the circle of the island is forty miles, and is considered the largest on the globe. What are these diameters compared to that of Clavius, which we are over in this moment?"

"What is its width?" asked Nicholl.

"About seventy miles," answered Barbicane. "This amphitheatre is certainly the largest on the moon, but many are fifty miles wide!"

"Ah, my friends," exclaimed Michel Ardan, "can you imagine what this peaceful orb of night was once like? when these craters vomited torrents of lava and stones, with clouds of smoke and sheets of flame? What a prodigious spectacle formerly, and now what a falling off! This moon is now only the meagre case of fireworks, of which the rockets, serpents, suns, and wheels, after going off magnificently, only leave torn pieces of cardboard. Who can tell the cause, reason, or justification of such cataclysms?"

Barbicane did not listen to Michel Ardan. He was contemplating those ramparts of Clavius, formed of wide mountains several leagues thick. At the bottom of its immense cavity lay hundreds of small extinct craters, making the soil like a sieve, and overlooked by a peak more than 15,000 feet high.

The plain around had a desolate aspect. Nothing so arid as these reliefs, nothing so sad as these ruins of mountains, if so they may be called, as those heaps of peaks and mountains encumbering the ground! The satellite seemed to have been blown up in this place.

The projectile still went on, and the chaos was still the same. Circles, craters, and mountains succeeded each
other incessantly. No more plains or seas—an interminable Switzerland or Norway. Lastly, in the centre of the creviced region at its culminating point, the most splendid mountain of the lunar disc, the dazzling Tycho, to which posterity still gives the name of the illustrious Danish astronomer.

Whilst observing the full moon in a cloudless sky, there is no one who has not remarked this brilliant point on the southern hemisphere. Michel Ardan, to qualify it, employed all the metaphors his imagination could furnish him with. To him Tycho was an ardent focus of light, a centre of irradiation, a crater vomiting flames! It was the axle of a fiery wheel, a sea-star encircling the disc with its silver tentacles, an immense eye darting fire, a nimbo made for Pluto’s head! It was a star hurled by the hand of the Creator, and fallen upon the lunar surface!

Tycho forms such a luminous concentration that the inhabitants of the earth can see it without a telescope, although they are at a distance of 100,000 leagues. It will, therefore, be readily imagined what its intensity must have been in the eyes of observers placed at fifty leagues only.

Across this pure ether its brilliancy was so unbearable that Barbicane and his friends were obliged to blacken the object-glasses of their telescopes with gas-smoke in order to support it. Then, mute, hardly emitting a few admiring interjections, they looked and contemplated. All their sentiments, all their impressions were concentrated in their eyes, as life, under violent emotion, is concentrated in the heart.

Tycho belongs to the system of radiating mountains, like Aristarchus and Copernicus. But it testified the most completely of all to the terrible volcanic action to which the formation of the moon is due.

Tycho is situated in south lat. 43° and east long. 12°. Its centre is occupied by a crater more than forty miles wide. It affects a slightly elliptical form, and is inclosed by circular ramparts, which on the east and west overlook the exterior plain from a height of 5,000 metres. It is an aggregation of Mont Blancs, placed round a common centre, and crowned with shining rays.

Photography itself could never represent what this incomparable mountain, with all its projections converging to it and its interior excrescences, is really like. In fact, it is during the full moon that Tycho is seen in all its splendour. Then all shadows disappear, the foreshortenings of perspective disappear, and all proofs come out white—an unfortunate circumstance, for this strange region would have been curious to reproduce with photographic exactitude. It is only an agglomeration of holes, craters, circles, a vertiginous network of crests. It will be understood, therefore, that the bubbleings of this central eruption have kept their first forms. Crystallised by cooling, they have stereotyped the aspect which the moon formerly presented under the influence of Plutonic forces.

The distance which separated the travellers from the circular summits of Tycho was not so great that the travellers could not survey its principal details. Even upon the embankment which forms the ramparts of Tycho, the mountains hanging to the interior and exterior slopes rose in stories like gigantic terraces. They appeared to be higher by 300 or 400 feet on the west than on the east. No system of terrestrial castrametation could equal these natural fortifications. A town built at the bottom of this circular cavity would have been utterly inaccessible.

Inaccessible and marvellously extended over this ground of picturesque relief! Nature had not left the bottom of this crater flat and empty. It possessed a special orography, a mountain system which made it a world apart. The travellers clearly distinguished the cones, central hills, remarkable movements of the ground, naturally disposed for the reception of masterpieces of Selenite architecture. There was the place for a temple, here for a forum, there the foundations of a palace, there the plateau of a citadel, the whole overlooked by a central mountain, 1,500 feet high—a vast circuit which would have held ancient Rome ten times over.

"Ah!" exclaimed Michel Ardan, made enthusiastic by the sight, "what grand towns could be built in this circle of mountains! A tranquil city, a peaceful refuge, away from all human cares! How all misanthropes could live there, all haters of humanity, all those disgusted with social life!"

"All! It would be too small for them!" replied Barbicane simply.

CHAPTER XVIII.
GRAVE QUESTIONS.

In the meantime the projectile had passed the neighbourhood of Tycho. Barbicane and his two friends then observed, with the most scrupulous attention, those brilliant radii which the celebrated mountain dispenses so curiously on every horizon.

What was this radiating aureole? What geological phenomenon had caused those ardent beams? This question justly occupied Barbicane. Under his eyes, in every direction, ran luminous furrows, with raised banks and concave middle, some ten miles, others more than twenty miles wide. These shining trails ran in certain places at least 300 leagues from Tycho, and seemed to cover, especially towards the east, north-east, and north, half the southern hemisphere. One of these furrows stretched as far as the amphitheatre of Neander, situated on the 40th meridian. Another went rounding off through the Sea of Nectar and broke against the chain of the Pyrenees after a run of 400
leagues; others towards the west covered with a luminous network the Sea of Clouds and the Sea of Humours.

What was the origin of these shining rays running equally over plains and reliefs, however high? They all started from a common centre, the crater of Tycho. They emanated from it.

Herschel attributed their brilliant aspect to ancient streams of lava congealed by the cold, an opinion which has not been generally received. Other astronomers have seen in these inexplicable rays a kind of _moraines_, ranges of erratic blocks thrown out at the epoch of the formation of Tycho.

"And why should it not be so?" asked Nicholl of Barbicane, who rejected these different opinions at the same time that he related them.

"Because the regularity of these luminous lines, and the violence necessary to send them to such a distance, are inexplicable.

"_Par bleu_!" replied Michel Ardan. "I can easily explain to myself the origin of these rays."

"Indeed," said Barbicane.

"Yes," resumed Michel. "Why should they not be the cracks caused by the shock of a bullet or a stone upon a pane of glass?"

"Good," replied Barbicane, smiling; "and what hand would be powerful enough to hurl the stone that would produce such a shock?"

"A hand is not necessary," answered Michel, who would not give in; "and as to the stone, let us say it is a comet."

"Ah! comets?" exclaimed Barbicane; "those much-abused comets! My worthy Michel, your explanation is not bad, but your comet is not wanted. The shock might have come from the interior of the planet. A violent contraction of the lunar crust whilst cooling was enough to make that gigantic crack."

"Contraction let it be—something like a lunar colic," answered Michel Ardan.

"Besides," added Barbicane, "that is also the opinion of an English _savant_, Nasmyth, and it seems to me to explain the radiation of these mountains sufficiently."

"That Nasmyth was no fool!" answered Michel.

The travellers, who could never weary of such a spectacle, long admired the splendours of Tycho. Their projectile, bathed in that double irradiation of the sun and moon, must have appeared like a globe of fire. They had, therefore, suddenly passed from considerable cold to intense heat. Nature was thus preparing them to become Selenites.

To become Selenites! That idea again brought up the question of the habitability of the moon. After what they had seen, could the travellers solve it? Could they conclude for or against? Michel Ardan asked his two friends to give utterance to their opinion, and asked them outright if they thought that humanity and animality were represented in the lunar world.

"I think we cannot answer," said Barbicane, "but in my opinion the question ought not to be stated in that form. I ask to be allowed to state it differently."

"State it as you like," answered Michel.

"This is it," resumed Barbicane. "The problem is double, and requires a double solution. Is the moon habitable? Has it been inhabited?"

"Right," said Nicholl. "Let us first see if the moon is habitable."

"To tell the truth, I know nothing about it," replied Michel.

"And I answer in the negative," said Barbicane. "In her actual state, with her certainly very slight atmosphere, her seas mostly dried up, her insufficient water, her restricted vegetation, her abrupt alternations of heat and cold, her nights and days 354 hours long, the moon does not appear habitable to me, nor propitious to the development of the animal kingdom, nor sufficient for the needs of existence such as we understand it."

"Agreed," answered Nicholl; "but is not the moon habitable for beings differently organised to us?"

"That question is more difficult to answer," replied Barbicane. "I will try to do it, however, but I ask Nicholl if movement seems to him the necessary result of existence, under no matter what organisation?"

"Without the slightest doubt," answered Nicholl.

"Well, then, my worthy companion, my answer will be that we have seen the lunar continent at a distance of 500 yards, and that nothing appeared to be moving on the surface of the moon. The presence of no matter what form of humanity would be betrayed by appropriations, different constructions, or even ruins. What did we see? Everywhere the geological work of Nature, never the work of man. If, therefore, representatives of the animal kingdom exist upon the moon, they have taken refuge in those bottomless cavities which the eye cannot reach. And I cannot admit that either, for they would have left traces of their passage upon the plains which the atmosphere, however slight, covers. Now these traces are nowhere visible. Therefore the only hypothesis that remains is one of living beings without movement or life."
"You might just as well say living creatures who are not alive."
"Precisely," answered Barbicane, "which for us has no meaning."
"Then now we may formulate our opinion," said Michel.
"Yes," answered Nicholl.
"Very well," resumed Michel Ardan; "the Scientific Commission, meeting in the projectile of the Gun Club, after having supported its arguments upon fresh facts lately observed, decides unanimously upon the question of the habitability of the moon--'No, the moon is not inhabited.'"

This decision was taken down by Barbicane in his notebook, where he had already written the _procès-verbal_ of the sitting of December 6th.

"Now," said Nicholl, "let us attack the second question, depending on the first. I therefore ask the honourable Commission if the moon is not habitable, has it been inhabited?"

"Answer, Citizen Barbicane," said Michel Ardan.

"My friends," answered Barbicane, "I did not undertake this journey to form an opinion upon the ancient habitability of our satellite. I may add that my personal observations only confirm me in this opinion. I believe, I even affirm, that the moon has been inhabited by a human race organised like ours, that it has produced animals anatomically formed like terrestrial animals; but I add that these races, human or animal, have had their day, and are for ever extinct."

"Then," asked Michel, "the moon is an older world than the earth?"

"No," answered Barbicane with conviction, "but a world that has grown old more quickly, whose formation and deformation have been more rapid. Relatively the organising forces of matter have been much more violent in the interior of the moon than in the interior of the celestial globe. The actual state of this disc, broken up, tormented, and swollen, proves this abundantly. In their origin the moon and the earth were only gases. These gases became liquids under different influences, and the solid mass was formed afterwards. But it is certain that our globe was gas or liquid still when the moon, already solidified by cooling, became habitable."

"I believe that," said Nicholl.

"Then," resumed Barbicane, "it was surrounded by atmosphere. The water held in by the gassy element could not evaporate. Under the influence of air, water, light, and heat, solar and central, vegetation took possession of these continents prepared for its reception, and certainly life manifested itself about that epoch, for Nature does not spend itself in inutilities, and a world so marvellously habitable must have been inhabited."

"Still," answered Nicholl, "many phenomena inherent to the movements of our satellite must have prevented the expansion of the vegetable and animal kingdoms. The days and nights 354 hours long, for example."

"At the terrestrial poles," said Michel, "they last six months."

"That is not a valuable argument, as the poles are not inhabited."

"In the actual state of the moon," resumed Barbicane, "the long nights and days create differences of temperature insupportable to the constitution, but it was not so at that epoch of historical times. The atmosphere enveloped the disc with a fluid mantle. Vapour deposited itself in the form of clouds. This natural screen tempered the ardour of the solar lays, and retained the nocturnal radiation. Both light and heat could diffuse themselves in the air. Hence there was equilibrium between the influences which no longer exists now that the atmosphere has almost entirely disappeared. Besides, I shall astonish you--"

"Astonish us?" said Michel Ardan.

"But I believe that at the epoch when the moon was inhabited the nights and days did not last 354 hours!"

"Why so?" asked Nicholl quickly.

"Because it is very probable that then the moon's movement of rotation on her axis was not equal to her movement of revolution, an equality which puts every point of the lunar disc under the action of the solar rays for fifteen days."

"Agreed," answered Nicholl; "but why should not these movements have been equal, since they are so actually?"

"Because that equality has only been determined by terrestrial attraction. Now, how do we know that this attraction was powerful enough to influence the movements of the moon at the epoch the earth was still fluid?"

"True," replied Nicholl; "and who can say that the moon has always been the earth's satellite?"

"And who can say," exclaimed Michel Ardan, "that the moon did not exist before the earth?"

Imagination began to wander in the indefinite field of hypotheses. Barbicane wished to hold them in. "Those," said he, "are speculations too high, problems really insoluble. Do not let us enter into them. Let us only admit the insufficiency of primordial attraction, and then by the inequality of rotation and revolution days and nights could succeed each other upon the moon as they do upon the earth. Besides, even under those conditions life was possible."

"Then," asked Michel Ardan, "humanity has quite disappeared from the moon?"
"Yes," answered Barbicane, "after having, doubtless, existed for thousands of centuries. Then gradually the atmosphere becoming rarefied, the disc will again be uninhabitable like the terrestrial globe will one day become by cooling."

"By cooling?"

"Certainly," answered Barbicane. "As the interior fires became extinguished the incandescent matter was concentrated and the lunar disc became cool. By degrees the consequences of this phenomenon came about—the disappearance of organic beings and the disappearance of vegetation. Soon the atmosphere became rarefied, and was probably drawn away by terrestrial attraction; the breathable air disappeared, and so did water by evaporation. At that epoch the moon became uninhabitable, and was no longer inhabited. It was a dead world like it is to-day."

"And you say that the like fate is reserved for the earth?"

"Very probably."

"But when?"

"When the cooling of its crust will have made it uninhabitable."

"Has the time it will take our unfortunate globe to melt been calculated?"

"Certainly."

"And you know the reason?"

"Perfectly."

"Then tell us, sulky _savant_—you make me boil with impatience."

"Well, my worthy Michel," answered Barbicane tranquilly, "it is well known what diminution of temperature the earth suffers in the lapse of a century. Now, according to certain calculations, that average temperature will be brought down to zero after a period of 400,000 years!"

"Four hundred thousand years!" exclaimed Michel. "Ah! I breathe again! I was really frightened. I imagined from listening to you that we had only fifty thousand years to live!"

Barbicane and Nicholl could not help laughing at their companion’s uneasiness. Then Nicholl, who wanted to have done with it, reminded them of the second question to be settled.

"Has the moon been inhabited?" he asked.

The answer was unanimously in the affirmative.

During this discussion, fruitful in somewhat hazardous theories, although it resumed the general ideas of science on the subject, the projectile had run rapidly towards the lunar equator, at the same time that it went farther away from the lunar disc. It had passed the circle of Willem, and the 40th parallel, at a distance of 400 miles. Then leaving Pitatus to the right, on the 30th degree, it went along the south of the Sea of Clouds, of which it had already approached the north. Different amphitheatres appeared confusedly under the white light of the full moon—Bouillaud, Purbach, almost square with a central crater, then Arzachel, whose interior mountain shone with indefinable brilliancy.

At last, as the projectile went farther and farther away, the details faded from the travellers' eyes, the mountains were confounded in the distance, and all that remained of the marvellous, fantastical, and wonderful satellite of the earth was the imperishable remembrance.

CHAPTER XIX.

A STRUGGLE WITH THE IMPOSSIBLE.

For some time Barbicane and his companions, mute and pensive, looked at this world, which they had only seen from a distance, like Moses saw Canaan, and from which they were going away for ever. The position of the projectile relatively to the moon was modified, and now its lower end was turned towards the earth.

This change, verified by Barbicane, surprised him greatly. If the bullet was going to gravitate round the satellite in an elliptical orbit, why was not its heaviest part turned towards it like the moon to the earth? There again was an obscure point.

By watching the progress of the projectile they could see that it was following away from the moon an analogous curve to that by which it approached her. It was, therefore, describing a very long ellipsis which would probably extend to the point of equal attraction, where the influences of the earth and her satellite are neutralised.

Such was the conclusion which Barbicane correctly drew from the facts observed, a conviction which his two friends shared with him.

Questions immediately began to shower upon him.

"What will become of us after we have reached the neutral point?" asked Michel Ardan.

"That is unknown!" answered Barbicane.

"But we can make suppositions, I suppose?"
"We can make two," answered Barbicane. "Either the velocity of the projectile will then be insufficient, and it will remain entirely motionless on that line of double attraction--"

"I would rather have the other supposition, whatever it is," replied Michel.

"Or the velocity will be sufficient," resumed Barbicane, "and it will continue its elliptical orbit, and gravitate eternally round the orb of night."

"Not very consoling that revolution," said Michel, "to become the humble servants of a moon whom we are in the habit of considering our servant. And is that the future that awaits us?"

Neither Barbicane nor Nicholl answered.

"Why do you not answer?" asked the impatient Michel.

"There is nothing to answer," said Nicholl.

"Can nothing be done?"

"No," answered Barbicane. "Do you pretend to struggle with the impossible?"

"Why not? Ought a Frenchman and two Americans to recoil at such a word?"

"But what do you want to do?"

"Command the motion that is carrying us along!"

"Command it?"

"Yes," resumed Michel, getting animated, "stop it or modify it; use it for the accomplishment of our plans."

"And how, pray?"

"That is your business! If artillermen are not masters of their bullets they are no longer artillermen. If the projectile commands the gunner, the gunner ought to be rammed instead into the cannon! Fine savants, truly! who don't know now what to do after having induced me--"

"Induced!" cried Barbicane and Nicholl. "Induced! What do you mean by that?"

"No recriminations!" said Michel. "I do not complain. The journey pleases me. The bullet suits me. But let us do all that is humanly possible to fall somewhere, if only upon the moon."

"We should only be too glad, my worthy Michel," answered Barbicane, "but we have no means of doing it."

"Can we not modify the motion of the projectile?"

"No."

"Nor diminish its speed?"

"No."

"Not even by lightening it like they lighten an overloaded ship?"

"What can we throw out?" answered Nicholl. "We have no ballast on board. And besides, it seems to me that a lightened projectile would go on more quickly."

"Less quickly," said Michel.


"Neither more nor less quickly," answered Barbicane, wishing to make his two friends agree, "for we are moving in the void where we cannot take specific weight into account."

"Very well," exclaimed Michel Ardan in a determined tone; "there is only one thing to do."

"What is that?" asked Nicholl.

"Have breakfast," imperturbably answered the audacious Frenchman, who always brought that solution to the greatest difficulties.

In fact, though that operation would have no influence on the direction of the projectile, it might be attempted without risk, and even successfully from the point of view of the stomach. Decidedly the amiable Michel had only good ideas.

They breakfasted, therefore, at 2 a.m., but the hour was not of much consequence. Michel served up his habitual menu, crowned by an amiable bottle out of his secret cellar. If ideas did not come into their heads the Chambertin of 1863 must be despaired of.

The meal over, observations began again.

The objects they had thrown out of the projectile still followed it at the same invariable distance. It was evident that the bullet in its movement of translation round the moon had not passed through any atmosphere, for the specific weight of these objects would have modified their respective distances.

There was nothing to see on the side of the terrestrial globe. The earth was only a day old, having been new at midnight the day before, and two days having to go by before her crescent, disengaged from the solar rays, could serve as a clock to the Selenites, as in her movement of rotation each of her points always passes the same meridian of the moon every twenty-four hours.

The spectacle was a different one on the side of the moon; the orb was shining in all its splendour amidst innumerable constellations, the rays of which could not trouble its purity. Upon the disc the plains again wore the
sombre tint which is seen from the earth. The rest of the nimbus was shining, and amidst the general blaze Tycho stood out like a sun.

Barbicane could not manage any way to appreciate the velocity of the projectile, but reasoning demonstrated that this speed must be uniformly diminishing in conformity with the laws of rational mechanics.

In fact, it being admitted that the bullet would describe an orbit round the moon, that orbit must necessarily be elliptical. Science proves that it must be thus. No mobile circulation round any body is an exception to that law. All the orbits described in space are elliptical, those of satellites round their planets, those of planets around their sun, that of the sun round the unknown orb that serves as its central pivot. Why should the projectile of the Gun Club escape that natural arrangement?

Now in elliptical orbits attracting bodies always occupy one of the foci of the ellipsis. The satellite is, therefore, nearer the body round which it gravitates at one moment than it is at another. When the earth is nearest the sun she is at her perihelion, and at her aphelion when most distant. The moon is nearest the earth at her perigee, and most distant at her apogee. To employ analogous expressions which enrich the language of astronomers, if the projectile remained a satellite of the moon, it ought to be said that it is in its "aposelene" at its most distant point, and at its "periselene" at its nearest.

In the latter case the projectile ought to attain its maximum of speed, in the latter its minimum. Now it was evidently going towards its "aposelene," and Barbicane was right in thinking its speed would decrease up to that point, and gradually increase when it would again draw near the moon. That speed even would be absolutely _nil_ if the point was coexistent with that of attraction.

Barbicane studied the consequences of these different situations; he was trying what he could make of them when he was suddenly interrupted by a cry from Michel Ardan.

"I'faith!" cried Michel, "what fools we are!"

"I don't say we are not," answered Barbicane; "but why?"

"Because we have some very simple means of slackening the speed that is taking us away from the moon, and we do not use them."

"And what are those means?"

"That of utilising the force of recoil in our rockets."

"Ah, why not?" said Nicholl.

"We have not yet utilised that force, it is true," said Barbicane, "but we shall do so."

"When?" asked Michel.

"When the time comes. Remark, my friends, that in the position now occupied by the projectile, a position still oblique to the lunar disc, our rockets, by altering its direction, might take it farther away instead of nearer to the moon. Now I suppose it is the moon you want to reach?"

"Essentially," answered Michel.

"Wait, then. Through some inexplicable influence the projectile has a tendency to let its lower end fall towards the earth. It is probable that at the point of equal attraction its conical summit will be rigorously directed towards the moon. At that moment it may be hoped that its speed will be _nil_. That will be the time to act, and under the effort of our rockets we can, perhaps, provoke a direct fall upon the surface of the lunar disc."

"Bravo!" said Michel.

"We have not done it yet, and we could not do it as we passed the neutral point, because the projectile was still animated with too much velocity."

"Well reasoned out," said Nicholl.

"We must wait patiently," said Barbicane, "and put every chance on our side; then, after having despaired so long, I again begin to think we shall reach our goal."

This conclusion provoked hurrahs from Michel Ardan. No one of these daring madmen remembered the question they had all answered in the negative—No, the moon is not inhabited! No, the moon is probably not inhabitable! And yet they were going to do all they could to reach it.

One question only now remained to be solved: at what precise moment would the projectile reach that point of equal attraction where the travellers would play their last card?

In order to calculate that moment to within some seconds Barbicane had only to have recourse to his travelling notes, and to take the different altitudes from lunar parallels. Thus the time employed in going over the distance between the neutral point and the South Pole must be equal to the distance which separates the South Pole from the neutral point. The hours representing the time it took were carefully noted down, and the calculation became easy.

Barbicane found that this point would be reached by the projectile at 1 a.m. on the 8th of December. It was then 3 a.m. on the 7th of December. Therefore, if nothing intervened, the projectile would reach the neutral point in twenty-two hours.
The rockets had been put in their places to slacken the fall of the bullet upon the moon, and now the bold fellows were going to use them to provoke an exactly contrary effect. However that may be, they were ready, and there was nothing to do but await the moment for setting fire to them.

"As there is nothing to do," said Nicholl, "I have a proposition to make."

"What is that?" asked Barbicane.

"I propose we go to sleep."

"That is a nice idea!" exclaimed Michel Ardan.

"It is forty hours since we have closed our eyes," said Nicholl. "A few hours' sleep would set us up again."

"Never!" replied Michel.

"Good," said Nicholl; "every man to his humour—mine is to sleep."

And lying down on a divan, Nicholl was soon snoring like a forty-eight pound bullet.

"Nicholl is a sensible man," said Barbicane soon. "I shall imitate him."

A few minutes after he was joining his bass to the captain's baritone.

"Decidedly," said Michel Ardan, when he found himself alone, "these practical people sometimes do have opportune ideas."

And stretching out his long legs, and folding his long arms under his head, Michel went to sleep too.

But this slumber could neither be durable nor peaceful. Too many preoccupations filled the minds of these three men, and a few hours after, at about 7 a.m., they all three awoke at once.

The projectile was still moving away from the moon, inclining its conical summit more and more towards her. This phenomenon was inexplicable at present, but it fortunately aided the designs of Barbicane. Another seventeen hours and the time for action would have come.

That day seemed long. However bold they might be, the travellers felt much anxiety at the approach of the minute that was to decide everything, either their fall upon the moon or their imprisonment in an immutable orbit. They therefore counted the hours, which went too slowly for them, Barbicane and Nicholl obstinately plunged in calculations, Michel walking up and down the narrow space between the walls contemplating with longing eye the impassible moon.

Sometimes thoughts of the earth passed through their minds. They saw again their friends of the Gun Club, and the dearest of them all, J.T. Maston. At that moment the honourable secretary must have been occupying his post on the Rocky Mountains. If he should perceive the projectile upon the mirror of his gigantic telescope what would he think? After having seen it disappear behind the south pole of the moon, they would see it reappear at the north! It was, therefore, the satellite of a satellite! Had J.T. Maston sent that unexpected announcement into the world? Was this to be the _dénouement_ of the great enterprise?

Meanwhile the day passed without incident. Terrestrial midnight came. The 8th of December was about to commence. Another hour and the point of equal attraction would be reached. What velocity then animated the projectile? They could form no estimate; but no error could vitiate Barbicane's calculations. At 1 a.m. that velocity ought to be and would be _nil_.

Besides, another phenomenon would mark the stopping point of the projectile on the neutral line. In that spot the two attractions, terrestrial and lunar, would be annihilated. Objects would not weigh anything. This singular fact, which had so curiously surprised Barbicane and his companions before, must again come about under identical circumstances. It was at that precise moment they must act.

The conical summit of the bullet had already sensibly turned towards the lunar disc. The projectile was just right for utilising all the recoil produced by setting fire to the apparatus. Chance was therefore in the travellers' favour. If the velocity of the projectile were to be absolutely annihilated upon the neutral point, a given motion, however slight, towards the moon would determine its fall.

"Five minutes to one," said Nicholl.

"Everything is ready," answered Michel Ardan, directing his match towards the flame of the gas.

"Wait!" said Barbicane, chronometer in hand.

At that moment weight had no effect. The travellers felt its complete disappearance in themselves. They were near the neutral point if they had not reached it.

"One o'clock!" said Barbicane.

Michel Ardan put his match to a contrivance that put all the fuses into instantaneous communication. No detonation was heard outside, where air was wanting, but through the port-lights Barbicane saw the prolonged flame, which was immediately extinguished.

The projectile had a slight shock which was very sensibly felt in the interior.

The three friends looked, listened, without speaking, hardly breathing. The beating of their hearts might have been heard in the absolute silence.
"Are we falling?" asked Michel Ardan at last.
"No," answered Nicholl; "for the bottom of the projectile has not turned towards the lunar disc!"

At that moment Barbicane left his window and turned towards his two companions. He was frightfully pale, his forehead wrinkled, his lips contracted.

"We are falling!" said he.
"Ah!" cried Michel Ardan, "upon the moon?"
"Upon the earth!" answered Barbicane.
"The devil!" cried Michel Ardan; and he added philosophically, "when we entered the bullet we did not think it would be so difficult to get out of it again."

In fact, the frightful fall had begun. The velocity kept by the projectile had sent it beyond the neutral point. The explosion of the fuses had not stopped it. That velocity which had carried the projectile beyond the neutral line as it went was destined to do the same upon its return. The law of physics condemned it, in its elliptical orbit, to pass by every point it had already passed.

It was a terrible fall from a height of 78,000 leagues, and which no springs could deaden. According to the laws of ballistics the projectile would strike the earth with a velocity equal to that which animated it as it left the Columbiad—a velocity of 16,000 metres in the last second!

And in order to give some figures for comparison it has been calculated that an object thrown from the towers of Notre Dame, the altitude of which is only 200 feet, would reach the pavement with a velocity of 120 leagues an hour. Here the projectile would strike the earth with a velocity of 57,600 leagues an hour.

"We are lost men," said Nicholl coldly.
"Well, if we die," answered Barbicane, with a sort of religious enthusiasm, "the result of our journey will be magnificently enlarged! God will tell us His own secret! In the other life the soul will need neither machines nor engines in order to know! It will be identified with eternal wisdom!"

"True," replied Michel Ardan: "the other world may well console us for that trifling orb called the moon!"
Barbicane crossed his arms upon his chest with a movement of sublime resignation.
"God's will be done!" he said.

CHAPTER XX.
THE SOUNDINGS OF THE SUSQUEHANNA.

Well, lieutenant, and what about those soundings?

"I think the operation is almost over, sir. But who would have expected to find such a depth so near land, at 100 leagues only from the American coast?"

"Yes, Bronsfield, there is a great depression," said Captain Blomsberry. "There exists a submarine valley here, hollowed out by Humboldt's current, which runs along the coasts of America to the Straits of Magellan."

"Those great depths," said the lieutenant, "are not favourable for the laying of telegraph cables. A smooth plateau is the best, like the one the American cable lies on between Valentia and Newfoundland."

"I agree with you, Bronsfield. And, may it please you, lieutenant, where are we now?"
"Sir," answered Bronsfield, "we have at this moment 21,500 feet of line out, and the bullet at the end of the line has not yet touched the bottom, for the sounding-lead would have come up again."

"Brook's apparatus is an ingenious one," said Captain Blomsberry. "It allows us to obtain very correct soundings."

"Touched!" cried at that moment one of the forecastle-men who was superintending the operation.

The captain and lieutenant went on to the forecastle-deck.
"What depth are we in?" asked the captain.
"Twenty-one thousand seven hundred and sixty-two feet," answered the lieutenant, writing it down in his pocket-book.

"Very well, Bronsfield," said the captain, "I will go and mark the result on my chart. Now have the sounding-line brought in—that is a work of several hours. Meanwhile the engineer shall have his fires lighted, and we shall be ready to start as soon as you have done. It is 10 p.m., and with your permission, lieutenant, I shall turn in."

"Certainly, sir, certainly!" answered Lieutenant Bronsfield amiably.

The captain of the Susquehanna, a worthy man if ever there was one, the very humble servant of his officers, went to his cabin, took his brandy-and-water with many expressions of satisfaction to the steward, got into bed, not before complimenting his servant on the way he made beds, and sank into peaceful slumber.

It was then 10 p.m. The eleventh day of the month of December was going to end in a magnificent night.

The Susquehanna, a corvette of 500 horse power, of the United States Navy, was taking soundings in the Pacific
at about a hundred leagues from the American coast, abreast of that long peninsula on the coast of New Mexico.

The wind had gradually fallen. There was not the slightest movement in the air. The colours of the corvette hung from the mast motionless and inert.

The captain, Jonathan Blomsberry, cousin-german to Colonel Blomsberry, one of the Gun Club members who had married a Horschbidden, the captain's aunt and daughter of an honourable Kentucky merchant--Captain Blomsberry could not have wished for better weather to execute the delicate operation of sounding. His corvette had felt nothing of that great tempest which swept away the clouds heaped up on the Rocky Mountains, and allowed the course of the famous projectile to be observed. All was going on well, and he did not forget to thank Heaven with all the fervour of a Presbyterian.

The series of soundings executed by the Susquehanna were intended for finding out the most favourable bottoms for the establishment of a submarine cable between the Hawaiian Islands and the American coast.

It was a vast project set on foot by a powerful company. Its director, the intelligent Cyrus Field, meant even to cover all the islands of Oceania with a vast electric network--an immense enterprise worthy of American genius.

It was to the corvette Susquehanna that the first operations of sounding had been entrusted. During the night from the 11th to the 12th of December she was exactly in north lat. 27° 7' and 41° 37' long., west from the Washington meridian.

The moon, then in her last quarter, began to show herself above the horizon.

After Captain Blomsberry's departure, Lieutenant Bronsfield and a few officers were together on the poop. As the moon appeared their thoughts turned towards that orb which the eyes of a whole hemisphere were then contemplating. The best marine glasses could not have discovered the projectile wandering round the demi-globe, and yet they were all pointed at the shining disc which millions of eyes were looking at in the same moment.

"They started ten days ago," then said Lieutenant Bronsfield. "What can have become of them?"

"They have arrived, sir," exclaimed a young midshipman, "and they are doing what all travellers do in a new country, they are looking about them."

"I am certain of it as you say so, my young friend," answered Lieutenant Bronsfield, smiling.

"Still," said another officer, "their arrival cannot be doubted. The projectile must have reached the moon at the moment she was full, at midnight on the 5th. We are now at the 11th of December; that makes six days. Now in six times twenty-four hours, with no darkness, they have had time to get comfortably settled. It seems to me that I see our brave countrymen encamped at the bottom of a valley, on the borders of a Selenite stream, near the projectile, half buried by its fall, amidst volcanic remains, Captain Nicholl beginning his levelling operations, President Barbicane putting his travelling notes in order, Michel Ardan performing the lunar solitudes with his Londrés cigar--"

"Oh, it must be so; it is so!" exclaimed the young midshipman, enthusiastic at the ideal description of his superior.

"I should like to believe it," answered Lieutenant Bronsfield, who was seldom carried away. "Unfortunately direct news from the lunar world will always be wanting."

"Excuse me, sir," said the midshipman, "but cannot President Barbicane write?"

A roar of laughter greeted this answer.

"Not letters," answered the young man quickly. "The post-office has nothing to do with that."

"Perhaps you mean the telegraph-office?" said one of the officers ironically.

"Nor that either," answered the midshipman, who would not give in. "But it is very easy to establish graphic communication with the earth."

"And how, pray?"

"By means of the telescope on Long's Peak. You know that it brings the moon to within two leagues only of the Rocky Mountains, and that it allows them to see objects having nine feet of diameter on her surface. Well, our industrious friends will construct a gigantic alphabet! They will write words 600 feet long, and sentences a league long, and then they can send up news!"

The young midshipman, who certainly had some imagination was loudly applauded. Lieutenant Bronsfield himself was convinced that the idea could have been carried out. He added that by sending luminous rays, grouped by means of parabolical mirrors, direct communications could also be established--in fact, these rays would be as visible on the surface of Venus or Mars as the planet Neptune is from the earth. He ended by saying that the brilliant points already observed on the nearest planets might be signals made to the earth. But he said, that though by these means they could have news from the lunar world, they could not send any from the terrestrial world unless the Selenites have at their disposition instruments with which to make distant observations.

"That is evident," answered one of the officers, "but what has become of the travellers? What have they done? What have they seen? That is what interests us. Besides, if the experiment has succeeded, which I do not doubt, it
will be done again. The Columbiad is still walled up in the soil of Florida. It is, therefore, now only a question of
powder and shot, and every time the moon passes the zenith we can send it a cargo of visitors."

"It is evident," answered Lieutenant Bronsfield, "that J.T. Maston will go and join his friends one of these days."
"If he will have me," exclaimed the midshipman, "I am ready to go with him."
"Oh, there will be plenty of amateurs, and if they are allowed to go, half the inhabitants of the earth will soon
have emigrated to the moon!"

This conversation between the officers of the Susquehanna was kept up till about 1 a.m. It would be impossible
to transcribe the overwhelming systems and theories which were emitted by these audacious minds. Since
Barbicane's attempt it seemed that nothing was impossible to Americans. They had already formed the project of
sending, not another commission of _savants_, but a whole colony, and a whole army of infantry, artillery, and
cavalry to conquer the lunar world.

At 1 a.m. the sounding-line was not all hauled in. Ten thousand feet remained out, which would take several
more hours to bring in. According to the commander's orders the fires had been lighted, and the pressure was going
up already. The Susquehanna might have started at once.

At that very moment—it was 1.17 a.m.—Lieutenant Bronsfield was about to leave his watch to turn in when his
attention was attracted by a distant and quite unexpected hissing sound.

His comrades and he at first thought that the hissing came from an escape of steam, but upon lifting up his head
he found that it was high up in the air.

They had not time to question each other before the hissing became of frightful intensity, and suddenly to their
dazzled eyes appeared an enormous bolis, inflamed by the rapidity of its course, by its friction against the
atmospheric strata.

This ignited mass grew huger as it came nearer, and fell with the noise of thunder upon the bowsprit of the
corvette, which it smashed off close to the stem, and vanished in the waves.

A few feet nearer and the Susquehanna would have gone down with all on board.

At that moment Captain Blomsberry appeared half-clothed, and rushing in the forecastle, where his officers had
preceded him—

"With your permission, gentlemen, what has happened?" he asked.

And the midshipman, making himself the mouthpiece of them all, cried out—

"Commander, it is 'they' come back again."

CHAPTER XXI.

J.T. MASTON CALLED IN.

Emotion was great on board the Susquehanna. Officers and sailors forgot the terrible danger they had just been
in—the danger of being crushed and sunk. They only thought of the catastrophe which terminated the journey. Thus,
therefore, the most audacious enterprise of ancient and modern times lost the life of the bold adventurers who had
attempted it.

"It is 'they' come back," the young midshipman had said, and they had all understood. No one doubted that the
bolis was the projectile of the Gun Club. Opinions were divided about the fate of the travellers.

"They are dead!" said one.

"They are alive," answered the other. "The water is deep here, and the shock has been deadened."

"But they will have no air, and will die suffocated!"

"Burnt!" answered the other. "Their projectile was only an incandescent mass as it crossed the atmosphere."

"What does it matter?" was answered unanimously, "living or dead they must be brought up from there."

Meanwhile Captain Blomsberry had called his officers together, and with their permission he held a council.

Something must be done immediately. The most immediate was to haul up the projectile—a difficult operation, but
not an impossible one. But the corvette wanted the necessary engines, which would have to be powerful and precise.

It was, therefore, resolved to put into the nearest port, and to send word to the Gun Club about the fall of the bullet.

This determination was taken unanimously. The choice of a port was discussed. The neighbouring coast had no
harbour on the 27th degree of latitude. Higher up, above the peninsula of Monterey, was the important town which
gives its name to it. But, seated on the confines of a veritable desert, it had no telegraphic communication with
the interior, and electricity alone could spread the important news quickly enough.

Some degrees above lay the bay of San Francisco. Through the capital of the Gold Country communication with
the centre of the Union would be easy. By putting all steam on, the Susquehanna, in less than two days, could reach
the port of San Francisco. She must, therefore, start at once.

The fires were heaped up, and they could set sail immediately. Two thousand fathoms of sounding still remained
in the water. Captain Blomsberry would not lose precious time in hauling it in, and resolved to cut the line.

"We will fix the end to a buoy," said he, "and the buoy will indicate the exact point where the projectile fell."

"Besides," answered Lieutenant Bronsfield, "we have our exact bearings: north lat. 27° 7', and west long. 41° 37'."

"Very well, Mr. Bronsfield," answered the captain; "with your permission, have the line cut."

A strong buoy, reinforced by a couple of spars, was thrown out on to the surface of the ocean. The end of the line was solidly struck beneath, and only submitted to the ebb and flow of the surges, so that it would not drift much.

At that moment the engineer came to warn the captain that he had put the pressure on, and they could start. The captain thanked him for his excellent communication. Then he gave N.N.E. as the route. The corvette was put about, and made for the bay of San Francisco with all steam on. It was then 3 a.m.

Two hundred leagues to get over was not much for a quick vessel like the Susquehanna. It got over that distance in thirty-six hours, and on the 14th of December, at 1.27 p.m., she would enter the bay of San Francisco.

At the sight of this vessel of the national navy arriving with all speed on, her bowsprit gone, and her mainmast propped up, public curiosity was singularly excited. A compact crowd was soon assembled on the quays awaiting the landing.

After weighing anchor Captain Blomsberry and Lieutenant Bronsfield got down into an eight-oared boat which carried them rapidly to the land.

They jumped out on the quay.

"The telegraph-office?" they asked, without answering one of the thousand questions that were showered upon them.

Blomsberry and Bronsfield went into the office whilst the crowd crushed against the door.

A few minutes later one message was sent in four different directions:--1st, to the Secretary of the Navy, Washington; 2nd, to the Vice-President of the Gun Club, Baltimore; 3rd, to the Honourable J.T. Maston, Long's Peak, Rocky Mountains; 4th, to the Sub-Director of the Cambridge Observatory, Massachusetts.

It ran as follows:--

"In north lat. 20° 7', and west long. 41° 37', the projectile of the Columbiad fell into the Pacific, on December 12th, at 1.17 am. Send instructions.--BLOMSBERRY, Commander Susquehanna."

Five minutes afterwards the whole town of San Francisco knew the tidings. Before 6 p.m. the different States of the Union had intelligence of the supreme catastrophe. After midnight, through the cable, the whole of Europe knew the result of the great American enterprise.

It would be impossible to describe the effect produced throughout the world by the unexpected news.

On receipt of the telegram the Secretary of the Navy telegraphed to the Susquehanna to keep under fire, and wait in the bay of San Francisco. She was to be ready to set sail day or night.

The Observatory of Cambridge had an extraordinary meeting, and, with the serenity which distinguishes scientific bodies, it peacefully discussed the scientific part of the question.

At the Gun Club there was an explosion. All the artillerymen were assembled. The Vice-President, the Honourable Wilcome, was just reading the premature telegram by which Messrs. Maston and Belfast announced that the projectile had just been perceived in the gigantic reflector of Long's Peak. This communication informed them also that the bullet, retained by the attraction of the moon, was playing the part of sub-satellite in the solar world.

The truth on this subject is now known.

However, upon the arrival of Blomsberry's message, which so formally contradicted J.T. Maston's telegram, two parties were formed in the bosom of the Gun Club. On the one side were members who admitted the fall of the projectile, and consequently the return of the travellers. On the other were those who, holding by the observations at Long's Peak, concluded that the commander of the Susquehanna was mistaken. According to the latter, the pretended projectile was only a bolis, nothing but a bolis, a shooting star, which in its fall had fractured the corvette. Their argument could not very well be answered, because the velocity with which it was endowed had made its observation very difficult. The commander of the Susquehanna and his officers might certainly have been mistaken in good faith. One argument certainly was in their favour: if the projectile had fallen on the earth it must have touched the terrestrial spheroid upon the 27th degree of north latitude, and, taking into account the time that had elapsed, and the earth's movement of rotation, between the 41st and 42nd degree of west longitude.

However that might be, it was unanimously decided in the Gun Club that Blomsberry's brother Bilsby and Major Elphinstone should start at once for San Francisco and give their advice about the means of dragging up the projectile from the depths of the ocean.

These men started without losing an instant, and the railway which was soon to cross the whole of Central America took them to St. Louis, where rapid mail-coaches awaited them.
Almost at the same moment that the Secretary of the Navy, the Vice-President of the Gun Club, and the Sub-
Director of the Observatory received the telegram from San Francisco, the Honourable J.T. Maston felt the most
violent emotion of his whole existence—an emotion not even equalled by that he had experienced when his
celebrated cannon was blown up, and which, like it, nearly cost him his life.

It will be remembered that the Secretary of the Gun Club had started some minutes after the projectile—and
almost as quickly—for the station of Long's Peak in the Rocky Mountains. The learned J. Belfast, Director of the
Cambridge Observatory, accompanied him. Arrived at the station the two friends had summarily installed
themselves, and no longer left the summit of their enormous telescope.

We know that this gigantic instrument had been set up on the reflecting system, called "front view" by the
English. This arrangement only gave one reflection of objects, and consequently made the view much clearer. The
result was that J.T. Maston and Belfast, whilst observing, were stationed in the upper part of the instrument instead
of in the lower. They reached it by a twisted staircase, a masterpiece of lightness, and below them lay the metal, well
terminated by the metallic mirror, 280 feet deep.

Now it was upon the narrow platform placed round the telescope that the two _savants_ passed their existence,
cursing the daylight which hid the moon from their eyes, and the clouds which obstinately veiled her at night.

Who can depict their delight when, after waiting several days, during the night of December 5th they perceived
the vehicle that was carrying their friends through space? To that delight succeeded deep disappointment when,
trusting to incomplete observations, they sent out with their first telegram to the world the erroneous affirmation that
the projectile had become a satellite of the moon gravitating in an immutable orbit.

After that instant the bullet disappeared behind the invisible disc of the moon. But when it ought to have
reappeared on the invisible disc the impatience of J.T. Maston and his no less impatient companion may be
imagined. At every minute of the night they thought they should see the projectile again, and they did not see it.
Hence between them arose endless discussions and violent disputes, Belfast affirming that the projectile was not
visible, J.T. Maston affirming that any one but a blind man could see it.

"It is the bullet!" repeated J.T. Maston.
"No!" answered Belfast, "it is an avalanche falling from a lunar mountain!"
"Well, then, we shall see it to-morrow."
"No, it will be seen no more. It is carried away into space."
"We shall see it, I tell you."
"No, we shall not."

And while these interjections were being showered like hail, the well-known irritability of the Secretary of the
Gun Club constituted a permanent danger to the director, Belfast.

Their existence together would soon have become impossible, but an unexpected event cut short these eternal
discussions.

During the night between the 14th and 15th of December the two irreconcilable friends were occupied in
observing the lunar disc. J.T. Maston was, as usual, saying strong things to the learned Belfast, who was getting
angry too. The Secretary of the Gun Club declared for the thousandth time that he had just perceived the projectile,
adding even that Michel Ardan's face had appeared at one of the port-lights. He was emphasising his arguments by a
series of gestures which his redoubtable hook rendered dangerous.

At that moment Belfast's servant appeared upon the platform—it was 10 p.m.—and gave him a telegram. It was
the message from the Commander of the Susquehanna.

Belfast tore the envelope, read the inclosure, and uttered a cry.
"What is it?" said J.T. Maston.
"It's the bullet!"
"What of that?"
"It has fallen upon the earth!"

Another cry; this time a howl answered him.

He turned towards J.T. Maston. The unfortunate fellow, leaning imprudently over the metal tube, had
disappeared down the immense telescope—a fall of 280 feet! Belfast, distracted, rushed towards the orifice of the
reflector.

He breathed again. J.T. Maston's steel hook had caught in one of the props which maintained the platform of the
telescope. He was uttering formidable cries.

Belfast called. Help came, and the imprudent secretary was hoisted up, not without trouble.

He reappeared unhurt at the upper orifice.
"Suppose I had broken the mirror?" said he.
"You would have paid for it," answered Belfast severely.
"And where has the infernal bullet fallen?" asked J.T. Maston.
"Into the Pacific."
"Let us start at once."
A quarter of an hour afterwards the two learned friends were descending the slope of the Rocky Mountains, and two days afterwards they reached San Francisco at the same time as their friends of the Gun Club, having killed five horses on the road.
Elphinstone, Blomsberry, and Bilsby rushed up to them upon their arrival.
"What is to be done?" they exclaimed.
"The bullet must be fished up," answered J.T. Maston, "and as soon as possible!"

CHAPTER XXII.
PICKED UP.
The very spot where the projectile had disappeared under the waves was exactly known. The instruments for seizing it and bringing it to the surface of the ocean were still wanting. They had to be invented and then manufactured. American engineers could not be embarrassed by such a trifle. The grappling-irons once established and steam helping, they were assured of raising the projectile, notwithstanding its weight, which diminished the density of the liquid amidst which it was plunged.

But it was not enough to fish up the bullet. It was necessary to act promptly in the interest of the travellers. No one doubted that they were still living.
"Yes," repeated J.T. Maston incessantly, whose confidence inspired everybody, "our friends are clever fellows, and they cannot have fallen like imbeciles. They are alive, alive and well, but we must make haste in order to find them so. He had no anxiety about provisions and water. They had enough for a long time! But air!--air would soon fail them. Then they must make haste!"

And they did make haste. They prepared the Susquehanna for her new destination. Her powerful engines were arranged to be used for the hauling machines. The aluminium projectile only weighed 19,250 lbs., a much less weight than that of the transatlantic cable, which was picked up under similar circumstances. The only difficulty lay in the smooth sides of the cylindro-conical bullet, which made it difficult to grapple.

With that end in view the engineer Murchison, summoned to San Francisco, caused enormous grappling-irons to be fitted upon an automatical system which would not let the projectile go again if they succeeded in seizing it with their powerful pincers. He also had some diving-dresses prepared, which, by their impermeable and resisting texture, allowed divers to survey the bottom of the sea. He likewise embarked on board the Susquehanna apparatuses for compressed air, very ingeniously contrived. They were veritable rooms, with port-lights in them, and which, by introducing the water into certain compartments, could be sunk to great depths. These apparatuses were already at San Francisco, where they had been used in the construction of a submarine dyke. This was fortunate, for there would not have been time to make them.

Yet notwithstanding the perfection of the apparatus, notwithstanding the ingenuity of the _savants_ who were to use them, the success of the operation was anything but assured. Fishing up a bullet from 20,000 feet under water must be an uncertain operation. And even if the bullet should again be brought to the surface, how had the travellers borne the terrible shock that even 20,000 feet of water would not sufficiently deaden?

In short, everything must be done quickly. J.T. Maston hurried on his workmen day and night. He was ready either to buckle on the diver's dress or to try the air-apparatus in order to find his courageous friends.

Still, notwithstanding the diligence with which the different machines were got ready, notwithstanding the considerable sums which were placed at the disposition of the Gun Club by the Government of the Union, five long days (five centuries) went by before the preparations were completed. During that time public opinion was excited to the highest point. Telegrams were incessantly exchanged all over the world through the electric wires and cables. The saving of Barbicane, Nicholl, and Michel Ardan became an international business. All the nations that had subscribed to the enterprise of the Gun Club were equally interested in the safety of the travellers.

At last the grappling-chains, air-chambers, and automatic grappling-irons were embarked on board the Susquehanna. J.T. Maston, the engineer Murchison, and the Gun Club delegates already occupied their cabins. There was nothing to do but to start.

On the 21st of December, at 8 p.m., the corvette set sail on a calm sea with a rather cold north-east wind blowing. All the population of San Francisco crowded on to the quays, mute and anxious, reserving its hurrahs for the return.

The steam was put on to its maximum of tension, and the screw of the Susquehanna carried it rapidly out of the bay.
It would be useless to relate the conversations on board amongst the officers, sailors, and passengers. All these men had but one thought. Their hearts all beat with the same emotion. What were Barbicane and his companions doing whilst they were hastening to their succour? What had become of them? Had they been able to attempt some audacious manoeuvre to recover their liberty? No one could say. The truth is that any attempt would have failed. Sunk to nearly two leagues under the ocean, their metal prison would defy any effort of its prisoners.

On the 23rd of December, at 8 a.m., after a rapid passage, the Susquehanna ought to be on the scene of the disaster. They were obliged to wait till twelve o’clock to take their exact bearings. The buoy fastened on to the sounding-line had not yet been seen.

At noon Captain Blomsberry, helped by his officers, who controlled the observation, made his point in presence of the delegates of the Gun Club. That was an anxious moment. The Susquehanna was found to be at some minutes west of the very spot where the projectile had disappeared under the waves.

The direction of the corvette was therefore given in view of reaching the precise spot.

At 12.47 p.m. the buoy was sighted. It was in perfect order, and did not seem to have drifted far.

"At last!" exclaimed J.T. Maston.

"Shall we begin?" asked Captain Blomsberry.

"Without losing a second," answered J.T. Maston.

Every precaution was taken to keep the corvette perfectly motionless.

Before trying to grapple the projectile, the engineer, Murchison, wished to find out its exact position on the seabottom. The submarine apparatus destined for this search received their provision of air. The handling of these engines is not without danger, for at 20,000 feet below the surface of the water and under such great pressure they are exposed to ruptures the consequences of which would be terrible.

J.T. Maston, the commander's brother, and the engineer Murchison, without a thought of these dangers, took their places in the air-chambers. The commander, on his foot-bridge, presided over the operation, ready to stop or haul in his chains at the least signal. The screw had been taken off, and all the force of the machines upon the windlass would soon have brought up the apparatus on board.

The descent began at 1.25 p.m., and the chamber, dragged down by its reservoirs filled with water, disappeared under the surface of the ocean.

The emotion of the officers and sailors on board was now divided between the prisoners in the projectile and the prisoners of the submarine apparatus. These latter forgot themselves, and, glued to the panes of the port-lights, they attentively observed the liquid masses they were passing through.

The descent was rapid. At 2.17 p.m. J.T. Maston and his companions had reached the bottom of the Pacific; but they saw nothing except the arid desert which neither marine flora nor fauna any longer animated. By the light of their lamps, furnished with powerful reflectors, they could observe the dark layers of water in a rather large radius, but the projectile remained invisible in their eyes.

The impatience of these bold divers could hardly be described. Their apparatus being in electric communication with the corvette, they made a signal agreed upon, and the Susquehanna carried their chamber over a mile of space at one yard from the soil.

They thus explored all the submarine plain, deceived at every instant by optical delusions which cut them to the heart. Here a rock, there a swelling of the ground, looked to them like the much-sought-for projectile; then they would soon find out their error and despair again.

"Where are they? Where can they be?" cried J.T. Maston.

And the poor man called aloud to Nicholl, Barbicane, and Michel Ardan, as if his unfortunate friends could have heard him through that impenetrable medium!

The search went on under those conditions until the vitiated state of the air in the apparatus forced the divers to go up again.

The hauling in was begun at 6 p.m., and was not terminated before midnight.

"We will try again to-morrow," said J.T. Maston as he stepped on to the deck of the corvette.

"Yes," answered Captain Blomsberry.

"And in another place."

"Yes."

J.T. Maston did not yet doubt of his ultimate success, but his companions, who were no longer intoxicated with the animation of the first few hours, already took in all the difficulties of the enterprise. What seemed easy at San Francisco in open ocean appeared almost impossible. The chances of success diminished in a large proportion, and it was to chance alone that the finding of the projectile had to be left.

The next day, the 24th of December, notwithstanding the fatigues of the preceding day, operations were resumed. The corvette moved some minutes farther west, and the apparatus, provisioned with air again, took the
same explorers to the depths of the ocean.

All that day was passed in a fruitless search. The bed of the sea was a desert. The day of the 25th brought no result, neither did that of the 26th.

It was disheartening. They thought of the unfortunate men shut up for twenty-six days in the projectile. Perhaps they were all feeling the first symptoms of suffocation, even if they had escaped the dangers of their fall. The air was getting exhausted, and doubtless with the air their courage and spirits.

"The air very likely, but their courage never," said J.T. Maston.

On the 28th, after two days' search, all hope was lost. This bullet was an atom in the immensity of the sea! They must give up the hope of finding it.

Still J.T. Maston would not hear about leaving. He would not abandon the place without having at least found the tomb of his friends. But Captain Blomsberry could not stay on obstinately, and notwithstanding the opposition of the worthy secretary, he was obliged to give orders to set sail.

On the 29th of December, at 9 a.m., the Susquehanna, heading north-east, began to return to the bay of San Francisco.

It was 10 a.m. The corvette was leaving slowly and as if with regret the scene of the catastrophe, when the sailor at the masthead, who was on the look-out, called out all at once--

"A buoy on the lee bow!"

The officers looked in the direction indicated. They saw through their telescopes the object signalled, which did look like one of those buoys used for marking the openings of bays or rivers; but, unlike them, a flag floating in the wind surmounted a cone which emerged five or six feet. This buoy shone in the sunshine as if made of plates of silver.

The commander, Blomsberry, J.T. Maston, and the delegates of the Gun Club ascended the foot-bridge and examined the object thus drifting on the waves.

All looked with feverish anxiety, but in silence. None of them dared utter the thought that came into all their minds.

The corvette approached to within two cables' length of the object.

A shudder ran through the whole crew.

The flag was an American one!

At that moment a veritable roar was heard. It was the worthy J.T. Maston, who had fallen in a heap; forgetting on the one hand that he had only an iron hook for one arm, and on the other that a simple gutta-percha cap covered his cranium-box, he had given himself a formidable blow.

They rushed towards him and picked him up. They recalled him to life. And what were his first words?

"Ah! triple brutes! quadruple idiots! quintuple boobies that we are!"

"What is the matter?" every one round him exclaimed.

"What the matter is?"

"Speak, can't you?"

"It is, imbeciles," shouted the terrible secretary, "it is the bullet only weighs 19,250 lbs!"

"Well?"

"And it displaces 28 tons, or 56,000 lbs., consequently _it floats_!"

Ah! how that worthy man did underline the verb "to float!" And it was the truth! All, yes! all these _savants_ had forgotten this fundamental law, that in consequence of its specific lightness the projectile, after having been dragged by its fall to the greatest depths of the ocean, had naturally returned to the surface; and now it was floating tranquilly whichever way the wind carried them.

The boats had been lowered. J.T. Maston and his friends rushed into them. The excitement was at its highest point. All hearts palpitated whilst the boats rowed towards the projectile. What did it contain--the living or the dead? The living. Yes! unless death had struck down Barbicane and his companions since they had hoisted the flag!

Profound silence reigned in the boats. All hearts stopped beating. Eyes no longer performed their office. One of the port-lights of the projectile was opened. Some pieces of glass remaining in the frame proved that it had been broken. This port-light was situated actually five feet above water.

A boat drew alongside--that of J.T. Maston. He rushed to the broken window.

At that moment the joyful and clear voice of Michel Ardan was heard exclaiming in the accents of victory--

"Double blank, Barbicane, double blank!"

Barbicane, Michel Ardan, and Nicholl were playing at dominoes.

CHAPTER XXIII.
THE END.

It will be remembered that immense sympathy accompanied the three travellers upon their departure. If the beginning of their enterprise had caused such excitement in the old and new world, what enthusiasm must welcome their return! Would not those millions of spectators who had invaded the Floridian peninsula rush to meet the sublime adventurers? Would those legions of foreigners from all points of the globe, now in America, leave the Union without seeing Barbicane, Nicholl, and Michel Ardan once more? No, and the ardent passion of the public would worthily respond to the grandeur of the enterprise. Human beings who had left the terrestrial spheroid, who had returned after their strange journey into celestial space, could not fail to be received like the prophet Elijah when he returned to the earth. To see them first, to hear them afterwards, was the general desire.

This desire was to be very promptly realised by almost all the inhabitants of the Union.

Barbicane, Nicholl, Ardan, and the delegates of the Gun Club returned without delay to Baltimore, and were there received with indescribable enthusiasm. The president's travelling notes were ready to be given up for publicity. The _New York Herald_ bought this manuscript at a price which is not yet known, but which must have been enormous. In fact, during the publication of the _Journey to the Moon_ they printed 5,000,000 copies of that newspaper. Three days after the travellers' return to the earth the least details of their expedition were known. The only thing remaining to be done was to see the heroes of this superhuman enterprise.

The exploration of Barbicane and his friends around the moon had allowed them to control the different theories about the terrestrial satellite. These _savants_ had observed it _de visu_ and under quite peculiar circumstances. It was now known which systems were to be rejected, which admitted, upon the formation of this orb, its origin, and its inhabitability. Its past, present, and future had given up their secrets. What could be objected to conscientious observations made at less than forty miles from that curious mountain of Tycho, the strangest mountain system of lunar oorography? What answers could be made to _savants_ who had looked into the dark depths of the amphitheatre of Pluto? Who could contradict these audacious men whom the hazards of their enterprise had carried over the invisible disc of the moon, which no human eye had ever seen before? It was now their prerogative to impose the limits of that selenographic science which had built up the lunar world like Cuvier did the skeleton of a fossil, and to say, "The moon was this, a world inhabitable and inhabited anterior to the earth! The moon is this, a world now uninhabitable and uninhabited!"

In order to welcome the return of the most illustrious of its members and his two companions, the Gun Club thought of giving them a banquet; but a banquet worthy of them, worthy of the American people, and under such circumstances that all the inhabitants of the Union could take a direct part in it.

All the termini of the railroads in the State were joined together by movable rails. Then, in all the stations hung with the same flags, decorated with the same ornaments, were spread tables uniformly dressed. At a certain time, severely calculated upon electric clocks which beat the seconds at the same instant, the inhabitants were invited to take their places at the same banquet.

During four days, from the 5th to the 9th of January, the trains were suspended like they are on Sundays upon the railways of the Union, and all the lines were free.

One locomotive alone, a very fast engine, dragging a state saloon, had the right of circulating, during these four days, upon the railways of the United States.

This locomotive, conducted by a stoker and a mechanic, carried, by a great favour, the Honourable J.T. Maston, Secretary of the Gun Club.

The saloon was reserved for President Barbicane, Captain Nicholl, and Michel Ardan.

The train left the station of Baltimore upon the whistle of the engine-driver amidst the hurrahs and all the admiring interjections of the American language. It went at the speed of eighty leagues an hour. But what was that speed compared to the one with which the three heroes had left the Columbiad?

Thus they went from one town to another, finding the population in crowds upon their passage saluting them with the same acclamations, and showering upon them the same "bravoes." They thus travelled over the east of the Union through Pennsylvania, Connecticut, Massachusetts, Vermont, Maine, and New Brunswick; north and west through New York, Ohio, Michigan, and Wisconsin; south through Illinois, Missouri, Arkansas, Texas, and Louisiana; south-east through Alabama and Florida, Georgia, and the Carolinas; they visited the centre through Tennessee, Kentucky, Virginia, and Indiana; then after the station of Washington they re-entered Baltimore, and during four days they could imagine that the United States of America, seated at one immense banquet, saluted them simultaneously with the same hurrahs.

This apotheosis was worthy of these heroes, whom fable would have placed in the ranks of demigods.

And now would this attempt, without precedent in the annals of travels, have any practical result? Would direct communication ever be established with the moon? Would a service of navigation ever be founded across space for the solar world? Will people ever go from planet to planet, from Jupiter to Mercury, and later on from one star to
another, from the Polar star to Sirius, would a method of locomotion allow of visiting the suns which swarm in the
firmament?

No answer can be given to these questions, but knowing the audacious ingenuity of the Anglo-Saxon race, no
one will be astonished that the Americans tried to turn President Barbicane's experiment to account.

Thus some time after the return of the travellers the public received with marked favour the advertisement of a
Joint-Stock Company (Limited), with a capital of a hundred million dollars, divided into a hundred thousand shares
of a thousand dollars each, under the name of _National Company for Interstellar Communication_ --President,
Barbicane; Vice-President, Captain Nicholl; Secretary, J.T. Maston; Director, Michel Ardan--and as it is customary
in America to foresee everything in business, even bankruptcy, the Honourable Harry Trollope, Commissary Judge,
and Francis Dayton were appointed beforehand assignees.

THE END.

A VOYAGE IN A BALLOON
by
JULES VERNE

I.

My Ascension at Frankfort--The Balloon, the Gas, the Apparatus, the Ballast--An Unexpected Travelling
Companion--Conversation in the Air--Anecdotes--At 800 Metres[A]--The Portfolio of the Pale Young Man--
Pictures and Caricatures--Des Rosiers and d'Arlandes--At 1200 Metres--Atmospheric Phenomena--The Philosopher
Charles--Systems--Blanchard--Guyton-Morveaux--M. Julien--M. Petin--At 1500 Metres--The Storm--Great
Personages in Balloons--The Valve--The Curious Animals--The Aerial Ship--Game of Balloons.

[Footnote A: A metre is equal to 39.33 English inches.]

In the month of September, 1850, I arrived at Frankfort-on-the-Maine. My passage through the principal cities of
Germany, had been brilliantly marked by aerostatic ascensions; but, up to this day, no inhabitant of the
Confederation had accompanied me, and the successful experiments at Paris of Messrs. Green, Godard, and
Poitevin, had failed to induce the grave Germans to attempt aerial voyages.

Meanwhile, hardly had the news of my approaching ascension circulated throughout Frankfort, than three
persons of note asked the favour of accompanying me. Two days after, we were to ascend from the Place de la
Comédie. I immediately occupied myself with the preparations. My balloon, of gigantic proportions, was of silk,
coated with gutta percha, a substance not liable to injury from acids or gas, and of absolute impermeability. Some
trifling rents were mended: the inevitable results of perilous descents.

The day of our ascension was that of the great fair of September, which attracts all the world to Frankfort. The
apparatus for filling was composed of six hogsheads arranged around a large vat, hermetically sealed. The hydrogen
gas, evolved by the contact of water with iron and sulphuric acid, passed from the first reservoirs to the second, and
thence into the immense globe, which was thus gradually inflated. These preparations occupied all the morning, and
about 11 o'clock, the balloon was three-quarters full; sufficiently so;--for as we rise, the atmospheric layers diminish
in density, and the gas, confined within the aerostat, acquiring more elasticity, might otherwise burst its envelope.
My calculations had furnished me with the exact measurement of gas required to carry my companions and myself
to a considerable height.

We were to ascend at noon. It was truly a magnificent spectacle, that of the impatient crowd who thronged
around the reserved enclosure, inundated the entire square and adjoining streets, and covered the neighbouring
houses from the basements to the slated roofs. The high winds of past days had lulled, and an overpowering heat
was radiating from an unclouded sky; not a breath animated the atmosphere. In such weather, one might descend in
the very spot he had left.

I carried three hundred pounds of ballast, in bags; the car, perfectly round, four feet in diameter, and three feet in
height, was conveniently attached; the cord which sustained it was symmetrically extended from the upper
hemisphere of the aerostat; the compass was in its place, the barometer suspended to the iron hoop which
surrounded the supporting cord, at a distance of eight feet above the car; the anchor carefully prepared;--all was in
readiness for our departure.

Among the persons who crowded around the enclosure, I remarked a young man with pale face and agitated
features. I was struck with his appearance. He had been an assiduous spectator of my ascensions in several cities of
Germany. His uneasy air and his extraordinary pre-occupation never left him; he eagerly contemplated the curious
machine, which rested motionless at a few feet from the ground, and remained silent.

The clock struck twelve! This was the hour. My _compagnons du voyage_ had not appeared. I sent to the
dwelling of each, and learned that one had started for Hamburg, another for Vienna and the third, still more fearful, for London. Their hearts had failed them at the moment of undertaking one of those excursions, which, since the ingenious experiments of aeronauts, are deprived of all danger. As they made, as it were a part of the programme of the fête, they had feared being compelled to fulfil their agreements, and had fled at the moment of ascension. Their courage had been in inverse ratio to the square of their swiftness in retreat.

The crowd, thus partly disappointed, were shouting with anger and impatience. I did not hesitate to ascend alone. To re-establish the equilibrium between the specific gravity of the balloon and the weight to be raised, I substituted other bags of sand for my expected companions and entered the car. The twelve men who were holding the aerostat by twelve cords fastened to the equatorial circle, let them slip between their fingers; the car rose a few feet above the ground. There was not a breath of wind, and the atmosphere, heavy as lead, seemed insurmountable.

"All is ready!" exclaimed I; "attention!"
"Attention!"
There was some movement in the crowd which seemed to be invading the reserved enclosure.
"Let go!"

The balloon slowly ascended; but I experienced a shock which threw me to the bottom of the car. When I rose, I found myself face to face with an unexpected voyager,—the pale young man.

"Monsieur, I salute you!" said he to me.
"By what right?"—
"Am I here? By the right of your inability to turn me out."

I was confounded. His assurance disconcerted me; and I had nothing to say in reply. I looked at him, but he paid no regard to my astonishment. He continued:

"My weight will disturb your equilibrium, Monsieur: will you permit me—"

And without waiting for my assent, he lightened the balloon by two bags of sand which he emptied into the air.

"Monsieur," said I, taking the only possible course, "you are here,—well! you choose to remain,—well! but to me alone belongs the management of the aerostat."

"Monsieur," replied he, "your urbanity is entirely French; it is of the same country with myself! I press in imagination the hand which you refuse me. Take your measures,—act as it may seem good to you; I will wait till you have ended—"

"To—"

"To converse with you."

The barometer had fallen to twenty-six inches; we had attained a height of about six hundred metres, and were over the city; which satisfied me of our complete quiescence, for I could not judge by our motionless flags. Nothing betrays the horizontal voyage of a balloon; it is the mass of air surrounding it which moves. A kind of wavering heat bathed the objects extended at our feet, and gave their outlines an indistinctness to be regretted. The needle of the compass indicated a slight tendency to float towards the south.

I looked again at my companion. He was a man of thirty, simply clad; the bold outlines of his features betokened indomitable energy; he appeared very muscular. Absorbed in the emotion of this silent suspension, he remained immovable, seeking to distinguish the objects which passed beneath his view.

"Vexatious mist!" said he, at the expiration of a few moments. I made no reply.

"What would you? I could not pay for my voyage; I was obliged to take you by surprise."

"No one has asked you to descend!"

"A similar occurrence," he resumed, "happened to the Counts of Laurencin and Dampierre, when they ascended at Lyons, on the 15th of January, 1784. A young merchant, named Fontaine, scaled the railing, at the risk of upsetting the equipage. He accomplished the voyage, and nobody was killed!"

"Once on the earth, we will converse!" said I, piqued at the tone of lightness with which he spoke.

"Bah! do not talk of returning!"

"Do you think then that I shall delay my descent?"

"Descent!" said he, with surprise. "Let us ascend!"

And before I could prevent him, two bags of sand were thrown out, without even being emptied.

"Monsieur!" said I, angrily.

"I know your skill," replied he, composedly; "your brilliant ascensions have made some noise in the world. Experience is the sister of practice, but it is also first cousin to theory, and I have long and deeply studied the aerostatic art. It has affected my brain," added he, sadly, falling into a mute torpor.

The balloon, after having risen, remained stationary; the unknown consulted the barometer, and said:
"Here we are at 800 metres! Men resemble insects! See, I think it is from this height that we should always look at them, to judge correctly of their moral proportions! The Place de la Comédie is transformed to an immense ant-hill. Look at the crowd piled up on the quays. The Zeil diminishes. We are above the church of Dom. The Mein is now only a white line dividing the city, and this bridge, the Mein-Brucke, looks like a white thread thrown between the two banks of the river."

The atmosphere grew cooler.

"There is nothing I will not do for you, my host," said my companion. "If you are cold, I will take off my clothes and lend them to you."

"Thanks!"

"Necessity makes laws. Give me your hand, I am your countryman. You shall be instructed by my company, and my conversation shall compensate you for the annoyance I have caused you."

I seated myself, without replying, at the opposite extremity of the car. The young man had drawn from his great coat a voluminous portfolio; it was a work on aerostation.

"I possess," said he, "a most curious collection of engraving, and caricatures appertaining to our aerial mania. This precious discovery has been at once admired and ridiculed. Fortunately we have passed the period when the Mongolfiers sought to make factitious clouds with the vapour of water; and of the gas affecting electric properties, which they produced by the combustion of clamp straw with chopped wool."

"Would you detract from the merit of these inventions?" replied I. "Was it not well done to have proved by experiment the possibility of rising in the air?"

"Who denies the glory of the first aerial navigators? Immense courage was necessary to ascend by means of those fragile envelopes which contained only warm air. Besides, has not aerostatic science made great progress since the ascensions of Blanchard? Look, Monsieur."

He took from his collection an engraving.

"Here is the first aerial voyage undertaken by Pilatre des Rosiers and the Marquis d'Arlandes, four months after the discovery of balloons. Louis XVI. refused his consent to this voyage; two condemned criminals were to have first attempted aerial travelling. Pilatre des Rosiers was indignant at this injustice and, by means of artifice, succeeded in setting out. This car, which renders the management of the balloon easy, had not then been invented; a circular gallery surrounded the lower part of the aerostat. The two aeronauts stationed themselves at the extremities of this gallery. The damp straw with which it was filled encumbered their movements. A chafing-dish was suspended beneath the orifice of the balloon; when the voyagers wished to ascend, they threw, with a long fork, straw upon this brazier, at the risk of burning the machine, and the air, growing warmer, gave to the balloon a new ascensional force. The two bold navigators ascended, on the 21st of November, 1783, from the gardens of La Muette, which the Dauphin had placed at their disposal. The aerostat rose majestically, passed the Isle des Cygnes, crossed the Seine at the Barrière de la Conference, and, directing its way between the dome of the Invalides and L'Ecole Militaire, approached St. Sulpice; then the aeronauts increased the fire, ascended, cleared the Boulevard, and descended beyond the Barrière d'Enfer. As it touched the ground, the collapsed, and buried Pilatre des Rosiers beneath its folds."

"Unfortunate presage!" said I, interested in these details, which so nearly concerned me.

"Presage of his catastrophe," replied the unknown, with sadness. "You have experienced nothing similar?"

"Nothing!"

"Bah! misfortunes often arrive without presage." And he remained silent.

We were advancing towards the south; the magnetic needle pointed in the direction of Frankfort, which was flying beneath our feet.

"Perhaps we shall have a storm," said the young man.

"We will descend first."

"Indeed! it will be better to ascend; we shall escape more surely;" and two bags of sand were thrown overboard.

The balloon rose rapidly, and stopped at twelve hundred metres. The cold was now intense, and there was a slight buzzing in my ears. Nevertheless, the rays of the sun fell hotly on the globe, and, dilating the gas it contained, gave it a greater ascensional force. I was stupified.

"Fear nothing," said the young man to me.

"We have three thousand five hundred toises of respirable air. You need not trouble yourself about my proceedings."

I would have risen, but a vigorous hand detained me on my seat.

"Your name?" asked I.

"My name! how does it concern you?"

"I have the honour to ask your name."
"I am called Erostratus or Empedocles,—as you please. Are you interested in the progress of aerostatic science?"

He spoke with icy coldness, and I asked myself with whom I had to do.

"Monsieur," continued he, "nothing new has been invented since the days of the philosopher Charles. Four months after the discovery of aerostats, he had invented the valve, which permits the gas to escape when the balloon is too full, or when one wishes to descend; the car, which allows the machine to be easily managed; the network, which encloses the fabric of the balloon, and prevents its being too heavily pressed; the ballast, which is used in ascending and choosing the spot of descent; the coat of caoutchouc, which renders the silk impermeable; the barometer, which determines the height attained; and, finally, the hydrogen, which, fourteen times lighter than air, allows of ascension to the most distant atmospheric layers, and prevents exposure to aerial combustion. On the 1st of December, 1783, three hundred thousand spectators thronged the Tuileries. Charles ascended, and the soldiers presented arms. He travelled nine leagues in the air: managing his machine with a skill never since surpassed in aeronautic experiments. The King conferred on him a pension of two thousand livres, for in those days inventions were encouraged. In a few days, the subscription list was filled; for every one was interested in the progress of science."

The unknown was seized with a violent agitation.

"I, Monsieur, have studied; I am satisfied that the first aeronauts guided their balloons. Not to speak of Blanchard, whose assertions might be doubted, at Dijon, Guyton-Morveaux, by the aid of oars and a helm, imparted to his machines perceptible motions, a decided direction. More recently, at Paris, a watchmaker, M. Julien, has made at the Hippodrome convincing experiments; for, with the aid of a particular mechanism, an aerial apparatus of oblong form was manifestly propelled against the wind. M. Petin placed four balloons, filled with hydrogen, in juxtaposition, and, by means of sails disposed horizontally and partially furled, hoped to obtain a disturbance of the equilibrium, which, inclining the apparatus, should compel it to an oblique path. But the motive power destined to surmount the resistance of currents,—the helice, moving in a movable medium, was unsuccessful. I have discovered the only method of guiding balloons, and not an Academy has come to my assistance, not a city has filled my subscription lists, not a government has deigned to listen to me! It is infamous!"

His gesticulations were so furious that the car experienced violent oscillations; I had much difficulty in restraining him. Meanwhile, the balloon had encountered a more rapid current. We were advancing in a southerly direction, at 1200 metres in height, almost accustomed to this new temperature.

"There is Darmstadt," said my companion. "Do you perceive its magnificent chateau? The storm-cloud below makes the outlines of objects waver; and it requires a practised eye to recognise localities."

"You are certain that it is Darmstadt?"

"Undoubtedly; we are six leagues from Frankfort."

"Then we must descend."

"Descend! you would not alight upon the steeples!" said the unknown, mockingly.

"No; but in the environs of the city."

"Well, it is too warm; let us remount a little."

As he spoke thus, he seized some bags of ballast. I precipitated myself upon him; but, with one hand, he overthrew me, and the lightened balloon rose to a height of 1500 metres.

"Sit down," said he, "and do not forget that Brioschi, Biot, and Gay-Lussac, ascended to a height of seven thousand metres, in order to establish some new scientific laws."

"We must descend;" resumed I, with an attempt at gentleness. "The storm is gathering beneath our feet and around us; it would not be prudent."

"We will ascend above it, and shall have nothing to fear from it. What more beautiful than to reign in heaven, and look down upon the clouds which hover upon the earth! Is it not an honour to navigate these aerial waves? The greatest personages have travelled like ourselves. The Marquise and Comtesse de Montalembert, the Comtesse de Potteries, Mille. La Garde, the Marquis of Montalembert, set out from the Faubourg St. Antoine for these unknown regions. The Duc de Chartres displayed much address and presence of mind in his ascension of the 15th of July, 1784; at Lyons, the Comtes de Laurenccin and de Dampierre; at Nantes, M. de Luynes; at Bordeaux, D'Arbelet des Granges; in Italy, the Chevalier Andreani; in our days, the Duke of Brunswick; have left in the air the track of their glory. In order to equal these great personages, we must ascend into the celestial regions higher than they. To approach the infinite is to comprehend it."

The rarefaction of the air considerably dilated the hydrogen, and I saw the lower part of the aerostat, designedly left empty, become by degrees inflated, rendering the opening of the valve indispensable; but my fearful companion seemed determined not to allow me to direct our movements. I resolved to pull secretly the cord attached to the valve, while he was talking with animation. I feared to guess with whom I had to do; it would have been too horrible! It was about three-quarters of an hour since we had left Frankfort, and from the south thick clouds were
arising and threatening to engulf us.

"Have you lost all hope of making your plans succeed?" said I, with great apparent interest.

"All hope!" replied the unknown, despairingly. "Wounded by refusals, caricatures, those blows with the foot of an ass, have finished me. It is the eternal punishment reserved for innovators. See these caricatures of every age with which my portfolio is filled."

I had secured the cord of the valve, and stooping over his works, concealed my movements from him. It was to be feared, nevertheless, that he would notice that rushing sound, like a waterfall, which the gas produces in escaping.

"How many jests at the expense of the Abbé Miolan! He was about to ascend with Janninet and Bredin. During the operation, their balloon took fire, and an ignorant populace tore it to pieces. Then the caricature of _The Curious Animals_ called them _Maulant, Jean Mind, and Gredin_."

The barometer had began to rise; it was time! A distant muttering of thunder was heard towards the south.

"See this other engraving," continued he, without seeming to suspect my manoeuvres. "It is an immense balloon, containing a ship, large castles, houses, &c. The caricaturists little thought that their absurdities would one day become verities. It is a large vessel; at the left is the helm with the pilot's box; at the prow, _maisons de plaisance_, a gigantic organ, and cannon to call the attention of the inhabitants of earth or of the moon; above the stern the observatory and pilot-balloon; at the equatorial circle, the barracks of the army; on the left the lantern; then upper galleries for promenades, the sails, the wings; beneath, the cafés and general store-houses of provisions. Admire this magnificent announcement. 'Invented for the good of the human race, this globe will depart immediately for the seaports in the Levant, and on its return will announce its voyages for the two poles and the extremities of the Occident. Every provision is made; there will be an exact rate of fare for each place of destination; but the prices for distant voyages will be the same, 1000 lous. And it must be confessed that this is a moderate sum, considering the celerity, convenience, and pleasure of this mode of travelling above all others. While in this balloon, every one can divert himself as he pleases, dancing, playing, or conversing with people of talent. Pleasure will be the soul of the aerial society.' All these inventions excited laughter. But before long, if my days were not numbered, these projects should become realities."

We were visibly descending; he did not perceive it!

"See this game of balloons; it contains the whole history of the aerostatic art. This game, for the use of educated minds, is played like that of the Jew; with dice and counters of any value agreed upon, which are to be paid or received, according to the condition in which one arrives."

"But," I resumed, "you seem to have valuable documents on aerostation?"

"I am less learned than the Almighty! That is all! I possess all the knowledge possible in this world. From Phaeton, Icarus, and Architas. I have searched all, comprehended all! Through me, the aerostatic art would render immense services to the world, if God should spare my life! But that cannot be."

"Why not?"

"Because my name is Empedocles or Erostratus!"

II.

The Company of Aerostiers--The Battle of Fleurus--The Balloon over the Sea--Blanchard and Jefferies--A Drama such as is rarely seen--3000 Metres--The Thunder beneath our Feet--Gavnerin at Rome--The Compass gone--The Victims of Aerostation--Pilatre--At 4000 Metres--The Barometer gone--Descents of Olivarri, Mosment, Bittorf, Harris, Sadler, and Madame Blanchard--The Valve rendered useless--7000 Metres--Zambecarri--The Balloon (sic) Wrecked--Incalkulate Heights--The Car Overset--Despair--Vertigo--The Fall--The Dénouement.

I shuddered! Fortunately the balloon was approaching the earth. But the danger is the same at 50 feet as at 5000 metres! The clouds were advancing.

"Remember the battle of Fleurus, and you will comprehend the utility of aerostats! Coulee, by order of the government, organized a company of aerostiers. At the siege of Maubuge, General Jourdan found this new method of observation so serviceable, that twice a day, accompanied by the General himself, Coutelle ascended into the air; the correspondence between the aeronaut and the aerostiers who held the balloon, was carried on by means of little white, red, and yellow flags. Cannons and carbines were often aimed at the balloon at the moment of its ascension, but without effect. When Jourdan was preparing to invest Charleroi, Coutelle repaired to the neighbourhood of that place, rose from the plain of Jumet, and remained taking observations seven or eight hours, with General Morelot. The Austrians came to deliver the city, and a battle was fought on the heights of Fleurus. General Jourdan publicly proclaimed the assistance he had received from aeronautic observations. Well! notwithstanding the services rendered on this occasion, and during the campaign with Belgium, the year which witnessed the commencement of the military career of balloons, also saw it terminate. And the school of Meuon, founded by government, was closed by Bonaparte, on his return from Egypt. 'What are we to expect from the child which has just been born?' Franklin had said. But the child was born alive! It need not have been strangled!"
The unknown hid his forehead in his hands, reflected for a few moments, then, without raising his head, said to me:

"Notwithstanding my orders, you have opened the upper valve!"

I let go the cord.

"Fortunately" continued he, "we have still two hundred pounds of ballast."

"What are your plans?" said I, with effort.

"You have never crossed the sea?"

I grew frightfully pale, terror froze my veins.

"It is a pity," said he, "that we are being wafted towards the Adriatic! That is only a streamlet. Higher! we shall find other currents!"

And without looking at me, he lightened the balloon by several bags of sand.

"I allowed you to open the valve, because the dilatation of the gas threatened to burst the balloon. But do not do it again."

I was stupified.

"You know the voyage from Dover to Calais made by Blanchard and Jefferies. It was rich in incident. On the 7th of January, 1785, in a northeast wind, their balloon was filled with gas on the Dover side; scarcely had they risen, when an error in equilibrium compelled them to throw out their ballast, retaining only thirty pounds. The wind drifted them slowly along towards the shores of France. The permeability of the tissue gradually suffered the gas to escape, and at the expiration of an hour and a half, the voyagers perceived that they were descending. 'What is to be done?' said Jefferies. 'We have passed over only three-fourths of the distance,' replied Blanchard 'and at a slight elevation. By ascending we shall expose ourselves to contrary winds. Throw out the remainder of the ballast.' The balloon regained its ascensional force, but soon re-descended. About midway of the voyage, the aeronauts threw out their books and tools. A quarter of an hour afterwards, Blanchard said to Jefferies: 'The barometer?--'It is rising! We are lost; and yet there are the shores of France!' A great noise was heard. 'Is the balloon rent?' asked Jefferies. 'No! the escape of the gas has collapsed the lower part of the balloon! But we are still descending. We are lost! Everything not indispensable must be thrown overboard! Their provisions, oars and helm were thrown out into the sea. They were now only 100 metres in height. 'We are remounting,' said the Doctor. 'No, it is the jerk caused by the diminution of weight. There is not a ship in sight! Not a bark on the horizon! To the sea with our garments!' And the unfortunate men stripped, but the balloon continued to descend. 'Blanchard,' said Jefferies, 'you were to have made this voyage alone; you consented to take me; I will sacrifice myself to you! I will throw myself into the water, and the balloon, relieved, will re-ascend!'--' No, no, it is frightful.' The balloon collapsed more and more, and its concavity forming a parachute, forced the gas against its sides and accelerated its motion. 'Adieu, my friend,' said the Doctor. 'May God preserve you!' He was about to have taken the leap, when Blanchard detained him. 'One resource remains to us! We can cut the cords by which the car is attached, and cling to the network? perhaps the balloon will rise. Ready! But the barometer falls! We remount! The wind freshens! We are saved!' The voyagers perceived Calais! Their joy became delirium; a few moments later, they descended in the forest of Guines. I doubt not," continued the unknown, "that in similar circumstances you would follow the example of Doctor Jefferies."

The clouds were unrolling beneath our feet in glittering cascades; the balloon cast a deep shadow on this pile of clouds, and was surrounded by them as with an aureola! The thunder growled beneath our feet! All this was frightful!

"Let us descend!" exclaimed I.

"Descend, when the sun is awaiting us yonder! Down with the bags!" And he lightened the balloon of more than fifty pounds. At 3000 metres we remained stationary. The unknown talked incessantly, but I scarcely heard him; I was completely prostrated, while he seemed in his element.

"With a good wind, we shall go far, but we must especially go high!"

"We are lost!"

"In the Antilles there are currents of air which travel a hundred leagues an hour! On the occasion of Napoleon's coronation, Gavnerin let off a balloon illuminated with coloured lamps, at eleven o'clock in the evening! The wind blew from the N.N.E.; the next morning at daybreak the inhabitants of Rome saluted its passage above the dome of St. Peter's. We will go farther."

I scarcely heard him; everything was buzzing around me! There was an opening in the clouds!

"See that city, my host," said the unknown. "It is Spire. Nothing else!"

I dared not lean over the railing of the car. Nevertheless I perceived a little black spot. This was Spire. The broad Rhine looked like a riband, the great roads like threads. Above our heads the sky was of a deep azure; I was benumbed with the cold. The birds had long since forsaken us; in this rarefied air their flight would have been impossible. We were alone in space, and I in the presence of a strange man!
"It is useless for you to know whither I am taking you," said he, and he threw the compass into the clouds. "A fall is a fine thing. You know that there have been a few victims from Pilatre des Rosiers down to Lieutenant Gale, and these misfortunes have always been caused by imprudence. Pilatre des Rosiers ascended in company with Remain, at Boulogne, on the 13th of June, 1785. To his balloon, inflated with gas, he had suspended a _mongolfier_ filled with warm air, undoubtedly to save the trouble of letting off gas, or throwing out ballast. It was like putting a chafing-dish beneath a powder-cask. The imprudent men rose to a height of four hundred metres, and encountered opposing winds, which drove them over the ocean. In order to descend, Pilatre attempted to open the valve of the aerostat; but the cord of this valve caught in the balloon, and tore it so that it was emptied in an instant. It fell on the mongolfier, overturned it, and the imprudent men were dashed to pieces in a few seconds. It is _frightful, is_ it not?"

said the unknown, shaking me from my torpor.

I could reply only by these words:

"In pity, let us descend! The clouds are gathering around us in every direction, and frightful detonations reverberating from the cavity of the aerostat are multiplying around us."

"You make me impatient!" said he. "You shall no longer know whether we are ascending or descending."

And the barometer went after the compass, along with some bags of sand. We must have been at a height of four thousand metres. Some icicles were attached to the sides of the car, and a sort of fine snow penetrated to my bones. Meanwhile a terrific storm was bursting beneath our feet. We were above it.

"Do not fear," said my strange companion; "it is only imprudence that makes victims. Olivari, who perished at Orleans, ascended in a mongolfier made of paper; his car, suspended below the chafing-dish, and ballasted with combustible materials, became a prey to the flames! Olivari fell, and was killed. Mosment ascended at Lille, on a light platform; an oscillation made him lose his equilibrium. Mosment fell, and was killed. Bittorf, at Manheim, saw his paper balloon take fire in the air! Bittorf fell, and was killed. Harris ascended in a balloon badly constructed, the valve of which was too large to be closed again. Harris fell, and was killed. Sadler, deprived of ballast by his long stay in the air, was dragged over the city of Boston, and thrown against the chimneys. Sadler fell, and was killed. Cocking descended with a convex parachute which he pretended to have perfected. Cocking fell, and was killed. Well, I love them, those noble victims of their courage! and I will die like them! Higher! higher!"

All the phantoms of this necrology were passing before my eyes! The rarefaction of the air and the rays of tile sun increased the dilatation of the gas; the balloon continued to ascend! I mechanically attempted to open the valve; but the unknown cut the cord a few feet above my head. I was lost!

"Did you see Madame Blanchard fall?" said he to me. "I saw her, I--yes, I was at Tivoli on the 6th of July, 1819. Madame Blanchard ascended in a balloon of small size, to save the expense of filling; she was therefore obliged to inflate it entirely, and the gas escaped by the lower orifice, leaving on its route a train of hydrogen. She carried, suspended above her car, by an iron wire, a kind of firework, forming an aureola, which she was to kindle. She had often repeated this experiment. On this occasion she carried, besides, a little parachute, ballasted by a firework terminating in a ball with silver rain. Site was to launch this apparatus, after having lighted it with a _lance à feu_, prepared for the purpose. She ascended. The night was dark. At the moment of lighting the firework, she was so imprudent as to let the lance pass beneath the column of hydrogen, which was escaping from the balloon. My eyes were fixed on her. Suddenly an unexpected flash illuminated the darkness. I thought it a surprise of the skilful aeronaut. The flame increased, suddenly disappeared, and re-appeared at the top of the aerostat under the form of an immense jet of burning gas. This sinister light projected over the Boulevard, and over the quarter Montmartre. Then I saw the unfortunate woman rise, twice attempt to compress the orifice of the balloon, to extinguish the fire, then seat herself in the car and seek to direct its descent; for she did not fall. The combustion of the gas lasted several minutes. The balloon, diminishing by degrees, continued to descend, but this was not a fall! The wind blew from the northeast, and drove her over Paris. There were, at that time, in the neighbourhood of the house No. 16 Rue de Provence, immense gardens. The aeronaut might have fallen there without danger. But unhappily the balloon and the car alighted on the roof of the house. The shock was slight. 'Help!' cried the unfortunate woman. I arrived in the street at that moment. The car slid along the roof, and encountered an iron hook. At this shock, Madame Blanchard was thrown out of the car, and precipitated on the pavement! She was killed!"

These histories of fatal augury froze me with horror. The unknown was standing upright, with bare head, bristling hair, haggard eyes.

Illusion was no longer possible. I saw at last the horrible truth. I had to deal with a madman!

He threw out half the ballast, and we must have been borne to a height of 7000 metres! Blood spouted from my nose and mouth.

"What a fine thing it is to be martyrs to science! They are canonized by posterity!"

I heard no more. The unknown looked around him with horror, and knelt at my ear.

"On the 7th of October, 1804, the weather had begun to clear up a little; for several days preceding, the wind and
rain had been incessant. But the ascension announced by Zambecarri could not be postponed! His idiot enemies
already scoffed at him. To save himself and science from public ridicule, it became necessary for him to ascend. It
was at Bologna! No one aided him in filling his balloon; he rose at midnight, accompanied by Andreoli and
Grossetti. The balloon ascended slowly; it had been rent by the wind, and the gas escaped. The three intrepid
voyagers could observe the state of the barometer only by the aid of a dark lantern. Zambecarri had not eaten daring
twenty-four hours; Grossetti was also fasting.

"'My friends,' said Zambecarri, 'I am benumbed with the cold; I am exhausted; I must die;' and he fell senseless
in the gallery.

"It was the same with Grossetti. Andreoli alone remained awake. After long efforts he succeeded in arousing
Zambecarri from his stupor.

"'What is there new? Where are we going? In which direction is the wind? What time is it?'

"It is two o'clock!'

"Where is the compass?'

"It has fallen out.'

"Great God! the lamp is extinguished!'

"It could not burn longer in this rarefied air!' said Zambecarri.

"The moon had not risen; the atmosphere was plunged in horrible darkness.

"I am cold, I am cold, Andreoli! What shall we do?'

"The unfortunate men slowly descended through a layer of white clouds.

"'Hush!' said Andreoli; 'do you hear--'

"'What?' replied Zambecarri.

"A singular noise!'

"'You are mistaken!'

"No!--Do you see those midnight travellers, listening to that incomprehensible sound? Have they struck against
a rower? Are they about to be precipitated on the roofs? Do you hear it? It is like the sound of the ocean!'

"Impossible!'

"'It is the roaring of the waves!'

"That is true!--Light! light!'

"After five fruitless attempts, Andreoli obtained it. It was three o'clock. The sound of the waves was heard with
violence; they almost touched the surface of the sea.

"'We are lost!' exclaimed Zambecarri, seizing a bag of ballast.

"'Help!' cried Andreoli.

"The car touched the water, and the waves covered them breast high. To the sea with instruments, garments,
money! The aeronauts stripped entirely. The lightened balloon rose with frightful rapidity. Zambecarri was seized
with violent vomiting. Grossetti bled freely. The unhappy men could not speak; their respiration was short. They
were seized with cold, and in a moment covered with a coat of ice. The moon appeared to them red as blood. After
having traversed these high regions during half an hour, the machine again fell into the sea. It was four o'clock in
the morning: the bodies of the wretched aeronauts were half in the water, and the balloon, acting as a sail, dragged them
about during several hours. At daybreak, they found themselves opposite Pesaro, five miles from the shore; they
were about to land, when a sudden flaw of wind drove them back to the open sea. They were lost! The affrighted
barks fled at their approach. Fortunately, a more intelligent navigator hailed them, took them on board; and they
landed at Ferrara. That was frightful! Zambecarri was a brave man. Scarcely recovered from his sufferings, he
recommenced his ascensions. In one of them, he struck against a tree; his lamp, filled with spirits of wine, was
spilled over his clothes, and they caught fire; he was covered with flame his machine was beginning to kindle, when
he descended, half burned. The 21st September, 1812, he made another ascension at Bologna; his balloon caught in
tree; his lamp set fire to it. Zambecarri fell, and was killed! And in presence of these high facts, shall we still
hesitate? No! The higher we go the more glorious will be our death"

The balloon, entirely unballasted, we were borne to incredible heights. The aerostat vibrated in the atmosphere;
the slightest sound re-echoed through the celestial vaults; the globe, the only object which struck my sight in
immensity, seemed about to be annihilated, and above us the heights of heaven lost themselves in the profound
darkness!

I saw the unknown rise before me.

"This is the hour!" said he to me. "We must die! We are rejected by men! They despise its! let us crush them!"

"Mercy!" exclaimed I.

"Let us cut the cords! let this car be abandoned in space! The attractive force will change its direction, and we
shall land in the sun!"
Despair gave me strength! I precipitated myself upon the madman, and a frightful struggle took place! But I was thrown down! and while he held me beneath his knee, he cut the cords of the car!

"One!" said he.
"Mercy! O, God!"
"Two! three!"

One cord more, and the car was sustained only on one side. I made a superhuman effort, rose, and violently repulsed this insensate.

"Four!" said he.
The car was overset. I instinctively clung to the cords which held it, and climbed up the outside.
The unknown had disappeared in space!

In a twinkling the balloon ascended to an immeasurable height! A horrible crash was heard. The dilated gas had burst its envelope! I closed my eyes. A few moments afterwards, a moist warmth reanimated me; I was in the midst of fiery clouds! The balloon was whirling with fearful rapidity! I felt myself swooning! Driven by the wind, I travelled a hundred leagues an hour in my horizontal course; the lightnings flashed around me!

Meanwhile my fall was not rapid. When I opened my eyes, I perceived the country. I was two miles from the sea, the hurricane urging me on with great force. I was lost, when a sudden shock made me let go; my hands opened, a cord slipped rapidly between my fingers, and I found myself on the ground. It was the cord of the anchor, which, sweeping the surface of the ground, had caught in a crevice! I fainted, and my lightened balloon, resuming its flight, was lost beyond the sea.

When I recovered my senses, I was in the house of a peasant, at Harderwick, a little town of Gueldre, fifteen leagues from Amsterdam, on the banks of the Zuyderzée.

A miracle had saved me. But my voyage had been but a series of imprudences against which I had been unable to defend myself.

May this terrific recital, while it instructs those who read it, not discourage the explorers of the routes of air.

DOCTOR OX'S EXPERIMENT.

CHAPTER I.
HOW IT IS USELESS TO SEEK, EVEN ON THE BEST MAPS, FOR THE SMALL TOWN OF QUIQUENDONE.

If you try to find, on any map of Flanders, ancient or modern, the small town of Quiquendone, probably you will not succeed. Is Quiquendone, then, one of those towns which have disappeared? No. A town of the future? By no means. It exists in spite of geographies, and has done so for some eight or nine hundred years. It even numbers two thousand three hundred and ninety-three souls, allowing one soul to each inhabitant. It is situated thirteen and a half kilometres north-west of Oudenarde, and fifteen and a quarter kilometres south-east of Bruges, in the heart of Flanders. The Vaar, a small tributary of the Scheldt, passes beneath its three bridges, which are still covered with a quaint mediaeval roof, like that at Tournay. An old château is to be seen there, the first stone of which was laid so long ago as 1197, by Count Baldwin, afterwards Emperor of Constantinople; and there is a Town Hall, with Gothic windows, crowned by a chaperet of battlements, and surrounded by a turreted belfry, which rises three hundred and fifty-seven feet above the soil. Every hour you may hear there a chime of five octaves, a veritable aerial piano, the renown of which surpasses that of the famous chimes of Bruges. Strangers--if any ever come to Quiquendone--do not quit the curious old town until they have visited its "Stadtholder's Hall", adorned by a full-length portrait of William of Nassau, by Brandon; the loft of the Church of Saint Magloire, a masterpiece of sixteenth century architecture; the cast-iron well in the spacious Place Saint Ernuph, the admirable ornamentation of which is attributed to the artist-blacksmith, Quentin Metsys; the tomb formerly erected to Mary of Burgundy, daughter of Charles the Bold, who now reposes in the Church of Notre Dame at Bruges; and so on. The principal industry of Quiquendone is the manufacture of whipped creams and barley-sugar on a large scale. It has been governed by the Van Tricasses, from father to son, for several centuries. And yet Quiquendone is not on the map of Flanders! Have the geographers forgotten it, or is it an intentional omission? That I cannot tell; but Quiquendone really exists; with its narrow streets, its fortified walls, its Spanish-looking houses, its market, and its burgomaster--so much so, that it has recently been the theatre of some surprising phenomena, as extraordinary and incredible as they are true, which are to be recounted in the present narration.

Surely there is nothing to be said or thought against the Flemings of Western Flanders. They are a well-to-do folk, wise, prudent, sociable, with even tempers, hospitable, perhaps a little heavy in conversation as in mind; but this does not explain why one of the most interesting towns of their district has yet to appear on modern maps.

This omission is certainly to be regretted. If only history, or in default of history the chronicles, or in default of chronicles the traditions of the country, made mention of Quiquendone! But no; neither atlases, guides, nor
itineraries speak of it. M. Joanne himself, that energetic hunter after small towns, says not a word of it. It might be readily conceived that this silence would injure the commerce, the industries, of the town. But let us hasten to add that Quiquendone has neither industry nor commerce, and that it does very well without them. Its barley-sugar and whipped cream are consumed on the spot; none is exported. In short, the Quiquonians have no need of anybody. Their desires are limited, their existence is a modest one; they are calm, moderate, phlegmatic— in a word, they are Flemings; such as are still to be met with sometimes between the Scheldt and the North Sea.

CHAPTER II.
IN WHICH THE BURGOMASTER VAN TRICASSE AND THE COUNSELLOR NIKLAUSSE CONSULT ABOUT THE AFFAIRS OF THE TOWN.

"You think so?" asked the burgomaster.
"I--think so," replied the counsellor, after some minutes of silence.
"You see, we must not act hastily," resumed the burgomaster.
"We have been talking over this grave matter for ten years," replied the Counsellor Niklausse, "and I confess to you, my worthy Van Tricasse, that I cannot yet take it upon myself to come to a decision."
"I quite understand your hesitation," said the burgomaster, who did not speak until after a good quarter of an hour of reflection, "I quite understand it, and I fully share it. We shall do wisely to decide upon nothing without a more careful examination of the question."
"It is certain," replied Niklausse, "that this post of civil commissary is useless in so peaceful a town as Quiquendone."
"Our predecessor," said Van Tricasse gravely, "our predecessor never said, never would have dared to say, that anything is certain. Every affirmation is subject to awkward qualifications."

The counsellor nodded his head slowly in token of assent; then he remained silent for nearly half an hour. After this lapse of time, during which neither the counsellor nor the burgomaster moved so much as a finger, Niklausse asked Van Tricasse whether his predecessor—of some twenty years before—had not thought of suppressing this office of civil commissary, which each year cost the town of Quiquendone the sum of thirteen hundred and seventy-five francs and some centimes.
"I believe he did," replied the burgomaster, carrying his hand with majestic deliberation to his ample brow; "but the worthy man died without having dared to make up his mind, either as to this or any other administrative measure. He was a sage. Why should I not do as he did?"

Counsellor Niklausse was incapable of originating any objection to the burgomaster's opinion.
"The man who dies," added Van Tricasse solemnly, "without ever having decided upon anything during his life, has very nearly attained to perfection."

This said, the burgomaster pressed a bell with the end of his little finger, which gave forth a muffled sound, which seemed less a sound than a sigh. Presently some light steps glided softly across the tile floor. A mouse would not have made less noise, running over a thick carpet. The door of the room opened, turning on its well-oiled hinges. A young girl, with long blonde tresses, made her appearance. It was Suzel Van Tricasse, the burgomaster's only daughter. She handed her father a pipe, filled to the brim, and a small copper brazier, spoke not a word, and disappeared at once, making no more noise at her exit than at her entrance.

The worthy burgomaster lighted his pipe, and was soon hidden in a cloud of bluish smoke, leaving Counsellor Niklausse plunged in the most absorbing thought.

The room in which these two notable personages, charged with the government of Quiquendone, were talking, was a parlour richly adorned with carvings in dark wood. A lofty fireplace, in which an oak might have been burned or an ox roasted, occupied the whole of one of the sides of the room; opposite to it was a trellised window, the painted glass of which toned down the brightness of the sunbeams. In an antique frame above the chimney-piece appeared the portrait of some worthy man, attributed to Memling, which no doubt represented an ancestor of the Van Tricasses, whose authentic genealogy dates back to the fourteenth century, the period when the Flemings and Guy de Dampierre were engaged in wars with the Emperor Rudolph of Hapsburgh.

This parlour was the principal apartment of the burgomaster's house, which was one of the pleasantest in Quiquendone. Built in the Flemish style, with all the abruptness, quaintness, and picturesqueness of Pointed architecture, it was considered one of the most curious monuments of the town. A Carthusian convent, or a deaf and dumb asylum, was not more silent than this mansion. Noise had no existence there; people did not walk, but glided about in it; they did not speak, they murmured. There was not, however, any lack of women in the house, which, in addition to the burgomaster Van Tricasse himself, sheltered his wife, Madame Brigitte Van Tricasse, his daughter,
Suzel Van Tricsasse, and his domestic, Lotchè Janshéu. We may also mention the burgomaster’s sister, Aunt Hermance, an elderly maiden who still bore the nickname of Tatanémance, which her niece Suzel had given her when a child. But in spite of all these elements of discord and noise, the burgomaster’s house was as calm as a desert.

The burgomaster was some fifty years old, neither fat nor lean, neither short nor tall, neither rubicund nor pale, neither gay nor sad, neither contented nor discontented, neither energetic nor dull, neither proud nor humble, neither good nor bad, neither generous nor miserly, neither courageous nor cowardly, neither too much nor too little of anything—a man notably moderate in all respects, whose invariable slowness of motion, slightly hanging lower jaw, prominent eyebrows, massive forehead, smooth as a copper plate and without a wrinkle, would at once have betrayed to a physiognomist that the burgomaster Van Tricsasse was phlegm personified. Never, either from anger or passion, had any emotion whatever hastened the beating of this man’s heart, or flushed his face; never had his pupils contracted under the influence of any irritation, however ephemeral. He invariably wore good clothes, neither too large nor too small, which he never seemed to wear out. He was shod with large square shoes with triple soles and silver buckles, which lasted so long that his shoemaker was in despair. Upon his head he wore a large hat which dated from the period when Flanders was separated from Holland, so that this venerable masterpiece was at least forty years old. But what would you have? It is the passions which wear out body as well as soul, the clothes as well as the body; and our worthy burgomaster, apathetic, indolent, indifferent, was passionate in nothing. He wore nothing out, not even himself, and he considered himself the very man to administer the affairs of Quiquendone and its tranquil population.

The town, indeed, was not less calm than the Van Tricsasse mansion. It was in this peaceful dwelling that the burgomaster reckoned on attaining the utmost limit of human existence, after having, however, seen the good Madame Brigitte Van Tricsasse, his wife, precede him to the tomb, where, surely, she would not find a more profound repose than that she had enjoyed on earth for sixty years.

This demands explanation.

The Van Tricsasse family might well call itself the "Jeannot family." This is why:--

Every one knows that the knife of this typical personage is as celebrated as its proprietor, and not less incapable of wearing out, thanks to the double operation, incessantly repeated, of replacing the handle when it is worn out, and the blade when it becomes worthless. A precisely similar operation had been going on from time immemorial in the Van Tricsasse family, to which Nature had lent herself with more than usual complacency. From 1340 it had invariably happened that a Van Tricsasse, when left a widower, had remarried a Van Tricsasse younger than himself; who, becoming in turn a widow, had married again a Van Tricsasse younger than herself; and so on, without a break in the continuity, from generation to generation. Each died in his or her turn with mechanical regularity. Thus the worthy Madame Brigitte Van Tricsasse had now her second husband; and, unless she violated her every duty, would precede her spouse—he being ten years younger than herself—to the other world, to make room for a new Madame Van Tricsasse. Upon this the burgomaster calmly counted, that the family tradition might not be broken. Such was this mansion, peaceful and silent, of which the doors never creaked, the windows never rattled, the floors never groaned, the chimneys never roared, the weathercocks never grated, the furniture never squeaked, the locks never clanked, and the occupants never made more noise than their shadows. The god Harpocrates would certainly have chosen it for the Temple of Silence.

CHAPTER III.
IN WHICH THE COMMISSARY PASSAUF ENTERS AS NOISILY AS UNEXPECTEDLY.

When the interesting conversation which has been narrated began, it was a quarter before three in the afternoon. It was at a quarter before four that Van Tricsasse lighted his enormous pipe, which could hold a quart of tobacco, and it was at thirty-five minutes past five that he finished smoking it.

All this time the two comrades did not exchange a single word.

About six o’clock the counsellor, who had a habit of speaking in a very summary manner, resumed in these words,—

“So we decide--”

“To decide nothing,” replied the burgomaster.

“I think, on the whole, that you are right, Van Tricsasse.”

“I think so too, Niklausse. We will take steps with reference to the civil commissary when we have more light on the subject-- later on. There is no need for a month yet.”

“Nor even for a year,” replied Niklausse, unfolding his pocket-handkerchief and calmly applying it to his nose.
There was another silence of nearly a quarter of an hour. Nothing disturbed this repeated pause in the conversation; not even the appearance of the house-dog Lento, who, not less phlegmatic than his master, came to pay his respects in the parlour. Noble dog!—a model for his race. Had he been made of pasteboard, with wheels on his paws, he would not have made less noise during his stay.

Towards eight o'clock, after Lotchè had brought the antique lamp of polished glass, the burgomaster said to the counsellor,—

"We have no other urgent matter to consider?"

"No, Van Tricasse; none that I know of."

"Have I not been told, though," asked the burgomaster, "that the tower of the Oudenarde gate is likely to tumble down?"

"Ah!" replied the counsellor; "really, I should not be astonished if it fell on some passer-by any day."

"Oh! before such a misfortune happens I hope we shall have come to a decision on the subject of this tower."

"I hope so, Van Tricasse."

"There are more pressing matters to decide."

"No doubt; the question of the leather-market, for instance."

"What, is it still burning?"

"Still burning, and has been for the last three weeks."

"Have we not decided in council to let it burn?"

"Yes, Van Tricasse—on your motion."

"Was not that the surest and simplest way to deal with it?"

"Without doubt."

"Well, let us wait. Is that all?"

"All," replied the counsellor, scratching his head, as if to assure himself that he had not forgotten anything important.

"Ah!" exclaimed the burgomaster, "haven't you also heard something of an escape of water which threatens to inundate the low quarter of Saint Jacques?"

"I have. It is indeed unfortunate that this escape of water did not happen above the leather-market! It would naturally have checked the fire, and would thus have saved us a good deal of discussion."

"What can you expect, Niklausse? There is nothing so illogical as accidents. They are bound by no rules, and we cannot profit by one, as we might wish, to remedy another."

It took Van Tricasse's companion some time to digest this fine observation.

"Well, but," resumed the Counsellor Niklausse, after the lapse of some moments, "we have not spoken of our great affair!"

"What great affair? Have we, then, a great affair?" asked the burgomaster.

"No doubt. About lighting the town."

"O yes. If my memory serves me, you are referring to the lighting plan of Doctor Ox."

"Precisely."

"It is going on, Niklausse," replied the burgomaster. "They are already laying the pipes, and the works are entirely completed."

"Perhaps we have hurried a little in this matter," said the counsellor, shaking his head.

"Perhaps. But our excuse is, that Doctor Ox bears the whole expense of his experiment. It will not cost us a sou."

"That, true enough, is our excuse. Moreover, we must advance with the age. If the experiment succeeds, Quiquendone will be the first town in Flanders to be lighted with the oxy—What is the gas called?"

"Oxyhydric gas."

"Well, oxyhydric gas, then."

At this moment the door opened, and Lotchè came in to tell the burgomaster that his supper was ready.

Counsellor Niklausse rose to take leave of Van Tricasse, whose appetite had been stimulated by so many affairs discussed and decisions taken; and it was agreed that the council of notables should be convened after a reasonably long delay, to determine whether a decision should be provisionally arrived at with reference to the really urgent matter of the Oudenarde gate.

The two worthy administrators then directed their steps towards the street-door, the one conducting the other. The counsellor, having reached the last step, lighted a little lantern to guide him through the obscure streets of Quiquendone, which Doctor Ox had not yet lighted. It was a dark October night, and a light fog overshadowed the town.

Niklausse's preparations for departure consumed at least a quarter of an hour; for, after having lighted his lantern, he had to put on his big cow-skin socks and his sheep-skin gloves; then he put up the furred collar of his
overcoat, turned the brim of his felt hat down over his eyes, grasped his heavy crow-beaked umbrella, and got ready
to start.

When Lotchè, however, who was lighting her master, was about to draw the bars of the door, an unexpected
noise arose outside.

Yes! Strange as the thing seems, a noise—a real noise, such as the town had certainly not heard since the taking
of the donjon by the Spaniards in 1513—terrible noise, awoke the long-dormant echoes of the venerable Van
Tricasse mansion.

Some one knocked heavily upon this door, hitherto virgin to brutal touch! Redoubled knocks were given with
some blunt implement, probably a knotty stick, wielded by a vigorous arm. With the strokes were mingled cries and
calls. These words were distinctly heard:—

"Monsieur Van Tricasse! Monsieur the burgomaster! Open, open quickly!"

The burgomaster and the counsellor, absolutely astounded, looked at each other speechless.

This passed their comprehension. If the old culverin of the château, which had not been used since 1385, had
been let off in the parlour, the dwellers in the Van Tricasse mansion would not have been more dumbfounded.

Meanwhile, the blows and cries were redoubled. Lotchè, recovering her coolness, had plucked up courage to
speak.

"Who is there?"

"It is I! I! I!"

"Who are you?"

"The Commissary Passauf!"

The Commissary Passauf! The very man whose office it had been contemplated to suppress for ten years. What
had happened, then? Could the Burgundians have invaded Quiquendone, as they did in the fourteenth century? No
event of less importance could have so moved Commissary Passauf, who in no degree yielded the palm to the
burgomaster himself for calmness and phlegm.

On a sign from Van Tricasse—for the worthy man could not have articulated a syllable—the bar was pushed back
and the door opened.

Commissary Passauf flung himself into the antechamber. One would have thought there was a hurricane.

"What's the matter, Monsieur the commissary?" asked Lotchè, a brave woman, who did not lose her head under
the most trying circumstances.

"What's the matter!" replied Passauf, whose big round eyes expressed a genuine agitation. "The matter is that I
have just come from Doctor Ox's, who has been holding a reception, and that there—"

[Illustration: I have just come from Doctor Ox's]

"There?"

"There I have witnessed such an altercation as—Monsieur the burgomaster, they have been talking politics!"

"Politics!" repeated Van Tricasse, running his fingers through his wig.

"Politics!" resumed Commissary Passauf, "which has not been done for perhaps a hundred years at Quiquendone. Then the discussion got warm, and the advocate, André Schut, and the doctor, Dominique Custos,
became so violent that it may be they will call each other out."

"Call each other out!" cried the counsellor. "A duel! A duel at Quiquendone! And what did Advocate Schut and
Doctor Gustos say?"

"Just this: 'Monsieur advocate,' said the doctor to his adversary, 'you go too far, it seems to me, and you do not
take sufficient care to control your words!'"

The Burgomaster Van Tricasse clasped his hands—the counsellor turned pale and let his lantern fall—the
commissary shook his head. That a phrase so evidently irritating should be pronounced by two of the principal men
in the country!

"This Doctor Custos," muttered Van Tricasse, "is decidedly a dangerous man—a hare-brained fellow! Come,
gentlemen!"

On this, Counsellor Niklausse and the commissary accompanied the burgomaster into the parlour.

CHAPTER IV.

IN WHICH DOCTOR OX REVEALS HIMSELF AS A PHYSIOLOGIST OF THE FIRST RANK, AND AS
AN AUDACIOUS EXPERIMENTALIST.

Who, then, was this personage, known by the singular name of Doctor Ox?

An original character for certain, but at the same time a bold savant, a physiologist, whose works were known
and highly estimated throughout learned Europe, a happy rival of the Davys, the Daltons, the Bostocks, the Menzies,
the Godwins, the Vierordts—of all those noble minds who have placed physiology among the highest of modern sciences.

Doctor Ox was a man of medium size and height, aged--: but we cannot state his age, any more than his nationality. Besides, it matters little; let it suffice that he was a strange personage, impetuous and hot-blooded, a regular oddity out of one of Hoffmann's volumes, and one who contrasted amusingly enough with the good people of Quiquendone. He had an imperturbable confidence both in himself and in his doctrines. Always smiling, walking with head erect and shoulders thrown back in a free and unconstrained manner, with a steady gaze, large open nostrils, a vast mouth which inhaled the air in liberal draughts, his appearance was far from unpleasing. He was full of animation, well proportioned in all parts of his bodily mechanism, with quicksilver in his veins, and a most elastic step. He could never stop still in one place, and relieved himself with impetuous words and a superabundance of gesticulations.

Was Doctor Ox rich, then, that he should undertake to light a whole town at his expense? Probably, as he permitted himself to indulge in such extravagance,—and this is the only answer we can give to this indiscreet question.

Doctor Ox had arrived at Quiquendone five months before, accompanied by his assistant, who answered to the name of Gédéon Ygé; a tall, dried-up, thin man, haughty, but not less vivacious than his master.

And next, why had Doctor Ox made the proposition to light the town at his own expense? Why had he, of all the Flemings, selected the peaceable Quiquendonians, to endow their town with the benefits of an unheard-of system of lighting? Did he not, under this pretext, design to make some great physiological experiment by operating _in anima vili_? In short, what was this original personage about to attempt? We know not, as Doctor Ox had no confidant except his assistant Ygé, who, moreover, obeyed him blindly.

In appearance, at least, Doctor Ox had agreed to light the town, which had much need of it, "especially at night," as Commissary Passauf wittily said. Works for producing a lighting gas had accordingly been established; the gasometers were ready for use, and the main pipes, running beneath the street pavements, would soon appear in the form of burners in the public edifices and the private houses of certain friends of progress. Van Tricasse and Niklausse, in their official capacity, and some other worthies, thought they ought to allow this modern light to be introduced into their dwellings.

If the reader has not forgotten, it was said, during the long conversation of the counsellor and the burgomaster, that the lighting of the town was to be achieved, not by the combustion of common carburetted hydrogen, produced by distilling coal, but by the use of a more modern and twenty-fold more brilliant gas, oxyhydric gas, produced by mixing hydrogen and oxygen.

The doctor, who was an able chemist as well as an ingenious physiologist, knew how to obtain this gas in great quantity and of good quality, not by using manganate of soda, according to the method of M. Tessié du Motay, but by the direct decomposition of slightly acidulated water, by means of a battery made of new elements, invented by himself. Thus there were no costly materials, no platinum, no retorts, no combustibles, no delicate machinery to produce the two gases separately. An electric current was sent through large basins full of water, and the liquid was decomposed into its two constituent parts, oxygen and hydrogen. The oxygen passed off at one end; the hydrogen, of double the volume of its late associate, at the other. As a necessary precaution, they were collected in separate reservoirs, for their mixture would have produced a frightful explosion if it had become ignited. Thence the pipes were to convey them separately to the various burners, which would be so placed as to prevent all chance of explosion. Thus a remarkably brilliant flame would be obtained, whose light would rival the electric light, which, as everybody knows, is, according to Cassellmann's experiments, equal to that of eleven hundred and seventy-one wax candles,—not one more, nor one less.

It was certain that the town of Quiquendone would, by this liberal contrivance, gain a splendid lighting; but Doctor Ox and his assistant took little account of this, as will be seen in the sequel.

The day after that on which Commissary Passauf had made his noisy entrance into the burgomaster's parlour, Gédéon Ygé and Doctor Ox were talking in the laboratory which both occupied in common, on the ground-floor of the principal building of the gas-works.

"Well, Ygé, well," cried the doctor, rubbing his hands. "You saw, at my reception yesterday, the cool-bloodedness of these worthy Quiquendonians. For animation they are midway between sponges and coral! You saw them disputing and irritating each other by voice and gesture? They are already metamorphosed, morally and physically! And this is only the beginning. Wait till we treat them to a big dose!"

"Indeed, master," replied Ygé, scratching his sharp nose with the end of his forefinger, "the experiment begins well, and if I had not prudently closed the supply-tap, I know not what would have happened."

"You heard Schut, the advocate, and Custos, the doctor?" resumed Doctor Ox. "The phrase was by no means ill-natured in itself, but, in the mouth of a Quiquendonian, it is worth all the insults which the Homeric heroes hurled at
each other before drawing their swords, Ah, these Flemings! You'll see what we shall do some day!"

"We shall make them ungrateful," replied Ygène, in the tone of a man who esteems the human race at its just worth.

"Bah!" said the doctor; "what matters it whether they think well or ill of us, so long as our experiment succeeds?"

"Besides," returned the assistant, smiling with a malicious expression, "is it not to be feared that, in producing such an excitement in their respiratory organs, we shall somewhat injure the lungs of these good people of Quiquendone?"

"So much the worse for them! It is in the interests of science. What would you say if the dogs or frogs refused to lend themselves to the experiments of vivisection?"

[Illustration: It is in the interests of Science.]

It is probable that if the frogs and dogs were consulted, they would offer some objection; but Doctor Ox imagined that he had stated an unanswerable argument, for he heaved a great sigh of satisfaction.

"After all, master, you are right," replied Ygène, as if quite convinced. "We could not have hit upon better subjects than these people of Quiquendone for our experiment."

"We--could--not," said the doctor, slowly articulating each word.

"Have you felt the pulse of any of them?"

"Some hundreds."

"And what is the average pulsation you found?"

"Not fifty per minute. See--this is a town where there has not been the shadow of a discussion for a century, where the carmen don't swear, where the coachmen don't insult each other, where horses don't run away, where the dogs don't bite, where the cats don't scratch,--a town where the police-court has nothing to do from one year's end to another,--a town where people do not grow enthusiastic about anything, either about art or business,--a town where the gendarmes are a sort of myth, and in which an indictment has not been drawn up for a hundred years,--a town, in short, where for three centuries nobody has struck a blow with his fist or so much as exchanged a slap in the face! You see, Ygène, that this cannot last, and that we must change it all."

"Perfectly! perfectly!" cried the enthusiastic assistant; "and have you analyzed the air of this town, master?"

"I have not failed to do so. Seventy-nine parts of azote and twenty-one of oxygen, carbonic acid and steam in a variable quantity. These are the ordinary proportions."

"Good, doctor, good!" replied Ygène. "The experiment will be made on a large scale, and will be decisive."

"And if it is decisive," added Doctor Ox triumphantly, "we shall reform the world!"

CHAPTER V.
IN WHICH THE BURGOMASTER AND THE COUNSELLOR PAY A VISIT TO DOCTOR OX, AND WHAT FOLLOWS.

The Counsellor Niklausse and the Burgomaster Van Tricasse at last knew what it was to have an agitated night. The grave event which had taken place at Doctor Ox's house actually kept them awake. What consequences was this affair destined to bring about? They could not imagine. Would it be necessary for them to come to a decision? Would the municipal authority, whom they represented, be compelled to interfere? Would they be obliged to order arrests to be made, that so great a scandal should not be repeated? All these doubts could not but trouble these soft natures; and on that evening, before separating, the two notables had "decided" to see each other the next day.

On the next morning, then, before dinner, the Burgomaster Van Tricasse proceeded in person to the Counsellor Niklausse's house. He found his friend more calm. He himself had recovered his equanimity.

"Nothing new?" asked Van Tricasse.

"Nothing new since yesterday," replied Niklausse.

"And the doctor, Dominique Custos?"

"I have not heard anything, either of him or of the advocate, André Schut."

After an hour's conversation, which consisted of three remarks which it is needless to repeat, the counsellor and the burgomaster had resolved to pay a visit to Doctor Ox, so as to draw from him, without seeming to do so, some details of the affair.

Contrary to all their habits, after coming to this decision the two notables set about putting it into execution forthwith. They left the house and directed their steps towards Doctor Ox's laboratory, which was situated outside the town, near the Oudenarde gate--the gate whose tower threatened to fall in ruins.

They did not take each other's arms, but walked side by side, with a slow and solemn step, which took them forward but thirteen inches per second. This was, indeed, the ordinary gait of the Quiquendonians, who had never,
within the memory of man, seen any one run across the streets of their town.

From time to time the two notables would stop at some calm and tranquil crossway, or at the end of a quiet street, to salute the passers-by.

"Good morning, Monsieur the burgomaster," said one.
"Good morning, my friend," responded Van Tricasse.
"Anything new, Monsieur the counsellor?" asked another.
"Nothing new," answered Niklausse.

But by certain agitated motions and questioning looks, it was evident that the altercation of the evening before was known throughout the town. Observing the direction taken by Van Tricasse, the most obtuse Quiquendonians guessed that the burgomaster was on his way to take some important step. The Custos and Schut affair was talked of everywhere, but the people had not yet come to the point of taking the part of one or the other. The Advocate Schut, having never had occasion to plead in a town where attorneys and bailiffs only existed in tradition, had, consequently, never lost a suit. As for the Doctor Custos, he was an honourable practitioner, who, after the example of his fellow-doctors, cured all the illnesses of his patients, except those of which they died—a habit unhappily acquired by all the members of all the faculties in whatever country they may practise.

On reaching the Oudenarde gate, the counsellor and the burgomaster prudently made a short detour, so as not to pass within reach of the tower, in case it should fall; then they turned and looked at it attentively.

"I think that it will fall," said Van Tricasse.
"I think so too," replied Niklausse.
"Unless it is propped up," added Van Tricasse. "But must it be propped up? That is the question."
"That is—in fact—the question."

Some moments after, they reached the door of the gasworks.

"Can we see Doctor Ox?" they asked.

Doctor Ox could always be seen by the first authorities of the town, and they were at once introduced into the celebrated physiologist's study.

Perhaps the two notables waited for the doctor at least an hour; at least it is reasonable to suppose so, as the burgomaster—a thing that had never before happened in his life—betrayed a certain amount of impatience, from which his companion was not exempt.

Doctor Ox came in at last, and began to excuse himself for having kept them waiting; but he had to approve a plan for the gasometer, rectify some of the machinery—but everything was going on well! The pipes intended for the oxygen were already laid. In a few months the town would be splendidly lighted. The two notables might even now see the orifices of the pipes which were laid on in the laboratory.

Then the doctor begged to know to what he was indebted for the honour of this visit.

"Only to see you, doctor; to see you," replied Van Tricasse. "It is long since we have had the pleasure. We go abroad but little in our good town of Quiquendone. We count our steps and measure our walks. We are happy when nothing disturbs the uniformity of our habits."

Niklausse looked at his friend. His friend had never said so much at once—at least, without taking time, and giving long intervals between his sentences. It seemed to him that Van Tricasse expressed himself with a certain volubility, which was by no means common with him. Niklausse himself experienced a kind of irresistible desire to talk.

As for Doctor Ox, he looked at the burgomaster with sly attention.

Van Tricasse, who never argued until he had snugly ensconced himself in a spacious armchair, had risen to his feet. I know not what nervous excitement, quite foreign to his temperament, had taken possession of him. He did not gesticulate as yet, but this could not be far off. As for the counsellor, he rubbed his legs, and breathed with slow and long gasps. His look became animated little by little, and he had "decided" to support at all hazards, if need be, his trusty friend the burgomaster.

Van Tricasse got up and took several steps; then he came back, and stood facing the doctor.

"And in how many months," he asked in a somewhat emphatic tome, "do you say that your work will be finished?"

"In three or four months, Monsieur the burgomaster," replied Doctor Ox.
"Three or four months,—it's a very long time!" said Van Tricasse.
"Altogether too long!" added Niklausse, who, not being able to keep his seat, rose also.
"This lapse of time is necessary to complete our work," returned Doctor Ox. "The workmen, whom we have had to choose in Quiquendone, are not very expeditious."

[Illustration: "The workmen, whom we have had to choose in Quiquendone, are not very expeditious."]
"How not expeditious?" cried the burgomaster, who seemed to take the remark as personally offensive.
"No, Monsieur Van Tricasse," replied Doctor Ox obstinately. "A French workman would do in a day what it takes ten of your workmen to do; you know, they are regular Flemings!"

"Flemings!" cried the counsellor, whose fingers closed together. "In what sense, sir, do you use that word?"

"Why, in the amiable sense in which everybody uses it," replied Doctor Ox, smiling.

"Ah, but doctor," said the burgomaster, pacing up and down the room, "I don't like these insinuations. The workmen of Quiquendone are as efficient as those of any other town in the world, you must know; and we shall go neither to Paris nor London for our models! As for your project, I beg you to hasten its execution. Our streets have been unpaved for the putting down of your conduit-pipes, and it is a hindrance to traffic. Our trade will begin to suffer, and I, being the responsible authority, do not propose to incur reproaches which will be but too just."

Worthy burgomaster! He spoke of trade, of traffic, and the wonder was that those words, to which he was quite unaccustomed, did not scorch his lips. What could be passing in his mind?

"Besides," added Niklausse, "the town cannot be deprived of light much longer."

"But," urged Doctor Ox, "a town which has been un-lighted for eight or nine hundred years--"

"All the more necessary is it," replied the burgomaster, emphasizing his words. "Times alter, manners alter! The world advances, and we do not wish to remain behind. We desire our streets to be lighted within a month, or you must pay a large indemnity for each day of delay; and what would happen if, amid the darkness, some affray should take place?"

"No doubt," cried Niklausse. "It requires but a spark to inflame a Fleming! Fleming! Flame!"

"Apropos of this," said the burgomaster, interrupting his friend, "Commissary Passauf, our chief of police, reports to us that a discussion took place in your drawing-room last evening, Doctor Ox. Was he wrong in declaring that it was a political discussion?"

"By no means, Monsieur the burgomaster," replied Doctor Ox, who with difficulty repressed a sigh of satisfaction.

"So an altercation did take place between Dominique Gustos and André Schut?"

"Yes, counsellor; but the words which passed were not of grave import."

"Not of grave import!" cried the burgomaster. "Not of grave import, when one man tells another that he does not measure the effect of his words! But of what stuff are you made, monsieur? Do you not know that in Quiquendone nothing more is needed to bring about extremely disastrous results? But monsieur, if you, or any one else, presume to speak thus to me--"

"Or to me," added Niklausse.

As they pronounced these words with a menacing air, the two notables, with folded arms and bristling air, confronted Doctor Ox, ready to do him some violence, if by a gesture, or even the expression of his eye, he manifested any intention of contradicting them.

But the doctor did not budge.

"At all events, monsieur," resumed the burgomaster, "I propose to hold you responsible for what passes in your house. I am bound to insure the tranquillity of this town, and I do not wish it to be disturbed. The events of last evening must not be repeated, or I shall do my duty, sir! Do you hear? Then reply, sir."

The burgomaster, as he spoke, under the influence of extraordinary excitement, elevated his voice to the pitch of anger. He was furious, the worthy Van Tricasse, and might certainly be heard outside. At last, beside himself, and seeing that Doctor Ox did not reply to his challenge, "Come, Niklausse," said he.

And, slamming the door with a violence which shook the house, the burgomaster drew his friend after him.

Little by little, when they had taken twenty steps on their road, the worthy notables grew more calm. Their pace slackened, their gait became less feverish. The flush on their faces faded away; from being crimson, they became rosy. A quarter of an hour after quitting the gasworks, Van Tricasse said softly to Niklausse, "An amiable man, Doctor Ox! It is always a pleasure to see him!"

CHAPTER VI.
IN WHICH FRANTZ NIKLAUSSE AND SUZEL VAN TRICASSE FORM CERTAIN PROJECTS FOR THE FUTURE.

Our readers know that the burgomaster had a daughter, Suzel But, shrewd as they may be, they cannot have divined that the counsellor Niklausse had a son, Frantz; and had they divined this, nothing could have led them to imagine that Frantz was the betrothed lover of Suzel. We will add that these young people were made for each other, and that they loved each other, as folks did love at Quiquendone.

It must not be thought that young hearts did not beat in this exceptional place; only they beat with a certain deliberation. There were marriages there, as in every other town in the world; but they took time about it. Betrothed
couples, before engaging in these terrible bonds, wished to study each other; and these studies lasted at least ten years, as at college. It was rare that any one was "accepted" before this lapse of time.

Yes, ten years! The courtships last ten years! And is it, after all, too long, when the being bound for life is in consideration? One studies ten years to become an engineer or physician, an advocate or attorney, and should less time be spent in acquiring the knowledge to make a good husband? Is it not reasonable? and, whether due to temperament or reason with them, the Quiquendonians seem to us to be in the right in thus prolonging their courtship. When marriages in other more lively and excitable cities are seen taking place within a few months, we must shrug our shoulders, and hasten to send our boys to the schools and our daughters to the _pensions_ of Quiquendone.

For half a century but a single marriage was known to have taken place after the lapse of two years only of courtship, and that turned out badly!

Frantz Niklausse, then, loved Suzel Van Tricasse, but quietly, as a man would love when he has ten years before him in which to obtain the beloved object. Once every week, at an hour agreed upon, Frantz went to fetch Suzel, and took a walk with her along the banks of the Vaar. He took good care to carry his fishing-tackle, and Suzel never forgot her canvas, on which her pretty hands embroidered the most unlikely flowers.

Frantz was a young man of twenty-two, whose cheeks betrayed a soft, peachy down, and whose voice had scarcely a compass of one octave.

As for Suzel, she was blonde and rosy. She was seventeen, and did not dislike fishing. A singular occupation this, however, which forces you to struggle craftily with a barbel. But Frantz loved it; the pastime was congenial to his temperament. As patient as possible, content to follow with his rather dreamy eye the cork which bobbed on the top of the water, he knew how to wait; and when, after sitting for six hours, a modest barbel, taking pity on him, consented at last to be caught, he was happy—but he knew how to control his emotion.

On this day the two lovers—one might say, the two betrothed—were seated upon the verdant bank. The limpid Vaar murmured a few feet below them. Suzel quietly drew her needle across the canvas. Frantz automatically carried his line from left to right, then permitted it to descend the current from right to left. The fish made capricious rings in the water, which crossed each other around the cork, while the hook hung useless near the bottom.

From time to time Frantz would say, without raising his eyes,--
"I think I have a bite, Suzel."

"Do you think so, Frantz?" replied Suzel, who, abandoning her work for an instant, followed her lover's line with earnest eye.

"N-no," resumed Frantz; "I thought I felt a little twitch; I was mistaken."

"You _will_ have a bite, Frantz," replied Suzel, in her pure, soft voice. "But do not forget to strike at the right moment. You are always a few seconds too late, and the barbel takes advantage to escape."

"Would you like to take my line, Suzel?"

"Willingly, Frantz."

"Then give me your canvas. We shall see whether I am more adroit with the needle than with the hook."

And the young girl took the line with trembling hand, while her swain plied the needle across the stitches of the embroidery. For hours together they thus exchanged soft words, and their hearts palpitated when the cork bobbed on the water. Ah, could they ever forget those charming hours, during which, seated side by side, they listened to the murmurs of the river?

[Illustration: the young girl took the line]

The sun was fast approaching the western horizon, and despite the combined skill of Suzel and Frantz, there had not been a bite. The barbels had not shown themselves complacent, and seemed to scoff at the two young people, who were too just to bear them malice.

"We shall be more lucky another time, Frantz," said Suzel, as the young angler put up his still virgin hook.

"Let us hope so," replied Frantz.

Then walking side by side, they turned their steps towards the house, without exchanging a word, as mute as their shadows which stretched out before them. Suzel became very, very tall under the oblique rays of the setting sun. Frantz appeared very, very thin, like the long rod which he held in his hand.

They reached the burgomaster's house. Green tufts of grass bordered the shining pavement, and no one would have thought of tearing them away, for they deadened the noise made by the passers-by.

As they were about to open the door, Frantz thought it his duty to say to Suzel,--
"You know, Suzel, the great day is approaching?"

"It is indeed, Frantz," replied the young girl, with downcast eyes.

"Yes," said Frantz, "in five or six years--"

"Good-bye, Frantz," said Suzel.
"Good-bye, Frantz," said Suzel.

"Good-bye, Suzel," replied Frantz.

And, after the door had been closed, the young man resumed the way to his father's house with a calm and equal pace.

CHAPTER VII.
IN WHICH THE ANDANTES BECOME ALLEGROS, AND THE ALLEGROS VIVACES.

The agitation caused by the Schut and Custos affair had subsided. The affair led to no serious consequences. It appeared likely that Quiquendone would return to its habitual apathy, which that unexpected event had for a moment disturbed.

Meanwhile, the laying of the pipes destined to conduct the oxyhydric gas into the principal edifices of the town was proceeding rapidly. The main pipes and branches gradually crept beneath the pavements. But the burners were still wanting; for, as it required delicate skill to make them, it was necessary that they should be fabricated abroad. Doctor Ox was here, there, and everywhere; neither he nor Ygène, his assistant, lost a moment, but they urged on the workmen, completed the delicate mechanism of the gasometer, fed day and night the immense piles which decomposed the water under the influence of a powerful electric current. Yes, the doctor was already making his gas, though the pipe-laying was not yet done; a fact which, between ourselves, might have seemed a little singular. But before long,—at least there was reason to hope so,—before long Doctor Ox would inaugurate the splendours of his invention in the theatre of the town.

For Quiquendone possessed a theatre—a really fine edifice, in truth—the interior and exterior arrangement of which combined every style of architecture. It was at once Byzantine, Roman, Gothic, Renaissance, with semicircular doors, Pointed windows, Flamboyant rose-windows, fantastic bell-turrets,—in a word, a specimen of all sorts, half a Parthenon, half a Parisian Grand Café. Nor was this surprising, the theatre having been commenced under the burgomaster Ludwig Van Tricas, in 1175, and only finished in 1837, under the burgomaster Natalis Van Tricas. It had required seven hundred years to build it, and it had, been successively adapted to the architectural style in vogue in each period. But for all that it was an imposing structure; the Roman pillars and Byzantine arches of which would appear to advantage lit up by the oxyhydric gas.

Pretty well everything was acted at the theatre of Quiquendone; but the opera and the opera comique were especially patronized. It must, however, be added that the composers would never have recognized their own works, so entirely changed were the "movements" of the music.

In short, as nothing was done in a hurry at Quiquendone, the dramatic pieces had to be performed in harmony with the peculiar temperament of the Quiquendonians. Though the doors of the theatre were regularly thrown open at four o'clock and closed again at ten, it had never been known that more than two acts were played during the six intervening hours. "Robert le Diable," "Les Huguenots," or "Guillaume Tell" usually took up three evenings, so slow was the execution of these masterpieces. The _vivaces_, at the theatre of Quiquendone, lagged like real _adagios_. The _allegros_ were "long-drawn out" indeed. The demisemiquavers were scarcely equal to the ordinary semibreves of other countries. The most rapid runs, performed according to Quiquendonian taste, had the solemn march of a chant. The gayest shakes were languishing and measured, that they might not shock the ears of the _dilettanti_. To give an example, the rapid air sung by Figaro, on his entrance in the first act of "Le Barbièr de Séville," lasted fifty-eight minutes—when the actor was particularly enthusiastic.

Artists from abroad, as might be supposed, were forced to conform themselves to Quiquendonian fashions; but as they were well paid, they did not complain, and willingly obeyed the leader's baton, which never beat more than eight measures to the minute in the _allegros_.

But what applause greeted these artists, who enchanted without ever wearying the audiences of Quiquendone! All hands clapped one after another at tolerably long intervals, which the papers characterized as "frantic applause;" and sometimes nothing but the lavish prodigality with which mortar and stone had been used in the twelfth century saved the roof of the hall from falling in.

Besides, the theatre had only one performance a week, that these enthusiastic Flemish folk might not be too much excited; and this enabled the actors to study their parts more thoroughly, and the spectators to digest more at leisure the beauties of the masterpieces brought out.

Such had long been the drama at Quiquendone. Foreign artists were in the habit of making engagements with the director of the town, when they wanted to rest after their exertions in other scenes; and it seemed as if nothing could ever change these inveterate customs, when, a fortnight after the Schut-Custos affair, an unlooked-for incident occurred to throw the population into fresh agitation.

It was on a Saturday, an opera day. It was not yet intended, as may well be supposed, to inaugurate the new
illumination. No; the pipes had reached the hall, but, for reasons indicated above, the burners had not yet been placed, and the wax-candles still shed their soft light upon the numerous spectators who filled the theatre. The doors had been opened to the public at one o'clock, and by three the hall was half full. A queue had at one time been formed, which extended as far as the end of the Place Saint Ernuph, in front of the shop of Josse Lietrinck the apothecary. This eagerness was significant of an unusually attractive performance.

"Are you going to the theatre this evening?" inquired the counsellor the same morning of the burgomaster.

"I shall not fail to do so," returned Van Tricasse, "and I shall take Madame Van Tricasse, as well as our daughter Suzel and our dear Tatanémance, who all dote on good music."

"Mademoiselle Suzel is going then?"

"Certainly, Niklausse."

"Then my son Frantz will be one of the first to arrive," said Niklausse.

"A spirited boy, Niklausse," replied the burgomaster sententiously; "but hot-headed! He will require watching!"

"He loves, Van Tricasse,—he loves your charming Suzel."

"Well, Niklausse, he shall marry her. Now that we have agreed on this marriage, what more can he desire?"

"He desires nothing, Van Tricasse, the dear boy! But, in short— we'll say no more about it—he will not be the last to get his ticket at the box-office."

"Ah, vivacious and ardent youth!" replied the burgomaster, recalling his own past. "We have also been thus, my worthy counsellor! We have loved—we too! We have danced attendance in our day! Till to-night, then, till to-night! By-the-bye, do you know this Fiovaranti is a great artist? And what a welcome he has received among us! It will be long before he will forget the applause of Quiquendone!"

The tenor Fiovaranti was, indeed, going to sing; Fiovaranti, who, by his talents as a virtuoso, his perfect method, his melodious voice, provoked a real enthusiasm among the lovers of music in the town.

For three weeks Fiovaranti had been achieving a brilliant success in "Les Huguenots." The first act, interpreted according to the taste of the Quiquendonians, had occupied an entire evening of the first week of the month.— Another evening in the second week, prolonged by infinite _andantes_, had elicited for the celebrated singer a real ovation. His success had been still more marked in the third act of Meyerbeer's masterpiece. But now Fiovaranti was to appear in the fourth act, which was to be performed on this evening before an impatient public. Ah, the duet between Raoul and Valentine, that pathetic love-song for two voices, that strain so full of _crescendos_, _stringendos_, and _piu crescendos_—all this, sung slowly, compendiously, interminably! Ah, how delightful!

[Illustration: Fiovaranti had been achieving a brilliant success in "Les Huguenots."]

At four o'clock the hall was full. The boxes, the orchestra, the pit, were overflowing. In the front stalls sat the Burgomaster Van Tricasse, Mademoiselle Van Tricasse, Madame Van Tricasse, and the amiable Tatanémance in a green bonnet; not far off were the Counsellor Niklausse and his family, not forgetting the amorous Frantz. The families of Custos the doctor, of Schut the advocate, of Honoré Syntax the chief judge, of Norbet Sontman the insurance director, of the banker Collaert, gone mad on German music, and himself somewhat of an amateur, and the teacher Rupp, and the master of the academy, Jerome Resh, and the civil commissary, and so many other notabilities of the town that they could not be enumerated here without wearying the reader's patience, were visible in different parts of the hall.

It was customary for the Quiquendonians, while awaiting the rise of the curtain, to sit silent, some reading the paper, others whispering low to each other, some making their way to their seats slowly and noiselessly, others casting timid looks towards the bewitching beauties in the galleries.

But on this evening a looker-on might have observed that, even before the curtain rose, there was unusual animation among the audience. People were restless who were never known to be restless before. The ladies' fans fluttered with abnormal rapidity. All appeared to be inhaling air of exceptional stimulating power. Every one breathed more freely. The eyes of some became unwontedly bright, and seemed to give forth a light equal to that of the candles, which themselves certainly threw a more brilliant light over the hall. It was evident that people saw more clearly, though the number of candles had not been increased. Ah, if Doctor Ox's experiment were being tried! But it was not being tried, as yet.

The musicians of the orchestra at last took their places. The first violin had gone to the stand to give a modest la to his colleagues. The stringed instruments, the wind instruments, the drums and cymbals, were in accord. The conductor only waited the sound of the bell to beat the first bar.

The bell sounds. The fourth act begins. The _allegro appassionato_ of the inter-act is played as usual, with a majestic deliberation which would have made Meyerbeer frantic, and all the majesty of which was appreciated by the Quiquendonian _diletanti_.

But soon the leader perceived that he was no longer master of his musicians. He found it difficult to restrain them, though usually so obedient and calm. The wind instruments betrayed a tendency to hasten the movements, and
it was necessary to hold them back with a firm hand, for they would otherwise outstrip the stringed instruments; which, from a musical point of view, would have been disastrous. The bassoon himself, the son of Josse Lietrinck the apothecary, a well-bred young man, seemed to lose his self-control.

Meanwhile Valentine has begun her recitative, "I am alone," &c.; but she hurries it.

The leader and all his musicians, perhaps unconsciously, follow her in her _cantabile_, which should be taken deliberately, like a 12/8 as it is. When Raoul appears at the door at the bottom of the stage, between the moment when Valentine goes to him and that when she conceals herself in the chamber at the side, a quarter of an hour does not elapse; while formerly, according to the traditions of the Quiquendone theatre, this recitative of thirty-seven bars was wont to last just thirty-seven minutes.

Saint Bris, Nevers, Cavannes, and the Catholic nobles have appeared, somewhat prematurely, perhaps, upon the scene. The composer has marked _allegro_{pomposo}_ on the score. The orchestra and the lords proceed _allegro_ indeed, but not at all _pomposo_, and at the chorus, in the famous scene of the "benediction of the poniards," they no longer keep to the enjoined _allegro_. Singers and musicians broke away impetuously. The leader does not even attempt to restrain them. Nor do the public protest; on the contrary, the people find themselves carried away, and see that they are involved in the movement, and that the movement responds to the impulses of their souls.

"Will you, with me, deliver the land, From troubles increasing, an impious band?"

They promise, they swear. Nevers has scarcely time to protest, and to sing that "among his ancestors were many soldiers, but never an assassin." He is arrested. The police and the aldermen rush forward and rapidly swear "to strike all at once." Saint Bris utters the recitative which summons the Catholics to vengeance. The three monks, with white scarfs, hasten in by the door at the back of Nevers's room, without making any account of the stage directions, which enjoin on them to advance slowly. Already all the artists have drawn sword or poniard, which the three monks bless in a trice. The sopranos, bassos, attack the _allegro furioso_ with cries of rage, and of a dramatic 6/8 time they make it 6/8 quadrille time. Then they rush out, bellowing,--

"At midnight, Noiselessly, God wills it, Yes, At midnight."

At this moment the audience start to their feet. Everybody is agitated--in the boxes, the pit, the galleries. It seems as if the spectators are about to rush upon the stage, the Burgomaster Van Tricasse at their head, to join with the conspirators and annihilate the Huguenots, whose religious opinions, however, they share. They applaud, call before the curtain, make loud acclamations! Tatanémance grasps her bonnet with feverish hand. The candles throw out a lurid glow of light.

Raoul, instead of slowly raising the curtain, tears it apart with a superb gesture and finds himself confronting Valentine.

At last! It is the grand duet, and it starts off _allegro vivace_. Raoul does not wait for Valentine's pleading, and Valentine does not wait for Raoul's responses.

The fine passage beginning, "Danger is passing, time is flying," becomes one of those rapid airs which have made Offenbach famous, when he composes a dance for conspirators. The _andante amoroso_, "Thou hast said it, aye, thou lovest me," becomes a real _vivace furioso_, and the violoncello ceases to imitate the inflections of the singer's voice, as indicated in the composer's score. In vain Raoul cries, "Speak on, and prolong the ineffable delight, Aye, thou lovest me!" Valentine cannot "prolong." It is evident that an unaccustomed fire devours her. Her _b's_ and _c's_ above the stave were dreadfully shrill. He struggles, he gesticulates, he is all in a glow.

The alarum is heard; the bell resounds; but what a panting bell! The bell-ringer has evidently lost his self-control. It is a frightful tocsin, which violently struggles against the fury of the orchestra.

Finally the air which ends this magnificent act, beginning, "No more love, no more intoxication, O the remorse that oppresses me!" which the composer marks _allegro con moto_, becomes a wild _prestissimo_. You would say an express-train was whirling by. The alarum resounds again. Valentine falls fainting. Raoul precipitates himself from the window.

It was high time. The orchestra, really intoxicated, could not have gone on. The leader's baton is no longer anything but a broken stick on the prompter's box. The violin strings are broken, and their necks twisted. In his fury the drummer has burst his drum. The counter-bassist has perched on the top of his musical monster. The first clarionet has swallowed the reed of his instrument, and the second hautboy is chewing his reed keys. The groove of the trombone is strained, and finally the unhappy cornist cannot withdraw his hand from the bell of his horn, into which he had thrust it too far.

And the audience! The audience, panting, all in a heat, gesticulates and howls. All the faces are as red as if a fire were burning within their bodies. They crowd each other, hustle each other to get out--the men without hats, the women without mantles! They elbow each other in the corridors, crush between the doors, quarrel, fight! There are no longer any officials, any burgomaster. All are equal amid this infernal frenzy!

[Illustration: They hustle each other to get out]
Some moments after, when all have reached the street, each one resumes his habitual tranquillity, and peaceably enters his house, with a confused remembrance of what he has just experienced.

The fourth act of the "Huguenots," which formerly lasted six hours, began, on this evening at half-past four, and ended at twelve minutes before five.

It had only lasted eighteen minutes!

CHAPTER VIII.
IN WHICH THE ANCIENT AND SOLEMN GERMAN WALTZ BECOMES A WHIRLWIND.

But if the spectators, on leaving the theatre, resumed their customary calm, if they quietly regained their homes, preserving only a sort of passing stupefaction, they had none the less undergone a remarkable exaltation, and overcome and weary as if they had committed some excess of dissipation, they fell heavily upon their beds.

The next day each Quiquendonian had a kind of recollection of what had occurred the evening before. One missed his hat, lost in the hubbub; another a coat-flap, torn in the brawl; one her delicately fashioned shoe, another her best mantle. Memory returned to these worthy people, and with it a certain shame for their unjustifiable agitation. It seemed to them an orgy in which they were the unconscious heroes and heroines. They did not speak of it; they did not wish to think of it. But the most astounded personage in the town was Van Tricasse the burgomaster.

The next morning, on waking, he could not find his wig. Lotchè looked everywhere for it, but in vain. The wig had remained on the field of battle. As for having it publicly claimed by Jean Mistrol, the town-crier,—no, it would not do. It were better to lose the wig than to advertise himself thus, as he had the honour to be the first magistrate of Quiquendone.

The worthy Van Tricasse was reflecting upon this, extended beneath his sheets, with bruised body, heavy head, furred tongue, and burning breast. He felt no desire to get up; on the contrary; and his brain worked more during this morning than it had probably worked before for forty years. The worthy magistrate recalled to his mind all the incidents of the incomprehensible performance. He connected them with the events which had taken place shortly before at Doctor Ox's reception. He tried to discover the causes of the singular excitability which, on two occasions, had betrayed itself in the best citizens of the town.

"What _can_ be going on?" he asked himself. "What giddy spirit has taken possession of my peaceable town of Quiquendone? Are we about to go mad, and must we make the town one vast asylum? For yesterday we were all there, notables, counsellors, judges, advocates, physicians, schoolmasters; and ail, if my memory serves me,—all of us were assailed by this excess of furious folly! But what was there in that infernal music? It is inexplicable! Yet I certainly ate or drank nothing which could put me into such a state. No; yesterday I had for dinner a slice of overdone veal, several spoonfuls of spinach with sugar, eggs, and a little beer and water,—that couldn't get into my head! No! There is something that I cannot explain, and as, after all, I am responsible for the conduct of the citizens, I will have an investigation."

But the investigation, though decided upon by the municipal council, produced no result. If the facts were clear, the causes escaped the sagacity of the magistrates. Besides, tranquillity had been restored in the public mind, and with tranquillity, forgetfulness of the strange scenes of the theatre. The newspapers avoided speaking of them, and the account of the performance which appeared in the "Quiquendone Memorial," made no allusion to this intoxication of the entire audience.

Meanwhile, though the town resumed its habitual phlegm, and became apparently Flemish as before, it was observable that, at bottom, the character and temperament of the people changed little by little. One might have truly said, with Dominique Custos, the doctor, that "their nerves were affected."

Let us explain. This undoubted change only took place under certain conditions. When the Quiquendonians passed through the streets of the town, walked in the squares or along the Vaar, they were always the cold and methodical people of former days. So, too, when they remained at home, some working with their hands and others with their heads,—these doing nothing, those thinking nothing,—their private life was silent, inert, vegetating as before. No quarrels, no household squabbles, no acceleration in the beating of the heart, no excitement of the brain. The mean of their pulsations remained as it was of old, from fifty to fifty-two per minute.

But, strange and inexplicable phenomenon though it was, which would have defied the sagacity of the most ingenious physiologists of the day, if the inhabitants of Quiquendone did not change in their home life, they were visibly changed in their civil life and in their relations between man and man, to which it leads.

If they met together in some public edifice, it did not "work well," as Commissary Passauf expressed it. On change, at the town-hall, in the amphitheatre of the academy, at the sessions of the council, as well as at the reunions of the _savants_, a strange excitement seized the assembled citizens. Their relations with each other became embarrassing before they had been together an hour. In two hours the discussion degenerated into an angry
dispute. Heads became heated, and personalities were used. Even at church, during the sermon, the faithful could not listen to Van Stabel, the minister, in patience, and he threw himself about in the pulpit and lectured his flock with far more than his usual severity. At last this state of things brought about alterations more grave, alas! than that between Gustos and Schut, and if they did not require the interference of the authorities, it was because the antagonists, after returning home, found there, with its calm, forgetfulness of the offences offered and received.

This peculiarity could not be observed by these minds, which were absolutely incapable of recognizing what was passing in them. One person only in the town, he whose office the council had thought of suppressing for thirty years, Michael Passauf, had remarked that this excitement, which was absent from private houses, quickly revealed itself in public edifices; and he asked himself, not without a certain anxiety, what would happen if this infection should ever develop itself in the family mansions, and if the epidemic—this was the word he used—should extend through the streets of the town. Then there would be no more forgetfulness of insults, no more tranquillity, no intermission in the delirium; but a permanent inflammation, which would inevitably bring the Quiquendonians into collision with each other.

"What would happen then?" Commissary Passauf asked himself in terror. "How could these furious savages be arrested? How check these goaded temperaments? My office would be no longer a sinecure, and the council would be obliged to double my salary—unless it should arrest me myself, for disturbing the public peace!"

These very reasonable fears began to be realized. The infection spread from the change, the theatre, the church, the town-hall, the academy, the market, into private houses, and that in less than a fortnight after the terrible performance of the "Huguenots."

Its first symptoms appeared in the house of Collaert, the banker.

That wealthy personage gave a ball, or at least a dancing-party, to the notabilities of the town. He had issued, some months before, a loan of thirty thousand francs, three quarters of which had been subscribed; and to celebrate this financial success, he had opened his drawing-rooms, and given a party to his fellow-citizens.

Everybody knows that Flemish parties are innocent and tranquil enough, the principal expense of which is usually in beer and syrups. Some conversation on the weather, the appearance of the crops, the fine condition of the gardens, the care of flowers, and especially of tulips; a slow and measured dance, from time to time, perhaps a minuet; sometimes a waltz, but one of those German waltzes which achieve a turn and a half per minute, and during which the dancers hold each other as far apart as their arms will permit,--such is the usual fashion of the balls attended by the aristocratic society of Quiquendone. The polka, after being altered to four time, had tried to become accustomed to it; but the dancers always lagged behind the orchestra, no matter how slow the measure, and it had to be abandoned.

These peaceable reunions, in which the youths and maidens enjoyed an honest and moderate pleasure, had never been attended by any outburst of ill-nature. Why, then, on this evening at Collaert the banker's, did the syrups seem to be transformed into heady wines, into sparkling champagne, into heating punches? Why, towards the middle of the evening, did a sort of mysterious intoxication take possession of the guests? Why did the minuet become a jig? Why did the orchestra hurry with its harmonies? Why did the candles, just as at the theatre, burn with unwonted refulgence? What electric current invaded the banker's drawing-rooms? How happened it that the couples held each other so closely, and clasped each other's hands so convulsively, that the "cavaliers seuls" made themselves conspicuous by certain extraordinary steps in that figure usually so grave, so solemn, so majestic, so very proper?

Alas! what OEdipus could have answered these unsolvable questions? Commissary Passauf, who was present at the party, saw the storm coming distinctly, but he could not control it or fly from it, and he felt a kind of intoxication entering his own brain. All his physical and emotional faculties increased in intensity. He was seen, several times, to throw himself upon the confectionery and devour the dishes, as if he had just broken a long fast.

The animation of the ball was increasing all this while. A long murmur, like a dull buzzing, escaped from all breasts. They danced—really danced. The feet were agitated by increasing frenzy. The faces became as purple as those of Silenus. The eyes shone like carbuncles. The general fermentation rose to the highest pitch.

And when the orchestra thundered out the waltz in "Der Freyschütz,"—when this waltz, so German, and with a movement so slow, was attacked with wild arms by the musicians,—ah! it was no longer a waltz, but an insensate whirlwind, a giddy rotation, a gyration worthy of being led by some Mephistopheles, beating the measure with a firebrand! Then a galop, an infernal galop, which lasted an hour without any one being able to stop it, whirled off, in its windings, across the halls, the drawing-rooms, the antechambers, by the staircases, from the cellar to the garret of the opulent mansion, the young men and young girls, the fathers and mothers, people of every age, of every weight, of both sexes; Collaert, the fat banker, and Madame Collaert, and the counsellors, and the magistrates, and the chief justice, and Niklausse, and Madame Van Tricasse, and the Burgomaster Van Tricasse, and the Commissary Passauf himself, who never could recall afterwards who had been his partner on that terrible evening.

[Illustration: it was no longer a waltz]
But she did not forget! And ever since that day she has seen in her dreams the fiery commissary, enfolding her in an impassioned embrace! And "she"--was the amiable Tatanémance!

CHAPTER IX.
IN WHICH DOCTOR OX AND YGÈNE, HIS ASSISTANT, SAY A FEW WORDS.
"Well, Ygène?"
"Well, master, all is ready. The laying of the pipes is finished."
"At last! Now, then, we are going to operate on a large scale, on the masses!"

CHAPTER X.
IN WHICH IT WILL BE SEEN THAT THE EPIDEMIC INVADES THE ENTIRE TOWN, AND WHAT EFFECT IT PRODUCES.

During the following months the evil, in place of subsiding, became more extended. From private houses the epidemic spread into the streets. The town of Quiquendone was no longer to be recognized.

A phenomenon yet stranger than those which had already happened, now appeared; not only the animal kingdom, but the vegetable kingdom itself, became subject to the mysterious influence.

According to the ordinary course of things, epidemics are special in their operation. Those which attack humanity spare the animals, and those which attack the animals spare the vegetables. A horse was never inflicted with smallpox, nor a man with the cattle-plague, nor do sheep suffer from the potato-rot. But here all the laws of nature seemed to be overturned. Not only were the character, temperament, and ideas of the townsfolk changed, but the domestic animals--dogs and cats, horses and cows, asses and goats--suffered from this epidemic influence, as if their habitual equilibrium had been changed. The plants themselves were infected by a similar strange metamorphosis.

In the gardens and vegetable patches and orchards very curious symptoms manifested themselves. Climbing plants climbed more audaciously. Tufted plants became more tufted than ever. Shrubs became trees. Cereals, scarcely sown, showed their little green heads, and gained, in the same length of time, as much in inches as formerly, under the most favourable circumstances, they had gained in fractions. Asparagus attained the height of several feet; the artichokes swelled to the size of melons, the melons to the size of pumpkins, the pumpkins to the size of gourds, the gourds to the size of the belfry bell, which measured, in truth, nine feet in diameter. The cabbages were bushes, and the mushrooms umbrellas.

The fruits did not lag behind the vegetables. It required two persons to eat a strawberry, and four to consume a pear. The grapes also attained the enormous proportions of those so well depicted by Poussin in his "Return of the Envoys to the Promised Land."

[ Illustration: It required two persons to eat a strawberry ]

It was the same with the flowers: immense violets spread the most penetrating perfumes through the air; exaggerated roses shone with the brightest colours; lilies formed, in a few days, impenetrable copses; geraniums, daisies, camellias, rhododendrons, invaded the garden walks, and stifled each other. And the tulips,--those dear liliaceous plants so dear to the Flemish heart, what emotion they must have caused to their zealous cultivators! The worthy Van Bistrom nearly fell over backwards, one day, on seeing in his garden an enormous "Tulipa gesneriana," a gigantic monster, whose cup afforded space to a nest for a whole family of robins!

The entire town flocked to see this floral phenomenon, and renamed it the "Tulipa quiquendonia".

But alas! if these plants, these fruits, these flowers, grew visibly to the naked eye, if all the vegetables insisted on assuming colossal proportions, if the brilliancy of their colours and perfume intoxicated the smell and the sight, they quickly withered. The air which they absorbed rapidly exhausted them, and they soon died, faded, and dried up.

Such was the fate of the famous tulip, which, after several days of splendour, became emaciated, and fell lifeless.

It was soon the same with the domestic animals, from the house-dog to the stable pig, from the canary in its cage to the turkey of the back-court. It must be said that in ordinary times these animals were not less phlegmatic than their masters. The dogs and cats vegetated rather than lived. They never betrayed a wag of pleasure nor a snarl of wrath. Their tails moved no more than if they had been made of bronze. Such a thing as a bite or scratch from any of them had not been known from time immemorial. As for mad dogs, they were looked upon as imaginary beasts, like the griffins and the rest in the menagerie of the apocalypse.

But what a change had taken place in a few months, the smallest incidents of which we are trying to reproduce! Dogs and cats began to show teeth and claws. Several executions had taken place after reiterated offences. A horse was seen, for the first time, to take his bit in his teeth and rush through the streets of Quiquendone; an ox was
observed to precipitate itself, with lowered horns, upon one of his herd; an ass was seen to turn himself ever, with
his legs in the air, in the Place Saint Ernuph, and bray as ass never brayed before; a sheep, actually a sheep,
defended valiantly the cutlets within him from the butcher's knife.

Van Tricasse, the burgomaster, was forced to make police regulations concerning the domestic animals, as,
seized with lunacy, they rendered the streets of Quiquendone unsafe.

But alas! if the animals were mad, the men were scarcely less so. No age was spared by the scourge. Babies soon
became quite insupportable, though till now so easy to bring up; and for the first time Honoré Syntax, the judge, was
obliged to apply the rod to his youthful offspring.

There was a kind of insurrection at the high school, and the dictionaries became formidable missiles in the
classes. The scholars would not submit to be shut in, and, besides, the infection took the teachers themselves, who
overwhelmed the boys and girls with extravagant tasks and punishments.

Another strange phenomenon occurred. All these Quiquendonians, so sober before, whose chief food had been
whipped creams, committed wild excesses in their eating and drinking. Their usual regimen no longer sufficed. Each
stomach was transformed into a gulf, and it became necessary to fill this gulf by the most energetic means. The
consumption of the town was trebled. Instead of two repasts they had six. Many cases of indigestion were reported.
The Counsellor Niklausse could not satisfy his hunger. Van Tricasse found it impossible to assuage his thirst, and
remained in a state of rabid semi-intoxication.

In short, the most alarming symptoms manifested themselves and increased from day to day. Drunken people
 staggered in the streets, and these were often citizens of high position.

Dominique Custos, the physician, had plenty to do with the heartburns, inflammations, and nervous affections,
which proved to what a strange degree the nerves of the people had been irritated.

There were daily quarrels and altercations in the once deserted but now crowded streets of Quiquendone; for
nobody could any longer stay at home. It was necessary to establish a new police force to control the disturbers of
the public peace. A prison-cage was established in the Town Hall, and speedily became full, night and day, of
refractory offenders. Commissary Passauf was in despair.

A marriage was concluded in less than two months,—such a thing had never been seen before. Yes, the son of
Rupp, the schoolmaster, wedded the daughter of Augustine de Rovere, and that fifty-seven days only after he had
petitioned for her hand and heart!

Other marriages were decided upon, which, in old times, would have remained in doubt and discussion for years.
The burgomaster perceived that his own daughter, the charming Suzel, was escaping from his hands.

As for dear Tatanémance, she had dared to sound Commissary Passauf on the subject of a union, which seemed
to her to combine every element of happiness, fortune, honour, youth!

At last,—to reach the depths of abomination,—a duel took place! Yes, a duel with pistols—horse-pistols—at
seventy-five paces, with ball-cartridges. And between whom? Our readers will never believe!

Between M. Frantz Niklausse, the gentle angler, and young Simon Collaert, the wealthy banker's son.

And the cause of this duel was the burgomaster's daughter, for whom Simon discovered himself to be fired with
passion, and whom he refused to yield to the claims of an audacious rival!

CHAPTER XI.
IN WHICH THE QUIQUENDONIANS ADOPT A HEROIC RESOLUTION.

We have seen to what a deplorable condition the people of Quiquendone were reduced. Their heads were in a
ferment. They no longer knew or recognized themselves. The most peaceable citizens had become quarrelsome. If
you looked at them askance, they would speedily send you a challenge. Some let their moustaches grow, and
several—the most belligerent—curled them up at the ends.

This being their condition, the administration of the town and the maintenance of order in the streets became
difficult tasks, for the government had not been organized for such a state of things. The burgomaster—that worthy
Van Tricasse whom we have seen so placid, so dull, so incapable of coming to any decision— the burgomaster
became intractable. His house resounded with the sharpness of his voice. He made twenty decisions a day, scolding
his officials, and himself enforcing the regulations of his administration.

Ah, what a change! The amiable and tranquil mansion of the burgomaster, that good Flemish home—where was
its former calm? What changes had taken place in your household economy! Madame Van Tricasse had become
acid, whimsical, harsh. Her husband sometimes succeeded in drowning her voice by talking louder than she, but
could not silence her. The petulant humour of this worthy dame was excited by everything. Nothing went right. The
servants offended her every moment. Tatanémance, her sister-in-law, who was not less irritable, replied sharply to
her. M. Van Tricasse naturally supported Lotchè, his servant, as is the case in all good households; and this
permanently exasperated Madame, who constantly disputed, discussed, and made scenes with her husband.

"What on earth is the matter with us?" cried the unhappy burgomaster. "What is this fire that is devouring us? Are we possessed with the devil? Ah, Madame Van Tricasse, Madame Van Tricasse, you will end by making me die before you, and thus violate all the traditions of the family!"

The reader will not have forgotten the strange custom by which M. Van Tricasse would become a widower and marry again, so as not to break the chain of descent.

Meanwhile, this disposition of all minds produced other curious effects worthy of note. This excitement, the cause of which has so far escaped us, brought about unexpected physiological changes. Talents, hitherto unrecognized, betrayed themselves. Aptitudes were suddenly revealed. Artists, before common-place, displayed new ability. Politicians and authors arose. Orators proved themselves equal to the most arduous debates, and on every question inflamed audiences which were quite ready to be inflamed. From the sessions of the council, this movement spread to the public political meetings, and a club was formed at Quiquendone; whilst twenty newspapers, the "Quiquendone Signal," the "Quiquendone Impartial," the "Quiquendone Radical," and so on, written in an inflammatory style, raised the most important questions.

But what about? you will ask. Apropos of everything, and of nothing; apropos of the Oudenarde tower, which was falling, and which some wished to pull down, and others to prop up; apropos of the police regulations issued by the council, which some obstinate citizens threatened to resist; apropos of the sweeping of the gutters, repairing the sewers, and so on. Nor did the enraged orators confine themselves to the internal administration of the town. Carried on by the current they went further, and essayed to plunge their fellow-citizens into the hazards of war.

Quiquendone had had for eight or nine hundred years a _casus belli_ of the best quality; but she had preciously laid it up like a relic, and there had seemed some probability that it would become effete, and no longer serviceable. This was what had given rise to the _casus belli_.

It is not generally known that Quiquendone, in this cosy corner of Flanders, lies next to the little town of Virgamen. The territories of the two communities are contiguous.

Well, in 1185, some time before Count Baldwin's departure to the Crusades, a Virgamen cow--not a cow belonging to a citizen, but a cow which was common property, let it be observed--audaciously ventured to pasture on the territory of Quiquendone. This unfortunate beast had scarcely eaten three mouthfuls; but the offence, the abuse, the crime--whatever you will--was committed and duly indicted, for the magistrates, at that time, had already begun to know how to write.

"We will take revenge at the proper moment," said simply Natalis Van Tricasse, the thirty-second predecessor of the burgomaster of this story, "and the Virgamenians will lose nothing by waiting."

The Virgamenians were forewarned. They waited thinking, without doubt, that the remembrance of the offence would fade away with the lapse of time; and really, for several centuries, they lived on good terms with their neighbours of Quiquendone.

But they counted without their hosts, or rather without this strange epidemic, which, radically changing the character of the Quiquendonians, aroused their dormant vengeance.

It was at the club of the Rue Monstrelet that the truculent orator Schut, abruptly introducing the subject to his hearers, inflamed them with the expressions and metaphors used on such occasions. He recalled the offence, the injury which had been done to Quiquendone, and which a nation "jealous of its rights" could not admit as a precedent; he showed the insult to be still existing, the wound still bleeding: he spoke of certain special head-shakings on the part of the people of Virgamen, which indicated in what degree of contempt they regarded the people of Quiquendone; he appealed to his fellow-citizens, who, unconsciously perhaps, had supported this mortal insult for long centuries; he adjured the "children of the ancient town" to have no other purpose than to obtain a substantial reparation. And, lastly, he made an appeal to "all the living energies of the nation!"

With what enthusiasm these words, so new to Quiquendonian ears, were greeted, may be surmised, but cannot be told. All the auditors rose, and with extended arms demanded war with loud cries. Never had the Advocate Schut achieved such a success, and it must be avowed that his triumphs were not few.

The burgomaster, the counsellor, all the notabilities present at this memorable meeting, would have vainly attempted to resist the popular outburst. Besides, they had no desire to do so, and cried as loud, if not louder, than the rest,—

"To the frontier! To the frontier!"

As the frontier was but three kilometers from the walls of Quiquendone, it is certain that the Virgamenians ran a real danger, for they might easily be invaded without having had time to look about them.

Meanwhile, Josse Liefrinck, the worthy chemist, who alone had preserved his senses on this grave occasion, tried to make his fellow-citizens comprehend that guns, cannon, and generals were equally wanting to their design.

They replied to him, not without many impatient gestures, that these generals, cannons, and guns would be
improvised; that the right and love of country sufficed, and rendered a people irresistible. Hereupon the burgomaster himself came forward, and in a sublime harangue made short work of those pusillanimous people who disguise their fear under a veil of prudence, which veil he tore off with a patriotic hand. At this sally it seemed as if the hall would fall in under the applause. The vote was eagerly demanded, and was taken amid acclamations. The cries of "To Virgamen! to Virgamen!" redoubled.

The burgomaster then took it upon himself to put the armies in motion, and in the name of the town he promised the honours of a triumph, such as was given in the times of the Romans to that one of its generals who should return victorious.

Meanwhile, Josse Liefrinck, who was an obstinate fellow, and did not regard himself as beaten, though he really had been, insisted on making another observation. He wished to remark that the triumph was only accorded at Rome to those victorious generals who had killed five thousand of the enemy.

"Well, well!" cried the meeting deliriously.
"And as the population of the town of Virgamen consists of but three thousand five hundred and seventy-five inhabitants, it would be difficult, unless the same person was killed several times--"

But they did not let the luckless logician finish, and he was turned out, hustled and bruised.
"Citizens," said Pulmacher the grocer, who usually sold groceries by retail, "whatever this cowardly apothecary may have said, I engage by myself to kill five thousand Virgamenians, if you will accept my services!"
"Five thousand five hundred!" cried a yet more resolute patriot.
"Six thousand six hundred!" retorted the grocer.
"Seven thousand!" cried Jean Orbideck, the confectioner of the Rue Hemling, who was on the road to a fortune by making whipped creams.
"Adjudged!" exclaimed the burgomaster Van Tricasse, on finding that no one else rose on the bid. And this was how Jean Orbideck the confectioner became general-in-chief of the forces of Quiquendone.

CHAPTER XII.
IN WHICH YGÈNE, THE ASSISTANT, GIVES A REASONABLE PIECE OF ADVICE, WHICH IS EAGERLY REJECTED BY DOCTOR OX.

"Well, master," said Ygène next day, as he poured the pails of sulphuric acid into the troughs of the great battery.
"Well," resumed Doctor Ox, "was I not right? See to what not only the physical developments of a whole nation, but its morality, its dignity, its talents, its political sense, have come! It is only a question of molecules."
"No doubt; but--"
"But--"
"Do you not think that matters have gone far enough, and that these poor devils should not be excited beyond measure?"
"No, no!" cried the doctor; "no! I will go on to the end!"
"As you will, master; the experiment, however, seems to me conclusive, and I think it time to--"
"To--"
"To close the valve."
"You'd better!" cried Doctor Ox. "If you attempt it, I'll throttle you!"

CHAPTER XIII.
IN WHICH IT IS ONCE MORE PROVED THAT BY TAKING HIGH GROUND ALL HUMAN LITTLENESSES MAY BE OVERLOOKED.

"You say?" asked the Burgomaster Van Tricasse of the Counsellor Niklausse.
"I say that this war is necessary," replied Niklausse, firmly, "and that the time has come to avenge this insult."
"Well, I repeat to you," replied the burgomaster, tartly, "that if the people of Quiquendone do not profit by this occasion to vindicate their rights, they will be unworthy of their name."
"And as for me, I maintain that we ought, without delay, to collect our forces and lead them to the front."
"Really, monsieur, really!" replied Van Tricasse. "And do you speak thus to _me_?"
"To yourself, monsieur the burgomaster; and you shall hear the truth, unwelcome as it may be."
"And you shall hear it yourself, counsellor," returned Van Tricasse in a passion, "for it will come better from my mouth than from yours! Yes, monsieur, yes, any delay would be dishonourable. The town of Quiquendone has
waited nine hundred years for the moment to take its revenge, and whatever you may say, whether it pleases you or not, we shall march upon the enemy."

"Ah, you take it thus!" replied Niklausse harshly. "Very well, monsieur, we will march without you, if it does not please you to go."

"A burgomaster's place is in the front rank, monsieur!"

[Illustration: "A burgomaster's place is in the front rank, monsieur!" ]

"And that of a counsellor also, monsieur."

"You insult me by thwarting all my wishes," cried the burgomaster, whose fists seemed likely to hit out before long.

"And you insult me equally by doubting my patriotism," cried Niklausse, who was equally ready for a tussle.

"I tell you, monsieur, that the army of Quiquendone shall be put in motion within two days!"

"And I repeat to you, monsieur, that forty-eight hours shall not pass before we shall have marched upon the enemy!"

It is easy to see, from this fragment of conversation, that the two speakers supported exactly the same idea. Both wished for hostilities; but as their excitement disposed them to altercation, Niklausse would not listen to Van Tricasse, nor Van Tricasse to Niklausse. Had they been of contrary opinions on this grave question, had the burgomaster favoured war and the counsellor insisted on peace, the quarrel would not have been more violent. These two old friends gazed fiercely at each other. By the quickened beating of their hearts, their red faces, their contracted pupils, the trembling of their muscles, their harsh voices, it might be conjectured that they were ready to come to blows.

But the striking of a large clock happily checked the adversaries at the moment when they seemed on the point of assaulting each other.

"At last the hour has come!" cried the burgomaster.

"What hour?" asked the counsellor.

"The hour to go to the belfry tower."

"It is true, and whether it pleases you or not, I shall go, monsieur."

"And I too."

"Let us go!"

"Let us go!"

It might have been supposed from these last words that a collision had occurred, and that the adversaries were proceeding to a duel; but it was not so. It had been agreed that the burgomaster and the counsellor, as the two principal dignitaries of the town, should repair to the Town Hall, and there show themselves on the high tower which overlooked Quiquendone; that they should examine the surrounding country, so as to make the best strategetic plan for the advance of their troops.

Though they were in accord on this subject, they did not cease to quarrel bitterly as they went. Their loud voices were heard resounding in the streets; but all the passers-by were now accustomed to this; the exasperation of the dignitaries seemed quite natural, and no one took notice of it. Under the circumstances, a calm man would have been regarded as a monster.

The burgomaster and the counsellor, having reached the porch of the belfry, were in a paroxysm of fury. They were no longer red, but pale. This terrible discussion, though they had the same idea, had produced internal spasms, and every one knows that paleness shows that anger has reached its last limits.

At the foot of the narrow tower staircase there was a real explosion. Who should go up first? Who should first creep up the winding steps? Truth compels us to say that there was a tussle, and that the Counsellor Niklausse, forgetful of all that he owed to his superior, to the supreme magistrate of the town, pushed Van Tricasse violently back, and dashed up the staircase first.

Both ascended, denouncing and raging at each other at every step. It was to be feared that a terrible climax would occur on the summit of the tower, which rose three hundred and fifty-seven feet above the pavement.

The two enemies soon got out of breath, however, and in a little while, at the eightieth step, they began to move up heavily, breathing loud and short.

Then—was it because of their being out of breath?—their wrath subsided, or at least only betrayed itself by a succession of unseemly epithets. They became silent, and, strange to say, it seemed as if their excitement diminished as they ascended higher above the town. A sort of lull took place in their minds. Their brains became cooler, and simmered down like a coffee-pot when taken away from the fire. Why?

We cannot answer this "why," but the truth is that, having reached a certain landing-stage, two hundred and sixty-six feet above ground, the two adversaries sat down and, really more calm, looked at each other without any anger in their faces.
"How high it is!" said the burgomaster, passing his handkerchief over his rubicund face.

"Very high!" returned the counsellor. "Do you know that we have gone fourteen feet higher than the Church of Saint Michael at Hamburg?"

"I know it," replied the burgomaster, in a tone of vanity very pardonable in the chief magistrate of Quiquendone.

The two notabilities soon resumed their ascent, casting curious glances through the loopholes pierced in the tower walls. The burgomaster had taken the head of the procession, without any remark on the part of the counsellor. It even happened that at about the three hundred and fourth step, Van Tricasse being completely tired out, Niklausse kindly pushed him from behind. The burgomaster offered no resistance to this, and, when he reached the platform of the tower, said graciously,--

"Thanks, Niklausse; I will do the same for you one day."

A little while before it had been two wild beasts, ready to tear each other to pieces, who had presented themselves at the foot of the tower; it was now two friends who reached its summit.

The weather was superb. It was the month of May. The sun had absorbed all the vapours. What a pure and limpid atmosphere! The most minute objects over a broad space might be discerned. The walls of Virgamen, glistening in their whiteness,—its red, pointed roofs, its belfries shining in the sunlight—appeared a few miles off. And this was the town that was foredoomed to all the horrors of fire and pillage!

The burgomaster and the counsellor sat down beside each other on a small stone bench, like two worthy people whose souls were in close sympathy. As they recovered breath, they looked around; then, after a brief silence,—

"How fine this is!" cried the burgomaster.

"Yes, it is admirable!" replied the counsellor. "Does it not seem to you, my good Van Tricasse, that humanity is destined to dwell rather at such heights, than to crawl about on the surface of our globe?"

"I agree with you, honest Niklausse," returned the burgomaster, "I agree with you. You seize sentiment better when you get clear of nature. You breathe it in every sense! It is at such heights that philosophers should be formed, and that sages should live, above the miseries of this world!"

"Shall we go around the platform?" asked the counsellor.

"Let us go around the platform," replied the burgomaster.

And the two friends, arm in arm, and putting, as formerly, long pauses between their questions and answers, examined every point of the horizon.

[Illustration: The two friends, arm in arm]

"It is at least seventeen years since I have ascended the belfry tower," said Van Tricasse.

"I do not think I ever came up before," replied Niklausse; "and I regret it, for the view from this height is sublime! Do you see, my friend, the pretty stream of the Vaar, as it winds among the trees?"

"And, beyond, the heights of Saint Hermandad! How gracefully they shut in the horizon! Observe that border of green trees, which Nature has so picturesquely arranged! Ah, Nature, Nature, Niklausse! Could the hand of man ever hope to rival her?"

"It is enchanting, my excellent friend," replied the counsellor. "See the flocks and herds lying in the verdant pastures,—the oxen, the cows, the sheep!"

"And the labourers going to the fields! You would say they were Arcadian shepherds; they only want a bagpipe!"

"And over all this fertile country the beautiful blue sky, which no vapour dims! Ah, Niklausse, one might become a poet here! I do not understand why Saint Simeon Stylites was not one of the greatest poets of the world."

"It was because, perhaps, his column was not high enough," replied the counsellor, with a gentle smile.

At this moment the chimes of Quiquendone rang out. The clear bells played one of their most melodious airs.

The two friends listened in ecstasy.

Then in his calm voice, Van Tricasse said,—

"But what, friend Niklausse, did we come to the top of this tower to do?"

"In fact," replied the counsellor, "we have permitted ourselves to be carried away by our reveries——"

"What did we come here to do?" repeated the burgomaster.

"We came," said Niklausse, "to breathe this pure air, which human weaknesses have not corrupted."

"Well, shall we descend, friend Niklausse?"

"Let us descend, friend Van Tricasse."

They gave a parting glance at the splendid panorama which was spread before their eyes; then the burgomaster passed down first, and began to descend with a slow and measured pace. The counsellor followed a few steps behind. They reached the landing-stage at which they had stopped on ascending. Already their cheeks began to redden. They tarried a moment, then resumed their descent.

In a few moments Van Tricasse begged Niklausse to go more slowly, as he felt him on his heels, and it "worried
him." It even did more than worry him; for twenty steps lower down he ordered the counsellor to stop, that he might get on some distance ahead.

The counsellor replied that he did not wish to remain with his leg in the air to await the good pleasure of the burgomaster, and kept on.

Van Tricasse retorted with a rude expression.

The counsellor responded by an insulting allusion to the burgomaster's age, destined as he was, by his family traditions, to marry a second time.

The burgomaster went down twenty steps more, and warned Niklausse that this should not pass thus.

Niklausse replied that, at all events, he would pass down first; and, the space being very narrow, the two dignitaries came into collision, and found themselves in utter darkness. The words "blockhead" and "booby" were the mildest which they now applied to each other.

"We shall see, stupid beast!" cried the burgomaster,—"we shall see what figure you will make in this war, and in what rank you will march!"

"In the rank that precedes yours, you silly old fool!" replied Niklausse.

Then there were other cries, and it seemed as if bodies were rolling over each other. What was going on? Why were these dispositions so quickly changed? Why were the gentle sheep of the tower's summit metamorphosed into tigers two hundred feet below it?

However this might be, the guardian of the tower, hearing the noise, opened the door, just at the moment when the two adversaries, bruised, and with protruding eyes, were in the act of tearing each other's hair,—fortunately they wore wigs.

"You shall give me satisfaction for this!" cried the burgomaster, shaking his fist under his adversary's nose.

"Whenever you please!" growled the Counsellor Niklausse, attempting to respond with a vigorous kick.

The guardian, who was himself in a passion,—I cannot say why,—thought the scene a very natural one. I know not what excitement urged him to take part in it, but he controlled himself, and went off to announce throughout the neighbourhood that a hostile meeting was about to take place between the Burgomaster Van Tricasse and the Counsellor Niklausse.

CHAPTER XIV.

IN WHICH MATTERS GO SO FAR THAT THE INHABITANTS OF QUIQUENDONE, THE READER, AND EVEN THE AUTHOR, DEMAND AN IMMEDIATE DÉNOUEMENT.

The last incident proves to what a pitch of excitement the Quiquendonians had been wrought. The two oldest friends in the town, and the most gentle—before the advent of the epidemic, to reach this degree of violence! And that, too, only a few minutes after their old mutual sympathy, their amiable instincts, their contemplative habit, had been restored at the summit of the tower!

On learning what was going on, Doctor Ox could not contain his joy. He resisted the arguments which Ygéne, who saw what a serious turn affairs were taking, addressed to him. Besides, both of them were infected by the general fury. They were not less excited than the rest of the population, and they ended by quarrelling as violently as the burgomaster and the counsellor.

Besides, one question eclipsed all others, and the intended duels were postponed to the issue of the Virgamenian difficulty. No man had the right to shed his blood uselessly, when it belonged, to the last drop, to his country in danger. The affair was, in short, a grave one, and there was no withdrawing from it.

The Burgomaster Van Tricasse, despite the warlike ardour with which he was filled, had not thought it best to throw himself upon the enemy without warning him. He had, therefore, through the medium of the rural policeman, Hottering, sent to demand reparation of the Virgamenians for the offence committed, in 1195, on the Quiquendonian territory.

The authorities of Virgamen could not at first imagine of what the envoy spoke, and the latter, despite his official character, was conducted back to the frontier very cavalierly.

Van Tricasse then sent one of the aides-de-camp of the confectioner-general, citizen Hildevert Shuman, a manufacturer of barley-sugar, a very firm and energetic man, who carried to the authorities of Virgamen the original minute of the indictment drawn up in 1195 by order of the Burgomaster Natalis Van Tricasse.

The authorities of Virgamen burst out laughing, and served the aide-de-camp in the same manner as the rural policeman.

The burgomaster then assembled the dignitaries of the town.

A letter, remarkably and vigorously drawn up, was written as an ultimatum; the cause of quarrel was plainly stated, and a delay of twenty-four hours was accorded to the guilty city in which to repair the outrage done to
Quiquendone.

The letter was sent off, and returned a few hours afterwards, torn to bits, which made so many fresh insults. The Virgamenians knew of old the forbearance and equanimity of the Quiquendonians, and made sport of them and their demand, of their _casus belli_ and their _ultimatum_.

There was only one thing left to do,—to have recourse to arms, to invoke the God of battles, and, after the Prussian fashion, to hurl themselves upon the Virgamenians, before the latter could be prepared.

This decision was made by the council in solemn conclave, in which cries, objurgations, and menacing gestures were mingled with unexampled violence. An assembly of idiots, a congress of madmen, a club of maniacs, would not have been more tumultuous.

As soon as the declaration of war was known, General Jean Orbideck assembled his troops, perhaps two thousand three hundred and ninety-three combatants from a population of two thousand three hundred and ninety-three souls. The women, the children, the old men, were joined with the able-bodied males. The guns of the town had been put under requisition. Five had been found, two of which were without cocks, and these had been distributed to the advance-guard. The artillery was composed of the old culverin of the château, taken in 1339 at the attack on Quesnoy, one of the first occasions of the use of cannon in history, and which had not been fired off for five centuries. Happily for those who were appointed to take it in charge there were no projectiles with which to load it; but such as it was, this engine might well impose on the enemy. As for side-arms, they had been taken from the museum of antiquities,—flint hatchets, helmets, Frankish battle-axes, javelins, halberds, rapiers, and so on; and also in those domestic arsenals commonly known as "cupboards" and "kitchens." But courage, the right, hatred of the foreigner, the yearning for vengeance, were to take the place of more perfect engines, and to replace—at least it was hoped so—the modern mitrailleuses and breech-loaders.

The troops were passed in review. Not a citizen failed at the roll-call. General Orbideck, whose seat on horseback was far from firm, and whose steed was a vicious beast, was thrown three times in front of the army; but he got up again without injury, and this was regarded as a favourable omen. The burgomaster, the counsellor, the civil commissary, the chief justice, the school-teacher, the banker, the rector,—in short, all the notabilities of the town,—marched at the head. There were no tears shed, either by mothers, sisters, or daughters. They urged on their husbands, fathers, brothers, to the combat, and even followed them and formed the rear-guard, under the orders of the courageous Madame Van Tricasse.

The crier, Jean Mistrol, blew his trumpet; the army moved off, and directed itself, with fervent cries, towards the Oudenarde gate.

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At the moment when the head of the column was about to pass the walls of the town, a man threw himself before it.

"Stop! stop! Fools that you are!" he cried. "Suspend your blows! Let me shut the valve! You are not changed in nature! You are good citizens, quiet and peaceable! If you are so excited, it is my master, Doctor Ox's, fault! It is an experiment! Under the pretext of lighting your streets with oxyhydric gas, he has saturated—"

The assistant was beside himself; but he could not finish. At the instant that the doctor's secret was about to escape his lips, Doctor Ox himself pounced upon the unhappy Ygène in an indescribable rage, and shut his mouth by blows with his fist.

It was a battle. The burgomaster, the counsellor, the dignitaries, who had stopped short on Ygène's sudden appearance, carried away in turn by their exasperation, rushed upon the two strangers, without waiting to hear either the one or the other.

Doctor Ox and his assistant, beaten and lashed, were about to be dragged, by order of Van Tricasse, to the round-house, when,--

CHAPTER XV.

IN WHICH THE DÉNOUEMENT TAKES PLACE.

When a formidable explosion resounded. All the atmosphere which enveloped Quiquendone seemed on fire. A flame of an intensity and vividness quite unwonted shot up into the heavens like a meteor. Had it been night, this flame would have been visible for ten leagues around.

The whole army of Quiquendone fell to the earth, like an army of monks. Happily there were no victims; a few scratches and slight hurts were the only result. The confectioner, who, as chance would have it, had not fallen from his horse this time, had his plume singed, and escaped without any further injury.

[ Illustration: The whole army of Quiquendone fell to the earth]

What had happened?
Something very simple, as was soon learned; the gasworks had just blown up. During the absence of the doctor and his assistant, some careless mistake had no doubt been made. It is not known how or why a communication had been established between the reservoir which contained the oxygen and that which enclosed the hydrogen. An explosive mixture had resulted from the union of these two gases, to which fire had accidentally been applied.

This changed everything; but when the army got upon its feet again, Doctor Ox and his assistant Ygène had disappeared.

CHAPTER XVI.
IN WHICH THE INTELLIGENT READER SEES THAT HE HAS GUESSED CORRECTLY, DESPITE ALL THE AUTHOR'S PRECAUTIONS.

After the explosion, Quiquendone immediately became the peaceable, phlegmatic, and Flemish town it formerly was.

After the explosion, which indeed did not cause a very lively sensation, each one, without knowing why, mechanically took his way home, the burgomaster leaning on the counsellor's arm, the advocate Schut going arm in arm with Custos the doctor, Frantz Niklausse walking with equal familiarity with Simon Collaert, each going tranquilly, noiselessly, without even being conscious of what had happened, and having already forgotten Virgamen and their revenge. The general returned to his confections, and his aide-de-camp to the barley-sugar.

Thus everything had become calm again; the old existence had been resumed by men and beasts, beasts and plants; even by the tower of Oudenarde gate, which the explosion--these explosions are sometimes astonishing--had set upright again!

And from that time never a word was spoken more loudly than another, never a discussion took place in the town of Quiquendone. There were no more politics, no more clubs, no more trials, no more policemen! The post of the Commissary Passauf became once more a sinecure, and if his salary was not reduced, it was because the burgomaster and the counsellor could not make up their minds to decide upon it.

From time to time, indeed, Passauf flitted, without any one suspecting it, through the dreams of the inconsolable Tatanémance.

As for Frantz's rival, he generously abandoned the charming Suzel to her lover, who hastened to wed her five or six years after these events.

And as for Madame Van Tricasse, she died ten years later, at the proper time, and the burgomaster married Mademoiselle Pélagie Van Tricasse, his cousin, under excellent conditions--for the happy mortal who should succeed him.

CHAPTER XVII. IN WHICH DOCTOR OX'S THEORY IS EXPLAINED.

What, then, had this mysterious Doctor Ox done? Tried a fantastic experiment,--nothing more.

After having laid down his gas-pipes, he had saturated, first the public buildings, then the private dwellings, finally the streets of Quiquendone, with pure oxygen, without letting in the least atom of hydrogen.

This gas, tasteless and odorless, spread in generous quantity through the atmosphere, causes, when it is breathed, serious agitation to the human organism. One who lives in an air saturated with oxygen grows excited, frantic, burns!

You scarcely return to the ordinary atmosphere before you return to your usual state. For instance, the counsellor and the burgomaster at the top of the belfry were themselves again, as the oxygen is kept, by its weight, in the lower strata of the air.

But one who lives under such conditions, breathing this gas which transforms the body physiologically as well as the soul, dies speedily, like a madman.

It was fortunate, then, for the Quiquendonians, that a providential explosion put an end to this dangerous experiment, and abolished Doctor Ox's gas-works.

To conclude: Are virtue, courage, talent, wit, imagination,--are all these qualities or faculties only a question of oxygen?

Such is Doctor Ox's theory; but we are not bound to accept it, and for ourselves we utterly reject it, in spite of the curious experiment of which the worthy old town of Quiquendone was the theatre.

MASTER ZACHARIUS
CHAPTER I.
A WINTER NIGHT.

The city of Geneva lies at the west end of the lake of the same name. The Rhone, which passes through the town at the outlet of the lake, divides it into two sections, and is itself divided in the centre of the city by an island placed in mid-stream. A topographical feature like this is often found in the great depôts of commerce and industry. No doubt the first inhabitants were influenced by the easy means of transport which the swift currents of the rivers offered them—those "roads which walk along of their own accord," as Pascal puts it. In the case of the Rhone, it would be the road that ran along.

Before new and regular buildings were constructed on this island, which was enclosed like a Dutch galley in the middle of the river, the curious mass of houses, piled one on the other, presented a delightfully confused _coup-d'oeil_. The small area of the island had compelled some of the buildings to be perched, as it were, on the piles, which were entangled in the rough currents of the river. The huge beams, blackened by time, and worn by the water, seemed like the claws of an enormous crab, and presented a fantastic appearance. The little yellow streams, which were like cobwebs stretched amid this ancient foundation, quivered in the darkness, as if they had been the leaves of some old oak forest, while the river engulfed in this forest of piles, foamed and roared most mournfully.

One of the houses of the island was striking for its curiously aged appearance. It was the dwelling of the old clockmaker, Master Zacharius, whose household consisted of his daughter Gerande, Aubert Thun, his apprentice, and his old servant Scholastique.

There was no man in Geneva to compare in interest with this Zacharius. His age was past finding out. Not the oldest inhabitant of the town could tell for how long his thin, pointed head had shaken above his shoulders, nor the day when, for the first time, he had-walked through the streets, with his long white locks floating in the wind. The man did not live; he vibrated like the pendulum of his clocks. His spare and cadaverous figure was always clothed in dark colours. Like the pictures of Leonardo di Vinci, he was sketched in black.

Gerande had the pleasantest room in the whole house, whence, through a narrow window, she had the inspiriting view of the snowy peaks of Jura; but the bedroom and workshop of the old man were a kind of cavern close on to the water, the floor of which rested on the piles.

From time immemorial Master Zacharius had never come out except at meal times, and when he went to regulate the different clocks of the town. He passed the rest of his time at his bench, which was covered with numerous clockwork instruments, most of which he had invented himself. For he was a clever man; his works were valued in all France and Germany. The best workers in Geneva readily recognized his superiority, and showed that he was an honour to the town, by saying, "To him belongs the glory of having invented the escapement." In fact, the birth of true clock-work dates from the invention which the talents of Zacharius had discovered not many years before.

After he had worked hard for a long time, Zacharius would slowly put his tools away, cover up the delicate pieces that he had been adjusting with glasses, and stop the active wheel of his lathe; then he would raise a trap-door constructed in the floor of his workshop, and, stooping down, used to inhale for hours together the thick vapours of the Rhone, as it dashed along under his eyes.

After the silent meal, the old clockmaker left the table without embracing his daughter, or saying his usual "Good-night" to all. He left by the narrow door leading to his den, and the staircase groaned under his heavy footsteps as he went down.

Gerande, Aubert, and Scholastique sat for some minutes without speaking. On this evening the weather was dull; the clouds dragged heavily on the Alps, and threatened rain; the severe climate of Switzerland made one feel sad, while the south wind swept round the house, and whistled ominously.

"My dear young lady," said Scholastique, at last, "do you know that our master has been out of sorts for several days? Holy Virgin! I know he has had no appetite, because his words stick in his inside, and it would take a very clever devil to drag even one out of him."

"My father has some secret cause of trouble, that I cannot even guess," replied Gerande, as a sad anxiety spread over her face.

"Mademoiselle, don't let such sadness fill your heart. You know the strange habits of Master Zacharius. Who can
read his secret thoughts in his face? No doubt some fatigue has overcome him, but to-morrow he will have forgotten it, and be very sorry to have given his daughter pain."

It was Aubert who spoke thus, looking into Gerande's lovely eyes. Aubert was the first apprentice whom Master Zacharius had ever admitted to the intimacy of his labours, for he appreciated his intelligence, discretion, and goodness of heart; and this young man had attached himself to Gerande with the earnest devotion natural to a noble nature.

Gerande was eighteen years of age. Her oval face recalled that of the artless Madonnas whom veneration still displays at the street corners of the antique towns of Brittany. Her eyes betrayed an infinite simplicity. One would love her as the sweetest realization of a poet's dream. Her apparel was of modest colours, and the white linen which was folded about her shoulders had the tint and perfume peculiar to the linen of the church. She led a mystical existence in Geneva, which had not as yet been delivered over to the dryness of Calvinism.

While, night and morning, she read her Latin prayers in her iron-clasped missal, Gerande had also discovered a hidden sentiment in Aubert Thun's heart, and comprehended what a profound devotion the young workman had for her. Indeed, the whole world in his eyes was condensed into this old clockmaker's house, and he passed all his time near the young girl, when he left her father's workshop, after his work was over.

Old Scholastique saw all this, but said nothing. Her loquacity exhausted itself in preference on the evils of the times, and the little worries of the household. Nobody tried to stop its course. It was with her as with the musical snuff-boxes which they made at Geneva; once wound up, you must break them before you will prevent their playing all their airs through.

Finding Gerande absorbed in a melancholy silence, Scholastique left her old wooden chair, fixed a taper on the end of a candlestick, lit it, and placed it near a small waxen Virgin, sheltered in her niche of stone. It was the family custom to kneel before this protecting Madonna of the domestic hearth, and to beg her kindly watchfulness during the coming night; but on this evening Gerande remained silent in her seat.

"Well, well, dear demoiselle," said the astonished Scholastique, "supper is over, and it is time to go to bed. Why do you tire your eyes by sitting up late? Ah, Holy Virgin! It's much better to sleep, and to get a little comfort from happy dreams! In these detestable times in which we live, who can promise herself a fortunate day?"

"Ought we not to send for a doctor for my father?" asked Gerande.

"A doctor!" cried the old domestic. "Has Master Zacharius ever listened to their fancies and pompous sayings? He might accept medicines for the watches, but not for the body!"

"What shall we do?" murmured Gerande. "Has he gone to work, or to rest?"

"Gerande," answered Aubert softly, "some mental trouble annoys your father, that is all."

"Do you know what it is, Aubert?"

"Perhaps, Gerande"

"Tell us, then," cried Scholastique eagerly, economically extinguishing her taper.

"For several days, Gerande," said the young apprentice, "something absolutely incomprehensible has been going on. All the watches which your father has made and sold for some years have suddenly stopped. Very many of them have been brought back to him. He has carefully taken them to pieces; the springs were in good condition, and the wheels well set. He has put them together yet more carefully; but, despite his skill, they will not go."

"The devil's in it!" cried Scholastique.

"Why say you so?" asked Gerande. "It seems very natural to me. Nothing lasts for ever in this world. The infinite cannot be fashioned by the hands of men."

"It is none the less true," returned Aubert, "that there is in this something very mysterious and extraordinary. I have myself been helping Master Zacharius to search for the cause of this derangement of his watches; but I have not been able to find it, and more than once I have let my tools fall from my hands in despair."

"But why undertake so vain a task?" resumed Scholastique. "Is it natural that a little copper instrument should go of itself, and mark the hours? We ought to have kept to the sun-dial!"

"You will not talk thus, Scholastique," said Aubert, "when you learn that the sun-dial was invented by Cain."

"Good heavens! what are you telling me?"

"Do you think," asked Gerande simply, "that we might pray to God to give life to my father's watches?"

"Without doubt," replied Aubert.

"Good! They will be useless prayers," muttered the old servant, "but Heaven will pardon them for their good intent."

The taper was relighted. Scholastique, Gerande, and Aubert knelt down together upon the tiles of the room. The young girl prayed for her mother's soul, for a blessing for the night, for travellers and prisoners, for the good and the wicked, and more earnestly than all for the unknown misfortunes of her father.

[Illustration: The young girl prayed]
Then the three devout souls rose with some confidence in their hearts, because they had laid their sorrow on the bosom of God.

Aubert repaired to his own room; Gerande sat pensively by the window, whilst the last lights were disappearing from the city streets; and Scholastique, having poured a little water on the flickering embers, and shut the two enormous bolts on the door, threw herself upon her bed, where she was soon dreaming that she was dying of fright.

Meanwhile the terrors of this winter's night had increased. Sometimes, with the whirlpools of the river, the wind engulfed itself among the piles, and the whole house shivered and shook; but the young girl, absorbed in her sadness, thought only of her father. After hearing what Aubert told her, the malady of Master Zacharius took fantastic proportions in her mind; and it seemed to her as if his existence, so dear to her, having become purely mechanical, no longer moved on its worn-out pivots without effort.

Suddenly the pent-house shutter, shaken by the squall, struck against the window of the room. Gerande shuddered and started up without understanding the cause of the noise which thus disturbed her reverie. When she became a little calmer she opened the sash. The clouds had burst, and a torrent-like rain pattered on the surrounding roofs. The young girl leaned out of the window to draw to the shutter shaken by the wind, but she feared to do so. It seemed to her that the rain and the river, confounding their tumultuous waters, were submerging the frail house, the planks of which creaked in every direction. She would have flown from her chamber, but she saw below the flickering of a light which appeared to come from Master Zacharius's retreat, and in one of those momentary calms during which the elements keep a sudden silence, her ear caught plaintive sounds. She tried to shut her window, but could not. The wind violently repelled her, like a thief who was breaking into a dwelling.

Gerande thought she would go mad with terror. What was her father doing? She opened the door, and it escaped from her hands, and slammed loudly with the force of the tempest. Gerande then found herself in the dark supper-room, succeeded in gaining, on tiptoe, the staircase which led to her father's shop, and pale and fainting, glided down.

The old watchmaker was upright in the middle of the room, which resounded with the roaring of the river. His bristling hair gave him a sinister aspect. He was talking and gesticulating, without seeing or hearing anything. Gerande stood still on the threshold.

"It is death!" said Master Zacharius, in a hollow voice; "it is death! Why should I live longer, now that I have dispersed my existence over the earth? For I, Master, Zacharius, am really the creator of all the watches that I have fashioned! It is a part of my very soul that I have shut up in each of these cases of iron, silver, or gold! Every time that one of these accursed watches stops, I feel my heart cease beating, for I have regulated them with its pulsations!"

As he spoke in this strange way, the old man cast his eyes on his bench. There lay all the pieces of a watch that he had carefully taken apart. He took up a sort of hollow cylinder, called a barrel, in which the spring is enclosed, and removed the steel spiral, but instead of relaxing itself, according to the laws of its elasticity, it remained coiled on itself like a sleeping viper. It seemed knotted, like impotent old men whose blood has long been congealed. Master Zacharius vainly essayed to uncoil it with his thin fingers, the outlines of which were exaggerated on the wall; but he tried in vain, and soon, with a terrible cry of anguish and rage, he threw it through the trap-door into the boiling Rhone.

Gerande, her feet riveted to the floor, stood breathless and motionless. She wished to approach her father, but could not. Giddy hallucinations took possession of her. Suddenly she heard, in the shade, a voice murmur in her ears,--

"Gerande, dear Gerande! grief still keeps you awake. Go in again, I beg of you; the night is cold."
"Aubert!" whispered the young girl. "You!"
"Ought I not to be troubled by what troubles you?"
These soft words sent the blood back into the young girl's heart. She leaned on Aubert's arm, and said to him,--

"My father is very ill, Aubert! You alone can cure him, for this disorder of the mind would not yield to his daughter's consolings. His mind is attacked by a very natural delusion. His is attacked by a very natural delusion, and in working with him, repairing the watches, you will bring him back to reason. Aubert," she continued, "it is not true, is it, that his life is mixed up with that of his watches?"

Aubert did not reply.
"But is my father's a trade condemned by God?" asked Gerande, trembling.
"I know not," returned the apprentice, warming the cold hands of the girl with his own. "But go back to your room, my poor Gerande, and with sleep recover hope!"

Gerande slowly returned to her chamber, and remained there till daylight, without sleep closing her eyelids. Meanwhile, Master Zacharius, always mute and motionless, gazed at the river as it rolled turbulently at his feet.
CHAPTER II.
THE PRIDE OF SCIENCE.

The severity of the Geneva merchant in business matters has become proverbial. He is rigidly honourable, and excessively just. What must, then, have been the shame of Master Zacharius, when he saw these watches, which he had so carefully constructed, returning to him from every direction?

It was certain that these watches had suddenly stopped, and without any apparent reason. The wheels were in a good condition and firmly fixed, but the springs had lost all elasticity. Vainly did the watchmaker try to replace them; the wheels remained motionless. These unaccountable derangements were greatly to the old man's discredit. His noble inventions had many times brought upon him suspicions of sorcery, which now seemed confirmed. These rumours reached Gerande, and she often trembled for her father, when she saw malicious glances directed towards him.

Yet on the morning after this night of anguish, Master Zacharius seemed to resume work with some confidence. The morning sun inspired him with some courage. Aubert hastened to join him in the shop, and received an affable "Good-day."

"I am better," said the old man. "I don't know what strange pains in the head attacked me yesterday, but the sun has quite chased them away, with the clouds of the night."

"In faith, master," returned Aubert, "I don't like the night for either of us!"

"And thou art right, Aubert. If you ever become a great man, you will understand that day is as necessary to you as food. A great savant should be always ready to receive the homage of his fellow-men."

"Master, it seems to me that the pride of science has possessed you."

"Pride, Aubert! Destroy my past, annihilate my present, dissipate my future, and then it will be permitted to me to live in obscurity! Poor boy, who comprehends not the sublime things to which my art is wholly devoted! Art thou not but a tool in my hands?"

"Yet, Master Zacharius," resumed Aubert, "I have more than once merited your praise for the manner in which I adjusted the most delicate parts of your watches and clocks."

"No doubt, Aubert; thou art a good workman, such as I love; but when thou workest, thou thinkest thou hast in thy hands but copper, silver, gold; thou dost not perceive these metals, which my genius animates, palpitating like living flesh! So that thou wilt not die, with the death of thy works!"

Master Zacharius remained silent after these words; but Aubert essayed to keep up the conversation.

"Indeed, master," said he, "I love to see you work so unceasingly! You will be ready for the festival of our corporation, for I see that the work on this crystal watch is going forward famously."

"No doubt, Aubert," cried the old watchmaker, "and it will be no slight honour for me to have been able to cut and shape the crystal to the durability of a diamond! Ah, Louis Berghem did well to perfect the art of diamond-cutting, which has enabled me to polish and pierce the hardest stones!"

Master Zacharius was holding several small watch pieces of cut crystal, and of exquisite workmanship. The wheels, pivots, and case of the watch were of the same material, and he had employed remarkable skill in this very difficult task.

"Would it not be fine," said he, his face flushing, "to see this watch palpitating beneath its transparent envelope, and to be able to count the beatings of its heart?"

"I will wager, sir," replied the young apprentice, "that it will not vary a second in a year."

"And you would wager on a certainty! Have I not imparted to it all that is purest of myself? And does my heart vary? My heart, I say?"

Aubert did not dare to lift his eyes to his master's face.

"Tell me frankly," said the old man sadly. "Have you never taken me for a madman? Do you not think me sometimes subject to dangerous folly? Yes; is it not so? In my daughter's eyes and yours, I have often read my condemnation. Oh!" he cried, as if in pain, "to be misunderstood by those whom one most loves in the world! But I will prove victoriously to thee, Aubert, that I am right! Do not shake thy head, for thou wilt be astounded. The day on which thou understandest how to listen to and comprehend me, thou wilt see that I have discovered the secrets of existence, the secrets of the mysterious union of the soul with the body!"

[Illustration: "Thou wilt see that I have discovered the secrets of existence."]

As he spoke thus, Master Zacharius appeared superb in his vanity. His eyes glittered with a supernatural fire, and his pride illumined every feature. And truly, if ever vanity was excusable, it was that of Master Zacharius!

The watchmaking art, indeed, down to his time, had remained almost in its infancy. From the day when Plato, four centuries before the Christian era, invented the night watch, a sort of clepsydra which indicated the hours of the night by the sound and playing of a flute, the science had continued nearly stationary. The masters paid more
attention to the arts than to mechanics, and it was the period of beautiful watches of iron, copper, wood, silver, which were richly engraved, like one of Cellini’s ewers. They made a masterpiece of chasing, which measured time imperfectly, but was still a masterpiece. When the artist's imagination was not directed to the perfection of modelling, it set to work to create clocks with moving figures and melodious sounds, whose appearance took all attention. Besides, who troubled himself, in those days, with regulating the advance of time? The delays of the law were not as yet invented; the physical and astronomical sciences had not as yet established their calculations on scrupulously exact measurements; there were neither establishments which were shut at a given hour, nor trains which departed at a precise moment. In the evening the curfew bell sounded; and at night the hours were cried amid the universal silence. Certainly people did not live so long, if existence is measured by the amount of business done; but they lived better. The mind was enriched with the noble sentiments born of the contemplation of chefs-d’œuvres. They built a church in two centuries, a painter painted but few pictures in the course of his life, a poet only composed one great work; but these were so many masterpieces for after-ages to appreciate.

When the exact sciences began at last to make some progress, watch and clock making followed in their path, though it was always arrested by an insurmountable difficulty,—the regular and continuous measurement of time.

It was in the midst of this stagnation that Master Zacharius invented the escapement, which enabled him to obtain a mathematical regularity by submitting the movement of the pendulum to a sustained force. This invention had turned the old man’s head. Pride, swelling in his heart, like mercury in the thermometer, had attained the height of transcendent folly. By analogy he had allowed himself to be drawn to materialistic conclusions, and as he constructed his watches, he fancied that he had discovered the secrets of the union of the soul with the body.

Thus, on this day, perceiving that Aubert listened to him attentively, he said to him in a tone of simple conviction,—

"Dost thou know what life is, my child? Hast thou comprehended the action of those springs which produce existence? Hast thou examined thyself? No. And yet, with the eyes of science, thou mightest have seen the intimate relation which exists between God’s work and my own; for it is from his creature that I have copied the combinations of the wheels of my clocks."

"Master," replied Aubert eagerly, "can you compare a copper or steel machine with that breath of God which is called the soul, which animates our bodies as the breeze stirs the flowers? What mechanism could be so adjusted as to inspire us with thought?"

"That is not the question," responded Master Zacharius gently, but with all the obstinacy of a blind man walking towards an abyss. "In order to understand me, thou must recall the purpose of the escapement which I have invented. When I saw the irregular working of clocks, I understood that the movements shut up in them did not suffice, and that it was necessary to submit them to the regularity of some independent force. I then thought that the balance-wheel might accomplish this, and I succeeded in regulating the movement! Now, was it not a sublime idea that came to me, to return to it its lost force by the action of the clock itself, which it was charged with regulating?"

Aubert made a sign of assent.

"Now, Aubert," continued the old man, growing animated, "cast thine eyes upon thyself! Dost thou not understand that there are two distinct forces in us, that of the soul and that of the body—that is, a movement and a regulator? The soul is the principle of life; that is, then, the movement. Whether it is produced by a weight, by a spring, or by an immaterial influence, it is none the less in the heart. But without the body this movement would be unequal, irregular, impossible! Thus the body regulates the soul, and, like the balance-wheel, it is submitted to regular oscillations. And this is so true, that one falls ill when one's drink, food, sleep—in a word, the functions of the body— are not properly regulated; just as in my watches the soul renders to the body the force lost by its oscillations. Well, what produces this intimate union between soul and body, if not a marvellous escapement, by which the wheels of the one work into the wheels of the other? This is what I have discovered and applied; and there are no longer any secrets for me in this life, which, is, after all, only an ingenious mechanism!"

Master Zacharius looked sublime in this hallucination, which carried him to the ultimate mysteries of the Infinite. But his daughter Gerande, standing on the threshold of the door, had heard all. She rushed into her father's arms, and he pressed her convulsively to his breast.

"What is the matter with thee, my daughter?" he asked.

"If I had only a spring here," said she, putting her hand on her heart, "I would not love you as I do, father."

Master Zacharius looked intently at Gerande, and did not reply. Suddenly he uttered a cry, carried his hand eagerly to his heart, and fell fainting on his old leathern chair.

"Father, what is the matter?"

[ Illustration: "Father, what is the matter?"

"Help!" cried Aubert. "Scholastique!"

But Scholastique did not come at once. Some one was knocking at the front door; she had gone to open it, and
when she returned to the shop, before she could open her mouth, the old watchmaker, having recovered his senses, spoke:—

"I divine, my old Scholastique, that you bring me still another of those accursed watches which have stopped."

"Lord, it is true enough!" replied Scholastique, handing a watch to Aubert.

"My heart could not be mistaken!" said the old man, with a sigh.

Meanwhile Aubert carefully wound up the watch, but it would not go.

CHAPTER III.
A STRANGE VISIT.

Poor Gerande would have lost her life with that of her father, had it not been for the thought of Aubert, who still attached her to the world.

The old watchmaker was, little by little, passing away. His faculties evidently grew more feeble, as he concentrated them on a single thought. By a sad association of ideas, he referred everything to his monomania, and a human existence seemed to have departed from him, to give place to the extra-natural existence of the intermediate powers. Moreover, certain malicious rivals revived the sinister rumours which had spread concerning his labours.

The news of the strange derangements which his watches betrayed had a prodigious effect upon the master clockmakers of Geneva. What signified this sudden paralysis of their wheels, and why these strange relations which they seemed to have with the old man's life? These were the kind of mysteries which people never contemplate without a secret terror. In the various classes of the town, from the apprentice to the great lord who used the watches of the old horologist, there was no one who could not himself judge of the singularity of the fact. The citizens wished, but in vain, to get to see Master Zacharius. He fell very ill; and this enabled his daughter to withdraw him from those incessant visits which had degenerated into reproaches and recriminations.

Medicines and physicians were powerless in presence of this organic wasting away, the cause of which could not be discovered. It sometimes seemed as if the old man's heart had ceased to beat; then the pulsations were resumed with an alarming irregularity.

A custom existed in those days of publicly exhibiting the works of the masters. The heads of the various corporations sought to distinguish themselves by the novelty or the perfection of their productions; and it was among these that the condition of Master Zacharius excited the most lively, because most interested, commiseration. His rivals pitied him the more willingly because they feared him the less. They never forgot the old man's success, when he exhibited his magnificent clocks with moving figures, his repeaters, which provoked general admiration, and commanded such high prices in the cities of France, Switzerland, and Germany.

Meanwhile, thanks to the constant and tender care of Gerande and Aubert, his strength seemed to return a little; and in the tranquillity in which his convalescence left him, he succeeded in detaching himself from the thoughts which had absorbed him. As soon as he could walk, his daughter lured him away from the house, which was still besieged with dissatisfied customers. Aubert remained in the shop, vainly adjusting and readjusting the rebel watches; and the poor boy, completely mystified, sometimes covered his face with his hands, fearful that he, like his master, might go mad.

Gerande led her father towards the more pleasant promenades of the town. With his arm resting on hers, she conducted him sometimes through the quarter of Saint Antoine, the view from which extends towards the Cologny hill, and over the lake; on fine mornings they caught sight of the gigantic peaks of Mount Buet against the horizon. Gerande pointed out these spots to her father, who had well-nigh forgotten even their names. His memory wandered; and he took a childish interest in learning anew what had passed from his mind. Master Zacharius leaned upon his daughter; and the two heads, one white as snow and the other covered with rich golden tresses, met in the same ray of sunlight.

So it came about that the old watchmaker at last perceived that he was not alone in the world. As he looked upon his young and lovely daughter, and on himself old and broken, he reflected that after his death she would be left alone without support. Many of the young mechanics of Geneva had already sought to win Gerande's love; but none of them had succeeded in gaining access to the impenetrable retreat of the watchmaker's household. It was natural, then, that during this lucid interval, the old man's choice should fall on Aubert Thun. Once struck with this thought, he remarked to himself that this young couple had been brought up with the same ideas and the same beliefs; and the oscillations of their hearts seemed to him, as he said one day to Scholastique, "isochronous."

The old servant, literally delighted with the word, though she did not understand it, swore by her holy patron saint that the whole town should hear it within a quarter of an hour. Master Zacharius found it difficult to calm her; but made her promise to keep on this subject a silence which she never was known to observe.

So, though Gerande and Aubert were ignorant of it, all Geneva was soon talking of their speedy union. But it
happened also that, while the worthy folk were gossiping, a strange chuckle was often heard, and a voice saying, "Gerande will not wed Aubert."

If the talkers turned round, they found themselves facing a little old man who was quite a stranger to them.

How old was this singular being? No one could have told. People conjectured that he must have existed for several centuries, and that was all. His big flat head rested upon shoulders the width of which was equal to the height of his body; this was not above three feet. This personage would have made a good figure to support a pendulum, for the dial would have naturally been placed on his face, and the balance-wheel would have oscillated at its ease in his chest. His nose might readily have been taken for the style of a sun-dial, for it was narrow and sharp; his teeth, far apart, resembled the cogs of a wheel, and ground themselves between his lips; his voice had the metallic sound of a bell, and you could hear his heart beat like the tick of a clock. This little man, whose arms moved like the hands on a dial, walked with jerks, without ever turning round. If any one followed him, it was found that he walked a league an hour, and that his course was nearly circular.

This strange being had not long been seen wandering, or rather circulating, around the town; but it had already been observed that, every day, at the moment when the sun passed the meridian, he stopped before the Cathedral of Saint Pierre, and resumed his course after the twelve strokes of noon had sounded. Excepting at this precise moment, he seemed to become a part of all the conversations in which the old watchmaker was talked of; and people asked each other, in terror, what relation could exist between him and Master Zacharius. It was remarked, too, that he never lost sight of the old man and his daughter while they were taking their promenades.

One day Gerande perceived this monster looking at her with a hideous smile. She clung to her father with a frightened motion.

"What is the matter, my Gerande?" asked Master Zacharius.

"I do not know," replied the young girl.

"But thou art changed, my child. Art thou going to fall ill in thy turn? Ah, well," he added, with a sad smile, "then I must take care of thee, and I will do it tenderly."

"O father, it will be nothing. I am cold, and I imagine that it is--"

"What, Gerande?"

"The presence of that man, who always follows us," she replied in a low tone.

Master Zacharius turned towards the little old man.

"Faith, he goes well," said he, with a satisfied air, "for it is just four o'clock. Fear nothing, my child; it is not a man, it is a clock!"

Gerande looked at her father in terror. How could Master Zacharius read the hour on this strange creature's visage?

"By-the-bye," continued the old watchmaker, paying no further attention to the matter, "I have not seen Aubert for several days."

"He has not left us, however, father," said Gerande, whose thoughts turned into a gentler channel.

"What is he doing then?"

"He is working."

"Ah!" cried the old man. "He is at work repairing my watches, is he not? But he will never succeed; for it is not repair they need, but a resurrection!"

Gerande remained silent.

"I must know," added the old man, "if they have brought back any more of those accursed watches upon which the Devil has sent this epidemic!"

After these words Master Zacharius fell into complete silence, till he knocked at the door of his house, and for the first time since his convalescence descended to his shop, while Gerande sadly repaired to her chamber.

Just as Master Zacharius crossed the threshold of his shop, one of the many clocks suspended on the wall struck five o'clock. Usually the bells of these clocks--admirably regulated as they were--struck simultaneously, and this rejoiced the old man's heart; but on this day the bells struck one after another, so that for a quarter of an hour the ear was deafened by the successive noises. Master Zacharius suffered acutely; he could not remain still, but went from one clock to the other, and beat the time to them, like a conductor who no longer has control over his musicians.

When the last had ceased striking, the door of the shop opened, and Master Zacharius shuddered from head to foot to see before him the little old man, who looked fixedly at him and said,--

"Master, may I not speak with you a few moments?"

"Who are you?" asked the watchmaker abruptly.

"A colleague. It is my business to regulate the sun."

"Ah, you regulate the sun?" replied Master Zacharius eagerly, without wincing. "I can scarcely compliment you upon it. Your sun goes badly, and in order to make ourselves agree with it, we have to keep putting our clocks
forward so much or back so much."

"And by the cloven foot," cried this weird personage, "you are right, my master! My sun does not always mark noon at the same moment as your clocks; but some day it will be known that this is because of the inequality of the earth's transfer, and a mean noon will be invented which will regulate this irregularity!"

"Shall I live till then?" asked the old man, with glistening eyes.
"Without doubt,' replied the little old man, laughing. "Can you believe that you will ever die?"
"Alas! I am very ill now."
"Ah, let us talk of that. By Beelzebub! that will lead to just what I wish to speak to you about."

Saying this, the strange being leaped upon the old leather chair, and carried his legs one under the other, after the fashion of the bones which the painters of funeral hangings cross beneath death's heads. Then he resumed, in an ironical tone;--

[Illustration: Then he resumed, in an ironical tone]

"Let us see, Master Zacharius, what is going on in this good town of Geneva? They say that your health is failing, that your watches have need of a doctor!"

"Ah, do you believe that there is an intimate relation between their existence and mine?" cried Master Zacharius.

"Why, I imagine that these watches have faults, even vices. If these wantons do not preserve a regular conduct, it is right that they should bear the consequences of their irregularity. It seems to me that they have need of reforming a little!"

"What do you call faults?" asked Master Zacharius, reddening at the sarcastic tone in which these words were uttered. "Have they not a right to be proud of their origin?"

"Not too proud, not too proud," replied the little old man. "They bear a celebrated name, and an illustrious signature is graven on their cases, it is true, and theirs is the exclusive privilege of being introduced among the noblest families; but for some time they have got out of order, and you can do nothing in the matter, Master Zacharius; and the stupidest apprentice in Geneva could prove it to you!"

"To you, to me;--Master Zacharius! cried the old man, with a flush of outraged pride.
"To you, Master Zacharius,--you, who cannot restore life to your watches!"

"But it is because I have a fever, and so have they also!" replied the old man, as a cold sweat broke out upon him.

"Very well, they will die with you, since you cannot impart a little elasticity to their springs."

"Die! No, for you yourself have said it! I cannot die,--I, the first watchmaker in the world; I, who, by means of these pieces and diverse wheels, have been able to regulate the movement with absolute precision! Have I not subjected time to exact laws, and can I not dispose of it like a despot? Before a sublime genius had arranged these wandering hours regularly, in what vast uncertainty was human destiny plunged? At what certain moment could the acts of life be connected with each other? But you, man or devil, whatever you may be, have never considered the magnificence of my art, which calls every science to its aid! No, no! I, Master Zacharius, cannot die, for, as I have regulated time, time would end with me! It would return to the infinite, whence my genius has rescued it, and it would lose itself irreparably in the abyss of nothingness! No, I can no more die than the Creator of this universe, that submitted to His laws! I have become His equal, and I have partaken of His power! If God has created eternity, Master Zacharius has created time!"

The old watchmaker now resembled the fallen angel, defiant in the presence of the Creator. The little old man gazed at him, and even seemed to breathe into him this impious transport.

"Well said, master," he replied. "Beelzebub had less right than you to compare himself with God! Your glory must not perish! So your servant here desires to give you the method of controlling these rebellious watches."

"What is it? what is it?" cried Master Zacharius.

"You shall know on the day after that on which you have given me your daughter's hand."

"My Gerande?"

"Herself!"

"My daughter's heart is not free," replied Master Zacharius, who seemed neither astonished nor shocked at the strange demand.

"Bah! She is not the least beautiful of watches; but she will end by stopping also--"

"My daughter,--my Gerande! No!"

"Well, return to your watches, Master Zacharius. Adjust and readjust them. Get ready the marriage of your daughter and your apprentice. Temper your springs with your best steel. Bless Aubert and the pretty Gerande. But remember, your watches will never go, and Gerande will not wed Aubert!"

Thereupon the little old man disappeared, but not so quickly that Master Zacharius could not hear six o'clock strike in his breast.
CHAPTER IV.
THE CHURCH OF SAINT PIERRE.

Meanwhile Master Zacharius became more feeble in mind and body every day. An unusual excitement, indeed, impelled him to continue his work more eagerly than ever, nor could his daughter entice him from it.

His pride was still more aroused after the crisis to which his strange visitor had hurried him so treacherously, and he resolved to overcome, by the force of genius, the malign influence which weighed upon his work and himself. He first repaired to the various clocks of the town which were confided to his care. He made sure, by a scrupulous examination, that the wheels were in good condition, the pivots firm, the weights exactly balanced. Every part, even to the bells, was examined with the minute attention of a physician studying the breast of a patient. Nothing indicated that these clocks were on the point of being affected by inactivity.

Gerande and Aubert often accompanied the old man on these visits. He would no doubt have been pleased to see them eager to go with him, and certainly he would not have been so much absorbed in his approaching end, had he thought that his existence was to be prolonged by that of these cherished ones, and had he understood that something of the life of a father always remains in his children.

The old watchmaker, on returning home, resumed his labours with feverish zeal. Though persuaded that he would not succeed, it yet seemed to him impossible that this could be so, and he unceasingly took to pieces the watches which were brought to his shop, and put them together again.

Aubert tortured his mind in vain to discover the causes of the evil.

"Master," said he, "this can only come from the wear of the pivots and gearing."

"Do you want, then, to kill me, little by little?" replied Master Zacharius passionately. "Are these watches child's work? Was it lest I should hurt my fingers that I worked the surface of these copper pieces in the lathe? Have I not forged these pieces of copper myself, so as to obtain a greater strength? Are not these springs tempered to a rare perfection? Could anybody have used finer oils than mine? You must yourself agree that it is impossible, and you avow, in short, that the devil is in it!"

From morning till night discontented purchasers besieged the house, and they got access to the old watchmaker himself, who knew not which of them to listen to.

[ Illustration: From morning till night discontented purchasers besieged the house]

"This watch loses, and I cannot succeed in regulating it," said one.

"This," said another, "is absolutely obstinate, and stands still, as did Joshua's sun."

"If it is true," said most of them, "that your health has an influence on that of your watches, Master Zacharius, get well as soon as possible."

The old man gazed at these people with haggard eyes, and only replied by shaking his head, or by a few sad words,

"Wait till the first fine weather, my friends. The season is coming which revives existence in wearied bodies. We want the sun to warm us all!"

"A fine thing, if my watches are to be ill through the winter!" said one of the most angry. "Do you know, Master Zacharius, that your name is inscribed in full on their faces? By the Virgin, you do little honour to your signature!"

It happened at last that the old man, abashed by these reproaches, took some pieces of gold from his old trunk, and began to buy back the damaged watches. At news of this, the customers came in a crowd, and the poor watchmaker's money fast melted away; but his honesty remained intact. Gerande warmly praised his delicacy, which was leading him straight towards ruin; and Aubert soon offered his own savings to his master.

"What will become of my daughter?" said Master Zacharius, clinging now and then in the shipwreck to his paternal love.

Aubert dared not answer that he was full of hope for the future, and of deep devotion to Gerande. Master Zacharius would have that day called him his son-in-law, and thus refuted the sad prophecy, which still buzzed in his ears,

"Gerande will not wed Aubert."

By this plan the watchmaker at last succeeded in entirely despoiling himself. His antique vases passed into the hands of strangers; he depriving himself of the richly-carved panels which adorned the walls of his house; some primitive pictures of the early Flemish painters soon ceased to please his daughter's eyes, and everything, even the precious tools that his genius had invented, were sold to indemnify the clamorous customers.

Scholastique alone refused to listen to reason on the subject; but her efforts failed to prevent the unwelcome visitors from reaching her master, and from soon departing with some valuable object. Then her chattering was heard in all the streets of the neighbourhood, where she had long been known. She eagerly denied the rumours of
sorcery and magic on the part of Master Zacharius, which gained currency; but as at bottom she was persuaded of their truth, she said her prayers over and over again to redeem her pious falsehoods.

It had been noticed that for some time the old watchmaker had neglected his religious duties. Time was, when he had accompanied Gerande to church, and had seemed to find in prayer the intellectual charm which it imparts to thoughtful minds, since it is the most sublime exercise of the imagination. This voluntary neglect of holy practices, added to the secret habits of his life, had in some sort confirmed the accusations levelled against his labours. So, with the double purpose of drawing her father back to God, and to the world, Gerande resolved to call religion to her aid. She thought that it might give some vitality to his dying soul; but the dogmas of faith and humility had to combat, in the soul of Master Zacharius, an insurmountable pride, and came into collision with that vanity of science which connects everything with itself, without rising to the infinite source whence first principles flow.

It was under these circumstances that the young girl undertook her father's conversion; and her influence was so effective that the old watchmaker promised to attend high mass at the cathedral on the following Sunday. Gerande was in an ecstasy, as if heaven had opened to her view. Old Scholastique could not contain her joy, and at last found irrefutable arguments against the gossiping tongues which accused her master of impiety. She spoke of it to her neighbours, her friends, her enemies, to those whom she knew not as well as to those whom she knew.

"In faith, we scarcely believe what you tell us, dame Scholastique," they replied; "Master Zacharius has always acted in concert with the devil!"

"You haven't counted, then," replied the old servant, "the fine bells which strike for my master's clocks? How many times they have struck the hours of prayer and the mass!"

"No doubt," they would reply. "But has he not invented machines which go all by themselves, and which actually do the work of a real man?"

"Could a child of the devil," exclaimed dame Scholastique wrathfully, "have executed the fine iron clock of the château of Andernatt, which the town of Geneva was not rich enough to buy? A pious motto appeared at each hour, and a Christian who obeyed them, would have gone straight to Paradise! Is that the work of the devil?"

This masterpiece, made twenty years before, had carried Master Zacharius's fame to its acme; but even then there had been accusations of sorcery against him. But at least the old man's visit to the Cathedral ought to reduce malicious tongues to silence.

Master Zacharius, having doubtless forgotten the promise made to his daughter, had returned to his shop. After being convinced of his powerlessness to give life to his watches, he resolved to try if he could not make some new ones. He abandoned all those useless works, and devoted himself to the completion of the crystal watch, which he intended to be his masterpiece; but in vain did he use his most perfect tools, and employ rubies and diamonds for resisting friction. The watch fell from his hands the first time that he attempted to wind it up!

The old man concealed this circumstance from every one, even from his daughter; but from that time his health rapidly declined. There were only the last oscillations of a pendulum, which goes slower when nothing restores its original force. It seemed as if the laws of gravity, acting directly upon him, were dragging him irresistibly down to the grave.

The Sunday so ardently anticipated by Gerande at last arrived. The weather was fine, and the temperature inspiring. The people of Geneva were passing quietly through the streets, gaily chatting about the return of spring. Gerande, tenderly taking the old man's arm, directed her steps towards the cathedral, while Scholastique followed behind with the prayer-books. People looked curiously at them as they passed. The old watchmaker permitted himself to be led like a child, or rather like a blind man. The faithful of Saint Pierre were almost frightened when they saw him cross the threshold, and shrank back at his approach.

The chants of high mass were already resounding through the church. Gerande went to her accustomed bench, and kneeled with profound and simple reverence. Master Zacharius remained standing upright beside her.

The ceremonies continued with the majestic solemnity of that faithful age, but the old man had no faith. He did not implore the pity of Heaven with cries of anguish of the "Kyrie;" he did not, with the "Gloria in Excelsis," sing the splendours of the heavenly heights; the reading of the Testament did not draw him from his materialistic reverie, and he forgot to join in the homage of the "Credo." This proud old man remained motionless, as insensible and silent as a stone statue; and even at the solemn moment when the bell announced the miracle of transubstantiation, he did not bow his head, but gazed directly at the sacred host which the priest raised above the heads of the faithful. Gerande looked at her father, and a flood of tears moistened her missal. At this moment the clock of Saint Pierre struck half-past eleven. Master Zacharius turned quickly towards this ancient clock which still spoke. It seemed to him as if its face was gazing steadily at him; the figures of the hours shone as if they had been engraved in lines of fire, and the hands shot forth electric sparks from their sharp points.

[Illustration: This proud old man remained motionless]

The mass ended. It was customary for the "Angelus" to be said at noon, and the priests, before leaving the altar,
waited for the clock to strike the hour of twelve. In a few moments this prayer would ascend to the feet of the Virgin.

But suddenly a harsh noise was heard. Master Zacharius uttered a piercing cry.

The large hand of the clock, having reached twelve, had abruptly stopped, and the clock did not strike the hour.

Gerande hastened to her father's aid. He had fallen down motionless, and they carried him outside the church.

"It is the death-blow!" murmured Gerande, sobbing.

When he had been borne home, Master Zacharius lay upon his bed utterly crushed. Life seemed only to still exist on the surface of his body, like the last whiffs of smoke about a lamp just extinguished. When he came to his senses, Aubert and Gerande were leaning over him. In these last moments the future took in his eyes the shape of the present. He saw his daughter alone, without a protector.

"My son," said he to Aubert, "I give my daughter to thee."

So saying, he stretched out his hands towards his two children, who were thus united at his death-bed.

But soon Master Zacharius lifted himself up in a paroxysm of rage. The words of the little old man recurred to his mind.

"I do not wish to die!" he cried; "I cannot die! I, Master Zacharius, ought not to die! My books--my accounts!--"

With these words he sprang from his bed towards a book in which the names of his customers and the articles which had been sold to them were inscribed. He seized it and rapidly turned over its leaves, and his emaciated finger fixed itself on one of the pages.

"There!" he cried, "there! this old iron clock, sold to Pittonaccio! It is the only one that has not been returned to me! It still exists--it goes--it lives! Ah, I wish for it--I must find it! I will take such care of it that death will no longer seek me!"

And he fainted away.

Aubert and Gerande knelt by the old man's bed-side and prayed together.

CHAPTER V.

THE HOUR OF DEATH.

Several days passed, and Master Zacharius, though almost dead, rose from his bed and returned to active life under a supernatural excitement. He lived by pride. But Gerande did not deceive herself; her father's body and soul were for ever lost.

The old man got together his last remaining resources, without thought of those who were dependent upon him. He betrayed an incredible energy, walking, ferreting about, and mumbling strange, incomprehensible words.

One morning Gerande went down to his shop. Master Zacharius was not there. She waited for him all day.

Master Zacharius did not return.

Gerande wept bitterly, but her father did not reappear.

Aubert searched everywhere through the town, and soon came to the sad conviction that the old man had left it.

"Let us find my father!" cried Gerande, when the young apprentice told her this sad news.

"Where can he be?" Aubert asked himself.

An inspiration suddenly came to his mind. He remembered the last words which Master Zacharius had spoken. The old man only lived now in the old iron clock that had not been returned! Master Zacharius must have gone in search of it.

Aubert spoke of this to Gerande.

"Let us look at my father's book," she replied.

They descended to the shop. The book was open on the bench. All the watches or clocks made by the old man, and which had been returned to him because they were out of order, were stricken out excepting one:--

"Sold to M. Pittonaccio, an iron clock, with bell and moving figures; sent to his château at Andernatt."

It was this "moral" clock of which Scholastique had spoken with so much enthusiasm.

"My father is there!" cried Gerande.

"Let us hasten thither," replied Aubert. "We may still save him!"

"Not for this life," murmured Gerande, "but at least for the other."

"By the mercy of God, Gerande! The château of Andernatt stands in the gorge of the 'Dents-du-Midi' twenty hours from Geneva. Let us go!"

That very evening Aubert and Gerande, followed by the old servant, set out on foot by the road which skirts Lake Leman. They accomplished five leagues during the night, stopping neither at Bessinge nor at Ermance, where rises the famous château of the Mayors. They with difficulty forded the torrent of the Dranse, and everywhere they went they inquired for Master Zacharius, and were soon convinced that they were on his track.
The next morning, at daybreak, having passed Thonon, they reached Evian, whence the Swiss territory may be seen extended over twelve leagues. But the two betrothed did not even perceive the enchanting prospect. They went straight forward, urged on by a supernatural force. Aubert, leaning on a knotty stick, offered his arm alternately to Gerande and to Scholastique, and he made the greatest efforts to sustain his companions. All three talked of their sorrow, of their hopes, and thus passed along the beautiful road by the water-side, and across the narrow plateau which unites the borders of the lake with the heights of the Chalais. They soon reached Bouveret, where the Rhone enters the Lake of Geneva.

On leaving this town they diverged from the lake, and their weariness increased amid these mountain districts. Vionnaz, Chesset, Collombay, half lost villages, were soon left behind. Meanwhile their knees shook, their feet were lacerated by the sharp points which covered the ground like a brushwood of granite;--but no trace of Master Zacharius!

He must be found, however, and the two young people did not seek repose either in the isolated hamlets or at the château of Monthay, which, with its dependencies, formed the appanage of Margaret of Savoy. At last, late in the day, and half dead with fatigue, they reached the hermitage of Notre-Dame-du-Sex, which is situated at the base of the Dents-du-Midi, six hundred feet above the Rhone.

The hermit received the three wanderers as night was falling. They could not have gone another step, and here they must needs rest.

The hermit could give them no news of Master Zacharius. They could scarcely hope to find him still living amid these sad solitudes. The night was dark, the wind howled amid the mountains, and the avalanches roared down from the summits of the broken crags.

Aubert and Gerande, crouching before the hermit's hearth, told him their melancholy tale. Their mantles, covered with snow, were drying in a corner; and without, the hermit's dog barked lugubriously, and mingled his voice with that of the tempest.

"Pride," said the hermit to his guests, "has destroyed an angel created for good. It is the stumbling-block against which the destinies of man strike. You cannot reason with pride, the principal of all the vices, since, by its very nature, the proud man refuses to listen to it. It only remains, then, to pray for your father!"

All four knelt down, when the barking of the dog redoubled, and some one knocked at the door of the hermitage.

"Open, in the devil's name!"

The door yielded under the blows, and a dishevelled, haggard, ill-clothed man appeared.

"My father!" cried Gerande.

It was Master Zacharius.

"Where am I?" said he. "In eternity! Time is ended--the hours no longer strike--the hands have stopped!"

"Father!" returned Gerande, with so piteous an emotion that the old man seemed to return to the world of the living.

"Thou here, Gerande?" he cried; "and thou, Aubert? Ah, my dear betrothed ones, you are going to be married in our old church!"

"Father," said Gerande, seizing him by the arm, "come home to Geneva,--come with us!"

The old man tore away from his daughter's embrace and hurried towards the door, on the threshold of which the snow was falling in large flakes.

"Do not abandon your children!" cried Aubert.

"Why return," replied the old man sadly, "to those places which my life has already quitted, and where a part of myself is for ever buried?"

"Your soul is not dead," said the hermit solemnly.

"My soul? O no,--its wheels are good! I perceive it beating regularly--"

"Your soul is immaterial,--your soul is immortal!" replied the hermit sternly.

"Yes--like my glory! But it is shut up in the château of Andernatt, and I wish to see it again!"

The hermit crossed himself; Scholastique became almost inanimate. Aubert held Gerande in his arms.

"The château of Andernatt is inhabited by one who is lost," said the hermit, "one who does not salute the cross of my hermitage."

"My father, go not thither!"

"I want my soul! My soul is mine--"

"Hold him! Hold my father!" cried Gerande.

But the old man had leaped across the threshold, and plunged into the night, crying, "Mine, mine, my soul!"

Gerande, Aubert, and Scholastique hastened after him. They went by difficult paths, across which Master Zacharius sped like a tempest, urged by an irresistible force. The snow raged around them, and mingled its white flakes with the froth of the swollen torrents.
As they passed the chapel erected in memory of the massacre of the Theban legion, they hurriedly crossed
themselves. Master Zacharius was not to be seen.

At last the village of Evionnaz appeared in the midst of this sterile region. The hardest heart would have been
moved to see this hamlet, lost among these horrible solitudes. The old man sped on, and plunged into the deepest
gorge of the Dents-du-Midi, which pierce the sky with their sharp peaks.

Soon a ruin, old and gloomy as the rocks at its base, rose before him.

"It is there--there!" he cried, hastening his pace still more frantically.

The château of Andernatt was a ruin even then. A thick, crumbling tower rose above it, and seemed to menace
with its downfall the old gables which reared themselves below. The vast piles of jagged stones were gloomy to look
on. Several dark halls appeared amid the debris, with caved-in ceilings, now become the abode of vipers.

A low and narrow postern, opening upon a ditch choked with rubbish, gave access to the château. Who had
dwelt there none knew. No doubt some margrave, half lord, half brigand, had sojourned in it; to the margrave had
succeeded bandits or counterfeit coiners, who had been hanged on the scene of their crime. The legend went that, on
winter nights, Satan came to lead his diabolical dances on the slope of the deep gorges in which the shadow of these
ruins was engulfed.

But Master Zacharius was not dismayed by their sinister aspect. He reached the postern. No one forbade him to
pass. A spacious and gloomy court presented itself to his eyes; no one forbade him to cross it. He passed along the
kind of inclined plane which conducted to one of the long corridors, whose arches seemed to banish daylight from
beneath their heavy springings. His advance was unresisted. Gerande, Aubert, and Scholastique closely followed
him.

Master Zacharius, as if guided by an irresistible hand, seemed sure of his way, and strode along with rapid step.

He reached an old worm-eaten door, which fell before his blows, whilst the bats described oblique circles around his
head.

An immense hall, better preserved than the rest, was soon reached. High sculptured panels, on which serpents,
ghouls, and other strange figures seemed to disport themselves confusedly, covered its walls. Several long and
narrow windows, like loopholes, shivered beneath the bursts of the tempest.

Master Zacharius, on reaching the middle of this hall, uttered a cry of joy.

On an iron support, fastened to the wall, stood the clock in which now resided his entire life. This unequalled
masterpiece represented an ancient Roman church, with buttresses of wrought iron, with its heavy bell-tower, where
there was a complete chime for the anthem of the day, the "Angelus," the mass, vespers, compline, and the
benediction. Above the church door, which opened at the hour of the services, was placed a "rose," in the centre of
which two hands moved, and the archivault of which reproduced the twelve hours of the face sculptured in relief.
Between the door and the rose, just as Scholastique had said, a maxim, relative to the employment of every moment
of the day, appeared on a copper plate. Master Zacharius had once regulated this succession of devices with a really
Christian solicitude; the hours of prayer, of work, of repast, of recreation, and of repose, followed each other
according to the religious discipline, and were to infallibly insure salvation to him who scrupulously observed their
commands.

Master Zacharius, intoxicated with joy, went forward to take possession of the clock, when a frightful roar of
laughter resounded behind him.

He turned, and by the light of a smoky lamp recognized the little old man of Geneva.

"You here?" cried he.

Gerande was afraid. She drew closer to Aubert.

"Good-day, Master Zacharius," said the monster.

"Who are you?"

"Signor Pittonaccio, at your service! You have come to give me your daughter! You have remembered my
words, 'Gerande will not wed Aubert.'"

The young apprentice rushed upon Pittonaccio, who escaped from him like a shadow.

"Stop, Aubert!" cried Master Zacharius.

"Good-night," said Pittonaccio, and he disappeared.

"My father, let us fly from this hateful place!" cried Gerande. "My father!"

Master Zacharius was no longer there. He was pursuing the phantom of Pittonaccio across the rickety corridors.
Scholastique, Gerande, and Aubert remained, speechless and fainting, in the large gloomy hall. The young girl had
fallen upon a stone seat; the old servant knelt beside her, and prayed; Aubert remained erect, watching his betrothed.
Pale lights wandered in the darkness, and the silence was only broken by the movements of the little animals which
live in old wood, and the noise of which marks the hours of "death watch."
When daylight came, they ventured upon the endless staircase which wound beneath these ruined masses; for two hours they wandered thus without meeting a living soul, and hearing only a far-off echo responding to their cries. Sometimes they found themselves buried a hundred feet below the ground, and sometimes they reached places whence they could overlook the wild mountains.

Chance brought them at last back again to the vast hall, which had sheltered them during this night of anguish. It was no longer empty. Master Zacharius and Pittonaccio were talking there together, the one upright and rigid as a corpse, the other crouching over a marble table.

Master Zacharius, when he perceived Gerande, went forward and took her by the hand, and led her towards Pittonaccio, saying, "Behold your lord and master, my daughter. Gerande, behold your husband!"

Gerande shuddered from head to foot.
"Never!" cried Aubert, "for she is my betrothed."
"Never!" responded Gerande, like a plaintive echo.

Pittonaccio began to laugh.
"You wish me to die, then!" exclaimed the old man. "There, in that clock, the last which goes of all which have gone from my hands, my life is shut up; and this man tells me, 'When I have thy daughter, this clock shall belong to thee.' And this man will not rewind it. He can break it, and plunge me into chaos. Ah, my daughter, you no longer love me!"

"My father!" murmured Gerande, recovering consciousness.
"If you knew what I have suffered, far away from this principle of my existence!" resumed the old man. "Perhaps no one looked after this timepiece. Perhaps its springs were left to wear out, its wheels to get clogged. But now, in my own hands, I can nourish this health so dear, for I must not die,--I, the great watchmaker of Geneva. Look, my daughter, how these hands advance with certain step. See, five o'clock is about to strike. Listen well, and look at the maxim which is about to be revealed."

Five o'clock struck with a noise which resounded sadly in Gerande's soul, and these words appeared in red letters:

"YOU MUST EAT OF THE FRUITS OF THE TREE OF SCIENCE."

Aubert and Gerande looked at each other stupefied. These were no longer the pious sayings of the Catholic watchmaker. The breath of Satan must have passed over it. But Zacharius paid no attention to this, and resumed--

"Dost thou hear, my Gerande? I live, I still live! Listen to my breathing,--see the blood circulating in my veins! No, thou wouldst not kill thy father, and thou wilt accept this man for thy husband, so that I may become immortal, and at last attain the power of God!"

At these blasphemous words old Scholastique crossed herself, and Pittonaccio laughed aloud with joy.

"And then, Gerande, thou wilt be happy with him. See this man,--he is Time! Thy existence will be regulated with absolute precision. Gerande, since I gave thee life, give life to thy father!"

[Illustration: "See this man,--he is Time!"]

"Gerande," murmured Aubert, "I am thy betrothed."
"He is my father!" replied Gerande, fainting.
"She is thine!" said Master Zacharius. "Pittonaccio, them wilt keep thy promise!"
"Here is the key of the clock," replied the horrible man.

Master Zacharius seized the long key, which resembled an uncoiled snake, and ran to the clock, which he hastened to wind up with fantastic rapidity. The creaking of the spring jarred upon the nerves. The old watchmaker wound and wound the key, without stopping a moment, and it seemed as if the movement were beyond his control. He wound more and more quickly, with strange contortions, until he fell from sheer weariness.

"There, it is wound up for a century!" he cried.

Aubert rushed from the hall as if he were mad. After long wandering, he found the outlet of the hateful château, and hastened into the open air. He returned to the hermitage of Notre-Dame-du-Sex, and talked so despairingly to the holy recluse, that the latter consented to return with him to the château of Andernatt.

If, during these hours of anguish, Gerande had not wept, it was because her tears were exhausted.

Master Zacharius had not left the hall. He ran every moment to listen to the regular beating of the old clock.

Meanwhile the clock had struck, and to Scholastique's great terror, these words had appeared on the silver face:--

"MAN OUGHT TO BECOME THE EQUAL OF GOD."

The old man had not only not been shocked by these impious maxims, but read them deliriously, and flattered himself with thoughts of pride, whilst Pittonaccio kept close by him.

The marriage-contract was to be signed at midnight. Gerande, almost unconscious, saw or heard nothing. The silence was only broken by the old man's words, and the chuckling of Pittonaccio.

Eleven o'clock struck. Master Zacharius shuddered, and read in a loud voice:--
"MAN SHOULD BE THE SLAVE OF SCIENCE, AND SACRIFICE TO IT RELATIVES AND FAMILY."
"Yes!" he cried, "there is nothing but science in this world!"
The hands slipped over the face of the clock with the hiss of a serpent, and the pendulum beat with accelerated strokes.

Master Zacharius no longer spoke. He had fallen to the floor, his throat rattled, and from his oppressed bosom came only these half-broken words: "Life--science!"
The scene had now two new witnesses, the hermit and Aubert. Master Zacharius lay upon the floor; Gerande was praying beside him, more dead than alive.

Of a sudden a dry, hard noise was heard, which preceded the strike.
Master Zacharius sprang up.
"Midnight!" he cried.
The hermit stretched out his hand towards the old clock,--and midnight did not sound.
Master Zacharius uttered a terrible cry, which must have been heard in hell, when these words appeared:--
"WHO EVER SHALL ATTEMPT TO MAKE HIMSELF THE EQUAL OF GOD, SHALL BE FOR EVER DAMNED!"
The old clock burst with a noise like thunder, and the spring, escaping, leaped across the hall with a thousand fantastic contortions; the old man rose, ran after it, trying in vain to seize it, and exclaiming, "My soul,--my soul!"
The spring bounded before him, first on one side, then on the other, and he could not reach it.
At last Pittonaccio seized it, and, uttering a horrible blasphemy, ingulfed himself in the earth.
Master Zacharius fell backwards. He was dead.

The old watchmaker was buried in the midst of the peaks of Andernatt.
Then Aubert and Gerande returned to Geneva, and during the long life which God accorded to them, they made it a duty to redeem by prayer the soul of the castaway of science.

A DRAMA IN THE AIR.
In the month of September, 185--, I arrived at Frankfort-on-the-Maine. My passage through the principal German cities had been brilliantly marked by balloon ascents; but as yet no German had accompanied me in my car, and the fine experiments made at Paris by MM. Green, Eugene Godard, and Poitevin had not tempted the grave Teutons to essay aerial voyages.

But scarcely had the news of my approaching ascent spread through Frankfort, than three of the principal citizens begged the favour of being allowed to ascend with me. Two days afterwards we were to start from the Place de la Comédie. I began at once to get my balloon ready. It was of silk, prepared with gutta percha, a substance impermeable by acids or gasses; and its volume, which was three thousand cubic yards, enabled it to ascend to the loftiest heights.

The day of the ascent was that of the great September fair, which attracts so many people to Frankfort. Lighting gas, of a perfect quality and of great lifting power, had been furnished to me in excellent condition, and about eleven o'clock the balloon was filled; but only three-quarters filled,--an indispensable precaution, for, as one rises, the atmosphere diminishes in density, and the fluid enclosed within the balloon, acquiring more elasticity, might burst its sides. My calculations had furnished me with exactly the quantity of gas necessary to carry up my companions and myself.

We were to start at noon. The impatient crowd which pressed around the enclosed space, filling the enclosed square, overflowing into the contiguous streets, and covering the houses from the ground-floor to the slated gables, presented a striking scene. The high winds of the preceding days had subsided. An oppressive heat fell from the cloudless sky. Scarcely a breath animated the atmosphere. In such weather, one might descend again upon the very spot whence he had risen.

I carried three hundred pounds of ballast in bags; the car, quite round, four feet in diameter, was comfortably arranged; the hempen cords which supported it stretched symmetrically over the upper hemisphere of the balloon; the compass was in place, the barometer suspended in the circle which united the supporting cords, and the anchor carefully put in order. All was now ready for the ascent.

Among those who pressed around the enclosure, I remarked a young man with a pale face and agitated features. The sight of him impressed me. He was an eager spectator of my ascents, whom I had already met in several German cities. With an uneasy air, he closely watched the curious machine, as it lay motionless a few feet above the ground; and he remained silent among those about him.

Twelve o'clock came. The moment had arrived, but my travelling companions did not appear.
I sent to their houses, and learnt that one had left for Hamburg, another for Vienna, and the third for London. Their courage had failed them at the moment of undertaking one of those excursions which, thanks to the ability of living aeronauts, are free from all danger. As they formed, in some sort, a part of the programme of the day, the fear had seized them that they might be forced to execute it faithfully, and they had fled far from the scene at the instant when the balloon was being filled. Their courage was evidently the inverse ratio of their speed—in decamping.

The multitude, half deceived, showed not a little ill-humour. I did not hesitate to ascend alone. In order to re-establish the equilibrium between the specific gravity of the balloon and the weight which had thus proved wanting, I replaced my companions by more sacks of sand, and got into the car. The twelve men who held the balloon by twelve cords fastened to the equatorial circle, let them slip a little between their fingers, and the balloon rose several feet higher. There was not a breath of wind, and the atmosphere was so leaden that it seemed to forbid the ascent.

"Is everything ready?" I cried.

The men put themselves in readiness. A last glance told me that I might go.

"Attention!"

There was a movement in the crowd, which seemed to be invading the enclosure.

"Let go!"

The balloon rose slowly, but I experienced a shock which threw me to the bottom of the car.

When I got up, I found myself face to face with an unexpected fellow-voyager,—the pale young man.

"Monsieur, I salute you," said he, with the utmost coolness.

[Illustration: "Monsieur, I salute you,"

"By what right—"

"Am I here? By the right which the impossibility of your getting rid of me confers."

I was amazed! His calmness put me out of countenance, and I had nothing to reply. I looked at the intruder, but he took no notice of my astonishment.

"Does my weight disarrange your equilibrium, monsieur?" he asked. "You will permit me—"

And without waiting for my consent, he relieved the balloon of two bags, which he threw into space.

"Monsieur," said I, taking the only course now possible, "you have come; very well, you will remain; but to me alone belongs the management of the balloon."

"Monsieur," said he, "your urbanity is French all over: it comes from my own country. I morally press the hand you refuse me. Make all precautions, and act as seems best to you. I will wait till you have done—"

"For what?"

"To talk with you."

The barometer had fallen to twenty-six inches. We were nearly six hundred yards above the city; but nothing betrayed the horizontal displacement of the balloon, for the mass of air in which it is enclosed goes forward with it. A sort of confused glow enveloped the objects spread out under us, and unfortunately obscured their outline.

I examined my companion afresh.

He was a man of thirty years, simply clad. The sharpness of his features betrayed an indomitable energy, and he seemed very muscular. Indifferent to the astonishment he created, he remained motionless, trying to distinguish the objects which were vaguely confused below us.

"Miserable mist!" said he, after a few moments.

I did not reply.

"You owe me a grudge?" he went on. "Bah! I could not pay for my journey, and it was necessary to take you by surprise."

"Nobody asks you to descend, monsieur!"

"Eh, do you not know, then, that the same thing happened to the Counts of Laurencin and Dampierre, when they ascended at Lyons, on the 15th of January, 1784? A young merchant, named Fontaine, scaled the gallery, at the risk of capsizing the machine. He accomplished the journey, and nobody died of it!"

"Once on the ground, we will have an explanation," replied I, piqued at the light tone in which he spoke.

"Bah! Do not let us think of our return."

"Do you think, then, that I shall not hasten to descend?"

"Descend!" said he, in surprise. "Descend? Let us begin by first ascending."

And before I could prevent it, two more bags had been thrown over the car, without even having been emptied.

"Monsieur!" cried I, in a rage.

[Illustration: "Monsieur!" cried I, in a rage.]

"I know your ability," replied the unknown quietly, "and your fine ascents are famous. But if Experience is the sister of Practice, she is also a cousin of Theory, and I have studied the aerial art long. It has got into my head!" he added sadly, falling into a silent reverie.
The balloon, having risen some distance farther, now became stationary. The unknown consulted the barometer, and said,—

"Here we are, at eight hundred yards. Men are like insects. See! I think we should always contemplate them from this height, to judge correctly of their proportions. The Place de la Comédie is transformed into an immense ant-hill. Observe the crowd which is gathered on the quays; and the mountains also get smaller and smaller. We are over the Cathedral. The Main is only a line, cutting the city in two, and the bridge seems a thread thrown between the two banks of the river."

The atmosphere became somewhat chilly.

"There is nothing I would not do for you, my host," said the unknown. "If you are cold, I will take off my coat and lend it to you."

"Thanks," said I dryly.

"Bah! Necessity makes law. Give me your hand. I am your fellow-countryman; you will learn something in my company, and my conversation will indemnify you for the trouble I have given you."

I sat down, without replying, at the opposite extremity of the car. The young man had taken a voluminous manuscript from his great-coat. It was an essay on ballooning.

"I possess," said he, "the most curious collection of engravings and caricatures extant concerning aerial manias. How people admired and scoffed at this precious discovery! We are happily no longer in the age in which Montgolfier tried to make artificial clouds with steam, or a gas having electrical properties, produced by the combustion of moist straw and chopped-up wool."

"Do you wish to depreciate the talent of the inventors?" I asked, for I had resolved to enter into the adventure. "Was it not good to have proved by experience the possibility of rising in the air?"

"Ah, monsieur, who denies the glory of the first aerial navigators? It required immense courage to rise by means of those frail envelopes which only contained heated air. But I ask you, has the aerial science made great progress since Blanchard's ascensions, that is, since nearly a century ago? Look here, monsieur."

The unknown took an engraving from his portfolio.

"Here," said he, "is the first aerial voyage undertaken by Pilâtre des Rosiers and the Marquis d'Arlandes, four months after the discovery of balloons. Louis XVI. refused to consent to the venture, and two men who were condemned to death were the first to attempt the aerial ascent. Pilâtre des Rosiers became indignant at this injustice, and, by means of intrigues, obtained permission to make the experiment. The car, which renders the management easy, had not then been invented, and a circular gallery was placed around the lower and contracted part of the Montgolfier balloon. The two aeronauts must then remain motionless at each extremity of this gallery, for the moist straw which filled it forbade them all motion. A chafing-dish with fire was suspended below the orifice of the balloon; when the aeronauts wished to rise, they threw straw upon this brazier, at the risk of setting fire to the balloon, and the air, more heated, gave it fresh ascending power. The two bold travellers rose, on the 21st of November, 1783, from the Muette Gardens, which the dauphin had put at their disposal. The balloon went up majestically, passed over the Isle of Swans, crossed the Seine at the Conference barrier, and, drifting between the dome of the Invalides and the Military School, approached the Church of Saint Sulpice. Then the aeronauts added to the fire, crossed the Boulevard, and descended beyond the Enfer barrier. As it touched the soil, the balloon collapsed, and for a few moments buried Pilâtre des Rosiers under its folds."

"Unlucky augury," I said, interested in the story, which affected me nearly.

"An augury of the catastrophe which was later to cost this unfortunate man his life," replied the unknown sadly.

"Have you never experienced anything like it?"

"Never,"

"Bah! Misfortunes sometimes occur unforeshadowed!" added my companion.

He then remained silent.

Meanwhile we were advancing southward, and Frankfort had already passed from beneath us.

"Perhaps we shall have a storm," said the young man.

"We shall descend before that," I replied.

"Indeed! It is better to ascend. We shall escape it more surely."

And two more bags of sand were hurled into space.

The balloon rose rapidly, and stopped at twelve hundred yards. I became colder; and yet the sun's rays, falling upon the surface, expanded the gas within, and gave it a greater ascending force.

"Fear nothing," said the unknown. "We have still three thousand five hundred fathoms of breathing air. Besides, do not trouble yourself about what I do."

I would have risen, but a vigorous hand held me to my seat.

"Your name?" I asked.
"My name? What matters it to you?"
"I demand your name!"
"My name is Erostratus or Empedocles, whichever you choose!"
This reply was far from reassuring.

The unknown, besides, talked with such strange coolness that I anxiously asked myself whom I had to deal with.

"Monsieur," he continued, "nothing original has been imagined since the physicist Charles. Four months after
the discovery of balloons, this able man had invented the valve, which permits the gas to escape when the balloon is
too full, or when you wish to descend; the car, which aids the management of the machine; the netting, which holds
the envelope of the balloon, and divides the weight over its whole surface; the ballast, which enables you to ascend,
and to choose the place of your landing; the india-rubber coating, which renders the tissue impermeable; the
barometer, which shows the height attained. Lasty, Charles used hydrogen, which, fourteen times lighter than air,
permits you to penetrate to the highest atmospheric regions, and does not expose you to the dangers of a combustion
in the air. On the 1st of December, 1783, three hundred thousand spectators were crowded around the Tuileries.
Charles rose, and the soldiers presented arms to him. He travelled nine leagues in the air, conducting his balloon
with an ability not surpassed by modern aeronauts. The king awarded him a pension of two thousand livres; for then
they encouraged new inventions."

The unknown now seemed to be under the influence of considerable agitation.
"Monsieur," he resumed, "I have studied this, and I am convinced that the first aeronauts guided their balloons.
Without speaking of Blanchard, whose assertions may be received with doubt, Guyton-Morveaux, by the aid of oars
and rudder, made his machine answer to the helm, and take the direction he determined on. More recently, M.
Julien, a watchmaker, made some convincing experiments at the Hippodrome, in Paris; for, by a special mechanism,
his aerial apparatus, oblong in form, went visibly against the wind. It occurred to M. Petin to place four hydrogen
balloons together; and, by means of sails hung horizontally and partly folded, he hopes to be able to disturb the
equilibrium, and, thus inclining the apparatus, to convey it in an oblique direction. They speak, also, of forces to
overcome the resistance of currents,—for instance, the screw; but the screw, working on a moveable centre, will give
no result. I, monsieur, have discovered the only means of guiding balloons; and no academy has come to my aid, no
city has filled up subscriptions for me, no government has thought fit to listen to me! It is infamous!"

The unknown gesticulated fiercely, and the car underwent violent oscillations. I had much trouble in calming
him.

Meanwhile the balloon had entered a more rapid current, and we advanced south, at fifteen hundred yards above
the earth.

"See, there is Darmstadt," said my companion, leaning over the car. "Do you perceive the château? Not very
distinctly, eh? What would you have? The heat of the storm makes the outline of objects waver, and you must have a
skilled eye to recognize localities."
"Are you certain it is Darmstadt?" I asked.
"I am sure of it. We are now six leagues from Frankfort."
"Then we must descend."
"Descend! You would not go down, on the steeple s, said the unknown, with a chuckle.
"No, but in the suburbs of the city."
"Well, let us avoid the steeple s!"

So speaking, my companion seized some bags of ballast. I hastened to prevent him; but he overthrew me with
one hand, and the unballasted balloon ascended to two thousand yards.

"Rest easy," said he, "and do not forget that Broioschi, Biot, Gay-Lussac, Bixio, and Barral ascended to still
greater heights to make their scientific experiments."
"Monsieur, we must descend," I resumed, trying to persuade him by gentleness. "The storm is gathering around
us. It would be more prudent—"

"Bah! We will mount higher than the storm, and then we shall no longer fear it!" cried my companion. "What is
nobler than to overlook the clouds which oppress the earth? Is it not an honour thus to navigate on aerial billows?
The greatest men have travelled as we are doing. The Marchioness and Countess de Montalembert, the Countess of
Podenas, Mademoiselle la Garde, the Marquis de Montalembert, rose from the Faubourg Saint-Antoine for these
unknown regions, and the Duke de Chartres exhibited much skill and presence of mind in his ascent on the 15th of
July, 1784. At Lyons, the Counts of Laurencin and Dampierre; at Nantes, M. de Luynes; at Bordeaux, D'Arbelet des
Granges; in Italy, the Chevalier Andreani; in our own time, the Duke of Brunswick,—have all left the traces of their
glory in the air. To equal these great personages, we must penetrate still higher than they into the celestial depths! To
approach the infinite is to comprehend it!"

The rarefaction of the air was fast expanding the hydrogen in the balloon, and I saw its lower part, purposely left
empty, swell out, so that it was absolutely necessary to open the valve; but my companion did not seem to intend that I should manage the balloon as I wished. I then resolved to pull the valve cord secretly, as he was excitedly talking; for I feared to guess with whom I had to deal. It would have been too horrible! It was nearly a quarter before one. We had been gone forty minutes from Frankfort; heavy clouds were coming against the wind from the south, and seemed about to burst upon us.

"Have you lost all hope of succeeding in your project?" I asked with anxious interest.

"All hope!" exclaimed the unknown in a low voice. "Wounded by slights and caricatures, these asses' kicks have finished me! It is the eternal punishment reserved for innovators! Look at these caricatures of all periods, of which my portfolio is full."

While my companion was fumbling with his papers, I had seized the valve-cord without his perceiving it. I feared, however, that he might hear the hissing noise, like a water-course, which the gas makes in escaping.

"How many jokes were made about the Abbé Miolan!" said he. "He was to go up with Janninet and Bredin. During the filling their balloon caught fire, and the ignorant populace tore it in pieces! Then this caricature of 'curious animals' appeared, giving each of them a punning nickname."

I pulled the valve-cord, and the barometer began to ascend. It was time. Some far-off rumblings were heard in the south.

"Here is another engraving," resumed the unknown, not suspecting what I was doing. "It is an immense balloon carrying a ship, strong castles, houses, and so on. The caricaturists did not suspect that their follies would one day become truths. It is complete, this large vessel. On the left is its helm, with the pilot's box; at the prow are pleasure-houses, an immense organ, and a cannon to call the attention of the inhabitants of the earth or the moon; above the poop there are the observatory and the balloon long-boat; in the equatorial circle, the army barrack; on the left, the funnel; then the upper galleries for promenading, sails, pinions; below, the cafés and general storehouse. Observe this pompous announcement: 'Invented for the happiness of the human race, this globe will depart at once for the ports of the Levant, and on its return the programme of its voyages to the two poles and the extreme west will be announced. No one need furnish himself with anything; everything is foreseen, and all will prosper. There will be a uniform price for all places of destination, but it will be the same for the most distant countries of our hemisphere—that is to say, a thousand louis for one of the said journeys. And it must be confessed that this sum is very moderate, when the speed, comfort, and arrangements which will be enjoyed on the balloon are considered—arrangements which are not to be found on land, while on the balloon each passenger may consult his own habits and tastes. This is so true that in the same place some will be dancing, others standing; some will be enjoying delicacies; others fasting. Whoever desires the society of wits may satisfy himself; whoever is stupid may find stupid people to keep him company. Thus pleasure will be the soul of the aerial company.' All this provoked laughter; but before long, if I am not cut off, they will see it all realized."

We were visibly descending. He did not perceive it!

"This kind of 'game at balloons,'" he resumed, spreading out before me some of the engravings of his valuable collection, "this game contains the entire history of the aerostatic art. It is used by elevated minds, and is played with dice and counters, with whatever stakes you like, to be paid or received according to where the player arrives."

"Why," said I, "you seem to have studied the science of aerostation profoundly."

"Yes, monsieur, yes! From Phaethon, Icarus, Architas, I have searched for, examined, learnt everything. I could render immense services to the world in this art, if God granted me life. But that will not be!"

"Why?"

"Because my name is Empedocles, or Erostratus."

Meanwhile, the balloon was happily approaching the earth; but when one is falling, the danger is as great at a hundred feet as at five thousand.

"Do you recall the battle of Fleurus?" resumed my companion, whose face became more and more animated. "It was at that battle that Contello, by order of the Government, organized a company of balloonists. At the siege of Manbenge General Jourdan derived so much service from this new method of observation that Contello ascended twice a day with the general himself. The communications between the aeronaut and his agents who held the balloon were made by means of small white, red, and yellow flags. Often the gun and cannon shot were directed upon the balloon when he ascended, but without result. When General Jourdan was preparing to invest Charleroi, Contello went into the vicinity, ascended from the plain of Jumet, and continued his observations for seven or eight hours with General Morlot, and this no doubt aided in giving us the victory of Fleurus. General Jourdan publicly acknowledged the help which the aeronautical observations had afforded him. Well, despite the services rendered on that occasion and during the Belgian campaign, the year which had seen the beginning of the military career of balloons saw also its end. The school of Meudon, founded by the Government, was closed by Buonaparte on his return from Egypt. And now, what can you expect from the new-born infant? as Franklin said. The infant was born
alive; it should not be stifled!"

[Illustration: "He continued his observations for seven or eight hours with General Morlot"]
The unknown bowed his head in his hands, and reflected for some moments; then raising his head, he said,--
"Despite my prohibition, monsieur, you have opened the valve."
I dropped the cord.
"Happily," he resumed, "we have still three hundred pounds of ballast."
"What is your purpose?" said I.
"Have you ever crossed the seas?" he asked.
I turned pale.
"It is unfortunate," he went on, "that we are being driven towards the Adriatic. That is only a stream; but higher up we may find other currents."
And, without taking any notice of me, he threw over several bags of sand; then, in a menacing voice, he said,--
"I let you open the valve because the expansion of the gas threatened to burst the balloon; but do not do it again!"
Then he went on as follows:--
"You remember the voyage of Blanchard and Jeffries from Dover to Calais? It was magnificent! On the 7th of January, 1785, there being a north-west wind, their balloon was inflated with gas on the Dover coast. A mistake of equilibrium, just as they were ascending, forced them to throw out their ballast so that they might not go down again, and they only kept thirty pounds. It was too little; for, as the wind did not freshen, they only advanced very slowly towards the French coast. Besides, the permeability of the tissue served to reduce the inflation little by little, and in an hour and a half the aeronauts perceived that they were descending.
"'What shall we do?' said Jeffries.
"'We are only one quarter of the way over,' replied Blanchard, 'and very low down. On rising, we shall perhaps meet more favourable winds.'
"'Let us throw out the rest of the sand.'
"The balloon acquired some ascending force, but it soon began to descend again. Towards the middle of the transit the aeronauts threw over their books and tools. A quarter of an hour after, Blanchard said to Jeffries,—
"'The barometer?'
"'It is going up! We are lost, and yet there is the French coast.'
"A loud noise was heard.
"'Has the balloon burst?' asked Jeffries.
"'No. The loss of the gas has reduced the inflation of the lower part of the balloon. But we are still descending. We are lost! Out with everything useless!'
"Provisions, oars, and rudder were thrown into the sea. The aeronauts were only one hundred yards high.
"'We are going up again,' said the doctor.
"'No. It is the spurt caused by the diminution of the weight, and not a ship in sight, not a bark on the horizon! To the sea with our clothing!'
"The unfortunates stripped themselves, but the balloon continued to descend.
"'Blanchard,' said Jeffries, 'you should have made this voyage alone; you consented to take me; I will sacrifice myself! I am going to throw myself into the water, and the balloon, relieved of my weight, will mount again.'
"'No, no! It is frightful!'
"The balloon became less and less inflated, and as it doubled up its concavity pressed the gas against the sides, and hastened its downward course.
[Illustration: The balloon became less and less inflated]
"'Adieu, my friend," said the doctor. 'God preserve you!'
"He was about to throw himself over, when Blanchard held him back.
"'There is one more chance,' said he. 'We can cut the cords which hold the car, and cling to the net! Perhaps the balloon will rise. Let us hold ourselves ready. But--the barometer is going down! The wind is freshening! We are saved!'
"The aeronauts perceived Calais. Their joy was delirious. A few moments more, and they had fallen in the forest of Guines. I do not doubt," added the unknown, "that, under similar circumstances, you would have followed Doctor Jeffries' example!"
The clouds rolled in glittering masses beneath us. The balloon threw large shadows on this heap of clouds, and was surrounded as by an aureola. The thunder rumbled below the car. All this was terrifying.
"Let us descend!" I cried.
"Descend, when the sun is up there, waiting for us? Out with more bags!"
And more than fifty pounds of ballast were cast over.
At a height of three thousand five hundred yards we remained stationary.

The unknown talked unceasingly. I was in a state of complete prostration, while he seemed to be in his element.

"With a good wind, we shall go far," he cried. "In the Antilles there are currents of air which have a speed of a hundred leagues an hour. When Napoleon was crowned, Garnerin sent up a balloon with coloured lamps, at eleven o'clock at night. The wind was blowing north-north-west. The next morning, at daybreak, the inhabitants of Rome greeted its passage over the dome of St. Peter's. We shall go farther and higher!"

I scarcely heard him. Everything whirled around me. An opening appeared in the clouds.

"See that city," said the unknown. "It is Spires!"

I leaned over the car and perceived a small blackish mass. It was Spires. The Rhine, which is so large, seemed an unrolled ribbon. The sky was a deep blue over our heads. The birds had long abandoned us, for in that rarefied air they could not have flown. We were alone in space, and I in presence of this unknown!

"It is useless for you to know whither I am leading you," he said, as he threw the compass among the clouds. "Ah! a fall is a grand thing! You know that but few victims of ballooning are to be reckoned, from Pilâtre des Rosiers to Lieutenant Gale, and that the accidents have always been the result of imprudence. Pilâtre des Rosiers set out with Romain of Boulogne, on the 13th of June, 1785. To his gas balloon he had affixed a Montgolfier apparatus of hot air, so as to dispense, no doubt, with the necessity of losing gas or throwing out ballast. It was putting a torch under a powder-barrel. When they had ascended four hundred yards, and were taken by opposing winds, they were driven over the open sea. Pilâtre, in order to descend, essayed to open the valve, but the valve-cord became entangled in the balloon, and tore it so badly that it became empty in an instant. It fell upon the Montgolfier apparatus, overturned it, and dragged down the unfortunates, who were soon shattered to pieces! It is frightful, is it not?"

I could only reply, "For pity's sake, let us descend!"

The clouds gathered around us on every side, and dreadful detonations, which reverberated in the cavity of the balloon, took place beneath us.

"You provoke me," cried the unknown, "and you shall no longer know whether we are rising or falling!"

The barometer went the way of the compass, accompanied by several more bags of sand. We must have been 5000 yards high. Some icicles had already attached themselves to the sides of the car, and a kind of fine snow seemed to penetrate to my very bones. Meanwhile a frightful tempest was raging under us, but we were above it.

"Do not be afraid," said the unknown. "It is only the imprudent who are lost. Olivari, who perished at Orleans, rose in a paper 'Montgolfier;' his car, suspended below the chafing-dish, and ballasted with combustible materials, caught fire; Olivari fell, and was killed! Mosment rose, at Lille, on a light tray; an oscillation disturbed his equilibrium; Mosment fell, and was killed! Bittorf, at Mannheim, saw his balloon catch fire in the air; and he, too, fell, and was killed! Harris rose in a badly constructed balloon, the valve of which was too large and would not shut; Harris fell, and was killed! Sadler, deprived of ballast by his long sojourn in the air, was dragged over the town of Boston and dashed against the chimneys; Sadler fell, and was killed! Cokling descended with a convex parachute which he pretended to have perfected; Cokling fell, and was killed! Well, I love them, these victims of their own imprudence, and I shall die as they did. Higher! still higher!"

All the phantoms of this necrology passed before my eyes. The rarefaction of the air and the sun's rays added to the expansion of the gas, and the balloon continued to mount. I tried mechanically to open the valve, but the unknown cut the cord several feet above my head. I was lost!

"Did you see Madame Blanchard fall?" said he. "I saw her; yes, I! I was at Tivoli on the 6th of July, 1819. Madame Blanchard rose in a small sized balloon, to avoid the expense of filling, and she was forced to entirely inflate it. The gas leaked out below, and left a regular train of hydrogen in its path. She carried with her a sort of pyrotechnic aureola, suspended below her car by a wire, which she was to set off in the air. This she had done many times before. On this day she also carried up a small parachute ballasted by a firework contrivance, that would go off in a shower of silver. She was to start this contrivance after having lighted it with a port-fire made on purpose. She set out; the night was gloomy. At the moment of lighting her fireworks she was so imprudent as to pass the taper under a powder-barrel. When they had ascended four hundred yards, and were taken by opposing winds, they were driven over the open sea. Madame Blanchard essayed to fall less, continued to descend, but it was not a fall. The wind blew from the north-west and drove it towards Paris. There were then some large gardens just by the house No. 16, Rue de Provence. Madame Blanchard essayed to fall..."
there without danger: but the balloon and the car struck on the roof of the house with a light shock. ‘Save me!’ cried the wretched woman. I got into the street at this moment. The car slid along the roof, and encountered an iron cramp. At this concussion, Madame Blanchard was thrown out of her car and precipitated upon the pavement. She was killed!"

These stories froze me with horror. The unknown was standing with bare head, dishevelled hair, haggard eyes! There was no longer any illusion possible. I at last recognized the horrible truth. I was in the presence of a madman!

He threw out the rest of the ballast, and we must have now reached a height of at least nine thousand yards. Blood spurted from my nose and mouth!

"Who are nobler than the martyrs of science?" cried the lunatic. "They are canonized by posterity."

But I no longer heard him. He looked about him, and, bending down to my ear, muttered,--

"And have you forgotten Zambecarri’s catastrophe? Listen. On the 7th of October, 1804, the clouds seemed to lift a little. On the preceding days, the wind and rain had not ceased; but the announced ascension of Zambecarri could not be postponed. His enemies were already bantering him. It was necessary to ascend, to save the science and himself from becoming a public jest. It was at Boulogne. No one helped him to inflate his balloon.

"He rose at midnight, accompanied by Andreoli and Grossetti. The balloon mounted slowly, for it had been perforated by the rain, and the gas was leaking out. The three intrepid aeronauts could only observe the state of the barometer by aid of a dark lantern. Zambecarri had eaten nothing for twenty-four hours. Grossetti was also fasting.

"‘My friends,’ said Zambecarri, ‘I am overcome by cold, and exhausted. I am dying.’

"He fell inanimate in the gallery. It was the same with Grossetti. Andreoli alone remained conscious. After long efforts, he succeeded in reviving Zambecarri.

"‘What news? Whither are we going? How is the wind? What time is it?’

"‘It is two o’clock.‘

"‘Where is the compass?’

"‘Upset!’

"‘Great God! The lantern has gone out!’

"‘It cannot burn in this rarefied air,’ said Zambecarri.

"‘The moon had not risen, and the atmosphere was plunged in murky darkness.

"‘I am cold, Andreoli. What shall I do?’

"‘They slowly descended through a layer of whitish clouds.

"‘Sh!’ said Andreoli. ‘Do you hear?’

"‘What?’ asked Zambecarri.

"‘A strange noise.’

"‘You are mistaken.’

"‘No.’

“Consider these travellers, in the middle of the night, listening to that unaccountable noise! Are they going to knock against a tower? Are they about to be precipitated on the roofs?

"‘Do you hear? One would say it was the noise of the sea.’

"‘Impossible!’

"‘It is the groaning of the waves!’

"‘It is true.’

"‘Light! light!’

"After five fruitless attempts, Andreoli succeeded in obtaining light. It was three o’clock.

"‘The voice of violent waves was heard. They were almost touching the surface of the sea!

"‘We are lost!’ cried Zambecarri, seizing a large bag of sand.

"‘Help!’ cried Andreoli.

"‘The car touched the water, and the waves came up to their breasts.

"‘Throw out the instruments, clothes, money!’

"The aeronauts completely stripped themselves. The balloon, relieved, rose with frightful rapidity. Zambecarri was taken with vomiting. Grossetti bled profusely. The unfortunate men could not speak, so short was their breathing. They were taken with cold, and they were soon crusted over with ice. The moon looked as red as blood.

"After traversing the high regions for a half-hour, the balloon again fell into the sea. It was four in the morning. They were half submerged in the water, and the balloon dragged them along, as if under sail, for several hours.

"At daybreak they found themselves opposite Pesaro, four miles from the coast. They were about to reach it, when a gale blew them back into the open sea. They were lost! The frightened boats fled at their approach. Happily, a more intelligent boatman accosted them, hoisted them on board, and they landed at Ferrada.
"A frightful journey, was it not? But Zambecarri was a brave and energetic man. Scarcely recovered from his sufferings, he resumed his ascensions. During one of them he struck against a tree; his spirit-lamp was broken on his clothes; he was enveloped in fire, his balloon began to catch the flames, and he came down half consumed.

"At last, on the 21st of September, 1812, he made another ascension at Boulogne. The balloon clung to a tree, and his lamp again set it on fire. Zambecarri fell, and was killed! And in presence of these facts, we would still hesitate! No. The higher we go, the more glorious will be our death!"

[Illustration: "Zambecarri fell, and was killed!"

The balloon being now entirely relieved of ballast and of all it contained, we were carried to an enormous height. It vibrated in the atmosphere. The least noise resounded in the vaults of heaven. Our globe, the only object which caught my view in immensity, seemed ready to be annihilated, and above us the depths of the starry skies were lost in thick darkness.

I saw my companion rise up before me.

"The hour is come!" he said. "We must die. We are rejected of men. They despise us. Let us crush them!"

"Mercy!" I cried.

"Let us cut these cords! Let this car be abandoned in space. The attractive force will change its direction, and we shall approach the sun!"

Despair galvanized me. I threw myself upon the madman, we struggled together, and a terrible conflict took place. But I was thrown down, and while he held me under his knee, the madman was cutting the cords of the car.

"One!" he cried.

"My God!"

"Two! Three!"

I made a superhuman effort, rose up, and violently repulsed the madman.

"Four!"

The car fell, but I instinctively clung to the cords and hoisted myself into the meshes of the netting.

The madman disappeared in space!

[Illustration: The madman disappeared in space!]

The balloon was raised to an immeasurable height. A horrible cracking was heard. The gas, too much dilated, had burst the balloon. I shut my eyes--

Some instants after, a damp warmth revived me. I was in the midst of clouds on fire. The balloon turned over with dizzy velocity. Taken by the wind, it made a hundred leagues an hour in a horizontal course, the lightning flashing around it.

Meanwhile my fall was not a very rapid one. When I opened my eyes, I saw the country. I was two miles from the sea, and the tempest was driving me violently towards it, when an abrupt shock forced me to loosen my hold. My hands opened, a cord slipped swiftly between my fingers, and I found myself on the solid earth!

It was the cord of the anchor, which, sweeping along the surface of the ground, was caught in a crevice; and my balloon, unballasted for the last time, careered off to lose itself beyond the sea.

When I came to myself, I was in bed in a peasant's cottage, at Harderwick, a village of La Gueldre, fifteen leagues from Amsterdam, on the shores of the Zuyder-Zee.

A miracle had saved my life, but my voyage had been a series of imprudences, committed by a lunatic, and I had not been able to prevent them.

May this terrible narrative, though instructing those who read it, not discourage the explorers of the air.

A WINTER AMID THE ICE.

CHAPTER I.

THE BLACK FLAG.

The curé of the ancient church of Dunkirk rose at five o'clock on the 12th of May, 18--, to perform, according to his custom, low mass for the benefit of a few pious sinners.

Attired in his priestly robes, he was about to proceed to the altar, when a man entered the sacristy, at once joyous and frightened. He was a sailor of some sixty years, but still vigorous and sturdy, with, an open, honest countenance.

"Monsieur the curé," said he, "stop a moment, if you please."

[Illustration: 'Monsieur the curé,' said he, "stop a moment, if you please."]

"What do you want so early in the morning, Jean Courbutte?" asked the curé.

"What do I want? Why, to embrace you in my arms, i' faith!"
"Well, after the mass at which you are going to be present--"
"The mass?" returned the old sailor, laughing. "Do you think you are going to say your mass now, and that I will let you do so?"
"And why should I not say my mass?" asked the curé. "Explain yourself. The third bell has sounded--"
"Whether it has or not," replied Jean Cornbutte, "it will sound many more times to-day, monsieur the curé, for you have promised me that you will bless, with your own hands, the marriage of my son Louis and my niece Marie!"
"He has arrived, then," said the curé "joyfully.
"It is nearly the same thing," replied Cornbutte, rubbing his hands. "Our brig was signalled from the look out at sunrise,--our brig, which you yourself christened by the good name of the 'Jeune-Hardie'!"
"I congratulate you with all my heart, Cornbutte," said the curé, taking off his chasuble and stole. "I remember our agreement. The vicar will take my place, and I will put myself at your disposal against your dear son's arrival."
"And I promise you that he will not make you fast long," replied the sailor. "You have already published the banns, and you will only have to absolve him from the sins he may have committed between sky and water, in the Northern Ocean. I had a good idea, that the marriage should be celebrated the very day he arrived, and that my son Louis should leave his ship to repair at once to the church."
"Go, then, and arrange everything, Cornbutte."
"I fly, monsieur the curé. Good morning!"
The sailor hastened with rapid steps to his house, which stood on the quay, whence could be seen the Northern Ocean, of which he seemed so proud.
Jean Cornbutte had amassed a comfortable sum at his calling. After having long commanded the vessels of a rich shipowner of Havre, he had settled down in his native town, where he had caused the brig "Jeune-Hardie" to be constructed at his own expense. Several successful voyages had been made in the North, and the ship always found a good sale for its cargoes of wood, iron, and tar. Jean Cornbutte then gave up the command of her to his son Louis, a fine sailor of thirty, who, according to all the coasting captains, was the boldest mariner in Dunkirk.
Louis Cornbutte had gone away deeply attached to Marie, his father's niece, who found the time of his absence very long and weary. Marie was scarcely twenty. She was a pretty Flemish girl, with some Dutch blood in her veins. Her mother, when she was dying, had confided her to her brother, Jean Cornbutte. The brave old sailor loved her as a daughter, and saw in her proposed union with Louis a source of real and durable happiness.
The arrival of the ship, already signalled off the coast, completed an important business operation, from which Jean Cornbutte expected large profits. The "Jeune-Hardie," which had left three months before, came last from Bodøe, on the west coast of Norway, and had made a quick voyage thence.
On returning home, Jean Cornbutte found the whole house alive. Marie, with radiant face, had assumed her wedding-dress.
"I hope the ship will not arrive before we are ready!" she said.
"Hurry, little one," replied Jean Cornbutte, "for the wind is north, and she sails well, you know, when she goes freely."
"Have our friends been told, uncle?" asked Marie.
"They have."
"The notary, and the curé?"
"Rest easy. You alone are keeping us waiting."
At this moment Clerbaut, an old crony, came in.
"Well, old Cornbutte," cried he, "here's luck! Your ship has arrived at the very moment that the government has decided to contract for a large quantity of wood for the navy!"
"What is that to me?" replied Jean Cornbutte. "What care I for the government?"
"You see, Monsieur Clerbaut," said Marie, "one thing only absorbs us,--Louis's return."
"I don't dispute that," replied Clerbaut. "But--in short--this purchase of wood--"
"And you shall be at the wedding," replied Jean Cornbutte, interrupting the merchant, and shaking his hand as if he would crush it.
"This purchase of wood--"
"And with all our friends, landsmen and seamen, Clerbaut. I have already informed everybody, and I shall invite the whole crew of the ship."
"And shall we go and await them on the pier?" asked Marie.
"Indeed we will," replied Jean Cornbutte. "We will defile, two by two, with the violins at the head."
Jean Cornbutte's invited guests soon arrived. Though it was very early, not a single one failed to appear. All congratulated the honest old sailor whom they loved. Meanwhile Marie, kneeling down, changed her prayers to God into thanksgivings. She soon returned, lovely and decked out, to the company; and all the women kissed her on the
check, while the men vigorously grasped her by the hand. Then Jean Cornbutte gave the signal of departure.

It was a curious sight to see this joyous group taking its way, at sunrise, towards the sea. The news of the ship's arrival had spread through the port, and many heads, in nightcaps, appeared at the windows and at the half-opened doors. Sincere compliments and pleasant nods came from every side.

The party reached the pier in the midst of a concert of praise and blessings. The weather was magnificent, and the sun seemed to take part in the festivity. A fresh north wind made the waves foam; and some fishing-smacks, their sails trimmed for leaving port, streaked the sea with their rapid wakes between the breakwaters.

The two piers of Dunkirk stretch far out into the sea. The wedding-party occupied the whole width of the northern pier, and soon reached a small house situated at its extremity, inhabited by the harbour-master. The wind freshened, and the "Jeune-Hardie" ran swiftly under her topsails, mizzen, brigantine, gallant, and royal. There was evidently rejoicing on board as well as on land. Jean Cornbutte, spy-glass in hand, responded merrily to the questions of his friends.

"See my ship!" he cried; "clean and steady as if she had been rigged at Dunkirk! Not a bit of damage done,--not a rope wanting!"

"Do you see your son, the captain?" asked one.
"No, not yet. Why, he's at his business!"
"Why doesn't he run up his flag?" asked Clerbaut.
"I scarcely know, old friend. He has a reason for it, no doubt."
"Your spy-glass, uncle?" said Marie, taking it from him. "I want to be the first to see him."
"But he is my son, mademoiselle!"
"He has been your son for thirty years," answered the young girl, laughing, "and he has only been my betrothed for two!"

The "Jeune-Hardie" was now entirely visible. Already the crew were preparing to cast anchor. The upper sails had been reefed. The sailors who were among the rigging might be recognized. But neither Marie nor Jean Cornbutte had yet been able to wave their hands at the captain of the ship.

"Faith! there's the first mate, André Vasling," cried Clerbaut.
"And there's Fidèle Misonne, the carpenter," said another.
"And our friend Penellan," said a third, saluting the sailor named.

The "Jeune-Hardie" was only three cables' lengths from the shore, when a black flag ascended to the gaff of the brigantine. There was mourning on board!

A shudder of terror seized the party and the heart of the young girl.

The ship sadly swayed into port, and an icy silence reigned on its deck. Soon it had passed the end of the pier. Marie, Jean Cornbutte, and all their friends hurried towards the quay at which she was to anchor, and in a moment found themselves on board.

"My son!" said Jean Cornbutte, who could only articulate these words.

The sailors, with uncovered heads, pointed to the mourning flag. Marie uttered a cry of anguish, and fell into old Cornbutte's arms.

André Vasling had brought back the "Jeune-Hardie," but Louis Cornbutte, Marie's betrothed, was not on board.

CHAPTER II.
Jean Cornbutte's Project.

As soon as the young girl, confided to the care of the sympathizing friends, had left the ship, André Vasling, the mate, apprised Jean Cornbutte of the dreadful event which had deprived him of his son, narrated in the ship's journal as follows:--

[Illustration: André Vasling, the mate, apprised Jean Cornbutte of the dreadful event]

"At the height of the Maëlstrom, on the 26th of April, the ship, putting for the cape, by reason of bad weather and south-west winds, perceived signals of distress made by a schooner to the leeward. This schooner, deprived of its mizzen-mast, was running towards the whirlpool, under bare poles. Captain Louis Cornbutte, seeing that this vessel was hastening into imminent danger, resolved to go on board her. Despite the remonstrances of his crew, he had the long-boat lowered into the sea, and got into it, with the sailor Courtois and the helmsman Pierre Nouquet. The crew watched them until they disappeared in the fog. Night came on. The sea became more and more boisterous. The "Jeune-Hardie", drawn by the currents in those parts, was in danger of being engulfed by the Maëlstrom. She was obliged to fly before the wind. For several days she hovered near the place of the disaster, but in vain. The long-boat, the schooner, Captain Louis, and the two sailors did not reappear. André Vasling then called the crew together, took command of the ship, and set sail for Dunkirk."
After reading this dry narrative, Jean Cornbutte wept for a long time; and if he had any consolation, it was the thought that his son had died in attempting to save his fellow-men. Then the poor father left the ship, the sight of which made him wretched, and returned to his desolate home.

The sad news soon spread throughout Dunkirk. The many friends of the old sailor came to bring him their cordial and sincere sympathy. Then the sailors of the "Jeune-Hardie" gave a more particular account of the event, and André Vasling told Marie, at great length, of the devotion of her betrothed to the last.

When he ceased weeping, Jean Cornbutte thought over the matter, and the next day after the ship's arrival, when André came to see him, said,—

"Are you very sure, André, that my son has perished?"
"Alas, yes, Monsieur Jean," replied the mate.
"And you made all possible search for him?"
"All, Monsieur Cornbutte. But it is unhappily but too certain that he and the two sailors were sucked down in the whirlpool of the Maëlstrom."
"Would you like, André, to keep the second command of the ship?"
"That will depend upon the captain, Monsieur Cornbutte."
"I shall be the captain," replied the old sailor. "I am going to discharge the cargo with all speed, make up my crew, and sail in search of my son."
"Your son is dead!" said André obstinately.
"It is possible, André," replied Jean Cornbutte sharply, "but it is also possible that he saved himself. I am going to rummage all the ports of Norway whither he might have been driven, and when I am fully convinced that I shall never see him again, I will return here to die!"

André Vasling, seeing that this decision was irrevocable, did not insist further, but went away.

Jean Cornbutte at once apprised his niece of his intention, and he saw a few rays of hope glisten across her tears. It had not seemed to the young girl that her lover's death might be doubtful; but scarcely had this new hope entered her heart, than she embraced it without reserve.

The old sailor determined that the "Jeune-Hardie" should put to sea without delay. The solidly built ship had no need of repairs. Jean Cornbutte gave his sailors notice that if they wished to re-embark, no change in the crew would be made. He alone replaced his son in the command of the brig. None of the comrades of Louis Cornbutte failed to respond to his call, and there were hardy tars among them,—Alaine Turquiette, Fidèle Misonne the carpenter, Penellan the Breton, who replaced Pierre Nouquet as helmsman, and Gradlin, Aupic, and Gervique, courageous and well-tried mariners.

Jean Cornbutte again offered André Vasling his old rank on board. The first mate was an able officer, who had proved his skill in bringing the "Jeune-Hardie" into port. Yet, from what motive could not be told, André made some difficulties and asked time for reflection.

"As you will, André Vasling," replied Cornbutte. "Only remember that if you accept, you will be welcome among us."

Jean had a devoted sailor in Penellan the Breton, who had long been his fellow-voyager. In times gone by, little Marie was wont to pass the long winter evenings in the helmsman's arms, when he was on shore. He felt a fatherly friendship for her, and she had for him ah affection quite filial. Penellan hastened the fitting out of the ship with all his energy, all the more because, according to his opinion, André Vasling had not perhaps made every effort possible to find the castaways, although he was excusable from the responsibility which weighed upon him as captain.

Within a week the "Jeune-Hardie" was ready to put to sea. Instead of merchandise, she was completely provided with salt meats, biscuits, barrels of flour, potatoes, pork, wine, brandy, coffee, tea, and tobacco.

The departure was fixed for the 22nd of May. On the evening before, André Vasling, who had not yet given his answer to Jean Cornbutte, came to his house. He was still undecided, and did not know which course to take.

Jean was not at home, though the house-door was open. André went into the passage, next to Marie's chamber, where the sound of an animated conversation struck his ear. He listened attentively, and recognized the voices of Penellan and Marie.

The discussion had no doubt been going on for some time, for the young girl seemed to be stoutly opposing what the Breton sailor said.

"How old is my uncle Cornbutte?" said Marie.
"Something about sixty years," replied Penellan.
"Well, is he not going to brave danger to find his son?"
"Our captain is still a sturdy man," returned the sailor. "He has a body of oak and muscles as hard as a spare spar. So I am not afraid to have him go to sea again!"
"My good Penellan," said Marie, "one is strong when one loves! Besides, I have full confidence in the aid of Heaven. You understand me, and will help me."

"No!" said Penellan. "It is impossible, Marie. Who knows whither we shall drift, or what we must suffer? How many vigorous men have I seen lose their lives in these seas!"

"Penellan," returned the young girl, "if you refuse me, I shall believe that you do not love me any longer."

André Vasling understood the young girl's resolution. He reflected a moment, and his course was determined on.

"Jean Cornbutte," said he, advancing towards the old sailor, who now entered, "I will go with you. The cause of my hesitation has disappeared, and you may count upon my devotion."

"I have never doubted you, André Vasling," replied Jean Cornbutte, grasping him by the hand. "Marie, my child!" he added, calling in a loud voice.

Marie and Penellan made their appearance.

"We shall set sail to-morrow at daybreak, with the outgoing tide," said Jean. "My poor Marie, this is the last evening that we shall pass together.

"Uncle!" cried Marie, throwing herself into his arms.  "Marie, by the help of God, I will bring your lover back to you!"

"Yes, we will find Louis," added André Vasling.

"You are going with us, then?" asked Penellan quickly.

"Yes, Penellan, André Vasling is to be my first mate," answered Jean.

"Oh, oh!" ejaculated the Breton, in a singular tone.

"And his advice will be useful to us, for he is able and enterprising.

"And yourself, captain," said André. "You will set us all a good example, for you have still as much vigour as experience."

"Well, my friends, good-bye till to-morrow. Go on board and make the final arrangements. Good-bye, André; good-bye, Penellan."

The mate and the sailor went out together, and Jean and Marie remained alone. Many bitter tears were shed during that sad evening. Jean Cornbutte, seeing Marie so wretched, resolved to spare her the pain of separation by leaving the house on the morrow without her knowledge. So he gave her a last kiss that evening, and at three o'clock next morning was up and away.

The departure of the brig had attracted all the old sailor's friends to the pier. The curé, who was to have blessed Marie's union with Louis, came to give a last benediction on the ship. Rough grasps of the hand were silently exchanged, and Jean went on board.

The crew were all there. André Vasling gave the last orders. The sails were spread, and the brig rapidly passed out under a stiff north-west breeze, whilst the cure, upright in the midst of the kneeling spectators, committed the vessel to the hands of God.

Whither goes this ship? She follows the perilous route upon which so many castaways have been lost! She has no certain destination. She must expect every peril, and be able to brave them without hesitating. God alone knows where it will be her fate to anchor. May God guide her!

CHAPTER III.

A RAY OF HOPE.

At that time of the year the season was favourable, and the crew might hope promptly to reach the scene of the shipwreck.

Jean Cornbutte's plan was naturally traced out. He counted on stopping at the Feroë Islands, whither the north wind might have carried the castaways; then, if he was convinced that they had not been received in any of the ports of that locality, he would continue his search beyond the Northern Ocean, ransack the whole western coast of Norway as far as Bodoë, the place nearest the scene of the shipwreck; and, if necessary, farther still.

André Vasling thought, contrary to the captain's opinion, that the coast of Iceland should be explored; but Penellan observed that, at the time of the catastrophe, the gale came from the west; which, while it gave hope that the unfortunates had not been forced towards the gulf of the Maëlstrom, gave ground for supposing that they might have been thrown on the Norwegian coast.

It was determined, then, that this coast should be followed as closely as possible, so as to recognize any traces of them that might appear.

The day after sailing, Jean Cornbutte, intent upon a map, was absorbed in reflection, when a small hand touched his shoulder, and a soft voice said in his ear,--

"Have good courage, uncle."
"Have good courage, uncle."

He turned, and was stupefied. Marie embraced him.

"Marie, my daughter, on board!" he cried.

"The wife may well go in search of her husband, when the father embarks to save his child."

"Unhappy Marie! How wilt thou support our fatigues! Dost thou know that thy presence may be injurious to our search?"

"No, uncle, for I am strong."

"Who knows whither we shall be forced to go, Marie? Look at this map. We are approaching places dangerous even for us sailors, hardened though we are to the difficulties of the sea. And thou, frail child?"

"But, uncle, I come from a family of sailors. I am used to stories of combats and tempests. I am with you and my old friend Penellan!"

"Penellan! It was he who concealed you on board?"

"Yes, uncle; but only when he saw that I was determined to come without his help."

Penellan entered.

"It is not possible to undo what you have done, Penellan; but remember that you are responsible for Marie's life."

"Rest easy, captain," replied Penellan. "The little one has force and courage, and will be our guardian angel. And then, captain, you know it is my theory, that all in this world happens for the best."

The young girl was installed in a cabin, which the sailors soon got ready for her, and which they made as comfortable as possible.

A week later the "Jeune-Hardie" stopped at the Feroë Islands, but the most minute search was fruitless. No wreck, or fragments of a ship had come upon these coasts. Even the news of the event was quite unknown. The brig resumed its voyage, after a stay of ten days, about the 10th of June. The sea was calm, and the winds were favourable. The ship sped rapidly towards the Norwegian coast, which it explored without better result.

Jean Cornbutte determined to proceed to Bodoë. Perhaps he would there learn the name of the shipwrecked schooner to succour which Louis and the sailors had sacrificed themselves.

On the 30th of June the brig cast anchor in that port.

The authorities of Bodoë gave Jean Cornbutte a bottle found on the coast, which contained a document bearing these words:

"This 26th April, on board the 'Froöern,' after being accosted by the long-boat of the 'Jeune-Hardie,' we were drawn by the currents towards the ice. God have pity on us!"

Jean Cornbutte's first impulse was to thank Heaven. He thought himself on his son's track. The "Froöern" was a Norwegian sloop of which there had been no news, but which had evidently been drawn northward.

Not a day was to be lost. The "Jeune-Hardie" was at once put in condition to brave the perils of the polar seas. Fidèle Misonne, the carpenter, carefully examined her, and assured himself that her solid construction might resist the shock of the ice-masses.

Penellan, who had already engaged in whale-fishing in the arctic waters, took care that woollen and fur coverings, many sealskin moccassins, and wood for the making of sledges with which to cross the ice-fields were put on board. The amount of provisions was increased, and spirits and charcoal were added; for it might be that they would have to winter at some point on the Greenland coast. They also procured, with much difficulty and at a high price, a quantity of lemons, for preventing or curing the scurvy, that terrible disease which decimates crews in the icy regions. The ship's hold was filled with salt meat, biscuits, brandy, &c., as the steward's room no longer sufficed. They provided themselves, moreover, with a large quantity of "pemmican," an Indian preparation which concentrates a great deal of nutrition within a small volume.

By order of the captain, some saws were put on board for cutting the ice-fields, as well as picks and wedges for separating them. The captain determined to procure some dogs for drawing the sledges on the Greenland coast.

The whole crew was engaged in these preparations, and displayed great activity. The sailors Aupic, Gervique, and Gradlin zealously obeyed Penellan's orders; and he admonished them not to accustom themselves to woollen garments, though the temperature in this latitude, situated just beyond the polar circle, was very low.

Penellan, though he said nothing, narrowly watched every action of André Vasling. This man was Dutch by birth, came from no one knew whither, but was at least a good sailor, having made two voyages on board the "Jeune-Hardie". Penellan would not as yet accuse him of anything, unless it was that he kept near Marie too constantly, but he did not let him out of his sight.

Thanks to the energy of the crew, the brig was equipped by the 16th of July, a fortnight after its arrival at Bodoë. It was then the favourable season for attempting explorations in the Arctic Seas. The thaw had been going on for two months, and the search might be carried farther north. The "Jeune-Hardie" set sail, and directed her way towards
Cape Brewster, on the eastern coast of Greenland, near the 70th degree of latitude.

CHAPTER IV.
IN THE PASSES.

About the 23rd of July a reflection, raised above the sea, announced the presence of the first icebergs, which, emerging from Davis' Straits, advanced into the ocean. From this moment a vigilant watch was ordered to the lookout men, for it was important not to come into collision with these enormous masses.

The crew was divided into two watches. The first was composed of Fidèle Misonne, Gradlin, and Gervique; and the second of André Vasling, Aupic, and Penellan. These watches were to last only two hours, for in those cold regions a man's strength is diminished one-half. Though the "Jeune-Hardie" was not yet beyond the 63rd degree of latitude, the thermometer already stood at nine degrees centigrade below zero.

Rain and snow often fell abundantly. On fair days, when the wind was not too violent, Marie remained on deck, and her eyes became accustomed to the uncouth scenes of the Polar Seas.

On the 1st of August she was promenading aft, and talking with her uncle, Penellan, and André Vasling. The ship was then entering a channel three miles wide, across which broken masses of ice were rapidly descending southwards.

"When shall we see land?" asked the young girl.
"In three or four days at the latest," replied Jean Cornbutte.
"But shall we find there fresh traces of my poor Louis?"
"Perhaps so, my daughter; but I fear that we are still far from the end of our voyage. It is to be feared that the 'Froöern' was driven farther northward."
"That may be," added André Vasling, "for the squall which separated us from the Norwegian boat lasted three days, and in three days a ship makes good headway, if it is no longer able to resist the wind."
"Permit me to tell you, Monsieur Vasling," replied Penellan, "that that was in April, that the thaw had not then begun, and that therefore the 'Froöern' must have been soon arrested by the ice."
"And no doubt dashed into a thousand pieces," said the mate, "as her crew could not manage her."
"But these ice-fields," returned Penellan, "gave her an easy means of reaching land, from which she could not have been far distant."
"Let us hope so," said Jean Cornbutte, interrupting the discussion, which was daily renewed between the mate and the helmsman. "I think we shall see land before long."
"There it is!" cried Marie. "See those mountains!"
"No, my child," replied her uncle. "Those are mountains of ice, the first we have met with. They would shatter us like glass if we got entangled between them. Penellan and Vasling, overlook the men."

These floating masses, more than fifty of which now appeared at the horizon, came nearer and nearer to the brig. Penellan took the helm, and Jean Cornbutte, mounted on the gallant, indicated the route to take.

Towards evening the brig was entirely surrounded by these moving rocks, the crushing force of which is irresistible. It was necessary, then, to cross this fleet of mountains, for prudence prompted them to keep straight ahead. Another difficulty was added to these perils. The direction of the ship could not be accurately determined, as all the surrounding points constantly changed position, and thus failed to afford a fixed perspective. The darkness soon increased with the fog. Marie descended to her cabin, and the whole crew, by the captain's orders, remained on deck. They were armed with long boat-poles, with iron spikes, to preserve the ship from collision with the ice.

The ship soon entered a strait so narrow that often the ends of her yards were grazed by the drifting mountains, and her booms seemed about to be driven in. They were even forced to trim the mainyard so as to touch the shrouds. Happily these precautions did not deprive, the vessel of any of its speed, for the wind could only reach the upper sails, and these sufficed to carry her forward rapidly. Thanks to her slender hull, she passed through these valleys, which were filled with whirlpools of rain, whilst the icebergs crushed against each other with sharp cracking and splitting.

Jean Cornbutte returned to the deck. His eyes could not penetrate the surrounding darkness. It became necessary to furl the upper sails, for the ship threatened to ground, and if she did so she was lost.
"Cursed voyage!" growled André Vasling among the sailors, who, forward, were avoiding the most menacing ice-blocks with their boat-hooks.
"Truly, if we escape we shall owe a fine candle to Our Lady of the Ice!" replied Aupic.
"Who knows how many floating mountains we have got to pass through yet?" added the mate.
"And who can guess what we shall find beyond them?" replied the sailor.
"Don't talk so much, prattler," said Gervique, "and look out on your side. When we have got by them, it'll be
time to grumble. Look out for your boat-hook!"

At this moment an enormous block of ice, in the narrow strait through which the brig was passing, came rapidly
down upon her, and it seemed impossible to avoid it, for it barred the whole width of the channel, and the brig could
not heave-to.

"Do you feel the tiller?" asked Cornbutte of Penellan.

"No, captain. The ship does not answer the helm any longer."

"Ohé, boys!" cried the captain to the crew; "don't be afraid, and buttress your hooks against the gunwale."

The block was nearly sixty feet high, and if it threw itself upon the brig she would be crushed. There was an
undefinable moment of suspense, and the crew retreated backward, abandoning their posts despite the captain's
orders.

But at the instant when the block was not more than half a cable's length from the "Jeune-Hardie," a dull sound
was heard, and a veritable waterspout fell upon the bow of the vessel, which then rose on the back of an enormous
billow.

The sailors uttered a cry of terror; but when they looked before them the block had disappeared, the passage was
free, and beyond an immense plain of water, illumined by the rays of the declining sun, assured them of an easy
navigation.

"All's well!" cried Penellan. "Let's trim our topsails and mizzen!"

An incident very common in those parts had just occurred. When these masses are detached from one another in
the thawing season, they float in a perfect equilibrium; but on reaching the ocean, where the water is relatively
warmer, they are speedily undermined at the base, which melts little by little, and which is also shaken by the shock
of other ice-masses. A moment comes when the centre of gravity of these masses is displaced, and then they are
completely overturned. Only, if this block had turned over two minutes later, it would have fallen on the brig and
carried her down in its fall.

CHAPTER V.
LIVERPOOL ISLAND.

The brig now sailed in a sea which was almost entirely open. At the horizon only, a whitish light, this time
motionless, indicated the presence of fixed plains of ice.

Jean Cornbutte now directed the "Jeune-Hardie" towards Cape Brewster. They were already approaching the
regions where the temperature is excessively cold, for the sun's rays, owing to their obliquity when they reach them,
are very feeble.

On the 3rd of August the brig confronted immoveable and united ice-masses. The passages were seldom more
than a cable's length in width, and the ship was forced to make many turnings, which sometimes placed her heading
the wind.

Penellan watched over Marie with paternal care, and, despite the cold, prevailed upon her to spend two or three
hours every day on deck, for exercise had become one of the indispensable conditions of health.

Marie's courage did not falter. She even comforted the sailors with her cheerful talk, and all of them became
warmly attached to her. André Vasling showed himself more attentive than ever, and seized every occasion to be in
her company; but the young girl, with a sort of presentiment, accepted his services with some coldness. It may be
easily conjectured that André's conversation referred more to the future than to the present, and that he did not
conceal the slight probability there was of saving the castaways. He was convinced that they were lost, and the
young girl ought thenceforth to confide her existence to some one else.

Marie had not as yet comprehended André's designs, for, to his great disgust, he could never find an opportunity
to talk long with her alone. Penellan had always an excuse for interfering, and destroying the effect of André's words
by the hopeful opinions he expressed.

Marie, meanwhile, did not remain idle. Acting on the helmsman's advice, she set to work on her winter
garments; for it was necessary that she should completely change her clothing. The cut of her dresses was not
suitable for these cold latitudes. She made, therefore, a sort of furred pantaloons, the ends of which were lined with
seal-skin; and her narrow skirts came only to her knees, so as not to be in contact with the layers of snow with which
the winter would cover the ice-fields. A fur mantle, fitting closely to the figure and supplied with a hood, protected
the upper part of her body.

In the intervals of their work, the sailors, too, prepared clothing with which to shelter themselves from the cold.
They made a quantity of high seal-skin boots, with which to cross the snow during their explorations. They worked
thus all the time that the navigation in the straits lasted.
André Vasling, who was an excellent shot, several times brought down aquatic birds with his gun; innumerable flocks of these were always careering about the ship. A kind of eider-duck provided the crew with very palatable food, which relieved the monotony of the salt meat.

At last the brig, after many turnings, came in sight of Cape Brewster. A long-boat was put to sea. Jean Cornbutte and Penellan reached the coast, which was entirely deserted.

The ship at once directed its course towards Liverpool Island, discovered in 1821 by Captain Scoresby, and the crew gave a hearty cheer when they saw the natives running along the shore. Communication was speedily established with them, thanks to Penellan’s knowledge of a few words of their language, and some phrases which we natives themselves had learnt of the whalers who frequented those parts.

These Greenlanders were small and squat; they were not more than four feet ten inches high; they had red, round faces, and low foreheads; their hair, flat and black, fell over their shoulders; their teeth were decayed, and they seemed to be affected by the sort of leprosy which is peculiar to ichthyophagous tribes.

In exchange for pieces of iron and brass, of which they are extremely covetous, these poor creatures brought bear furs, the skins of sea-calves, sea-dogs, sea-wolves, and all the animals generally known as seals. Jean Cornbutte obtained these at a low price, and they were certain to become most useful.

The captain then made the natives understand that he was in search of a shipwrecked vessel, and asked them if they had heard of it. One of them immediately drew something like a ship on the snow, and indicated that a vessel of that sort had been carried northward three months before: he also managed to make it understood that the thaw and breaking up of the ice-fields had prevented the Greenlanders from going in search of it; and, indeed, their very light canoes, which they managed with paddles, could not go to sea at that time.

This news, though meagre, restored hope to the hearts of the sailors, and Jean Cornbutte had no difficulty in persuading them to advance farther in the polar seas.

Before quitting Liverpool Island, the captain purchased a pack of six Esquimaux dogs, which were soon acclimatised on board. The ship weighed anchor on the morning of the 10th of August, and entered the northern straits under a brisk wind.

The longest days of the year had now arrived; that is, the sun, in these high latitudes, did not set, and reached the highest point of the spirals which it described above the horizon.

This total absence of night was not, however, very apparent, for the fog, rain, and snow sometimes enveloped the ship in real darkness.

Jean Cornbutte, who was resolved to advance as far as possible, began to take measures of health. The space between decks was securely enclosed, and every morning care was taken to ventilate it with fresh air. The stoves were installed, and the pipes so disposed as to yield as much heat as possible. The sailors were advised to wear only one woollen shirt over their cotton shirts, and to hermetically close their seal cloaks. The fires were not yet lighted, for it was important to reserve the wood and charcoal for the most intense cold.

Warm beverages, such as coffee and tea, were regularly distributed to the sailors morning and evening; and as it was important to live on meat, they shot ducks and teal, which abounded in these parts.

Jean Cornbutte also placed at the summit of the mainmast a “crow’s nest,” a sort of cask staved in at one end, in which a look-out remained constantly, to observe the icefields.

Two days after the brig had lost sight of Liverpool Island the temperature became suddenly colder under the influence of a dry wind. Some indications of winter were perceived. The ship had not a moment to lose, for soon the way would be entirely closed to her. She advanced across the straits, among which lay ice-plains thirty feet thick.

On the morning of the 3rd of September the “Jeune-Hardie” reached the head of Gaël-Hamkes Bay. Land was then thirty miles to the leeward. It was the first time that the brig had stopped before a mass of ice which offered no outlet, and which was at least a mile wide. The saws must now be used to cut the ice. Penellan, Aupic, Gradlin, and Turquiette were chosen to work the saws, which had been carried outside the ship. The direction of the cutting was so determined that the current might carry off the pieces detached from the mass. The whole crew worked at this task for nearly twenty hours. They found it very painful to remain on the ice, and were often obliged to plunge into the water up to their middle; their seal-skin garments protected them but imperfectly from the damp.

Moreover all excessive toil in those high latitudes is soon followed by an overwhelming weariness; for the breath soon fails, and the strongest are forced to rest at frequent intervals.

At last the navigation became free, and the brig was towed beyond the mass which had so long obstructed her course.

CHAPTER VI.
THE QUAKING OF THE ICE.
For several days the "Jeune-Hardie" struggled against formidable obstacles. The crew were almost all the time at work with the saws, and often powder had to be used to blow up the enormous blocks of ice which closed the way.

On the 12th of September the sea consisted of one solid plain, without outlet or passage, surrounding the vessel on all sides, so that she could neither advance nor retreat. The temperature remained at an average of sixteen degrees below zero. The winter season had come on, with its sufferings and dangers.

The "Jeune-Hardie" was then near the 21st degree of longitude west and the 76th degree of latitude north, at the entrance of Gâël-Hamkes Bay.

Jean Cornbutte made his preliminary preparations for wintering. He first searched for a creek whose position would shelter the ship from the wind and breaking up of the ice. Land, which was probably thirty miles west, could alone offer him secure shelter, and he resolved to attempt to reach it.

He set out on the 12th of September, accompanied by André Vasling, Penellan, and the two sailors Gradlin and Turquiette. Each man carried provisions for two days, for it was not likely that their expedition would occupy a longer time, and they were supplied with skins on which to sleep.

Snow had fallen in great abundance and was not yet frozen over; and this delayed them seriously. They often sank to their waists, and could only advance very cautiously, for fear of falling into crevices. Penellan, who walked in front, carefully sounded each depression with his iron-pointed staff.

About five in the evening the fog began to thicken, and the little band were forced to stop. Penellan looked about for an iceberg which might shelter them from the wind, and after refreshing themselves, with regrets that they had no warm drink, they spread their skins on the snow, wrapped themselves up, lay close to each other, and soon dropped asleep from sheer fatigue.

The next morning Jean Cornbutte and his companions were buried beneath a bed of snow more than a foot deep. Happily their skins, perfectly impermeable, had preserved them, and the snow itself had aided in retaining their heat, which it prevented from escaping.

The captain gave the signal of departure, and about noon they at last descried the coast, which at first they could scarcely distinguish. High ledges of ice, cut perpendicularly, rose on the shore; their variegated summits, of all forms and shapes, reproduced on a large scale the phenomena of crystallization. Myriads of aquatic fowl flew about at the approach of the party, and the seals, lazily lying on the ice, plunged hurriedly into the depths.

"I'faith!" said Penellan, "we shall not want for either furs or game!"

"Those animals," returned Cornbutte, "give every evidence of having been already visited by men; for in places totally uninhabited they would not be so wild."

"None but Greenlanders frequent these parts," said André Vasling.

"I see no trace of their passage, however; neither any encampment nor the smallest hut," said Penellan, who had climbed up a high peak. "O captain!" he continued, "come here! I see a point of land which will shelter us splendidly from the north-east wind."

"Come along, boys!" said Jean Cornbutte.

His companions followed him, and they soon rejoined Penellan. The sailor had said what was true. An elevated point of land jutted out like a promontory, and curving towards the coast, formed a little inlet of a mile in width at most. Some moving ice-blocks, broken by this point, floated in the midst, and the sea, sheltered from the colder winds, was not yet entirely frozen over.

This was an excellent spot for wintering, and it only remained to get the ship thither. Jean Cornbutte remarked that the neighbouring ice-field was very thick, and it seemed very difficult to cut a canal to bring the brig to its destination. Some other creek, then, must be found; it was in vain that he explored northward. The coast remained steep and abrupt for a long distance, and beyond the point it was directly exposed to the attacks of the east-wind.

The circumstance disconcerted the captain all the more because André Vasling used strong arguments to show how bad the situation was. Penellan, in this dilemma, found it difficult to convince himself that all was for the best.

But one chance remained--to seek a shelter on the southern side of the coast. This was to return on their path, but hesitation was useless. The little band returned rapidly in the direction of the ship, as their provisions had begun to run short. Jean Cornbutte searched for some practicable passage, or at least some fissure by which a canal might be cut across the ice-fields, all along the route, but in vain.

Towards evening the sailors came to the same place where they had encamped over night. There had been no snow during the day, and they could recognize the imprint of their bodies on the ice. They again disposed themselves to sleep with their furs.

Penellan, much disturbed by the bad success of the expedition, was sleeping restlessly, when, at a waking moment, his attention was attracted by a dull rumbling. He listened attentively, and the rumbling seemed so strange that he nudged Jean Cornbutte with his elbow.
"What is that?" said the latter, whose mind, according to a sailor's habit, was awake as soon as his body.
"Listen, captain."
The noise increased, with perceptible violence.
"It cannot be thunder, in so high a latitude," said Cornbutte, rising.
"I think we have come across some white bears," replied Penellan.
"The devil! We have not seen any yet."
"Sooner or later, we must have expected a visit from them. Let us give them a good reception."
Penellan, armed with a gun, lightly crossed the ledge which sheltered them. The darkness was very dense; he could discover nothing; but a new incident soon showed him that the cause of the noise did not proceed from around them.
Jean Cornbutte rejoined him, and they observed with terror that this rumbling, which awakened their companions, came from beneath them.
A new kind of peril menaced them. To the noise, which resembled peals of thunder, was added a distinct undulating motion of the ice-field. Several of the party lost their balance and fell.
"Attention!" cried Penellan.
"Yes!" some one responded.
"Turquiette! Gradlin! where are you?"
"Here I am!" responded Turquiette, shaking off the snow with which he was covered.
"This way, Vasling," cried Cornbutte to the mate. "And Gradlin?"
"Present, captain. But we are lost!" shouted Gradlin, in fright.
"No!" said Penellan. "Perhaps we are saved!"
Hardly had he uttered these words when a frightful cracking noise was heard. The ice-field broke clear through, and the sailors were forced to cling to the block which was quivering just by them. Despite the helmsman's words, they found themselves in a most perilous position, for an ice-quake had occurred. The ice masses had just "weighed anchor," as the sailors say. The movement lasted nearly two minutes, and it was to be feared that the crevice would yawn at the very feet of the unhappy sailors. They anxiously awaited daylight in the midst of continuous shocks, for they could not, without risk of death, move a step, and had to remain stretched out at full length to avoid being engulfed.

[Illustration: they found themselves in a most perilous position, for an ice-quake had occurred.]
As soon as it was daylight a very different aspect presented itself to their eyes. The vast plain, a compact mass the evening before, was now separated in a thousand places, and the waves, raised by some submarine commotion, had broken the thick layer which sheltered them.
The thought of his ship occurred to Jean Cornbutte's mind.
"My poor brig!" he cried. "It must have perished!"
The deepest despair began to overcast the faces of his companions. The loss of the ship inevitably preceded their own deaths.
"Courage, friends," said Penellan. "Reflect that this night's disaster has opened us a path across the ice, which will enable us to bring our ship to the bay for wintering! And, stop! I am not mistaken. There is the 'Jeune-Hardie,' a mile nearer to us!"
All hurried forward, and so imprudently, that Turquiette slipped into a fissure, and would have certainly perished, had not Jean Cornbutte seized him by his hood. He got off with a rather cold bath.
The brig was indeed floating two miles away. After infinite trouble, the little band reached her. She was in good condition; but her rudder, which they had neglected to lift, had been broken by the ice.

CHAPTER VII.
SETTLING FOR THE WINTER.
Penellan was once more right; all was for the best, and this ice-quake had opened a practicable channel for the ship to the bay. The sailors had only to make skilful use of the currents to conduct her thither.
On the 19th of September the brig was at last moored in her bay for wintering, two cables' lengths from the shore, securely anchored on a good bottom. The ice began the next day to form around her hull; it soon became strong enough to bear a man's weight, and they could establish a communication with land.
The rigging, as is customary in arctic navigation, remained as it was; the sails were carefully furled on the yards and covered with their casings, and the "crow's-nest" remained in place, as much to enable them to make distant observations as to attract attention to the ship.
The sun now scarcely rose above the horizon. Since the June solstice, the spirals which it had described
descended lower and lower; and it would soon disappear altogether.

The crew hastened to make the necessary preparations. Penellan supervised the whole. The ice was soon thick around the ship, and it was to be feared that its pressure might become dangerous; but Penellan waited until, by reason of the going and coming of the floating ice-masses and their adherence, it had reached a thickness of twenty feet; he then had it cut around the hull, so that it united under the ship, the form of which it assumed; thus enclosed in a mould, the brig had no longer to fear the pressure of the ice, which could make no movement.

The sailors then elevated along the wales, to the height of the nettings, a snow wall five or six feet thick, which soon froze as hard as a rock. This envelope did not allow the interior heat to escape outside. A canvas tent, covered with skins and hermetically closed, was stretched over the whole length of the deck, and formed a sort of walk for the sailors.

They also constructed on the ice a storehouse of snow, in which articles which embarrassed the ship were stowed away. The partitions of the cabins were taken down, so as to form a single vast apartment forward, as well as aft. This single room, besides, was more easy to warm, as the ice and damp found fewer corners in which to take refuge. It was also less difficult to ventilate it, by means of canvas funnels which opened without.

Each sailor exerted great energy in these preparations, and about the 25th of September they were completed. André Vasling had not shown himself the least active in this task. He devoted himself with especial zeal to the young girl's comfort, and if she, absorbed in thoughts of her poor Louis, did not perceive this, Jean Cornbutte did not fail soon to remark it. He spoke of it to Penellan; he recalled several incidents which completely enlightened him regarding his mate's intentions; André Vasling loved Marie, and reckoned on asking her uncle for her hand, as soon as it was proved beyond doubt that the castaways were irrevocably lost; they would return then to Dunkirk, and André Vasling would be well satisfied to wed a rich and pretty girl, who would then be the sole heiress of Jean Cornbutte.

But André, in his impatience, was often imprudent. He had several times declared that the search for the castaways was useless, when some new trace contradicted him, and enabled Penellan to exult over him. The mate, therefore, cordially detested the helmsman, who returned his dislike heartily. Penellan only feared that André might sow seeds of dissension among the crew, and persuaded Jean Cornbutte to answer him evasively on the first occasion.

When the preparations for the winter were completed, the captain took measures to preserve the health of the crew. Every morning the men were ordered to air their berths, and carefully clean the interior walls, to get rid of the night's dampness. They received boiling tea or coffee, which are excellent cordials to use against the cold, morning and evening; then they were divided into hunting-parties, who should procure as much fresh nourishment as possible for every day.

Each one also took healthy exercise every day, so as not to expose himself without motion to the cold; for in a temperature thirty degrees below zero, some part of the body might suddenly become frozen. In such cases friction of the snow was used, which alone could heal the affected part.

Penellan also strongly advised cold ablutions every morning. It required some courage to plunge the hands and face in the snow, which had to be melted within. But Penellan bravely set the example, and Marie was not the last to imitate him.

Jean Cornbutte did not forget to have readings and prayers, for it was needful that the hearts of his comrades should not give way to despair or weariness. Nothing is more dangerous in these desolate latitudes.

The sky, always gloomy, filled the soul with sadness. A thick snow, lashed by violent winds, added to the horrors of their situation. The sun would soon altogether disappear. Had the clouds not gathered in masses above their heads, they might have enjoyed the moonlight, which was about to become really their sun during the long polar night; but, with the west winds, the snow did not cease to fall. Every morning it was necessary to clear off the sides of the ship, and to cut a new stairway in the ice to enable them to reach the ice-field. They easily succeeded in doing this with snow-knives; the steps once cut, a little water was thrown over them, and they at once hardened.

Penellan had a hole cut in the ice, not far from the ship. Every day the new crust which formed over its top was broken, and the water which was drawn thence, from a certain depth, was less cold than that at the surface.

All these preparations occupied about three weeks. It was then time to go forward with the search. The ship was imprisoned for six or seven months, and only the next thaw could open a new route across the ice. It was wise, then, to profit by this delay, and extend their explorations northward.

CHAPTER VIII.

PLAN OF THE EXPLORATIONS.

On the 9th of October, Jean Cornbutte held a council to settle the plan of his operations, to which, that there
might be union, zeal, and courage on the part of every one, he admitted the whole crew. Map in hand, he clearly explained their situation.

Illustration: Map in hand, he clearly explained their situation.]
The eastern coast of Greenland advances perpendicularly northward. The discoveries of the navigators have given the exact boundaries of those parts. In the extent of five hundred leagues, which separates Greenland from Spitzbergen, no land has been found. An island (Shannon Island) lay a hundred miles north of Gaël-Hamkes Bay, where the "Jeune-Hardie" was wintering.

If the Norwegian schooner, as was most probable, had been driven in this direction, supposing that she could not reach Shannon Island, it was here that Louis Cornbutte and his comrades must have sought for a winter asylum.

This opinion prevailed, despite André Vasling's opposition; and it was decided to direct the explorations on the side towards Shannon Island.

Arrangements for this were at once begun. A sledge like that used by the Esquimaux had been procured on the Norwegian coast. This was constructed of planks curved before and behind, and was made to slide over the snow and ice. It was twelve feet long and four wide, and could therefore carry provisions, if need were, for several weeks. Fidèle Misonne soon put it in order, working upon it in the snow storehouse, whither his tools had been carried. For the first time a coal-stove was set up in this storehouse, without which all labour there would have been impossible. The pipe was carried out through one of the lateral walls, by a hole pierced in the snow; but a grave inconvenience resulted from this,—for the heat of the stove, little by little, melted the snow where it came in contact with it; and the opening visibly increased. Jean Cornbutte contrived to surround this part of the pipe with some metallic canvas, which is impermeable by heat. This succeeded completely.

While Misonne was at work upon the sledge, Penellan, aided by Marie, was preparing the clothing necessary for the expedition. Seal-skin boots they had, fortunately, in plenty. Jean Cornbutte and André Vasling occupied themselves with the provisions. They chose a small barrel of spirits-of-wine for heating a portable chafing-dish; reserves of coffee and tea in ample quantity were packed; a small box of biscuits, two hundred pounds of pemmican, and some gourds of brandy completed the stock of viands. The guns would bring down some fresh game every day. A quantity of powder was divided between several bags; the compass, sextant, and spy-glass were put carefully out of the way of injury.

On the 11th of October the sun no longer appeared above the horizon. They were obliged to keep a lighted lamp in the lodgings of the crew all the time. There was no time to lose; the explorations must be begun. For this reason: in the month of January it would become so cold that it would be impossible to venture out without peril of life. For two months at least the crew would be condemned to the most complete imprisonment; then the thaw would begin, and continue till the time when the ship should quit the ice. This thaw would, of course, prevent any explorations. On the other hand, if Louis Cornbutte and his comrades were still in existence, it was not probable that they would be able to resist the severities of the arctic winter. They must therefore be saved beforehand, or all hope would be lost. André Vasling knew all this better than any one. He therefore resolved to put every possible obstacle in the way of the expedition.

The preparations for the journey were completed about the 20th of October. It remained to select the men who should compose the party. The young girl could not be deprived of the protection of Jean Cornbutte or of Penellan; neither of these could, on the other hand, be spared from the expedition.

The question, then, was whether Marie could bear the fatigues of such a journey. She had already passed through rough experiences without seeming to suffer from them, for she was a sailor's daughter, used from infancy to the fatigues of the sea, and even Penellan was not dismayed to see her struggling in the midst of this severe climate, against the dangers of the polar seas.

It was decided, therefore, after a long discussion, that she should go with them, and that a place should be reserved for her, at need, on the sledge, on which a little wooden hut was constructed, closed in hermetically. As for Marie, she was delighted, for she dreaded to be left alone without her two protectors.

The expedition was thus formed: Marie, Jean Cornbutte, Penellan, André Vasling, Aupic, and Fidèle Misonne were to go. Alaine Turquiette remained in charge of the brig, and Gervique and Gradlin stayed behind with him. New provisions of all kinds were carried; for Jean Cornbutte, in order to carry the exploration as far as possible, had resolved to establish dépôts along the route, at each seven or eight days' march. When the sledge was ready it was at once fitted up, and covered with a skin tent. The whole weighed some seven hundred pounds, which a pack of five dogs might easily carry over the ice.

On the 22nd of October, as the captain had foretold, a sudden change took place in the temperature. The sky cleared, the stars emitted an extraordinary light, and the moon shone above the horizon, no longer to leave the heavens for a fortnight. The thermometer descended to twenty-five degrees below zero.

The departure was fixed for the following day.
CHAPTER IX.
THE HOUSE OF SNOW.

On the 23rd of October, at eleven in the morning, in a fine moonlight, the caravan set out. Precautions were this time taken that the journey might be a long one, if necessary. Jean Cornbutte followed the coast, and ascended northward. The steps of the travellers made no impression on the hard ice. Jean was forced to guide himself by points which he selected at a distance; sometimes he fixed upon a hill bristling with peaks; sometimes on a vast iceberg which pressure had raised above the plain.

At the first halt, after going fifteen miles, Penellan prepared to encamp. The tent was erected against an ice-block. Marie had not suffered seriously with the extreme cold, for luckily the breeze had subsided, and was much more bearable; but the young girl had several times been obliged to descend from her sledge to avert numbness from impeding the circulation of her blood. Otherwise, her little hut, hung with skins, afforded her all the comfort possible under the circumstances.

When night, or rather sleeping-time, came, the little hut was carried under the tent, where it served as a bedroom for Marie. The evening repast was composed of fresh meat, pemmican, and hot tea. Jean Cornbutte, to avert danger of the scurvy, distributed to each of the party a few drops of lemon-juice. Then all slept under God's protection.

After eight hours of repose, they got ready to resume their march. A substantial breakfast was provided to the men and the dogs; then they set out. The ice, exceedingly compact, enabled these animals to draw the sledge easily. The party sometimes found it difficult to keep up with them.

But the sailors soon began to suffer one discomfort—that of being dazzled. Ophthalmia betrayed itself in Aupic and Misonne. The moon's light, striking on these vast white plains, burnt the eyesight, and gave the eyes insupportable pain.

There was thus produced a very singular effect of refraction. As they walked, when they thought they were about to put foot on a hillock, they stepped down lower, which often occasioned falls, happily so little serious that Penellan made them occasions for bantering. Still, he told them never to take a step without sounding the ground with the ferruled staff with which each was equipped.

About the 1st of November, ten days after they had set out, the caravan had gone fifty leagues to the northward. Weariness pressed heavily on all. Jean Cornbutte was painfully dazzled, and his sight sensibly changed. Aupic and Misonne had to feel their way: for their eyes, rimmed with red, seemed burnt by the white reflection. Marie had been preserved from this misfortune by remaining within her hut, to which she confined herself as much as possible. Penellan, sustained by an indomitable courage, resisted all fatigue. But it was André Vasling who bore himself best, and upon whom the cold and dazzling seemed to produce no effect. His iron frame was equal to every hardship; and he was secretly pleased to see the most robust of his companions becoming discouraged, and already foresaw the moment when they would be forced to retreat to the ship again.

On the 1st of November it became absolutely necessary to halt for a day or two. As soon as the place for the encampment had been selected, they proceeded to arrange it. It was determined to erect a house of snow, which should be supported against one of the rocks of the promontory. Misonne at once marked out the foundations, which measured fifteen feet long by five wide. Penellan, Aupic, and Misonne, by aid of their knives, cut out great blocks of ice, which they carried to the chosen spot and set up, as masons would have built stone walls. The sides of the foundation were soon raised to a height and thickness of about five feet; for the materials were abundant, and the structure was intended to be sufficiently solid to last several days. The four walls were completed in eight hours; an opening had been left on the southern side, and the canvas of the tent, placed on these four walls, fell over the opening and sheltered it. It only remained to cover the whole with large blocks, to form the roof of this temporary structure.

After three more hours of hard work, the house was done; and they all went into it, overcome with weariness and discouragement. Jean Cornbutte suffered so much that he could not walk, and André Vasling so skilfully aggravated his gloomy feelings, that he forced from him a promise not to pursue his search farther in those frightful solitudes. Penellan did not know which saint to invoke. He thought it unworthy and craven to give up his companions for reasons which had little weight, and tried to upset them; but in vain.

Meanwhile, though it had been decided to return, rest had become so necessary that for three days no preparations for departure were made.

On the 4th of November, Jean Cornbutte began to bury on a point of the coast the provisions for which there was no use. A stake indicated the place of the deposit, in the improbable event that new explorations should be made in
that direction. Every day since they had set out similar deposits had been made, so that they were assured of ample sustenance on the return, without the trouble of carrying them on the sledge.

The departure was fixed for ten in the morning, on the 5th. The most profound sadness filled the little band. Marie with difficulty restrained her tears, when she saw her uncle so completely discouraged. So many useless sufferings! so much labour lost! Penellan himself became furious in his ill-humour; he consigned everybody to the nether regions, and did not cease to wax angry at the weakness and cowardice of his comrades, who were more timid and tired, he said, than Marie, who would have gone to the end of the world without complaint.

André Vasling could not disguise the pleasure which this decision gave him. He showed himself more attentive than ever to the young girl, to whom he even held out hopes that a new search should be made when the winter was over; knowing well that it would then be too late!

CHAPTER X.
BURIED ALIVE.

The evening before the departure, just as they were about to take supper, Penellan was breaking up some empty casks for firewood, when he was suddenly suffocated by a thick smoke. At the same instant the snow-house was shaken as if by an earthquake. The party uttered a cry of terror, and Penellan hurried outside.

It was entirely dark. A frightful tempest—for it was not a thaw—was raging, whirlwinds of snow careered around, and it was so exceedingly cold that the helmsman felt his hands rapidly freezing. He was obliged to go in again, after rubbing himself violently with snow.

"It is a tempest," said he. "May heaven grant that our house may withstand it, for, if the storm should destroy it, we should be lost!"

At the same time with the gusts of wind a noise was heard beneath the frozen soil; icebergs, broken from the promontory, dashed away noisily, and fell upon one another; the wind blew with such violence that it seemed sometimes as if the whole house moved from its foundation; phosphorescent lights, inexplicable in that latitude, flashed across the whirlwinds of the snow.

"Marie! Marie!" cried Penellan, seizing the young girl's hands.
"We are in a bad case!" said Misonne.
"And I know not whether we shall escape," replied Aupic.
"Let us quit this snow-house!" said André Vasling.
"Impossible!" returned Penellan. "The cold outside is terrible; perhaps we can bear it by staying here."
"Give me the thermometer," demanded Vasling.

Aupic handed it to him. It showed ten degrees below zero inside the house, though the fire was lighted. Vasling raised the canvas which covered the opening, and pushed it aside hastily; for he would have been lacerated by the fall of ice which the wind hurled around, and which fell in a perfect hail-storm.

"Well, Vasling," said Penellan, "will you go out, then? You see that we are more safe here."
"Yes," said Jean Cornbutte; "and we must use every effort to strengthen the house in the interior."
"But a still more terrible danger menaces us," said Vasling.
"What?" asked Jean.
"The wind is breaking the ice against which we are propped, just as it has that of the promontory, and we shall be either driven out or buried!"

"That seems doubtful," said Penellan, "for it is freezing hard enough to ice over all liquid surfaces. Let us see what the temperature is."

He raised the canvas so as to pass out his arm, and with difficulty found the thermometer again, in the midst of the snow; but he at last succeeded in seizing it, and, holding the lamp to it, said,--

"Thirty-two degrees below zero! It is the coldest we have seen here yet!"

[ Illustration: "Thirty-two degrees below zero!"

"Ten degrees more," said Vasling, "and the mercury will freeze!"

A mournful silence followed this remark.

About eight in the morning Penellan essayed a second time to go out to judge of their situation. It was necessary to give an escape to the smoke, which the wind had several times repelled into the hut. The sailor wrapped his cloak tightly about him, made sure of his hood by fastening it to his head with a handkerchief, and raised the canvas.

The opening was entirely obstructed by a resisting snow. Penellan took his staff, and succeeded in plunging it into the compact mass; but terror froze his blood when he perceived that the end of the staff was not free, and was checked by a hard body!

"Cornbutte," said he to the captain, who had come up to him, "we are buried under this snow!"
"What say you?" cried Jean Cornbutte.

"I say that the snow is massed and frozen around us and over us, and that we are buried alive!"

"Let us try to clear this mass of snow away," replied the captain.

The two friends buttressed themselves against the obstacle which obstructed the opening, but they could not move it. The snow formed an iceberg more than five feet thick, and had become literally a part of the house. Jean could not suppress a cry, which awoke Misonne and Vasling. An oath burst from the latter, whose features contracted. At this moment the smoke, thicker than ever, poured into the house, for it could not find an issue.

"Malediction!" cried Misonne. "The pipe of the stove is sealed up by the ice!"

Penellan resumed his staff, and took down the pipe, after throwing snow on the embers to extinguish them, which produced such a smoke that the light of the lamp could scarcely be seen; then he tried with his staff to clear out the orifice, but he only encountered a rock of ice! A frightful end, preceded by a terrible agony, seemed to be their doom! The smoke, penetrating the throats of the unfortunate party, caused an insufferable pain, and air would soon fail them altogether!

Marie here rose, and her presence, which inspired Cornbutte with despair, imparted some courage to Penellan. He said to himself that it could not be that the poor girl was destined to so horrible a death.

"Ah!" said she, "you have made too much fire. The room is full of smoke!"

"Yes, yes," stammered Penellan.

"It is evident," resumed Marie, "for it is not cold, and it is long since we have felt too much heat."

No one dared to tell her the truth.

"See, Marie," said Penellan bluntly, "help us get breakfast ready. It is too cold to go out. Here is the chafing-dish, the spirit, and the coffee. Come, you others, a little pemmican first, as this wretched storm forbids us from hunting."

These words stirred up his comrades.

"Let us first eat," added Penellan, "and then we shall see about getting off."

Penellan set the example and devoured his share of the breakfast. His comrades imitated him, and then drank a cup of boiling coffee, which somewhat restored their spirits. Then Jean Cornbutte decided energetically that they should at once set about devising means of safety.

André Vasling now said,--

"If the storm is still raging, which is probable, we must be buried ten feet under the ice, for we can hear no noise outside."

Penellan looked at Marie, who now understood the truth, and did not tremble. The helmsman first heated, by the flame of the spirit, the iron point of his staff, and successfully introduced it into the four walls of ice, but he could find no issue in either. Cornbutte then resolved to cut out an opening in the door itself. The ice was so hard that it was difficult for the knives to make the least impression on it. The pieces which were cut off soon encumbered the hut. After working hard for two hours, they had only hollowed out a space three feet deep.

Some more rapid method, and one which was less likely to demolish the house, must be thought of; for the farther they advanced the more violent became the effort to break off the compact ice. It occurred to Penellan to make use of the chafing-dish to melt the ice in the direction they wanted. It was a hazardous method, for, if their imprisonment lasted long, the spirit, of which they had but little, would be wanting when needed to prepare the meals. Nevertheless, the idea was welcomed on all hands, and was put in execution. They first cut a hole three feet deep by one in diameter, to receive the water which would result from the melting of the ice; and it was well that they took this precaution, for the water soon dripped under the action of the flames, which Penellan moved about under the mass of ice. The opening widened little by little, but this kind of work could not be continued long, for the water, covering their clothes, penetrated to their bodies here and there. Penellan was obliged to pause in a quarter of an hour, and to withdraw the chafing-dish in order to dry himself. Misonne then took his place, and worked sturdily at the task.

In two hours, though the opening was five feet deep, the points of the staffs could not yet find an issue without.

"It is not possible," said Jean Cornbutte, "that snow could have fallen in such abundance. It must have been gathered on this point by the wind. Perhaps we had better think of escaping in some other direction."

"I don't know," replied Penellan; "but if it were only for the sake of not discouraging our comrades, we ought to continue to pierce the wall where we have begun. We must find an issue ere long."

"Will not the spirit fail us?" asked the captain.

"I hope not. But let us, if necessary, dispense with coffee and hot drinks. Besides, that is not what most alarms me."

"What is it, then, Penellan?"

"Our lamp is going out, for want of oil, and we are fast exhausting our provisions.--At last, thank God!"
Penellan went to replace André Vasling, who was vigorously working for the common deliverance.

"Monsieur Vasling," said he, "I am going to take your place; but look out well, I beg of you, for every tendency of the house to fall, so that we may have time to prevent it."

The time for rest had come, and when Penellan had added one more foot to the opening, he lay down beside his comrades.

CHAPTER XI.
A CLOUD OF SMOKE.

The next day, when the sailors awoke, they were surrounded by complete darkness. The lamp had gone out. Jean Cornbutte roused Penellan to ask him for the tinder-box, which was passed to him. Penellan rose to light the fire, but in getting up, his head struck against the ice ceiling. He was horrified, for on the evening before he could still stand upright. The chafing-dish being lighted up by the dim rays of the spirit, he perceived that the ceiling was a foot lower than before.

Penellan resumed work with desperation.

At this moment the young girl observed, by the light which the chafing-dish cast upon Penellan's face, that despair and determination were struggling in his rough features for the mastery. She went to him, took his hands, and tenderly pressed them.

"She cannot, must not die thus!" he cried.

He took his chafing-dish, and once more attacked the narrow opening. He plunged in his staff, and felt no resistance. Had he reached the soft layers of the snow? He drew out his staff, and a bright ray penetrated to the house of ice!

"Here, my friends!" he shouted.

He pushed back the snow with his hands and feet, but the exterior surface was not thawed, as he had thought. With the ray of light, a violent cold entered the cabin and seized upon everything moist, to freeze it in an instant. Penellan enlarged the opening with his cutlass, and at last was able to breathe the free air. He fell on his knees to thank God, and was soon joined by Marie and his comrades.

A magnificent moon lit up the sky, but the cold was so extreme that they could not bear it. They re-entered their retreat; but Penellan first looked about him. The promontory was no longer there, and the hut was now in the midst of a vast plain of ice. Penellan thought he would go to the sledge, where the provisions were. The sledge had disappeared!

The cold forced him to return. He said nothing to his companions. It was necessary, before all, to dry their clothing, which was done with the chafing-dish. The thermometer, held for an instant in the air, descended to thirty degrees below zero.

An hour after, Vasling and Penellan resolved to venture outside. They wrapped themselves up in their still wet garments, and went out by the opening, the sides of which had become as hard as a rock.

"We have been driven towards the north-east," said Vasling, reckoning by the stars, which shone with wonderful brilliancy.

"That would not be bad," said Penellan, "if our sledge had come with us."

"Is not the sledge there?" cried Vasling. "Then we are lost!"

"Let us look for it," replied Penellan.

They went around the hut, which formed a block more than fifteen feet high. An immense quantity of snow had fallen during the whole of the storm, and the wind had massed it against the only elevation which the plain presented. The entire block had been driven by the wind, in the midst of the broken icebergs, more than twenty-five miles to the north-east, and the prisoners had suffered the same fate as their floating prison. The sledge, supported by another iceberg, had been turned another way, for no trace of it was to be seen, and the dogs must have perished amid the frightful tempest.

André Vasling and Penellan felt despair taking possession of them. They did not dare to return to their companions. They did not dare to announce this fatal news to their comrades in misfortune. They climbed upon the block of ice in which the hut was hollowed, and could perceive nothing but the white immensity which encompassed them on all sides. Already the cold was beginning to stiffen their limbs, and the damp of their garments was being transformed into icicles which hung about them.

Just as Penellan was about to descend, he looked towards André. He saw him suddenly gaze in one direction, then shudder and turn pale.

"What is the matter, Vasling?" he asked.
"Nothing," replied the other. "Let us go down and urge the captain to leave these parts, where we ought never to have come, at once!"

Instead of obeying, Penellan ascended again, and looked in the direction which had drawn the mate's attention. A very different effect was produced on him, for he uttered a shout of joy, and cried,--

"Blessed be God!"

A light smoke was rising in the north-east. There was no possibility of deception. It indicated the presence of human beings. Penellan's cries of joy reached the rest below, and all were able to convince themselves with their eyes that he was not mistaken.

Without thinking of their want of provisions or the severity of the temperature, wrapped in their hoods, they were all soon advancing towards the spot whence the smoke arose in the north-east. This was evidently five or six miles off, and it was very difficult to take exactly the right direction. The smoke now disappeared, and no elevation served as a guiding mark, for the ice-plain was one united level. It was important, nevertheless, not to diverge from a straight line.

"Since we cannot guide ourselves by distant objects," said Jean Cornbutte, "we must use this method. Penellan will go ahead, Vasling twenty steps behind him, and I twenty steps behind Vasling. I can then judge whether or not Penellan diverges from the straight line."

They had gone on thus for half an hour, when Penellan suddenly stopped and listened. The party hurried up to him.

"Did you hear nothing?" he asked.

"Nothing!" replied Misonne.

"It is strange," said Penellan. "It seemed to me I heard cries from this direction."

"Cries?" replied Marie. "Perhaps we are near our destination, then."

"That is no reason," said André Vasling. "In these high latitudes and cold regions sounds may be heard to a great distance."

"However that may be," replied Jean Cornbutte, "let us go forward, or we shall be frozen."

"No!" cried Penellan. "Listen!"

Some feeble sounds--quite perceptible, however--were heard. They seemed to be cries of distress. They were twice repeated. They seemed like cries for help. Then all became silent again.

"I was not mistaken," said Penellan. "Forward!"

He began to run in the direction whence the cries had proceeded. He went thus two miles, when, to his utter stupefaction, he saw a man lying on the ice. He went up to him, raised him, and lifted his arms to heaven in despair.

André Vasling, who was following close behind with the rest of the sailors, ran up and cried,--

"It is one of the castaways! It is our sailor Courtois!"

"He is dead!" replied Penellan. "Frozen to death!"

Jean Cornbutte and Marie came up beside the corpse, which was already stiffened by the ice. Despair was written on every face. The dead man was one of the comrades of Louis Cornbutte!

"Forward!" cried Penellan."

They went on for half an hour in perfect silence, and perceived an elevation which seemed without doubt to be land.

"It is Shannon Island," said Jean Cornbutte.

A mile farther on they distinctly perceived smoke escaping from a snow-hut, closed by a wooden door. They shouted. Two men rushed out of the hut, and Penellan recognized one of them as Pierre Nouquet.

"Pierre!" he cried.

Pierre stood still as if stunned, and unconscious of what was going on around him. André Vasling looked at Pierre Nouquet's companion with anxiety mingled with a cruel joy, for he did not recognize Louis Cornbutte in him.

"Pierre! it is I!" cried Penellan. "These are all your friends!"

Pierre Nouquet recovered his senses, and fell into his old comrade's arms.

"And my son--and Louis!" cried Jean Cornbutte, in an accent of the most profound despair.

CHAPTER XII.

THE RETURN TO THE SHIP.

At this moment a man, almost dead, dragged himself out of the hut and along the ice.

It was Louis Cornbutte.

[Illustration: It was Louis Cornbutte.]

"My son!"
"My beloved!"
These two cries were uttered at the same time, and Louis Cornbutte fell fainting into the arms of his father and Marie, who drew him towards the hut, where their tender care soon revived him.
"My father! Marie!" cried Louis; "I shall not die without having seen you!"
"You will not die!" replied Penellan, "for all your friends are near you."
André Vasling must have hated Louis Cornbutte bitterly not to extend his hand to him, but he did not.
Pierre Nouquet was wild with joy. He embraced every body; then he threw some wood into the stove, and soon a comfortable temperature was felt in the cabin.
There were two men there whom neither Jean Cornbutte nor Penellan recognized.
They were Jocki and Herming, the only two sailors of the crew of the Norwegian schooner who were left.
"My friends, we are saved!" said Louis. "My father! Marie! You have exposed yourselves to so many perils!"
"We do not regret it, my Louis," replied the father. "Your brig, the 'Jeune-Hardie,' is securely anchored in the ice sixty leagues from here. We will rejoin her all together."
"When Courtois comes back he'll be mightily pleased," said Pierre Nouquet.
A mournful silence followed this, and Penellan apprised Pierre and Louis of their comrade's death by cold.
"My friends," said Penellan, "we will wait here until the cold decreases. Have you provisions and wood?"
"Yes; and we will burn what is left of the 'Froöern.'"
The "Froöern" had indeed been driven to a place forty miles from where Louis Cornbutte had taken up his winter quarters. There she was broken up by the icebergs floated by the thaw, and the castaways were carried, with a part of the débris of their cabin, on the southern shores of Shannon Island.
They were then five in number--Louis Cornbutte, Courtois, Pierre Nouquet, Jocki, and Herming. As for the rest of the Norwegian crew, they had been submerged with the long-boat at the moment of the wreck.
When Louis Cornbutte, shut in among the ice, realized what must happen, he took every precaution for passing the winter. He was an energetic man, very active and courageous; but, despite his firmness, he had been subdued by this horrible climate, and when his father found him he had given up all hope of life. He had not only had to contend with the elements, but with the ugly temper of the two Norwegian sailors, who owed him their existence. They were like savages, almost inaccessible to the most natural emotions. When Louis had the opportunity to talk to Penellan, he advised him to watch them carefully. In return, Penellan told him of André Vasling's conduct. Louis could not believe it, but Penellan convinced him that after his disappearance Vasling had always acted so as to secure Marie's hand.
The whole day was employed in rest and the pleasures of reunion. Misonne and Pierre Nouquet killed some sea-birds near the hut, whence it was not prudent to stray far. These fresh provisions and the replenished fire raised the spirits of the weakest. Louis Cornbutte got visibly better. It was the first moment of happiness these brave people had experienced. They celebrated it with enthusiasm in this wretched hut, six hundred leagues from the North Sea, in a temperature of thirty degrees below zero!
This temperature lasted till the end of the moon, and it was not until about the 17th of November, a week after their meeting, that Jean Cornbutte and his party could think of setting out. They only had the light of the stars to guide them; but the cold was less extreme, and even some snow fell.
Before quitting this place a grave was dug for poor Courtois. It was a sad ceremony, which deeply affected his comrades. He was the first of them who would not again see his native land.
Misonne had constructed, with the planks of the cabin, a sort of sledge for carrying the provisions, and the sailors drew it by turns. Jean Cornbutte led the expedition by the ways already traversed. Camps were established with great promptness when the times for repose came. Jean Cornbutte hoped to find his deposits of provisions again, as they had become well-nigh indispensable by the addition of four persons to the party. He was therefore very careful not to diverge from the route by which he had come.
By good fortune he recovered his sledge, which had stranded near the promontory where they had all run so many dangers. The dogs, after eating their straps to satisfy their hunger, had attacked the provisions in the sledge. These had sustained them, and they served to guide the party to the sledge, where there was a considerable quantity of provisions left. The little band resumed its march towards the bay. The dogs were harnessed to the sleigh, and no event of interest attended the return.
It was observed that Aupic, André Vasling, and the Norwegians kept aloof, and did not mingle with the others; but, unbeknown to themselves, they were narrowly watched. This germ of dissension more than once aroused the fears of Louis Cornbutte and Penellan.
About the 7th of December, twenty days after the discovery of the castaways, they perceived the bay where the "Jeune-Hardie" was lying. What was their astonishment to see the brig perched four yards in the air on blocks of ice! They hurried forward, much alarmed for their companions, and were received with joyous cries by Gervique,
Turquiette, and Gradlin. All of them were in good health, though they too had been subjected to formidable dangers.

The tempest had made itself felt throughout the polar sea. The ice had been broken and displaced, crushed one piece against another, and had seized the bed on which the ship rested. Though its specific weight tended to carry it under water, the ice had acquired an incalculable force, and the brig had been suddenly raised up out of the sea.

The first moments were given up to the happiness inspired by the safe return. The exploring party were rejoiced to find everything in good condition, which assured them a supportable though it might be a rough winter. The ship had not been shaken by her sudden elevation, and was perfectly tight. When the season of thawing came, they would only have to slide her down an inclined plane, to launch her, in a word, in the once more open sea.

But a bad piece of news spread gloom on the faces of Jean Cornbutte and his comrades. During the terrible gale the snow storehouse on the coast had been quite demolished; the provisions which it contained were scattered, and it had not been possible to save a morsel of them. When Jean and Louis Cornbutte learnt this, they visited the hold and steward's room, to ascertain the quantity of provisions which still remained.

The thaw would not come until May, and the brig could not leave the bay before that period. They had therefore five winter months before them to pass amid the ice, during which fourteen persons were to be fed. Having made his calculations, Jean Cornbutte found that he would at most be able to keep them alive till the time for departure, by putting each and all on half rations. Hunting for game became compulsory to procure food in larger quantity.

For fear that they might again run short of provisions, it was decided to deposit them no longer in the ground. All of them were kept on board, and beds were disposed for the new comers in the common lodging. Turquiette, Gervique, and Gradlin, during the absence of the others, had hollowed out a flight of steps in the ice, which enabled them easily to reach the ship's deck.

CHAPTER XIII.
The Two Rivals.

André Vasling had been cultivating the good-will of the two Norwegian sailors. Aupic also made one of their band, and held himself apart, with loud disapproval of all the new measures taken; but Louis Cornbutte, to whom his father had transferred the command of the ship, and who had become once more master on board, would listen to no objections from that quarter, and in spite of Marie's advice to act gently, made it known that he intended to be obeyed on all points.

Nevertheless, the two Norwegians succeeded, two days after, in getting possession of a box of salt meat. Louis ordered them to return it to him on the spot, but Aupic took their part, and André Vasling declared that the precautions about the food could not be any longer enforced.

It was useless to attempt to show these men that these measures were for the common interest, for they knew it well, and only sought a pretext to revolt.

Penellan advanced towards the Norwegians, who drew their cutlasses; but, aided by Misonne and Turquiette, he succeeded in snatching the weapons from their hands, and gained possession of the salt meat. André Vasling and Aupic, seeing that matters were going against them, did not interfere. Louis Cornbutte, however, took the mate aside, and said to him,--

"André Vasling, you are a wretch! I know your whole conduct, and I know what you are aiming at, but as the safety of the whole crew is confided to me, if any man of you thinks of conspiring to destroy them, I will stab him with my own hand!"

"Louis Cornbutte," replied the mate, "it is allowable for you to act the master; but remember that absolute obedience does not exist here, and that here the strongest alone makes the law."

Marie had never trembled before the dangers of the polar seas; but she was terrified by this hatred, of which she was the cause, and the captain's vigour hardly reassured her.

Despite this declaration of war, the meals were partaken of in common and at the same hours. Hunting furnished some ptarmigans and white hares; but this resource would soon fail them, with the approach of the terrible cold weather. This began at the solstice, on the 22nd of December, on which day the thermometer fell to thirty-five degrees below zero. The men experienced pain in their ears, noses, and the extremities of their bodies. They were seized with a mortal torpor combined with headache, and their breathing became more and more difficult.

In this state they had no longer any courage to go hunting or to take any exercise. They remained crouched around the stove, which gave them but a meagre heat; and when they went away from it, they perceived that their blood suddenly cooled.

Jean Cornbutte's health was seriously impaired, and he could no longer quit his lodging. Symptoms of scurvy manifested themselves in him, and his legs were soon covered with white spots. Marie was well, however, and
occupied herself tending the sick ones with the zeal of a sister of charity. The honest fellows blessed her from the bottom of their hearts.

The 1st of January was one of the gloomiest of these winter days. The wind was violent, and the cold insupportable. They could not go out, except at the risk of being frozen. The most courageous were fain to limit themselves to walking on deck, sheltered by the tent. Jean Cornbutte, Gervique, and Gradlin did not leave their beds. The two Norwegians, Aupic, and André Vasling, whose health was good, cast ferocious looks at their companions, whom they saw wasting away.

Louis Cornbutte led Penellan on deck, and asked him how much firing was left.
"The coal was exhausted long ago," replied Penellan, "and we are about to burn our last pieces of wood."
"If we are not able to keep off this cold, we are lost," said Louis.
"There still remains a way--" said Penellan, "to burn what we can of the brig, from the barricading to the water-line; and we can even, if need be, demolish her entirely, and rebuild a smaller craft."
"That is an extreme means," replied Louis, "which it will be full time to employ when our men are well. For," he added in a low voice, "our force is diminishing, and that of our enemies seems to be increasing. That is extraordinary."
"It is true," said Penellan; "and unless we took the precaution to watch night and day, I know not what would happen to us."
"Let us take our hatchets," returned Louis, "and make our harvest of wood."

Despite the cold, they mounted on the forward barricading, and cut off all the wood which was not indispensably necessary to the ship; then they returned with this new provision. The fire was started afresh, and a man remained on guard to prevent it from going out.

Meanwhile Louis Cornbutte and his friends were soon tired out. They could not confide any detail of the life in common to their enemies. Charged with all the domestic cares, their powers were soon exhausted. The scurvy betrayed itself in Jean Cornbutte, who suffered intolerable pain. Gervique and Gradlin showed symptoms of the same disease. Had it not been for the lemon-juice with which they were abundantly furnished, they would have speedily succumbed to their sufferings. This remedy was not spared in relieving them.

But one day, the 15th of January, when Louis Cornbutte was going down into the steward's room to get some lemons, he was stupefied to find that the barrels in which they were kept had disappeared. He hurried up and told Penellan of this misfortune. A theft had been committed, and it was easy to recognize its authors. Louis Cornbutte then understood why the health of his enemies continued so good! His friends were no longer strong enough to take the lemons away from them, though his life and that of his comrades depended on the fruit; and he now sank, for the first time, into a gloomy state of despair.

CHAPTER XIV.
DISTRESS.

On the 20th of January most of the crew had not the strength to leave their beds. Each, independently of his woollen coverings, had a buffalo-skin to protect him against the cold; but as soon as he put his arms outside the clothes, he felt a pain which obliged him quickly to cover them again.

Meanwhile, Louis having lit the stove fire, Penellan, Misonne, and André Vasling left their beds and crouched around it. Penellan prepared some boiling coffee, which gave them some strength, as well as Marie, who joined them in partaking of it.

Louis Cornbutte approached his father's bedside; the old man was almost motionless, and his limbs were helpless from disease. He muttered some disconnected words, which carried grief to his son's heart.
"Louis," said he, "I am dying. O, how I suffer! Save me!"
Louis took a decisive resolution. He went up to the mate, and, controlling himself with difficulty, said,--
"Do you know where the lemons are, Vasling?"
"In the steward's room, I suppose," returned the mate, without stirring.
"You know they are not there, as you have stolen them!"
"You are master, Louis Cornbutte, and may say and do anything."
"For pity's sake, André Vasling, my father is dying! You can save him,--answer!"
"I have nothing to answer," replied André Vasling.
"Wretch!" cried Penellan, throwing himself, cutlass in hand, on the mate.
"Help, friends!" shouted Vasling, retreating.

Aupic and the two Norwegian sailors jumped from their beds and placed themselves behind him. Turquiette, Penellan, and Louis prepared to defend themselves. Pierre Nouquet and Gradlin, though suffering much, rose to
"You are still too strong for us," said Vasling. "We do not wish to fight on an uncertainty."

The sailors were so weak that they dared not attack the four rebels, for, had they failed, they would have been lost.

"André Vasling!" said Louis Cornbutte, in a gloomy tone, "if my father dies, you will have murdered him; and I will kill you like a dog!"

Vasling and his confederates retired to the other end of the cabin, and did not reply.

It was then necessary to renew the supply of wood, and, in spite of the cold, Louis went on deck and began to cut away a part of the barricading, but was obliged to retreat in a quarter of an hour, for he was in danger of falling, overcome by the freezing air. As he passed, he cast a glance at the thermometer left outside, and saw that the mercury was frozen. The cold, then, exceeded forty-two degrees below zero. The weather was dry, and the wind blew from the north.

On the 26th the wind changed to the north-east, and the thermometer outside stood at thirty-five degrees. Jean Cornbutte was in agony, and his son had searched in vain for some remedy with which to relieve his pain. On this day, however, throwing himself suddenly on Vasling, he managed to snatch a lemon from him which he was about to suck.

Vasling made no attempt to recover it. He seemed to be awaiting an opportunity to accomplish his wicked designs.

The lemon-juice somewhat relieved old Cornbutte, but it was necessary to continue the remedy. Marie begged Vasling on her knees to produce the lemons, but he did not reply, and soon Penellan heard the wretch say to his accomplices,—

[Illustration: Marie begged Vasling on her knees to produce the lemons, but he did not reply.]

"The old fellow is dying. Gervique, Gradlin, and Nouquet are not much better. The others are daily losing their strength. The time is near when their lives will belong to us!"

It was then resolved by Louis Cornbutte and his adherents not to wait, and to profit by the little strength which still remained to them. They determined to act the next night, and to kill these wretches, so as not to be killed by them.

The temperature rose a little. Louis Cornbutte ventured to go out with his gun in search of some game.

He proceeded some three miles from the ship, and often, deceived by the effects of the mirage and refraction, he went farther away than he intended. It was imprudent, for recent tracts of ferocious animals were to be seen. He did not wish, however, to return without some fresh meat, and continued on his route; but he then experienced a strange feeling, which turned his head. It was what is called "white vertigo."

The reflection of the ice hillocks and fields affected him from head to foot, and it seemed to him that the dazzling colour penetrated him and caused an irresistible nausea. His eye was attacked. His sight became uncertain. He thought he should go mad with the glare. Without fully understanding this terrible effect, he advanced on his way, and soon put up a ptarmigan, which he eagerly pursued. The bird soon fell, and in order to reach it Louis leaped from an ice-block and fell heavily; for the leap was at least ten feet, and the refraction made him think it was only two. The vertigo then seized him, and, without knowing why, he began to call for help, though he had not been injured by the fall. The cold began to take him, and he rose with pain, urged by the sense of self-preservation.

Suddenly, without being able to account for it, he smelt an odour of boiling fat. As the ship was between him and the wind, he supposed that this odour proceeded from her, and could not imagine why they should be cooking fat, this being a dangerous thing to do, as it was likely to attract the white bears.

Louis returned towards the ship, absorbed in reflections which soon inspired his excited mind with terror. It seemed to him as if colossal masses were moving on the horizon, and he asked himself if there was not another icequake. Several of these masses interposed themselves between him and the ship, and appeared to rise about its sides. He stopped to gaze at them more attentively, when to his horror he recognized a herd of gigantic bears.

These animals had been attracted by the odour of grease which had surprised Lonis. He sheltered himself behind a hillock, and counted three, which were scaling the blocks on which the "Jeune-Hardie" was resting.

Nothing led him to suppose that this danger was known in the interior of the ship, and a terrible anguish oppressed his heart. How resist these redoubtable enemies? Would André Vasling and his confederates unite with the rest on board in the common peril? Could Penellan and the others, half starved, benumbed with cold, resist these formidable animals, made wild by unassuaged hunger? Would they not be surprised by an unlooked-for attack?

Louis made these reflections rapidly. The bears had crossed the blocks, and were mounting to the assault of the ship. He might then quit the block which protected him; he went nearer, clinging to the ice, and could soon see the enormous animals tearing the tent with their paws, and leaping on the deck. He thought of firing his gun to give his comrades notice; but if these came up without arms, they would inevitably be torn in pieces, and nothing showed as
yet that they were even aware of their new danger.

CHAPTER XV.

THE WHITE BEARS.

After Louis Cornbutte's departure, Penellan had carefully shut the cabin door, which opened at the foot of the deck steps. He returned to the stove, which he took it upon himself to watch, whilst his companions regained their berths in search of a little warmth.

It was then six in the evening, and Penellan set about preparing supper. He went down into the steward's room for some salt meat, which he wished to soak in the boiling water. When he returned, he found André Vasling in his place, cooking some pieces of grease in a basin.

"I was there before you," said Penellan roughly; "why have you taken my place?"

"For the same reason that you claim it," returned Vasling: "because I want to cook my supper."

"You will take that off at once, or we shall see!"

"We shall see nothing," said Vasling; "my supper shall be cooked in spite of you."

"You shall not eat it, then," cried Penellan, rushing upon Vasling, who seized his cutlass, crying,--

"Help, Norwegians! Help, Aupic!"

These, in the twinkling of an eye, sprang to their feet, armed with pistols and daggers. The crisis had come.

Penellan precipitated himself upon Vasling, to whom, no doubt, was confided the task to fight him alone; for his accomplices rushed to the beds where lay Misonne, Turquiette, and Nouquet. The latter, ill and defenceless, was delivered over to Herming's ferocity. The carpenter seized a hatchet, and, leaving his berth, hurried up to encounter Aupic. Turquiette and Jocki, the Norwegian, struggled fiercely. Gervique and Gradlin, suffering horribly, were not even conscious of what was passing around them.

Nouquet soon received a stab in the side, and Herming turned to Penellan, who was fighting desperately. André Vasling had seized him round the body.

At the beginning of the affray the basin had been upset on the stove, and the grease running over the burning coals, impregnated the atmosphere with its odour. Marie rose with cries of despair, and hurried to the bed of old Jean Cornbutte.

[Illustration: Marie rose with cries of despair, and hurried to the bed of old Jean Cornbutte.]

Vasling, less strong than Penellan, soon perceived that the latter was getting the better of him. They were too close together to make use of their weapons. The mate, seeing Herming, cried out,--

"Help, Herming!"

"Help, Misonne!" shouted Penellan, in his turn.

But Misonne was rolling on the ground with Aupic, who was trying to stab him with his cutlass. The carpenter's hatchet was of little use to him, for he could not wield it, and it was with the greatest difficulty that he parried the lunges which Aupic made with his knife.

Meanwhile blood flowed amid the groans and cries. Turquiette, thrown down by Jocki, a man of immense strength, had received a wound in the shoulder, and he tried in vain to clutch a pistol which hung in the Norwegian's belt. The latter held him as in a vice, and it was impossible for him to move.

At Vasling's cry for help, who was being held by Penellan close against the door, Herming rushed up. As he was about to stab the Breton's back with his cutlass, the latter felled him to the earth with a vigorous kick. His effort to do this enabled Vasling to disengage his right arm; but the door, against which they pressed with all their weight, suddenly yielded, and Vasling fell over.

Of a sudden a terrible growl was heard, and a gigantic bear appeared on the steps. Vasling saw him first. He was not four feet away from him. At the same moment a shot was heard, and the bear, wounded or frightened, retreated. Vasling, who had succeeded in regaining his feet, set-out in pursuit of him, abandoning Penellan.

Penellan then replaced the door, and looked around him. Misonne and Turquiette, tightly garrotted by their antagonists, had been thrown into a corner, and made vain efforts to break loose. Penellan rushed to their assistance, but was overturned by the two Norwegians and Aupic. His exhausted strength did not permit him to resist these three men, who so clung to him as to hold him motionless. Then, at the cries of the mate, they hurried on deck, thinking that Louis Cornbutte was to be encountered.

André Vasling was struggling with a bear, which he had already twice stabbed with his knife. The animal, beating the air with his heavy paws, was trying to clutch Vasling; he retiring little by little on the barricading, was apparently doomed, when a second shot was heard. The bear fell. André Vasling raised his head and saw Louis Cornbutte in the ratlines of the mizen-mast, his gun in his hand. Louis had shot the bear in the heart, and he was dead.
Hate overcame gratitude in Vasling's breast; but before satisfying it, he looked around him. Aupic's head was broken by a paw-stroke, and he lay lifeless on deck. Jocki, hatchet in hand, was with difficulty parrying the blows of the second bear which had just killed Aupic. The animal had received two wounds, and still struggled desperately. A third bear was directing his way towards the ship's prow. Vasling paid no attention to him, but, followed by Herming, went to the aid of Jocki; but Jocki, seized by the beast's paws, was crushed, and when the bear fell under the shots of the other two men, he held only a corpse in his shaggy arms.

"We are only two, now" said Vasling, with gloomy ferocity, "but if we yield, it will not be without vengeance!"

Herming reloaded his pistol without replying. Before all, the third bear must be got rid of. Vasling looked forward, but did not see him. On raising his eyes, he perceived him erect on the barricading, clinging to the ratlines and trying to reach Louis. Vasling let his gun fall, which he had aimed at the animal, while a fierce joy glittered in his eyes.

"Ah," he cried, "you owe me that vengeance!"

Louis took refuge in the top of the mast. The bear kept mounting, and was not more than six feet from Louis, when he raised his gun and pointed it at the animal's heart.

Vasling raised his weapon to shoot Louis if the bear fell.

Louis fired, but the bear did not appear to be hit, for he leaped with a bound towards the top. The whole mast shook.

"Herming," he cried, "go and find Marie! Go and find my betrothed!"

Vasling uttered a shout of exultation.

"Help! help! Herming!" cried the mate.

"Help! Penellan!" cried Louis.

Steps were heard on the stairs. Penellan appeared, loaded his pistol, and discharged it in the bear's ear; he roared; the pain made him relax his paws for a moment, and Louis, exhausted, fell motionless on the deck; but the bear, closing his paws tightly in a supreme agony, fell, dragging down the wretched Vasling, whose body was crushed under him.

Penellan hurried to Louis Cornbutte's assistance. No serious wound endangered his life: he had only lost his breath for a moment.

"Marie!" he said, opening his eyes.

"Saved!" replied Perfellan. "Herming is lying there with a knife-wound in his stomach."

"And the bears---"

"Dead, Louis; dead, like our enemies! But for those beasts we should have been lost. Truly, they came to our succour. Let us thank Heaven!"

Louis and Penellan descended to the cabin, and Marie fell into their arms.

CHAPTER XVI.

CONCLUSION.

Herming, mortally wounded, had been carried to a berth by Misonne and Turquiette, who had succeeded in getting free. He was already at the last gasp of death; and the two sailors occupied themselves with Nouquet, whose
wound was not, happily, a serious one.

But a greater misfortune had overtaken Louis Cornbutte. His father no longer gave any signs of life. Had he died of anxiety for his son, delivered over to his enemies? Had he succumbed in presence of these terrible events? They could not tell. But the poor old sailor, broken by disease, had ceased to live!

At this unexpected blow, Louis and Marie fell into a sad despair; then they knelt at the bedside and wept, as they prayed for Jean Cornbutte's soul, Penellan, Misonne, and Turquiette left them alone in the cabin, and went on deck. The bodies of the three bears were carried forward. Penellan decided to keep their skins, which would be of no little use; but he did not think for a moment of eating their flesh. Besides, the number of men to feed was now much decreased. The bodies of Vasling, Aupic, and Jocki, thrown into a hole dug on the coast, were soon rejoined by that of Herming. The Norwegian died during the night, without repentance or remorse, foaming at the mouth with rage.

The three sailors repaired the tent, which, torn in several places, permitted the snow to fall on the deck. The temperature was exceedingly cold, and kept so till the return of the sun, which did not reappear above the horizon till the 8th of January.

Jean Cornbutte was buried on the coast. He had left his native land to find his son, and had died in these terrible regions! His grave was dug on an eminence, and the sailors placed over it a simple wooden cross.

From that day, Louis Cornbutte and his comrades passed through many other trials; but the lemons, which they found, restored them to health.

Gervique, Gradlin, and Nouquet were able to rise from their berths a fortnight after these terrible events, and to take a little exercise.

Soon hunting for game became more easy and its results more abundant. The water-birds returned in large numbers. They often brought down a kind of wild duck which made excellent food. The hunters had no other deprivation to deplore than that of two dogs, which they lost in an expedition to reconnoitre the state of the icefields, twenty-five miles to the southward.

The month of February was signalized by violent tempests and abundant snows. The mean temperature was still twenty-five degrees below zero, but they did not suffer in comparison with past hardships. Besides, the sight of the sun, which rose higher and higher above the horizon, rejoiced them, as it forecast the end of their torments. Heaven had pity on them, for warmth came sooner than usual that year. The ravens appeared in March, careering about the ship. Louis Cornbutte captured some cranes which had wandered thus far northward. Flocks of wild birds were also seen in the south.

The return of the birds indicated a diminution of the cold; but it was not safe to rely upon this, for with a change of wind, or in the new or full moons, the temperature suddenly fell; and the sailors were forced to resort to their most careful precautions to protect themselves against it. They had already burned all the barricading, the bulkheads, and a large portion of the bridge. It was time, then, that their wintering was over. Happily, the mean temperature of March was not over sixteen degrees below zero. Marie occupied herself with preparing new clothing for the advanced season of the year.

After the equinox, the sun had remained constantly above the horizon. The eight months of perpetual daylight had begun. This continual sunlight, with the increasing though still quite feeble heat, soon began to act upon the ice.

Great precautions were necessary in launching the ship from the lofty layer of ice which surrounded her. She was therefore securely propped up, and it seemed best to await the breaking up of the ice; but the lower mass, resting on a bed of already warm water, detached itself little by little, and the ship gradually descended with it. Early in April she had reached her natural level.

Torrents of rain came with April, which, extending in waves over the ice-plain, hastened still more its breaking up. The thermometer rose to ten degrees below zero. Some of the men took off their seal-skin clothes, and it was no longer necessary to keep a fire in the cabin stove day and night. The provision of spirit, which was not exhausted, was used only for cooking the food.

Soon the ice began to break up rapidly, and it became imprudent to venture upon the plain without a staff to sound the passages; for fissures wound in spirals here and there. Some of the sailors fell into the water, with no worse result, however, than a pretty cold bath.

The seals returned, and they were often hunted, and their grease utilized.

The health of the crew was fully restored, and the time was employed in hunting and preparations for departure. Louis Cornbutte often examined the channels, and decided, in consequence of the shape of the southern coast, to attempt a passage in that direction. The breaking up had already begun here and there, and the floating ice began to pass off towards the high seas. On the 25th of April the ship was put in readiness. The sails, taken from their sheaths, were found to be perfectly preserved, and it was with real delight that the sailors saw them once more swaying in the wind. The ship gave a lurch, for she had found her floating line, and though she would not yet move forward, she lay quietly and easily in her natural element.
In May the thaw became very rapid. The snow which covered the coast melted on every hand, and formed a thick mud, which made it well-nigh impossible to land. Small heathers, rosy and white, peeped out timidly above the lingering snow, and seemed to smile at the little heat they received. The thermometer at last rose above zero.

Twenty miles off, the ice masses, entirely separated, floated towards the Atlantic Ocean. Though the sea was not quite free around the ship, channels opened by which Louis Cornbutte wished to profit.

On the 21st of May, after a parting visit to his father's grave, Louis at last set out from the bay. The hearts of the honest sailors were filled at once with joy and sadness, for one does not leave without regret a place where a friend has died. The wind blew from the north, and favoured their departure. The ship was often arrested by ice-banks, which were cut with the saws; icebergs not seldom confronted her, and it was necessary to blow them up with powder. For a month the way was full of perils, which sometimes brought the ship to the verge of destruction; but the crew were sturdy, and used to these dangerous exigencies. Penellan, Pierre Nouquet, Turquiette, Fidèle Misonne, did the work of ten sailors, and Marie had smiles of gratitude for each.

The "Jeune-Hardie" at last passed beyond the ice in the latitude of Jean-Mayer Island. About the 25th of June she met ships going northward for seals and whales. She had been nearly a month emerging from the Polar Sea.

On the 16th of August she came in view of Dunkirk. She had been signalled by the look-out, and the whole population flocked to the jetty. The sailors of the ship were soon clasped in the arms of their friends. The old curé received Louis Cornbutte and Marie with patriarchal arms, and of the two masses which he said on the following day, the first was for the repose of Jean Cornbutte's soul, and the second to bless these two lovers, so long united in misfortune.

THE FORTIETH FRENCH ASCENT OF MONT BLANC

BY PAUL VERNE.

I arrived at Chamonix on the 18th of August, 1871, fully decided to make the ascent of Mont Blanc, cost what it might. My first attempt in August, 1869, was not successful. Bad weather had prevented me from mounting beyond the Grands-Mulets. This time circumstances seemed scarcely more favourable, for the weather, which had promised to be fine on the morning of the 18th, suddenly changed towards noon. Mont Blanc, as they say in its neighbourhood, "put on its cap and began to smoke its pipe," which, to speak more plainly, means that it is covered with clouds, and that the snow, driven upon it by a south-west wind, formed a long crest on its summit in the direction of the unfathomable precipices of the Brenva glaciers. This crest betrayed to imprudent tourists the route they would have taken, had they had the temerity to venture upon the mountain.

The next night was very inclement. The rain and wind were violent, and the barometer, below the "change," remained stationary.

Towards daybreak, however, several thunder-claps announced a change in the state of the atmosphere. Soon the clouds broke. The chain of the Brevent and the Aiguilles-Rouges betrayed itself. The wind, turning to the north-west, brought into view above the Col de Balme, which shuts in the valley of Chamonix on the north, some light, isolated, fleecy clouds, which I hailed as the heralds of fine weather.

Despite this happy augury and a slight rise in the barometer, M. Balmat, chief guide of Chamonix, declared to me that I must not yet think of attempting the ascent.

"If the barometer continues to rise," he added, "and the weather holds good, I promise you guides for the day after to-morrow-- perhaps for to-morrow. Meanwhile, have patience and stretch your legs; I will take you up the Brevent. The clouds are clearing away, and you will be able to exactly distinguish the path you will have to go over to reach the summit of Mont Blanc. If, in spite of this, you are determined to go, you may try it!"

This speech, uttered in a certain tone, was not very reassuring, and gave food for reflection. Still, I accepted his proposition, and he chose as my companion the guide Edward Ravanel, a very sedate and devoted fellow, who perfectly knew his business.

M. Donatien Levesque, an enthusiastic tourist and an intrepid pedestrian, who had made early in the previous year an interesting and difficult trip in North America, was with me. He had already visited the greater part of America, and was about to descend the Mississippi to New Orleans, when the war cut short his projects and recalled him to France. We had met at Aix-les-Bains, and we had determined to make an excursion together in Savoy and Switzerland.

Donatien Levesque knew my intentions, and, as he thought that his health would not permit him to attempt so long a journey over the glaciers, it had been agreed that he should await my return from Mont Blanc at Chamonix, and should make the traditional visit to the Mer-de-Glace by the Montanvers during my absence.

On learning that I was going to ascend the Brevent, my friend did not hesitate to accompany me thither. The
ascent of the Brevent is one of the most interesting trips that can be made from Chamonix. This mountain, about seven thousand six hundred feet high, is only the prolongation of the chain for the Aiguilles-Rouges, which runs from the south-west to the north-east, parallel with that of Mont Blanc, and forms with it the narrow valley of Chamonix. The Brevent, by its central position, exactly opposite the Bossons glacier, enables one to watch the parties which undertake the ascent of the giant of the Alps nearly throughout their journey. It is therefore much frequented.

We started about seven o'clock in the morning. As we went along, I thought of the mysterious words of the master-guide; they annoyed me a little. Addressing Ravanel, I said,--

"Have you made the ascent of Mont Blanc?"

"Yes, monsieur," he replied, "once; and that's enough. I am not anxious to do it again."

"The deuce!" said I. "I am going to try it."

"You are free, monsieur; but I shall not go with you. The mountain is not good this year. Several attempts have already been made; two only have succeeded. As for the second, the party tried the ascent twice. Besides, the accident last year has rather cooled the amateurs."

"An accident! What accident?"

"Did not monsieur hear of it? This is how it happened. A party, consisting of ten guides and porters and two Englishmen, started about the middle of September for Mont Blanc. They were seen to reach the summit; then, some minutes after, they disappeared in a cloud. When the cloud passed over no one was visible. The two travellers, with seven guides and porters, had been blown off by the wind and precipitated on the Cormayeur side, doubtless into the Brenva glacier. Despite the most vigilant search, their bodies could not be found. The other three were found one hundred and fifty yards below the summit, near the Petits-Mulets. They had become blocks of ice."

"But these travellers must have been imprudent," said I to Ravanel. "What folly it was to start off so late in the year on such an expedition! They should have gone up in August."

I vainly tried to keep up my courage; this lugubrious story would haunt me in spite of myself. Happily the weather soon cleared, and the rays of a bright sun dissipated the clouds which still veiled Mont Blanc, and, at the same time, those which overshadowed my thoughts.

Our ascent was satisfactorily accomplished. On leaving the chalets of Planpraz, situated at a height of two thousand and sixty-two yards, you ascend, on ragged masses of rock and pools of snow, to the foot of a rock called "The Chimney," which is scaled with the feet and hands. Twenty minutes after, you reach the summit of the Brevent, whence the view is very fine. The chain of Mont Blanc appears in all its majesty. The gigantic mountain, firmly established on its powerful strata, seems to defy the tempests which sweep across its icy shield without ever impairing it; whilst the crowd of icy needles, peaks, mountains, which form its cortege and rise everywhere around it, without equalling its noble height, carry the evident traces of a slow wasting away.

[ Illustration: View of Mont Blanc from the Brevent.]

From the excellent look-out which we occupied, we could reckon, though still imperfectly, the distance to be gone over in order to attain the summit. This summit, which from Chamonix appears so near the dome of the Goûter, now took its true position. The various plateaus which form so many degrees which must be crossed, and which are not visible from below, appeared from the Brevent, and threw the so-much-desired summit, by the laws of perspective, still farther in the background. The Bossons glacier, in all its splendour, bristled with icy needles and blocks (blocks sometimes ten yards square), which seemed, like the waves of an angry sea, to beat against the sides of the rocks of the Grands-Mulets, the base of which disappeared in their midst.

This marvellous spectacle was not likely to cool my impatience, and I more eagerly than ever promised myself to explore this hitherto unknown world.

My companion was equally inspired by the scene, and from this moment I began to think that I should not have to ascend Mont Blanc alone.

We descended again to Chamonix; the weather became milder every hour; the barometer continued to ascend; everything seemed to promise well.

The next day at sunrise I hastened to the master-guide. The sky was cloudless; the wind, almost imperceptible, was north-east. The chain of Mont Blanc, the higher summits of which were gilded by the rising sun, seemed to invite the many tourists to ascend it. One could not, in all politeness, refuse so kindly an invitation.

M. Balmat, after consulting his barometer, declared the ascent to be practicable, and promised me the two guides and the porter prescribed in our agreement. I left the selection of these to him. But an unexpected incident disturbed my preparations for departure.

As I came out of M. Balmat's office, I met Ravanel, my guide of the day before.

"Is monsieur going to Mont Blanc?" he asked.

"Yes, certainly," said I. "Is it not a favourable time logo?"
He reflected a few moments, and then said with an embarrassed air,—

"Monsieur, you are my traveller; I accompanied you yesterday to the Brevent, so I cannot leave you now; and, since you are going up, I will go with you, if you will kindly accept my services. It is your right, for on all dangerous journeys the traveller can choose his own guides. Only, if you accept my offer, I ask that you will also take my brother, Ambrose Ravanel, and my cousin, Gaspard Simon. These are young, vigorous fellows; they do not like the ascent of Mont Blanc better than I do; but they will not shirk it, and I answer for them to you as I would for myself."

This young man inspired me with all confidence. I accepted his proposition, and hastened to apprise M. Balmat of the choice I had made. But M. Balmat had meanwhile been selecting guides for me according to their turn on his list. One only had accepted, Edward Simon; the answer of another, Jean Carrier, had not yet been received, though it was scarcely doubtful, as this man had already made the ascent of Mont Blanc twenty-nine times. I thus found myself in an embarrassing position. The guides I had chosen were all from Argentière, a village six kilometres from Chamonix. Those of Chamonix accused Ravanel of having influenced me in favour of his family, which was contrary to the regulations.

To cut the discussion short, I took Edward Simon, who had already made his preparations as a third guide. He would be useless if I went up alone, but would become indispensable if my friend also ascended.

This settled, I went to tell Donatien Levesque. I found him sleeping the sleep of the just, for he had walked over sixteen kilometres on a mountain the evening before. I had some difficulty in waking him; but on removing first his sheets, then his pillows, and finally his mattress, I obtained some result, and succeeded in making him understand that I was preparing for the hazardous trip.

"Well," said he, yawning, "I will go with you as far as the Grands-Mulets, and await your return there."

"Bravo!" I replied. "I have just one guide too many, and I will attach him to your person."

We bought the various articles indispensable to a journey across the glaciers. Iron-spiked alpenstocks, coarse cloth leggings, green spectacles fitting tightly to the eyes, furred gloves, green veils,—nothing was forgotten. We each had excellent triple-soled shoes, which our guides roughed for the ice. This last is an important detail, for there are moments in such an expedition when the least slip is fatal, not only to yourself, but to the whole party with you.

Our preparations and those of the guides occupied nearly two hours. About eight o'clock our mules were brought; and we set out at last for the chalet of the Pierre-Pointue, situated at a height of six thousand five hundred feet, or three thousand above the valley of Chamonix, not far from eight thousand five hundred feet below the summit of Mont Blanc.

On reaching the Pierre-Pointue, about ten o'clock, we found there a Spanish tourist, M. N----, accompanied by two guides and a porter. His principal guide, Paccard, a relative of the Doctor Paccard who made, with Jacques Balmat, the first ascent of Mont Blanc, had already been to the summit eighteen times. M. N---- was also getting himself ready for the ascent. He had travelled much in America, and had crossed the Cordilleras to Quito, passing through snow at the highest points. He therefore thought that he could, without great difficulty, carry through his new enterprise; but in this he was mistaken. He had reckoned without the steepness of the inclinations which he had to cross, and the rarefaction of the air. I hasten to add, to his honour, that, since he succeeded in reaching the summit of Mont Blanc, it was due to a rare moral energy, for his physical energies had long before deserted him.

We breakfasted as heartily as possible at the Pierre-Pointue; this being a prudent precaution, as the appetite usually fails higher up among the ice.

[Illustration: View Of Bossons Glacier, Near The Grands-Mulets.]

M. N---- set out at eleven, with his guides, for the Grands-Mulets. We did not start until noon. The mule-road ceases at the Pierre-Pointue. We had then to go up a very narrow zigzag path, which follows the edge of the Bossons glacier, and along the base of the Aiguille-du-Midi. After an hour of difficult climbing in an intense heat, we reached a point called the Pierre-a-l'Echelle, eight thousand one hundred feet high. The guides and travellers were then bound together by a strong rope, with three or four yards between each. We were about to advance upon the Bossons glacier. This glacier, difficult at first, presents yawning and apparently bottomless crevasses on every hand. The vertical sides of these crevasses are of a glaucous and uncertain colour, but too seducing to the eye; when, approaching closely, you succeed in looking into their mysterious depths, you feel yourself irresistibly drawn towards them, and nothing seems more natural than to go down into them.

[Illustration: Passage Of The Bossons Glacier.]

You advance slowly, passing round the crevasses, or on the snow bridges of dubious strength. Then the rope plays its part. It is stretched out over these dangerous transits; if the snow bridge yields, the guide or traveller remains hanging over the abyss. He is drawn beyond it, and gets off with a few bruises. Sometimes, if the crevasse is very wide but not deep, he descends to the bottom and goes up on the other side. In this case it is necessary to cut steps in the ice, and the two leading guides, armed with a sort of hatchet, perform this difficult and perilous task. A special circumstance makes the entrance on the Bossons dangerous. You go upon the glacier at the base of the
Aiguille-du-Midi, opposite a passage whence stone avalanches often descend. This passage is nearly six hundred feet wide. It must be crossed quickly, and as you pass, a guide stands on guard to avert the danger from you if it presents itself. In 1869 a guide was killed on this spot, and his body, hurled into space by a stone, was dashed to pieces on the rocks nine hundred feet below.

We were warned, and hastened our steps as fast as our inexperience would permit; but on leaving this dangerous zone, another, not less dangerous, awaited us. This was the region of the "seracs,"--immense blocks of ice, the formation of which is not as yet explained.

These are usually situated on the edge of a plateau, and menace the whole valley beneath them. A slight movement of the glacier, or even a light vibration of the temperature, impels their fall, and occasions the most serious accidents.

"Messieurs, keep quiet, and let us pass over quickly." These words, roughly spoken by one of the guides, checked our conversation. We went across rapidly and in silence. We finally reached what is called the "Junction" (which might more properly be called the violent "Separation"), by the Côte Mountain, the Bossons and Tacconay glaciers. At this point the scene assumes an indescribable character; crevasses with changing colours, ice-needles with sharp forms, seracs suspended and pierced with the light, little green lakes compose a chaos which surpasses everything that one can imagine. Added to this, the rush of the torrents at the foot of the glaciers, the sinister and repeated crackings of the blocks which detached themselves and fell in avalanches down the crevasses, the trembling of the ground which opened beneath our feet, gave a singular idea of those desolate places the existence of which only betrays itself by destruction and death.

After passing the "Junction" you follow the Tacconay glacier for a while, and reach the side which leads to the Grands-Mulets. This part, which is very sloping, is traversed in zigzags. The leading guide takes care to trace them at an angle of thirty degrees, when there is fresh snow, to avoid the avalanches.

After crossing for three hours on the ice and snow, we reach the Grands-Mulets, rocks six hundred feet high, overlooking on one side the Bossons glacier, and on the other the sloping plains which extend to the base of the Goûter dome.

A small hut, constructed by the guides near the summit of the first rock, gives a shelter to travellers, and enables them to await a favourable moment for setting out for the summit of Mont Blanc.

They dine there as well as they can, and sleep too; but the proverb, "He who sleeps dines," does not apply to this elevation, for one cannot seriously do the one or the other.

"Well," said I to Levesque, after a pretence of a meal, "did I exaggerate the splendour of the landscape, and do you regret having come thus far?"

"I regret it so little," he replied, "that I am determined to go on to the summit. You may count on me."

"Very good," said I. "But you know the worst is yet to come."

"Nonsense!" he exclaimed, "we will go to the end. Meanwhile, let us observe the sunset, which must be magnificent."

The heavens had remained wonderfully clear. The chain of the Brevent and the Aiguilles-Rouges stretched out at our feet. Beyond, the Fitz rocks and the Aiguille-de-Varan rose above the Sallanche Valley, and the whole chains of Mont Fleury and the Reposoir appeared in the background. More to the right we could descry the snowy summit of the Buet, and farther off the Dents-du-Midi, with its five tusks, overhanging the valley of the Rhone. Behind us were the eternal snows of the Goûter, Mont Maudit, and, lastly, Mont Blanc.

Little by little the shadows invaded the valley of Chamonix, and gradually each of the summits which overlook it on the west. The chain of Mont Blanc alone remained luminous, and seemed encircled by a golden halo. Soon the shadows crept up the Goûter and Mont Maudit. They still respected the giant of the Alps. We watched this gradual disappearance of the light with admiration. It lingered awhile on the highest summit, and gave us the foolish hope that it would not depart thence. But in a few moments all was shrouded in gloom, and the livid and ghastly colours of death succeeded the living hues. I do not exaggerate. Those who love mountains will comprehend me.

After witnessing this sublime scene, we had only to await the moment of departure. We were to set out again at two in the morning. Now, therefore, we stretched ourselves upon our mattresses. It was useless to think of sleeping, much more of talking. We were absorbed by more or less gloomy thoughts. It was the night before the battle, with the difference that nothing forced us to engage in the struggle. Two sorts of
ideas struggled in the mind. It was the ebb and flow of the sea, each in its turn. Objections to the venture were not wanting. Why run so much danger? If we succeeded, of what advantage would it be? If an accident happened, how we should regret it! Then the imagination set to work; all the mountain catastrophes rose in the fancy. I dreamed of snow bridges giving way under my feet, of being precipitated in the yawning crevasses, of hearing the terrible noises of the avalanches detaching themselves and burying me, of disappearing, of cold and death seizing upon me, and of struggling with desperate effort, but in vain!

A sharp, horrible noise is heard at this moment
"The avalanche! the avalanche!" I cry.
"What is the matter with you?" asks Levesque, starting up.

Alas! It is a piece of furniture which, in the struggles of my nightmare, I have just broken. This very prosaic avalanche recalls me to the reality. I laugh at my terrors, a contrary current of thought gets the upper hand, and with it ambitious ideas. I need only use a little effort to reach this summit, so seldom attained. It is a victory, as others are. Accidents are rare--very rare! Do they ever take place at all? The spectacle from the summit must be so marvellous! And then what satisfaction there would be in having accomplished what so many others dared not undertake!

My courage was restored by these thoughts, and I calmly awaited the moment of departure.

About one o'clock the steps and voices of the guides, and the noise of opening doors, indicated that that moment was approaching. Soon Ravanel came in and said, "Come, messieurs, get up; the weather is magnificent. By ten o'clock we shall be at the summit."

At these words we leaped from our beds, and hurried to make our toilet. Two of the guides, Ambrose Ravanel and his cousin Simon, went on ahead to explore the road. They were provided with a lantern, which was to show us the way to go, and with hatchets to make the path and cut steps in the very difficult spots. At two o'clock we tied ourselves one to another: the order of march was, Edward Ravanel before me, and at the head; behind me Edward Simon, then Donatien Levesque; after him our two porters (for we took along with us the domestic of the Grands-Mulets hut as a second), and M. N----'s party.

The guides and porters having distributed the provisions between them, the signal for departure was given, and we set off in the midst of profound darkness, directing ourselves according to the lantern held up at some distance ahead.

There was something solemn in this setting out. But few words were spoken; the vagueness of the unknown impressed us, but the new and strange situation excited us, and rendered us insensible to its dangers. The landscape around was fantastic. But few outlines were distinguishable. Great white confused masses, with blackish spots here and there, closed the horizon. The celestial vault shone with remarkable brilliancy. We could perceive, at an uncertain distance, the lantern of the guides who were ahead, and the mournful silence of the night was only disturbed by the dry, distant noise of the hatchet cutting steps in the ice.

We crept slowly and cautiously over the first ascent, going towards the base of the Goûter. After ascending laboriously for two hours, we reached the first plateau, called the "Petit-Plateau," at the foot of the Goûter, at a height of about eleven thousand feet. We rested a few moments and then proceeded, turning now to the left and going towards the edge which conducts to the "Grand-Plateau."

But our party had already lessened in number: M. N----, with his guides, had stopped; his fatigue obliged him to take a longer rest.

About half-past four dawn began to whiten the horizon. At this moment we were ascending the slope which leads to the Grand-Plateau, which we soon safely reached. We were eleven thousand eight hundred feet high. We had well earned our breakfast. Wonderful to relate, Levesque and I had a good appetite. It was a good sign. We therefore installed ourselves on the snow, and made such a repast as we could. Our guides joyfully declared that success was certain. As for me, I thought they resumed work too quickly.

M. N---- rejoined us before long. We urged him to take some nourishment. He peremptorily refused. He felt the contraction of the stomach which is so common in those parts, and was almost broken down.

The Grand-Plateau deserves a special description. On the right rises the dome of the Goûter. Opposite it is Mont Blanc, rearing itself two thousand seven hundred feet above it. On the left are the "Rouges" rocks and Mont Maudit. This immense circle is one mass of glittering whiteness. On every side are vast crevasses. It was in one of these that three of the guides who accompanied Dr. Hamel and Colonel Anderson, in 1820, were swallowed up. In 1864 another guide met his death there.

This plateau must be crossed with great caution, as the crevasses are often hidden by the snow; besides, it is often swept by avalanches. On the 13th of October, 1866, an English traveller and three of his guides were buried under a mass of ice that fell from Mont Blanc. After a perilous search, the bodies of the three guides were found. They were expecting every moment to find that of the Englishman, when a fresh avalanche fell upon the first, and forced the searchers to abandon their task.
Three routes presented themselves to us. The ordinary route, which passes entirely to the left, by the base of Mont Maudit, through a sort of valley called the "Corridor," leads by gentle ascents to the top of the first escarpment of the Rouges rocks.

The second, less frequented, turns to the right by the Goûter, and leads to the summit of Mont Blanc by the ridge which unites these two mountains. You must pursue for three hours a giddy path, and scale a height of moving ice, called the "Camel's Hump."

The third route consists in ascending directly to the summit of the Corridor, crossing an ice-wall seven hundred and fifty feet high, which extends along the first escarpment of the Rouges rocks.

The guides declared the first route impracticable, on account of the recent crevasses which entirely obstructed it; the choice between the two others remained. I thought the second, by the "Camel's Hump," the best; but it was regarded as too dangerous, and it was decided that we should attack the ice-wall conducting to the summit of the Corridor.

When a decision is made, it is best to execute it without delay. We crossed the Grand-Plateau, and reached the foot of this really formidable obstacle.

The nearer we approached the more nearly vertical became its slope. Besides, several crevasses which we had not perceived yawned at its base.

We nevertheless began the difficult ascent. Steps were begun by the foremost guide, and completed by the next. We ascended two steps a minute. The higher we went the more the steepness increased. Our guides themselves discussed what route to follow; they spoke in patois, and did not always agree, which was not a good sign. At last the slope became such that our hats touched the legs of the guide just before us.

A hailstorm of pieces of ice, produced by the cutting of the steps, blinded us, and made our progress still more difficult. Addressing one of the foremost guides, I said,—

"Ah, it's very well going up this way! It is not an open road, I admit: still, it is practicable. Only how are you going to get us down again?"

"O monsieur," replied Ambrose Ravanel, "we will take another route going back."

At last, after violent effort for two hours, and after having cut more than four hundred steps in this terrible mass, we reached the summit of the Corridor completely exhausted.

We then crossed a slightly sloping plateau of snow, and passed along the side of an immense crevasse which obstructed our way. We had scarcely turned it when we uttered a cry of admiration. On the right, Piedmont and the plains of Lombardy were at our feet. On the left, the Pennine Alps and the Oberland, crowned with snow, raised their magnificent crests. Monte Rosa and the Cervin alone still rose above us, but soon we should overlook them in our turn.

This reflection recalled us to the end of our expedition. We turned our gaze towards Mont Blanc, and stood stupefied.

"Heavens! how far off it is still!" cried Levesque.

"And how high!" I added.

It was a discouraging sight. The famous wall of the ridge, so much feared, but which must be crossed, was before us, with its slope of fifty degrees. But after scaling the wall of the Corridor, it did not terrify us. We rested for half an hour and then continued our tramp; but we soon perceived that the atmospheric conditions were no longer the same. The sun shed his warm rays upon us; and their reflection on the snow added to our discomfort. The rarefaction of the air began to be severely felt. We advanced slowly, making frequent halts, and at last reached the plateau which overlooks the second escarpment of the Rouges rocks. We were at the foot of Mont Blanc. It rose, alone and majestic, at a height of six hundred feet above us. Monte Rosa itself had lowered its flag!

Levesque and I were completely exhausted. As for M. N----, who had rejoined us at the summit of the Corridor, it might be said that he was insensible to the rarefaction of the air, for he no longer breathed, so to speak.

We began at last to scale the last stage. We made ten steps and then stopped, finding it absolutely impossible to proceed. A painful contraction of the throat made our breathing exceedingly difficult. Our legs refused to carry us; and I then understood the picturesque expression of Jacques Balmat, when, in narrating his first ascent, he said that "his legs seemed only to be kept up by his trousers!" But our mental was superior to our physical force; and if the body faltered, the heart, responding "Excelsior!" stifled its desperate complaint, and urged forward our poor worn-out mechanism, despite itself. We thus passed the Petits-Mulets, and after two hours of superhuman efforts finally overlooked the entire chain. Mont Blanc was under our feet!

It was fifteen minutes after twelve.

The pride of success soon dissipated our fatigue. We had at last conquered this formidable crest. We overlooked
all the others, and the thoughts which Mont Blanc alone can inspire affected us with a deep emotion. It was ambition satisfied; and to me, at least, a dream realized!

Mont Blanc is the highest mountain in Europe. Several mountains in Asia and America are higher; but of what use would it be to attempt them, if, in the absolute impossibility of reaching their summit, you must be content to remain at a lesser height?

Others, such as Mont Cervin, are more difficult of access; but we perceived the summit of Mont Cervin twelve hundred feet below us!

And then, what a view to reward us for our troubles and dangers!

The sky, still pure, had assumed a deep-blue tint. The sun, despoiled of a part of his rays, had lost his brilliancy, as if in a partial eclipse. This effect, due to the rarefaction of the air, was all the more apparent as the surrounding eminences and plains were inundated with light. No detail of the scene, therefore, escaped our notice.

In the south-east, the mountains of Piedmont, and farther off the plains of Lombardy, shut in our horizon. Towards the west, the mountains of Savoy and Dauphiné; beyond, the valley of the Rhone. In the north-west, the Lake of Geneva and the Jura; then, descending towards the south, a chaos of mountains and glaciers, beyond description, overlooked by the masses of Monte Rosa, the Mischabelhoerner, the Cervin, the Weishorn--the most beautiful of crests, as Tyndall calls it--and farther off by the Jungfrau, the Monck, the Eiger, and the Finsteraarhorn.

The extent of our range of vision was not less than sixty leagues. We therefore saw at least one hundred and twenty leagues of country.

A special circumstance happened to enhance the beauty of the scene. Clouds formed on the Italian side and invaded the valleys of the Pennine Alps without veiling their summits. We soon had under our eyes a second sky, a lower sky, a sea of clouds, whence emerged a perfect archipelago of peaks and snow-wrapped mountains. There was something magical in it, which the greatest poets could scarcely describe.

The summit of Mont Blanc forms a ridge from southwest to north-east, two hundred paces long and a yard wide at the culminating point. It seemed like a ship's hull overturned, the keel in the air.

Strangely enough, the temperature was very high--ten degrees above zero. The air was almost still. Sometimes we felt a light breeze.

The first care of our guides was to place us all in a line on the crest opposite Chamonix, that we might be easily counted from below, and thus make it known that no one of us had been lost. Many of the tourists had ascended the Brevent and the Jardin to watch our ascent. They might now be assured of its success.

But to ascend was not all; we must think also of going down. The most difficult, if not most wearisome, task remained; and then one quits with regret a summit attained at the price of so much toil. The energy which urges you to ascend, the need, so natural and imperious, of overcoming, now fails you. You go forward listlessly, often looking behind you!

It was necessary, however, to decide, and, after a last traditional libation of champagne, we put ourselves in motion. We had remained on the summit an hour. The order of march was now changed. M. N----’s party led off; and, at the suggestion of his guide Paccard, we were all tied together with a rope. M. N----’s fatigue, which his strength, but not his will, betrayed, made us fear falls on his part which would require the help of the whole party to arrest. The event justified our foreboding. On descending the side of the wall, M. N---- made several false steps. His guides, very vigorous and skilful, were happily able to check him; but ours, feeling, with reason, that the whole party might be dragged down, wished to detach us from the rope. Levesque and I opposed this; and, by taking great precautions, we safely reached the base of this giddy ledge. There was no room for illusions. The almost bottomless abyss was before us, and the pieces of detached ice, which bounded by us with the rapidity of an arrow, clearly showed us the route which the party would take if a slip were made.

Once this terrible gap crossed, I began to breathe again. We descended the gradual slopes which led to the summit of the Corridor. The snow, softened by the heat, yielded beneath our feet; we sank in it to the knees, which made our progress very fatiguing. We steadily followed the path by which we ascended in the morning, and I was astonished when Gaspard Simon, turning towards me, said,--

"Monsieur, we cannot take any other road, for the Corridor is impracticable, and we must descend by the wall which we climbed up this morning."

I told Levesque this disagreeable news.

"Only," added Gaspard Simon, "I do not think we can all remain tied together. However, we will see how M. N---- bears it at first."

We advanced towards this terrible wall! M. N----’s party began to descend, and we heard Paccard talking rapidly to him. The inclination became so steep that we perceived neither him nor his guides, though we were bound together by the same rope.

As soon as Gaspard Simon, who went before me, could comprehend what was passing, he stopped, and after
exchanging some words in _patois_ with his comrades, declared that we must detach ourselves from M. N----'s party.

"We are responsible for you," he added, "but we cannot be responsible for others; and if they slip, they will drag us after them."

Saying this, he got loose from the rope. We were very unwilling to take this step; but our guides were inflexible. We then proposed to send two of them to help M. N----'s guides. They eagerly consented; but having no rope they could not put this plan into execution.

We then began this terrible descent. Only one of us moved at a time, and when each took a step the others buttressed themselves ready to sustain the shock if he slipped. The foremost guide, Edward Ravanel, had the most perilous task; it was for him to make the steps over again, now more or less worn away by the ascending caravan.

We progressed slowly, taking the most careful precautions. Our route led us in a right line to one of the crevasses which opened at the base of the escarpment. When we were going up we could not look at this crevasse, but in descending we were fascinated by its green and yawning sides. All the blocks of ice detached by our passage went the same way, and after two or three bounds, engulfed themselves in the crevasse, as in the jaws of the minotaur, only the jaws of the minotaur closed after each morsel, while the unsatiated crevasse yawned perpetually, and seemed to await, before closing, a larger mouthful. It was for us to take care that we should not be this mouthful, and all our efforts were made for this end. In order to withdraw ourselves from this fascination, this moral giddiness, if I may so express myself, we tried to joke about the dangerous position in which we found ourselves, and which even a chamois would not have envied us. We even got so far as to hum one of Offenbach's couplets; but I must confess that our jokes were feeble, and that we did not sing the airs correctly.

I even thought I discovered Levesque obstinately setting the words of "Barbe-Bleue" to one of the airs in "Il Trovatore," which rather indicated some grave preoccupation of the mind. In short, in order to keep up our spirits, we did as do those brave cowards who sing in the dark to forget their fright.

We remained thus, suspended between life and death, for an hour, which seemed an eternity; at last we reached the bottom of this terrible escarpment. We there found M. N---- and his party, safe and sound.

After resting a little while, we continued our journey.

As we were approaching the Petit-Plateau, Edward Ravanel suddenly stopped, and, turning towards us, said,--

"See what an avalanche! It has covered our tracks."

An immense avalanche of ice had indeed fallen from the Goûter, and entirely buried the path we had followed in the morning across the Petit-Plateau.

I estimated that the mass of this avalanche could not comprise less than five hundred cubic yards. If it had fallen while we were passing, one more catastrophe would no doubt have been added to the list, already too long, of the necrology of Mont Blanc.

This fresh obstacle forced us to seek a new road, or to pass around the foot of the avalanche. As we were much fatigued, the latter course was assuredly the simplest; but it involved a serious danger. A wall of ice more than sixty feet high, already partly detached from the Goûter, to which it only clung by one of its angles, overhung the path which we should follow. This great mass seemed to hold itself in equilibrium. What if our passing, by disturbing the air, should hasten its fall? Our guides held a consultation. Each of them examined with a spy-glass the fissure which had been formed between the mountain and this alarming ice-mass. The sharp and clear edges of the cleft betrayed a recent breaking off, evidently caused by the fall of the avalanche.

After a brief discussion, our guides, recognizing the impossibility of finding another road, decided to attempt this dangerous passage.

"We must walk very fast,--even run, if possible," said they, "and we shall be in safety in five minutes. Come, messieurs, a last effort!"

A run of five minutes is a small matter for people who are only tired; but for us, who were absolutely exhausted, to run even for so short a time on soft snow, in which we sank up to the knees, seemed an impossibility. Nevertheless, we made an urgent appeal to our energies, and after two or three tumbles, drawn forward by one, pushed by another, we finally reached a snow hillock, on which we fell breathless. We were out of danger.

It required some time to recover ourselves. We stretched out on the snow with a feeling of comfort which every one will understand. The greatest difficulties had been surmounted, and though there were still dangers to brave, we could confront them with comparatively little apprehension.

We prolonged our halt in the hope of witnessing the fall of the avalanche, but in vain. As the day was advancing, and it was not prudent to tarry in these icy solitudes, we decided to continue on our way, and about five o'clock we reached the hut of the Grands-Mulets.

After a bad night, attended by fever caused by the sunstrokes encountered in our expedition, we made ready to return to Chamonix; but, before setting out, we inscribed the names of our guides and the principal events of our
journey, according to the custom, on the register kept for this purpose at the Grands-Mulets.

About eight o'clock we started for Chamonix. The passage of the Bossons was difficult, but we accomplished it without accident.

[ Illustration: Grands-Mulets.--Party Descending From The Hut. ]

Half an hour before reaching Chamonix, we met, at the chalet of the Dard falls, some English tourists, who seemed to be watching our progress. When they perceived us, they hurried up eagerly to congratulate us on our success. One of them presented us to his wife, a charming person, with a well-bred air. After we had given them a sketch of our perilous peregrinations, she said to us, in earnest accents,--

"How much you are envied here by everybody! Let me touch your alpenstocks!"

These words seemed to interpret the general feeling.

The ascent of Mont Blanc is a very painful one. It is asserted that the celebrated naturalist of Geneva, De Saussure, acquired there the seeds of the disease of which he died in a few months after his return from the summit.

I cannot better close this narrative than by quoting the words of M. Markham Sherwell:--

"However it may be," he says, in describing his ascent of Mont Blanc, "I would not advise any one to undertake this ascent, the rewards of which can never have an importance proportionate to the dangers encountered by the tourist, and by those who accompany him."

THE END.

AN ANTARCTIC MYSTERY

BY

JULES VERNE

CHAPTER I. THE KERGUELEN ISLANDS

No doubt the following narrative will be received: with entire incredulity, but I think it well that the public should be put in possession of the facts narrated in "An Antarctic Mystery." The public is free to believe them or not, at its good pleasure.

No more appropriate scene for the wonderful and terrible adventures which I am about to relate could be imagined than the Desolation Islands, so called, in 1779, by Captain Cook. I lived there for several weeks, and I can affirm, on the evidence of my own eyes and my own experience, that the famous English explorer and navigator was happily inspired when he gave the islands that significant name.

Geographical nomenclature, however, insists on the name of Kerguelen, which is generally adopted for the group which lies in 49° 45' south latitude, and 69° 6' east longitude. This is just, because in 1772, Baron Kerguelen, a Frenchman, was the first to discover those islands in the southern part of the Indian Ocean. Indeed, the commander of the squadron on that voyage believed that he had found a new continent on the limit of the Antarctic seas, but in the course of a second expedition he recognized his error. There was only an archipelago. I may be believed when I assert that Desolation Islands is the only suitable name for this group of three hundred isles or islets in the midst of the vast expanse of ocean, which is constantly disturbed by austral storms.

Nevertheless, the group is inhabited, and the number of Europeans and Americans who formed the nucleus of the Kerguelen population at the date of the 2nd of August, 1839, had been augmented for two months past by a unit in my person. Just then I was waiting for an opportunity of leaving the place, having completed the geological and mineralogical studies which had brought me to the group in general and to Christmas Harbour in particular.

Christmas Harbour belongs to the most important islet of the archipelago, one that is about half as large as Corsica. It is safe, and easy, and free of access. Your ship may ride securely at single anchor in its waters, while the bay remains free from ice.

[ Illustration: The approach of the _Halbrane_. ]

The Kerguelens possess hundreds of other fjords. Their coasts are notched and ragged, especially in the parts between the north and the south-east, where little islets abound. The soil, of volcanic origin, is composed of quartz, mixed with a bluish stone. In summer it is covered with green mosses, grey lichens, various hardy plants, especially wild saxifrage. Only one edible plant grows there, a kind of cabbage, not found anywhere else, and very bitter of flavour. Great flocks of royal and other penguins people these islets, finding good lodging on their rocky and mossy surface. These stupid birds, in their yellow and white feathers, with their heads thrown back and their wings like the
sleeves of a monastic habit, look, at a distance, like monks in single file walking in procession along the beach.

The islands afford refuge to numbers of sea-calves, seals, and sea-elephants. The taking of those amphibious animals either on land or from the sea is profitable, and may lead to a trade which will bring a large number of vessels into these waters.

On the day already mentioned, I was accosted while strolling on the port by mine host of mine inn.

"Unless I am much mistaken, time is beginning to seem very long to you, Mr. Jeorling?"

The speaker was a big tall American who kept the only inn on the port.

"If you will not be offended, Mr. Atkins, I will acknowledge that I do find it long."

"Of course I won't be offended. Am I not as well used to answers of that kind as the rocks of the Cape to the rollers?"

"And you resist them equally well."

"Of course. From the day of your arrival at Christmas Harbour, when you came to the Green Cormorant, I said to myself that in a fortnight, if not in a week, you would have enough of it, and would be sorry you had landed in the Kerguelens."

"No, indeed, Mr. Atkins; I never regret anything I have done."

"That's a good habit, sir."

"Besides, I have gained knowledge by observing curious things here. I have crossed the rolling plains, covered with hard stringy mosses, and I shall take away curious mineralogical and geological specimens with me. I have gone sealing, and taken sea-calves with your people. I have visited the rookeries where the penguin and the albatross live together in good fellowship, and that was well worth my while. I have found a friendly welcome at the Green Cormorant, and I am very much obliged to you. But, if I am right in my reckoning, it is two months since the Chilian twomaster _Penãs_ set me down at Christmas Harbour in mid-winter.

"And you want to get back to your own country, which is mine, Mr. Jeorling; to return to Connecticut, to Providence, our capital."

"Doubtless, Mr. Atkins, for I have been a globe-trotter for close upon three years. One must come to a stop and take root at some time."

"Yes, and when one has taken root, one puts out branches."

"Just so, Mr. Atkins. However, as I have no relations living, it is likely that I shall be the last of my line. I am not likely to take a fancy for marrying at forty."

"Well, well, that is a matter of taste. Fifteen years ago I settled down comfortably at Christmas Harbour with my Betsy; she has presented me with ten children, who in their turn will present me with grandchildren."

"You will not return to the old country?"

"What should I do there, Mr. Jeorling, and what could I ever have done there? There was nothing before me but poverty. Here, on the contrary, in these Islands of Desolation, where I have no reason to feel desolate, ease and competence have come to me and mine!"

"No doubt, and I congratulate you, Mr. Atkins, for you are a happy man. Nevertheless it is not impossible that the fancy may take you some day--"

Mr. Atkins answered by a vigorous and convincing shake of the head. It was very pleasant to hear this worthy American talk. He was completely acclimatized on his archipelago, and to the conditions of life there. He lived with his family as the penguins lived in their rookeries. His wife was a "valiant" woman of the Scriptural type, his sons were strong, hardy fellows, who did not know what sickness meant. His business was prosperous. The Green Cormorant had the custom of all the ships, whalers and others, that put in at Kerguelen. Atkins supplied them with everything they required, and no second inn existed at Christmas Harbour. His sons were carpenters, sailmakers, and fishers, and they hunted the amphibians in all the creeks during the hot season. In short, this was a family of honest folk who fulfilled their destiny without much difficulty.

"Once more, Mr. Atkins, let me assure you," I resumed, "I am delighted to have come to Kerguelen. I shall always remember the islands kindly. Nevertheless, I should not be sorry to find myself at sea again."

"Come, Mr. Jeorling, you must have a little patience," said the philosopher, "you must not forget that the fine days will soon be here. In five or six weeks--"

"Yes, and in the meantime, the hills and the plains, the rocks and the shores will be covered thick with snow, and the sun will not have strength to dispel the mists on the horizon."

"Now, there you are again, Mr. Jeorling! Why, the wild grass is already peeping through the white sheet! Just look!"

"Yes, with a magnifying glass! Between ourselves, Arkins, could you venture to pretend that your bays are not still ice-locked in this month of August, which is the February of our northern hemisphere?"
"I acknowledge that, Mr. Jeorling. But again I say have patience! The winter has been mild this year. The ships will soon show up, in the east or in the west, for the fishing season is near."

"May Heaven hear you, Atkins, and guide the _Halbrane_ safely into port."

"Captain Len Guy? Ah, he's a good sailor, although he's English--there are good people everywhere--and he takes in his supplies at the Green Cormorant."

"You think the _Halbrane_--"

"Will be signalled before a week, Mr. Jeorling, or, if not, it will be because there is no longer a Captain Len Guy; and if there is no longer a Captain Len Guy, it is because the _Halbrane_ has sunk in full sail between the Kerguelens and the Cape of Good Hope."

Thereupon Mr. Atkins walked away, with a scornful gesture, indicating that such an eventuality was out of all probability.

My intention was to take my passage on board the _Halbrane_ so soon as she should come to her moorings in Christmas Harbour. After a rest of six or seven days, she would set sail again for Tristan d'Acunha, where she was to discharge her cargo of tin and copper. I meant to stay in the island for a few weeks of the fine season, and from thence set out for Connecticut. Nevertheless, I did not fail to take into due account the share that belongs to chance in human affairs, for it is wise, as Edgar Poe has said, always "to reckon with the unforeseen, the unexpected, the inconceivable, which have a very large share (in those affairs), and chance ought always to be a matter of strict calculation."

Each day I walked about the port and its neighbourhood. The sun was growing strong. The rocks were emerging by degrees from their winter clothing of snow; moss of a wine-like colour was springing up on the basalt cliffs, strips of seaweed fifty yards long were floating on the sea, and on the plain the lyella, which is of Andean origin, was pushing up its little points, and the only leguminous plant of the region, that gigantic cabbage already mentioned, valuable for its anti-scorbutic properties, was making its appearance.

I had not come across a single land mammal--sea mammals swarm in these waters--not even of the batrachian or reptilian kinds. A few insects only--butterflies or others--and even these did not fly, for before they could use their wings, the atmospheric currents carried the tiny bodies away to the surface of the rolling waves.

"And the _Halbrane_," I used to say to Atkins each morning.

"The _Halbrane_, Mr. Jeorling," he would reply with complacent assurance, "will surely come into port to-day, or, if not to-day, to-morrow."

In my rambles on the shore, I frequently routed a crowd of amphibians, sending them plunging into the newly released waters. The penguins, heavy and impassive creatures, did not disappear at my approach; they took no notice; but the black petrels, the puffins, black and white, the grebes and others, spread their wings at sight of me.

One day I witnessed the departure of an albatross, saluted by the very best croaks of the penguins, no doubt as a friend whom they were to see no more. Those powerful birds can fly for two hundred leagues without resting for a moment, and with such rapidity that they sweep through vast spaces in a few hours. The departing albatross sat motionless upon a high rock, at the end of the bay of Christmas Harbour, looking at the waves as they dashed violently against the beach.

Suddenly, the bird rose with a great sweep into the air, its claws folded beneath it, its head stretched out like the prow of a ship, uttering its shrill cry: a few moments later it was reduced to a black speck in the vast height and disappeared behind the misty curtain of the south.

CHAPTER II. THE SCHOONER _HALBRANE_

The _Halbrane_ was a schooner of three hundred tons, and a fast sailer. On board there was a captain, a mate, or lieutenant, a boatswain, a cook, and eight sailors; in all twelve men, a sufficient number to work the ship. Solidly built, copper-bottomed, very manageable, well suited for navigation between the fortieth and sixtieth parallels of south latitude, the _Halbrane_ was a credit to the ship-yards of Birkenhead.

All this I learned from Atkins, who adorned his narrative with praise and admiration of its theme. Captain Len Guy, of Liverpool, was three-fifths owner of the vessel, which he had commanded for nearly six years. He traded in the southern seas of Africa and America, going from one group of islands to another and from continent to continent. His ship's company was but a dozen men, it is true, but she was used for the purposes of trade only; he would have required a more numerous crew, and all the implements, for taking seals and other amphibia. The _Halbrane_ was not defenceless, however; on the contrary, she was heavily armed, and this was well, for those southern seas were not too safe; they were frequented at that period by pirates, and on approaching the isles the _Halbrane_ was put into a condition to resist attack. Besides, the men always slept with one eye open.

One morning--it was the 27th of August--I was roused out of my bed by the rough voice of the innkeeper and the
tremendous thumps he gave my door. "Mr. Jeorling, are you awake?"

"Of course I am, Atkins. How should I be otherwise, with all that noise going on? What's up?"

"A ship six miles out in the offing, to the nor'east, steering for Christmas!"

"Will it be the _Halbrane_?"

"We shall know that in a short time, Mr. Jeorling. At any rate it is the first boat of the year, and we must give it a welcome."

I dressed hurriedly and joined Atkins on the quay, where I found him in the midst of a group engaged in eager discussion. Atkins was indisputably the most considerable and considered man in the archipelago—consequently he secured the best listeners. The matter in dispute was whether the schooner in sight was or was not the _Halbrane_. The majority maintained that she was not, but Atkins was positive she was, although on this occasion he had only two backers.

The dispute was carried on with warmth, the host of the Green Cormorant defending his view, and the dissentients maintaining that the fast-approaching schooner was either English or American, until she was near enough to hoist her flag and the Union Jack went fluttering up into the sky. Shortly after the _Halbrane_ lay at anchor in the middle of Christmas Harbour.

The captain of the _Halbrane_, who received the demonstrative greeting of Atkins very coolly, it seemed to me, was about forty-five, red-faced, and solidly built, like his schooner; his head was large, his hair was already turning grey, his black eyes shone like coals of fire under his thick eyebrows, and his strong white teeth were set like rocks in his powerful jaws; his chin was lengthened by a coarse red beard, and his arms and legs were strong and firm. Such was Captain Len Guy, and he impressed me with the notion that he was rather impassive than hard, a shut-up sort of person, whose secrets it would not be easy to get at. I was told the very same day that my impression was correct, by a person who was better informed than Atkins, although the latter pretended to great intimacy with the captain. The truth was that nobody had penetrated that reserved nature.

I may as well say at once that the person to whom I have alluded was the boatswain of the _Halbrane_, a man named Hurliguerly, who came from the Isle of Wight. This person was about forty-four, short, stout, strong, and bow-legged; his arms stuck out from his body, his head was set like a ball on a bull neck, his chest was broad enough to hold two pairs of lungs (and he seemed to want a double supply, for he was always puffing, blowing, and talking), he had droll roguish eyes, with a network of wrinkles under them. A noteworthy detail was an ear-ring, one only, which hung from the lobe of his left ear. What a contrast to the captain of the schooner, and how did two such dissimilar beings contrive to get on together? They had contrived it, somehow, for they had been at sea in each other's company for fifteen years, first in the brig _Power_, which had been replaced by the schooner _Halbrane_, six years before the beginning of this story.

Atkins had told Hurliguerly on his arrival that I would take passage on the _Halbrane_, if Captain Len Guy consented to my doing so, and the boatswain presented himself on the following morning without any notice or introduction. He already knew my name, and he accosted me as follows:

"Mr. Jeorling, I salute you."

"I salute you in my turn, my friend. What do you want?"

"To offer you my services."

"On what account?"

"On account of your intention to embark on the _Halbrane_."

"Who are you?"

"I am Hurliguerly, the boatswain of the _Halbrane_, and besides, I am the faithful companion of Captain Len Guy, who will listen to me willingly, although he has the reputation of not listening to anybody."

"Well, my friend, let us talk, if you are not required on board just now."

"I have two hours before me, Mr. Jeorling. Besides, there's very little to be done to-day. If you are free, as I am--"

He waved his hand towards the port.

"Cannot we talk very well here?" I observed.

"Talk, Mr. Jeorling, talk standing up, and our throats dry, when it is so easy to sit down in a corner of the Green Cormorant in front of two glasses of whisky."

"I don't drink."

"Well, then, I'll drink for both of us. Oh! don't imagine you are dealing with a sot! No! never more than is good for me, but always as much!"

I followed the man to the tavern, and while Atkins was busy on the deck of the ship, discussing the prices of his purchases and sales, we took our places in the eating room of his inn. And first I said to Hurliguerly: "It was on Atkins that I reckoned to introduce me to Captain Len Guy, for he knows him very intimately, if I am not mistaken."
"Pooh! Atkins is a good sort, and the captain has an esteem for him. But he can't do what I can. Let me act for you, Mr. Jeorling."

"Is it so difficult a matter to arrange, boatswain, and is there not a cabin on board the _Halbrane_? The smallest would do for me, and I will pay--"

"All right, Mr. Jeorling! There is a cabin, which has never been used, and since you don't mind putting your hand in your pocket if required--however--between ourselves--it will take somebody sharper than you think, and who isn't good old Atkins, to induce Captain Len Guy to take a passenger. Yes, indeed, it will take all the smartness of the good fellow who now drinks to your health, regretting that you don't return the compliment!"

What a wink it was that accompanied this sentiment! And then the man took a short black pipe out of the pocket of his jacket, and smoked like a steamer in full blast.

"Mr. Hurliguerly?" said I.

"Mr. Jeorling."

"Why does your captain object to taking me on his ship?"

"Because he does not intend to take anybody on board his ship. He never has taken a passenger."

"But, for what reason, I ask you."

"Oh! because he wants to go where he likes, to turn about if he pleases and go the other way without accounting for his motives to anybody. He never leaves these southern seas, Mr. Jeorling; we have been going these many years between Australia on the east and America on the west; from Hobart Town to the Kerguelens, to Tristan d'Acunha, to the Falklands, only taking time anywhere to sell our cargo, and sometimes dipping down into the Antarctic Sea. Under these circumstances, you understand, a passenger might be troublesome, and besides, who would care to embark on the _Halbrane_? she does not like to flout the breezes, and goes wherever the wind drives her."

"The _Halbrane_ positively leaves the Kerguelens in four days?"

"Certainly."

"And this time she will sail westward for Tristan d'Acunha?"

"Probably."

"Well, then, that probability will be enough for me, and since you offer me your services, get Captain Len Guy to accept me as a passenger."

"It's as good as done."

"All right, Hurliguerly, and you shall have no reason to repent of it."

"Eh! Mr. Jeorling," replied this singular mariner, shaking his head as though he had just come out of the sea, "I have never repented of anything, and I know well that I shall not repent of doing you a service. Now, if you will allow me, I shall take leave of you, without waiting for Arkins to return, and get on board."

With this, Hurliguerly swallowed his last glass of whisky at a gulp--I thought the glass would have gone down with the liquor--bestowed a patronizing smile on me, and departed.

An hour later, I met the innkeeper on the port, and told him what had occurred.

"Ah! that Hurliguerly!" said he, "always the old story. If you were to believe him, Captain Len Guy wouldn't blow his nose without consulting him. He's a queer fellow, Mr. Jeorling, not bad, not stupid, but a great hand at getting hold of dollars or guineas! If you fall into his hands, mind your purse, button up your pocket, and don't let yourself be done."

"Thanks for your advice, Atkins. Tell me, you have been talking with Captain Len Guy; have you spoken about me?"

"Not yet, Mr. Jeorling. There's plenty of time. The _Halbrane_ has only just arrived, and--"

"Yes, yes, I know. But you understand that I want to be certain as soon as possible."

"There's nothing to fear. The matter will be all right. Besides, you would not be at a loss in any case. When the fishing season comes, there will be more ships in Christmas Harbour than there are houses around the Green Cormorant. Rely on me. I undertake your getting a passage."

Now, these were fair words, but, just as in the case of Hurliguerly, there was nothing in them. So, notwithstanding the fine promises of the two, I resolved to address myself personally to Len Guy, hard to get at though he might be, so soon as I should meet him alone.

The next day, in the afternoon, I saw him on the quay, and approached him. It was plain that he would have preferred to avoid me. It was impossible that Captain Len Guy, who knew every dweller in the place, should not have known that I was a stranger, even supposing that neither of my would-be patrons had mentioned me to him.

His attitude could only signify one of two things--either my proposal had been communicated to him, and he did not intend to accede to it; or neither Hurliguerly nor Atkins had spoken to him since the previous day. In the latter case, if he held aloof from me, it was because of his morose nature; it was because he did not choose to enter into conversation with a stranger.
At the moment when I was about to accost him, the _Halbrane's_ lieutenant rejoined his captain, and the latter availed himself of the opportunity to avoid me. He made a sign to the officer to follow him, and the two walked away at a rapid pace.

"This is serious," said I to myself. "It looks as though I shall find it difficult to gain my point. But, after all it only means delay. To-morrow morning I will go on board the _Halbrane_. Whether he likes it or whether he doesn't, this Len Guy will have to hear what I've got to say, and to give me an answer, yes or no!"

Besides, the captain of the _Halbrane_ might come at dinner-time to the Green Cormorant, where the ship's people usually took their meals when ashore. So I waited, and did not go to dinner until late. I was disappointed, however, for neither the captain nor anyone belonging to the ship patronized the Green Cormorant that day. I had to dine alone, exactly as I had been doing every day for two months.

After dinner, about half-past seven, when it was dark, I went out to walk on the port, keeping on the side of the houses. The quay was quite deserted; not a man of the _Halbrane_ crew was ashore. The ship's boats were alongside, rocking gently on the rising tide. I remained there until nine, walking up and down the edge in full view of the _Halbrane_. Gradually the mass of the ship became indistinct, there was no movement and no light. I returned to the inn, where I found Atkins smoking his pipe near the door.

"Atkins," said I, "it seems that Captain Len Guy does not care to come to your inn very often?"

"He sometimes comes on Sunday, and this is Saturday, Mr. Jeorling."

"You have not spoken to him?"

"Yes, I have."

Atkins was visibly embarrassed.

"You have informed him that a person of your acquaintance wished to take passage on the _Halbrane_?"

"Yes."

"What was his answer?"

"Not what either you or I would have wished, Mr. Jeorling."

"He refuses?"

"Well, yes, I suppose it was refusing; what he said was: 'My ship is not intended to carry passengers. I never have taken any, and I never intend to do so.'"

CHAPTER III. CAPTAIN LEN GUY

I slept ill. Again and again I "dreamed that I was dreaming." Now--this is an observation made by Edgar Poe--when one suspects that one is dreaming, the waking comes almost instantly. I woke then, and every time in a very bad humour with Captain Len Guy. The idea of leaving the Kerguelens on the _Halbrane_ had full possession of me, and I grew more and more angry with her disobliging captain. In fact, I passed the night in a fever of indignation, and only recovered my temper with daylight. Nevertheless I was determined to have an explanation with Captain Len Guy about his detestable conduct. Perhaps I should fail to get anything out of that human hedgehog, but at least I should have given him a piece of my mind.

I went out at eight o'clock in the morning. The weather was abominable. Rain, mixed with snow, a storm coming over the mountains at the back of the bay from the west, clouds scurrying down from the lower zones, an avalanche of wind and water. It was not likely that Captain Len Guy had come ashore merely to enjoy such a wetting and blowing.

No one on the quay; of course not. As for my getting on' board the _Halbrane_, that could not be done without hailing one of her boats, and the boatswain would not venture to send it for me.

"Besides," I reflected, "on his quarter-deck the captain is at home, and neutral ground is better for what I want to say to him, if he persists in his unjustifiable refusal. I will watch him this time, and if his boat touches the quay, he shall not succeed in avoiding me."

I returned to the Green Cormorant, and took up my post behind the window panes, which were dimmed by the hissing rain. There I waited, nervous, impatient, and in a state of growing irritation. Two hours wore away thus. Then, with the instability of the winds in the Kerguelens, the weather became calm before I did. I opened my window, and at the same moment a sailor stepped into one of the boats of the _Halbrane_ and laid hold of a pair of oars, while a second man seated himself in the back, but without taking the tiller ropes. The boat touched the landing, place and Captain Len Guy stepped on shore.

In a few seconds I was out of the inn, and confronted him.

"Sir," said I in a cold hard tone. Captain Len Guy looked at me steadily, and I was struck by the sadness of his eyes, which were as black as ink. Then in a very low voice he asked:
"You are a stranger?"
"A stranger at the Kerguelens? Yes."
"Of English nationality?"
"No. American."
He saluted me, and I returned the curt gesture.
"Sir," I resumed, "I believe Mr. Atkins of the Green Cormorant has spoken to you respecting a proposal of mine. That proposal, it seems to me, deserved a favourable reception on the part of a--"
"The proposal to take passage on my ship?" interposed Captain Len Guy.
"Precisely."
"I regret, sir, I regret that I could not agree to your request."
"Will you tell me why?"
"Because I am not in the habit of taking passengers. That is the first reason."
"And the second, captain?"
"Because the route of the _Halbrane_ is never settled beforehand. She starts for one port and goes to another, just as I find it to my advantage. You must know that I am not in the service of a shipowner. My share in the schooner is considerable, and I have no one but myself to consult in respect to her."
"Then it entirely depends on you to give me a passage?"
"That is so, but I can only answer you by a refusal--to my extreme regret."
"Perhaps you will change your mind, captain, when you know that I care very little what the destination of your schooner may be. It is not unreasonable to suppose that she will go somewhere--"
"Somewhere indeed." I fancied that Captain Len Guy threw a long look towards the southern horizon.
"To go here or to go there is almost a matter of indifference to me. What I desired above all was to get away from Kerguelen at the first opportunity that should offer."

Captain Len Guy made me no answer; he remained in silent thought, but did not endeavour to slip away from me.

"You are doing me the honour to listen to me?" I asked him sharply.
"Yes, sir."
"I will then add that, if I am not mistaken, and if the route of your ship has not been altered, it was your intention to leave Christmas Harbour for Tristan d'Acunha."
"Perhaps for Tristan d'Acunha, perhaps for the Cape, perhaps for the Falklands, perhaps for elsewhere."
"Well, then, Captain Guy, it is precisely elsewhere that I want to go," I replied ironically, and trying hard to control my irritation.

Then a singular change took place in the demeanour of Captain Len Guy. His voice became more sharp and harsh. In very plain words he made me understand that it was quite useless to insist, that Our interview had already lasted too long, that time pressed, and he had business at the port; in short that we had said all that we could have to say to each other.

I had put out my arm to detain him--to seize him would be a more correct term--and the conversation, ill begun, seemed likely to end still more ill, when this odd person turned towards me and said in a milder tone--

"Pray understand, sir, that I am very sorry to be unable to do what you ask, and to appear disobliging to an American. But I could not act otherwise. In the course of the voyage of the _Halbrane_ some unforeseen incident might occur to make the presence of a passenger inconvenient--even one so accommodating as yourself. Thus I might expose myself to the risk of being unable to profit by the chances which I seek."

"I have told you, captain, and I repeat it, that although my intention is to return to America and to Connecticut, I don't care whether I get there in three months or in six, or by what route; it's all the same to me, and even were your schooner to take me to the Antarctic seas--"

"The Antarctic seas!" exclaimed Captain Len Guy with a question in his tone. And his look searched my thoughts with the keenness of a dagger.

"Why do you speak of the Antarctic seas?" he asked, taking my hand.

"Well, just as I might have spoken of the 'Hyperborean seas' from whence an Irish poet has made Sebastian Cabot address some lovely verses to his Lady. (1) I spoke of the South Pole as I might have spoken of the North."

Captain Len Guy did not answer, and I thought I saw tears glisten in his eyes. Then, as though he would escape from some harrowing recollection which my words had evoked, he said--

"Who would venture to seek the South Pole?"

"It would be difficult to reach, and the experiments would be of no practical use," I replied. "Nevertheless there are men sufficiently adventurous to embark in such an enterprise."

"Yes--adventurous is the word!" muttered the captain.
'And now," I resumed, "the United States is again making an attempt with Wilkes's fleet, the _Vancouver_, the _Peacock_, the _Flying Fish_, and others."

"The United States, Mr. Jeorling? Do you mean to say that an expedition has been sent by the Federal Government to the Antarctic seas?"

"The fact is certain, and last year, before I left America, I learned that the vessels had sailed. That was a year ago, and it is very possible that Wilkes has gone farther than any of the preceding explorers."

Captain Len Guy had relapsed into silence, and came out of his inexplicable musing only to say abruptly--

"You come from Connecticut, sir?"

"From Connecticut."

"And more specially?"

"From Providence."

"Do you know Nantucket Island?"

"I have visited it several times."

"You know, I think," said the captain, looking straight into my eyes, "that Nantucket Island was the birthplace of Arthur Gordon Pym, the hero of your famous romance-writer Edgar Poe."

"Yes. I remember that Poe's romance starts from Nantucket."

"Romance, you say? That was the word you used?"

"Undoubtedly, captain."

"Yes, and that is what everybody says! But, pardon me, I cannot stay any longer. I regret that I cannot alter my mind with respect to your proposal. But, at any rate, you will only have a few days to wait. The season is about to open. Trading ships and whalers will put in at Christmas Harbour, and you will be able to make a choice, with the certainty of going to the port you want to reach. I am very sorry, sir, and I salute you."

With these words Captain Len Guy walked quickly away, and the interview ended differently from what I had expected, that is to say in formal, although polite, fashion.

As there is no use in contending with the impossible, I gave up the hope of a passage on the _Halbrane_, but continued to feel angry with her intractable captain. And why should I not confess that my curiosity was aroused? I felt that there was something mysterious about this sullen mariner, and I should have liked to find out what it was.

That day, Atkins wanted to know whether Captain Len Guy had made himself less disagreeable. I had to acknowledge that I had been no more fortunate in my negotiations than my host himself, and the avowal surprised him not a little. He could not understand the captain's obstinate refusal. And--a fact which touched him more nearly--the Green Cormorant had not been visited by either Len Guy or his crew since the arrival of the _Halbrane_. The men were evidently acting upon orders. So far as Hurliguerly was concerned, it was easy to understand that after his imprudent advance he did not care to keep up useless relations with me. I knew not whether he had attempted to shake the resolution of his chief; but I was certain of one thing; if he had made any such effort it had failed.

During the three following days, the 10th, 11th, and 12th of August, the work of repairing and re-victualling the schooner went on briskly; but all this was done with regularity, and without such noise and quarrelling as seamen at anchor usually indulge in. The _Halbrane_ was evidently well commanded, her crew well kept in hand, discipline strictly maintained.

The schooner was to sail on the 15th of August, and on the eve of that day I had no reason to think that Captain Len Guy had repented him of his categorical refusal. Indeed, I had made up my mind to the disappointment, and had no longer any angry feeling about it. When Captain Len Guy and myself met on the quay, we took no notice of each other; nevertheless, I fancied there was some hesitation in his manner; as though he would have liked to speak to me. He did not do so, however, and I was not disposed to seek a further explanation.

At seven o'clock in the evening of the 14th of August, the island being already wrapped in darkness, I was walking on the port after I had dined, walking briskly too, for it was cold, although dry weather. The sky was studded with stars and the air was very keen. I could not stay out long, and was returning to mine inn, when a man crossed my path, paused, came back, and stopped in front of me. It was the captain of the _Halbrane_.

"Mr. Jeorling," he began, "the _Halbrane_ sails tomorrow morning, with the ebb tide."

"What is the good of telling me that," I replied, "since you refuse--"

"Sir, I have thought over it, and if you have not changed your mind, come on board at seven o'clock."

"Really, captain," I replied, "I did not expect this relenting on your part."

"I repeat that I have thought over it, and I add that the _Halbrane_ shall proceed direct to Tristan d'Acunha. That will suit you, I suppose?"

"To perfection, captain. To-morrow morning, at seven o'clock, I shall be on board."

"Your cabin is prepared."

"The cost of the voyage--"
"We can settle that another time," answered the captain, "and to your satisfaction. Until to-morrow, then--"

"Until to-morrow."

I stretched out my arm, to shake hands with him upon our bargain. Perhaps he did not perceive my movement in the darkness, at all events he made no response to it, but walked rapidly away and got into his boat.

I was greatly surprised, and so was Arkins, when I found him in the eating-room of the Green Cormorant and told him what had occurred. His comment upon it was characteristic.

"This queer captain," he said, "is as full of whims as a spoilt child! It is to be hoped he will not change his mind again at the last moment."

The next morning at daybreak I bade adieu to the Green Cormorant, and went down to the port, with my kind-hearted host, who insisted on accompanying me to the ship, partly in order to make his mind easy respecting the sincerity of the captain's repentance, and partly that he might take leave of him, and also of Hurliguerly. A boat was waiting at the quay, and we reached the ship in a few minutes.

The first person whom I met on the deck was Hurliguerly; he gave me a look of triumph, which said as plainly as speech: "Ha! you see now. Our hard-to-manage captain has given in at last. And to whom do you owe this, but to the good boatswain who did his best for you, and did not boast overmuch of his influence?"

Was this the truth? I had strong reasons for doubting it. After all, what did it matter?

Captain Len Guy came on deck immediately after my arrival; this was not surprising, except for the fact that he did not appear to remark my presence.

Atkins then approached the captain and said in a pleasant tone,--

"We shall meet next year!"

"If it please God, Atkins."

They shook hands. Then the boatswain took a hearty leave of the innkeeper, and was rowed back to the quay.

Before dark the white summits of Table Mount and Havergal, which rise, the former to two, the other to three thousand feet above the level of the sea, had disappeared from our view.

(1) Thomas D'Arcy McGee. (J.V.)

CHAPTER IV. FROM THE KERGUELEN ISLES TO PRINCE EDWARD ISLAND

Never did a voyage begin more prosperously, or a passenger start in better spirits. The interior of the _Halbrane_ corresponded with its exterior. Nothing could exceed the perfect order, the Dutch cleanliness of the vessel. The captain's cabin, and that of the lieutenant, one on the port, the other on the starboard side, were fitted up with a narrow berth, a cupboard anything but capacious, an arm-chair, a fixed table, a lamp hung from the ceiling, various nautical instruments, a barometer, a thermometer, a chronometer, and a sextant in its oaken box. One of the two other cabins was prepared to receive me. It was eight feet in length, five in breadth. I was accustomed to the exigencies of sea life, and could do with its narrow proportions, also with its furniture--a table, a cupboard, a cane-bottomed arm-chair, a washing-stand on an iron pedestal, and a berth to which a less accommodating passenger would doubtless have objected. The passage would be a short one, however, so I took possession of that cabin, which I was to occupy for only four, or at the worst five weeks, with entire content.

The eight men who composed the crew were named respectively Martin Holt, sailing-master; Hardy, Rogers, Drap, Francis, Gratian, Burg, and Stern--sailors all between twenty-five and thirty-five years old--all Englishmen, well trained, and remarkably well disciplined by a hand of iron.

Let me set it down here at the beginning, the exceptionally able man whom they all obeyed at a word, a gesture, was not the captain of the _Halbrane_; that man was the second officer, James West, who was then thirty-two years of age.

James West was born on the sea, and had passed his childhood on board a lighter belonging to his father, and on which the whole family lived. All his life he had breathed the salt air of the English Channel, the Atlantic, or the Pacific. He never went ashore except for the needs of his service, whether of the State or of trade. If he had to leave one ship for another he merely shifted his canvas bag to the latter, from which he stirred no more. When he was not sailing in reality he was sailing in imagination. After having been ship's boy, novice, sailor, he became quartermaster, master, and finally lieutenant of the _Halbrane_, and he had already served for ten years as second in command under Captain Len Guy.

James West was not even ambitious of a higher rise; he did not want to make a fortune; he did not concern himself with the buying or selling of cargoes; but everything connected with that admirable instrument a sailing ship, James West understood to perfection.

The personal appearance of the lieutenant was as follows: middle height, slightly built, all nerves and muscles, strong limbs as agile as those of a gymnast, the true sailor's "look," but of very unusual far-sightedness and surprising penetration, sunburnt face, hair thick and short, beardless cheeks and chin, regular features, the whole expression denoting energy, courage, and physical strength at their utmost tension.
James West spoke but rarely--only when he was questioned. He gave his orders in a clear voice, not repeating them, but so as to be heard at once, and he was understood. I call attention to this typical officer of the Merchant Marine, who was devoted body and soul to Captain Len Guy as to the schooner _Halbrane_. He seemed to be one of the essential organs of his ship, and if the _Halbrane_ had a heart it was in James West's breast that it beat.

There is but one more person to be mentioned; the ship's cook--a negro from the African coast named Endicott, thirty years of age, who had held that post for eight years. The boatswain and he were great friends, and indulged in frequent talks.

Life on board was very regular, very simple, and its monotony was not without a certain charm. Sailing is repose in movement, a rocking in a dream, and I did not dislike my isolation. Of course I should have liked to find out why Captain Len Guy had changed his mind with respect to me; but how was this to be done? To question the lieutenant would have been loss of time. Besides, was he in possession of the secrets of his chief? It was no part of his business to be so, and I had observed that he did not occupy himself with anything outside of it. Not ten words were exchanged between him and me during the two meals which we took in common daily. I must acknowledge, however, that I frequently caught the captain's eyes fixed upon me, as though he longed to question me, as though he had something to learn from me, whereas it was I, on the contrary, who had something to learn from him. But we were both silent.

Had I felt the need of talking to somebody very strongly, I might have resorted to the boatswain, who was always disposed to chatter; but what had he to say that could interest me? He never failed to bid me good morning and good evening in most prolix fashion, but beyond these courtesies I did not feel disposed to go.

The good weather lasted, and on the 18th of August, in the afternoon, the look-out discerned the mountains of the Crozet group. The next day we passed Possession Island, which is inhabited only in the fishing season. At this period the only dwellers there are flocks of penguins, and the birds which whalers call "white pigeons."

The approach to land is always interesting at sea. It occurred to me that Captain Len Guy might take this opportunity of speaking to his passenger; but he did not.

We should see land, that is to say the peaks of Marion and Prince Edward Islands, before arriving at Tristan d'Acunha, but it was there the _Halbrane_ was to take in a fresh supply of water. I concluded therefore that the monotony of our voyage would continue unbroken to the end. But, on the morning of the 20th of August, to my extreme surprise, Captain Len Guy came on deck, approached me, and said, speaking very low,--

"Sir, I have something to say to you."

"I am ready to hear you, captain."

"I am not yet ready," persisted the captain.

"I have not spoken until to-day, for I am naturally taciturn." Here he hesitated again, but after a pause, continued with an effort,--

"Mr. Jeorling, have you tried to discover my reason for changing my mind on the subject of your passage?"

"I have tried, but I have not succeeded, captain. Perhaps, as I am not a compatriot of yours, you--"

"It is precisely because you are an American that I decided in the end to offer you a passage on the _Halbrane_."

"Because I am an American?"

"Also, because you come from Connecticut."

"I don't understand."

"You will understand if I add that I thought it possible, since you belong to Connecticut, since you have visited Nantucket Island, that you might have known the family of Arthur Gordon Pym."

"The hero of Edgar Poe's romance?"

"The same. His narrative was founded upon the manuscript in which the details of that extraordinary and disastrous voyage across the Antarctic Sea was related."

I thought I must be dreaming when I heard Captain Len Guy's words. Edgar Poe's romance was nothing but a fiction, a work of imagination by the most brilliant of our American writers. And here was a sane man treating that fiction as a reality.

I could not answer him. I was asking myself what manner of man was this one with whom I had to deal.

"You have heard my question?" persisted the captain.

"Yes, yes, captain, certainly, but I am not sure that I quite understand."

"I will put it to you more plainly. I ask you whether in Connecticut you personally knew the Pym family who lived in Nantucket Island? Arthur Pam's father was one of the principal merchants there, he was a Navy contractor. It was his son who embarked in the adventures which he related with his own lips to Edgar Poe--"

"Captain! Why, that story is due to the powerful imagination of our great poet. It is a pure invention."

"So, then, you don't believe it, Mr. Jeorling?" said the captain, shrugging his shoulders three times.

"Neither I nor any other person believes it, Captain Guy, and you are the first I have heard maintain that it was anything but a mere romance."
"Listen to me, then, Mr. Jeorling, for although this 'romance'--as you call it--appeared only last year, it is none the less a reality. Although eleven years have elapsed since the facts occurred, they are none the less true, and we still await the word J of an enigma which will perhaps never be solved."

Yes, he was mad; but by good fortune West was there to take his place as commander of the schooner. I had only to listen to him, and as I had read Poe's romance over and over again, I was curious to hear what the captain had to say about it.

"And now," he resumed in a sharper tone and with a shake in his voice which denoted a certain amount of nervous irritation, "it is possible that you did not know the Pym family; that you have never met them either at Providence or at Nantucket--"

"Or elsewhere."

"Just so! But don't commit yourself by asserting that the Pym family never existed, that Arthur Gordon is only a fictitious personage, and his voyage an imaginary one! Do you think any man, even your Edgar Poe, could have been capable of inventing, of creating--?"

The increasing vehemence of Captain Len Guy warned me of the necessity of treating his monomania with respect, and accepting all he said without discussion.

"Now," he proceeded, "please to keep the facts which I am about to state clearly in your mind; there is no disputing about facts. You may deduce any results from them you like. I hope you will not make me regret that I consented to give you a passage on the _Halbrane_."

This was an effectual warning, so I made a sign of acquiescence. The matter promised to be curious. He went on,--

"When Edgar Poe's narrative appeared in 1838, I was at New York. I immediately started for Baltimore, where the writer's family lived; the grandfather had served as quarter-master-general during the War of Independence. You admit, I suppose, the existence of the Poe family, although you deny that of the Pym family?"

I said nothing, and the captain continued, with a dark glance at me,--

"I inquired into certain matters relating to Edgar Poe. His abode was pointed out to me and I called at the house. A first disappointment! He had left America, and I could not see him. Unfortunately, being unable to see Edgar Poe, I was unable to refer to Arthur Gordon Pym in the case. That bold pioneer of the Antarctic regions was dead! As the American poet had stated, at the close of the narrative of his adventures, Gordon's death had already been made known to the public by the daily press."

What Captain Len Guy said was true; but, in common with all the readers of the romance, I had taken this declaration for an artifice of the novelist. My notion was that, as he either could not or dared not wind up so extraordinary a work of imagination, Poe had given it to be understood that he had not received the last three chapters from Arthur Pym, whose life had ended under sudden and deplorable circumstances which Poe did not make known.

"Then," continued the captain, "Edgar Poe being absent, Arthur Pym being dead, I had only one thing to do; to find the man who had been the fellow-traveller of Arthur Pym, that Dirk Peters who had followed him to the very verge of the high latitudes, and whence they had both returned--how? This is not known. Did they come back in company? The narrative does not say, and there are obscure points in that part of it, as in many other places. However, Edgar Poe stated explicitly that Dirk Peters would be able to furnish information relating to the non-communicated chapters, and that he lived at Illinois. I set out at once for Illinois; I arrived at Springfield; I inquired for this man, a half-breed Indian. He lived in the hamlet of Vandalia; I went there, and met with a second disappointment. He was not there, or rather, Mr. Jeorling, he was no longer there. Some years before this Dirk Peters had left Illinois, and even the United States, to go--nobody knows where. But I have talked, at Vandalia with people who had known him, with whom he lived, to whom he related his adventures, but did not explain the final issue. Of that he alone holds the secret."

What! This Dirk Peters had really existed? He still lived? I was on the point of letting myself be carried away by the statements of the captain of the _Halbrane_. Yes, another moment, and, in my turn, I should have made a fool of myself. This poor mad fellow imagined that he had gone to Illinois and seen people at Vandalia who had known Dirk Peters, and that the latter had disappeared. No wonder, since he had never existed, save in the brain of the novelist!

Nevertheless I did not want to vex Len Guy, and perhaps drive him still more mad. Accordingly I appeared entirely convinced that he was speaking words of sober seriousness, even when he added,--

"You are aware that in the narrative mention is made by the captain of the schooner on which Arthur Pym had embarked, of a bottle containing a sealed letter, which was deposited at the foot of one of the Kerguelen peaks?"

"Yes, I recall the incident."

"Well, then, in one of my latest voyages I sought for the place where that bottle ought to be. I found it and the
That letter stated that the captain and Arthur Pym intended to make every effort to reach the uttermost limits of the Antarctic Sea!" "You found that bottle?"

"Yes?"

"And the letter?"

"Yes!"

I looked at Captain Len Guy. Like certain monomaniacs he had come to believe in his own inventions. I was on the point of saying to him, "Show me that letter," but I thought better of it. Was he not capable of having written the letter himself? And then I answered,—

"It is much to be regretted, captain, that you were unable to come across Dirk Peters at Vandalia! He would at least have informed you under what conditions he and Arthur Pym returned from so far. Recollect, now, in the last chapter but one they are both there. Their boat is in front of the thick curtain of white mist; it dashes into the gulf of the cataract just at the moment when a veiled human form rises. Then there is nothing more; nothing but two blank lines—"

"Decidedly, sir, it is much to be regretted that I could not lay my hand on Dirk Peters! It would have been interesting to learn what was the outcome of these adventures. But, to my mind, it would have been still more interesting to have ascertained the fate of the others."

"The others?" I exclaimed almost involuntarily. "Of whom do you speak?"

"Of the captain and crew of the English schooner which picked up Arthur Pym and Dirk Peters after the frightful shipwreck of the __Grampus__, and brought them across the Polar Sea to Tsalal Island--"

"Captain," said I, just as though I entertained no doubt of the authenticity of Edgar Poe's romance, "is it not the case that all these men perished, some in the attack on the schooner, the others by the infernal device of the natives of Tsalal?"

"Who can tell?" replied the captain in a voice hoarse from emotion. "Who can say that some of the unfortunate creatures survived, and contrived to escape from the natives?"

"In any case," I replied, "it would be difficult to admit that those who had survived could still be living."

"And why?"

"Because the facts we are discussing are eleven years old."

"Sir," replied the captain, "since Arthur Pym and Dirk Peters were able to advance beyond Tsalal Island farther than the eighty-third parallel, since they found means of living in the midst of those Antarctic lands, why should not their companions, if they were not all killed by the natives, if they were so fortunate as to reach the neighbouring islands sighted during the voyage—why should not those unfortunate countrymen of mine have contrived to live there? Why should they not still be there, awaiting their deliverance?"

"Your pity leads you astray, captain," I replied. "It would be impossible."

"Impossible, sir! And if a fact, on indisputable evidence, appealed to the whole civilized world; if a material proof of the existence of these unhappy men, imprisoned at the ends of the earth, were furnished, who would venture to meet those who would fain go to their aid with the cry of 'Impossible!'"

Was it a sentiment of humanity, exaggerated to the point of madness, that had roused the interest of this strange man in those shipwrecked folk who never had suffered shipwreck, for the good reason that they never had existed?

Captain Len Guy approached me anew, laid his hand on my shoulder and whispered in my ear,—

"No, sir, no! the last word has not been said concerning the crew of the __Jane__.

Then he promptly withdrew.

The __Jane__ was, in Edgar Poe's romance, the name of the ship which had rescued Arthur Pym and Dirk Peters from the wreck of the __Grampus__, and Captain Len Guy had now uttered it for the first time. It occurred to me then that Guy was the name of the captain of the __Jane__, an English ship; but what of that? The captain of the __Jane__ never lived but in the imagination of the novelist, he and the skipper of the __Halbrane__ have nothing in common except a name which is frequently to be found in England. But, on thinking of the similarity, it struck me that the poor captain's brain had been turned by this very thing. He had conceived the notion that he was of kin to the unfortunate captain of the __Jane__! And this had brought him to his present state, this was the source of his passionate pity for the fate of the imaginary shipwrecked mariners!

It would have been interesting to discover whether James West was aware of the state of the case, whether his chief had ever talked to him of the follies he had revealed to me. But this was a delicate question, since it involved the mental condition of Captain Len Guy; and besides, any kind of conversation with the lieutenant was difficult. On the whole I thought it safer to restrain my curiosity. In a few days the schooner would reach Tristan d'Acunha, and I should part with her and her captain for good and all. Never, however, could I lose the recollection that I had actually met and sailed with a man who took the fictions of Edgar Poe's romance for sober fact. Never could I have looked for such an experience!
On the 22nd of August the outline of Prince Edward's Island was sighted, south latitude 46° 55', and 37° 46' east longitude. We were in sight of the island for twelve hours, and then it was lost in the evening mists.

On the following day the _Halbrane_ headed in the direction of the north-west, towards the most northern parallel of the southern hemisphere which she had to attain in the course of that voyage.

CHAPTER V. EDGAR POE'S ROMANCE

In this chapter I have to give a brief summary of Edgar Poe's romance, which was published at Richmond under the title of

THE ADVENTURES OF ARTHUR GORDON PYM.

We shall see whether there was any room for doubt that the adventures of this hero of romance were imaginary. But indeed, among the multitude of Poe's readers, was there ever one, with the sole exception of Len Guy, who believed them to be real? The story is told by the principal personage. Arthur Pym states in the preface that on his return from his voyage to the Antarctic seas he met, among the Virginian gentlemen who took an interest in geographical discoveries, Edgar Poe, who was then editor of the _Southern Literary Messenger_ at Richmond, and that he authorized the latter to publish the first part of his adventures in that journal "under the cloak of fiction." That portion having been favourably received, a volume containing the complete narrative was issued with the signature of Edgar Poe.

Arthur Gordon Pym was born at Nantucket, where he attended the Bedford School until he was sixteen years old. Having left that school for Mr. Ronald's, he formed a friendship with one Augustus Barnard, the son of a ship's captain. This youth, who was eighteen, had already accompanied his father on a whaling expedition in the southern seas, and his yarns concerning that maritime adventure fired the imagination of Arthur Pym. Thus it was that the association of these youths gave rise to Pym's irresistible vocation to adventurous voyaging, and to the instinct that especially attracted him towards the high zones of the Antarctic region. The first exploit of Augustus Barnard and Arthur Pym was an excursion on board a little sloop, the _Ariel_, a two-decked boat which belonged to the Pyms. One evening the two youths, both being very tipsy, embarked secretly, in cold October weather, and boldly set sail in a strong breeze from the south-west. The _Ariel_, aided by the ebb tide, had already lost sight of land when a violent storm arose. The imprudent young fellows were still intoxicated. No one was at the helm, not a reef was in the sail. The masts were carried away by the furious gusts, and the wreck was driven before the wind. Then came a great ship which passed over the _Ariel_ as the _Ariel_ would have passed a floating feather.

Arthur Pym gives the fullest details of the rescue of his companion and himself after this collision, under conditions of extreme difficulty. At length, thanks to the second officer of the _Penguin_, from New London, which arrived on the scene of the catastrophe, the comrades were picked with life all but extinct, and taken back to Nantucket.

This adventure, to which I cannot deny an appearance veracity, was an ingenious preparation for the chapters that were to follow, and indeed, up to the day on which Pym penetrates into the polar circle, the narrative might conceivably be regarded as authentic. But, beyond the polar circle, above the austral icebergs, it is quite another thing, and, if the author's work be not one of pure imagination, I am--well, of any other nationality than my own. Let us get on.

Their first adventure had not cooled the two youths, and eight months after the affair of the _Ariel_--June, 1827--the brig _Grampus_ was fitted out by the house of Lloyd and Vredenburg for whaling in the southern seas. This brig was an old, ill-repaired craft, and Mr. Barnard, the father of Augustus, was its skipper. His son, who was to accompany him on the voyage, strongly urged Arthur to go with him, and the latter would have asked nothing better, but he knew that his family, and especially his mother, would never consent to let him go.

This obstacle, however, could not stop a youth not much given to submit to the wishes of his parents. His head was full of the entreaties and persuasion of his companion, and he determined to embark secretly on the _Grampus_, for Mr. Barnard would not have authorized him to defy the prohibition of his family. He announced that he had been invited to pass a few days with a friend at New Bedford, took leave of his parents and left his home. Forty-eight hours before the brig was to sail, he slipped on board unperceived, and got into a hiding-place which had been prepared for him unknown alike to Mr. Barnard and the crew.

The cabin occupied by Augustus communicated by a trap-door with the hold of the _Grampus_, which was crowded with barrels, bales, and the innumerable components of a cargo. Through the trap-door Arthur Pym reached his hiding-place, which was a huge wooden chest with a sliding side to it. This chest contained a mattress, blankets, a jar of water, ship's biscuit, smoked sausage, a roast quarter of mutton, a few bottles of cordials and liqueurs, and also writing-materials. Arthur Pym, supplied with a lantern, candles, and tinder, remained three days and nights in his retreat. Augustus Barnard had not been able to visit him until just before the _Grampus_ set sail.
An hour later, Arthur Pym began to feel the rolling and pitching of the brig. He was very uncomfortable in the chest, so he got out of it, and in the dark, while holding on by a rope which was stretched across the hold to the trap of his friend's cabin, he was violently sea-sick in the midst of the chaos. Then he crept back into his chest, ate, and fell asleep.

Several days elapsed without the reappearance of Augustus Barnard. Either he had not been able to get down into the hold again, or he had not ventured to do so, fearing to betray the presence of Arthur Pym, and thinking the moment for confessing everything to his father had not yet come.

Arthur Pym, meanwhile, was beginning to suffer from the hot and vitiated atmosphere of the hold. Terrible nightmares troubled his sleep. He was conscious of raving, and in vain sought some place amid the mass of cargo where he might breathe a little more easily. In one of these fits of delirium he imagined that he was gripped in the claws of an African lion, (1) and in a paroxysm of terror he was about to betray himself by screaming, when he lost consciousness.

The fact is that he was not dreaming at all. It was not a lion that Arthur Pym felt crouching upon his chest, it was his own dog, Tiger, a young Newfoundland. The animal had been smuggled on board by Augustus Barnard unperceived by anybody--(this, at least, is an unlikely occurrence). At the moment of Arthur's coming out of his swoon the faithful Tiger was licking his face and hands with lavish affection.

Now the prisoner had a companion. Unfortunately, the said companion had drunk the contents of the water jar while Arthur was unconscious, and when Arthur Pym felt thirsty, he discovered that there was "not a drop to drink!" His lantern had gone out during his prolonged faint; he could not find the candles and the tinder-box, and he then resolved to rejoin Augustus Barnard at all hazards. He came out of the chest, and although faint from inanition and trembling with weakness, he felt his way in the direction of the trap-door by means of the rope. But, while he was approaching, one of the bales of cargo, shifted by the rolling of the ship, fell down and blocked up the passage. With immense but quite useless exertion he contrived to get over this obstacle, but when he reached the trap-door under Augustus Barnard's cabin he failed to raise it, and on slipping the blade of his knife through one of the joints he found that a heavy mass of iron was placed upon the trap, as though it were intended to condemn him beyond hope. He had to renounce his attempt and drag himself back towards the chest, on which he fell, exhausted, while Tiger covered him with caresses.

The master and the dog were desperately thirsty, and when Arthur stretched out his hand, he found Tiger lying on his back, with his paws up and his hair on end. He then felt Tiger all over, and his hand encountered a string passed round the dog's body. A strip of paper was fastened to the string under his left shoulder.

Arthur Pym had reached the last stage of weakness. Intelligence was almost extinct. However, after several fruitless attempts to procure a light, he succeeded in rubbing the paper with a little phosphorus--(the details given in Edgar Poe's narrative are curiously minute at this point)--and then by the glimmer that lasted less than a second he discerned just seven words at the end of a sentence. Terrifying words these were: _blood--remain hidden--life depends on it_.

What did these words mean? Let us consider the situation of Arthur Pym, at the bottom of the ship's hold, between the boards of a chest, without light, without water, with only ardent liquor to quench his thirst! And this warning to remain hidden, preceded by the word "blood "--that supreme word, king of words, so full of mystery, of suffering, of terror! Had there been strife on board the _Grampus_? Had the brig been attacked by pirates? Had the crew mutinied? How long had this state of things lasted?

It might be thought that the marvellous poet had exhausted the resources of his imagination in the terror of such a situation; but it was not so. There is more to come!

Arthur Pym lay stretched upon his mattress, incapable of thought, in a sort of lethargy; suddenly he became aware of a singular sound, a kind of continuous whistling breathing. It was Tiger, panting, Tiger with eyes that glared in the midst of the darkness, Tiger with gnashing teeth--Tiger gone mad. Another moment and the dog had sprung upon Arthur Pym, who, wound up to the highest pitch of horror, recovered sufficient strength to ward off his fangs, and wrapping around him a blanket which Tiger had torn with his white teeth, he slipped out of the chest, and shut the sliding side upon the snapping and struggling brute.

Arthur Pym contrived to slip through the stowage of the hold, but his head swam, and, falling against a bale, he let his knife drop from his hand.

Just as he felt himself breathing his last sigh he heard his name pronounced, and a bottle of water was held to his lips. He swallowed the whole of its contents, and experienced the most exquisite of pleasures.

A few minutes later, Augustus Barnard, seated with his comrade in a corner of the hold, told him all that had occurred on board the brig.

Up to this point, I repeat, the story is admissible, but we have not yet come to the events which "surpass all probability by their marvellousness."
The crew of the _Grampus_ numbered thirty-six men, including the Barnards, father and son. After the brig had put to sea on the 20th of June, Augustus Barnard had made several attempts to rejoin Arthur Pym in his hiding place, but in vain. On the third day a mutiny broke out on board, headed by the ship's cook, a negro like our Endicott; but he, let me say at once, would never have thought of heading a mutiny.

Numerous incidents are related in the romance—the massacre of most of the sailors who remained faithful to Captain Barnard, then the turning adrift of the captain and four of those men in a small whaler's boat when the ship was abreast of the Bermudas. These unfortunate persons were never heard of again.

Augustus Barnard would not have been spared, but for the intervention of the sailing-master of the _Grampus_. This sailing-master was a half-breed named Dirk Peters, and was the person whom Captain Len Guy had gone to look for in Illinois!

The _Grampus_ then took a south-east course under the command of the mate, who intended to pursue the occupation of piracy in the southern seas.

These events having taken place, Augustus Barnard would again have joined Arthur Pym, but he had been shut up in the forecastle in irons, and told by the ship's cook that he would not be allowed to come out until "the brig should be no longer a brig." Nevertheless, a few days afterwards, Augustus contrived to get rid of his fetters, to cut through the thin partition between him and the hold, and, followed by Tiger, he tried to reach his friend's hiding place. He could not succeed, but the dog had scented Arthur Pym, and this suggested to Augustus the idea of fastening a note to Tiger's neck bearing the words:

"I scrawl this with blood—remain hidden—your life depends on it—"

This note, as we have already learned, Arthur Pym had received. Just as he had arrived at the last extremity of distress his friend reached him.

Augustus added that discord reigned among the mutineers. Some wanted to take the _Grampus_ towards the Cape Verde Islands; others, and Dirk Peters was of this number, were bent on sailing to the Pacific Isles.

Tiger was not mad. He was only suffering from terrible thirst, and soon recovered when it was relieved.

The cargo of the _Grampus_ was so badly stowed away that Arthur Pym was in constant danger from the shifting of the bales, and Augustus, at all risks, helped him to remove to a corner of the 'tween decks.

The half-breed continued to be very friendly with the son of Captain Barnard, so that the latter began to consider whether the sailing-master might not be counted on in an attempt to regain possession of the ship.

They were just thirty days out from Nantucket when, on the 4th of July, an angry dispute arose among the mutineers about a little brig signalled in the offing, which some of them wanted to take and others would have allowed to escape. In this quarrel a sailor belonging to the cook's party, to which Dirk Peters had attached himself, was mortally injured. There were now only thirteen men on board, counting Arthur Pym.

Under these circumstances a terrible storm arose, and the _Grampus_ was mercilessly knocked about. This storm raged until the 9th of July, and on that day, Dirk Peters having manifested an intention of getting rid of the mate, Augustus Barnard readily assured him of his assistance, without, however, revealing the fact of Arthur Pym's presence on board. Next day, one of the cook's adherents, a man named Rogers, died in convulsions, and, beyond all doubt, of poison. Only four of the cook's party then remained, of these Dirk Peters was one. The mate had five, and would probably end by carrying the day over the cook's party.

There was not an hour to lose. The half-breed having informed Augustus Barnard that the moment for action had arrived, the latter told him the truth about Arthur Pym.

While the two were in consultation upon the means to be employed for regaining possession of the ship, a tempest was raging, and presently a gust of irresistible force struck the _Grampus_ and flung her upon her side, so that on righting herself she shipped a tremendous sea, and there was considerable confusion on board. This offered a favourable opportunity for beginning the struggle, although the mutineers had made peace among themselves. The latter numbered nine men, while the half-breed's party consisted only of himself, Augustus Barnard and Arthur Pym. The ship's master possessed only two pistols and a hanger. It was therefore necessary to act with prudence.

Then did Arthur Pym (whose presence on board the mutineers could not suspect) conceive the idea of a trick which had some chance of succeeding. The body of the poisoned sailor was still lying on the deck; he thought it likely, if he were to put on the dead man's clothes and appear suddenly in the midst of those superstitious sailors, that their terror would place them at the mercy of Dirk Peters. It was still dark when the half-breed went softly towards the ship's stern, and, exerting his prodigious strength to the utmost, threw himself upon the man at the wheel and flung him over the poop.

Augustus Barnard and Arthur Pym joined him instantly, each armed with a belaying-pin. Leaving Dirk Peters in the place of the steersman, Arthur Pym, so disguised as to present the appearance of the dead man, and his comrade, posted themselves close to the head of the forecastle gangway. The mate, the ship's cook, all the others were there, some sleeping, the others drinking or talking; guns and pistols were within reach of their hands.
The tempest raged furiously; it was impossible to stand on the deck.

At that moment the mate gave the order for Augustus Barnard and Dirk Peters to be brought to the forecastle. This order was transmitted to the man at the helm, no other than Dirk Peters, who went down, accompanied by Augustus Barnard, and almost simultaneously Arthur Pym made his appearance.

The effect of the apparition was prodigious. The mate, terrified on beholding the resuscitated sailor, sprang up, beat the air with his hands, and fell down dead. Then Dirk Peters rushed upon the others, seconded by Augustus Barnard, Arthur Pym, and the dog Tiger. In a few moments all were strangled or knocked on the head save Richard Parker, the sailor, whose life was spared.

And now, while the tempest was in full force, only four men were left to work the brig, which was labouring terribly with seven feet of water in her hold. They had to cut down the mainmast, and, when morning came, the mizen. That day was truly awful, the night was more awful still! If Dirk Peters and his companions had not lashed themselves securely to the remains of the rigging, they must have been carried away by a tremendous sea, which drove in the hatches of the _Grampus_.

Then follows in the romance a minute record of the series of incidents ensuing upon this situation, from the 14th of July to the 7th of August; the fishing for victuals in the submerged hold, the coming of a mysterious brig laden with corpses, which poisoned the atmosphere and passed on like a huge coffin, the sport of a wind of death; the torments of hunger and thirst; the impossibility of reaching the provision store; the drawing of lots by straws--the shortest gave Richard Parker to be sacrificed for the life of the other three--the death of that unhappy man, who was killed by Dirk Peters and devoured; lastly, the finding in the hold of a jar of olives and a small turtle.

Owing to the displacement of her cargo the _Grampus_ rolled and pitched more and more. The frightful heat caused the torture of thirst to reach the extreme limit of human endurance, and on the 1st of August, Augustus Barnard died. On the 3rd, the brig foundered in the night, and Arthur Pym and the half-breed, crouching upon the upturned keel, were reduced to feed upon the barnacles with which the bottom was covered, in the midst of a crowd of waiting, watching sharks. Finally, after the shipwrecked mariners of the _Grampus_ had drifted no less than twenty-five degrees towards the south, they were picked up by the schooner _Jane_, of Liverpool, Captain William Guy.

Evidently, reason is not outraged by an admission of the reality of these facts, although the situations are strained to the utmost limits of possibility; but that does not surprise us, for the writer is the American magician-poet, Edgar Poe. But from this moment onwards we shall see that no semblance of reality exists in the succession of incidents.

Arthur Pym and Dirk Peters were well treated on board the English schooner _Jane_. In a fortnight, having recovered from the effects of their sufferings, they remembered them no more. With alternations of fine and bad weather the _Jane_ sighted Prince Edward's Island on the 13th of October, then the Crozet Islands, and afterwards the Kerguelens, which I had left eleven days ago.

Three weeks were employed in chasing sea-calves; these furnished the _Jane_ with a goodly cargo. It was during this time that the captain of the _Jane_ buried the bottle in which his namesake of the _Halbrane_ claimed to have found a letter containing William Guy's announcement of his intention to visit the austral seas.

On the 12th of November, the schooner left the Kerguelens, and after a brief stay at Tristan d'Acunha she sailed to reconnoitre the Auroras in 35° 15' of south latitude, and 37° 38' of west longitude. But these islands were not to be found, and she did not find them.

On the 12th of December the _Jane_ headed towards the Antarctic pole. On the 26th, the first icebergs came in sight beyond the seventy-third degree.

From the 1st to the 14th of January, 1828, the movements were difficult, the polar circle was passed in the midst of ice-floes, the icebergs' point was doubled and the ship sailed on the surface of an open sea--the famous open sea where the temperature is 47° Fahrenheit, and the water is 34°.

Edgar Poe, every one will allow, gives free rein to his fancy at this point. No navigator had ever reached latitudes so high--not even James Weddell of the British Navy, who did not get beyond the seventy-fourth parallel in 1822. But the achievement of the _Jane_, although difficult of belief, is trifling in comparison with the succeeding incidents which Arthur Pym, or rather Edgar Poe, relates with simple earnestness. In fact he entertained no doubt of reaching the pole itself.

In the first place, not a single iceberg is to be seen on this fantastic sea. Innumerable flocks of birds skim its surface, among them is a pelican which is shot. On a floating piece of ice is a bear of the Arctic species and of gigantic size. At last land is signalled. It is an island of a league in circumference, to which the name of Bennet Islet was given, in honour of the captain's partner in the ownership of the _Jane_.

Naturally, in proportion as the schooner sailed southwards the variation of the compass became less, while the temperature became milder, with a sky always clear and a uniform northerly breeze. Needless to add that in that latitude and in the month of January there was no darkness.
The _Jane_ pursued her adventurous course, until, on the 18th of January, land was sighted in latitude 83° 20' and longitude 43° 5'.

This proved to be an island belonging to a numerous group scattered about in a westerly direction.

The schooner approached and anchored off the shore. Arms were placed in the boats, and Arthur Pym got into one of the latter with Dirk Peters. The men rowed shorewards, but were stopped by four canoes carrying armed men, "new men" the narrative calls them. These men showed no hostile intentions, but cried out continuously "anamoo" and "lamalama." When the canoes were alongside the schooner, the chief, Too-Wit, was permitted to go on board with twenty of his companions. There was profound astonishment on their part then, for they took the ship for a living creature, and lavished caresses on the rigging, the masts, and the bulwarks. Steered between the reefs by these natives, she crossed a bay with a bottom of black sand, and cast anchor within a mile of the beach. Then William Guy, leaving the hostages on board, stepped ashore amid the rocks.

If Arthur Pym is to be believed, this was Tsalal Island! Its trees resembled none of the species in any other zone of our planet. The composition of the rocks revealed a stratification unknown to modern mineralogists. Over the bed of the streams ran a liquid substance without any appearance of limpidity, streaked with distinct veins, which did not reunite by immediate cohesion when they were parted by the blade of a knife!

Klock-Klock, which we are obliged to describe as the chief "town" of the island, consisted of wretched huts entirely formed of black skins; it possessed domestic animals resembling the common pig, a sort of sheep with a black fleece, twenty kinds of fowls, tame albatrosses, ducks, and large turtles in great numbers.

On arriving at Klock-Klock, Captain William Guy and his companions found a population—where Arthur Pym estimated at ten thousand souls, men, women, and children—if not to be feared, at least to be kept at a distance, so noisy and demonstrative were they. Finally, after a long halt at the hut of Too-Wit, the strangers returned to the shore, where the "bêche-de-mer"—the favourite food of the Chinese—would provide enormous cargoes; for the succulent mollusk is more abundant there than in any other part of the austral regions.

Captain William Guy immediately endeavored to come to an understanding with Too-Wit on this matter, requesting him to authorize the construction of sheds in which some of the men of the _Jane_ might prepare the bêche-de-mer, while the schooner should hold on her course towards the Pole. Too-Wit accepted this proposal willingly, and made a bargain by which the natives were to give their labour in the gathering-in of the precious mollusk.

At the end of a month, the sheds being finished, three men were told off to remain at Tsalal. The natives had not given the strangers cause to entertain the slightest suspicion of them. Before leaving the place, Captain William Guy wished to return once more to the village of Klock-Klock, having, from prudent motives, left six men on board, the guns charged, the bulwark nettings in their place, the anchor hanging at the forepeak—in a word, all in readiness to oppose an approach of the natives. Too-Wit, escorted by a hundred warriors, came out to meet the visitors. Captain William Guy and his men, although the place was propitious to an ambuscade, walked in close order, each pressing upon the other. On the right, a little in advance, were Arthur Pym, Dirk Peters, and a sailor named Allen. Having reached a spot where a fissure traversed the hillside, Arthur Pym turned into it in order to gather some hazel nuts which hung in clusters upon stunted bushes. Having done this, he was returning to the path, when he perceived that Allen and the half-breed had accompanied him. They were all three approaching the mouth of the fissure, when they were thrown down by a sudden and violent shock. At the same moment the crumbling masses of the hill slid down upon them and they instantly concluded that they were doomed to be buried alive.

Alive—all three? No! Allen had been so deeply covered by the sliding soil that he was already smothered, but Arthur Pym and Dirk Peters contrived to drag themselves on their knees, and opening a way with their bowie knives, to a projecting mass of harder clay, which had resisted the movement from above, and from thence they climbed to a natural platform at the extremity of a wooded ravine. Above them they could see the blue sky-roof, and from their position were enabled to survey the surrounding country.

An artificial landslip, cunningly contrived by the natives, had taken place. Captain William Guy and his twenty-eight companions had disappeared; they were crushed beneath more than a million tons of earth and stones.

The plain was swarming with natives who had come, no doubt, from the neighbouring islets, attracted by the prospect of pillaging the _Jane_. Seventy boats were being paddled towards the ship. The six men on board fired on them, but their aim was uncertain in the first volley; a second, in which mitraille and grooved bullets were used, produced terrible effect. Nevertheless, the _Jane_ being boarded by the swarming islanders, her defenders were massacred, and she was set on fire.

Finally a terrific explosion took place—the fire had reached the powder store—killing a thousand natives and mutilating as many more, while the others fled, uttering the cry of _tekéli-li! tekéli-li!_

During the following week, Arthur Pym and Dirk Peters, living on nuts and bitterns' flesh, escaped discovery by the natives, who did not suspect their presence. They found themselves at the bottom of a sort of dark abyss
including several planes, but without issue, hollowed out from the hillside, and of great extent. The two men could not live in the midst of these successive abysses, and after several attempts they let themselves slide on one of the slopes of the hill. Instantly, six savages rushed upon them; but, thanks to their pistols, and the extraordinary strength of the half-breed, four of the assailants were killed. The fifth was dragged away by the fugitives, who reached a boat which had been pulled up on the beach and was laden with three huge turtles. A score of natives pursued and vainly tried to stop them; the former were driven off, and the boat was launched successfully and steered for the south.

Arthur Pym was then navigating beyond the eighty-fourth degree of south latitude. It was the beginning of March, that is to say, the antarctic winter was approaching. Five or six islands, which it was prudent to avoid, were visible towards the west. Arthur Pym's opinion was that the temperature would become more mild by degrees as they approached the pole. They tied together two white shirts which they had been wearing, and hoisted them to do duty as a sail. At sight of these shirts the native, who answered to the name of Nu-Nu, was terrified. For eight days this strange voyage continued, favoured by a mild wind from the north, in permanent daylight, on a sea without a fragment of ice, indeed, owing to the high and even temperature of the water, no ice had been seen since the parallel of Bennet Island.

Then it was that Arthur Pym and Dirk Peters entered upon a region of novelty and wonder. Above the horizon line rose a broad bar of light grey vapour, striped with long luminous rays, such as are projected by the polar aurora. A very strong current came to the aid of the breeze. The boat sailed rapidly upon a liquid surface of milky aspect, exceedingly hot, and apparently agitated from beneath. A fine white ash-dust began to fall, and this increased the terror of Nu-Nu, whose lips trembled over his two rows of black ivory.

On the 9th of March this rain of ashes fell in redoubled volume, and the temperature of the water rose so high that the hand could no longer bear it. The immense curtain of vapour, spread over the distant perimeter of the southern horizon resembled a boundless cataract falling noiselessly from the height of some huge rampart lost in the height of the heavens.

Twelve days later, it was darkness that hung over these waters, darkness furrowed by luminous streaks darting from the milky depths of the Antarctic Ocean, while the incessant shower of ash-dust fell and melted in its waters.

The boat approached the cataract with an impetuous velocity whose cause is not explained in the narrative of Arthur Pym. In the midst of this frightful darkness a flock of gigantic birds, of livid white plumage, swept by, uttering their eternal _tékéli-li_, and then the savage, in the supreme throes of terror, gave up the ghost.

Suddenly, in a mad whirl of speed, the boat rushed into the grasp of the cataract, where a vast gulf seemed ready to swallow it up. But before the mouth of this gulf there stood a veiled human figure, of greater size than any inhabitant of this earth, and the colour of the man's skin was the perfect whiteness of snow.

Such is the strange romance conceived by the more than human genius of the greatest poet of the New World.

(1) The American "lion" is only a small species of pumas and not formidable enough to terrify a Nantucket youth. J.V.

CHAPTER VI. AN OCEAN WAIF.

The navigation of the _Halbrane_ went on prosperously with the help of the sea and the wind. In fifteen days, if this state of things lasted, she might reach Tristan d'Acunha. Captain Len Guy left the working of the ship to James West, and well might he do so; there was nothing to fear with such a seaman as he.

"Our lieutenant has not his match afloat," said Hurliguerly to me one day. "He ought to be in command of a flag-ship."

"Indeed," I replied, "he seems to be a true son of the sea."

"And then, our _Halbrane_, what a craft! Congratulate yourself, Mr. Jeorling, and congratulate yourself also that I succeeded in bringing the captain to change his mind about you."

"If it was you who obtained that result, boatswain, I thank you heartily."

"And so you ought, for he was plaguily against it, was our captain, in spite of all old man Atkins could say. But I managed to make him hear reason."

"I shan't forget it, boatswain, I shan't forget it, since, thanks to your intervention, instead of moping at Kerguelen. I hope shortly to get within sight of Tristan d'Acunha."

"In a few days, Mr. Jeorling. Only think, sir, according to what I hear tell, they are making ships in England and America with machines in their insides, and wheels which they use as a duck uses its paddles. All right, we shall know what's the good of them when they come into use. My notion is, however, that those ships will never be able to fight with a fine frigate sailing with a fresh breeze."

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It was the 3rd of September. If nothing occurred to delay us, our schooner would be in sight of port in three days. The chief island of the group is visible on clear days at a great distance.

That day, between ten and eleven o'clock in the morning, I was walking backwards and forwards on the deck, on
the windward side. We were sliding smoothly over the surface of an undulating sea. The _Halbrane_ resembled an enormous bird, one of the gigantic albatross kind described by Arthur Pym—which had spread its sail-like wings, and was carrying a whole ship's crew towards space.

James West was looking out through his glasses to starboard at an object floating two or three miles away, and several sailors, hanging over the side, were also curiously observing it.

I went forward and looked attentively at the object. It was an irregularly formed mass about twelve yards in length, and in the middle of it there appeared a shining lump.

"That is no whale," said Martin Holt, the sailing-master. "It would have blown once or twice since we have been looking at it."

"Certainly!" assented Hardy. "Perhaps it is the carcase of some deserted ship."

"May the devil send it to the bottom!" cried Roger. "It would be a bad job to come up against it in the dark; it might send us down before we could know what had happened."

"I believe you," added Drap, "and these derelicts are more dangerous than a rock, for they are now here and again there, and there's no avoiding them."

Hurliguerly came up at this moment and planted his elbows on the bulwark, alongside of mine.

"What do you think of it, boatswain?" I asked.

"It is my opinion, Mr. Jeorling," replied the boatswain, "that what we see there is neither a blower nor a wreck, but merely a lump of ice."

"Hurliguerly is right," said James West; "it is a lump of ice, a piece of an iceberg which the currents have carried hither."

"What?" said I, "to the forty-fifth parallel?"

"Yes, sir," answered West, "that has occurred, and the ice sometimes gets up as high as the Cape, if we are to take the word of a French navigator, Captain Blosseville, who met one at this height in 1828."

"Then this mass will melt before long," I observed, feeling not a little surprised that West had honoured me by so lengthy a reply.

"It must indeed be dissolved in great part already," he continued, "and what we see is the remains of a mountain of ice which must have weighed millions of tons."

Captain Len Guy now appeared, and perceiving the group of sailors around West, he came forward. A few words were exchanged in a low tone between the captain and the lieutenant, and the latter passed his glass to the former, who turned it upon the floating object, now at least a mile nearer to us.

"It is ice," said he, "and it is lucky that it is dissolving. The _Halbrane_ might have come to serious grief by collision with it in the night."

I was struck by the fixity of his gaze upon the object, whose nature he had so promptly declared: he continued to contemplate it for several minutes, and I guessed what was passing in the mind of the man under the obsession of a fixed idea. This fragment of ice, torn from the southern icebergs, came from those waters wherein his thoughts continually ranged. He wanted to see it more near, perhaps at close quarters, it might be to take away some bits of it. At an order from West the schooner was directed towards the floating mass; presently we were within two cables'-length, and I could examine it.

The mound in the center was melting rapidly; before the end of the day nothing would remain of the fragment of ice which had been carried by the currents so high up as the forty-fifth parallel.

Captain Len Guy gazed at it steadily, but he now needed no glass, and presently we all began to distinguish a second object which little by little detached itself from the mass, according as the melting process went on—a black shape, stretched on the white ice.

What was our surprise, mingled with horror, when we saw first an arm, then a leg, then a trunk, then a head appear, forming a human body, not in a state of nakedness, but clothed in dark garments.

For a moment I even thought that the limbs moved, that the hands were stretched towards us.

The crew uttered a simultaneous cry. No! this body was not moving, but it was slowly slipping off the icy surface.

I looked at Captain Len Guy. His face was as livid as that of the corpse that had drifted down from the far latitudes of the austral zone. What could be done was done to recover the body of the unfortunate man, and who can tell whether a faint breath of life did not animate it even then? In any case his pockets might perhaps contain some document that would enable his identity to be established. Then, accompanied by a last prayer, those human remains should be committed to the depths of the ocean, the cemetery of sailors who die at sea.

A boat was let down. I followed it with my eyes as it neared the side of the ice fragment eaten by the waves.

Hurliguerly set foot upon a spot which still offered some resistance. Gratian got out after him, while Francis kept the boat fast by the chain. The two crept along the ice until they reached the corpse, then drew it to them by the arms.
and legs and so got it into the boat. A few strokes of the oars and the boatswain had rejoined the schooner. The corpse, completely frozen, having been laid at the foot of the mizen mast, Captain Len Guy approached and examined it long and closely, as though he sought to recognize it.

It was the corpse of a sailor, dressed in coarse stuff, woollen trousers and a patched jersey; a belt encircled his waist twice. His death had evidently occurred some months previously, probably very soon after the unfortunate man had been carried away by the drift. He was about forty, with slightly grizzled hair, a mere skeleton covered with skin. He must have suffered agonies of hunger.

Captain Len Guy lifted up the hair, which had been preserved by the cold, raised the head, gazed upon the scaled eyelids, and finally said with a sort of sob,--

"Patterson! Patterson!"

"Patterson?" I exclaimed.

The name, common as it was, touched some chord in my memory. When had I heard it uttered? Had I read it anywhere?

At this moment, James West, on a hint from the boatswain, searched the pockets of the dead man, and took out of them a knife, some string, an empty tobacco box, and lastly a leather pocket-book furnished with a metallic pencil.

"Give me that," said the captain. Some of the leaves were covered with writing, almost entirely effaced by the damp. He found, however, some words on the last page which were still legible, and my emotion may be imagined when I heard him read aloud in a trembling voice: "The _Jane_ . . . _Tsalal island_ . . . by eighty-three . . . There . . . eleven years . . . Captain . . . five sailors surviving . . . Hasten to bring them aid."

And under these lines was a name, a signature, the name of Patterson!

Then I remembered! Patterson was the second officer of the _Jane_, the mate of that schooner which had picked up Arthur Pym and Dirk Peters on the wreck of the _Grampus_, the _Jane_ having reached Tsalal Island; the _Jane_ which was attacked by natives and blown up in the midst of those waters.

So then it was all true? Edgar Poe's work was that of an historian, not a writer of romance? Arthur Gordon Pym's journal had actually been confided to him! Direct relations had been established between them! Arthur Pym existed, or rather he had existed, he was a real being! And he had died, by a sudden and deplorable death under circumstances not revealed before he had completed the narrative of his extraordinary voyage. And what parallel had he reached on leaving Tsalal Island with his companion, Dirk Peters, and how had both of them been restored to their native land, America?

I thought my head was turning, that I was going mad--I who accused Captain Guy of being insane! No! I had not heard aright! I had misunderstood? This was a mere phantom of my fancy!

And yet, how was I to reject the evidence found on the body of the mate of the _Jane_, that Patterson whose words were supported by ascertained dates? And above all, how could I retain a doubt, after James West, who was the most self-possessed among us, had succeeded in deciphering the following fragments of sentences:--

"Drifting since the 3rd of June north of Tsalal Island...Still there...Captain William Guy and five of the men of the _Jane_--the piece of ice I am on is drifting across the iceberg...food will soon fail me...Since the 13th of June...my last resources exhausted...to-day...16th of June . . . I am going to die."

So then for nearly three months Patterson's body had lain on the surface of this ice-waif which we had met on our way from the Kerguelens to Tristan d'Acunha! Ah! why had we not saved the mate of the _Jane_!

I had to yield to evidence. Captain Len Guy, who knew Patterson, had recognized him in this frozen corpse! It was indeed he who accompanied the captain of the _Jane_ when he had interred that bottle, containing the letter which I had refused to believe authentic, at the Kerguelens. Yes! for eleven years, the survivors of the English schooner had been cast away there without any hope of succour.

Len Guy turned to me and said, "Do you believe--_now_?"

"I believe," said I, faltering; "but Captain William Guy of the _Jane_, and Captain Len Guy of the _Halbrane_--"

"Are brothers!" he cried in a loud voice, which was heard by all the crew.

Then we turned our eyes once more to the place where the lump of ice had been floating; but the double influence of the solar rays and the waters in this latitude had produced its effect, no trace of the dead man's last refuge remained on the surface of the sea.

CHAPTER VII. TRISTAN D'ACUNHA.

Four days later, the _Halbrane_ neared that curious island of Tristan d'Acunha, which may be described as the big boiler of the African seas. By that time I had come to realize that the "hallucination" of Captain Len Guy was a
truth, and that he and the captain of the _Jane_ (also a reality) were connected with each other by this ocean waif from the authentic expedition of Arthur Pym. My last doubts were buried in the depths of the ocean with the body of Patterson.

And now, what was Captain Len Guy going to do? There was not a shadow of doubt on that point. He would take the _Halbrane_ to Tsalal Island, as marked upon Patterson's note-book. His lieutenant, James West, would go whithersoever he was ordered to go; his crew would not hesitate to follow him, and would not be stopped by any fear of passing the limits assigned to human power, for the soul of their captain and the strength of their lieutenant would be in them.

This, then, was the reason why Captain Len Guy refused to take passengers on board his ship, and why he had told me that his routes never were certain; he was always hoping that an opportunity for venturing into the sea of ice might arise. Who could tell indeed, whether he would not have sailed for the south at once without putting in at Tristan d'Acunha, if he had not wanted water? After what I had said before I went on board the _Halbrane_, I should have had no right to insist on his proceeding to the island for the sole purpose of putting me ashore. But a supply of water was indispensable, and besides, it might be possible there to put the schooner in a condition to contend with the icebergs and gain the open sea--since open it was beyond the eighty-second parallel---in fact to attempt what Lieutenant Wilkes of the American Navy was then attempting.

The navigators knew at this period, that from the middle of November to the beginning of March was the limit during which some success might be looked for. The temperature is more bearable then, storms are less frequent, the icebergs break loose from the mass, the ice wall has holes in it, and perpetual day reigns in that distant region.

Tristan d'Acunha lies to the south of the zone of the regular south-west winds. Its climate is mild and moist. The prevailing winds are west and north-west, and, during the winter--August and September--south. The island was inhabited, from 1811, by American whale fishers. After them, English soldiers were installed there to watch the St. Helena seas, and these remained until after the death of Napoleon, in 1821. Several years later the group of islands populated by Americans and Dutchmen from the Cape acknowledged the suzerainty of Great Britain, but this was not so in 1839. My personal observation at that date convinced me that the possession of Tristan d'Acunha was not worth disputing. In the sixteenth century the islands were called the Land of Life.

On the 5th of September, in the morning, the towering volcano of the chief island was signalled; a huge snow-covered mass, whose crater formed the basin of a small lake. Next day, on our approach, we could distinguish a vast heaped-up lava field. At this distance the surface of the water was striped with gigantic seaweeds, vegetable ropes, varying in length from six hundred to twelve hundred feet, and as thick as a wine barrel.

Here I should mention that for three days subsequent to the finding of the fragment of ice, Captain Len Guy came on deck for strictly nautical purposes only, and I had no opportunities of seeing him except at meals, when he maintained silence, that not even James West could have enticed him to break. I made no attempt to do this, being convinced that the hour would come when Len Guy would again speak to me of his brother, and of the efforts which he intended to make to save him and his companions. Now, I repeat, the season being considered, that hour had not come, when the schooner cast anchor on the 6th of September at Ansiedling, in Falmouth Bay, precisely in the place indicated in Arthur Pym's narrative as the moorings of the _Jane_.

At the period of the arrival of the _Jane_, an ex-corporal of the English artillery, named Glass, reigned over a little colony of twenty-six individuals, who traded with the Cape, and whose only vessel was a small schooner. At our arrival this Glass had more than fifty subjects, and was, as Arthur Pym remarked, quite independent of the British Government. Relations with the ex-corporal were established on the arrival of the _Halbrane_, and he proved very friendly and obliging. West, to whom the captain left the business of refilling the water tanks and taking in supplies of fresh meat and vegetables, had every reason to be satisfied with Glass, who, no doubt, expected to be paid, and was paid, handsomely.

The day after our arrival I met ex-corporal Glass, a vigorous, well-preserved man, whose sixty years had not impaired his intelligent vivacity. Independently of his trade with the Cape and the Falklands, he did an important business in seal-skins and the oil of marine animals, and his affairs were prosperous. As he appeared very willing to talk, I entered briskly into conversation with this self-appointed Governor of a contented little colony, by asking him,--

"Do many ships put in to Tristan d'Acunha?"
"As many as we require," he replied, rubbing his hands together behind his back, according to his invariable custom.
"In the fine season?"
"Yes, in the fine season, if indeed we can be said to have any other in these latitudes."
"I congratulate you, Mr. Glass. But it is to be regretted that Tristan d'Acunha has not a single port. If you possessed a landing-stage, now?"
"For what purpose, sir, when nature has provided us with such a bay as this, where there is shelter from gales, and it is easy to lie snug right up against the rocks? No, Tristan has no port, and Tristan can do without one."

Why should I have contradicted this good man? He was proud of his island, just as the Prince of Monaco is justly proud of his tiny principality.

I did not persist, and we talked of various things. He offered to arrange for me an excursion to the depths of the thick forests, which clothed the volcano up to the middle of the central cove.

I thanked him, but declined his offer, preferring to employ my leisure on land in some mineralogical studies. Besides, the _Halbrane_ was to set sail so soon as she had taken in her provisions.

"Your captain is in a remarkable hurry!" said Governor Glass.

"You think so?"

"He is in such haste that his lieutenant does not even talk of buying skins or oil from me."

"We require only fresh victuals and fresh water, Mr. Glass."

"Very well," replied the Governor, who was rather annoyed, "what the _Halbrane_ will not take other vessels will."

Then he resumed,—

"And where is your schooner bound for on leaving us?"

"For the Falklands, no doubt, where she can be repaired."

"You, sir, are only a passenger, I suppose?"

"As you say, Mr. Glass, and I had even intended to remain at Tristan d'Acunha for some weeks. But I have had to relinquish that project."

"I am sorry to hear it, sir. We should have been happy to offer you hospitality while awaiting the arrival of another ship."

"Such hospitality would have been most valuable to me," I replied, "but unfortunately I cannot avail myself of it."

In fact, I had finally resolved not to quit the schooner, but to embark for America from the Falkland Isles with out much delay. I felt sure that Captain Len Guy would not refuse to take me to the islands. I informed Mr. Glass of my intention, and he remarked, still in a tone of annoyance,—

"As for your captain, I have not even seen the colour of his hair."

"I don't think he has any intention of coming ashore."

"Is he ill?"

"Not to my knowledge. But it does not concern you, since he has sent his lieutenant to represent him."

"Oh, he's a cheerful person! One may extract two words from him occasionally. Fortunately, it is easier to get coin out of his pocket than speech out of his lips."

"That's the important thing, Mr. Glass."

"You are right, sir—Mr. Jeorling, of Connecticut, I believe?"

I assented.

"So! I know your name, while I have yet to learn that of the captain of the _Halbrane_."

"His name is Guy—Len Guy."

"An Englishman?"

"Yes—an Englishman."

"He might have taken the trouble to pay a visit to a countryman of his, Mr. Jeorling! But stay! I had some dealings formerly with a captain of that name. Guy, Guy—"

"William Guy?" I asked, quickly.

"Precisely. William Guy."

"Who commanded the _Jane_?"

"The _Jane_? Yes. The same man."

"An English schooner which put in at Tristan d'Acunha eleven years ago?"

"Eleven years, Mr. Jeorling. I had been settled in the island where Captain Jeffrey, of the _Berwick_, of London, found me in the year 1824, for full seven years. I perfectly recall this William Guy, as if he were before me. He was a fine, open-hearted fellow, and I sold him a cargo of seal-skins. He had the air of a gentleman, rather proud, but good-natured."

"And the _Jane_!"

"I can see her now at her moorings in the same place as the _Halbrane_. She was a handsome vessel of one hundred and eighty tons, very slender for'ards. She belonged to the port of Liverpool."

"Yes; that is true, all that is true."

"And is the _Jane_ still afloat, Mr. Jeorling?"
"No, Mr. Glass."
"Was she lost?"
"The fact is only too true, and the greater part of her crew with her."
"Will you tell me how this happened?"
"Willingly. On leaving Tristan d'Acunha the _Jane_ headed for the bearings of the Aurora and other islands, which William Guy hoped to recognize from information--"
"That came from me," interrupted the ex-corporal. "And those other islands, may I learn whether the _Jane_ discovered them?"
"No, nor the Auroras either, although William Guy remained several weeks in those waters, running from east to west, with a look-out always at the masthead."
"He must have lost his bearings, Mr. Jeorling, for, if several whalers, who were well deserving of credit, are to be believed, these islands do exist, and it was even proposed to give them my name."
"That would have been but just," I replied politely. "It will be very vexatious if they are not discovered some day," added the Governor, in a tone which indicated that he was not devoid of vanity.
"It was then," I resumed, "that Captain Guy resolved to carry out a project he had long cherished, and in which he was encouraged by a certain passenger who was on board the _Jane_."
"Arthur Gordon Pym," exclaimed Glass, "and his companion, one Dirk Peters; the two had been picked up at sea by the schooner."
"You knew them, Mr. Glass?" I asked eagerly.
"Knew them, Mr. Jeorling? I should think I did, indeed! That Arthur Pym was a strange person, always wanting to rush into adventures--a real rash American, quite capable of starting off to the moon! Has he gone there at last?"
"No, not quite, Mr. Glass, but, during her voyage, the schooner, it seems, did clear the polar circle, and pass the ice-wall. She got farther than any ship had ever done before."
"What a wonderful feat!"
"Yes. Unfortunately, the _Jane_ did not return. Arthur Pym and William Guy escaped the doom of the _Jane_ and the most of her crew. They even got back to America, how I do not know. Afterwards Arthur Pym died, but under what circumstances I am ignorant. As for the half-breed, after having retired to Illinois, he went off one day without a word to anyone and no trace of him has been found."
"And William Guy?" asked Mr. Glass.
I related the finding of the body of Patterson, the mate of the _Jane_, and I added that everything led to the belief that the captain of the _Jane_ and five of his companions were still living on an island in the austral regions, at less than six degrees from the Pole.
"Ah, Mr. Jeorling," cried Glass, "if some day William Guy and his sailors might be saved! They seemed to me to be such fine fellows."
"That is just what the _Halbrane_ is certainly going to attempt, so soon as she is ready, for her captain, Len Guy, is William Guy's own brother."
"Is it possible? Well, although I do not know Captain Len Guy, I venture to assert that the brothers do not resemble each other--at least in their behaviour to the Governor of Tristan d'Acunha!"
It was plain that the Governor was profoundly mortified, but no doubt he consoled himself by the prospect of selling his goods at twenty-five per cent above their value.
One thing was certain: Captain Len Guy had no intention of coming ashore. This was the more singular, inasmuch as he could not be unaware that the _Jane_ had put in at Tristan d'Acunha before proceeding to the southern seas. Surely he might be expected to put himself in communication with the last European who had shaken hands with his brother!
Nevertheless, Captain Len Guy remained persistently on board his ship, without even going on deck; and, looking through the glass skylight of his cabin, I saw him perpetually stooping over the table, which was covered with open books and out-spread charts. No doubt the charts were those of the austral latitudes, and the books were narratives of the precursors of the _Jane_ in those mysterious regions of the south.
On the table lay also a volume which had been read and re-read a hundred times. Most of its pages were dog-eared and their margins were filled with pencilled notes. And on the cover shone the title in brightly gilded letters:
THE ADVENTURES OF ARTHUR GORDON PYM.

CHAPTER VIII. BOUND FOR THE FALKLANDS.
On the 8th of September, in the evening, I had taken leave of His Excellency the Governor-General of the Archipelago of Tristan d'Acunha--for such is the official title bestowed upon himself by that excellent fellow, Glass,
ex-corporal of artillery in the British Army. On the following day, before dawn, the _Halbrane_ sailed.

After we had rounded Herald Point, the few houses of Ansiedlung disappeared behind the extremity of Falmouth Bay. A fine breeze from the east carried us along gaily.

During the morning we left behind us in succession Elephant Bay, Hardy Rock, West Point, Cotton Bay, and Daly's Promontory; but it took the entire day to lose sight of the volcano of Tristan d'Acunha, which is eight thousand feet high; its snow-clad bulk was at last veiled by the shades of evening.

During that week our voyage proceeded under the most favourable conditions; if these were maintained, the end of the month of September ought to bring us within sight of the first peaks of the Falkland Group; and so, very sensibly towards the south; the schooner having descended from the thirty-eighth parallel to the fifty-fifth degree of latitude.

The most daring, or, perhaps I ought to say, the most lucky of those discoverers who had preceded the _Halbrane_, under the command of Captain Len Guy, in the Antarctic seas, had not gone beyond--Kemp, the sixty-sixth parallel; Ballerry, the sixty-seventh; Biscoe, the sixty-eighth; Bellinghausen and Morrell, the seventieth; Cook, the seventy-first; Weddell, the seventy-fourth. And it was beyond the eighty-third, nearly five hundred and fifty miles farther, that we must go to the succour of the survivors of the _Jane_!

I confess that for a practical man of unimaginative temperament, I felt strangely excited; a nervous restlessness had taken possession of me. I was haunted by the figures of Arthur Pym and his companions, lost in Antarctic ice-deserts. I began to feel a desire to take part in the proposed undertaking of Captain Len Guy. I thought about it incessantly. As a fact there was nothing to recall me to America. It is true that whether I should get the consent of the commander of the _Halbrane_ remained to be seen; but, after all, why should he refuse to keep me as a passenger? Would it not be a very "human" satisfaction to him to give me material proof that he was in the right, by taking me to the very scene of a catastrophe that I had regarded as fictitious, showing me the remains of the _Jane_ at Tsalal, and landing me on that selfsame island which I had declared to be a myth?

Nevertheless, I resolved to wait, before I came to any definite determination, until an opportunity of speaking to the captain should arise.

After an interval of unfavourable weather, during which the _Halbrane_ made but slow progress, on the 4th of October, in the morning, the aspect of the sky and the sea underwent a marked change. The wind became calm, the waves abated, and the next day the breeze veered to the north-west. This was very favourable to us, and in ten days, with a continuance of such fortunate conditions, we might hope to reach the Falklands.

It was on the 11th that the opportunity of an explanation with Captain Len Guy was presented to me, and by himself, for he came out of his cabin, advanced to the side of the ship where I was seated, and took his place at my side.

Evidently he wished to talk to me, and of what, if not the subject which entirely absorbed him? He began by saying:

"I have not yet had the pleasure of a chat with you, Mr. Jeorling, since our departure from Tristan d'Acunha!"

"To my regret, captain," I replied, but with reserve, for I wanted him to make the running.

"I beg you to excuse me," he resumed, "I have so many things to occupy me and make me anxious. A plan of campaign to organize, in which nothing must be unforeseen or unprovided for. I beg you not to be displeased with me--"

"I am not, I assure you."

"That is all right, Mr. Jeorling; and now that I know you, that I am able to appreciate you, I congratulate myself upon having you for a passenger until our arrival at the Falklands."

"I am very grateful, captain, for what you have done for me, and I feel encouraged to--"

The moment seemed propitious to my making my proposal, when Captain Len Guy interrupted me.

"Well, Mr. Jeorling," he asked, "are you now convinced of the reality of the voyage of the _Jane_, or do you still regard Edgar Poe's book as a work of pure imagination?"

"I do not so regard it, captain."

"You no longer doubt that Arthur Pym and Dirk Peters have really existed, or that my brother William Guy and five of his companions are living?"

"I should be the most incredulous of men, captain, to doubt either fact, and my earnest desire is that the favour of Heaven may attend you and secure the safety of the shipwrecked mariners of the _Jane_."

"I will do all in my power, Mr. Jeorling, and by the blessing of God I shall succeed."

"I hope so, captain. Indeed, I am certain it will be so, and if you consent--"

"Is it not the case that you talked of this matter with one Glass, an English ex-corporal, who sets up to be Governor of Tristan d'Acunha?" inquired the captain, without allowing me to finish my sentence.

"That is so," I replied, "and what I learned from Glass has contributed not a little to change my doubts into
certainty."
"Ah I he has satisfied you?"
"Yes. He perfectly remembers to have seen the _Jane_, eleven years ago, when she had put in at Tristan
d'Acunha."
"The _Jane_--and my brother?"
"He told me that he had personal dealings with Captain William Guy."
"And he traded with the _Jane_?"
"Yes, as he has just been trading with the _Halbrane_."
"She was moored in this bay?"
"In the same place as your schooner."
"And--Arthur Pym--Dirk Peters?"
"He was with them frequently."
"Did he ask what had become of them?"
"Oh yes, and I informed him of the death of Arthur Pym, whom he regarded as a foolhardy adventurer, capable
of any daring folly."
"Say a madman, and a dangerous madman, Mr. Jeorling. Was it not he who led my unfortunate brother into that
fatal enterprise?"
"There is, indeed, reason to believe so from his narrative."
"And never to forget it! added the captain in a tone of agitation.
"This man, Glass," I resumed, "also knew Patterson, the mate of the _Jane_."
"He was a fine, brave, faithful fellow, Mr. Jeorling, and devoted, body and soul, to my brother."
"As West is to you, captain."
"Does Glass know where the shipwrecked men from the _Jane_ are now?"
"I told him, captain, and also all that you have resolved to do to save them."
I did not think proper to add that Glass had been much surprised at Captain Guy's abstaining from visiting him,
as, in his absurd vanity, he held the commander of the _Halbrane_ bound to do, nor that he did not consider the
Governor of Tristan d'Acunha bound to take the initiative.
"I wish to ask you, Mr. Jeorling, whether you think everything in Arthur Pym's journal, which has been
published by Edgar Poe, is exactly true?"
"I think there is some need for doubt," I answered "the singular character of the hero of those adventures being
taken into consideration--at least concerning the phenomena of the island of Tsalal. And we know that Arthur Pym
was mistaken in asserting that Captain William Guy and several of his companions perished in the landslip of the
hill at Klock-Klock."
"Ah! but he does not assert this, Mr. Jeorling! He says only that, when he and Dirk Peters had reached the
opening through which they could discern the surrounding country, the seat of the artificial earthquake was revealed
to them. Now, as the whole face of the hill was rushing into the ravine, the fate of my brother and twenty-nine of his
men could not be doubtful to his mind. He was, most naturally, led to believe that Dirk Peters and himself were the
only white men remaining alive on the island. He said nothing but this--nothing more. These were only
suppositions--very reasonable, are they not?"
"I admit that, fully, captain."
"But now, thanks to Patterson's note-book, we are certain that my brother and five of his companions escaped
from the landslip contrived by the natives."
"That is quite clear, captain. But, as to what became of the survivors of the _Jane_, whether they were taken by
the natives of Tsalal and kept in captivity, or remained free, Patterson's note-book says nothing, nor does it relate
under what circumstances he himself was carried far away from them."
"All that we shall learn, Mr. Jeorling. Yes, we shall know all. The main point is that we are quite sure my brother
and five of his sailors were living less than four months ago on some part of Tsalal Island. There is now no question
of a romance signed 'Edgar Poe,' but of a veracious narrative signed 'Patterson.'"
"Captain," said I, "will you let me be one of your company until the end of the campaign of the _Halbrane_ in
the Antarctic seas?"
Captain Len Guy looked at me with a glance as penetrating as a keen blade. Otherwise he did not appear
surprised by the proposal I had made; perhaps he had been expecting it--and he uttered only the single word:
"Willingly."

CHAPTER IX. FITTING OUT THE _HALBRANE_
On the 15th of October, our schooner cast anchor in Port Egmont, on the north of West Falkland. The group is composed of two islands, one the above-named, the other Soledad or East Falkland. Captain Len Guy gave twelve hours' leave to the whole crew. The next day the proceedings were to begin by a careful and minute inspection of the vessel's hull and keel, in view of the contemplated prolonged navigation of the Antarctic seas. That day Captain Len Guy went ashore, to confer with the Governor of the group on the subject of the immediate re-victualling of the schooner. He did not intend to make expense a consideration, because the whole adventure might be wrecked by an unwise economy. Besides I was ready to aid with my purse, as I told him, and I intended that we should be partners in the cost of this expedition.

James West remained on board all day, according to his custom in the absence of the captain, and was engaged until evening in the inspection of the hold. I did not wish to go ashore until the next day. I should have ample time while we remained in port to explore Port Egmont and its surroundings, and to study the geology and mineralogy of the island. Hurliguerly regarded the opportunity as highly favourable for the renewal of talk with me, and availed himself of it accordingly. He accosted me as follows:

"Accept my sincere compliments, Mr. Jeorling?"

"And wherefore, boatswain?"

"On account of what I have just heard—that you are to come with us to the far end of the Antarctic seas."

"Oh! not so far, I imagine, and if it is not a matter of going beyond the eighty-fourth parallel—"

"Who can tell," replied the boatswain, "at all events the _Halbrane_ will make more degrees of latitude than any other ship before her."

"We shall see."

"And does that not alarm you, Mr. Jeorling?"

"Not in the very least."

"Nor us, rest assured. No, no! You see, Mr. Jeorling, our captain is a good one, although he is no talker. You only need to take him the right way! First he gives you the passage to Tristan d'Acunha that he refused you at first, and now he extends it to the pole."

"The pole is not the question, boatswain."

"Ah! it will be reached at last, some day."

"The thing has not yet been done. And, besides, I don't take much interest in the pole, and have no ambition to conquer it. In any case it is only to Tsalal Island—"

"Tsalal Island, of course. Nevertheless, you will acknowledge that our captain has been very accommodating to you, and—"

"And therefore I am much obliged to him, boatswain, and," I hastened to add, "to you also; since it is to your influence I owe my passage."

"Very likely." Hurliguerly, a good fellow at bottom, as I afterwards learned, discerned a little touch of irony in my tone; but he did not appear to do so; he was resolved to persevere in his patronage of me. And, indeed, his conversation could not be otherwise than profitable to me, for he was thoroughly acquainted with the Falkland Islands. The result was that on the following day I went ashore adequately prepared to begin my perquisitions. At that period the Falklands were not utilized as they have been since.

It was at a later date that Port Stanley—described by Elisée Réclus, the French geographer, as "ideal"—was discovered. Port Stanley is sheltered at every point of the compass, and could contain all the fleets of Great Britain.

If I had been sailing for the last two months with bandaged eyes, and without knowing whither the _Halbrane_ was bound, and had been asked during the first few hours at our moorings, "Are you in the Falkland Isles or in Norway?" I should have puzzled how to answer the question. For here were coasts forming deep creeks, the steep hills with peaked sides, and the coast-ledges faced with grey rock. Even the seaside climate, exempt from great extremes of cold and heat, is common to the two countries. Besides, the frequent rains of Scandinavia visit Magellan's region in like abundance. Both have dense fogs, and, in spring and autumn, winds so fierce that the very vegetables in the fields are frequently rooted up.

A few walks inland would, however, have sufficed to make me recognize that I was still separated by the equator from the waters of Northern Europe. What had I found to observe in the neighbourhood of Port Egmont after my explorations of the first few days? Nothing but the signs of a sickly vegetation, nowhere arborescent. Here and there a few shrubs grew, in place of the flourishing firs of the Norwegian mountains, and the surface of a spongy soil which sinks and rises under the foot is carpeted with mosses, fungi, and lichens. No! this was not the enticing country where the echoes of the sagas resound, this was not the poetic realm of Wodin and the Valkyries.

On the deep waters of the Falkland Strait, which separates the two principal isles, great masses of extraordinary aquatic vegetation floated, and the bays of the Archipelago, where whales were already becoming scarce, were frequented by other marine mammals of enormous size—seals, twenty-five feet long by twenty in circumference, and
great numbers of sea elephants, wolves, and lions, of proportions no less gigantic. The uproar made by these animals, by the females and their young especially, surpasses description. One would think that herds of cattle were bellowing on the beach. Neither difficulty nor danger attends the capture, or at least the slaughter of the marine beasts. The sealers kill them with a blow of a club when they are lying in the sands on the strand. These are the special features that differentiate Scandinavia from the Falklands, not to speak of the infinite number of birds which rose on my approach, grebe, cormorants, black-headed swans, and above all, tribes of penguins, of which hundreds of thousands are massacred every year.

One day, when the air was filled with a sound of braying, sufficient to deafen one, I asked an old sailor belonging to Port Egmont,—

"Are there asses about here?"

"Sir," he replied, "those are not asses that you hear, but penguins."

The asses themselves, had any been there, would have been deceived by the braying of these stupid birds. I pursued my investigations some way to the west of the bay. West Falkland is more extensive than its neighbour, La Soledad, and possesses another fort at the southern point of Byron's Sound—too far off for me to go there.

I could not estimate the population of the Archipelago even approximately. Probably, it did not then exceed from two to three hundred souls, mostly English, with some Indians, Portuguese, Spaniards, Gauche from the Argentine Pampas, and natives from Tier Del Fuel. On the other hand, the representatives of the ovine and bovine races were to be counted by tens of thousands. More than five hundred thousand sheep yield over four hundred thousand dollars' worth of wool yearly. There are also horned cattle bred on the islands; these seem to have increased in size, while the other quadrupeds, for instance, horses, pigs, and rabbits, have decreased. All these live in a wild state, and the only beast of prey is the dog-fox, a species peculiar to the fauna of the Falklands.

Not without reason has this island been called "a cattle farm." What inexhaustible pastures, what an abundance of that savoury grass, the tussock, does nature lavish on animals there! Australia, though so rich in this respect, does not set a better spread table before her ovine and bovine pensioners.

The Falklands ought to be resorted to for the re-victualling of ships. The groups are of real importance to navigators making for the Strait of Magellan, as well as to those who come to fish in the vicinity of the polar regions.

When the work on the hull was done, West occupied himself with the masts and the rigging, with the assistance of Martin Holt, our sailing master, who was very clever at this kind of industry.

On the 21st of October, Captain Len Guy said to me: "You shall see, Mr. Jeorling, that nothing will be neglected to ensure the success of our enterprise. Everything that can be foreseen has been foreseen, and if the _Halbrane_ is to perish in some catastrophe, it will be because it is not permitted to human beings to go against the designs of God."

"I have good hopes, captain, as I have already said. Your vessel and her crew are worthy of confidence. But, supposing the expedition should be much prolonged, perhaps the supply of provisions—"

"We shall carry sufficient for two years, and those shall be of good quality. Port Egmont has proved capable of supplying us with everything we require."

"Another question, if you will allow me?"

"Put it, Mr. Jeorling, put it."

"Shall you not need a more numerous crew for the _Halbrane_? Though you have men enough for the working of the ship, suppose you find you have to attack or to defend in the Antarctic waters? Let us not forget that, according to Arthur Pym's narrative, there were thousands of natives on Tsalal Island, and if your brother—if his companions are prisoners—"

"I hope, Mr. Jeorling, our artillery will protect the _Halbrane_ better than the _Jane_ was protected by her guns. To tell the truth, the crew we have would not be sufficient for an expedition of this kind. I have been arranging for recruiting our forces."

"Will it be difficult?"

"Yes and no; for the Governor has promised to help me."

"I surmise, captain, that recruits will have to be attracted by larger pay."

"Double pay, Mr. Jeorling, and the whole crew must have the same."

"You know, captain, I am disposed, and, indeed, desirous to contribute to the expenses of the expedition. Will you kindly consider me as your partner?"

"All that shall be arranged, Mr. Jeorling, and I am very grateful to you. The main point is to complete our armament with the least possible delay. We must be ready to clear out in a week."

The news that the schooner was bound for the Antarctic seas had produced some sensation in the Falklands, at Port Egmont, and in the ports of La Soledad. At that season a number of unoccupied sailors were there, awaiting the
passing of the whaling-ships to offer their services, for which they were very well paid in general. If it had been only for a fishing campaign on the borders of the Polar Circle, between the Sandwich Islands and New Georgia, Captain Len Guy would have merely had to make a selection. But the projected voyage was a very different thing; and only the old sailors of the _Halbrane_ were entirely indifferent to the dangers of such an enterprise, and ready to follow their chief whithersoever it might please him to go.

In reality it was necessary to treble the crew of the schooner. Counting the captain, the mate, the boatswain, the cook and myself, we were thirteen on board. Now, thirty-two or thirty-four men would not be too many for us, and it must be remembered that there were thirty-eight on board the _Jane_.

In this emergency the Governor exerted himself to the utmost, and thanks to the largely-extra pay that was offered, Captain Len Guy procured his full tale of seamen. Nine recruits signed articles for the duration of the campaign, which could not be fixed beforehand, but was not to extend beyond Tsalal Island.

The crew, counting every man on board except myself, numbered thirty-one, and a thirty-second for whom I bespeak especial attention. On the eve of our departure, Captain Len Guy was accosted at the angle of the port by an individual whom he recognized as a sailor by his clothes, his walk, and his speech.

This individual said, in a rough and hardly intelligible voice,--
"Captain, I have to make a proposal to you."
"What is it?"
"Have you still a place?"
"For a sailor?"
"For a sailor."
"Yes and no."
"Is it yes?"
"It is yes, if the man suits me."
"Will you take me?"
"You are a seaman?"
"I have served the sea for twenty-five years?"
"Where?"
"In the Southern Seas,"
"Far?"
"Yes, far, far."
"Your age?"
"Forty-four years."
"And you are at Port Egmont?"
"I shall have been there three years, come Christmas."
"Did you expect to get on a passing whale-ship?"
"No."
"Then what were you doing here?"
"Nothing, and I did not think of going to sea again."
"Then why seek a berth?"
"Just an idea. The news of the expedition your schooner is going on was spread. I desire, yes, I desire to take part in it--with your leave, of course."
"You are known at Port Egmont?"
"Well known, and I have incurred no reproach since I came here."
"Very well," said the captain. "I will make inquiry respecting you."
"Inquire, captain, and if you say yes, my bag shall he on board this evening."
"What is your name?"
"Hunt."
"And you are--?"
"An American."

This Hunt was a man of short stature, his weather beaten face was brick red, his skin of a yellowish-brown like an Indian's, his body clumsy, his head very large, his legs were bowed, his whole frame denoted exceptional strength, especially the arms, which terminated in huge hands. His grizzled hair resembled a kind of fur.

A particular and anything but prepossessing character was imparted to the physiognomy of this individual by the extraordinary keenness of his small eyes, his almost lipless mouth, which stretched from ear to ear, and his long teeth, which were dazzlingly white; their enamel being intact, for he had never been attacked by scurvy, the common scourge of seamen in high latitudes.
Hunt had been living in the Falklands for three years; he lived alone on a pension, no one knew from whence this was derived. He was singularly uncommunicative, and passed his time in fishing, by which he might have lived, not only as a matter of sustenance, but as an article of commerce.

The information gained by Captain Len Guy was necessarily incomplete, as it was confined to Hunt's conduct during his residence at Port Egmont. The man did not fight, he did not drink, and he had given many proofs of his Herculean strength. Concerning his past nothing was known, but undoubtedly he had been a sailor. He had said more to Len Guy than he had ever said to anybody; but he kept silence respecting the family to which he belonged, and the place of his birth. This was of no importance; that he should prove to be a good sailor was all we had to think about. Hunt obtained a favourable reply, and came on board that same evening.

On the 27th, in the morning, in the presence of the authorities of the Archipelago, the _Halbrane's_ anchor was lifted, the last good wishes and the final adieus were exchanged, and the schooner took the sea. The same evening Capes Dolphin and Pembroke disappeared in the mists of the horizon.

Thus began the astonishing adventure undertaken by these brave men, who were driven by a sentiment of humanity towards the most terrible regions of the Antarctic realm.

CHAPTER X. THE OUTSET OF THE ENTERPRISE.

Here was I, then, launched into an adventure which seemed likely to surpass all my former experiences. Who would have believed such a thing of me. But I was under a spell which drew me towards the unknown, that unknown of the polar world whose secrets so many daring pioneers had in vain essayed to penetrate. And this time, who could tell but that the sphinx of the Antarctic regions would speak for the first time to human ears!

The new crew had firstly to apply themselves to learning their several duties, and the old—all fine fellows—aided them in the task. Although Captain Len Guy had not had much choice, he seemed to have been in luck. These sailors, of various nationalities, displayed zeal and good will. They were aware, also, that the mate was a man whom it would not do to vex, for Hurliguerly had given them to understand that West would break any man's head who did not go straight. His chief allowed him full latitude in this respect.

"A latitude," he added, "which is obtained by taking the altitude of the eye with a shut fist."

I recognized my friend the boatswain in the manner of this warning to all whom it might concern.

The new hands took the admonition seriously, and there was no occasion to punish any of them. As for Hunt, while he observed the docility of a true sailor in all his duties, he always kept himself apart, speaking to none, and even slept on the deck, in a corner, rather than occupy a bunk in the forecastle with the others.

Captain Len Guy's intention was to take the Sandwich Isles for his point of departure towards the south, after having made acquaintance with New Georgia, distant eight hundred miles from the Falklands. Thus the schooner would be in longitude on the route of the _Jane_.

On the 2nd of November this course brought us to the bearings which certain navigators have assigned to the Aurora Islands, 30° 15' of latitude and 47° 33' of east longitude.

Well, then, notwithstanding the affirmations—which I regarded with suspicion—of the captains of the _Aurora_ in 1762, of the Saint Miguel, in 1769, of the Pearl, in 1779, of the Prinicus and the Dolores, in 1790, of the Atrevida, in 1794, which gave the bearings of the three islands of the group, we did not perceive a single indication of land in the whole of the space traversed by us. It was the same with regard to the alleged islands of the conceited Glass. Not a single little islet was to be seen in the position he had indicated, although the look-out was most carefully kept. It is to be feared that his Excellency the Governor of Tristan d'Acunha will never see his name figuring in geographical nomenclature.

It was now the 6th of November. Our passage promised to be shorter than that of the _Jane_. We had no need to hurry, however. Our schooner would arrive before the gates of the iceberg wall would be open. For three days the weather caused the working of the ship to be unusually laborious, and the new crew behaved very well; thereupon the boatswain congratulated them. Hurliguerly bore witness that Hunt, for all his awkward and clumsy build, was in himself worth three men.

"A famous recruit," said he.

"Yes, indeed," I replied, "and gained just at the last moment."

"Very true, Mr. Jeorling! But what a face and head he has, that Hunt!"

"I have often met Americans like him in the regions of the Far West," I answered, "and I should not be surprised if this man had Indian blood in his veins. Do you ever talk with Hunt?"

"Very seldom, Mr. Jeorling. He keeps himself to himself, and away from everybody. And yet, it is not for want of mouth. I never saw anything like his! And his hands! Have you seen his hands? Be on your guard, Mr. Jeorling, if ever he wants to shake hands with you."
"Fortunately, boatswain, Hunt does not seem to be quarrelsome. He appears to be a quiet man who does not abuse his strength."

"No--except when he is setting a halyard. Then I am always afraid the pulley will come down and the yard with it."

Hunt certainly was a strange being, and I could not resist observing him with curiosity, especially as it struck me that he regarded me at times with a curious intentness.

On the 10th of November, at about two in the afternoon, the look-out shouted,--

"Land ahead, starboard!"

An observation had just given 55° 7' latitude and 41° 13' longitude. This land could only be the Isle de Saint Pierre--its British names are South Georgia, New Georgia, and King George's Island--and it belongs to the circumpolar regions.

It was discovered by the Frenchman, Barbe, in 1675, before Cook; but, although he came in second, the celebrated navigator gave it the series of names which it still bears.

The schooner took the direction of this island, whose snow-clad heights--formidable masses of ancient rock-rise to an immense altitude through the yellow fogs of the surrounding space.

New Georgia, situated within five hundred leagues of Magellan Straits, belongs to the administrative domain of the Falklands. The British administration is not represented there by anyone, the island is not inhabited, although it is habitable, at least in the summer season.

On the following day, while the men were gone in search of water, I walked about in the vicinity of the bay. The place was an utter desert, for the period at which sealing is pursued there had not arrived. New Georgia, being exposed to the direct action of the Antarctic polar current, is freely frequented by marine mammals. I saw several droves of these creatures on the rocks, the strand, and within the rock grottoes of the coast. Whole "smalas" of penguins, standing motionless in interminable rows, brayed their protest against the invasion of an intruder--I allude to myself.

Innumerable larks flew over the surface of the waters and the sands; their song awoke my memory of lands more favoured by nature. It is fortunate that these birds do not want branches to perch on; for there does not exist a tree in New Georgia. Here and there I found a few phanerogams, some pale-coloured mosses, and especially tussock grass in such abundance that numerous herds of cattle might be fed upon the island.

On the 12th November the _Halbrane_ sailed once more, and having doubled Charlotte Point at the extremity of Royal Bay, she headed in the direction of the Sandwich Islands, four hundred miles from thence.

So far we had not encountered floating ice. The reason was that the summer sun had not detached any, either from the icebergs or the southern lands. Later on, the current would draw them to the height of the fiftieth parallel, which, in the southern hemisphere, is that of Paris or Quebec. But we were much impeded by huge banks of fog which frequently shut out the horizon. Nevertheless, as these waters presented no danger, and there was nothing to fear from ice packs or drifting icebergs, the _Halbrane_ was able to pursue her route towards the Sandwich Islands comfortably enough. Great flocks of clangorous birds, breasting the wind and hardly moving their wings, passed us in the midst of the fogs, petrels, divers, halcyons, and albatross, bound landwards, as though to show us the way.

Owing, no doubt, to these mists, we were unable to discern Traversey Island. Captain Len Guy, however, thought some vague streaks of intermittent light which were perceived in the night, between the 14th and 15th, probably proceeded from a volcano which might be that of Traversey, as the crater frequently emits flames.

On the 17th November the schooner reached the Archipelago to which Cook gave the name of Southern Thule in the first instance, as it was the most southern land that had been discovered at that period. He afterwards baptized it Sandwich Isles.

James West repaired to Thule in the large boat, in order to explore the approachable points, while Captain Len Guy and I descended on the Bristol strand.

We found absolutely desolate country; the only inhabitants were melancholy birds of Antarctic species. Mosses and lichens cover the nakedness of an unproductive soil. Behind the beach a few firs rise to a considerable height on the bare hill-sides, from whence great masses occasionally come crashing down with a thundering sound. Awful solitude reigns everywhere. There was nothing to attest the passage of any human being, or the presence of any shipwrecked persons on Bristol Island.

West's exploration at Thule produced a precisely similar result. A few shots fired from our schooner had no effect but to drive away the crowd of petrels and divers, and to startle the rows of stupid penguins on the beach.

While Captain Len Guy and I were walking, I said to him,--

"You know, of course, what Cook's opinion on the subject of the Sandwich group was when he discovered it. At first he believed he had set foot upon a continent. According to him, the mountains of ice carried out of the Antarctic Sea by the drift were detached from that continent. He recognized afterwards that the Sandwiches only formed an
Archipelago, but, nevertheless, his belief that a polar continent farther south exists, remained firm and unchanged."

"I know that is so, Mr. Jeorling," replied the captain, "but if such a continent exists, we must conclude that there is a great gap in its coast, and that Weddell and my brother each got in by that gap at six years' interval. That our great navigator had not the luck to discover this passage is easy to explain; he stopped at the seventy-first parallel! But others found it after Captain Cook, and others will find it again."

"And we shall be of the number, captain."

"Yes--with the help of God! Cook did not hesitate to assert that no one would ever venture farther than he had gone, and that the Antarctic lands, if any such existed, would never be seen, but the future will prove that he was mistaken. They have been seen so far as the eighty-fourth degree of latitude--"

"And who knows," said I, "perhaps beyond that, by Arthur Pym."

"Perhaps, Mr. Jeorling. It is true that we have not to trouble ourselves about Arthur Pym, since he, at least, and Dirk Peters also, returned to America."

"But--supposing he did not return?"

"I consider that we have not to face that eventuality," replied Captain Len Guy.

CHAPTER XI. FROM THE SANDWICH ISLANDS TO THE POLAR CIRCLE.

The _Halbrane_, singularly favoured by the weather, sighted the New South Orkneys group in six days after she had sailed from the Sandwich Islands. This archipelago was discovered by Palmer, an American, and Bothwell, an Englishman, jointly, in 1821-22. Crossed by the sixty-first parallel, it is comprehended between the forty-fourth and the forty, seventh meridian.

On approaching, we were enabled to observe contorted masses and steep cliffs on the north side, which became less rugged as they neared the coast, at whose edge lay enormous ice-floes, heaped together in formidable confusion; these, before two months should have expired, would be drifted towards the temperate waters. At that season the whaling ships would appear to carry on the taking of the great blowing creatures, while some of their crews would remain on the islands to capture seals and sea-elephants.

In order to avoid the strait, which was encumbered with islets and ice-floes, Captain Len Guy first cast anchor at the south-eastern extremity of Laurie Island, where he passed the day on the 24th; then, having rounded Cape Dundas, he sailed along the southern coast of Coronation Island, where the schooner anchored on the 25th. Our close and careful researches produced no result as regarded the sailors of the _Jane_.

The islands and islets were peopled by multitudes of birds. Without taking the penguins into account, those guano-covered rocks were crowded with white pigeons, a species of which I had already seen some specimens. These birds have rather short, conical beaks, and red-rimmed eyelids; they can be knocked over with little difficulty. As for the vegetable kingdom in the New South Orkneys, it is represented only by grey lichen and some scanty seaweeds. Mussels are found in great abundance all along the rocks; of these we procured an ample supply.

The boatswain and his men did not lose the opportunity of killing several dozens of penguins with their sticks, not from a ruthless instinct of destruction, but from the legitimate desire to procure fresh food. "Their flesh is just as good as chicken, Mr. Jeorling," said Hurliguerly. "Did you not eat penguin at the Kerguelens?"

"Yes, boatswain, but it was cooked by Arkins."

"Very well, then; it will be cooked by Endicott here, and you will not know the difference."

And in fact we in the saloon, like the men in the forecastle, were regaled with penguin, and acknowledged the merits of our excellent sea-cook.

The _Halbrane_ sailed on the 26th of November, at six o'clock in the morning, heading south. She reascended the forty-third meridian; this we were able to ascertain very exactly by a good observation. This route it was that Weddell and then William Guy had followed, and, provided the schooner did not deflect either to the east or the west, she must inevitably come to Tsalal Island. The difficulties of navigation had to be taken into account, of course.

The wind, continuing to blow steadily from the west, was in our favour, and if the present speed of the _Halbrane_ could be maintained, as I ventured to suggest to Captain Len Guy, the voyage from the South Orkneys to the Polar Circle would be a short one. Beyond, as I knew, we should have to force the gate of the thick barrier of icebergs, or to discover a breach in that ice-fortress.

"So that, in less than a month, captain--" I suggested, tentatively.

"In less than a month I hope to have found the iceless sea which Weddell and Arthur Pym describe so fully, beyond the ice-wall, and thenceforth we need only sail on under ordinary conditions to Bennet Island in the first place, and afterwards to Tsalal Island. Once on that 'wide open sea,' what obstacle could arrest or even retard our
progress?"

"I can foresee none, captain, so soon as we shall get to the back of the ice-wall. The passage through is the
difficult point; it must be our chief source of anxieties and if only the wind holds--"

"It will hold, Mr. Jeorling. All the navigators of the austral seas have been able to ascertain, as I myself have
done, the permanence of this wind."

"That is true, and I rejoice in the assurance, captain. Besides, I acknowledge, without shrinking from the
admission, that I am beginning to be superstitious."

"And why not, Mr. Jeorling? What is there unreasonable in admitting the intervention of a supernatural power in
the most ordinary circumstances of life? And we, who sail the _Halbrane_, should we venture to doubt it? Recall to
your mind our meeting with the unfortunate Patterson on our ship's course, the fragment of ice carried into the
waters where we were, and dissolved immediately afterwards. Were not these facts providential? Nay, I go farther
still, and am sure that, after having done so much to guide us towards our compatriots, God will not abandon us--"

"I think as you think, captain. No, His intervention is not to be denied, and I do not believe that chance plays the
part assigned to it by superficial minds upon the stage of human life. All the facts are united by a mysterious chain."

"A chain, Mr. Jeorling, whose first link, so far as we are concerned, is Patterson's ice-block, and whose last will
be Tsalal Island. Ah! My brother! my poor brother! Left there for eleven years, with his companions in misery,
without being able to entertain the hope that succour ever could reach them! And Patterson carried far away from
them, under we know not what conditions, they not knowing what had become of him! If my heart is sick when I
think of these catastrophes, Mr. Jeorling, at least it will not fail me unless it be at the moment when my brother
throws himself into my arms."

So then we two were agreed in our trust in Providence. It had been made plain to us in a manifest fashion that
God had entrusted us with a mission, and we would do all that might be humanly possible to accomplish it.

The schooner's crew, I ought to mention, were animated by the like sentiments, and shared the same hopes. I
allude to the original seamen who were so devoted to their captain. As for the new ones, they were probably
indifferent to the result of the enterprise, provided it should secure the profits promised to them by their engagement.

At least, I was assured by the boatswain that such was the case, but with the exception of Hunt. This man had
apparently not been induced to take service by the bribe of high wages or prize money. He was absolutely silent on
that and every other subject.

"If he does not speak to you, boatswain," I said, "neither does he speak to me."

"Do you know, Mr. Jeorling, what it is my notion that man has already done?"

"Tell me, Hurliguerly."

"Well, then, I believe he has gone far, far into the southern seas, let him be as dumb as a fish about it. Why he is
dumb is his own affair. But if that sea-hog of a man has not been inside the Antarctic Circle and even the ice wall by
a good dozen degrees, may the first sea we ship carry me overboard."

"From what do you judge, boatswain?"

"From his eyes, Mr. Jeorling, from his eyes. No matter at what moment, let the ship's head be as it may, those
eyes of his are always on the south, open, unwinking, fixed like guns in position."

Hurliguerly did not exaggerate, and I had already remarked this. To employ an expression of Edgar Poe's, Hunt
had eyes like a falcon's.

"When he is not on the watch," resumed the boatswain, "that savage leans all the time with his elbows on the
side, as motionless as he is mute. His right place would be at the end of our bow, where he would do for a
figurehead to the _Halbrane_, and a very ugly one at that! And then, when he is at the helm, Mr. Jeorling, just
observe him! His enormous hands clutch the handles as though they were fastened to the wheel; he gazes at the
binnacle as though the magnet of the compass were drawing his eyes. I pride myself on being a good steersman, but
as for being the equal of Hunt, I'm not! With him, not for an instant does the needle vary from the sailing-line,
however rough a lurch she may give. I am sure that if the binnacle lamp were to go out in the night Hunt would not
require to relight it. The fire in his eyes would light up the dial and keep him right."

For several days our navigation went on in unbroken monotony, without a single incident, and under favourable
conditions. The spring season was advancing, and whales began to make their appearance in large numbers.

In these waters a week would suffice for ships of heavy tonnage to fill their casks with the precious oil. Thus the
new men of the crew, and especially the Americans, did not conceal their regret for the captain's indifference in the
presence of so many animals worth their weight in gold, and more abundant than they had ever seen whales at that
period of the year. The leading malcontent was Hearne, a sealing-master, to whom his companions were ready to
listen. He had found it easy to get the upper hand of the other sailors by his rough manner and the surly audacity that
was expressed by his whole personality. Hearne was an American, and forty-five years of age. He was an active,
vigorous man, and I could see him in my mind's eye, standing up on his double bowed whaling-boat brandishing the
harpoon, darting it into the flank of a whale, and paying out the rope. He must have been fine to see. Granted his passion for this business, I could not be surprised that his discontent showed itself upon occasion. In any case, however, our schooner was not fitted out for fishing, and the implements of whaling were not on board.

One day, about three o'clock in the afternoon, I had gone forward to watch the gambols of a "school" of the huge sea mammals. Hearne was pointing them out to his companions, and muttering in disjointed phrases,—

"There, look there! That's a fin-back! There's another, and another; three of them with their dorsal fins five or six feet high. Just see them swimming between two waves, quietly, making no jumps. Ah! if I had a harpoon, I bet my head that I could send it into one of the four yellow spots they have on their bodies. But there's nothing to be done in this traffic-box; one cannot stretch one's arms. Devil take it! In these seas it is fishing we ought to be at, not—"

Then, stopping short, he swore a few oaths, and cried out, "And that other whale!"

"The one with a hump like a dromedary?" asked a sailor.

"Yes. It is a humpback," replied Hearne. "Do you make out its wrinkled belly, and also its long dorsal fin? They're not easy to take, those humpbacks, for they go down into great depths and devour long reaches of your lines. Truly, we deserve that he should give us a switch of his tail on our side, since we don't send a harpoon into his."

"Look out! Look out!" shouted the boatswain. This was not to warn us that we were in danger of receiving the formidable stroke of the humpback's tail which the sealing-master had wished us. No, an enormous blower had come alongside the schooner, and almost on the instant a spout of ill-smelling water was ejected from its blow-hole with a noise like a distant roar of artillery. The whole foredeck to the main hatch was inundated.

"That's well done!" growled Hearne, shrugging his shoulders, while his companions shook themselves and cursed the humpback.

Besides these two kinds of cetacea we had observed several right-whales, and these are the most usually met with in the southern seas. They have no fins, and their blubber is very thick. The taking of these fat monsters of the deep is not attended with much danger. The right-whales are vigorously pursued in the southern seas, where the little shell fish called "whales' food" abound. The whales subsist entirely upon these small crustaceans.

Presently, one of these right-whales, measuring sixty feet in length—that is to say, the animal was the equivalent of a hundred barrels of oil—was seen floating within three cables' lengths of the schooner.

"Yes! that's a right-whale," exclaimed Hearne. "You might tell it by its thick, short spout. See, that one on the port side, like a column of smoke, that's the spout of a right-whale! And all this is passing before our very noses—a dead loss! Why, it's like emptying money-bags into the sea not to fill one's barrels when one can. A nice sort of captain, indeed, to let all this merchandise be lost, and do such wrong to his crew!"

"Hearne," said an imperious voice, "go up to the maintop. You will be more at your ease there to reckon the whales."

"But, sir—"

"No reply, or I'll keep you up there until to-morrow. Come—be off at once."

And as he would have got the worst of an attempt at resistance, the sealing-master obeyed in silence.

The season must have been abnormally advanced, for although we continued to see a vast number of testaceans, we did not catch sight of a single whaling-ship in all this fishing-ground.

I hasten to state that, although we were not to be tempted by whales, no other fishing was forbidden on board the _Halbrane_. and our daily bill of fare profited by the boatswain's trawling lines, to the extreme satisfaction of stomachs weary of salt meat. Our lines brought us goby, salmon, cod, mackerel, conger, mullet, and parrot-fish.

The birds which we saw, and which came from every point of the horizon, were those I have already mentioned, petrels, divers, halcyons, and pigeons in countless flocks. I also saw—but beyond aim—a giant petrel; its dimensions were truly astonishing. This was one of those called "quebrantahnesos" by the Spaniards. This bird of the Magellanian waters is very remarkable; its curved and slender wings have a span of from thirteen to fourteen feet, equal to that of the wings of the great albatross. Nor is the latter wanting among these powerful winged creatures; we saw the dusky-plumed albatross of the cold latitudes, sweeping towards the glacial zone.

On the 30th of November, after observation taken at noon, it was found that we had reached 66° 23' 3" of latitude.

The _Halbrane_ had then crossed the Polar Circle which circumscribes the area of the Antarctic zone.

CHAPTER XII. BETWEEN THE POLAR CIRCLE AND THE ICE WALL.

Since the _Halbrane_ has passed beyond the imaginary curve drawn at twenty-three and a half degrees from the Pole, it seems as though she had entered a new region, "that region of Desolation and Silence," as Edgar Poe says; that magic person of splendour and glory in which the _Eleanora's_ singer longed to be shut up to all eternity; that immense ocean of light ineffable.
It is my belief—to return to less fanciful hypotheses—that the Antarctic region, with a superficies of more than five millions of square miles, has remained what our spheroid was during the glacial period. In the summer, the southern zone, as we all know, enjoys perpetual day, owing to the rays projected by the orb of light above its horizon in his spiral ascent. Then, so soon as he has disappeared, the long night sets in, a night which is frequently illuminated by the polar aurora or Northern Lights.

It was then in the season of light that our schooner was about to sail in these formidable regions. The permanent brightness would not fail us before we should have reached Tsalal Island, where we felt no doubt of finding the men of the _Jane_.

When Captain Len Guy, West, and the old sailors of the crew learned that the schooner had cleared the sixty-sixth parallel of latitude, their rough and sunburnt faces shone with satisfaction. The next day, Hurliguerly accosted me on the deck with a broad smile and a cheerful manner.

"So then, Mr. Jeorling," said he, "we've left the famous' Circle' behind us!"

"Not far enough, boatswain, not far enough!"

"Oh, that will come! But I am disappointed."

"In what way?"

"Because we have not done what is usual on board ships on crossing the Line!"

"You regret that?"

"Certainly I do, and the _Halbrane_ might have been allowed the ceremony of a southern baptism."

"A baptism? And whom would you have baptized, boatswain, seeing that all our men, like yourself, have already sailed beyond this parallel?"

"We! Oh, yes! But you! Oh, no, Mr. Jeorling. And why, may I ask, should not that ceremony be performed in your honour?"

"True, boatswain; this is the first time in the course of my travels that I have been in so high a latitude."

"And you should have been rewarded by a baptism, Mr. Jeorling. Yes, indeed, but without any big fuss—no drum and trumpet about it, and leaving out old Father Neptune with his masquerade. If you would permit me to baptize you—"

"So be it, Hurliguerly," said I, putting my hand into my pocket. "Baptize as you please. Here is something to drink my health with at the nearest tavern."

"Then that will be Bennet Islet or Tsalal Island, provided there are any taverns in those savage islands, and any Atkinses to keep them."

"Tell me, boatswain—I always get back to Hunt—does he seem so much pleased to have passed the Polar Circle as the _Halbrane's_ old sailors are?"

"Who knows? There's nothing to be got out of him one way or another. But, as I have said before, if he has not already made acquaintance with the ice-barrier."

"What makes you think so?"

"Everything and nothing, Mr. Jeorling. One feels these things; one doesn't think them. Hunt is an old sea-dog, who has carried his canvas bag into every corner of the world."

The boatswain's opinion was mine also, and some inexplicable presentiment made me observe Hunt constantly, for he occupied a large share of my thoughts.

Early in December the wind showed a north-west tendency, and that was not good for us, but we would have no serious right to complain so long as it did not blow due south-west. In the latter case the schooner would have been thrown out of her course, or at least she would have had a struggle to keep in it, and it was better for us, in short, not to stray from the meridian which we had followed since our departure from the New South Orkneys. Captain Len Guy was made anxious by this alteration in the wind, and besides, the speed of the _Halbrane_ was manifestly lessened, for the breeze began to soften on the 4th, and in the middle of the night it died away.

In the morning the sails hung motionless and shrivelled along the masts. Although not a breath reached us, and the surface of the ocean was unruffled, the schooner was rocked from side to side by the long oscillations of the swell coming from the west.

"The sea feels something," said Captain Len Guy to me, "and there must be rough weather on that side," he added, pointing westward.

"The horizon is misty," I replied; "but perhaps the sun towards noon—"

"The sun has no strength in this latitude, Mr. Jeorling, not even in summer. Jem!"

West came up to us.

"What do you think of the sky?"

"I do not think well of it. We must be ready for anything and everything, captain."

"Has not the look-out given warning of the first drifting ice?" I asked.
"Yes," replied Captain Len Guy, "and if we get near the icebergs the damage will not be to them. Therefore, if prudence demands that we should go either to the east or to the west, we shall resign ourselves, but only in case of absolute necessity."

The watch had made no mistake. In the afternoon we sighted masses, islets they might be called, of ice, drifting slowly southward, but these were not yet of considerable extent or altitude. These packs were easy to avoid; they could not interfere with the sailing of the _Halbrane_. But, although the wind had hitherto permitted her to keep on her course, she was not advancing, and it was exceedingly disagreeable to be rolling about in a rough and hollow sea which struck our ship's sides most unpleasantly.

About two o'clock it was blowing a hurricane from all the points of the compass. The schooner was terribly knocked about, and the boatswain had the deck cleared of everything that was movable by her rolling and pitching.

Fortunately, the cargo could not be displaced, the stowage having been effected with perfect forecast of nautical eventualities. We had not to dread the fate of the _Grampus_, which was lost owing to negligence in her lading. It will be remembered that the brig turned bottom upwards, and that Arthur Pym and Dirk Peters remained for several days crouching on its keel.

Besides, the schooner's pumps did not give a drop of water; the ship was perfectly sound in every part, owing to the efficient repairs that had been done during our stay at the Falklands. The temperature had fallen rapidly, and hail, rain, and snow thickened and darkened the air. At ten o'clock in the evening--I must use this word, although the sun remained always above the horizon--the tempest increased, and the captain and his lieutenant, almost unable to hear each other's voices amid the elemental strife, communicated mostly by gestures, which is as good a mode as speech between sailors.

I could not make up my mind to retire to my cabin, and, seeking the shelter of the roundhouse, I remained on deck, observing the weather phenomena, and the skill, certainty, celerity, and effect with which the crew carried out the orders of the captain and West. It was a strange and terrible experience for a landsman, even one who had seen so much of the sea and seamanship as I had. At the moment of a certain difficult manoeuvre, four men had to climb to the crossbars of the fore-mast in order to reef the mainsail. The first who sprang to the ratlines was Hunt. The second was Martin Holt; Burry and one of the recruits followed them. I could not have believed that any man could display such skill and agility as Hunt's. His hands and feet hardly caught the ratlines. Having reached the crossbars first, he stretched himself on the ropes to the end of the yard, while Holt went to the other end, and the two recruits remained in the middle.

While the men were working, and the tempest was raging round us, a terrific lurch of the ship to starboard under the stroke of a mountainous wave, flung everything on the deck into wild confusion, and the sea rushed in through the scupper-holes. I was knocked down, and for some moments was unable to rise.

So great had been the incline of the schooner that the end of the yard of the mainsail was plunged three or four feet into the crest of a wave. When it emerged Martin Holt, who had been astride on it, had disappeared. A cry was heard, uttered by the sailing-master, whose arm could be seen wildly waving amid the whiteness of the foam. The sailors rushed to the side and flung out one a rope, another a cask, a third a spar--in short, any object of which Martin Holt might lay hold. At the moment when I struggled up to my feet I caught sight of a massive substance which cleft the air and vanished in the whirl of the waves.

Was this a second accident? No! it was a voluntary action, a deed of self-sacrifice. Having finished his task, Hunt had thrown himself into the sea, that he might save Martin Holt.

"Two men overboard!"

Yes, two--one to save the other. And were they not about to perish together?

The two heads rose to the foaming surface of the water.

Hunt was swimming vigorously, cutting through the waves, and was nearing Martin Holt.

"They are lost! both lost!" exclaimed the captain. "The boat, West, the boat!"

"If you give the order to lower it," answered West, "I will be the first to get into it, although at the risk of my life. But I must have the order."

In unspeakable suspense the ship's crew and myself had witnessed this scene. None thought of the position of the _Halbrane_, which was sufficiently dangerous; all eyes were fixed upon the terrible waves. Now fresh cries, the frantic cheers of the crew, rose above the roar of the elements. Hunt had reached the drowning man just as he sank out of sight, had seized hold of him, and was supporting him with his left arm, while Holt, incapable of movement, swayed helplessly about like a weed. With the other arm Hunt was swimming bravely and making way towards the schooner.

A minute, which seemed endless, passed. The two men, the one dragging the other, were hardly to be distinguished in the midst of the surging waves.

At last Hunt reached the schooner, and caught one of the lines hanging over the side.
In a minute Hunt and Martin Holt were hoisted on board; the latter was laid down at the foot of the foremast, and the former was quite ready to go to his work. Holt was speedily restored by the aid of vigorous rubbing; his senses came back, and he opened his eyes.

"Martin Holt," said Captain Len Guy, who was leaning over him, "you have been brought back from very far--"

"Yes, yes, captain," answered Holt, as he looked about him with a searching gaze, "but who saved me?"

"Hunt," cried the boatswain, "Hunt risked his life for you."

As the latter was hanging back, Hurliguerly pushed him towards Martin Holt, whose eyes expressed the liveliest gratitude.

"Hunt," said he, "you have saved me. But for you I should have been lost. I thank you."

Hunt made no reply.

"Hunt," resumed Captain Len Guy, "don't you hear?"

The man seemed not to have heard.

"Hunt," said Martin Holt again, "come near to me. I thank you. I want to shake hands with you."

And he held out his right hand. Hunt stepped back a few paces, shaking his head with the air of a man who did not want so many compliments for a thing so simple, and quietly walked forward to join his shipmates, who were working vigorously under the orders of West.

Decidedly, this man was a hero in courage and self-devotion; but equally decidedly he was a being impervious to impressions, and not on that day either was the boatswain destined to know "the colour of his words!"

For three whole days, the 6th, 7th, and 8th of December, the tempest raged in these waters, accompanied by snow storms which perceptibly lowered the temperature. It is needless to say that Captain Len Guy proved himself a true seaman, that James West had an eye to everything, that the crew seconded them loyally, and that Hunt was always foremost when there was work to be done or danger to be incurred.

In truth, I do not know how to give an idea of this man! What a difference there was between him and most of the sailors recruited at the Falklands, and especially between him and Hearne, the sealing-master! They obeyed, no doubt, for such a master as James West gets himself obeyed, whether with good or ill will. But behind backs what complaints were made, what recriminations were exchanged I All this, I feared, was of evil presage for the future.

Martin Holt had been able to resume his duties very soon, and he fulfilled them with hearty good-will. He knew the business of a sailor right well, and was the only man on board who could compete with Hunt in handiness and zeal.

"Well, Holt," said I to him one day when he was talking with the boatswain, "what terms are you on with that queer fellow Hunt now? Since the salvage affair, is he a little more communicative?"

"No, Mr. Jeorling, and I think he even tries to avoid me."

"To avoid you?"

"Well, he did so before, for that matter."

"Yes, indeed, that is true," added Hurliguerly; "I have made the same remark more than once."

"Then he keeps aloof from you, Holt, as from the others?"

"From me more than from the others."

"What is the meaning of that?" "I don't know, Mr. Jeorling."

I was surprised at what the two men had said, but a little observation convinced me that Hunt actually did avoid every occasion of coming in contact with Martin Holt. Did he not think that he had a right to Holt's gratitude although the latter owed his life to him? This man's conduct was certainly very strange.

In the early morning of the 9th the wind showed a tendency to change in the direction of the east, which would mean more manageable weather for us. And, in fact, although the sea still remained rough, at about two in the morning it became feasible to put on more sail without risk, and thus the _Halbrane_ regained the course from which she had been driven by the prolonged tempest.

In that portion of the Antarctic sea the ice-packs were more numerous, and there was reason to believe that the tempest, by hastening the smash-up, had broken the barrier of the iceberg wall towards the east.

CHAPTER XIII. ALONG THE FRONT OF THE ICEBERGS.

Although the seas beyond the Polar Circle were wildly tumultuous, it is but just to acknowledge that our navigation had been accomplished so far under exceptional conditions. And what good luck it would be if the _Halbrane_, in this first fortnight of December, were to find the Weddell route open!

There! I am talking of the Weddell route as though it were a macadamized road, well kept, with mile-stones and "This way to the South Pole" on a signpost!

The numerous wandering masses of ice gave our men no trouble; they were easily avoided. It seemed likely that
no real difficulties would arise until the schooner should have to try to make a passage for herself through the icebergs.

Besides, there was no surprise to be feared. The presence of ice was indicated by a yellowish tint in the atmosphere, which the whalers called "blink." This is a phenomenon peculiar to the glacial zones which never deceives the observer.

For five successive days the _Halbrane_ sailed without sustaining any damage, without having, even for a moment, had to fear a collision. It is true that in proportion as she advanced towards the south the number of icepacks increased and the channels became narrower. On the 14th an observation gave us 72° 37' for latitude, our longitude remaining the same, between the forty-second and the forty-third meridian. This was already a point beyond the Antarctic Circle that few navigators had been able to reach. We were at only two degrees lower than Weddell.

The navigation of the schooner naturally became a more delicate matter in the midst of those dim, wan masses soiled with the excreta of birds. Many of them had a leprous look: compared with their already considerable volume, how small our little ship, over whose mast some of the icebergs already towered, must have appeared!

Captain Len Guy admirably combined boldness and prudence in his command of his ship. He never passed to leeward of an iceberg, if the distance did not guarantee the success of any manoeuvre whatsoever that might suddenly become necessary. He was familiar with all the contingencies of ice-navigation, and was not afraid to venture into the midst of these flotillas of drifts and packs. That day he said to me,--

"Mr. Jeorling; this is not the first time that I have tried to penetrate into the Polar Sea, and without success. Well, if I made the attempt to do this when I had nothing but presumption as to the fate of the _Jane_ to go upon, what shall I not do now that presumption is changed into certainty?"

"I understand that, captain, and of course your experience of navigation in these waters must increase our chances of success."

"Undoubtedly. Nevertheless, all that lies beyond the fixed icebergs is still the unknown for me, as it is for other navigators."

"The Unknown! No, not absolutely, captain, since we possess the important reports of Weddell, and, I must add, of Arthur Pym also."

"Yes, I know; they have spoken of the open sea."

"Do you not believe that such a sea exists?"

"Yes, I do believe that it exists, and for valid reasons. In fact, it is perfectly manifest that these masses, called icebergs and icefields, could not be formed in the ocean itself. It is the tremendous and irresistible action of the surge which detaches them from the continents or islands of the high latitudes. Then the currents carry them into less cold waters, where their edges are worn by the waves, while the temperature disintegrates their bases and their sides, which are subjected to thermometric influences."

"That seems very plain," I replied. "Then these masses have come from the icebergs. (1) They clash with them in drifting, sometimes break into the main body, and clear their passage through. Again, we must not judge the southern by the northern zone. The conditions are not identical. Cook has recorded that he never met the equivalent of the Antarctic ice mountains in the Greenland seas, even at a higher latitude."

"What is the reason?" I asked.

"No doubt that the influence of the south winds is predominant in the northern regions. Now, those winds do not reach the northern regions until they have been heated in their passage over America, Asia, and Europe, and they contribute to raise the temperature of the atmosphere. The nearest land, ending in the points of the Cape of Good Hope, Patagonia, and Tasmania, does not modify the atmospheric currents."

"That is an important observation, captain, and it justifies your opinion with regard to an open sea."

"Yes, open--at least, for ten degrees behind the icebergs. Let us then only get through that obstacle, and our greatest difficulty will have been conquered. You were right in saying that the existence of that open sea has been formally recognized by Weddell."

"And by Arthur Pym, captain."

"And by Arthur Pym."

From the 15th of December the difficulties of navigation increased with the number of the drifting masses. The wind, however, continued to be uniformly favourable, showing no tendency to veer to the south. The breeze freshened now and then, and we had to take in sail. When this occurred we saw the sea foaming along the sides of the ice packs, covering them with spray like the rocks on the coast of a floating island, but without hindering their onward march.

Our crew could not fail to be impressed by the sight of the schooner making her way through these moving masses; the new men among them, at least, for the old hands had seen such manoeuvres before. But they soon
became accustomed to it, and took it all for granted.

It was necessary to organize the look-out ahead with the greatest care. West had a cask fixed at the head of the foremost--what is called a crow's-nest--and from thence an unremitting watch was kept.

The 16th was a day of excessive fatigue to the men. The packs and drifts were so close that only very narrow and winding passage-way between them was to be found, so that the working of the ship was more than commonly laborious.

Under these circumstances, none of the men grumbled, but Hunt distinguished himself by his activity. Indeed, he was admitted by Captain Len Guy and the crew to be an incomparable seaman. But there was something mysterious about him that excited the curiosity of them all.

At this date the _Halbrane_ could not be very far from the icebergs. If she held on in her course in that direction she would certainly reach them before long, and would then have only to seek for a passage. Hitherto, however, the look-out had not been able to make out between the icebergs an unbroken crest of ice beyond the ice-fields.

Constant and minute precautions were indispensable all day on the 16th, for the helm, which was loosened by merciless blows and bumps, was in danger of being unshipped.

The sea mammals had not forsaken these seas. Whales were seen in great numbers, and it was a fairy-like spectacle when several of them spouted simultaneously. With fin-backs and hump-backs, porpoises of colossal size appeared, and these Hearne harpooned cleverly when they came within range. The flesh of these creatures was much relished on board, after Endicott had cooked it in his best manner.

As for the usual Antarctic birds, petrels, pigeons, and cormorants, they passed in screaming flocks, and legions of penguins, ranged along the edges of the icefields, watched the evolutions of the schooner. These penguins are the real inhabitants of these dismal solitudes, and nature could not have created a type more suited to the desolation of the glacial zone.

On the morning of the 17th the man in the crow's-nest at last signalled the icebergs.

Five or six miles to the south a long dentated crest upreared itself, plainly standing out against the fairly clear sky, and all along it drifted thousands of ice-packs. This motionless barrier stretched before us from the north-west to the south-east, and by merely sailing along it the schooner would still gain some degrees southwards.

When the _Halbrane_ was within three miles of the icebergs, she lay-to in the middle of a wide basin which allowed her complete freedom of movement.

A boat was lowered, and Captain Len Guy got into it, with the boatswain, four sailors at the oars, and one at the helm. The boat was pulled in the direction of the enormous rampart, vain search was made for a channel through which the schooner could have slipped, and after three hours of this fatiguing reconnoitring, the men returned to the ship. Then came a squall of rain and snow which caused the temperature to fall to thirty-six degrees (2'22 C. above zero), and shut out the view of the ice-rampart from us.

During the next twenty-four hours the schooner lay within four miles of the icebergs. To bring her nearer would have been to get among winding channels from which it might not have been possible to extricate her. Not that Captain Len Guy did not long to do this, in his fear of passing some opening unperceived.

"If I had a consort," he said, "I would sail closer along the icebergs, and it is a great advantage to be two, when one is on such an enterprise as this! But the _Halbrane_ is alone, and if she were to fail us--"

Even though we approached no nearer to the icebergs than prudence permitted, our ship was exposed to great risk, and West was constantly obliged to change his trim in order to avoid the shock of an icefield.

Fortunately, the wind blew from east to north-nor'-east without variation, and it did not freshen. Had a tempest arisen I know not what would have become of the schooner--yes, though, I do know too well: she would have been lost and all on board of her. In such a case the _Halbrane_ could not have escaped; we must have been flung on the base of the barrier.

After a long examination Captain Len Guy had to renounce the hope of finding a passage through the terrible wall of ice. It remained only to endeavour to reach the south-east point of it. At any rate, by following that course we lost nothing in latitude; and, in fact, on the 18th the observation taken made the seventy-third parallel the position of the _Halbrane_.

I must repeat, however, that navigation in the Antarctic seas will probably never be accomplished under more felicitous circumstances--the precocity of the summer season, the permanence of the north wind, the temperature forty-nine degrees at the lowest; all this was the best of good-fortune. I need not add that we enjoyed perpetual light, and the whole twenty-four hours round the sun's rays reached us from every point of the horizon.

Two or three times the captain approached within two miles of the icebergs. It was impossible but that the vast mass must have been subjected to climacteric influences; ruptures must surely have taken place at some points.

But his search had no result, and we had to fall back into the current from west to east.

I must observe at this point that during all our search we never descried land or the appearance of land out at sea,
as indicated on the charts of preceding navigators. These maps are incomplete, no doubt, but sufficiently exact in
their main lines. I am aware that ships have often passed over the indicated bearings of land. This, however, was not
admissible in the case of Tsalal. If the _Jane_ had been able to reach the islands, it was because that portion of the
Antarctic sea was free, and in so "early" a year, we need not fear any obstacle in that direction.

At last, on the 19th, between two and three o'clock in the afternoon, a shout from the crow's-nest was heard.
"What is it?" roared West.
"The iceberg wall is split on the south-east."
"What is beyond?" "Nothing in sight."

It took West very little time to reach the point of observation, and we all waited below, how impatiently may be
imagined. What if the look-out were mistaken, if some optical delusion?--But West, at all events, would make no
mistake.

After ten interminable minutes his clear voice reached us on the deck.
"Open sea!" he cried.
Unanimous cheers made answer.

The schooner's head was put to the south-east, hugging the wind as much as possible.

Two hours later we had doubled the extremity of the ice-barrier, and there lay before our eyes a sparkling sea,
entirely open.

(1) The French word is _banquise_, which means the vast stretch of icebergs farther south than the barrière or
ice wall.

CHAPTER XIV. A VOICE IN A DREAM.

Entirely free from ice? No. It would have been premature to affirm this as a fact. A few icebergs were visible in
the distance, while some drifts and packs were still going east. Nevertheless, the break-up had been very thorough
on that side, and the sea was in reality open, since a ship could sail freely.

"God has come to our aid," said Captain Len Guy. "May He be pleased to guide us to the end."
"In a week," I remarked, "our schooner might come in sight of Tsalal Island."

"Provided that the east wind lasts, Mr. Jeorling. Don't forget that in sailing along the icebergs to their eastern
extremity, the _Halbrane_ went out of her course, and she must be brought back towards the west."

"The breeze is for us, captain."

"And we shall profit by it, for my intention is to make for Bennet Islet. It was there that my brother first landed,
and so soon as we shall have sighted that island we shall be certain that we are on the right route. To-day, when I
have ascertained our position exactly, we shall steer for Bennet Islet."

"Who knows but that we may come upon some fresh sign?"
"It is not impossible, Mr. Jeorling."

I need not say that recourse was had to the surest guide within our reach, that veracious narrative of Arthur
Gordon Pym, which I read and re-read with intense attention, fascinated as I was by the idea that I might be
permitted to behold with my own eyes those strange phenomena of nature in the Antarctic world which I, in
common with all Edgar Poe's readers, had hitherto regarded as creations of the most imaginative writer who ever
gave voice by his pen to the phantasies of a unique brain. No doubt a great part of the wonders of Arthur Gordon
Pym's narrative would prove pure fiction, but if even a little of the marvellous story were found to be true, how great
a privilege would be mine!

The picturesque and wonderful side of the story we were studying as gospel truth had little charm and but slight
interest for Captain Len Guy; he was indifferent to everything in Pym's narrative that did not relate directly to the
castaways of Tsalal Island: his mind was solely and constantly set upon their rescue.

According to the narrative of Arthur Pym _Jane_ experienced serious difficulties, due to bad weather, from the
1st to the 4th of January, 1828. It was not until the morning of the 5th, in latitude 23° 15' that she found a free
passage through the last iceberg that barred her way. The final difference between our position and the _Jane_ in a
parallel ease, was that the _Jane_ took fifteen days to accomplish the distance of ten degrees, or six hundred miles,
which separated her on the 5th of January from Tsalal Island, while on the 19th of December the _Halbrane_ was
only about seven degrees, or four hundred miles, off the island. Bennet Islet, where Captain Guy intended to put in
for twenty-four hours, was fifty miles nearer. Our voyage was progressing under prosperous conditions; we were no
longer visited by sudden hail and snow storms, or those rapid falls of temperature which tried the crew of the _Jane_
so sorely. A few ice-floes drifted by us, occasionally peopled, as tourists throng a pleasure yacht, by penguins, and
also by dusky seals, lying flat upon the white surfaces like enormous leeches. Above this strange flotilla we traced
the incessant flight of petrels, pigeons, black puffins, divers, grebe, sterns, cormorants, and the sooty-black albatross
of the high latitudes. Huge medusas, exquisitely tinted, floated on the water like spread parasols. Among the
denizens of the deep, captured by the crew of the schooner with line and net, I noted more particularly a sort of giant
John Dory (1) (_dorade_) three feet in length, with firm and savoury flesh.

During the night, or rather what ought to have been the night of the 19th-20th, my sleep was disturbed by a strange dream. Yes! there could be no doubt but that it was only a dream! Nevertheless, I think it well to record it here, because it is an additional testimony to the haunting influence under which my brain was beginning to labour.

I was sleeping--at two hours after midnight--and was awakened by a plaintive and continuous murmuring sound. I opened--or I imagined I opened my eyes. My cabin was in profound darkness. The murmur began again; I listened, and it seemed to me that a voice--a voice which I did not know--whispered these words:--

"Pym . . . Pym . . . poor Pym!"

Evidently this could only be a delusion; unless, indeed, some one had got into my cabin: the door was locked.

"Pym!" the voice repeated. "Poor Pym must never be forgotten."

This time the words were spoken close to my ear. What was the meaning of the injunction, and why was it addressed to me? And besides, had not Pym, after his return to America, met with a sudden and deplorable death, the circumstances or the details being unknown?

I began to doubt whether I was in my right mind, and shook myself into complete wakefulness, recognizing that I had been disturbed by an extremely vivid dream due to some cerebral cause.

I turned out of my berth, and, pushing back the shutter, looked out of my cabin. No one aft on the deck, except Hunt, who was at the helm.

I had nothing to do but to lie down again, and this I did. It seemed to me that the name of Arthur Pym was repeated in my hearing several times; nevertheless, I fell asleep and did not wake until morning, when I retained only a vague impression of this occurrence, which soon faded away. No other incident at that period of our voyage calls for notice. Nothing particular occurred on board our schooner. The breeze from the north, which had forsaken us, did not recur, and only the current carried the _Halbrane_ towards the south. This caused a delay unbearable to our impatience.

At last, on the 21st, the usual observation gave 82° 50' of latitude, and 42° 20' of west longitude. Bennet Islet, if it had any existence, could not be far off now.

Yes! the islet did exist, and its bearings were those indicated by Arthur Pym.

At six o'clock in the evening one of the crew cried out that there was land ahead on the port side. (1) The legendary etymology of this piscatorial designation is _Janitore_, the "door-keeper," in allusion to St. Peter, who brought a fish said to be of that species, to our Lord at His command.

CHAPTER XV. BENNET ISLET.

The _Halbrane_ was then within sight of Bennet Islet! The crew urgently needed rest, so the disembarkation was deferred until the following day, and I went back to my cabin.

The night passed without disturbance, and when day came not a craft of any kind was visible on the waters, not a native on the beach. There were no huts upon the coast, no smoke arose in the distance to indicate that Bennet Islet was inhabited. But William Guy had not found any trace of human beings there, and what I saw of the islet answered to the description given by Arthur Pym. It rose upon a rocky base of about a league in circumference, and was so arid that no vegetation existed on its surface.

"Mr. Jeorling," said Captain Len Guy, "do you observe a promontory in the direction of the north-east?"

"I observe it, captain."

"Is it not formed of heaped-up rocks which look like giant bales of cotton?"

"That is so, and just what the narrative describes."

"Then all we have to do is to land on the promontory, Mr. leoding. Who knows but we may come across some vestige of the crew of the fane, supposing them to have succeeded in escaping from Tsalal Island."

The speaker was devouring the islet with his eyes. What must his thoughts, his desires, his impatience have been! But there was a man whose gaze was set upon the same point even more fixedly; that man was Hunt.

Before we left the _Halbrane_ Len Guy enjoined the most minute and careful watchfulness upon his lieutenant. This was a charge which West did not need. Our exploration would take only half a day at most. If the boat had not returned in the afternoon a second was to be sent in search of us.

"Look sharp also after our recruits," added the captain.

"Don't be uneasy, captain," replied the lieutenant. "Indeed, since you want four men at the oars you had better take them from among the new ones. That will leave four less troublesome fellows on board."

This was a good idea, for, under the deplorable influence of Hearne, the discontent of his shipmates from the Falklands was on the increase. The boat being ready, four of the new crew took their places forward, while Hunt, at his own request, was steersman. Captain Len Guy, the boatswain and myself, all well armed, seated ourselves aft, and we started for the northern point of the islet. In the course of an hour we had doubled the promontory, and come in sight of the little bay whose shores the boats of the fane had touched.
Hunt steered for this bay, gliding with remarkable skill between the rocky points which stuck up here and there. One would have thought he knew his way among them.

We disembarked on a stony coast. The stones were covered with sparse lichen. The tide was already ebbing, leaving uncovered the sandy bottom of a sort of beach strewn with black blocks, resembling big nail-heads.

Two men were left in charge of the boat while we landed amid the rocks, and, accompanied by the other two, Captain Len Guy, the boatswain, Hunt and I proceeded towards the centre, where we found some rising ground, from whence we could see the whole extent of the islet. But there was nothing to be seen on any side, absolutely nothing. On coming down from the slight eminence Hunt went on in front, as it had been agreed that he was to be our guide. We followed him therefore, as he led us towards the southern extremity of the islet. Having reached the point, Hunt looked carefully on all sides of him, then stooped and showed us a piece of half rotten wood lying among the scattered stones.

"I remember!" I exclaimed; "Arthur Pym speaks of a piece of wood with traces of carving on it which appeared to have belonged to the bow of a ship."

"Among the carving my brother fancied he could trace the design of a tortoise," added Captain Len Guy.

"Just so," I replied, "but Arthur Pym pronounced that resemblance doubtful. No matter; the piece of wood is still in the same place that is indicated in the narrative, so we may conclude that since the _Jane_ cast anchor here no other crew has ever set foot upon Bennet Islet. It follows that we should only lose time in looking out for any tokens of another landing. We shall know nothing until we reach Tsalal Island."

"Yes, Tsalal Island," replied the captain.

We then retraced our steps in the direction of the bay. In various places we observed fragments of coral reef, and bêche-de-mer was so abundant that our schooner might have taken a full cargo of it. Hunt walked on in silence with downcast eyes, until as we were close upon the beach to the east, he, being about ten paces ahead, stopped abruptly, and summoned us to him by a hurried gesture.

In an instant we were by his side. Hunt had evinced no surprise on the subject of the piece of wood first found, but his attitude changed when he knelt down in front of a worm-eaten plank lying on the sand. He felt it all over with his huge hands, as though he were seeking some tracery on its rough surface whose signification might be intelligible to him. The black paint was hidden under the thick dirt that had accumulated upon it. The plank had probably formed part of a ship’s stern, as the boatswain requested us to observe.

"Yes, yes," repeated Captain Len Guy, "it made part of a stern."

Hunt, who still remained kneeling, nodded his big head in assent.

"But," I remarked, "this plank must have been cast upon Bennet Islet from a wreck! The cross-currents must have found it in the open sea, and--"

"If that were so--" cried the captain.

The same thought had occurred to both of us. What was our surprise, indeed our amazement, our unspeakable emotion, when Hunt showed us eight letters cut in the plank, not painted, but hollow and distinctly traceable with the finger.

It was only too easy to recognize the letters of two names, arranged in two lines, thus:

AN LI.E.PO.L.

The _Jane of Liverpool_! The schooner commanded by Captain William Guy! What did it matter that time had blurred the other letters? Did not those suffice to tell the name of the ship and the port she belonged to? The _Jane_ of Liverpool!

Captain Len Guy had taken the plank in his hands, and now he pressed his lips to it, while tears fell from his eyes.

It was a fragment of the _Jane_! I did not utter a word until the captain’s emotion had subsided. As for Hunt, I had never seen such a lightning glance from his brilliant hawk-like eyes as he now cast towards the southern horizon.

Captain Len Guy rose.

Hunt, without a word, placed the plank upon his shoulder, and we continued our route.

When we had made the tour of the island, we halted at the place where the boat had been left under the charge of two sailors, and about half-past two in the afternoon we were again on board.

Early on the morning of the 23rd of December the _Halbrane_ put off from Bennet Islet, and we carried away with us new and convincing testimony to the catastrophe which Tsalal Island had witnessed.

During that day, I observed the sea water very attentively, and it seemed to me less deeply blue than Arthur Pym describes it. Nor had we met a single specimen of his monster of the austral fauna, an animal three feet long, six inches high, with four short legs, long coral claws, a silky body, a rat’s tail, a cat’s head, the hanging ears, blood-red lips and white teeth of a dog. The truth is that I regarded several of these details as "suspect," and entirely due toan
over-imaginative temperament.

Seated far aft in the ship, I read Edgar Poe's book with sedulous attention, but I was not unaware of the fact that Hunt, whenever his duties furnished him with an opportunity, observed me pertinaciously, and with looks of singular meaning.

And, in fact, I was re-perusing the end of Chapter XVII., in which Arthur Pym acknowledged his responsibility for the sad and tragic events which were the results of his advice. It was, in fact, he who over-persuaded Captain William Guy, urging him "to profit by so tempting an opportunity of solving the great problem relating to the Antarctic Continent." And, besides, while accepting that responsibility, did he not congratulate himself on having been the instrument of a great discovery, and having aided in some degree to reveal to science one of the most marvellous secrets which had ever claimed its attention?

At six o'clock the sun disappeared behind a thick curtain of mist. After midnight the breeze freshened, and the _Halbrane'_s progress marked a dozen additional miles.

On the morrow the good ship was less than the third of a degree, that is to say less than twenty miles, from Tsalal Island.

Unfortunately, just after mid-day, the wind fell. Nevertheless, thanks to the current, the Island of Tsalal was signalled at forty-five minutes past six in the evening.

The anchor was cast, a watch was set, with loaded firearms within hand-reach, and boarding-nets ready. The _Halbrane_ ran no risk of being surprised. Too eyes were watching on board--especially those of Hunt, whose gaze never quitted the horizon of that southern zone for an instant.

CHAPTER XVI, TSALAL ISLAND.

The night passed without alarm. No boat had put off from the island, nor had a native shown himself upon the beach. The _Halbrane_, then, had not been observed on her arrival; this was all the better.

We had cast anchor in ten fathoms, at three miles from the coast.

When the _Jane_ appeared in these waters, the people of Tsalal beheld a ship for the first time, and they took it for an enormous animal, regarding its masts as limbs, and its sails as garments. Now, they ought to be better informed on this subject, and if they did not attempt to visit us, to what motive were we to assign such conduct?

Captain Len Guy gave orders for the lowering of the ship's largest boat, in a voice which betrayed his impatience.

The order was executed, and the captain, addressing West, said--

"Send eight men down with Martin Holt; send Hunt to the helm. Remain yourself at the moorings, and keep a look-out landwards as well as to sea."

"Aye, aye, sir; don't be uneasy."

"We are going ashore, and we shall try to gain the village of Klock-Klock. If any difficulty should arise on sea, give us warning by firing three shots."

"All right," replied West--"at a minute's interval."

"If we should not return before evening, send the second boat with ten armed men under the boatswain's orders, and let them station themselves within a cable's length of the shore, so as to escort us back. You understand?"

"Perfectly, captain."

"If we are not to be found, after you have done all in your power, you will take command of the schooner, and bring her back to the Falklands."

"I will do so."

The large boat was rapidly got ready. Eight men embarked in it, including Martin Holt and Hunt, all armed with rifles, pistols, and knives; the latter weapons were slung in their belts. They also carried cartridge-pouches. I stepped forward and said,--

"Will you not allow me to accompany you, captain?"

"If you wish to do so, Mr. Jeorling."

I went to my cabin, took my gun--a repeating rifle--with ball and powder, and rejoined Captain Len Guy, who had kept a place in the stern of the boat for me. Our object was to discover the passage through which Arthur Pym and Dirk Peters had crossed the reef on the 19th of January, 1828, in the _Jane's_ boat. For twenty minutes we rowed along the reef, and then Hunt discovered the pass, which was through a narrow cut in the rocks. Leaving two men in the boat, we landed, and having gone through the winding gorge which gave access to the crest of the coast, our little force, headed by Hunt, pushed on towards the centre of the island. Captain Len Guy and myself exchanged observations, as we walked, on the subject of this country, which, as Arthur Pym declared, differed essentially from every other land hitherto visited by human beings. We soon found that Pym's description was trustworthy. The
general colour of the plains was black, as though the clay were made of lava-dust; nowhere was anything white to be seen. At a hundred paces distance Hunt began to run towards an enormous mass of rock, climbed on it with great agility, and looked out over a wide extent of space like a man who ought to recognize the place he is in, but does not.

"What is the matter with him?" asked Captain Len Guy, who was observing Hunt attentively.

"I don't know what is the matter with him, captain. But, as you are aware, everything about this man is odd: his ways are inexplicable, and on certain sides of him he seems to belong to those strange beings whom Arthur Pym asserts that he found on this island. One would even say that--"

"That--" repeated the captain.

"That--" I said, without finishing my sentence.

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"That--" repeated the captain.
no resources whatever to offer after the cataclysm. I spoke of this to the captain.

"Yes," he replied, and tears stood in his eyes, "yes, it may be so. And yet, how could my brother and his unfortunate companions have found the means of escaping? Is it not far more probable that they all perished in the earthquake?"

Here Hunt made us a signal to follow him, and we did so.

After he had pushed across the valley for a considerable distance, he stopped.

What a spectacle was before our eyes!

There, lying in heaps, were human bones, all the fragments of that framework of humanity which we call the skeleton, hundreds of them, without a particle of flesh, clusters of skulls still bearing some tufts of hair—a vast bone heap, dried and whitened in this place! We were struck dumb and motionless by this spectacle. When Captain Len Guy could speak, he murmured,—

"My brother, my poor brother!"

On a little reflection, however, my mind refused to admit certain things. How was this catastrophe to be reconciled with Patterson's memoranda? The entries in his note-book stated explicitly that the mate of the _Jane_ had left his companions on Tsalal Island seven months previously. They could not then have perished in this earthquake, for the state of the bones proved that it had taken place several years earlier, and must have occurred after the departure of Arthur Pym and Dirk Peters, since no mention of it was made in the narrative of the former.

These facts were, then, irreconcilable. If the earthquake was of recent date, the presence of those time-bleached skeletons could not be attributed to its action. In any case, the survivors of the _Jane_ were not among them. But then, where were they?

The valley of Klock-Klock extended no farther; we had to retrace our steps in order to regain the coast. We had hardly gone half a mile on the cliff's edge when Hunt again stopped, on perceiving some fragments of bones which were turning to dust, and did not seem to be those of a human being.

Were these the remains of one of the strange animals described by Arthur Pym, of which we had not hitherto seen any specimens?

Hunt suddenly uttered a cry, or rather a sort of savage growl, and held out his enormous hand, holding a metal collar. Yes! a brass collar, a collar eaten by rust, but bearing letters which might still be deciphered. These letters formed the three following words:—

"_Tiger_—Arthur Pym."

Tiger!—the name of the dog which had saved Arthur Pym's life in the hold of the _Grampus_, and, during the revolt of the crew, had sprung at the throat of Jones, the sailor, who was immediately "finished" by Dirk Peters.

So, then, that faithful animal had not perished in the shipwreck of the _Grampus_. He had been taken on board the _Jane_ at the same time as Arthur Pym and the half-breed. And yet the narrative did not allude to this, and after the meeting with the schooner there was no longer any mention of the dog. All these contradictions occurred to me. I could not reconcile the facts. Nevertheless, there could be no doubt that Tiger had been saved from the shipwreck like Arthur Pym, had escaped the landslip of the Klock-Klock hill, and had come to his death at last in the catastrophe which had destroyed a portion of the population of Tsalal.

But, again, William Guy and his five sailors could not be among those skeletons which were strewn upon the earth, since they were living at the time of Patterson's departure, seven months ago, and the catastrophe already dated several years back!

Three hours later we had returned on board the _Halbrane_, without having made any other discovery. Captain Len Guy went direct to his cabin, shut himself up there, and did not reappear even at dinner hour.

The following day, as I wished to return to the island in order to resume its exploration from one coast to the other, I requested West to have me rowed ashore.

Hung the boatswain, Martin Holt, four men, and myself took our places in the boat without arms; for there was no longer anything to fear.

We disembarked at our yesterday's landing-place, and Hunt again led the way towards the hill of Klock-Klock. Nothing remained of the eminence that had been carried away in the artificial landslip, from which the captain of the _Jane_, Patterson, his second officer, and five of his men had happily escaped. The village of Klock-Klock had thus disappeared; and doubtless the mystery of the strange discoveries narrated in Edgar Poe's work was now and ever would remain beyond solution.

We had only to regain our ship, returning by the east side of the coast. Hunt brought us through the space where sheds had been erected for the preparation of the _bêche-de mer_, and we saw the remains of them. On all sides silence and abandonment reigned.

We made a brief pause at the place where Arthur Pym and Dirk Peters seized upon the boat which bore them
towards higher latitudes, even to that horizon of dark vapour whose rents permitted them to discern the huge human figure, the white giant.

Hunt stood with crossed arms, his eyes devouring the vast extent of the sea.

"Well, Hunt?" said I, tentatively.

Hunt did not appear to hear me; he did not turn his head in my direction.

"What are we doing here?" I asked him, and touched him on the shoulder.

He started, and cast a glance upon me which went to my heart.

"Come along, Hunt," cried Hurliguerly. "Are you going to take root on this rock? Don't you see the _Halbrane_ waiting for us at her moorings? Come along. We shall be off to-morrow. There is nothing more to do here."

It seemed to me that Hunt's trembling lips repeated the word "nothing," while his whole bearing protested against what the boatswain said.

The boat brought us back to the ship. Captain Len Guy had not left his cabin. West, having received no orders, was pacing the deck aft. I seated myself at the foot of the mainmast, observing the sea which lay open and free before us.

At this moment the captain came on deck; he was very pale, and his features looked pinched and weary.

"Mr. Jeorling," said he, "I can affirm conscientiously that I have done all it was possible to do. Can I hope henceforth that my brother William and his companions--No! No! We must go away--before winter--"

He drew himself up, and cast a last glance towards Tsalal Island.

"To-morrow, Jim," he said to West, "to-morrow we will make sail as early as possible."

At this moment a rough voice uttered the words:

"And Pym--poor Pym!"

I recognized this voice.

It was the voice I had heard in my dream.

CHAPTER XVII. AND PYM?

"And Pym--poor Pym?"

I turned round quickly.

Hunt had spoken. This strange person was standing motionless at a little distance, gazing fixedly at the horizon.

It was so unusual to hear Hunt's voice on board the schooner, that the men, whom the unaccustomed sound reached, drew near, moved by curiosity. Did not his unexpected intervention point to--I had a presentiment that it did--some wonderful revelation?

A movement of West's hand sent the men forward, leaving only the mate, the boatswain, Martin Holt, the sailing-master, and Hardy, with the captain and myself in the vicinity of Hunt. The captain approached and addressed him:

"What did you say?"

"I said, 'And Pym--poor Pym.'"

"Well, then, what do you mean by repeating the name of the man whose pernicious advice led my brother to the island on which the _Jane_ was lost, the greater part of her crew was massacred, and where we have not found even one left of those who were still here seven months ago?"

Hunt did not speak.

"Answer, I say--answer!" cried the captain.

Hunt hesitated, not because he did not know what to say, but from a certain difficulty in expressing his ideas.

The latter were quite clear, but his speech was confused, his words were unconnected. He had a certain language of his own which sometimes was picturesque, and his pronunciation was strongly marked by the hoarse accent of the Indians of the Far West.

"You see," he said, "I do not know how to tell things. My tongue stops. Understand me, I spoke of Pym, poor Pym, did I not?"

"Yes," answered West, sternly; "and what have you to say about Arthur Pym?"

"I have to say that he must not be abandoned."

"Abandoned!" I exclaimed.

"No, never! It would be cruel--too cruel. We must go to seek him."

"To seek him?" repeated Captain Len Guy.

"Understand me; it is for this that I have embarked on the _Halbrane_.--yes, to find poor Pym!"

"And where is he," I asked, "if not deep in a grave, in the cemetery of his natal city?"

"No, he is in the place where he remained, alone, all alone," continued Hunt, pointing towards the south; "and
since then the sun has risen on that horizon seven times."

It was evident that Hunt intended to designate the Antarctic regions, but what did he mean by this?
"Do you not know that Arthur Pym is dead?" said the captain.
"Dead!" replied Hunt, emphasizing the word with an expressive gesture. "No! listen to me: I know things; understand me, he is not dead."
"Come now, Hunt," said I, "remember what you do know. In the last chapter of the adventures of Arthur Pym, does not Edgar Poe relate his sudden and deplorable end?"
"Explain yourself, Hunt," said the captain, in a tone of command. "Reflect, take your time, and say plainly whatever you have to say."

And, while Hunt passed his hand over his brow, as though to collect his memory of far-off things, I observed to Captain Len Guy,--
"There is something very singular in the intervention of this man, if indeed he be not mad."
At my words the boatswain shook his head, for he did not believe Hunt to be in his right mind.
The latter understood this shake of the boatswain's head, and cried out in a harsh tone,--
"No, not mad. And madmen are respected on the prairies, even if they are not believed. And I--I must be believed. No, no, no! Pym is not dead!"
"Edgar Poe asserts that he is," I replied.
"Yes, I know, Edgar Poe of Baltimore. But--he never saw poor Pym, never, never."
"What?" exclaimed Captain Len Guy; "the two men were not acquainted?"
"No!"
"And it was not Arthur Pym himself who related his adventures to Edgar Poe?"
"No, captain, no! He, below there, at Baltimore, had only the notes written by Pym from the day when he hid himself on board the _Grampus_ to the very last hour--the last--understand me the last."
"Who, then, brought back that journal?" asked Captain Len Guy, as he seized Hunt's hand.
"It was Pym's companion, he who loved him, his poor Pym, like a son. It was Dirk Peters, the half-breed, who came back alone from there--beyond.""
"The half-breed, Dirk Peters!" I exclaimed.
"Yes."
"Alone?"
"Alone."
"And Arthur Pym may be--"
"There," answered Hunt, in a loud voice, bending towards the southern line, from which he had not diverted his gaze for a moment.

Could such an assertion prevail against the general incredulity? No, assuredly not! Martin Holt nudged Hurliguerly with his elbow, and both regarded Hunt with pity, while West observed him without speaking. Captain Len Guy made me a sign, meaning that nothing serious was to be got out of this poor fellow, whose mental faculties must have been out of gear for a long time.

And nevertheless, when I looked keenly at Hunt, it seemed to me that a sort of radiance of truth shone out of his eyes:

Then I set to work to interrogate the man, putting to him precise and pressing questions which he tried to answer categorically, as we shall see, and not once did he contradict himself.
"Tell me," I asked, "did Arthur Pym really come to Tsalal Island on board the _Grampus_?"
"Yes."
"Did Arthur Pym separate himself, with the half-breed and one of the sailors, from his companions while Captain William Guy had gone to the village of Klock-Klock?"
"Yes. The sailor was one Allen, and he was almost immediately stifled under the stones."
"Then the two others saw the attack, and the destruction of the schooner, from the top of the hill?"
"Yes."
"Then, some time later, the two left the island, after they had got possession of one of the boats which the natives could not take from them?"
"Yes."
"And, after twenty days, having reached the front of the curtain of vapour, they were both carried down into the gulf of the cataract?"

This time Hunt did not reply in the affirmative; he hesitated, he stammered out some vague words; he seemed to be trying to rekindle the half-extinguished flame of his memory. At length, looking at me and shaking his head, he answered,--
"No, not both. Understand me--Dirk never told me--"

"Dirk Peters" interposed Captain Len Guy, quickly. "You knew Dirk Peters?"

"Yes."

"Where?"

"At Vandalia, State of Illinois."

"And it is from him that you have all this information concerning the voyage?"

"From him."

"And he came back alone--alone--from that voyage, having left Arthur Pym."

"Alone!"

"Speak, man--do speak!" I cried, impatiently. Then, in broken, but intelligible sentences, Hunt spoke,--

"Yes--there--a curtain of vapour--so the half-breed often said--understand me. The two, Arthur Pym and he, were in the Tsalal boat. Then an enormous block of ice came full upon them. At the shock Dirk Peters was thrown into the sea, but he clung to the ice block, and--understand me, he saw the boat drift with the current, far, very far, too far! In vain did Pym try to rejoin his companion, he could not; the boat drifted on and on, and Pym, that poor dear Pym, was carried away. It is he who has never come back, and he is there, still there!"

If Hunt had been the half-breed in person he could not have spoken with more heartfelt emotion of "poor Pym."

It was then, in front of the "curtain of vapour," that Arthur Pym and the half-breed had been separated from each other. Dirk Peters had succeeded in returning from the ice-world to America, whither he had conveyed the notes that were communicated to Edgar Poe.

Hunt was minutely questioned upon all these points and he replied, conformably, he declared, to what the half-breed had told him many times. According to this statement, Dirk Peters had Arthur Pym's note-book in his pocket at the moment when the ice-block struck them, and thus the journal which the half-breed placed at the disposal of the American romance-writer was saved.

"Understand me," Hunt repeated, "for I tell you things as I have them from Dirk Peters. While the drift was carrying him away, he cried out with all his strength. Pym, poor Pym, had already disappeared in the midst of the vapour. The half-breed, feeding upon raw fish, which he contrived to catch, was carried back by a cross current to Tsalal Island, where he landed half dead from hunger."

"To Tsalal Island!" exclaimed Captain Len Guy. "And how long was it since they had left it?"

"Three weeks--yes, three weeks at the farthest, so Dirk Peters told me."

"Then he must have found all that remained of the crew of the _Jane_--my brother William and those who had survived with him?"

"No," replied Hunt; "and Dirk Peters always believed that they had perished--yes, to the very last man. There was no one upon the island."

"No one?" "Not a living soul."

"But the population?"

"No! No one, I tell you. The island was a desert--yes, a desert!"

This statement contradicted certain facts of which we were absolutely certain. After all, though, it that when Dirk Peters returned to Tsalal Island, the population, seized by who can tell what terror, had already taken refuge upon the south-western group, and that William Guy and his companions were still hidden in gorges of Klock-Klock. That would explain why half-breed had not come across them, and also why survivors of the _Jane_ had had nothing to fear during eleven years of their sojourn in the island. On the other hand, since Patterson had left them there seven previously, if we did not find them, that must have because they had been obliged to leave Tsalal, the being rendered uninhabitable by the earthquake.

"So that," resumed Captain Len Guy, "on the return of Dirk Peters, there was no longer an inhabitant on the island?"

"No one," repeated Hunt, "no one. The half-breed did not meet a single native."

"And what did Dirk Peters do?"

"Understand me. A forsaken boat lay there, at the back of the bay, containing some dried meat and several casks of water. The half-breed got into it, and a south wind--yes, south, very strong, the same that had driven the ice block, with the cross current, towards Tsalal Island--carried him on for weeks and weeks--to the iceberg barrier, through a passage in it--you may believe me, I am telling you only what Dirk Peters told me--and he cleared the polar circle."

"And beyond it?" I inquired.

"Beyond it. He was picked up by an American whaler, the _Sandy Hook_, and taken back to America."

Now, one thing at all events was clear. Edgar Poe had never known Arthur Pym. This was the reason why, to leave his readers in exciting uncertainty, he had brought Pym to an end "as sudden as it was deplorable," without indicating the manner or the cause of his death.
"And yet, although Arthur Pym did not return, could it be reasonably admitted that he had survived his companion for any length of time, that he was still living, eleven years having elapsed since his disappearance?"

"Yes, yes," replied Hunt.

And this he affirmed with the strong conviction that Dirk Peters had infused into his mind while the two were living together in Vandalia, in Illinois.

Now the question arose, was Hunt sane? Was it not he who had stolen into my cabin in a fit of insanity—of this I had no doubt—and murmured in my ear the words: "And Pym—poor Pym?"

Yes, and I had not been dreaming! In short, if all that Hunt had just said was true, if he was but the faithful reporter of secrets which had been entrusted to him by Dirk Peters, ought he to be believed when he repeated in a tone of mingled command and entreaty,—

"Pym is not dead. Pym is there. Poor Pym must not be forsaken!"

When I had made an end of questioning Hunt, Captain Len Guy came out of his meditative mood, profoundly troubled, and gave the word, "All hands forward!"

When the men were assembled around him, he said,—

"Listen to me, Hunt, and seriously consider the gravity of the questions I am about to put to you."

Hunt held his head up, and ran his eyes over the crew of the _Halbrane_.

"You assert, Hunt, that all you have told us concerning Arthur Pym is true?"

"Yes."

"You knew Dirk Peters?"

"Yes."

"You lived some years with him in Illinois?"

"Nine years."

"And he often related these things to you?"

"Yes."

"And, for your own part, you have no doubt that he told you the exact truth?"

"None."

"Well, then, did it never occur to him that some of the crew of the _Jane_ might have remained on Tsalal Island?"

"No."

"He believed that William Guy and his companions must all have perished in the landslip of the hill of Klock-Klock?"

"Yes, and from what he often repeated to me, Pym believed it also."

"Where did you see Dirk Peters for the last time?"

"At Vandalia."

"How long ago?"

"Over two years."

"And which of you two was the first to leave Vandalia?"

I thought I detected a slight hesitation in Hunt before he answered,—

"We left the place together."

"You, to go to?"

"The Falklands."

"And he—?"

"He?" repeated Hunt.

And then his wandering gaze fixed itself on Martin Holt, our sailing-master, whose life he had saved at the risk of his own during the tempest.

"Well!" resumed the captain, "do you not understand what I am asking you?"

"Yes."

"Then answer me. When Dirk Peters left Illinois, did he finally give up America?"

"Yes."

"To go whither? Speak!"

"To the Falklands."

"And where is he now?"

"He stands before you."

Dirk Peters! Hunt was the half-breed Dirk Peters, the devoted companion of Arthur Pym, he whom Captain Guy had so long sought for in the United States, and whose presence was probably to furnish us with a fresh reason for pursuing our daring campaign.
I shall not be at all surprised if my readers have already recognized Dirk Peters in Hunt; indeed, I shall be astonished if they have failed to do so. The extraordinary thing is that Captain Len Guy and myself, who had read Edgar Poe's book over and over again, did not see at once, when Hunt came on the ship at the Falklands, that he and the half-breed were identical! I can only admit that we were both blindfolded by some hidden action of Fate, just when certain pages of that book ought to have effectually cleared our vision.

There was no doubt whatever that Hunt really was Dirk Peters. Although he was eleven years older, he answered in every particular to the description of him given by Arthur Pym, except that he was no longer "of fierce aspect." In fact, the half-breed had changed with age and the experience of terrible scenes through which he had passed; nevertheless, he was still the faithful companion to whom Arthur Pym had often owed his safety, that same Dirk Peters who loved him as his own son, and who had never--no, never--lost the hope of finding him again one day amid the awful Antarctic wastes.

Now, why had Dirk Peters hidden himself in the Falklands under the name of Hunt? Why, since his embarkation on the _Halbrane_, had he kept up that _incognito_? Why had he not told who he was, since he was aware of the intentions of the captain, who was about to make every effort to save his countrymen by following the course of the _Jane_?

Why? No doubt because he feared that his name would inspire horror. Was it not the name of one who had shared in the horrible scenes of the _Grampus_, who had killed Parker, the sailor, who had fed upon the man's flesh, and quenched his thirst in the man's blood? To induce him to reveal his name he must needs be assured that the _Halbrane_ would attempt to discover and rescue Arthur Pym!

And as to the existence of Arthur Pym? I confess that my reason did not rebel against the admission of it as a possibility. The imploring cry of the half-breed, "Pym, poor Pym! he must not be forsaken!" troubled me profoundly.

Assuredly, since I had resolved to take part in the expedition of the _Halbrane_, I was no longer the same man! A long silence had followed the astounding declaration of the half-breed. None dreamed of doubting his veracity. He had said, "I am Dirk Peters." He was Dirk Peters.

At length, moved by irresistible impulse, I said: "My friends, before any decision is made, let us carefully consider the situation. Should we not lay up everlasting regret for ourselves if we were to abandon our expedition at the very moment when it promises to succeed? Reflect upon this, captain, and you, my companions. It is less than seven months since Patterson left your countrymen alive on Tsalal Island. If they were there then, the fact proves that for eleven years they had been enabled to exist on the resources provided by the island, having nothing to fear from the islanders, some of whom had fallen victims to circumstances unknown to us, and others had probably transferred themselves to some neighbouring island. This is quite plain, and I do not see how any objection can be raised to my reasoning."

No one made answer: there was none to be made.

"If we have not come across the captain of the _Jane_ and his people," I resumed, "it is because they have been obliged to abandon Tsalal Island since Patterson's departure. Why? In my belief, it was because the earthquake had rendered the island uninhabitable. Now, they would only have required a native boat to gain either another island or some point of the Antarctic continent by the aid of the southern current. I hardly hesitate to assert that all this has occurred; but in any case, I know, and I repeat, that we shall have done nothing if we do not persevere in the search on which the safety of your countrymen depends."

I questioned my audience by a searching look. No answer.

Captain Len Guy, whose emotion was unrestrained, bowed his head, for he felt that I was right, that by invoking the duties of humanity I was prescribing the only course open to men with feeling hearts.

"And what is in question?" I continued, after the silent pause. "To accomplish a few degrees of latitude, and that while the sea is open, while we have two months of good weather to look for, and nothing to fear from the southern winter. I certainly should not ask you to brave its severity. And shall we hesitate, when the _Halbrane_ is abundantly furnished, her crew complete and in good health? Shall we take fright at imaginary dangers? Shall we not have courage to go on, on, thither?"

And I pointed to the southern horizon. Dirk Peters pointed to it also, with an imperative gesture which spoke for him.

Still, the eyes of all were fixed upon us, but there was no response. I continued to urge every argument, and to quote every example in favour of the safety of pursuing our voyage, but the silence was unbroken and now the men stood with eyes cast down.

And yet I had not once pronounced the name of Dirk Peters, nor alluded to Dirk Peters' proposal.

I was asking myself whether I had or had not succeeded in inspiring my companions with my own belief, when Captain Len Guy spoke:

"Dirk Peters," he said, "doyou assert that Arthur Pym and you after your departure from Tsalal Island saw land
in the direction of the south?"

"Yes, land," answered the half-breed. "Islands or continent--understand me--and I believe that Pym, poor Pym, is waiting there until aid comes to him."

"There, where perhaps William Guy and his companions are also waiting," said I, to bring back the discussion to more practical points.

Captain Len Guy reflected for a little while, and then spoke:

"Is it true, Dirk Peters," he asked, "that beyond the eighty-fourth parallel the horizon is shut in by that curtain of vapour which is described in the narrative? Have you seen--seen with your own eyes--those cataracts in the air, that gulf in which Arthur Pym's boat was lost?"

The half-breed looked from one to the other of us, and shook his big head.

"I don't know," he said. "What are you asking me about, captain? A curtain of vapour? Yes, perhaps, and also appearances of land towards the south."

Evidently Dirk Peters had never read Edgar Poe's book, and very likely did not know how to read. After having handed over Pym's journal, he had not troubled himself about its publication. Having retired to Illinois at first and to the Falklands afterwards, he had no notion of the stir that the work had made, or of the fantastic and baseless climax to which our great poet had brought those strange adventures.

And, besides, might not Arthur Pym himself, with his tendency to the supernatural, have fancied that he saw these wondrous things, due solely to his imaginative brain?

Then, for the first time in the course of this discussion, West's voice made itself heard. I had no idea which side he would take. The first words he uttered were:

"Captain, your orders?"

Captain Len Guy turned towards his crew, who surrounded him, both the old and the new. Hearne remained in the background, ready to intervene if he should think it necessary.

The captain questioned the boatswain and his comrades, whose devotion was unreservedly his, by a long and anxious look, and I heard him mutter between his teeth,--

"Ah! if it depended only on me! If I were sure of the assent and the help of them all!"

"Then Hearne spoke roughly:

"Captain," said he, "it's two months since we left the Falklands. Now, my companions were engaged for a voyage which was not to take them farther beyond the icebergs than Tsalal Island."

"That is not so," exclaimed Captain Len Guy. "No! That is not so. I recruited you all for an enterprise which I have a right to pursue, so far as I please."

"Beg pardon," said Hearne, coolly, "but we have come to a point which no navigator has ever yet reached, in a sea, no ship except the _Jane_ has ever ventured into before us, and therefore my comrades and I mean to return to the Falklands before the bad season. From there you can return to Tsalal Island, and even go on to the Pole, if you so please."

A murmur of approbation greeted his words; no doubt the sealing-master justly interpreted the sentiments of the majority, composed of the new recruits. To go against their opinion, to exact the obedience of these ill-disposed men, and under such conditions to risk the unknown Antarctic waters, would have been an act of temerity—or, rather, an act of madness—that would have brought about some catastrophe.

Nevertheless, West, advancing upon Hearne, said to him in a threatening tone, "Who gave you leave to speak?"

"The captain questioned us," replied Hearne. "I had a right to reply."

The man uttered these words with such insolence that West, who was generally so self-restrained, was about to give free vent to his wrath, when Captain Len Guy, stopping him by a motion of his hand, said quietly,--

"Be calm, Jem. Nothing can be done unless we are all agreed. What is your opinion, Hurtiguerly?"

"It is very clear, captain," replied the boatswain. "I will obey your orders, whatever they may be! It is our duty not to forsake William Guy and the others so long as any chance of saving them remains."

The boatswain paused for a moment, while several of the sailors gave unequivocal signs of approbation.

"As for what concerns Arthur Pym—"

"There is no question of Arthur Pym," struck in the captain, "but only of my brother William and his companions."

I saw at this moment that Dirk Peters was about to protest, and caught hold of his arm. He shook with anger, but kept silence.

The captain continued his questioning of the men, desiring to know by name all those upon whom he might reckon. The old crew to a man acquiesced in his proposals, and pledged themselves to obey his orders implicitly and follow him whithersoever he chose to go.

Three only of the recruits joined those faithful seamen; these were English sailors. The others were of Hearne's
opinion, holding that for them the campaign was ended at Tsalal Island. They therefore refused to go beyond that point, and formally demanded that the ship should be steered northward so as to clear the icebergs at the most favourable period of the season.

Twenty men were on their side, and to constrain them to lend a hand to the working of the ship if she were to be diverted to the south would have been to provoke them to rebel. There was but one resource: to arouse their covetousness, to strike the chord of self-interest.

I intervened, therefore, and addressed them in a which placed the seriousness of my proposal beyond a doubt.

"Men of the _Halbrane_, listen to me! Just as various States have done for voyages of discovery in the Polar Regions, I offer a reward to the crew of this schooner. Two thousand dollars shall be shared among you for every degree we make beyond the eighty-fourth parallel."

Nearly seventy dollars to each man; this was a strong temptation. I felt that I had hit the mark.

"I will sign an agreement to that effect," I continued, "with Captain Len Guy as your representative, and the sums gained shall be handed to you on your return, no matter under what conditions that return be accomplished."

I waited for the effect of this promise, and, to tell the truth, I had not to wait long.

"Hurrah!" cried the boatswain, acting as fugleman to his comrades, who almost unanimously added their cheers to his. Hearne offered no farther opposition; it would always be in his power to put in his word when the stances should be more propitious.

Thus the bargain was made, and, to gain my ends, I have made a heavier sacrifice. It is true we were within seven degrees of the South and, if the _Halbrane_ should indeed reach that spot, it would never cost me more than fourteen thousand dollars.

Early in the morning of the 27th of December the _Halbrane_ put out to sea, heading south-west.

After the scene of the preceding evening Captain Len Guy had taken a few hours' rest. I met him next day on deck while West was going about fore and aft, and he called us both to him.

"Mr. Jeorling," he said, "it was with a terrible pang that I came to the resolution to bring our schooner back to the north! I felt I had not done all I ought to do for our unhappy fellow-countrymen: but I knew that the majority of the crew would be against me if I insisted on going beyond Tsalal Island."

"That is true, captain; there was a beginning of indiscipline on board, and perhaps it might have ended in a revolt."

"A revolt we should have speedily put down," said West, coolly, "were it only by knocking Hearne, who is always exciting the mutinous men, on the head."

"And you would have done well, Jem," said the captain. "Only, justice being satisfied, what would have become of the agreement together, which we must have in order to do anything?"

"Of course, captain, it is better that things passed off without violence! But for the future Hearne will have to look out for himself."

"His companions," observed the captain, "are now greedy for the prizes that have been promised them. The greed of gain will make them more willing and persevering. The generosity of Mr. Jeorling has succeeded where our entreaties would undoubtedly have failed. I thank him for it."

Captain Len Guy held out a hand to me, which I grasped cordially.

After some general conversation relating to our purpose, the ship's course, and the proposed verification of the bearings of the group of islands on the west of Tsalal which is described by Arthur Pym, the captain said,--

"As it is possible that the ravages of the earthquake did not extend to this group, and that it may still be inhabited, we must be on our guard in approaching the bearings."

"Which cannot bevery far off," I added. "And then, captain, who knows but that your brother and his sailors might have taken refu ge on one of these islands!"

This was admissible, but not a consoling eventuality, for in that case the poor fellows would have fallen into the hands of those savages of whom they were rid while they remained at Tsalal.

"Jem," resumed Captain Len Guy, "we are making good way, and no doubt land will be signalled in a few hours. Give orders for the watch to be careful."

"It's done, captain."

"There is a man in the crow's-nest?"

"Dirk Peters himself, at his own request." "All right, Jem; we may trust his vigilance."

"And also his eyes," I added, "for he is gifted with amazing sight."

For two hours of very quick sailing not the smallest indication of the group of eight islands was visible.

"It is incomprehensible that we have not come in sight of them," said the captain. "I reckon that the _Halbrane_ has made sixty miles since this morning, and the islands in question are tolerably close together."
"Then, captain, we must conclude--and it is not unlikely--that the group to which Tsalal belonged has entirely disappeared in the earthquake."

"Land ahead?" cried Dirk Peters.

We looked, but could discern nothing on the sea, nor was it until a quarter of an hour had elapsed that our glasses enabled us to recognize the tops of a few scattered islets shining in the oblique rays of the sun, two or three miles to the westward.

What a change! How had it come about? Arthur Pym described spacious islands, but only a small number of tiny islets, half a dozen at most, protruded from the waters.

At this moment the half-breed came sliding down from his lofty perch and jumped to the deck.

"Well, Dirk Peters! Have you recognized the group?" asked the captain.

"The group?" replied the half-breed, shaking his head. "No, I have only seen the tops of five or six islets. There is nothing but stone heaps there--not a single island!"

As the schooner approached we easily recognized these fragments of the group, which had been almost entirely destroyed on its western side. The scattered remains formed dangerous reefs which might seriously injure the keel or the sides of the _Halbrane_, and there was no intention of risking the ship's safety among them. We accordingly cast anchor at a safe distance, and a boat was lowered for the reception of Captain Len Guy, the boatswain, Dirk Peters, Holt, two men and myself. The still, transparent water, as Peters steered us skilfully between the projecting edges of the little reefs, allowed us to see, not a bed of sand strewn with shells, but heaps which were overgrown by land vegetation, tufts plants not belonging to the marine flora that floated the surface of the sea. Presently we landed on one of the larger islets which rose to about thirty feet above the sea.

"Do the tides rise sometimes to that height?" I inquired of the captain.

"Never," he replied, "and perhaps we shall discover some remains of the vegetable kingdom, of habitations, or of an encampment."

"The best thing we can do," said the boatswain, "is to follow Dirk Peters, who has already distanced us. The half-breed's lynx eyes will see what we can't."

Peters had indeed scaled the eminence in a moment, and we presently joined him on the top.

The islet was strewn with remains (probably of those domestic animals mentioned in Arthur Pym's journal), but these bones differed from the bones on Tsalal Island by the fact that the heaps dated from a few months only. This then agreed with the recent period at which we placed the earthquake. Besides, plants and tufts of flowers were growing here and there.

"And these are this year's," I cried, "no southern winter has passed over them."

These facts having been ascertained, no doubt could remain respecting the date of the cataclysm after the departure of Patterson. The destruction of the population of Tsalal whose bones lay about the village was not attributable to that catastrophe. William Guy and the five sailors of the _Jane_ had been able to fly in time, since no bones that could be theirs had been found on the island.

Where had they taken refuge? This was the everpressing question. What answer were we to obtain? Must we conclude that having reached one of these islets they had perished in the swallowing-up of the archipelago? We debated this point, as may be supposed, at a length and with detail which I can only indicate here. Suffice it to say that a decision was arrived at to the following effect. Our sole chance of discovering the unfortunate castaways was to continue our voyage for two or three parallels farther; the goal was there, and which of us would not sacrifice even his life to attain it?

"God is guiding us, Mr. Jeorling," said Captain Len Guy.

CHAPTER XVIII. A REVELATION.

The following day, the 29th of December, at six in the morning, the schooner set sail with a north-east wind, and this time her course was due south. The two succeeding days passed wholly without incident; neither land nor any sign of land was observed. The men on the Halbrahe took great hauls of fish, to their own satisfaction and ours. It was New Year's Day, 1840, four months and seventeen days since I had left the Kerguelens and two months and five days since the Halbrahe had sailed from the Falklands. The half-breed, between whom and myself an odd kind of tacit understanding subsisted, approached the bench on which I was sitting--the captain was in his cabin, and West was not in sight--with a plain intention of conversing with me. The subject may easily be guessed.

"Dirk Peters," said I, taking up the subject at once, "do you wish that we should talk of _him_?"

"Him?" he murmured.

"You have remained faithful to his memory, Dirk Peters."

"Forget him, sir! Never!"
"He is always there--before you?"
"Always! So many dangers shared! That makes brothers! No, it makes a father and his son! Yes! And I have seen America again, but Pym--poor Pym--he is still beyond there!"
"Dirk Peters," I asked, "have you any idea of the route which you and Arthur Pym followed in the boat after your departure from Tsalal Island?"
"None, sir! Poor Pym had no longer any instrument--you know--sea machines--for looking at the sun. We could not know, except that for the eight days the current pushed us towards the south, and the wind also. A fine breeze and a fair sea, and our shirts for a sail."
"Yes, white linen shirts, which frightened your prisoner Nu Nu--"
"Perhaps so--I did not notice. But if Pym has said so, Pym must be believed."
"And during those eight days you were able to supply yourselves with food?"
"Yes, sir, and the days after--we and the savage. You know--the three turtles that were in the boat. These animals contain a store of fresh water--and their flesh is sweet, even raw. Oh, raw flesh, sir?"
He lowered his voice, and threw a furtive glance around him. It would be impossible to describe the frightful expression of the half-breed's face as he thus recalled the terrible scenes of the _Grampus_. And it was not the expression of a cannibal of Australia or the New Hebrides, but that of a man who is pervaded by an insurmountable horror of himself.
"Was it not on the 1st of March, Dirk Peters," I asked, "that you perceived for the first time the veil of grey vapour shot with luminous and moving rays?"
"I do not remember, sir, but if Pym says it was so, Pym must be believed."
"Did he never speak to you of fiery rays which fell from the sky?" I did not use the term "polar aurora," lest the half-breed should not understand it.
"Never, sir," said Dirk Peters, after some reflection. "Did you not remark that the colour of the sea changed, grew white like milk, and that its surface became ruffled around your boat?"
"It may have been so, sir; I did not observe. The boat went on and on, and my head went with it."
"And then, the fine powder, as fine as ashes, that fell--"
"I don't remember it." "Was it not snow?"
"Snow? Yes! No! The weather was warm. What did Pym say? Pym must be believed." He lowered his voice and continued: "But Pym will tell you all that, sir. He knows. I do not know. He saw, and you will believe him."
"Yes, Dirk Peters, I shall believe him."
"We are to go in search of him, are we not?"
"I hope so."
"After we shall have found William Guy and the sailors of the _Jane_!"
"Yes, after."
"And even if we do not find them?"
"Yes, even in that case. I think I shall induce our captain. I think he will not refuse--"
"No, he will not refuse to bring help to a man--a man like him p"
"And yet," I said, "if William Guy and his people are living, can we admit that Arthur Pym--"
"Living? Yes! Living!" cried the half-breed. "By the great spirit of my fathers, he is--he is waiting for me, my poor Pym! How joyful he will be when he clasps his old Dirk in his arms, and I--I, when I feel him, there, there."
And the huge chest of the man heaved like a stormy sea. Then he went away, leaving me inexpressibly affected by the revelation of the tenderness for his unfortunate companion that lay deep in the heart of this semi-savage.
In the meantime I said but little to Captain Len Guy, whose whole heart and soul were set on the rescue of brother, of the possibility of our finding Arthur Gordon Pym. Time enough, if in the course of this strange enterprise of ours we succeeded in that object, to urge upon him one still more visionary.
At length, on the 7th of January--according to Dirk Peters, who had fixed it only by the time that had expired--we arrived at the place where Nu Nu the savage breathed his last, lying in the bottom of the boat. On that day an observation gave 86° 33' for the latitude, the longitude remaining the same between the and the forty-third meridian. Here it was, according the half-breed, that the two fugitives were parted after the collision between the boat and the floating mass of ice. But a question now arose. Since the mass of ice carrying away Dirk Peters had drifted towards the north, was this because it was subjected to the action of a countercurrent?
Yes, that must have been so, for our schooner had not felt the influence of the current which had guided her on leaving the Falklands, for fully four days. And yet, there was nothing surprising in that, for everything is variable in the austral seas. Happily, the fresh breeze from the north-east continued to blow, and the _Halbrane_ made progress toward higher waters, thirteen degrees in advance upon Weddells ship and two degrees upon the fane. As for the land--islands or continent--which Captain Len Guy was seeking on the surface of that vast ocean, it did not appear. I
was well aware that he was gradually losing confidence in our enterprise.

As for me, I was possessed by the desire to rescue Arthur Pym as well as the survivors of the _Jane_. And yet, how could he have survived? But then, the half-breed's fixed idea! Supposing our captain were to give the order to go back, what would Dirk Peters do? Throw himself into the sea rather than return northwards? This it was which made me dread some act of violence on his part, when he heard the greater number of the sailors protesting against this insensate voyage, and talking of putting the ship about, especially towards Hearne, who was stealthily inciting his comrades of the Falklands to insubordination.

It was absolutely necessary not to allow discipline to decline, or discouragement to grow among the crew; so that, on the 7th of January, Captain Len Guy at my request assembled the men and addressed them in the following words:

"Sailors of the _Halbrane_, since our departure from Tsalal Island, the schooner has gained two degrees southwards, and I now inform you, that, conformably with the engagement signed by Mr. Jeorling, four thousand dollars--that is two thousand dollars for each degree--are due to you, and will be paid at the end of the voyage."

These words were greeted with some murmurs of satisfaction, but not with cheers, except those of Hurliguerly the boatswain, and Endicott the cook, which found no echo.

On the 13th of January a conversation took place between the boatswain and myself of a nature to justify my anxiety concerning the temper of our crew.

The men were at breakfast, with the exception of Drap and Stern. The schooner was cutting the water under a stiff breeze. I was walking between the fore and main masts, watching the great flights of birds wheeling about the ship with deafening clangour, and the petrels occasionally perching on our yards. No effort was made to catch or shoot them; it would have been useless cruelty, since their oily and stringy flesh is not eatable.

At this moment Hurliguerly approached me, looked attentively at the birds, and said,--

"I remark one thing, Mr. Jeorling."
"What is it, boatswain?"
"That these birds do not fly so directly south as they did up to the present. Some of them are setting north."
"I have noticed the same fact."
"And I add, Mr. Jeorling, that those who are below there will come back without delay."
"And you conclude from this?"
"I conclude that they feel the approach of winter."
"Of winter?"
"Undoubtedly."
"No, no, boatswain; the temperature is so high that the birds can't want to get to less cold regions so prematurely."
"Oh! prematurely, Mr. Jeorling."
"Yes, boatswain; do we not know that navigators have always been able to frequent the Antarctic waters until the month of March?"
"Not at such a latitude. Besides, there are precocious winters as well as precocious summers. The fine season this year was full two months in advance, and it is to be feared the bad season may come sooner than usual."
"That is very likely," I replied. "After all, it does not signify to us, since our campaign will certainly be over in three weeks."
"If some obstacle does not arise beforehand, Mr. Jeorling."
"And what obstacle?"
"For instance, a continent stretching to the south and barring our way."
"A continent, Hurliguerly!"
"I should not be at all surprised."
"And, in fact, there would be nothing surprising in it."
"As for the lands seen by Dirk Peters," said the boatswain, "where the men of the _Jane_ might have landed on one or another of them, I don't believe in them."
"Why?"
"Because William Guy, who can only have had a small craft at his disposal, could not have got so far into these seas."
"I do not feel quite so sure of that. Nevertheless, Mr. Jeorling--"
"What would there be so surprising in William Guy's being carried to land somewhere by the action of the currents? He did not remain on board his boat for eight months, I suppose. His companions and he may have been able to land on an island, or even on a continent, and that is a sufficient motive for us to pursue our search."
"No doubt--but all are not of your opinion," replied Hurliguerly, shaking his head.
"I know," said I, "and that is what makes me most anxious. Is the ill-feeling increasing?"

"I fear so, Mr. Jeorling. The satisfaction of having gained several hundreds of dollars is already lessened, and the prospect of gaining a few more hundreds does not put a stop to disputes. And yet the prize is tempting! From Tsalal Island to the pole, admitting that we might get there, is six degrees. Now six degrees at two thousand dollars each makes twelve thousand dollars for thirty men, that is four hundred dollars a head. A nice little sum to slip into one's pocket on the return of the _Halbrane_; but, notwithstanding, that fellow Hearne works so wickedly upon his comrades that I believe they are ready to 'bout ship in spite of anybody."

"I can believe that of the recruits, boatswain, but the old crew--"

"H--m! there are three or four of those who are beginning to reflect, and they are not easy in their minds about the prolongation of the voyage."

"I fancy Captain Len Guy and his lieutenant will how to get themselves obeyed."

"We shall see, Mr. Jeorling. But may it not that our captain himself will get disheartened; that the sense of his responsibility will prevail, and that he will renounce his enterprise?"

Yes! this was what I feared, and there was no remedy on that side. "As for my friend Endicott, Mr. Jeorling, I answer for him as for myself. We would go to the end of the world--if the world has an end--did the captain want to go there. True, we two, Dirk Peters and yourself, are but a few to be a law to the others."

"And what do you think of the half-breed?" I asked.

"Well, our men appear to accuse him chiefly of the prolongation of the voyage. You see, Mr. Jeorling, though you have a good deal to do with it, you pay, and pay well, while this crazy fellow, Dirk Peters, persists in asserting that his poor Pym is still living--his poor Pym who was drowned, or frozen, or crushed--killed, anyhow, one way or another, eleven years ago!"

So completely was this my own belief that I never discussed the subject with the half-breed.

"You see, Mr. Jeorling," resumed the boatswain, "at the first some curiosity was felt about Dirk Peters. Then, after he saved Martin Holt, it was interest. Certainly, he was no more talkative than before, and the bear came no oftener out of his den! But now we know what he is, and no one likes him the better for that. At all events it was he who induced our captain, by talking of land to the south of Tsalal Island, to make this voyage, and it is owing to him that he has reached the eighty-sixth degree of latitude."

"That is quite true, boatswain."

"And so, Mr. Jeorling, I am always afraid that one of these days somebody will do Peters an ill turn."

"Dirk Peters would defend himself, and I should pity the man who laid a finger on him."

"Quite so. It would not be good for anybody to be in his hands, for they could bend iron! But then, all being against him, he would be forced into the hold."

"Well, well, we have not yet come to that, I hope, and I count on you, Hurliguerly, to prevent any against Dirk Peters. Reason with your men. Make them understand that we have time to return to the Falklands before the end of the fine season. Their reproaches must not be allowed to provide the captain with an excuse for turning back before the object is attained."

"Count on me, Mr. Jeorling, I will serve you to the best of my ability."

"You will not repent of doing so, Hurliguerly. Nothing is easier than to add a round o to the four hundred dollars which each man is to have, if that man be something more than a sailor--even were his functions simply those of boatswain on board the _Halbrane_."

Nothing important occurred on the 13th and 14th, but a fresh fall in the temperature took place. Captain Len Guy called my attention to this, pointing out the flocks of birds continuously flying north.

While he was speaking to me I felt that his last hopes were fading. And who could wonder? Of the land indicated by the half-breed nothing was seen, and we were already more than one hundred and eighty miles Tsalal Island. At every point of the compass was the sea, nothing but the vast sea with its desert horizon which the sun's disk had been nearing since the 21st and would touch on the 21st March, prior to during the six months of the austral night. Honestly, was it possible to admit that William Guy and his five panions could have accomplished such a distance on a craft, and was there one chance in a hundred that the could ever be recovered?

On the 15th of January an observation most carefully taken gave 43° 13' longitude and 88° 17' latitude. The _Halbrane_ was less than two degrees from the pole.

Captain Len Guy did not seek to conceal the result of this observation, and the sailors knew enough of nautical calculation to understand it. Besides, if the consequences had to be explained to them, were not Holt and Hardy there to do this, and Hearne, to exaggerate them to the utmost?

During the afternoon I had indubitable proof that the sealing-master had been working on the minds of the crew. The men, emerging at the foot of the mainmast, talked in whispers and cast evil glances at us. Two or three sailors made threatening gestures undisguisedly; then arose such angry mutterings that West could not to be deaf to them.
He strode forward and called out. "Silence, there! The first man who speaks will have to reckon with me?"

Captain Len Guy was shut up in his cabin, but every moment I expected to see him come out, give one last long around the waste of waters, and then order the ship’s course to be reversed. Nevertheless, on the next day the schooner was sailing in the same direction. Unfortunately--for the circumstance had some gravity--a mist was beginning to come down on us. I could not keep still, I My apprehensions were redoubled. It was that West was only awaiting the order to change the helm. What mortal anguish soever the captain's must be, I understood too well that he would not give that order without hesitation.

For several days past I had not seen the half-breed, or, least, I had not exchanged a word with him. He was boycotted by the whole crew, with the exception of the boatswain, who was careful to address him, although rarely got a word in return. Dirk Peters took not faintest notice of this state of things. He remained completely absorbed in his own thoughts, yet, had he heard West give the word to steer north, I know not acts of violence he might have driven. He seemed to avoid me; was this from a desire not to compromise me?

On the 17th, in the afternoon, however, Dirk Peters manifested an intention of speaking to me, and never, never, could I have imagined what I was to learn in that interview.

It was about half-past two, and, not feeling well, I gone to my cabin, where the side window was open, that at the back was closed. I heard a knock at the dom and asked who was there.

"Dirk Peters," was the reply.
"You want to speak to me?"
"Yes."
"I am coming out."
"If you please--I should prefer--may I come into your cabin?"
"Come in."

He entered, and shut the door behind him?

Without rising I signed to him to seat himself arm-chair, but he remained standing.

"What do you want of me, Dirk Peters?" I asked at length, as he seemed unable to make up his mind to speak.

"I want to tell you something--because it seems well that you should know it, and you only. In the crew--they must never know it."
"If it is a grave matter, and you fear any indiscretion, Dirk Peters, why do you speak to me?"
"If!--I must! Ah, yes! I must! It is impossible to keep it there! It weighs on me like a stone."

And Dirk Peters struck his breast violently.

Then he resumed:
"Yes! I am always afraid it may escape me during my sleep, and that someone will hear it, for I dream of it, and in dreaming--"

"You dream," I replied, "and of what?"

"Of him, of him. Therefore it is that I sleep in corners, all alone, for fear that his true name should be discovered."

Then it struck me that the half-breed was perhaps about to respond to an inquiry which I had not yet made--why he had gone to live at the Falklands under the name of Hunt after leaving Illinois?

I put the question to him, and he replied,--

"It is not that; no, it is not that I wish--"

"I insist, Dirk Peters, and I desire to know in the first place for what reason you did not remain in America, for what reason you chose the Falklands--"

"For what reason, sir? Because I wanted to get near Pym, my poor Pym--because I hoped to find an opportunity at the Falklands of embarking on a whaling ship bound for the southern sea."

"But that name of Hunt?"

"I would not bear my own name any longer--on account of the affair of the _Grampus_."

The half-breed was alluding to the scene of the "short straw" (or lot-drawing) on board the American brig, when it was decided between Augustus Barnard, Arthur Pym, Dirk Peters, and Parker, the sailor, that one of the four should be sacrificed--as food for the three others. I remembered the obstinate resistance of Arthur Pym, and how it was impossible for him to refuse to take his the tragedy about to be performed--he says this himself--and the horrible act whose remembrance must poison the existence of all those who had survived it.

Oh, that lot-drawing! The "short straws" were little splinters of wood of uneven length which Arthur held in his hand. The shortest was to designate him who should be immolated. And he speaks of the sort of involuntary fierce desire to deceive his corn that he felt--"to cheat" is the word he uses--but he did not "cheat," and he asks pardon for having had the idea! Let us try to put ourselves in his place!

He made up his mind, and held out his hand, closed on the four slips. Dirk Peters drew the first. Fate favoured
him. He had nothing more to fear. Arthur Pym calculated that one more chance was against him. Augustus Barnard
drew in his turn. Saved, too, he! And now Arthur Pym reckoned up the exact chances Parker and himself. At that
moment all the ferocity the tiger entered into his soul. He conceived an intense and devilish hatred of his poor
comrade, his fellow-man.

Five minutes elapsed before Parker dared to draw. At length Arthur Pym, standing with closed eyes, not
knowing whether the lot was for or against him, felt a hand seize his own. It was the hand of Dirk Peters. Arthur
Pym had escaped death. And then the half-breed upon Parker and stabbed him in the back. The frightful repast
followed--immediately--and words are not sufficient to convey to the mind the horror of the reality.

Yes! I knew that hideous story, not a fable, as I had long believed. This was what had happened on board the
_Grampus_ on the 16th of July, 1827, and vainly did I try to understand Dirk Peters' reason for recalling it to my
recollection.

"Well, Dirk Peters," I said, "I will ask you, since you were anxious to hide your name, what it was that induced
you to reveal it, when the _Halbrane_ was moored off Tsalal Island; why you did not keep to the name of Hunt?"

"Sir--understand me--there was hesitation about going farther--they wanted to turn back. This was decided, and
then I thought that by telling who I was--Dirk Peters--of the _Grampus_--poor Pym's companion--I should be heard;
they would believe with me that he was still living, they would go in search of him! And yet, it was a serious thing
to do--to acknowledge that I was Dirk Peters, he who had killed Parker! But hunger, devouring hunger!"

"Come, come, Dirk Peters," said I, "you exaggerate! If the lot had fallen to you, you would have incurred the fate
of Parker. You cannot be charged with a crime."

"Sir, would Parker's family speak of it as you do?"

"His family! Had he then relations?"

"Yes--and that is why Pym changed his name in the narrative. Parker's name was not Parker--it was--"

"Arthur Pym was right," I said, interrupting him quickly, "and as for me, I do not wish to know Parker's real
name. Keep this secret."

"No, I will tell it to you. It weighs too heavily on me, and I shall be relieved, perhaps, when I have told you, Mr.
Jeoring."

"No, Dirk Peters, no!"

"His name was Holt--Ned Holt."

"Holt!" I exclaimed, "the same name as our sailing-master's."

"Who is his own brother, sir."

"Martin Holt?"

"Yes--understand me--his brother."

"But he believes that Ned Holt perished in the wreck of the _Grampus_ with the rest."

"It was not so, and if I learned that I--"

Just at that instant a violent shock flung me out of my bunk.

The schooner had made such a lurch to the port side that she was near foundering.

I heard an angry voice cry out:

"What dog is that at the helm?"

It was the voice of West, and the person he was Hearne.

I rushed out of my cabin.

"Have you let the wheel go?" repeated West, who had seized Hearne by the collar of his jersey.

"Lieutenant--I don't know--"

"Yes, I tell you, you have let it go. A little more and the schooner would have capsized under full sail."

"Gratian," cried West, calling one of the sailors, "take the helm; and you, Hearne, go down into the hold."

On a sudden the cry of "Land!" resounded, and every eye was turned southwards.

CHAPTER XIX. LAND?

"Land" is the only word to be found at the beginning of the nineteenth chapter of Edgar Poe's book. I thought it
would be a good idea--placing after it a note of interrogation--to put it as a heading to this portion of our narrative.

Did that word, dropped from our fore-masthead, indicate an island or a continent? And, whether a continent or
an island, did not a disappointment await us? Could they be there whom we had come to seek? And Arthur Pym,
who was dead, unquestionably dead, in spite of Dirk Peters' assertions, had he ever set foot on this land?

When the welcome word resounded on board the _Jane_ on the 17th January, 1828--(a day full of incidents
according to Arthur Pym's diary)--it was succeeded by "Land on the starboard bow!" Such might have been the
signal from the masthead of the _Halbrane_.

The outlines of land lightly drawn above the sky line were visible on this side.

The land announced to the sailors of the fane was the wild and barren Bennet Islet. Less than one degree south of it lay Tsalal Island, then fertile, habitable and inhabited, and on which Captain Len Guy had hoped to meet his fellow-countrymen. But what would this unknown island, five degrees farther off in the depths of the southern sea, be for our schooner? Was it the goal so ardently desired and so earnestly sought for? Were the two brothers, William and Len Guy, to meet at this place Would the _Halbrane_ come there to the end of a voyage whose success would be definitely secured by the restoration of the survivors of the fane to their country?

I repeat that I was just like the half-breed. Our aim was not merely to discover the survivors, nor was success in this matter the only success we looked for. However, since land was before our eyes, we must get nearer to it first.

That cry of "Land" caused an immediate diversion of our thoughts. I no longer dwelt upon the secret Dirk Peters had just told me--and perhaps the half-breed forgot it also, for he rushed to the bow and fixed his eyes immovably on the horizon. As for West, whom nothing could divert from his duty, he repeated his commands. Gratian came to take the helm, and Hearne was shut up in the hold.

On the whole this was a just punishment, and none of the old crew protested against it, for Hearne's inattention awkwardness had really endangered the schooner, for a short time only.

Five or six of the Falklands sailors did, however, murmur a little.

A sign from the mate silenced them, and they returned at once to their posts.

Needless to say, Captain Len Guy, upon hearing the cry of the look-out man, had tumbled up from his cabin; and eagerly examined this land at ten or twelve miles distance.

As I have said, I was no longer thinking about the secret Dirk Peters had confided to me. Besides, so long as the secret remained between us two--and neither would betray it--there would be nothing to fear. But if ever an unlucky accident were to reveal to Martin Holt that his brother's name had been changed to Parker, that the unfortunate man had not perished in the shipwreck of the _Grampus_, but had been sacrificed to save his companions from perishing of hunger; that Dirk Peters, to whom Martin Holt himself owed his life, had killed him with his own hand, what might not happen then? This was the reason why the half-breed shrank from any expression of thanks from Martin Holt--why he avoided Martin Holt, the victim's brother.

The boatswain had just struck six bells. The schooner was sailing with the caution demanded by navigation in unknown seas. There might be shoals or reefs barely hidden under the surface on which she might run aground or be wrecked. As things stood with the _Halbrane_, and even admitting that she could be floated again, an accident would have rendered her return impossible before the winter set in. We had urgent need that every chance should be in our favour and not one against us.

West had given orders to shorten sail. When the boatswain had furled the top-gallant-sail, the top-sail and royal, the _Halbrane_ remained under her mainsail, her fore-sail and her jib: sufficient canvas to cover the distance that separated her from land in a few hours. Captain Len Guy immediately heaved the lead, which showed a depth of twenty fathoms. Several other soundings showed that the coast, which was very steep, was probably prolonged like a wall under the water. Nevertheless, as the bottom might happen to rise sharply instead of following the slope of the coast, we did not venture to proceed out the sounding line in hand.

The weather was still beautiful, although the sky was overcast by a mist from south-east to south-west. Owing to this there was some difficulty in identifying the vague outlines which stood out like floating vapour in the sky, disappearing and then reappearing between the breaks of the mist.

However, we all agreed to regard this land as from twenty-five to thirty fathoms in height, at least at its highest part.

No! we would not admit that we were the victims of a delusion, and yet our uneasy minds feared that it might so!

Is it not natural, after all, for the heart to be assailed by a thousand apprehensions as we near the end of any enterprise? At this thought my mind became confused and dreamy. The _Halbrane_ seemed to be reduced to the dimensions of a small boat lost in this boundless space—the contrary of that limitless sea of which Edgar Poe speaks, where, like a living body, the ship grows larger.

When we have charts, or even sailing directions instruct us concerning the hydrography of the coasts, the nature of the landfalls, the bays and the creeks, we may sail along boldly. In every other region, the master of a ship must not defer the order to cast anchor near the shore until the morrow. But, where we were, what an amount of prudence was necessary! And yet, no manifest obstacle was before us. Moreover, we had no cause to fear that the light would fail us during the sunny the night. At this season the sun did not set so soon under the western horizon, and its rays bathed the vast Antarctic zone in unabated light.

From that day forward the ship's log recorded that the temperature fell continuously. The thermometer in the air and in the shade did not mark more than 32° (0° C.), and when plunged into water it only indicated 26° (3° 33' C. below 0°). What could be the cause of this fall, since we were at the height of the southern summer? The crew were
obliged to resume their woollen clothing, which they had left off a month previously. The schooner, however, was sailing before the wind, and these first cold blasts were less keenly felt. Yet we recognized the necessity of reaching our goal as soon as possible. To linger in this region or to expose ourselves to the danger of wintering out would be to tempt Providence!

Captain Len Guy tested the direction of the current by heavy lead lines, and discovered that it was beginning to deviate from its former course.

"Whether it is a continent," said he, "that lies before us, or whether it is an island, we have at present no means of determining. If it be a continent, we must conclude that the current has an issue towards the south-east."

"And it is quite possible," I replied, "that the solid part of the Antarctic region may be reduced to a mere polar mound. In any case, it is well to note any of those observations which are likely to be accurate."

"That is just what I am doing, Mr. Jeorling, and we shall bring back a mass of information about this portion of the southern sea which will prove useful to navigators."

"If ever any venture to come so far south, captain! We have penetrated so far, thanks to the help of particular circumstances, the earliness of the summer season, an abnormal temperature and a rapid thaw. Such conditions may only occur once in twenty or fifty years!"

"Wherefore, Mr. Jeorling, I thank Providence for this, and hope revives in me to some extent. As the weather has been constantly fine, what is there to make it impossible for my brother and my fellow-countrymen to have landed on this coast, whither the wind and the tide bore them? What our schooner has done, their boat may have done! They surely did not start on a voyage which might prolonged to an indefinite time without a proper supply of provisions! Why should they not have found the resources as those afforded to them by the island of Tsalal during many long years? They had ammunition and arms elsewhere. Fish abound in these waters, water-fowl also. Oh yes! my heart is full of hope, and I wish I were a few hours older!"

Without being quite so sanguine as Len Guy, I was glad to see he had regained his hopeful mood. Perhaps, if his investigations were successful, I might be able to have them continued in Arthur Pym's interest—even into the heart of this strange land which we were approaching.

The _Halbrane_ was going along slowly on these clear waters, which swarmed with fish belonging to the same species as we had already met. The sea-birds were more numerous, and were evidently not frightened; for they kept flying round the mast, or perching in the yards. Several whitish ropes about five or six feet long were brought on board. They were chaplets formed of millions of shell-fish.

Whales, spouting jets of feathery water from their blow-holes, appeared at a distance, and I remarked that all of them took a southerly direction. There was therefore reason to believe that the sea extended far and wide in that direction.

The schooner covered two or three miles of her course without any increase of speed. This coast evidently stretched from north-west to south-east. Nevertheless, the telescopes revealed no distinctive features—even after three hours' navigation.

The crew, gathered together on the forecastle, were looking on without revealing their impressions. West, after going aloft to the fore-cross-trees, where he had remained ten minutes, had reported nothing precise. Stationed at the port side, leaning my elbows on the bulwarks, I closely watched the sky line, broken only towards the east.

At this moment the boatswain rejoined me, and without preface said:

"Will you allow me to give you my opinion, Mr. Jeorling?"

"Give it, boatswain," I replied, "at the risk of my not adopting it if I don't agree with it."

"It is correct, and according as we get nearer one must really be blind not to adopt it!"

"And what idea have you got?"

"That it is not land which lies before us, Mr. Jeorling!"

"What is it you are saying?"

"Look attentively, putting one finger before your eyes--look there--out a--starboard."

I did as Hurliguerly directed.

"Do you see?" he began again. "May I lose my liking for my grog if these heights do not change place, not with regard to the schooner, but with regard to themselves!"

"And what do you conclude from this?"

"That they are moving icebergs."

"Icebergs?"

"Sure enough, Mr. Jeorling."

Was not the boatswain mistaken? Were we in for a disappointment? Were there only drifting ice-mountains in the distance instead of a shore?

Presently, there was no doubt on the subject; for some time past the crew had no longer believed existence of
land in that direction.

Ten minutes afterwards, the man in the crow's-nest announced that several icebergs were coming north-west, in an oblique direction, into the course of the _Halbrane._

This news produced a great sensation on board. Our last hope was suddenly extinguished. And what a blow to Captain Len Guy! We should have to seek land of the austral zone under higher latitudes without being sure of ever coming across it!

And then the cry, "Back ship! back ship!" sounded almost unanimously on board the _Halbrane._

Yes, indeed, the recruits from the Falklands demanding that we should turn back, although Hearne was not there to fan the flame of insubordination, and I must acknowledge that the greater part of the old tars seemed to agree with them.

West awaited his chief's orders, not daring to impose silence.

Gratian was at the helm, ready to give a turn to wheel, whilst his comrades with their hands on the cleats were preparing to ease off the sheets.

Dirk Peters remained immovable, leaning against the fore-mast, his head down, his body bent, and his mouth set firm. Not a word passed his lips.

But now he turned towards me, and what a look of mingled wrath and entreaty he gave me!

I don't know what irresistible motive induced me to interfere personally, and once again to protest! A final argument had just crossed my mind--an argument whose weight could not be disputed.

So I began to speak, and I did so with such conviction that none tried to interrupt me.

The substance of what I said was as follows:--

"No! all hope must not be abandoned. Land cannot be far off. The icebergs which are formed in the open sea by the accumulation of ice are not before us. These icebergs must have broken off from the solid base of a continent or an island. Now, since the thaw begins at this season of the year, the drift will last for only a short time. Behind them we must meet the coast on which they were formed. In another twenty-four hours, or forty-eight at the most, if the land does not appear, Captain Len Guy will steer to the north again!"

Had I convinced the crew, or ought I to take advantage of Hearne's absence and of the fact that he could not communicate with them to make them understand that they were being deceived, and to repeat to them that it would endanger the schooner if our course were now to be reversed.

The boatswain came to my help, and in a good-humoured voice exclaimed,--

"Very well reasoned, and for my part I accept Mr. Jeorling's opinion. Assuredly, land is near! If we seek it beyond those icebergs, we shall discover it without much hard work, or great danger! What is one degree farther south, when it is a question of putting a hundred additional dollars into one's pocket? And let us not forget that if they are acceptable when they go in, they are none the less so when they come out!"

Upon this, Endicott, the cook, came to the aid of his friend the boatswain.

"Yes, very good things indeed are dollars!" cried he, showing two rows of shining white teeth.

Did the crew intend to yield to Hurliguerly's argument, or would they try to resist if the _Halbrane_ went on in the direction of the icebergs?

Captain Len Guy took up his telescope again, and turned it upon these moving masses; he observed them with much attention, and cried out in a loud voice,--

"Steer south-sou'-west!"

West gave orders to execute the manoeuvres. The sailors hesitated an instant. Then, recalled to obedience, they began to brace the yards and slack the sheets, and the schooner increased her speed.

When the operation was over, I went up to Hurliguerly, and drawing him aside, I said,--

"Thank you, boatswain."

"Ah, Mr. Jeorling," he replied, shaking his head, "it is all very fine for this time, but you must not do it again! Everyone would turn against me, even Endicott, perhaps."

"I have urged nothing which is not at least probable," I answered sharply.

"I don't deny that fact, Mr. Jeorling."

"Yes, Hurliguerly, yes--I believe what I have said, and I have no doubt but that we shall really see the land beyond the icebergs."

"Just possible, Mr. Jeoding, quite possible. But it must appear before two days, or, on the word of a boatswain, nothing can prevent us from putting about!"

During the next twenty-four hours the _Halbrane_ took a south-south-westerly course. Nevertheless, her direction must have been frequently changed and her speed decreased in avoiding the ice. The navigation became very difficult so soon as the schooner headed towards the line of the bergs, which it had to cut obliquely. However, there were none of the packs which blocked up all access to the iceberg on the 67th parallel. The enormous heaps
were melting away with majestic slowness. The ice-blocks appeared "quite new" (to employ a perfectly accurate expression), and perhaps they had only been formed some days. However, with a height of one hundred and fifty feet, their bulk must have been calculated by millions of tons. West was watching closely in order to avoid collisions, and did not leave the deck even for an instant.

Until now, Captain Len Guy had always been able to rely upon the indications of the compass. The magnetic pole, still hundreds of miles off, had no influence on the compass, its direction being east. The needle remained steady, and might be trusted.

So, in spite of my conviction, founded, however, on very serious arguments, there was no sign of land, and I was wondering whether it would not be better to steer more to the west, at the risk of removing the _Halbrane_ from that extreme point where the meridians of the globe cross each other.

Thus, as the hours went by—and I was only allowed forty-eight—it was only too plain that lack of courage prevailed, and that everyone was inclined to be insubordinate.

After another day and a half, I could no longer contend with the general discontent. The schooner must ultimately retrace her course towards the north.

The crew were working in silence, whilst West was giving sharp short orders for manoeuvring through the channels, sometimes luffing in order to avoid a collision, now bearing away almost square before the wind. Nevertheless, in spite of a close watch, in spite of the skill of the sailors, in spite of the prompt execution of the manoeuvres, dangerous friction against the hull, which left long traces of the ridge of the icebergs, occurred. And, in truth, the bravest could not repress a feeling of terror when thinking that the planking might have given way and the sea have invaded us.

The base of these floating ice-mountains was very steep, so that it would have been impossible for us to land upon one. Moreover, we saw no seals—these were usually very numerous where the ice-fields abounded—not even a flock of the screeching penguins which, on other occasions, the _Halbrane_ sent diving by myriads as she passed through them; the birds themselves seemed rarer and wilder. Dread, from which none of us could escape, seemed to come upon us from these desolate and deserted regions. How could we still entertain a hope that the survivors of the _Jane_ had found shelter, and obtained means of existence in those awful solitudes?

And if the Halbræhe were also shipwrecked, would there remain any evidence of her fate?

Since the previous day, from the moment our southern course had been abandoned, to cut the line of the icebergs, a change had taken place in the demeanour of the half-breed. Nearly always crouched down at the foot of the fore-mast, looking afar into the boundless space, he only got up in order to lend a hand to some manoeuvre, and without any of his former vigilance or zeal. Not that he had ceased to believe that his comrade of the _Jane_ was still living—that thought never even came into his mind! But he felt by instinct that the traces of poor Pym were not to be recovered by following this course.

"Sir," he would have said to me, "this is not the way! No, this is not the way!" And how could I have answered him?

Towards seven o'clock in the evening a rather thick mist arose; this would tend to make the navigation of the schooner difficult and dangerous.

The day, with its emotions of anxiety and alternatives, had worn me out. So I returned to my cabin, where I threw myself on my bunk in my clothes.

But sleep did not come to me, owing to my besetting thoughts. I willingly admit that the constant reading of Edgar Poe's works, and reading them in this place in which his heroes delighted, had exercised an influence on me which I did not fully recognize.

To-morrow, the forty-eight hours would be up, the last concession which the crew had made to my entreaties.

"Things are not going as you wish?" the boatswain said to me just as I was leaving the deck.

No, certainly not, since land was not to be seen behind the fleet of icebergs. If no sign of a coast appeared between these moving masses, Captain Len Guy would steer north to-morrow.

Ah! were I only master of the schooner! If I could have bought it even at the price of all my fortune, if these men had been my slaves to drive by the lash, the _Halbrane_ should never have given up this voyage, even if it led her so far as the point above which flames the Southern Cross.

My mind was quite upset, and teemed with a thousand thoughts, a thousand regrets, a thousand desires! I wanted to get up, but a heavy hand held me down in my bunk! And I longed to leave this cabin where I was struggling against nightmare in my half-sleep, to launch one of the boats of the _Halbrane_ to jump into it with Dirk Peters, who would not hesitate about following me, and so abandon both of us to the current running south.

And lo! I was doing this in a dream. It is to-morrow! Captain Len Guy has given orders to reverse our course, after a last glance at the horizon. One of the boats is in tow. I warn the half-breed. We creep along without being seen. We cut the painter. Whilst the schooner sails on ahead, we stay astern and the current carries us off.
Thus we drift on the sea without hindrance! At length our boat stops. Land is there. I see a sort of sphinx surmounting the southern peak--the sea-sphinx. I go to him. I question him. He discloses the secrets of these mysterious regions to me. And then, the phenomena whose reality Arthur Pym asserted appear around the mythic monster. The curtain of flickering vapours, striped with luminous rays, is rent asunder. And it is not a face of superhuman grandeur which arises before my astonished eyes: it is Arthur Pym, fierce guardian of the south pole, flaunting the ensign of the United States in those high latitudes!

Was this dream suddenly interrupted, or was it changed by a freak of my brain? I cannot tell, but I felt as though I had been suddenly awakened. It seemed as though a change had taken place in the motion of the schooner, which was sliding along on the surface of the quiet sea, with a slight list to starboard. And yet, there was neither rolling nor pitching. Yes, I felt myself carried off as though my bunk were the car of an air-balloon. I was not mistaken, and I had fallen from dreamland into reality.

Crash succeeded crash overhead. I could not account for them. Inside my cabin the partitions deviated from the vertical in such a way as to make one believe that the _Halbrane_ had fallen over on her beam ends. Almost immediately, I was thrown out of my bunk and barely escaped splitting my skull against the corner of the table. However, I got up again, and, clinging on to the edge of the door frame, I propped myself against the door.

At this instant the bulwarks began to crack and the port side of the ship was torn open.

Could there have been a collision between the schooner and one of those gigantic floating masses which West was unable to avoid in the mist?

Suddenly loud shouts came from the after-deck, and then screams of terror, in which the maddened voices of the crew joined.

At length there came a final crash, and the _Halbrane_ remained motionless.

I had to crawl along the floor to reach the door and gain the deck. Captain Len Guy having already left his cabin, dragged himself on his knees, so great was the list to port, and caught on as best he could.

In the fore part of the ship, between the forecastle and the fore-mast, many heads appeared.

Dirk Peters, Hardy, Martin Holt and Endicott, the latter with his black face quite vacant, were clinging to the starboard shrouds.

A man came creeping up to me, because the slope of the deck prevented him from holding himself upright: it was Hurliguerly, working himself along with his hands like a top-man on a yard.

Stretched out at full length, my feet propped up against the jamb of the door, I held out my hand to the boatswain, and helped him, not without difficulty, to hoist himself up near me.

"What is wrong?" I asked. "A stranding, Mr. Jeorling."

"We are ashore!"

"A shore presupposes land," replied the boatswain ironically, "and so far as land goes there was never any except in that rascal Dirk Peters' imagination."

"But tell me--what has happened?"

"We came upon an iceberg in the middle of the fog, and were unable to keep clear of it."

"An iceberg, boatswain?"

"Yes, an iceberg, which has chosen just now to turn head over heels. In turning, it struck the _Halbrane_ and carried it off just as a battledore catches a shuttlecock, and now here we are, stranded at certainly one hundred feet above the level of the Antarctic Sea."

Could one have imagined a more terrible conclusion to the adventurous voyage of the _Halbrane_?

In the middle of these remote regions our only means of transport had just been snatched from its natural element, and carried off by the turn of an iceberg to a height of more than one hundred feet! What a conclusion! To be swallowed up in a polar tempest, to be destroyed in a fight with savages, to be crushed in the ice, such are the dangers to which any ship engaged in the polar seas is exposed! But to think that the _Halbrane_ had been lifted by a floating mountain just as that mountain was turning over, was stranded and almost at its summit--no! such a thing seemed quite impossible.

I did not know whether we could succeed in letting down the schooner from this height with the means we had at our disposal. But I did know that Captain Len Guy, the mate and the older members of the crew, when they had recovered from their first fright, would not give up in despair, no matter how terrible the situation might be; of that I had no doubt whatsoever! They would all look to the general safety; as for the measures to be taken, no one yet knew anything. A foggy veil, a sort of greyish mist still hung over the iceberg. Nothing could be seen of its enormous mass except the narrow craggy cleft in which the schooner was wedged, nor even what place it occupied in the middle of the ice-fleet drifting towards the south-east.

Common prudence demanded that we should quit the _Halbrane_, which might slide down at a sharp shake of the iceberg. Were we even certain that the latter had regained its position on the surface of the sea? Was her stability
secure? Should we not be on the look-out for a fresh upheaval? And if the schooner were to fall into the abyss, which of us could extricate himself safe and sound from such a fall, and then from the final plunge into the depths of the ocean?

In a few minutes the crew had abandoned the **Halbrane**. Each man sought for refuge on the ice-slopes, awaiting the time when the iceberg should be freed from mist. The oblique rays from the sun did not succeed in piercing it, and the red disk could hardly be perceived through the opaque mass.

However, we could distinguish each other at about twelve feet apart. As for the **Halbrane**, she looked like a confused blackish mass standing out sharply against the whiteness of the ice.

We had now to ascertain whether any of those who were on the deck at the time of the catastrophe had been thrown over the bulwarks and precipitated, into the sea?

By Captain Len Guy’s orders all the sailors then present joined the group in which I stood with the mate, the boatswain, Hardy and Martin Holt.

So far, this catastrophe had cost us five men—these were the first since our departure from Kerguelen, but were they to be the last?

There was no doubt that these unfortunate fellows had perished, because we called them in vain, and in vain we sought for them, when the fog abated, along the sides of the iceberg, at every place where they might have been able to catch on to a projection.

When the disappearance of the five men had been ascertained, we fell into despair. Then we felt more keenly than before the dangers which threaten every expedition to the Antarctic zone.

“What about Hearne?” said a voice.

Martin Holt pronounced the name at a moment when there was general silence. Had the sealing-master been crushed to death in the narrow part of the hold where he was shut up?

West rushed towards the schooner, hoisted himself on board by means of a rope hanging over the bows, and gained the hatch which gives access to that part of the hold.

We waited silent and motionless to learn the fate of Hearne, although the evil spirit of the crew was but little worthy of our pity.

And yet, how many of us were then thinking that if we had heeded his advice, and if the schooner had taken the northern course, a whole crew would not have been reduced to take refuge on a drifting ice-mountain! I scarcely dared to calculate my own share of the vast responsibility, I who had so vehemently insisted on the prolongation of the voyage.

At length the mate reappeared on deck and Hearne followed him! By a miracle, neither the bulkheads, nor the ribs, nor the planking had yielded at the place where the sealing-master was confined.

Hearne rejoined his comrades without opening his lips, and we had no further trouble about him.

Towards six o’clock in the morning the fog cleared off, owing to a marked fall in the temperature. We had no longer to do with completely frozen vapour, but had to deal with the phenomenon called frost-rime, which often occurs in these high latitudes. Captain Len Guy recognized it by the quantity of prismatic threads, the point following the wind which roughened the light ice-crust deposited on the sides of the iceberg. Navigators know better than to confound this frost-rime with the hoar frost of the temperate zones, which only freezes when it has been deposited on the surface of the soil.

We were now enabled to estimate the size of the solid mass on which we clustered like flies on a sugar-loaf, and the schooner, seen from below, looked no bigger than the yawl of a trading vessel.

This iceberg of between three and four hundred fathoms in circumference measured from 130 to 140 feet high. According to all calculations, therefore, its depth would be four or five times greater, and it would consequently weigh millions of tons.

This is what had happened:

The iceberg, having been melted away at its base by contact with warmer waters, had risen little by little; its centre of gravity had become displaced, and its equilibrium could only be re-established by a sudden capsise, which had lifted up the part that had been underneath above the sea-level. The **Halbrane**, caught in this movement, was hoisted as by an enormous lever. Numbers of icebergs capsize thus on the polar seas, and form one of the greatest dangers to which approaching vessels are exposed.

Our schooner was caught in a hollow on the west side of the iceberg. She listed to starboard with her stern raised and her bow lowered. We could not help thinking that the slightest shake would cause her to slide along the slope of the iceberg into the sea. The collision had been so violent as to stave in some of the planks of her hull. After the first collision, the galley situated before the fore-mast had broken its fastenings. The door between Captain Len Guy’s and the mate’s cabins was torn away from the hinges. The topmast and the topgallant-mast had come down after the back-stays parted, and fresh fractures could plainly be seen as high as the cap of the masthead.
Fragments of all kinds, yards, spars, a part of the sails, breakers, cases, hen-coops, were probably floating at the foot of the mass and drifting with it.

The most alarming part of our situation was the fact that of the two boats belonging to the _Halbrane_, one had been stove in when we grounded, and the other, the larger of the two, was still hanging on by its tackles to the starboard davits. Before anything else was done this boat had to be put in a safe place, because it might prove our only means of escape.

As a result of the first examination, we found that the lower masts had remained in their places, and might be of use if ever we succeeded in releasing the schooner. But how were we to release her from her bed in the ice and restore her to her natural element?

When I found myself with Captain Len Guy, the mate, and the boatswain, I questioned them on this subject.

"I agree with you," replied West, "that the operation involves great risks, but since it is indispensable, we will accomplish it. I think it will be necessary to dig out a sort of slide down to the base of the iceberg."

"And without the delay of a single day," added Captain Len Guy.

"Do you hear, boatswain?" said Jem West.

"Work begins to-day."

"I hear, and everyone will set himself to the task," replied Hurliguerly. "If you allow me, I shall just make one observation, captain."

"What is it?"

"Before beginning the work, let us examine the hull and see what the damage is, and whether it can be repaired. For what use would it be to launch a ship stripped of her planks, which would go to the bottom at once?"

We complied with the boatswain's just demand.

The fog having cleared off, a bright sun then illumined the eastern side of the iceberg, whence the sea was visible round a large part of the horizon. Here the sides of the iceberg showed rugged projections, ledges, shoulders, and even flat instead of smooth surfaces, giving no foothold. However, caution would be necessary in order to avoid the falling of those unbalanced blocks, which a single shock might set loose. And, as a matter of fact, during the morning, several of these blocks did roll into the sea with a frightful noise just like an avalanche.

On the whole, the iceberg seemed to be very steady on its new base. So long as the centre of gravity was below the level of the water-line, there was no fear of a fresh capsize.

I had not yet had an opportunity of speaking to Dirk Peters since the catastrophe. As he had answered to his name, I knew he was not numbered among the victims. At this moment, I perceived him standing on a narrow projection; needless to specify the direction in which his eyes were turned.

Captain Len Guy, the mate, the boatswain, Hardy, and Martin Holt, whom I accompanied, went up again towards the schooner in order to make a minute investigation of the hull. On the starboard side the operation would be easy enough, because the _Halbrane_ had a list to the opposite side. On the port side we would have to slide along to the keel as well as we could by scooping out the ice, in order to insure the inspection of every part of the planking.

After an examination which lasted two hours, it was discovered that the damage was of little importance, and could be repaired in a short time. Two or three planks only were wrenched away by the collision. In the inside the skin was intact, the ribs not having given way. Our vessel, constructed for the polar seas, had resisted where many others less solidly built would have been dashed to pieces. The rudder had indeed been unshipped, but that could easily be set right.

Having finished our inspection inside and outside, we agreed that the damage was less considerable than we feared, and on that subject we became reassured. Reassured! Yes, if we could only succeed in getting the schooner afloat again.

CHAPTER XX, "UNMERCIFUL DISASTER"

In the morning, after breakfast, it was decided that the men should begin to dig a sloping bed which would allow the _Halbrane_ to slide to the foot of the iceberg. Would that Heaven might grant success to the operation, for who could contemplate without terror having to brave the severity of the austral winter, and to pass six months under such conditions as ours on a vast iceberg, dragged none could tell whither? Once the winter had set in, none of us could have escaped from that most terrible of fates--dying of cold.

At this moment, Dirk Peters, who was observing the horizon from south to east at about one hundred paces off, cried out in a rough voice: "Lying to!"

Lying to? What could the half-breed mean by that, except that the floating mass had suddenly ceased to drift? As for the cause of this stoppage, it was neither the moment to investigate it, nor to ask ourselves what the
consequences were likely to be.

"It is true, however," cried the boatswain. "The iceberg is not stirring, and perhaps has not stirred since it capsized!"

"How?" said I, "it no longer changes its place?"

"No," replied the mate, "and the proof is that the others, drifting on, are leaving it behind!"

And, in fact, whilst five or six icebergs were descending towards the south, ours was as motionless as though it had been stranded on a shoal.

The simplest explanation was that the new base had encountered ground at the bottom of the sea to which it now adhered, and would continue to adhere, unless the submerged part rose in the water so as to cause a second capsize.

This complicated matters seriously, because the dangers of positive immobility were such that the chances of drifting were preferable. At least, in the latter case there was some hope of coming across a continent or an island, or even (if the currents did not change) of crossing the boundaries of the austral region.

Here we were, then, after three months of this terrible voyage! Was there now any question of trying to save William Guy, his comrades on the lane, and Arthur Pym? Was it not for our own safety that any means at our disposal should be employed? And could it be wondered at were the sailors of the _Halbrane_ to rebel, were they to listen to Hearne's suggestions, and make their officers, or myself especially, responsible for the disasters of this expedition?

Moreover, what was likely to take place, since, notwithstanding their losses, the followers of the sealing-master were still a majority of the ship's company?

This question I could clearly see was occupying the thoughts of Captain Len Guy and West.

Again, although the recruits from the Falklands formed only a total of fourteen men, as against the twelve of the old crew, was it not to be feared that some of the latter would take Hearne's side? What if Hearne's people, urged by despair, were already thinking of seizing the only boat we now possessed, setting off towards the north, and leaving us on this iceberg? It was then, of great importance that our boat should be put in safety and closely watched.

A marked change had taken place in Captain Len Guy since the recent occurrences. He seemed to be transformed upon finding himself face to face with the dangers which menaced us. Up to that time he had been solely occupied in searching for his fellow-countrymen; he had handed over the command of the schooner to West, and he could not have given it to anyone more zealous and more capable. But from this date he resumed his position as master of the ship, and used it with the energy required by the circumstances; in a word, he again became sole master on board, after God.

At his command the crew were drawn up around him on a flat spot a little to the left of the _Halbrane_. In that place the following were assembled:--on the seniors' side: Martin Holt and Hardy, Rogers, Francis, Gratian, Bury, Stern, the cook (Endicott), and I may add Dirk Peters; on the side of the new-comers, Hearne and the thirteen other Falkland sailors. The latter composed a distinct group; the sealing-master was their spokesman and exercised a baneful influence over them.

Captain Len Guy cast a stern glance upon the men and said in a sharp tone:

"Sailors of the _Halbrane_, I must first speak to you of our lost companions. Five of us have just perished in this catastrophe."

"We are waiting to perish in our turn, in these seas, where we have been dragged in spite of--"

"Be silent, Hearne," cried West, pale with anger, "or if not--"

"Hearne has said what he had to say," Captain Len Guy continued, coldly. "Now it is said, and I advise him not to interrupt me a second time!"

The sealing-master might possibly have ventured on an answer, for he felt that he was backed by the majority of the crew; but Martin Holt held him back, and he was silent.

Captain Len Guy then took off his hat and pronounced the following words with an emotion that affected us to the bottom of our hearts:--

"We must pray for those who have died in this dangerous voyage, which was undertaken in the name of humanity. May God be pleased to take into consideration the fact that they devoted their lives to their fellow-creatures, and may He not be insensible to our prayers! Kneel down, sailors of the _Halbrane_!"

They all knelt down on the icy surface, and the murmurs of prayer ascended towards heaven.

We waited for Captain Len Guy to rise before we did so.

"Now," he resumed, "after those who are dead come those who have survived. To them I say that they must obey me, whatever my orders may be, and even in our present situation I shall not tolerate any hesitation or opposition. The responsibility for the general safety is mine, and I will not yield any of it to anyone. I am master here, as on board--"

"On board--when there is no longer a ship," muttered the sealing-master.
"You are mistaken, Hearne, the vessel is there, and we will put it back into the sea. Besides, if we had only a boat, I am the captain of it. Let him beware who forgets this!"

That day, Captain Len Guy, having taken the height of the sun by the sextant and fixed the hour by the chronometer (both of these instruments had escaped destruction in the collision), obtained the following position of his ship:--

South latitude: 88° 55'.
West longitude: 39° 12'.

The _Halbrane_ was only at 1° 5'--about 65 miles--from the south pole.

"All hands to work," was the captain's order that afternoon, and every one obeyed it with a will. There was not a moment to lose, as the question of time was more important than any other. So far as provisions were concerned, there was enough in the schooner for eighteen months on full rations, so we were not threatened with hunger, nor with thirst either, notwithstanding that owing to the water-casks having been burst in the collision, their contents had escaped through their staves. Luckily, the barrels of gin, whisky, beer, and wine, being placed in the least exposed part of the hold, were nearly all intact. Under this head we had experienced no loss, and the iceberg would supply us with good drinking-water. It is a well-known fact that ice, whether formed from fresh or salt water, contains no salt, owing to the chloride of sodium being eliminated in the change from the liquid to the solid state. The origin of the ice, therefore, is a matter of no importance. However, those blocks which are easily distinguished by their greenish colour and their perfect transparency are preferable. They are solidified rain, and therefore much more suitable for drinking-water.

Without doubt, our captain would have recognized any blocks of this description, but none were to be found on the glacier, owing to its being that part of the berg which was originally submerged, and came to the top after the fall.

The captain and West decided first to lighten the vessel, by conveying everything on board to land. The masts were to be cleared of rigging, taken out, and placed on the plateau. It was necessary to lighten the vessel as much as possible, even to clear out the ballast, owing to the difficult and dangerous operation of launching. It would be better to put off our departure for some days if this operation could be performed under more favourable circumstances. The loading might be afterwards accomplished without much difficulty.

Besides this, another reason by no means less serious presented itself to us. It would have been an act of unpardonable rashness to leave the provisions in the storeroom of the _Halbrane_, her situation on the side of the iceberg being very precarious. One shake would suffice to detach the ship, and with her would have disappeared the supplies on which our lives depended.

On this account, we passed the day in removing casks of half-salted meat, dried vegetables, flour, biscuits, tea, coffee, barrels of gin, whisky, wine and beer from the hold and store-room and placing them in safety in the hammocks near the _Halbrane_.

We also had to insure our landing against any possible accident, and, I must add, against any plot on the part of Hearne and others to seize the boat in order to return to the ice-barrier.

We placed the long boat in a cavity which would be easy to watch, about thirty feet to the left of the schooner, along with its oars, rudder, compass, anchor, masts and sail.

By day there was nothing to fear, and at night, or rather during the hours of sleep, the boatswain and one of the superiors would keep guard near the cavity, and we might rest assured that no evil could befall.

The 19th, 20th, and 21st of January were passed in working extra hard in the unshipping of the cargo and the dismantling of the _Halbrane_. We slung the lower masts by means of yards forming props. Later on, West would see to replacing the main and mizzen masts; in any case, we could do without them until we had reached the Falklands or some other winter port.

Needless to say, we had set up a camp on the plateau of which I have spoken, not far from the _Halbrane_. Sufficient shelter against the inclemency of the weather, not unfrequent at this time of the year, was to be found under tents, constructed of sails placed on spars and fastened down by pegs. The glass remained set fair; the wind was nor'-east, the temperature having risen to 46 degrees (2° 78' C.).

Endicott's kitchen was fitted up at the end of the plain, near a steep projection by which we could climb to the very top of the berg.

It is only fair to state that during these three days of hard work no fault was to be found with Hearne. The sealing-master knew he was being closely watched, and he was well aware that Captain Len Guy would not spare him if he tried to get up insubordination amongst his comrades. It was a pity that his bad instincts had induced him to play such a part, for his strength, skill, and cleverness made him a very valuable man, and he had never proved more useful than under these circumstances.

Was he changed for the better? Did he understand that general good feeling was necessary for the safety of all? I
I need not dwell on the ardour with which the half-breed did the rough work, always first to begin and the last to leave off, doing as much as four men, and scarcely sleeping, only resting during meals, which he took apart from the others. He had hardly spoken to me all since the schooner had met with this terrible accident.

What indeed could he say to me? Did I not know as well as he that it would be necessary to renounce every hope of pursuing our intended voyage?

Now and again I noticed Martin Holt and the halfbreed near each other while some difficult piece of work was in progress. Our sailing-master did not miss a chance of getting near Dirk Peters, who always tried his best to escape from him, for reasons well known to me. And whenever I thought of the secret of the fate of the so-called Parker, Martin Holt’s brother, which had been entrusted to me, that dreadful scene of the _Grampus_ filled me with horror. I was certain that if this secret were made known the half-breed would become an object of terror. He would no longer be looked upon as the rescuer of the sailing-master; and the latter, learning that his brother—Luckily, Dirk Peters and myself were the only two acquainted with the fact.

While the _Halbrane_ was being unloaded, Captain Len Guy and the mate were considering how the vessel might be launched. They had to allow for a drop of one hundred feet between the cavity in which the ship lay and the sea; this to be effected by means of an inclined bed hollowed in an oblique line along the west side of the iceberg, and to measure two or three hundred perches in length. So, while the first lot of men, commanded by the boatswain, was unloading the schooner, a second batch under West’s orders began to cut the trench between the blocks which covered the side of the floating mountain.

Floating? I know not why I use this expression, for the iceberg no longer floated, but remained as motionless as an island. There was nothing to indicate that it would ever move again. Other icebergs drifted along and passed us, going south-east, whilst ours, to use Dirk Peters’ expression, was “ly ing to.” Would its base be sufficiently undermined to allow it to detach itself? Perhaps some heavy mass of ice might strike it and set it free by the shock.

No one could predict such an event, and we had only the _Halbrane_ to rely upon for getting us out of these regions.

We were engaged in these various tasks until the 24th of January. The atmosphere was clear, the temperature was even, and the thermometer had indeed gone up to two or three degrees above freezing-point. The number of icebergs coming from the nor’-west was therefore increasing; there were now a hundred of them, and a collision with any of these might have a most disastrous result. Hardy, the caulker, hastened first of all to mend the hull; pegs had to be changed, bits of planking to be replaced, seams to be caulked. We had everything that was necessary for this work, and we might rest assured that it would be performed in the best possible manner. In the midst of the silence of these solitudes, the noise of the hammers striking nails into the side, and the sound of the mallet stuffing tow into the seams, had a startling effect. Sea-gulls, wild duck, albatross, and petrels flew in a circle round the top of the berg with a shrill screaming, and made a terrible uproar.

When I found myself with West and the captain, our conversation naturally turned on our situation and how to get out of it, and upon our chances of pulling through. The mate had good hopes that if no accident occurred the launching would be successfully accomplished. The captain was more reserved on the subject, but at the thought that he would have to renounce all hope of finding the survivors of the fane, his heart was ready to break. When the _Halbrane_ should again be ready for the sea, and when West should inquire what course he was to steer, would Captain Len Guy dare to reply, “To the south”? No! for he would not be followed either by the new hands, or by the greater portion of the older members of the crew. To continue our search in this direction, to go beyond the pole, without being certain of reaching the Indian Ocean instead of the Atlantic, would have been rashness of which no navigator would be guilty. If a continent bound the sea on this side, the schooner would run the danger of being crushed by the mass of ice before it could escape the southern winter.

Under such circumstances, to attempt to persuade Captain Len Guy to pursue the voyage would only be to court a certain refusal. It could not even be proposed, now that necessity obliged us to return northwards, and not to delay a single day in this portion of the Antarctic regions. At any rate, though I resolved not again to speak of the matter to the captain, I lost no opportunity of sounding the boatswain. Often when he had finished his work, Hurliguerly would come and join me; we would chat, and we would compare our recollections of travel.

One day as we were seated on the summit of the iceberg, gazing fixedly on the deceptive horizon, he exclaimed,—

"Who could ever have imagined, Mr. Jeorling, when the _Halbrane_ left Kerguelen, that six and a half months afterwards she would be stuck on the side of an icemountain?"

"A fact much more to be regretted," I replied, "because only for that accident we should have attained our object, and we should have begun our return journey."

"I don't mean to contradict," replied the boatswain, "but you say we should have attained our object, Do you mean by that, that we should have found our countrymen?"
"Perhaps."

"I can scarcely believe such would have been the case, Mr. Jeorling, although this was the principal and perhaps even the only object of our navigation in the polareas."

"The only one--yes--at the start," I insinuated. "But since the half-breed's revelations about Arthur Pym--"

"Ah! You are always harking back on that subject, like brave Dirk Peters."

"Always, Hurliguerly; and only that a deplorable and unforeseen accident made us run aground--"

"I leave you to your delusions, Mr. Jeorling, since you believe you have run aground--"

"Why? Is not this the case?"

"In any case it is a wonderful running aground," replied the boatswain. "Instead of a good solid bottom, we have run aground in the air."

"Then I am right, Hurliguerly, in saying it is an unfortunate adventure."

"Unfortunate, truly, but in my opinion we should take warning by it."

"What warning?"

"That it is not permitted to us to venture so far in these latitudes, and I believe that the Creator forbids His creatures to climb to the summit of the poles."

"Notwithstanding that the summit of one pole is only sixty miles away from us now."

"Granted, Mr. Jeorling, but these sixty miles are equal to thousands when we have no means of making them! And if the launch of the schooner is not successful, here are we condemned to winter quarters which the polar bears themselves would hardly relish!"

I replied only by a shake of my head, which Hurliguerly could not fail to understand.

"Do you know, Mr. Jeorling, of what I think oftenest?"

"What do you think of, boatswain?"

"Of the Kerguelens, whither we are certainly not travelling. Truly, in a bad season it was cold enough there! There is not much difference between this archipelago and the islands situated on the edge of the Antarctic Sea! But there one is not far from the Cape, and if we want to warm our shins, no iceberg bars the way. Whereas here it is the devil to weigh anchor, and one never knows if one shall find a clear course."

"I repeat it, boatswain. If this last accident had not occurred, everything would have been over by this time, one way or another. We should still have had more than six weeks to get out of these southern seas. It is seldom that a ship is so roughly treated as ours has been, and I consider it real bad luck, after our having profited by such fortunate circumstances--"

"These circumstances are all over, Mr. Jeorling," exclaimed Hurliguerly, "and I fear indeed--"

"What--you also, boatswain--you whom I believed to be so confident!"

"Confidence, Mr. Jeorling, wears out like the ends of one's trousers, What would you have me do? When I compare my lot to old Atkins, installed in his cosy inn; when I think of the Green Cormorant, of the big parlours downstairs with the little tables round which friends sip whisky and gin, discussing the news of the day, while the stove makes more noise than the weathercock on the roof--oh, then the comparison is not in our favour, and in my opinion Mr. Atkins enjoys life better than I do."

"You shall see them all again, boatswain--Atkins, the Green Cormorant, and Kerguelen! For God's sake do not let yourself grow downhearted! And if you, a sensible and courageous man, despairs already--"

"Oh, if I were the only one it would not be half so bad as it is!"

"The whole crew does not despair, surely?"

"Yes--and no," replied Hurliguerly, "for I know some who are not at all satisfied!"

"Has Hearne begun his mischief again? Is he exciting his companion?"

"Not openly at least, Mr. Jeorling, and since I have kept him under my eye I have neither seen nor heard anything. Besides, he knows what awaits him if he budges. I believe I am not mistaken, the sly dog has changed his tactics. But what does not astonish me in him, astonishes me in Martin Holt."

"What do you mean, boatswain?"

"That they seem to be on good terms with each other. See how Hearne seeks out Martin Holt, talks to him frequently, and Holt does not treat his unfavourably."

"Martin Holt is not one of those who would listen to Hearne's advice, or follow it if he tried to provoke rebellion amongst the crew."

"No doubt, Mr. Jeorling. However, I don't fancy seeing them so much together. Hearne is a dangerous and unscrupulous individual, and most likely Martin Holt does not distrust him sufficiently."

"He is wrong, boatswain."

"And--wait a moment--do you know what they were talking about the other day when I overheard a few scraps of their conversation?"
"I could not possibly guess until you tell me, Hurliguerly.

"Well, while they were conversing on the bridge of the _Halbrane_, I heard them talking about Dirk Peters, and Hearne was saying: 'You must not owe a grudge to the half-breed, Master Holt, because he refused to respond to your advances and accept your thanks! If he be only a sort of brute, he possesses plenty of courage, and has showed it in getting you out of a bad corner at the risk of his life. And besides, do not forget that he formed part of the crew of the _Grampus_ and your brother Ned, if I don't mistake--''"

"He said that, boatswain; he spoke of the _Grampus_!" I exclaimed.

"Yes--of the _Grampus_!

"And of Ned Holt?"

"Precisely, Mr. Jeorling!"

"And what answer did Martin Holt make?"

"He replied: 'I don't even know under what circumstances my unfortunate brother perished. Was it during a revolt on board? Brave man that he was, he would not betray his captain, and perhaps he was massacred.'"

"Did Hearne dwell on this, boatswain?"

"Yes, but he added: 'It is very sad for you, Master Holt! The captain of the _Grampus_, according to what I have been told, was abandoned, being placed in a small boat with one or two of his men--and who knows if your brother was not along with him?'"

"And what next?"

"Then, Mr. Jeorling, he added: 'Did it never occur to you to ask Dirk Peters to enlighten you on the subject?' 'Yes, once,' replied Martin Holt, 'I questioned the halfbreed about it, and never did I see a man so overcome. He replied in so low a voice that I could scarcely understand him, 'I know not--I know not--' and he ran away with his face buried in his hands.'"

"Was that all you heard of the conversation, boatswain?"

"That was all, Mr. Jeorling, and I thought it so strange that I wished to inform you of it."

"And what conclusion did you draw from it?"

"Nothing, except that I look upon the sealing-master as a scoundrel of the deepest dye, perfectly capable of working in secret for some evil purpose with which he would like to associate Martin Holt!"

What did Hearne's new attitude mean? Why did he strive to gain Martin Holt, one of the best of the crew, as an ally? Why did he recall the scenes of the _Grampus_? Did Hearne know more of this matter of Dirk Peters and Ned Holt than the others; this secret of which the half-breed and I believed ourselves to be the sole possessors?

The doubt caused me serious uneasiness. However, I took good care not to say anything of it to Dirk Peters. If he had for a moment suspected that Hearne spoke of what happened on board the _Grampus_, if he had heard that the rascal (as Hurliguerly called him, and not without reason) constantly talked to Martin Holt about his brother, I really do not know what would have happened.

In short, whatever the intentions of Hearne might be, it was dreadful to think that our sailing-master, on whose fidelity Captain Len Guy ought to be able to count, was in conspiracy with him.

The sealing-master must have a strong motive for acting in this way. What it was I could not imagine. Although the crew seemed to have abandoned every thought of mutiny, a strict watch was kept, especially on Hearne.

Besides, the situation must soon change, at least so far as the schooner was concerned. Two days afterwards the work was finished. The caulking operations were completed, and also the slide for lowering the vessel to the base of our floating mountain.

Just now the upper portion of the ice had been slightly softened, so that this last work did not entail much labour for pick-axe or spade. The course ran obliquely round the west side of the berg, so that the incline should not be too great at any point. With cables properly fixed, the launch, it seemed, might be effected without any mishap. I rather feared lest the melting of the ice should make the gliding less smooth at the lower part of the berg.

Needless to say, the cargo, masting, anchors, chains, &c., had not been put on board. The hull was quite heavy enough, and not easily moved, so it was necessary to lighten it as much as possible.

When the schooner was again in its element, the loading could be effected in a few days.

On the afternoon of the 28th, the finishing touches were given. It was necessary to put supports for the sides of the slide in some places where the ice had melted quickly. Then everyone was allowed to rest from 4 o'clock p.m. The captain had double rations served out to all hands, and well they merited this extra supply of spirits; they had indeed worked hard during the week. I repeat that every sign of mutiny had disappeared. The crew thought of nothing except this great operation of the launching. The _Halbrane_ in the sea would mean departure, it would also mean return! For Dirk Peters and me it would be the definite abandonment of Arthur Pym.

That night the temperature was the highest we had so far experienced. The thermometer registered 53° (11° 67’ C. below zero). So, although the sun was nearing the horizon, the ice was melting, and thousands of small streams
flowed in every direction. The early birds awoke at four o'clock, and I was one of their number. I had scarcely slept, and I fancy that Dirk Peters did not sleep much, haunted as he was by the sad thought of having to turn back!

The launch was to take place at ten o'clock. Taking every possible difficulty into account, and allowing for the minutest precautions, the captain hoped that it would be completed before the close of the day. Everyone believed that by evening the schooner would be at the foot of the berg.

Of course we had all to lend a hand to this difficult task. To each man a special duty was assigned; some were employed to facilitate the sliding with wooden rollers, if necessary; others to moderate the speed of the hull, in case it became too great, by means of hawsers and cables.

We breakfasted at nine o'clock in the tents. Our sailors were perfectly confident, and could not refrain from drinking "success to the event"; and although this was a little premature, we added our hurrahs to theirs. Success seemed very nearly assured, as the captain and the mate had worked out the matter so carefully and skilfully. At last we were about to leave our encampment and take up our stations (some of the sailors were there already), when cries of amazement and fear were raised. What a frightful scene, and, short as it may have been, what an impression of terror it left on our minds!

One of the enormous blocks which formed the bank of the mud-bed where the _Halbrane_ lay, having become loose owing to the melting of its base, had slipped and was bounding over the others down the incline.

In another moment, the schooner, being no longer retained in position, was swinging on this declivity.

Yes! I saw it! I saw the schooner topple over, slide down first on its left side, crush one of the men who delayed too long about jumping to one side, then bound from block to block, and finally fling itself into space.

In another moment the _Halbrane_, staved in, broken up, with gaping planks and shattered ribs, had sunk, causing a tremendous jet of water to spout up at the foot of the iceberg.

Horrified! yes, indeed, we were horrified when the schooner, carried off as though by an avalanche, had disappeared in the abyss! Not a particle of our _Halbrane_ remained, not even a wreck!

A minute ago she was one hundred feet in the air, now she was five hundred in the depths of the sea! Yes, we were so stupefied that we were unable to think of the dangers to come--our amazement was that of people who "cannot believe their eyes."

Prostration succeeded as a natural consequence. There was not a word spoken. We stood motionless, with our feet rooted to the icy soil. No words could express the horror of our situation!

As for West, when the schooner had disappeared in the abyss, I saw big tears fall from his eyes. The _Halbrane_ that he loved so much was now an unknown quantity! Yes, our stout-hearted mate wept.

Three of our men had perished, and in what frightful fashion! I had seen Rogers and Gratian, two of our most faithful sailors, stretch out their hands in despair as they were knocked about by the rebounding of the schooner, and finally sink with her! The other man from the Falklands, an American, was crushed in its rush; his shapeless form lay in a pool of blood. Three new victims within the last ten days had to be inscribed on the register of those who died during this fatal voyage! Ah! fortune had favoured us up to the hour when the _Halbrane_ was snatched from her own element, but her hand was now against us. And was not this last the worst blow--must it not prove the stroke of death?

The silence was broken by a tumult of despairing voices, whose despair was justified indeed by this irreparable misfortune!

And I am sure that more than one thought it would have been better to have been on the _Halbrane_ as she rebounded off the side of the iceberg!

Everything would have been over then, as all was over with Rogers and Gratian! This foolish expedition would thus have come to a conclusion worthy of such rashness and imprudence!

At last, the instinct of self-preservation triumphed, and except Hearne, who stood some distance off and affected silence, all the men shouted: "To the boat! to the boat!"

These unfortunate fellows were out of their mind. Terror led them astray. They rushed towards the crag where our one boat (which could not hold them all) had been sheltered during the unloading of the schooner.

Captain Len Guy and Jem West rushed after them. I joined them immediately, followed by the boatswain. We were armed, and resolved to make use of our arms. We had to prevent these furious men from seizing the boat, which did not belong to a few, but to all!

"Hallo, sailors!" cried the captain.

"Hallo!" repeated West, "stop there, or we fire on the first who goes a step farther!"

Both threatened the men with their pistols. The boatswain pointed his gun at them. I held my rifle, ready to fire.

It was in vain! The frenzied men heard nothing, would not hear anything, and one of them fell, struck by the
mate’s bullet, just as he was crossing the last block. He was unable to catch on to the bank with his hands, and slipping on the frozen slope, he disappeared in the abyss.

Was this the beginning of a massacre? Would others let themselves be killed at this place? Would the old hands side with the new-comers?

At that moment I remarked that Hardy, Martin Holt, Francis Bury, and Stern hesitated about coming over to our side, while Hearne, still standing motionless at some distance, gave no encouragement to the rebels.

However, we could not allow them to become masters of the boat, to bring it down, to embark ten or twelve men, and to abandon us to our certain fate on this iceberg. They had almost reached the boat, heedless of danger and deaf to threats, when a second report was heard, and one of the sailors fell, by a bullet from the boatswain’s gun.

One American and one Fuegian less to be numbered amongst the sealing-master’s partisans!

Then, in front of the boat, a man appeared. It was Dirk Peters, who had climbed the opposite slope.

The half-breed put one of his enormous hands on the stern and with the other made a sign to the furious men to clear off. Dirk Peters being there, we no longer needed our arms, as he alone would suffice to protect the boat.

And indeed, as five or six of the sailors were advancing, he went up to them, caught hold of the nearest by the belt, lifted him up, and sent him flying ten paces off. The wretched man not being able to catch hold of anything, would have rebounded into the sea had not Hearne seized him.

Owing to the half-breed’s intervention the revolt was instantly queued. Besides, we were coming up to the boat, and with us those of our men whose hesitation bad not lasted long.

No matter. The others were still thirteen to our ten. Captain Len Guy made his appearance; anger shone in his eyes, and with him was West, quite unmoved. Words failed the captain for some moments, but his looks said what his tongue could not utter. At length, in a terrible voice, he said,--

"I ought to treat you as evil-doers; however, I will only consider you as madmen! The boat belongs to everybody. It is now our only means of salvation, and you wanted to steal it—to steal it like cowards! Listen attentively to what I say for the last time! This boat, belonging to the _Halbrane_, is now the _Halbrane_ herself! I am the captain of it, and let him who disobeys me, beware!"

With these last words Captain Len Guy looked at Hearne, for whom this warning was expressly meant. The sealing-master had not appeared in the last scene, not openly at least, but nobody doubted that he had urged his comrades to make off with the boat, and that he had every intention of doing the same again.

"Now to the camp," said the captain, "and you, Dirk Peters, remain here!"

The half-breed’s only reply was to nod his big head and betake himself to his post.

The crew returned to the camp without the least hesitation. Some lay down in their sleeping-places, others wandered about. Hearne neither tried to join them nor to go near Martin Holt.

Now that the sailors were reduced to idleness, there was nothing to do except to ponder on our critical situation, and invent some means of getting out of it.

The captain, the mate, and the boatswain formed a council, and I took part in their deliberations. Captain Len Guy began by saying,--

"We have protected our boat, and we shall continue to protect it."

"Until death," declared West.

"Who knows," said I, "whether we shall not soon be forced to embark?"

"In that case," replied the captain, "as all cannot fit into it, it will be necessary to make a selection. Lots shall determine which of us are to go, and I shall not ask to be treated differently from the others."

"We have not come to that, luckily," replied the boatswain. "The iceberg is solid, and there is no fear of its melting before winter."

"No," assented West, "that is not to be feared. What it behoves us to do is, while watching the boat, to keep an eye on the provisions."

"We are lucky," added Hurllguery, "to have put our cargo in safety. Poor, dear _Halbrane_. She will remain in these seas, like the fane, her elder sister!"

Yes, without doubt, and I thought so for many reasons, the one destroyed by the savages of Tsalal, the other by one of these catastrophes that no human power can prevent.

"You are right," replied the captain, "and we must prevent our men from plundering. We are sure of enough provisions for one year, without counting what we may get by fishing."

"And it is so much the more necessary, captain, to keep a close watch, because I have seen some hovering about the spirit casks."

"I will see to that," replied West.

"But," I then asked, "had we not better prepare ourselves for the fact that we may be compelled to winter on this iceberg."
"May Heaven avert such a terrible probability," replied the captain.
"After all, if it were necessary, we could get through it, Mr. Jeorling," said the boatswain. "We could hollow out sheltering-places in the ice, so as to be able to bear the extreme cold of the pole, and so long as we had sufficient to appease our hunger--"

At this moment the horrid recollection of the _Grampus_ came to my mind--the scenes in which Dirk Peters killed Ned Holt, the brother of our sailing-master. Should we ever be in such extremity?
Would it not, before we proceed to set up winter quarters for seven or eight months, be better to leave the iceberg altogether, if such a thing were possible?
I called the attention of Captain Len Guy and West to this point.
This was a difficult question to answer, and a long silence preceded the reply.
At last the captain said,--
"Yes, that would be the best resolution to come to; and if our boat could hold us all, with the provisions necessary for a voyage that might last three or four weeks, I would not hesitate to put to sea now and return towards the north."
But I made them observe that we should be obliged to direct our course contrary to wind and current; our schooner herself could hardly have succeeded in doing this. Whilst to continue towards the south--
"Towards the south?" repeated the captain, who looked at me as though he sought to read my thoughts.
"Why not?" I answered. "If the iceberg had not been stopped in its passage, perhaps it would have drifted to some land in that direction, and might not our boat accomplish what it would have done?"
The captain, shaking his head, answered nothing. West also was silent.
"Eh! our iceberg will end by raising its anchor," replied Hurliguerly. "It does not hold to the bottom, like the Falklands or the Kerguelens! So the safest course is to wait, as the boat cannot carry twenty-three, the number of our party."

I dwelt upon the fact that it was not necessary for all twenty-three to embark. It would be sufficient, I said, for five or six of us to reconnoitre further south for twelve or fifteen miles.
"South?" repeated Captain Len Guy.
"Undoubtedly, captain," I added. "You probably know what the geographers frankly admit, that the antarctic regions are formed by a capped continent."
"Geographers know nothing, and can know nothing about it," replied West, coldly.
"It is a pity," said I, "that as we are so near, we should not attempt to solve this question of a polar continent."
I thought it better not to insist just at present.
Moreover there would be danger in sending out our only boat on a voyage of discovery, as the current might carry it too far, or it might not find us again in the same place. And, indeed, if the iceberg happened to get loose at the bottom, and to resume its interrupted drift, what would become of the men in the boat?
The drawback was that the boat was too small to carry us all, with the necessary provisions. Now, of the seniors, there remained ten men, counting Dirk Peters; of the new men there were thirteen; twenty-three in all. The largest number our boat could hold was from eleven to twelve persons. Then eleven of us, indicated by lot, would have to remain on this island of ice. And what would become of them?
With regard to this Hurliguerly made a sound observation.
"After all," he said, "I don't know that those who would embark would be better off than those who remained! I am so doubtful of the result, that I would willingly give up my place to anyone who wanted it."
Perhaps the boatswain was right. But in my own mind, when I asked that the boat might be utilized, it was only for the purpose of reconnoitring the iceberg.

We finally decided to arrange everything with a view to wintering out, even were our ice-mountain again to drift.
"We may be sure that will be agreed to by our men," declared Hurliguerly.
"What is necessary must be done," replied the mate, "and to-day we must set to work."
That was a sad day on which we began our preparations.
Endicott, the cook, was the only man who submitted without murmuring. As a negro, who cares little about the future, shallow and frivolous like all his race, he resigned himself easily to his fate; and this is, perhaps, true philosophy. Besides, when it came to the question of cooking, it mattered very little to him whether it was here or there, so long as his stoves were set up somewhere.
So he said to his friend the mate, with his broad negro smile,--
"Luckily my kitchen did not go off with the schooner, and you shall see, Hurliguerly, if I do not make up dishes just as good as on board the _Halbrane_, so long as provisions don't grow scarce, of course--"
"Well! they will not be wanting for some time to come," replied the boatswain. "We need not fear hunger, but
cold, such cold as would reduce you to an icicle the minute you cease to warm your feet. Cold that makes your skin crack and your skull split! Even if we had some hundreds of tons of coal--But, all things being well calculated, there is only just what will do to boil this large kettle."

"And that is sacred," cried Endicott; "touching is forbidden! The kitchen before all."

"And that is the reason why it never strikes you to pity yourself, you old nigger! You can always make sure of keeping your feet warm at your oven!"

"What would you have, boatswain? You are a first-rate cook, or you are not. When you are, you take advantage of it; but I will remember to keep you a little place before my stove."

"That's good! that's good, Endicott! Each one shall have his turn! There is no privilege, even for a boatswain! On the whole, it is better not to have to fear famine! One can fight against the cold. We shall dig holes in the iceberg, and cuddle ourselves up there. And why should we not have a general dwelling-room? We could make a cave for ourselves with pickaxes! I have heard tell that ice preserves heat. Well, let it preserve ours, and that is all I ask of it?"

The hour had come for us to return to the camp and to seek our sleeping-places.

Dirk Peters alone refused to be relieved of his duty as watchman of the boat, and nobody thought of disputing the post with him.

Captain Len Guy and West did not enter the tents until they had made certain that Hearne and his companions had gone to their usual place of rest. I came back likewise and went to bed.

I could not tell how long I had been sleeping, nor what time it was, when I found myself rolling on the ground after a violent shock.

What could be happening? Was it another capsize of the iceberg?

We were all up in a second, then outside the tents in the full light of a night in the polar regions.

A second floating mass of enormous size had just struck our iceberg, which had "hoisted the anchor" (as the sailors say) and was drifting towards the south.

An unhoped-for change in the situation had taken place. What were to be the consequences of our being no longer cast away at that place? The current was now carrying us in the direction of the pole! The first feeling of joy inspired by this conviction was, however, succeeded by all the terrors of the unknown l and what an unknown!

Dirk Peters only was entirely rejoiced that we had resumed the route which, he believed, would lead us to the discovery of traces of his "poor Pym"--far other ideas occupied the minds of his companions.

Captain Len Guy no longer entertained any hope of rescuing his countrymen, and having reached the condition of despair, he was bound by his duty to take his crew back to the north, so as to clear the antarctic circle while the season rendered it possible to do so. And we were being carried away towards the south!

Naturally enough, we were all deeply impressed by the fearfulness of our position, which may be summed up in a few words. We were no longer cast away, with a possible ship, but the tenants of a floating iceberg, with no hope but that our monster tenement might encounter one of the whaling ships whose business in the deep waters lies between the Orkneys, New Georgia, and the Sandwich Islands. A quantity of things had been thrown into the ice by the collision which had set our iceberg afloat, but these were chiefly articles belonging to the _Halbrane_. Owing to the precaution that had been taken on the previous day, when the cargo was stowed away in the clefts, it had been only slightly damaged. What would have become of us, had all our reserves been swallowed up in that grim encounter?

Now, the two icebergs formed but one, which was travelling south at the rate of two miles an hour. At this rate, thirty hours would suffice to bring us to the point of the axis at which the terrestrial meridians unite. Did the current which was carrying us along pass to the pole itself, or was there any land which might arrest our progress? This was another question, and I discussed it with the boatswain.

"Nobody knows, Mr. Jeorling," was Hurliguerly's reply. "If the current goes to the pole, we shall go there; and if it doesn't, we shan't. An iceberg isn't a ship, and as it has neither sails nor helm, it goes as the drift takes it."

"That's true, boatswain. And therefore I had the idea that if two or three of us were to embark in the boat--"

"Ah! you still hold to your notion of the boat--"

"Certainly, for, if there is land somewhere, is it not possible that the people of the _Jane_--"

"Have come upon it, Mr. Jeorling--at four thousand miles from Tsalal Island."

"Who knows, boatswain?"

"That may be, but allow me to say that your argument will be reasonable when the land comes in sight, if it ever does so. Our captain will see what ought to be done, and he will remember that time presses. We cannot delay in these waters, and, after all, the one thing of real importance to us is to get out of the polar circle before the winter makes it impassable."

There was good sense in Hurliguerly's words; I could not deny the fact.
During that day the greater part of the cargo was placed in the interior of a vast cave-like fissure in the side of the iceberg, where, even in case of a second collision, casks and barrels would be in safety. Our men then assisted Endicott to set up his cooking-stove between two blocks, so that it was firmly fixed, and they heaped up a great mass of coals close to it.

No murmurs, no recrimination disturbed these labours. It was evident that silence was deliberately maintained. The crew obeyed the captain and West because they gave no orders but such as were of urgent necessity. But, afterwards, would these men allow the authority of their leaders to be uncontested? How long would the recruits from the Falklands, who were already exasperated by the disasters of our enterprise, resist their desire to seize upon the boat and escape?

I did not think they would make the attempt, however, so long as our iceberg should continue to drift, for the boat could not outstrip its progress; but, if it were to run aground once more, to strike upon the coast of an island or a continent, what would not these unfortunate creatures do to escape the horrors of wintering under such conditions?

In the afternoon, during the hour of rest allowed to the crew, I had a second conversation with Dirk Peters. I had taken my customary seat at the top of the iceberg, and had occupied it for half an hour, being, as may be supposed, deep in thought, when I saw the half-breend coming quickly up the slope. We had exchanged hardly a dozen words since the iceberg had begun to move again. When Dirk Peters came up to me, he did not address me at first, and was so intent on his thoughts that I was not quite sure he saw me. At length, he leaned back against an ice-block, and spoke:

"Mr. Jeorling," he said, "you remember, in your cabin in the _Halbrane_, I told you the--the affair of the _Grampus_?"

I remembered well.

"I told you that Parker's name was not Parker, that it was Holt, and that he was Ned Holt's brother?"

"I know, Dirk Peters," I replied, "but why do you refer to that sad story again?"

"Why, Mr. Jeorling? Have not--have you never sam anything about it to anybody?"

"Not to anybody," I protested. "How could you suppose I should be so ill-advised, so imprudent, as to divulge your secret, a secret which ought never to pass our lips--a dead secret?"

"Dead, yes, dead! And yet, understand me, it seems to me that, among the crew, something is known."

I instantly recalled to mind what the boatswain had told me concerning a certain conversation in which he had overheard Hearne prompting Martin Holt to ask the half-breed what were the circumstances of his brother's death on board the _Grampus_. Had a portion of the secret got out, or was this apprehension on the part of Dirk Peters purely imaginary?

"Explain yourself," I said.

"Understand me, Mr. Jeorling, I am a bad hand at explaining. Yes, yesterday--I have thought of nothing else since--Martin Holt took me aside, far from the others, and told me that he wished to speak to me--"

"Of the _Grampus_?"

"Of the _Grampus_--yes, and of his brother, Ned Holt. For the first time he uttered that name before me--and yet we have sailed together for nearly three months."

The half-breend's voice was so changed that I could hardly hear him.

"It seemed to me," he resumed, "that in Martin Holt's mind--no, I was not mistaken--there was something like a suspicion."

"But tell me what he said! Tell me exactly what he asked you. What is it?"

I felt sure that the question put by Martin Holt, whatsoever its bearing, had been inspired by Hearne. Nevertheless, as I considered it well that the half-breed should know nothing of the sealing-master's disquieting and inexplicable intervention in this tragic affair, I decided upon concealing it from him.

"He asked me," replied Dirk Peters, "did I not remember Ned Holt of the _Grampus_, and whether he had perished in the fight with the mutineers or in the shipwreck; whether he was one of the men who had been abandoned with Captain Barnard; in short, he asked me if I could tell him how his brother died. Ah! how!"

No idea could be conveyed of the horror with which the half-breend uttered words which revealed a profound loathing of himself.

"And what answer did you make to Martin Holt?"

"None, none!"

"You should have said that Ned Holt perished in the wreck of the brig."

"I could not--understand me--I could not. The two brothers are so like each other. In Martin Holt I seemed to see Ned Holt. I was afraid, I got away from him."

The half-breend drew himself up with a sudden movement, and I sat thinking, leaning my head on my hands. These tardy questions of Holt's respecting his brother were put, I had no doubt whatsoever, at the instigation of
Hearne, but what was his motive, and was it at the Falklands that he had discovered the secret of Dirk Peters? I had not breathed a word on the subject to anymn. To the second question no answer suggested itself; the first involved a serious issue. Did the sealing-master merely desire to gratify his enmity against Dirk Peters, the only one of the Falkland sailors who had always taken the side of Captain Len Guy, and who had prevented the seizure of the boat by Hearne and his companions? Did he hope, by arousing the wrath and vengeance of Martin Holt, to detach the sailing-master from his allegiance and induce him to become an accomplice in Hearne's own designs? And, in fact, when it was a question of sailing the boat in these seas, had he not imperative need of Martin Holt, one of the best seamen of the _Halbrane_? A man who would succeed where Hearne and his companions would fail, if they had only themselves to depend on?

I became lost in this labyrinth of hypotheses, and it must be admitted that its complications added largely to the troubles of an already complicated position.

When I raised my eyes, Dirk Peters had disappeared; he had said what he came to say, and he now knew that I had not betrayed his confidence.

The customary precautions were taken for the night, no individual being allowed to remain outside the camp, with the exception of the half-breed, who was in charge of the boat.

The following day was the 31st of January. I pushed back the canvas of the tent, which I shared with Captain Len Guy and West respectively, as each succeeded the other on release from the alternate "watch," very early, and experienced a severe disappointment.

Mist, everywhere! Nay, more than mist, a thick yellow, mouldy-smelling fog. And more than this again; the temperature had fallen sensibly: this was probably a forewarning of the austral winter. The summit of our ice-mountain was lost in vapour, in a fog which would not resolve itself into rain, but would continue to muffle up the horizon.

"Bad luck!" said the boatswain, "for now if we were to pass by land we should not perceive it."

"And our drift?"

"More considerable than yesterday, Mr. Jeorling. The captain has sounded, and he makes the speed no less than between three and four miles."

"And what do you conclude from this?"

"I conclude that we must be within a narrower sea, since the current is so strong. I should not be surprised if we had land on both sides of us within ten or fifteen miles."

"This, then, would be a wide strait that cuts the antarctic continent?"

"Yes. Our captain is of that opinion."

"And, holding that opinion, is he not going to make an attempt to reach one or other of the coasts of this strait?"

"And how?"

"With the boat."

"Risk the boat in the midst of this fog!" exclaimed the boatswain, as he crossed his arms. "What are you thinking of, Mr. Jeorling? Can we cast anchor to wait for it? And all the chances would be that we should never see it again. Ah! if we only had the _Halbrane_!"

But there was no longer a _Halbrane_!

In spite of the difficulty of the ascent through the half-condensed vapour, I climbed up to the top of the iceberg, but when I had gained that eminence I strove in vain to pierce the impenetrable grey mantle in which the waters were wrapped.

I remained there, hustled by the north-east wind, which was beginning to blow freshly and might perhaps rend the fog asunder. But no, fresh vapours accumulated around our floating refuge, driven up by the immense ventilation of the open sea. Under the double action of the atmospheric and antarctic currents, we drifted more and more rapidly, and I perceived a sort of shudder pass throughout the vast bulk of the iceberg.

Then it was that I felt myself under the dominion of a sort of hallucination, one of those hallucinations which must have troubled tile mind of Arthur Pym. It seemed to me that I was losing myself in his extraordinary personality; at last I was beholding all that he had seen! Was not that impenetrable mist the curtain of vapours which he had seen in his delirium? I peered into it, seeking for those luminous rays which had streaked the sky from east to west! I sought in its depths for that limitless cataract, rolling in silence from the height of some immense rampart lost in the vastness of the zenith! I sought for the awful white giant of the South Pole!

At length reason resumed her sway. This visionary madness, intoxicating while it lasted, passed off by degrees, and I descended the slope to our camp.

The whole day passed without a change. The fog never once lifted to give us a glimpse outside of its muffling folds, and if the iceberg, which had travelled forty miles since the previous day, had passed by the extremity of the axis of the earth, we should never know it.
CHAPTER XXI. AMID THE MISTS.

So this was the sum of all our efforts, trials and disappointments! Not to speak of the destruction of the _Halbrane_, the expedition had already cost nine lives. From thirty-two men who had embarked on the schooner, our number was reduced to twenty-three: how low was that figure yet to fall?

Between the south pole and antarctic circle lay twenty degrees, and those would have to be cleared in a month or six weeks at the most; if not, the iceberg barrier would be re-formed and closed-up. As for wintering in that part of the antarctic circle, not a man of us could have survived it.

Besides, we had lost all hope of rescuing the survivors of the _Jane_, and the sole desire of the crew was to escape as quickly as possible from the awful solitudes of the south. Our drift, which had been south, down to the pole, was now north, and, if that direction should continue, perhaps we might be favoured with such good fortune as would make up for all the evil that had befallen us! In any case there was nothing for it but, in familiar phrase, “to let ourselves go.”

The mist did not lift during the end, 3rd, and 4th of February, and it would have been difficult to make out the rate of progress of our iceberg since it had passed the pole. Captain Len Guy, however, and West, considered themselves safe in reckoning it at two hundred and fifty miles.

The current did not seem to have diminished in speed or changed its course. It was now beyond a doubt that we were moving between the two halves of a continent, one on the east, the other on the west, which formed the vast antarctic region. And I thought it was matter of great regret that we could not get aground on one or the other side of this vast strait, whose surface would presently be solidified by the coming of winter.

When I expressed this sentiment to Captain Len Guy, he made me the only logical answer:

“What would you have, Mr. Jeorling? We are powerless. There is nothing to be done, and the persistent fog is the worst part of our ill luck. I no longer know where we are. It is impossible to take an observation, and this befalls us just as the sun is about to disappear for long months.”

“Let me come back to the question of the boat,” said I, “for the last time. Could we not, with the boat--”

“Go on a discovery cruise? Can you think of such a thing? That would be an imprudence I would not commit, even though the crew would allow me.”

I was on the point of exclaiming: “And what if your brother and your countrymen have found refuge on some spot of the land that undoubtedly lies about us?”

But I restrained myself. Of what avail was it to reawaken our captain’s grief? He, too, must have contemplated this eventuality, and he had not renounced his purpose of further search without being fully convinced of the folly of a last attempt.

During those three days of fog I had not caught sight of Dirk Peters, or rather he had made no attempt to approach, but had remained inflexibly at his post by the boat. Martin Holt’s questions respecting his brother Ned seemed to indicate that his secret was known--at least in part, and the half-breed held himself more than ever aloof, sleeping while the others watched, and watching in their time of sleep. I even wondered whether he regretted having confided in me, and fancied that he had aroused my repugnance by his sad story. If so, he was mistaken; I deeply pitied the poor half-breed.

Nothing could exceed the melancholy monotony of the hours which we passed in the midst of a fog so thick that the wind could not lift its curtain. The position of the iceberg could not be ascertained. It went with the current at a like speed, and had it been motionless there would have been no appreciable difference for us, for the wind had fallen--at least, so we supposed--and not a breath was stirring. The flame of a torch held up in the air did not flicker. The silence of space was broken only by the clangour of the sea-birds, which came in muffled croaking tones through the stifling atmosphere of vapour. Petrels and albatross swept the top of the iceberg, where they kept a useless watch in their flight. In what direction were those swift-winged creatures--perhaps already driven towards the confines of the arctic region but the approach of winter--bound? We could not tell. One day, the boatswain, who was determined to solve this question if possible, having mounted to the extreme top, not without risk of breaking his neck, came into such violent contact with a _quebranta huesos_--a sort of gigantic petrel measuring twelve feet with spread wings--that he was flung on his back.

“Curse the bird!” he said on his return to the camp, addressing the observation to me. “I have had a narrow escape! A thump, and down I went, sprawling. I saved myself I don’t know how, for I was all but over the side. Those ice ledges, you know, slip through one’s fingers like water. I called out to the bird, ‘Can’t you even look before you, you fool?’ But what was the good of that? The big blunderer did not even beg my pardon!”

In the afternoon of the same day our ears were assailed by a hideous braying from below. Hurliguerly remarked that as there were no ass to treat us to the concert, it must be given by penguins. Hitherto these countless dwellers
in the polar regions had not thought proper to accompany us on our moving island; we had not seen even one, either at the foot of the iceberg or on the drifting packs. There could be no doubt that they were there in thousands, for the music was unmistakably that of a multitude of performers. Now those birds frequent by choice the edges of the coasts of islands and continents in high latitudes, or the ice-fields in their neighbourhood. Was not their presence an indication that land was near?

I asked Captain Len Guy what he thought of the presence of these birds.

"I think what you think, Mr. Jeorling," he replied. "Since we have been drifting, none of them have taken refuge on the iceberg, and here they are now in crowds, if we may judge by their deafening cries. From whence do they come? No doubt from land, which is probably near."

"Is this West's opinion?"

"Yes, Mr. Jeorling, and you know he is not given to vain imaginations."

"Certainly not."

"And then another thing has struck both him and me, which has apparently escaped your attention. It is that the braying of the penguins is mingled with a sound like the lowing of cattle. Listen and you will readily distinguish it."

I listened, and, sure enough, the orchestra was more full than I had supposed.

"I hear the lowing plainly," I said; "there are, then, seals and walrus also in the sea at the base."

"That is certain, Mr. Jeorling, and I conclude from the fact that those animals—both birds and mammals—very rare since we left Tsalal Island, frequent the waters into which the currents have carried us."

"Of course, captain, of course. Oh! what a misfortune it is that we should be surrounded by this impenetrable fog!"

"Which prevents us from even getting down to the base of the iceberg! There, no doubt, we should discover whether there are seaweed drifts around us; if that be so, it would be another sign."

"Why not try, captain?"

"No, no, Mr. Jeorling, that might lead to falls, and I will not permit anybody to leave the camp. If land be there, I imagine our iceberg will strike it before long."

"And if it does not?"

"If it does not, how are we to make it?"

I thought to myself that the boat might very well be used in the latter case. But Captain Len Guy preferred to wait, and perhaps this was the wiser course under our circumstances.

At eight o'clock that evening the half-condensed mist was so compact that it was difficult to walk through it. The composition of the air seemed to be changed, as though it were passing into a solid state. It was not possible to discern whether the fog had any effect upon the compass. I knew the matter had been studied by meteorologists, and that they believe they may safely affirm that the needle is not affected by this condition of the atmosphere. I will add here that since we had left the South Pole behind no confidence could be placed in the indications of the compass; it had gone wild at the approach to the magnetic pole, to which we were no doubt on the way. Nothing could be known, therefore, concerning the course of the iceberg.

The sun did not set quite below the horizon at this period, yet the waters were wrapped in tolerably deep darkness at nine o'clock in the evening, when the muster of the crew took place.

On this occasion each man as usual answered to his name except Dirk Peters.

The call was repeated in the loudest of Hurliguerly's stentorian tones. No reply.

"Has nobody seen Dirk Peters during the day?" inquired the captain.

"Nobody," answered the boatswain.

"Can anything have happened to him?"

"Don't be afraid," cried the boatswain. "Dirk Peters is in his element, and as much at his ease in the fog as a polar bear. He has got out of one bad scrape; he will get out of a second!"

I let Hurliguerly have his say, knowing well why the half-breed kept out of the way.

That night none of us, I am sure, could sleep. We were smothered in the tents, for lack of oxygen. And we were all more or less under the influence of a strange sort of presentiment, as though our fate were about to change, for better or worse, if indeed it could be worse.

The night wore on without any alarm, and at six o'clock in the morning each of us came out to breathe a more wholesome air.

The state of things was unchanged, the density of the fog was extraordinary. It was, however, found that the barometer had risen, too quickly, it is true, for the rise to be serious. Presently other signs of change became evident. The wind, which was growing colder—a south wind since we had passed beyond the south pole—began to blow a full gale, and the noises from below were heard more distinctly through the space swept by the atmospheric currents.

At nine o'clock the iceberg doffed its cap of vapour quite suddenly, producing an indescribable transformation
scene which no fairy's wand could have accomplished in less time or with greater success.

In a few moments, the sky was clear to the extreme verge of the horizon, and the sea reappeared, illumined by the oblique rays of the sun, which now rose only a few degrees above it. A rolling swell of the waves bathed the base of our iceberg in white foam, as it drifted, together with a great multitude of floating mountains under the double action of wind and current, on a course inclining to the nor'-nor'-east.

"Land!"

This cry came from the summit of the moving mountain, and Dirk Peters was revealed to our sight, standing on the outermost block, his hand stretched towards the north.

The half-breed was not mistaken. The land this time--yes!--it was land! Its distant heights, of a blackish hue, rose within three or four miles of us.

86° 12' south latitude. 114° 17' east longitude.

The iceberg was nearly four degrees beyond the antarctic pole, and from the western longitudes that our schooner had followed tracing the course of the _Jane_, we had passed into the eastern longitudes.

CHAPTER XXII. IN CAMP.

A little after noon, the iceberg was within a mile of the land.

After their dinner, the crew climbed up to the topmost block, on which Dirk Peters was stationed. On our approach the half-breed descended the opposite slope and when I reached the top he was no longer to be seen.

The land on the north evidently formed a continent or island of considerable extent. On the west there was a sharply projecting cape, surmounted by a sloping height which resembled an enormous seal's head on the side view; then beyond that was a wide stretch of sea. On the east the land was prolonged out of sight.

Each one of us took in the position. It depended on the current—whether it would carry the iceberg into an eddy which might drive it on the coast, or continue to drift it towards the north. Which was the more admissible hypothesis?

Captain Len Guy, West, Hurliguerly, and I talked over the matter, while the crew discussed it among themselves. Finally, it was agreed that the current tended rather to carry the iceberg towards the northern point of land.

"After all," said Captain Len Guy, "if it is habitable during the months of the summer season, it does not look like being inhabited, since we cannot descry a human being on the shore."

"Let us bear in mind, captain," said I, "that the iceberg is not calculated to attract attention as the _Halbrane_ would have done."

"Evidently, Mr. Jeorling; and the natives, if there were any, would have been collected on the beach to see the _Halbrane_ already."

"We must not conclude, captain, because we do not see any natives--"

"Certainly not, Mr. Jeorling; but you will agree with me that the aspect of this land is very unlike that of Tsalal Island when the fane reached it; there is nothing here but desolation and barrenness."

"I acknowledge that—barrenness and desolation, that is all. Nevertheless, I want to ask you whether it is your intention to go ashore, captain?"

"With the boat?"

"With the boat, should the current carry our iceberg away from the land."

"We have not an hour to lose, Mr. Jeorling, and the delay of a few hours might condemn us to a cruel winter stay, if we arrived too late at the iceberg barrier."

"And, considering the distance, we are not too soon," observed West.

"I grant it," I replied, still persisting. "But, to leave this land behind us without ever having set foot on it, without having made sure that it does not preserve the traces of an encampment, if your brother, captain—his companions—"

Captain Len Guy shook his head. How could the castaways have supported life in this desolate region for several months?

Besides, the British flag was hoisted on the summit of the iceberg, and William Guy would have recognized it and come down to the shore he had been living.

No one. No one.

At this moment, West, who had been observing certain points of approach, said,--

"Let us wait a little before we come to a decision. In less than an hour we shall be able to decide. Our speed is slackening, it seems to me, and it is possible that an eddy may bring us back obliquely to the coast."

"That is my opinion too," said the boatswain, "and if our floating machine is not stationary, it is nearly so. It seems to be turning round."
West and Hurliguerly were not mistaken. For some reason or other the iceberg was getting out of the course which it had followed continuously. A giratory movement had succeeded to that of drifting, owing to the action of an eddy which set towards the coast.

Besides, several ice-mountains, in front of us, had just run aground on the edge of the shore. It was, then, useless to discuss whether we should take to the boat or not. According as we approached, the desolation of the land became more and more apparent, and the prospect of enduring six months’ wintering there would have appalled the stoutest hearts.

At five in the afternoon, the iceberg plunged into a deep rift in the coast ending in a long point on the right, and there stuck fast.

"On shore! On shore!" burst from every man, like a single exclamation, and the men were already hurrying down the slope of the iceberg, when West commanded:

"Wait for orders!"

Some hesitation was shown—especially on the part of Hearne and several of his comrades. Then the instinct of discipline prevailed, and finally the whole crew ranged themselves around Captain Len Guy. It was not necessary to lower the boat, the iceberg being in contact with the point.

The captain, the boatswain, and myself, preceding the others, were the first to quit the camp; ours were the first human feet to tread this virgin and volcanic soil.

We walked for twenty minutes on rough land, strewn with rocks of igneous origin, solidified lava, dusty slag, and grey ashes, but without enough clay to grow even the hardiest plants.

With some risk and difficulty, Captain Len Guy, the boatswain, and I succeeded in climbing the hill; this exploit occupied a whole hour. Although evening had now come, it brought no darkness in its train. From the top of the hill we could see over an extent of from thirty to forty miles, and this was what we saw.

Behind us lay the open sea, laden with floating masses; a great number of these had recently heaped themselves up against the beach and rendered it almost inaccessible.

On the west was a strip of hilly land, which extended beyond our sight, and was washed on its east side by a boundless sea. It was evident that we had been carried by the drift through a strait.

Ah! if we had only had our _Halbrane_! But our sole possession was a frail craft barely capable of containing a dozen men, and we were twenty-three!

There was nothing for it but to go down to the shore again, to carry the tents to the beach, and take measures in view of a winter sojourn under the terrible conditions imposed upon us by circumstances.

On our return to the coast the boatswain discovered several caverns in the granitic cliffs, sufficiently spacious to house us all and afford storage for the cargo of the _Halbrane_. Whatever might be our ultimate decision, we could not do better than place our material and instal ourselves in this opportune shelter.

After we had reascended the slopes of the iceberg and reached our camp, Captain Len Guy had the men mustered. The only missing man was Dirk Peters, who had decidedly isolated himself from the crew. There was nothing to fear from him, however; he would be with the faithful against the mutinous, and under all circumstances we might count upon him. When the circle had been formed, Captain Len Guy spoke, without allowing any sign of discouragement to appear, and explained the position with the utmost frankness and lucidity, stating in the first place that it was absolutely necessary to lower the cargo to the coast and stow it away in one of the caverns. Concerning the vital question of food, he stated that the supply of flour, preserved meat, and dried vegetables would suffice for the winter, however prolonged, and on that of fuel he was satisfied that we should not want for coal, provided it was not wasted; and it would be possible to economize it, as the hibernating waifs might brave the cold of the polar zone under a covering of snow and a roof of ice.

Was the captain’s tone of security feigned? I did not think so, especially as West approved of what he said.

A third question raised by Hearne remained, and was well calculated to arouse jealousy and anger among the crew. It was the question of the use to be made of the only craft remaining to us. Ought the boat to be kept for the needs of our hibernation, or used to enable us to return to the iceberg barrier?

Captain Len Guy would not pronounce upon this; he desired to postpone the decision for twenty-four or forty-eight hours. The boat, carrying the provisions necessary for such a voyage, could not accommodate more than eleven or, at the outside, twelve men. If the departure of the boat were agreed to, then its passengers must be selected by lot. The captain proceeded to state that neither West, the boatswain, I, nor he would claim any privilege, but would submit to the fortune of the lot with all the others. Both Martin Holt and Hardy were perfectly capable of taking the boat to the fishing-grounds, where the whalers would still be found.

Then, those to whom the lot should fall were not to forget their comrades, left to winter on the eighty-sixth parallel, and were to send a ship to take them off at the return of summer.

All this was said in a tone as calm as it was firm. I must do Captain Len Guy the justice to say that he rose to the
occasion.

When he had concluded—without any interruption even from Hearne—no one made a remark. There was, indeed, none to be made, since, in the given case, lots were to be drawn under conditions of perfect equality.

The hour of rest having arrived, each man entered the camp, partook of the supper prepared by Endicott, and went to sleep for the last time under the tents.

Dirk Peters had not reappeared, and I sought for him in vain.

On the following day, the 7th of February, everybody set to work early with a will. The boat was let down with all due precaution to the base of the iceberg, and drawn up by the men on a little sandy beach out of reach of the water. It was in perfectly good condition, and thoroughly serviceable.

The boatswain then set to work on the former contents of the _Halbrane_, furniture, bedding, sails, clothing, instruments, and utensils. Stowed away in a cabin, these things would no longer be exposed to the knocking about and damage of the iceberg. The cases containing preserved food and the casks of spirits were rapidly carried ashore.

I worked with the captain and West at this onerous task, and Dirk Peters also turned up and lent the valuable assistance of his great strength, but he did not utter a word to anyone.

Our occupation continual on the 8th, 9th, and 10th February, and our task was finished in the afternoon of the 10th. The cargo was safely stowed in the interior of a large grotto, with access to it by a narrow opening. We were to inhabit the adjoining grotto, and Endicott set up his kitchen in the latter, on the advice of the boatswain. Thus we should profit by the heat of the stove, which was to cook our food and warm the cavern during the long days, or rather the long nights of the austral winter.

During the process of housing and storing, I observed nothing to arouse suspicion in the bearing of Hearne and the Falklands men. Nevertheless, the half-breed was kept on guard at the boat, which might easily have been seized upon the beach.

Hurligerly, who observed his comrades closely, appeared less anxious.

On that same evening Captain Len Guy, having reassembled his people, stated that the question should be discussed on the morrow, adding that, if it were decided in the affirmative, lots should be drawn immediately. No reply was made.

It was late, and half dark outside, for at this date the sun was on the edge of the horizon, and would very soon disappear below it.

I had been asleep for some hours when I was awakened by a great shouting at a short distance. I sprang up instantly and darted out of the cavern, simultaneously with the captain and West, who had also been suddenly aroused from sleep.

"The boat! the boat!" cried West.

The boat was no longer in its place—that place so jealously guarded by Dirk Peters.

After they had pushed the boat into the sea, three men had got into it with bales and casks, while ten others strove to control the half-breed.

Hearne was there, and Martin Holt also; the latter, it seemed to me, was not interfering.

These wretches, then, intended to depart before the lots were drawn; they meant to forsake us. They had succeeded in surprising Dirk Peters, and they would have killed him, had he not fought hard for life.

In the face of this mutiny, knowing our inferiority of numbers, and not knowing whether he might count on all the old crew, Captain Len Guy re-entered the cavern with West in order to procure arms. Hearne and his accomplices were armed.

I was about to follow them when the following words arrested my steps.

The half-breed, overpowered by numbers, had been knocked down, and at this moment Martin Holt, in gratitude to the man who saved his life, was rushing to his aid, but Hearne called out to him,—

"Leave the fellow alone, and come with us!"

Martin Holt hesitated.

"Yes, leave him alone, I say; leave Dirk Peters, the assassin of your brother, alone."

"The assassin of my brother!"

"Your brother, killed on board the _Grampus_—""

"Killed! by Dirk Peters?"

"Yes! Killed and eaten—eaten!—eaten!" repeated Hearne, who pronounced the hateful worms with a kind of howl.

And then, at a sign from Hearne, two of his comrades seized Martin Holt and dragged him into the boat. Hearne was instantly followed by all those whom he had induced to join in this criminal deed.

At that moment Dirk Peters rose from the ground, and sprang upon one of the Falklands men as he was in the act of stepping on the platform of the boat, lifted him up bodily, hurled him round his head and dashed his brains out against a rock.
In an instant the half-breed fell, shot in the shoulder by a bullet from Hearne’s pistol, and the boat was pushed off.

Then Captain Len Guy and West came out of the cavern—the whole scene had passed in less than a minute—and ran down to the point, which they reached together with the boatswain, Hardy, Francis, and Stern.

The boat, which was drawn by the current, was already some distance off, and the tide was falling rapidly.

West shouldered his gun and fired; a sailor dropped into the bottom of the boat. A second shot, fired by Captain Len Guy, grazed Hearne’s breast, and the ball was lost among the ice-blocks at the moment when the boat disappeared behind the iceberg.

The only thing for us to do was to cross to the other side of the point. The current would carry the wretches thither, no doubt, before it bore them northsyard. If they passed within range, and if a second shot should hit Hearne, either killing or wounding him, his companions might perhaps decide on coming back to us.

A quarter of an hour elapsed. When the boat appeared at the other side of the point, it was so far off that our bullets could not reach it. Hearne had already had the sail set, and the boat, impelled by wind and current jointly, was soon no more than a white speck on the face of the waters, and speedily disappeared.

CHAPTER XXIII. FOUND AT LAST

The question of our wintering on the land whereon we had been thrown was settled for us. But, after all, the situation was not changed for those among the nine (now only remaining of the twenty-three) who should not have drawn the lot of departure. Who could speculate upon the chances of the whole nine? Might not all of them have drawn the lot of “stay”? And, when every chance was fully weighed, was that of those who had left us the best? To this question there could be no answer.

When the boat had disappeared, Captain Len Guy and his companions retraced their steps towards the cavern in which we must live for all the time during which we could not go out, in the dread darkness of the antarctic winter. My first thought was of Dirk Peters, who, being wounded, could not follow us when we hurried to the other side of the point.

On reaching the cavern I failed to find the half-breed, Was he severely wounded? Should we have to mourn the death of this man who was as faithful to us as to his “poor Pym”?

"Let us search for him, Mr. Jeorling!” cried the boatswain.

"We will go together,” said the captain. "Dirk Peters would never have forsaken us, and we will not forsake him."

"Would he come back,” said I, "now that what he thought was known to him and me only has come out?"

I informed my companions of the reason why the name of Ned Holt had been changed to that of Parker in Arthur Pym’s narrative, and of the circumstances under which the half-breed had apprised me of the fact. At the same time I urged every consideration that might exculpate him, dwelling in particular upon the point that if the lot had fallen to Dirk Peters, he would have been the victim of the others’ hunger.

"Dirk Peters confided this secret to you only?” inquired Captain Len Guy.

"To me only, captain."

"And you have kept it?"

"Absolutely."

"Then I cannot understand how it came to the knowledge of Hearne."

"At first,” I replied, "I thought Hearne might have talked in his sleep, and that it was by chance Martin Holt learned the secret. After reflection, however, I recalled to mind that when the half-breed related the scene on the _Grampus_ to me, he was in my cabin, and the side sash was raised. I have reason to think that the man at the wheel overheard our conversation. Now that man was Hearne, who, in order to hear it more clearly, let go the wheel, so that the _Halbrane_ lurched—"

"I remember,” said West. "I questioned the fellow sharply, and sent him clown into the hold."

"Well, then, captain,” I resumed, "it was from that day that Hearne made up to Martin Holt. Hurliguerly called my attention to the fact."

"Of course he did,” said the boatswain, "for Hearne, not being capable of managing the boat which he intended to seize, required a master-hand like Holt."

"And so,” I said, "he kept on urging Holt to question the half-breed concerning his brother’s fate, and you know how Holt came at last to learn the fearful truth. Martin Holt seemed to be stupefied by the revelation. The others dragged him away, and now he is with them! We were all agreed that things had happened as I supposed, and now the question was, did Dirk Peters, in his present state of mind, mean to absent himself? Would he consent to resume his place among us?”
We all left the cavern, and after an hour's search we came in sight of Dirk Peters, whose first impulse was to escape from us. At length, however, Hurliguerly and Francis came up with him. He stood still and made no resistance. I advanced and spoke to him, the others did the same. Captain Len Guy offered him his hand, which he took after a moment's hesitation. Then, without uttering a single word, he returned towards the beach.

From that day no allusion was ever made to the tragic story of the _Grampus_. Dirk Peters' wound proved to be slight; he merely wrapped a piece of sailcloth round the injured arm, and went off to his work with entire unconcern.

We made all the preparation in our power for a prolonged hibernation. Winter was threatening us. For some days past the sun hardly showed at all through the mists. The temperature fell to 36 degrees and would rise no more, while the solar rays, casting shadows of endless length upon the soil, gave hardly any heat. The captain made us put on warm woollen clothes without waiting for the cold to become more severe.

Icebergs, packs, streams, and drifts came in greater numbers from the south. Some of these struck and stayed upon the coast, which was already heaped up with ice, but the greater number disappeared in the direction of the north-east.

"All these pieces," said the boatswain, "will go to the closing up of the iceberg wall. If Hearne and his lot of scoundrels are not ahead of them, I imagine they will find the door shut, and as they have no key to open it with--"

"I suppose you think, boatswain, that our case is less desperate than theirs?"

"I do think so, Mr. Jorling, and I have always thought so. If everything had been done as it was settled, and the lot had fallen to me to go with the boat, I would have given up my turn to one of the others. After all, there is something in feeling dry ground under our feet. I don't wish the death of anybody, but if Hearne and his friends do not succeed in clearing the iceberg barrier--if they are doomed to pass the winter on the ice, reduced for food to a supply that will only last a few weeks, you know the fate that awaits them?"

"Yes, a fate worse than ours!"

"And besides," said the boatswain, "even supposing they do reach the Antarctic Circle. If the whalers have already left the fishing-grounds, it is not a laden and overladen craft that will keep the sea until the Australian coasts are in sight."

This was my own opinion, and also that of the captain and West.

During the following four days, we completed the storage of the whole of our belongings, and made some excursions into the interior of the country, finding "all barren," and not a trace that any landing had ever been made there.

One day, Captain Len Guy proposed that we should give a geographical name to the region whither the iceberg had carried us. It was named Halbrane Land, in memory of our schooner, and we called the strait that separated the two parts of the polar continent the _Jane_ Sound.

Then we took to shooting the penguins which swarmed upon the rocks, and to capturing some of the amphibious animals which frequented the beach. We began to feel the want of fresh meat, and Endicott's cooking rendered seal and walrus flesh quite palatable. Besides, the fat of these creatures would serve, at need, to warm the cavern and feed the cooking-stove. Our most formidable enemy would be the cold, and we must fight it by every means within our power. It remained to be seen whether the amphibia would not forsake Halbrane Land at the approach of winter, and seek a less rigorous climate in lower latitudes. Fortunately there were hundreds of other animals to secure our little company from hunger, and even from thirst, at need. The beach was the home of numbers of galapagos--a kind of turtle so called from an archipelago in the equinoctial sea, where also they abound, and mentioned by Arthur Pym as supplying food to the islanders, It will be remembered that Pym and Peters found three of these galapagos in the native boat which carried them away from Tsalal Island.

The movement of these huge creatures is slow, heavy, and waddling; they have thin necks two feet long, triangular snake-like heads, and can go without food for very long periods.

Arthur Pym has compared the antarctic turtles to dromedaries, because, like those ruminants, they have a pouch just where the neck begins, which contains from two to three gallons of cold fresh water. He relates, before the scene of the lot-drawing, that but for one of these turtles the shipwrecked crew of the _Grampus_ must have died of hunger and thirst. If Pym is to be believed, some of the great turtles weigh from twelve to fifteen hundred pounds. Those of Halbrane Land did not go beyond seven or eight hundred pounds, but their flesh was none the less savoury.

On the 19th of February an incident occurred--an incident which those who acknowledge the intervention of Providence in human affairs will recognize as providential.

It was eight o'clock in the morning; the weather was calm; the sky was tolerably clear; the thermometer stood at thirty-two degrees Fahrenheit.

We were assembled in the cavern, with the exception of the boatswain, waiting for our breakfast, which Endicott was preparing, and were about to take our places at table, when we heard a call from outside.

The voice was Hurliguerly's, and we hurried out. On seeing us, he cried.--
"Come--come quickly?"
He was standing on a rock at the foot of the hillock above the beach in which Halbrahe Land ended beyond the point, and his right hand was stretched out towards the sea.
"What is it?" asked Captain Len Guy.
"A boat."
"Is it the _Halbrane's_ boat coming back?"
"No, captain--it is not."
Then we perceived a boat, not to be mistaken for that of our schooner in form or dimensions, drifting without oars or paddle, seemingly abandoned to the current.
We had but one idea in common--to seize at any cost upon this derelict craft, which would, perhaps, prove our salvation. But how were we to reach it? how were we to get it in to the point of Halbrane Land?
While we were looking distractedly at the boat and at each other, there came a sudden splash at the end of the hillock, as though a body had fallen into the sea.
It was Dirk Peters, who, having flung off his clothes, had sprung from the top of a rock, and was swimming rapidly towards the boat before we made him out.
We cheered him heartily. I never beheld anything like that swimming. He bounded through the waves like a porpoise, and indeed he possessed the strength and swiftness of one. What might not be expected of such a man!
In a few minutes the half-breed had swum several cables' lengths towards the boat in an oblique direction. We could only see his head like a black speck on the surface of the rolling waves. A period of suspense, of intense watching of the brave swimmer succeeded. Surely, surely he would reach the boat; but must he not be carried away with it? Was it to be believed that even his great strength would enable him, swimming, to tow it to the beach?
"After all, why should there not be oars in the boat?" said the boatswain.
"He has it! He has it! Hurrah, Dirk, hurrah!" shouted Hurliguerly, and Endicott echoed his exultant cheer.
The half-breed had, in fact, reached the boat and raised himself alongside half out of the water. His big, strong hand grasped the side, and at the risk of causing the boat to capsize, he hoisted himself up to the side, stepped over it, and sat down to draw his breath.
Almost instantly a shout reached our ears. It was uttered by Dirk Peters. What had he found? Paddles! It must be so, for we saw him seat himself in the front of the boat, and paddle with all his strength in striving to get out of the current.
"Come along?" said the captain, and, turning the base of the hillock, we all ran along the edge of the beach between the blackish stones that bestrewed it.
After some time, West stopped us. The boat had reached the shelter of a small projection at that place, and it was evident that it would be run ashore there.
When it was within five or six cables' lengths, and the eddy was helping it on, Dirk Peters let go the paddles, stooped towards the after-part of the boat, and then raised himself, holding up an inert body.
An agonized cry from Captain Len Guy rent the air!
"My brother--my brother?"
"He is living! He is living!" shouted Dirk Peters.
A moment later, the boat had touched the beach, and Captain Len Guy held his brother in his arms.
Three of William Guy's companions lay apparently lifeless in the bottom of the boat.
And these four men were all that remained of the crew of the _Jane_.

CHAPTER XXIV. ELEVEN YEARS IN A FEW PAGES.
The heading of the following chapter indicates that the adventures of William Guy and his companions after destruction of the English schooner, and the details of their history subsequent to the departure of Arthur Pym and Dirk Peters, are about to be narrated with all possible brevity.
We carried our treasure-trove to the cavern, and had happiness of restoring all four men to life. In reality, it was hunger, nothing but hunger, which had reduced the poor fellows to the semblance of death.
On the 8th of February, 1828, the crew of the _Jane_, having no reason to doubt the good faith of the population of Tsala Island, or that of their chief, Too-Wit, disembarked, in order to visit the village of Klock-Klock, having previously put the schooner into a state of defense, leaving six men on board.
The crew, counting William Guy, the captain, Arthur Pym, and Dirk Peters, formed a body of thirty-two men armed with guns, pistols, and knives. The dog Tiger accompanied them.
On reaching the narrow gorge leading to the village preceded and followed by the numerous warriors of Too Wit, the little company divided, Arthur Pym, Dirk Peters, and Allen (the sailor) entering a cleft in the hill-side with
that they abandoned their island, whither they were destined never to return.

and the Wampos, who are the leading personages of Klock-Klock. It was under these extraordinary circumstances

was the most dangerous and deadly of enemies, for the poor animal was mad, and his fangs were fatal!

whence he had returned to Klock-Klock, to spread terror among the natives. But Tiger was no mere phantom foe; he

terror of whiteness common to all the natives of Tsalal.

defending themselves against this one beast?

unknown animal, a terrible quadruped, which dashed into the midst of the islanders, snapping at and biting them

side. Some of the savages even took to their boats as though a great danger were at hand. What was happening?

with hundreds of natives coming and going about their several occupations, with their constant cry of _tékéli-li_?

of seven persons, who were then reduced to eating nuts only, and were suffering in consequence from severe pain in

events.

the horizon of the eighty-fourth parallel.

had to be asked, and which nobody could answer. Nevertheless, they would not have hesitated to attempt the

sea. Where were the fugitives to go, and what was to become of them without provisions?--these were questions that

found an opportunity to escape.

their hiding-place, securing a boat, and abandoning Tsalal Island, but William Guy and his companions had not yet

the intention of crossing it to the other side. From that moment their companions were never to see them more.

After a short interval a shock was felt. The opposite hill fell down in a vast heap, burying William Guy and his
twenty-eight companions.

Twenty-two of these unfortunate men were crushed to death on the instant, and their bodies would never be

found under that mass of earth.

Seven, miraculously sheltered in the depth of a great cleft of the hill, had survived the catastrophe. These were

William Guy, Patterson, Roberts, Coyin, Trinkle, also Forbes and Sexton, since dead. As for Tiger, they knew not

whether he had perished in the landslip, or whether he had escaped. There existed in the right side of the hill, as well

as in the left, on either side of the fissure, certain winding passages, and it was by crawling along these in the

darkness that William Guy, Patterson, and the others reached a cavity which let in light and air in abundance. From

this shelter they beheld the attack on the _Jane_ by sixty pirogues, the defence made by the six men on board; the

invasion of the ship by the savages, and finally the explosion which caused the death of a vast number of natives as

well as the complete destruction of the ship.

Too-Wit and the Tsalal islanders were at first terrified by the effects of this explosion, but probably still more

disappointed. Their instincts of pillage could not be gratified, because some valueless wreckage was all that

remained of the ship and her cargo, and they had no reason to suppose that any of the crew had survived the cleverly

contrived collapse of the hill. Hence it came about that Arthur Pym and Dirk Peters on the one side, and William

Guy and his companions on the other, were enabled to remain undisturbed in the labyrinths of Klock-Klock, where

they fed on the flesh of bitterns--these they could catch with their hands--and the fruit of the nut-trees which grow

on the hill-sides. They procured fire by rubbing pieces of soft against pieces of hard wood; there was a quantity of

both within their reach.

After a whole week of this confinement, Arthur Pym and the half-breed had succeeded, as we know, in leaving

their hiding-place, securing a boat, and abandoning Tsalal Island, but William Guy and his companions had not yet

found an opportunity to escape.

After they had been shut up in the labyrinth for twentyone days, the birds on which they lived began to fail them,

and they recognized that their only means of escaping hunger--(they had not to fear thirst, for there was a spring of

fresh water in the interior of the hill)--was to go down again to the coast, lay hands upon a native boat, and get out to

sea. Where were the fugitives to go, and what was to become of them without provisions?--these were questions that

had to be asked, and which nobody could answer. Nevertheless, they would not have hesitated to attempt the

adventure if they could have a few hours of darkness; but, at that time of year, the sun did not as yet go down behind

the horizon of the eighty-fourth parallel.

Death would probably have put an end to their misery had not the situation been changed by the following

events.

On the 22nd of February, in the morning, William Guy and Patterson were talking together, in terrible perplexity

of mind, at the orifice of the cavity that opened upon the country. They no longer knew how to provide for the wants

of seven persons, who were then reduced to eating nuts only, and were suffering in consequence from severe pain in

the head and stomach. They could see big turtles crawling on the beach, but how could they venture to go thither,

of their several occupations, with their constant cry of _tékéli-li_?

Suddenly, this crowd of people became violently agitated. Men, women, and children ran wildly about on every

side. Some of the savages even took to their boats as though a great danger were at hand. What was happening?

William Guy and his companions were very soon informed. The cause of the tumult was the appearance of an

unknown animal, a terrible quadruped, which dashed into the midst of the islanders, snapping at and biting them

indiscriminately, as it sprang at their throats with a hoarse growling.

And yet the infuriated animal was alone, and might easily have been killed by stones or arrows. Why then did a

crowd of savages manifest such abject terror? Why did they take to flight? Why did they appear incapable of

defending themselves against this one beast?

The animal was white, and the sight of it had produced the phenomenon previously observed, that inexplicable

terror of whiteness common to all the natives of Tsalal.

To their extreme surprise, William Guy and his companions recognized the strange animal as the dog Tiger.

Yes! Tiger had escaped from the crumbling mass of the hill and betaken himself to the interior of the island,

whence he had returned to Klock-Klock, to spread terror among the natives. But Tiger was no mere phantom foe; he

was the most dangerous and deadly of enemies, for the poor animal was mad, and his fangs were fatal!

This was the reason why the greater part of the Tsalal islanders took to flight, headed by their chief, Too-Wit,

and the Wampos, who are the leading personages of Klock-Klock. It was under these extraordinary circumstances

that they abandoned their island, whither they were destined never to return.

Although the boats carried off the bulk of the population, a considerable number still remained on Tsalal, having
no means of escape, and their fate accomplished itself quickly. Several natives who were bitten by Tiger developed hydrophobia rapidly, and attacked the others. Fearful scenes ensued, and are briefly to be summed up in one dismal statement. The bones we had seen in or near Klock-Klock were those of the poor savages, which had lain there bleeding for eleven years!

The poor dog had died after he had done his fell work, in a corner on the beach, where Dirk Peters found his skeleton and the collar bearing the name of Arthur Pym.

Then, after those natives who could not escape from the island had all perished in the manner described, William Guy, Patterson, Trinkle, Covin, Forbes, and Sexton ventured to come out of the labyrinth, where they were on the verge of death by starvation.

What sort of existence was that of the seven survivors of the expedition during the eleven ensuing years?

On the whole, it was more endurable than might have been supposed. The natural products of an extremely fertile soil and the presence of a certain number of domestic animals secured them against want of food; they had only to make out the best shelter for themselves they could contrive, and wait for an opportunity of getting away from the island with as much patience as might be granted to them. And from whence could such an opportunity come? Only from one of the chances within the resources of Providence.

Captain William Guy, Patterson, and their five companions descended the ravine, which was half filled with the fallen masses of the hill-face, amid heaps of scoria and blocks of black granite. Before they left this gorge, it occurred to William Guy to explore the fissure on the right into which Arthur Pym, Dirk Peters, and Allen had turned, but he found it blocked up; it was impossible for him to get into the pass. Thus he remained in ignorance of the existence of the natural or artificial labyrinth which corresponded with the one he had just left, and probably communicated with it under the dry bed of the torrent. The little company, having passed the chaotic barrier that intercepted the northern route, proceeded rapidly towards the north-west. There, on the coast, at about three miles from Klock-Klock, they established themselves in a grotto very like that in our own occupation on the coast of Halbrane Land.

And it was in this place that, during long, hopeless years, the seven survivors of the fane lived, as we were about to do ourselves, but under better conditions, for the fertility of the soil of Tsalal furnished them with resources unknown in Halbrane Land. In reality, we were condemned to perish when our provisions should be exhausted, but they could have waited indefinitely--and they did wait.

They had never entertained any doubt that Arthur Pym, Dirk Peters, and Allen had perished, and this was only too true in Allen's case. How, indeed, could they ever have imagined that Pyro and the half-breed had got hold of a boat and made their escape from Tsalal Island?

So, then, as William Guy told us, not an incident occurred to break the monotony of that existence of eleven years--not even the reappearance of the islanders, who were kept away from Tsalal by superstitious terror. No danger had threatened them during all that time; but, of course, as it became more and more prolonged, they lost the hope of ever being rescued. At first, with the return of the fine season, when the sea was once more open, they had thought it possible that a ship would be sent in search of the _Jane_. But after four or five years they relinquished all hope.

There is no need for dwelling on this period, which extends from the year 1828 to the year 1839. The winters were hard. The summer did indeed extend its beneficent influence to the islands of the Tsalal group, but the cold season, with its attendant snows, rains, and tempests, spared them none of its severity.

During seven months Captain William Guy had not lost one of those who had come with him safe and sound out of the trap set for them at Klock-Klock, and this was due, no doubt, to their robust constitutions, remarkable power of endurance, and great strength of character. Alas! misfortune was making ready to fall on them.

The month of May had come--it corresponds in those regions to the month of November in northern lands--and the ice-packs which the current carried towards the north were beginning to drift past Tsalal. One day, one of the seven men failed to return to the cavern. They called, they waited, they searched for him. All was in vain. He did not reappear; no doubt he had been drowned. He was never more seen by his fellow-exiles.

This man was Patterson, the faithful companion of William Guy.

Now, what William Guy did not know, but we told him, was that Patterson--under what circumstances none would ever learn--had been carried away on the surface of an iceblock, where he died of hunger. And on that ice-block, which had travelled so far as Prince Edward Island, the boatswain had discovered the corpse of the unfortunate man almost decomposed by the action of the warmer waters.

When Captain Len Guy told his brother of the finding of the body of Patterson, and how it was owing to the notes in his pocket-book that the _Halbrane_ had been enabled to proceed towards the antarctic seas, William Guy hid his face in his hands and wept.

Other misfortunes followed upon this one.
Five months after the disappearance of Patterson, in the middle of October, Tsalal Island was laid waste from coast to coast by an earthquake, which destroyed the southwestern group almost entirely. William Guy and his companions must soon have perished on the barren land, which no longer could give them food, had not the means of leaving its coast, now merely an expanse of tumbled rocks, been afforded them in an almost miraculous manner. Two days after the earthquake, the current carried ashore within a few hundred yards of their cavern a boat which had drifted from the island group on the south-west.

Without the delay of even one day, the boat was laden with as much of the remaining provisions as it could contain, and the six men embarked in it, bidding adieu for ever to the now uninhabitable island.

Unfortunately a very strong breeze was blowing; it was impossible to resist it, and the boat was driven southwards by that very same current which had caused our iceberg to drift to the coast of Halbrane Land.

For two months and a half these poor fellows were borne across the open sea, with no control over their course. It was not until the 2nd of January in the present year (1840) that they sighted land—east of the _Jane_ Sound.

Now, we already knew this land was not more than fifty miles from Halbrane Land. Yes! so small, relatively, was the distance that separated us from those whom we had sought for in the antarctic regions far and wide, and concerning whom we had lost hope.

Their boat had gone ashore far to the south-east of us. But on how different a coast from that of Tsalal Island, or, rather, on one how like that of Halbrane Land! Nothing was to be seen but sand and stones; neither trees, shrubs, nor plants of any kind. Their provisions were almost exhausted; William Guy and his companions were soon reduced to extreme want, and two of the little company, Forbes and Sexton, died.

The remaining four resolved not to remain a single day longer in the place where they were doomed to die of hunger. They embarked in the boat with the small supply of food still remaining, and once more abandoned themselves to the current, without having been able to verify their position, for want of instruments.

Thus had they been borne upon the unknown deep for twenty-five days, their resources were completely exhausted, and they had not eaten for forty-eight hours, when the boat, with its occupants lying inanimate at the bottom of it, was sighted from Halbrane Land. The rest is already known to the reader of this strange eventful history.

And now the two brothers were at length reunited in that remote corner of the big world which we had dubbed Halbrane Land.

CHAPTER XXV. "WE WERE THE FIRST."

Two days later not one of the survivors from the two schooners, the _Jane_ and the _Halbrane_, remained upon any coast of the Antarctic region.

On the 21st of February, at six o'clock in the morning, the boat, with us all (we numbered thirteen) in it, left the little creek and doubled the point of Halbrane Land. On the previous day we had fully and finally debated the question of our departure, with the understanding that if it were settled in the affirmative, we should start without delay.

The captain of the fane was for an immediate departure, and Captain Len Guy was not opposed to it. I willingly sided with them, and West was of a similar opinion. The boatswain was inclined to oppose us. He considered it imprudent to give up a certainty for the uncertain, and he was backed by Endicott, who would in any case say "ditto" to his "Mr. Burke." However, when the time came, Hurliguerly Conformed to the view of the majority with a good grace, and declared himself quite ready to set out, since we were all of that way of thinking.

Our boat was one of those in use in the Tsalal Archipelago for plying between the islands. We knew, from the narrative of Arthur Pym, that these boats are of two kinds, one resembling rafts or flat boats, the other strongly-built pirogues. Our boat was of the former kind, forty feet long, six feet in width, and worked by several paddles.

We called our little craft the _Paracura_, after a fish which abounds in these waters. A rough image of that denizen of the southern deep was cut upon the gunwale.

Needless to say that the greater part of the cargo of the _Halbrane_ was left in our cavern, fully protected from the weather, at the disposal of any shipwrecked people who might chance to be thrown on the coast of Halbrane Land. The boatswain had planted a spar on the top of this slope to attract attention. But, our two schooners notwithstanding, what vessel would ever venture into such latitudes?

_Nota Bene._—We were just thirteen—the fatal number. Perfectly good relations subsisted among us. We had no longer to dread the rebellion of a Hearne. (How often we speculated upon the fate of those whom he had beguiled!) At seven o'clock, the extreme point of Halbrahe Land lay five miles behind us, and in the evening we gradually lost sight of the heights that varied that part of the coast.

I desire to lay special stress on the fact that not a single scrap of iron entered into the construction of this boat,
not so much as a nail or a bolt, for that metal was entirely unknown to the Tsalal islanders. The planks were bound together by a sort of liana, or creeping-plant, and caulked with moss steeped in pitch, which was turned by contact with the sea-water to a substance as hard as metal.

I have nothing special to record during the week that succeeded our departure. The breeze blew steadily from the south, and we did not meet with any unfavourable current between the banks of the _Jane_ Sound.

During those first eight days, the Paracuts, by paddling when the wind fell, had kept up the speed that was indispensable for our reaching the Pacific Ocean within a short time.

The desolate aspect of the land remained the same, while the strait was already visited by floating drifts, packs of one to two hundred feet in length, some oblong, others circular, and also by icebergs which our boat passed easily. We were made anxious, however, by the fact that these masses were proceeding towards the iceberg barrier, for would they not close the passages, which ought to be still open at this time?

I shall mention here that in proportion as Dirk Peters was carried farther and farther from the places wherein no trace of his poor Pym had been found, he was more silent than ever, and no longer even answered me when I addressed him.

It must not be forgotten that since our iceberg had passed beyond the south pole, we were in the zone of eastern longitudes counted from the zero of Greenwich to the hundred and eightieth degree. All hope must therefore be abandoned of our either touching at the Falklands, or finding whaling-ships in the waters of the Sandwich Islands, the South Orkneys, or South Georgia.

Our voyage proceeded under unaltered conditions for ten days. Our little craft was perfectly sea-worthy. The two captains and West fully appreciated its soundness, although, as I have previously said, not a scrap of iron had a place in its construction. It had not once been necessary to repair its seams, so staunch were they. To be sure, the sea was smooth, its long, rolling waves were hardly ruffled on their surface.

On the loth of March, with the same longitude the observation gave 7° 13' for latitude. The speed of the _Paracuta_ had then been thirty miles in each twenty-four hours. If this rate of progress could be maintained for three weeks, there was every chance of our finding the passes open, and being able to get round the iceberg barrier; also that the whaling-ships would not yet have left the fishing-grounds.

The sun was on the verge of the horizon, and the time was approaching when the Antarctic region would be shrouded in polar night. Fortunately, in re-ascending towards the north we were getting into waters from whence light was not yet banished. Then did we witness a phenomenon as extraordinary as any of those described by Arthur Pym. For three or four hours, sparks, accompanied by a sharp noise, shot out of our fingers' ends, our hair, and our beards. There was an electric snowstorm, with great flakes falling loosely, and the contact produced this strange luminosity. The sea rose so suddenly and tumbled about so wildly that the _Paracuta_ was several times in danger of being swallowed up by the waves, but we got through the mystic-seeming tempest all safe and sound.

Nevertheless, space was thenceforth but imperfectly lighted. Frequent mists came up and bounded our outlook to a few cable-lengths. Extreme watchfulness and caution were necessary to avoid collision with the floating masses of ice, which were travelling more slowly than the _Paracuta_.

It is also to be noted that, on the southern side, the sky was frequently lighted up by the broad and brilliant rays of the polar aurora.

The temperature fell very perceptibly, and no longer rose above twenty-three degrees.

Forty-eight hours later Captain Len Guy and his brother succeeded with great difficulty in taking an approximate observation, with the following results of their calculations:

Latitude: 75° 17' south. Latitude: 118° 3' east.

At this date, therefore (12th March), the _Paracuta_ was distant from the waters of the Antarctic Circle only four hundred miles.

During the night a thick fog came on, with a subsidence of the breeze. This was to be regretted, for it increased the risk of collision with the floating ice. Of course fog could not be a surprise to us, being where we were, but what did surprise us was the gradually increasing speed of our boat, although the falling of the wind ought to have lessened it.

This increase of speed could not be due to the current for we were going more quickly than it.

This state of things lasted until morning, without our being able to account for what was happening, when at about ten o'clock the mist began to disperse in the low zones. The coast on the west reappeared—a rocky coast, without a mountainous background; the _Paracuta_ was following its line.

And then, no more than a quarter of a mile away, we beheld a huge mound, reared above the plain to a height of three hundred feet, with a circumference of from two to three hundred feet. In its strange form this great mound resembled an enormous sphinx; the body upright, the paws stretched out, crouching in the attitude of the winged monster which Grecian Mythology has placed upon the way to Thebes.
Was this a living animal, a gigantic monster, a mastodon a thousand times the size of those enormous elephants of the polar seas whose remains are still found in the ice? In our frame of mind we might have believed that it was such a creature, and believed also that the mastodon was about to hurl itself on our little craft and crush it to atoms. After a few moments of unreasoning and unreasonable fright, we recognized that the strange object was only a great mound, singularly shaped, and that the mist had just rolled off its head, leaving it to stand out and confront us. Ah! that sphinx! I remembered, at sight of it, that on the night when the iceberg was overturned and the _Halbrane_ was carried away, I had dreamed of a fabulous animal of this kind, seated at the pole of the world, and from whom Edgar Poe could only wrest its secrets.

But our attention was to be attracted, our surprise, even our alarm, was evoked soon by phenomena still more strange than the mysterious earth form upon which the mist-curtain had been raised so suddenly.

I have said that the speed of the _Paracuta_ was gradually increasing; now it was excessive, that of the current remaining inferior to it. Now, of a sudden, the grapnel that had belonged to the _Halbrane_, and was in the bow of the boat, flew out of its socket as though drawn by an irresistible power, and the rope that held it was strained to breaking point. It seemed to tow us, as it grazed the surface of the water towards the shore.

"What's the matter?" cried William Guy. "Cut away, boatswain, cut away!" shouted West, "or we shall be dragged against the rocks."

Hurliguerly hurried to the bow of the _Paracuta_ to cut away the rope. Of a sudden the knife he held was snatched out of his hand, the rope broke, and the grapnel, like a projectile, shot off in the direction of the sphinx.

At the same moment, all the articles on board the boat that were made of iron or steel--cooking utensils, arms, Endicott's stove, our knives, which were torn from out pockets--took flight after a similar fashion in the same direction, while the boat, quickening its course, brought up against the beach.

What was happening? In order to explain these inexplicable things, were we not obliged to acknowledge that we had come into the region of those wonders which I attributed to the hallucinations of Arthur Pym?

No! These were physical facts which we had just witnessed, and not imaginary phenomenal!

We had, however, no time for reflection, and immediately upon our landing, our attention was turned in another direction by the sight of a boat lying wrecked upon the sand.

"The _Halbrane's_ boat!" cried Hurliguerly. It was indeed the boat which Hearne had stolen, and it was simply smashed to pieces; in a word, only the formless wreckage of a craft which has been flung against rocks by the sea, remained.

We observed immediately that all the ironwork of the boat had disappeared, down to the hinges of the rudder. Not one trace of the metal existed.

What could be the meaning of this?

A loud call from West brought us to a little strip of beach on the right of our stranded boat.

Three corpses lay upon the stony soil, that of Hearne, that of Martin Holt, and that of one of the Falklands men.

Of the thirteen who had gone with the sealing-master, there remained only these three, who had evidently been dead some days.

What had become of the ten missing men? Had their bodies been carried out to sea?

We searched all along the coast, into the creeks, and between the outlying rocks, but in vain. Nothing was to be found, no traces of a camp, not even the vestiges of a landing.

"Their boat," said William Guy, "must have been struck by a drifting iceberg. The rest of Hearne's companions have been drowned, and only these three bodies have come ashore, lifeless."

"But," asked the boatswain, "how is the state the boat is in to be explained?"

"And especially," added West, "the disappearance of all the iron?"

"Indeed," said I, "it looks as though every bit had been violently torn off."

Leaving the _Paracuta_ in the charge of two men, we again took our way to the interior, in order to extend our search over a wider expanse.

As we were approaching the huge mound the mist cleared away, and the form stood out with greater distinctness. It was, as I have said, almost that of a sphinx, a dusky-hued sphinx, as though the matter which composed it had been oxidized by the inclemency of the polar climate.

And then a possibility flashed into my mind, an hypothesis which explained these astonishing phenomena.

"Ah!" I exclaimed, "a loadstone! that is it! A magnet with prodigious power of attraction!"

I was understood, and in an instant the final catastrophe, to which Hearne and his companions were victims, was explained with terrible clearness.

The Antarctic Sphinx was simply a colossal magnet. Under the influence of that magnet the iron bands of the _Halbrane's_ boat had been torn out and projected as though by the action of a catapult. This was the occult force that had irresistibly attracted everything made of iron on the _Paracuta_. And the boat itself would have shared the
fate of the _Halbrane’s_ boat had a single bit of that metal been employed in its construction. Was it, then, the proximity of the magnetic pole that produced such effects?

At first we entertained this idea, but on reflection we rejected it.

At the place where the magnetic meridians cross, the only phenomenon produced is the vertical position of the magnetic needle in two similar points of the terrestrial globe. This phenomenon, already proved by observations made on the spot, must be identical in the Antarctic regions.

Thus, then, there did exist a magnet of prodigious intensity in the zone of attraction which we had entered. Under our eyes one of those surprising effects which had hitherto been classed among fables was actually produced.

The following appeared to me to be the true explanation.

The Trade-winds bring a constant succession of clouds or mists in which immense quantities of electricity not completely exhausted by storms, are stored. Hence there exists a formidable accumulation of electric fluid at the poles, and it flows towards the land in a permanent stream.

From this cause come the northern and southern auroras, whose luminous splendours shine above the horizon, especially during the long polar night, and are visible even in the temperate zones when they attain their maximum of culmination.

These continuous currents at the poles, which bewilder our compasses, must possess an extraordinary influence. And it would suffice that a block of iron should be subjected to their action for it to be changed into a magnet of power proportioned to the intensity of the current, to the number of turns of the electric helix, and to the square root of the diameter of the block of magnetized iron. Thus, then, the bulk of the sphinx which upreared its mystic form upon this outer edge of the southern lands might be calculated by thousands of cubic yards.

Now, in order that the current should circulate around it and make a magnet of it by induction, what was required? Nothing but a metallic lode, whose innumerable windings through the bowels of the soil should be connected subterraneously at the base of the block.

It seemed to me also that the place of this block ought to be in the magnetic axis, as a sort of gigantic calamite, from whence the imponderable fluid whose currents made an inexhaustible accumulator set up at the confines of the world should issue. Our compass could not have enabled us to determine whether the marvel before our eyes really was at the magnetic pole of the southern regions. All I can say is, that its needle staggered about, helpless and useless. And in fact the exact location of the Antarctic Sphinx mattered little in respect of the constitution of that artificial loadstone, and the manner in which the clouds and metallic lode supplied its attractive power.

In this very plausible fashion I was led to explain the phenomenon by instinct. It could not be doubted that we were in the vicinity of a magnet which produced these terrible but strictly natural effects by its attraction.

I communicated my idea to my companions, and they regarded this explanation as conclusive, in presence of the physical facts of which we were the actual witnesses.

"We shall incur no risk by going to the foot of the mound, I suppose," said Captain Len Guy.

"None," I replied.

"There--yes--here?"

I could not describe the impression those three words made upon us. Edgar Poe would have said that they were three cries from the depths of the under world.

It was Dirk Peters who had spoken, and his body was stretched out in the direction of the sphinx, as though it had been turned to iron and was attracted by the magnet.

Then he sped swiftly towards the sphinx-like mound, and his companions followed him over rough ground strewn with volcanic remains of all sorts.

The monster grew larger as we neared it, but lost none of its mythological shape. Alone on that vast plain it produced a sense of awe. And--but this could only have been a delusion--we seemed to be drawn towards it by the force of its magnetic attraction.

On arriving at the base of the mound, we found there the various articles on which the magnet had exerted its power; arms, utensils, the grapnel of the _Paracuta_ , all adhering to the sides of the monster. There also were the iron relics of the _Halbrane's_ boat, all her utensils, arms, and fittings, even to the nails and the iron portions of the rudder.

There was no possibility of regaining possession of any of these things. Even had they not adhered to the loadstone rock at too great a height to be reached, they adhered to it too closely to be detached. Hurliguerly was infuriated by the impossibility of recovering his knife, which he recognized at fifty feet above his head, and cried as he shook his clenched fist at the imperturbable monster,--

"Thief of a sphinx!"

Of course the things which had belonged to the _Halbrane's_ boat and the _Paracuta's_ were the only articles that adorned the mighty sides of the lonely mystic form. Never had any ship reached such a latitude of the Antarctic
Sea. Hearne and his accomplices, Captain Len Guy and his companions, were the first who had trodden this point of the southern continent. And any vessel that might have approached this colossal magnet must have incurred certain destruction. Our schooner must have perished, even as its boat had been dashed into a shapeless wreck.

West now reminded us that it was imprudent to prolong our stay upon this Land of the Sphinx—a name to be retained. Time pressed, and a few days’ delay would have entailed our wintering at the foot of the ice-barrier.

The order to return to the beach had just been given, when the voice of the half-breed was again heard, as he cried out:

"There! There! There!"

We followed the sounds to the back of the monster’s right paw, and we found Dirk Peters on his knees, with his hands stretched out before an almost naked corpse, which had been preserved intact by the cold of these regions, and was as rigid as iron. The head was bent, a white beard hung down to the waist, the nails of the feet and hands were like claws.

How had this corpse been fixed to the side of the mound at six feet above the ground?

Across the body, held in place by its cross-belt, we saw the twisted barrel of a musket, half-eaten by rust.

"Pym—my poor Pym!" groaned Dirk Peters.

He tried to rise, that he might approach and kiss the ossified corpse. But his knees bent under him, a strangled sob seemed to rend his throat, with a terrible spasm his faithful heart broke, and the half-breed fell back—dead!

The story was easy to read. After their separation, the boat had carried Arthur Pym through these Antarctic regions! Like us, once he had passed beyond the south pole, he came into the zone of the monster! And there, while his boat was swept along on the northern current, he was seized by the magnetic fluid before he could get rid of the gun which was slung over his shoulder, and hurled against the fatal loadstone Sphinx of the Ice-realm.

Now the faithful half-breed rests under the clay of the Land of the Antarctic Mystery, by the side of his "poor Pym," that hero whose strange adventures found a chronicler no less strange in the great American poet!

CHAPTER XXVI. A LITTLE REMNANT.

That same day, in the afternoon, the _Paracuta_ departed from the coast of the Land of the Sphinx, which had lain to the west of us since the 21st of February.

By the death of Dirk Peters the number of the passengers was reduced to twelve. These were all who remained of the double crew of the two schooners, the first comprising thirty-eight men, the second, thirty-two; in all seventy souls. But let it not be forgotten that the voyage of the _Halbrane_ had been undertaken in fulfilment of a duty to humanity, and four of the survivors of the _Jane_ owed their rescue to it.

And now there remains but little to tell, and that must be related as succinctly as possible. It is unnecessary to dwell upon our return voyage, which was favoured by the constancy of the currents and the wind to the northern course. The last part of the voyage was accomplished amid great fatigue, suffering, and but it ended in our safe deliverance from all these.

Firstly, a few days after our departure from the Land the Sphinx, the sun set behind the western horizon reappear no more for the whole winter. It was then the midst of the semi-darkness of the austral night that the _Paracuta_ pursued her monotonous course. True, the southern polar lights were frequently visible; but they were not the sun, that single orb of day which had illumined our horizons during the months of the Antarctic summer, and their capricious splendour could not replace his unchanging light. That long darkness of the poles sheds a moral and physical influence on mortals which no one can elude, a gloomy and overwhelming impression almost impossible to resist.

Of all the _Paracuta’s_ passengers, the boatswain and Endicott only preserved their habitual good-humour; those two were equally insensitive to the weariness and the peril of our voyage. I also except West, who was ever ready to face every eventuality, like a man who is always on the defensive. As for the two brothers Guy, their happiness in being restored to each other made them frequently oblivious of the anxieties and risks of the future.

Of Hurliguerly I cannot speak too highly. He proved himself a thoroughly good fellow, and it raised our drooping spirits to hear him repeat in his jolly voice,—

"We shall get to port all right, my friends, be sure of that. And, if you only reckon things up, you will see that we have had more good luck than bad. Oh, yes, I know, there was the loss of our schooner! Poor _Halbrane_, carried up into the air like a balloon, then flung into the deep like an avalanche! But, on the other hand, there was the iceberg which brought us to the coast, and the Tsalal boat which brought us and Captain William Guy and his three companions together. And don’t forget the current and the breeze that have pushed us on up to now, and will keep pushing us on, I’m sure of that. With so many trumps in our hand we cannot possibly lose the game. The only thing to be regretted is that we shall have to get ashore again in Australia or New Zealand, instead of casting anchor at the
Kerguelens, near the quay of Christmas Harbour, in front of the Greea Cormorant."

For a week we pursued our course without deviation to east or west, and it was not until the 21st of March that the Paracutis lost sight of Halbrane Land, being carried towards the north by the current, while the coast-line of the continent, for such we are convinced it is, trended in a round curve to the north-east.

Although the waters of this portion of sea were still open, they carried a flotilla of icebergs or ice-fields. Hence arose serious difficulties and also dangers to navigation in the midst of the gloomy mists, when we had to manoeuvre between these moving masses, either to find passage or to prevent our little craft from being crushed like grain between the millstones.

Besides, Captain Len Guy could no longer ascertain his position either in latitude or longitude. The sun being absent, calculations by the position of the stars was too complicated, it was impossible to take altitudes, and the _Paracuta_ abandoned herself to the action of the current, which invariably bore us northward, as the compass indicated. By keeping the reckoning of its medium speed, however, we concluded that on the 27th of March our boat was between the sixty-ninth and the sixty-eighth parallels, that is to say, some seventy miles only from the Antarctic Circle.

Ah! if no obstacle to the course of our perilous navigation had existed, if passage between this inner sea of the southern zone and the waters of the Pacific Ocean had been certain, the _Paracuta_ might have reached the extreme limit of the austral seas in a few days. But a few hundred miles more to sail, and the iceberg-barrier would confront us with its immovable rampart, and unless a passage could be found, we should be obliged to go round it either by the east or by the west.

Once cleared indeed--

Ah! once cleared, we should be in a frail craft upon the terrible Pacific Ocean, at the period of the year when its tempests rage with redoubled fury and strong ships dread the might of its waves.

We were determined not to think of this. Heaven would come to our aid. We should be picked up by some ship. This the boatswain asserted confidently, and we were bound to believe the boatswain.

For six entire days, until the end of April, the Paracura held her course among the ice-barrier, whose crest was profiled at an altitude of between seven and eight hundred feet above the level of the sea. The extremities were not visible either on the east or the west, and if our boat did not find an open passage, we could not clear it. By a most fortunate chance a passage was found on the above-mentioned date, and attempted, amid a thousand risks. Yes, we required all the zeal, skill, and courage of our men and their chiefs to accomplish such a task.

At last we were in the South Pacific waters, but our boat had suffered severely in getting through, and it had sprung more than one leak. We were kept busy in baling out the water, which also came in from above.

The breeze was gentle, the sea more calm than we could have hoped, and the real danger did not lie in the risks of navigation. No, it arose from the fact that not a ship was visible in these waters, not a whaler was to be seen on the fishing-grounds. At the beginning of April these places are forsaken, and we arrived some weeks too late.

We learned afterwards that had we arrived a little sooner, we should have met the vessels of the American expedition.

In fact, on the 1st of February, by 95° 50' longitude and 64° 17' latitude, Lieutenant Wilkes was still exploring these seas in one of his ships, the Vincennes, after having discovered a long extent of coast stretching from east to west. On the approach of the bad season, he returned to Hobart Town, in Tasmania. The same year, the expedition of the French captain Dumont d'Urville, which started in 1838, discovered Adélie Land in 66° 30' latitude and 38° 21' east longitude, and Clarie Coast in 64° 30' and 129° 54'. Their campaign having ended with these important discoveries, the _Astrolabe_ and the _Zélée_ left the Antarctic Ocean and returned to Hobart Town.

None of these ships, then, were in those waters; so that, when our nutshell _Paracuta_ was "alone on a lone, lone sea" beyond the ice-barrier, we were bound to believe that it was no longer possible we could be saved.

We were fifteen hundred miles away from the nearest land, and winter was a month old!

Hurliguerly himself was obliged to acknowledge the last fortunate chance upon which he had counted failed us.

On the 6th of April we were at the end of our resources; the sea began to threaten, the boat seemed likely to be swallowed up in the angry waves.

"A ship!" cried the boatswain, and on the instant we made out a vessel about four miles to the north-east, beneath the mist which had suddenly risen.

Signals were made, signals were perceived; the ship lowered her largest boat and sent it to our rescue.

This ship was the _Tasman_, an American three-master, from Charlestown, where we were received with eager welcome and cordiality. The captain treated my companions as though they had been his own countrymen.

The _Tasman_ had come from the Falkland Islands where the captain had learned that seven months previously the American schooner _Halbrane_ had gone to the southern seas in search of the shipwrecked people of the _Jane_. But as the season advanced, the schooner not having reappeared, she was given up for lost in the Antarctic regions.
Fifteen days after our rescue the _Tasman_ disembarked the survivors of the crew of the two schooners at Melbourne, and it was there that our men were paid the sums they had so hardly earned, and so well deserved.

We then learned from maps that the _Paracuta_ had debouched into the Pacific from the land called Clarie by Dumont d’Urville, and the land called Fabricia, which was discovered in 1838 by Bellenny.

Thus terminated this adventurous and extraordinary expedition, which cost, alas, too many victims. Our final word is that although the chances and the necessities of our voyage carried us farther towards the south pole than hose who preceded us, although we actually did pass beyond the axial point of the terrestrial globe, discoveries of great value still remain to be made in those waters!

Arthur Pym, the hero whom Edgar Poe has made so famous, has shown the way. It is for others to follow him, and to wrest the last Antarctic Mystery from the Sphinx of the Ice-realm.

THE END.

End of the Voyage Extraordinaire
pursued to excess, were becoming rare. The "right" whale, which bears the name of "North Caper," in the Northern Ocean, and that of "Sulphur Bottom," in the South Sea, was likely to disappear. The whalers had been obliged to fall back on the finback or jubarte, a gigantic mammifer, whose attacks are not without danger.

This is what Captain Hull had done during this cruise; but on his next voyage he calculated on reaching a higher latitude, and, if necessary, going in sight of Clarie and Adelie Lands, whose discovery, contested by the American Wilkes, certainly belongs to the illustrious commander of the "Astrolabe" and the Zelee, to the Frenchman, Dumont d'Urville.

In fact, the season had not been favorable for the "Pilgrim." In the beginning of January, that is to say, toward the middle of the Southern summer, and even when the time for the whalers to return had not yet arrived Captain Hull had been obliged to abandon the fishing places. His additional crew--a collection of pretty sad subjects--gave him an excuse, as they say, and he determined to separate from them.

The "Pilgrim" then steered to the northwest, for New Zealand, which she sighted on the 15th of January. She arrived at Waitemata, port of Auckland, situated at the lowest end of the Gulf of Chouraki, on the east coast of the northern island, and landed the fishermen who had been engaged for the season.

The crew was not satisfied. The cargo of the "Pilgrim" was at least two hundred barrels of oil short. There had never been worse fishing. Captain Hull felt the disappointment of a hunter who, for the first time, returns as he went away--or nearly so. His self-love, greatly excited, was at stake, and he did not pardon those scoundrels whose insubordination had compromised the results of his cruise.

It was in vain that he endeavored to recruit a new fishing crew at Auckland. All the disposable seamen were embarked on the other whaling vessels. He was thus obliged to give up the hope of completing the "Pilgrim's" cargo, and Captain Hull was preparing to leave Auckland definitely, when a request for a passage was made which he could not refuse.

Mrs. Weldon, wife of the "Pilgrim's" owner, was then at Auckland with her young son Jack, aged about five years, and one of her relatives, her Cousin Benedict. James W. Weldon, whom his business operations sometimes obliged to visit New Zealand, had brought the three there, and intended to bring them back to San Francisco.

But, just as the whole family was going to depart, little Jack became seriously ill, and his father, imperatively recalled by his business, was obliged to leave Auckland, leaving his wife, his son, and Cousin Benedict there.

Three months had passed away--three long months of separation, which were extremely painful to Mrs. Weldon. Meanwhile her young child was restored to health, and she was at liberty to depart, when she was informed of the arrival of the "Pilgrim."

Now, at that period, in order to return to San Francisco, Mrs. Weldon found herself under the necessity of going to Australia by one of the vessels of the Golden Age Trans-oceanic Company, which ply between Melbourne and the Isthmus of Panama by Papeiti. Then, once arrived at Panama, it would be necessary for her to await the departure of the American steamer, which establishes a regular communication between the Isthmus and California.

Thence, delays, trans-shipments, always disagreeable for a woman and a child. It was just at this time that the "Pilgrim" came into port at Auckland. Mrs. Weldon did not hesitate, but asked Captain Hull to take her on board to bring her back to San Francisco--she, her son, Cousin Benedict, and Nan, an old negress who had served her since her infancy. Three thousand marine leagues to travel on a sailing vessel! But Captain Hull's ship was so well managed, and the season still so fine on both sides of the Equator! Captain Hull consented, and immediately put his own cabin at the disposal of his passenger. He wished that, during a voyage which might last forty or fifty days, Mrs. Weldon should be installed as well as possible on board the whaler.

There were then certain advantages for Mrs. Weldon in making the voyage under these conditions. The only disadvantage was that this voyage would be necessarily prolonged in consequence of this circumstance--the "Pilgrim" would go to Valparaiso, in Chili, to effect her unloading. That done, there would be nothing but to ascend the American coast, with land breezes, which make these parts very agreeable.

Besides, Mrs. Weldon was a courageous woman, whom the sea did not frighten. Then thirty years of age, she was of robust health, being accustomed to long voyages, for, having shared with her husband the fatigues of several passages, she did not fear the chances more or less contingent, of shipping on board a ship of moderate tonnage. She knew Captain Hull to be an excellent seaman, in whom James W. Weldon had every confidence. The "Pilgrim" was a strong vessel, capital sailer, well quoted in the flotilla of American whalers. The opportunity presented itself. It was necessary to profit by it. Mrs. Weldon did profit by it.

Cousin Benedict--it need not be said--would accompany her.

This cousin was a worthy man, about fifty years of age. But, notwithstanding his fifty years, it would not have been prudent to let him go out alone. Long, rather than tall, narrow, rather than thin, his figure bony, his skull enormous and very hairy, one recognized in his whole interminable person one of those worthy savants, with gold spectacles, good and inoffensive beings, destined to remain great children all their lives, and to finish very old, like
centenaries who would die at nurse.

"Cousin Benedict"—he was called so invariably, even outside of the family, and, in truth, he was indeed one of those good men who seem to be the born cousins of all the world—Cousin Benedict, always impeded by his long arms and his long limbs, would be absolutely incapable of attending to matters alone, even in the most ordinary circumstances of life. He was not troublesome, oh! no, but rather embarrassing for others, and embarrassed for himself. Easily satisfied, besides being very accommodating, forgetting to eat or drink, if some one did not bring him something to eat or drink, insensible to the cold as to the heat, he seemed to belong less to the animal kingdom than to the vegetable kingdom. One must conceive a very useless tree, without fruit and almost without leaves, incapable of giving nourishment or shelter, but with a good heart.

Such was Cousin Benedict. He would very willingly render service to people if, as Mr. Prudhomme would say, he were capable of rendering it.

Finally, his friends loved him for his very feebleness. Mrs. Weldon regarded him as her child—a large elder brother of her little Jack.

It is proper to add here that Cousin Benedict was, meanwhile, neither idle nor unoccupied. On the contrary, he was a worker. His only passion—natural history—absorbed him entirely.

To say "Natural History" is to say a great deal.

We know that the different parts of which this science is composed are zoology, botany, mineralogy, and geology.

Now Cousin Benedict was, in no sense, a botanist, nor a mineralogist, nor a geologist.

Was he, then, a zoologist in the entire acceptation of the word, a kind of Cuvier of the New World, decomposing an animal by analysis, or putting it together again by synthesis, one of those profound connoisseurs, versed in the study of the four types to which modern science refers all animal existence, vertebrates, mollusks, articulates, and radiates? Of these four divisions, had the artless but studious savant observed the different classes, and sought the orders, the families, the tribes, the genera, the species, and the varieties which distinguish them?

No.

Had Cousin Benedict devoted himself to the study of the vertebrates, mammals, birds, reptiles, and fishes?
No.

Was it to the mollusks, from the cephalopodes to the bryozoans, that he had given his preference, and had malacology no more secrets for him?

Not at all.

Then it was on the radiates, echinoderms, acalephes, polypes, entozoons, sponges, and infusoria, that he had for such a long time burned the midnight oil?

It must, indeed, be confessed that it was not on the radiates.

Now, in zoology there only remains to be mentioned the division of the articulates, so it must be that it was on this division that Cousin Benedict's only passion was expended.

Yes, and still it is necessary to select.

This branch of the articulates counts six classes: insects, myriapodes, arachnides, crustaceans, cirrhopodes, and annelides.

Now, Cousin Benedict, scientifically speaking, would not know how to distinguish an earth-worm from a medicinal leech, a sand-fly from a glans-marinus, a common spider from a false scorpion, a shrimp from a frog, a gally-worm from a scolopendra.

But, then, what was Cousin Benedict? Simply an entomologist—nothing more.

To that, doubtless, it may be said that in its etymological acceptation, entomology is that part of the natural sciences which includes all the articulates. That is true, in a general way; but it is the custom to give this word a more restricted sense. It is then only applied, properly speaking, to the study of insects, that is to say: "All the articulate animals of which the body, composed of rings placed end to end, forms three distinct segments, and which possesses three pairs of legs, which have given them the name of hexapodes."

Now, as Cousin Benedict had confined himself to the study of the articulates of this class, he was only an entomologist.

But, let us not be mistaken about it. In this class of the insects are counted not less than ten orders:

1. Orthopterans as grasshoppers, crickets, etc. 2. Neuropterans as ant-eaters, dragon-flies or libellula. 3. Hymenopterans as bees, wasps, ants. 4. Lepidopterans as butterflies, etc. 5. Hemipterans as cicada, plant-lice, fleas, etc. 6. Coleopterans as cockchafers, fire-flies, etc. 7. Dipterans as gnats, musquitoes, flies. 8. Rhipipterans as stylops. 9. Parasites as acara, etc. 10. Thysanurans as lepidotus, flying-lice, etc.

Now, in certain of these orders, the coleopters, for example, there are recognized thirty thousand species, and sixty thousand in the dipters; so subjects for study are not wanting, and it will be conceded that there is sufficient in
this class alone to occupy a man!

Thus, Cousin Benedict's life was entirely and solely consecrated to entomology.

To this science he gave all his hours--all, without exception, even the hours of sleep, because he invariably dreamt "hexapodes." That he carried pins stuck in his sleeves and in the collar of his coat, in the bottom of his hat, and in the facings of his vest, need not be mentioned.

When Cousin Benedict returned from some scientific promenade his precious head-covering in particular was no more than a box of natural history, being bristling inside and outside with pierced insects.

And now all will be told about this original when it is stated, that it was on account of his passion for entomology that he had accompanied Mr. and Mrs. Weldon to New Zealand. There his collection was enriched by some rare subjects, and it will be readily understood that he was in haste to return to classify them in the cases of his cabinet in San Francisco.

So, as Mrs. Weldon and her child were returning to America by the "Pilgrim," nothing more natural than for Cousin Benedict to accompany them during that passage.

But it was not on him that Mrs. Weldon could rely, if she should ever find herself in any critical situation. Very fortunately, the prospect was only that of a voyage easily made during the fine season, and on board of a ship whose captain merited all her confidence.

During the three days that the "Pilgrim" was in port at Waitemata, Mrs. Weldon made her preparations in great haste, for she did not wish to delay the departure of the schooner. The native servants whom she employed in her dwelling in Auckland were dismissed, and, on the 22d January, she embarked on board the "Pilgrim," bringing only her son Jack, Cousin Benedict, and Nan, her old negress.

Cousin Benedict carried all his curious collection of insects in a special box. In this collection figured, among others, some specimens of those new staphylins, species of carnivorous coleopters, whose eyes are placed above the head, and which, till then, seemed to be peculiar to New Caledonia. A certain venomous spider, the "katipo," of the Maoris, whose bite is often fatal to the natives, had been very highly recommended to him. But a spider does not belong to the order of insects properly so called; it is placed in that of the arachnida, and, consequently, was valueless in Cousin Benedict's eyes. Thus he scorned it, and the most beautiful jewel of his collection was a remarkable staphylin from New Zealand.

It is needless to say that Cousin Benedict, by paying a heavy premium, had insured his cargo, which to him seemed much more precious than all the freight of oil and bones stowed away in the hold of the "Pilgrim."

Just as the "Pilgrim" was getting under sail, when Mrs. Weldon and her companion for the voyage found themselves on the deck of the schooner, Captain Hull approached his passenger:

"It is understood, Mrs. Weldon," he said to her, "that, if you take passage on board the 'Pilgrim,' it is on your own responsibility."

"Why do you make that observation to me, Mr. Hull?" asked Mrs. Weldon.

"Because I have not received an order from your husband in regard to it, and, all things considered, a schooner cannot offer you the guarantees of a good passage, like a packet-boat, specially intended to carry travelers."

"If my husband were here," replied Mrs. Weldon, "do you think, Mr. Hull, that he would hesitate to embark on the 'Pilgrim,' in company with his wife and child?"

"No, Mrs. Weldon, he would not hesitate," said Captain Hull; "no, indeed! no more than I should hesitate myself! The 'Pilgrim' is a good ship after all, even though she has made but a sad cruise, and I am sure of her, as much so as a seaman can be of the ship which he has commanded for several years. The reason I speak, Mrs. Weldon, is to get rid of personal responsibility, and to repeat that you will not find on board the comfort to which you have been accustomed."

"As it is only a question of comfort, Mr. Hull," replied Mrs. Weldon, "that should not stop me. I am not one of those troublesome passengers who complain incessantly of the narrowness of the cabins, and the insufficiency of the table."

Then, after looking for a few moments at her little Jack, whom she held by the hand, Mrs. Weldon said:

"Let us go, Mr. Hull!"

The orders were given to get under way at once, the sails were set, and the "Pilgrim," working to get out to sea in the shortest time possible, steered for the American coast.

But, three days after her departure, the schooner, thwarted by strong breezes from the east, was obliged to tack to larboard to make headway against the wind. So, at the date of February 2d, Captain Hull still found himself in a higher latitude than he would have wished, and in the situation of a sailor who wanted to double Cape Horn rather than reach the New Continent by the shortest course.
CHAPTER II.
DICK SAND.

Meanwhile the sea was favorable, and, except the delays, navigation would be accomplished under very
supportable conditions.

Mrs. Weldon had been installed on board the "Pilgrim" as comfortably as possible.

Neither poop nor "roufle" was at the end of the deck. There was no stern cabin, then, to receive the passengers.
She was obliged to be contented with Captain Hull's cabin, situated aft, which constituted his modest sea lodging.
And still it had been necessary for the captain to insist, in order to make her accept it. There, in that narrow lodging,
was installed Mrs. Weldon, with her child and old Nan. She took her meals there, in company with the captain and
Cousin Benedict, for whom they had fitted up a kind of cabin on board.

As to the commander of the "Pilgrim," he had settled himself in a cabin belonging to the ship's crew--a cabin
which would be occupied by the second officer, if there were a second one on board. But the brig-schooner was
navigated, we know, under conditions which enabled her to dispense with the services of a second officer.

The men of the "Pilgrim," good and strong seamen, were very much united by common ideas and habits. This
fishing season was the fourth which they had passed together. All Americans of the West, they were acquainted for a
long period, and belonged to the same coast of the State of California.

These brave men showed themselves very thoughtful towards Mrs. Weldon, the wife of the owner of their ship,
for whom they professed boundless devotion. It must be said that, largely interested in the profits of the ship, they
had navigated till then with great gain. If, by reason of their small number, they did not spare themselves, it was
because every labor increased their earnings in the settling of accounts at the end of each season. This time, it is true,
the profit would be almost nothing, and that gave them just cause to curse and swear against those New Zealand
scoundrels.

One man on board, alone among all, was not of American origin. Portuguese by birth, but speaking English
fluently, he was called Negoro, and filled the humble position of cook on board.

Negoro might be forty years old. Thin, nervous, of medium height, with very brown hair, skin somewhat
swarthy, he ought to be strong. Had he received any instruction? Yes; that appeared in certain observations which
escaped him sometimes. Besides, he never spoke of his past life, he said not a word about his family. Whence he
came, where he had lived, no one could tell. What would his future be? No one knew any more about that. He only
announced his intention of going on shore at Valparaiso. He was certainly a singular man. At all events, he did not
seem to be a sailor. He seemed to be even more strange to marine things than is usual with a master cook, part of
whose existence is passed at sea.

Meanwhile, as to being incommoded by the rolling and pitching of the ship, like men who have never navigated,
he was not in the least, and that is something for a cook on board a vessel.

Finally, he was little seen. During the day, he most generally remained confined in his narrow kitchen, before the
stove for melting, which occupied the greater part of it. When night came and the fire in the stove was out, Negoro
went to the cabin which was assigned to him at the end of the crew's quarters. Then he went to bed at once and went
to sleep.

It has been already said that the "Pilgrim's" crew was composed of five sailors and a novice.

This young novice, aged fifteen, was the child of an unknown father and mother. This poor being, abandoned
from his birth, had been received and brought up by public charity.

Dick Sand--that was his name--must have been originally from the State of New York, and doubtless from the
capital of that State.

If the name of Dick--an abbreviation of Richard--had been given to the little orphan, it was because it was the
name of the charitable passer-by who had picked him up two or three hours after his birth. As to the name of Sand, it
was attributed to him in remembrance of the place where he had been found; that is to say, on that point of land
called Sandy-Hook, which forms the entrance of the port of New York, at the mouth of the Hudson.

Dick Sand, when he should reach his full growth, would not exceed middle height, but he was well built. One
could not doubt that he was of Anglo-Saxon origin. He was brown, however, with blue eyes, in which the crystalline
sparkled with ardent fire. His seaman's craft had already prepared him well for the conflicts of life. His intelligent
but his color soon came back on board the "Pilgrim," thanks to this gymnastic, and to the bracing sea-breezes.

old arms grew feeble during those exercises. All that benefited little Jack, whom sickness had made somewhat pale;

backstays. Dick Sand went before or followed him, always ready to hold him up or keep him back, if his six-year-

craft which seemed amusing.

management, Dick and Jack were almost always together. The young novice showed the little boy everything in his

leisure hours, which are frequent in a voyage, when the sea is smooth, when the well set up sails require no

Sand cherished this child, who, feeling himself loved by this "large brother," sought his company. During those long

Finally, to be only fifteen, but to act and think as if he were thirty, that was Dick Sand.

life for those who had taught him to instruct himself and to love God, the young novice would not hesitate to give it.

fallen on good soil. The orphan's heart was filled with gratitude, and some day, if it should be necessary to give his

respect to the son of the rich ship-owner. But--his protectors knew it well--this good seed which they had sown had

had been a mother to him, and in Jack he saw a little brother, all the time keeping in remembrance his position in

when he learned that Mrs. Weldon was going to take passage on board the "Pilgrim." Mrs. Weldon for several years

superfluous. Better let the facts speak for themselves. But it will be understood how happy the young novice was

circumstances.

Weldon's, his benefactor, commanded by his protector, Captain Hull. Thus he found himself in the most favorable

first time on the "Pilgrim." A good seaman ought to understand fishing as well as navigation. It is a good preparation

portion of his instruction, he did not neglect to join the practical. It was as novice that he was able to embark for the

San Francisco, and he had him brought up in the Catholic religion, to which his family adhered.

This honest seaman immediately formed a friendship with this honest young boy, and later he made him known to

the South Sea. There he learned the seaman's trade, and as one ought to learn it, from the earliest age. Little by little

he instructed himself under the direction of officers who were interested in this little old man. So the cabin-boy soon

became the novice, expecting something better, of course. The child who understands, from the beginning, that work

is the law of life, the one who knows, from an early age, that he will gain his bread only by the sweat of his brow--a

Bible precept which is the rule of humanity--that one is probably intended for great things; for some day he will

have, with the will, the strength to accomplish them.

It was, when he was a cabin-boy on board a merchant vessel, that Dick Sand was remarked by Captain Hull. This

honest seaman immediately formed a friendship with this honest young boy, and later he made him known to the

ship-owner, James W. Weldon. The latter felt a lively interest in this orphan, whose education he completed at

San Francisco, and he had him brought up in the Catholic religion, to which his family adhered.

During the course of his studies, Dick Sand showed a particular liking for geography, for voyages, while waiting
till he was old enough to learn that branch of mathematics which relates to navigation. Then to this theoretical

portion of his instruction, he did not neglect to join the practical. It was as novice that he was able to embark for the

first time on the "Pilgrim." A good seaman ought to understand fishing as well as navigation. It is a good preparation

for all the contingencies which the maritime career admits of. Besides, Dick Sand set out on a vessel of James W.

Weldon's, his benefactor, commanded by his protector, Captain Hull. Thus he found himself in the most favorable

circumstances.

To speak of the extent of his devotion to the Weldon family, to whom he owed everything, would be

superfluous. Better let the facts speak for themselves. But it will be understood how happy the young novice was

when he learned that Mrs. Weldon was going to take passage on board the "Pilgrim." Mrs. Weldon for several years

had been a mother to him, and in Jack he saw a little brother, all the time keeping in remembrance his position in

respect to the son of the rich ship-owner. But--his protectors knew it well--this good seed which they had sown had

fallen on good soil. The orphan's heart was filled with gratitude, and some day, if it should be necessary to give his

life for those who had taught him to instruct himself and to love God, the young novice would not hesitate to give it.

Finally, to be only fifteen, but to act and think as if he were thirty, that was Dick Sand.

Mrs. Weldon knew what her _protégé_ was worth. She could trust little Jack with him without any anxiety. Dick

Sand cherished this child, who, feeling himself loved by this "large brother," sought his company. During those long

leisure hours, which are frequent in a voyage, when the sea is smooth, when the well set up sails require no

management, Dick and Jack were almost always together. The young novice showed the little boy everything in his

craft which seemed amusing.

Without fear Mrs. Weldon saw Jack, in company with Dick Sand, spring out on the shrouds, climb to the top of

the mizzen-mast, or to the booms of the mizzen-topmast, and come down again like an arrow the whole length of the

backstays. Dick Sand went before or followed him, always ready to hold him up or keep him back, if his six-year-

old arms grew feeble during those exercises. All that benefited little Jack, whom sickness had made somewhat pale;

but his color soon came back on board the "Pilgrim," thanks to this gymnastic, and to the bracing sea-breezes.

So passed the time. Under these conditions the passage was being accomplished, and only the weather was not
very favorable, neither the passengers nor the crew of the "Pilgrim" would have had cause to complain.

Meanwhile this continuance of east winds made Captain Hull anxious. He did not succeed in getting the vessel into the right course. Later, near the Tropic of Capricorn, he feared finding calms which would delay him again, without speaking of the equatorial current, which would irresistibly throw him back to the west. He was troubled then, above all, for Mrs. Weldon, by the delays for which, meanwhile, he was not responsible. So, if he should meet, on his course, some transatlantic steamer on the way toward America, he already thought of advising his passenger to embark on it. Unfortunately, he was detained in latitudes too high to cross a steamer running to Panama; and, besides, at that period communication across the Pacific, between Australia and the New World, was not as frequent as it has since become.

It then was necessary to leave everything to the grace of God, and it seemed as if nothing would trouble this monotonous passage, when the first incident occurred precisely on that day, February 2d, in the latitude and longitude indicated at the beginning of this history.

Dick Sand and Jack, toward nine o'clock in the morning, in very clear weather, were installed on the booms of the mizzen-topmast. Thence they looked down on the whole ship and a portion of the ocean in a large circumferenee. Behind, the perimeter of the horizon was broken to their eyes, only by the mainmast, carrying brigantine and fore-staff. That beacon hid from them a part of the sea and the sky. In the front, they saw the bowsprit stretching over the waves, with its three jibs, which were hauled tightly, spread out like three great unequal wings. Underneath rounded the foremast, and above, the little top-sail and the little gallant-sail, whose bolt-rope quivered with the pranks of the breeze. The schooner was then running on the larboard tack, and hugging the wind as much as possible.

Dick Sand explained to Jack how the "Pilgrim," ballasted properly, well balanced in all her parts, could not capsize, even if she gave a pretty strong heel to starboard, when the little boy interrupted him.

"What do I see there?" said he.

"You see something, Jack?" demanded Dick Sand, who stood up straight on the booms.

"Yes--there!" replied little Jack, showing a point of the sea, left open by the interval between the stays of the standing-jib and the flying-jib.

Dick Sand looked at the point indicated attentively, and forthwith, with a loud voice, he cried;

"A wreck to windward, over against starboard!"

* * * * *

CHAPTER III.

THE WRECK.

Dick Sand's cry brought all the crew to their feet. The men who were not on watch came on deck. Captain Hull, leaving his cabin, went toward the bow.

Mrs. Weldon, Nan, even the indifferent Cousin Benedict himself, came to lean over the starboard rail, so as to see the wreck signaled by the young novice.

Negoro, alone, did not leave the cabin, which served him for a kitchen; and as usual, of all the crew, he was the only one whom the encounter with a wreck did not appear to interest.

Then all regarded attentively the floating object which the waves were rocking, three miles from the "Pilgrim."

"Ah! what can that be?" said a sailor.

"Some abandoned raft," replied another.

"Perhaps there are some unhappy shipwrecked ones on that raft," said Mrs. Weldon.

"We shall find out," replied Captain Hull. "But that wreck is not a raft. It is a hull thrown over on the side."

"Ah! is it not more likely to be some marine animal--some mammifer of great size?" observed Cousin Benedict.

"I do not think so," replied the novice.

"Then what is your idea, Dick?" asked Mrs. Weldon.

"An overturned hull, as the captain has said, Mrs. Weldon. It even seems to me that I see its copper keel glistening in the sun."

"Yes--indeed," replied Captain Hull. Then addressing the helmsman: "Steer to the windward, Bolton. Let her go a quarter, so as to come alongside the wreck."

"Yes, sir," replied the helmsman.

"But," continued Cousin Benedict, "I keep to what I have said. Positively it is an animal."

"Then this would be a whale in copper," replied Captain Hull, "for, positively, also, I see it shine in the sun!"

"At all events, Cousin Benedict," added Mrs. Weldon, "you will agree with us that this whale must be dead, for it is certain that it does not make the least movement."
“Ah! Cousin Weldon,” replied Cousin Benedict, who was obstinate, “this would not be the first time that one has met a whale sleeping on the surface of the waves.”

“That is a fact,” replied Captain Hull; “but to-day, the thing is not a whale, but a ship.”

“We shall soon see,” replied Cousin Benedict, who, after all, would give all the mammifers of the Arctic or Antarctic seas for an insect of a rare species.

“Steer, Bolton, steer!” cried Captain Hull again, “and do not board the wreck. Keep a cable's length. If we cannot do much harm to this hull, it might cause us some damage, and I do not care to hurt the sides of the 'Pilgrim' with it. Tack a little, Bolton, tack!”

The “Pilgrim's” prow, which had been directed toward the wreck, was turned aside by a slight movement of the helm.

The schooner was still a mile from the capsized hull. The sailors were eagerly looking at it. Perhaps it held a valuable cargo, which it would be possible to transfer to the "Pilgrim." We know that, in these salvages, the third of the value belongs to the rescuers, and, in this case, if the cargo was not damaged, the crew, as they say, would make "a good haul." This would be a fish of consolation for their incomplete fishing.

A quarter of an hour later the wreck was less than a mile from the "Pilgrim."

It was indeed a ship, which presented itself on its side, to the starboard. Capsized as far as the nettings, she heeled so much that it would be almost impossible to stand upon her deck. Nothing could be seen beyond her masts. From the port-shrouds were banging only some ends of broken rope, and the chains broken by the cloaks of white-crested waves. On the starboard side opened a large hole between the timbers of the frame-work and the damaged planks.

"This ship has been run into," cried Dick Sand.

"There is no doubt of that," replied Captain Hull; "and it is a miracle that she did not sink immediately."

"If there has been a collision," observed Mrs. Weldon, "we must hope that the crew of this ship has been picked up by those who struck her."

"It is to be hoped so, Mrs. Weldon," replied Captain Hull, "unless this crew sought refuge in their own boats after the collision, in case the colliding vessel should sail right on--which, alas! sometimes happens."

"Is it possible? That would be a proof of very great inhumanity, Mr. Hull."

"Yes, Mrs. Weldon. Yes! and instances are not wanting. As to the crew of this ship, what makes me believe that it is more likely they have left it, is that I do not see a single boat; and, unless the men on board have been picked up, I should be more inclined to think that they have tried to reach the land. But, at this distance from the American continent, or from the islands of Oceanica, it is to be feared that they have not succeeded."

"Perhaps," said Mrs. Weldon, "we shall never know the secret of this catastrophe. Meanwhile, it might be possible that some man of the crew is still on board."

"That is not probable, Mrs. Weldon," replied Captain Hull. "Our approach would be already known, and they would make some signals to us. But we shall make sure of it.--Luff a little, Bolton, luff," cried Captain Hull, while indicating with his hand what course to take.

The "Pilgrim" was now only three cables' length from the wreck, and they could no longer doubt that this hull had been completely abandoned by all its crew.

But, at that moment, Dick Sand made a gesture which imperiously demanded silence.

"Listen, listen!" said he.

Each listened.

"I hear something like a bark!" cried Dick Sand. In fact, a distant barking resounded from the interior of the hull. Certainly there was a living dog there, imprisoned perhaps, for it was possible that the hatches were hermetically closed. But they could not see it, the deck of the capsized vessel being still invisible.

"If there be only a dog there, Mr. Hull," said Mrs. "Weldon," we shall save it."

"Yes, yes!" cried little Jack, "we shall save it. I shall give it something to eat! It will love us well! Mama, I am going to bring it a piece of sugar!"

"Stay still, my child," replied Mrs. Weldon smiling. "I believe that the poor animal is dying of hunger, and it will prefer a good mess to your morsel of sugar."

"Well, then, let it have my soup," cried little Jack. "I can do without it very well."

At that moment the barking was more distinctly heard. Three hundred feet, at the most, separated the two ships. Almost immediately a dog of great height appeared on the starboard netting, and clung there, barking more despairingly than ever.

"Howik," said Captain Hull, turning toward the master of the "Pilgrim's" crew, "heave to, and lower the small boat."

"Hold on, my dog, hold on!" cried little Jack to the animal, which seemed to answer him with a half-stifled bark.
The "Pilgrim's" sails were rapidly furled, so that the ship should remain almost motionless, less than half a cable's length from the wreck.

The boat was brought alongside. Captain Hull, Dick Sand and two sailors got into it at once.

The dog barked all the time. It tried to hold on to the netting, but every moment it fell back on the deck. One would say that its barks were no longer addressed to those who were coming to him. Were they then addressed to some sailors or passengers imprisoned in this ship?

"Is there, then, on board some shipwrecked one who has survived?" Mrs. Weldon asked herself.

A few strokes of the oars and the "Pilgrim's" boat would reach the capsized hull.

But, suddenly, the dog's manner changed. Furious barks succeeded its first barks inviting the rescuers to come. The most violent anger excited the singular animal.

"What can be the matter with that dog?" said Captain Hull, while the boat was turning the stern of the vessel, so as to come alongside of the part of the deck lying under the water.

What Captain Hull could not then observe, what could not be noticed even on board the "Pilgrim," was that the dog's fury manifested itself just at the moment when Negoro, leaving his kitchen, had just come toward the forecastle.

Did the dog then know and recognize the master cook? It was very improbable.

However that may be, after looking at the dog, without showing any surprise, Negoro, who, however, frowned for an instant, returned to the crew's quarters.

Meanwhile the boat had rounded the larboard netting. A somewhat strong swell of the sea would certainly submerge the "Waldeck" in a few moments.

The brig's deck had been swept from one end to the other. There was nothing left except the stumps of the mainmast and of the mizzen-mast, both broken off two feet above the scuttles, and which had fallen in the collision, carrying away shrouds, back-stays, and rigging. Meanwhile, as far as the eye could see, no wreck was visible around the "Waldeck"--which seemed to indicate that the catastrophe was already several days old.

"If some unhappy creatures have survived the collision," said Captain Hull, "it is probable that either hunger or thirst has finished them, for the water must have gained the store-room. There are only dead bodies on board!"

"No," cried Dick Sand, "no! The dog would not bark that way. There are living beings on board!"

At that moment the animal, responding to the call of the novice, slid to the sea, and swam painfully toward the boat, for it seemed to be exhausted.

They took it in, and it rushed eagerly, not for a piece of bread that Dick Sand offered it first, but to a half-tub which contained a little fresh water.

"This poor animal is dying of thirst!" cried Dick Sand.

The boat then sought a favorable place to board the "Waldeck" more easily, and for that purpose it drew away a few strokes. The dog evidently thought that its rescuers did not wish to go on board, for he seized Dick Sand by his jacket, and his lamentable barks commenced again with new strength.

They understood it. Its pantomime and its language were as clear as a man's language could be. The boat was brought immediately as far as the larboard cat-head. There the two sailors moored it firmly, while Captain Hull and Dick Sand, setting foot on the deck at the same time as the dog, raised themselves, not without difficulty, to the hatch which opened between the stumps of the two masts.

By this hatch the two made their way into the hold.

The "Waldeck's" hold, half full of water, contained no goods. The brig sailed with ballast--a ballast of sand which had slid to larboard and which helped to keep the ship on her side. On that head, then, there was no salvage to effect.

"Nobody here," said Captain Hull.
"Nobody," replied the novice, after having gone to the foremost part of the hold.
But the dog, which was on the deck, kept on barking and seemed to call the captain's attention more
imperatively.
"Let us go up again," said Captain Hull to the novice.
Both appeared again on the deck.
The dog, running to them, sought to draw them to the poop.
They followed it.
There, in the square, five bodies—undoubtedly five corpses—were lying on the floor.
By the daylight which entered in waves by the opening, Captain Hull discovered the bodies of five negroes.
Dick Sand, going from one to the other, thought he felt that the unfortunates were still breathing.
"On board! on board!" cried Captain Hull.
The two sailors who took care of the boat were called, and helped to carry the shipwrecked men out of the poop.
This was not without difficulty, but two minutes after, the five blacks were laid in the boat, without being at all
conscious that any one was trying to save them. A few drops of cordial, then a little fresh water prudently
administered, might, perhaps, recall them to life.
The "Pilgrim" remained a half cable's length from the wreck, and the boat would soon reach her.
A girt-line was let down from the main-yard, and each of the blacks drawn up separately reposed at last on the
"Pilgrim's" deck.
The dog had accompanied them.
"The unhappy creatures!" cried Mrs. Weldon, on perceiving those poor men, who were only inert bodies.
"They are alive, Mrs. Weldon. We shall save them. Yes, we shall save them," cried Dick Sand.
"What has happened to them?" demanded Cousin Benedict.
"Wait till they can speak," replied Captain Hull, "and they will tell us their history. But first of all, let us make
them drink a little water, in which we shall mix a few drops of rum." Then, turning round: "Negoro!" he called.
At that name the dog stood up as if it knew the sound, its hair bristling, its mouth open.
Meanwhile, the cook did not appear.
"Negoro!" repeated Captain Hull.
The dog again gave signs of extreme fury.
Negoro left the kitchen.
Hardly had he shown himself on the deck, than the dog sprang on him and wanted to jump at his throat.
With a blow from the poker with which he was armed, the cook drove away the animal, which some of the
sailors succeeded in holding.
"Do you know this dog?" Captain Hull asked the master cook.
"I?" replied Negoro. "I have never seen it."
"That is singular," murmured Dick Sand.
* * * *

CHAPTER IV.
THE SURVIVORS OF THE "WALDECK."
The slave trade was still carried on, on a large scale, in all equinoctial Africa. Notwithstanding the English and
French cruisers, ships loaded with slaves leave the coasts of Angola and Mozambique every year to transport
negroes to various parts of the world, and, it must be said, of the civilized world.
Captain Hull was not ignorant of it. Though these parts were not ordinarily frequented by slave-ships, he asked
himself if these blacks, whose salvage he had just effected, were not the survivors of a cargo of slaves that the
"Waldeck" was going to sell to some Pacific colony. At all events, if that was so, the blacks became free again by
the sole act of setting foot on his deck, and he longed to tell it to them.
Meanwhile the most earnest care had been lavished on the shipwrecked men from the "Waldeck." Mrs. Weldon,
aided by Nan and Dick Sand, had administered to them a little of that good fresh water of which they must have
been deprived for several days, and that, with some nourishment, sufficed to restore them to life.
The eldest of these blacks—he might be about sixty years old—was soon able to speak, and he could answer in
English the questions which were addressed to him.
"The ship which carried you was run into?" asked Captain Hull, first of all.
"Yes," replied the old black. "Ten days ago our ship was struck, during a very dark night. We were asleep----"
"But the men of the 'Waldeck'—what has become of them?"
"They were no longer there, sir, when my companions and I reached the deck."
"Then, was the crew able to jump on board the ship which struck the 'Waldeck'?' demanded Captain Hull.

"Perhaps, and we must indeed hope so for their sakes."

"And that ship, after the collision, did it not return to pick you up?"

"No."

"Did she then go down herself?"

"She did not founder," replied the old black, shaking his head, "for we could see her running away in the night."

This fact, which was attested by all the survivors of the "Waldeck," may appear incredible. It is only too true, however, that captains, after some terrible collision, due to their imprudence, have often taken flight without troubling themselves about the unfortunate ones whom they had put in danger, and without endeavoring to carry assistance to them.

That drivers do as much and leave to others, on the public way, the trouble of repairing the misfortune which they have caused, that is indeed to be condemned. Still, their victims are assured of finding immediate help. But, that men to men, abandon each other thus at sea, it is not to be believed, it is a shame!

Meanwhile, Captain Hull knew several examples of such inhumanity, and he was obliged to tell Mrs. Weldon that such facts, monstrous as they might be, were unhappily not rare.

Then, continuing:

"Whence came the 'Waldeck?'" he asked.

"From Melbourne."

"Then you are not slaves?"

"No, sir!" the old black answered quickly, as he stood up straight. "We are subjects of the State of Pennsylvania, and citizens of free America!"

"My friends," replied Captain Hull, "believe me that you have not compromised your liberty in coming on board of the American brig, the 'Pilgrim.'"

In fact, the five blacks which the "Waldeck" carried belonged to the State of Pennsylvania. The oldest, sold in Africa as a slave at the age of six years, then brought to the United States, had been freed already many years ago by the Emancipation Proclamation. As to his companions, much younger than he, sons of slaves liberated before their birth, they were born free; no white had ever had the right of property over them. They did not even speak that "negro" language, which does not use the article, and only knows the infinitive of the verbs—a language which has disappeared little by little, indeed, since the anti-slavery war. These blacks had, then, freely left the United States, and they were returning to it freely.

As they told Captain Hull, they were engaged as laborers at an Englishman's who owned a vast mine near Melbourne, in Southern Australia. There they had passed three years, with great profit to themselves; their engagement ended, they had wished to return to America.

They then had embarked on the "Waldeck," paying their passage like ordinary passengers. On the 5th of December they left Melbourne, and seventeen days after, during a very black night, the "Waldeck" had been struck by a large steamer.

The blacks were in bed. A few seconds after the collision, which was terrible, they rushed on the deck.

Already the ship's masts had fallen, and the "Waldeck" was lying on the side; but she would not sink, the water not having invaded the hold sufficiently to cause it.

As to the captain and crew of the "Waldeck," all had disappeared, whether some had been precipitated into the sea, whether others were caught on the rigging of the colliding ship, which, after the collision, had fled to return no more.

The five blacks were left alone on board, on a half-capsized hull, twelve hundred miles from any land.

Then oldest of the negroes was named Tom. His age, as well as his energetic character, and his experience, often put to the proof during a long life of labor, made him the natural head of the companions who were engaged with him.

The other blacks were young men from twenty-five to thirty years old, whose names were Bat (abbreviation of Bartholomew), son of old Tom, Austin, Acteon, and Hercules, all four well made and vigorous, and who would bring a high price in the markets of Central Africa. Even though they had suffered terribly, one could easily recognize in them magnificent specimens of that strong race, on which a liberal education, drawn from the numerous schools of North America, had already impressed its seal.

Tom and his companions then found themselves alone on the "Waldeck" after the collision, having no means of raising that inert hull, without even power to leave it, because the two boats on board had been shattered in the boarding. They were reduced to waiting for the passage of a ship, while the wreck drifted little by little under the action of the currents. This action explained why she had been encountered so far out of her course, for the "Waldeck," having left Melbourne, ought to be found in much lower latitude.
During the ten days which elapsed between the collision and the moment when the "Pilgrim" arrived in sight of the shipwrecked vessel the five blacks were sustained by some food which they had found in the office of the landing-place. But, not being able to penetrate into the steward's room, which the water entirely covered, they had had no spirits to quench their thirst, and they had suffered cruelly, the water casks fastened to the deck having been stove in by the collision. Since the night before, Tom and his companions, tortured by thirst, had become unconscious.

Such was the recital which Tom gave, in a few words, to Captain Hull. There was no reason to doubt the veracity of the old black. His companions confirmed all that he had said; besides, the facts pleaded for the poor men.

Another living being, saved on the wreck, would doubtless have spoken with the same sincerity if it had been gifted with speech.

It was that dog, that the sight of Negoro seemed to affect in such a disagreeable manner. There was in that some truly inexplicable antipathy.

Dingo--that was the name of the dog--belonged to that race of mastiffs which is peculiar to New Holland. It was not in Australia, however, that the captain of the "Waldeck" had found it. Two years before Dingo, wandering half dead of hunger, had been met on the western coast of Africa, near the mouth of the Congo. The captain of the "Waldeck" had picked up this fine animal, who, being not very sociable, seemed to be always regretting some old master, from whom he had been violently separated, and whom it would be impossible to find again in that desert country. S. V.--those two letters engraved on his collar--were all that linked this animal to a past, whose mystery one would seek in vain to solve.

Dingo, a magnificent and robust beast, larger than the dogs of the Pyrenees, was then a superb specimen of the New Holland variety of mastiffs. When it stood up, throwing its head back, it equaled the height of a man. Its agility--its muscular strength, would be sufficient for one of those animals which without hesitation attack jaguars and panthers, and do not fear to face a bear. Its long tail of thick hair, well stocked and stiff like a lion's tail, its general hue dark fawn-color, was only varied at the nose by some whitish streaks. This animal, under the influence of anger, might become formidable, and it will be understood that Negoro was not satisfied with the reception given him by this vigorous specimen of the canine race.

Meanwhile, Dingo, if it was not sociable, was not bad. It seemed rather to be sad. An observation which had been made by old Tom on board the "Waldeck" was that this dog did not seem to like blacks. It did not seek to harm them, but certainly it shunned them. May be, on that African coast where it wandered, it had suffered some bad treatment from the natives. So, though Tom and his companions were honest men, Dingo was never drawn toward them. During the ten days that the shipwrecked dog had passed on the "Waldeck," it had kept at a distance, feeding itself, they knew not how, but having also suffered cruelly from thirst.

Such, then, were the survivors of this wreck, which the first surge of the sea would submerge. No doubt it would have carried only dead bodies into the depths of the ocean if the unexpected arrival of the "Pilgrim," herself kept back by calms and contrary winds, had not permitted Captain Hull to do a work of humanity.

This work had only to be completed by bringing back to their country the shipwrecked men from the "Waldeck," who, in this shipwreck, had lost their savings of three years of labor. This is what was going to be done. The "Pilgrim," after having effected her unloading at Valparaiso, would ascend the American coast as far as California. There Tom and his companions would be well received by James W. Weldon--his generous wife assured them of it--and they would be provided with all that would be necessary for them to return to the State of Pennsylvania.

These honest men, reassured about the future, had only to thank Mrs. Weldon and Captain Hull. Certainly they owed them a great deal, and although they were only poor negroes, perhaps, they did not despair of some day paying this debt of gratitude.

CHAPTER V.

S. V.

Meanwhile, the "Pilgrim" had continued her course, making for the east as much as possible. This lamentable continuance of calms did not cease to trouble Captain Hull--not that he was uneasy about two or three weeks' delay in a passage from New Zealand to Valparaiso, but because of the extra fatigue which this delay might bring to his lady passenger.

Meanwhile, Mrs. Weldon did not complain, and philosophically took her misfortune in patience.

That same day, February 2d, toward evening, the wreck was lost sight of.

Captain Hull was troubled, in the first place, to accommodate Tom and his companions as conveniently as possible. The crew's quarters on the "Pilgrim," built on the deck in the form of a "roufle," would be too small to hold them. An arrangement was then made to lodge them under the forecastle. Besides, these honest men, accustomed to
rude labors, could not be hard to please, and with fine weather, warm and salubrious, this sleeping-place ought to suffice for the whole passage.

The life on board, shaken for a moment from its monotony by this incident, then went on as usual.

Tom, Austin, Bat, Acteon, and Hercules would indeed wish to make themselves useful. But with these constant winds, the sails once set, there was nothing more to do. Meanwhile, when there was a veering about, the old black and his companions hastened to give a hand to the crew, and it must be confessed that when the colossal Hercules hauled some rope, they were aware of it. This vigorous negro, six feet high, brought in a tackle all by himself.

It was joy for little Jack to look at this giant. He was not afraid of him, and when Hercules hoisted him up in his arms, as if he were only a cork baby, there were cries of joy to go on.

"Lift me very high," said little Jack.
"There, Master Jack!" replied Hercules.
"Am I very heavy?"
"I do not even feel you."
"Well, higher still! To the end of your arm!" And Hercules, holding the child's two little feet in his large hand, walked him about like a gymnast in a circus. Jack saw himself, tall, taller, which amused him very much. He even tried to make himself heavy—which the colossus did not perceive at all.

Dick Sand and Hercules, they were two friends for little Jack. He was not slow in making himself a third--that was Dingo.

It has been said that Dingo was not a sociable dog. Doubtless that held good, because the society of the "Waldeck" did not suit it. On board the "Pilgrim" it was quite another thing. Jack probably knew how to touch the fine animal's heart. The latter soon took pleasure in playing with the little boy, whom this play pleased. It was soon discovered that Dingo was one of those dogs who have a particular taste for children. Besides, Jack did it no harm. His greatest pleasure was to transform Dingo into a swift steed, and it is safe to affirm that a horse of this kind is much superior to a pasteboard quadruped, even when it has wheels to its feet. So Jack galloped bare-back on the dog, which let him do it willingly, and, in truth, Jack was no heavier to it than the half of a jockey to a race-horse.

But what a break each day in the stock of sugar in the store-room!

Dingo soon became a favorite with the whole crew. Alone, Negoro continued to avoid any encounter with the animal, whose antipathy was always as strong as it was inexplicable.

Meanwhile, little Jack had not neglected Dick Sand, his friend of old, for Dingo. All the time that was unclaimed by his duties on board, the novice passed with the little boy.

Mrs. Weldon, it is needless to say, always regarded this intimacy with the most complete satisfaction.

One day, February 6th, she spoke of Dick to Captain Hull, and the captain praised the young novice in the highest terms.

"That boy," he said to Mrs. Weldon, "will be a good seaman some day, I'll guarantee. He has truly a passion for the sea, and by this passion he makes up for the theoretical parts of the calling which he has not yet learned. What he already knows is astonishing, when we think of the short time he has had to learn."

"It must be added," replied Mrs. Weldon, "that he is also an excellent person, a true boy, very superior to his age, and who has never merited any blame since we have known him."

"Yes, he is a good young man," continued the captain, "justly loved and appreciated by all."

"This cruise finished," said Mrs. Weldon, "I know that my husband's intention is to have him follow a course of navigation, so that, he may afterwards obtain a captain's commission."

"And Mr. Weldon is right," replied Captain Hull. "Dick Sand will one day do honor to the American marine."

"This poor orphan commenced life sadly," observed Mrs. Weldon. "He has been in a hard school!"

"Doubtless, Mrs. Weldon; but the lessons have not been lost on him. He has learned that he must make his own way in this world, and he is in a fair way to do it."

"Yes, the way of duty!"

"Look at him now, Mrs. Weldon," continued Captain Hull. "He is at the helm, his eye fixed on the point of the foresail. No distraction on the part of this young novice, as well as no lurch to the ship. Dick Sand has already the confidence of an old steersman. A good beginning for a seaman. Our craft, Mrs. Weldon, is one of those in which it is necessary to begin very young. He who has not been a cabin-boy will never arrive at being a perfect seaman, at least in the merchant marine. Everything must be learned, and, consequently, everything must be at the same time instinctive and rational with the sailor--the resolution to grasp, as well as the skill to execute."

"Meanwhile, Captain Hull," replied Mrs. Weldon, "good officers are not lacking in the navy."

"No," replied Captain Hull; "but, in my opinion, the best have almost all begun their career as children, and, without speaking of Nelson and a few others, the worst are not those who began by being cabin-boys."

At that moment they saw Cousin Benedict springing up from the rear companion-way. As usual he was
absorbed, and as little conscious of this world as the Prophet Elias will be when he returns to the earth.

Cousin Benedict began to walk about on the deck like an uneasy spirit, examining closely the interstices of the netting, rummaging under the hen-cages, putting his hand between the seams of the deck, there, where the pitch had scaled off.

"Ah! Cousin Benedict," asked Mrs. Weldon, "do you keep well?"

"Yes--Cousin Weldon--I am well, certainly--but I am in a hurry to get on land."

"What are you looking for under that bench, Mr. Benedict?" asked Captain Hull.

"Insects, sir," returned Cousin Benedict. "What do you expect me to look for, if not insects?"

"Insects! Faith, I must agree with you; but it is not at sea that you will enrich your collection."

"And why not, sir? It is not impossible to find on board some specimen of----"

"Cousin Benedict," said Mrs. Weldon, "do you then slander Captain Hull? His ship is so well kept, that you will return empty-handed from your hunt."

Captain Hull began to laugh.

"Mrs. Weldon exaggerates," replied he. "However, Mr. Benedict, I believe you will lose your time rummaging in our cabins."

"Ah! I know it well," cried Cousin Benedict, shrugging his shoulders. "I have had a good search----"

"But, in the 'Pilgrim's' hold," continued Captain Hull, "perhaps you will find some cockroaches--subjects of little interest, however."

"Of little interest, those nocturnal orthopters which have incurred the maledictions of Virgil and Horace!" retorted Cousin Benedict, standing up straight. "Of little interest, those near relations of the 'periplaneta orientalis' and of the American kakerlac, which inhabit----"

"Which infest!" said Captain Hull.

"Which reign on board!" retorted Cousin Benedict, fiercely.

"Amiable sovereignty!"

"Ah! you are not an entomologist, sir?"

Never at my own expense."

"Now, Cousin Benedict," said Mrs. Weldon, smiling, "do not wish us to be devoured for love of science."

"I wish, nothing, Cousin Weldon," replied, the fiery entomologist, "except to be able to add to my collection some rare subject which might do it honor."

"Are you not satisfied, then, with the conquests that you have made in New Zealand?"

"Yes, truly, Cousin Weldon. I have been rather fortunate in conquering one of those new staphylins which till now had only been found some hundreds of miles further, in New Caledonia."

At that moment Dingo, who was playing with Jack, approached Cousin Benedict, gamboling.

"Go away! go away!" said the latter, pushing off the animal.

"To love cockroaches and detest dogs!" cried Captain Hull. "Oh! Mr. Benedict!"

"A good dog, notwithstanding," said little Jack, taking Dingo's great head in his small hands.

"Yes. I do not say no," replied Cousin Benedict. "But what do you want? This devil of an animal has not realized the hopes I conceived on meeting it."

"Ah! my goodness!" cried Mrs. Weldon, "did you, then, hope to be able to classify it in the order of the dipters or the hymenopters?"

"No," replied Cousin Benedict, seriously. "But is it not true that this Dingo, though it be of the New Zealand race, was picked up on the western coast of Africa?"

"Nothing is more true," replied Mrs. Weldon, "and Tom had often heard the captain of the 'Waldeck' say so."

"Well, I had thought--I had hoped--that this dog would have brought away some specimens of hemipteras peculiar to the African fauna."

"Merciful heavens!" cried Mrs. Weldon.

"And that perhaps," added Cousin Benedict, "some penetrating or irritating flea--of a new species----"

"Do you understand, Dingo?" said Captain Hull. "Do you understand, my dog? You have failed in all your duties!"

"But I have examined it well," added the entomologist, with an accent of deep regret. "I have not been able to find a single insect."

"Which you would have immediately and mercilessly put to death, I hope!" cried Captain Hull.

"Sir," replied Cousin Benedict, dryly, "learn that Sir John Franklin made a scruple of killing the smallest insect, be it a mosquito, whose attacks are otherwise formidable as those of a flea; and meanwhile you will not hesitate to allow, that Sir John Franklin was a seaman who was as good as the next."

"Surely," said Captain Hull, bowing.
"And one day, after being frightfully devoured by a dipter, he blew and sent it away, saying to it, without even using _thou_ or _thee_: 'Go! the world is large enough for you and for me!'"

"Ah!" ejaculated Captain Hull.

"Yes, sir."

"Well, Mr. Benedict," retorted Captain Hull, "another had said that long before Sir John Franklin."

"Another?"

"Yes; and that other was Uncle Toby."

"An entomologist?" asked Cousin Benedict, quickly.

"No! Sterne's Uncle Toby, and that worthy uncle pronounced precisely the same words, while setting free a mosquito that annoyed him, but which he thought himself at liberty to _thee_ and _thou_: 'Go, poor devil,' he said to it, 'the world is large enough to contain us, thee and me!'"

"An honest man, that Uncle Toby!" replied Cousin Benedict. "Is he dead?"

"I believe so, indeed," retorted Captain Hull, gravely, "as he has never existed!"

And each began to laugh, looking at Cousin Benedict.

Thus, then, in these conversations, and many others, which invariably bore on some point of entomological science, whenever Cousin Benedict took part, passed away long hours of this navigation against contrary winds. The sea always fine, but winds which obliged the schooner to tack often. The "Pilgrim" made very little headway toward the east—the breeze was so feeble; and they longed to reach those parts where the prevailing winds would be more favorable.

It must be stated here that Cousin Benedict had endeavored to initiate the young novice into the mysteries of entomology. But Dick Sand had shown himself rather refractory to these advances. For want of better company the savant had fallen back on the negroes, who comprehended nothing about it. Tom, Acteon, Bat, and Austin had even finished by deserting the class, and the professor found himself reduced to Hercules alone, who seemed to him to have some natural disposition to distinguish a parasite from a thysanuran.

So the gigantic black lived in the world of coleopteras, carnivorous insects, hunters, gunners, ditches, cicindelles, carabes, sylphides, moles, cockchafers, horn-beetles, tenebrians, mites, lady-birds, studying all Cousin Benedict's collection, not but the latter trembled on seeing his frail specimens in Hercules' great hands, which were hard and strong as a vise. But the colossal pupil listened so quietly to the professor's lessons that it was worth risking something to give them.

While Cousin Benedict worked in that manner, Mrs. Weldon did not leave little Jack entirely unoccupied; She taught him to read and to write. As to arithmetic, it was his friend Dick Sand who inculcated the first elements.

At the age of five, one is still only a little child, and is perhaps better instructed by practical games than by theoretical lessons necessarily a little arduous.

Jack learned to read, not in a primer, but by means of movable letters, printed in red on cubes of wood. He amused himself by arranging the blocks so as to form words. Sometimes Mrs. Weldon took these cubes and composed a word; then she disarranged them, and it was for Jack to replace them in the order required.

The little boy liked this manner of learning to read very much. Each day he passed some hours, sometimes in the cabin, sometimes on the deck, in arranging and disarranging the letters of his alphabet.

Now, one day this led to an incident so extraordinary, so unexpected, that it is necessary to relate with some detail.

It was on the morning of February 9th, Jack, half-lying on the deck, was amusing himself forming a word which old Tom was to put together again, after the letters had been mixed. Tom, with his hand over his eyes so as not to cheat, as he agreed, would see nothing, and did see nothing of the work of the little boy.

Of these different letters, about fifty in number, some were large, others small. Besides, some of these cubes carried a figure, which taught the child to form numbers as well as to form words.

These cubes were arranged on the deck, and little Jack was taking sometimes one, sometimes another, to make a word—a truly great labor.

Now, for some moments, Dingo was moving round the young child, when suddenly it stopped. Its eyes became fixed, its right paw was raised, its tail wagged convulsively. Then, suddenly throwing itself on one of the cubes, it seized it in its mouth and laid it on the deck a few steps from Jack.

This cube bore a large letter—the letter S.

"Dingo, well Dingo!" cried the little boy, who at first was afraid that his S was swallowed by the dog.

But Dingo had returned, and, beginning the same performance again, it seized another cube, and went to lay it near the first.

This second cube was a large V.

This time Jack gave a cry.
At this cry, Mrs. Weldon, Captain Hull, and the young novice, who were walking on the deck, assembled. Little Jack then told them what had just passed.

Dingo knew its letters; Dingo knew how to read! That was very certain, that! Jack had seen it!

Dick Sand wanted to go and take the two cubes, to restore them to his friend Jack, but Dingo showed him its teeth.

However, the novice succeeded in gaining possession of the two cubes, and he replaced them in the set.

Dingo advanced again, seized again the same two letters, and carried them to a distance. This time its two paws lay on them; it seemed decided to guard them at all hazards. As to the other letters of the alphabet, it did not seem as if it had any knowledge of them.

"That is a curious thing," said Mrs. Weldon.

"It is, in fact, very singular," replied Captain Hull, who was looking attentively at the two letters.

"S. V. . ." said Mrs. Weldon.

"S. V. ," repeated Captain Hull. "But those are precisely the letters which are on Dingo's collar!"

Then, all at once, turning to the old black: "Tom," he asked, "have you not told me that this dog only belonged to the captain of the 'Waldeck' for a short time?"

"In fact, sir," replied Tom, "Dingo was only on board two years at the most."

"And have you not added that the captain of the 'Waldeck' had picked up this dog on the western coast of Africa?"

"Yes, sir, in the neighborhood of the mouth of the Congo. I have often heard the captain say so."

"So," asked Captain Hull, "it has never been known to whom this dog had belonged, nor whence it came?"

"Never, sir. A dog found is worse than a child! That has no papers, and, more, it cannot explain."

Captain Hull was silent, and reflected.

"Do those two letters, then, awake some remembrance?" Mrs. Weldon asked Captain Hull, after leaving him to his reflections for some moments.

"Yes, Mrs. Weldon, a remembrance, or rather a coincidence at least singular."

What?

"Those two letters might well have a meaning, and fix for us the fate of an intrepid traveler."

"What do you mean?" demanded Mrs. Weldon.

"Here is what I mean, Mrs. Weldon. In 1871--consequently two years ago--a French traveler set out, under the auspices of the Paris Geographical Society, with the intention of crossing Africa from the west to the east. His point of departure was precisely the mouth of the Congo. His point of arrival would be as near as possible to Cape Delgado, at the mouths of the Rovuma, whose course he would descend. Now, this French traveler was named Samuel Vernon."

"Samuel Vernon!" repeated Mrs. Weldon.

"Yes, Mrs. Weldon; and those two names begin precisely by those two letters which Dingo has chosen among all the others, and which are engraved on its collar."

"Exactly," replied Mrs. Weldon. "And that traveler----"

"That traveler set out," replied Captain Hull, "and has not been heard of since his departure."

"Never?" said the novice.

"Never," repeated Captain Hull.

"What do you conclude from it?" asked Mrs. Weldon.

"That, evidently, Samuel Vernon has not been able to reach the eastern coast of Africa, whether he may have been made prisoner by the natives, whether death may have struck him on the way."

"And then this dog?"

"This dog would have belonged to him; and, more fortunate than its master, if my hypothesis is true, it would have been able to return to the Congo coast, because it was there, at the time when these events must have taken place, that it was picked up by the captain of the 'Waldeck.'"

"But," observed Mrs. Weldon, "do you know if this French traveler was accompanied on his departure by a dog? Is it not a mere supposition on your part?"

"It is only a supposition, indeed, Mrs. Weldon," replied Captain Hull. "But what is certain is, that Dingo knows these two letters S and V, which are precisely the initials of the two names of the French traveler. Now, under what circumstances this animal would learn to distinguish them is what I cannot explain; but, I repeat it, it very certainly knows them; and look, it pushes them with its paw, and seems to invite us to read them with it."

In fact, they could not misunderstand Dingo's intention.

"Then was Samuel Vernon alone when he left the sea-coast of the Congo?" ask Dick Sand.

"That I know not," replied Captain Hull. "However, it is probable that he would take a native escort."
At that moment Negoro, leaving his post, showed himself on the deck. At first no one remarked his presence, and could not observe the singular look he cast on the dog when he perceived the two letters over which the animal seem to mount guard. But Dingo, having perceived the master-cook, began to show signs of the most extreme fury. Negoro returned immediately to the crew's quarters, not without a menacing gesture at the dog's skill having escaped him.

"There is some mystery there," murmured Captain Hull, who had lost none of this little scene.

"But, sir," said the novice, "is it not very astonishing that a dog should know the letters of the alphabet?"

"No!" cried little Jack. "Mama has often told me the story of a dog which knew how to read and write, and even play dominoes, like a real schoolmaster!"

"My dear child," replied Mrs. Weldon, smiling, "that dog, whose name was Munito, was not a savant, as you suppose. If I may believe what has been told me about it, Munito would not have been able to distinguish the letters which served to compose the words. But its master, a clever American, having remarked what fine hearing Munito had, applied himself to cultivating that sense, and to draw from it some very curious effects."

"How did he set to work, Mrs. Weldon?" asked Dick Sand, whom the history interested almost as much as little Jack.

"In this way, my friend." When Munito was 'to appear' before the public, letters similar to these were displayed on a table. On that table the poodle walked about, waiting till a word was proposed, whether in a loud voice or in a low voice. Only, one essential condition was that its master should know the word."

"And, in the absence of its master--" said the novice.

"The dog could have done nothing," replied Mrs. Weldon, "and here is the reason. The letters spread out on the table, Munito walked about through this alphabet. When it arrived before the letter which it should choose to form the word required, it stopped; but if it stopped it was because it heard the noise--imperceptible to all others--of a toothpick that the American snapped in his pocket. That noise was the signal for Munito to take the letter and arrange it in suitable order."

"And that was all the secret?" cried Dick Sand.

"That was the whole secret," replied Mrs. Weldon. "It is very simple, like all that is done in the matter of prestidigitation. In case of the American's absence, Munito would be no longer Munito. I am, then, astonished, his master not being there--if, indeed, the traveler, Samuel Vernon, has ever been its master--that Dingo could have recognized those two letters."

"In fact," replied Captain Hull, "it is very astonishing. But, take notice, there are only two letters in question here, two particular letters, and not a word chosen by chance. After all, that dog which rang at the door of a convent to take possession of the plate intended for the poor passers-by, that other which commissioned at the same time with one of its kind, to turn the spit for two days each, and which refused to fill that office when its turn had not come, those two dogs, I say, advanced farther than Dingo into that domain of intelligence reserved for man. Besides, we are in the presence of an inscrutable fact. Of all the letters of that alphabet, Dingo has only chosen these two: S and V. The others it does not even seem to know. Therefore we must conclude that, for a reason which escapes us, its attention has been especially drawn to those two letters."

"Ah! Captain Hull," replied the young novice, "if Dingo could speak! Perhaps he would tell us what those two letters signify, and why it has kept a tooth ready for our head cook."

"And what a tooth!" replied Captain Hull, as Dingo, opening its mouth, showed its formidable fangs.

* * * *

CHAPTER VI.
A WHALE IN SIGHT.

It will be remembered that this singular incident was made, more than once, the subject of conversation held in the stern of the "Pilgrim" between Mrs. Weldon, Captain Hull, and the young novice. The latter, more particularly, experienced an instinctive mistrust with regard to Negoro, whose conduct, meanwhile, merited no reproach.

In the prow they talked of it also, but they did not draw from it the same conclusions. There, among the ship's crew, Dingo passed merely for a dog that knew how to read, and perhaps even write, better than more than one sailor on board. As for talking, if he did not do it, it was probably for good reasons that he kept silent.

"But, one of these fine days," says the steersman, Bolton, "one fine day that dog will come and ask us how we are heading; if the wind is to the west-north-west-half-north, and we will have to answer him! There are animals that speak! Well, why should not a dog do as much if he took it into his head? It is more difficult to talk with a beak than with a mouth!"

"No doubt," replied the boatswain, Howik. "Only it has never been known."
It would have astonished these brave men to tell them that, on the contrary, it had been known, and that a certain Danish servant possessed a dog which pronounced distinctly twenty words. But whether this animal comprehended what he said was a mystery. Very evidently this dog, whose glottis was organized in a manner to enable him to emit regular sounds, attached no more sense to his words than do the paroquets, parrots, jackdaws, and magpies to theirs. A phrase with animals is nothing more than a kind of song or spoken cry, borrowed from a strange language of which they do not know the meaning.

However that might be, Dingo had become the hero of the deck, of which fact he took no proud advantage. Several times Captain Hull repeated the experiment. The wooden cubes of the alphabet were placed before Dingo, and invariably, without an error, without hesitation, the two letters, S and V, were chosen from among all by the singular animal, while the others never attracted his attention.

As for Cousin Benedict, this experiment was often renewed before him, without seeming to interest him.

"Meanwhile," he condescended to say one day, "we must not believe that the dogs alone have the privilege of being intelligent in this manner. Other animals equal them, simply in following their instinct. Look at the rats, who abandon the ship destined to founder at sea; the beavers, who know how to foresee the rising of the waters, and build their dams higher in consequence; those horses of Nicomedes, of Scanderberg, and of Oppien, whose grief was such that they died when their masters did; those asses, so remarkable for their memory, and many other beasts which have done honor to the animal kingdom. Have we not seen birds, marvelously erect, that correctly write words dictated by their professors; cockatoos that count, as well as a reckoner in the Longitude Office, the number of persons present in a parlor? Has there not existed a parrot, worth a hundred gold crowns, that recited the Apostle's Creed to the cardinal, his master, without missing a word? Finally, the legitimate pride of an entomologist should be raised to the highest point, when he sees simple insects give proofs of a superior intelligence, and affirm eloquently the axiom:

"In minimis maximus Deus,"

those ants which, represent the inspectors of public works in the largest cities, those aquatic _argyronetes_ which manufacture diving-bells, without having ever learned the mechanism; those fleas which draw carriages like veritable coachmen, which go through the exercise as well as riflemen, which fire off cannon better than the commissioned artillerymen of West Point? No! this Dingo does not merit so many eulogies, and if he is so strong on the alphabet, it is, without doubt, because he belongs to a species of mastiff, not yet classified in zoological science, the _canis alphabeticus_ of New Zealand."

In spite of these discourses and others of the envious entomologist, Dingo lost nothing in the public estimation, and continued to be treated as a phenomenon in the conversations of the forecastle.

All this time, it is probable that Negoro did not share the enthusiasm of the ship in regard to the animal. Perhaps he found it too intelligent. However, the dog always showed the same animosity against the head cook, and, doubtless, would have brought upon itself some misfortune, if it had not been, for one thing, "a dog to defend itself," and for another, protected by the sympathy of the whole crew.

So Negoro avoided coming into Dingo's presence more than ever. But Dick Sand had observed that since the incident of the two letters, the reciprocal antipathy between the man and the dog was increased. That was truly inexplicable.

On February 10th, the wind from the northeast, which, till then, had always succeeded those long and overwhelming calms, during which the "Pilgrim" was stationary, began to abate perceptibly. Captain Hull then could hope that a change in the direction of the atmospheric currents was going to take place. Perhaps the schooner would finally sail with the wind. It was still only nineteen days since her departure from the port of Auckland. The delay was not yet of much account, and, with a favorable wind, the "Pilgrim," well rigged, would easily make up for lost time. But several days must still elapse before the breezes would blow right from the west.

This part of the Pacific was always deserted. No vessel showed itself in these parts. It was a latitude truly forsaken by navigators. The whalers of the southern seas were not yet prepared to go beyond the tropic. On the "Pilgrim," which peculiar circumstances had obliged to leave the fishing grounds before the end of the season, they must not expect to cross any ship bound for the same destination.

As to the trans-pacific packet-boats, it has been already said that they did not follow so high a parallel in their passages between Australia and the American continent.

However, even if the sea is deserted, one must not give up observing it to the extreme limits of the horizon. Monotonous as it may appear to heedless minds, it is none the less infinitely varied for him who knows how to comprehend it. Its slightest changes charm the imagination of one who feels the poetry of the ocean. A marine herb which floats up and down on the waves, a branch of sargasso whose light track zebras, the surface of the waters, and end of a board, whose history he would wish to guess, he would need nothing more. Facing this infinite, the mind is no longer stopped by anything. Imagination runs riot. Each of those molecules of water, that evaporation is
continually changing from the sea to the sky, contains perhaps the secret of some catastrophe. So, those are to be envied, whose inner consciousness knows how to interrogate the mysteries of the ocean, those spirits who rise from its moving surface to the heights of heaven.

Besides, life always manifests itself above as well as below the seas. The "Pilgrim's" passengers could see flights of birds excited in the pursuit of the smallest fishes, birds which, before winter, fly from the cold climate of the poles. And more than once, Dick Sand, a scholar of Mrs. Weldon's in that branch as in others, gave proofs of marvelous skill with the gun and pistol, in bringing down some of those rapid-winged creatures.

There were white petrels here; there, other petrels, whose wings were embroidered with brown. Sometimes, also, companies of _damiers_ passed, or some of those penquins whose gait on land is so heavy and so ridiculous. However, as Captain Hull remarked, these penquins, using their stumps like true fins, can challenge the most rapid fishes in swimming, to such an extent even, that sailors have often confounded them with bonitoes.

Higher, gigantic albatrosses beat the air with great strokes, displaying an extent of ten feet between the extremities of their wings, and then came to light on the surface of the waters, which they searched with their beaks to get their food.

All these scenes made a varied spectacle, that only souls closed to the charms of nature would have found monotonous.

That day Mrs. Weldon was walking aft on the "Pilgrim," when a rather curious phenomenon attracted her attention. The waters of the sea had become reddish quite suddenly. One might have believed that they had just been stained with blood; and this inexplicable tinge extended as far as the eye could reach.

Dick Sand was then with little Jack near Mrs. Weldon.

"Dick," she said to the young novice, "Do you see that singular color of the waters of the Pacific? Is it due to the presence of a marine herb?"

"No, Mrs. Weldon," replied Dick Sand, "that tinge is produced by myriads of little crustaceans, which generally serve to nourish the great mammals. Fishermen call that, not without reason, 'whales' food.'"

"Crustaceans!" said Mrs. Weldon. "But they are so small that we might almost call them sea insects. Perhaps Cousin Benedict would be very much enchanted to make a collection of them." Then calling: "Cousin Benedict!" cried she.

Cousin Benedict appeared out of the companion-way almost at the same time as Captain Hull.

"Cousin Benedict," said Mrs. Weldon, "see that immense reddish field which extends as far as we can see."

"Hold!" said Captain Hull. "That is whales' food. Mr. Benedict, a fine occasion to study this curious species of crustacea."

"Phew!" from the entomologist.

"How--phew!" cried the captain. "But you have no right to profess such indifference. These crustaceans form one of the six classes of the articulates, if I am not mistaken, and as such----"

"Phew!" said Cousin Benedict again, shaking his lead.

"For instance----I find you passably disdainful for an entomologist!"

"Entomologist, it may be;" replied Cousin Benedict, "but more particularly hexapodist, Captain Hull, please remember."

"At all events," replied Captain Hull, "if these crustaceans do not interest you, it can't be helped; but it would be otherwise if you possessed a whale's stomach. Then what a regale! Do you see, Mrs. Weldon, when we whalers, during the fishing season, arrive in sight of a shoal of these crustaceans, we have only time to prepare our harpoons and our lines. We are certain that the game is not distant."

"Is it possible that such little beasts can feed such large ones?" cried Jack.

"Ah! my boy," replied Captain Hull, "little grains of vermicelli, of flour, of fecula powder, do they not make very good porridge? Yes; and nature has willed that it should be so. When a whale floats in the midst of these red waters, its soup is served; it has only to open its immense mouth. Myriads of crustaceans enter it. The numerous plates of those whalebones with which the animal's palate is furnished serve to strain like fishermen's nets; nothing can get out of them again, and the mass of crustaceans is ingulfed in the whale's vast stomach, as the soup of your dinner in yours."

"You think right, Jack," observed Dick Sand, "that Madam Whale does not lose time in picking these crustaceans one by one, as you pick shrimps."

"I may add," said Captain Hull, "that it is just when the enormous gourmand is occupied in this way, that it is easiest to approach it without exciting its suspicion. That is the favorable moment to harpoon it with some success."

At that instant, and as if to corroborate Captain Hull, a sailor's voice was heard from the front of the ship:

"A whale to larboard!"

Captain Hull strode up.
"A whale!" cried he.

And his fisherman's instinct urging him, he hastened to the "Pilgrim's" forecastle.

Mrs. Weldon, Jack, Dick Sand, Cousin Benedict himself, followed him at once.

In fact, four miles to windward a certain bubbling indicated that a huge marine mammifer was moving in the midst of the red waters. Whalers could not be mistaken in it. But the distance was still too considerable to make it possible to recognize the species to which this mammifer belonged. These species, in fact, are quite distinct.

Was it one of those "right" whales, which the fishermen of the Northern Ocean seek most particularly? Those cetaceans, which lack the dorsal fin, but whose skin covers a thick stratum of lard, may attain a length of eighty feet, though the average does not exceed sixty, and then a single one of those monsters furnishes as much as a hundred barrels of oil.

Was it, on the contrary, a "humpback," belonging to the species of baloenopters, a designation whose termination should at least gain it the entomologist's esteem? These possess dorsal fins, white in color, and as long as half the body, which resemble a pair of wings--something like a flying whale.

Had they not in view, more likely, a "finback" mammifer, as well known by the name "jubarte," which is provided with a dorsal fin, and whose length may equal that of the "right" whale?

Captain Hull and his crew could not yet decide, but they regarded the animal with more desire than admiration.

If it is true that a clockmaker cannot find himself in a room in the presence of a clock without experiencing the irresistible wish to wind it up, how much more must the whaler, before a whale, be seized with the imperative desire to take possession of it? The hunters of large game, they say, are more eager than the hunters of small game. Then, the larger the animal, the more it excites covetousness. Then, how should hunters of elephants and fishers of whales feel? And then there was that disappointment, felt by all the "Pilgrim's" crew, of returning with an incomplete cargo.

Meanwhile, Captain Hull tried to distinguish the animal which had been signaled in the offing. It was not very visible from that distance. Nevertheless, the trained eye of a whaler could not be deceived in certain details easier to discern at a distance.

In fact, the water-spout, that is, that column of vapor and water which the whale throws back by its rents, would attract Captain Hull's attention, and fix it on the species to which this cetacean belonged.

"That is not a 'right' whale," cried he. "Its water-spout would be at once higher and of a smaller volume. On the other hand, if the noise made by that spout in escaping could be compared to the distant noise of a cannon, I should be led to believe that that whale belongs to the species of 'humpbacks;' but there is nothing of the kind, and, on listening, we are assured that this noise is of quite a different nature. What is your opinion on this subject, Dick?"

asked Captain Hull, turning toward the novice.

"I am ready to believe, captain," replied Dick Sand, "that we have to do with a jubarte. See how his rents throw that column of liquid violently into the air. Does it not seem to you also--which would confirm my idea--that that spout contains more water than condensed vapor? And, if I am not mistaken, it is a special peculiarity of the jubarte."

"In fact, Dick," replied Captain Hull, "there is no longer any doubt possible! It is a jubarte which floats on the surface of these red waters."

"That's fine," cried little Jack.

"Yes, my boy! and when we think that the great beast is there, in process of breakfasting, and little suspecting that the whalers are watching it."

"I would dare to affirm that it is a jubarte of great size," observed Dick Sand.

"Truly," replied Captain Hull, who was gradually becoming more excited. "I think it is at least seventy feet long!"

"Good!" added the boatswain. "Half a dozen whales of that size would suffice to fill a ship as large as ours!"

"Yes, that would be sufficient," replied Captain Hull, who mounted on the bowsprit to see better.

"And with this one," added the boatswain, "we should take on board in a few hours the half of the two hundred barrels of oil which we lack."

"Yes!--truly--yes!" murmured Captain Hull.

"That is true," continued Dick Sand; "but it is sometimes a hard matter to attack those enormous jubartes!"

"Very hard, very hard!" returned Captain Hull. "Those baloenopters have formidable tails, which must not be approached without distrust. The strongest pirogue would not resist a well-given blow. But, then, the profit is worth the trouble!"

"Bah!" said one of the sailors, "a fine jubarte is all the same a fine capture!"

"And profitable!" replied another.

"It would be a pity not to salute this one on the way!"

It was evident that these brave sailors were growing excited in looking at the whale. It was a whole cargo of
barrels of oil that was floating within reach of their hands. To hear them, without doubt there was nothing more to be
done, except to stow those barrels in the "Pilgrim's" hold to complete her lading. Some of the sailors, mounted on
the ratlines of the fore-shrouds, uttered longing cries. Captain Hull, who no longer spoke, was in a dilemma. There
was something there, like an irresistible magnet, which attracted the "Pilgrim" and all her crew.

"Mama, mama!" then cried little Jack, "I should like to have the whale, to see how it is made."

"Ah! you wish to have this whale, my boy? Ah! why not, my friends?" replied Captain Hull, finally yielding to
his secret desire. "Our additional fishermen are lacking, it is true, but we alone----"

"Yes! yes!" cried the sailors, with a single voice.

"This will not be the first time that I have followed the trade of harpooner," added Captain Hull, "and you will
see if I still know how to throw the harpoon!"

"Hurrah! hurrah! hurrah!" responded the crew.

* * * * *

CHAPTER VII.

PREPARATIONS.

It will be understood that the sight of this prodigious mammifer was necessary to produce such excitement on
board the "Pilgrim."

The whale, which floated in the middle of the red waters, appeared enormous. To capture it, and thus complete
the cargo, that was very tempting. Could fishermen let such an occasion escape them?

However, Mrs. Weldon believed she ought to ask Captain Hull if it was not dangerous for his men and for him to
attack a whale under those circumstances.

"No, Mrs. Weldon," replied Captain Hull. "More than once it has been my lot to hunt the whale with a single
boat, and I have always finished by taking possession of it. I repeat it, there is no danger for us, nor, consequently,
for yourself."

Mrs. Weldon, reassured, did not persist.

Captain Hull at once made his preparations for capturing the jubarte. He knew by experience that the pursuit of
that baloenopter was not free from difficulties, and he wished to parry all.

What rendered this capture less easy was that the schooner's crew could only work by means of a single boat,
while the "Pilgrim" possessed a long-boat, placed on its stocks between the mainmast and the mizzen-mast, besides
three whale-boats, of which two were suspended on the larboard and starboard pegs, and the third aft, outside the
crown-work.

Generally these three whale-boats were employed simultaneously in the pursuit of cetaceans. But during the
fishing season, we know, an additional crew, hired at the stations of New Zealand, came to the assistance of the
"Pilgrim's" sailors.

Now, in the present circumstances, the "Pilgrim" could only furnish the five sailors on board--that is, enough to
arm a single whale-boat. To utilize the group of Tom and his friends, who had offered themselves at once, was
impossible. In fact, the working of a fishing pirogue requires very well trained seamen. A false move of the helm, or
a false stroke of an oar, would be enough to compromise the safety of the whale-boat during an attack.

On the other hand, Captain Hull did not wish to leave his ship without leaving on board at least one man from
the crew, in whom he had confidence. It was necessary to provide for all eventualities.

Now Captain Hull, obliged to choose strong seamen to man the whale-boat, was forced to put on Dick Sand the
care of guarding the "Pilgrim."

"Dick," said he to him, "I shall charge you to remain on board during my absence, which I hope will be short."

"Well, sir," replied the young novice.

Dick Sand would have wished to take part in this fishing, which had a great attraction for him, but he understood
that, for one reason, a man's arms were worth more than his for service in a whale-boat, and that for another, he
alone could replace Captain Hull. So he was satisfied. The whale-boat's crew must be composed of the five men,
including the master, Howik, which formed the whole crew of the "Pilgrim." The four sailors were going to take
their places at the oars, and Howik would hold the stern oar, which serves to guide a boat of this kind. A simple
rudder, in fact, would not have a prompt enough action, and in case the side oars should be disabled, the stern oar,
well handled, could put the whale-boat beyond the reach of the monster's blows.

There was only Captain Hull besides. He had reserved to himself the post of harpooner, and, as he had said, this
would not be his first attempt. It was he who must first throw the harpoon, then watch the unrolling of the long line
fastened at its end; then, finally finish the animal with spears, when it should return to the surface of the ocean.

Whalers sometimes employ firearms for this kind of fishing. By means of a special instrument, a sort of small
cannon, stationed either on board the ship or at the front of the boat, they throw either a harpoon, which draws with it the rope fastened to its end, or explosive balls, which produce great ravages in the body of the animal.

But the "Pilgrim" was not furnished with apparatus of this kind. This was, besides, an instrument of high price, rather difficult to manage, and fishermen, but little friendly to innovations, seem to prefer the employment of primitive weapons, which they use skilfully—that is to say,—the harpoon and spear.

It was then by the usual method, attacking the whale with the sword, that Captain Hull was going to attempt to capture the jubarte signaled five miles from his ship.

Besides, the weather would favor this expedition. The sea, being very calm, was propitious for the working of a whale-boat. The wind was going down, and the "Pilgrim" would only drift in an insensible manner while her crew were occupied in the offing.

So the starboard whale-boat was immediately lowered, and the four sailors went into it.

Howik passed them two of those long spears which serve as harpoons, then two long lances with sharp points. To those offensive arms he added five coils of those strong flexible ropes that the whalers call "lines," and which measure six hundred feet in length. Less would not do, for it sometimes happens that these cords, fastened end to end, are not enough for the "demand," the whale plunges down so deep.

Such were the different weapons which were carefully disposed in the front of the boat.

Howik and the four sailors only waited for the order to let go the rope.

A single place was vacant in the prow of the whale-boat—that which Captain Hull would occupy.

It is needless to say that the "Pilgrim's" crew, before quitting her, had brought the ship's sails aback. In other words, the yards were braced in such a manner that the sails, counteracting their action, kept the vessel almost stationary.

Just as he was about to embark, Captain Hull gave a last glance at his ship. He was sure that all was in order, the halliards well turned, the sails suitably trimmed. As he was leaving the young novice on board during an absence which might last several hours, he wished, with a good reason, that unless for some urgent cause, Dick Sand would not have to execute a single maneuver.

At the moment of departing he gave the young man some last words of advice.

"Dick," said he, "I leave you alone. Watch over everything. If, as is possible, it should become necessary to get the ship under way, in case we should be led too far in pursuit of this jubarte, Tom and his companions could come to your aid perfectly well. After telling them clearly what they would have to do, I am assured that they would do it."

"Yes, Captain Hull," replied old Tom, "and Mr. Dick can count on us."

"Command! command!" cried Bat. "We have such a strong desire to make ourselves useful."

"On what must we pull?" asked Hercules, turning up the large sleeves of his jacket.

"On nothing just now," replied Dick Sand, smiling.

"At your service," continued the colossus.

"Dick," continued Captain Hull, "the weather is beautiful. The wind has gone down. There is no indication that it will freshen again. Above all, whatever may happen, do not put a boat to sea, and do not leave the ship."

"That is understood."

"If it should become necessary for the 'Pilgrim' to come to us, I shall make a signal to you, by hoisting a flag at the end of a boat-hook."

"Rest assured, captain, I shall not lose sight of the whale-boat," replied Dick Sand.

"Good, my boy," replied Captain Hull. "Courage and coolness. Behold yourself assistant captain. Do honor to your grade. No one has been such at your age!"

Dick Sand did not reply, but he blushed while smiling. Captain Hull understood that blush and that smile.

"The honest boy!" he said to himself; "modesty and good humor, in truth, it is just like him!"

Meanwhile, by these urgent recommendations, it was plain that, even though there would be no danger in doing it, Captain Hull did not leave his ship willingly, even for a few hours. But an irresistible fisherman's instinct, above all, the strong desire to complete his cargo of oil, and not fall short of the engagements made by James W. Weldon in Valparaiso, all that told him to attempt the adventure. Besides, that sea, so fine, was marvelously conducive to the pursuit of a cetacean. Neither his crew nor he could resist such a temptation. The fishing cruise would be finally complete, and this last consideration touched Captain Hull's heart above everything.

Captain Hull went toward the ladder.

"I wish you success," said Mrs. Weldon to him.

"Thank you, Mrs. Weldon."

"I beg you, do not do too much harm to the poor whale," cried little Jack.

"No, my boy," replied Captain Hull.

"Take it very gently, sir."
"Yes--with gloves, little Jack."

"Sometimes," observed Cousin Benedict, "we find rather curious insects on the back of these large mammals."

"Well, Mr. Benedict," replied Captain Hull, laughing, "you shall have the right to 'entomologize' when our jubarte will be alongside of the 'Pilgrim.'"

Then turning to Tom:

"Tom, I count on your companions and you," said he, "to assist us in cutting up the whale, when it is lashed to the ship's hull—which will not be long."

"At your disposal, sir," replied the old black.

"Good!" replied Captain Hull.

"Dick, these honest men will aid you in preparing the empty barrels. During our absence they will bring them on deck, and by this means the work will go fast on our return."

"That shall be done, captain."

For the benefit of those who do not know, it is necessary to say that the jubarte, once dead, must be towed as far as the "Pilgrim," and firmly lashed to her starboard side. Then the sailors, shod in boots, with cramp-hooks would take their places on the back of the enormous cetacean, and cut it up methodically in parallel bands marked off from the head to the tail. These bands would be then cut across in slices of a foot and a half, then divided into pieces, which, after being stowed in the barrels, would be sent to the bottom of the hold.

Generally the whaling ship, when the fishing is over, manages to land as soon as possible, so as to finish her manipulations. The crew lands, and then proceeds to melt the lard, which, under the action of the heat, gives up all its useful part—that is, the oil. In this operation, the whale's lard weighs about a third of its weight.

But, under present circumstances, Captain Hull could not dream of putting back to finish that operation. He only counted on melting this quantity of lard at Valparaiso. Besides, with winds which could not fail to hail from the west, he hoped to make the American coast before twenty days, and that lapse of time could not compromise the results of his fishing.

The moment for setting out had come. Before the "Pilgrim's" sails had been brought aback, she had drawn a little nearer to the place where the jubarte continued to signal its presence by jets of vapor and water.

The jubarte was all this time swimming in the middle of the vast red field of crustaceans, opening its large mouth automatically, and absorbing at each draught myriads of animalcules.

According to the experienced ones on board, there was no fear that the whale dreamt of escaping. It was, doubtless, what the whalers call a "fighting" whale.

Captain Hull strode over the netting, and, descending the rope ladder, he reached the prow of the whale-boat. Mrs. Weldon, Jack, Cousin Benedict, Tom, and his companions, for a last time wished the captain success.

Dingo itself, rising on its paws and passing its head above the railing, seemed to wish to say good-by to the crew.

Then all returned to the prow, so as to lose none of the very attractive movements of such a fishing.

The whale-boat put off, and, under the impetus of its four oars, vigorously handled, it began to distance itself from the "Pilgrim."

"Watch well, Dick, watch well!" cried Captain Hull to the young novice for the last time.

"Count on me, sir."

"One eye for the ship, one eye for the whale-boat, my boy. Do not forget it."

"That shall be done, captain," replied Dick Sand, who went to take his place near the helm.

Already the light boat was several hundred feet from the ship. Captain Hull, standing at the prow, no longer able to make himself heard, renewed his injunctions by the most expressive gestures.

It was then that Dingo, its paws still resting on the railing, gave a sort of lamentable bark, which would have an unfavorable effect upon men somewhat given to superstition.

That bark even made Mrs. Weldon shudder.

"Dingo," said she, "Dingo, is that the way you encourage your friends? Come, now, a fine bark, very clear, very sonorous, very joyful."

But the dog barked no more, and, letting itself fall back on its paws, it came slowly to Mrs. Weldon, whose hand it licked affectionately.

"It does not wag its tail," murmured Tom in a low tone. "Bad sign--bad sign."

But almost at once Dingo stood up, and a howl of anger escaped it.

Mrs. Weldon turned round.

Negoro had just left his quarters, and was going toward the forecastle, with the intention, no doubt, of looking for himself at the movements of the whale-boat.

Dingo rushed at the head cook, a prey to the strongest as well as to the most inexplicable fury.
Negoro seized a hand-spike and took an attitude of defense. The dog was going to spring at his throat. "Here, Dingo, here!" cried Dick Sand, who, leaving his post of observation for an instant, ran to the prow of the ship.

Mrs. Weldon on her side, sought to calm the dog. Dingo obeyed, not without repugnance, and returned to the young novice, growling secretly.

Negoro had not pronounced a single word, but his face had grown pale for a moment. Letting go of his hand-spike, he regained his cabin.

"Hercules," then said Dick Sand, "I charge you especially to watch over that man."

"I shall watch," simply replied Hercules, clenching his two enormous fists in sign of assent.

Mrs. Weldon and Dick Sand then turned their eyes again on the whale-boat, which the four oarsmen bore rapidly away.

It was nothing but a speck on the sea.

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CHAPTER VIII.
THE JUBARTE.

Captain Hull, an experienced whaler, would leave nothing to chance. The capture of a jubarte is a difficult thing. No precaution ought to be neglected. None was in this case.

And, first of all, Captain Hull sailed so as to come up to the whale on the leeward, so that no noise might disclose the boat's approach.

Howik then steered the whale-boat, following the rather elongated curve of that reddish shoal, in the midst of which floated the jubarte. They would thus turn the curve.

The boatswain, set over this work, was a seaman of great coolness, who inspired Captain Hull with every confidence. He had not to fear either hesitation or distraction from Howik.

"Attention to the steering, Howik," said Captain Hull. "We are going to try to surprise the jubarte. We will only show ourselves when we are near enough to harpoon it."

"That is understood, sir," replied the boatswain.

"I am going to follow the contour of these reddish waters, so as to keep to the leeward."

"Good!" said Captain Hull. "Boys, as little noise as possible in rowing."

The oars, carefully muffled with straw, worked silently. The boat, skilfully steered by the boatswain, had reached the large shoal of crustaceans. The starboard oars still sank in the green and limpid water, while those to larboard, raising the reddish liquid, seemed to rain drops of blood.

"Wine and water!" said one of the sailors.

"Yes," replied Captain Hull, "but water that we cannot drink, and wine that we cannot swallow. Come, boys, let us not speak any more, and heave closer!"

The whale-boat, steered by the boatswain, glided noiselessly on the surface of those half-greased waters, as if it were floating on a bed of oil.

The jubarte did not budge, and did not seem to have yet perceived the boat, which described a circle around it. Captain Hull, in making the circuit, necessarily went farther than the "Pilgrim," which gradually grew smaller in the distance. This rapidity with which objects diminish at sea has always an odd effect. It seems as if we look at them shortened through the large end of a telescope. This optical illusion evidently takes place because there are no points of comparison on these large spaces. It was thus with the "Pilgrim," which decreased to the eye and seemed already much more distant than she really was.

Half an hour after leaving her, Captain Hull and his companions found themselves exactly to the leeward of the whale, so that the latter occupied an intermediate point between the ship and the boat. So the moment had come to approach, while making as little noise as possible. It was not impossible for them to get beside the animal and harpoon it at good range, before its attention would be attracted.

"Row more slowly, boys," said Captain Hull, in a low voice.

"It seems to me," replied Howik, "that the gudgeon suspects something. It breathes less violently than it did just now!"

"Silence! silence!" repeated Captain Hull.

Five minutes later the whale-boat was at a cable's length from the jubarte. A cable's length, a measure peculiar to the sea, comprises a length of one hundred and twenty fathoms, that is to say, two hundred meters.

The boatswain, standing aft, steered in such a manner as to approach the left side of the mammal, but avoiding,
with the greatest care, passing within reach of the formidable tail, a single blow of which would be enough to crush the boat.

At the prow Captain Hull, his legs a little apart to maintain his equilibrium, held the weapon with which he was going to give the first blow. They could count on his skill to fix that harpoon in the thick mass which emerged from the waters.

Near the captain, in a pail, was coiled the first of the five lines, firmly fastened to the harpoon, and to which they would successively join the other four if the whale plunged to great depths.

"Are we ready, boys?" murmured Captain Hull.
"Yes," replied Howik, grasping his oar firmly in his large hands.
"Alongside! alongside!"
The boatswain obeyed the order, and the whale-boat came within less than ten feet of the animal.
The latter no longer moved, and seemed asleep.
Whales thus surprised while asleep offer an easier prize, and it often happens that the first blow which is given wounds them mortally.

"This immovableness is quite astonishing!" thought Captain Hull. "The rascal ought not to be asleep, and nevertheless----there is something there!"
The boatswain thought the same, and he tried to see the opposite side of the animal.
But it was not the moment to reflect, but to attack.
Captain Hull, holding his harpoon by the middle of the handle, balanced it several times, to make sure of good aim, while he examined the jubarte's side. Then he threw it with all the strength of his arm.

"Back, back!" cried he at once.
And the sailors, pulling together, made the boat recoil rapidly, with the intention of prudently putting it in safety from the blows of the cetacean's tail.

But at that moment a cry from the boatswain made them understand why the whale was so extraordinarily motionless for so long a time on the surface of the sea.

"A young whale!" said he.
In fact, the jubarte, after having been struck by the harpoon, was almost entirely overturned on the side, thus discovering a young whale, which she was in process of suckling.

This circumstance, as Captain Hull well knew, would render the capture of the jubarte much more difficult. The mother was evidently going to defend herself with greater fury, as much for herself as to protect her "little one"--if, indeed, we can apply that epithet to an animal which did not measure less than twenty feet.

Meanwhile, the jubarte did not rush at the boat, as there was reason to fear, and there was no necessity, before taking flight, to quickly cut the line which connected the boat with the harpoon. On the contrary, and as generally happens, the whale, followed by the young one, dived, at first in a very oblique line; then rising again with an immense bound, she commenced to cleave the waters with extreme rapidity.

But before she had made her first plunge, Captain Hull and the boatswain, both standing, had had time to see her, and consequently to estimate her at her true value.

This jubarte was, in reality, a whale of the largest size. From the head to the tail, she measured at least eighty feet. Her skin, of a yellowish brown, was much varied with numerous spots of a darker brown.

It would indeed be a pity, after an attack so happily begun, to be under the necessity of abandoning so rich a prey.

The pursuit, or rather the towing, had commenced. The whale-boat, whose oars had been raised, darted like an arrow while swinging on the tops of the waves.

Howik kept it steady, notwithstanding those rapid and frightful oscillations. Captain Hull, his eye on his prey, did not cease making his eternal refrain:

"Be watchful, Howik, be watchful!"
And they could be sure that the boatswain's vigilance would not be at fault for an instant.

Meanwhile, as the whale-boat did not fly nearly as fast as the whale, the line of the harpoon spun out with such rapidity that it was to be feared that it would take fire in rubbing against the edge of the whale-boat. So Captain Hull took care to keep it damp, by filling with water the pail at the bottom of which the line was coiled.

All this time the jubarte did not seem inclined to stop her flight, nor willing to moderate it. The second line was then lashed to the end of the first, and it was not long before it was played out with the same velocity.

At the end of five minutes it was necessary to join on the third line, which ran off under the water.
The jubarte did not stop. The harpoon had evidently not penetrated into any vital part of the body. They could even observe, by the increased obliquity of the line, that the animal, instead of returning to the surface, was sinking into lower depths.
"The devil!" cried Captain Hull, "but that rascal will use up our five lines!"
"And lead us to a good distance from the 'Pilgrim,'" replied the boatswain.
"Nevertheless, she must return to the surface to breathe," replied Captain Hull. "She is not a fish, and she must have the provision of air like a common individual."
"She has held her breath to run better," said one of the sailors, laughing.
In fact, the line was unrolling all the time with equal rapidity.
To the third line, it was soon necessary to join the fourth, and that was not done without making the sailors somewhat anxious touching their future part of the prize.
"The devil! the devil!" murmured Captain Hull. "I have never seen anything like that! Devilish jubarte!"
Finally the fifth line had to be let out, and it was already half unrolled when it seemed to slacken.
"Good! good!" cried Captain Hull. "The line is less stiff. The jubarte is getting tired."
At that moment, the "Pilgrim" was more than five miles to the leeward of the whale-boat. Captain Hull, hoisting a flag at the end of a boat-hook, gave the signal to come nearer.
And almost at once, he could see that Dick Sand, aided by Tom and his companions, commenced to brace the yards in such a manner as to trim them close to the wind.
But the breeze was feeble and irregular. It only came in short puffs. Most certainly, the "Pilgrim" would have some trouble in joining the whale-boat, if indeed she could reach it. Meanwhile, as they had foreseen, the jubarte had returned to the surface of the water to breathe, with the harpoon fixed in her side all the time. She then remained almost motionless, seeming to wait for her young whale, which this furious course must have left behind.
Captain Hull made use of the oars so as to join her again, and soon he was only a short distance from her.
Two oars were laid down and two sailors armed themselves, as the captain had done, with long lances, intended to strike the enemy.
Howik worked skilfully then, and held himself ready to make the boat turn rapidly, in case the whale should turn suddenly on it.
"Attention!" cried Captain Hull. "Do not lose a blow! Aim well, boys! Are we ready, Howik?"
"I am prepared, sir," replied the boatswain, "but one thing troubles me. It is that the beast, after having fled so rapidly, is very quiet now."
"In fact, Howik, that seems to me suspicious. Let us be careful!"
"Yes, but let us go forward."
Captain Hull grew more and more animated.
The boat drew still nearer. The jubarte only turned in her place. Her young one was no longer near her; perhaps she was trying to find it again.
Suddenly she made a movement with her tail, which took her thirty feet away.
Was she then going to take flight again, and must they take up this interminable pursuit again on the surface of the waters?
"Attention!" cried Captain Hull. "The beast is going to take a spring and throw herself on us. Steer, Howik, steer!"
The jubarte, in fact, had turned in such a manner as to present herself in front of the whale-boat. Then, beating the sea violently with her enormous fins, she rushed forward.
The boatswain, who expected this direct blow, turned in such a fashion that the jubarte passed by the boat, but without reaching it.
Captain Hull and the two sailors gave her three vigorous thrusts on the passage, seeking to strike some vital organ.
The jubarte stopped, and, throwing to a great height two columns of water mingled with blood, she turned anew on the boat, bounding, so to say, in a manner frightful to witness.
These seamen must have been expert fishermen, not to lose their presence of mind on this occasion.
Howik again skilfully avoided the jubarte's attack, by darting the boat aside.
Three new blows, well aimed, again gave the animal three new wounds. But, in passing, she struck the water so roughly with her formidable tail, that an enormous wave arose, as if the sea were suddenly opened.
The whale-boat almost capsized, and, the water rushing in over the side, it was half filled.
"The bucket, the bucket!" cried Captain Hull.
The two sailors, letting go their oars, began to bale out the boat rapidly, while the captain cut the line, now become useless.
No! the animal, rendered furious by grief, no longer dreamt of flight. It was her turn to attack, and her agony threatened to be terrible.
A third time she turned round, "head to head," a seaman would say, and threw herself anew on the boat.
But the whale-boat, half full of water, could no longer move with the same facility. In this condition, how could it avoid the shock which threatened it? If it could be no longer steered, there was still less power to escape.

And besides, no matter how quickly the boat might be propelled, the swift jubarte would have always overtaken it with a few bounds. It was no longer a question of attack, but of defense.

Captain Hull understood it all.

The third attack of the animal could not be entirely kept off. In passing she grazed the whale-boat with her enormous dorsal fin, but with so much force that Howik was thrown down from his bench.

The three lances, unfortunately affected by the oscillation, this time missed their aim.

"Howik! Howik!" cried Captain Hull, who himself had been hardly able to keep his place.

"Present!" replied the boatswain, as he got up. But he then perceived that in his fall his stern oar had broken in the middle.

"Another oar!" said Captain Hull.

"I have one," replied Howik.

At that moment, a bubbling took place under the waters only a few fathoms from the boat.

The young whale had just reappeared. The jubarte saw it, and rushed towards it.

This circumstance could only give a more terrible character to the contest. The whale was going to fight for two.

Captain Hull looked toward the "Pilgrim." His hand shook the boat-hook, which bore the flag, frantically.

What could Dick Sand do that had not been already done at the first signal from the captain? The "Pilgrim's" sails were trimmed, and the wind commenced to fill them. Unhappily the schooner did not possess a helix, by which the action could be increased to sail faster.

To lower one of the boats, and, with the aid of the blacks, row to the assistance of the captain, would be a considerable loss of time; besides, the novice had orders not to quit the ship, no matter what happened. However, he had the stern-boat lowered from its pegs, and towed it along, so that the captain and his companions might take refuge in it, in case of need.

At that moment the jubarte, covering the young whale with her body, had returned to the charge. This time she turned in such a manner as to reach the boat exactly.

"Attention, Howik!" cried Captain Hull, for the last time.

But the boatswain was, so to speak, disarmed. Instead of a lever, whose length gave force, he only held in his hand an oar relatively short. He tried to put about; it was impossible.

The sailors knew that they were lost. All rose, giving a terrible cry, which was perhaps heard on the "Pilgrim."

A terrible blow from the monster's tail had just struck the whale-boat underneath. The boat, thrown into the air with irresistible violence, fell back, broken in three pieces, in the midst of waves furiously lashed by the whale's bounds.

The unfortunate sailors, although grievously wounded, would have had, perhaps, the strength to keep up still, either by swimming or by hanging on to some of the floating wreck. That is what Captain Hull did, for he was seen for a moment hoisting the boatswain on a wreck.

But the jubarte, in the last degree of fury, turned round, sprang up, perhaps in the last pangs of a terrible agony, and with her tail she beat the troubled waters frightfully, where the unfortunate sailors were still swimming.

For some minutes one saw nothing but a liquid water-spout scattering itself in sheafs on all sides.

A quarter of an hour after, when Dick Sand, who, followed by the blacks, had rushed into the boat, had reached the scene of the catastrophe, every living creature had disappeared. There was nothing left but some pieces of the whale-boat on the surface of the waters, red with blood.

* * * * *

CHAPTER IX.
CAPTAIN SAND.

The first impression felt by the passengers of the "Pilgrim" in presence of this terrible catastrophe was a combination of pity and horror. They only thought of this frightful death of Captain Hull and the five sailors. This fearful scene had just taken place almost under their eyes, while they could do nothing to save the poor men. They had not even been able to arrive in time to pick up the whale-boat's crew, their unfortunate companions, wounded, but still living, and to oppose the "Pilgrim's" hull to the jubarte's formidable blows. Captain Hull and his men had forever disappeared.

When the schooner arrived at the fatal place, Mrs. Weldon fell on her knees, her hands raised toward Heaven.

"Let us pray!" said the pious woman.

She was joined by her little Jack, who threw himself on his knees, weeping, near his mother. The poor child
understood it all. Dick Sand, Nan, Tom, and the other blacks remained standing, their heads bowed. All repeated the prayer that Mrs. Weldon addressed to God, recommending to His infinite goodness those who had just appeared before Him.

Then Mrs. Weldon, turning to her companions, "And now, my friends," said she, "let us ask Heaven for strength and courage for ourselves."

Yes! They could not too earnestly implore the aid of Him who can do all things, for their situation was one of the gravest!

This ship which carried them had no longer a captain to command her, no longer a crew to work her. She was in the middle of that immense Pacific Ocean, hundreds of miles from any land, at the mercy of the winds and waves.

What fatality then had brought that whale in the "Pilgrim's" course? What still greater fatality had urged the unfortunate Captain Hull, generally so wise, to risk everything in order to complete his cargo? And what a catastrophe to count among the rarest of the annals of whale-fishing was this one, which did not allow of the saving of one of the whale-boat's sailors!

Yes, it was a terrible fatality! In fact, there was no longer a seaman on board the "Pilgrim." Yes, one--Dick Sand--and he was only a beginner, a young man of fifteen. Captain, boatswain, sailors, it may be said that the whole crew was now concentrated in him.

On board there was one lady passenger, a mother and her son, whose presence would render the situation much more difficult. Then there were also some blacks, honest men, courageous and zealous without a doubt, ready to obey whoever should undertake to command them, but ignorant of the simplest notions of the sailor's craft.

Dick Sand stood motionless, his arms crossed, looking at the place where Captain Hull had just been swallowed up--Captain Hull, his protector, for whom he felt a filial affection. Then his eyes searched the horizon, seeking to discover some ship, from which he would demand aid and assistance, to which he might be able at least to confide Mrs. Weldon. He would not abandon the "Pilgrim," no, indeed, without having tried his best to bring her into port. But Mrs. Weldon and her little boy would be in safety. He would have had nothing more to fear for those two beings, to whom he was devoted body and soul.

The ocean was deserted. Since the disappearance of the jubarte, not a speck came to alter the surface. All was sky and water around the "Pilgrim." The young novice knew only too well that he was beyond the routes followed by the ships of commerce, and that the other whalers were cruising still farther away at the fishing-grounds.

However, the question was, to look the situation in the face, to see things as they were. That is what Dick Sand did, asking God, from the depths of his heart, for aid and succor. What resolution was he going to take?

At that moment Negoro appeared on the deck, which he had left after the catastrophe. What had been felt in the presence of this irreparable misfortune by a being so enigmatical, no one could tell. He had contemplated the disaster without making a gesture, without departing from his speechlessness. His eye had evidently seized all the details of it. But if at such a moment one could think of observing him, he would be astonished at least, because not a muscle of his impassible face had moved. At any rate, and as if he had not heard it, he had not responded to the pious appeal of Mrs. Weldon, praying for the engulfed crew. Negoro walked aft, there even where Dick Sand was standing motionless. He stopped three steps from the novice.

"You wish to speak to me?" asked Dick Sand.

"I wish to speak to Captain Hull," replied Negoro, coolly, "or, in his absence, to boatswain Howik."

"You know well that both have perished!" cried the novice.

"Then who commands on board now?" asked Negoro, very insolently.

"I," replied Dick Sand, without hesitation.

"You!" said Negoro, shrugging his shoulders. "A captain of fifteen years?"

"A captain of fifteen years!" replied the novice, advancing toward the cook.

The latter drew back.

"Do not forget it," then said Mrs. Weldon. "There is but one captain here--Captain Sand, and it is well for all to remember that he will know how to make himself obeyed."

Negoro bowed, murmuring in an ironical tone a few words that they could not understand, and he returned to his post.

We see, Dick's resolution was taken.

Meanwhile the schooner, under the action of the breeze, which commenced to freshen, had already passed beyond the vast shoal of crustaceans.

Dick Sand examined the condition of the sails; then his eyes were cast on the deck. He had then this sentiment, that, if a frightful responsibility fell upon him in the future, it was for him to have the strength to accept it. He dared to look at the survivors of the "Pilgrim," whose eyes were now fixed on him. And, reading in their faces that he could count on them, he said to them in two words, that they could in their turn count on him.
Dick Sand had, in all sincerity, examined his conscience.
If he was capable of taking in or setting the sails of the schooner, according to circumstances, by employing the arms of Tom and his companions, he evidently did not yet possess all the knowledge necessary to determine his position by calculation.

In four or five years more, Dick Sand would know thoroughly that beautiful and difficult sailor's craft. He would know how to use the sextant--that instrument which Captain Hull's hand had held every day, and which gave him the height of the stars. He would read on the chronometer the hour of the meridian of Greenwich, and from it would be able to deduce the longitude by the hour angle. The sun would be made his counselor each day. The moon--the planets would say to him, "There, on that point of the ocean, is thy ship!" That firmament, on which the stars move like the hands of a perfect clock, which nothing shakes nor can derange, and whose accuracy is absolute--that firmament would tell him the hours and the distances. By astronomical observations he would know, as his captain had known every day, nearly to a mile, the place occupied by the "Pilgrim," and the course followed as well as the course to follow.

And now, by reckoning, that is by the progress measured on the log, pointed out by the compass, and corrected by the drift, he must alone ask his way.

However, he did not falter.

Mrs. Weldon understood all that was passing in the young novice's resolute heart.
"Thank you, Dick," she said to him, in a voice which did not tremble. "Captain Hull is no more. All his crew have perished with him. The fate of the ship is in your hands! Dick, you will save the ship and those on board!"
"Yes, Mrs. Weldon," replied Dick Sand, "yes! I shall attempt it, with the aid of God!"
"Tom and his companions are honest men on whom you can depend entirely."
"I know it, and I shall make sailors of them, and we shall work together. With fine weather that will be easy. With bad weather--well, with bad weather, we shall strive, and we shall save you yet, Mrs. Weldon--you and your little Jack, both! Yes, I feel that I shall do it."

And he repeated:
"With the aid of God!"
"Now, Dick, can you tell where the 'Pilgrim' is?" asked Mrs. Weldon.
"Easily," replied the novice. "I have only to consult the chart on board, on which her position was marked yesterday by Captain Hull."
"And will you be able to put the ship in the right direction?"
"Yes, I shall be able to put her prow to the east, nearly at the point of the American coast that we must reach."
"But, Dick," returned Mrs. Weldon, "you well understand, do you not, that this catastrophe may, and indeed must, modify our first projects? It is no longer a question of taking the 'Pilgrim' to Valparaiso. The nearest port of the American coast is now her port of destination."
"Certainly, Mrs. Weldon," replied the novice. "So fear nothing! We cannot fail to reach that American coast which stretches so far to the south."
"Where is it situated?" asked Mrs. Weldon.
"There, in that direction," replied Dick Sand, pointing to the east, which he knew by means of the compass.
"Well, Dick, we may reach Valparaiso, or any other part of the coast. What matter? What we want is to land."
"And we shall do it, Mrs. Weldon, and I shall land you on a good place," replied the young man, in a firm voice.
"Besides, in standing in for the land, I do not renounce the hope of encountering some of those vessels which do the coasting trade on that shore. Ah! Mrs. Weldon, the wind begins to blow steadily from the northwest! God grant that it may keep on; we shall make progress, and good progress. We shall drive in the offing with all our sails set, from the brigantine to the flying-jib!"

Dick Sand had spoken with the confidence of the seaman, who feels that he stands on a good ship, a ship of whose every movement he is master. He was going to take the helm and call his companions to set the sails properly, when Mrs. Weldon reminded him that he ought first to know the "Pilgrim's" position.

It was, indeed, the first thing to do. Dick Sand went into the captain's cabin for the chart on which the position of the day before was indicated. He could then show Mrs. Weldon that the schooner was in latitude 43° 35', and in longitude 164° 13', for, in the last twenty-four hours, she had not, so to say, made any progress.

Mrs. Weldon leaned over this chart. She looked at the brown color which represented the land on the right of the ocean. It was the coast of South America, an immense barrier thrown between the Pacific and the Atlantic from Cape Horn to the shores of Columbia. To consider it in that way, that chart, which, was then spread out under her eyes, on which was drawn a whole ocean, gave the impression that it would be easy to restore the "Pilgrim's" passengers to their country. It is an illusion which is invariably produced on one who is not familiar with the scale on which marine charts are drawn. And, in fact, it seemed to Mrs. Weldon that the land ought to be in sight, as it was
on that piece of paper!

And, meanwhile, on that white page, the "Pilgrim" drawn on an exact scale, would be smaller than the most microscopic of infusoria! That mathematical point, without appreciable dimensions, would appear lost, as it was in reality in the immensity of the Pacific!

Dick Sand himself had not experienced the same impression as Mrs. Weldon. He knew how far off the land was, and that many hundreds of miles would not suffice to measure the distance from it. But he had taken his part; he had become a man under the responsibility which had fallen upon him.

The moment to act had come. He must profit by this northwest breeze which was blowing up. Contrary winds had given place to favorable winds, and some clouds scattered in the zenith under the cirriform form, indicated that they would blow steadily for at least a certain time.

Dick called Tom and his companions.

"My friends," he said to them, "our ship has no longer any crew but you. I cannot work without your aid. You are not sailors, but you have good arms. Place them, then, at the 'Pilgrim's' service and we can steer her. Every one's salvation depends on the good work of every one on board."

"Mr. Dick," replied Tom, "my companions and I, we are your sailors. Our good will shall not be wanting. All that men can do, commanded by you, we shall do it."

"Well spoken, old Tom," said Mrs. Weldon.

"Yes, well spoken," continued Dick Sand; "but we must be prudent, and I shall not carry too much canvas, so as not to run any risk. Circumstances require a little less speed, but more security. I will show you, my friends, what each will have to do in the work. As to me, I shall remain at the helm, as long as fatigue does not oblige me to leave it. From time to time a few hours' sleep will be sufficient to restore me. But, during those few hours, it will be very necessary for one of you to take my place. Tom, I shall show you how we steer by means of the mariner's compass. It is not difficult, and, with a little attention, you will soon learn to keep the ship's head in the right direction."

"Whenever you like, Mr. Dick," replied the old black.

"Well," said the novice, "stay near me at the helm till the end of the day, and if fatigue overcomes me, you will then be able to replace me for a few hours."

"And I," said little Jack, "will I not be able to help my friend, Dick, a little?"

"Yes, dear child," replied Mrs. Weldon, clasping Jack in her arms, "you shall learn to steer, and I am sure that while you are at the helm we shall have good winds."

"Very sure--very sure. Mother, I promise it to you," replied the little boy, clapping his hands.

"Yes," said the young novice, smiling, "good cabin-boys know how to maintain good winds. That is well known by old sailors." Then, addressing Tom, and the other blacks: "My friends," he said to them, "we are going to put the 'Pilgrim' under full sail. You will only have to do what I shall tell you."

"At your orders," replied Tom, "at your orders, Captain Sand."

* * * * *

CHAPTER X.

THE FOUR DAYS WHICH FOLLOW.

Dick Sand was then captain of the "Pilgrim," and, without losing an instant, he took the necessary measures for putting the ship under full sail.

It was well understood that the passengers could have only one hope--that of reaching some part of the American coast, if not Valparaiso. What Dick Sand counted on doing was to ascertain the direction and speed of the "Pilgrim," so as to get an average. For that, it was sufficient to make each day on the chart the way made, as it has been said, by the log and the compass. There was then on board one of those "patent logs," with an index and helix, which give the speed very exactly for a fixed time. This useful instrument, very easily handled, could render the most useful services, and the blacks were perfectly adapted to work it.

A single cause of error would interfere--the currents. To combat it, reckoning would be insufficient; astronomical observations alone would enable one to render an exact calculation from it. Now, those observations the young novice was still unable to make.

For an instant Dick Sand had thought of bringing the "Pilgrim" back to New Zealand. The passage would be shorter, and he would certainly have done it if the wind, which, till then, had been contrary, had not become favorable. Better worth while then to steer for America.

In fact, the wind had changed almost to the contrary direction, and now it blew from the northwest with a tendency to freshen. It was then necessary to profit by it and make all the headway possible.

So Dick Sand prepared to put the "Pilgrim" under full sail.
In a schooner brig-rigged, the foremast carries four square sails; the foresail, on the lower mast; above, the topsail, on the topmast; then, on the top-gallant mast, a top-sail and a royal.

The mainmast, on the contrary, has fewer sails. It only carries a brigantine below, and a fore-staffsail above. Between these two masts, on the stays which support them at the prow, a triple row of triangular sails may be set.

Finally, at the prow, on the bowsprit, and its extreme end, were hauled the three jibs.

The jibs, the brigantine, the fore-staff, and the stay-sails are easily managed. They can be hoisted from the deck without the necessity of climbing the masts, because they are not fastened on the yards by means of rope-bands, which must be previously loosened.

On the contrary, the working of the foremast sails demands much greater proficiency in seamanship. In fact, when it is necessary to set them, the sailors must climb by the rigging--it may be in the foretop, it may be on the spars of the top-gallant mast, it may be to the top of the said mast--and that, as well in letting them fly as in drawing them in to diminish their surface in reefing them. Thence the necessity of running out on foot-ropes--movable ropes stretched below the yards--of working with one hand while holding on by the other--perilous work for any one who is not used to it. The oscillation from the rolling and pitching of the ship, very much increased by the length of the lever, the flapping of the sails under a stiff breeze, have often sent a man overboard. It was then a truly dangerous operation for Tom and his companions.

Very fortunately, the wind was moderate. The sea had not yet had time to become rough. The rolling and pitching kept within bounds.

When Dick Sand, at Captain Hull's signal, had steered toward the scene of the catastrophe, the "Pilgrim" only carried her jibs, her brigantine, her foresail, and her top-sail. To get the ship under way as quickly as possible, the novice had only to make use of, that is, to counter-brace, the foresail. The blacks had easily helped him in that maneuver.

The question now was to get under full sail, and, to complete the sails, to hoist the top-sails, the royal, the fore-staff, and the stay-sails.

"My friends," said the novice to the five blacks, "do as I tell you, and all will go right."

Dick Sand was standing at the wheel of the helm.

"Go!" cried he. "Tom, let go that rope quickly!"

"Let go?" said Tom, who did not understand that expression.

"Yes, loosen it! Now you, Bat--the same thing! Good! Heave--haul taut. Let us see, pull it in!"

"Like that?" said Bat.

"Yes, like that. Very good. Come, Hercules--strong. A good pull there!"

To say "strong" to Hercules was, perhaps, imprudent. The giant of course gave a pull that brought down the rope.

"Oh! not so strong, my honest fellow!" cried Dick Sand, smiling. "You are going to bring down the masts!"

"I have hardly pulled," replied Hercules.

"Well, only make believe! You will see that that will be enough! Well, slacken--cast off! Make fast--Make fast--like that! Good! All together! Heave--pull on the braces."

And the whole breadth of the foremast, whose larboard braces had been loosened, turned slowly. The wind then swelling the sails imparted a certain speed to the ship.

Dick Sand then had the jib sheet-ropes loosened. Then he called the blacks aft:

"Behold what is done, my friends, and well done. Now let us attend to the mainmast. But break nothing, Hercules."

"I shall try," replied the colossus, without being willing to promise more.

This second operation was quite easy. The main-boom sheet-rope having been let go gently, the brigantine took the wind more regularly, and added its powerful action to that of the forward sails.

The fore-staff was then set above the brigantine, and, as it is simply brailed up, there was nothing to do but bear on the rope, to haul aboard, then to secure it. But Hercules pulled so hard, along with his friend Acteon, without counting little Jack, who had joined them, that the rope broke off.

All three fell backwards--happily, without hurting themselves. Jack was enchanted.

"That's nothing! that's nothing!" cried the novice. "Fasten the two ends together for this time and hoist softly!"

That was done under Dick Sand's eyes, while he had not yet left the helm. The "Pilgrim" was already sailing rapidly, headed to the east, and there was nothing more to be done but keep it in that direction. Nothing easier, because the wind was favorable, and lurches were not to be feared.

"Good, my friends!" said the novice. "You will be good sailors before the end of the voyage!"

"We shall do our best, Captain Sand," replied Tom.

Mrs. Weldon also complimented those honest men.
Little Jack himself received his share of praise, for he had worked bravely.

"Indeed, I believe, Mr. Jack," said Hercules, smiling, "that it was you who broke the rope. What a good little fist you have. Without you we should have done nothing right."

And little Jack, very proud of himself, shook his friend Hercules' hand vigorously.

The setting of the "Pilgrim's" sails was not yet complete. She still lacked those top-sails whose action is not to be despised under this full-sail movement. Top-sail, royal, stay-sails, would add sensibly to the schooner's speed, and Dick Sand resolved to set them.

This operation would be more difficult than the others, not for the stay-sails, which could be hoisted, hauled aboard and fastened from below, but for the cross-jacks of the foremast. It was necessary to climb to the spars to let them out, and Dick Sand, not wishing to expose any one of his improvised crew, undertook to do it himself.

He then called Tom and put him at the wheel, showing him how he should keep the ship. Then Hercules, Bat, Acteon and Austin being placed, some at the royal halyards, others at those of the top-sails, he proceeded up the mast. To climb the rattlings of the fore-shrouds, then the rattlings of the topmast-shrouds, to gain the spars, that was only play for the young novice. In a minute he was on the foot-rope of the top-sail yard, and he let go the rope-bands which kept the sail bound.

Then he stood on the spars again and climbed on the royal yard, where he let out the sail rapidly.

Dick Sand had finished his task, and seizing one of the starboard backstays, he slid to the deck.

There, under his directions, the two sails were vigorously hauled and fastened, then the two yards hoisted to the block. The stay-sails being set next between the mainmast and the foremast, the work was finished. Hercules had broken nothing this time.

The "Pilgrim" then carried all the sails that composed her rigging. Doubtless Dick Sand could still add the foremast studding-sails to larboard, but it was difficult work under the present circumstances, and should it be necessary to take them in, in case of a squall, it could not be done fast enough. So the novice stopped there.

Tom was relieved from his post at the wheel, which Dick Sand took charge of again.

The breeze freshened. The "Pilgrim," making a slight turn to starboard, glided rapidly over the surface of the sea, leaving behind her a very flat track, which bore witness to the purity of her water-line.

"We are well under way, Mrs. Weldon," then said Dick Sand, "and, now, may God preserve this favorable wind!"

Mrs. Weldon pressed the young man's hand. Then, fatigued with all the emotions of that last hour, she sought her cabin, and fell into a sort of painful drowsiness, which was not sleep.

The new crew remained on the schooner's deck, watching on the forecastle, and ready to obey Dick Sand's orders—that is to say, to change the set of the sails according to the variations of the wind; but so long as the breeze kept both that force and that direction, there would be positively nothing to do.

During all this time what had become of Cousin Benedict?

Cousin Benedict was occupied in studying with a magnifying glass an articulate which he had at last found on board—a simple orthopter, whose head disappeared under the prothorax; an insect with flat elytrums, with round abdomen, with rather long wings, which belonged to the family of the roaches, and to the species of American cockroaches.

It was exactly while ferreting in Negoro's kitchen, that he had made that precious discovery, and at the moment when the cook was going to crush the said insect pitilessly. Thence anger, which, indeed, Negoro took no notice of.

But this Cousin Benedict, did he know what change had taken place on board since the moment when Captain Hull and his companions had commenced that fatal whale-fishing? Yes, certainly. He was even on the deck when the "Pilgrim" arrived in sight of the remains of the whale-boat. The schooner's crew had then perished before his eyes.

To pretend that this catastrophe had not affected him, would be to accuse his heart. That pity for others that all people feel, he had certainly experienced it. He was equally moved by his cousin's situation. He had come to press Mrs. Weldon's hand, as if to say to her: "Do not be afraid. I am here. I am left to you."

Then Cousin Benedict had turned toward his cabin, doubtless so as to reflect on the consequences of this disastrous event, and on the energetic measures that he must take. But on his way he had met the cockroach in question, and his desire was—held, however, against certain entomologists—to prove the cockroaches of the phoraspese species, remarkable for their colors, have very different habits from cockroaches properly so called; he had given himself up to the study, forgetting both that there had been a Captain Hull in command of the "Pilgrim," and that that unfortunate had just perished with his crew. The cockroach absorbed him entirely. He did not admire it less, and he made as much time over it as if that horrible insect had been a golden beetle.

The life on board had then returned to its usual course, though every one would remain for a long time yet under the effects of such a keen and unforeseen catastrophe.
During this day Dick Sand was everywhere, so that everything should be in its place, and that he could be prepared for the smallest contingency. The blacks obeyed him with zeal. The most perfect order reigned on board the "Pilgrim." It might then be hoped that all would go well.

On his side, Negoro made no other attempt to resist Dick Sand's authority. He appeared to have tacitly recognized him. Occupied as usual in his narrow kitchen, he was not seen more than before. Besides, at the least infraction--at the first symptom of insubordination, Dick Sand was determined to send him to the hold for the rest of the passage. At a sign from him, Hercules would take the head cook by the skin of the neck; that would not have taken long. In that case, Nan, who knew how to cook, would replace the cook in his functions. Negoro then could say to himself that he was indispensable, and, as he was closely watched, he seemed unwilling to give any cause of complaint.

The wind, though growing stronger till evening, did not necessitate any change in the "Pilgrim's" sails. Her solid masting, her iron rigging, which was in good condition, would enable her to bear in this condition even a stronger breeze.

During the night it is often the custom to lessen the sails, and particularly to take in the high sails, fore-staff, top-sail, royal, etc. That is prudent, in case some squall of wind should come up suddenly. But Dick Sand believed he could dispense with this precaution. The state of the atmosphere indicated nothing of the kind, and besides, the young novice determined to pass the first night on the deck, intending to have an eye to everything. Then the progress was more rapid, and he longed to be in less desolate parts.

It has been said that the log and the compass were the only instruments which Dick Sand could use, so as to estimate approximately the way made by the "Pilgrim."

During this day the novice threw the log every half-hour, and he noted the indications furnished by the instrument.

As to the instrument which bears the name of compass, there were two on board. One was placed in the binnacle, under the eyes of the man at the helm. Its dial, lighted by day by the diurnal light, by night by two side-lamps, indicated at every moment which way the ship headed--that is, the direction she followed. The other compass was an inverted one, fixed to the bars of the cabin which Captain Hull formerly occupied. By that means, without leaving his chamber, he could always know if the route given was exactly followed, if the man at the helm, from ignorance or negligence, allowed the ship to make too great lurches.

Besides, there is no ship employed in long voyages which does not possess at least two compasses, as she has two chronometers. It is necessary to compare these instruments with each other, and, consequently, control their indications.

The "Pilgrim" was then sufficiently provided for in that respect, and Dick Sand charged his men to take the greatest care of the two compasses, which were so necessary to him.

Now, unfortunately, during the night of the 12th to the 13th of February, while the novice was on watch, and holding the wheel of the helm, a sad accident took place. The inverted compass, which was fastened by a copper ferule to the woodwork of the cabin, broke off and fell on the floor. It was not seen till the next day.

How had the ferule come to break. It was inexplicable enough. It was possible, however, that it was oxydized, and that the pitching and rolling had broken it from the woodwork. Now, indeed, the sea had been rougher during the night. However it was, the compass was broken in such a manner that it could not be repaired.

Dick Sand was much thwarted. Henceforth he was reduced to trust solely to the compass in the binnacle. Very evidently no one was responsible for the breaking of the second compass, but it might have sad consequences. The novice then took every precaution to keep the other compass beyond the reach of every accident.

Till then, with that exception, all went well on board the "Pilgrim."

Mrs. Weldon, seeing Dick Sand's calmness, had regained confidence. It was not that she had ever yielded to despair. Above all, she counted on the goodness of God. Also, as a sincere and pious Catholic, she comforted herself by prayer.

Dick Sand had arranged so as to remain at the helm during the night. He slept five or six hours in the day, and that seemed enough for him, as he did not feel too much fatigued. During this time Tom or his son Bat took his place at the wheel of the helm, and, thanks to his counsels, they were gradually becoming passable steersmen.

Often Mrs. Weldon and the novice talked to each other. Dick Sand willingly took advice from this intelligent and courageous woman. Each day he showed her on the ship's chart the course run, which he took by reckoning, taking into account only the direction and the speed of the ship. "See, Mrs. Weldon," he often repeated to her, "with these winds blowing, we cannot fail to reach the coast of South America. I should not like to affirm it, but I verily believe that when our vessel shall arrive in sight of land, it will not be far from Valparaiso."

Mrs. Weldon could not doubt the direction of the vessel was right, favored above all by those winds from the northwest. But how far the "Pilgrim" still seemed to be from the American coast! How many dangers between her
and the firm land, only counting those which might come from a change in the state of the sea and the sky!

Jack, indifferent like children of his age, had returned to his usual games, running on the deck, amusing himself with Dingo. He found, of course, that his friend Dick was less with him than formerly; but his mother had made him understand that they must leave the young novice entirely to his occupations. Little Jack had given up to these reasons, and no longer disturbed "Captain Sand."

So passed life on board. The blacks did their work intelligently, and each day became more skilful in the sailor's craft. Tom was naturally the boatswain, and it was he, indeed, whom his companions would have chosen for that office. He commanded the watch while the novice rested, and he had with him his son Bat and Austin. Acteon and Hercules formed the other watch, under Dick Sand's direction. By this means, while one steered, the others watched at the prow.

Even though these parts were deserted, and no collision was really to be feared, the novice exacted a rigorous watch during the night. He never sailed without having his lights in position—a green light on the starboard, a red light on the larboard—and in that he acted wisely.

All the time, during those nights which Dick Sand passed entirely at the helm, he occasionally felt an irresistible heaviness over him. His hand then steered by pure instinct. It was the effect of a fatigue of which he did not wish to take account.

Now, it happened that during the night of the 13th to the 14th of February, that Dick Sand was very tired, and was obliged to take a few hours' rest. He was replaced at the helm by old Tom.

The sky was covered with thick clouds, which had gathered with the evening, under the influence of the cold air. It was then very dark, and it was impossible to distinguish the high sails lost in the darkness. Hercules and Acteon were on watch on the forecastle.

Aft, the light from the binnacle only gave a faint gleam, which the metallic apparatus of the wheel reflected softly. The ship's lanterns throwing their lights laterally, left the deck of the vessel in profound darkness.

Toward three o'clock in the morning, a kind of hypnotic phenomenon took place, of which old Tom was not even conscious. His eyes, which were fixed too long on a luminous point of the binnacle, suddenly lost the power of vision, and he fell into a true anaesthetic sleep.

Not only was he incapable of seeing, but if one had touched or pinched him hard he would probably have felt nothing.

So he did not see a shadow which glided over the deck.

It was Negoro.

Arrived aft, the head cook placed under the binnacle a pretty heavy object which he held in hand.

Then, after observing for an instant the luminous index of the compass, he retired without having been seen.

If, the next day, Dick Sand had perceived that object placed by Negoro under the binnacle, he might have hastened to take it away.

In fact, it was a piece of iron, whose influence had just altered the indications of the compass. The magnetic needle had been deviated, and instead of marking the magnetic north, which differs a little from the north of the world, it marked the northeast. It was then, a deviation of four points; in other words, of half a right angle.

Tom soon recovered from his drowsiness. His eyes were fixed on the compass. He believed, he had reason to believe, that the "Pilgrim" was not in the right direction. He then moved the helm so as to head the ship to the east—at least, he thought so.

But, with the deviation of the needle, which he could not suspect, that point, changed by four points, was the southeast.

And thus, while under the action of a favorable wind, the "Pilgrim" was supposed to follow the direction wished for, she sailed with an error of forty-five degrees in her route!

CHAPTER XI.

TEMPEST.

During the week which followed that event, from the 14th of February to the 21st, no incident took place on board. The wind from the northwest freshened gradually, and the "Pilgrim" sailed rapidly, making on average one hundred and sixty miles in twenty-four hours. It was nearly all that could be asked of a vessel of that size.

Dick Sand thought the schooner must be approaching those parts more frequented by the merchant vessels which seek to pass from one hemisphere to the other. The novice was always hoping to encounter one of those ships, and he clearly intended either to transfer his passengers, or to borrow some additional sailors, and perhaps an officer. But, though he watched vigilantly, no ship could be signaled, and the sea was always deserted.

Dick Sand continued to be somewhat astonished at that. He had crossed this part of the Pacific several times.
during his three fishing voyages to the Southern Seas. Now, in the latitude and longitude where his reckoning put him, it was seldom that some English or American ship did not appear, ascending from Cape Horn toward the equator, or coming toward the extreme point of South America.

But what Dick Sand was ignorant of, what he could not even discover, was that the "Pilgrim" was already in higher latitude--that is to say, more to the south than he supposed. That was so for two reasons:

The first was, that the currents of these parts, whose swiftness the novice could only imperfectly estimate, had contributed--while he could not possibly keep account of them--to throw the ship out of her route.

The second was, that the compass, made inaccurate by Negoro's guilty hand, henceforth only gave incorrect bearings--bearings that, since the loss of the second compass, Dick Sand could not control. So that, believing, and having reason to believe, that he was sailing eastward, in reality, he was sailing southeast. The compass, it was always before his eyes. The log, it was thrown regularly. His two instruments permitted him, in a certain measure, to direct the "Pilgrim," and to estimate the number of miles sailed. But, then, was that sufficient?

However, the novice always did his best to reassure Mrs. Weldon, whom the incidents of this voyage must at times render anxious.

"We shall arrive, we shall arrive!" he repeated. "We shall reach the American coast, here or there; it matters little, on the whole, but we cannot fail to land there!"

"I do not doubt it, Dick."

"Of course, Mrs. Weldon, I should be more at ease if you were not on board--if we had only ourselves to answer for; but----"

"But if I were not on board," replied Mrs. Weldon; "if Cousin Benedict, Jack, Nan and I, had not taken passage on the 'Pilgrim,' and if, on the other hand, Tom and his companions had not been picked up at sea, Dick, there would be only two men here, you and Negoro! What would have become of you, alone with that wicked man, in whom you cannot have confidence? Yes, my child, what would have become of you?"

"I should have begun," replied Dick Sand, resolutely, "by putting Negoro where he could not injure me."

"And you would have worked alone?"

"Yes--alone--with the aid of God!"

The firmness of these words was well calculated to encourage Mrs. Weldon. But, nevertheless, while thinking of her little Jack, she often felt uneasy. If the woman would not show what she experienced as a mother, she did not always succeed in preventing some secret anguish for him to rend her heart.

Meanwhile, if the young novice was not sufficiently advanced in his hydrographic studies to make his point, he possessed a true sailor's scent, when the question was "to tell the weather." The appearance of the sky, for one thing; on the other hand, the indications of the barometer, enabled him to be on his guard. Captain Hull, a good meteorologist, had taught him to consult this instrument, whose prognostications are remarkably sure.

Here is, in a few words, what the notices relative to the observation of the barometer contain:

1. When, after a rather long continuance of fine weather, the barometer begins to fall in a sudden and continuous manner, rain will certainly fall; but, if the fine weather has had a long duration, the mercury may fall two or three days in the tube of the barometer before any change in the state of the atmosphere may be perceived. Then, the longer the time between the falling of the mercury and the arrival of the rain, the longer will be the duration of rainy weather.

2. If, on the contrary, during a rainy period which has already had a long duration, the barometer commences to rise slowly and regularly, very certainly fine weather will come, and it will last much longer if a long interval elapses between its arrival and the rising of the barometer.

3. In the two cases given, if the change of weather follows immediately the movement of the barometrical column, that change will last only a very short time.

4. If the barometer rises with slowness and in a continuous manner for two or three days, or even more, it announces fine weather, even when the rain will not cease during those three days, and _vice versa_; but if the barometer rises two days or more during the rain, then, the fine weather having come, if it commences to fall again, the fine weather will last a very short time, and _vice versa_.

5. In the spring and in the autumn, a sudden fall of the barometer presages wind. In the summer, if the weather is very warm, it announces a storm. In winter, after a frost of some duration, a rapid falling of the barometrical column announces a change of wind, accompanied by a thaw and rain; but a rising which happens during a frost which has already lasted a certain time, prognosticates snow.

6. Rapid oscillations of the barometer should never be interpreted as presaging dry or rainy weather of any duration. Those indications are given exclusively by the rising or the falling which takes place in a slow and continuous manner.

7. Toward the end of autumn, if after prolonged rainy and windy weather, the barometer begins to rise, that
rising announces the passage of the wind to the north and the approach of the frost.

Such are the general consequences to draw from the indications of this precious instrument.

Dick Sand knew all that perfectly well, as he had ascertained for himself in different circumstances of his sailor's life, which made him very skilful in putting himself on his guard against all contingencies.

Now, just toward the 20th of February, the oscillations of the barometrical column began to preoccupy the young novice, who noted them several times a day with much care. In fact, the barometer began to fall in a slow and continuous manner, which presages rain; but, this rain being delayed, Dick Sand concluded from that, that the bad weather would last. That is what must happen.

But the rain was the wind, and in fact, at that date, the breeze freshened so much that the air was displaced with a velocity of sixty feet a second, say thirty-one miles an hour.

Dick Sand was obliged to take some precautions so as not to risk the "Pilgrim's" masting and sails.

Already he had the royal, the fore-staff, and the flying-jib taken in, and he resolved to do the same with the top-sail, then take in two reefs in the top-sail.

This last operation must present certain difficulties with a crew of little experience. Hesitation would not do, however, and no one hesitated. Dick Sand, accompanied by Bat and Austin, climbed into the rigging of the foremost, and succeeded, not without trouble, in taking in the top-sail. In less threatening weather he would have left the two yards on the mast, but, foreseeing that he would probably be obliged to level that mast, and perhaps even to lay it down upon the deck, he unrigged the two yards and sent them to the deck. In fact, it is understood that when the wind becomes too strong, not only must the sails be diminished, but also the masting. That is a great relief to the ship, which, carrying less weight above, is no longer so much strained with the rolling and pitching.

This first work accomplished--and it took two hours--Dick Sand and his companions were busy reducing the surface of the top-sail, by taking in two reefs. The "Pilgrim" did not carry, like the majority of modern ships, a double top-sail, which facilitates the operation. It was necessary, then, to work as formerly--that is to say, to run out on the foot-ropes, pull toward you a sail beaten by the wind, and lash it firmly with its reef-lines. It was difficult, long, perilous; but, finally, the diminished top-sail gave less surface to the wind, and the schooner was much relieved.

Dick Sand came down again with Bat and Austin. The "Pilgrim" was then in the sailing condition demanded by that state of the atmosphere which has been qualified as "very stiff."

During the three days which followed, 20th, 21st and 22d of February, the force and direction of the wind were not perceptibly changed. All the time the mercury continued to fall in the barometrical tube, and, on this last day, the novice noted that it kept continually below twenty-eight and seven-tenths inches.

Besides, there was no appearance that the barometer would rise for some time. The aspect of the sky was bad, and extremely windy. Besides, thick fogs covered it constantly. Their stratum was even so deep that the sun was no longer seen, and it would have been difficult to indicate precisely the place of his setting and rising.

Dick Sand began to be anxious. He no longer left the deck; he hardly slept. However, his moral energy enabled him to drive back his fears to the bottom of his heart.

The next day, February 22d, the breeze appeared to decrease a little in the morning, but Dick Sand did not trust in it. He was right, for in the afternoon the wind freshened again, and the sea became rougher.

Toward four o'clock, Negoro, who was rarely seen, left his post and came up on the forecastle. Dingo, doubtless, was sleeping in some corner, for it did not bark as usual.

Negoro, always silent, remained for half an hour observing the horizon.

Long surges succeeded each other without, as yet, being dashed together. However, they were higher than the force of the wind accounted for. One must conclude from that, that there was very bad weather in the west, perhaps at a rather short distance, and that it would not be long in reaching these parts.

Negoro watched that vast extent of sea, which was greatly troubled, around the "Pilgrim." Then his eyes, always cold and dry, turned toward the sky.

The aspect of the sky was disturbing. The vapors moved with very different velocities. The clouds of the upper zone traveled more rapidly than those of the low strata of the atmosphere. The case then must be foreseen, in which those heavy masses would fall, and might change into a tempest, perhaps a hurricane, what was yet only a very stiff breeze--that is to say, a displacement of the air at the rate of forty-three miles an hour.

Whether Negoro was not a man to be frightened, or whether he understood nothing of the threats of the weather, he did not appear to be affected. However, an evil smile glided over his lips. One would say, at the end of his observations, that this state of things was rather calculated to please him than to displease him. One moment he mounted on the bowsprit and crawled as far as the ropes, so as to extend his range of vision, as if he were seeking some indication on the horizon. Then he descended again, and tranquilly, without having pronounced a single word, without having made a gesture, he regained the crew's quarters.
Meanwhile, in the midst of all these fearful conjunctions, there remained one happy circumstance which each one on board ought to remember; it was that this wind, violent as it was or might become, was favorable, and that the "Pilgrim" seemed to be rapidly making the American coast. If, indeed, the weather did not turn to tempest, this navigation would continue to be accomplished without great danger, and the veritable perils would only spring up when the question would be to land on some badly ascertained point of the coast.

That was indeed what Dick Sand was already asking himself. When he should once make the land, how should he act, if he did not encounter some pilot, some one who knew the coast? In case the bad weather should oblige him to seek a port of refuge, what should he do, because that coast was to him absolutely unknown? Indeed, he had not yet to trouble himself with that contingency. However, when the hour should come, he would be obliged to adopt some plan. Well, Dick Sand adopted one.

During the thirteen days which elapsed, from the 24th of February to the 9th of March, the state of the atmosphere did not change in any perceptible manner. The sky was always loaded with heavy fogs. For a few hours the wind went down, then it began to blow again with the same force. Two or three times the barometer rose again, but its oscillation, comprising a dozen lines, was too sudden to announce a change of weather and a return of more manageable winds. Besides the barometrical column fell again almost immediately, and nothing could inspire any hope of the end of that bad weather within a short period.

Terrible storms burst forth also, which very seriously disturbed Dick Sand. Two or three times the lightning struck the waves only a few cable-lengths from the ship. Then the rain fell in torrents, and made those whirlpools of half condensed vapors, which surrounded the "Pilgrim" with a thick mist.

For entire hours the man at the lookout saw nothing, and the ship sailed at random.

Even though the ship, although resting firmly on the waves, was horribly shaken, Mrs. Weldon, fortunately, supported this rolling and pitching without being incommoded. But her little boy was very much tried, and she was obliged to give him all her care.

As to Cousin Benedict, he was no more sick than the American cockroaches which he made his society, and he passed his time in studying, as if he were quietly settled in his study in San Francisco.

Very fortunately, also, Tom and his companions found themselves little sensitive to sea-sickness, and they could continue to come to the young novice's aid--well accustomed, himself, to all those excessive movements of a ship which flies before the weather.

The "Pilgrim" ran rapidly under this reduced sail, and already Dick Sand foresaw that he would be obliged to reduce it again. But he wished to hold out as long as it would be possible to do so without danger. According to his reckoning, the coast ought to be no longer distant. So they watched with care. All the time the novice could hardly trust his companions' eyes to discover the first indications of land. In fact, no matter what good sight he may have, he who is not accustomed to interrogating the sea horizons is not skilful in distinguishing the first contours of a coast, above all in the middle of fogs. So Dick Sand must watch himself, and he often climbed as far as the spars to see better. But no sign yet of the American coast.

This astonished him, and Mrs. Weldon, by some words which escaped him, understood that astonishment.

It was the 9th of March. The novice kept at the prow, sometimes observing the sea and the sky, sometimes looking at the "Pilgrim's" masting, which began to strain under the force of the wind.

"You see nothing yet, Dick?" she asked him, at a moment when he had just left the long lookout.

"Nothing, Mrs. Weldon, nothing," replied the novice; and meanwhile, the horizon seems to clear a little under this violent wind, which is going to blow still harder."

"And, according to you, Dick, the American coast ought not to be distant now."

"It cannot be, Mrs. Weldon, and if anything astonishes me, it is not having made it yet."

"Meanwhile," continued Mrs. Weldon, "the ship has always followed the right course."

"Always, since the wind settled in the northwest," replied Dick Sand; "that is to say, since the day when we lost our unfortunate captain and his crew. That was the 10th of February. We are now on the 9th of March. There have been then, twenty-seven since that."

"But at that period what distance were we from the coast?" asked Mrs. Weldon.

"About four thousand five hundred miles, Mrs. Weldon. If there are things about which I have more than a doubt, I can at least guarantee this figure within about twenty miles."

"And what has been the ship's speed?"

"On an average, a hundred and eighty miles a day since the wind freshened," replied the novice. "So, I am surprised at not being in sight of land. And, what is still more extraordinary, is that we do not meet even a single one of those vessels which generally frequent these parts!"

"Could you not be deceived, Dick," returned Mrs. Weldon, "in estimating the 'Pilgrim's' speed?"

"No, Mrs. Weldon. On that point I could not be mistaken. The log has been thrown every half hour, and I have
taken its indications very accurately. Wait, I am going to have it thrown anew, and you will see that we are sailing at this moment at the rate of ten miles an hour, which would give us more than two hundred miles a day."

Dick Sand called Tom, and gave him the order to throw the log, an operation to which the old black was now quite accustomed.

The log, firmly fastened to the end of the line, was brought and sent out.

Twenty-five fathoms were hardly unrolled, when the rope suddenly slackened between Tom's hands.

"Ah! Mr. Dick!" cried he.

"Well, Tom?"

"The rope has broken!"

"Broken!" cried Dick Sand. "And the log is lost!"

Old Tom showed the end of the rope which remained in his hand.

It was only too true. It was not the fastening which had failed. The rope had broken in the middle. And, nevertheless, that rope was of the first quality. It must have been, then, that the strands of the rope at the point of rupture were singularly worn! They were, in fact, and Dick Sand could tell that when he had the end of the rope in his hands! But had they become so by use? was what the novice, become suspicious, asked himself.

However that was, the log was now lost, and Dick Sand had no longer any means of telling exactly the speed of his ship. In the way of instruments, he only possessed one compass, and he did not know that its indications were false.

Mrs. Weldon saw him so saddened by this accident, that she did not wish to insist, and, with a very heavy heart, she retired into her cabin.

But if the "Pilgrim's" speed and consequently the way sailed over could no longer be estimated, it was easy to tell that the ship's headway was not diminishing.

In fact, the next day, March 10th, the barometer fell to twenty-eight and two-tenths inches. It was the announcement of one of those blasts of wind which travel as much as sixty miles an hour.

It became urgent to change once more the state of the sails, so as not to risk the security of the vessel.

Dick Sand resolved to bring down his top-gallant mast and his fore-staff, and to furl his low sails, so as to sail under his foretop-mast stay-sail and the low reef of his top-sail.

He called Tom and his companions to help him in that difficult operation, which, unfortunately, could not be executed with rapidity.

And meanwhile time pressed, for the tempest already declared itself with violence.

Dick Sands, Austin, Acteon, and Bat climbed into the masting, while Tom remained at the wheel, and Hercules on the deck, so as to slacken the ropes, as soon as he was commanded.

After numerous efforts, the fore-staff and the top-gallant mast were gotten down upon the deck, not without these honest men having a hundred times risked being precipitated into the sea, the rolling shook the masting to such an extent. Then, the top-sail having been lessened and the foresail furled, the schooner carried only her foretop-mast stay-sail and the low reef of his top-sail.

Even though her sails were then extremely reduced, the "Pilgrim" continued, none the less, to sail with excessive velocity.

The 12th the weather took a still worse appearance. On that day, at dawn, Dick Sand saw, not without terror, the barometer fall to twenty-seven and nine-tenths inches. It was a real tempest which was raging, and such that the "Pilgrim" could not carry even the little sail she had left.

Dick Sand, seeing that his top-sail was going to be torn, gave the order to furl. But it was in vain. A more violent gust struck the ship at that moment, and tore off the sail. Austin, who was on the yard of the foretop-sail, was struck by the larboard sheet-rope. Wounded, but rather slightly, he could climb down again to the deck.

Dick Sand, extremely anxious, had but one thought. It was that the ship, urged with such fury, was going to be dashed to pieces every moment; for, according to his calculation, the rocks of the coast could not be distant. He then returned to the prow, but he saw nothing which had the appearance of land, and then, came back to the wheel.

A moment after Negoro came on deck. There, suddenly, as if in spite of himself, his arm was extended toward a point of the horizon. One would say that he recognized some high land in the fogs!

Still, once more he smiled wickedly, and without saying anything of what he had been able to see, he returned to his post.

* * * * *

CHAPTER XII.
ON THE HORIZON.
At that date the tempest took its most terrible form, that of the hurricane. The wind had set in from the southwest. The air moved with a velocity of ninety miles an hour. It was indeed a hurricane, in fact, one of those terrible windstorms which wrecks all the ships of a roadstead, and which, even on land, the most solid structures cannot resist. Such was the one which, on the 25th of July, 1825, devastated Guadaloupe. When heavy cannons, carrying balls of twenty-four pounds, are raised from their carriages, one may imagine what would become of a ship which has no other point of support than an unsteady sea? And meanwhile, it is to its mobility alone that she may owe her salvation. She yields to the wind, and, provided she is strongly built, she is in a condition to brave the most violent surges. That was the case with the "Pilgrim."

A few minutes after the top-sail had been torn in pieces, the foretop-mast stay-sail was in its turn torn off. Dick Sand must then give up the idea of setting even a storm-jib--a small sail of strong linen, which would make the ship easier to govern. The "Pilgrim" then ran without canvas, but the wind took effect on her hull, her masts, her rigging, and nothing more was needed to impart to her an excessive velocity. Sometimes even she seemed to emerge from the waves, and it was to be believed that she hardly grazed them. Under these circumstances, the rolling of the ship, tossed about on the enormous billows raised by the tempest, was frightful. There was danger of receiving some monstrous surge aft. Those mountains of water ran faster than the schooner, threatening to strike her stern if she did not rise pretty fast. That is extreme danger for every ship which scuds before the tempest. But what could be done to ward off that contingency? Greater speed could not be imparted to the "Pilgrim," because she would not have kept the smallest piece of canvas. She must then be managed as much as possible by means of the helm, whose action was often powerless.

Dick Sand no longer left the helm. He was lashed by the waist, so as not to be carried away by some surge. Tom and Bat, fastened also, stood near to help him. Hercules and Acteon, bound to the bitts, watched forward. As to Mrs. Weldon, to Little Jack, to Cousin Benedict, to Nan, they remained, by order of the novice, in the aft cabins. Mrs. Weldon would have preferred to have remained on deck, but Dick Sand was strongly opposed to it; it would be exposing herself uselessly.

All the scuttles had been hermetically nailed up. It was hoped that they would resist if some formidable billow should fall on the ship. If, by any mischance, they should yield under the weight of these avalanches, the ship might fill and sink. Very fortunately, also, the stowage had been well attended to, so that, notwithstanding the terrible tossing of the vessel, her cargo was not moved about.

Dick Sand had again reduced the number of hours which he gave to sleep. So Mrs. Weldon began to fear that he would take sick. She made him consent to take some repose.

Now, it was while he was still lying down, during the night of the 13th to the 14th of March, that a new incident took place. Tom and Bat were aft, when Negoro, who rarely appeared on that part of the deck, drew near, and even seemed to wish to enter into conversation with them; but Tom and his son did not reply to him. Suddenly, in a violent rolling of the ship, Negoro fell, and he would, doubtless, have been thrown into the sea if he had not held on to the binnacle. Dick Sand, in a moment of wakefulness, heard that cry, and rushing out of his quarters, he ran aft. Negoro had already risen, but he held in his hand the piece of iron which he had just taken from under the binnacle, and he hid it before Dick Sand could see it.

"What's the matter?" asked the novice.
"It's that cook of misfortune, who has just fallen on the compass!" replied Tom.

At those words Dick Sand, in the greatest anxiety, leaned over the binnacle. It was in good condition; the compass, lighted by two lamps, rested as usual on its concentric circles.

The young novice was greatly affected. The breaking of the only compass on board would be an irreparable misfortune.

But what Dick Sand could not observe was that, since the taking away of the piece of iron, the needle had returned to its normal position, and indicated exactly the magnetic north as it ought to be under that meridian.

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"I say," replied the head cook, "that there is no rule which forbids walking aft."

"Well, I make that the rule," replied Dick Sand, "and I forbid you, remember, to come aft."

"Indeed!" replied Negoro.

That man, so entirely under self-control, then made a menacing gesture.

The novice drew a revolver from his pocket, and pointed it at the head cook.

"Negoro," said he, "recollect that I am never without this revolver, and that on the first act of insubordination I shall blow out your brains!"

At that moment Negoro felt himself irresistibly bent to the deck.

It was Hercules, who had just simply laid his heavy hand on Negoro's shoulder.

"Captain Sand," said the giant, "do you want me to throw this rascal overboard? He will regale the fishes, who are not hard to please!"

"Not yet," replied Dick Sand.

Negoro rose as soon as the black's hand no longer weighed upon him. But, in passing Hercules:

"Accursed negro," murmured he, "I'll pay you back!"

Meanwhile, the wind had just changed; at least, it seemed to have veered round forty-five degrees. And, notwithstanding, a singular thing, which struck the novice, nothing in the condition of the sea indicated that change. The ship headed the same way all the time, but the wind and the waves, instead of taking her directly aft, now struck her by the larboard quarter--a very dangerous situation, which exposes a ship to receive bad surges. So Dick Sand was obliged to veer round four points to continue to scud before the tempest.

But, on the other hand, his attention was awakened more than ever. He asked himself if there was not some connection between Negoro's fall and the breaking of the first compass. What did the head cook intend to do there? Had he some interest in putting the second compass out of service also? What could that interest be? There was no explanation of that. Must not Negoro desire, as they all desired, to land on the American coast as soon as possible?

When Dick Sand spoke of this incident to Mrs. Weldon, the latter, though she shared his distrust in a certain measure, could find no plausible motive for what would be criminal premeditation on the part of the head cook.

However, as a matter of prudence, Negoro was well watched. Thereafter he attended to the novice's orders and he did not risk coming aft in the ship, where his duties never called him. Besides, Dingo having been installed there permanently, the cook took care to keep away.

During all that week the tempest did not abate. The barometer fell again. From the 14th to the 26th of March it was impossible to profit by a single calm to set a few sails. The "Pilgrim" scudded to the northeast with a speed which could not be less than two hundred miles in twenty-four hours, and still the land did not appear!--that land, America, which is thrown like an immense barrier between the Atlantic and the Pacific, over an extent of more than a hundred and twenty degrees!

Dick Sand asked himself if he was not a fool, if he was still in his right mind, if, for so many days, unknown to him, he was not sailing in a false direction. No, he could not find fault with himself on that point. The sun, even though he could not perceive it in the fogs, always rose before him to set behind him. But, then, that land, had it disappeared? That America, on which his vessel would go to pieces, perhaps, where was it, if it was not there? Be it the Southern Continent or the Northern Continent--for anything way possible in that chaos--the "Pilgrim" could not miss either one or the other. What had happened since the beginning of this frightful tempest? What was still going on, as that coast, whether it should prove salvation or destruction, did not appear? Must Dick Sand suppose, then, that he was deceived by his compass, whose indications he could no longer control, because the second compass was lacking to make that control? Truly, he had that fear which the absence of all land might justify.

So, when he was at the helm, Dick Sand did not cease to devour the chart with his eyes. But he interrogated it in vain; it could not give him the solution of an enigma which, in the situation in which Negoro had placed him, was incomprehensible for him, as it would have been for any one else.

On this day, however, the 26th of March, towards eight o'clock in the morning, an incident of the greatest importance took place.

Hercules, on watch forward, gave this cry:

"Land! land!"

Dick Sand sprang to the forecastle. Hercules could not have eyes like a seaman. Was he not mistaken?

"Land!" cried Dick Sand.

"There," replied Hercules, showing an almost imperceptible point on the horizon in the northeast. They hardly heard each other speak in the midst of the roaring of the sea and the sky.

"You have seen the land?" said the novice.

"Yes," replied Hercules.

And his hand was still stretched out to larboard forward.
The novice looked. He saw nothing.

At that moment, Mrs. Weldon, who had heard the cry given by Hercules, came up on deck, notwithstanding her promise not to come there.

"Madam!" cried Dick Sand.

Mrs. Weldon, unable to make herself heard, tried, for herself, to perceive that land signaled by the black, and she seemed to have concentrated all her life in her eyes.

It must be believed that Hercules's hand indicated badly the point of the horizon which he wished to show: neither Mrs. Weldon nor the novice could see anything.

But, suddenly, Dick Sand in turn stretched out his hand.

"Yes! yes! land!" said he.

A kind of summit had just appeared in an opening in the fog. His sailor's eyes could not deceive him.

"At last!" cried he; "at last!"

He clung feverishly to the netting. Mrs. Weldon, sustained by Hercules, continued to watch that land almost deserted.

The coast, formed by that high summit, rose at a distance of ten miles to leeward.

The opening being completely made in a breaking of the clouds, they saw it again more distinctly. Doubtless it was some promontory of the American continent. The "Pilgrim," without sails, was not in a condition to head toward it, but it could not fail to make the land there.

That could be only a question of a few hours. Now, it was eight o'clock in the morning. Then, very certainly, before noon the "Pilgrim" would be near the land.

At a sign from Dick Sand, Hercules led Mrs. Weldon aft again, for she could not bear up against the violence of the pitching.

The novice remained forward for another instant, then he returned to the helm, near old Tom.

At last, then, he saw that coast, so slowly made, so ardently desired! but it was now with a feeling of terror.

In fact, in the "Pilgrim's" present condition, that is to say, scudding before the tempest, land to leeward, was shipwreck with all its terrible contingencies.

Two hours passed away. The promontory was then seen off from the ship.

At that moment they saw Negoro come on deck. This time he regarded the coast with extreme attention, shook his head like a man who would know what to believe, and went down again, after pronouncing a name that nobody could hear.

Dick Sand himself sought to perceive the coast, which ought to round off behind the promontory.

Two hours rolled by. The promontory was standing on the larboard stern, but the coast was not yet to be traced.

Meanwhile the sky cleared at the horizon, and a high coast, like the American land, bordered by the immense chain of the Andes, should be visible for more than twenty miles.

Dick Sand took his telescope and moved it slowly over the whole eastern horizon.

Nothing! He could see nothing!

At two o'clock in the afternoon every trace of land had disappeared behind the "Pilgrim." Forward, the telescope could not seize any outline whatsoever of a coast, high or low.

Then a cry escaped Dick Sand. Immediately leaving the deck, he rushed into the cabin, where Mrs. Weldon was with little Jack, Nan, and Cousin Benedict.

"An island! That was only an island!" said he.

"An island, Dick! but what?" asked Mrs. Weldon.

"The chart will tell us," replied the novice.

And running to his berth, he brought the ship's chart.

"There, Mrs. Weldon, there!" said he. "That land which we have seen, it can only be this point, lost in the middle of the Pacific! It can only be the Isle of Paques; there is no other in these parts."

"And we have already left it behind?" asked Mrs. Weldon.

"Yes, well to the windward of us."

Mrs. Weldon looked attentively at the Isle of Paques, which only formed an imperceptible point on the chart.

"And at what distance is it from the American coast?"

"Thirty-five degrees."

"Which makes-----"

"About two thousand miles."

"But then the 'Pilgrim' has not sailed, if we are still so far from the continent?"

"Mrs. Weldon," replied Dick Sand, who passed his hand over his forehead for a moment, as if to concentrate his ideas, "I do not know--I cannot explain this incredible delay! No! I cannot--unless the indications of the compass
have been false? But that island can only be the Isle of Paques, because we have been obliged to scud before the
wind to the northeast, and we must thank Heaven, which has permitted me to mark our position! Yes, it is still two
thousand miles from the coast! I know, at last, where the tempest has blown us, and, if it abates, we shall be able to
land on the American continent with some chance of safety. Now, at least, our ship is no longer lost on the
immensity of the Pacific!"

This confidence, shown by the young novice, was shared by all those who heard him speak. Mrs. Weldon,
herself, gave way to it. It seemed, indeed, that these poor people were at the end of their troubles, and that the
"Pilgrim," being to the windward of her port, had only to wait for the open sea to enter it! The Isle of Paques—by its
true name Vai-Hon—discovered by David in 1686, visited by Cook and Laperouse, is situated 27° south latitude and
112° east longitude. If the schooner had been thus led more than fifteen degrees to the north, that was evidently due
to that tempest from the southwest, before which it had been obliged to scud.

Then the "Pilgrim" was still two thousand miles from the coast. However, under the impetus of that wind which
blew like thunder, it must, in less than ten days, reach some point of the coast of South America.

But could they not hope, as the novice had said, that the weather would become more manageable, and that it
would be possible to set some sail, when they should make the land?

It was still Dick Sand's hope. He said to himself that this hurricane, which had lasted so many days, would end
perhaps by "killing itself." And now that, thanks to the appearance of the Isle of Paques, he knew exactly his
position, he had reason to believe that, once master of his vessel again, he would know how to lead her to a safe
place.

Yes! to have had knowledge of that isolated point in the middle of the sea, as by a providential favor, that had
restored confidence to Dick Sand; if he was going all the time at the caprice of a hurricane, which he could not
subdue, at least, he was no longer going quite blindfold.

Besides, the "Pilgrim," well-built and rigged, had suffered little during those rude attacks of the tempest. Her
damages reduced themselves to the loss of the top-sail and the foretop-mast stay-sail—a loss which it would be easy
to repair. Not a drop of water had penetrated through the well-stanched seams of the hull and the deck. The pumps
were perfectly free. In this respect there was nothing to fear.

There was, then, this interminable hurricane, whose fury nothing seemed able to moderate. If, in a certain
measure, Dick Sand could put his ship in a condition to struggle against the violent storm, he could not order that
wind to moderate, those waves to be still, that sky to become serene again. On board, if he was "master after God,"
outside the ship, God alone commanded the winds and the waves.

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CHAPTER XIII.

LAND! LAND!

Meanwhile, that confidence with which Dick Sand's heart filled instinctively, was going to be partly justified.

The next day, March 27th, the column of mercury rose in the barometrical tube. The oscillation was neither
sudden nor considerable—a few lines only—but the progression seemed likely to continue. The tempest was evidently
going to enter its decreasing period, and, if the sea did remain excessively rough, they could tell that the wind was
going down, veering slightly to the west.

Dick Sand could not yet think of using any sail. The smallest sail would be carried away. However, he hoped
that twenty-four hours would not elapse before it would be possible for him to rig a storm-jib.

During the night, in fact, the wind went down quite noticeably, if they compared it to what it had been till then,
and the ship was less tossed by those violent rollings which had threatened to break her in pieces.

The passengers began to appear on deck again. They no longer ran the risk of being carried away by some surge
from the sea.

Mrs. Weldon was the first to leave the hatchway where Dick Sand, from prudent motives, had obliged them to
shut themselves up during the whole duration of that long tempest. She came to talk with the novice, whom a truly
superhuman will had rendered capable of resisting so much fatigue. Thin, pale under his sunburnt complexion, he
might well be weakened by the loss of that sleep so necessary at his age. No, his valiant nature resisted everything.
Perhaps he would pay dearly some day for that period of trial. But that was not the moment to allow himself to be
cast down. Dick Sand had said all that to himself. Mrs. Weldon found him as energetic as he had ever been.

And then he had confidence, that brave Sand, and if confidence does not command itself, at least it commands.

"Dick, my dear child, my captain," said Mrs. Weldon, holding out her hand to the young novice.

"Ah! Mrs. Weldon," exclaimed Dick Sand, smiling, "you disobey your captain. You return on deck, you leave
your cabin in spite of his--prayers."
"Yes, I disobey you," replied Mrs. Weldon; "but I have, as it were, a presentiment that the tempest is going down or is going to become calm."

"It is becoming calm, in fact, Mrs. Weldon," replied the novice. "You are not mistaken. The barometer has not fallen since yesterday. The wind has moderated, and I have reason to believe that our hardest trials are over."

"Heaven hears you, Dick. All! you have suffered much, my poor child! You have done there----"

"Only my duty, Mrs. Weldon."

"But at last will you be able to take some rest?"

"Rest!" replied the novice; "I have no need of rest, Mrs. Weldon. I am well, thank God, and it is necessary for me to keep up to the end. You have called me captain, and I shall remain captain till the moment when all the 'Pilgrim's' passengers shall be in safety."

"Dick," returned Mrs. Weldon, "my husband and I, we shall never forget what you have just done."

"God has done all," replied Dick Sand; "all!"

"My child, I repeat it, that by your moral and physical energy, you have shown yourself a man--a man fit to command, and before long, as soon as your studies are finished--my husband will not contradict me--you will command for the house of James W. Weldon!"

"I--I----" exclaimed Dick Sand, whose eyes filled with tears.

"Dick," replied Mrs. Weldon, "you are already our child by adoption, and now, you are our son, the deliverer of your mother, and of your little brother Jack. My dear Dick, I embrace you for my husband and for myself!"

The courageous woman did not wish to give way while clasping the young novice in her arms, but her heart overflowed. As to Dick Sand's feelings, what pen could do them justice? He asked himself if he could not do more than give his life for his benefactors, and he accepted in advance all the trials which might come upon him in the future.

After this conversation Dick Sand felt stronger. If the wind should become so moderate that he should be able to hoist some canvas, he did not doubt being able to steer his ship to a port where all those which it carried would at last be in safety.

On the 29th, the wind having moderated a little, Dick Sand thought of setting the foresail and the top-sail, consequently to increase the speed of the "Pilgrim" while directing her course.

"Come, Tom; come, my friends!" cried he, when he went on deck at daybreak; "come, I need your arms!"

"We are ready, Captain Sand," replied old Tom.

"Ready for everything," added Hercules. "There was nothing to do during that tempest, and I begin to grow rusty."

"You should have blown with your big mouth," said little Jack; "I bet you would have been as strong as the wind!"

"That is an idea, Jack," replied Dick Sand, laughing. "When there is a calm we shall make Hercules blow on the sails."

"At your service, Mister Dick!" replied the brave black, inflating his cheeks like a gigantic Boreas.

"Now, my friends," continued the novice, we are to begin by binding a spare sail to the yard, because our top-sail was carried away in the hurricane. It will be difficult, perhaps, but it must be done."

"It shall be done!" replied Acteon.

"Can I help you?" asked little Jack, always ready to work.

"Yes, my Jack," replied the novice. "You will take your place at the wheel, with our friend Bat, and you will help him to steer."

If little Jack was proud of being assistant helmsman on the "Pilgrim," it is superfluous to say so.

"Now to work," continued Dick Sand, "and we must expose ourselves as little as possible."

The blacks, guided by the novice, went to work at once. To fasten a top-sail to its yard presented some difficulties for Tom and his companions. First the rolled up sail must be hoisted, then fastened to the yard.

However, Dick Sand commanded so well, and was so well obeyed, that after an hour's work the sail was fastened to its yard, the yard hoisted, and the top-sail properly set with two reefs.

As to the foresail and the second jib, which had been furled before the tempest, those sails were set without a great deal of trouble, in spite of the force of the wind.

At last, on that day, at ten o'clock in the morning, the "Pilgrim" was sailing under her foresail, her top-sail, and her jib.

Dick Sand had not judged it prudent to set more sail. The canvas which he carried ought to assure him, as long as the wind did not moderate, a speed of at least two hundred miles in twenty-four hours, and he did not need any greater to reach the American coast before ten days.

The novice was indeed satisfied when, returning to the wheel, he again took his post, after thanking Master Jack,
assistant helmsman of the "Pilgrim." He was no longer at the mercy of the waves. He was making headway. His joy will be understood by all those who are somewhat familiar with the things of the sea.

The next day the clouds still ran with the same velocity, but they left large openings between them, through which the rays of the sun made their way to the surface of the waters. The "Pilgrim" was at times overspread with them. A good thing is that vivifying light! Sometimes it was extinguished behind a large mass of vapors which came up in the east, then it reappeared, to disappear again, but the weather was becoming fine again.

The scuttles had been opened to ventilate the interior of the ship. A salubrious air penetrated the hold, the crew's quarters. They put the wet sails to dry, stretching them out in the sun. The deck was also cleaned. Dick Sand did not wish his ship to arrive in port without having made a bit of toilet. Without overworking the crew, a few hours spent each day at that work would bring it to a good end.

Though the novice could no longer throw the log, he was so accustomed to estimating the headway of a ship that he could take a close account of her speed. He had then no doubt of reaching land before seven days, and he gave that opinion to Mrs. Weldon, after showing her, on the chart, the probable position of the ship.

"Well, at what point of the coast shall we arrive, my dear Dick?" she asked him.

"Here, Mrs. Weldon," replied the novice, indicating that long coast line which extends from Peru to Chili. "I do not know how to be more exact. Here is the Isle of Paques, that we have left behind in the west, and, by the direction of the wind, which has been constant, I conclude that we shall reach land in the east. Ports are quite numerous on that coast, but to name the one we shall have in view when we make the land is impossible at this moment."

"Well, Dick, whichever it may be, that port will be welcome."

"Yes, Mrs. Weldon, and you will certainly find there the means to return promptly to San Francisco. The Pacific Navigation Company has a very well organized service on this coast. Its steamers touch at the principal points of the coast; nothing will be easier than to take passage for California."

"Then you do not count on bringing the 'Pilgrim' to San Francisco?" asked Mrs. Weldon.

"Yes, after having put you on shore, Mrs. Weldon. If we can procure an officer and a crew, we are going to discharge our cargo at Valparaiso, as Captain Hull would have done. Then we shall return to our own port. But that would delay you too much, and, though very sorry to be separated from you——"

"Well, Dick," replied Mrs. Weldon, "we shall see later what must be done. Tell me, you seem to fear the dangers which the land presents."

"In fact, they are to be feared," replied the novice, "but I am always hoping to meet some ship in these parts, and I am even very much surprised at not seeing any. If only one should pass, we would enter into communication with her; she would give us our exact situation, which would greatly facilitate our arrival in sight of land."

"Are there not pilots who do service along this coast?" asked Mrs. Weldon.

"There ought to be," replied Dick Sand, "but much nearer land. We must then continue to approach it."

"And if we do not meet a pilot?" asked Mrs. Weldon, who kept on questioning him in order to know how the young novice would prepare for all contingencies.

"In that case, Mrs. Weldon, either the weather will be clear, the wind moderate, and I shall endeavor to sail up the coast sufficiently near to find a refuge, or the wind will be stronger, and then——"

"Then what will you do, Dick?"

"Then, in the present condition of the 'Pilgrim,'" replied Dick Sand, "once near the land, it will be very difficult to set off again."

"What will you do?" repeated Mrs. Weldon.

"I shall be forced to run my ship aground," replied the novice, whose brow darkened for a moment. "Ah! it is a hard extremity. God grant that we may not be reduced to that. But, I repeat it, Mrs. Weldon, the appearance of the sky is reassuring, and it is impossible for a vessel or a pilot-boat not to meet us. Then, good hope. We are headed for the land, we shall see it before long."

Yes, to run a ship aground is a last extremity, to which the most energetic sailor does not resort without fear! Thus, Dick Sand did not wish to foresee it, while he had some chances of escaping it.

For several days there were, in the state of the atmosphere, alternatives which, anew, made the novice very uneasy. The wind kept in the condition of a stiff breeze all the time, and certain oscillations of the barometrical column indicated that it tended to freshen. Dick Sand then asked himself, not without apprehension, if he would be again forced to scud without sails. He had so much interest in keeping at least his top-sail, that he resolved to do so so long as it was not likely to be carried away. But, to secure the solidity of the masts, he had the shrouds and backstays hauled taut. Above all, all unnecessary risk must be avoided, as the situation would become one of the gravest, if the "Pilgrim" should be disabled by losing her masts.

Once or twice, also, the barometer rising gave reason to fear that the wind might change point for point; that is to say, that it might pass to the east. It would then be necessary to sail close to the wind!
A new anxiety for Dick Sand. What should he do with a contrary wind? Tack about? But if he was obliged to come to that, what new delays and what risks of being thrown into the offing.

Happily those fears were not realized. The wind, after shifting for several days, blowing sometimes from the north, sometimes from the south, settled definitely in the west. But it was always a strong breeze, almost a gale, which strained the masting.

It was the 5th of April. So, then, more than two months had already elapsed since the "Pilgrim" had left New Zealand. For twenty days a contrary wind and long calms had retarded her course. Then she was in a favorable condition to reach land rapidly. Her speed must even have been very considerable during the tempest. Dick Sand estimated its average at not less than two hundred miles a day! How, then, had he not yet made the coast? Did it flee before the "Pilgrim?" It was absolutely inexplicable.

And, nevertheless, no land was signaled, though one of the blacks kept watch constantly in the crossbars.

Dick Sand often ascended there himself. There, with a telescope to his eyes, he sought to discover some appearance of mountains. The Andes chain is very high. It was there in the zone of the clouds that he must seek some peak, emerging from the vapors of the horizon.

Several times Tom and his companions were deceived by false indications of land. They were only vapors of an odd form, which rose in the background. It happened sometimes that these honest men were obstinate in their belief; but, after a certain time, they were forced to acknowledge that they had been dupes of an optical illusion. The pretended land, moved away, changed form and finished by disappearing completely.

On the 6th of April there was no longer any doubt possible.

It was eight o'clock in the morning. Dick Sand had just ascended into the bars. At that moment the fogs were condensed under the first rays of the sun, and the horizon was pretty clearly defined.

From Dick Sand's lips escaped at last the so long expected cry:
"Land! land before us!"

At that cry every one ran on deck, little Jack, curious as folks are at that age, Mrs. Weldon, whose trials were going to cease with the landing, Tom and his companions, who were at last going to set foot again on the American continent, Cousin Benedict himself, who had great hope of picking up quite a rich collection of new insects for himself. Negoro, alone, did not appear.

Each then saw what Dick Sand had seen, some very distinctly, others with the eyes of faith. But on the part of the novice, so accustomed to observe sea horizons, there was no error possible, and an hour after, it must be allowed he was not deceived.

At a distance of about four miles to the east stretched a rather low coast, or at least what appeared such. It must be commanded behind by the high chain of the Andes, but the last zone of clouds did not allow the summits to be perceived.

The "Pilgrim" sailed directly and rapidly to this coast, which grew larger to the eye.

Two hours after it was only three miles away.

This part of the coast ended in the northeast by a pretty high cape, which covered a sort of roadstead protected from land winds. On the contrary, in the southeast, it lengthened out like a thin peninsula.

A few trees crowned a succession of low cliffs, which were then clearly defined under the sky. But it was evident, the geographical character of the country being given, that the high mountain chain of the Andes formed their background.

Moreover, no habitation in sight, no port, no river mouth, which might serve as a harbor for a vessel. At that moment the "Pilgrim" was running right on the land. With the reduced sail which she carried, the winds driving her to the coast, Dick Sand would not be able to set off from it.

In front lay a long band of reefs, on which the sea was foaming all white. They saw the waves unfurl half way up the cliffs. There must be a monstrous surf there.

Dick Sand, after remaining on the forecastle to observe the coast, returned aft, and, without saying a word, he took the helm.

The wind was freshening all the time. The schooner was soon only a mile from the shore.

Dick Sand then perceived a sort of little cove, into which he resolved to steer; but, before reaching it, he must cross a line of reefs, among which it would be difficult to follow a channel. The surf indicated that the water was shallow everywhere.

At that moment Dingo, who was going backwards and forwards on the deck, dashed forward, and, looking at the land, gave some lamentable barks. One would say that the dog recognized the coast, and that its instinct recalled some sad remembrance.

Negoro must have heard it, for an irresistible sentiment led him out of his cabin; and although he had reason to
fear the dog, he came almost immediately to lean on the netting.

Very fortunately for him Dingo, whose sad barks were all the time being addressed to that land, did not perceive him.

Negoro looked at that furious surf, and that did not appear to frighten him. Mrs. Weldon, who was looking at him, thought she saw his face redden a little, and that for an instant his features were contracted.

Then, did Negoro know this point of the continent where the winds were driving the "Pilgrim?"

At that moment Dick Sand left the wheel, which he gave back to old Tom. For a last time he came to look at the cove, which gradually opened. Then:

"Mrs. Weldon," said he, in a firm voice, "I have no longer any hope of finding a harbor! Before half an hour, in spite of all my efforts, the 'Pilgrim' will be on the reefs! We must run aground! I shall not bring the ship into port! I am forced to lose her to save you! But, between your safety and hers, I do not hesitate!"

"You have done all that depended on you, Dick?" asked Mrs. Weldon.

"All," replied the young novice.

And at once he made his preparations for stranding the ship.

First of all, Mrs. Weldon, Jack, Cousin Benedict and Nan, must put on life-preservers. Dick Sand, Tom and the blacks, good swimmers, also took measures to gain the coast, in case they should be precipitated into the sea.

Hercules would take charge of Mrs. Weldon. The novice took little Jack under his care.

Cousin Benedict, very tranquil, however, reappeared on the deck with his entomologist box strapped to his shoulder. The novice commended him to Bat and Austin. As to Negoro, his singular calmness said plainly enough that he had no need of anybody's aid.

Dick Sand, by a supreme precaution, had also brought on the forecastle ten barrels of the cargo containing whale's oil.

That oil, properly poured the moment the "Pilgrim" would be in the surf, ought to calm the sea for an instant, in lubricating, so to say, the molecules of water, and that operation would perhaps facilitate the ship's passage between the reefs. Dick Sand did not wish to neglect anything which might secure the common safety.

All these precautions taken, the novice returned to take his place at the wheel.

The "Pilgrim" was only two cables' lengths from the coast, that is, almost touching the reefs, her starboard side already bathed in the white foam of the surf. Each moment the novice thought that the vessel's keel was going to strike some rocky bottom.

Suddenly, Dick Sand knew, by a change in the color of the water, that a channel lengthened out among the reefs. He must enter it bravely without hesitating, so as to make the coast as near as possible to the shore.

The novice did not hesitate. A movement of the helm thrust the ship into the narrow and sinuous channel. In this place the sea was still more furious, and the waves dashed on the deck.

The blacks were posted forward, near the barrels, waiting for the novice's orders.

"Pour the oil—pour!" exclaimed Dick Sand.

Under this oil, which was poured on it in quantities, the sea grew calm, as by enchantment, only to become more terrible again a moment after.

The "Pilgrim" glided rapidly over those lubricated waters and headed straight for the shore.

Suddenly a shock took place. The ship, lifted by a formidable wave, had just stranded, and her masting had fallen without wounding anybody.

The "Pilgrim's" hull, damaged by the collision, was invaded by the water with extreme violence. But the shore was only half a cable's length off, and a chain of small blackish rocks enabled it to be reached quite easily.

So, ten minutes after, all those carried by the "Pilgrim" had landed at the foot of the cliff.

CHAPTER XIV.
THE BEST TO DO.

So then, after a voyage long delayed by calms, then favored by winds from the northwest and from the southwest--a voyage which had not lasted less than seventy-four days--the "Pilgrim" had just run aground!

However, Mrs. Weldon and her companions thanked Providence, because they were in safety. In fact, it was on a continent, and not on one of the fatal isles of Polynesia, that the tempest had thrown them. Their return to their country, from any point of South America on which they should land, ought not, it seemed, to present serious difficulties.

As to the "Pilgrim," she was lost. She was only a carcass without value, of which the surf was going to disperse the débris in a few hours. It would be impossible to save anything. But if Dick Sand had not that joy of bringing back a vessel intact to his ship-owner, at least, thanks to him, those who sailed in her were safe and sound on some
hospitable coast, and among them, the wife and child of James W. Weldon.

As to the question of knowing on what part of the American coast the schooner had been wrecked, they might dispute it for a long time. Was it, as Dick Sand must suppose, on the shore of Peru? Perhaps, for he knew, even by the bearings of the Isle of Paques, that the "Pilgrim" had been thrown to the northeast under the action of the winds; and also, without doubt, under the influence of the currents of the equatorial zone. From the forty-third degree of latitude, it had, indeed, been possible to drift to the fifteenth.

It was then important to determine, as soon as possible, the precise point of the coast where the schooner had just been lost. Granted that this coast was that of Peru, ports, towns and villages were not lacking, and consequently it would be easy to gain some inhabited place. As to this part of the coast, it seemed deserted.

It was a narrow beach, strewed with black rocks, shut off by a cliff of medium height, very irregularly cut up by large funnels due to the rupture of the rock. Here and there a few gentle declivities gave access to its crest.

In the north, at a quarter of a mile from the stranding place, was the mouth of a little river, which could not have been perceived from the offing. On its banks hung numerous _rhizomas_, sorts of mangroves, essentially distinct from their congener of India.

The crest of the cliff—that was soon discovered—was overhung by a thick forest, whose verdant masses undulated before the eyes, and extended as far as the mountains in the background. There, if Cousin Benedict had been a botanist, how many trees, new to him, would not have failed to provoke his admiration.

There were high baobabs—to which, however, an extraordinary longevity has been falsely attributed—the bark of which resembles Egyptian syenite, Bourbon palms, white pines, tamarind-trees, pepper-plants of a peculiar species, and a hundred other plants that an American is not accustomed to see in the northern region of the New Continent.

But, a circumstance rather curious, among those forest productions one would not meet a single specimen of that numerous family of palm-trees which counts more than a thousand species, spread in profusion over almost the whole surface of the globe.

Above the sea-shore a great number of very noisy birds were flying, which belonged for the greater part to different varieties of swallows, of black plumage, with a steel-blue shade, but of a light chestnut color on the upper part of the head. Here and there also rose some partridges, with necks entirely white, and of a gray color.

Mrs. Weldon and Dick Sand observed that these different birds did not appear to be at all wild. They approached without fearing anything. Then, had they not yet learned to fear the presence of man, and was this coast so deserted that the detonation of a firearm had never been heard there?

At the edge of the rocks were walking some pelicans of the species of "pelican minor," occupied in filling with little fish the sack which they carry between the branches of their lower jaw. Some gulls, coming from the offing, commenced to fly about around the "Pilgrim."

Those birds were the only living creatures that seemed to frequent this part of the coast, without counting, indeed, numbers of interesting insects that Cousin Benedict would well know how to discover. But, however little Jack would have it, one could not ask them the name of the country; in order to learn it, it would be necessary to address some native. There were none there, or at least, there was not one to be seen. No habitation, hut, or cabin, neither in the north, beyond the little river, nor in the south, nor finally on the upper part of the cliff, in the midst of the trees of the thick forest. No smoke ascended into the air, no indication, mark, or imprint indicated that this portion of the continent was visited by human beings. Dick Sand continued to be very much surprised.

"Where are we? Where can we be?" he asked himself. "What! nobody to speak to?"

Nobody, in truth, and surely, if any native had approached, Dingo would have scented him, and announced him by a bark. The dog went backward and forward on the strand, his nose to the ground, his tail down, growling secretly—certainly very singular behavior—but neither betraying the approach of man nor of any animal whatsoever.

"Dick, look at Dingo!" said Mrs. Weldon.

"Yes, that is very strange," replied the novice. "It seems as if he were trying to recover a scent."

"Very strange, indeed," murmured Mrs. Weldon; then, continuing, "what is Negoro doing?" she asked.

"He is doing what Dingo is doing," replied Dick Sand. "He goes, he comes! After all, he is free here. I have no longer the right to control him. His service ended with the stranding of the Pilgrim.""

In fact, Negoro surveyed the strand, turned back, and looked at the shore and the cliff like a man trying to recall recollections and to fix them. Did he, then, know this country? He would probably have refused to reply to that question if it had been asked. The best thing was still to have nothing to do with that very unsociable personage.

Dick Sand soon saw him walk from the side of the little river, and when Negoro had disappeared on the other side of the cliff, he ceased to think of him.

Dingo had indeed barked when the cook had arrived on the steep bank, but became silent almost immediately.

It was necessary, now, to consider the most pressing wants. Now, the most pressing was to find a refuge, a shelter of some kind, where they could install themselves for the time, and partake of some nourishment. Then they
would take counsel, and they would decide what it would be convenient to do.

As to food, they had not to trouble themselves. Without speaking of the resources which the country must offer, the ship's store-room had emptied itself for the benefit of the survivors of the shipwreck. The surf had thrown here and there among the rocks, then uncovered by the ebb-tide, a great quantity of objects. Tom and his companions had already picked up some barrels of biscuit, boxes of alimentary preserves, cases of dried meat. The water not having yet damaged them, food for the little troop was secured for more time, doubtless, than they would require to reach a town or a village. In that respect there was nothing to fear. These different waifs, already put in a safe place, could no longer be taken back by a rising sea.

Neither was sweet water lacking. First of all Dick Sand had taken care to send Hercules to the little river for a few pints. But it was a cask which the vigorous negro brought back on his shoulder, after having filled it with water fresh and pure, which the ebb of the tide left perfectly drinkable.

As to a fire, if it were necessary to light one, dead wood was not lacking in the neighborhood, and the roots of the old mangroves ought to furnish all the fuel of which they would have need. Old Tom, an ardent smoker, was provided with a certain quantity of German tinder, well preserved in a box hermetically closed, and when they wanted it, he would only have to strike the tinder-box with the flint of the strand.

It remained, then, to discover the hole in which the little troop would lie down, in case they must take one night's rest before setting out.

And, indeed, it was little Jack who found the bedroom in question. While trotting about at the foot of the cliff, he discovered, behind a turn of the rock, one of those grottoes well polished, well hollowed out, which the sea herself digs, when the waves, enlarged by the tempest, beat the coast.

The young child was delighted. He called his mother with cries of joy, and triumphantly showed her his discovery.

"Good, my Jack!" replied Mrs. Weldon. "If we were Robinson Crusoes, destined to live a long time on this shore, we should not forget to give your name to that grotto!"

The grotto was only from ten to twelve feet long, and as many wide; but, in little Jack's eyes, it was an enormous cavern. At all events, it must suffice to contain the shipwrecked ones; and, as Mrs. Weldon and Nan noted with satisfaction, it was very dry. The moon being then in her first quarter, they need not fear that those neap-tides would reach the foot of the cliff, and the grotto in consequence. Then, nothing more was needed for a few hours' rest.

Ten minutes after everybody was stretched out on a carpet of sea-weed. Negoro himself thought he must rejoin the little troop and take his part of the repast, which was going to be made in common. Doubtless he had not judged it proper to venture alone under the thick forest, through which the winding river made its way.

It was one o'clock in the afternoon. The preserved meat, the biscuit, the sweet water, with the addition of a few drops of rum, of which Bat had saved a quarter cask, made the requisites for this repast. But if Negoro took part in it, he did not at all mingle in the conversation, in which were discussed the measures demanded by the situation of the shipwrecked. All the time, without appearing to do so, he listened to it, and doubtless profited by what he heard.

During this time Dingo, who had not been forgotten, watched outside the grotto. They could be at ease. No living being would show himself on the strand without the faithful animal giving the alarm.

Mrs. Weldon, holding her little Jack, half lying and almost asleep on her lap, began to speak.

"Dick, my friend," said she, "in the name of all, I thank you for the devotion that you have shown us till now; but we do not consider you free yet. You will be our guide on land, as you were our captain at sea. We place every confidence in you. Speak, then! What must we do?"

Mrs. Weldon, old Nan, Tom and his companions, all had their eyes fixed on the young novice. Negoro himself looked at him with a singular persistence. Evidently, what Dick Sand was going to reply interested him very particularly.

Dick Sand reflected for a few moments. Then:

"Mrs. Weldon," said he, "the important thing is to know, first, where we are. I believe that our ship can only have made the land on that portion of the American sea-coast which forms the Peruvian shore. The winds and currents must have carried her as far as that latitude. But are we here in some southern province of Peru, that is to say on the least inhabited part which borders upon the pampas? Maybe so. I would even willingly believe it, seeing this beach so desolate, and, it must be, but little frequented. In that case, we might be very far from the nearest town, which would be unfortunate."

"Well, what is to be done?" repeated Mrs. Weldon.

"My advice," replied Dick Sand, "would be not to leave this shelter till we know our situation. To-morrow, after a night's rest, two of us could go to discover it. They would endeavor, without going too far, to meet some natives, to inform themselves from them, and return to the grotto. It is not possible that, in a radius of ten or twelve miles, we find nobody."
"To separate!" said Mrs. Weldon.

"That seems necessary to me," replied the novice. "If no information can be picked up, if, as is not impossible, the country is absolutely desolate, well, we shall consider some other way of extricating ourselves."

"And which of us shall go to explore?" asked Mrs. Weldon, after a moment's reflection.

"That is yet to be decided," replied Dick Sand. "At all events, I think that you, Mrs. Weldon, Jack, Mr. Benedict, and Nan, ought not to quit this grotto. Bat, Hercules, Acteon, and Austin should remain near you, while Tom and I should go forward. Negoro, doubtless, will prefer to remain here?" added Dick Sand, looking at the head-cook.

"Probably," replied Negoro, who was not a man to commit himself any more than that.

"We should take Dingo with us," continued the novice. "He would be useful to us during our exploration."

Dingo, hearing his name pronounced, reappeared at the entrance of the grotto, and seemed to approve of Dick Sand's projects by a little bark.

Since the novice had made this proposition, Mrs. Weldon remained pensive. Her repugnance to the idea of a separation, even short, was very serious. Might it not happen that the shipwreck of the "Pilgrim" would soon be known to the Indian tribes who frequented the sea-shore, either to the north or to the south, and in case some plunderers of the wrecks thrown on the shore should present themselves, was it not better for all to be united to repulse them?

That objection, made to the novice's proposition, truly merited a discussion.

It fell, however, before Dick Sand's arguments, who observed that the Indians ought not to be confounded with the savages of Africa or Polynesia, and any aggression on their part was probably not to be feared. But to entangle themselves in this country without even knowing to what province of South America it belonged, nor at what distance the nearest town of that province was situated, was to expose themselves to many fatigues. Doubtless separation might have its inconveniences, but far less than marching blindly into the midst of a forest which appeared to stretch as far as the base of the mountains.

"Besides," repeated Dick Sand, persistently, "I cannot admit that this separation will be of long duration, and I even affirm that it will not be so. After two days, at the most, if Tom and I have come across neither habitation nor inhabitant, we shall return to the grotto. But that is too improbable, and we shall not have advanced twenty miles into the interior of the country before we shall evidently be satisfied about its geographical situation. I may be mistaken in my calculation, after all, because the means of fixing it astronomically have failed me, and it is not impossible for us to be in a higher or lower latitude."

"Yes--you are certainly right, my child," replied Mrs. Weldon, in great anxiety.

"And you, Mr. Benedict," asked Dick Sand, "what do you think of this project?"

"I?" replied Cousin Benedict.

"Yes; what is your advice?"

"I have no advice," replied Cousin Benedict. "I find everything proposed, good, and I shall do everything that you wish. Do you wish to remain here one day or two? that suits me, and I shall employ my time in studying this shore from a purely entomological point of view."

"Do, then, according to your wish," said Mrs. Weldon to Dick Sand. "We shall remain here, and you shall depart with old Tom."

"That is agreed upon," said Cousin Benedict, in the most tranquil manner in the world. "As for me, I am going to pay a visit to the insects of the country."

"Do not go far away, Mr. Benedict," said the novice. "We urge you strongly not to do it."

"Do not be uneasy, my boy."

"And above all, do not bring back too many musquitoes," added old Tom.

A few moments after, the entomologist, his precious tin box strapped to his shoulders, left the grotto.

Almost at the same time Negoro abandoned it also. It appeared quite natural to that man to, be always occupied with himself. But, while Cousin Benedict clambered up the slopes of the cliff to go to explore the border of the forest, he, turning round toward the river, went away with slow steps and disappeared, a second time ascending the steep bank.

Jack slept all the time. Mrs. Weldon, leaving him on Nan's knees, then descended toward the strand. Dick Sand and his companions followed her. The question was, to see if the state of the sea then would permit them to go as far as the "Pilgrim's" hull, where there were still many objects which might be useful to the little troop.

The rocks on which the schooner had been wrecked were now dry. In the midst of the _débris_ of all kinds stood the ship's carcass, which the high sea had partly covered again. That astonished Dick Sand, for he knew that the tides are only very moderate on the American sea-shore of the Pacific. But, after all, this phenomenon might be explained by the fury of the wind which beat the coast.

On seeing their ship again, Mrs. Weldon and her companions experienced a painful impression. It was there that
they had lived for long days, there that they had suffered. The aspect of that poor ship, half broken, having neither mast nor sails, lying on her side like a being deprived of life, sadly grieved their hearts. But they must visit this hull, before the sea should come to finish demolishing it.

Dick Sand and the blacks could easily make their way into the interior, after having hoisted themselves on deck by means of the ropes which hung over the "Pilgrim's" side. While Tom, Hercules, Bat, and Austin employed themselves in taking from the storeroom all that might be useful, as much eatables as liquids, the novice made his way into the arsenal. Thanks to God, the water had not invaded this part of the ship, whose rear had remained out of the water after the stranding.

There Dick Sand found four guns in good condition, excellent Remingtons from Purdy & Co.'s factory, as well as a hundred cartridges, carefully shut up in their cartridge-boxes. There was material to arm his little band, and put it in a state of defense, if, contrary to all expectation, the Indians attacked him on the way.

The novice did not neglect to take a pocket-lantern; but the ship's charts, laid in a forward quarter and damaged by the water, were beyond use.

There were also in the "Pilgrim's" arsenal some of those solid cutlasses which serve to cut up whales. Dick Sand chose six, destined to complete the arming of his companions, and he did not forget to bring an inoffensive child's gun, which belonged to little Jack.

As to the other objects still held by the ship, they had either been dispersed, or they could no longer be used. Besides, it was useless to overburden themselves for the few days the journey would last. In food, in arms, in munitions, they were more than provided for. Meanwhile, Dick Sand, by Mrs. Weldon's advice, did not neglect to take all the money which he found on board--about five hundred dollars.

That was a small sum, indeed! Mrs. Weldon had carried a larger amount herself and she did not find it again.

Who, then, except Negoro, had been able to visit the ship before them and to lay hands on Captain Hull's and Mrs. Weldon's reserve? No one but he, surely, could be suspected. However, Dick Sand hesitated a moment. All that he knew and all that he saw of him was that everything was to be feared from that concentrated nature, from whom the misfortunes of others could snatch a smile. Yes, Negoro was an evil being, but must they conclude from that that he was a criminal? It was painful to Dick Sand's character to go as far as that. And, meanwhile, could suspicion rest on any other? No, those honest negroes had not left the grotto for an instant, while Negoro had wandered over the beach. He alone must be guilty. Dick Sand then resolved to question Negoro, and, if necessary, have him searched when he returned. He wished to know decidedly what to believe.

The sun was then going down to the horizon. At that date he had not yet crossed the equator to carry heat and light into the northern hemisphere, but he was approaching it. He fell, then, almost perpendicularly to that circular line where the sea and the sky meet. Twilight was short, darkness fell promptly—which confirmed the novice in the thought that he had landed on a point of the coast situated between the tropic of Capricorn and the equator.

Mrs. Weldon, Dick Sand, and the blacks then returned to the grotto, where they must take some hours' rest.

"The night will still be stormy," observed Tom, pointing to the horizon laden with heavy clouds.

"Yes," replied Dick Sand, "there is a strong breeze blowing up. But what matter, at present? Our poor ship is lost, and the tempest can no longer reach us?"

"God's will be done!" said Mrs. Weldon.

It was agreed that during that night, which would be very dark, each of the blacks would watch turn about at the entrance to the grotto. They could, besides, count upon Dingo to keep a careful watch.

They then perceived that Cousin Benedict had not returned.

Hercules called him with all the strength of his powerful lungs, and almost immediately they saw the entomologist coming down the slopes of the cliff, at the risk of breaking his neck.

Cousin Benedict was literally furious. He had not found a single new insect in the forest--no, not one--which was fit to figure in his collection. Scorpions, scolopendras, and other myriapodes, as many as he could wish, and even more, were discovered. And we know that Cousin Benedict did not interest himself in myriapodes.

"It was not worth the trouble," added he, "to travel five or six thousand miles, to have braved the tempest, to be wrecked on the coast, and not meet one of those American hexapodes, which do honor to an entomological museum! No; the game was not worth the candle!"

As a conclusion, Cousin Benedict asked to go away. He did not wish to remain another hour on that detested shore.

Mrs. Weldon calmed her large child. They made him hope that he would be more fortunate the next day, and all went to lie down in the grotto, to sleep there till sunrise, when Tom observed that Negoro had not yet returned, though night had arrived.

"Where can he be?" asked Mrs. Weldon.

"What matter!" said Bat.
"On the contrary, it does matter," replied Mrs. Weldon. "I should prefer having that man still near us."

"Doubtless, Mrs. Weldon," replied Dick Sand; "but if he has forsaken our company voluntarily, I do not see how we could oblige him to rejoin us. Who knows but he has his reasons for avoiding us forever?"

And taking Mrs. Weldon aside, Dick Sand confided to her his suspicions. He was not astonished to find that she had them also. Only they differed on one point.

"If Negoro reappears," said Mrs. Weldon, "he will have put the product of his theft in a safe place. Take my advice. What we had better do, not being able to convict him, will be to hide our suspicions from him, and let him believe that we are his dupes."

Mrs. Weldon was right. Dick Sand took her advice.

However, Negoro was called several times.

He did not reply. Either he was still too far away to hear, or he did not wish to return.

The blacks did not regret being rid of his presence; but, as Mrs. Weldon had just said, perhaps he was still more to be feared afar than near. And, moreover, how explain that Negoro would venture alone into that unknown country? Had he then lost his way, and on this dark night was he vainly seeking the way to the grotto?

Mrs. Weldon and Dick Sand did not know what to think. However it was, they could not, in order to wait for Negoro, deprive themselves of a repose so necessary to all.

At that moment the dog, which was running on the strand, barked aloud.

"What is the matter with Dingo?" asked Mrs. Weldon.

"We must, indeed, find out," replied the novice. "Perhaps it is Negoro coming back."

At once Hercules, Bat, Austin, and Dick Sand took their way to the mouth of the river.

But, arrived at the bank, they neither saw nor heard anything. Dingo now was silent.

Dick Sand and the blacks returned to the grotto.

The going to sleep was organized as well as possible. Each of the blacks prepared himself to watch in turn outside. But Mrs. Weldon, uneasy, could not sleep. It seemed to her that this land so ardently desired did not give her what she had been led to hope for, security for hers, and rest for herself.

* * * * *

CHAPTER XV.

HARRIS.

The next day, April 7th, Austin, who was on guard at sunrise, saw Dingo run barking to the little river. Almost immediately Mrs. Weldon, Dick Sand and the blacks came out of the grotto.

Decidedly there was something there.

"Dingo has scented a living creature, man or beast," said the novice.

"At all events it was not Negoro," observed Tom, "for Dingo would bark with fury."

"If it is not Negoro, where can he be?" asked Mrs. Weldon, giving Dick Sand a look which was only understood by him; "and if it is not he, who, then, is it?"

"We are going to see, Mrs. Weldon," replied the novice. Then, addressing Bat, Austin, and Hercules, "Arm yourselves, my friends, and come!"

Each of the blacks took a gun and a cutlass, as Dick Sand had done. A cartridge was slipped into the breech of the Remingtons, and, thus armed, all four went to the bank of the river.

Mrs. Weldon, Tom, and Acteon remained at the entrance of the grotto, where little Jack and Nan still rested by themselves.

The sun was then rising. His rays, intercepted by the high mountains in the east, did not reach the cliff directly; but as far as the western horizon, the sea sparkled under the first fires of day.

Dick Sand and his companions followed the strand of the shore, the curve of which joined the mouth of the river. There Dingo, motionless, and as if on guard, was continually barking.

It was evident that he saw or scented some native.

And, in fact, it was no longer against Negoro, against its enemy on board the ship, that the dog had a grudge this time.

At that moment a man turned the last plane of the cliff. He advanced prudently to the strand, and, by his familiar gestures, he sought to calm Dingo. They saw that he did not care to face the anger of the vigorous animal.

"It is not Negoro!" said Hercules.

"We cannot lose by the change," replied Bat.

"No," said the novice. "It is probably some native, who will spare us the ennui of a separation. We are at last going to know exactly where we are."
And all four, putting their guns back on their shoulders, went rapidly toward the unknown.

The latter, on seeing them approach, at first gave signs of the greatest surprise. Very certainly, he did not expect to meet strangers on that part of the coast. Evidently, also, he had not yet perceived the remains of the "Pilgrim," otherwise the presence of the shipwrecked would very naturally be explained to him. Besides, during the night the surf had finished demolishing the ship's hull; there was nothing left but the wrecks that floated in the offing.

At the first moment the unknown, seeing four armed men marching toward him, made a movement as if he would retrace his steps. He carried a gun in a shoulder-belt, which passed rapidly into his hand, and from his hand to his shoulder. They felt that he was not reassured.

Dick Sand made a gesture of salutation, which doubtless the unknown understood, for, after some hesitation, he continued to advance.

Dick Sand could then examine him with attention.

He was a vigorous man, forty years old at the most, his eyes bright, his hair and beard gray, his skin sunburnt like that of a nomad who has always lived in the open air, in the forest, or on the plain. A kind of blouse of tanned skin served him for a close coat, a large hat covered his head, leather boots came up above his knees, and spurs with large rowels sounded from their high heels.

What Dick Sand noticed at first—and which was so, in fact—was that he had before him, not one of those Indians, habitual rovers over the pampas, but one of those adventurers of foreign blood, often not very commendable, who are frequently met with in those distant countries.

It also seemed, by his rather familiar attitude, by the reddish color of a few hairs of his beard, that this unknown must be of Anglo-Saxon origin. At all events, he was neither an Indian nor a Spaniard.

And that appeared certain, when in answer to Dick Sand, who said to him in English, "Welcome!" he replied in the same language and without any accent.

"Welcome yourself, my young friend," said the unknown, advancing toward the novice, whose hand he pressed.

As to the blacks, he contented himself with making a gesture to them without speaking to them.

"You are English?" he asked the novice.


"From the South?"

"From the North."

This reply seemed to please the unknown, who shook the novice's hand more vigorously and this time in very an American manner.

"And may I know, my young friend," he asked, "how you find yourself on this coast?"

But, at that moment, without waiting till the novice had replied to his question, the unknown took off his hat and bowed.

Mrs. Weldon had advanced as far as the steep bank, and she then found herself facing him.

It was she who replied to this question.

"Sir," said she, "we are shipwrecked ones whose ship was broken to pieces yesterday on these reefs."

An expression of pity spread over the unknown's face, whose eyes sought the vessel which had been stranded.

"There is nothing left of our ship," added the novice. "The surf has finished the work of demolishing it during the night."

"And our first question," continued Mrs. Weldon, "will be to ask you where we are."

"But you are on the sea-coast of South America," replied the unknown, who appeared surprised at the question.

"Can you have any doubt about that?"

"Yes, sir, for the tempest had been able to make us deviate from our route," replied Dick Sand. "But I shall ask where we are more exactly. On the coast of Peru, I think."

"No, my young friend, no! A little more to the south! You are wrecked on the Bolivian coast."

"Aha!" exclaimed Dick Sand.

"And you are even on that southern part of Bolivia which borders on Chili."

"Then what is that cape?" asked Dick Sand, pointing to the promontory on the north.

"I cannot tell you the name," replied the unknown, "for if I know the country in the interior pretty well from having often traversed it, it is my first visit to this shore."

Dick Sand reflected on what he had just learned. That only half astonished him, for his calculation might have, and indeed must have, deceived him, concerning the currents; but the error was not considerable. In fact, he believed himself somewhere between the twenty-seventh and the thirtieth parallel, from the bearings he had taken from the Isle of Paques, and it was on the twenty-fifth parallel that he was wrecked. There was no impossibility in the "Pilgrim's" having deviated by relatively small digression, in such a long passage.

Besides, there was no reason to doubt the unknown's assertions, and, as that coast was that of lower Bolivia there
was nothing astonishing in its being so deserted.

"Sir," then said Dick Sand, "after your reply I must conclude that we are at a rather great distance from Lima."

"Oh! Lima is far away--over there--in the north!"

Mrs. Weldon, made suspicious first of all by Negoro's disappearance, observed the newly-arrived with extreme attention; but she could discover nothing, either in his attitude or in his manner of expressing himself which could lead her to suspect his good faith.

"Sir," said she, "without doubt my question is not rash. You do not seem to be of Peruvian origin?"

"I am American as you are, madam," said the unknown, who waited for an instant for the American lady to tell him her name.

"Mrs. Weldon," replied the latter.

"I? My name is Harris and I was born in South Carolina. But here it is twenty years since I left my country for the pampas of Bolivia, and it gives me pleasure to see compatriots."

"You live in this part of the province, Mr. Harris?" again asked Mrs. Weldon.

"No, Mrs. Weldon," replied Harris, "I live in the South, on the Chilian frontier; but at this present moment I am going to Atacama, in the northeast."

"Are we then on the borders of the desert of that name?" asked Dick Sand.

"Precisely, my young friend, and this desert extends far beyond the mountains which shut off the horizon."

"The desert of Atacama?" repeated Dick Sand.

"Yes," replied Harris. "This desert is like a country by itself, in this vast South America, from which it differs in many respects. It is, at the same time, the most curious and the least known portion of this continent."

"And you travel alone?" asked Mrs. Weldon.

"Oh, it is not the first time that I have taken this journey!" replied the American. "There is, two hundred miles from here, an important farm, the Farm of San Felice, which belongs to one of my brothers, and it is to his house that I am going for my trade. If you wish to follow me you will be well received, and the means of transport to gain the town of Atacama will not fail you. My brother will be happy to furnish them."

These offers, made freely, could only prepossess in favor of the American, who immediately continued, addressing Mrs. Weldon:

"These blacks are your slaves?"

And he pointed to Tom and his companions.

"We have no longer any slaves in the United States," replied Mrs. Weldon, quickly. "The North abolished slavery long ago, and the South has been obliged to follow the example of the North!"

"Ah! that is so," replied Harris. "I had forgotten that the war of 1862 had decided that grave question. I ask those honest men's pardon for it," added Harris, with that delicate irony which a Southerner must put into his language when speaking to blacks. "But on seeing those gentlemen in your service, I believed----"

"They are not, and have never been, in my service, sir," replied Mrs. Weldon, gravely.

"We should be honored in serving you, Mrs. Weldon," then said old Tom. "But, as Mr. Harris knows, we do not belong to anybody. I have been a slave myself, it is true, and sold as such in Africa, when I was only six years old; but my son Bat, here, was born of an enfranchised father, and, as to our companions, they were born of free parents."

"I can only congratulate you about it," replied Harris, in a tone which Mrs. Weldon did not find sufficiently serious. "In this land of Bolivia, also, we have no slaves. Then you have nothing to fear, and you can go about as freely here as in the New England States."

At that moment little Jack, followed by Nan, came out of the grotto rubbing his eyes. Then, perceiving his mother, he ran to her. Mrs. Weldon embraced him tenderly.

"The charming little boy!" said the American, approaching Jack.

"It is my son," replied Mrs. Weldon.

"Oh, Mrs. Weldon, you must have been doubly tried, because your child has been exposed to so many dangers."

"God has brought him out of them safe and sound, as He has us, Mr. Harris," replied Mrs. Weldon.

"Will you permit me to kiss him on his pretty cheeks?" asked Harris.

"Willingly," replied Mrs. Weldon.

But Mr. Harris's face, it appeared, did not please little Jack, for he clung more closely to his mother.

"Hold!" said Harris, "you do not want me to embrace you? You are afraid of me, my good little man?"

"Excuse him, sir," Mrs. Weldon hastened to say. "It is timidity on his part."

"Good! we shall become better acquainted," replied Harris. "Once at the Farm, he will amuse himself mounting a gentle pony, which will tell him good things of me."

But the offer of the gentle pony did not succeed in cajoling Jack any more than the proposition to embrace Mr. Harris.
Mrs. Weldon, thus opposed, hastened to change the conversation. They must not offend a man who had so obligingly offered his services.

During this time Dick Sand was reflecting on the proposition which had been made to them so opportunistically, to gain the Farm of San Felice. It was, as Harris had said, a journey of over two hundred miles, sometimes through forests, sometimes through plains—a very fatiguing journey, certainly, because there were absolutely no means of transport.

The young novice then presented some observations to that effect, and waited for the reply the American was going to make.

"The journey is a little long, indeed," replied Harris, "but I have there, a few hundred feet behind the steep bank, a horse which I count on offering to Mrs. Weldon and her son. For us, there is nothing difficult, nor even very fatiguing in making the journey on foot. Besides, when I spoke of two hundred miles, it was by following, as I have already done, the course of this river. But if we go through the forest, our distance will be shortened by at least eighty miles. Now, at the rate of ten miles a day, it seems to me that we shall arrive at the Farm without too much distress."

Mrs. Weldon thanked the American.

"You cannot thank me better than by accepting," replied Harris. "Though I have never crossed this forest, I do not believe I shall be embarrassed in finding the way, being sufficiently accustomed to the pampas. But there is a graver question—that of food. I have only what is barely enough for myself while on the way to the Farm of San Felice."

"Mr. Harris," replied Mrs. Weldon, "fortunately we have food in more than sufficient quantity, and we shall be happy to share with you."

"Well, Mrs. Weldon, it seems to me that all is arranged for the best, and that we have only to set out."

Harris went toward the steep bank, with the intention of going to take his horse from the place where he had left it, when Dick Sand stopped him again, by asking him a question.

To abandon the sea-coast, to force his way into the interior of the country, under that interminable forest, did not please the young novice. The sailor reappeared in him, and either to ascend or descend the coast would be more to his mind.

"Mr. Harris," said he, "instead of traveling for one hundred and twenty miles in the Desert of Atacama, why not follow the coast? Distance for distance, would it not be better worth while to seek to reach the nearest town, either north or south?"

"But my young friend," replied Harris, frowning slightly, "it seems to me that on this coast, which I know very imperfectly, there is no town nearer than three or four hundred miles."

"To the north, yes," replied Dick Sand; "but to the south——"

"To the south," replied the American, "we must descend as far as Chili. Now, the distance is almost as long, and, in your place, I should not like to pass near the pampas of the Argentine Republic. As to me, to my great regret, I could not accompany you there."

"The ships which go from Chili to Peru, do they not pass, then, in sight of this coast?" asked Mrs. Weldon.

"No," replied Harris. "They keep much more out at sea, and you ought not to meet any of them."

"Truly," replied Mr. Weldon. "Well, Dick, have you still some question to ask Mr. Harris?"

"A single one, Mrs. Weldon," replied the novice, who experienced some difficulty in giving up. "I shall ask Mr. Harris in what port he thinks we shall be able to find a ship to bring us back to San Francisco?"

"Faith, my young friend, I could not tell you," replied the American. "All that I know is, that at the Farm of San Felice we will furnish you with the means of gaining the town of Atacama, and from there——"

"Mr. Harris," then said Mrs. Weldon, "do not believe that Dick Sand hesitates to accept your offers."

"No, Mrs. Weldon, no; surely I do not hesitate," replied the young novice; "but I cannot help regretting not being stranded a few degrees farther north or farther south. We should have been in proximity to a port, and that circumstance, in facilitating our return to our country, would prevent us from taxing Mr. Harris's good will."

"Do not fear imposing upon me, Mrs. Weldon," returned Harris. "I repeat to you that too rarely have I occasion to find myself again in the presence of my compatriots. For me it is a real pleasure to oblige you."

"We accept your offer, Mr. Harris," replied Mrs. Weldon; "but I should not wish, however, to deprive you of your horse. I am a good walker——"

"And I am a very good walker," replied Harris, bowing. "Accustomed to long journeys across the pampas, it is not I who will keep back our caravan. No, Mrs. Weldon, you and your little Jack will use this horse. Besides, it is possible that we may meet some of the farm servants on the way, and, as they will be mounted—well, they will yield their horses to us."

Dick Sand saw well that in making new objections he would oppose Mrs. Weldon.
"Mr. Harris," said he, "when do we set out?"

"Even to-day, my young friend," replied Harris. "The bad season commences with the month of April, and it is of the utmost importance for you to reach the farm of San Felice first. Finally, the way across the forest is the shortest, and perhaps the safest. It is less exposed than the coast to the incursions of wandering Indians, who are indefatigable robbers."

"Tom, my friends," replied Dick Sand, turning to the blacks, "it only remains for us to make preparations for departure. Let us select, then, from among the provisions on hand, those which can be most easily transported, and let us make packs, of which each will take his share."

"Mr. Dick," said Hercules, "if you wish, I shall carry the whole load very well."

"No, my brave Hercules," replied the novice; "it will be better for us all to share the burden."

"You are a strong companion, Hercules," then said Harris, who looked at the negro as if the latter were for sale.

"In the markets of Africa you would be worth a good price."

"I am worth what I am worth," replied Hercules, laughing, "and the buyers will only have to run well, if they wish to catch me."

All was agreed upon, and to hasten the departure, each went to work. However, they had only to think of feeding the little troop for the journey from the sea-coast to the farm, that is to say, for a march of ten days.

"But, before setting out, Mr. Harris," said Mrs. Weldon, "before accepting your hospitality, I beg you to accept ours. We offer it to you with our best wishes."

"I accept, Mrs. Weldon; I accept with eagerness," replied Harris, gayly.

"In a few minutes our breakfast will be ready."

"Good, Mrs. Weldon. I am going to profit by those ten minutes to go and get my horse and bring it here. He will have breakfasted, he will."

"Do you want me to go with you, sir?" asked Dick Sand.

"As you please, my young friend," replied Harris. "Come; I shall make you acquainted with the lower course of this river."

Both set out.

During this time, Hercules was sent in search of the entomologist. Faith, Cousin Benedict was very uneasy indeed about what was passing around him. He was then wandering on the summit of the cliff in quest of an "unfindable" insect, which, however, he did not find.

Hercules brought him back against his will. Mrs. Weldon informed him that departure was decided upon, and that, for ten days, they must travel to the interior of the country.

Cousin Benedict replied that he was ready to set out, and that he would not ask better than to cross America entirely, provided they would let him "collect" on the way.

Mrs. Weldon then occupied herself, with Nan's assistance, in preparing a comfortable repast--a good precaution before setting out.

During this time, Harris, accompanied by Dick Sand, had turned the angle of the cliff. Both followed the high bank, over a space of three hundred steps. There, a horse, tied to a tree, gave joyous neighing at the approach of his master.

It was a vigorous beast, of a species that Dick Sand could not recognize. Neck and shoulders long, loins short, and hindquarters stretched out, shoulders flat, forehead almost pointed. This horse offered, however, distinctive signs of those races to which we attribute an Arabian origin.

"You see, my young friend," said Harris, "that it is a strong animal, and you may count on it not failing you on the route."

Harris detached his horse, took it by the bridle, and descended the steep bank again, preceding Dick Sand. The latter had thrown a rapid glance, as well over the river as toward the forest which shut up its two banks. But he saw nothing of a nature to make him uneasy.

However, when he had rejoined the American, he suddenly gave him the following question, which the latter could little expect:

"Mr. Harris," he asked, "you have not met a Portuguese, named Negoro, in the night?"

"Negoro?" replied Harris, in the tone of a man who does not understand what is said. "Who is this Negoro?"

"He was the cook on board," replied Dick Sand, "and he has disappeared."

"Drowned, perhaps," said Harris.

"No, no," replied Dick Sand. "Yesterday evening he was still with us, but during the night he has left us, and he has probably ascended the steep bank of this river. So I asked you, who have come from that side, if you had not met him."
"I have met nobody," replied the American; "and if your cook has ventured alone into the forest, he runs a great risk of going astray. Perhaps we shall overtake him on the way."

"Yes; perhaps!" replied Dick Sand.

When the two returned to the grotto, breakfast was ready. It was composed, like the supper of the evening before, of alimentary conserves, of corned beef and of biscuit. Harris did honor to it, like a man whom nature had endowed with a great appetite.

"Let us go," said he; "I see that we shall not die of hunger on the way! I shall not say as much for that poor devil of a Portuguese, of whom our young friend has spoken."

"Ah!" said Mrs. Weldon, "Dick Sand has told you that we have not seen Negoro again?"

"Yes, Mrs. Weldon," replied the novice. "I desired to know if Mr. Harris had not met him."

"No," replied Harris; "so let us leave that deserter where he is, and think of our departure--whenever you are ready, Mrs. Weldon."

Each took the pack which was intended for him. Mrs. Weldon, assisted by Hercules, placed herself on the horse, and the ungrateful little Jack, with his gun strapped on his back, straddled the animal without even thinking of thanking him who had put that excellent beast at his disposal. Jack, placed before his mother, then said to her that he would know how to lead the gentleman's horse very well.

They then gave him the bridle to hold, and he did not doubt that he was the veritable head of the caravan.

* * * * *

CHAPTER XVI.

ON THE WAY.

It was not without a certain apprehension--nothing seemed to justify it, however--that Dick Sand, three hundred steps from the steep bank of the river, penetrated into the thick forest, the difficult paths of which he and his companions were going to follow for ten days. On the contrary, Mrs. Weldon herself, a woman and a mother, whom the perils would make doubly anxious, had every confidence. Two very serious motives had contributed to reassure her; first, because this region of the pampas was neither very formidable on account of the natives, nor on account of the animals which were found there; next, because, under the direction of Harris, of a guide so sure of himself as the American appeared to be, they could not be afraid of going astray.

Here is the order of proceeding, which, as far as possible, would be observed during the journey:

Dick Sand and Harris, both armed, one with his long gun, the other with a Remington, kept at the head of the little troop.

Then came Bat and Austin, also armed, each with a gun and a cutlass.

Behind them followed Mrs. Weldon and little Jack, on horseback; then Nan and Tom.

In the rear, Acteon, armed with the fourth Remington, and Hercules, with a hatchet in his belt, closed the march.

Dingo went backwards and forwards, and, as Dick Sand remarked, always like an uneasy dog seeking a scent. The dog's ways had visibly changed since the "Pilgrim's" shipwreck had cast it on this sea-coast. It seemed agitated, and almost incessantly it kept up a dull grumbling, rather lamentable than furious. That was remarked by all, though no one could explain it.

As to Cousin Benedict, it had been as impossible to assign him an order of marching as Dingo. Unless he had been held by a string, he would not have kept it. His tin box strapped to his shoulder, his net in his hand, his large magnifying glass suspended to his neck, sometimes behind, sometimes in front, he scampered away among the high herbs, watching for orthopters or any other insect in "pter," at the risk of being bit by some venomous serpent.

During the first hour Mrs. Weldon, uneasy, called him back twenty times. It was no use.

"Cousin Benedict," she finished by saying to him, "I beg you very seriously not to go far away, and I urge you for the last time to pay attention to my entreaties."

"Meanwhile, cousin," replied the intractable entomologist, "when I perceive an insect?"

"When you perceive an insect," replied Mrs. Weldon, "you would do well to let it go in peace, or you will put me under the necessity of taking your box away from you."

"Take away my box!" cried Cousin Benedict, as if it were a question of snatching away his heart.

"Your box and your net," added Mrs. Weldon, pitilessly.

"My net, cousin! And why not my glasses? You will not dare! No; you will not dare!"

"Even, your glasses, which I forgot. I thank you, Cousin Benedict, for reminding me that I have that means of making you blind, and, in that way, forcing you to be wise."

This triple menace had the effect of making him keep quiet--this unsubmitive cousin--for about an hour. Then he began to go away again, and, as he would do the same, even without net, without box, and without glasses, they
were obliged to let him do as he pleased. But Hercules undertook to watch him closely—which quite naturally became one of his duties—and it was agreed that he would act with Cousin Benedict as the latter would with an insect; that is, that he would catch him, if necessary, and bring him back as delicately as the other would with the rarest of the lepidopters.

That rule made, they troubled themselves no more about Cousin Benedict.

The little troop, it has been seen, was well armed, and guarded itself carefully. But, as Harris repeated, there was no encounter to fear except with wandering Indians, and they would probably see none.

At all events, the precautions taken would suffice to keep them respectful.

The paths which wound across the thick forest did not merit that name. They were rather the tracks of animals than the tracks of men. They could only be followed with difficulty. So, in fixing the average distance that the little troop would make in a march of twelve hours at only five or six miles, Harris had calculated wisely.

The weather, however, was very fine. The sun mounted toward the zenith, spreading in waves his almost perpendicular rays. On the plain this heat would be unbearable, Harris took care to remark; but, under those impenetrable branches, they bore it easily and with impunity.

The greater part of the trees of this forest were unknown, as well to Mrs. Weldon as to her companions, black or white.

However, an expert would remark that they were more remarkable for their quality than for their height. Here, it was the "banhina," or iron wood; there, the "molompi," identical with the "pterocarpe," a solid and light wood, fit for making the spoons used in sugar manufactories or oars, from the trunk of which exuded an abundant resin; further on, "fusticks," or yellow wood, well supplied with coloring materials, and lignum-vitæs, measuring as much as twelve feet in diameter, but inferior in quality to the ordinary lignum-vitæs.

While walking, Dick Sand asked Harris the name of these different trees.

"Then you have never been on the coast of South America?" Harris asked him before replying to his question.

"Never," replied the novice; "never, during my voyages, have I had occasion to visit these coasts, and to say the truth, I do not believe that anybody who knew about them has ever spoken to me of them."

"But have you at least explored the coasts of Colombia, those of Chili, or of Patagonia?"

"No, never."

"But perhaps Mrs. Weldon has visited this part of the new continent?" asked Harris. "Americans do not fear voyages, and doubtless-----"

"No, Mr. Harris," replied Mrs. Weldon. "The commercial interests of my husband have never called him except to New Zealand, and I have not had to accompany him anywhere. Not one of us, then, knows this portion of lower Bolivia."

"Well, Mrs. Weldon, you and your companions will see a singular country, which contrasts strangely with the regions of Peru, of Brazil, or of the Argentine Republic. Its flora and fauna would astonish a naturalist. Ah! we may say that you have been shipwrecked at a good place, and if we may ever thank chance-----"

"I wish to believe that it is not chance which has led us here, but God, Mr. Harris."

"God! Yes! God!" replied Harris, in the tone of a man who takes little account of providential intervention in the things of this world.

Then, since nobody in the little troop knew either the country or its productions, Harris took a pleasure in naming pleasantly the most curious trees of the forest.

In truth, it was a pity that, in Cousin Benedict's case, the entomologist was not supplemented by the botanist! If, up to this time, he had hardly found insects either rare or new, he might have made fine discoveries in botany. There was, in profusion, vegetation of all heights, the existence of which in the tropical forests of the New World had not been yet ascertained. Cousin Benedict would certainly have attached his name to some discovery of this kind. But he did not like botany—he knew nothing about it. He even, quite naturally, held flowers in aversion, under the pretext that some of them permit themselves to imprison the insects in their corollas, and poison them with their venomous juices.

At times, the forest became marshy. They felt under foot quite a network of liquid threads, which would feed the affluents of the little river. Some of the rills, somewhat large, could only be crossed by choosing fordable places.

On their banks grew tufts of reeds, to which Harris gave the name of papyrus. He was not mistaken, and those herbaceous plants grew abundantly below the damp banks.

Then, the marsh passed, thickets of trees again covered the narrow routes of the forest.

Harris made Mrs. Weldon and Dick Sand remark some very fine ebony-trees, much larger than the common ebony-tree, which furnish a wood much blacker and much stronger than that of commerce. Then there were mango-trees, still numerous, though they were rather far from the sea. A kind of fur of white moss climbed them as far as the branches. Their thick shade and their delicious fruit made them precious trees, and meanwhile, according to
Harris, not a native would dare to propagate the species. "Whoever plants a mango-tree dies!" Such is the
superstitious maxim of the country.

During the second half of this first day of the journey, the little troop, after the midday halt, began to ascend land
slightly inclined. They were not as yet the slopes of the chain of the first plane, but a sort of undulating plateau
which connected the plain with the mountain.

There the trees, a little less compact, sometimes clustered in groups, would have rendered the march easier, if the
soil had not been invaded by herbaceous plants. One might believe himself in the jungles of Oriental India.
Vegetation appeared to be less luxuriant than in the lower valley of the little river, but it was still superior to that of
the temperate regions of the Old or of the New World.

Indigo was growing there in profusion, and, according to Harris, this leguminous plant passed with reason for
the most usurping plant of the country. If a field came to be abandoned, this parasite, as much despised as the thistle
or the nettle, took possession of it immediately.

One tree seemed lacking in this forest, which ought to be very common in this part of the new continent; it was
the caoutchouc-tree. In fact, the "ficus primoides," the "castilloa elastica," the "cecropia peltats," the "collophora
utilis," the "cameraria letifolia," and above all, the "syphonia elastica," which belong to different families, abound in
the provinces of South America. And meanwhile, a rather singular thing, there was not a single one to be seen.

Now, Dick Sand had particularly promised his friend Jack to show him some caoutchouc trees. So a great
decception for the little boy, who figured to himself that gourds, speaking babies, articulate punchinellos, and elastic
balloons grew quite naturally on those trees. He complained.

"Patience, my good little man," replied Harris. "We shall find some of those caoutchoucs, and by hundreds, in
the neighborhood of the farm."

"Handsome ones, very elastic?" asked little Jack.

"The most elastic there are. Hold! while waiting, do you want a good fruit to take away your thirst?" And, while
speaking, Harris went to gather from a tree some fruits, which seemed to be as pleasant to the taste as those from the
peach-tree.

"Are you very sure, Mr. Harris," asked Mrs. Weldon, "that this fruit can do no harm?"

"Mrs. Weldon, I am going to convince you," replied the American, who took a large mouthful of one of those
fruits. "It is a mango."

And little Jack, without any more pressing, followed Harris's example, He declared that it was very good, "those
pears," and the tree was at once put under contribution.

Those mangos belonged to a species whose fruit is ripe in March and April, others being so only in September,
and, consequently, their mangos were just in time.

"Yes, it is good, good, good!" said little Jack, with his mouth full. "But my friend Dick has promised me
cayoutchoux, if I was very good, and I want caoutchoucs!"

"You will have them, Jack," replied Mrs. Weldon, "because Mr. Harris assures you of it."

"But that is not all," went on Jack. "My friend Dick has promised me some other thing!"

"What then, has friend Dick promised?" asked Harris, smiling.

"Some humming-birds, sir."

"And you shall have some humming-birds, my good little man, but farther on--farther on," replied Harris.

The fact is that little Jack had a right to claim some of these charming creatures, for he was now in a country
where they should abound. The Indians, who know how to weave their feathers artistically, have lavished the most
poetical names on those jewels of the flying race. They call them either the "rays" or the "hairs of the sun." Here, it
is "the little king of the flowers;" there, "the celestial flower that comes in its flight to caress the terrestrial flower." It
is again "the bouquet of jewels, which sparkles in the fire of the day." It can be believed that their imagination would
know how to furnish a new poetical appellation for each of the one hundred and fifty species which constitute this
marvelous tribe of humming-birds.

Meanwhile, however numerous these humming-birds might be in the forests of Bolivia, little Jack was obliged to
still content himself with Harris's promise. According to the American, they were still too close to the coast, and the
humming-birds did not like these deserts so near the ocean. The presence of man did not frighten them at the
"hacienda;" they heard nothing all day but their cry of "teretere" and the murmur of their wings, similar to that of a
spinning-wheel.

"Ah! how I should like to be there!" cried little Jack.

The surest method of getting there--to the "hacienda" of San Felice--was not to stop on the road. Mrs. Weldon
and her companions only took the time absolutely necessary for repose.

The aspect of the forest already changed. Between the less crowded trees large clearings opened here and there.
The sun, piercing the green carpet, then showed its structure of red, syenite granite, similar to slabs of lapis-lazuli.
On some heights the sarsaparilla abounded, a plant with fleshy tubercles, which formed an inextricable tangle. The forest, with the narrow paths, was better for them.

Before sunset the little troop were about eight miles from the point of departure. This journey had been made without accident, and even without great fatigue. It is true, it was the first journey on the march, and no doubt the following halting places would be rougher.

By a common consent they decided to make a halt at this place. The question then was, not to establish a real camp, but to simply organize a resting-place. One man on guard, relieved every two hours, would suffice to watch during the night, neither the natives nor the deer being truly formidable.

They found nothing better for shelter than an enormous mango-tree, whose large branches, very bushy, formed a kind of natural veranda. If necessary, they could nestle in the branches.

Only, on the arrival of the little troop, a deafening concert arose from the top of the tree.

The mango served as a perch for a colony of gray parrots, prattling, quarrelsome, ferocious birds, which set upon living birds, and those who would judge them from their congeners which Europe keeps in cages, would be singularly mistaken.

These parrots jabbered with such a noise that Dick Sand thought of firing at them to oblige them to be silent, or to put them to flight. But Harris dissuaded him, under the pretext that in these solitudes it was better not to disclose his presence by the detonation of a fire-arm.

"Let us pass along without noise," he said, "and we shall pass along without danger."

Supper was prepared at once, without any need of proceeding to cook food. It was composed of conserves and biscuit. A little rill, which wound under the plants, furnished drinkable water, which they did not drink without improving it with a few drops of rum. As to dessert, the mango was there with its juicy fruit, which the parrots did not allow to be picked without protesting with their abominable cries.

At the end of the supper it began to be dark. The shade rose slowly from the ground to the tops of the trees, from which the foliage soon stood out like a fine tracery on the more luminous background of the sky. The first stars seemed to be shining flowers, which twinkled at the end of the last branches. The wind went down with the night, and no longer trembled in the branches of the trees. The parrots themselves had become mute. Nature was going to rest, and inviting every living being to follow her in this deep sleep.

Preparations for retiring had to be of a very primitive character.

"Shall we not light a large fire for the night?" Dick Sand asked the American.

"What's the good?" replied Harris. "Fortunately the nights are not cold, and this enormous mango will preserve the soil from all evaporation. We have neither cold nor dampness to fear. I repeat, my young friend, what I told you just now. Let us move along incognito. No more fire than gunshots, if possible."

"I believe, indeed," then said Mrs. Weldon, "that we have nothing to fear from the Indians—even from those wanderers of the woods, of whom you have spoken, Mr. Harris. But, are there not other four-footed wanderers, that the sight of a fire would help to keep at a distance?"

"Mrs. Weldon," replied the American, "you do too much honor to the deer of this country. Indeed, they fear man more than he fears them."

"We are in a wood," said Jack, "and there is always beasts in the woods."

"There are woods and woods, my good little man, as there are beasts and beasts," replied Harris, laughing. "Imagine that you are in the middle of a large park. Truly, it is not without reason that the Indians say of this country, 'Es como el pariso!' It is like an earthly paradise!"

"Then there are serpents?" said Jack.

"No, my Jack," replied Mrs. Weldon, "there are no serpents, and you may sleep tranquilly."

"And lions?" asked Jack.

"Not the ghost of a lion, my good little man," replied Harris.

"Tigers, then?"

"Ask your mama if she has ever heard tell of tigers on this continent."

"Never," replied Mrs. Weldon.

"Good!" said Cousin Benedict, who, by chance, was listening to the conversation: "if there are neither lions nor tigers in the New World, which is perfectly true, we at least encounter cougars and jaguars."

"Are they bad?" asked little Jack.

"Phew!" replied Harris; "a native has little fear of attacking those animals, and we are strong. Stay! Hercules would be strong enough to crush two jaguars at once, one in each hand!"

"You will watch well, Hercules," then said little Jack, "and if a beast comes to bite us----"

"It is I who will bite it, Mr. Jack!" replied Hercules, showing his mouth, armed with superb teeth.

"Yes, you will watch, Hercules," said the novice, "but your companions and I will relieve you, turn about."
"No, Mr. Dick," replied Acteon, "Hercules, Bat, Austin, and I, we four will be enough for this labor. You must rest the whole night."

"Thank you, Acteon," replied Dick Sand, "but I ought to----"

"No! let those brave men do it, my dear Dick!" then said Mrs. Weldon.

"I, also; I shall watch!" added little Jack, whose eyelids were already closing.

"Yes, my Jack, yes! you will watch!" replied his mother, who did not wish to contradict him.

"But," the little boy said again, "if there are no lions, if there are no tigers in the forest, there are wolves!"

"Oh! wolves in jest!" replied the American. "They are not even wolves, but kinds of foxes, or rather of those dogs of the woods which they call 'guaras.'"

"And those _guaras_, they bite?" asked little Jack.

"Bah! Dingo would make only one mouthful of those beasts!"

"Never mind," replied Jack, with a last yawn; "guaras are wolves, because they are called wolves!"

And with that Jack fell asleep peaceably in Nan's arms, beside the trunk of the mango. Mrs. Weldon, lying near her, gave a last kiss to her little boy, and her tired eyes quickly closed for the night.

A few moments later Hercules brought back to the camp Cousin Benedict, who had just gone off to commence a chase for pyrophores. They are "cocuyos," or luminous flies, which the stylish put in their hair, like so many living gems. These insects which throw a bright and bluish light from two spots situated at the base of their corselet, are very numerous in South America. Cousin Benedict then counted on making a large collection, but Hercules did not leave him time, and, in spite of his recriminations, the negro brought him to the halting-place. That was because, when Hercules had orders, he executed them with military preciseness, which, no doubt, prevented the incarceration of a notable quantity of luminous flies in the entomologist's tin box.

A few moments after, with the exception of the giant, who was watching, all were reposing in a profound sleep.

CHAPTER XVII.
A HUNDRED MILES IN TWO DAYS.

Generally, travelers or ramblers in the woods, who have slept in the forests under the lovely stars, are awakened by howlings as fantastic as disagreeable. There is everything in this morning concert: clucking, grunting, croaking, sneering, barking, and almost "speaking," if one may make use of this word, which completes the series of different noises.

There are the monkeys who thus salute the daybreak. There we meet the little "marikina," the marmoset with a speckled mask; the "mono gris," the skin of which the Indians use to recover the batteries of their guns; the "sagous," recognizable from their long bunches of hair, and many others, specimens of this numerous family.

Of these various four-handed animals, the most remarkable are decidedly the "gueribas," with curling tails and a face like Beelzebub. When the sun rises, the oldest of the band, with an imposing and mysterious voice, sings a monotonous psalm. It is the baritone of the troop. The young tenors repeat after him the morning symphony. The Indians say then that the "gueribas" recite their _pater-nosters_.

But, on this day, it seemed that the monkeys did not offer their prayer, for no one heard them; and, meanwhile, their voice is loud, for it is produced by the rapid vibration of a kind of bony drum, formed by a swelling of the hyoides bone in the neck.

In short, for one reason or for another, neither the "gueribas," nor the "sagous," nor any other four-handed animals of this immense forest, sang, on this morning, their usual concert.

This would not have satisfied the wandering Indians. Not that these natives appreciate this kind of strange choral music, but they willingly give chase to the monkeys, and if they do, it is because the flesh of this animal is excellent, above all, when it is smoke-dried.

Dick Sand, of course, could not be familiar with the habits of the "gueribas," neither were his companions, or this not hearing them would have undoubtedly been a subject of surprise. They awoke then, one after the other, much refreshed by these few hours of repose, which no alarm had come to disturb.

Little Jack was not the last to stretch his arms. His first question was, to ask if Hercules had eaten a wolf during the night. No wolf had shown himself, and consequently Hercules had not yet breakfasted.

All, besides, were fasting like him, and after the morning prayer, Nan occupied herself preparing the repast.

The bill of fare was that of the supper of the night before, but with appetites sharpened by the morning air of the forest, no one dreamed of being difficult to please. It was necessary, above all, to gather strength for a good day's march, and they did it. For the first time, perhaps, Cousin Benedict comprehended that to eat was not an action indifferent or useless to life; only, he declared that he had not come to "visit" this country to walk with his hands in his pockets, and that, if Hercules prevented him from chasing the "cocuyos," and other luminous flies, Hercules
would have some trouble with him.

This threat did not seem to frighten the giant to any great extent. However, Mrs. Weldon took him aside and told him that, perhaps, he might allow his big baby to run to the right and left, but on condition that he did not lose sight of him. It would not do to completely sever Cousin Benedict from the pleasures so natural to his age.

At seven o'clock in the morning, the little troop took up their journey toward the east, preserving the order of march that had been adopted the previous day. It was always the forest. On this virgin soil, where the heat and the moisture agreed to produce vegetation, it might well be thought that the reign of growth appeared in all its power. The parallel of this vast plateau was almost confounded with tropical latitudes, and, during certain months in summer, the sun, in passing to the zenith, darted its perpendicular rays there. There was, therefore, an enormous quantity of imprisoned heat in this earth, of which the subsoil preserved the damp. Also, nothing could be more magnificent than this succession of forests, or rather this interminable forest.

Meanwhile, Dick Sand had not failed to observe this—-that, according to Harris, they were in the region of the pampas. Now, pampas is a word from the "quichna" language, which signifies a plain. Now, if his recollections did not deceive him, he believed that these plains presented the following characteristics: Lack of water, absence of trees, a failure of stones, an almost luxuriant abundance of thistles during the rainy season, thistles which became almost shrubby with the warm season, and then formed impenetrable thickets; then, also, dwarf trees, thorny shrubs, the whole giving to these plains a rather arid and desolate aspect.

Now, it had not been thus, since the little troop, guided by the American, had left the coast. The forest had not ceased to spread to the limits of the horizon. No, this was not the pampas, such as the young novice had imagined them. Had nature, as Harris had told him, been able to make a region apart from the plateau of Atacama, of which he knew nothing, if it did not form one of the most vast deserts of South America, between the Andes and the Pacific Ocean?

On that day Dick Sand propounded some questions on this subject, and expressed to the American the surprise he felt at this singular appearance of the pampas.

But he was quickly undeceived by Harris, who gave him the most exact details about this part of Bolivia, thus witnessing to his great knowledge of the country.

"You are right, my young friend," he said to the novice. "The true pampa is indeed such as the books of travels have depicted it to you, that is, a plain rather arid, and the crossing of which is often difficult. It recalls our savannahs of North America—-except that these are a little marshy. Yes, such is indeed the pampa of the Rio Colorado, such are the "llanos" of the Orinoco and of Venezuela. But here, we are in a country, the appearance of which even astonishes me. It is true, it is the first time I have followed this route across the plateau, a route which has the advantage of shortening our journey. But, if I have not yet seen it, I know that it presents an extraordinary contrast to the veritable pampa. As to this one, you would find it again, not between the Cordilleras of the west and the high chain of the Andes, but beyond the mountains, over all that eastern part of the continent which extends as far as the Atlantic."

"Must we then clear the Andes range?" Dick Sand asked, quickly.

"No, my young friend, no," replied the American, smiling. "So I said: You _would_ find it again, and not: You _will_ find it again. Be reassured, we shall not leave this plateau, those elevations of which do not exceed fifteen hundred feet. Ah! if it had been necessary to cross the Cordilleras with only the means of transport at our disposal, I should never have drawn you into such an undertaking."

"In fact," replied Dick Sand, "it would be better to ascend or descend the coast."

"Oh! a hundred times!" replied Harris. "But the Farm of San Felice is situated on this side of the Cordilleras. So, then, our journey, neither in its first nor in its second part, will offer any real difficulty."

"And you do not fear going astray in these forests, which you cross for the first time?" asked Dick Sand.

"No, my young friend, no," replied Harris. "I know indeed that this forest is like an immense sea, or rather like the bottom of a sea, where a sailor himself could not take the latitude nor recognize his position. But accustomed to traveling in the woods, I know how to find my route only by the inclination of certain trees, by the direction of their leaves, by the movement or the composition of the soil, by a thousand details which escape you! Be sure of it, I will lead you, you and yours, where you ought to go!"

All these things were said very clearly by Harris. Dick Sand and he, at the head of the troop, often talked without any one mingling in their conversation. If the novice felt some doubts that the American did not always succeed in scattering, he preferred to keep them to himself.

The 8th, 9th, 10th, 11th, and 12th of April passed in this manner, without any incident to mark the journey. They did not make more than eight to nine miles in twelve hours. The times consecrated to eating or repose came at regular intervals, and though a little fatigue was felt already, the sanitary condition was still very satisfactory.

Little Jack began to suffer a little from this life in the woods, to which he was not accustomed, and which was
becoming very monotonous for him. And then all the promises which had been made him had not been kept. The caoutchouc jumping-jacks, the humming-birds, all those seemed constantly to recede. There had also been a question of showing him the most beautiful parrots in the world, and they ought not to be wanting in these rich forests. Where, then, were the popinjays with green plumage, almost all originally from these countries, the _aras_, with naked cheeks, with long pointed tails, with glittering colors, whose paws never rest on the earth, and the "camindes," which are more peculiar to tropical countries, and the many-colored she-parrots, with feathered faces, and finally all those prattling birds which, according to the Indians, still speak the language of extinct tribes?

Of parrots, little Jack only saw ash-gray jakos, with red tails, which abounded under the trees. But these jakos were not new to him. They have transported them into all parts of the world. On the two continents they fill the houses with their insupportable chattering, and, of all the family of the "psittacius," they are the ones which learn to speak most easily.

It must be said, besides, that if Jack was not contented, Cousin Benedict was no more so. He had been allowed to wander a little to the right or to the left during the march. However, he had not found any insect which was fit to enrich his collection. Even the "pyrophores" obstinately refused to show themselves to him, and attract him by the phosphorescences of their corselet. Nature seemed truly to mock the unhappy entomologist, whose temper was becoming cross.

For four days more the march toward the northeast was continued in the same way. On the 16th of April the distance traversed from the coast could not be estimated at less than one hundred miles. If Harris had not gone astray—and he affirmed it without hesitation—the Farm of San Felice was no more than twenty miles from the halting place of that day. Before forty-eight hours the little troop then would have a comfortable shelter where its members could at last repose from their fatigues.

Meanwhile, though the plateau had been almost entirely crossed in its middle part, not a native, not a wanderer had been encountered under the immense forest.

More than once, without saying anything about it, Dick Sand regretted being unable to go ashore on some other point of the coast. More to the south, or more to the north, villages, hamlets, or plantations would not have been lacking, and long before this Mrs. Weldon and her companions would have found an asylum.

But, if the country seemed to be abandoned by man, animals showed themselves more frequently during these last days. At times was heard a kind of long, plaintive cry, that Harris attributed to some of those large tardi-grades, habitual denizens of those vast wooded regions, named "ais."

On that day, also, during the midday halt, a hissing passed through the air, which made Mrs. Weldon very uneasy, because it was so strange.

"What is that?" she asked, rising hastily.

"A serpent!" cried Dick Sand, who gun, in hand, threw himself before Mrs. Weldon.

They might fear, in fact, that some reptile would glide among the plants to the halting place. It would be nothing astonishing if it were one of those enormous "sucurus," kinds of boas, which sometimes measure forty feet in length.

But Harris reminded Dick Sand that the blacks were already following, and he reassured Mrs. Weldon.

According to him, that hissing could not be produced by a "sucurus," because that serpent does not hiss; but he indicated the presence of several inoffensive quadrupeds, rather numerous in that country.

"Be reassured, then," said he, "and make no movement which may frighten those animals."

"But what are they?" asked Dick Sand, who made it like a law of conscience to interrogate and make the American speak—who, however, never required pressing before replying.

"They are antelopes, my young friend," replied Harris.

"Oh! how I should like to see them!" cried Jack.

"That is very difficult, my good little man," replied the American, "very difficult."

"Perhaps we may try to approach than—those hissing antelopes?" returned Dick Sand.

"Oh! you will not take three steps," replied the American, shaking his head, "before the whole band will take flight. I beg of you, then, not to trouble yourself."

But Dick Sand had his reasons for being curious. He wished to see, and, gun in hand, he glided among the herbs. Immediately a dozen graceful gazelles, with small, sharp horns, passed with the rapidity of a water-spout. Their hair, bright red, looked like a cloud of fire under the tall underwood of the forest.

"I had warned you," said Harris, when the novice returned to take his place.

Those antelopes were so light of foot, that it had been truly impossible to distinguish them; but it was not so with another troop of animals which was signaled the same day. Those could be seen—imperfectly, it is true—but their apparition led to a rather singular discussion between Harris and some of his companions.

The little troop, about four o'clock in the afternoon, had stopped for a moment near an opening in the woods, when three or four animals of great height went out of a thicket a hundred steps off, and scampered away at once
with remarkable speed.

In spite of the American's recommendations, this time the novice, having quickly shouldered his gun, fired at one of these animals. But at the moment when the charge was going off, the weapon had been rapidly turned aside by Harris, and Dick Sand, skilful as he was, had missed his aim.

"No firing; no firing!" said the American.

"Ah, now, but those are giraffes!" cried Dick Sand, without otherwise replying to Harris's observation.

"Giraffes!" repeated Jack, standing up on the horse's saddle. "Where are they, the large beasts?"

"Giraffes!" replied Mrs. Weldon. "You are mistaken, my dear Dick. There are no giraffes in America."

"Indeed," said Harris, who appeared rather surprised, "there cannot be any giraffes in this country."

"What, then?" said Dick Sand.

"I really do not know what to think," replied Harris. "Have not your eyes deceived you, my young friend, and are not those animals more likely to be ostriches?"

"Ostriches!" repeated Dick Sand and Mrs. Weldon, looking at each other in great surprise.

"Yes, only ostriches," repeated Harris.

"But ostriches are birds," returned Dick Sand, "and consequently they have only two feet."

"Well," replied Harris, "I indeed thought I saw that those animals, which have just made off so rapidly, were bipeds."

"Bipeds!" replied the novice.

"Indeed it seemed to me that I saw animals with four legs," then said Mrs. Weldon.

"I also," added old Tom; then Bat, Acteon, and Austin confirmed those words.

"Ostriches with four legs!" cried Harris, with a burst of laughter. "That would be ridiculous!"

"So," returned Dick Sand, "we have believed they were giraffes, and not ostriches."

"No, my young friend, no," said Harris. "You have certainly seen badly. That is explained by the rapidity with which those animals have flown away. Besides, it has happened more than once that hunters have been deceived like you, and in the best faith in the world."

What the American said was very plausible. Between an ostrich of great height and a giraffe of medium height, seen at a certain distance, it is easy to make a mistake. If it were a question of a beak or a nose, both are none the less joined to the end of a long neck turned backward, and, strictly speaking, it may be said that an ostrich is only a half giraffe. It only needs the hind legs. Then, this biped and this quadruped, passing rapidly, on a sudden may, very properly, be taken one for the other.

Besides, the best proof that Mrs. Weldon and the others were mistaken was that there are no giraffes in America. Dick Sand then made this reflection:

"But I believed that ostriches were not met with in the New World any more than giraffes."

"Yes, my young friend," replied Harris; "and, indeed, South America possesses a peculiar species. To this species belongs the 'nandon,' which you have just seen."

Harris spoke the truth. The "nandon" is a long-legged bird, rather common in the plains of South America, and its flesh, when it is young, is good to eat.

This strong animal, whose height sometimes exceeds two meters, has a straight beak; wings long, and formed of tufted feathers of a bluish shade; feet formed of three claws, furnished with nails—which essentially distinguishes it from the ostriches of Africa.

These very exact details were given by Harris, who appeared to be very strongly posted on the manners of the "nandons."

Mrs. Weldon and her companions were obliged to acknowledge that they had been deceived.

"Besides," added Harris, "possibly we may encounter another band of these ostriches. Well, next time look better, and no longer allow yourselves to take birds for quadrupeds! But above all, my young friend, do not forget my recommendations, and do not fire on any animal whatsoever. We have no need of hunting to procure food, and no detonation of a fire-arm must announce our presence in this forest."

Meanwhile Dick Sand remained pensive. Once more a doubt had just arisen on his mind.

The next day, April 17th, the march was continued, and the American affirmed that twenty-four hours would not pass before the little troop should be installed at the Farm of San Felice.

"There, Mrs. Weldon," added he, "you will receive all the care necessary to your position, and a few days' rest will quite restore you. Perhaps you will not find at this farm the luxury to which you are accustomed in your residence in San Francisco, but you will see that our improved lands in the interior do not lack what is comfortable. We are not absolutely savages."

"Mr. Harris," replied Mrs. Weldon, "if we have only thanks to offer you for your generous resort, at least we shall offer them to you with all our hearts. Yes! It is time for us to arrive there!"
"You are very much fatigued, Mrs. Weldon?"
"I, no matter!" replied Mrs. Weldon; "but I perceive that my little Jack is gradually becoming exhausted! The fever begins to affect him at certain hours!"
"Yes," replied Harris, "and although the climate of this plateau is very healthful, it must be acknowledged that in March and April intermittent fevers reign."
"Doubtless," then said Dick Sand, "but also Nature, who is always and everywhere provident, has put the remedy near the evil!"
"And how is that, my young friend?" asked Harris, who did not seem to understand.
"Are we not, then, in the region of the quininae?" replied Dick Sand.
"In fact," said Harris, "you are perfectly right. The trees which furnish the precious febrifuge bark are native here."
"I am even astonished," added Dick Sand, "that we have not yet seen a single one."
"Ah! my young friend," replied Harris, "those trees are not easy to distinguish. Though they are often of great height, though their leaves are large, their flowers rosy and odoriferous, we do not discover them easily. It is rarely that they grow in groups. They are rather scattered through the forests, and the Indians who collect the quinina can only recognize them by their foliage, always green."
"Mr. Harris," said Mrs. Weldon, "if you see one of those trees you will show it to me."
"Certainly, Mrs. Weldon, but at the farm you will find some sulphate of quinine. That is worth still more to break the fever than the simple bark of the tree."
Formerly, this bark was only reduced to powder, which bore the name of "Jesuits' Powder," because, in 1649, the Jesuits of Rome received a considerable quantity from their mission in America.
This last day of the journey passed without other incident. Evening came and the halt was organized for the whole night as usual. Till then it had not rained, but the weather was preparing to change, for a warm mist rose from the soil and soon found a thick fog.
They were touching, in fact, on the rainy season. Fortunately, the next day, a comfortable shelter would be hospitably offered to the little troop. There were only a few hours to elapse.
Though, according to Harris, who could only establish his calculation by the time which the journey had lasted, they could not be more than six miles from the farm, the ordinary precautions were taken for the night. Tom and his companions would watch one after the other. Dick Sand insisted that nothing should be neglected in that respect.
Less than ever, would he depart from his habitual prudence, for a terrible suspicion was incrusted in his mind; but he did not wish to say anything yet.
The retiring to rest had been made at the feet of a group of large trees. Fatigue aiding, Mrs. Weldon and hers were already asleep, when they were awakened by a great cry.
"Eh! what's the matter?" asked Dick Sand, quickly, who was on his feet first of all.
"It is I! it is I who have cried!" replied Cousin Benedict.
"And what is the matter with you?" asked Mrs. Weldon.
"I have just been bit!"
"By a serpent?" asked Mrs. Weldon, with alarm.
"No, no! It was not a serpent, but an insect," replied Cousin Benedict. "Ah! I have it! I have it!"
"Well, crush your insect," said Harris, "and let us sleep, Mr. Benedict!"
"Crush an insect!" cried Cousin Benedict. "Not so! I must see what it is!"
"Some mosquito!" said Harris, shrugging his shoulders.
"No! It is a fly," replied Cousin Benedict, "and a fly which ought to be very curious!"
Dick Sand had lit a little portable lantern, and he approached Cousin Benedict.
"Divine goodness!" cried the latter. "Behold what consoles me for all my deceptions! I have, then, at last made a discovery!"
The honest man was raving. He looked at his fly in triumph. He would willingly kiss it.
"But what is it, then?" asked Mrs. Weldon.
"A dipter, cousin, a famous dipter!" And Cousin Benedict showed a fly smaller than a bee, of a dull color, streaked with yellow on the lower part of its body.
"And this fly is not venomous?" asked Mrs. Weldon.
"No, cousin, no; at least not for man. But for animals, for antelopes, for buffaloes, even for elephants, it is another thing. Ah! adorable insect!"
"At last," asked Dick Sand, "will you tell us, Mr. Benedict, what is this fly?"
"This fly," replied the entomologist, "this fly that I hold between my fingers, this fly--it is a _tsetse_! It is that famous dipter that is the honor of a country, and, till now, no one has ever found a _tsetse_ in America!"
Dick Sand did not dare to ask Cousin Benedict in what part of the world this redoubtable _tsetse_ was only to be met. And when his companions, after this incident, had returned to their interrupted sleep, Dick Sand, in spite of the fatigue which overwhelmed him, did not close his eyes the whole night.

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CHAPTER XVIII.
THE TERRIBLE WORD.

It was time to arrive. Extreme lassitude made it impossible for Mrs. Weldon to continue any longer a journey made under such painful conditions. Her little boy, crimson during the fits of fever, very pale during the intermissions, was pitiable to see. His mother extremely anxious, had not been willing to leave Jack even in the care of the good Nan. She held him, half-lying, in her arms.

Yes, it was time to arrive. But, to trust to the American, on the very evening of this day which was breaking—the evening of the 18th of April, the little troop should finally reach the shelter of the "hacienda" of San Felice.

Twelve days' journey for a woman, twelve nights passed in the open air; it was enough to overwhelm Mrs. Weldon, energetic as she was. But, for a child, it was worse, and the sight of little Jack sick, and without the most ordinary cares, had sufficed to crush her.

Dick Sand, Nan, Tom, and his companions had supported the fatigues of the journey better.

Their provisions, although they were commencing to get exhausted, had not become injured, and their condition was satisfactory.

As for Harris, he seemed made for the difficulties of these long journeys across the forests, and it did not appear that fatigue could affect him. Only, in proportion as he neared the farm, Dick Sand observed that he was more preoccupied and less frank in behavior than before. The contrary would have been more natural. This was, at least, the opinion of the young novice, who had now become more than suspicious of the American. And meanwhile, what interest could Harris have in deceiving them? Dick Sand could not have explained it, but he watched their guide more closely.

The American probably felt himself suspected by Dick Sand, and, no doubt, it was this mistrust which made him still more taciturn with "his young friend."

The march had been resumed.

In the forest, less thick, the trees were scattered in groups, and no longer formed impenetrable masses. Was it, then, the true pampas of which Harris had spoken?

During the first hours of the day, no accident happened to aggravate the anxieties that Dick Sand felt. Only two facts were observed by him. Perhaps they were not very important, but in these actual junctures, no detail could be neglected.

It was the behavior of Dingo which, above all, attracted more especially the young man's attention.

In fact the dog, which, during all this journey, had seemed to be following a scent, became quite different, and that almost suddenly. Until then, his nose to the ground, generally smelling the herbs or the shrubs, he either kept quiet, or he made a sort of sad, barking noise, like an expression of grief or of regret.

Now, on this day, the barking of the singular animal became like bursts, sometimes furious, such as they formerly were when Negoro appeared on the deck of the "Pilgrim." A suspicion crossed suddenly Dick Sand's mind, and it was confirmed by Tom, who said to him:

"How very singular, Mr. Dick! Dingo no longer smells the ground as he did yesterday! His nose is in the air, he is agitated, his hair stands up! One would think he scented in the distance----"

"Negoro, is it not so?" replied Dick Sand, who seized the old black's arm, and signed to him to speak in a low voice.

"Negoro, Mr. Dick! May it not be that he has followed our steps?"

"Yes, Tom; and that at this moment even he may not be very far from us."

"But why?" said Tom.

"Either Negoro does not know this country," went on Dick Sand, "and then he would have every interest in not losing sight of us-----"

"Or?" said Tom, who anxiously regarded the novice.

"Or," replied Dick Sand, "he does know it, and then he-----"

"But how should Negoro know this country? He has never come here!"

"Has he never been here?" murmured Dick Sand.

"It is an incontestable fact that Dingo acts as if this man whom he detests were near us!"

Then, interrupting himself to call the dog, which, after some hesitation, came to him:
"Eh!" said he; "Negoro! Negoro!"

A furious barking was Dingo's reply. This name had its usual effect upon him, and he darted forward, as if Negoro had been hidden behind some thicket.

Harris had witnessed all this scene. With his lips a little drawn, he approached the novice.

"What did you ask Dingo then?" said he.

"Oh, not much, Mr. Harris," replied old Tom, jokingly. "We asked him for news of the ship-companion whom we have lost!"

"Ah!" said the American, "the Portuguese, the ship's cook of whom you have already spoken to me?"

"Yes," replied Tom. "One would say, to hear Dingo, that Negoro is in the vicinity."

"How could he get as far as this?" replied Harris.

"He never was in this country that I know of; at least, he concealed it from us," replied Tom.

"It would be astonishing," said Harris. "But, if you wish, we will beat these thickets. It is possible that this poor devil has need of help; that he is in distress."

"It is useless, Mr. Harris," replied Dick Sand. "If Negoro has known how to come as far as this, he will know how to go farther. He is a man to keep out of trouble."

"As you please," replied Harris.

"Let us go. Dingo, be quiet," added Dick Sand, briefly, so as to end the conversation.

The second observation made by the novice was in connection with the American horse. He did not appear to "feel the stable," as do animals of his species. He did not suck in the air; he did not hasten his speed; he did not dilate his nostrils; he uttered none of the neighings that indicate the end of a journey. To observe him well, he appeared to be as indifferent as if the farm, to which he had gone several times, however, and which he ought to know, had been several hundreds of miles away.

"That is not a horse near home," thought the young novice.

And, meanwhile, according to what Harris had said the evening before, there only remained six miles to go, and, of these last six miles, at five o'clock in the evening four had been certainly cleared.

Now, if the horse felt nothing of the stable, of which he should have great need, nothing besides announced the approaches to a great clearing, such as the Farm of San Felice must be.

Mrs. Weldon, indifferent as she then was to what did not concern her child, was struck at seeing the country still so desolate. What! not a native, not a farm-servant, at such a short distance! Harris must be wild! No! she repulsed this idea. A new delay would have been the death of her little Jack!

Meanwhile, Harris always kept in advance, but he seemed to observe the depths of the wood, and looked to the right and left, like a man who was not sure of himself--nor of his road.

Mrs. Weldon shut her eyes so as not to see him.

After a plain a mile in extent, the forest, without being as dense as in the west, had reappeared, and the little troop was again lost under the great trees.

At six o'clock in the evening they had reached a thicket, which appeared to have recently given passage to a band of powerful animals. Dick Sand looked around him very attentively. At a distance which far surpassed the human height, the branches were torn off or broken. At the same time the herbs, roughly scattered, exhibited on the soil, a little marshy, prints of steps which could not be those of jaguars, or cougars.

Were these, then, the "ais," or some other tardigraves, whose feet had thus marked the soil? But how, then, explain the break in the branches at such a height?

Elephants might have, without doubt, left such imprints, stamped these large traces, made a similar hole in the impenetrable underwood. But elephants are not found in America. These enormous thick-skinned quadrupeds are not natives of the New World. As yet, they have never been acclimated there.

The hypothesis that elephants had passed there was absolutely inadmissible.

However that might be, Dick Sand hardly knew how much this inexplicable fact gave him to think about. He did not even question the American on this point. What could he expect from a man who had tried to make him take giraffes for ostriches? Harris would have given him some explanation, more or less imaginative, which would not have changed the situation.

At all events, Dick had formed his opinion of Harris. He felt in him a traitor! He only awaited an occasion to unmask his disloyalty, to have the right to do it, and everything told him that this opportunity was near.

But what could be Harris's secret end? What future, then, awaited the survivors of the "Pilgrim?" Dick Sand repeated to himself that his responsibility had not ceased with the shipwreck. It was more than ever necessary for him to provide for the safety of those whom the waves had thrown on this coast! This woman, this young child, these blacks--all his companions in misfortune--it was he alone who must save them! But, if he could attempt anything on board ship, if he could act on the sea, here, in the midst of the terrible trials which he foresaw, what part
could he take?

Dick Sand would not shut his eyes before the frightful reality that each instant made more indisputable. In this juncture he again became the captain of fifteen years, as he had been on the "Pilgrim." But he would not say anything which could alarm the poor mother before the moment for action had arrived.

And he said nothing, not even when, arrived on the bank of a rather large stream, preceding the little troop about one hundred feet, he perceived enormous animals, which threw themselves under the large plants on the brink.

"Hippopotami! hippopotami!" he was going to exclaim.

And they were, indeed, these thick-skinned animals, with a big head, a large, swollen snout, a mouth armed with teeth which extend a foot beyond it--animals which are squat on their short limbs, the skin of which, unprovided with hair, is of a tawny red. Hippopotami in America!

They continued to march during the whole day, but painfully. Fatigue commenced to retard even the most robust. It was truly time to arrive, or they would be forced to stop.

Mrs. Weldon, wholly occupied with her little Jack, did not perhaps feel the fatigue, but her strength was exhausted. All, more or less, were tired. Dick Sand, resisted by a supreme moral energy, caused by the sentiment of duty.

Toward four o'clock in the evening, old Tom found, in the grass, an object which attracted his attention. It was an arm, a kind of knife, of a particular shape, formed of a large, curved blade, set in a square, ivory handle, rather roughly ornamented. Tom carried this knife to Dick Sand, who took it, examined it, and, finally, showed it to the American, saying:

"No doubt the natives are not very far off."

"That is so," replied Harris, "and meanwhile----"

"Meanwhile?" repeated Dick Sand, who now steadily looked Harris in the face.

"We should be very near the farm," replied Harris, hesitating, "and I do not recognize----"

"You are then astray?" quickly asked Dick Sand.

"Astray! no. The farm cannot be more than three miles away, now. But, I wished to take the shortest road through the forest, and perhaps I have made a little mistake!"

"Perhaps," replied Dick Sand.

"I would do well, I think, to go in advance," said Harris.

"No, Mr. Harris, we will not separate," replied Dick Sand, in a decided tone.

"As you will," replied the American. "But, during the night, it will be difficult for me to guide you."

"Never mind that!" replied Dick Sand. "We are going to halt. Mrs. Weldon will consent to pass a last night under the trees, and to-morrow, when it is broad daylight, we will proceed on our journey! Two or three miles still, that will be an hour's walk!"

"Be it so," replied Harris.

At that moment Dingo commenced to bark furiously.

"Here, Dingo, here!" cried Dick Sand. "You know well that no one is there, and that we are in the desert!"

This last halt was then decided upon.

Mrs. Weldon let her companions work without saying a word. Her little Jack was sleeping in her arms, made drowsy by the fever.

They sought the best place to pass the night. This was under a large bunch of trees, where Dick Sand thought of disposing all for their rest. But old Tom, who was helping him in these preparations, stopped suddenly, crying out:

"Mr. Dick! look! look!"

"What is it, old Tom?" asked Dick Sand, in the calm tone of a man who attends to everything.

"There--there!" cried Tom; "on those trees--blood stains!--and--on the ground--mutilated limbs!"

Dick Sand rushed toward the spot indicated by old Tom. Then, returning to him: "Silence, Tom, silence!" said he.

In fact, there on the ground were hands cut off, and above these human remains were several broken forks, and a chain in pieces!

Happily, Mrs. Weldon had seen nothing of this horrible spectacle.

As for Harris, he kept at a distance, and any one observing him at this moment would have been struck at the change made in him. His face had something ferocious in it.

Dingo had rejoined Dick Sand, and before these bloody remains, he barked with rage.

The novice had hard work to drive him away.

Meanwhile, old Tom, at the sight of these forks, of this broken chain, had remained motionless, as if his feet were rooted in the soil. His eyes were wide open, his hands clenched; he stared, murmuring these incoherent words:

"I have seen--already seen--these forks--when little--I have seen!"
And no doubt the memories of his early infancy returned to him vaguely. He tried to recall them. He was going to speak.

"Be silent, Tom!" repeated Dick Sand. "For Mrs. Weldon's sake, for all our sakes, be silent!"

And the novice led the old black away.

Another halting place was chosen, at some distance, and all was arranged for the night.

The repast was prepared, but they hardly touched it. Fatigue took away their hunger. All were under an indefinable impression of anxiety which bordered on terror.

 Darkness came gradually: soon it was profound. The sky was covered with great stormy clouds. Between the trees in the western horizon they saw some flashes of heat lightning. The wind had fallen; not a leaf moved on the trees. An absolute silence succeeded the noises of the day, and it might be believed that the heavy atmosphere, saturated with electricity, was becoming unfit for the transmission of sounds.

Dick Sand, Austin, and Bat watched together. They tried to see, to hear, during this very dark night, if any light whatsoever, or any suspicious noise should strike their eyes or their ears. Nothing troubled either the calm or the obscurity of the forest.

Torn, not sleepy, but absorbed in his remembrances, his head bent, remained quiet, as if he had been struck by some sudden blow.

Mrs. Weldon rocked her child in her arms, and only thought of him.

Only Cousin Benedict slept, perhaps, for he alone did not suffer from the common impression. His faculty for looking forward did not go so far.

Suddenly, about eleven o'clock, a prolonged and grave roaring was heard, with which was mingled a sort of sharper shuddering. Tom stood up and stretched out his hand toward a dense thicket, a mile or more distant.

Dick Sand seized his arm, but he could not prevent Tom from crying in a loud voice: "The lion! the lion!"

This roaring, which he had so often heard in his infancy, the old black had just recognized it.

"The lion!" he repeated.

Dick Sand, incapable of controlling himself longer, rushed, cutlass in hand, to the place occupied by Harris.

Harris was no longer there, and his horse had disappeared with him.

A sort of revelation took place in Dick Sand's mind. He was not where he had believed he was!

So it was not on the American coast that the "Pilgrim" had gone ashore! It was not the Isle of Paques, whose bearing the novice had taken at sea, but some other island situated exactly to the west of this continent, as the Isle of Paques is situated to the west of America.

The compass had deceived him during a part of the voyage, we know why! Led away by the tempest over a false route, he must have doubled Cape Horn, and from the Pacific Ocean he had passed into the Atlantic! The speed of his ship, which he could only imperfectly estimate, had been doubled, unknown to him, by the force of the hurricane!

Behold why the caoutchouc trees, the quinquinas, the products of South America were missing in this country, which was neither the plateau of Atacama nor the Bolivian pampa!

Yes, they were giraffes, not ostriches, which had fled away in the opening! They were elephants that had crossed the thick underwood! They were hippopotami whose repose Dick Sand had troubled under the large plants! It was the _tsetse_, that dipter picked up by Benedict, the formidable _tsetse_ under whose stings the animals of the caravans perish!

Finally, it was, indeed, the roaring of the lion that had just sounded through the forest! And those forks, those chains, that knife of singular form, they were the tools of the slave-trader! Those mutilated hands, they were the hands of captives!

The Portuguese Negoro, and the American Harris, must be in collusion! And those terrible words guessed by Dick Sand, finally escaped his lips:

"Africa! Equatorial Africa! Africa of the slave-trade and the slaves!"

End of Part I

_PART II_

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CHAPTER I.
THE SLAVE TRADE.

The slave trade! Nobody is ignorant of the significance of this word, which should never have found a place in
human language. This abominable traffic, for a long time practised to the profit of the European nations which possessed colonies beyond the sea, has been already forbidden for many years. Meanwhile it is always going on a large scale, and principally in Central Africa. Even in this nineteenth century the signature of a few States, calling themselves Christians, are still missing from the Act for the Abolition of Slavery.

We might believe that the trade is no longer carried on; that this buying and this selling of human creatures has ceased; it is not so, and that is what the reader must know if he wishes to become more deeply interested in the second part of this history. He must learn what these men-hunts actually are still, these hunts which threaten to depopulate a whole continent for the maintenance of a few slave colonies; where and how these barbarous captures are executed; how much blood they cost; how they provoke incendiarism and pillage; finally, for whose profit they are made.

It is in the fifteenth century only that we see the trade in blacks carried on for the first time. Behold under what circumstances it was established:

The Mussulmans, after being expelled from Spain, took refuge beyond the Strait on the coast of Africa. The Portuguese, who then occupied that part of the coast, pursued them with fury. A certain number of those fugitives were made prisoners and brought back to Portugal. Reduced to slavery, they constituted the first nucleus of African slaves which has been formed in Western Europe since the Christian Era.

But those Mussulmans belonged, for the most part, to rich families, who wished to buy them back for gold. The Portuguese refused to accept a ransom, however large it might be. They had only to make foreign gold. What they lacked were the arms so indispensable then for the work of the growing colonies, and, to say it all, the arms of the slave.

The Mussulman families, being unable to buy back their captive relatives, then offered to exchange them for a much larger number of black Africans, whom it was only too easy to carry off. The offer was accepted by the Portuguese, who found that exchange to their advantage, and thus the slave trade was founded in Europe.

Toward the end of the sixteenth century this odious traffic was generally admitted, and it was not repugnant to the still barbarous manners. All the States protected it so as to colonize more rapidly and more surely the isles of the New World. In fact, the slaves of black origin could resist the climate, where the badly acclimated whites, still unfit to support the heat of intertropical climates, would have perished by thousands. The transport of negroes to the American colonies was then carried on regularly by special vessels, and this branch of transatlantic commerce led to the creation of important stations on different points of the African coast. The "merchandise" cost little in the country of production, and the returns were considerable.

But, necessary as was the foundation of the colonies beyond the sea from all points of view, it could not justify those markets for human flesh. Generous voices soon made themselves heard, which protested against the trade in blacks, and demanded from the European governments a decree of abolition in the name of the principles of humanity.

In 1751, the Quakers put themselves at the head of the abolition movement, even in the heart of that North America where, a hundred years later, the War of Secession was to burst forth, to which this question of slavery was not a foreign one. Different States in the North--Virginia, Connecticut, Massachusetts, Pennsylvania--decreed the abolition of the slave trade, and freed the slaves brought to their territories at great expense.

But the campaign commenced by the Quakers did not limit itself to the northern provinces of the New World. Slaveholders were warmly attacked beyond the Atlantic. France and England, more particularly, recruited partisans for this just cause. "Let the colonies perish rather than a principle!" Such was the generous command which resounded through all the Old World, and, in spite of the great political and commercial interests engaged in the question, it was effectively transmitted through Europe.

The impetus was given. In 1807, England abolished the slave-trade in her colonies, and France followed her example in 1814. The two powerful nations exchanged a treaty on this subject--a treaty confirmed by Napoleon during the Hundred Days.

However, that was as yet only a purely theoretical declaration. The slave-ships did not cease to cross the seas, and to dispose of their "ebony cargoes" in colonial ports.

More practical measures must be taken in order to put an end to this commerce. The United States, in 1820, and England, in 1824, declared the slave trade an act of piracy, and those who practised it pirates. As such, they drew on themselves the penalty of death, and they were pursued to the end. France soon adhered to the new treaty; but the States of South America, and the Spanish and Portuguese colonies, did not join in the Act of Abolition. The exportation of blacks then continued to their profit, notwithstanding the right of search generally recognized, which was limited to the verification of the flag of suspicious vessels.

Meanwhile, the new Law of Abolition had not a retroactive effect. No more new slaves were made, but the old ones had not yet recovered their liberty.
It was under those circumstances that England set an example. In May, 1833, a general declaration emancipated all the blacks in the colonies of Great Britain, and in August, 1838, six hundred and seventy thousand slaves were declared free.

Ten years later, in 1848, the Republic emancipated the slaves of the French colonies, say about two hundred and sixty thousand blacks. In 1861, the war which broke out between the Federals and Confederates, of the United States, finishing the work of emancipation, extended it to all North America.

The three great powers had then accomplished this work of humanity. At the present hour, the trade is no longer carried on, except for the benefit of the Spanish and Portuguese colonies, and to satisfy the wants of the populations of the Orient, Turks, or Arabs. Brazil, if she has not yet restored her old slaves to liberty, at least no longer receives new ones, and the children of the blacks are born free there.

It is in the interior of Africa, in the prosecution of those bloody wars, waged by the African chiefs among themselves for this man-hunt, that entire tribes are reduced to slavery. Two opposite directions are then given to the caravans: one to the west, toward the Portuguese colony of Angola; the other to the east, on the Mozambique. Of these unfortunate beings, of whom only a small portion arrive at their destination, some are exported, it may be to Cuba, it may be to Madagascar; others to the Arab or Turkish provinces of Asia, to Mecca, or to Muscat. The English and French cruisers can only prevent this traffic to a small extent, as it is so difficult to obtain an effective surveillance over such far-extended coasts.

But the figures of these odious exportations, are they still considerable?

Yes! The number of slaves who arrive at the coast is estimated at not less than eighty thousand; and this number, it appears, only represents the tenth of natives massacred.

After these dreadful butcheries the devastated fields are deserted, the burnt villages are without inhabitants, the rivers carry down dead bodies, deer occupy the country. Livingstone, the day after one of these men-hunts, no longer recognized the provinces he had visited a few months before. All the other travelers—Grant, Speke, Burton, Cameron, and Stanley—do not speak otherwise of this wooded plateau of Central Africa, the principal theater of the wars between the chiefs. In the region of the great lakes, over all that vast country which feeds the market of Zanzibar, in Bornou and Fezzan, farther south, on the banks of the Nyassa and the Zambesi, farther west, in the districts of the upper Zaire, which the daring Stanley has just crossed, is seen the same spectacle—ruins, massacres, depopulation. Then will slavery in Africa only end with the disappearance of the black race; and will it be with this race as it is with the Australian race, or the race in New Holland?

But the market of the Spanish and Portuguese colonies will close some day. That outlet will be wanting. Civilized nations can no longer tolerate the slave trade!

Yes, without doubt; and this year even, 1878, ought to see the enfranchisement of all the slaves still possessed by Christian States. However, for long years to come the Mussulman nations will maintain this traffic, which depopulates the African continent. It is for them, in fact, that the most important emigration of the blacks is made, as the number of natives snatched from their provinces and brought to the eastern coast annually exceeds forty thousand. Long before the expedition to Egypt the negroes of the Senaara were sold by thousands to the negroes of the Darfour, and reciprocally. General Bonaparte was able to buy a pretty large number of these blacks, of whom he made organized soldiers, like the Mamelukes. Since then, during this century, of which four-fifths have now passed away, commerce in slaves has not diminished in Africa. On the contrary.

And, in fact, Islamism is favorable to the slave trade. The black slave must replace the white slave of former times, in Turkish provinces. So contractors of every origin pursue this execrable traffic on a large scale. They thus carry a supplement of population to those races, which are dying out and will disappear some day, because they do not regenerate themselves by labor. These slaves, as in the time of Bonaparte, often become soldiers. With certain nations of the upper Niger, they compose the half of the armies of the African chiefs. Under these circumstances, their fate is not sensibly inferior to that of free men. Besides, when the slave is not a soldier, he is money which has circulation; even in Egypt and at Bornou, officers and functionaries are paid in that money. William Lejean has seen it and has told of it.

Such is, then, the actual state of the trade.

Must it be added that a number of agents of the great European powers are not ashamed to show a deplorable indulgence for this commerce. Nevertheless, nothing is truer; while the cruisers watch the coasts of the Atlantic and the Indian Oceans, the traffic goes on regularly in the interior, the caravans walk on under the eyes of certain functionaries, and massacres, where ten blacks perish to furnish one slave, take place at stated periods!

So it will now be understood how terrible were those words just pronounced by Dick Sand.

"Africa! Equatorial Africa! Africa of slave-traders and slaves!"

And he was not deceived; it was Africa with all its dangers, for his companions and for himself.

But on what part of the African continent had an inexplicable fatality landed him? Evidently on the western
of the cataracts of Massassa, he lost one of his companions, Francis Pocock. July 18th he was drawn with his boat
was the upper Zaire, or Congo, and that by following its course he could descend directly to the sea.

courageous American, reascending as far as the second degree of northern latitude, ascertained that the Loualaba
several hundred natives, attacked Stanley's little fleet, which succeeded in putting them to flight. Then the

expedition.

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in the Maroungou and Manyouema countries by the officers of the Sultan of Zanzibar.

which had been already visited by Livingstone and Cameron. Here he witnessed the most horrible scenes, practised

epidemic of smallpox. In seventy-four days he effected the passage of the lake at N'yangwe, a great slave market,

on the eastern coast. Twenty-one months after, August 24th, 1876, he abandoned Oujiji, which was decimated by an

then was to gain a complete knowledge of Loualaba, of which he had only had a glimpse.

It was the first view in the unknown of the great Portuguese Colony.

Eighteen years after, two daring discoverers crossed Africa from the east to the west, and arrived, one south, the

other north, of Angola, after unheard-of difficulties.

The first, according to the date, was a lieutenant in the English navy, Verney-Howet Cameron. In 1872, there

was reason to fear that the expedition of the American, Stanley, was in great danger. It had been sent to the great

lake region in search of Livingstone. Lieutenant Cameron offered to go over the same road.

The offer was accepted. Cameron, accompanied by Dr. Dillon, Lieutenant Cecil Murphy and Robert Moffat, a

nephew of Livingstone, started from Zanzibar. After having crossed Ougogo, he met Livingstone's faithful servants
carrying their master's body to the eastern coast. He continued his route to the west, with the unconquerable desire to
pass from one coast to the other.

He crossed Ounyanyembe, Ougounda, and Kahouele, where he collected the great traveler's papers. Having
passed over Tanganyika, and the Bambarré mountains, he reached Loualaba, but could not descend its course. After
having visited all the provinces devastated by war and depopulated by the slave trade, Kilemmba, Ouroua, the
sources of the Lomane, Oulouda, Lovale, and having crossed the Coanza and the immense forests in which Harris
has just entrapped Dick Sand and his companions, the energetic Cameron finally perceived the Atlantic Ocean and
arrived at Saint Philip of Benguela. This journey of three years and four months had cost the lives of his two
companions, Dr. Dillon and Robert Moffat.

Henry Moreland Stanley, the American, almost immediately succeeded the Englishman, Cameron, on the road
of discoveries. We know that this intrepid correspondent of the New York _Herald_, sent in search of Livingstone,
had found him on October 30th, 1871, at Oujiji, on Lake Tanganyika. Having so happily accomplished his object for
the sake of humanity, Stanley determined to pursue his journey in the interest of geographical science. His object
then was to gain a complete knowledge of Loualaba, of which he had only had a glimpse.

Cameron was then lost in the provinces of Central Africa, when, in November, 1874, Stanley quitted Bagamoga,
on the eastern coast. Twenty-one months after, August 24th, 1876, he abandoned Oujiji, which was decimated by an
epidemic of smallpox. In seventy-four days he effected the passage of the lake at Nyangwe, a great slave market,
which had been already visited by Livingstone and Cameron. Here he witnessed the most horrible scenes, practised
in the Maroungou and Manyouema countries by the officers of the Sultan of Zanzibar.

Stanley then took measures to explore the course of the Loualaba and to descend it as far as its mouth. One
hundred and forty bearers, engaged at Nyangwe, and nineteen boats, formed the material and the force of his
expedition.

From the very start he had to fight the cannibals of Ougouson. From the start, also, he had to attend to the
carrying of boats, so as to pass insuperable cataracts.

Under the equator, at the point where the Loualaba makes a bend to the northeast, fifty-four boats, manned by
several hundred natives, attacked Stanley's little fleet, which succeeded in putting them to flight. Then the
courageous American, reascending as far as the second degree of northern latitude, ascertained that the Loualaba
was the upper Zaire, or Congo, and that by following its course he could descend directly to the sea.

This he did, fighting nearly every day against the tribes that lived near the river. On June 3d, 1877, at the passage
of the cataracts of Massassa, he lost one of his companions, Francis Pocock. July 18th he was drawn with his boat.
into the falls of M'belo, and only escaped death by a miracle.

Finally, August 6th, Henry Stanley arrived at the village of Ni-Sanda, four days' journey from the coast.

Two days after, at Banza-M'bouko, he found the provisions sent by two merchants from Emboma.

He finally rested at this little coast town, aged, at thirty-five years, by over-fatigue and privations, after an entire passage of the African continent, which had taken two years and nine months of his life.

However, the course of the Loualaba was explored as far as the Atlantic; and if the Nile is the great artery of the North, if the Zambesi is the great artery of the East, we now know that Africa still possesses in the West the third of the largest rivers in the world—a river which, in a course of two thousand, nine hundred miles, under the names of Loualaba, Zaire, and Congo, unites the lake region with the Atlantic Ocean.

However, between these two books of travel--Stanley's and Cameron's--the province of Angola is somewhat better known in this year than in 1873, at that period when the "Pilgrim" was lost on the African coast. It was well known that it was the seat of the western slave-trade, thanks to its important markets of Bihe, Cassange, and Kazounde.

It was into this country that Dick Sand had been drawn, more than one hundred miles from the coast, with a woman exhausted by fatigue and grief, a dying child, and some companions of African descent, the prey, as everything indicated, to the rapacity of slave merchants.

Yes, it was Africa, and not that America where neither the natives, nor the deer, nor the climate are very formidable. It was not that favorable region, situated between the Cordilleras and the coast, where straggling villages abound, and where missions are hospitably opened to all travelers.

They were far away, those provinces of Peru and Bolivia, where the tempest would have surely carried the "Pilgrim," if a criminal hand had not changed its course, where the shipwrecked ones would have found so many facilities for returning to their country.

It was the terrible Angola, not even that part of the coast inspected by the Portuguese authorities, but the interior of the colony, which is crossed by caravans of slaves under the whip of the driver.

What did Dick Sand know of this country where treason had thrown him? Very little; what the missionaries of the sixteenth and seventeenth centuries had said of it; what the Portuguese merchants, who frequented the road from St. Paul de Loanda to the Zaire, by way of San Salvador, knew of it; what Dr. Livingstone had written about it, after his journey of 1853, and that would have been sufficient to overwhelm a soul less strong than his.

Truly, the situation was terrible.

CHAPTER II.

HARRIS AND NEGORO.

The day after that on which Dick Sand and his companions had established their last halt in the forest, two men met together about three miles from there, as it had been previously arranged between them.

These two men were Harris and Negoro; and we are going to see now what chance had brought together, on the coast of Angola, the Portuguese come from New Zealand, and the American, whom the business of trader obliged to often traverse this province of Western Africa.

Harris and Negoro were seated at the foot of an enormous banyan, on the steep bank of an impetuous stream, which ran between a double hedge of papyrus.

The conversation commenced, for the Portuguese and the American had just met, and at first they dwelt on the deeds which had been accomplished during these last hours.

"And so, Harris," said Negoro, "you have not been able to draw this little troop of Captain Sand, as they call this novice of fifteen years, any farther into Angola?"

"No, comrade," replied Harris; "and it is even astonishing that I have succeeded in leading him a hundred miles at least from the coast. Several days ago my young friend, Dick Sand, looked at me with an anxious air, his suspicions gradually changed into certainties--and faith--"

"Another hundred miles, Harris, and those people would be still more surely in our hands! However, they must not escape us!"

"Ah! How could they?" replied Harris, shrugging his shoulders. "I repeat it, Negoro, there was only time to part company with them. Ten times have I read in my young friend's eyes that he was tempted to send a ball into my breast, and I have too bad a stomach to digest those prunes which weigh a dozen to the pound."

"Good!" returned Negoro; "I also have an account to settle with this novice."

"And you shall settle it at your ease, with interest, comrade. As to me, during the first three days of the journey I succeeded very well in making him take this province for the Desert of Atacama, which I visited formerly. But the child claimed his caoutchoucs and his humming-birds. The mother demanded her quinquinas. The cousin was crazy
to find cocuyos. Faith, I was at the end of my imagination, and after with great difficulty making them swallow ostriches--a god-send, indeed, Negoro!--I no longer knew what to invent. Besides, I well saw that my young friend no longer accepted my explanations. Then we fell on elephants' prints. The hippopotami were added to the party. And you know, Negoro, hippopotami and elephants in America are like honest men in the penitentiaries of Benguela. Finally, to finish me, there was the old black, who must find forks and chains at the foot of a tree. Slaves had freed themselves from them to flee. At the same moment the lion roared, starting the company, and it is not easy to pass off that roaring for the mewing of an inoffensive cat. I then had only time to spring on my horse and make my way here."

"I understand," replied Negoro. "Nevertheless, I would wish to hold them a hundred miles further in the province."

"One does what he can, comrade," replied Harris. "As to you, who followed our caravan from the coast, you have done well to keep your distance. They felt you were there. There is a certain Dingo that does not seem to love you. What have you done to that animal?"

"Nothing," replied Negoro; "but before long it will receive a ball in the head."

"As you would have received one from Dick Sand, if you had shewn ever so little of your person within two hundred feet of his gun. Ah! how well he fires, my young friend; and, between you and me, I am obliged to admit that he is, in his way, a fine boy."

"No matter how fine he is, Harris, he will pay dear for his insolence," replied Negoro, whose countenance expressed implacable cruelty.

"Good," murmured Harris, "my comrade remains just the same as I have always known him! Voyages have not injured him!"

Then, after a moment's silence: "Ah, there, Negoro," continued he, "when I met you so fortunately there below, at the scene of the shipwreck, at the mouth of the Longa, you only had time to recommend those honest people to me, while begging me to lead them as far as possible across this pretended Bolivia. You have not told me what you have been doing these two years! Two years, comrade, in our chance existence, is a long time. One fine day, after having taken charge of a caravan of slaves on old Alvez's account--whose very humble agents we are--you left Cassange, and have not been heard of since! I have thought that you had some disagreement with the English cruiser, and that you were hung!"

"I came very near it, Harris."

"That will come, Negoro."

"Thank you!"

"What would you have?" replied Harris, with an indifference quite philosophical; "it is one of the chances of the trade! We do not carry on the slave-trade on the coast of Africa without running the risk of dying elsewhere than in our beds! So, you have been taken?"

"Yes!"

"By the English?"

"No! By the Portuguese."

"Before or after having delivered your cargo?" asked Harris.

"After--," replied Negoro, who had hesitated a little about replying. "These Portuguese now make difficulties. They want no more slavery, though they have used it so long to their profit. I was denounced--watched. They took me--"

"And condemned--"

"Me to finish my days in the penitentiary of St. Paul de Loanda."

"A thousand devils!" exclaimed Harris. "That is an unhealthy place for men accustomed, like us, to live in the open air. As to me, perhaps I should prefer being hung."

"One does not escape from the gallows," replied Negoro; "but from prison--"

"You were able to make your escape?"

"Yes, Harris. Only fifteen days after being put in prison. I was able to hide myself at the bottom of the hold of an English steamer, sailing for Auckland, of New Zealand. A barrel of water and a case of conserves, between which I had intruded, furnished me with food and drink during the whole passage. Oh! I suffered terribly, from not being willing to show myself when we were at sea. But, if I had been imprudent enough to do it, I would have been confined again at the bottom of the hold, and, voluntarily or not, the torture would be the same. Besides, on my arrival at Auckland, they would have returned me again to the English authorities, and finally brought me back to the penitentiary of Loanda, or, perhaps, hung me, as you said. That was why I preferred to travel incognito."

"And without paying your passage!" exclaimed Harris, laughing. "Ah! that is not considerate, comrade, to be fed and carried gratis!"
"Yes," returned Negoro, "but thirty days' passage at the bottom of the hold--"

"At last that was over, Negoro. You set out for New Zealand, in the land of the Maoris. But you have returned. Was the return made under the same circumstances?"

"Not so, Harris. You may well believe that, over there, I had only one idea--to return to Angola and take up my trade of slave-trader again."

"Yes," replied Harris, "one loves his trade--from habit."

"For eighteen months--"

Having pronounced those last words, Negoro stopped suddenly. He seized his companion's arm, and listened.

"Harris," said he, lowering his voice, "was there not a trembling in that papyrus bush?"

"Yes, indeed," replied Harris, seizing his gun, always ready to fire.

Negoro and he stood up, looked around them, and listened with the greatest attention.

"There is nothing there," said Harris. "It is this brook, swelled by the storm, which runs more noisily. For two years, comrade, you have been unaccustomed to the noises of the forest, but you will get used to them again. Continue, then, the narration of your adventures. When I understand the past, we shall talk of the future."

Negoro and Harris sat down again at the foot of the banyan. The Portuguese continued, in these terms:

"For eighteen months I vegetated in Auckland. When the steamer arrived there I was able to leave it without being seen; but not a piastre, not a dollar in my pocket! In order to live I had to follow all trades--"

"Even the trade of an honest man, Negoro?"

"As you say, Harris."

"Poor boy!"

"Now, I was always waiting for an opportunity, which was long coming, when the 'Pilgrim,' a whaler, arrived at the port of Auckland."

"That vessel which went ashore on the coast of Angola?"

"Even the same, Harris, and on which Mrs. Weldon, her child, and her cousin were going to take passage. Now, as an old sailor, having even been second on board a slave ship, I was not out of my element in taking service on a ship. I then presented myself to the 'Pilgrim's' captain, but the crew was made up. Very fortunately for me, the schooner's cook had deserted. Now, he is no sailor who does not know how to cook. I offered myself as head cook. For want of a better, I was accepted. A few days after, the 'Pilgrim' had lost sight of the land of New Zealand."

"But," asked Harris, "according to what my young friend has told me, the 'Pilgrim' did not set sail at all for the coast of Africa. How then has she arrived here?"

"Dick Sand ought not to be able to understand it yet, and perhaps he will never understand it," replied Negoro; "but I am going to explain to you what has passed, Harris, and you will be able to tell it again to your young friend, if it pleases you to do so."

"How, then?" replied Harris. "Speak, comrade, speak!"

"The 'Pilgrim,'" continued Negoro, "as on the way to Valparaiso. When I went on board, I only intended to go to Chili. It was always a good half of the way between New Zealand and Angola, and I was drawing nearer Africa's coast by several thousand miles. But it so happened that only three weeks after leaving Auckland, Captain Hull, who commanded the 'Pilgrim,' disappeared with all his crew, while chasing a whale. On that day, then, only two sailors remained on board--the novice and the cook, Negoro."

"And you took command of the ship?" asked Harris.

"I had that idea at first, but I saw that they distrusted me. There were live strong blacks on board, free men. I would not have been the master, and, on reflection, I remained what I was at the departure--the 'Pilgrim's' cook."

"Then it was chance that led this ship to the coast of Africa?"

"No, Harris," replied Negoro; "there has been no chance in all this adventure except meeting you, in one of your journeys, just on that part of the coast where the 'Pilgrim' was wrecked. But as to coming in sight of Angola, it was by my will, my secret will, that that was done. Your young friend, still much of a novice in navigation, could only tell his position by means of the log and the compass. Well, one day, the log went to the bottom. One night the compass was made false, and the 'Pilgrim,' driven by a violent tempest, took the wrong route. The length of the voyage, inexplicable to Dick Sand, would be the same to the most experienced seaman. Without the novice knowing or even suspecting it, Cape Horn was doubled, but I, Harris, I recognized it in the midst of the fogs. Then, thanks to me, the needle in the compass took its true direction again, and the ship, blown to the northeast by that frightful hurricane, has just been cast on the coast of Africa, just on this land of Angola which I wished to reach."

"And even at that moment, Negoro," replied Harris, "chance had led me there to receive you, and guide those honest people to the interior. They believed themselves--they could only believe themselves in America. It was easy for me to make them take this province for lower Bolivia, to which it has really some resemblance."

"Yes, they believed it, as your young friend believed they had made the Isle of Paques, when they passed in sight
of Tristan d'Acunha."

"Anybody would be deceived by it, Negoro."

"I know it, Harris, and I even counted on profiting by that error. Finally, behold Mrs. Weldon and her companions one hundred miles in the interior of this Africa, where I wanted to bring them!"

"But," replied Harris, "they know now where they are."

"Ah! what matter at present!" cried Negoro.

"And what will you do with them?" asked Harris.

"What will I do with them?" replied Negoro. "Before telling you, Harris, give me news of our master, the slave-trader, Alvez, whom I have not seen for two years."

"Oh, the old rascal is remarkably well," replied Harris, "and he will be enchanted to see you again."

"Is he at the Bihe market?" asked Negoro.

"No, comrade, he has been at his establishment at Kazounde for a year."

"And business is lively?"

"Yes, a thousand devils!" exclaimed Harris, "although the slave trade becomes more and more difficult, at least on this coast. The Portuguese authorities on one side, and the English cruisers on the other, limit exportations. There are few places, except in the environs of Mossamedes, to the south of Angola, that the shipping of blacks can now be made with any chance of success. So, at this time, the pens are filled with slaves, waiting for the ships which ought to carry them to Spanish colonies. As to passing them by Benguela, or St. Paul de Loanda, that is not possible. The governors no longer understand reason, no more do the chiefs (title given to the Portuguese governors of secondary establishments). We must, then, return to the factories of the interior. This is what old Alvez intends to do. He will go from the Nyangwe and Tanganyika side to change his stuffs for ivory and slaves. Business is always profitable with upper Egypt and the Mozambique coast, which furnishes all Madagascar. But I fear the time will come when the trade can be no longer carried on. The English are making great progress in the interior of Africa. The missionaries advance and work against us. That Livingstone, curse him, after exploring the lake region, is going, they say, to travel toward Angola. Then they speak of a Lieutenant Cameron, who proposes to cross the continent from east to west. They also fear that the American, Stanley, wishes to do as much. All these visits will end by damaging our operations, Negoro, and if we care for our own interests, not one of those visitors will return to relate in Europe what he has had the indiscretion to come to see in Africa."

Would not one say, to hear them, the rascals, that they were speaking like honest merchants whose affairs were momentarily cramped by a commercial crisis? Who would believe that, instead of sacks of coffee or casks of sugar, they were talking of human beings to export like merchandise? These traders have no other idea of right or wrong. The moral sense is entirely lacking in them, and if they had any, how quickly they would lose it among the frightful atrocities of the African slave trade.

But where Harris was right, was when he said that civilization was gradually penetrating those savage countries in the wake of those hardy travelers, whose names are indissoluble linked to the discoveries of Equatorial Africa. At the head, David Livingstone, after him, Grant, Speke, Burton, Cameron, Stanley, those heroes will leave imperishable names as benefactors of humanity.

When their conversation reached that point, Harris knew what the last two years of Negoro's life had been. The trader Alvez's old agent, the escaped prisoner from the Loanda penitentiary, reappeared the same as Harris had always known him, that is, ready to do anything. But what plan Negoro intended to take in regard to the shipwrecked from the "Pilgrim," Harris did not yet know. He asked his accomplice about it.

"And now," said he, "what are you going to do with those people?"

"I shall make two parties of them," replied Negoro, like a man whose plan had been long formed, "those whom I shall sell as slaves, and those whom----"

The Portuguese did not finish, but his ferocious physiognomy spoke plainly enough.

"Which will you sell?" asked Harris.

"Those blacks who accompany Mrs. Weldon," replied Negoro. "Old Tom is not perhaps of much value, but the others are four strong fellows, who will bring a high price in the Kazounde market."

"I well believe it, Negoro," replied Harris. "Four negroes, well made, accustomed to work, have very little resemblance to those brutes which come to us from the interior. Certainly, you will sell them at a high price. Slaves, born in America, and exported to the markets of Angola; that is rare merchandise! But," added the American, "you have not told me if there was any money on board the 'Pilgrim."

"Oh! a few hundred dollars only, which I have succeeded in saving. Fortunately, I count on certain returns."

"Which, then, comrade?" asked Harris, with curiosity.

"Nothing!" replied Negoro, who appeared to regret having spoken more than he intended.

"It now remains to take possession of all that high-priced merchandise," said Harris.
"Is it, then, so difficult?" asked Negoro.

"No, comrade. Ten miles from here, on the Coanza, a caravan of slaves is encamped, conducted by the Arab, Ibn Hamis. He only awaits my return to take the road for Kazounde. There are more native soldiers there than are needed to capture Dick Sand and his companions. It will be sufficient for my young friend to conceive the idea of going to the Coanza."

"But will he get that idea?" asked Negoro.

"Surely," replied Harris, "because he is intelligent, and cannot suspect the danger that awaits him. Dick Sand would not think of returning to the coast by the way we have followed together. He would be lost among these immense forests. He will seek, then, I am sure, to reach one of the rivers that flow toward the coast, so as to descend it on a raft. He has no other plan to take, and I know he will take it."

"Yes, perhaps so," replied Negoro, who was reflecting.

"It is not ‘perhaps so,’ it is ‘assuredly so,’ that must be said," continued Harris. "Do you see, Negoro? It is as if I had appointed a rendezvous with my young friend on the banks of the Coanza."

"Well, then," replied Negoro, "let us go. I know Dick Sand. He will not delay an hour, and we must get before him."

"Let us start, comrade."

Harris and Negoro both stood up, when the noise that had before attracted the Portuguese's attention was renewed. It was a trembling of the stems between the high papyrus.

Negoro stopped, and seized Harris's hand.

Suddenly a low barking was heard. A dog appeared at the foot of the bank, with its mouth open, ready to spring.

"Dingo!" cried Harris.

"Ah! this time it shall not escape me!" replied Negoro.

Dingo was going to jump upon him, when Negoro, seizing Harris's gun, quickly put it to his shoulder and fired.

A long howl of pain replied to the detonation, and Dingo disappeared between the double row of bushes that bordered the brook.

Negoro descended at once to the bottom of the bank.

Drops of blood stained some of the papyrus stems, and a long red track was left on the pebbles of the brook.

"At last that cursed animal is paid off!" exclaimed Negoro.

Harris had been present at this whole scene without saying a word.

"Ah now, Negoro," said he, "that dog had a particular grudge against you."

"It seemed so, Harris, but it will have a grudge against me no longer!"

"And why did it detest you so much, comrade?"

"Oh! an old affair to settle between it and me."

"An old affair?" replied Harris.

Negoro said no more about it, and Harris concluded that the Portuguese had been silent on some past adventure, but he did not insist on knowing it.

A few moments later, both, descending the course of the brook, went toward the Coanza, across the forest.

* * * * *

CHAPTER III.

ON THE MARCH.

Africa! That name so terrible under the present circumstances, that name which he must now substitute for that of America, was not for an instant out of Dick Sand's thoughts. When the young novice traced back the last weeks, it was to ask himself how the "Pilgrim" had ended by reaching this dangerous shore, how it had doubled Cape Horn, and passed from one ocean to the other! He could now explain to himself why, in spite of the rapid motion of his vessel, land was so long coming in sight, because the length of the distance which he should have made to reach the American coast had been doubled without his knowledge.

"Africa! Africa!" Dick Sand repeated.

Then, suddenly, while he called up with tenacious mind all the incidents of this inexplicable voyage, he felt that his compass must have been injured. He remembered, too, that the first compass had been broken, and that the log-line had snapped—a fact which had made it impossible for him to establish the speed of the "Pilgrim."

"Yes," thought he, "there remained but one compass on board, one only, the indications of which I could not control! And one night I was awakened by a cry from old Tom. Negoro was there, aft. He had just fallen on the binnacle. May he not have put it out of order?"

Dick Sand was growing enlightened. He had his finger on the truth. He now understood all that was ambiguous
in Negoro's conduct. He saw his hand in this chain of incidents which had led to the loss of the "Pilgrim," and had so fearfully endangered those on board of her.

But what, then, was this miserable man? Had he been a sailor and known so well how to hide the fact? Was he capable of contriving this odious plot which had thrown the ship on the coast of Africa?

At any rate, if obscure points still existed in the past, the present could offer no more of them. The young novice knew only too well that he was in Africa, and very probably in the fatal province of Angola, more than a hundred miles from the coast. He also knew that Harris's treason could no longer be doubted. From this fact, the most simple logic led him to conclude that the American and the Portuguese had long known each other, that a fatal chance had united them on this coast, and that a plan had been concerted between them, the result of which would be dreadful for the survivors of the "Pilgrim."

And now, why these odious actions? That Negoro wished, at all hazards, to seize Tom and his companions, and sell them for slaves in this slave-trading country, might be admitted. That the Portuguese, moved by a sentiment of hatred, would seek to be revenged on him, Dick Sand, who had treated him as he deserved, might also be conceived. But Mrs. Weldon, this mother, and this young child—what would the wretch do with them? If Dick Sand could have overheard a little of the conversation between Harris and Negoro, he would have known what to expect, and what dangers menaced Mrs. Weldon, the blacks, and himself.

The situation was frightful, but the young novice did not yield under it. Captain on board, he remained captain on land. He must save Mrs. Weldon, little Jack, all those whose fate Heaven had placed in his hands. His task was only commencing. He would accomplish it to the end.

After two or three hours, during which the present and the future were summed up in his mind, with their good and their evil chances—the last, alas! the most numerous—Dick Sand rose, firm and resolved.

The first glimmer of light then touched the summits of the forest. With the exception of the novice and Tom, all slept. Dick Sand approached the old black.

"Tom," he said to him, in a low tone, "you have recognized the roaring of the lion, you have remembered the instruments of the slave-traders. You know that we are in Africa!"

"Yes, Mr. Dick, I know it."

"Well, Tom, not a word of all that, neither to Mrs. Weldon nor to your companions. We must be the only ones to know, the only ones to have any fears."

" Alone—in fact. It is necessary," replied Tom.

"Tom," continued the novice, "we have to watch more carefully than ever. We are in an enemy's country—and what enemies! what a country! To keep our companions on their guard, it will be enough to tell them that we have been betrayed by Harris. They will think that we fear an attack from wandering Indians, and that will suffice."

"You can count absolutely on their courage and devotion, Mr. Dick."

"I know it, as I count on your good sense and your experience. You will come to my help, old Tom?"

"Always, and everywhere, Mr. Dick."

Dick Sand's plan was accepted and approved by the old black. If Harris were detected in open treason before the hour for action, at least the young novice and his companions were not in fear of any immediate danger. In fact, it was the discovery of the irons abandoned by some slaves, and the roaring of the lion, that had caused the American's sudden disappearance.

He knew that he was discovered, and he had fled probably before the little party which he guided had reached the place where an attack had been arranged. As for Negoro, whose presence Dingo had certainly recognized during these last days of the march, he must have rejoined Harris, so as to consult with him. At any rate, several hours would pass before Dick Sand and his friends would be assailed, and it was necessary to profit by them.

The only plan was to regain the coast as quickly as possible. This coast, as the young novice had every reason to believe, was that of Angola. After having reached it, Dick Sand would try to gain, either to the north or to the south, the Portuguese settlements, where his companions could await in safety some opportunity to return to their country.

But, to effect this return to the coast, should they take the road already passed over? Dick Sand did not think so, and in that he was going to agree with Harris, who had clearly foreseen that circumstances would oblige the young novice to shorten the road.

In fact, it would have been difficult, not to say imprudent, to recommence this difficult journey through the forest, which, besides, could only tend to bring them out at the place they had started from. This would also allow Negoro's accomplices to follow an assured track. The only thing they could do was to cross a river, without leaving any traces, and, later on, to descend its course. At the same time, there was less to fear from an attack by animals, which by a happy chance had so far kept at a good distance. Even the animosity of the natives, under these circumstances, seemed less important. Once embarked on a solid raft, Dick Sand and his companions, being well armed, would be in the best condition to defend themselves. The whole thing was to find the river.
It must be added that, given the actual state of Mrs. Weldon and her little Jack, this mode of traveling would be the most suitable. Arms would not fail to carry the sick child. Lacking Harris's horse, they could even make a litter of branches, on which Mrs. Weldon could be borne. But this would require two men out of five, and Dick Sand wished, with good reason, that all his companions might be free in their movements in case of a sudden attack.

And then, in descending the current of a river, the young novice would find himself in his element!

The question now was, whether a navigable stream of water existed in the neighborhood. Dick Sand thought it probable, and for this reason: The river which emptied into the Atlantic at the place where the "Pilgrim" had stranded could not ascend much to the north, nor much to the east, of the province, because a chain of mountains quite close to them--those which they had mistaken for the Cordilleras--shut in the horizon on these two sides. Then, either the river descended from these heights, or it made a bend toward the south, and, in these two cases, Dick Sand could not take long to find the course. Perhaps, even before reaching the river--for it had a right to this qualification, being a direct tributary of the ocean--one of its affluents would be met with which would suffice for the transport of the little party.

At any rate, a stream of some sort could not be far away.

In fact, during the last miles of the journey the nature of the earth had been modified. The declivities diminished and became damp. Here and there ran narrow streams, which indicated that the sub-soil enclosed everywhere a watery network. During the last day's march the caravan had kept along one of these rivulets, whose waters, reddened with oxyde of iron, eat away its steep, worn banks. To find it again could not take long, or be very difficult. Evidently they could not descend its impetuous course, but it would be easy to follow it to its junction with a more considerable, possibly a navigable, affluent.

Such was the very simple plan which Dick Sand determined upon, after having conferred with old Tom.

Day came, all their companions gradually awoke. Mrs. Weldon placed little Jack in Nan's arms. The child was drowsy and faded-looking during the intermittent periods, and was sad to see.

Mrs. Weldon approached Dick Sand. "Dick," she asked, after a steady glance, "where is Harris? I do not perceive him."

The young novice thought that, while letting his companions believe that they were treading on the soil of Bolivia, it would not do to hide from them the American's treason. So he said, without hesitation: "Harris is no longer here."

"Has he, then, gone ahead?" asked Mrs. Weldon. "He has fled, Mrs. Weldon," replied Dick Sand. "This Harris is a traitor, and it is according to Negoro's plan that he led us this far." "For what motive?" quickly asked Mrs. Weldon.

"I do not know," replied Dick Sand; "but what I do know is, that we must return, without delay, to the coast."

"That man--a traitor!" repeated Mrs. Weldon. "I had a presentiment of it! And you think, Dick, that he is in league with Negoro?"

"That may be, Mrs. Weldon. The wretch is on our track. Chance has brought these two scoundrels together, and--"

"And I hope that they will not be separated when I find them again!" said Hercules. "I will break the head of one against the other's head!" added the giant, holding out his formidable fists.

"But my child!" cried Mrs. Weldon. "The care that I hoped to find for him at the farm of San Felice--"

"Jack will get well," said old Tom, "when he approaches the more healthy part of the coast."

"Dick," remarked Mrs. Weldon, "you are sure that this Harris has betrayed us?"

"Yes, Mrs. Weldon," replied the young novice, who would have liked to avoid any explanation on this subject. He also hastened to add, while looking at the old black:

"This very night Tom and I discovered his treason, and if he had not jumped on his horse and fled, I would have killed him."

"So this farm--"

"There is neither farm, nor village, nor settlement in the neighborhood," replied Dick Sand. "Mrs. Weldon, I repeat to you, we must return to the coast."

"By the same road, Dick?"

"No, Mrs. Weldon, but by descending a river which will take us to the sea without fatigue and without danger. A few more miles on foot, and I do not doubt--"

"Oh, I am strong, Dick!" replied Mrs. Weldon, who struggled against her own weakness. "I will walk! I will carry my child!"

"We are here, Mrs. Weldon," said Bat, "and we will carry you!"

"Yes, yes," added Austin. "Two branches of a tree, foliage laid across."

"Thanks, my friends," replied Mrs. Weldon; "but I want to march. I will march. Forward!"

"Forward!" exclaimed the young novice.
"Give me Jack," said Hercules, who took the child from Nan's arms. "When I am not carrying something, I am
tired."

The brave negro gently took in his strong arms the little sleeping boy, who did not even wake.

Their arms were carefully examined. What remained of the provisions was placed in one package, so as to be
carried by one man. Austin threw it on his back, and his companions thus became free in their movements.

Cousin Benedict, whose long limbs were like steel and defied all fatigue, was ready to set out. Had he remarked
Harris's disappearance? It would be imprudent to affirm it. Little disturbed him. Besides, he was under the effects of
one of the most terrible catastrophes that could befall him.

In fact, a grave complication, Cousin Benedict had lost his magnifying-glass and his spectacles. Very happily,
also, but without his suspecting it, Bat had found the two precious articles in the tall grass where they had slept, but,
by Dick Sand's advice, he kept them safely. By this means they would be sure that the big child would keep quiet
during the march, because he could see no farther, as they say, than the end of his nose.

Thus, placed between Acteon and Austin, with the formal injunction not to leave them, the woful Benedict
uttered no complaint, but followed in his place, like a blind man led by a string.

The little party had not gone fifty steps when old Tom suddenly stopped it with one word.

"Dingo?" said he.

"In fact, Dingo is not here!" replied Hercules.

The black called the dog several times with his powerful voice.

No barking replied to him.

Dick Sand remained silent. The absence of the dog, was to be regretted, for he had preserved the little party from
all surprise.

"Could Dingo have followed Harris?" asked Tom.

"Harris? No," replied Dick Sand; "but he may have put himself on Negoro's scent. He felt him in our steps."

"This cook of misfortune would quickly end him with a ball!" cried Hercules.

"Provided Dingo did not first strangle him," replied Bat.

"Perhaps so," replied the young novice. "But we cannot wait for Dingo's return. Besides, if he is living, the
intelligent animal will know how to find us. Forward!"

The weather was very warm. Since daybreak large clouds obscured the horizon. Already a storm was threatened
in the air. Probably the day would not end without some thunder-claps. Happily the forest, more or less dense,
retained a little freshness of the surface of the soil. Here and there great forest trees inclosed prairies covered with a
tall, thick grass. In certain spots enormous trunks, already petrified, lay on the ground, indicating the presence of
coal mines, which are frequently met with on the African continent. Then, in the clearings, where the green carpet
was mingled with some sprigs of roses, the flowers were various in color, yellow and blue ginger plants, pale
lobelias, red orchids, incessantly visited by the insects which fertilized them.

The trees no longer formed impenetrable masses, but their nature was more varied. There were a kind of palm-
tree, which gives an oil found only in Africa; cotton-trees forming thickets from eight to ten feet high, whose wood-
stalks produce a cotton with long hairs, almost analogous to that of Fernambouc. From the copals there oozes, by the
holes which certain insects make, an odorous gum, which runs along the ground and collects for the wants of the
natives. Here spread the lemon-trees, the grenadiers of a savage condition of a country, and twenty other odorous
plants, which prove the prodigious fertility of this plateau of Central Africa. In several places, also, the perfume was
agreeably mingled with the tine odor of vanilla, although they could not discover what tree exhaled it.

This whole collection of trees and plants was perfectly green, although it was in the middle of the dry season,
and only rare storms could water these luxuriant forests. It was then the time for fevers; but, as Livingstone has
observed, they can be cured by leaving the place where they have been contracted. Dick Sand knew this remark of
the great traveler, and he hoped that little Jack would not contradict it. He told it to Mrs. Weldon, after having
observed that the periodical access had not returned as they feared, and that the child slept quietly in Hercules' arms.

Thus they went forward carefully and rapidly. Sometimes they discovered traces where men or animals had
recently passed. The twisted and broken branches of the brushwood and the thickets afforded an opportunity to walk
with a more equal step. But the greater part of the time numerous obstacles, which they had to overcome, retarded
the little party, to Dick Sand's great disappointment.

There were twisted lianes that might justly be compared with the disordered rigging of a ship, certain vines
similar to bent swords, whose blades were ornamented with long thorns, vegetable serpents, fifty or sixty feet long,
which had the faculty of turning to prick the passer-by with their sharp spikes. The blacks, hatchet in hand, cut them
down with vigorous blows, but the lianes reappeared constantly, reaching from the earth to the top of the highest
trees which they encircled.

The animal kingdom was not less curious than the vegetable kingdom in this part of the province. Birds flew in
vast numbers under these powerful branches; but it will be understood that they had no gunshot to fear from the men, who wished to pass as secretly as rapidly. There were Guinea fowls in large flocks, heath-cocks of various kinds, very difficult to approach, and some of those birds which the Americans of the North have, by onomatopoeia, called “whip-poor-wills,” three syllables which exactly reproduce their cries. Dick Sand and Tom might truly have believed themselves in some province of the new continent. But, alas! they knew what to expect.

Until then the deer, so dangerous in Africa, had not approached the little troop. They again saw, in this first halt, some giraffes, which Harris had undoubtedly called ostriches. These swift animals passed rapidly, frightened by the apparition of a caravan in these little-frequented forests. In the distance, on the edge of the prairie, there arose at times a thick cloud of dust. It was a herd of buffaloes, which galloped with the noise of wagons heavily laden.

For two miles Dick Sand thus followed the course of the rivulet which must end in a more important river. He was in haste to confide his companions to the rapid current of one of the coast rivers. He felt sure that the dangers and the fatigue would be much less than on the shore.

Towards noon three miles had been cleared without any bad incident or meeting. There was no trace of either Harris or Negoro. Dingo had not reappeared. It was necessary to halt to take rest and nourishment.

The encampment was established in a bamboo thicket, which completely sheltered the little party.

They talked very little during this repast. Mrs. Weldon had taken her little boy in her arms; she could not take her eyes off of him; she could not eat.

"You must take some nourishment, Mrs. Weldon," Dick Sand repeated several times. "What will become of you if your strength gives out? Eat, eat! We will soon start again, and a good current will carry us without fatigue to the coast."

Mrs. Weldon looked in Dick Sand's face while he thus talked. The young novice's burning eyes spoke of the courage by which he felt animated. In seeing him thus, in observing these brave, devoted blacks, wife and mother, she could not yet despair; and, besides, why was she abandoned? Did she not think herself on hospitable ground? Harris's treason could not, in her eyes, have any very serious consequences. Dick Sand read her thought, and he kept his eyes on the ground.

* * * * *

CHAPTER IV.
THE BAD ROADS OF ANGOLA.

At this moment little Jack awoke, and put his arms around his mother's neck. His eyes looked better. The fever had not returned.

"You are better, my darling," said Mrs. Weldon, pressing the sick child to her heart.

"Yes, mama," replied Jack, "but I am a little thirsty."

They could only give the child some fresh water, of which he drank with pleasure.

"And my friend Dick?" he said.

"Here I am, Jack," replied Dick Sand, coming to take the young child's hand.

"And my friend Hercules?"

"Hercules is here, Mr. Jack," replied the giant, bringing nearer his good face.

"And the horse?" demanded little Jack.

"The horse? Gone, Mr. Jack," replied Hercules. "I will carry you. Will you find that I trot too hard?"

"No," replied little Jack; "but then I shall no longer have any bridle to hold."

"Oh! you will put a bit in _my_ mouth, if you wish," said Hercules, opening his large mouth, "and you may pull back so long as that will give you pleasure."

"You know very well that I shall not pull back."

"Good! You would be wrong! I have a hard mouth."

"But Mr. Harris's farm?" the little boy asked again.

"We shall soon arrive there, my Jack," replied Mrs. Weldon. "Yes, soon!"

"Will we set out again?" then said Dick Sand, in order to cut short this conversation.

"Yes, Dick, let us go," replied Mrs. Weldon.

The camp was broken up, and the march continued again in the same order. It was necessary to pass through the underwood, so as not to leave the course of the rivulet. There had been some paths there, formerly, but those paths were dead, according to the native expression—that is, brambles and brushwood had usurped them. In these painful conditions they might spend three hours in making one mile. The blacks worked without relaxation. Hercules, after putting little Jack back in Nan's arms, took his part of the work; and what a part! He gave stout "heaves," making his ax turn round, and a hole was made before them, as if he had been a devouring fire.
Fortunately, this fatiguing work would not last. This first mile cleared, they saw a large hole, opened through the underwood, which ended obliquely at the rivulet and followed its bank. It was a passage made by elephants, and those animals, doubtless by hundreds, were in the habit of traversing this part of the forest. Great holes, made by the feet of the enormous pachyderms, riddled a soil softened during the rainy season. Its spongy nature also prepared it for those large imprints.

It soon appeared that this passage did not serve for those gigantic animals alone. Human beings had more than once taken this route, but as flocks, brutally led to the slaughter-house, would have followed it. Here and there bones of dead bodies strewed the ground; remains of skeletons, half gnawed by animals, some of which still bore the slave's fetters.

There are, in Central Africa, long roads thus marked out by human débris. Hundreds of miles are traversed by caravans, and how many unhappy wretches fall by the way, under the agents' whips, killed by fatigue or privations, decimated by sickness! How many more massacred by the traders themselves, when food fails! Yes, when they can no longer feed them, they kill them with the gun, with the sword, with the knife! These massacres are not rare.

So, then, caravans of slaves had followed this road. For a mile Dick Sand and his companions struck against these scattered bones at each step, putting to flight enormous fern-owls. Those owls rose at their approach, with a heavy flight, and turned round in the air.

Mrs. Weldon looked without seeing. Dick Sand trembled lest she should question him, for he hoped to lead her back to the coast without telling her that Harris's treachery had led them astray in an African province. Fortunately, Mrs. Weldon did not explain to herself what she had under her eyes. She had desired to take her child again, and little Jack, asleep, absorbed all her care. Nan walked near her, and neither of them asked the young novice the terrible questions he dreaded.

Old Tom went along with his eyes down. He understood only too well why this opening was strewn with human bones.

His companions looked to the right, to the left, with an air of surprise, as if they were crossing an interminable cemetery, the tombs of which had been overthrown by a cataclysm; but they passed in silence.

Meanwhile, the bed of the rivulet became deeper and wider at the same time. Its current was less impetuous. Dick Sand hoped that it would soon become navigable, or that it would before long reach a more important river, tributary to the Atlantic.

Cost what it might, the young novice was determined to follow this stream of water. Neither did he hesitate to abandon this opening; because, as ending by an oblique line, it led away from the rivulet.

The little party a second time ventured through the dense underwood. They marched, ax in hand, through leaves and bushes inextricably interlaced.

But if this vegetation obstructed the ground, they were no longer in the thick forest that bordered the coast. Trees became rare. Large sheaves of bamboo alone rose above the grass, and so high that even Hercules was not a head over them. The passage of the little party was only revealed by the movement of these stalks.

Toward three o'clock in the afternoon of that day, the nature of the ground totally changed. Here were long plains, which must have been entirely inundated in the rainy season. The earth, now more swampy, was carpeted by thick mosses, beneath charming ferns. Should it be diversified by any steep ascents, they would see brown hematites appear, the last deposits of some rich vein of mineral.

Dick Sand then recalled—and very fortunately—what he had read in "Livingstone's Travels." More than once the daring doctor had nearly rested in these marshes, so treacherous under foot.

"Listen to me, my friends," said he, going ahead. "Try the ground before stepping on it."

"In fact," replied Tom, "they say that these grounds have been softened by the rain; but, however, it has not rained during these last days."

"No," replied Bat; "but the storm is not far off."

"The greater reason," replied Dick Sand, "why we should hurry and get clear of this swamp before it commences. Hercules, take little Jack in your arms. Bat, Austin, keep near Mrs. Weldon, so as to be able to help her if necessary. You, Mr. Benedict--Why, what are you doing, Mr. Benedict?"

"I am falling!" innocently replied Cousin Benedict, who had just disappeared as if a trap had been suddenly opened beneath his feet.

In fact, the poor man had ventured on a sort of quagmire, and had disappeared half-way in the sticky mud. They stretched out their hands, and he rose, covered with slime, but quite satisfied at not having injured his precious entomologist's box. Acteon went beside him, and made it his duty to preserve the unlucky, near-sighted man from any new disasters.

Besides, Cousin Benedict had made rather a bad choice of the quagmire for his plunge. When they drew him out of the sticky earth a large quantity of bubbles rose to the surface, and, in bursting, they emitted some gases of a
suffocating odor. Livingstone, who had been sunk up to his chest in this slime, compared these grounds to a
collection of enormous sponges, made of black, porous earth, from which numerous streams of water spouted when
they were stepped upon. These places were always very dangerous.

For the space of half a mile Dick Sand and his companions must march over this spongy soil. It even became so
bad that Mrs. Weldon was obliged to stop, for she sank deep in the mire. Hercules, Bat, and Austin, wishing to spare
her the unpleasantness more than the fatigue of a passage across this marshy plain, made a litter of bamboos, on
which she consented to sit. Her little Jack was placed in her arms, and they endeavored to cross that pestilential
marsh in the quickest manner.

The difficulties were great. Acteon held Cousin Benedict firmly. Tom aided Nan, who, without him, would have
disappeared several times in some crevice. The three other blacks carried the litter. At the head, Dick Sand sounded
the earth. The choice of the place to step on was not made without trouble. They marched from preference on the
edges, which were covered by a thick and tough grass. Often the support failed, and they sank to the knees in the
slime.

At last, about five o'clock in the evening, the marsh being cleared, the soil regained sufficient firmness, thanks to
its clayey nature; but they felt it damp underneath. Very evidently these lands lay below the neighboring rivers, and
the water ran through their pores.

At that time the heat had become overwhelming. It would even have been unbearable, if thick storm clouds had not
interposed between the burning rays and the ground. Distant lightnings began to rend the sky and low rollings of
thunder grumbled in the depths of the heavens. A formidable storm was going to burst forth.

Now, these cataclysms are terrible in Africa: rain in torrents, squalls of wind which the strongest trees cannot
resist, clap after clap of thunder, such is the contest of the elements in that latitude.

Dick Sand knew it well, and he became very uneasy. They could not pass the night without shelter. The plain
was likely to be inundated, and it did not present a single elevation on which it was possible to seek refuge.

But refuge, where would they seek it in this low desert, without a tree, without a bush? The bowels of the earth
even would not give it. Two feet below the surface they would find water.

However, toward the north a series of low hills seemed to limit the marshy plain. It was as the border of this
depression of land. A few trees were profiled there on a more distant, clearer belt, left by the clouds on the line of
the horizon.

There, if shelter were still lacking, the little band would at least no longer risk being caught in a possible
inundation. There perhaps was salvation for all.

"Forward, my friends, forward!" repeated Dick Sand. "Three miles more and we shall be safer than in these
bottom-lands."

"Hurry! hurry!" cried Hercules.

The brave black would have wished to take that whole world in big arms and carry it alone.

Those words inspired those courageous men, and in spite of the fatigue of a day's march, they advanced more
quickly than they had done at the commencement from the halting-place.

When the storm burst forth the end to be attained was still more than two miles off. Now—a fact which was the
more to be feared—the rain did not accompany the first lightnings exchanged between the ground and the electrical
clouds. Darkness then became almost complete, though the sun had not disappeared below the horizon. But the
dome of vapors gradually lowered, as if it threatened to fall in—a falling in which must result in a torrent of rain.
Lightnings, red or blue, split it in a thousand places, and enveloped the plain in an inextricable network of fire.

Twenty times Dick and his companions ran the risk of being struck by lightning. On this plateau, deprived of
trees, they formed the only projecting points which could attract the electrical discharges. Jack, awakened by the
noise of the thunder, hid himself in Hercules' arms. He was very much afraid, poor little boy, but he did not wish to
let his mother see it, for fear of afflicting her more. Hercules, while taking great steps, consoled him as well as he
could.

"Do not be afraid, little Jack," he repeated. "If the thunder comes near us, I will break it in two with a single
hand. I am stronger than it!"

And, truly, the giant's strength reassured Jack a little.

Meanwhile the rain must soon fall, and then it would in torrents, poured out by those clouds in condensing. What
would become of Mrs. Weldon and her companions, if they did not find a shelter?

Dick Sand stopped a moment near old Tom.

"What must be done?" said he.

"Continue our march, Mr. Dick," replied Tom. "We cannot remain on this plain, that the rain is going to
transform into a marsh!"

"No, Tom, no! But a shelter! Where? What? If it were only a hut—"
Dick Sand had suddenly broken off his sentence. A more vivid flash of lightning had just illuminated the whole plain.

"What have I seen there, a quarter of a mile off?" exclaimed Dick Sand.

"Yes, I also, I have seen--" replied old Tom, shaking his head.

"A camp, is it not?"

"Yes, Mr. Dick, it must be a camp, but a camp of natives!"

A new flash enabled them to observe this camp more closely. It occupied a part of the immense plain.

There, in fact, rose a hundred conical tents, symmetrically arranged, and measuring from twelve to fifteen feet in height. Not a soldier showed himself, however. Were they then shut up under their tents, so as to let the storm pass, or was the camp abandoned?

In the first case, whatever Heaven should threaten, Dick Sand must flee in the quickest manner. In the second, there was, perhaps, the shelter he asked.

"I shall find out," he said to himself; then, addressing old Tom: "Stay here. Let no one follow me. I shall go to reconnoiter that camp."

"Let one of us accompany you, Mr. Dick."

"No, Tom, I shall go alone. I can approach without being seen. Stay here."

The little troop, that followed Tom and Dick Sand, halted. The young novice left at once and disappeared in the darkness, which was profound when the lightning did not tear the sky.

Some large drops of rain already began to fall.

"What is the matter?" asked Mrs. Weldon, approaching the old black.

"We have perceived a camp, Mrs. Weldon," replied Tom; "a camp--or, perhaps, a village, and our captain wished to reconnoiter it before leading us to it."

Mrs. Weldon was satisfied with this reply. Three minutes after, Dick Sand was returning.

"Come! come!" he cried, in a voice which expressed his entire satisfaction.

"The camp is abandoned?" asked Tom.

"It is not a camp," replied the young novice; "it is not a village. They are ant-hills!"

"Ant-hills!" exclaimed Cousin Benedict, whom that word aroused.

"Yes, Mr. Benedict, but ant-hills twelve feet high, at least, and in which we shall endeavor to hide ourselves."

"But then," replied Cousin Benedict, "those would be ant-hills of the warlike termite or of the devouring termite. Only those ingenious insects raise such monuments, which the greatest architects would not disown."

"Whether they be termites or not, Mr. Benedict," replied Dick Sand, "we must dislodge them and take their place."

"They will devour us. They will be defending their rights."

"Forward! Forward!"

"But, wait now!" said Cousin Benedict again. "I thought those ant-hills only existed in Africa."

"Forward!" exclaimed Dick Sand, for the last time, with a sort of violence. He was so much afraid that Mrs. Weldon might hear the last word pronounced by the entomologist.

They followed Dick Sand with all haste. A furious wind had sprung up. Large drops crackled on the ground. In a few moments the squalls of wind would become unbearable. Soon one of those cones which stood on the plain was reached. No matter how threatening the termites might be, the human beings must not hesitate. If they could not drive the insects away, they must share their abode.

At the bottom of this cone, made with a kind of reddish clay, there was a very narrow hole. Hercules enlarged it with his cutlass in a few moments, so as to give a passage even to a man like himself.

To Cousin Benedict's extreme surprise, not one of the thousands of termites that ought to occupy the ant-hill showed itself. Was, then, the cone abandoned?

The hole enlarged, Dick and his companions glided into it. Hercules disappeared the last, just as the rain fell with such rage that it seemed to extinguish the lightnings.

But those wind squalls were no longer to be feared. A happy chance had furnished this little troop with a solid shelter, better than a tent, better than a native's hut.

It was one of those termite cones that, according to Lieutenant Cameron's comparison, are more astonishing than the pyramids of Egypt, raised by the hands of men, because they have been built by such small insects.

"It is," said he, "as if a nation had built Mount Everest, the highest mountain of the Himalaya chain."

CHAPTER V.
ANTS AND THEIR DWELLING.
At this moment the storm burst with a violence unknown in temperate latitudes.

It was providential that Dick Sand and his companions had found this refuge!

In fact, the rain did not fall in distinct drops, but in streams of various thickness. Sometimes it was a compact mass forming a sheet of water, like a cataract, a Niagara. Imagine an aerial basin, containing a whole sea, being upset. Under such showers the ground was hollowed out, the plains were changed to lakes, the streams to torrents, the rivers, overflowing, inundated vast territories. In temperate zones the violence of the storms decreases according to their duration; but in Africa, however heavy they are, they continue for several entire days. How can so much electricity be collected in the clouds? How can such quantities of vapor be accumulated? It is very difficult to comprehend this. However, such are the facts, and one might suppose himself transported to the extraordinary epochs of the diluvian period.

Fortunately, the ant-cone, with its thick walls, was perfectly impervious. A beaver's hut, of well-beaten earth, could not have been more water-tight. A torrent could have passed over it without a single drop of water filtering through its pores.

As soon as Dick Sand and his companions had taken possession of the cone they occupied themselves in examining its interior arrangement. The lantern was lighted, and the ant-hill was sufficiently illuminated. This cone, which measured twelve feet in height inside, was eleven feet wide, except in its upper part, which rounded in the form of a sugar loaf. Everywhere the walls were about one foot in thickness, and there was a distance between the stories of cells which adorned them.

We may be astonished at the construction of such monuments, due to these industrious swarms of insects, but it is true that they are frequently found in the interior of Africa. Smeathman, a Dutch traveler of the last century, with four of his companions, occupied the top of one of these cones. In the Lounde, Livingstone observed several of these ant-hills, built of reddish clay, and attaining a height of fifteen and twenty feet. Lieutenant Cameron has many a time mistaken for a camp these collections of cones which dotted the plain in N'yangwe. He has even stopped at the foot of great edifices, not more than twenty feet high, but composed of forty or fifty enormous rounded cones, flanked with bell-towers like the dome of a cathedral, such as Southern Africa possesses.

To what species of ant was due, then, the prodigious style of architecture of these cones?

"To the warlike termite," Cousin Benedict had replied, without hesitating, as soon as he had recognized the nature of the materials employed in their construction.

And, in fact, the walls, as has been said, were made of reddish clay. Had they been formed of a gray or black alluvian earth, they must have been attributed to the "termes mordax" or the "termes atrox." As we see, these insects have not very cheering names—a fact which cannot but please a strong entomologist, such as Cousin Benedict.

The central part of the cone, in which the little troop had first found shelter, and which formed the empty interior, would not have contained them; but large cavities, in close contact, made a number of divisions, in which a person of medium height could find refuge. Imagine a succession of open drawers, and at the bottom of those drawers millions of cells which the termites had occupied, and the interior disposition of the ant-hill is easily understood. To sum up, these drawers are in tiers, like the berths in a ship's cabin. In the upper ones Mrs. Weldon, little Jack, Nan, and Cousin Benedict took refuge. In the lower row Austin, Bat, and Acteon hid themselves. As for Dick Sand, Tom, and Hercules, they remained in the lower part of the cone.

"My friends," then said the young novice to the two blacks, "the ground is becoming damp. We must fill it up by crumbling the red clay from the base; but take care not to obstruct the hole by which the air enters. We cannot risk being smothered in this ant-hill."

"We have only one night to spend here," replied old Tom.

"Well, let us try and make it recover us from our fatigue. This is the first time in ten days that we have not to sleep in the open air."

"Ten days!" repeated Tom.

"Besides," added Dick Sand, "as this cone forms a solid shelter, perhaps we had better stay here twenty-four hours. During that time, I will go in search of the stream that we are in need of; it cannot be very distant. I think that until we have constructed our raft, it will be better not to quit this shelter. The storm cannot reach us here. Let us make the floor stronger and dryer."

Dick Sand's orders were executed at once. Hercules, with his ax, crumbled the first story of cells, which was composed of crisp red clay. He thus raised, more than a foot, the interior part of the swampy earth on which the ant-hill rested, and Dick Sand made sure that the air could freely penetrate to the interior of the cone through the orifice pierced at its base.

It was, certainly, a fortunate circumstance that the ant-hill had been abandoned by the termites. With a few thousands of these ants, it would have been uninhabitable. But, had it been evacuated for some time, or had the voracious newroptera but just quit it? It was not superfluous to ponder this question.
Cousin Benedict was so much surprised at the abandonment, that he at once considered the reason for it, and he was soon convinced that the emigration had been recent.

In fact, he did not wait, but, descending to the lower part of the cone, and taking the lantern, he commenced to examine the most secret corners of the ant-hill. He thus discovered what is called the "general store-house" of the termites, that is to say, the place where these industrious insects lay up the provisions of the colony.

It was a cavity hollowed in the wall, not far from the royal cell, which Hercules's labor had destroyed, along with the cells destined for the young larvae.

In this store-room Cousin Benedict collected a certain quantity of particles of gum and the juices of plants, scarcely solidified, which proved that the termites had lately brought them from without.

"Well, no!" cried he. "No!" as if he were replying to some contradiction, "No, this ant-hill has not been long abandoned."

"Who says to the contrary, Mr. Benedict?" said Dick Sand. "Recently or not, the important thing for us is that the termites have left it, because we have to take their place."

"The important thing," replied Cousin Benedict, "will be to know why they have left it. Yesterday--this morning, perhaps--these sagacious newroptera were still here, because, see these liquid juices; and this evening----"

"Well, what do you conclude, Mr. Benedict?" asked Dick Sand.

"That a secret presentiment has caused them to abandon the cone. Not only have all the termites left their cells, but they have taken care to carry away the young larvae, of which I cannot find one. Well, I repeat that all this was not done without a motive, and that these sagacious insects foresaw some near danger."

"They foresaw that we were going to invade their dwelling," replied Hercules, laughing.

"Indeed!" replied Cousin Benedict, whom this answer sensibly shocked. "You think yourself so strong that you would be dangerous to these courageous insects? A few thousand of these newroptera would quickly reduce you to a skeleton if they found you dead on the road."

"Dead, certainly," replied Hercules, who would not give up; "but, living, I could crush masses of them."

"You might crush a hundred thousand, five hundred thousand, a million," replied Cousin Benedict, with animation, "but not a thousand millions; and a thousand millions would devour you, living or dead, to the last morsel."

During this discussion, which was less trifling than might be supposed, Dick Sand reflected on the observations made by Cousin Benedict. There was no doubt that the savant knew too much about the habits of the termites to be mistaken. If he declared that a secret instinct warned them to leave the ant-hill recently, it was because there was truly peril in remaining in it.

Meanwhile, as it was impossible to abandon this shelter at a moment when the storm was raging with unparalleled intensity, Dick Sand looked no farther for an explanation of what seemed to be inexplicable, and he contented himself with saying:

"Well, Mr. Benedict, if the termites have left their provisions in this ant-hill, we must not forget that we have brought ours, and let us have supper. To-morrow, when the storm will be over, we will consult together on our future plans."

They then occupied themselves in preparing the evening meal, for, great as their fatigue was, it had not affected the appetite of these vigorous walkers. On the contrary, the food, which had to last for two more days, was very welcome. The damp had not reached the biscuits, and for several minutes it could be heard cracking under the solid teeth of Dick Sand and his companions. Between Hercules's jaws it was like grain under the miller's grindstone. It did not crackle, it powdered.

Mrs. Weldon alone scarcely eat, and even Dick Sand's entreaties were vain. It seemed to him that this brave woman was more preoccupied, more sad than she had been hitherto. Meanwhile her little Jack suffered less; the fever had not returned, and at this time he was sleeping, under his mother's eyes, in a cell well lined with garments. Dick Sand knew not what to think.

It is useless to say that Cousin Benedict did honor to the repast, not that he paid any attention either to the quality or to the quantity of the food that he devoured, but because he had found an opportunity to deliver a lecture in entomology on the termites. Ah! if he had been able to find a termite, a single one, in the deserted ant hill! But nothing.

"These admirable insects," said he, without taking the trouble to find out if any one were listening--"these admirable insects belong to the marvelous order of newroptera, whose horns are longer than the head, the jaws very distinct, and whose lower wings are generally equal to the upper ones. Five tribes constitute this order: the Panorpates (scorpion flies), the Myrmileoniens, the Hemerobins, the Termitines and the Perlides. It is useless to add that the insects which now interest us, and whose dwelling we occupy, perhaps unduly, are the Termitines."

At this moment Dick Sand listened very attentively to Cousin Benedict. Had the meeting with these termites
excited in him the thought that he was perhaps on the African continent, without knowing by what chance he had arrived there? The young novice was very anxious to find out.

The savant, mounted on his favorite hobby, continued to ride it beautifully.

"Now these termitines," said he, "are characterized by four joints on the instep, horned jaws, and remarkable strength. We have the _mantispe_ species, the _raphidie_, and the termite species. The last is often known under the term of white ants, in which we count the deadly termite, the yellow corslet termite, the termite that shuns the light, the biter, the destroyer--"

"And those that constructed this ant-hill?" asked Dick Sand.

"They are the martial ants," replied Cousin Benedict, who pronounced this word as if it had been the Macedonians, or some other ancient people brave in war. "Yes, the warlike ants, and of all sizes. Between Hercules and a dwarf the difference would be less than between the largest of these insects and the smallest. Among them are 'workers' of five millimeters in length 'soldiers' of ten, and males and females of twenty. We find also a kind otherwise very curious: the _sirafous_ half an inch in length, which have pincers for jaws, and a head larger than the body, like the sharks. They are the sharks among insects, and in a fight between some _sirafous_ and a shark, I would bet on the _sirafous_."

"And where are these _sirafous_ commonly observed?" then asked Dick Sand.

"In Africa," replied Cousin Benedict; "in the central and southern provinces. Africa is, in fact, the country of ants. You should read what Livingstone says of them in the last notes reported by Stanley. More fortunate than myself, the doctor has witnessed a Homeric battle, joined between an army of black ants and an army of red ants. The latter, which are called 'drivers,' and which the natives name _sirafous_, were victorious.

"The others, the _tchoungous_, took flight, carrying their eggs and their young, not without having bravely defended themselves. Never, according to Livingstone, never was the spirit of battle carried farther, either among men or beasts! With their tenacious jaws, which tear out the piece, these _sirafous_ make the bravest man recoil. The largest animals—even lions and elephants—flee before them.

"Nothing stops them; neither trees, which they climb to the summit, nor streams, which they cross by making a suspension bridge of their own bodies, hooked together. And numerous! Another African traveler—Du Chaillu—has seen a column of these ants defile past him for twelve hours without stopping on the road. But why be astonished at the sight of such myriads? The fecundity of these insects is surprising; and, to return to our fighting termites, it has been proved that a female deposits as much as sixty thousand eggs in a day! Besides, these newroptera furnish the natives with a juicy food. Broiled ants, my friends; I know of nothing better in the world!"

"Have you then eaten them, Mr. Benedict?" asked Hercules.

"Never," replied the wise professor; "but I shall eat some."

"Where?"

"Here."

"Here; we are not in Africa!" said Tom, very quickly.

"No, no!" replied Cousin Benedict; "and, thus far, these warlike termites, and their villages of ant-hills, have only been observed on the African Continent. Ah! such travelers. They do not know how to see! Well! all the better, after all. I have discovered a _tsetse_ in America. To the glory of this, I shall join that of having found the warlike termites on the same continent! What matter for an article that will make a sensation in educated Europe, and, perhaps, appear in folio form, with prints and engravings, besides the text!"

"It was evident that the truth had not entered Cousin Benedict's brain. The poor man and all his companions, Dick Sand and Tom excepted, believed themselves, and must believe themselves, where they were not! It needed other incidents, facts still more grave than certain scientific curiosities, to undeceive them!"

It was then nine o'clock in the morning. Cousin Benedict had talked for a long time. Did he perceive that his auditors, propped up in their cells, had gradually fallen asleep during his entomological lecture? No; certainly not. He lectured for himself. Dick Sand no longer questioned him, and remained motionless, although he did not sleep. As for Hercules, he had resisted longer than the others; but fatigue soon finished by shutting his eyes, and, with his eyes, his ears.

For some time longer Cousin Benedict continued to lecture. However, sleep finally got the best of him, and he mounted to the upper cavity of the cone, in which he had chosen his domicile.

Deep silence fell on the interior of the cone, while the storm filled space with noise and fire. Nothing seemed to indicate that the tempest was nearly over.

The lantern had been extinguished. The interior of the cone, while the storm filled space with noise and fire. Nothing seemed to indicate that the tempest was nearly over.

The savant, mounted on his favorite hobby, continued to ride it beautifully.

"Now these termitines," said he, "are characterized by four joints on the instep, horned jaws, and remarkable strength. We have the _mantispe_ species, the _raphidie_, and the termite species. The last is often known under the term of white ants, in which we count the deadly termite, the yellow corslet termite, the termite that shuns the light, the biter, the destroyer--"

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into the hands of these natives.

And how to avoid this danger, the worst of all, during their return to the coast. Harris and Negoro had not led them a hundred miles into the interior of Angola without a secret design to gain possession of them.

But what did this miserable Portuguese intend? Who had merited his hatred? The young novice repeated to himself, that he alone had incurred it. Then he passed in review all the incidents that had taken place during the "Pilgrim's" voyage; the meeting with the wreck and the blacks; the pursuit of the whale; the disappearance of Captain Hull and his crew.

Dick Sand had found himself, at the age of fifteen, intrusted with the command of a vessel, the compass and log of which were soon injured by Negoro's criminal actions. He again saw himself using his authority in the presence of this insolent cook, threatening to put him in irons, or to blow out his brains with a pistol shot. Ah, why had he hesitated to do it? Negoro's corpse would have been thrown overboard, and none of these catastrophes would have happened.

Such were the young man's various thoughts. Then they dwelt a moment on the shipwreck which had ended the "Pilgrim's" voyage. The traitor Harris appeared then, and this province of South America gradually became transformed. Bolivia changed to the terrible Angola, with its feverish climate, its savage deer, its natives still more cruel. Could the little party escape during its return to the coast? This river which he was seeking, which he hoped to find, would it conduct them to the shore with more safety, and with less fatigue? He would not doubt it, for he knew well that a march of a hundred miles through this inhospitable country, in the midst of incessant dangers, was no longer possible.

"Happily," he said to himself, "Mrs. Weldon and all are ignorant of the danger of the situation. Old Tom and I, we alone are to know that Negoro has thrown us on the coast of Africa; and that Harris has led me into the wilds of Angola."

Dick Sand was thus sunk in overpowering thoughts, when he felt a breath on his forehead. A hand rested on his shoulder, and a trembling voice murmured these words in his ear:

"I know all, my poor Dick, but God can yet save us! His will be done!"

CHAPTER VI.

THE DIVING-BELL.

To this unexpected revelation Dick Sand could not reply. Besides, Mrs. Weldon had gone back at once to her place beside little Jack. She evidently did not wish to say any more about it, and the young novice had not the courage to detain her.

Thus Mrs. Weldon knew what to believe. The various incidents, of the way had enlightened her also, and perhaps, too, that word, "Africa!" so unluckily pronounced the night before by Cousin Benedict.

"Mrs. Weldon knows everything," repeated Dick Sand to himself. "Well, perhaps it is better so. The brave woman does not despair. I shall not despair either."

Dick Sand now longed for day to return, that he might explore the surroundings of this termite village. He must find a tributary of the Atlantic with a rapid course to transport all his little troop. He had a presentiment that this watercourse could not be far distant. Above all, they must avoid an encounter with the natives, perhaps already sent in pursuit of them under Harris's and Negoro's direction.

But it was not day yet. No light made its way into the cone through the lower orifice. Rumblings, rendered low by the thickness of the walls, indicated that the storm still raged. Listening, Dick Sand also heard the rain falling with violence at the base of the ant-hill. As the large drops no longer struck a hard soil, he must conclude that the whole plain was inundated.

It must have been about eleven o'clock. Dick Sand then felt that a kind of torpor, if not a true sleep, was going to overcome him. It would, however, be rest. But, just as he was yielding to it, the thought came to him that, by the settling of the clay, washed in, the lower orifice was likely to be obstructed. All passage for the outer air would be closed. Within, the respiration of ten persons would soon vitiate the air by loading it with carbonic acid.

Dick Sand then slipped to the ground, which had been raised by the clay from the first floor of cells.

That cushion was still perfectly dry, and the orifice entirely free. The air penetrated freely to the interior of the cone, and with it some flashes of lightning, and the loud noises of that storm, that a diluvian rain could not extinguish.

Dick Sand saw that all was well. No immediate danger seemed to menace these human termites, substituted for the colony of newroptera. The young novice then thought of refreshing himself by a few hours' sleep, as he already felt its influence. Only with supreme precaution Dick Sand lay on that bed of clay, at the bottom of the cone, near the narrow edifice.
By this means, if any accident happened outside, he would be the first to remark it. The rising day would also awaken him, and he would be ready to begin the exploration of the plain.

Dick Sand lay down then, his head against the wall, his gun under his hand, and almost immediately he was asleep.

How long this drowsiness lasted he could not tell, when he was awakened by a lively sensation of coolness.

He rose and recognized, not without great anxiety, that the water was invading the ant hill, and even so rapidly, that in a few seconds it would reach the story of cells occupied by Tom and Hercules.

The latter, awakened by Dick Sand, were told about this new complication.

The lighted lantern soon showed the interior of the cone.

The water had stopped at a height of about five feet, and remained stationary.

"What is the matter, Dick?" asked Mrs. Weldon.

"It is nothing," replied the young novice. "The lower part of the cone has been inundated. It is probably that during this storm a neighboring river has overflowed on this plain."

"Good!" said Hercules; "that proves the river is there!"

"Yes," replied Dick Sand, "and it will carry us to the coast. Be reassured, then, Mrs. Weldon; the water cannot reach you, nor little Jack, nor Nan, nor Mr. Benedict."

Mrs. Weldon did not reply. As to the cousin, he slept like a veritable termite.

Meanwhile the blacks, leaning over this sheet of water, which reflected the lantern's light, waited for Dick Sand to indicate to them what should be done. He was measuring the height of the inundation.

After having the provisions and arms put out of the reach of the inundation, Dick Sand was silent.

"The water has penetrated by the orifice," said Tom.

"Yes," replied Dick Sand, "and now it prevents the interior air from being renewed."

"Could we not make a hole in the wall above the level of the water?" asked the old black.

"Doubtless, Tom; but if we have five feet of water within, there are perhaps six or seven, even more, without."

"You think, Mr. Dick--?"

"I think, Tom, that the water, rising inside the ant-hill, has compressed the air in the upper part, and that this air now makes an obstacle to prevent the water from rising higher. But if we pierce a hole in the wall by which the air would escape, either the water would still rise till it reached the outside level, or if it passed the hole, it would rise to that point where the compressed air would again keep it back. We must be here like workmen in a diving-bell."

"What must be done?" asked Tom.

"Reflect well before acting," replied Dick Sand. "An imprudence might cost us our lives!"

The young novice's observation was very true.

In comparing the cone to a submerged bell, he was right. Only in that apparatus the air is constantly renewed by means of pumps. The divers breathe comfortably, and they suffer no other inconveniences than those resulting from a prolonged sojourn in a compressed atmosphere, no longer at a normal pressure.

But here, beside those inconveniences, space was already reduced a third by the invasion of the water. As to the air, it would only be renewed if they put it in communication with the outer atmosphere by means of a hole.

Could they, without running the danger spoken of by Dick Sand, pierce that hole? Would not the situation be aggravated by it?

What was certain was, that the water now rested at a level which only two causes could make it exceed, namely: if they pierced a hole, and the level of the rising waters was higher outside, or if the height of this rising water should still increase. In either of these cases, only a narrow space would remain inside the cone, where the air, not renewed, would be still more compressed.

But might not the ant-hill be torn from the ground and overthrown by the inundation, to the extreme danger of those within it? No, no more than a beaver's hut, so firmly did it adhere by its base.

Then, the event most to be feared was the persistence of the storm, and, consequently, the increase of the inundation. Thirty feet of water on the plain would cover the cone with eighteen feet of water, and bear on the air within with the pressure of an atmosphere.

Now, after reflecting well upon it, Dick Sand was led to fear that this inundation might increase considerably.

In fact, it could not be due solely to that deluge poured out by the clouds. It seemed more probable that a neighboring watercourse, swelled by the storm, had burst its banks, and was spreading over this plain lying below it. What proof had they that the ant-hill was not then entirely submerged, and that it was full time to leave it by the top part, which would not be difficult to demolish?

Dick Sand, now extremely anxious, asked himself what he ought to do. Must he wait or suddenly announce the probable result of the situation, after ascertaining the condition of things?

It was then three o'clock in the morning. All, motionless, silent, listened. The noise from outside came very
feebly through the obstructed orifice. All the time a dull sound, strong and continued, well indicated that the contest of the elements had not ceased.

At that moment old Tom observed that the water level was gradually rising.

"Yes," replied Dick Sand, "and if it rises, as the air cannot escape from within, it is because the rising of the waters increases and presses it more and more."

"It is but slight so far," said Tom.

"Without doubt," replied Dick Sand; "but where will this level stop?"

"Mr. Dick," asked Bat, "would you like me to go out of the ant-hill? By diving, I should try to slip out by the hole."

"It will be better for me to try it," replied Dick Sand.

"No, Mr. Dick, no," replied old Tom, quickly; "let my son do it, and trust to his skill. In case he could not return, your presence is necessary here."

Then, lower:

"Do not forget Mrs. Weldon and little Jack."

"Be it so," replied Dick Sand. "Go, then, Bat. If the ant-hill is submerged, do not seek to enter it again. We shall try to come out as you will have done. But if the cone still emerges, strike on its top with the ax that you will take with you. We will hear you, and it will be the signal for us to demolish the top from our side. You understand?"

"Yes, Mr. Dick," replied Bat.

"Go, then, boy," added old Tom, pressing his son's hand.

Bat, after laying in a good provision of air by a long aspiration, plunged under the liquid mass, whose depth then exceeded five feet. It was a rather difficult task, because he would have to seek the lower orifice, slip through it, and then rise to the outside surface of the waters.

That must be done quickly.

Nearly half a minute passed away. Dick Sand then thought that Bat had succeeded in passing outside when the black emerged.

"Well!" exclaimed Dick Sand.

"The hole is stopped up by rubbish!" replied Bat, as soon as he could take breath.

"Stopped up!" repeated Tom.

"Yes," replied Bat. "The water has probably diluted the clay. I have felt around the walls with my hand. There is no longer any hole."

Dick Sand shook his head. His companions and he were hermetically sequestered in this cone, perhaps submerged by the water.

"If there is no longer any hole," then said Hercules, "we must make one."

"Wait," replied the young novice, stopping Hercules, who, hatchet in hand, was preparing to dive.

Dick Sand reflected for a few moments, and then he said:

"We are going to proceed in another manner. The whole question is to know whether the water covers the ant-hill or not. If we make a small opening at the summit of the cone, we shall find out which it is. But in case the ant-hill should be submerged now, the water would fill it entirely, and we would be lost. Let us feel our way."

"But quickly," replied Tom.

In fact, the level continued to rise gradually. There were then six feet of water inside the cone. With the exception of Mrs. Weldon, her son, Cousin Benedict, and Nan, who had taken refuge in the upper cavities, all were immersed to the waist.

Then there was a necessity for quick action, as Dick Sand proposed.

It was one foot above the interior level, consequently seven feet from the ground, that Dick Sand resolved to pierce a hole in the clay wall.

If, by this hole, they were in communication with the outer air, the cone emerges. If, on the contrary, this hole was pierced below the water level outside, the air would be driven inward, and in that case they must stop it up at once, or the water would rise to its orifice. Then they would commence again a foot higher, and so on. If, at last, at the top, they did not yet find the outer air, it was because there was a depth of more than fifteen feet of water in the plain, and that the whole termite village had disappeared under the inundation. Then what chance had the prisoners in the ant-hill to escape the most terrible of deaths, death by slow asphyxia?

Dick Sand knew all that, but he did not lose his presence of mind for a moment. He had closely calculated the consequences of the experiment he wished to try. Besides, to wait longer was not possible. Asphyxia was threatening in this narrow space, reduced every moment, in a medium already saturated with carbonic acid.

The best tool Dick Sand could employ to pierce a hole through the wall was a ramrod furnished with a screw, intended to draw the wadding from a gun. By making it turn rapidly, this screw scooped out the clay like an auger,
and the hole was made little by little. Then it would not have a larger diameter than that of the ramrod, but that would be sufficient. The air could come through very well.

Hercules holding up the lantern lighted Dick Sand. They had some wax candles to take its place, and they had not to fear lack of light from that source.

A minute after the beginning of the operation, the ramrod went freely through the wall. At once a rather dull noise was produced, resembling that made by globules of air escaping through a column of water. The air escaped, and, at the same moment, the level of the water rose in the cone, and stopped at the height of the hole. This proved that they had pierced too low—that is to say, below the liquid mass.

"Begin again," the young novice said, coolly, after rapidly stopping the hole with a handful of clay.

The water was again stationary in the cone, but the reserved space had diminished more than eight inches. Respiration became difficult, for the oxygen was beginning to fail. They saw it also by the lantern's light, which reddened and lost a part of its brightness.

One foot above the first hole, Dick Sand began at once to pierce a second by the same process. If the experiment failed, the water would rise still higher inside the cone—but that risk must be run.

While Dick Sand was working his auger, they heard Cousin Benedict cry out, suddenly:

"Mercy! look--look--look why!"

Hercules raised his lantern and threw its light on Cousin Benedict, whose face expressed the most perfect satisfaction.

"Yes," repeated he, "look why those intelligent termites have abandoned the ant-hill! They had felt the inundation beforehand. Ah! instinct, my friends, instinct. The termites are wiser than we are, much wiser."

And that was all the moral Cousin Benedict drew from the situation.

At that moment Dick Sand drew out the ramrod, which had penetrated the wall. A hissing was produced. The water rose another foot inside the cone—the hole had not reached the open air outside.

The situation was dreadful. Mrs. Weldon, then almost reached by the water, had raised little Jack in her arms. All were stifling in this narrow space. Their ears buzzed.

The lantern only threw a faint light.

"Is the cone, then, entirely under water?" murmured Dick Sand.

He must know; and, in order to know, he must pierce a third hole, at the very top.

But it was asphyxia, it was immediate death, if the result of this last attempt should prove fruitless. The air remaining inside would escape through the upper sheet of water, and the water would fill the whole cone.

"Mrs. Weldon," then said Dick Sand, "you know the situation. If we delay, respirable air will fail us. If the third attempt fails, water will fill all this space. Our only chance is that the summit of the cone is above the level of the inundation. We must try this last experiment. Are you willing?"

"Do it, Dick!" replied Mrs. Weldon.

At that moment the lantern went out in that medium already unfit for combustion. Mrs. Weldon and her companions were plunged in the most complete darkness.

Dick Sand was perched on Hercules's shoulders. The latter was hanging on to one of the lateral cavities. Only his head was above the bed of water.

Mrs. Weldon, Jack, and Cousin Benedict were in the last story of cells.

Dick Sand scratched the wall, and his ramrod pierced the clay rapidly. In this place the wall, being thicker and harder also, was more difficult to penetrate. Dick Sand hastened, not without terrible anxiety, for by this narrow opening either life was going to penetrate with the air, or with the water it was death.

Suddenly a sharp hissing was heard. The compressed air escaped—but a ray of daylight filtered through the wall. The water only rose eight inches, and stopped, without Dick Sand being obliged to close the hole. The equilibrium was established between the level within and that outside. The summit of the cone emerged. Mrs. Weldon and her companions were saved.

At once, after a frantic hurra, in which Hercules's thundering voice prevailed, the cutlasses were put to work. The summit, quickly attacked, gradually crumbled. The hole was enlarged, the pure air entered in waves, and with it the first rays of the rising sun. The top once taken off the cone, it would be easy to hoist themselves on to its wall, and they would devise means of reaching some neighboring height, above all inundations.

Dick Sand first mounted to the summit of the cone.

A cry escaped him.

That particular noise, too well known by African travelers, the whizzing of arrows, passed through the air.

Dick Sand had had time to perceive a camp a hundred feet from the ant-hill, and ten feet from the cone, on the inundated plain, long boats, filled with natives.

It was from one of those boats that the flight of arrows had come the moment the young novice's head appeared.
out of the hole.

Dick Sand, in a word, had told all to his companions. Seizing his gun, followed by Hercules, Acteon, and Bat, he reappeared at the summit of the cone, and all fired on one of the boats.

Several natives fell, and yells, accompanied by shots, replied to the detonation of the fire-arms.

But what could Dick Sand and his companions do against a hundred Africans, who surrounded them on all sides?

The ant-hill was assailed. Mrs. Weldon, her child, and Cousin Benedict, all were brutally snatched from it, and without having had time to speak to each other or to shake hands for the last time, they saw themselves separated from each other, doubtless in virtue of orders previously given.

A last boat took away Mrs. Weldon, little Jack and Cousin Benedict. Dick Sand saw them disappear in the middle of the camp.

As to him, accompanied by Nan, Old Tom, Hercules, Bat, Acteon and Austin, he was thrown into a second boat, which went toward another point of the hill.

Twenty natives entered this boat.

It was followed by five others.

Resistance was not possible, and nevertheless, Dick Sand and his companions attempted it. Some soldiers of the caravan were wounded by them, and certainly they would have paid for this resistance with their lives, if there had not been a formal order to spare them.

In a few minutes, the passage was made. But just as the boat landed, Hercules, with an irresistible bound, sprang on the ground. Two natives having sprung on him, the giant turned his gun like a club, and the natives fell, with their skulls broken.

A moment after, Hercules disappeared under the cover of the trees, in the midst of a shower of balls, as Dick Sand and his companions, having been put on land, were chained like slaves.

CHAPTER VII.
IN CAMP ON THE BANKS OF THE COANZA.

The aspect of the country was entirely changed since the inundation. It had made a lake of the plain where the termite village stood. The cones of twenty ant-hills emerged, and formed the only projecting points on this large basin.

The Coanza had overflowed during the night, with the waters of its tributaries swelled by the storm.

This Coanza, one of the rivers of Angola, flows into the Atlantic, a hundred miles from the cape where the "Pilgrim" was wrecked. It was this river that Lieutenant Cameron had to cross some years later, before reaching Benguela. The Coanza is intended to become the vehicle for the interior transit of this portion of the Portuguese colony. Already steamers ascend its lower course, and before ten years elapse, they will ply over its upper bed. Dick Sand had then acted wisely in seeking some navigable river toward the north. The rivulet he had followed had just been emptied into the Coanza. Only for this sudden attack, of which he had had no intimation to put him on his guard, he would have found the Coanza a mile farther on. His companions and he would have embarked on a raft, easily constructed, and they would have had a good chance to descend the stream to the Portuguese villages, where the steamers come into port. There, their safety would be secured.

It would not be so.

The camp, perceived by Dick Sand, was established on an elevation near the ant-hill, into which fate had thrown him, as in a trap. At the summit of that elevation rose an enormous sycamore fig-tree, which would easily shelter five hundred men under its immense branches. Those who have not seen those giant trees of Central Africa, can form no idea of them. Their branches form a forest, and one could be lost in it. Farther on, great banyans, of the kind whose seeds do not change into fruits, completed the outline of this vast landscape.

It was under the sycamore's shelter, hidden, as in a mysterious asylum, that a whole caravan--the one whose arrival Harris had announced to Negoro--had just halted. This numerous procession of natives, snatched from their villages by the trader Alvez's agents, were going to the Kazounde market. Thence the slaves, as needed, would be sent either to the barracks of the west coast, or to Nyangwe, toward the great lake region, to be distributed either in upper Egypt, or in the factories of Zanzibar.

As soon as they arrived at the camp, Dick Sand and his companions had been treated as slaves. Old Tom, his son Austin, Acteon, poor Nan, negroes by birth, though they did not belong to the African race, were treated like captive natives. After they were disarmed, in spite of the strongest resistance, they were held by the throat, two by two, by means of a pole six or seven feet long, forked at each end, and closed by an iron rod. By this means they were forced to march in line, one behind the other, unable to get away either to the right or to the left. As an over precaution, a
heavy chain was attached to their waists. They had their arms free, to carry burdens, their feet free to march, but they
could not use them to flee. Thus they were going to travel hundreds of miles under an overseer's lash. Placed apart,
overcome by the reaction which followed the first moments of their struggle against the negroes, they no longer
made a movement. Why had they not been able to follow Hercules in his flight? And, meanwhile, what could they
hope for the fugitive? Strong as he was, what would become of him in that inhospitable country, where hunger,
solitude, savage beasts, natives, all were against him? Would he not soon regret his companion's fate? They,
however, had no pity to expect from the chiefs of the caravan, Arabs or Portuguese, speaking a language they could
not understand. These chiefs only entered into communication with their prisoners by menacing looks and gestures.

Dick Sand himself was not coupled with any other slave. He was a white man, and probably they had not dared
to inflict the common treatment on him. Unarmed, he had his feet and hands free, but a driver watched him
especially. He observed the camp, expecting each moment to see Negoro or Harris appear. His expectation was in
vain. He had no doubt, however, that those two miserable men had directed the attack against the ant-hill.

Thus the thought came to him that Mrs. Weldon, little Jack, and Cousin Benedict had been led away separately
by orders from the American or from the Portuguese. Seeing neither one nor the other, he said to himself that
perhaps the two accomplices even accompanied their victims. Where were they leading them? What would they do
with them? It was his most cruel care. Dick Sand forgot his own situation to think only of Mrs. Weldon and hers.

The caravan, camped under the gigantic sycamore, did not count less than eight hundred persons, say five
hundred slaves of both sexes, two hundred soldiers, porters, marauders, guards, drivers, agents, or chiefs.

These chiefs were of Arab and Portuguese origin. It would be difficult to imagine the cruelties that these inhuman
beings inflicted on their captives. They struck them without relaxation, and those who fell exhausted, not fit to be
sold, were finished with gunshots or the knife. Thus they hold them by terror. But the result of this system is, that on
the arrival of the caravan, fifty out of a hundred slaves are missing from the trader's list. A few may have escaped,
but the bones of those who died from torture mark out the long routes from the interior to the coast.

It is supposed that the agents of European origin, Portuguese for the most part, are only rascals whom their
country has rejected, convicts, escaped prisoners, old slave-drivers whom the authorities have been unable to hang--
in a word, the refuse of humanity. Such was Negoro, such was Harris, now in the service of one of the greatest
contractors of Central Africa, Jose-Antonio Alvez, well known by the traders of the province, about whom
Lieutenant Cameron has given some curious information.

The soldiers who escort the captives are generally natives in the pay of the traders. But the latter have not the
monopoly of those raids which procure the slaves for them. The negro kings also make atrocious wars with each
other, and with the same object. Then the vanquished adults, the women and children, reduced to slavery, are sold
by the vanquishers for a few yards of calico, some powder, a few firearms, pink or red pearls, and often even, as
Livingstone says, in periods of famine, for a few grains of maize.

The soldiers who escorted old Alvez's caravan might give a true idea of what African armies are.

It was an assemblage of negro bandits, hardly clothed, who brandished long flint-lock guns, the gun-barrels
garnished with a great number of copper rings. With such an escort, to which are joined marauders who are no
better, the agents often have all they can do. They dispute orders, they insist on their own halting places and hours,
they threaten to desert, and it is not rare for the agents to be forced to yield to the exactions of this soldiery.

Though the slaves, men or women, are generally subjected to carry burdens while the caravan is on the march,
yet a certain number of porters accompany it. They are called more particularly "Pagazis," and they carry bundles of
precious objects, principally ivory. Such is the size of these elephants' teeth sometimes, of which some weigh as
much as one hundred and sixty pounds, that it takes two of these "Pagazis" to carry them to the factories. Thence
this precious merchandise is exported to the markets of Khartoum, of Zanzibar and Natal.

On arriving, these "Pagazis" are paid the price agreed upon. It consists in twenty yards of cotton cloth, or of that
stuff which bears the name of "Merikani," a little powder, a handful of cowry (shells very common in that country,
which serve as money), a few pearls, or even those of the slaves who would be difficult to sell. The slaves are paid,
when the trader has no other money.

Among the five hundred slaves that the caravan counted, there were few grown men. That is because, the
"Razzia" being finished and the village set on fire, every native above forty is unmercifully massacred and hung to a
neighboring tree. Only the young adults of both sexes and the children are intended to furnish the markets. After
these men-hunts, hardly a tenth of the vanquished survive. This explains the frightful depopulation which changes
vast territories of equatorial Africa into deserts.

Here, the children and the adults were hardly clothed with a rag of that bark stuff, produced by certain trees, and
called "mbouzon" in the country. Thus the state of this troop of human beings, women covered with wounds from
the "havildars'" whips, children ghastly and meager, with bleeding feet, whom their mothers tried to carry in addition
to their burdens, young men closely riveted to the fork, more torturing than the convict's chain, is the most
lamentable that can be imagined.

Yes, the sight of the miserable people, hardly living, whose voices have no sound, ebony skeletons according to Livingstone's expression, would touch the hearts of wild beasts. But so much misery did not touch those hardened Arabs nor those Portuguese, who, according to Lieutenant Cameron, are still more cruel. This is what Cameron says: "To obtain these fifty women, of whom Alvez called himself proprietor, ten villages had been destroyed, ten villages having each from one hundred to two hundred souls: a total of fifteen hundred inhabitants. Some had been able to escape, but the greater part--almost all--had perished in the flames, had been killed in defending their families, or had died of hunger in the jungle, unless the beasts of prey had terminated their sufferings more promptly.

"Those crimes, perpetrated in the center of Africa by men who boast of the name of Christians, and consider themselves Portuguese, would seem incredible to the inhabitants of civilized countries. It is impossible that the government of Lisbon knows the atrocities committed by people who boast of being her subjects." --Tour of the World.

In Portugal there have been very warm protestations against these assertions of Cameron's.

It need not be said that, during the marches, as during the halts, the prisoners were very carefully guarded. Thus, Dick Sand soon understood that he must not even attempt to get away. But then, how find Mrs. Weldon again? That she and her child had been carried away by Negoro was only too certain. The Portuguese had separated her from her companions for reasons unknown as yet to the young novice. But he could not doubt Negoro's intervention, and his heart was breaking at the thought of the dangers of all kinds which threatened Mrs. Weldon.

"Ah!" he said to himself, "when I think that I have held those two miserable men, both of them, at the end of my gun, and that I have not killed them!"

This thought was one of those which returned most persistently to Dick Sand's mind. What misfortunes the death, the just death of Harris and Negoro might have prevented! What misery, at least, for those whom these brokers in human flesh were now treating as slaves!

All the horror of Mrs. Weldon's and little Jack's situation now represented itself to Dick Sand. Neither the mother nor the child could count on Cousin Benedict. The poor man could hardly take care of himself.

Doubtless they were taking all three to some district remote from the province of Angola. But who was carrying the still sick child?

"His mother; yes, his mother," Dick Sand repeated to himself. "She will have recovered strength for him; she will have done what these unhappy female slaves do, and she will fall like them. Ah! may God put me again in front of her executioners, and I--"

But he was a prisoner! He counted one head in this live-stock that the overseers were driving to the interior of Africa. He did not even know whether Negoro and Harris themselves were directing the convoy of which their victims made a part. Dingo was no longer there to scent the Portuguese, to announce his approach. Hercules alone might come to the assistance of the unfortunate Mrs. Weldon. But was that miracle to be hoped for?

However, Dick Sand fell back again on that idea. He said to himself that the strong black man was free. Of his devotion there was no doubt. All that a human being could do, Hercules would do in Mrs. Weldon's interest. Yes, either Hercules would try to find them and put himself in communication with them; or if that failed him, he would endeavor to concert with him, Dick Sand, and perhaps carry him off, deliver him by force. During the night halts, mingling with these prisoners, black like them, could he not deceive the soldier's vigilance, reach him, break his bonds, and lead him away into the forest? And both of them, then free, what would they not do for Mrs. Weldon's safety. A water course would enable them to descend to the coast. Dick Sand would again take up that plan so unfortunately prevented by the natives' attack, with new chances of success and a greater knowledge of the difficulties.

The young novice thus alternated between fear and hope. In fact, he resisted despair, thanks to his energetic nature, and held himself in readiness to profit by the least chance that might offer itself to him.

What he most desired to know was to what market the agents were taking the convoy of slaves. Was it to one of the factories of Angola, and would it be an affair of a few halting-places only, or would this convoy travel for hundreds of miles still, across Central Africa? The principal market of the contractors is that of N'yangwe, in Manyema, on that meridian which divides the African continent into two almost equal parts, there where extends the country of the great lakes, that Livingstone was then traversing. But it was far from the camp on the Coanza to that village. Months of travel would not suffice to reach it.

That was one of Dick Sand's most serious thoughts; for, once at N'yangwe, in case even Mrs. Weldon, Hercules, the other blacks and he should succeed in escaping, how difficult it would be, not to say impossible, to return to the seacoast, in the midst of the dangers of such a long route.

But Dick Sand soon had reason to think that the convoy would soon reach its destination. Though he did not understand the language employed by the chiefs of the caravan, sometimes Arab, sometimes the African idiom, he
remarked that the name of an important market of that region was often pronounced. It was the name Kazounde, and
he knew that a very great trade in slaves was carried on there. He was then naturally led to believe that there the fate
of the prisoners would be decided, whether for the profit of the king of that district or for the benefit of some rich
trader of the country. We know that he was not mistaken.

Now, Dick Sand, being posted in the facts of modern geography, knew very exactly what is known of Kazounde.
The distance from Saint Paul de Loanda to this city does not exceed four hundred miles, and consequently two
hundred and fifty miles, at the most, separates it from the camp established on the Coanza. Dick Sand made his
calculation approximately, taking the distance traveled by the little troop under Harris's lead as the base. Now, under
ordinary circumstances, this journey would only require from ten to twelve days. Doubling that time for the needs of
a caravan already exhausted by a long route, Dick Sand might estimate the length of the journey from the Coanza to
Kazounde at three weeks.

Dick Sand wished very much to impart what he believed he knew to Tom and his companions. It would be a
kind of consolation for them to be assured that they were not being led to the center of Africa, into those fatal
countries which they could not hope to leave. Now, a few words uttered in passing would be sufficient to enlighten
them. Would he succeed in saying those words?

Tom and Bat—chance had reunited the father and son—Acteon and Austin, forked two by two, were at the right
extremity of the camp. An overseer and a dozen soldiers watched them.

Dick Sand, free in his movements, resolved to gradually diminish the distance that separated him from his
companions to fifty steps. He then commenced to maneuver to that end.

Very likely old Tom divined Dick Sand's thought. A word, pronounced in a low voice, warned his companions
to be attentive. They did not stir, but they kept themselves ready to see, as well as to hear.

Soon, with an indifferent air, Dick Sand had gained fifty steps more. From the place where he then was, he could
have called out, in such a manner as to be heard, that name Kazounde, and tell them what the probable length of the
journey would be. But to complete his instructions, and confer with them on their conduct during the journey, would
be still better. He then continued to draw nearer to them. Already his heart was beating with hope; he was only a few
steps from the desired end, when the overseer, as if he had suddenly penetrated his intention, rushed on him. At the
cries of that enraged person, ten soldiers ran to the spot, and Dick Sand was brutally led back to the rear, while Tom
and his companions were taken to the other extremity of the camp.

Exasperated, Dick Sand had thrown himself upon the overseer. He had ended by breaking his gun in his hands.
He had almost succeeded in snatching it from him. But seven or eight soldiers assailed him at once, and force was
used to secure him. Furious, they would have massacred him, if one of the chiefs of the caravan, an Arab of great
height and ferocious physiognomy, had not intervened. This Arab was the chief Ibn Hamis, of whom Harris had
spoken. He pronounced a few words which Dick Sand could not understand, and the soldiers, obliged to release their
prey, went away.

It was, then, very evident, for one thing, that there had been a formal order not to allow the young novice to
communicate with his companions; and for another, that his life should not be taken.

Who could have given such orders, if not Harris or Negoro?

At that moment—it was nine o'clock in the morning, April 19th—the harsh sounds from a "condou's" horn (a kind
of ruminating animal among the African deer) burst forth, and the drum was heard. The halt was going to end.

All, chiefs, porters, soldiers, slaves, were immediately on foot. Laden with their packs, several groups of
captives were formed under the leadership of an overseer, who unfurled a banner of bright colors.

The signal for departure was given. Songs then rose on the air; but they were the vanquished, not the
vanquishers, who sang thus.

This is what they said in these songs—a threatening expression of a simple faith from the slaves against their
oppressors—against their executioners:

"You have sent me to the coast, but I shall be dead; I shall have a yoke no longer, and I shall return to kill you."

CHAPTER VIII.
SOME OF DICK SAND'S NOTES.

Though the storm of the day before had ceased, the weather was still very unsettled. It was, besides, the period
of the "masika," the second period of the rainy season, under this zone of the African heaven. The nights in
particular would be rainy during one, two, or three weeks, which could only increase the misery of the caravan.

It set out that day in cloudy weather, and, after quitting the banks of the Coanza, made its way almost directly to
the east. Fifty soldiers marched at the head, a hundred on each of the two sides of the convoy, the rest as a rear-
guard. It would be difficult for the prisoners to flee, even if they had not been chained. Women, children, and men
were going pell-mell, and the overseers urged them on with the whip. There were unfortunate mothers who, nursing one child, held a second by the hand that was free. Others dragged these little beings along, without clothing, without shoes, on the sharp grasses of the soil.

The chief of the caravan, that ferocious Ibn Hamis, who had interfered in the struggle between Dick Sand and his overseer, watched this whole troop, going backwards and forwards from the head to the foot of the long column. If his agents and he troubled themselves but little about the sufferings of their captives, they must reckon more seriously either with the soldiers who claimed some additional rations, or with the "pagazis" who wanted to halt. Thence discussions; often even an exchange of brutality. The slaves suffered more from the overseers' constant irritation. Nothing was heard but threats from one side, and cries of grief from the other. Those who marched in the last ranks treaded a soil that the first had stained with their blood.

Dick Sand's companions, always carefully kept in front of the convoy, could have no communication with him. They advanced in file, the neck held in the heavy fork, which did not permit a single head-movement. The whips did not spare them any more than their sad companions in misfortune.

Bat, coupled with his father, marched before him, taxing his ingenuity not to shake the fork, choosing the best places to step on, because old Tom must pass after him. From time to time, when the overseer was a little behind, he uttered various words of encouragement, some of which reached Tom. He even tried to retard his march, if he felt that Tom was getting tired. It was suffering, for this good son to be unable to turn his head towards his good father, whom he loved. Doubtless, Tom had the satisfaction of seeing his son; however, he paid dear for it. How many times great tears flowed from his eyes when the overseer's whip fell upon Bat! It was a worse punishment than if it had fallen on his own flesh.

Austin and Acteon marched a few steps behind, tied to each other, and brutally treated every moment. Ah, how they envied Hercules's fate! Whatever were the dangers that threatened the latter in that savage country, he could at least use his strength and defend his life.

During the first moments of their captivity, old Tom had finally made known the whole truth to his companions. They had learned from him, to their profound astonishment, that they were in Africa; that Negoro's and Harris's double treachery had first thrown them there, and then led them away, and that no pity was to be expected from their masters.

Nan was not better treated. She made part of a group of women who occupied the middle of the convoy. They had chained her with a young mother of two children, one at the breast, the other aged three years, who walked with difficulty. Nan, moved with pity, had burdened herself with the little creature, and the poor slave had thanked her by a tear. Nan then carried the infant, at the same time, sparing her the fatigue, to which she would have yielded, and the blows the overseer would have given her. But it was a heavy burden for old Nan. She felt that her strength would soon fail her, and then she thought of little Jack. She pictured him to herself in his mother's arms. Sickness had wasted him very much, but he must be still heavy for Mrs. Weldon's weakened arms. Where was she? What would become of her? Would her old servant ever see her again?

Dick Sand had been placed almost in the rear of the convoy. He could neither perceive Tom, nor his companions, nor Nan. The head of the long caravan was only visible to him when it was crossing some plain. He walked, a prey, to the saddest thoughts, from which the agents' cries hardly drew his attention. He neither thought of himself, nor the fatigue he must still support, nor of the tortures probably reserved for him by Negoro. He only thought of Mrs. Weldon. In rain he sought on the ground, on the brambles by the paths, on the lower branches of the trees, to find some trace of her passage. She could not have taken another road, if as everything indicated, they were leading her to Kazounde. What would he not give to find some indication of her march to the destination where they themselves were being led!

Such was the situation of the young novice and his companions in body and mind. But whatever they might have to fear for themselves, great as was their own sufferings, pity took possession of them on seeing the frightful misery of that sad troop of captives, and the revolting brutality of their masters. Alas! they could do nothing to succor the afflicted, nothing to resist the others.

All the country situated east of the Coanza was only a forest for over an extent of twenty miles. The trees, however, whether they perish under the biting of the numerous insects of these countries, or whether troops of elephants beat them down while they are still young, are less crowded here than in the country next to the seacoast. The march, then, under the trees, would not present obstacles. The shrubs might be more troublesome than the trees. There was, in fact, an abundance of those cotton-trees, seven to eight feet high, the cotton of which serves to manufacture the black and white striped stuffs used in the interior of the province.

In certain places, the soil transformed itself into thick jungles, in which the convoy disappeared. Of all the animals of the country, the elephants and giraffes alone were taller than those reeds which resemble bamboos, those herbs, the stalks of which measure an inch in diameter. The agents must know the country marvelously well, not to
be lost in these jungles.

Each day the caravan set out at daybreak, and only halted at midday for an hour. Some packs containing tapioca were then opened, and this food was parsimoniously distributed to the slaves. To this potatoes were added, or goat’s meat and veal, when the soldiers had pillaged some village in passing. But the fatigue had been such, the repose so insufficient, so impossible even during these rainy nights, that when the hour for the distribution of food arrived the prisoners could hardly eat. So, eight days after the departure from the Coanza, twenty had fallen by the way, at the mercy of the beasts that prowled behind the convoy. Lions, panthers and leopards waited for the victims which could not fail them, and each evening after sunset their roaring sounded at such a short distance that one might fear a direct attack.

On hearing those roars, rendered more formidable by the darkness, Dick Sand thought with terror of the obstacles such encounters would present against Hercules’s enterprise, of the perils that menaced each of his steps. And meanwhile if he himself should find an opportunity to flee, he would not hesitate.

Here are some notes taken by Dick Sand during this journey from the Coanza to Kazounde. Twenty-five "marches" were employed to make this distance of two hundred and fifty miles, the "march" in the traders’ language being ten miles, halting by day and night.

_From 25th to 27th April._--Saw a village surrounded by walls of reeds, eight or nine feet high. Fields cultivated with maize, beans, "sorghas" and various arachides. Two blacks seized and made prisoners. Fifteen killed. Population fled.

The next day crossed an impetuous river, one hundred and fifty yards wide. Floating bridge, formed of trunks of trees, fastened with lianes. Piles half broken. Two women, tied to the same fork, precipitated into the water. One was carrying her little child. The waters are disturbed and become stained with blood. Crocodiles glide between the parts of the bridge. There is danger of stepping into their open mouths.

_April 28th._--Crossed a forest of bauhiniers. Trees of straight timber--those which furnish the iron wood for the Portuguese.

Heavy rain. Earth wet. March extremely painful.

Perceived, toward the center of the convoy, poor Nan, carrying a little negro child in her arms. She drags herself along with difficulty. The slave chained with her limps, and the blood flows from her shoulder, torn by lashes from the whip.

In the evening camped under an enormous baobab with white flowers and a light green foliage.

During the night roars of lions and leopards. Shots fired by one of the natives at a panther. What has become of Hercules?

_April 29th and 30th._--First colds of what they call the African winter. Dew very abundant. End of the rainy season with the month of April; it commences with the month of November. Plains still largely inundated. East winds which check perspiration and renders one more liable to take the marsh fevers.

No trace of Mrs. Weldon, nor of Mr. Benedict. Where would they take them, if not to Kazounde? They must have followed the road of the caravan and preceded us. I am eaten up with anxiety. Little Jack must be seized again with the fever in this unhealthy region. But does he still live?

_From May 1st to May 6th._--Crossed, with several halting-places, long plains, which evaporation has not been able to dry up. Water everywhere up to the waist. Myriads of leeches adhering to the skin. We must march for all that. On some elevations that emerge are lotus and papyrus. At the bottom, under the water, other plants, with large cabbage leaves, on which the feet slip, which occasions numerous falls.

In these waters, considerable quantities of little fish of the silurus species. The natives catch them by billions in wickers and sell them to the caravans.

Impossible to find a place to camp for the night. We see no limit to the inundated plain. We must march in the dark. To-morrow many slaves will be missing from the convoy. What misery! When one falls, why get up again? A few moments more under these waters, and all would be finished. The overseer's stick would not reach you in the darkness.

Yes, but Mrs. Weldon and her son! I have not the right to abandon them. I shall resist to the end. It is my duty.

Dreadful cries are heard in the night. Twenty soldiers have torn some branches from resinous trees whose branches were above water. Livid lights in the darkness.

This is the cause of the cries I heard. An attack of crocodiles; twelve or fifteen of those monsters have thrown themselves in the darkness on the flank of the caravan.

Women and children have been seized and carried away by the crocodiles to their "pasture lands"--so Livingstone calls those deep holes where this amphibious animal deposits its prey, after having drowned it, for it only eats it when it has reached a certain degree of decomposition.

I have been rudely grazed by the scales of one of these crocodiles. An adult slave has been seized near me and
torn from the fork that held him by the neck. The fork was broken. What a cry of despair! What a howl of grief! I hear it still!

_May 7th and 8th._--The next day they count the victims. Twenty slaves have disappeared.

At daybreak I look for Tom and his companions. God be praised! they are living. Alas! ought I to praise God? Is one not happier to be done with all this misery?

Tom is at the head of the convoy. At a moment when his son Bat made a turn, the fork was presented obliquely, and Tom was able to see me.

I search in vain for old Nan. Is she in the central group? or has she perished during that frightful night?

The next day, passed the limit of the inundated plain, after twenty-four hours in the water. We halt on a hill. The sun dries us a little. We eat, but what miserable food! A little tapioca, a few handfuls of maize. Nothing but the troubled water to drink. Prisoners extended on the ground--how many will not get up!

No! it is not possible that Mrs. Weldon and her son have passed through so much misery! God would be so gracious to them as to have them led to Kazounde by another road. The unhappy mother could not resist.

New case of small-pox in the caravan; the "ndoue," as they say. The sick could not be able to go far. Will they abandon them?

_May 9th._--They have begun the march again at sunrise. No laggards. The overseer's whip has quickly raised those overcome by fatigue or sickness. Those slaves have a value; they are money. The agents will not leave them behind while they have strength enough to march.

I am surrounded by living skeletons. They have no longer voice enough to complain. I have seen old Nan at last. She is a sad sight. The child she was carrying is no longer in her arms. She is alone, too. That will be less painful for her; but the chain is still around her waist, and she has been obliged to throw the end over her shoulder.

By hastening, I have been able to draw near her. One would say that she did not recognize me. Am I, then, changed to that extent?

"Nan," I said.

The old servant looked at me a long time, and then she exclaimed:

"You, Mr. Dick! I--I--before long I shall be dead!"

"No! no! Courage!" I replied, while my eyes fell so as not to see what was only the unfortunate woman's bloodless specter.

"Dead!" she continued; "and I shall not see my dear mistress again, nor my little Jack. My God! my God! have pity on me!"

I wished to support old Nan, whose whole body trembled under her torn clothing. It would have been a mercy to see myself tied to her, and to carry my part of that chain, whose whole weight she bore since her companion's death.

A strong arm pushes me back, and the unhappy Nan is thrown back into the crowd of slaves, lashed by the whips. I wished to throw myself on that brutal----The Arab chief appears, seizes my arm, and holds me till I find myself again in the caravan's last rank.

Then, in his turn, he pronounces the name, "Negoro!"

Negoro! It is then by the Portuguese's orders that he acts and treats me differently from my companions in misfortune?

For what fate am I reserved?

_May 10th._--To-day passed near two villages in flames. The stubble burns on all sides. Dead bodies are hung from the trees the fire has spared. Population fled.

Fields devastated. The _razzie_ is exercised there. Two hundred murders, perhaps, to obtain a dozen slaves.

Evening has arrived. Halt for the night. Camp made under great trees. High shrubs forming a thicket on the border of the forest.

Some prisoners fled the night before, after breaking their forks. They have been retaken, and treated with unprecedented cruelty. The soldiers' and overseers' watchfulness is redoubled.

Night has come. Roaring of lions and hyenas, distant snorting of hippopotami. Doubtless some lake or watercourse near.

In spite of my fatigue, I cannot sleep. I think of so many things.

Then, it seems to me that I hear prowling in the high grass. Some animal, perhaps. Would it dare force an entrance into the camp?

I listen. Nothing! Yes! An animal is passing through the reeds. I am unarmed! I shall defend myself, nevertheless. My life may be useful to Mrs. Weldon, to my companions.

I look through the profound darkness. There is no moon. The night is extremely dark.

Two eyes shine in the darkness, among the papyrus--two eyes of a hyena or a leopard. They disappear--reappear. At last there is a rustling of the bushes. An animal springs upon me!
I am going to cry out, to give the alarm. Fortunately, I was able to restrain myself. I cannot believe my eyes! It is Dingo! Dingo, who is near me! Brave Dingo! How is it restored to me? How has it been able to find me again? Ah! instinct! Would instinct be sufficient to explain such miracles of fidelity? It licks my hands. Ah! good dog, now my only friend, they have not killed you, then!

It understands me.
I return its caresses.
It wants to bark.
I calm it. It must not be heard.

Let it follow the caravan in this way, without being seen, and perhaps----But what! It rubs its neck obstinately against my hands. It seems to say to me: "Look for something." I look, and I feel something there, fastened to its neck. A piece of reed is slipped under the collar, on which are graven those two letters, S.V., the mystery of which is still inexplicable to us.

Yes. I have unfastened the reed. I have broken it! There is a letter inside. But this letter--I cannot read it. I must wait for daylight!--daylight! I should like to keep Dingo; but the good animal, even while licking my hands, seems in a hurry to leave me. It understands that its mission is finished. With one bound aside, it disappears among the bushes without noise. May God spare it from the lions' and hyenas' teeth!

Dingo has certainly returned to him who sent it to me.

This letter, that I cannot yet read, burns my hands! Who has written it? Would it come from Mrs. Weldon? Does it come from Hercules? How has the faithful animal, that we believed dead, met either the one or the other? What is this letter going to tell me? Is it a plan of escape that it brings me? Or does it only give me news of those dear to me? Whatever it may be, this incident has greatly moved me, and has relaxed my misery.

Ah! the day comes so slowly. I watch for the least light on the horizon. I cannot close my eyes. I still hear the roaring of the animals. My poor Dingo, can you escape them? At last day is going to appear, and almost without dawn, under these tropical latitudes.

I settle myself so as not to be seen. I try to read--I cannot yet. At last I have read. The letter is from Hercules's hand. It is written on a bit of paper, in pencil. Here is what it says:

"Mrs. Weldon was taken away with little Jack in a _kitanda_. Harris and Negoro accompany it. They precede the caravan by three or four marches, with Cousin Benedict. I have not been able to communicate with her. I have found Dingo, who must have been wounded by a shot, but cured. Good hope, Mr. Dick. I only think of you all, and I fled to be more useful to you. HERCULES."

Ah! Mrs. Weldon and her son are living. God be praised! They have not to suffer the fatigues of these rude halting-places. A _kitanda_--it is a kind of litter of dry grass, suspended to a long bamboo, that two men carry on the shoulder. A stuff curtain covers it over. Mrs. Weldon and her little Jack are in that _kitanda_. What does Harris and Negoro want to do with them? Those wretches are evidently going to Kazounde. Yes, yes, I shall find them again. Ah! in all this misery it is good news, it is joy that Dingo has brought me!

_From May 11th to 15th_.--The caravan continues its march. The prisoners drag themselves along more and more painfully. The majority have marks of blood under their feet. I calculate that it will take ten days more to reach Kazounde. How many will have ceased to suffer before then? But I--I must arrive there, I shall arrive there.

It is atrocious! There are, in the convoy, unfortunate ones whose bodies are only wounds. The cords that bind them enter into the flesh.

Since yesterday a mother carries in her arms her little infant, dead from hunger. She will not separate from it.

Our route is strewn with dead bodies. The smallpox rages with new violence.

We have just passed near a tree. To this tree slaves were attached by the neck. They were left there to die of hunger.

_From May 16th to 24th_.--I am almost exhausted, but I have no right to give up. The rains have entirely ceased. We have days of "hard marching." That is what the traders call the "tirikesa," or afternoon march. We must go faster, and the ground rises in rather steep ascents.

We pass through high shrubs of a very tough kind. They are the "nyassi," the branches of which tear the skin off my face, whose sharp seeds penetrate to my skin, under my dilapidated clothes. My strong boots have fortunately kept good.

The agents have commenced to abandon the slaves too sick to keep up. Besides, food threatens to fail; soldiers and _pagazis_ would revolt if their rations were diminished. They dare not retrench from them, and then so much worse for the captives.

"Let them eat one another!" said the chief.

Then it follows that young slaves, still strong, die without the appearance of sickness. I remember what Dr. Livingstone has said on that subject: "Those unfortunates complain of the heart; they put their hands there, and they
fall. It is positively the heart that breaks! That is peculiar to free men, reduced to slavery unexpectedly!"

To-day, twenty captives who could no longer drag themselves along, have been massacred with axes, by the _havildars_! The Arab chief is not opposed to massacre. The scene has been frightful!

Poor old Nan has fallen under the knife, in this horrible butchery! I strike against her corpse in passing! I cannot even give her a Christian burial! She is first of the "Pilgrim's" survivors whom God has called back to him. Poor good creature! Poor Nan!

I watch for Dingo every night. It returns no more! Has misfortune overtaken it or Hercules? No! no! I do not want to believe it! This silence, which appears so long to me, only proves one thing--it is that Hercules has nothing new to tell me yet. Besides, he must be prudent, and on his guard.

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CHAPTER IX.
KAZOUNDE.

On May 26th, the caravan of slaves arrived at Kazounde. Fifty per cent. of the prisoners taken in the last raid had fallen on the road. Meanwhile, the business was still good for the traders; demands were coming in, and the price of slaves was about to rise in the African markets.

Angola at this period did an immense trade in blacks. The Portuguese authorities of St. Paul de Loanda, or of Benguela, could not stop it without difficulty, for the convoys traveled towards the interior of the African continent. The pens near the coast overflowed with prisoners, the few slavers that succeeded in eluding the cruisers along the shore not being sufficient to carry all of them to the Spanish colonies of America.

Kazounde, situated three hundred miles from the mouth of the Coanza, is one of the principal "lakonis," one of the most important markets of the province. On its grand square the "tchitoka" business is transacted; there, the slaves are exposed and sold. It is from this point that the caravans radiate toward the region of the great lakes.

Kazounde, like all the large towns of Central Africa, is divided into two distinct parts. One is the quarter of the Arab, Portuguese or native traders, and it contains their pens; the other is the residence of the negro king, some ferocious crowned drunkard, who reigns through terror, and lives from supplies furnished by the contractors.

At Kazounde, the commercial quarter then belonged to that Jose-Antonio Alvez, of whom Harris and Negoro had spoken, they being simply agents in his pay. This contractor's principal establishment was there, he had a second at Bihe, and a third at Cassange, in Benguela, which Lieutenant Cameron visited some years later.

Imagine a large central street, on each side groups of houses, "tembes," with flat roofs, walls of baked earth, and a square court which served as an enclosure for cattle. At the end of the street was the vast "tchitoka" surrounded by slave-pens. Above this collection of buildings rose some enormous banyans, whose branches swayed with graceful movements. Here and there great palms, with their heads in the air, drove the dust on the streets like brooms. Twenty birds of prey watched over the public health. Such is the business quarter of Kazounde.

Near by ran the Louhi, a river whose course, still undetermined, is an affluent, or at least a sub-affluent, of the Coango, a tributary of the Zoïre.

The residence of the King of Kazounde, which borders on the business quarter, is a confused collection of ill-built hovels, which spread over the space of a mile square. Of these hovels, some are open, others are inclosed by a palisade of reeds, or bordered with a hedge of fig-trees. In one particular enclosure, surrounded by a fence of papyrus, thirty of these huts served us dwellings for the chief's slaves, in another group lived his wives, and a "tembe," still larger and higher, was half hidden in a plantation of cassada. Such was the residence of the King of Kazounde, a man of fifty--named Moini Lounga; and already almost deprived of the power of his predecessors. He had not four thousand of soldiers there, where the principal Portuguese traders could count twenty thousand, and he could no longer, as in former times, decree the sacrifice of twenty-five or thirty slaves a day.

This king was, besides, a prematurely-aged man, exhausted by debauch, crazed by strong drink, a ferocious maniac, mutilating his subjects, his officers or his ministers, as the whim seized him, cutting the nose and ears off some, and the foot or the hand from others. His own death, not unlooked for, would be received without regret.

A single man in all Kazounde might, perhaps, lose by the death of Moini Lounga. This was the contractor, Jose-Antonio Alvez, who agreed very well with the drunkard, whose authority was recognized by the whole province. If the accession of his first wife, Queen Moini, should be contested, the States of Moini Lounga might be invaded by a neighboring competitor, one of the kings of Oukonson. The latter, being younger and more active, had already seized some villages belonging to the Kazounde government. He had in his services another trader, a rival of Alvez Tipo-Type, a black Arab of a pure race, whom Cameron met at Nyangwe.

What was this Alvez, the real sovereign under the reign of an imbruted negro, whose vices he had developed and served?
Jose-Antonio Alvez, already advanced in years, was not, as one might suppose, a "msoungou," that is to say, a man of the white race. There was nothing Portuguese about him but his name, borrowed, no doubt, for the needs of commerce. He was a real negro, well known among traders, and called Kenndele. He was born, in fact, at Donndo, or the borders of the Coanza. He had commenced by being simply the agent of the slave-brokers, and would have finished as a famous trader, that is to say, in the skin of an old knave, who called himself the most honest man in the world.

Cameron met this Alvez in the latter part of 1874, at Kilemmba, the capital of Kassonngo, chief of Ouroua. He guided Cameron with his caravan to his own establishment at Bihe, over a route of seven hundred miles. The convoy of slaves, on arriving at Kazounde, had been conducted to the large square.

It was the 26th of May. Dick Sand's calculations were then verified. The journey had lasted thirty-eight days from the departure of the army encamped on the banks of the Coanza. Five weeks of the most fearful miseries that human beings could support.

It was noon when the train entered Kazounde. The drums were beaten, horns were blown in the midst of the detonations of fire-arms. The soldiers guarding the caravan discharged their guns in the air, and the men employed by Jose-Antonio Alvez replied with interest. All these bandits were happy at meeting again, after an absence which had lasted for four months. They were now going to rest and make up for lost time in excesses and idleness.

The prisoners then formed a total of two hundred and fifty, the majority being completely exhausted. After having been driven like cattle, they were to be shut up in pens, which American farmers would not have used for pigs. Twelve or fifteen hundred other captives awaited them, all of whom would be exposed in the market at Kazounde on the next day but one. These pens were filled up with the slaves from the caravan. The heavy forks had been taken off them, but they were still in chains.

The "pagazis" had stopped on the square after having disposed of their loads of ivory, which the Kazounde dealers would deliver. Then, being paid with a few yards of calico or other stuff at the highest price, they would return and join some other caravan.

Old Tom and his companions had been freed from the iron collar which they had carried for five weeks. Bat and his father embraced each other, and all shook hands; but no one ventured to speak. What could they say that would not be an expression of despair? Bat, Acteon and Austin, all three vigorous, accustomed to hard work, had been able to resist fatigue; but old Tom, weakened by privations, was nearly exhausted. A few more days and his corpse would have been left, like poor Nan's, as food for the beasts of the province.

As soon as they arrived, the four men had been placed in a narrow pen, and the door had been at once shut upon them. There they had found some food, and they awaited the trader's visit, with whom, although quite in vain, they intended to urge the fact that they were Americans.

Dick Sand had remained alone on the square, under the special care of a keeper.

At length he was at Kazounde, where he did not doubt that Mrs. Weldon, little Jack, and Cousin Benedict had preceded him. He had looked for them in crossing the various quarters of the town, even in the depths of the "tembes" that lined the streets, on this "tchitoka" now almost deserted.

Mrs. Weldon was not there.

"Have they not brought her here?" he asked himself. "But where could she be? No; Hercules cannot be mistaken. Then, again, he must have learned the secret designs of Negoro and Harris; yet they, too--I do not see them."

Dick Sand felt the most painful anxiety. He could understand that Mrs. Weldon, retained a prisoner, would be concealed from him. But Harris and Negoro, particularly the latter, should hasten to see him, now in their power, if only to enjoy their triumph--to insult him, torture him, perhaps avenge themselves. From the fact that they were not there, must he conclude that they had taken another direction, and that Mrs. Weldon was to be conducted to some other point of Central Africa? Should the presence of the American and the Portuguese be the signal for his punishment, Dick Sand impatiently desired it. Harris and Negoro at Kazounde, was for him the certainty that Mrs. Weldon and her child were also there.

Dick Sand then told himself that, since the night when Dingo had brought him Hercules's note, the dog had not been seen. The young man had prepared an answer at great risks. In it he told Hercules to think only of Mrs. Weldon, not to lose sight of her, and to keep her informed as well as possible of what happened; but he had not been able to send it to its destination. If Dingo had been able to penetrate the ranks of the caravan once, why did not Hercules let him try it a second time? Had the faithful animal perished in some fruitless attempt? Perhaps Hercules was following Mrs. Weldon, as Dick Sand would have done in his place. Followed by Dingo, he might have plunged into the depths of the woody plateau of Africa, in the hope of reaching one of the interior establishments.

What could Dick Sand imagine if, in fact, neither Mrs. Weldon nor her enemies were there? He had been so sure, perhaps foolishly, of finding them at Kazounde, that not to see them there at once gave him a terrible shock. He felt a sensation of despair that he could not subdue. His life, if it were no longer useful to those whom he loved, was
good for nothing, and he had only to die. But, in thinking in that manner, Dick Sand mistook his own character. Under the pressure of these trials, the child became a man, and with him discouragement could only be an accidental tribute paid to human nature.

A loud concert of trumpet-calls and cries suddenly commenced. Dick Sand, who had just sunk down in the dust of the "tchitoka," stood up. Every new incident might put him on the track of those whom he sought.

In despair a moment before, he now no longer despairs.

"Alvez! Alvez!" This name was repeated by a crowd of natives and soldiers who now invaded the grand square. The man on whom the fate of so many unfortunate people depended was about to appear. It was possible that his agents, Harris and Negoro, were with him. Dick Sand stood upright, his eyes open, his nostrils dilated. The two traitors would find this lad of fifteen years before them, upright, firm, looking them in the face. It would not be the captain of the "Pilgrim" who would tremble before the old ship's cook.

A hammock, a kind of "kitanda" covered by an old patched curtain, discolored, fringed with rags, appeared at the end of the principal street. An old negro descended. It was the trader, Jose-Antonio Alvez. Several attendants accompanied him, making strong demonstrations.

Along with Alvez appeared his friend Coimbra, the son of Major Coimbra of Bihe, and, according to Lieutenant Cameron, the greatest scamp in the province. He was a dirty creature, his breast was uncovered, his eyes were bloodshot, his hair was rough and curly, his face yellow; he was dressed in a ragged shirt and a straw petticoat. He would have been called a horrible old man in his tattered straw hat. This Coimbra was the confidant, the tool of Alvez, an organizer of raids, worthy of commanding the trader's bandits.

As for the trader, he might have looked a little less sordid than his attendant. He wore the dress of an old Turk the day after a carnival. He did not furnish a very high specimen of the factory chiefs who carry on the trade on a large scale.

To Dick Sand's great disappointment, neither Harris nor Negoro appeared in the crowd that followed Alvez. Must he, then, renounce all hope of finding them at Kazounde?

Meanwhile, the chief of the caravan, the Arab, Ibn Hamis, shook hands with Alvez and Coimbra. He received numerous congratulations. Alvez made a grimace at the fifty per cent. of slaves failing in the general count, but, on the whole, the affair was very satisfactory. With what the trader possessed of human merchandise in his pens, he could satisfy the demands from the interior, and barter slaves for ivory teeth and those "hannas" of copper, a kind of St. Andrew's cross, in which form this metal is carried into the center of Africa.

The overseers were also complimented. As for the porters, the trader gave orders that their salary should be immediately paid them.

Jose-Antonio Alvez and Coimbra spoke a kind of Portuguese mingled with a native idiom, which a native of Lisbon would scarcely have understood. Dick Sand could not hear what these merchants were saying. Were they talking of him and his companions, so treacherously joined to the persons in the convoy? The young man could not doubt it, when, at a gesture from the Arab, Ibn Hamis, an overseer, went toward the pen where Tom, Austin, Bat and Acteon had been shut up.

Almost immediately the four Americans were led before Alvez.

Dick Sand slowly approached. He wished to lose nothing of this scene.

Alvez's face lit up at the sight of these few well-made blacks, to whom rest and more abundant food had promptly restored their natural vigor. He looked with contempt at old Tom, whose age would affect his value, but the other three would sell high at the next Kazounde sale.

Alvez remembered a few English words which some agents, like the American, Harris, had taught him, and the old monkey thought he would ironically welcome his new slaves.

Tom understood the trader's words; he at once advanced, and, showing his companions, said: "We are free men--citizens of the United States."

Alvez certainly understood him; he replied with a good-humored grimace, wagging his head: "Yes, yes, Americans! Welcome, welcome!"

"Welcome," added Coimbra.

He advanced toward Austin, and like a merchant who examines a sample, after having felt his chest and his shoulders, he wanted to make him open his mouth, so as to see his teeth.

But at this moment Signor Coimbra received in his face the worst blow that a major's son had ever caught. Alvez's confidant staggered under it.

Several soldiers threw themselves on Austin, who would perhaps pay dearly for this angry action.

Alvez stopped them by a look. He laughed, indeed, at the misfortune of his friend, Coimbra, who had lost two of the five or six teeth remaining to him.

Alvez did not intend to have his merchandise injured. Then, he was of a gay disposition, and it was a long time
since he had laughed so much.

Meanwhile, he consoled the much discomfited Coimbra, and the latter, helped to his feet, again took his place near the trader, while throwing a menacing look at the audacious Austin.

At this moment Dick Sand, driven forward by an overseer, was led before Alvez.

The latter evidently knew all about the young man, whence he came, and how he had been taken to the camp on the Coanza.

So he said, after having given him an evil glance:

"The little Yankee!"

"Yes, Yankee!" replied Dick Sand. "What do they wish to do with my companions and me?"

"Yankee! Yankee! Yankee!" repeated Alvez.

Did he not or would he not understand the question put to him?

A second time Dick Sand asked the question regarding his companions and himself. He then turned to Coimbra, whose features, degraded as they were by the abuse of alcoholic liquors, he saw were not of native origin.

Coimbra repeated the menacing gesture already made at Austin, and did not answer.

During this time Alvez talked rapidly with the Arab, Ibn Hamis, and evidently of things that concerned Dick Sand and his friends.

No doubt they were to be again separated, and who could tell if another chance to exchange a few words would ever again be offered them.

"My friends," said Dick, in a low voice, and as if he were only speaking to himself, "just a few words! I have received, by Dingo, a letter from Hercules. He has followed the caravan. Harris and Negoro took away Mrs. Weldon, Jack, and Mr. Benedict. Where? I know not, if they are not here at Kazounde. Patience! courage! Be ready at any moment. God may yet have pity on us!"

"And Nan?" quickly asked old Tom.

"Nan is dead!"

"The first!"

"And the last!" replied Dick Sand, "for we know well----"

At this moment a hand was laid on his shoulder, and he heard these words, spoken in the amiable voice which he knew only too well:

"Ah, my young friend, if I am not mistaken! Enchanted to see you again!"

Dick Sand turned.

Harris was before him.

"Where is Mrs. Weldon?" cried Dick Sand, walking toward the American.

"Alas!" replied Harris, pretending a pity that he did not feel, "the poor mother! How could she survive!"

"Dead!" cried Dick Sand. "And her child?"

"The poor baby!" replied Harris, in the same tone, "how could he outlive such fatigue!"

So, all whom Dick Sand loved were dead!

What passed within him? An irresistible movement of anger, a desire for vengeance, which he must satisfy at any price!

Dick Sand jumped upon Harris, seized a dagger from the American's belt, and plunged it into his heart.

"Curse you!" cried Harris, falling.

Harris was dead.

CHAPTER X.

THE GREAT MARKET DAY.

Dick Sand's action had been so rapid that no one could stop him. A few natives threw themselves upon him, and he would have been murdered had not Negoro appeared.

At a sign from the Portuguese, the natives drew back, raised Harris's corpse and carried it away. Alvez and Coimbra demanded Dick Sand's immediate death, but Negoro said to them in a low voice that they would lose nothing by waiting. The order was given to take away the young novice, with a caution not to lose sight of him for a moment.

Dick Sand had seen Negoro for the first time since their departure from the coast. He knew that this wretch was alone responsible for the loss of the "Pilgrim." He ought to hate him still more than his accomplices. And yet, after having struck the American, he scorned to address a word to Negoro. Harris had said that Mrs. Weldon and her child had succumbed. Nothing interested him now, not even what they would do with him. They would send him away. Where? It did not matter.
Dick Sand, heavily chained, was left on the floor of a pen without a window, a kind of dungeon where the trader, Alvez, shut up the slaves condemned to death for rebellion or unlawful acts. There he could no longer have any communication with the exterior; he no longer dreamed of regretting it. He had avenged those whom he loved, who no longer lived. Whatever fate awaited him, he was ready for it.

It will be understood that if Negoro had stopped the natives who were about to punish Harris's murderer, it was only because he wished to reserve Dick Sand for one of those terrible torments of which the natives hold the secret. The ship's cook held in his power the captain of fifteen years. He only wanted Hercules to make his vengeance complete.

Two days afterward, May 28th, the sale began, the great "lakoni," during which the traders of the principal factories of the interior would meet the natives of the neighboring provinces. This market was not specially for the sale of slaves, but all the products of this fertile Africa would be gathered there with the producers.

From early morning all was intense animation on the vast "tchitoka" of Kazounde, and it is difficult to give a proper idea of the scene. It was a concourse of four or five thousand persons, including Alvez's slaves, among whom were Tom and his companions. These four men, for the reason that they belonged to a different race, are all the more valuable to the brokers in human flesh. Alvez was there, the first among all. Attended by Coimbra, he offered the slaves in lots. These the traders from the interior would form into caravans. Among these traders were certain half-breeds from Oujiji, the principal market of Lake Tanganyika, and some Arabs, who are far superior to the half-breeds in this kind of trade.

The natives flocked there in great numbers. There were children, men, and women, the latter being animated traders, who, as regards a genius for bargaining, could only be compared to their white sisters.

In the markets of large cities, even on a great day of sale, there is never much noise or confusion. Among the civilized the need of selling exceeds the desire to buy. Among these African savages offers are made with as much eagerness as demands.

The "lakoni" is a festival day for the natives of both sexes, and if for good reasons they do not put on their best clothes, they at least wear their handsomest ornaments.

Some wear the hair divided in four parts, covered with cushions, and in plaits tied like a chignon or arranged in pan-handles on the front of the head with bunches of red feathers. Others have the hair in bent horns sticky with red earth and oil, like the red lead used to close the joints of machines. In these masses of real or false hair is worn a bristling assemblage of skewers, iron and ivory pins, often even, among elegant people, a tattooing-knife is stuck in the crisp mass, each hair of which is put through a "sofi" or glass bead, thus forming a tapestry of different-colored grains. Such are the edifices most generally seen on the heads of the men.

The women prefer to divide their hair in little tufts of the size of a cherry, in wreaths, in twists the ends of which form designs in relief, and in corkscrews, worn the length of the face. A few, more simple and perhaps prettier, let their long hair hang down the back, in the English style, and others wear it cut over the forehead in a fringe, like the French. Generally they wear on these wigs a greasy putty, made of red clay or of glossy "ukola," a red substance extracted from sandal-wood, so that these elegant persons look as if their heads were dressed with tiles.

It must not be supposed that this luxury of ornamentation is confined to the hair of the natives. What are ears for if not to pass pins of precious wood through, also copper rings, charms of plaited maize, which draw them forward, or little gourds which do for snuff-boxes, and to such an extent that the distended lobes of these appendages fall sometimes to the shoulders of their owners?

After all, the African savages have no pockets, and how could they have any? This gives rise to the necessity of placing where they can their knives, pipes, and other customary objects. As for the neck, arms, wrists, legs, and ankles, these various parts of the body are undoubtedly destined to carry the copper and brass bracelets, the horns cut off and decorated with bright buttons, the rows of red pearls, called _same-sames_ or "talakas," and which were very fashionable. Besides, with these jewels, worn in profusion, the wealthy people of the place looked like traveling shrines.

Again, if nature gave the natives teeth, was it not that they could pull out the upper and lower incisors, file them in points, and curve them in sharp fangs like the fangs of a rattlesnake? If she has placed nails at the end of the fingers, is it not that they may grow so immoderately that the use of the hand is rendered almost impossible? If the skin, black or brown, covers the human frame, is it not so as to zebra it by "temmbos" or tattooings representing trees, birds, crescents, full moons, or waving lines, in which Livingstone thought he could trace the designs of ancient Egypt? This tattooing, done by fathers, is practised by means of a blue matter introduced into the incisions, and is "stereotyped" point by point on the bodies of the children, thus establishing to what tribe or to what family they belong. The coat-of-arms must be engraved on the breast, when it cannot be painted on the panel of a carriage.

Such are the native fashions in ornament. In regard to garments properly so called, they are summed up very easily; for the men, an apron of antelope leather, reaching to the knees, or perhaps a petticoat of a straw material of
brilliant colors; for the women, a belt of pearls, supporting at the hips a green petticoat, embroidered in silk, ornamented with glass beads or coury; sometimes they wear garments made of "lambba," a straw material, blue, black, and yellow, which is much prized by the natives of Zanzibar.

These, of course, are the negroes of the best families. The others, merchants, and slaves, are seldom clothed. The women generally act as porters, and reach the market with enormous baskets on their back, which they hold by means of a leathern strap passed over the forehead. Then, their places being taken, and the merchandise unpacked, they squat in their empty baskets.

The astonishing fertility of the country causes the choice alimentary produces to be brought to this "lakoni." There were quantities of the rice which returns a hundred per cent., of the maize, which, in three crops in eight months, produces two hundred per cent., the sesamum, the pepper of Ouroua, stronger than the Cayenne, allspice, tapioca, sorghum, nutmegs, salt, and palm-oil.

Hundreds of goats were gathered there, hogs, sheep without wool, evidently of Tartar origin, quantities of poultry and fish. Specimens of pottery, very gracefully turned, attracted the eyes by their violent colors.

Various drinks, which the little natives cried about in a squeaking voice, enticed the unwary, in the form of plantain wine, "pombe," a liquor in great demand, "malofou," sweet beer, made from the fruit of the banana-tree and mead, a limpid mixture of honey and water fermented with malt.

But what made the Kazounde market still more curious was the commerce in stuffs and ivory.

In the line of stuffs, one might count by thousands of "choukkas" or armfuls, the "Mericani" unbleached calico, come from Salem, in Massachusetts, the "kanaki," a blue gingham, thirty-four inches wide, the "sohari," a stuff in blue and white squares, with a red border, mixed with small blue stripes. It is cheaper than the "dioulis," a silk from Surat, with a green, red or yellow ground, which is worth from seventy to eighty dollars for a remnant of three yards when woven with gold.

As for ivory, it was brought from all parts of Central Africa, being destined for Khartoum, Zanzibar, or Natal. A large number of merchants are employed solely in this branch of African commerce.

Imagine how many elephants are killed to furnish the five hundred thousand kilograms of ivory, which are annually exported to European markets, and principally to the English! The western coast of Africa alone produces one hundred and forty tons of this precious substance. The average weight is twenty-eight pounds for a pair of elephant's tusks, which, in 1874, were valued as high as fifteen hundred francs; but there are some that weigh one hundred and seventy-five pounds, and at the Kazounde market, admirers would have found some admirable ones. They were of an opaque ivory, translucent, soft under the tool, and with a brown rind, preserving its whiteness and not growing yellow with time like the ivories of other provinces.

And, now, how are these various business affairs regulated between buyers and sellers? What is the current coin? As we have said, for the African traders this money is the slave.

The native pays in glass beads of Venetian manufacture, called "catchocolos," when they are of a lime white; "bouboulous," when they are black; "sikounderetches," when they are red. These beads or pearls, strung in ten rows or "khetes," going twice around the neck, make the "foundo," which is of great value. The usual measure of the beads is the "frasilah," which weighs seventy pounds. Livingstone, Cameron, and Stanley were always careful to be abundantly provided with this money.

In default of glass beads, the "pice," a Zanzibar piece, worth four centimes, and the "vroungouas," shells peculiar to the eastern coasts, are current in the markets of the African continent. As for the cannibal tribes, they attach a certain value to the teeth of the human jaw, and at the "lakoni," these chaplets were to be seen on the necks of natives, who had no doubt eaten their producers; but these teeth were ceasing to be used as money.

Such, then, was the appearance of the great market. Toward the middle of the day the gaiety reached a climax; the noise became deafening. The fury of the neglected vendors, and the anger of the overcharged customers, were beyond description. Thence frequent quarrels, and, as we know, few guardians of the peace to quell the fray in this howling crowd.

Toward the middle of the day, Alvez gave orders to bring the slaves, whom he wished to sell, to the square. The crowd was thus increased by two thousand unfortunate beings of all ages, whom the trader had kept in pens for several months. This "stock" was not in a bad condition. Long rest and sufficient food had improved these slaves so as to look to advantage at the "lakoni." As for the last arrivals, they could not stand any comparison with them, and, after a month in the pens, Alvez could certainly have sold them with more profit. The demands, however, from the eastern coast, were so great that he decided to expose and sell them as they were.

This was a misfortune for Tom and his three companions. The drivers pushed them into the crowd that invaded the "tchitoka." They were strongly chained, and their glances told what horror, what fury and shame overwhelmed them.

"Mr. Dick is not there," Bat said, after some time, during which he had searched the vast plain with his eyes.
"No," replied Acteon, "they will not put him up for sale."
"He will be killed, if he is not already," added the old black. "As for us, we have but one hope left, which is, that the same trader will buy us all. It would be a great consolation not to be separated."
"Ah! to know that you are far away from me, working like a slave, my poor, old father!" cried Bat, sobbing aloud.
"No," said Tom. "No; they will not separate us, and perhaps we might----"
"If Hercules were here!" cried Austin.
But the giant had not reappeared. Since the news sent to Dick Sand, they had heard no one mention either Hercules or Dingo. Should they envy him his fate? Why, yes; for if Hercules were dead, he was saved from the chains of slavery!
Meanwhile, the sale had commenced. Alvez's agents marched the various lots of men, women and children through the crowd, without caring if they separated mothers from their infants. May we not call these beings "unfortunates," who were treated only as domestic animals?
Tom and his companions were thus led from buyers to buyers. An agent walked before them naming the price adjudged to their lot. Arab or mongrel brokers, from the central provinces, came to examine them. They did not discover in them the traits peculiar to the African race, these traits being modified in America after the second generation. But these vigorous and intelligent negroes, so very different from the blacks brought from the banks of the Zambeze or the Loualaba, were all the more valuable. They felt them, turned them, and looked at their teeth. Horse-dealers thus examine the animals they wish to buy. Then they threw a stick to a distance, made them run and pick it up, and thus observed their gait.
This was the method employed for all, and all were submitted to these humiliating trials. Do not believe that these people are completely indifferent to this treatment! No, excepting the children, who cannot comprehend the state of degradation to which they are reduced, all, men or women, were ashamed.
Besides, they were not spared injuries and blows. Coimbra, half drunk, and Alvez's agents, treated them with extreme brutality, and from their new masters, who had just paid for them in ivory stuffs and beads, they would receive no better treatment. Violently separated, a mother from her child, a husband from his wife, a brother from a sister, they were not allowed a last caress nor a last kiss, and on the "lakoni" they saw each other for the last time.
In fact, the demands of the trade exacted that the slaves should be sent in different directions, according to their sex. The traders who buy the men do not buy women. The latter, in virtue of polygamy, which is legal among the Mussulmans, are sent to the Arabic countries, where they are exchanged for ivory. The men, being destined to the hardest labor, go to the factories of the two coasts, and are exported either to the Spanish colonies or to the markets of Muscat and Madagascar. This sorting leads to heart-breaking scenes between those whom the agents separate, and who will die without ever seeing each other again.
The four companions in turn submitted to the common fate. But, to tell the truth, they did not fear this event. It was better for them to be exported into a slave colony. There, at least, they might have a chance to protest. On the contrary, if sent to the interior, they might renounce all hope of ever regaining their liberty.
It happened as they wished. They even had the almost unhoped for consolation of not being separated. They were in brisk demand, being wanted by several traders. Alvez clapped his hands. The prices rose. It was strange to see these slaves of unknown value in the Kazounde market, and Alvez had taken good care to conceal where they came from. Tom and his friends, not speaking the language of the country, could not protest.
Their master was a rich Arab trader, who in a few days would send them to Lake Tanganyika, the great thoroughfare for slaves; then, from that point, toward the factories of Zanzibar.
Would they ever reach there, through the most unhealthy and the most dangerous countries of Central Africa? Fifteen hundred miles to march under these conditions, in the midst of frequent wars, raised and carried on between chiefs, in a murderous climate. Was old Tom strong enough to support such misery? Would he not fall on the road like old Nan? But the poor men were not separated. The chain that held them all was lighter to carry. The Arab trader would evidently take care of merchandise which promised him a large profit in the Zanzibar market.
Tom, Bat, Acteon, and Austin then left the place. They saw and heard nothing of the scene which was to end the great "lakoni" of Kazounde.

CHAPTER XI
THE KING OF KAZOUNDE IS OFFERED A PUNCH.
It was four o'clock in the afternoon when a loud noise of drums, cymbals, and other instruments of African origin resounded at the end of the principal street. In all corners of the market-place the animation was redoubled. Half a day of cries and wrestling had neither weakened the voices nor broken the limbs of these abominable traders.
A large number of slaves still remained to be sold. The traders disputed over the lots with an ardor of which the London Exchange would give but an imperfect idea, even on a day when stocks were rising.

All business was stopped, and the criers took their breath as soon as the discordant concert commenced.

The King of Kazounde, Moini Loungga, had come to honor the great "lakoni" with a visit. A numerous train of women, officers, soldiers and slaves followed him. Alvez and some other traders went to meet him, and naturally exaggerated the attention which this crowned brute particularly enjoyed.

Moini Loungga was carried in an old palanquin, and descended, not without the aid of a dozen arms, in the center of the large square.

This king was fifty years old, but he looked eighty. Imagine a frightful monkey who had reached extreme old age; on his head a sort of crown, ornamented with leopard's claws, dyed red, and enlarged by tufts of whitish hair; this was the crown of the sovereigns of Kazounde. From his waist hung two petticoats made of leather, embroidered with pearls, and harder than a blacksmith's apron. He had on his breast a quantity of tattooing which bore witness to the ancient nobility of the king; and, to believe him, the genealogy of Moini Loungga was lost in the night of time. On the ankles, wrists and arms of his majesty, bracelets of leather were rolled, and he wore a pair of domestic shoes with yellow tops, which Alvez had presented him with about twenty years before.

His majesty carried in his left hand a large stick with a plated knob, and in his right a small broom to drive away flies, the handle of which was enriched with pearls.

Over his head was carried one of those old patched umbrellas, which seemed to have been cut out of a harlequin's dress.

On the monarch's neck and on his nose were the magnifying glass and the spectacles which had caused Cousin Benedict so much trouble. They had been hidden in Bat's pocket.

Such is the portrait of his negro majesty, who made the country tremble in a circumference of a hundred miles.

Moini Loungga, from the fact of occupying a throne, pretended to be of celestial origin, and had any of his subjects doubted the fact, he would have sent them into another world to discover it. He said that, being of a divine essence, he was not subject to terrestrial laws. If he ate, it was because he wished to do so; if he drank, it was because it gave him pleasure. It was impossible for him to drink any more. His ministers and his officers, all incurable drunkards, would have passed before him for sober men.

The court was alcoholized to the last chief, and incessantly imbibed strong beer, cider, and, above all, a certain drink which Alvez furnished in profusion.

Moini Loungga counted in his harem wives of all ages and of all kinds. The larger part of them accompanied him in this visit to the "lakoni."

Moini, the first, according to date, was a vixen of forty years, of royal blood, like her colleagues. She wore a bright tartan, a straw petticoat embroidered with pearls, and necklaces wherever she could put them. Her hair was dressed so as to make an enormous framework on her little head. She was, in fact, a monster.

The other wives, who were either the cousins or the sisters of the king, were less richly dressed, but much younger. They walked behind her, ready to fulfil, at a sign from their master, their duties as human furniture. These unfortunate beings were really nothing else. If the king wished to sit down, two of these women bent toward the earth and served him for a chair, while his feet rested on the bodies of some others, as if on an ebony carpet.

In Moini Loungga's suite came his officers, his captains, and his magicians.

A remarkable thing about these savages, who staggered like their master, was that each lacked a part of his body-one an ear, another an eye, this one the nose, that one the hand. Not one was whole. That is because they apply only two kinds of punishment in Kazounde--mutilation or death--all at the caprice of the king. For the least fault, some amputation, and the most cruelly punished are those whose ears are cut off, because they can no longer wear rings in their ears.

The captains of the _kilolos_, governors of districts, hereditary or named for four years, wore hats of zebra skin and red vests for their whole uniform. Their hands brandished long palm canes, steeped at one end with charmed drugs.

As to the soldiers, they had for offensive and defensive weapons, bows, of which the wood, twined with the cord, was ornamented with fringes; knives, whetted with a serpent's tongue; broad and long lances; shields of palm wood, decorated in arabesque style. For what there was of uniform, properly so called, it cost his majesty's treasury absolutely nothing.

Finally, the kind's cortège comprised, in the last place, the court magicians and the instrumentalists.

The sorcerers, the "mganngas," are the doctors of the country. These savages attach an absolute faith to divinatory services, to incantations, to the fetiches, clay figures stained with white and red, representing fantastic animals or figures of men and women cut out of whole wood. For the rest, those magicians were not less mutilated than the other courtiers, and doubtless the monarch paid them in this way for the cures that did not succeed.
The instrumentalists, men or women, made sharp rattles whizz, noisy drums sound or shudder under small sticks
terminated by a caoutchouc ball, "marimehas," kinds of dulcimers formed of two rows of gourds of various
dimensions—the whole very deafening for any one who does not possess a pair of African ears.

Above this crowd, which composed the royal cortège, waved some flags and standards, then at the ends of spears
the bleached skulls of the rival chiefs whom Moini Loungga had vanquished.

When the king had quitted his palanquin, acclamations burst forth from all sides. The soldiers of the caravan
discharged their old guns, the low detonations of which were but little louder than the vociferations of the crowd.
The overseers, after rubbing their black noses with cinnabar powder, which they carried in a sack, bowed to the
ground. Then Alvez, advancing in his turn, handed the king a supply of fresh tobacco—"soothing herb," as they call
it in the country. Moini Loungga had great need of being soothed, for he was, they did not know why, in a very bad
humor.

At the same time Alvez, Coimbra, Ibn Hamis, and the Arab traders, or mongrels, came to pay their court to the
powerful sovereign of Kazounde. "Marhaba," said the Arabs, which is their word of welcome in the language of
Central Africa. Others clapped their hands and bowed to the ground. Some daubed themselves with mud, and gave
signs of the greatest servility to this hideous majesty.

Moini Loungga hardly looked at all these people, and walked, keeping his limbs apart, as if the ground were
rolling and pitching. He walked in this manner, or rather he rolled in the midst of waves of slaves, and if the traders
feared that he might take a notion to apportion some of the prisoners to himself, the latter would no less dread falling
into the power of such a brute.

Negoro had not left Alvez for a moment, and in his company presented his homage to the king. Both conversed
in the native language, if, however, that word "converse" can be used of a conversation in which Moini Loungga
only took part by monosyllables that hardly found a passage through his drunken lips. And still, did he not ask his
friend, Alvez, to renew his supply of brandy just exhausted by large libations?

"King Loungga is welcome to the market of Kazounde," said the trader.
"I am thirsty," replied the monarch.
"He will take his part in the business of the great 'lakoni,'" added Alvez.
"Drink!" replied Moini Loungga.
"My friend Negoro is happy to see the King of Kazounde again, after such a long absence."
"Drink!" repeated the drunkard, whose whole person gave forth a disgusting odor of alcohol.
"Well, some 'pombe! some mead!' exclaimed Jose-Antonio Alvez, like a man who well knew what Moini
Loungga wanted.

"No, no!" replied the king; "my friend Alvez's brandy, and for each drop of his fire-water I shall give him----"
"A drop of blood from a white man!" exclaimed Negoro, after making a sign to Alvez, which the latter
understood and approved.

"A white man! Put a white man to death!" repeated Moini Loungga, whose ferocious instincts were aroused by
the Portuguese's proposition.
"One of Alvez's agents has been killed by this white man," returned Negoro.
"Yes, my agent, Harris," replied the trader, "and his death must be avenged!"
"Send that white man to King Massongo, on the Upper Zaire, among the Assonas. They will cut him in pieces.
They will eat him alive. They have not forgotten the taste of human flesh!" exclaimed Moini Loungga.

He was, in fact, the king of a tribe of man-eaters, that Massongo. It is only too true that in certain provinces of
Central Africa cannibalism is still openly practised. Livingstone states it in his "Notes of Travel." On the borders of
the Loualaba the Manyemas not only eat the men killed in the wars, but they buy slaves to devour them, saying that
"human flesh is easily salted, and needs little seasoning." Those cannibals Cameron has found again among the
Moene-Bongga, where they only feast on dead bodies after steeping them for several days in a running stream.
Stanley has also encountered those customs of cannibalism among the inhabitants of the Oukonson. Cannibalism is
evidently well spread among the tribes of the center.

But, cruel as was the kind of death proposed by the king for Dick Sand, it did not suit Negoro, who did not care
to give up his victim.

"It was here," said he, "that the white man killed our comrade Harris."
"It is here that he ought to die!" added Alvez.
"Where you please, Alvez," replied Moini Loungga; "but a drop of fire-water for a drop of blood!"
"Yes," replied the trader, "fire-water, and you will see that it well merits that name! We shall make it blaze, this
water! Jose-Antonio Alvez will offer a punch to the King Moini Loungga."

The drunkard shook his friend Alvez's hands. He could not contain his joy. His wives, his courtiers shared his
ecstasy. They had never seen brandy blaze, and doubtless they counted on drinking it all blazing. Then, after the
thirst for alcohol, the thirst for blood, so imperious among these savages, would be satisfied also.

Poor Dick Sand! What a horrible punishment awaited him. When we think of the terrible or grotesque effects of intoxication in civilized countries, we understand how far it can urge barbarous beings.

We will readily believe that the thought of torturing a white could displease none of the natives, neither Jose-Antonio Alvez, a negro like themselves, nor Coimbra, a mongrel of black blood, nor Negoro either, animated with a ferocious hatred against the whites.

The evening had come, an evening without twilight, that was going to make day change tonight almost at once, a propitious hour for the blazing of the brandy.

It was truly a triumphant idea of Alvez's, to offer a punch to this negro majesty, and to make him love brandy under a new form. Moini Loungga began to find that fire-water did not sufficiently justify its name. Perhaps, blazing and burning, it would tickle more agreeably the blunted papillas of his tongue.

The evening's program then comprised a punch first, a punishment afterwards.

Dick Sand, closely shut up in his dark prison, would only come out to go to his death. The other slaves, sold or not, had been put back in the barracks. There only remained at the "tchitoka," the traders, the overseers and the soldiers ready to take their part of the punch, if the king and his court allowed them.

Jose-Antonio Alvez, advised by Negoro, did the thing well. They brought a vast copper basin, capable of containing at least two hundred pints, which was placed in the middle of the great place. Barrels holding alcohol of inferior quality, but well refined, were emptied into the basin. They spared neither the cinnamon, nor the allspice, nor any of the ingredients that might improve this punch for savages.

All had made a circle around the king. Moini Loungga advanced staggering to the basin. One would say that this vat of brandy fascinated him, and that he was going to throw himself into it.

Alvez generously held him back and put a lighted match into his hand.

"Fire!" cried he with a cunning grimace of satisfaction.

"Fire!" replied Moini Loungga lashing the liquid with the end of the match.

What a flare and what an effect, when the bluish flames played on the surface of the basin. Alvez, doubtless to render that alcohol still sharper, had mingled with it a few handfuls of sea salt. The assistants' faces were then given that spectral lividity that the imagination ascribes to phantoms.

Those negroes, drunk in advance, began to cry out, to gesticulate, and, taking each other by the hand, formed an immense circle around the King of Kazounde.

Alvez, furnished with an enormous metal spoon, stirred the liquid, which threw a great white glare over those delirious monkeys.

Moini Loungga advanced. He seized the spoon from the trader's hands, plunged it into the basin, then, drawing it out full of punch in flames, he brought it to his lips.

What a cry the King of Kazounde then gave! An act of spontaneous combustion had just taken place. The king had taken fire like a petroleum bonbon. This fire developed little heat, but it devoured none the less.

At this spectacle the natives' dance was suddenly stopped.

One of Moini Loungga's ministers threw himself on his sovereign to extinguish him; but, not less alcoholized than his master, he took fire in his turn.

In this way, Moini Loungga's whole court was in peril of burning up.

Alvez and Negoro did not know how to help his majesty. The women, frightened, had taken flight. As to Coimbra, he took his departure rapidly, well knowing his inflammable nature.

The king and the minister, who had fallen on the ground, were burning up, a prey to frightful sufferings.

In bodies so thoroughly alcoholized, combustion only produces a light and bluish flame, that water cannot extinguish. Even stifled outside, it would still continue to burn inwardly. When liquor has penetrated all the tissues, there exists no means of arresting the combustion.

A few minutes after, Moini Loungga and his minister had succumbed, but they still burned. Soon, in the place where they had fallen, there was nothing left but a few light coals, one or two pieces of the vertebral column, fingers, toes, that the fire does not consume, in cases of spontaneous combustion, but which it covers with an infectious and penetrating soot.

It was all that was left of the King of Kazounde and of his minister.

CHAPTER XII.
A ROYAL BURIAL.

The next day, May 29th, the city of Kazounde presented a strange aspect. The natives, terrified, kept themselves
shut up in their huts. They had never seen a king, who said he was of divine essence, nor a simple minister, die of this horrible death. They had already burned some of their fellow-beings, and the oldest could not forget certain culinary preparations relating to cannibalism.

They knew then how the incineration of a human body takes place with difficulty, and behold their king and his minister had burnt all alone! That seemed to them, and indeed ought to seem to them, inexplicable.

Jose-Antonio Alvez kept still in his house. He might fear that he would be held responsible for the accident. Negoro had informed him of what had passed, warning him to take care of himself. To charge him with Moini Loungga’s death might be a bad affair, from which he might not be able to extricate himself without damage.

But Negoro had a good idea. By his means Alvez spread the report that the death of Kazounde’s sovereign was supernatural; that the great Manitou only reserved it for his elect. The natives, so inclined to superstition, accepted this lie. The fire that came out of the bodies of the king and his minister became a sacred fire. They had nothing to do but honor Moini Loungga by obsequies worthy of a man elevated to the rank of the gods.

These obsequies, with all the ceremonial connected with them among the African tribes, was an occasion offered to Negoro to make Dick Sand play a part. What this death of Moini Loungga was going to cost in blood, would be believed with difficulty, if the Central Africa travelers, Lieutenant Cameron among others, had not related facts that cannot be doubted.

The King of Kazounde’s natural heir was the Queen Moini. In proceeding without delay with the funeral ceremonies she acted with sovereign authority, and could thus distance the competitors, among others that King of the Oukonson, who tended to encroach upon the rights of Kazounde’s sovereigns. Besides, Moini, even by becoming queen, avoided the cruel fate reserved for the other wives of the deceased; at the same time she would get rid of the youngest ones, of whom she, first in date, had necessarily to complain. This result would particularly suit the ferocious temperament of that vixen. So she had it announced, with deer’s horns and other instruments, that the obsequies of the defunct king would take place the next evening with all the usual ceremony.

No protestation was made, neither at court nor from the natives. Alvez and the other traders had nothing to fear from the accession of this Queen Moini. With a few presents, a few flattering remarks, they would easily subject her to their influence. Thus the royal heritage was transmitted without difficulty. There was terror only in the harem, and not without reason.

The preparatory labors for the funeral were commenced the same day. At the end of the principal street of Kazounde flowed a deep and rapid stream, an affluent of the Coango. The question was to turn this stream aside, so as to leave its bed dry. It was in that bed that the royal grave must be dug. After the burial the stream would be restored to its natural channel.

The natives were busily employed in constructing a dam, that forced the stream to make a provisional bed across the plain of Kazounde. At the last tableau of this funeral ceremony the barricade would be broken, and the torrent would take its old bed again.

Negoro intended Dick Sand to complete the number of victims sacrificed on the king's tomb. He had been a witness of the young novice's irresistible movement of anger, when Harris had acquainted him with the death of Mrs. Weldon and little Jack.

Negoro, cowardly rascal, had not exposed himself to the same fate as his accomplice. But now, before a prisoner firmly fastened by the feet and hands, he supposed he had nothing to fear, and resolved to pay him a visit. Negoro was one of those miserable wretches who are not satisfied with torturing their victims; they must also enjoy their sufferings.

Toward the middle of the day, then, he repaired to the barrack where Dick Sand was guarded, in sight of an overseer. There, closely bound, was lying the young novice, almost entirely deprived of food for twenty-four hours, weakened by past misery, tortured by those bands that entered into his flesh; hardly able to turn himself, he was waiting for death, no matter how cruel it might be, as a limit to so many evils.

However, at the sight of Negoro he shuddered from head to foot. He made an instinctive effort to break the bands that prevented him from throwing himself on that miserable man and having revenge.

But Hercules himself would not succeed in breaking them. He understood that it was another kind of contest that was going to take place between the two, and arming himself with calmness, Dick Sand compelled himself to look Negoro right in the face, and decided not to honor him with a reply, no matter what he might say.

"I believed it to be my duty," Negoro said to him it first, "to come to salute my young captain for the last time, and to let him know how I regret, for his sake, that he does not command here any longer, as he commanded on board the 'Pilgrim.'"

And, seeing that Dick Sand did not reply:

"What, captain, do you no longer recognize your old cook? He comes, however, to take your orders, and to ask you what he ought to serve for your breakfast."
At the same time Negoro brutally kicked the young novice, who was lying on the ground.

"Besides," added he, "I should have another question to address to you, my young captain. Could you yet explain to me, how, wishing to land on the American coast, you have ended by arriving in Angola, where you are?"

Certainly, Dick Sand had no more need of the Portuguese's words to understand what he had truly divined, when he knew at last that the "Pilgrim's" compass must have been made false by this traitor. But Negoro's question was an avowal. Still he only replied by a contemptuous silence.

"You will acknowledge, captain," continued Kegoro, "that it was fortunate for you that there was a seaman on board—a real one, at that. Great God, where would we be without him? Instead of perishing on some breaker, where the tempest would have thrown you, you have arrived, thanks to him, in a friendly port, and if it is to any one that you owe being at last in a safe place, it is to that seaman whom you have wronged in despising, my young master!"

Speaking thus, Negoro, whose apparent calmness was only the result of an immense effort, had brought his form near Dick Sand. His face, suddenly become ferocious, touched him so closely that one would believe that he was going to devour him. This rascal could no longer contain his fury.

"Every dog has his day!" he exclaimed, in the paroxysm of fury excited in him by his victim's calmness. "To-day I am captain, I am master! Your life is in my hands!"

"Take it," Sand replied, without emotion. "But, know there is in heaven a God, avenger of all crimes, and your punishment is not distant!"

"If God occupies himself with human beings, there is only time for Him to take care of you!"

"I am ready to appear before the Supreme Judge," replied Dick Sand, coldly, "and death will not make me afraid."

"We shall see about that!" howled Negoro. "You count on help of some kind, perhaps—help at Kazounde, where Alvez and I are all-powerful! You are a fool! You say to yourself, perhaps, that your companions are still there, that old Tom and the others. Undeceive yourself. It is a long time since they were sold and sent to Zanzibar—too fortunate if they do not die of fatigue on the way!"

"God has a thousand ways of doing justice," replied Dick Sand. "The smallest instrument is sufficient for him. Hercules is free."

"Hercules!" exclaimed Negoro, striking the ground with his foot; "he perished long ago under the lions' and panthers' teeth. I regret only one thing, that is, that those ferocious beasts should have forestalled my vengeance!"

"If Hercules is dead," replied Dick Sand, "Dingo is alive. A dog like that, Negoro, is more than enough to take revenge on a man of your kind. I know you well, Negoro; you are not brave. Dingo will seek for you; it will know how to find you again. Some day you will die under his teeth!"

"Miserable boy!" exclaimed the Portuguese, exasperated. "Miserable boy! Dingo died from a ball that I fired at it. It is dead, like Mrs. Weldon and her son; dead, as all the survivors of the 'Pilgrim' shall die!"

"And as you yourself shall die before long," replied Dick Sand, whose tranquil look made the Portuguese grow pale.

Negoro, beside himself, was on the point of passing from words to deeds, and strangling his unarmed prisoner with his hands. Already he had sprung upon him, and was shaking him with fury, when a sudden reflection stopped him. He remembered that he was going to kill his victim, that all would be over, and that this would spare him the twenty-four hours of torture he intended for him. He then stood up, said a few words to the overseer, standing impassive, commanded him to watch closely over the prisoner, and went out of the barrack.

Instead of casting him down, this scene had restored all Dick Sand's moral force. His physical energy underwent a happy reaction, and at the same time regained the mastery. In bending over him in his rage, had Negoro slightly loosened the bands that till then had rendered all movement impossible? It was probable, for Dick Sand thought that his members had more play than before the arrival of his executioner. The young novice, feeling solaced, said to himself that perhaps it would be possible to get his arms free without too much effort. Guarded as he was, in a prison firmly shut, that would doubtless be only a torture—only a suffering less; but it was such a moment in life when the smallest good is invaluable.

Certainly, Dick Sand hoped for nothing. No human succor could come to him except from outside, and whence could it come to him? He was then resigned. To tell the truth, he no longer cared to live. He thought of all those who had met death before him, and he only aspired to join them. Negoro had just repeated what Harris had told him: "Mrs. Weldon and little Jack had succumbed." It was, indeed, only too probable that Hercules, exposed to so many dangers, must have perished also, and from a cruel death. Tom and his companions were at a distance, forever lost to him—Dick Sand ought to believe it. To hope for anything but the end of his troubles, by a death that could not be more terrible than his life, would be signal folly. He then prepared to die, above all throwing himself upon God, and asking courage from Him to go on to the end without giving way. But thoughts of God are good and noble thoughts! It is not in vain that one lifts his soul to Him who can do all, and, when Dick Sand had offered his whole sacrifice,
he found that, if one could penetrate to the bottom of his heart, he might perhaps discover there a last ray of hope—that glimmer which a breath from on high can change, in spite of all probabilities, into dazzling light.

The hours passed away. Night came. The rays of light, that penetrated through the thatch of the barrack, gradually disappeared. The last noises of the "tchitoka," which, during that day had been very silent, after the frightful uproar of the night before—those last noises died out. Darkness became very profound in the interior of the narrow prison. Soon all reposed in the city of Kazounde.

Dick Sand fell into a restoring sleep, that lasted two hours. After that he awoke, still stronger. He succeeded in freeing one of his arms from their bands—it was already a little reduced—and it was a delight for him to be able to extend it and draw it back at will.

The night must be half over. The overseer slept with heavy sleep, due to a bottle of brandy, the neck of which was still held in his shut hand. The savage had emptied it to the last drop. Dick Sand's first idea was to take possession of his jailer's weapons, which might be of great use to him in case of escape; but at that moment he thought he heard a slight scratching at the lower part of the door of the barrack. Helping himself with his arms, he succeeded in crawling as far as the door-sill without waking the overseer.

Dick Sand was not mistaken. The scratching continued, and in a more distinct manner. It seemed that from the outside some one was digging the earth under the door. Was it an animal? Was it a man?

"Hercules! If it were Hercules!" the young novice said to himself.

His eyes were fixed on his guard; he was motionless, and under the influence of a leaden sleep. Dick Sand, bringing his lips to the door-sill, thought he might risk murmuring Hercules's name. A moan, like a low and plaintive bark, replied to him.

"It is not Hercules," said Dick to himself, "but it is Dingo. He has scented me as far as this barrack. Should he bring me another word from Hercules? But if Dingo is not dead, Negoro has lied, and perhaps—"

At that moment a paw passed under the door. Dick Sand seized it, and recognized Dingo's paw. But, if it had a letter, that letter could only be attached to its neck. What to do? Was it possible to make that hole large enough for Dingo to put in its head? At all events, he must try it.

But hardly had Dick Sand begun to dig the soil with his nails, than barks that were not Dingo's sounded over the place. The faithful animal had just been scented by the native dogs, and doubtless could do nothing more than take to flight. Some detonations burst forth. The overseer half awoke. Dick Sand, no longer able to think of escaping, because the alarm was given, must then roll himself up again in his corner, and, after a lovely hope, he saw appear that day which would be without a to-morrow for him.

During all that day the grave-diggers' labors were pushed on with briskness. A large number of natives took part, under the direction of Queen Moini's first minister. All must be ready at the hour named, under penalty of mutilation, for the new sovereign promised to follow the defunct king's ways, point by point.

The ceremony would take place with torches and with great pomp. The whole population of Kazounde, native or not, must assist at it.
The body of the king, laid in a palanquin, was carried in the last ranks of the cortège. It was surrounded by his wives of the second order, some of whom were going to accompany him beyond this life. Queen Moini, in great state, marched behind what might be called the catafalque. It was positively night when all the people arrived on the banks of the brook; but the resin torches, shaken by the porters, threw great bursts of light over the crowd.

The ditch was seen distinctly. It was carpeted with black, living bodies, for they moved under the chains that bound them to the ground. Fifty slaves were waiting there till the torrent should close over them. The majority were young natives, some resigned and mute, others giving a few groans. The wives all dressed as for a _fête_, and who must perish, had been chosen by the queen.

One of these victims, she who bore the title of second wife, was bent on her hands and knees, to serve as a royal footstool, as she had done in the king's lifetime. The third wife came to hold up the manikin, while the fourth lay at its feet, in the guise of a cushion.

Before the manikin, at the end of the ditch, a post, painted red, rose from the earth. To this post was fastened a white man, who was going to be counted also among the victims of these bloody obsequies.

That white man was Dick Sand. His body, half naked, bore the marks of the tortures he had already suffered by Negoro's orders. Tied to this post, he waited for death like a man who has no hope except in another life.

However, the moment had not yet arrived when the barricade would be broken.

On a signal from the queen, the fourth wife, she who was placed at the king's feet, was beheaded by Kazounde's executioner, and her blood flowed into the ditch. It was the beginning of a frightful scene of butchery. Fifty slaves fell under the executioner's knife. The bed of the river ran waves of blood.

During half an hour the victims' cries mingled with the assistants' vociferations, and one would seek in vain in that crowd for a sentiment of repugnance or of pity.

At last Queen Moini made a gesture, and the barricade that held back the upper waters gradually opened. By a refinement of cruelty, the current was allowed to filter down the river, instead of being precipitated by an instantaneous bursting open of the dam. Slow death instead of quick death!

The water first drowned the carpet of slaves which covered the bottom of the ditch. Horrible leaps were made by those living creatures, who struggled against asphyxia. They saw Dick Sand, submerged to the knees, make a last effort to break his bonds. But the water mounted. The last heads disappeared under the torrent, that took its course again, and nothing indicated that at the bottom of this river was dug a tomb, where one hundred victims had just perished in honor of Kazounde's king.

The pen would refuse to paint such pictures, if regard for the truth did not impose the duty of describing them in their abominable reality. Man is still there, in those sad countries. To be ignorant of it is not allowable.

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CHAPTER XIII.

THE INTERIOR OF A FACTORY.

Harris and Negoro had told a lie in saying that Mrs. Weldon and little Jack were dead. She, her son, and Cousin Benedict were then in Kazounde.

After the assault on the ant-hill, they had been taken away beyond the camp on the Coanza by Harris and Negoro, accompanied by a dozen native soldiers.

A palanquin, the "kitanda" of the country, received Mrs. Weldon and little Jack. Why such care on the part of such a man as Negoro? Mrs. Weldon was afraid to explain it to herself.

The journey from the Counza to Kazounde was made rapidly and without fatigue. Cousin Benedict, on whom trouble seemed to have no effect, walked with a firm step. As he was allowed to search to the right and to the left, he did not think of complaining. The little troop, then, arrived at Kazounde eight days before Ibn Hamis's caravan. Mrs. Weldon was shut up, with her child and Cousin Benedict, in Alvez's establishment.

Little Jack was much better. On leaving the marshy country, where he had taken the fever, he gradually became better, and now he was doing well. No doubt neither he nor his mother could have borne the hardships of the caravan; but owing to the manner in which they had made this journey, during which they had been given a certain amount of care, they were in a satisfactory condition, physically at least.

As to her companions, Mrs. Weldon had heard nothing of them. After having seen Hercules flee into the forest, she did not know what had become of him. As to Dick Sand, as Harris and Negoro were no longer there to torture him, she hoped that his being a white man would perhaps spare him some bad treatment. As to Nan, Tom, Bat, Austin, and Acteon, they were blacks, and it was too certain that they would be treated as such. Poor people! who should never have trodden that land of Africa, and whom treachery had just cast there.

When Ibn Hamis's caravan had arrived at Kazounde, Mrs. Weldon, having no communication with the outer
him to her heart, while covering him with kisses. All that she could do was not to cry before him.

indeed, to have deserted him. He wished to see his comrade, Dick Sand, again. His young imagination was very
inquired after all, for old Nan, for his friend Hercules, for Bat, for Austin, for Acteon, and for Dingo, that appeared,
misfortune.

natural to his age. He rarely quitted his mother, who did not like to leave him alone, and always dreaded some

Little Jack often spoke of his father, whom he had not seen for so long. He asked to be taken back to him. He
inquired after all, for old Nan, for his friend Hercules, for Bat, for Austin, for Acteon, and for Dingo, that appeared,
indeed, to have deserted him. He wished to see his comrade, Dick Sand, again. His young imagination was very
much affected, and only lived in those remembrances. To his questions Mrs. Weldon could only reply by pressing
him to her heart, while covering him with kisses. All that she could do was not to cry before him.
Meanwhile, Mrs. Weldon had not failed to observe that, if bad treatment had been spared her during the journey from the Coanza, nothing in Alvez's establishment indicated that there would be any change of conduct in regard to her. There were in the factory only the slaves in the trader's service. All the others, which formed the object of his trade, had been penned up in the barrack of the _tchitoka_, then sold to the brokers from the interior.

Now, the storehouses of the establishment were overflowing with stuffs and ivory. The stuffs were intended to be exchanged in the provinces of the center, the ivory to be exported from the principal markets of the continent.

In fact, then, there were few people in the factory. Mrs. Weldon and Jack occupied a hut apart; Cousin Benedict another. They did not communicate with the trader's servants. They ate together. The food, consisting of goat's flesh or mutton, vegetables, tapioca, _sorgho_, and the fruits of the country, was sufficient.

Halima, a young slave, was especially devoted to Mrs. Weldon's service. In her way, and as she could, she even evinced for her a kind of savage, but certainly sincere, affection.

Mrs. Weldon hardly saw Jose-Antonio Alvez, who occupied the principal house of the factory. She did not see Negoro at all, as he lodged outside; but his absence was quite inexplicable. This absence continued to astonish her, and make her feel anxious at the same time.

"What does he want? What is he waiting for?" she asked herself. "Why has he brought us to Kazounde?"

So had passed the eight days that preceded and followed the arrival of Ibn Hamis's caravan—that is, the two days before the funeral ceremonies, and the six days that followed.

In the midst of so many anxieties, Mrs. Weldon could not forget that her husband must be a prey to the most frightful despair, on not seeing either his wife or his son return to San Francisco. Mr. Weldon could not know that his wife had adopted that fatal idea of taking passage on board the "Pilgrim," and he would believe that she had embarked on one of the steamers of the Trans-Pacific Company. Now, these steamers arrived regularly, and neither Mrs. Weldon, nor Jack, nor Cousin Benedict were on them. Besides, the "Pilgrim" itself was already overdue at Sun Francisco. As she did not reappear, James W. Weldon must now rank her in the category of ships supposed to be lost, because not heard of.

What a terrible blow for him, when news of the departure of the "Pilgrim" and the embarkation of Mrs. Weldon should reach him from his correspondents in Auckland! What had he done? Had he refused to believe that his son and she had perished at sea? But then, where would he search? Evidently on the isles of the Pacific, perhaps on the American coast. But never, no never, would the thought occur to him that she had been thrown on the coast of this fatal Africa!

So thought Mrs. Weldon. But what could she attempt? Flee! How? She was closely watched. And then to flee was to venture into those thick forests, in the midst of a thousand dangers, to attempt a journey of more than two hundred miles to reach the coast. And meanwhile Mrs. Weldon was decided to do it, if no other means offered themselves for her to recover her liberty. But, first, she wished to know exactly what Negoro's designs were.

At last she knew them.

On the 6th of June, three days after the burial of Kazounde's king, Negoro entered the factory, where he had not yet set foot since his return. He went right to the hut occupied by his prisoner.

Mrs. Weldon was alone. Cousin Benedict was taking one of his scientific walks. Little Jack, watched by the slave Halima, was walking in the enclosure of the establishment.

Negoro pushed open the door of the hut without knocking.

"Mrs. Weldon," said he, "Tom and his companions have been sold for the markets of Oujiji!"

"May God protect them!" said Mrs. "Weldon, shedding tears.

"Nan died on the way, Dick Sand has perished----"

"Nan dead! and Dick!" cried Mrs. Weldon.

"Yes, it is just for your captain of fifteen to pay for Harris's murder with his life," continued Negoro. "You are alone in Kazounde, mistress; alone, in the power of the 'Pilgrim' old cook—absolutely alone, do you understand?"

What Negoro said was only too true, even concerning Tom and his friends. The old black man, his son Bat, Acteon and Austin had departed the day before with the trader of Oujiji's caravan, without the consolation of seeing Mrs. Weldon again, without even knowing that their companion in misery was in Kazounde, in Alvez's establishment. They had departed for the lake country, a journey figured by hundreds of miles, that very few accomplish, and from which very few return.

"Well?" murmured Mrs. Weldon, looking at Negoro without answering.

"Mrs. Weldon," returned the Portuguese, in an abrupt voice, "I could revenge myself on you for the bad treatment I suffered on board the 'Pilgrim.' But Dick Sand's death will satisfy my vengeance. Now, mistress, I become the merchant again, and behold my projects with regard to you."

Mrs. Weldon looked at him without saying a word.

"You," continued the Portuguese, "your child, and that imbecile who runs after the flies, you have a commercial
"I am of a free race," replied Mrs. Weldon, in a firm tone. "You are a slave, if I wish it."
"And who would buy a white woman?"
"A man who will pay for her whatever I shall ask him."
Mrs. Weldon bent her head for a moment, for she knew that anything was possible in that frightful country. "You have heard?" continued Negoro. "Who is this man to whom you will pretend to sell me?" replied Mrs. Weldon.
"To sell you or to re-sell you. At least, I suppose so!" added the Portuguese, sneering.
"The name of this man?" asked Mrs. Weldon. "This man—he is James W. Weldon, your husband."
"My husband!" exclaimed Mrs. Weldon, who could not believe what she had just heard. "Himself, Mrs. Weldon—your husband, to whom I do not wish simply to restore his wife, his child, and his cousin, but to sell them, and, at a high price."

Mrs. Weldon asked herself if Negoro was not setting a trap for her. However, she believed he was speaking seriously. To a wretch to whom money is everything, it seems that we can trust, when business is in question. Now, this was business.
"And when do you propose to make this business operation?" returned Mrs. Weldon. "As soon as possible."
"Where?"
"Just here. Certainly James Weldon will not hesitate to come as far as Kazounde for his wife and son."
"No, he will not hesitate. But who will tell him?"
"I! I shall go to San Francisco to find James Weldon. I have money enough for this voyage."
"The money stolen from on board the 'Pilgrim'?"
"Yes, that, and more besides," replied Negoro, insolently. "But, if I wish to sell you soon, I also wish to sell you at a high price. I think that James Weldon will not regard a hundred thousand dollars——"
"He will not regard them, if he can give them," replied Mrs. Weldon, coldly. "Only my husband, to whom you will say, doubtless, that I am held a prisoner at Kazounde, in Central Africa——"
"Precisely!"
"My husband will not believe you without proofs, and he will not be so imprudent as to come to Kazounde on your word alone."
"He will come here," returned Negoro, "if I bring him a letter written by you, which will tell him your situation, which will describe me as a faithful servant, escaped from the hands of these savages."
"My hand shall never write that letter!" Mrs. Weldon replied, in a still colder manner. "You refuse?" exclaimed Negoro. "I refuse!"

The thought of the dangers her husband would pass through in coming as far as Kazounde, the little dependence that could be placed on the Portuguese's promises, the facility with which the latter could retain James Weldon, after taking the ransom agreed upon, all these reasons taken together made Mrs. Weldon refuse Negoro's proposition flatly and at once. Mrs. Weldon spoke, thinking only of herself, forgetting her child for the moment.
"You shall write that letter!" continued the Portuguese. "No!" replied Mrs. Weldon again. "Ah, take care!" exclaimed Negoro. "You are not alone here! Your child is, like you, in my power, and I well know how——"

Mrs. Weldon wished to reply that that would be impossible. Her heart was beating as if it would break; she was voiceless.

"Mrs. Weldon," said Negoro, "you will reflect on the offer I have made you. In eight days you will have handed me a letter to James Weldon's address, or you will repent of it."
That said, the Portuguese retired, without giving vent to his anger; but it was easy to see that nothing would stop him from constraining Mrs. Weldon to obey him.

CHAPTER XIV.
SOME NEWS OF DR. LIVINGSTONE.
Left alone, Mrs. Weldon at first only fixed her mind on this thought, that eight days would pass before Negoro would return for a definite answer. There was time to reflect and decide on a course of action. There could be no
question of the Portuguese's probity except in his own interest. The "market value" that he attributed to his prisoner would evidently be a safeguard for her, and protect her for the time, at least, against any temptation that might put her in danger. Perhaps she would think of a compromise that would restore her to her husband without obliging Mr. Weldon to come to Kazounde. On receipt of a letter from his wife, she well knew that James Weldon would set out. He would brave the perils of this journey into the most dangerous countries of Africa. But, once at Kazounde, when Negoro should have that fortune of a hundred thousand dollars in his hands, what guaranty would James W. Weldon, his wife, his son and Cousin Benedict have, that they would be allowed to depart? Could not Queen Moini's caprice prevent them? Would not this "sale" of Mrs. Weldon and hers be better accomplished if it took place at the coast, at some point agreed upon, which would spare Mr. Weldon both the dangers of the journey to the interior, and the difficulties, not to say the impossibilities, of a return?

So reflected Mrs. Weldon. That was why she had refused at once to accede to Negoro's proposition and give him a letter for her husband. She also thought that, if Negoro had put off his second visit for eight days, it was because he needed that time to prepare for his journey. If not, he would return sooner to force her consent.

"Would he really separate me from my child?" murmured she.

At that moment Jack entered the hut, and, by an instinctive movement, his mother seized him, as if Negoro were there, ready to snatch him from her.

"You are in great grief, mother?" asked the little boy.
"No, dear Jack," replied Mrs. Weldon; "I was thinking of your papa! You would be very glad to see him again?"
"Oh! yes, mother! Is he going to come?"
"No! no! He must not come!"
"Then we will go to see him again?"
"Yes, darling Jack!"
"With my friend Dick--and Hercules--and old Tom?"
"Yes! yes!" replied Mrs. Weldon, putting her head down to hide her tears.
"Has papa written to you?" asked little Jack.
"No, my love."
"Then you are going to write to him, mother?"
"Yes--yes--perhaps!" replied Mrs. Weldon.

And without knowing it, little Jack entered directly into his mother's thoughts. To avoid answering him further, she covered him with kisses.

It must be stated that another motive of some value was joined to the different reasons that had urged Mrs. Weldon to resist Negoro's injunctions. Perhaps Mrs. Weldon had a very unexpected chance of being restored to liberty without her husband's intervention, and even against Negoro's will. It was only a faint ray of hope, very vague as yet, but it was one.

In fact, a few words of conversation, overheard by her several days before, made her foresee a possible succor near at hand—one might say a providential succor.

Alvez and a mongrel from Oujiji were talking a few steps from the hut occupied by Mrs. Weldon. It is not astonishing that the slave-trade was the subject of conversation between those worthy merchants. The two brokers in human flesh were talking business. They were discussing the future of their commerce, and were worried about the efforts the English were making to destroy it—not only on the exterior, by cruisers, but in the interior, by their missionaries and their travelers.

Jose-Antonio Alvez found that the explorations of these hardy pioneers could only injure commercial operations. His interlocutor shared his views, and thought that all these visitors, civil or religious, should be received with gun-shots.

This had been done to some extent. But, to the great displeasure of the traders, if they killed some of these curious ones, others escaped them. Now, these latter, on returning to their country, recounted "with exaggerations," Alvez said, the horrors of the slave-trade, and that injured this commerce immensely—it being too much diminished already.

The mongrel agreed to that, and deplored it; above all, concerning the markets of N'yangwe, of Oujiji, of Zanzibar, and of all the great lake regions. There had come successively Speke, Grant, Livingstone, Stanley, and others. It was an invasion! Soon all England and all America would occupy the country!

Alvez sincerely pitied his comrade, and he declared that the provinces of Western Africa had been, till that time, less badly treated—that is to say, less visited; but the epidemic of travelers was beginning to spread. If Kazounde had been spared, it was not so with Cassange, and with Bihe, where Alvez owned factories. It may be remembered, also, that Harris had spoken to Negoro of a certain Lieutenant Cameron, who might, indeed, have the presumption to cross Africa from one side to the other, and after entering it by Zanzibar, leave it by Angola.
In fact, the trader had reason to fear, and we know that, some years after, Cameron to the south and Stanley to the north, were going to explore these little-known provinces of the west, describe the permanent monstrosities of the trade, unveil the guilty complicities of foreign agents, and make the responsibility fall on the right parties.

Neither Alvez nor the mongrel could know anything yet of this exploration of Cameron's and of Stanley's; but what they did know, what they said, what Mrs. Weldon heard, and what was of such great interest to her--in a word, what had sustained her in her refusal to subscribe at once to Negoro's demands, was this:

Before long, very probably, Dr. David Livingstone would arrive at Kazounde.

Now, the arrival of Livingstone with his escort, the influence which the great traveler enjoyed in Africa, the concourse of Portuguese authorities from Angola that could not fail to meet him, all that might bring about the deliverance of Mrs. Weldon and hers, in spite of Negoro, in spite of Alvez. It was perhaps their restoration to their country within a short time, and without James W. Weldon risking his life in a journey, the result of which could only be deplorable.

But was there any probability that Dr. Livingstone would soon visit that part of the continent? Yes, for in following that missionary tour, he was going to complete the exploration of Central Africa.

We know the heroic life of this son of the tea merchant, who lived in Blantyre, a village in the county of Lanark. Born on the 13th of March, 1813, David Livingstone, the second of six children, became, by force of study, both a theologian and doctor. After making his novitiate in the "London Missionary Society," he embarked for the Cape in 1840, with the intention of joining the missionary Moffat in Southern Africa.

From the Cape, the future traveler repaired to the country of the Bechnanas, which he explored for the first time, returned to Kuruman and married Moffat's daughter, that brave companion who would be worthy of him. In 1843 he founded a mission in the valley of the Mabotsa.

Four years later, we find him established at Kolobeng, two hundred and twenty-five miles to the north of Kuruman, in the country of the Bechnanas.

Two years after, in 1849, Livingstone left Kolobeng with his wife, his three children and two friends, Messrs. Oswell and Murray. August 1st, of the same year, he discovered Lake N'gami, and returned to Kolobeng, by descending the Zouga.

In this journey Livingstone, stopped by the bad will of the natives, had not passed beyond the N'gami. A second attempt was not more fortunate. A third must succeed. Then, taking a northern route, again with his family and Mr. Oswell, after frightful sufferings (for lack of food, for lack of water) that almost cost him the lives of his children, he reached the country of the Makalolos beside the Chobe, a branch of the Zambezi. The chief, Sebituane, joined him at Linyanti. At the end of June, 1851, the Zambezi was discovered, and the doctor returned to the Cape to bring his family to England.

In fact, the intrepid Livingstone wished to be alone while risking his life in the daring journey he was going to undertake.

On leaving the Cape this time, the question was to cross Africa obliquely from the south to the west, so as to reach Saint Paul de Loanda.

On the third of June, 1852, the doctor set out with a few natives. He arrived at Kuruman and skirted the Desert of Kalahari. The 31st December he entered Litoubarouba and found the country of the Bechnanas ravaged by the Boers, old Dutch colonists, who were masters of the Cape before the English took possession of it.

Livingstone left Litoubarouba on the 15th of January, 1853, penetrated to the center of the country of the Bamangouatos, and, on May 23d, he arrived at Linyanti, where the young sovereign of the Makalolos, Sckeleton, received him with great honor.

There, the doctor held back by the intense fevers, devoted himself to studying the manners of the country, and, for the first time, he could ascertain the ravages made by the slave-trade in Africa.

One month after he descended the Chobe, reached the Zambezi, entered Naniele, visited Katonga and Libonta, arrived at the confluence of the Zambezi and the Leeba, formed the project of ascending by that watercourse as far as the Portuguese possessions of the west, and, after nine weeks' absence, returned to Linyanti to make preparations.

On the 11th of November, 1853, the doctor, accompanied by twenty-seven Makalolos, left Linyanti, and on the 27th of December he reached the mouth of the Leeba. This watercourse was ascended as far as the territory of the Balondas, there where it receives the Makonda, which comes from the east. It was the first time that a white man penetrated into this region.

January 14th, Livingstone entered Shinte's residence. He was the most powerful sovereign of the Balondas. He gave Livingstone a good reception, and, the 26th of the same month, after crossing the Leeba, he arrived at King Katema's. There, again, a good reception, and thence the departure of the little troop that on the 20th of February encamped on the borders of Lake Dilolo.

On setting out from this point, a difficult country, exigencies of the natives, attacks from the tribes, revolt of his
companions, threats of death, everything conspired against Livingstone, and a less energetic man would have abandoned the party. The doctor persevered, and on the 4th of April, he reached the banks of the Coango, a large watercourse which forms the eastern boundary of the Portuguese possessions, and flows northward into the Zaire.

Six days after, Livingstone entered Cassange, where the trader Alvez had seen him passing through, and on the 31st of May he arrived at Saint Paul de Loanda. For the first time, and after a journey of two years, Africa had just been crossed obliquely from the south to the west.

David Livingstone left Loanda, September 24th of the same year. He skirted the right bank of that Coanza that had been so fatal to Dick Sand and his party, arrived at the confluence of the Lombe, crossing numerous caravans of slaves, passed by Cassange again, left it on the 20th of February, crossed the Coango, and reached the Zambezi at Kawawa. On the 8th of June he discovered Lake Dilolo again, saw Shinte again, descended the Zambezi, and reentered Linyanti, which he left on the 3d of November, 1855.

This second part of the journey, which would lead the doctor toward the eastern coast, would enable him to finish completely this crossing of Africa from the west to the east.

After having visited the famous Victoria Falls, the "thundering foam," David Livingstone abandoned the Zambezi to take a northeastern direction. The passage across the territory of the Batokas (natives who were besotted by the inhalation of hemp), the visit to Semalembone (the powerful chief of the region), the crossing of the Kafone, the finding of the Zambezi again, the visit to King Mbourouma, the sight of the ruins of Zambo (an ancient Portuguese city), the encounter with the Chief Mpende on the 17th of January, 1856 (then at war with the Portuguese), the final arrival at Tete, on the border of the Zambezi, on the 2d of March—such were the principal halting-places of this tour.

The 22d of April Livingstone left that station, formerly a rich one, descended as far as the delta of the river, and arrived at Quilimane, at its mouth, on the 20th of May, four years after leaving the Cape. On the 12th of July he embarked for Maurice, and on the 22d of December he was returning to England, after sixteen years' absence.

The prize of the Geographical Society of Paris, the grand medal of the London Geographical Society, and brilliant receptions greeted the illustrious traveler. Another would, perhaps, have thought that repose was well earned. The doctor did not think so, and departed on the 1st of March, 1858, accompanied by his brother Charles, Captain Bedinfield, the Drs. Kirk and Meller, and by Messrs. Thornton and Baines. He arrived in May on the coast of Mozambique, having for an object the exploration of the basin of the Zambezi.

All would not return from this voyage. A little steamer, the "My Robert," enabled the explorers to ascend the great river by the Rongone. They arrived at Tete, September the 8th; thence reconnaissance of the lower course of the Zambezi and of the Chire, its left branch, in January, 1859; visit to Lake Chirona in April; exploration of the Manganjas' territory; discovery of Lake Nyassa on September 10th; return to the Victoria Falls, August 9th, 1860; arrival of Bishop Mackensie and his missionaries at the mouth of the Zambezi, January 31st, 1861; the exploration of the Rovouma, on the "Pioneer," in March; the return to Lake Nyassa in September, 1861, and residence there till the end of October; January 30th, 1862, arrival of Mrs. Livingstone and a second steamer, the "Lady Nyassa:" such were the events that marked the first years of this new expedition. At this time, Bishop Mackensie and one of his missionaries had already succumbed to the unhealthfulness of the climate, and on the 27th of April, Mrs. Livingstone died in her husband's arms.

In May, the doctor attempted a second reconnaissance of the Rovouma; then, at the end of November, he entered the Zambezi again, and sailed up the Chire again. In April, 1863, he lost his companion, Thornton, sent back to Europe his brother Charles and Dr. Kirk, who were both exhausted by sickness, and November 10th, for the third time, he saw Nyassa, of which he completed the hydrography. Three months after he was again at the mouth of the Zambezi, passed to Zanzibar, and July 20th, 1864, after five years' absence, he arrived in London, where he published his work entitled: "Exploration of the Zambezi and its Branches."

January 28th, 1866, Livingstone landed again at Zanzibar. He was beginning his fourth voyage.

August 8th, after having witnessed the horrible scenes provoked by the slave-trade in that country, the doctor, taking this time only a few _cipayes_ and a few negroes, found himself again at Mokalaose, on the banks of the Nyassa. Six weeks later, the majority of the men forming the escort took flight, returned to Zanzibar, and there falsely spread the report of Livingstone's death.

He, however, did not draw back. He wished to visit the country comprised between the Nyassa and Lake Tanganyika. December 10th, guided by some natives, he traversed the Loangona River, and April 2d, 1867, he discovered Lake Liemmba. There he remained a month between life and death. Hardly well again August 30th he reached Lake Moero, of which he visited the northern shore, and November 21st he entered the town of Cayembe, where he lived forty days, during which he twice renewed his exploration of Lake Moero.

From Cayembe Livingstone took a northern direction, with the design of reaching the important town of Oujiji, on the Tanganyika. Surprised by the rising of the waters, and abandoned by his guides, he was obliged to return to
Cayembe. He redescended to the south June 6th, and six weeks after gained the great lake Bangoneolo. He remained there till August 9th, and then sought to reascend toward Lake Tanganyika.

What a journey! On setting out, January 7th, 1869, the heroic doctor's feebleness was such that he had to be carried. In February he at last reached the lake and arrived at Oujiji, where he found some articles sent to his address by the Oriental Company of Calcutta.

Livingstone then had but one idea, to gain the sources of the valley of the Nile by ascending the Tanganyika. September 21st he was at Bambarre, in the Manonyema, a cannibal country, and arrived at the Loualaba--that Loualaba that Cameron was going to suspect, and Stanley to discover, to be only the upper Zaire, or Congo. At Mamohela the doctor was sick for eighty days. He had only three servants. July 21st, 1871, he departed again for the Tanganyika, and only reentered Oujiji October 23d. He was then a mere skeleton.

Meanwhile, before this period, people had been a long time without news of the traveler. In Europe they believed him to be dead. He himself had almost lost hope of being ever relieved.

Eleven days after his entrance into Oujiji shots were heard a quarter of a mile from the lake. The doctor arrives. A man, a white man, is before him. "Doctor Livingstone, I presume?"

"Yes," replied the latter, raising his cap, with a friendly smile.

Their hands were warmly clasped.

"I thank God," continued the white man, "that He has permitted me to meet you."

"I am happy," said Livingstone, "to be here to receive you."

The white man was the American Stanley, a reporter of the New York _Herald_, whom Mr. Bennett, the proprietor of that journal, had just sent to find David Livingstone.

In the month of October, 1870, this American, without hesitation, without a word, simply as a hero, had embarked at Bombay for Zanzibar, and almost following Speke and Burton's route, after untold sufferings, his life being menaced several times, he arrived at Oujiji.

The two travelers, now become fast friends, then made an expedition to the north of Lake Tanganyika. They embarked, pushed as far as Cape Malaya, and after a minute exploration, were of the opinion that the great lake had for an outlet a branch of the Loualaba.

It was what Cameron and Stanley himself were going to determine positively some years after. December 12th, Livingstone and his companion were returning to Oujiji.

Stanley prepared to depart. December 27th, after a navigation of eight days, the doctor and he arrived at Ousimba; then, February 23d, they entered Kouihara.

March 12th was the day of parting.

"You have accomplished," said the doctor to his companion, "what few men would have done, and done it much better than certain great travelers. I am very grateful to you for it. May God lead you, my friend, and may He bless you!"

"May He," said Stanley, taking Livingstone's hand, "bring you back to us safe and sound, dear doctor!"

Stanley drew back quickly from this embrace, and turned so as to conceal his tears. "Good-by, doctor, dear friend," he said in a stifled voice.

"Good-by," replied Livingstone, feebly.

Stanley departed, and July 12th, 1872, he landed at Marseilles.

Livingstone was going to return to his discoveries. August 25th, after five months passed at Konihara, accompanied by his black servants, Souzi, Chouma, and Amoda, by two other servants, by Jacob Wainwright, and by fifty-six men sent by Stanley, he went toward the south of the Tanganyika.

A month after, the caravan arrived at M'oura, in the midst of storms, caused by an extreme drought. Then came the rains, the bad will of the natives, and the loss of the beasts of burden, from falling under the stings of the tsetse. January 24th, 1873, the little troop was at Tchitounkone. April 27th, after having left Lake Bangoneolo to the east, the troop was going toward the village of Tchitambo.

At that place some traders had left Livingstone. This is what Alvez and his colleague had learned from them. They had good reason to believe that the doctor, after exploring the south of the lake, would venture across the Loanda, and come to seek unknown countries in the west. Thence he was to ascend toward Angola, to visit those regions infested by the slave-trade, to push as far as Kazounde; the tour seemed to be all marked out, and it was very probable that Livingstone would follow it.

Mrs. Weldon then could count on the approaching arrival of the great traveler, because, in the beginning of June, it was already more than two months since he had reached the south of Lake Bangoneolo.

Now, June 13th, the day before that on which Negoro would come to claim from Mrs. Weldon the letter that would put one hundred thousand dollars in his hands, sad news was spread, at which Alvez and the traders only rejoiced.
May 1st, 1873, at dawn, Dr. David Livingstone died. In fact, on April 29th, the little caravan had reached the village of Tchitambo, to the south of the lake. The doctor was carried there on a litter. On the 30th, in the night, under the influence of excessive grief, he moaned out this complaint, that was hardly heard: "Oh, dear! dear!" and he fell back from drowsiness.

At the end of an hour he called his servant, Souzi, asking for some medicine, then murmuring in a feeble voice: "It is well. Now you can go."

Toward four o'clock in the morning, Souzi and five men of the escort entered the doctor's hut. David Livingstone, kneeling near his bed, his head resting on his hands, seemed to be engaged in prayer. Souzi gently touched his cheek; it was cold. David Livingstone was no more.

Nine months after, his body, carried by faithful servants at the price of unheard-of fatigues, arrived at Zanzibar. On April 12th, 1874, it was buried in Westminster Abbey, among those of her great men, whom England honors equally with her kings.

CHAPTER XV.
WHERE A MANTICORE MAY LEAD.

To what plank of safety will not an unfortunate being cling? Will not the eyes of the condemned seek to seize any ray of hope, no matter how vague?

So it had been with Mrs. Weldon. One can understand what she must have felt when she learned, from Alvez himself, that Dr. Livingstone had just died in a little Bangoneolo village.

It seemed to her that she was more isolated than ever; that a sort of bond that attached her to the traveler, and with him to the civilized world, had just been broken.

The plank of safety sank under her hand, the ray of hope went out before her eyes. Tom and his companions had left Kazounde for the lake region. Not the least news of Hercules. Mrs. Weldon was not sure of any one. She must then fall back on Negoro's proposition, while trying to amend it and secure a definite result from it.

June 14th, the day fixed by him, Negoro presented himself at Mrs. Weldon's hut.

The Portuguese was, as always, so he said, perfectly practical. However, he abated nothing from the amount of the ransom, which his prisoner did not even discuss. But Mrs. Weldon also showed herself very practical in saying to him:

"If you wish to make an agreement, do not render it impossible by unacceptable conditions. The exchange of our liberty for the sum you exact may take place, without my husband coming into a country where you see what can be done with a white man! Now, I do not wish him to come here at any price!"

After some hesitation Negoro yielded, and Mrs. Weldon finished with the concession that James Weldon should not venture as far as Kazounde. A ship would land him at Mossamedes, a little port to the south of Angola, ordinarily frequented by slave-ships, and well-known by Negoro. It was there that the Portuguese would conduct James W. Weldon; and at a certain time Alvez's agent would bring thither Mrs. Weldon, Jack, and Cousin Benedict. The ransom would be given to those agents on the giving up of the prisoners, and Negoro, who would play the part of a perfectly honest man with James Weldon, would disappear on the ship's arrival.

Mrs. Weldon had gained a very important point. She spared her husband the dangers of a voyage to Kazounde, the risk of being kept there, after paying the exacted ransom, and the perils of the return. As to the six hundred miles that separated Kazounde from Mossamedes, by going over them as she had traveled on leaving the Coanza, Mrs. Weldon would only have a little fatigue to fear. Besides, it would be to Alvez's interest--for he was in the affair--for the prisoners to arrive safe and sound.

The conditions being thus settled, Mrs. Weldon wrote to her husband, leaving to Negoro the care of passing himself off as a devoted servant, who had escaped from the natives. Negoro took the letter, which did not allow James Weldon to hesitate about following him as far as Mossamedes, and, the next day, escorted by twenty blacks, he traveled toward the north.

Why did he take that direction? Was it, then, Negoro's intention to embark on one of the vessels which frequent the mouths of the Congo, and thus avoid the Portuguese stations, as well as the penitentiaries in which he had been an involuntary guest? It was probable. At least, that was the reason he gave Alvez.

After his departure, Mrs. Weldon must try to arrange her existence in such a manner as to pass the time of her sojourn at Kazounde as happily as possible. Under the most favorable circumstances, it would last three or four months. Negoro's going and returning would require at least that time.

Mrs. Weldon's intention was, not to leave the factory. Her child, Cousin Benedict, and she, were comparatively safe there. Halima's good care softened the severity of this sequestration a little. Besides, it was probable that the trader would not permit her to leave the establishment. The great premium that the prisoner's ransom would procure.
him, made it well worth while to guard her carefully.

It was even fortunate that Alvez was not obliged to leave Kazounde to visit his two other factories of Bihe and Cassange. Coimbra was going to take his place in the expedition on new _razzias_ or raids. There was no motive for regretting the presence of that drunkard. Above all, Negoro, before setting out, had given Alvez the most urgent commands in regard to Mrs. Weldon. It was necessary to watch her closely. They did not know what had become of Hercules. If he had not perished in that dreadful province of Kazounde, perhaps he would attempt to get near the prisoner and snatch her from Alvez's hands. The trader perfectly understood a situation which ciphered itself out by a good number of dollars. He would answer for Mrs. Weldon as for his own body.

So the monotonous life of the prisoner during the first days after her arrival at the factory, was continued. What passed in this enclosure reproduced very exactly the various acts of native existence outside. Alvez lived like the other natives of Kazounde. The women of the establishment worked as they would have done in the town, for the greater comfort of their husbands or their masters. Their occupations included preparing rice with heavy blows of the pestle in wooden mortars, to perfect decortication; cleansing and winnowing maize, and all the manipulations necessary to draw from it a granulous substance which serves to compose that potage called "mtyelle" in the country; the harvesting of the _sorgo_, a kind of large millet, the ripening of which had just been solemnly celebrated at this time; the extraction of that fragrant oil from the "mpafon" drupes, kinds of olives, the essence of which forms a perfume sought for by the natives; spinning of the cotton, the fibers of which are twisted by means of a spindle a foot and a half long, to which the spinners impart a rapid rotation; the fabrication of bark stuffs with the mallet; the extraction from the tapioca roots, and the preparation of the earth for the different products of the country, cassava, flour that they make from the manioc beans, of which the pods, fifteen inches long, named "mositsanes," grow on trees twenty feet high; arachides intended to make oil, perennial peas of a bright blue, known under the name of "icholobs," the flowers of which relieve the slightly insipid taste of the milk of sorgho; native coffee, sugar canes, the juice of which is reduced to a syrup; onions, Indian pears, sesameum, cucumbers, the seeds of which are roasted like chestnuts; the preparation of fermented drinks, the "malofori," made with bananas, the "pombe" and other liquors; the care of the domestic animals, of those cows that only allow themselves to be milked in the presence of their little one or of a stuffed calf; of those heifers of small race, with short horns, some of which have a hump; of those goats which, in the country where their flesh serves for food, are an important object of exchange, one might say current money like the slave; finally, the feeding of the birds, swine, sheep, oxen, and so forth.

This long enumeration shows what rude labors fall on the feeble sex in those savage regions of the African continent.

During this time the men smoke tobacco or hemp, chase the elephant or the buffalo, and hire themselves to the traders for the raids. The harvest of maize or of slaves is always a harvest that takes place in fixed seasons.

Of those various occupations, Mrs. Weldon only saw in Alvez's factory the part laid on the women. Sometimes she stopped, looking at them, while the slaves, it must be said, only replied to her by ugly grimaces. A race instinct led these unfortunates to hate a white woman, and they had no commiseration for her in their hearts. Halima alone was an exception, and Mrs. Weldon, having learned certain words of the native language, was soon able to exchange a few sentences with the young slave.

Little Jack often accompanied his mother when she walked in the inclosure; but he wished very much to go outside. There was, however, in an enormous baobab, marabout nests, formed of a few sticks, and "souimangas" nests, birds with scarlet breasts and throats, which resemble those of the tissirins; then "widows," that strip the thatch for the benefit of their family; "calaos," whose song was agreeable, bright gray parrots with red tails, which, in the Manyema, are called "rous," and give their name to the chiefs of the tribes; insectivorous "drougos," similar to gray linnets, with large, red beaks. Here and there also fluttered hundreds of butterflies of different species, especially in the neighborhood of the brooks that crossed the factory; but that was rather Cousin Benedict's affair than little Jack's, and the latter regretted greatly not being taller, so as to look over the walls. Alas! where was his poor friend, Dick Sand—he who had brought him so high up in the "Pilgrim's" masts? How he would have followed him on the branches of those trees, whose tops rose to more than a hundred feet! What good times they would have had together!

Cousin Benedict always found himself very well where he was, provided insects were not lacking. Happily, he had discovered in the factory—and he studied as much as he could without magnifying glass or spectacles—a small bee which forms its cells among the worm-holes of the wood, and a "sphex" that lays its eggs in cells that are not its own, as the cuckoo in the nests of other birds. Mosquitoes were not lacking either, on the banks of the rivulets, and they tattooed him with bites to the extent of making him unrecognizable. And when Mrs. Weldon reproached him with letting himself be thus devoured by those venomous insects: "It is their instinct, Cousin Weldon," he replied to her, scratching himself till the blood came; "it is their instinct, and we must not have a grudge against them!"
At last, one day--it was the 17th of June--Cousin Benedict was on the point of being the happiest of entomologists. But this adventure, which had unexpected consequences, needs to be related with some minuteness.

It was about eleven o'clock in the morning. An overpowering heat had obliged the inhabitants of the factory to keep in their huts, and one would not even meet a single native in the streets of Kazounde.

Mrs. Weldon was dozing near little Jack, who was sleeping soundly. Cousin Benedict, himself, suffering from the influence of this tropical temperature, had given up his favorite hunts, which was a great sacrifice for him, for, in those rays of the midday sun, he heard the rustle of a whole world of insects. He was sheltered, then, at the end of his hut, and there, sleep began to take possession of him in this involuntary siesta.

Suddenly, as his eyes half closed, he heard a humming; this is one of those insupportable buzzings of insects, some of which can give fifteen or sixteen thousand beats of their wings in a second.

"A hexapode!" exclaimed Cousin Benedict, awakened at once, and passing from the horizontal to the vertical position.

There was no doubt that it was a hexapode that was buzzing in his hut. But, if Cousin Benedict was very near-sighted, he had at least very acute hearing, so acute even that he could recognize one insect from another by the intensity of its buzz, and it seemed to him that this one was unknown, though it could only be produced by a giant of the species.

"What is this hexapode?" Cousin Benedict asked himself.

Behold him, seeking to perceive the insect, which was very difficult to his eyes without glasses, but trying above all to recognize it by the buzzing of its wings.

His instinct as an entomologist warned him that he had something to accomplish, and that the insect, so providentially entered into his hut, ought not to be the first comer.

Cousin Benedict no longer moved. He listened. A few rays of light reached him. His eyes then discovered a large black point that flew about, but did not pass near enough for him to recognize it. He held his breath, and if he felt himself stung in some part of the face or hands, he was determined not to make a single movement that might put his hexapode to flight. At last the buzzing insect, after turning around him for a long time, came to rest on his head. Cousin Benedict's mouth widened for an instant, as if to give a smile--and what a smile! He felt the light animal running on his hair. An irresistible desire to put his hand there seized him for a moment; but he resisted it, and did well.

"No, no!" thought he, "I would miss it, or what would be worse, I would injure it. Let it come more within my reach. See it walking! It descends. I feel its dear little feet running on my skull! This must be a hexapode of great height. My God! only grant that it may descend on the end of my nose, and there, by squinting a little, I might perhaps see it, and determine to what order, genus, species, or variety it belongs."

So thought Cousin Benedict. But it was a long distance from his skull, which was rather pointed, to the end of his nose, which was very long. How many other roads the capricious insect might take, beside his ears, beside his forehead--roads that would take it to a distance from the savant's eyes--without counting that at any moment it might take its flight, leave the hut, and lose itself in those solar rays where, doubtless, its life was passed, and in the midst of the buzzing of its congeners that would attract it outside!

Cousin Benedict said all that to himself. Never, in all his life as an entomologist, had he passed more touching minutes. An African hexapode, of a new species, or, at least, of a new variety, or even of a new sub-variety, was there on his head, and he could not recognize it except it designed to walk at least an inch from his eyes.

However, Cousin Benedict's prayer must be heard. The insect, after having traveled over the half-bald head, as on the summit of some wild bush, began to descend Cousin Benedict's forehead, and the latter might at last conceive the hope that it would venture to the top of his nose. Once arrived at that top, why would it not descend to the base?

"In its place, I--I would descend," thought the worthy savant.

What is truer than that, in Cousin Benedict's place, any other would have struck his forehead violently, so as to crush the enticing insect, or at least to put it to flight. To feel six feet moving on his skin, without speaking of the fear of being bitten, and not make a gesture, one will agree that it was the height of heroism. The Spartan allowing his breast to be devoured by a fox; the Roman holding burning coals between his fingers, were not more masters of themselves than Cousin Benedict, who was undoubtedly descended from those two heroes.

After twenty little circuits, the insect arrived at the top of the nose. Then there was a moment's hesitation that made all Cousin Benedict's blood rush to his heart. Would the hexapode ascend again beyond the line of the eyes, or would it descend below?

It descended. Cousin Benedict felt its caterpillar feet coming toward the base of his nose. The insect turned neither to the right nor to the left. It rested between its two buzzing wings, on the slightly hooked edge of that learned nose, so well formed to carry spectacles. It cleared the little furrow produced by the incessant use of that optical instrument, so much missed by the poor cousin, and it stopped just at the extremity of his nasal appendage.
It was the best place this hasapode could choose. At that distance, Cousin Benedict's two eyes, by making their visual rays converge, could, like two lens, dart their double look on the insect.

"Almighty God!" exclaimed Cousin Benedict, who could not repress a cry, "the tuberculous manticore."

Now, he must not cry it out, he must only think it. But was it not too much to ask from the most enthusiastic of entomologists?

To have on the end of his nose a tuberculous manticore, with large elytrums—an insect of the cicendeletes tribe—a very rare specimen in collections—one that seems peculiar to those southern parts of Africa, and yet not utter a cry of admiration; that is beyond human strength.

Unfortunately the manticore heard this cry, which was almost immediately followed by a sneeze, that shook the appendage on which it rested. Cousin Benedict wished to take possession of it, extended his hand, shut it violently, and only succeeded in seizing the end of his own nose.

"Malediction!" exclaimed he. But then he showed a remarkable coolness.

He knew that the tuberculous manticore only flutters about, so to say, that it walks rather than flies. He then knelt, and succeeded in perceiving, at less than ten inches from his eyes, the black point that was gliding rapidly in a ray of light.

Evidently it was better to study it in this independent attitude. Only he must not lose sight of it.

"To seize the manticore would be to risk crushing it," Cousin Benedict said to himself. "No; I shall follow it! I shall admire it! I have time enough to take it!"

Was Cousin Benedict wrong? However that may be, see him now on all fours, his nose to the ground like a dog that smells a scent, and following seven or eight inches behind the superb hexapode. One moment after he was outside his hut, under the midday sun, and a few minutes later at the foot of the palisade that shut in Alvez's establishment.

At this place was the manticore going to clear the enclosure with a bound, and put a wall between its adorer and itself? No, that was not in its nature, and Cousin Benedict knew it well. So he was always there, crawling like a snake, too far off to recognize the insect entomologically—besides, that was done—but near enough to perceive that large, moving point traveling over the ground.

The manticore, arrived near the palisade, had met the large entrance of a mole-hill that opened at the foot of the enclosure. There, without hesitating, it entered this subterranean gallery, for it is in the habit of seeking those obscure passages. Cousin Benedict believed that he was going to lose sight of it. But, to his great surprise, the passage was at least two feet high, and the mole-hill formed a gallery where his long, thin body could enter. Besides, he put the ardor of a ferret into his pursuit, and did not even perceive that in "earthing" himself thus, he was passing outside the palisade.

In fact, the mole-hill established a natural communication between the inside and the outside. In half a minute Cousin Benedict was outside of the factory. That did not trouble him. He was absorbed in admiration of the elegant insect that was leading him on. But the latter, doubtless, had enough of this long walk. Its elytrums turned aside, its wings spread out. Cousin Benedict felt the danger, and, with his curved hand, he was going to make a provisional prison for the manticore, when—f-r-r-r-r!—it flew away!

What despair! But the manticore could not go far. Cousin Benedict rose; he looked, he darted forward, his two hands stretched out and open. The insect flew above his head, and he only perceived a large black point, without appreciable form to him.

Would the manticore come to the ground again to rest, after having traced a few capricious circles around Cousin Benedict's bald head? All the probabilities were in favor of its doing so.

Unfortunately for the unhappy savant, this part of Alvez's establishment, which was situated at the northern extremity of the town, bordered on a vast forest, which covered the territory of Kazounde for a space of several square miles. If the manticore gained the cover of the trees, and if there, it should flutter from branch to branch, he must renounce all hope of making it figure in that famous tin box, in which it would be the most precious jewel.

Alas! that was what happened. The manticore had rested again on the ground. Cousin Benedict, having the unexpected hope of seeing it again, threw himself on the ground at once. But the manticore no longer walked: it proceeded by little jumps.

Cousin Benedict, exhausted, his knees and hands bleeding, jumped also. His two arms, his hands open, were extended to the right, to the left, according as the black point bounded here or there. It might be said that he was drawing his body over that burning soil, as a swimmer does on the surface of the water.

Useless trouble! His two hands always closed on nothing. The insect escaped him while playing with him, and soon, arrived under the fresh branches, it arose, after throwing into Cousin Benedict's ear, which it touched lightly, the most intense but also the most ironical buzzing of its coleopter wings.

"Malediction!" exclaimed Cousin Benedict, a second time. "It escapes me. Ungrateful hexapode! Thou to whom
I reserved a place of honor in my collection! Well, no, I shall not give thee up! I shall follow thee till I reach thee!"

He forgot, this discomfited cousin, that his nearsighted eyes would not enable him to perceive the _manticore_ among the foliage. But he was no longer master of himself. Vexation, anger, made him a fool. It was himself, and only himself, that he must blame for his loss. If he had taken possession of the insect at first, instead of following it "in its independent ways," nothing of all that would have happened, and he would possess that admirable specimen of African _manticores_, the name of which is that of a fabulous animal, having a man's head and a lion's body.

Cousin Benedict had lost his head. He little thought that the most unforeseen of circumstances had just restored him to liberty. He did not dream that the ant-hill, into which he had just entered, had opened to him an escape, and that he had just left Alvez's establishment. The forest was there, and under the trees was his _manticore_, flying away! At any price, he wanted to see it again.

See him, then, running across the thick forest, no longer conscious even of what he was doing, always imagining he saw the precious insect, beating the air with his long arms like a gigantic field-spider. Where he was going, how he would return, and if he should return, he did not even ask himself, and for a good mile he made his way thus, at the risk of being met by some native, or attacked by some beast.

Suddenly, as he passed near a thicket, a gigantic being sprang out and threw himself on him. Then, as Cousin Benedict would have done with the _manticore_, that being seized him with one hand by the nape of the neck, with the other by the lower part of the back, and before he had time to know what was happening, he was carried across the forest.

Truly, Cousin Benedict had that day lost a fine occasion of being able to proclaim himself the happiest entomologist of the five parts of the world.

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CHAPTER XVI.
A MAGICIAN.

When Mrs. Weldon, on the 17th of the month, did not see Cousin Benedict reappear at the accustomed hour, she was seized with the greatest uneasiness. She could not imagine what had become of her big baby. That he had succeeded in escaping from the factory, the enclosure of which was absolutely impassable, was not admissible. Besides, Mrs. Weldon knew her cousin. Had one proposed to this original to flee, abandoning his tin box and his collection of African insects, he would have refused without the shadow of hesitation. Now, the box was there in the hut, intact, containing all that the savant had been able to collect since his arrival on the continent. To suppose that he was voluntarily separated from his entomological treasures, was inadmissible.

Nevertheless, Cousin Benedict was no longer in Jose-Antonio Alvez's establishment.

During all that day Mrs. Weldon looked for him persistently. Little Jack and the slave Halima joined her. It was useless.

Mrs. Weldon was then forced to adopt this sad hypothesis: the prisoner had been carried away by the trader's orders, for motives that she could not fathom. But then, what had Alvez done with him? Had he incarcerated him in one of the barracks of the large square? Why this carrying away, coming after the agreement made between Mrs. Weldon and Negoro, an agreement which included Cousin Benedict in the number of the prisoners whom the trader would conduct to Mossamedes, to be placed in James W. Weldon's hands for a ransom?

If Mrs. Weldon had been a witness of Alvez's anger, when the latter learned of the prisoner's disappearance, she would have understood that this disappearance was indeed made against his will. But then, if Cousin Benedict had escaped voluntarily, why had he not let her into the secret of his escape?

However, the search of Alvez and his servants, which was made with the greatest care, led to the discovery of that mole-hill, which put the factory in direct communication with the neighboring forest. The trader no longer doubted that the "fly-hunter" had fled by that narrow opening. One may then judge of his fury, when he said to himself that this flight would doubtless be put to account, and would diminish the prize that the affair would bring him.

"That imbecile is not worth much," thought he, "nevertheless, I shall be compelled to pay dear for him. Ah! if I take him again!"

But notwithstanding the searchings that were made inside, and though the woods were beaten over a large radius, it was impossible to find any trace of the fugitive.

Mrs. Weldon must resign herself to the loss of her cousin, and Alvez mourn over his prisoner. As it could not be admitted that the latter had established communications with the outside, it appeared evident that chance alone had made him discover the existence of the mole-hill, and that he had taken flight without thinking any more of those he left behind than if they had never existed.
Mrs. Weldon was forced to allow that it must be so, but she did not dream of blaming the poor man, so perfectly unconscious of his actions.

"The unfortunate! what will become of him?" she asked herself.

It is needless to say that the mole-hill had been closed up the same day, and with the greatest care, and that the watch was doubled inside as well as outside the factory.

The monotonous life of the prisoners then continued for Mrs. Weldon and her child.

Meanwhile, a climatic fact, very rare at that period of the year, was produced in the province. Persistent rains began about the 19th of June, though the _masika_ period, that finishes in April, was passed. In fact, the sky was covered, and continual showers inundated the territory of Kazounde.

What was only a vexation for Mrs. Weldon, because she must renounce her walks inside the factory, became a public misfortune for the natives. The low lands, covered with harvests already ripe, were entirely submerged. The inhabitants of the province, to whom the crop suddenly failed, soon found themselves in distress. All the labors of the season were compromised, and Queen Moini, any more than her ministers, did not know how to face the catastrophe.

They then had recourse to the magicians, but not to those whose profession is to heal the sick by their incantations and sorceries, or who predict success to the natives. There was a public misfortune on hand, and the best "mganngas," who have the privilege of provoking or stopping the rains, were prayed to, to conjure away the peril.

Their labor was in vain. It was in vain that they intoned their monotonous chant, rang their little bells and hand-bells, employed their most precious amulets, and more particularly, a horn full of mud and bark, the point of which was terminated by three little horns. The spirits were exorcised by throwing little balls of dung, or in spitting in the faces of the most august personages of the court; but they did not succeed in chasing away the bad spirits that presided over the formation of the clouds.

Now, things were going from bad to worse, when Queen Moini thought of inviting a celebrated magician, then in the north of Angola. He was a magician of the first order, whose power was the more marvelous because they had never tested it in this country where he had never come. But there was no question of its success among the Masikas.

It was on the 25th of June, in the morning, that the new magician suddenly announced his arrival at Kazounde with great ringing of bells.

This sorcerer came straight to the "tchitoka," and immediately the crowd of natives rushed toward him. The sky was a little less rainy, the wind indicated a tendency to change, and those signs of calm, coinciding with the arrival of the magician, predisposed the minds of the natives in his favor.

Besides, he was a superb man—a black of the finest water. He was at least six feet high, and must be extraordinarily strong. This prestige already influenced the crowd.

Generally, the sorcerers were in bands of three, four, or five when they went through the villages, and a certain number of acolytes, or companions, made their cortege. This magician was alone. His whole breast was zebraed with white marks, done with pipe clay. The lower part of his body disappeared under an ample skirt of grass stuff, the "train" of which would not have disgraced a modern elegant. A collar of birds' skulls was round his neck; on his head was a sort of leathern helmet, with plumes ornamented with pearls; around his loins a copper belt, to which hung several hundred bells, noisier than the sonorous harness of a Spanish mule: thus this magnificent specimen of the corporation of native wizards was dressed.

All the material of his art was comprised in a kind of basket, of which a calebash formed the bottom, and which was filled with shells, amulets, little wooden idols, and other fetiches, plus a notable quantity of dung balls, important accessories to the incantations and divinatory practises of the center of Africa.

One peculiarity was soon discovered by the crowd. This magician was dumb. But this infirmity could only increase the consideration with which they were disposed to surround him. He only made a guttural sound, low and languid, which had no signification. The more reason for being well skilled in the mysteries of witchcraft.

The magician first made the tour of the great place, executing a kind of dance which put in motion all his chime of bells. The crowd followed, imitating his movements—it might be said, as a troop of monkeys following a gigantic, four-handed animal. Then, suddenly, the sorcerer, treading the principal street of Kazounde, went toward the royal residence.

As soon as Queen Moini had been informed of the arrival of the new wizard, she appeared, followed by her courtiers.

The magician bowed to the ground, and lifted up his head again, showing his superb height. His arms were then extended toward the sky, which was rapidly furrowed by masses of clouds. The sorcerer pointed to those clouds with his hand; he imitated their movements in an animated pantomime. He showed them fleeing to the west, but returning to the east by a rotary movement that no power could stop.
Then, suddenly, to the great surprise of the town and the court, this sorcerer took the redoubtable sovereign of Kazounde by the hand. A few courtiers wished to oppose this act, which was contrary to all etiquette; but the strong magician, seizing the nearest by the nape of the neck, sent him staggering fifteen paces off.

The queen did not appear to disapprove of this proud manner of acting. A sort of grimace, which ought to be a smile, was addressed to the wizard, who drew the queen on with rapid steps, while the crowd rushed after him.

This time it was toward Alvez's establishment that the sorcerer directed his steps. He soon reached the door, which was shut. A simple blow from his shoulder threw it to the ground, and he led the conquered queen into the interior of the factory.

The trader, his soldiers and his slaves, ran to punish the daring being who took it upon himself to throw down doors without waiting for them to be opened to him. Suddenly, seeing that their sovereign did not protest, they stood still, in a respectful attitude.

No doubt Alvez was about to ask the queen why he was honored by her visit, but the magician did not give him time. Making the crowd recede so as to leave a large space free around him, he recommenced his pantomime with still greater animation. He pointed to the clouds, he threatened them, he exorcised them; he made a sign as if he could first stop them, and then scatter them. His enormous cheeks were puffed out, and he blew on this mass of heavy vapors as if he had the strength to disperse them. Then, standing upright, he seemed to intend stopping them in their course, and one would have said that, owing to his gigantic height, he could have seized them.

The superstitious Moini, "overcome" by the acting of this tall comedian, could no longer control herself. Cries escaped her. She raved in her turn, and instinctively repeated the magician's gestures. The courtiers and the crowd followed her example, and the mute's guttural sounds were lost amid those songs; cries, and yells which the native language furnishes with so much prodigality.

Did the clouds cease to rise on the eastern horizon and veil the tropical sun? Did they vanish before the exorcisms of this new wizard? No. And just at this moment, when the queen and her people imagined that they had appeased the evil spirits that had watered them with so many showers, the sky, somewhat clear since daybreak, became darker than ever. Large drops of rain fell pattering on the ground.

Then a sudden change took place in the crowd. They then saw that this sorcerer was worth no more than the others. The queen's brows were frowning. They understood that he at least was in danger of losing his ears. The natives had contracted the circle around him; fists threatened him, and they were about to punish him, when an unforeseen incident changed the object of their evil intentions.

The magician, who overlooked the whole yelling crowd, stretched his arms toward one spot in the enclosure.

Mrs. Weldon and little Jack, attracted by the noise and the clamor, had just left their hut. The magician, with an angry gesture, had pointed to them with his left hand, while his right was raised toward the sky.

They! it was they! It was this white woman--it was her child--they were causing all this evil. They had brought these clouds from their rainy country, to inundate the territories of Kazounde.

It was at once understood. Queen Moini, pointing to Mrs. Weldon, made a threatening gesture. The natives, uttering still more terrible cries, rushed toward her.

Mrs. Weldon thought herself lost, and clasping her son in her arms, she stood motionless as a statue before this over-excited crowd.

The magician went toward her. The natives stood aside in the presence of this wizard, who, with the cause of the evil, seemed to have found the remedy.

The trader, Alvez, knowing that the life of the prisoner was precious, now approached, not being sure of what he ought to do.

The magician had seized little Jack, and snatching him from his mother's arms, he held him toward the sky. It seemed as if he were about to dash the child to the earth, so as to appease the gods.

With a terrible cry, Mrs. Weldon fell to the ground insensible.

But the magician, after having made a sign to the queen, which no doubt reassured her as to his intentions, raised the unhappy mother, and while the crowd, completely subdued, parted to give him space, he carried her away with her child.

Alvez was furious, not expecting this result. After having lost one of the three prisoners, to see the prize confided to his care thus escape, and, with the prize, the large bribe promised him by Negoro! Never! not if the whole territory of Kazounde were submerged by a new deluge! He tried to oppose this abduction.

The natives now began to mutter against him. The queen had him seized by her guards, and, knowing what it might cost him, the trader was forced to keep quiet, while cursing the stupid credulity of Queen Moini's subjects.

The savages, in fact, expected to see the clouds disappear with those who had brought them, and they did not doubt that the magician would destroy the scourge, from which they suffered so much, in the blood of the strangers.
Meanwhile, the magician carried off his victims as a lion would a couple of kids which did not satisfy his powerful appetite. Little Jack was terrified, his mother was unconscious. The crowd, roused to the highest degree of fury, escorted the magician with yells; but he left the enclosure, crossed Kazounde, and reentered the forest, walking nearly three miles, without resting for a moment. Finally he was alone, the natives having understood that he did not wish to be followed. He arrived at the bank of a river, whose rapid current flowed toward the north.

There, at the end of a large opening, behind the long, drooping branches of a thicket which hid the steep bank, was moored a canoe, covered by a sort of thatch.

The magician lowered his double burden into the boat, and following himself, shoved out from the bank, and the current rapidly carried them down the stream. The next minute he said, in a very distinct voice:

"Captain, here are Mrs. Weldon and little Jack; I present them to you. Forward. And may all the clouds in heaven fall on those idiots of Kazounde!"

* * * * *

CHAPTER XVII.

DRIFTING.

It was Hercules, not easily recognized in his magician's attire, who was speaking thus, and it was Dick Sand whom he was addressing--Dick Sand, still feeble enough, to lean on Cousin Benedict, near whom Dingo was lying. Mrs. Weldon, who had regained consciousness, could only pronounce these words:

"You! Dick! You!"

The young novice rose, but already Mrs. Weldon was pressing him in her arms, and Jack was lavishing caresses on him.

"My friend Dick! my friend Dick!" repeated the little boy. Then, turning to Hercules: "And I," he added, "I did not know you!"

"Hey! what a disguise!" replied Hercules, rubbing his breast to efface the variety of colors that striped it.

"You were too ugly!" said little Jack.

"Bless me! I was the devil, and the devil is not handsome."

"Hercules!" said Mrs. Weldon, holding out her hand to the brave black.

"He has delivered you," added Dick Sand, "as he has saved me, though he will not allow it."

"Saved! saved! We are not saved yet!" replied Hercules. "And besides, without Mr. Benedict, who came to tell us where you were, Mrs. Weldon, we could not have done anything."

In fact, it was Hercules who, five days before, had jumped upon the savant at the moment when, having been led two miles from the factory, the latter was running in pursuit of his precious manticore. Without this incident, neither Dick Sand nor the black would have known Mrs. Weldon's retreat, and Hercules would not have ventured to Kazounde in a magician's dress.

While the boat drifted with rapidity in this narrow part of the river, Hercules related what had passed since his flight from the camp on the Coanza; how, without being seen, he had followed the _kitanda_ in which Mrs. Weldon and her son were; how he had found Dingo wounded; how the two had arrived in the neighborhood of Kazounde; how a note from Hercules, carried by the dog, told Dick Sand what had become of Mrs. Weldon; how, after the unexpected arrival of Cousin Benedict, he had vainly tried to make his way into the factory, more carefully guarded than ever; how, at last, he had found this opportunity of snatching the prisoner from that horrible Jose-Antonio Alvez. Now, this opportunity had offered itself that same day. A _mgannga_, or magician, on his witchcraft circuit, that celebrated magician so impatiently expected, was passing through the forest in which Hercules roamed every night, watching, waiting, ready for anything.

To spring upon the magician, despoil him of his baggage, and of his magician's vestments, to fasten him to the foot of a tree with liane knots that the Davenports themselves could not have untied, to paint his body, taking the sorcerer's for a model, and to act out his character in charming and controlling the rains, had been the work of several hours. Still, the incredible credulity of the natives was necessary for his success.

During this recital, given rapidly by Hercules, nothing concerning Dick Sand had been mentioned.

"And you, Dick!" asked Mrs. Weldon.

"I, Mrs. Weldon!" replied the young man. "I can tell you nothing. My last thought was for you, for Jack! I tried in vain to break the cords that fastened me to the stake. The water rose over my head. I lost consciousness. When I came to myself, I was sheltered in a hole, concealed by the papyrus of this bank, and Hercules was on his knees beside me, lavishing his care upon me."

"Well! that is because I am a physician," replied Hercules; "a diviner, a sorcerer, a magician, a fortuneteller!"

"Hercules," said Mrs. Weldon, "tell me, how did you save Dick Sand?"
"Did I do it, Mrs. Weldon?" replied Hercules; "Might not the current have broken the stake to which our captain was tied, and in the middle of the night, carried him half-dead on this beam, to the place where I received him? Besides, in the darkness, there was no difficulty in gliding among the victims that carpeted the ditch, waiting for the bursting of the dam, diving under water, and, with a little strength, pulling up our captain and the stake to which these scoundrels had bound him! There was nothing very extraordinary in all that! The first-comer could have done as much. Mr. Benedict himself, or even Dingo! In fact, might it not have been Dingo?"

A yelping was heard; and Jack, taking hold of the dog's large head, gave him several little friendly taps.

"Dingo," he asked, "did you save our friend Dick?"

At the same time he turned the dog's head from right to left.

"He says, no, Hercules!" said Jack. "You see that it was not he. Dingo, did Hercules save our captain?"

The little boy forced Dingo's good head to move up and down, five or six times.

"He says, yes, Hercules! he says, yes!" cried little Jack. "You see then that it was you!"

"Friend Dingo," replied Hercules, caressing the dog. "that is wrong. You promised me not to betray me."

Yes, it was indeed Hercules, who had risked his life to save Dick Sand. But he had done it, and his modesty would not allow him to agree to the fact. Besides, he thought it a very simple thing, and he repeated that any one of his companions would have done the same under the circumstances.

This led Mrs. Weldon to speak of old Tom, of his son, of Acteon and Bat, his unfortunate companions. They had started for the lake region. Hercules had seen them pass with the caravan of slaves. He had followed them, but no opportunity to communicate with them had presented itself. They were gone! they were lost! Hercules had been laughing heartily, but now he shed tears which he did not try to restrain.

"Do not cry, my friend," Mrs. Weldon said to him. "God may be merciful, and allow us to meet them again."

In a few words she informed Dick Sand of all that had happened during her stay in Alvez's factory.

"Perhaps," she added, "it would have been better to have remained at Kazounde."

"What a fool I was!" cried Hercules.

"No, Hercules, no!" said Dick Sand. "These wretches would have found means to draw Mr. Weldon into some new trap. Let us flee together, and without delay. We shall reach the coast before Negoro can return to Mossamedes. There, the Portuguese authorities will give us aid and protection; and when Alvez comes to take his one hundred thousand dollars--"

"A hundred thousand blows on the old scoundrel's skull!" cried Hercules; "and I will undertake to keep the count."

However, here was a new complication, although it was very evident that Mrs. Weldon would not dream of returning to Kazounde. The point now was to anticipate Negoro. All Dick Sand's projects must tend toward that end.

Dick Sand was now putting in practise the plan which he had long contemplated, of gaining the coast by utilizing the current of a river or a stream. Now, the watercourse was there; its direction was northward, and it was possible that it emptied into the Zaire. In that case, instead of reaching St. Paul de Loanda, it would be at the mouth of the great river that Mrs. Weldon and her companions would arrive. This was not important, because help would not fail them in the colonies of Lower Guinea.

Having decided to descend the current of this river, Dick Sand's first idea was to embark on one of the herbaceous rafts, a kind of floating isle (of which Cameron has often spoken), which drifts in large numbers on the surface of African rivers.

But Hercules, while roaming at night on the bank, had been fortunate enough to find a drifting boat. Dick Sand could not hope for anything better, and chance had served him kindly. In fact, it was not one of those narrow boats which the natives generally use.

The perogue found by Hercules was one of those whose length exceeds thirty feet, and the width four--and they are carried rapidly on the waters of the great lakes by the aid of numerous paddles. Mrs. Weldon and her companions could install themselves comfortably in it, and it was sufficient to keep it in the stream by means of an oar to descend the current of the river.

At first, Dick Sand, wishing to pass unseen, had formed a project to travel only at night. But to drift twelve hours out of the twenty-four, was to double the length of a journey which might be quite long. Happily, Dick Sand had taken a fancy to cover the perogue with a roof of long grasses, sustained on a rod, which projected fore and aft. This, when on the water, concealed even the long oar. One would have said that it was a pile of herbs which drifted down stream, in the midst of floating islets. Such was the ingenious arrangement of the thatch, that the birds were deceived, and, seeing there some grains to pilfer, red-beaked gulls, "arrhiniusgas" of black plumage, and gray and white halcyons frequently came to rest upon it.

Besides, this green roof formed a shelter from the heat of the sun. A voyage made under these conditions might then be accomplished almost without fatigue, but not without danger.
In fact, the journey would be a long one, and it would be necessary to procure food each day. Hence the risk of hunting on the banks if fishing would not suffice, and Dick Sand had no firearms but the gun carried off by Hercules after the attack on the ant-hill; but he counted on every shot. Perhaps even by passing his gun through the thatch of the boat he might fire with surety, like a butter through the holes in his hut.

Meanwhile, the perogue drifted with the force of the current a distance not less than two miles an hour, as near as Dick Sand could estimate it.

He hoped to make, thus, fifty miles a day. But, on account of this very rapidity of the current, continual care was necessary to avoid obstacles--rocks, trunks of trees, and the high bottoms of the river. Besides, it was to be feared that this current would change to rapids, or to cataracts, a frequent occurrence on the rivers of Africa.

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boat again took the channel.

Must it be confessed! That great child of a Cousin Benedict had hoped for a moment that they would not be able
to pass. Such a voyage seemed to him unnecessary. He regretted Alvez's factory and the hut that contained his
precious entomologist's box. His chagrin was real, and indeed it was pitiful to see the poor man. Not an insect; no,
not one to preserve!

What, then, was his joy when Hercules, "his pupil" after all, brought him a horrible little beast which he had
found on a sprig of the tikatika. Singularly enough the brave black seemed a little confused in presenting it to him.

But what exclamations Cousin Benedict uttered when he had brought this insect, which he held between his
index finger and his thumb, as near as possible to his short-sighted eyes, which neither glasses nor microscope could
now assist.

"Hercules!" he cried, "Hercules! Ah! see what will gain your pardon! Cousin Weldon! Dick! a hexapode, unique
in its species, and of African origin! This, at least, they will not dispute with me, and it shall quit me only with my
life!"

"It is, then, very precious?" asked Mrs. Weldon.

"Precious!" cried Cousin Benedict. "An insect which is neither a coleopter, nor a neuropteran, nor a hymenopter;
which does not belong to any of the ten orders recognized by savants, and which they will be rather tempted to rank
in the second section of the arachnides. A sort of spider, which would be a spider if it had eight legs, and is,
however, a hexapode, because it has but six. Ah! my friends, Heaven owed me this joy; and at length I shall give my
name to a scientific discovery! That insect shall be the 'Hexapodes Benedictus.'"

The enthusiastic savant was so happy--he forgot so many miseries past and to come in riding his favorite hobby-
that neither Mrs. Weldon nor Dick Sand grudged him his felicitations.

All this time the perogue moved on the dark waters of the river. The silence of night was only disturbed by the
clattering scales of the crocodiles, or the snorting of the hippopotami that sported on the banks.

Then, through the sprigs of the thatch, the moon appeared behind the tops of the trees, throwing its soft light to
the interior of the boat.

Suddenly, on the right bank, was heard a distant hubbub, then a dull noise as if giant pumps were working in the
dark.

It was several hundred elephants, that, satiated by the woody roots which they had devoured during the day,
came to quench their thirst before the hour of repose. One would really have supposed that all these trunks, lowered
and raised by the same automatic movement, would have drained the river dry.

CHAPTER XVIII.

VARIOUS INCIDENTS.

For eight days the boat drifted, carried by the current under the conditions already described. No incident of any
importance occurred. For a space of many miles the river bathed the borders of superb forests; then the country,
shorn of these fine trees, spread in jungles to the limits of the horizon.

If there were no natives in this country--a fact which Dick Sand did not dream of regretting--the animals at least
abounded there. Zebras sported on the banks, elks, and "caamas," a species of antelope which were extremely
graceful, and they disappeared at night to give place to the leopards, whose growls could be heard, and even to the
lions which bounded in the tall grasses. Thus far the fugitives had not suffered from these ferocious creatures,
whether in the forests or in the river.

Meanwhile, each day, generally in the afternoon, Dick Sand neared one bank or the other, moored the boat,
disembarked, and explored the shore for a short distance.

In fact, it was necessary to renew their daily food. Now, in this country, barren of all cultivation, they could not
depend upon the tapioca, the sorgho, the maize, and the fruits, which formed the vegetable food of the native tribes.
These plants only grew in a wild state, and were not eatable. Dick Sand was thus forced to hunt, although the firing
of his gun might bring about an unpleasant meeting.

They made a fire by rubbing a little stick against a piece of the wild fig-tree, native fashion, or even simiesque
style, for it is affirmed that certain of the gorillas procure a fire by this means. Then, for several days, they cooked a
little elk or antelope flesh. During the 4th of July Dick Sand succeeded in killing, with a single ball, a "pokou,"
which gave them a good supply of venison. This animal, was five feet long; it had long horns provided with rings, a
yellowish red skin, dotted with brilliant spots, and white on the stomach; and the flesh was found to be excellent.

It followed then, taking into account these almost daily landings and the hours of repose that were necessary at
night, that the distance on the 8th of July could hot be estimated as more than one hundred miles. This was
considerable, however, and already Dick Sand asked himself where this interminable river ended. Its course
absorbed some small tributaries and did not sensibly enlarge. As for the general direction, after having been north for a long time, it took a bend toward the northwest.

However, this river furnished its share of food. Long lianes, armed with thorns, which served as fishhooks, caught several of those delicately-flavored "sandjikas," which, once smoked, are easily carried in this region; black "usakas" were also caught, and some "mormdes," with large heads, the genciva of which have teeth like the hairs of a brush, and some little "dagalas," the friends of running waters, belonging to the clupe species, and resembling the whitebait of the Thames.

During the 9th of July, Dick Sand had to give proof of extreme coolness. He was alone on the shore, carrying off a "caama," the horns of which showed above the thicket. He had just shot it, and now there bounded, thirty feet off, a formidable hunter, that no doubt came to claim its prey, and was not in a humor to give it up. It was a lion of great height, one of those which the natives call "karamos," and not one of the kind without a mane, named "lion of the Nyassi." This one measured five feet in height--a formidable beast. With one bound the lion had fallen on the "caama," which Dick Sand's ball had just thrown to the ground, and, still full of life, it shook and cried under the paw of the powerful animal.

Dick Sand was disarmed, not having had time to slide a second cartridge into his gun.

Dick Sand, in front, lowering his voice, gave directions to avoid striking against these rotten constructions. The night was clear. They saw well to direct the boat, but they could also be seen.

Then came a terrible moment. Two natives, who talked in loud tones, were squatting close to the water on the piles, between which the current carried the boat, and the direction could not be changed for a narrower pass. Now, would they not see it, and at their cries might not the whole village be alarmed?

A space of a hundred feet at most remained to be passed, when Dick Sand heard the two natives call more quickly to each other. One showed the other the mass of drifting herbs, which threatened to break the long liane ropes which they were occupied in stretching at that moment.

Rising hastily, they called out for help. Five or six other blacks ran at once along the piles and posted themselves on the cross-beams which supported them, uttering loud exclamations which the listeners could not understand.

In the boat, on the contrary, was absolute silence, except for the few orders given by Dick Sand in a low voice, and complete repose, except the movement of Hercules's right arm moving the oar; at times a low growl from Dingo, whose jaws Jack held together with his little hands; outside, the murmur of the water which broke against the piles, then above, the cries of the ferocious cannibals.

The natives, meanwhile, rapidly drew up their ropes. If they were raised in time the boat would pass, otherwise it would be caught, and all would be over with those who drifted against the piles, then above, the cries of the ferocious cannibals.

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The boat was caught between the piles. By an unheard-of piece of fortune, the last effort made by the natives had raised the ropes.

But in passing, as Dick Sand had feared, the boat was deprived of a part of the grasses which now floated at its right.

One of the natives uttered a cry. Had he had time to recognize what the roof covered, and was he going to alarm his comrades? It was more than probable.

Dick Sand and his friends were already out of reach, and in a few moments, under the impetus of this current, now changed into a kind of rapid, they had lost sight of the lacustrine village.

"To the left bank!" Dick Sand ordered, as being more prudent. "The stream is again navigable."

"To the left bank!" replied Hercules, giving the oar a vigorous stroke.

Dick Sand stood beside him and looked at the surface of the water, which the moon lit up. He saw nothing suspicious. Not a boat had started in pursuit. Perhaps these savages had none; and at daybreak not a native appeared, either on the bank or on the water. After that, increasing their precautions, the boat kept close to the left bank.

During the four following days, from the 11th to the 14th of July, Mrs. Weldon and her companions remarked that this portion of the territory had decidedly changed. It was no longer a deserted country; it was also a desert, and they might have compared it to that Kalahari explored by Livingstone on his first voyage.

The arid soil recalled nothing of the fertile fields of the upper country.

And always this interminable stream, to which might be given the name of river, as it seemed that it could only end at the Atlantic Ocean.

The question of food, in this desert country, became a problem. Nothing remained of their former stock. Fishing gave little; hunting was no longer of any use. Elks, antelopes, pokous, and other animals, could find nothing to live on in this desert, and with them had also disappeared the carnivorous animals.

The nights no longer echoed the accustomed roarings. Nothing broke the silence but the concert of frogs, which Cameron compares with the noise of calkers caking a ship; with riveters who rivet, and the drillers who drill, in a
shipbuilder's yard.

The country on the two banks was flat and destitute of trees as far as the most distant hills that bounded it on the east and west. The spurge grew alone and in profusion—not the euphosbium which produces cassava or tapioca flour, but those from which they draw an oil which does not serve as food.

Meantime it is necessary to provide some nourishment.

Dick Sand knew not what to do, and Hercules reminded him that the natives often eat the young shoots of the ferns and the pith which the papyrus leaf contains. He himself, while following the caravan of Ibn Ilamis across the desert, had been more than once reduced to this expedient to satisfy his hunger. Happily, the ferns and the papyrus grew in profusion along the banks, and the marrow or pith, which has a sweet flavor, was appreciated by all, particularly by little Jack.

This was not a very cheering prospect; the food was not strengthening, but the next day, thanks to Cousin Benedict, they were better served. Since the discovery of the "Hexapodus Benedictus," which was to immortalize his name, Cousin Benedict had recovered his usual manners. The insect was put in a safe place, that is to say, stuck in the crown of his hat, and the savant had recommenced his search whenever they were on shore. During that day, while hunting in the high grass, he started a bird whose warbling attracted him.

Dick Sand was going to shoot it, when Cousin Benedict cried out:
"Don't fire, Dick! Don't fire! A bird among five persons would not be enough."

"It will be enough for Jack," replied Dick Sand, taking aim at the bird, which was in no hurry to fly away.

"No, no!" said Cousin Benedict, "do not fire! It is an indicator, and it will bring us honey in abundance."

Dick Sand lowered his gun, realizing that a few pounds of honey were worth more than one bird; and Cousin Benedict and he followed the bird, which rose and flew away, inviting them to go with it.

They had not far to go, and a few minutes after, some old trunks, hidden in between the spurge, appeared in the midst of an intense buzzing of bees.

Cousin Benedict would have preferred not to have robbed these industrious hymenopters of the "fruit of their labors," as he expressed it. But Dick Sand did not understand it in that way. He smoked out the bees with some dry herbs and obtained a considerable quantity of honey. Then leaving to the indicator the cakes of wax, which made its share of the profit, Cousin Benedict and he returned to the boat.

The honey was well received, but it was but little, and, in fact, all would have suffered cruelly from hunger, if, during the day of the 12th, the boat had not stopped near a creek where some locusts swarmed. They covered the ground and the shrubs in myriads, two or three deep. Now, Cousin Benedict not failing to say that the natives frequently eat these orthopters—which was perfectly true—they took possession of this manna. There was enough to fill the boat ten times, and broiled over a mild fire, these edible locusts would have seemed excellent even to less famished people. Cousin Benedict, for his part, eat a notable quantity of them, sighing, it is true—still, he eat them.

Nevertheless, it was time for this long series of moral and physical trials to come to an end. Although drifting on this rapid river was not so fatiguing as had been the walking through the first forests near the coast, still, the excessive heat of the day, the damp mists at night, and the incessant attacks of the mosquitoes, made this descent of the watercourse very painful. It was time to arrive somewhere, and yet Dick Sand could see no limit to the journey. Would it last eight days or a month? Nothing indicated an answer. Had the river flowed directly to the west, they would have already reached the northern coast of Angola; but the general direction had been rather to the north, and they could travel thus a long time before reaching the coast.

Dick Sand was, therefore, extremely anxious, when a sudden change of direction took place on the morning of the 14th of July.

Little Jack was in the front of the boat, and he was gazing through the thatch, when a large expanse of water appeared on the horizon.

"The sea!" he shouted.

At this word Dick Sand trembled, and came close to little Jack.

"The sea?" he replied. "No, not yet; but at least a river which flows toward the west, and of which this stream is only a tributary. Perhaps it is the Zaire itself."

"May God grant that it is!" replied Mrs. Weldon.

Yes; for if this were the Zaire or Congo, which Stanley was to discover a few years later, they had only to descend its course so as to reach the Portuguese settlements at its mouth. Dick Sand hoped that it might be so, and he was inclined to believe it.

During the 15th, 16th, 17th and 18th of July, in the midst of a more fertile country, the boat drifted on the silvery waters of the river. They still took the same precautions, and it was always a mass of herbs that the current seemed to carry on its surface.

A few days more, and no doubt the survivors of the "Pilgrim" would see the termination of their miseries. Self-
sacrifice had been shared in by all, and if the young novice would not claim the greater part of it, Mrs. Weldon would demand its recognition for him.

But on the 18th of July, during the night, an incident took place which compromised the safety of the party. Toward three o'clock in the morning a distant noise, still very low, was heard in the west. Dick Sand, very anxious, wished to know what caused it. While Mrs. Weldon, Jack, and Cousin Benedict slept in the bottom of the boat, he called Hercules to the front, and told him to listen with the greatest attention. The night was calm. Not a breeze stirred the atmosphere.

"It is the noise of the sea," said Hercules, whose eyes shone with joy.

"No," replied Dick Sand, holding down his head.

"What is it then?" asked Hercules.

"Wait until day; but we must watch with the greatest care."

At this answer, Hercules returned to his post.

Dick Sand stood in front, listening all the time. The noise increased. It was soon like distant roaring.

Day broke almost without dawn. About half a mile down the river, just above the water, a sort of cloud floated in the atmosphere. But it was not a mass of vapor, and this became only too evident, when, under the first solar rays, which broke in piercing it, a beautiful rainbow spread from one bank to the other.

"To the shore!" cried Dick Sand, whose voice awoke Mrs. Weldon. "It is a cataract! Those clouds are spray! To the shore, Hercules!"

Dick Sand was not mistaken. Before them, the bed of the river broke in a descent of more than a hundred feet, and the waters rushed down with superb but irresistible impetuosity. Another half mile, and the boat would have been engulfed in the abyss.

CHAPTER XIX.

S. V.

With a vigorous plow of the oar, Hercules had pushed toward the left bank. Besides, the current was not more rapid in that place, and the bed of the river kept its normal declivity to the falls. As has been said, it was the sudden sinking of the ground, and the attraction was only felt three or four hundred feet above the cataract.

On the left bank were large and very thick trees. No light penetrated their impenetrable curtain. It was not without terror that Dick Sand looked at this territory, inhabited by the cannibals of the Lower Congo, which he must now cross, because the boat could no longer follow the stream. He could not dream of carrying it below the falls. It was a terrible blow for these poor people, on the eve perhaps of reaching the Portuguese villages at its mouth. They were well aided, however. Would not Heaven come to their assistance?

The boat soon reached the left bank of the river. As it drew near, Dingo gave strange marks of impatience and grief at the same time.

Dick Sand, who was watching the animal--for all was danger--asked himself if some beast or some native was not concealed in the high papyrus of the bank. But he soon saw that the animal was not agitated by a sentiment of anger.

"One would say that Dingo was crying!" exclaimed little Jack, clasping Dingo in his two arms.

Dingo escaped from him, and, springing into the water, when the boat was only twenty feet from the bank, reached the shore and disappeared among the bushes.

Neither Mrs. Weldon, nor Dick Sand, nor Hercules, knew what to think.

They landed a few moments after in the middle of a foam green with hairweed and other aquatic plants. Some kingfishers, giving a sharp whistle, and some little herons, white as snow, immediately flew away. Hercules fastened the boat firmly to a mangrove stump, and all climbed up the steep bank overhung by large trees.

There was no path in this forest. However, faint traces on the ground indicated that this place had been recently visited by natives or animals.

Dick Sand, with loaded gun, and Hercules, with his hatchet in his hand, had not gone ten steps before they found Dingo again. The dog, nose to the ground, was following a scent, barking all the time. A first inexplicable presentiment had drawn the animal to this part of the shore, a second led it into the depths of the wood. That was clearly visible to all.

"Attention!" said Dick Sand. "Mrs. Weldon, Mr. Benedict, Jack, do not leave us! Attention, Hercules!"

At this moment Dingo raised its head, and, by little bounds, invited them to follow.

A moment after Mrs. Weldon and her companions rejoined it at the foot of an old sycamore, lost in the thickest part of the wood.

There was a dilapidated hut, with disjoined boards, before which Dingo was barking lamentably.
"Who can be there?" exclaimed Dick Sand.

He entered the hut.

Mrs. Weldon and the others followed him.

The ground was scattered with bones, already bleached under the discoloring action of the atmosphere.

"A man died in that hut!" said Mrs. Weldon.

"And Dingo knew that man!" replied Dick Sand. "It was, it must have been, his master! Ah, see!"

Dick Sand pointed to the naked trunk of the sycamore at the end of the hut.

There appeared two large red letters, already almost effaced, but which could be still distinguished.

Dingo had rested its right paw on the tree, and it seemed to indicate them.

"S. V.!" exclaimed Dick Sand. "Those letters which Dingo knew among all others! Those initials that it carries on its collar!"

He did not finish, and stooping, he picked up a little copper box, all oxydized, which lay in a corner of the hut.

That box was opened, and a morsel of paper fell from it, on which Dick Sand read these few words:

"Assassinated--robbed by my guide, Negoro--3d December, 1871--here--120 miles from the coast--Dingo!--with me!"

"S. VERNON."

The note told everything. Samuel Vernon set out with his dog, Dingo, to explore the center of Africa, guided by Negoro. The money which he carried had excited the wretch's cupidity, and he resolved to take possession of it. The French traveler, arrived at this point of the Congo's banks, had established his camp in this hut. There he was mortally wounded, robbed, abandoned. The murder accomplished, no doubt Negoro took to flight, and it was then that he fell into the hands of the Portuguese. Recognized as one of the trader Alvez's agents, conducted to Saint Paul de Loanda, he was condemned to finish his days in one of the penitentiaries of the colony. We know that he succeeded in escaping, in reaching New Zealand, and how he embarked on the "Pilgrim" to the misfortune of those who had taken passage on it. But what happened after the crime? Nothing but what was easy to understand! The unfortunate Vernon, before dying, had evidently had time to write the note which, with the date and the motive of the assassination, gave the name of the assassin. This note he had shut up in that box where, doubtless, the stolen money was, and, in a last effort, his bloody finger had traced like an epitaph the initials of his name. Before those two red letters, Dingo must have remained for many days! He had learned to know them! He could no longer forget them! Then, returned to the coast, the dog had been picked up by the captain of the "Waldeck," and finally, on board the "Pilgrim," found itself again with Negoro. During this time, the bones of the traveler were whitening in the depths of this lost forest of Central Africa, and he no longer lived except in the remembrance of his dog.

Yes, such must have been the way the events had happened. As Dick Sand and Hercules prepared to give a Christian burial to the remains of Samuel Vernon, Dingo, this time giving a howl of rage, dashed out of the hut.

Almost at once horrible cries were heard at a short distance. Evidently a man was struggling with the powerful animal.

Hercules did what Dingo had done. In his turn he sprang out of the hut, and Dick Sand, Mrs. Weldon, Jack, Benedict, following his steps, saw him throw himself on a man, who fell to the ground, held at the neck by the dog's formidable teeth.

It was Negoro.

In going to the mouth of the Zaire, so as to embark for America, this rascal, leaving his escort behind, had come to the very place where he had assassinated the traveler who had trusted himself to him.

But there was a reason for it, and all understood it when they perceived some handfuls of French gold which glittered in a recently-dug hole at the foot of a tree. So it was evident that after the murder, and before falling into the hands of the Portuguese, Negoro had hidden the product of his crime, with the intention of returning some day to get it. He was going to take possession of this gold when Dingo scented him and sprang at his throat. The wretch, surprised, had drawn his cutlass and struck the dog at the moment when Hercules threw himself on him, crying:

"Ah, villain! I am going to strangle you at last!"

There was nothing more to do. The Portuguese gave no sign of life, struck, it maybe said, by divine justice, and on the very spot where the crime had been committed. But the faithful dog had received a mortal blow, and dragging itself to the hut, it came to die there--where Samuel Vernon had died.

Hercules buried deep the traveler's remains, and Dingo, lamented by all, was put in the same grave as its master. Negoro was no more, but the natives who accompanied him from Kazounde could not be far away. On not seeing him return, they would certainly seek him along the river. This was a very serious danger.

Dick Sand and Mrs. Weldon took counsel as to what they should do, and do without losing an instant.

One fact acquired was that this stream was the Congo, which the natives call Kwango, or Ikoutouya Kongo, and which is the Zaire under one longitude, the Loualaba under another. It was indeed that great artery of Central Africa,
to which the heroic Stanley has given the glorious name of "Livingstone," but which the geographers should perhaps replace by his own.

But, if there was no longer any doubt that this was the Congo, the French traveler's note indicated that its mouth was still one hundred and twenty miles from this point, and, unfortunately, at this place it was no longer navigable. High falls—very likely the falls of Ntamo—forbid the descent of any boat. Thus it was necessary to follow one or the other bank, at least to a point below the cataracts, either one or two miles, when they could make a raft, and trust themselves again to the current.

"It remains, then," said Dick Sand, in conclusion, "to decide if we shall descend the left bank, where we are, or the right bank of the river. Both, Mrs. Weldon, appear dangerous to me, and the natives are formidable. However, it seems as if we risk more on this bank, because we have the fear of meeting Negoro's escort."

"Let us pass over to the other bank," replied Mrs. Weldon.

"Is it practicable?" observed Dick Sand. "The road to the Congo's mouths is rather on the left bank, as Negoro was following it. Never mind. We must not hesitate. But before crossing the river with you, Mrs. Weldon, I must know if we can descend it below the falls."

That was prudent, and Dick Sand wished to put his project into execution on the instant.

The river at this place was not more than three or four hundred feet wide, and to cross it was easy for the young novice, accustomed to handling the oar. Mrs. Weldon, Jack, and Cousin Benedict would remain under Hercules's care till his return.

These arrangements made, Dick Sand was going to set out, when Mrs. Weldon said to him:

"You do not fear being carried away by the falls, Dick?"

"No, Mrs. Weldon. I shall cross four hundred feet above."

"But on the other bank—"

"I shall not land if I see the least danger."

"Take your gun."

"Yes, but do not be uneasy about me."

"Perhaps it would be better for us not to separate, Dick," added Mrs. Weldon, as if urged by some presentiment.

"No—let me go alone," replied Dick Sand. "I must act for the security of all. Before one hour I shall be back. Watch well, Hercules."

On this reply the boat, unfastened, carried Dick Sand to the other side of the Zaire.

Mrs. Weldon and Hercules, lying in the papyrus thickets, followed him with their eyes.

Dick Sand soon reached the middle of the stream. The current, without being very strong, was a little accentuated there by the attraction of the falls. Four hundred feet below, the imposing roaring of the waters filled the space, and some spray, carried by the western wind, reached the young novice. He shuddered at the thought that the boat, if it had been less carefully watched during the last night, would have been lost over those cataracts, that would only have restored dead bodies. But that was no longer to be feared, and, at that moment, the oar skilfully handled sufficed to maintain it in a direction a little oblique to the current.

A quarter of an hour after, Dick Sand had reached the opposite shore, and was preparing to spring on the bank.

At that moment cries were heard, and ten natives rushed on the mass of plants that still hid the boat.

They were the cannibals from the lake village. For eight days they had followed the right bank of the river. Under that thatch, which was torn by the stakes of their village, they had discovered the fugitives, that is to say, a sure prey for them, because the barrier of the falls would sooner or later oblige those unfortunate ones to land on one or the other side of the river.

Dick Sand saw that he was lost, but he asked himself if the sacrifice of his life might not save his companions. Master of himself, standing in the front of the boat, his gun pointed, he held the cannibals in check.

Meanwhile, they snatched away the thatch, under which they expected to find other victims. When they saw that the young novice alone had fallen into their hands, they betrayed their disappointment by frightful cries. A boy of fifteen among ten!

But, then, one of those natives stood up, his arm stretched toward the left bank, and pointed to Mrs. Weldon and her companions, who, having seen all and not knowing what to do, had just climbed up the bank!

Dick Sand, not even dreaming of himself, waited for an inspiration from Heaven that might save them.

The boat was going to be pushed out into the stream. The cannibals were going to cross the river. They did not budge before the gun aimed at them, knowing the effect of fire-arms. But one of them had seized the oar; he managed it like a man who knew how to use it, and the boat crossed the river obliquely. Soon it was not more than a hundred feet from the left bank.

"Flee!" cried Dick Sand to Mrs. Weldon. "Flee!"

Neither Mrs. Weldon nor Hercules stirred. One would say that their feet were fastened to the ground.
Flee! Besides, what good would it do? In less than an hour they would fall into the hands of the cannibals! Dick Sand understood it. But, then, that supreme inspiration which he asked from Heaven was sent him. He saw the possibility of saving all those whom he loved by making the sacrifice of his own life! He did not hesitate to do it. "May God protect them!" murmured he, "and in His infinite goodness may He have pity on me!"

At the same instant Dick Sand pointed his gun at the native who was steering the boat, and the oar, broken by a ball, flew into fragments.

The cannibals gave a cry of terror.

In fact, the boat, no longer directed by the oar, went with the stream. The current bore it along with increasing swiftness, and, in a few moments, it was only a hundred feet from the falls.

Mrs. Weldon and Hercules understood all. Dick Sand attempted to save them by precipitating the cannibals, with himself, into the abyss. Little Jack and his mother, kneeling on the bank, sent him a last farewell. Hercules's powerless hand was stretched out to him.

At that moment the natives, wishing to gain the left bank by swimming, threw themselves out of the boat, which they capsized.

Dick Sand had lost none of his coolness in the presence of the death which menaced him. A last thought then came to him. It was that this boat, even because it was floating keel upward, might serve to save him.

In fact, two dangers were to be feared when Dick Sand should be going over the cataract: asphyxia by the water, and asphyxia by the air. Now, this overturned hull was like a box, in which he might, perhaps, keep his head out of the water, at the same time that he would be sheltered from the exterior air, which would certainly have stifled him in the rapidity of his fall. In these conditions, it seems that a man would have some chance of escaping the double asphyxia, even in descending the cataracts of a Niagara.

Dick Sand saw all that like lightning. By a last instinct he clung to the seat which united the two sides of the boat, and, his head out of the water, under the capsized hull, he felt the irresistible current carrying him away, and the almost perpendicular fall taking place.

The boat sank into the abyss hollowed out by the waters at the foot of the cataract, and, after plunging deep, returned to the surface of the river.

Dick Sand, a good swimmer, understood that his safety now depended on the vigor of his arms.

A quarter of an hour after he reached the left bank, and there found Mrs. Weldon, little Jack, and Cousin Benedict, whom Hercules had led there in all haste.

But already the cannibals had disappeared in the tumult of the waters. They, whom the capsized boat had not protected, had ceased to live even before reaching the last depths of the abyss, and their bodies were going to be torn to pieces on those sharp rocks on which the under-current of the stream dashed itself.

CHAPTER XX.
CONCLUSION.

Two days after, the 20th of July, Mrs. Weldon and her companions met a caravan going toward Emboma, at the mouth of the Congo. These were not slave merchants, but honest Portuguese traders, who dealt in ivory. They made the fugitives welcome, and the latter part of the journey was accomplished under more agreeable conditions.

The meeting with this caravan was really a blessing from Heaven. Dick Sand would never have been able to descend the Zaire on a raft. From the Falls of Ntamo, as far as Yellala, the stream was a succession of rapids and cataracts. Stanley counted seventy-two, and no boat could undertake to pass them. It was at the mouth of the Congo that the intrepid traveler, four years later, fought the last of the thirty-two combats which he waged with the natives. Lower down, in the cataracts of Mbelo, he escaped death by a miracle.

On the 11th of August, Mrs. Weldon, Dick Sand, Jack, Hercules, and Cousin Benedict arrived at Emboma. Messrs. Motta Viega and Harrison received them with generous hospitality. A steamer was about sailing for the Isthmus of Panama. Mrs. Weldon and her companions took passage in it, and happily reached the American coast.

A despatch sent to San Francisco informed Mr. Weldon of the unlooked-for return of his wife and his child. He had vainly searched for tidings of them at every place where he thought the "Pilgrim" might have been wrecked.

Finally, on the 25th of August, the survivors of the shipwreck reached the capital of California. Ah! if old Tom and his companions had only been with them!

What shall we say of Dick Sand and of Hercules? One became the son, the other the friend, of the family. James Weldon knew how much he owed to the young novice, how much to the brave black. He was happy; and it was fortunate for him that Negoro had not reached him, for he would have paid the ransom of his wife and child with his whole fortune. He would have started for the African coast, and, once there, who can tell to what dangers, to what treachery, he would have been exposed?
A single word about Cousin Benedict. The very day of his arrival the worthy savant, after having shaken hands
with Mr. Weldon, shut himself up in his study and set to work, as if finishing a sentence interrupted the day before.
He meditated an enormous work on the "Hexapodes Benedictus," one of the _desiderata_ of entomological science.

There, in his study, lined with insects, Cousin Benedict's first action was to find a microscope and a pair of
glasses. Great heaven! What a cry of despair he uttered the first time he used them to study the single specimen
furnished by the African entomology!

The "Hexapodes Benedictus" was not a hexapode! It was a common spider! And if it had but six legs, instead of
eight, it was simply because the two front legs were missing! And if they were missing, these two legs, it was
because, in taking it, Hercules had, unfortunately, broken them off! Now, this mutilation reduced the pretended
"Hexapodes Benedictus" to the condition of an invalid, and placed it in the most ordinary class of spiders—a fact
which Cousin Benedict's near-sightedness had prevented him from discovering sooner. It gave him a fit of sickness,
from which, however, he happily recovered.

Three years after, little Jack was eight years old, and Dick Sand made him repeat his lessons, while working
faithfully at his own studies. In fact, hardly was he at home when, realizing how ignorant he was, he had
commenced to study with a kind of remorse—like a man who, for want of knowledge, finds himself unequal to his
task.

"Yes," he often repeated; "if, on board of the 'Pilgrim,' I had known all that a sailor should know, what
misfortunes we would have escaped!"

Thus spoke Dick Sand. At the age of eighteen he finished with distinction his hydrographical studies, and,
honored with a brevet by special favor, he took command of one of Mr. Weldon's vessels.

See what the little orphan, rescued on the beach at Sandy Hook, had obtained by his work and conduct. He was,
in spite of his youth, surrounded by the esteem, one might say the respect, of all who knew him; but his simplicity
and modesty were so natural to him, that he was not aware of it. He did not even suspect—although no one could
attribute to him what are called brilliant exploits—that the firmness, courage, and fidelity displayed in so many trials
had made of him a sort of hero.

Meanwhile, one thought oppressed him. In his rare leisure hours he always dreamed of old Tom, of Bat, of
Austin, and of Acteon, and of the misfortune for which he held himself responsible. It was also a subject of real grief
to Mrs. Weldon, the actual situation of her former companions in misery. Mr. Weldon, Dick Sand, and Hercules
moved heaven and earth to find traces of them. Finally they succeeded—thanks to the correspondents which the rich
shipowner had in different parts of the world. It was at Madagascar—where, however, slavery was soon to be
abolished—that Tom and his companions had been sold. Dick Sand wished to consecrate his little savings to ransom
them, but Mr. Weldon would not hear of it. One of his correspondents arranged the affair, and one day, the 15th of
November, 1877, four blacks rang the bell of his house.

They were old Tom, Bat, Acteon, and Austin. The brave men, after escaping so many dangers, came near being
stiffed, on that day, by their delighted friends.

Only poor Nan was missing from those whom the "Pilgrim" had thrown on the fatal coast of Africa. But the old
servant could not be recalled to life, and neither could Dingo be restored to them. Certainly it was miraculous that
these two alone had succumbed amid such adventures.

It is unnecessary to say that on that occasion they had a festival at the house of the California merchant. The best
toast, which all applauded, was that given by Mrs. Weldon to Dick Sand, "To the Captain at Fifteen!"

THE END.
End of the Voyage Extraordinaire

EIGHT HUNDRED LEAGUES ON THE AMAZON
By Jules Verne

PART I. THE GIANT RAFT

CHAPTER I. A CAPTAIN OF THE WOODS
"Phy jsl yld dqqf dzxg asgzz q q q e h x g kf n d r x u j u g l o c y t d x v k s b x h h u y p o h d v y r y m h
uh p y d k j o x p h e t o z i s l e t n p m v f o v p d p a j x h y y o j y g g a y m e q y n f u q l n m v l y f g s u z
m q l z t b q y u g s q e u b v n r c r e d g r u z b l r m x y u h q h p z d r g c r o h e p q x u f l v v r p l p h o n t h
v d d q f h q s n t z h h n f e p m q k y u u e x t o g z g k y u u m f v l j d q d p z j q s y k r p l x h x q r y m v k l o
h h o t o z v d k s p s u v j h d."
THE MAN who held in his hand the document of which this strange assemblage of letters formed the concluding paragraph remained for some moments lost in thought.

It contained about a hundred of these lines, with the letters at even distances, and undivided into words. It seemed to have been written many years before, and time had already laid his tawny finger on the sheet of good stout paper which was covered with the hieroglyphics.

On what principle had these letters been arranged? He who held the paper was alone able to tell. With such cipher language it is as with the locks of some of our iron safes—in either case the protection is the same. The combinations which they lead to can be counted by millions, and no calculator’s life would suffice to express them. Some particular "word" has to be known before the lock of the safe will act, and some "cipher" is necessary before that cryptogram can be read.

He who had just reperused the document was but a simple "captain of the woods." Under the name of _"Capitaes do Mato"_ are known in Brazil those individuals who are engaged in the recapture of fugitive slaves. The institution dates from 1722. At that period anti-slavery ideas had entered the minds of a few philanthropists, and more than a century had to elapse before the mass of the people grasped and applied them. That freedom was a right, that the very first of the natural rights of man was to be free and to belong only to himself, would seem to be self-evident, and yet thousands of years had to pass before the glorious thought was generally accepted, and the nations of the earth had the courage to proclaim it.

In 1852, the year in which our story opens, there were still slaves in Brazil, and as a natural consequence, captains of the woods to pursue them. For certain reasons of political economy the hour of general emancipation had been delayed, but the black had at this date the right to ransom himself, the children which were born to him were born free. The day was not far distant when the magnificent country, into which could be put three-quarters of the continent of Europe, would no longer count a single slave among its ten millions of inhabitants.

The occupation of the captains of the woods was doomed, and at the period we speak of the advantages obtainable from the capture of fugitives were rapidly diminishing. While, however, the calling continued sufficiently profitable, the captains of the woods formed a peculiar class of adventurers, principally composed of freedmen and deserters—not of very enviable reputation. The slave hunters in fact belonged to the dregs of society, and we shall not be far wrong in assuming that the man with the cryptogram was a fitting comrade for his fellow _"capitaes do mato."_ Torres—for that was his name—unlike the majority of his companions, was neither half-breed, Indian, nor negro. He was a white of Brazilian origin, and had received a better education than befitted his present condition. One of those unclassed men who are found so frequently in the distant countries of the New World, at a time when the Brazilian law still excluded mulattoes and others of mixed blood from certain employments, it was evident that if such exclusion had affected him, it had done so on account of his worthless character, and not because of his birth.

Torres at the present moment was not, however, in Brazil. He had just passed the frontier, and was wandering in the forests of Peru, from which issue the waters of the Upper Amazon.

He was a man of about thirty years of age, on whom the fatigues of a precarious existence seemed, thanks to an exceptional temperament and an iron constitution, to have had no effect. Of middle height, broad shoulders, regular features, and decided gait, his face was tainted with the scorching air of the tropics. He had a thick black beard, and eyes lost under contracting eyebrows, giving that swift but hard glance so characteristic of insolent natures. Clothed as backwoodsmen are generally clothed, not over elaborately, his garments bore witness to long and roughish wear. On his head, stuck jauntily on one side, was a leather hat with a large brim. Trousers he had of coarse wool, which were tucked into the tops of the thick, heavy boots which formed the most substantial part of his attire, and over all, and hiding all, was a faded yellowish poncho.

But if Torres was a captain of the woods it was evident that he was not now employed in that capacity, his means of attack and defense being obviously insufficient for any one engaged in the pursuit of the blacks. No firearms—neither gun nor revolver. In his belt only one of those weapons, more sword than hunting-knife, called a _"manchetta,"_ and in addition he had an _"enchada,"_ which is a sort of hoe, specially employed in the pursuit of the tatous and agoutis which abound in the forests of the Upper Amazon, where there is generally little to fear from wild beasts.

On the 4th of May, 1852, it happened, then, that our adventurer was deeply absorbed in the reading of the document on which his eyes were fixed, and, accustomed as he was to live in the forests of South America, he was perfectly indifferent to their splendors. Nothing could distract his attention; neither the constant cry of the howling monkeys, which St. Hillaire has graphically compared to the ax of the woodman as he strikes the branches of the trees, nor the sharp jingle of the rings of the rattlesnake (not an aggressive reptile, it is true, but one of the most venomous); neither the bawling voice of the horned toad, the most hideous of its kind, nor even the solemn and sonorous croak of the bellowing frog, which, though it cannot equal the bull in size, can surpass him in noise.

Torres heard nothing of all these sounds, which form, as it were, the complex voice of the forests of the New
World. Reclining at the foot of a magnificent tree, he did not even admire the lofty boughs of that "pao ferro," or iron wood, with its somber bark, hard as the metal which it replaces in the weapon and utensil of the Indian savage. No. Lost in thought, the captain of the woods turned the curious paper again and again between his fingers. With the cipher, of which he had the secret, he assigned to each letter its true value. He read, he verified the sense of those lines, unintelligible to all but him, and then he smiled--and a most unpleasant smile it was.

Then he murmured some phrases in an undertone which none in the solitude of the Peruvian forests could hear, and which no one, had he been anywhere else, would have heard.

"Yes," said he, at length, "here are a hundred lines very neatly written, which, for some one that I know, have an importance that is undoubted. That somebody is rich. It is a question of life or death for him, and looked at in every way it will cost him something." And, scrutinizing the paper with greedy eyes, "At a conto (1) only for each word of this last sentence it will amount to a considerable sum, and it is this sentence which fixes the price. It sums up the entire document. It gives their true names to true personages; but before trying to understand it I ought to begin by counting the number of words it contains, and even when this is done its true meaning may be missed."

In saying this Torres began to count mentally.

"There are fifty-eight words, and that makes fifty-eight contos. With nothing but that one could live in Brazil, in America, wherever one wished, and even live without doing anything! And what would it be, then, if all the words of this document were paid for at the same price? It would be necessary to count by hundreds of contos. Ah! there is quite a fortune here for me to realize if I am not the greatest of duffers!"

It seemed as though the hands of Torres felt the enormous sum, and were already closing over the rolls of gold. Suddenly his thoughts took another turn.

"At length," he cried, "I see land; and I do not regret the voyage which has led me from the coast of the Atlantic to the Upper Amazon. This man may quit America and go beyond the seas, and then how can I touch him? But no! he is there, and if I climb to the top of this tree I can see the roof under which he lives with his family!" Then seizing the paper and shaking it with terrible meaning: "Before to-morrow I will be in his presence; before to-morrow he will know that his honor and his life are contained in these lines. And when he wishes to see the cipher which permits him to read them, he--well, he will pay for it. He will pay, if I wish it, with all his fortune, as he ought to pay with all his blood! Ah! My worthy comrade, who gave me this cipher, who told me where I could find his old colleague, and the name under which he has been hiding himself for so many years, hardly suspects that he has made my fortune!"

For the last time Torres glanced over the yellow paper, and then, after carefully folding it, put it away into a little copper box which he used for a purse. This box was about as big as a cigar case, and if what was in it was all Torres possessed he would nowhere have been considered a wealthy man. He had a few of all the coins of the neighboring States--ten double-condors in gold of the United States of Colombia, worth about a hundred francs; Brazilian reis, worth about as much; golden sols of Peru, worth, say, double; some Chilian escudos, worth fifty francs or more, and some smaller coins; but the lot would not amount to more than five hundred francs, and Torres would have been somewhat embarrassed had he been asked how or where he had got them. One thing was certain, that for some months, after having suddenly abandoned the trade of the slave hunter, which he carried on in the province of Para, Torres had ascended the basin of the Amazon, crossed the Brazilian frontier, and come into Peruvian territory. To such a man the necessaries of life were but few; expenses he had none--nothing for his lodging, nothing for his clothes. The forest provided his food, which in the backwoods cost him naught. A few reis were enough for his tobacco, which he bought at the mission stations or in the villages, and for a trifle more he filled his flask with liquor. With little he could go far.

When he had pushed the paper into the metal box, of which the lid shut tightly with a snap, Torres, instead of putting it into the pocket of his under-vest, thought to be extra careful, and placed it near him in a hollow of a root of the tree beneath which he was sitting. This proceeding, as it turned out, might have cost him dear.

It was very warm; the air was oppressive. If the church of the nearest village had possessed a clock, the clock would have struck two, and, coming with the wind, Torres would have heard it, for it was not more than a couple of miles off. But he cared not as to time. Accustomed to regulate his proceedings by the height of the sun, calculated with more or less accuracy, he could scarcely be supposed to conduct himself with military precision. He breakfasted or dined when he pleased or when he could; he slept when and where sleep overtook him. If his table was not always spread, his bed was always ready at the foot of some tree in the open forest. And in other respects Torres was not difficult to please. He had traveled during most of the morning, and having already eaten a little, he began to feel the want of a snooze. Two or three hours' rest would, he thought, put him in a state to continue his road, and so he laid himself down on the grass as comfortably as he could, and waited for sleep beneath the ironwood-tree.

Torres was not one of those people who drop off to sleep without certain preliminaries. HE was in the habit of
drinking a drop or two of strong liquor, and of then smoking a pipe; the spirits, he said, overexcited the brain, and
the tobacco smoke agreeably mingled with the general haziness of his reverie.

Torres commenced, then, by applying to his lips a flask which he carried at his side; it contained the liquor
generally known under the name of "chica" in Peru, and more particularly under that of "caysuma" in the Upper
Amazon, to which fermented distillation of the root of the sweet manioc the captain had added a good dose of
"tafia" or native rum.

When Torres had drunk a little of this mixture he shook the flask, and discovered, not without regret, that it was
nearly empty.

"Must get some more," he said very quietly.

Then taking out a short wooden pipe, he filled it with the coarse and bitter tobacco of Brazil, of which the leaves
belong to that old "petun" introduced into France by Nicot, to whom we owe the popularization of the most
productive and widespread of the solanaceae.

This native tobacco had little in common with the fine qualities of our present manufacturers; but Torres was not
more difficult to please in this matter than in others, and so, having filled his pipe, he struck a match and applied
the flame to a piece of that stick substance which is the secretion of certain of the hymenoptera, and is known as "ants'
amadou." With the amadou he lighted up, and after about a dozen whiffs his eyes closed, his pipe escaped from his
fingers, and he fell asleep.

(1) One thousand reis are equal to three francs, and a conto of reis is worth three thousand francs.

CHAPTER II. ROBBER AND ROBBED

TORRES SLEPT for about half an hour, and then there was a noise among the trees—a sound of light footsteps,
as though some visitor was walking with naked feet, and taking all the precaution he could lest he should be heard.

To have put himself on guard against any suspicious approach would have been the first care of our adventurer had
his eyes been open at the time. But he had not then awoke, and what advanced was able to arrive in his presence, at
ten paces from the tree, without being perceived.

It was not a man at all, it was a "guariba."

Of all the prehensile-tailed monkeys which haunt the forests of the Upper Amazon—graceful sahuis, horned
sapajous, gray-coated monos, sagouins which seem to wear a mask on their grimacing faces—the guariba is without
doubt the most eccentric. Of sociable disposition, and not very savage, differing therein very greatly from the
mucura, who is as ferocious as he is foul, he delights in company, and generally travels in troops. It was he whose
presence had been signaled from afar by the monotonous concert of voices, so like the psalm-singing of some
church choir. But if nature has not made him vicious, it is none the less necessary to attack him with caution, and
under any circumstances a sleeping traveler ought not to leave himself exposed, lest a guariba should surprise him
when he is not in a position to defend himself.

This monkey, which is also known in Brazil as the "barbado," was of large size. The suppleness and stoutness of
his limbs proclaimed him a powerful creature, as fit to fight on the ground as to leap from branch to branch at the
tops of the giants of the forest.

He advanced then cautiously, and with short steps. He glanced to the right and to the left, and rapidly swung his
tail. To these representatives of the monkey tribe nature has not been content to give four hands—she has shown
herself more generous, and added a fifth, for the extremity of their caudal appendage possesses a perfect power of
prehension.

The guariba noiselessly approached, brandishing a study cudgel, which, wielded by his muscular arm, would
have proved a formidable weapon. For some minutes he had seen the man at the foot of the tree, but the sleeper did
not move, and this doubtless induced him to come and look at him a little nearer. He came forward then, not without
hesitation, and stopped at last about three paces off.

On his bearded face was pictured a grin, which showed his sharp-edged teeth, white as ivory, and the cudgel
began to move about in a way that was not very reassuring for the captain of the woods.

Unmistakably the sight of Torres did not inspire the guariba with friendly thoughts. Had he then particular
reasons for wishing evil to this defenseless specimen of the human race which chance had delivered over to him?
Perhaps! We know how certain animals retain the memory of the bad treatment they have received, and it is possible
that against backwoodsmen in general he bore some special grudge.

In fact Indians especially make more fuss about the monkey than any other kind of game, and, no matter to what
species it belongs, follow its chase with the ardor of Nimrods, not only for the pleasure of hunting it, but for the
pleasure of eating it.

Whatever it was, the guariba did not seen disinclined to change characters this time, and if he did not quite forget
that nature had made him but a simple herbivore, and longed to devour the captain of the woods, he seemed at least to have made up his mind to get rid of one of his natural enemies.

After looking at him for some minutes the guariba began to move round the tree. He stepped slowly, holding his breath, and getting nearer and nearer. His attitude was threatening, his countenance ferocious. Nothing could have seemed easier to him than to have crushed this motionless man at a single blow, and assuredly at that moment the life of Torres hung by a thread.

In truth, the guariba stopped a second time close up to the tree, placed himself at the side, so as to command the head of the sleeper, and lifted his stick to give the blow.

But if Torres had been imprudent in putting near him in the crevice of the root the little case which contained his document and his fortune, it was this imprudence which saved his life.

A sunbeam shooting between the branches just glinted on the case, the polished metal of which lighted up like a looking-glass. The monkey, with the frivolity peculiar to his species, instantly had his attention distracted. His ideas, if such an animal could have ideas, took another direction. He stopped, caught hold of the case, jumped back a pace or two, and, raising it to the level of his eyes, looked at it not without surprise as he moved it about and used it like a mirror. He was if anything still more astonished when he heard the rattle of the gold pieces it contained. The music enchanted him. It was like a rattle in the hands of a child. He carried it to his mouth, and his teeth grated against the metal, but made no impression on it.

Doubtless the guariba thought he had found some fruit of a new kind, a sort of huge almost brilliant all over, and with a kernel playing freely in its shell. But if he soon discovered his mistake he did not consider it a reason for throwing the case away; on the contrary, he grasped it more tightly in his left hand, and dropped the cudgel, which broke off a dry twig in its fall.

At this noise Torres woke, and with the quickness of those who are always on the watch, with whom there is no transition from the sleeping to the waking state, was immediately on his legs.

In an instant Torres had recognized with whom he had to deal.

"A guariba!" he cried.
And his hand seizing his manchetta, he put himself into a posture of defense.

The monkey, alarmed, jumped back at once, and not so brave before a waking man as a sleeping one, performed a rapid caper, and glided under the trees.

"It was time!" said Torres; "the rogue would have settled me without any ceremony!"

Of a sudden, between the hands of the monkey, who had stopped at about twenty paces, and was watching him with violent grimaces, as if he would like to snap his fingers at him, he caught sight of his precious case.

"The beggar!" he said. "If he has not killed me, he has done what is almost as bad. He has robbed me!"
The thought that the case held his money was not however, what then concerned him. But that which made him jump was the recollection that it contained the precious document, the loss of which was irreparable, as it carried with it that of all his hopes.

"Botheration!" said he.

And at the moment, cost what it might to recapture his case, Torres threw himself in pursuit of the guariba.

He knew that to reach such an active animal was not easy. On the ground he could get away too fast, in the branches he could get away too far. A well-aimed gunshot could alone stop him as he ran or climbed, but Torres possessed no firearm. His sword-knife and hoe were useless unless he could get near enough to hit him.

It soon became evident that the monkey could not be reached unless by surprise. Hence Torres found it necessary to employ cunning in dealing with the mischievous animal. To stop, to hide himself behind some tree trunk, to disappear under a bush, might induce the guariba to pull up and retrace his steps, and there was nothing else for Torres to try. This was what he did, and the pursuit commenced under these conditions; but when the captain of the woods disappeared, the monkey patiently waited until he came into sight again, and at this game Torres fatigued himself without result.

"Confound the guariba!" he shouted at length. "There will be no end to this, and he will lead me back to the Brazilian frontier. If only he would let go of my case! But no! The jingling of the money amuses him. Oh, you thief! If I could only get hold of you!"

And Torres recommenced the pursuit, and the monkey scuttled off with renewed vigor.

An hour passed in this way without any result. Torres showed a persistency which was quite natural. How without this document could he get his money?

And then anger seized him. He swore, he stamped, he threatened the guariba. That annoying animal only responded by a chuckling which was enough to put him beside himself.

And then Torres gave himself up to the chase. He ran at top speed, entangling himself in the high undergrowth, among those thick brambles and interlacing creepers, across which the guariba passed like a steeplechaser. Big roots
hidden beneath the grass lay often in the way. He stumbled over them and again started in pursuit. At length, to his
astonishment, he found himself shouting:

"Come here! come here! you robber!" as if he could make him understand him.

His strength gave out, breath failed him, and he was obliged to stop. "Confound it!" said he, "when I am after
runaway slaves across the jungle they never give me such trouble as this! But I will have you, you wretched
monkey! I will go, yes, I will go as far as my legs will carry me, and we shall see!"

The guariba had remained motionless when he saw that the adventurer had ceased to pursue him. He rested also,
for he had nearly reached that degree of exhaustion which had forbidden all movement on the part of Torres.

He remained like this during ten minutes, nibbling away at two or three roots, which he picked off the ground,
and from time to time he rattled the case at his ear.

Torres, driven to distraction, picked up the stones within his reach, and threw them at him, but did no harm at
such a distance.

But he hesitated to make a fresh start. On one hand, to keep on in chase of the monkey with so little chance of
reaching him was madness. On the other, to accept as definite this accidental interruption to all his plans, to be not
only conquered, but cheated and hoaxed by a dumb animal, was maddening. And in the meantime Torres had begun
to think that when the night came the robber would disappear without trouble, and he, the robbed one, would find a
difficulty in retracing his way through the dense forest. In fact, the pursuit had taken him many miles from the bank
of the river, and he would even now find it difficult to return to it.

Torres hesitated; he tried to resume his thoughts with coolness, and finally, after giving vent to a last
imprecation, he was about to abandon all idea of regaining possession of his case, when once more, in spite of
himself, there flashed across him the thought of his document, the remembrance of all that scaffolding on which his
future hopes depended, on which he had counted so much; and he resolved to make another effort.

Then he got up.
The guariba got up too.
He made several steps in advance.
The monkey made as many in the rear, but this time, instead of plunging more deeply into the forest, he stopped
at the foot of an enormous ficus--the tree of which the different kinds are so numerous all over the Upper Amazon
basin.

To seize the trunk with his four hands, to climb with the agility of a clown who is acting the monkey, to hook on
with his prehensile tail to the first branches, which stretched away horizontally at forty feet from the ground, and
to hoist himself to the top of the tree, to the point where the higher branches just bent beneath its weight, was only
sport to the active guariba, and the work of but a few seconds.

Up there, installed at his ease, he resumed his interrupted repast, and gathered the fruits which were within his
reach. Torres, like him, was much in want of something to eat and drink, but it was impossible! His pouch was flat,
his flask was empty.

However, instead of retracing his steps he directed them toward the tree, although the position taken up by the
monkey was still more unfavorable for him. He could not dream for one instant of climbing the ficus, which the
thief would have quickly abandoned for another.

And all the time the miserable case rattled at his ear.

Then in his fury, in his folly, Torres apostrophized the guariba. It would be impossible for us to tell the series of
invectives in which he indulged. Not only did he call him a half-breed, which is the greatest of insults in the mouth
of a Brazilian of white descent, but _"curiboca"_--that is to say, half-breed negro and Indian, and of all the insults
that one man can hurl at another in this equatorial latitude _"curiboca"_ is the cruelest.

But the monkey, who was only a humble quadruman, was simply amused at what would have revolted a
representative of humanity.

Then Torres began to throw stones at him again, and bits of roots and everything he could get hold of that would
do for a missile. Had he the hope to seriously hurt the monkey? No! he no longer knew what he was about. To tell
the truth, anger at his powerlessness had deprived him of his wits. Perhaps he hoped that in one of the movements
which the guariba would make in passing from branch to branch the case might escape him, perhaps he thought that
if he continued to worry the monkey he might throw it at his head. But no! the monkey did not part with the case,
and, holding it with one hand, he had still three left with which to move.

Torres, in despair, was just about to abandon the chase for good, and to return toward the Amazon, when he
heard the sound of voices. Yes! the sound of human voices.

Those were speaking at about twenty paces to the right of him.

The first care of Torres was to hide himself in a dense thicket. Like a prudent man, he did not wish to show
himself without at least knowing with whom he might have to deal. Panting, puzzled, his ears on the stretch, he
waited, when suddenly the sharp report of a gun rang through the woods.

    A cry followed, and the monkey, mortally wounded, fell heavily on the ground, still holding Torres' case.
    "By Jove!" he muttered, "that bullet came at the right time!"
    And then, without fearing to be seen, he came out of the thicket, and two young gentlemen appeared from under
    the trees.

    They were Brazilians clothed as hunters, with leather boots, light palm-leaf hats, waistcoats, or rather tunics,
    buckled in at the waist, and more convenient than the national poncho. By their features and their complexion they
    were at once recognizable as of Portuguese descent.

    Each of them was armed with one of those long guns of Spanish make which slightly remind us of the arms of
    the Arabs, guns of long range and considerable precision, which the dwellers in the forest of the upper Amazon
    handle with success.

    What had just happened was a proof of this. At an angular distance of more than eighty paces the quadruman had
    been shot full in the head.

    The two young men carried in addition, in their belts, a sort of dagger-knife, which is known in Brazil as a
    _"foca,"_ and which hunters do not hesitate to use when attacking the ounce and other wild animals which, if not
    very formidable, are pretty numerous in these forests.

    Torres had obviously little to fear from this meeting, and so he went on running toward the monkey's corpse.

    But the young men, who were taking the same direction, had less ground to cover, and coming forward a few
    paces, found themselves face to face with Torres.

    The latter had recovered his presence of mind.

    "Many thanks, gentlemen," said he gayly, as he raised the brim of his hat; "in killing this wretched animal you
    have just done me a great service!"

    The hunters looked at him inquiringly, not knowing what value to attach to his thanks.

    Torres explained matters in a few words.

    "You thought you had killed a monkey," said he, "but as it happens you have killed a thief!"
    "If we have been of use to you," said the youngest of the two, "it was by accident, but we are none the less
    pleased to find that we have done some good."

    And taking several steps to the rear, he bent over the guariba, and, not without an effort, withdrew the case from
    his stiffened hand.

    "Doubtless that, sir, is what belongs to you?"

    "The very thing," said Torres briskly, catching hold of the case and failing to repress a huge sigh of relief.

    "Whom ought I to thank, gentlemen," said he, "for the service you have rendered me?"

    "My friend, Manoel, assistant surgeon, Brazilian army," replied the young man.

    "If it was I who shot the monkey, Benito," said Manoel, "it was you that pointed him out to me."

    "In that case, sir," replied Torres, "I am under an obligation to you both, as well to you, Mr. Manoel, as to you,
    Mr. ----"  

    "Benito Garral," replied Manoel.

    The captain of the woods required great command over himself to avoid giving a jump when he heard this name,
    and more especially when the young man obligingly continued:

    "My father, Joam Garral, has his farm about three miles from here. If you would like, Mr. ----"

    "Torres," replied the adventurer.

    "If you would like to accompany us there, Mr. Torres, you will be hospitably received."

    "I do not know that I can," said Torres, who, surprised by this unexpected meeting, hesitated to make a start. "I
    fear in truth that I am not able to accept your offer. The occurrence I have just related to you has caused me to lose
    time. It is necessary for me to return at once to the Amazon--as I purpose descending thence to Para."

    "Very well, Mr. Torres," replied Benito, "it is not unlikely that we shall see you again in our travels, for before a
    month has passed my father and all his family will have taken the same road as you."

    "Ah!" said Torres sharply, "your father is thinking of recrossing the Brazilian frontier?"

    "Yes, for a voyage of some months," replied Benoito. "At least we hope to make him decide so. Don't we,
    Manoel?"

    Manoel nodded affirmatively.

    "Well, gentlemen," replied Torres, "it is very probable that we shall meet again on the road. But I cannot, much
to my regret, accept your offer now. I thank you, nevertheless, and I consider myself as twice your debtor."

    And having said so, Torres saluted the young men, who in turn saluted him, and set out on their way to the farm.

    As for Torres he looked after them as they got further and further away, and when he had lost sight of them--

    "Ah! he is about to recross the frontier!" said he, with a deep voice. "Let him recross it! and he will be still more
at my mercy! Pleasant journey to you, Joam Garral!"

And having uttered these words the captain of the woods, making for the south so as to regain the left bank of
the river by the shortest road, disappeared into the dense forest.

CHAPTER III. THE GARRAL FAMILY

THE VILLAGE of Iquitos is situated on the left bank of the Amazon, near the seventy-fourth meridian, on that
portion of the great river which still bears the name of the Marânón, and of which the bed separates Peru from the
republic of Ecuador. It is about fifty-five leagues to the west of the Brazilian frontier.

Iquitos, like every other collection of huts, hamlet, or village met with in the basin of the Upper Amazon, was
founded by the missionaries. Up to the seventeenth year of the century the Iquito Indians, who then formed the
entire population, were settled in the interior of the province at some distance from the river. But one day the springs
in their territory all dried up under the influence of a volcanic eruption, and they were obliged to come and take up
their abode on the left of the Marânón. The race soon altered through the alliances which were entered into with the
eriverine Indians, Ticunas, or Omaguas, mixed descent with a few Spaniards, and to-day Iquitos has a population of
two or three families of half-breeds.

The village is most picturesquely grouped on a kind of esplanade, and runs along at about sixty feet from the
river. It consists of some forty miserable huts, whose thatched roofs only just render them worthy of the name of
cottages. A stairway made of crossed trunks of trees leads up to the village, which lies hidden from the traveler's
eyes until the steps have been ascended. Once at the top he finds himself before an inclosure admitting of slight
defense, and consisting of many different shrubs and arborescent plants, attached to each other by festoons of lianas,
which here and there have made their way above the summits of the graceful palms and banana-trees.

At the time we speak of the Indians of Iquitos went about in almost a state of nudity. The Spaniards and half-
breeds alone were clothed, and much as they scorned their indigenous fellow-citizens, wore only a simple shirt, light
cotton trousers, and a straw hat. All lived cheerlessly enough in the village, mixing little together, and if they did
meet occasionally, it was only at such times as the bell of the mission called them to the dilapidated cottage which
served them for a church.

But if existence in the village of Iquitos, as in most of the hamlets of the Upper Amazon, was almost in a
rudimentary stage, it was only necessary to journey a league further down the river to find on the same bank a
wealthy settlement, with all the elements of comfortable life.

This was the farm of Joam Garral, toward which our two young friends returned after their meeting with the

Brazilian by birth, Joam Garral was without family or fortune. Trouble, he said, had obliged him to quit his
country and abandon all thoughts of return. He asked his host to excuse his entering on his past misfortunes--
misfortunes as serious as they were unmerited. What he sought, and what he wished, was a new life, a life of labor. 
He had started on his travels with some slight thought of entering a fazenda in the interior. He was educated, 
intelligent. He had in all his bearing that inexpressible something which tells you that the man is genuine and of 
frank and upright character. Magalhães, quite taken with him, asked him to remain at the farm, where he would, in a 
measure, supply that which was wanting in the worthy farmer.

Joam Garral accepted the offer without hesitation. His intention had been to join a "seringal," or caoutchouc 
concern, in which in those days a good workman could earn from five to six piastres a day, and could hope to 
become a master if he had any luck; but Magalhães very truly observed that if the pay was good, work was only 
found in the seringals at harvest time--that is to say, during only a few months of the year--and this would not 
constitute the permanent position that a young man ought to wish for.

The Portuguese was right. Joam Garral saw it, and entered resolutely into the service of the fazenda, deciding to 
devote to it all his powers.

Magalhães had no cause to regret his generous action. His business recovered. His wood trade, which extended 
by means of the Amazon up to Para, was soon considerably extended under the impulse of Joam Garral. The fazenda 
began to grow in proportion, and to spread out along the bank of the river up to its junction with the Nanay. A 
delightful residence was made of the house; it was raised a story, surrounded by a veranda, and half hidden under 
beautiful trees--mimosas, fig-sycamores, bauhinias, and paullinias, whose trunks were invisible beneath a network 
of scarlet-flowered bromelias and passion-flowers.

At a distance, behind huge bushes and a dense mass of arborescent plants, were concealed the buildings in which 
the staff of the fazenda were accommodated--the servants' offices, the cabins of the blacks, and the huts of the 
Indians. From the bank of the river, bordered with reeds and aquatic plants, the tree-encircled house was alone 
visible.

A vast meadow, laboriously cleared along the lagoons, offered excellent pasturage. Cattle abounded--a new 
source of profit in these fertile countries, where a herd doubles in four years, and where ten per cent. interest is 
earned by nothing more than the skins and the hides of the animals killed for the consumption of those who raise 
them! A few _"sitiros,"_ or manioc and coffee plantations, were started in parts of the woods which were cleared. 
Fields of sugar-canues soon required the construction of a mill to crush the sacchariferous stalks destined to be used 
hereafter in the manufacture of molasses, tafia, and rum. In short, ten years after the arrival of Joam Garral at the 
farm at Iquitos the fazenda had become one of the richest establishments on the Upper Amazon. Thanks to the good 
management exercised by the young clerk over the works at home and the business abroad, its prosperity daily 
increased.

The Portuguese did not wait so long to acknowledge what he owed to Joam Garral. In order to recompense him 
in proportion to his merits he had from the first given him an interest in the profits of his business, and four years 
after his arrival he had made him a partner on the same footing as himself, and with equal shares.

But there was more that he had in store for him. Yaquita, his daughter, had, in this silent young man, so gentle to 
others, so stern to himself, recognized the sterling qualities which her father had done. She was in love with him, but 
though on his side Joam had not remained insensible to the merits and the beauty of this excellent girl, he was too 
proud and reserved to dream of asking her to marry him.

A serious incident hastened the solution.

Magalhães was one day superintending a clearance and was mortally wounded by the fall of a tree. Carried home 
helpless to the farm, and feeling himself lost, he raised up Yaquita, who was weeping by his side, took her hand, and 
put it into that of Joam Garral, making him swear to take her for his wife.

"You have made my fortune," he said, "and I shall not die in peace unless by this union I know that the fortune 
of my daughter is assured."

"I can continue her devoted servant, her brother, her protector, without being her husband," Joam Garral had at 
first replied. "I owe you all, Magalhães. I will never forget it, but the price you would pay for my endeavors is out of 
all proportion to what they are worth."

The old man insisted. Death would not allow him to wait; he demanded the promise, and it was made to him.

Yaquita was then twenty-two years old, Joam was twenty-six. They loved each other and they were married 
some hours before the death of Magalhães, who had just strength left to bless their union.

It was under these circumstances that in 1830 Joam Garral became the new fazender of Iquitos, to the immense 
felicity of all those who composed the staff of the farm.

The prosperity of the settlement could not do otherwise than grow when these two minds were thus united.

A year after her marriage Yaquita presented her husband with a son, and, two years after, a daughter. Benito and 
Minha, the grandchildren of the old Portuguese, became worthy of their grandfather, children worthy of Joam and
Yaquita.

The daughter grew to be one of the most charming of girls. She never left the fazenda. Brought up in pure and healthy surroundings, in the midst of the beauteous nature of the tropics, the education given to her by her mother, and the instruction received by her from her father, were ample. What more could she have learned in a convent at Manaos or Belem? Where would she have found better examples of the domestic virtues? Would her mind and feelings have been more delicately formed away from her home? If it was ordained that she was not to succeed her mother in the management of the fazenda, she was equal to any other position to which she might be called.

With Benito it was another thing. His father very wisely wished him to receive as solid and complete an education as could then be obtained in the large towns of Brazil. There was nothing which the rich fazender refused his son. Benito was possessed of a cheerful disposition, an active mind, a lively intelligence, and qualities of heart equal to those of his head. At the age of twelve he was sent into Para, to Belem, and there, under the direction of excellent professors, he acquired the elements of an education which could not but eventually make him a distinguished man. Nothing in literature, in the sciences, in the arts, was a stranger to him. He studied as if the fortune of his father would not allow him to remain idle. He was not among such as imagine that riches exempt men from work—he was one of those noble characters, resolute and just, who believe that nothing should diminish our natural obligation in this respect if we wish to be worthy of the name of men.

During the first years of his residence at Belem, Benito had made the acquaintance of Manoel Valdez. This young man, the son of a merchant in Para, was pursuing his studies in the same institution as Benito. The conformity of their characters and their tastes proved no barrier to their uniting in the closest of friendships, and they became inseparable companions.

Manoel, born in 1832, was one year older than Benito. He had only a mother, and she lived on the modest fortune which her husband had left her. When Manoel's preliminary studies were finished, he had taken up the subject of medicine. He had a passionate taste for that noble profession, and his intention was to enter the army, toward which he felt himself attracted.

At the time that we saw him with his friend Benito, Manoel Valdez had already obtained his first step, and he had come away on leave for some months to the fazenda, where he was accustomed to pass his holidays. Well-built, and of distinguished bearing, with a certain native pride which became him well, the young man was treated by Joam and Yaquita as another son. But if this quality of son made him the brother of Benito, the title was scarcely attributable to some secret grief? Herein was a constant source of anxiety to his wife. 

In the year 1852—of which four months had already passed before the commencement of this history—Joam Garral attained the age of forty-eight years. In that sultry climate, which wears men away so quickly, he had known how, by sobriety, self-denial, suitable living, and constant work, to remain untouched where others had prematurely succumbed. His hair, which he wore short, and his beard, which was full, had already grown gray, and gave him the look of a Puritan. The proverbial honesty of the Brazilian merchants and fazenders showed itself in his features, of which straightforwardness was the leading characteristic. His calm temperament seemed to indicate an interior fire, kept well under control. The fearlessness of his look denoted a deep-rooted strength, to which, when danger threatened, he could never appeal in vain.

But, notwithstanding one could not help remarking about this quiet man of vigorous health, with whom all things had succeeded in life, a depth of sadness which even the tenderness of Yaquita had not been able to subdue.

Respected by all, placed in all the conditions that would seem necessary to happiness, why was not this just man more cheerful and less reserved? Why did he seem to be happy for others and not for himself? Was this disposition attributable to some secret grief? Herein was a constant source of anxiety to his wife.

Yaquita was now forty-four. In that tropical country where women are already old at thirty she had learned the secret of resisting the climate's destructive influences, and her features, a little sharpened but still beautiful, retained the haughty outline of the Portuguese type, in which nobility of face unites so naturally with dignity of mind.

Benito and Minha responded with an affection unbounded and unceasing for the love which their parents bore them.

Benito was now aged twenty-one, and quick, brave, and sympathetic, contrasted outwardly with his friend Manoel, who was more serious and reflective. It was a great treat for Benito, after quite a year passed at Belem, so far from the fazenda, to return with his young friend to his home to see once more his father, his mother, his sister, and to find himself, enthusiastic hunter as he was, in the midst of these superb forests of the Upper Amazon, some of whose secrets remained after so many centuries still unsolved by man.

Minha was twenty years old. A lovely girl, brunette, and with large blue eyes, eyes which seemed to open into her very soul; of middle height, good figure, and winning grace, in every way the very image of Yaquita. A little more serious than her brother, affable, good-natured, and charitable, she was beloved by all. On this subject you
could fearlessly interrogate the humblest servants of the fazenda. It was unnecessary to ask her brother's friend, Manoel Valdez, what he thought of her. He was too much interested in the question to have replied without a certain amount of partiality.

This sketch of the Garral family would not be complete, and would lack some of its features, were we not to mention the numerous staff of the fazenda.

In the first place, then, it behooves us to name an old negress, of some sixty years, called Cybele, free through the will of her master, a slave through her affection for him and his, and who had been the nurse of Yaquita. She was one of the family. She thee-ed and thou-ed both daughter and mother. The whole of this good creature's life was passed in these fields, in the middle of these forests, on that bank of the river which bounded the horizon of the farm. Coming as a child to Iquitos in the slave-trading times, she had never quitted the village; she was married there, and early a widow, had lost her only son, and remained in the service of Magalhaes. Of the Amazon she knew no more than what flowed before her eyes.

With her, and more specially attached to the service of Minha, was a pretty, laughing mulatto, of the same age as her mistress, to whom she was completely devoted. She was called Lina. One of those gentle creatures, a little spoiled, perhaps, to whom a good deal of familiarity is allowed, but who in return adore their mistresses. Quick, restless, coaxing, and lazy, she could do what she pleased in the house.

As for servants they were of two kinds--Indians, of whom there were about a hundred, employed always for the works of the fazenda, and blacks to about double the number, who were not yet free, but whose children were not born slaves. Joam Garral had herein preceded the Brazilian government. In this country, moreover, the negroes coming from Benguela, the Congo, or the Gold Coast were always treated with kindness, and it was not at the fazenda of Iquitos that one would look for those sad examples of cruelty which were so frequent on foreign plantations.

CHAPTER IV. HESITATION

MANOEL WAS in love with the sister of his friend Benito, and she was in love with him. Each was sensible of the other's worth, and each was worthy of the other.

When he was no longer able to mistake the state of his feelings toward Minha, Manoel had opened his heart to Benito.

"Manoel, my friend," had immediately answered the enthusiastic young fellow, "you could not do better than wish to marry my sister. Leave it to me! I will commence by speaking to the mother, and I think I can promise that you will not have to wait long for her consent."

Half an hour afterward he had done so.

Benito had nothing to tell his mother which she did not know; Yaquita had already divined the young people's secret.

Before ten minutes had elapsed Benito was in the presence of Minha. They had but to agree; there was no need for much eloquence. At the first words the head of the gentle girl was laid on her brother's shoulder, and the confession, "I am so happy!" was whispered from her heart.

The answer almost came before the question; that was obvious. Benito did not ask for more.

There could be little doubt as to Joam Garral's consent. But if Yaquita and her children did not at once speak to him about the marriage, it was because they wished at the same time to touch on a question which might be more difficult to solve. That question was, Where should the wedding take place?

Where should it be celebrated? In the humble cottage which served for the village church? Why not? Joam and Yaquita had there received the nuptial benediction of the Padre Passanha, who was then the curate of Iquitos parish. At that time, as now, there was no distinction in Brazil between the civil and religious acts, and the registers of the mission were sufficient testimony to a ceremony which no officer of the civil power was intrusted to attend to.

Joam Garral would probably wish the marriage to take place at Iquitos, with grand ceremonies and the attendance of the whole staff of the fazenda, but if such was to be his idea he would have to withstand a vigorous attack concerning it.

"Manoel," Minha said to her betrothed, "if I was consulted in the matter we should not be married here, but at Para. Madame Valdez is an invalid; she cannot visit Iquitos, and I should not like to become her daughter without knowing and being known by her. My mother agrees with me in thinking so. We should like to persuade my father to take us to Belem. Do you not think so?"

To this proposition Manoel had replied by pressing Minha's hand. He also had a great wish for his mother to be present at his marriage. Benito had approved the scheme without hesitation, and it was only necessary to persuade Joam Garral. And hence on this day the young men had gone out hunting in the woods, so as to leave Yaquita alone
with her husband.

In the afternoon these two were in the large room of the house. Joam Garral, who had just come in, was half-reclining on a couch of plaited bamboos, when Yaquita, a little anxious, came and seated herself beside him.

To tell Joam of the feelings which Manoel entertained toward his daughter was not what troubled her. The happiness of Minha could not but be assured by the marriage, and Joam would be glad to welcome to his arms the new son whose sterling qualities he recognized and appreciated. But to persuade her husband to leave the fazenda Yaquita felt to be a very serious matter.

In fact, since Joam Garral, then a young man, had arrived in the country, he had never left it for a day. Though the sight of the Amazon, with its waters gently flowing to the east, invited him to follow its course; though Joam every year sent rafts of wood to Manaos, to Belem, and the seacoast of Para; though he had seen each year Benito leave after his holidays to return to his studies, yet the thought seemed never to have occurred to him to go with him.

The products of the farm, of the forest, and of the fields, the fazender sold on the spot. He had no wish, either with thought or look, to go beyond the horizon which bounded his Eden.

From this it followed that for twenty-five years Joam Garral had never crossed the Brazilian frontier, his wife and daughter had never set foot on Brazilian soil. The longing to see something of that beautiful country of which Benito was often talking was not wanting, nevertheless. Two or three times Yaquita had sounded her husband in the matter. But she had noticed that the thought of leaving the fazenda, if only for a few weeks, brought an increase of sadness to his face. His eyes would close, and in a tone of mild reproach he would answer:

"Why leave our home? Are we not comfortable here?"

And Yaquita, in the presence of the man whose active kindness and unchangeable tenderness rendered her so happy, had not the courage to persist.

This time, however, there was a serious reason to make it worth while. The marriage of Minha afforded an excellent opportunity, it being so natural for them to accompany her to Belem, where she was going to live with her husband. She would there see and learn to love the mother of Manoel Valdez. How could Joam Garral hesitate in the face of so praiseworthy a desire? Why, on the other hand, did he not participate in this desire to become acquainted with her who was to be the second mother of his child?

Yaquita took her husband's hand, and with that gentle voice which had been to him all the music of his life:

"Joam," she said, "I am going to talk to you about something which we ardently wish, and which will make you as happy as we are."

"What is it about, Yaquita?" asked Joam.

"Manoel loves your daughter, he is loved by her, and in this union they will find the happiness----" At the first words of Yaquita Joam Garral had risen, without being able to control a sudden start. His eyes were immediately cast down, and he seemed to designedly avoid the look of his wife.

"What is the matter with you?" asked Yaquita.

"Minha? To get married!" murmured Joam.

"My dear," said Yaquita, feeling somewhat hurt, "have you any objection to make to the marriage? Have you not for some time noticed the feelings which Manoel has entertained toward our daughter?"

"Yes; and a year since----" And Joam sat down without finishing his thoughts. By an effort of his will he had again become master of himself. The unaccountable impression which had been made upon him disappeared. Gradually his eyes returned to meet those of Yaquita, and he remained thoughtfully looking at her.

Yaquita took his hand.

"Joam," she said, "have I been deceived? Had you no idea that this marriage would one day take place, and that it would give her every chance of happiness?"

"Yes," answered Joam. "All! Certainly. But, Yaquita, this wedding--this wedding that we are both thinking of--when is it coming off? Shortly?"

"It will come off when you choose, Joam."

"And it will take place here--at Iquitos?"

This question obliged Yaquita to enter on the other matter which she had at heart. She did not do so, however, without some hesitation, which was quite intelligible.

"Joan," said she, after a moment's silence, "listen to me. Regarding this wedding, I have got a proposal which I hope you will approve of. Two or three times during the last twenty years I have asked you to take me and my daughter to the provinces of the Lower Amazon, and to Para, where we have never been. The cares of the fazenda, the works which have required your presence, have not allowed you to grant our request. To absent yourself even for a few days would then have injured your business. But now everything has been successful beyond your dreams, and if the hour of repose has not yet come for you, you can at least for a few weeks get away from your work."
Joam Garral did not answer, but Yaquita felt his hand tremble in hers, as though under the shock of some sorrowful recollection. At the same time a half-smile came to her husband's lips—a mute invitation for her to finish what she had begun.

"Joam," she continued, "here is an occasion which we shall never see again in this life. Minha is going to be married away from us, and is going to leave us! It is the first sorrow which our daughter has caused us, and my heart quails when I think of the separation which is so near! But I should be content if I could accompany her to Belem! Does it not seem right to you, even in other respects that we should know her husband's mother, who is to replace me, and to whom we are about to entrust her? Added to this, Minha does not wish to grieve Madame Valdez by getting married at a distance from her. When we were married, Joam, if your mother had been alive, would you not have liked her to be present at your wedding?"

At these words of Yaquita Joam made a movement which he could not repress.

"My dear," continued Yaquita, "with Minha, with our two sons, Benito and Manoel, with you, how I should like to see Brazil, and to journey down this splendid river, even to the provinces on the seacoast through which it runs! It seems to me that the separation would be so much less cruel! As we came back we should revisit our daughter in her house with her second mother. I would not think of her as gone I knew not where. I would fancy myself much less a stranger to the doings of her life."

This time Joam had fixed his eyes on his wife and looked at her for some time without saying anything.

What ailed him? Why this hesitation to grant a request which was so just in itself—to say "Yes," when it would give such pleasure to all who belonged to him? His business affairs could not afford a sufficient reason. A few weeks of absence would not compromise matters to such a degree. His manager would be able to take his place without any hitch in the fazenda. And yet all this time he hesitated.

Yaquita had taken both her husband's hands in hers, and pressed them tenderly.

"Joam," she said, "it is not a mere whim that I am asking you to grant. No! For a long time I have thought over the proposition I have just made to you; and if you consent, it will be the realization of my most cherished desire. Our children know why I am now talking to you. Minha, Benito, Manoel, all ask this favor, that we should accompany them. We would all rather have the wedding at Belem than at Iquitos. It will be better for your daughter, for her establishment, for the position which she will take at Belem, that she should arrive with her people, and appear less of a stranger in the town in which she will spend most of her life."

Joam Garral leaned on his elbows. For a moment he hid his face in his hands, like a man who had to collect his thoughts before he made answer. There was evidently some hesitation which he was anxious to overcome, even some trouble which his wife felt but could not explain. A secret battle was being fought under that thoughtful brow. Yaquita got anxious, and almost reproached herself for raising the question. Anyhow, she was resigned to what Joam should decide. If the expedition would cost too much, she would silence her wishes; she would never more speak of leaving the fazenda, and never ask the reason for the inexplicable refusal.

Some minutes passed. Joam Garral rose. He went to the door, and did not return. Then he seemed to give a last look on that glorious nature, on that corner of the world where for twenty years of his life he had met with all his happiness.

Then with slow steps he returned to his wife. His face bore a new expression, that of a man who had taken a last decision, and with whom irresolution had ceased.

"You are right," he said, in a firm voice. "The journey is necessary. When shall we start?"

"Ah! Joam! my Joam!" cried Yaquita, in her joy. "Thank you for me! Thank you for them!"

And tears of affection came to her eyes as her husband clasped her to his heart.

At this moment happy voices were heard outside at the door of the house.

Manoel and Benito appeared an instant after at the threshold, almost at the same moment as Minha entered the room.

"Children! your father consents!" cried Yaquita. "We are going to Belem!"

With a grave face, and without speaking a word, Joam Garral received the congratulations of his son and the kisses of his daughter.

"And what date, father," asked Benito, "have you fixed for the wedding?"

"Date?" answered Joam. "Date? We shall see. We will fix it at Belem."

"I am so happy! I am so happy!" repeated Minha, as she had done on the day when she had first known of Manoel's request. "We shall now see the Amazon in all its glory throughout its course through the provinces of Brazil! Thanks, father!"

And the young enthusiast, whose imagination was already stirred, continued to her brother and to Manoel:

"Let us be off to the library! Let us get hold of every book and every map that we can find which will tell us anything about this magnificent river system! Don't let us travel like blind folks! I want to see everything and know..."
CHAPTER V. THE AMAZON

"THE LARGEST river in the whole world!" said Benito to Manoel Valdez, on the morrow.

They were sitting on the bank which formed the southern boundary of the fazenda, and looking at the liquid molecules passing slowly by, which, coming from the enormous range of the Andes, were on their road to lose themselves in the Atlantic Ocean eight hundred leagues away.

"And the river which carries to the sea the largest volume of water," replied Manoel.

"A volume so considerable," added Benito, "that it freshens the sea water for an immense distance from its mouth, and the force of whose current is felt by ships at eight leagues from the coast."

"A river whose course is developed over more than thirty degrees of latitude."

"And in a basin which from south to north does not comprise less than twenty-five degrees." "A basin!" exclaimed Benito. "Can you call it a basin, the vast plain through which it runs, the savannah which on all sides stretches out of sight, without a hill to give a gradient, without a mountain to bound the horizon?"

"And along its whole extent," continued Manoel, "like the thousand tentacles of some gigantic polyp, two hundred tributaries, flowing from north or south, themselves fed by smaller affluents without number, by the side of which the large rivers of Europe are but petty streamlets."

"And in its course five hundred and sixty islands, without counting islets, drifting or stationary, forming a kind of archipelago, and yielding of themselves the wealth of a kingdom!"

"And along its flanks canals, lagoons, and lakes, such as cannot be met with even in Switzerland, Lombardy, Scotland, or Canada."

"A river which, fed by its myriad tributaries, discharges into the Atlantic over two hundred and fifty millions of cubic meters of water every hour."

"A river whose course serves as the boundary of two republics, and sweeps majestically across the largest empire of South America, as if it were, in very truth, the Pacific Ocean itself flowing out along its own canal into the Atlantic."

"And what a mouth! An arm of the sea in which one island, Marajo, has a circumference of more than five hundred leagues!"

"And whose waters the ocean does not pond back without raising in a strife which is phenomenal, a tide-race, or _'pororoca,'_ to which the ebbs, the bores, and the eddies of other rivers are but tiny ripples fanned up by the breeze."

"A river which three names are scarcely enough to distinguish, and which ships of heavy tonnage, without any change in their cargoes, can ascend for more than three thousand miles from its mouth."

"A river which, by itself, its affluents, and subsidiary streams, opens a navigable commercial route across the whole of the south of the continent, passing from the Magdalena to the Ortequazza, from the Ortequazza to the Caqueta, from the Caqueta to the Putumayo, from the Putumayo to the Amazon! Four thousand miles of waterway, which only require a few canals to make the network of navigation complete!"

"In short, the biggest and most admirable river system which we have in the world."

The two young men were speaking in a kind of frenzy of their incomparable river. They were themselves children of this great Amazon, whose affluents, well worthy of itself, from the highways which penetrate Bolivia, Peru, Ecuador, New Grenada, Venezuela, and the four Guianas--English, French, Dutch and Brazilian.

What nations, what races, has it seen whose origin is lost in the far-distant past! It is one of the largest rivers of the globe. Its true source still baffles our explorers. Numbers of States still claim the honor of giving it birth. The Amazon was not likely to escape the inevitable fate, and Peru, Ecuador, and Colombia have for years disputed as to the honor of its glorious paternity.

To-day, however, there seems to be little doubt but that the Amazon rises in Peru, in the district of Huaraco, in the department of Tarma, and that it starts from the Lake of Lauricocha, which is situated between the eleventh and twelfth degree of south latitude.

Those who make the river rise in Bolivia, and descend form the mountains of Titicaca, have to prove that the true Amazon is the Ucayali, which is formed by the junction of the Paro and the Apurimac--an assertion which is now generally rejected.

At its departure from Lake Lauricocha the youthful river starts toward the northeast for a distance of five hundred and sixty miles, and does not strike to the west until it has received an important tributary--the Panta. It is called the Marañon in its journey through Colombia and Peru up to the Brazilian frontier--or, rather, the Maranhao, for Marañon is only the French rendering of the Portuguese name.
From the frontier of Brazil to Manaos, where the superb Rio Negro joins it, it takes the name of the Solimaës, or Solimoens, from the name of the Indian tribe Solimao, of which survivors are still found in the neighboring provinces. And, finally, from Manaos to the sea it is the Amasenas, or river of the Amazons, a name given it by the old Spaniards, the descendants of the adventurous Orellana, whose vague but enthusiastic stories went to show that there existed a tribe of female warriors on the Rio Nhamunda, one of the middle-sized affluents of the great river.

From its commencement the Amazon is recognizable as destined to become a magnificent stream. There are neither rapids nor obstacles of any sort until it reaches a defile where its course is slightly narrowed between two picturesque and unequal precipices. No falls are met with until this point is reached, where it curves to the eastward, and passes through the intermediary chain of the Andes. Hereabouts are a few waterfalls, were it not for which the river would be navigable from its mouth to its source. As it is, however, according the Humboldt, the Amazon is free for five-sixths of its length.

And from its first starting there is no lack of tributaries, which are themselves fed by subsidiary streams. There is the Chinchipa, coming from the northeast, on its left. On its right it is joined by the Chachapoyas, coming from the northeast. On the left we have the Marona and the Pastuca; and the Guallaga comes in from the right near the mission station of Laguna. On the left there comes the Chambyra and the Tigré, flowing from the northeast; and on the right the Huallaga, which joins the main stream twenty-eight hundred miles from the Atlantic, and can be ascended by steamboats for over two hundred miles into the very heart of Peru. To the right, again, near the mission of San Joachim d’Omaguas, just where the upper basin terminates, and after flowing majestically across the pampas of Sacramento, it receives the magnificent Ucayali, the great artery which, fed by numerous affluents, descends from Lake Chucuito, in the northeast of Arica.

Such are the principal branches above the village of Iquitos. Down the stream the tributaries become so considerable that the beds of most European rivers would fail to contain them. But the mouths of these auxiliary waters Joam Garral and his people will pass as they journey down the Amazon.

To the beauties of this unrivaled river, which waters the finest country in the world, and keeps along its whole course at a few degrees to the south of the equator, there is to be added another quality, possessed by neither the Nile, the Mississippi, nor the Livingstone--or, in other words, the old Congo-Zaira-Lualaba--and that is (although some ill-informed travelers have stated to the contrary) that the Amazon crosses a most healthy part of South America. Its basin is constantly swept by westerly winds. It is not a narrow valley surrounded by high mountains which border its banks, but a huge plain, measuring three hundred and fifty leagues from north to south, scarcely varied with a few knolls, whose whole extent the atmospheric currents can traverse unchecked.

Professor Agassiz very properly protested against the pretended unhealthiness of the climate of a country which is destined to become one of the most active of the world’s producers. According to him, "a soft and gentle breeze is constantly observable, and produces an evaporation, thanks to which the temperature is kept down, and the sun does not give out heat unchecked. The constancy of this refreshing breeze renders the climate of the river Amazon agreeable, and even delightful."

The Abbé Durand has likewise testified that if the temperature does not drop below 25 degrees Centigrade, it never rises above 33 degrees, and this gives for the year a mean temperature of from 28 degrees to 29 degrees, with a range of only 8 degrees.

After such statements we are safe in affirming that the basin of the Amazon has none of the burning heats of countries like Asia and Africa, which are crossed by the same parallels.

The vast plain which serves for its valley is accessible over its whole extent to the generous breezes which come from off the Atlantic.

And the provinces to which the river has given its name have acknowledged right to call themselves the healthiest of a country which is one of the finest on the earth.

And how can we say that the hydrographical system of the Amazon is not known?

In the sixteenth century Orellana, the lieutenant of one of the brothers Pizarro, descended the Rio Negro, arrived on the main river in 1540, ventured without a guide across the unknown district, and, after eighteen months of a navigation of which is record is most record, reached the mouth.

In 1636 and 1637 the Portuguese Pedro Texeira ascended the Amazon to Napo, with a fleet of forty-seven pirogues.

In 1743 La Condamine, after having measured an arc of the meridian at the equator, left his companions Bouguer and Godin des Odonais, embarked on the Chinchipe, descended it to its junction with the Marañon, reached the mouth at Napo on the 31st of July, just in time to observe an emersion of the first satellite of Jupiter--which allowed this "Humboldt of the eighteenth century" to accurately determine the latitude and longitude of the spot--visited the villages on both banks, and on the 6th of September arrived in front of the fort of Para. This immense journey had important results--not only was the course of the Amazon made out in scientific fashion, but it seemed
almost certain that it communicated with the Orinoco.

Fifty-five years later Humboldt and Bonpland completed the valuable work of La Condamine, and drew up the map of the Manañon as far as Napo.

Since this period the Amazon itself and all its principal tributaries have been frequently visited. In 1827 Lister-Maw, in 1834 and 1835 Smyth, in 1844 the French lieutenant in command of the "Boulonnaise," the Brazilian Valdez in 1840, the French "Paul Marcoy" from 1848 to 1860, the whimsical painter Biard in 1859, Professor Agassiz in 1865 and 1866, in 1967 the Brazilian engineer Franz Keller-Linzenger, and lastly, in 1879 Doctor Crevaux, have explored the course of the river, ascended many of its tributaries, and ascertained the navigability of its principal affluents.

But what has won the greatest honor for the Brazilian government is that on the 31st of July, 1857, after numerous frontier disputes between France and Brazil, about the Guiana boundary, the course of the Amazon was declared to be free and open to all flags; and, to make practice harmonize with theory, Brazil entered into negotiations with the neighboring powers for the exploration of every river-road in the basin of the Amazon.

To-day lines of well-found steamboats, which correspond direct with Liverpool, are plying on the river from its mouth up to Manaos; others ascend to Iquitos; others by way of the Tapajoz, the Madeira, the Rio Negro, or the Purus, make their way into the center of Peru and Bolivia.

One can easily imagine the progress which commerce will one day make in this immense and wealthy area, which is without a rival in the world.

But to this medal of the future there is a reverse. No progress can be accomplished without detriment to the indigenous races.

In face, on the Upper Amazon many Indian tribes have already disappeared, among others the Curicicurus and the Sorimaos. On the Putumayo, if a few Yuris are still met with, the Yahuas have abandoned the district to take refuge among some of the distant tributaries, and the Maoos have quitted its banks to wander in their diminished numbers among the forests of Japura.

The Tunantins is almost depopulated, and there are only a few families of wandering Indians at the mouth of the Jurua. The Teffé is almost deserted, and near the sources of the Japur there remained but the fragments of the great nation of the Umaüa. The Coari is forsaken. There are but few Muras Indians on the banks of the Purus. Of the ancient Manaos one can count but a wandering party or two. On the banks of the Rio Negro there are only a few half-breeds, Portuguese and natives, where a few years ago twenty-four different nations had their homes.

Such is the law of progress. The Indians will disappear. Before the Anglo-Saxon race Australians and Tasmanians have vanished. Before the conquerors of the Far West the North American Indians have been wiped out. One day perhaps the Arabs will be annihilated by the colonization of the French.

But we must return to 1852. The means of communication, so numerous now, did not then exist, and the journey of Joam Garral would require not less than four months, owing to the conditions under which it was made.

Hence this observation of Benito, while the two friends were watching the river as it gently flowed at their feet:

"Manoel, my friend, if there is very little interval between our arrival at Belem and the moment of our separation, the time will appear to you to be very short."

"Yes, Benito," said Manoel, "and very long as well, for Minha cannot by my wife until the end of the voyage."

CHAPTER VI. A FOREST ON THE GROUND

THE GARRAL family were in high glee. The magnificent journey on the Amazon was to be undertaken under conditions as agreeable as possible. Not only were the fazender and his family to start on a voyage for several months, but, as we shall see, he was to be accompanied by a part of the staff of the farm.

In beholding every one happy around him, Joam forgot the anxieties which appeared to trouble his life. From the day his decision was taken he had been another man, and when he busied himself about the preparations for the expedition he regained his former activity. His people rejoiced exceedingly at seeing him again at work. His moral self reacted against his physical self, and Joam again became the active, energetic man of his earlier years, and moved about once more as though he had spent his life in the open air, under the invigorating influences of forests, fields, and running waters.

Moreover, the few weeks that were to precede his departure had been well employed.

At this period, as we have just remarked, the course of the Amazon was not yet furrowed by the numberless steam vessels, which companies were only then thinking of putting into the river. The service was worked by individuals on their own account alone, and often the boats were only employed in the business of the riverside establishments.

These boats were either "ubas," canoes made from the trunk of a tree, hollowed out by fire, and finished with
the ax, pointed and light in front, and heavy and broad in the stern, able to carry from one to a dozen paddlers, and
of three or four tons burden: _"egariteas,"_ constructed on a larger scale, of broader design, and leaving on each side
a gangway for the rowers: or _"jangada,"_ rafts of no particular shape, propelled by a triangular sail, and
surmounted by a cabin of mud and straw, which served the Indian and his family for a floating home.

These three kinds of craft formed the lesser flotilla of the Amazon, and were only suited for a moderate traffic of
passengers or merchandise.

Larger vessels, however, existed, either _"vigilingas,"_ ranging from eight up to ten tons, with three masts
rigged with red sails, and which in calm weather were rowed by four long paddles not at all easy to work against the
stream; or _"cobertas,"_ of twenty tons burden, a kind of junk with a poop behind and a cabin down below, with two
masts and square sails of unequal size, and propelled, when the wind fell, by six long sweeps which Indians worked
from a forecastle.

But neither of these vessels satisfied Joam Garral. From the moment that he had resolved to descend the Amazon
he had thought of making the most of the voyage by carrying a huge convoy of goods into Para. From this point of
view there was no necessity to descend the river in a hurry. And the determination to which he had come pleased
every one, excepting, perhaps, Manoel, who would for very good reasons have preferred some rapid steamboat.

But though the means of transport devised by Joam were primitive in the extreme, he was going to take with him
a numerous following and abandon himself to the stream under exceptional conditions of comfort and security.

It would be, in truth, as if a part of the fazenda of Iquitos had been cut away from the bank and carried down the
Amazon with all that composed the family of the fazender--masters and servants, in their dwellings, their cottages,
and their huts.

The settlement of Iquitos included a part of those magnificent forests which, in the central districts of South
America, are practically inexhaustible.

Joam Garral thoroughly understood the management of these woods, which were rich in the most precious and
diverse species adapted for joinery, cabinet work, ship building, and carpentry, and from them he annually drew
considerable profits.

The river was there in front of him, and could it not be as safely and economically used as a railway if one
existed? So every year Joam Garral felled some hundreds of trees from his stock and formed immense rafts of
floating wood, of joists, beams, and slightly squared trunks, which were taken to Para in charge of capable pilots
who were thoroughly acquainted with the depths of the river and the direction of its currents.

This year Joam Garral decided to do as he had done in preceding years. Only, when the raft was made up, he was
going to leave to Benito all the detail of the trading part of the business. But there was no time to lose. The
beginning of June was the best season to start, for the waters, increased by the floods of the upper basin, would
gradually and gradually subside until the month of October.

The first steps had thus to be taken without delay, for the raft was to be of unusual proportions. It would be
necessary to fell a half-mile square of the forest which was situated at the junction of the Nanay and the Amazon--
that is to say, the whole river side of the fazenda, to form the enormous mass, for such were the _jangadas,_ or river
rafts, which attained the dimensions of a small island.

It was in this _jangada,_ safer than any other vessel of the country, larger than a hundred _egariteas_ or
_vigilingas_ coupled together, that Joam Garral proposed to embark with his family, his servants, and his
merchandise.

"Excellent idea!" had cried Minha, clapping her hands, when she learned her father's scheme.

"Yes," said Yaquita, "and in that way we shall reach Belem without danger or fatigue."

"And during the stoppages we can have some hunting in the forests which line the banks," added Benito.

"Won't it take rather long?" observed Manoel; "could we not hit upon some quicker way of descending the
Amazon?"

It would take some time, obviously, but the interested observation of the young doctor received no attention
from any one.

Joam Garral then called in an Indian who was the principal manager of the fazenda.

"In a month," he said to him, "the jangada must be built and ready to launch."

"We'll set to work this very day, sir."

It was a heavy task. There were about a hundred Indians and blacks, and during the first fortnight in May they
did wonders. Some people unaccustomed to these great tree massacres would perhaps have groaned to see giants
many hundred years old fall in a few hours beneath the axes of the woodmen; but there was such a quantity on the
banks of the river, up stream and down stream, even to the most distant points of the horizon, that the felling of this
half-mile of forest would scarcely leave an appreciable void.

The superintendent of the men, after receiving the instructions of Joam Garral, had first cleared the ground of the
creepers, brushwood, weeds, and arborescent plants which obstructed it. Before taking to the saw and the ax they had armed themselves with a felling-sword, that indispensable tool of every one who desires to penetrate the Amazonian forests, a large blade slightly curved, wide and flat, and two or three feet long, and strongly handled, which the natives wield with consummate address. In a few hours, with the help of the felling-sword, they had cleared the ground, cut down the underwood, and opened large gaps into the densest portions of the wood.

In this way the work progressed. The ground was cleared in front of the woodmen. The old trunks were divested of their clothing of creepers, cacti, ferns, mosses, and bromelias. They were stripped naked to the bark, until such time as the bark itself was stripped from off them.

Then the whole of the workers, before whom fled an innumerable crowd of monkeys who were hardly their superiors in agility, swung themselves into the upper branches, sawing off the heavier boughs and cutting down the topmost limbs, which had to be cleared away on the spot. Very soon there remained only a doomed forest, with long bare stems, bereft of their crowns, through which the sun luxuriantly rayed on to the humid soil which perhaps its shots had never before caressed.

There was not a single tree which could not be used for some work of skill, either in carpentry or cabinet-work. There, shooting up like columns of ivory ringed with brown, were wax-palms one hundred and twenty feet high, and four feet thick at their base; white chestnuts, which yield the three-cornered nuts; _"murichis,"_ unexcelled for building purposes; _"barrigudos,"_ measuring a couple of yards at the swelling, which is found at a few feet above the earth, trees with shining russet bark dotted with gray tubercles, each pointed stem of which supports a horizontal parasol; and _"bombax,"_ of superb stature, with its straight and smooth white stem. Among these magnificent specimens of the Amazonian flora there fell many _"quatibos"_ whose rosy canopies towered above the neighboring trees, whose fruits are like little cups with rows of chestnuts ranged within, and whose wood of clear violet is specially in demand for ship-building. And besides there was the ironwood; and more particularly the _"ibiriratea,"_ nearly black in its skin, and so close grained that of it the Indians make their battle-axes; _"jacarandas,"_ more precious than mahogany; _"caesalpinas,"_ only now found in the depths of the old forests which have escaped the woodman's ax; _"sapucaias,"_ one hundred and fifty feet high, buttressed by natural arches, which, starting from three yards from their base, rejoin the tree some thirty feet up the stem, twining themselves round the trunk like the filatures of a twisted column, whose head expands in a bouquet of vegetable fireworks made up of the yellow, purple, and snowy white of the parasitic plants.

Three weeks after the work was begun not one was standing of all the trees which had covered the angle of the Amazon and the Nanay. The clearance was complete. Joam Garral had not even had to bestir himself in the demolition of a forest which it would take twenty or thirty years to replace. Not a stick of young or old wood was left to mark the boundary of a future clearing, not even an angle to mark the limit of the denudation. It was indeed a clean sweep; the trees were cut to the level of the earth, to wait the day when their roots would be got out, over which the coming spring would still spread its verdant cloak.

This square space, washed on its sides by the waters of the river and its tributary, was destined to be cleared, plowed, planted, and sown, and the following year fields of manioc, coffee-shrubs, sugar-canies, arrowroot, maize, and peanuts would occupy the ground so recently covered by the trees.

The last week of the month had not arrived when the trunks, classified according to their varieties and specific gravity, were symmetrically arranged on the bank of the Amazon, at the spot where the immense jangada was to be guilting--with, of course, the different habitations for the accommodation of the crew, would become a veritable floating village--to wait the time when the waters of the river, swollen by the floods, would raise it and carry it for hundreds of leagues to the Atlantic coast.

The whole time the work was going on Joam Garral had been engaged in superintending it. From the clearing to the bank of the fazenda he had formed a large mound on which the portions of the raft were disposed, and to this matter he had attended entirely himself.

Yaqita was occupied with Cybele with the preparations for the departure, though the old negress could not be made to understand why they wanted to go or what they hoped to see.

"But you will see things that you never saw before," Yaqita kept saying to her.

"Will they be better than what I see now?" was Cybele's invariable reply.

Minha and her favorite for their part took care of what more particularly concerned them. They were not preparing for a simple voyage; for them it was a permanent departure, and there were a thousand details to look after for settling in the other country in which the young mulatto was to live with the mistress to whom she was so devotedly attached. Minha was a trifle sorrowful, but the joyous Lina was quite unaffected at leaving Iquitos. Minha Valdez would be the same to her as Minha Garral, and to check her spirits she would have to be separated from her mistress, and that was never thought of.

Benito had actively assisted his father in the work, which was on the point of completion. He commenced his
apprenticeship to the trade of a fazender, which would probably one day become his own, as he was about to do that of a merchant on their descent of the river.

As for Manoel, he divided his time between the house, where Yaquita and her daughter were as busy as possible, and the clearing, to which Benito fetched him rather oftener than he thought convenient, and on the whole the division was very unequal, as may well be imagined.

CHAPTER VII. FOLLOWING A LIANA

IT WAS a Sunday, the 26th of May, and the young people had made up their minds to take a holiday. The weather was splendid, the heat being tempered by the refreshing breezes which blew from off the Cordilleras, and everything invited them out for an excursion into the country.

Benito and Manoel had offered to accompany Minha through the thick woods which bordered the right bank of the Amazon opposite the fazenda.

It was, in a manner, a farewell visit to the charming environs of Iquitos. The young men went equipped for the chase, but as sportsmen who had no intention of going far from their companions in pursuit of any game. Manoel could be trusted for that, and the girls—for Lina could not leave her mistress—went prepared for a walk, an excursion of two or three leagues being not too long to frighten them.

Neither Joam Garral nor Yaquita had time to go with them. For one reason the plan of the jangada was not yet complete, and it was necessary that its construction should not be interrupted for a day, and another was that Yaquita and Cybele, well seconded as they were by the domestics of the fazenda, had not an hour to lose.

Minha had accepted the offer with much pleasure, and so, after breakfast on the day we speak of, at about eleven o'clock, the two young men and the two girls met on the bank at the angle where the two streams joined. One of the blacks went with them. They all embarked in one of the ubas used in the service of the farm, and after having passed between the islands of Iquitos and Parianta, they reached the right bank of the Amazon.

They landed at a clump of superb tree-ferns, which were crowned, at a height of some thirty feet with a sort of halo made of the dainty branches of green velvet and the delicate lacework of the drooping fronds.

"Well, Manoel," said Minha, "it is for me to do the honors of the forest; you are only a stranger in these regions of the Upper Amazon. We are at home here, and you must allow me to do my duty, as mistress of the house."

"Dearest Minha," replied the young man, "you will be none the less mistress of your house in our town of Belem than at the fazenda of Iquitos, and there as here——"

"Now, then," interrupted Benito, "you did not come here to exchange loving speeches, I imagine. Just forget for a few hours that you are engaged."

"Not for an hour—not for an instant!" said Manoel.

"Perhaps you will if Minha orders you?"

"Minha will not order me."

"Who knows?" said Lina, laughing.

"Lina is right," answered Minha, who held out her hand to Manoel. "Try to forget! Forget! my brother requires it. All is broken off! As long as this walk lasts we are not engaged: I am no more than the sister of Benito! You are only my friend!"

"To be sure," said Benito.

"Bravo! bravo! there are only strangers here," said the young mulatto, clapping her hands.

"Strangers who see each other for the first time," added the girl; "who meet, bow to——"

"Mademoiselle!" said Manoel, turning to Minha.

"To whom have I the honor to speak, sir?" said she in the most serious manner possible.

"To Manoel Valdez, who will be glad if your brother will introduce me."

"Oh, away with your nonsense!" cried Benito. "Stupid idea that I had! Be engaged, my friends—be it as much as you like! Be it always!"

"Always!" said Minha, from whom the word escaped so naturally that Lina's peals of laughter redoubled.

A grateful glance from Manoel repaid Minha for the imprudence of her tongue.

"Come along," said Benito, so as to get his sister out of her embarrassment; "if we walk on we shall not talk so much."

"One moment, brother," she said. "You have seen how ready I am to obey you. You wished to oblige Manoel and me to forget each other, so as not to spoil your walk. Very well; and now I am going to ask a sacrifice from you so that you shall not spoil mine. Whether it pleases you or not, Benito, you must promise me to forget——"

"Forget what?"

"That you are a sportsman!"
"What! you forbid me to----"

"I forbid you to fire at any of these charming birds--any of the parrots, caciques, or curucus which are flying
about so happily among the trees! And the same interdiction with regard to the smaller game with which we shall
have to do to-day. If any ounce, jaguar, or such thing comes too near, well----"

"But----" said Benito.

"If not, I will take Manoel's arm, and we shall save or lose ourselves, and you will be obliged to run after us."

"Would you not like me to refuse, eh?" asked Benito, looking at Manoel.

"I think I should!" replied the young man.

"Well then--no!" said Benito; "I do not refuse; I will obey and annoy you. Come on!"

And so the four, followed by the black, struck under the splendid trees, whose thick foliage prevented the sun's
rays from every reaching the soil.

There is nothing more magnificent than this part of the right bank of the Amazon. There, in such picturesque
confusion, so many different trees shoot up that it is possible to count more than a hundred different species in a
square mile. A forester could easily see that no woodman had been there with his hatchet or ax, for the effects of a
clearing are visible for many centuries afterward. If the new trees are even a hundred years old, the general aspect
still differs from what it was originally, for the lianas and other parasitic plants alter, and signs remain which no
native can misunderstand.

The happy group moved then into the tall herbage, across the thickets and under the bushes, chatting and
laughing. In front, when the brambles were too thick, the negro, felling-sword in hand, cleared the way, and put
thousands of birds to flight.

Minha was right to intercede for the little winged world which flew about in the higher foliage, for the finest
representations of tropical ornithology were there to be seen--green parrots and clamorous parakeets, which seemed
to be the natural fruit of these gigantic trees; humming-birds in all their varieties, light-blue and ruby red;
_"tisauras"_ with long scissor-like tails, looking like detached flowers which the wind blew from branch to branch;
blackbirds, with orange plumage bound with brown; golden-edged beccaficos; and _"sabias,"_ black as crows; all
united in a deafening concert of shrieks and whistles. The long beak of the toucan stood out against the golden
clusters of the _"quiriris,"_ and the treepeckers or woodpeckers of Brazil wagged their little heads, speckled all over
with their purple spots. It was truly a scene of enchantment.

But all were silent and went into hiding when above the tops of the trees there grated like a rusty weathercock
the _"alma de gato"_ or "soul of the cat," a kind of light fawn-colored sparrow-hawk. If he proudly hooted,
displaying in the air the long white plumes of his tail, he in his turn meekly took to flight when in the loftier heights
there appeared the _"gaviao,"_ the large white-headed eagle, the terror of the whole winged population of these
woods.

Minha made Manoel admire the natural wonders which could not be found in their simplicity in the more
civilized provinces of the east. He listened to her more with his eyes than his ears, for the cries and the songs of
these thousands of birds were every now and then so penetrating that he was not able to hear what she said. The
noisy laughter of Lina was alone sufficiently shrill to ring out with its joyous note above every kind of clucking,
chirping, hooting, whistling, and cooing.

At the end of an hour they had scarcely gone a mile. As they left the river the trees assumed another aspect, and
the animal life was no longer met with near the ground, but at from sixty to eighty feet above, where troops of
monkeys chased each other along the higher branches. Here and there a few cones of the solar rays shot down into
the underwood. In fact, in these tropical forests light does not seem to be necessary for their existence. The air is
enough for the vegetable growth, whether it be large or small, tree or plant, and all the heat required for the
development of their sap is derived not from the surrounding atmosphere, but from the bosom of the soil itself,
where it is stored up as in an enormous stove.

And on the bromelias, grass plantains, orchids, cacti, and in short all the parasites which formed a little forest
beneath the large one, many marvelous insects were they tempted to pluck as though they had been genuine
blossoms--nestors with blue wings like shimmering watered silk, leilu butterflies reflected with gold and striped with
fringes of green, agrippina moths, ten inches long, with leaves for wings, maribunda bees, like living emeralds set in
sockets of gold, and legions of lampyrons or pyrophorus coleopters, valagumas with breastplates of bronze, and
green elytræ, with yellow light pouring from their eyes, who, when the night comes, illuminate the forest with their
many-colored scintillations.

"What wonders!" repeated the enthusiastic girl.

"You are at home, Minha, or at least you say so," said Benito, "and that is the way you talk of your riches!"

"Sneer away, little brother!" replied Minha; "such beautiful things are only lent to us; is it not so, Manoel? They
come from the hand of the Almighty and belong to the world!"
"Let Benito laugh on, Minha," said Manoel. "He hides it very well, but he is a poet himself when his time comes, and he admires as much as we do all these beauties of nature. Only when his gun is on his arm, good-by to poetry!"

"Then be a poet now," replied the girl.

"I am a poet," said Benito. "Of Nature-enchanting, etc."

We may confess, however, that in forbidding him to use his gun Minha had imposed on him a genuine privation. There was no lack of game in the woods, and several magnificent opportunities he had declined with regret.

In some of the less wooded parts, in places where the breaks were tolerably spacious, they saw several pairs of ostriches, of the species known as "_naudus,_," from four to five feet high, accompanied by their inseparable "_seriemas,_," a sort of turkey, infinitely better from an edible point of view than the huge birds they escort.

"See what that wretched promise costs me," sighed Benito, as, at a gesture from his sister, he replaced under his arm the gun which had instinctively gone up to his shoulder.

"We ought to respect the seriemas," said Manoel, "for they are great destroyers of the snakes."

"Just as we ought to respect the snakes," replied Benito, "because they eat the noxious insects, and just as we ought the insects because they live on smaller insects more offensive still. At that rate we ought to respect everything."

But the instinct of the young sportsman was about to be put to a still more rigorous trial. The woods became of a sudden full of game. Swift stags and graceful roebucks scampered off beneath the bushes, and a well-aimed bullet would assuredly have stopped them. Here and there turkeys showed themselves with their milk and coffee-colored plumage; and peccaries, a sort of wild pig highly appreciated by lovers of venison, and agouties, which are the hares and rabbits of Central America; and tatous belonging to the order of edentates, with their scaly shells of patterns of mosaic.

And truly Benito showed more than virtue, and even genuine heroism, when he came across some tapirs, called "_antas_" in Brazil, diminutives of the elephant, already nearly undiscoverable on the banks of the Upper Amazon and its tributaries, pachyderms so dear to the hunters for their rarity, so appreciated by the gourmands for their meat, superior far to beef, and above all for the protuberance on the nape of the neck, which is a morsel fit for a king.

His gun almost burned his fingers, but faithful to his promise he kept it quiet.

But yet--and he cautioned his sister about this--the gun would go off in spite of him, and probably register a master-stroke in sporting annals, if within range there should come a "_tamandoa assa,_," a kind of large and very curious ant-eater.

Happily the big ant-eater did not show himself, neither did any panthers, leopards, jaguars, guepars, or cougars, called indifferently ounces in South America, and to whom it is not advisable to get too near.

"After all," said Benito, who stopped for an instant, "to walk is very well, but to walk without an object----"

"Without an object!" replied his sister; "but our object is to see, to admire, to visit for the last time these forests of Central America, which we shall not find again in Para, and to bid them a fast farewell."

"Ah! an idea!"

"An idea of Lina's can be no other than a silly one," said Benito, shaking his head.

"It is unkind, brother," said Minha, "to make fun of Lina when she has been thinking how to give our walk the object which you have just regretted it lacks."

"Besides, Mr. Benito, I am sure my idea will please you," replied the mulatto.

"Well, what is it?" asked Minha.

"You see that liana?"

And Lina pointed to a liana of the "_cipos_" kind, twisted round a gigantic sensitive mimosa, whose leaves, light as feathers, shut up at the least disturbance.

"Well?" said Benito.

"I proposed," replied Minha, "that we try to follow that liana to its very end."

"It is an idea, and it is an object!" observed Benito, "to follow this liana, no matter what may be the obstacles, thickets, underwood, rocks, brooks, torrents, to let nothing stop us, not even----"

"Certainly, you are right, brother!" said Minha; "Lina is a trifle absurd."

"Come on, then!" replied her brother; "you say that Lina is absurd so as to say that Benito is absurd to approve of it!"

"Well, both of you are absurd, if that will amuse you," returned Minha. "Let us follow the liana!"

"You are not afraid?" said Manoel.

"Still objections!" shouted Benito.

"Ah, Manoel! you would not speak like that if you were already on your way and Minha was waiting for you at the end."
"I am silent," replied Manoel; "I have no more to say. I obey. Let us follow the liana!"

And off they went as happy as children home for their holidays.

This vegetable might take them far if they determined to follow it to its extremity, like the thread of Ariadne, as far almost as that which the heiress of Minos used to lead her from the labyrinth, and perhaps entangle them more deeply.

It was in fact a creeper of the salses family, one of the cipos known under the name of the red "japicanga," whose length sometimes measures several miles. But, after all, they could leave it when they liked.

The cipo passed from one tree to another without breaking its continuity, sometimes twisting round the trunks, sometimes garlanding the branches, here jumping form a dragon-tree to a rosewood, then from a gigantic chestnut, the "Bertholletia excelsa," to some of the wine palms, "baccabas," whose branches have been appropriately compared by Agassiz to long sticks of coral flecked with green. Here round "tucumas," or ficuses, capriciously twisted like centenarian olive-trees, and of which Brazil had fifty-four varieties; here round the kinds of euphorbias, which produce caoutchouc, "gualtes," noble palm-trees, with slender, graceful, and glossy stems; and cacao-trees, which shoot up of their own accord on the banks of the Amazon and its tributaries, having different melastomas, some with red flowers and others ornamented with panicles of whitish berries.

But the halts! the shouts of cheating! when the happy company thought they had lost their guiding thread! For it was necessary to go back and disentangle it from the knot of parasitic plants.

"There it is!" said Lina, "I see it!"
"You are wrong," replied Minha; "that is not it, that is a liana of another kind."
"No, Lina is right!" said Benito.
"No, Lina is wrong!" Manoel would naturally return.

Hence highly serious, long-continued discussions, in which no one would give in.

Then the black on one side and Benito on the other would rush at the trees and clamber up to the branches encircled by the cipo so as to arrive at the true direction.

Now nothing was assuredly less easy in that jumble of knots, among which twisted the liana in the middle of bromelias, "karatas," armed with their sharp prickles, orchids with rosy flowers and violet lips the size of gloves, and oncidiums more tangled than a skein of worsted between a kitten's paws.

And then when the liana ran down again to the ground the difficulty of picking it out under the mass of lycopods, large-leaved heliconias, rosy-tasseled calliandras, rhipsalas encircling it like the thread on an electric reel, between the knots of the large white ipomas, under the fleshy stems of the vanilla, and in the midst of the shoots and branchlets of the grenadilla and the vine.

And when the cipo was found again what shouts of joy, and how they resumed the walk for an instant interrupted!

For an hour the young people had already been advancing, and nothing had happened to warn them that they were approaching the end.

They shook the liana with vigor, but it would not give, and the birds flew away in hundreds, and the monkeys fled from tree to tree, so as to point out the way.

If a thicket barred the road the felling-sword cut a deep gap, and the group passed in. If it was a high rock, carpeted with verdure, over which the liana twisted like a serpent, they climbed it and passed on.

A large break now appeared. There, in the more open air, which is as necessary to it as the light of the sun, the tree of the tropics, _par excellence_, which, according to Humboldt, "accompanies man in the infancy of his civilization," the great provider of the inhabitant of the torrid zones, a banana-tree, was standing alone. The long festoon of the liana curled round its higher branches, moving away to the other side of the clearing, and disappeared again into the forest.

"Shall we stop soon?" asked Manoel.
"No; a thousand times no!" cried Benito, "not without having reached the end of it!"
"Perhaps," observed Minha, "it will soon be time to think of returning."
"Oh, dearest mistress, let us go on again!" replied Lina.
"On forever!" added Benito.

And they plunged more deeply into the forest, which, becoming clearer, allowed them to advance more easily.

Besides, the cipo bore away to the north, and toward the river. It became less inconvenient to follow, seeing that they approached the right bank, and it would be easy to get back afterward.

A quarter of an hour later they all stopped at the foot of a ravine in front of a small tributary of the Amazon. But a bridge of lianas, made of "bejucos," twined together by their interlacing branches, crossed the stream. The cipo, dividing into two strings, served for a handrail, and passed from one bank to the other.

Benito, all the time in front, had already stepped on the swinging floor of this vegetable bridge.
Manoel wished to keep his sister back.
"Stay--stay, Minha!" he said, "Benito may go further if he likes, but let us remain here."
"No! Come on, come on, dear mistress!" said Lina. "Don't be afraid, the liana is getting thinner; we shall get the better of it, and find out its end!"

And, without hesitation, the young mulatto boldly ventured toward Benito.
"What children they are!" replied Minha. "Come along, Manoel, we must follow."
And they all cleared the bridge, which swayed above the ravine like a swing, and plunged again beneath the mighty trees.

But they had not proceeded for ten minutes along the interminable cipo, in the direction of the river, when they stopped, and this time not without cause.
"Have we got to the end of the liana?" asked Minha.
"No," replied Benito; "but we had better advance with care. Look!" and Benito pointed to the cipo which, lost in the branches of a high ficus, was agitated by violent shakings.
"What causes that?" asked Manoel.
"Perhaps some animal that we had better approach with a little circumspection!"
And Benito, cocking his gun, motioned them to let him go on a bit, and stepped about ten paces to the front.
Manoel, the two girls, and the black remained motionless where they were.
Suddenly Benito raised a shout, and they saw him rush toward a tree; they all ran as well.
Sight the most unforeseen, and little adapted to gratify the eyes!
A man, hanging by the neck, struggled at the end of the liana, which, supple as a cord, had formed into a slipknot, and the shakings came from the jerks into which he still agitated it in the last convulsions of his agony!
Benito threw himself on the unfortunate fellow, and with a cut of his hunting-knife severed the cipo.
The man slipped on to the ground. Manoel leaned over him, to try and recall him to life, if it was not too late.
"Poor man!" murmured Minha.
"Mr. Manoel! Mr. Manoel!" cried Lina. "He breathes again! His heart beats; you must save him."
"True," said Manoel, "but I think it was about time that we came up."
He was about thirty years old, a white, clothed badly enough, much emaciated, and he seemed to have suffered a good deal.

At his feet were an empty flask, thrown on the ground, and a cup and ball in palm wood, of which the ball, made of the head of a tortoise, was tied on with a fiber.
"To hang himself! to hang himself!" repeated Lina, "and young still! What could have driven him to do such a thing?"
But the attempts of Manoel had not been long in bringing the luckless wight to life again, and he opened his eyes and gave an "ahem!" so vigorous and unexpected that Lina, frightened, replied to his cry with another.
"Who are you, my friend?" Benito asked him.
"An ex-hanger-on, as far as I see."
"But your name?"
"Wait a minute and I will recall myself," said he, passing his hand over his forehead. "I am known as Fragoso, at your service; and I am still able to curl and cut your hair, to shave you, and to make you comfortable according to all the rules of my art. I am a barber, so to speak more truly, the most desperate of Figaros."

"And what made you think of----"
"What would you have, my gallant sir?" replied Fragoso, with a smile; "a moment of despair, which I would have duly regretted had the regrets been in another world! But eight hundred leagues of country to traverse, and not a coin in my pouch, was not very comforting! I had lost courage obviously."
To conclude, Fragoso had a good and pleasing figure, and as he recovered it was evident that he was of a lively disposition. He was one of those wandering barbers who travel on the banks of the Upper Amazon, going from village to village, and putting the resources of their art at the service of negroes, negresses, Indians and Indian women, who appreciate them very much.

But poor Fragoso, abandoned and miserable, having eaten nothing for forty hours, astray in the forest, had for an instant lost his head, and we know the rest.
"My friend," said Benito to him, "you will go back with us to the fazenda of Iquitos?"
"With pleasure," replied Fragoso; "you cut me down and I belong to you. I must somehow be dependent."
"Well, dear mistress, don't you think we did well to continue our walk?" asked Lina.
"That I do," returned the girl.
"Never mind," said Benito; "I never thought that we should finish by finding a man at the end of the cipo."
"And, above all, a barber in difficulties, and on the road to hang himself!" replied Fragoso.
The poor fellow, who was now wide awake, was told about what had passed. He warmly thanked Lina for the good idea she had had of following the liana, and they all started on the road to the fazenda, where Fragoso was received in a way that gave him neither wish nor want to try his wretched task again.

CHAPTER VIII. THE JANGADA

The half-mile square of forest was cleared. With the carpenters remained the task of arranging in the form of a raft the many venerable trees which were lying on the strand.

And an easy task it was. Under the direction of Joam Garral the Indians displayed their incomparable ingenuity. In everything connected with house-building or ship-building these natives are, it must be admitted, astonishing workmen. They have only an ax and a saw, and they work on woods so hard that the edge of their tools gets absolutely jagged; yet they square up trunks, shape beams out of enormous stems, and get out of them joists and planking without the aid of any machinery whatever, and, endowed with prodigious natural ability, do all these things easily with their skilled and patient hands.

The trees had not been launched into the Amazon to begin with; Joam Garral was accustomed to proceed in a different way. The whole mass of trunks was symmetrically arranged on a flat part of the bank, which he had already leveled up at the junction of the Nanay with the great river.

There it was that the jangada was to be built; thence it was that the Amazon was to float it when the time came for it to start for its destination.

And here an explanatory note is necessary in regard to the geography of this immense body of water, and more especially as relating to a singular phenomenon which the riverside inhabitants describe from personal observation.

The two rivers which are, perhaps, more extensive than the great artery of Brazil, the Nile and the Missouri-Mississippi, flow one from south to north across the African continent, the other from north to south through North America. They cross districts of many different latitudes, and consequently of many different climates.

The Amazon, on the contrary, is entirely comprised--at least it is from the point where it turns to the east, on the frontiers of Ecuador and Peru--between the second and fourth parallels of south latitude. Hence this immense river system is under the same climatic conditions during the whole of its course.

In these parts there are two distinct seasons during which rain falls. In the north of Brazil the rainy season is in September; in the south it occurs in March. Consequently the right-hand tributaries and the left-hand tributaries bring down their floods at half-yearly intervals, and hence the level of the Amazon, after reaching its maximum in June, gradually falls until October.

This Joam Garral knew by experience, and he intended to profit by the phenomenon to launch the jangada, after having built it in comfort on the river bank. In fact, between the mean and the higher level the height of the Amazon could vary as much as forty feet, and between the mean and the lower level as much as thirty feet. A difference of seventy feet like this gave the fazender all he required.

The building was commenced without delay. Along the huge bank the trunks were got into place according to their sizes and floating power, which of course had to be taken into account, as among these thick and heavy woods there were many whose specific gravity was but little below that of water.

The first layer was entirely composed of trunks laid side by side. A little interval had to be left between them, and they were bound together by transverse beams, which assured the solidity of the whole. _"Piaçaba"_ ropes strapped them together as firmly as any chain cables could have done. This material, which consists of the ramicles of a certain palm-tree growing very abundantly on the river banks, is in universal use in the district. Piaçaba floats, resists immersion, and is cheaply made--very good reasons for causing it to be valuable, and making it even an article of commerce with the Old World.

Above this double row of trunks and beams were disposed the joists and planks which formed the floor of the jangada, and rose about thirty inches above the load water-line. The bulk was enormous, as we must confess when it is considered that the raft measured a thousand feet long and sixty broad, and thus had a superificies of sixty thousand square feet. They were, in fact, about to commit a whole forest to the Amazon.

The work of building was conducted under the immediate direction of Joam Garral. But when that part was finished the question of arrangement was submitted to the discussion of all, including even the gallant Fragoso.

Just a word as to what he was doing in his new situation at the fazenda.

The barber had never been so happy as since the day when he had been received by the hospitable family. Joam Garral had offered to take him to Para, on the road to which he was when the liana, according to his account, had seized him by the neck and brought him up with a round turn. Fragoso had accepted the offer, thanked him from the bottom of his heart, and ever since had sought to make himself useful in a thousand ways. He was a very intelligent fellow--what one might call a "double right-hander"--that is to say, he could do everything, and could do everything
well. As merry as Lina, always singing, and always ready with some good-natured joke, he was not long in being liked by all.

But it was with the young mulatto that he claimed to have contracted the heaviest obligation.

"A famous idea that of yours, Miss Lina," he was constantly saying, "to play at 'following the liana!' It is a capital game even if you do not always find a poor chap of a barber at the end!"

"Quite a chance, Mr. Fragoso," would laughingly reply Lina; "I assure you, you owe me nothing!"

"What! nothing! I owe you my life, and I want it prolonged for a hundred years, and that my recollection of the fact may endure even longer! You see, it is not my trade to be hanged! If I tried my hand at it, it was through necessity. But, on consideration, I would rather die of hunger, and before quite going off I should try a little pasturage with the brutes! As for this liana, it is a lien between us, and so you will see!"

The conversation generally took a joking turn, but at the bottom Fragoso was very grateful to the mulatto for having taken the initiative in his rescue, and Lina was not insensible to the attentions of the brave fellow, who was as straightforward, frank, and good-looking as she was. Their friendship gave rise to many a pleasant, "Ah, ah!" on the part of Benito, old Cybele, and others.

To return to the Jangada. After some discussion it was decided, as the voyage was to be of some months' duration, to make it as complete and comfortable as possible. The Garral family, comprising the father, mother, daughter, Benito, Manoel, and the servants, Cybele and Lina, were to live in a separate house. In addition to these, there were to go forty Indians, forty blacks, Fragoso, and the pilot who was to take charge of the navigation of the raft.

Though the crew was large, it was not more than sufficient for the service on board. To work the jangada along the windings of the river and between the hundreds of islands and islets which lay in its course required fully as many as were taken, for if the current furnished the motive power, it had nothing to do with the steering, and the hundred and sixty arms were no more than were necessary to work the long boathooks by which the giant raft was to be kept in mid-stream.

In the first place, then, in the hinder part of the jangada they built the master's house. It was arranged to contain several bedrooms and a large dining-hall. One of the rooms was destined for Joam and his wife, another for Lina and Cybele near those of their mistresses, and a third room for Benito and Manoel. Minha had a room away from the others, which was not by any means the least comfortably designed.

This, the principal house, was carefully made of weather-boarding, saturated with boiling resin, and thus rendered water-tight throughout. It was capitally lighted with windows on all sides. In front, the entrance-door gave immediate access to the common room. A light veranda, resting on slender bamboos, protected the exterior from the direct action of the solar rays. The whole was painted a light-ocher color, which reflected the heat instead of absorbing it, and kept down the temperature of the interior.

But when the heavy work, so to speak, had been completed, Minha intervened with:

"Father, now your care has inclosed and covered us, you must allow us to arrange our dwelling to please ourselves. The outside belongs to you, the inside to us. Mother and I would like it to be as though our house at the fazenda went with us on the journey, so as to make you fancy that we had never left Iquitos!"

"Do just as you like, Minha," replied Joam Garral, smiling in the sad way he often did.

"That will be nice!"

"I leave everything to your good taste."

"And that will do us honor, father. It ought to, for the sake of the splendid country we are going through—which is yours, by the way, and into which you are to enter after so many years' absence."

"Yes, Minha; yes," replied Joam. "It is rather as if we were returning from exile--voluntary exile! Do your best; I approve beforehand of what you do."

On Minha and Lina, to whom were added of their own free will Manoel on the one side and Fragoso on the other, devolved the care of decorating the inside of the house. With some imagination and a little artistic feeling the result was highly satisfactory.

The best furniture of the fazenda naturally found its place within, as after arriving in Para they could easily return it by one of the _igariteos_. Tables, bamboo easy-chairs, cane sofas, carved wood shelves, everything that constituted the charming furniture of the tropics, was disposed with taste about the floating home. No one is likely to imagine that the walls remained bare. The boards were hidden beneath hangings of most agreeable variety. These hangings were made of valuable bark, that of the _"tuturis,"_ which is raised up in large folds like the brocades and damasks and softest and richest materials of our modern looms. On the floors of the rooms were jaguar skins, with wonderful spots, and thick monkey furs of exquisite fleeciness. Light curtains of the russet silk, produced by the _"sumauma,"_ hung from the windows. The beds, enveloped in mosquito curtains, had their pillows, mattresses, and bolsters filled with that fresh and elastic substance which in the Upper Amazon is yielded by the bombax.
Throughout on the shelves and side-tables were little odds and ends, brought from Rio Janeiro or Belem, those most precious to Minha being such as had come from Manoel. What could be more pleasing in her eyes than the knickknacks given by a loving hand which spoke to her without saying anything?

In a few days the interior was completed, and it looked just like the interior of the fazenda. A stationary house under a lovely clump of trees on the borders of some beautiful river! Until it descended between the banks of the larger stream it would not be out of keeping with the picturesque landscape which stretched away on each side of it.

We may add that the exterior of the house was no less charming than the interior.

In fact, on the outside the young fellows had given free scope to their taste and imagination.

From the basement to the roof it was literally covered with foliage. A confused mass of orchids, bromelias, and climbing plants, all in flower, rooted in boxes of excellent soil hidden beneath masses of verdure. The trunk of some ficus or mimosa was never covered by a more startlingly tropical attire. What whimsical climbers—ruby red and golden yellow, with variegated clusters and tangled twigs—turned over the brackets, under the ridges, on the rafters of the roof, and across the lintels of the doors! They had brought them wholesale from the woods in the neighborhood of the fazenda. A huge liana bound all the parasites together; several times it made the round of the house, clinging on to every angle, encircling every projection, forking, uniting, it everywhere threw out its irregular branchlets, and allowed not a bit of the house to be seen beneath its enormous clusters of bloom.

As a delicate piece of attention, the author of which can be easily recognized, the end of the cipo spread out before the very window of the young mulatto, as though a long arm was forever holding a bouquet of fresh flowers across the blind.

To sum up, it was as charming as could be; and as Yaquita, her daughter, and Lina were content, we need say no more about it.

"It would not take much to make us plant trees on the jangada," said Benito.

"Oh, trees!" ejaculated Minha.

"Why not?" replied Manoel. "Transported on to this solid platform, with some good soil, I am sure they would do well, and we would have no change of climate to fear for them, as the Amazon flows all the time along the same parallel."

"Besides," said Benito, "every day islets of verdure, torn from the banks, go drifting down the river. Do they not pass along with their trees, bushes, thickets, rocks, and fields, to lose themselves in the Atlantic eight hundred leagues away? Why, then, should we not transform our raft into a floating garden?"

"Would you like a forest, miss?" said Fragoso, who stopped at nothing.

"Yes, a forest!" cried the young mulatto; "a forest with its birds and its monkeys----"

"Its snakes, its jaguars!" continued Benito.

"Its Indians, its nomadic tribes," added Manoel, "and even its cannibals!"

"But where are you going to, Fragoso?" said Minha, seeing the active barber making a rush at the bank.

"To look after the forest!" replied Fragoso.

"Useless, my friend," answered the smiling Minha. "Manoel has given me a nosegay and I am quite content. It is true," she added, pointing to the house hidden beneath the flowers, "that he has hidden our house in his betrothal bouquet!"

CHAPTER IX. THE EVENING OF THE FIFTH OF JUNE

WHILE THE master's house was being constructed, Joam Garral was also busied in the arrangement of the outbuildings, comprising the kitchen, and offices in which provisions of all kinds were intended to be stored.

In the first place, there was an important stock of the roots of that little tree, some six or ten feet in height, which yields the manioc, and which form the principal food of the inhabitants of these inter-tropical countries. The root, very much like a long black radish, grows in clumps like potatoes. If it is not poisonous in Africa, it is certain that in South America it contains a more noxious juice, which it is necessary to previously get rid of by pressure. When this result is obtained, the root is reduced to flour, and is then used in many ways, even in the form of tapioca, according to the fancy of the natives.

On board the jangada there was a huge pile of this useful product destined for general consumption.

As for preserved meats, not forgetting a whole flock of sheep, kept in a special stable built in the front, they consisted principally of a quantity of the _"presunto"_ hams of the district, which are of first-class quality; but the guns of the young fellows and of some of the Indians were reckoned on for additional supplies, excellent hunters as they were, to whom there was likely to be no lack of game on the islands and in the forests bordering on the stream. The river was expected to furnish its daily quota; prawns, which ought rather to be called crawfish; _"tambagus,"_ the finest fish in the district, of a flavor superior to that of salmon, to which it is often compared; _"pirarucus"_ with
red scales, as large as sturgeons, which when salted are used in great quantities throughout Brazil; _"candirus,"_ awkward to capture, but good to eat; _"piranhas,"_ or devil-fish, striped with red bands, and thirty inches long; turtles large and small, which are counted by millions, and form so large a part of the food of the natives; some of every one of these things it was hoped would figure in turn on the tables of the master and his men.

And so each day shooting and fishing were to be regularly indulged in.

For beverages they had a good store of the best that country produced; _"caysuma"_ or _"machachera,"_ from the Upper and Lower Amazon, an agreeable liquor of slightly acidulated taste, which is distilled from the boiled root of the sweet manioc; _"beiju,"_ from Brazil, a sort of national brandy, the _"chica"_ of Peru; the _"mazato"_ of the Ucayali, extracted from the boiled fruits of the banana-tree, pressed and fermented; _"guarana,"_ a kind of paste made from the double almond of the _"paulliniasorbilis,"_ a genuine tablet of chocolate so far as its color goes, which is reduced to a fine powder, and with the addition of water yields an excellent drink.

And this was not all. There is in these countries a species of dark violet wine, which is got from the juice of the palm, and the aromatic flavor of this _"assais"_ is greatly appreciated by the Brazilians, and of it there were on board a respectable number of frasques (each holding a little more than half a gallon), which would probably be emptied before they arrived at Para.

The special cellar of the jangada did honor to Benito, who had been appointed its commander-in-chief. Several hundred bottles of sherry, port, and letubal recalled names dear to the earlier conquerors of South America. In addition, the young butler had stored away certain demijohns, holding half a dozen gallons each, of excellent _"tafia,"_ a sugared brandy a trifle more pronounced in taste than the national _"beiju._"

As far as tobacco was concerned, there was none of that coarse kind which usually contents the natives of the Amazonian basin. It all came direct from Villa Bella da Imperatriz—or, in other words, from the district in which is grown the best tobacco in Central America.

The principal habitation, with its annexes—kitchen, offices, and cellars—was placed in the rear—or, let us say, stern of the craft—and formed a part reserved for the Garral family and their personal servants.

In the center the huts for the Indians and the blacks had been erected. The staff were thus placed under the same conditions as at the fazenda of Iquitos, and would always be able to work under the direction of the pilot.

To house the crew a good many huts were required, and these gave to the jangada the appearance of a small village got adrift, and, to tell the truth, it was a better built and better peopled village than many of those on the Upper Amazon.

For the Indians Joam Garral had designed regular cabins—huts without walls, with only light poles supporting the roof of foliage. The air circulated freely throughout these open constructions and swung the hammock suspended in the interior, and the natives, among whom were three or four complete families, with women and children, were lodged as if they were on shore.

The blacks here found their customary sheds. They differed from the cabins by being closed in on their four faces, of which only one gave access to the interior. The Indians, accustomed to live in the open air, free and untrammelled, were not able to accustom themselves to the imprisonment of the _ajoupas,_ which agreed better with the life of the blacks.

In the bow regular warehouses had arisen, containing the goods which Joam Garral was carrying to Belem at the same time as the products of his forests.

There, in vast storerooms, under the direction of Benito, the rich cargo had been placed with as much order as if it had been carefully stowed away in a ship's hold.

In the first place, seven thousand arrobas of caoutchouc, each of about thirty pounds, composed the most precious part of the cargo, for every pound of it was worth from three to four francs. The jangada also took fifty hundredweight of sarsaparilla, a smilax which forms an important branch of foreign trade throughout the Amazon districts, and is getting rarer and rarer along the banks of the river, so that the natives are very careful to spare the stems when they gather them. Tonquin bans, known in Brazil under the name of _"cumars,"_ and used in the manufacture of certain essential oils; sassafras, from which is extracted a precious balsam for wounds; bales of dyeing plants, cases of several gums, and a quantity of precious woods, completed a well-adapted cargo for lucrative and easy sale in the provinces of Para.

Some may feel astonished that the number of Indians and negroes embarked were only sufficient to work the raft, and that a larger number were not taken in case of an attack by the riverside Indians.

Such would have been useless. The natives of Central America are not to be feared in the least, and the times are quite changed since it was necessary to provide against their aggressions. The Indians along the river belong to peaceable tribes, and the fiercest of them have retired before the advancing civilization, and drawn further and further away from the river and its tributaries. Negro deserters, escaped from the penal colonies of Brazil, England, Holland, or France, are alone to be feared. But there are only a small number of these fugitives, they only move in
isolated groups across the savannahs or the woods, and the jangada was, in a measure, secured from any attack on the parts of the backwoodsmen.

On the other hand, there were a number of settlements on the river--towns, villages, and missions. The immense stream no longer traverses a desert, but a basin which is being colonized day by day. Danger was not taken into consideration. There were no precautions against attacks.

To conclude our description of the jangada, we have only to speak of one or two erections of different kinds which gave it a very picturesque aspect.

In the bow was the cabin of the pilot--we say in the bow, and not at the stern, where the helmsman is generally found. In navigating under such circumstances a rudder is of no use. Long oars have no effect on a raft of such dimensions, even when worked with a hundred sturdy arms. It was from the sides, by means of long boat-hooks or props thrust against the bed of the stream, that the jangada was kept in the current, and had its direction altered when going astray. By this means they could range alongside either bank, if they wished for any reason to come to a halt. Three or four ubas, and two pirogues, with the necessary rigging, were carried on board, and afforded easy communications with the banks. The pilot had to look after the channels of the river, the deviations of the current, the eddies which it was necessary to avoid, the creeks or bays which afforded favorable anchorage, and to do this he had to be in the bow.

If the pilot was the material director of this immense machine--for can we not justly call it so?--another personage was its spiritual director; this was Padre Passanha, who had charge of the mission at Iquitos.

A religious family, like that of Joam Garral's, had availed themselves enthusiastically of this occasion of taking him with them.

Padre Passanha, then aged seventy, was a man of great worth, full of evangelical fervor, charitable and good, and in countries where the representatives of religion are not always examples of the virtues, he stood out as the accomplished type of those great missionaries who have done so much for civilization in the interior of the most savage regions of the world.

For fifty years Padre Passanha had lived at Iquitos, in the mission of which he was the chief. He was loved by all, and worthy so. The Garral family held him in great esteem; it was he who had married the daughter of Farmer Magalhaës to the clerk who had been received at the fazenda. He had known the children from birth; he had baptized them, educated them, and hoped to give each of them the nuptial blessing.

The age of the padre did not allow of his exercising his important ministry any longer. The horn of retreat for him had sounded; he was about to be replaced at Iquitos by a younger missionary, and he was preparing to return to Para, to end his days in one of those convents which are reserved for the old servants of God.

What better occasion could offer than that of descending the river with the family which was as his own? They had proposed it to him, and he had accepted, and when arrived at Belem he was to marry the young couple, Minha and Manoel.

But if Padre Passanha during the course of the voyage was to take his meals with the family, Joam Garral desired to build for him a dwelling apart, and heaven knows what care Yaquita and her daughter took to make him comfortable! Assuredly the good old priest had never been so lodged in his modest parsonage!

The parsonage was not enough for Padre Passanha; he ought to have a chapel.

The chapel then was built in the center of the jangada, and a little bell surmounted it.

It was small enough, undoubtedly, and it could not hold the whole of the crew, but it was richly decorated, and if Joam Garral found his own house on the raft, Padre Passanha had no cause to regret the poverty-stricken church of Iquitos.

Such was the wonderful structure which was going down the Amazon. It was then on the bank waiting till the flood came to carry it away. From the observation and calculation of the rising it would seem as though there was not much longer to wait.

All was ready to date, the 5th of June.

The pilot arrived the evening before. He was a man about fifty, well up in his profession, but rather fond of drink. Such as he was, Joam Garral in large matters at different times had employed him to take his rafts to Belem, and he had never had cause to repent it.

It is as well to add that Araujo--that was his name--never saw better than when he had imbibed a few glasses of tafia; and he never did any work at all without a certain demijohn of that liquor, to which he paid frequent court.

The rise of the flood had clearly manifested itself for several days. From minute to minute the level of the river rose, and during the twenty-four hours which preceded the maximum the waters covered the bank on which the raft rested, but did not lift the raft.

As soon as the movement was assured, and there could be no error as to the height to which the flood would rise, all those interested in the undertaking were seized with no little excitement. For if through some inexplicable cause
the waters of the Amazon did not rise sufficiently to flood the jangada, it would all have to be built over again. But as the fall of the river would be very rapid it would take long months before similar conditions recurred.

On the 5th of June, toward the evening, the future passengers of the jangada were collected on a plateau which was about a hundred feet above the bank, and waited for the hour with an anxiety quite intelligible.

There were Yaquita, her daughter, Manoel Valdez, Padre Passanha, Benito, Lina, Fragoso, Cybele, and some of the servants, Indian or negro, of the fazenda.

Fragoso could not keep himself still; he went and he came, he ran down the bank and ran up the plateau, he noted the points of the river gauge, and shouted "Hurrah!" as the water crept up.

"It will swim, it will swim!" he shouted. "The raft which is to take us to Belem! It will float if all the cataracts of the sky have to open to flood the Amazon!"

Joam Garral was on the raft with the pilot and some of the crew. It was for him to take all the necessary measures at the critical moment. The jangada was moored to the bank with solid cables, so that it could not be carried away by the current when it floated off.

Quite a tribe from one hundred and fifty to two hundred Indians, without counting the population of the village, had come to assist at the interesting spectacle.

They were all keenly on the watch, and silence reigned over the impressionable crowd.

Toward five o'clock in the evening the water had reached a level higher than that of the night before--by more than a foot--and the bank had already entirely disappeared beneath the liquid covering.

A certain groaning arose among the planks of the enormous structure, but there was still wanting a few inches before it was quite lifted and detached from the ground.

For an hour the groanings increased. The joists grated on all sides. A struggle was going on in which little by little the trunks were being dragged from their sandy bed.

Toward half-past six cries of joy arose. The jangada floated at last, and the current took it toward the middle of the river, but, in obedience to the cables, it quietly took up its position near the bank at the moment that Padre Passanha gave it his blessing, as if it were a vessel launched into the sea whose destinies are in the hands of the Most High!

CHAPTER X. FROM IQUITOS TO PEVAS

ON THE 6th of June, the very next day, Joam Garral and his people bade good-by to the superintendent and the Indians and negroes who were to stay behind at the fazenda. At six o'clock in the morning the jangada received all its passengers, or rather inhabitants, and each of them took possession of his cabin, or perhaps we had better say his house.

The moment of departure had come. Araujo, the pilot, got into his place at the bow, and the crew, armed with their long poles, went to their proper quarters.

Joam Garral, assisted by Benito and Manoel, superintended the unmooring.

At the command of the pilot the ropes were eased off, and the poles applied to the bank so as to give the jangada a start. The current was not long in seizing it, and coasting the left bank, the islands of Iquitos and Parianta were passed on the right.

The voyage had commenced--where would it finish? In Para, at Belem, eight hundred leagues from this little Peruvian village, if nothing happened to modify the route. How would it finish? That was the secret of the future.

The weather was magnificent. A pleasant _"pampero"_ tempered the ardor of the sun--one of those winds which in June or July come from off the Cordilleras, many hundred leagues away, after having swept across the huge plain of the Sacramento. Had the raft been provided with masts and sails she would have felt the effects of the breeze, and her speed would have been greater; but owing to the sinuosities of the river and its abrupt changes, which they were bound to follow, they had had to renounce such assistance.

In a flat district like that through which the Amazon flows, which is almost a boundless plain, the gradient of the river bed is scarcely perceptible. It has been calculated that between Tabatinga on the Brazilian frontier, and the source of this huge body of water, the difference of level does not exceed a decimeter in each league. There is no other river in the world whose inclination is so slight.

It follows from this that the average speed of the current cannot be estimated at more than two leagues in twenty-four hours, and sometimes, while the droughts are on, it is even less. However, during the period of the floods it has been known to increase to between thirty and forty kilometers.

Happily, it was under these latter conditions that the jangada was to proceed; but, cumbersome in its movements, it could not keep up to the speed of the current which ran past it. There are also to be taken into account the stoppages occasioned by the bends in the river, the numerous islands which had to be rounded, the shoals which had to be
avoided, and the hours of halting, which were necessarily lost when the night was too dark to advance securely, so that we cannot allow more than twenty-five kilometers for each twenty-four hours.

In addition, the surface of the water is far from being completely clear. Trees still green, vegetable remains, islets of plants constantly torn from the banks, formed quite a flotilla of fragments carried on by the currents, and were so many obstacles to speedy navigation.

The mouth of the Nanay was soon passed, and lost to sight behind a point on the left bank, which, with its carpet of russet grasses tinted by the sun, formed a ruddy relief to the green forests on the horizon.

The jangada took the center of the stream between the numerous picturesque islands, of which there are a dozen between Iquitos and Pucalpapa.

Araujo, who did not forget to clear his vision and his memory by an occasional application to his demijohn, maneuvered very ably when passing through this archipelago. At his word of command fifty poles from each side of the raft were raised in the air, and struck the water with an automatic movement very curious to behold.

While this was going on, Yaquita, aided by Lina and Cybele, was getting everything in order, and the Indian cooks were preparing the breakfast.

As for the two young fellows and Minha, they were walking up and down in company with Padre Passanha, and from time to time the lady stopped and watered the plants which were placed about the base of the dwelling-house.

"Well, padre," said Benito, "do you know a more agreeable way of traveling?"

"No, my dear boy," replied the padre; "it is truly traveling with all one's belongings."

"And without any fatigue," added Manoel; "we might do hundreds of thousands of miles in this way."

"And," said Minha, "you do not repent having taken passage with us? Does it not seem to you as if we were afloat on an island drifted quietly away from the bed of the river with its prairies and its trees? Only----"

"Only?" repeated the padre.

"Only we have made the island with our own hands; it belongs to us, and I prefer it to all the islands of the Amazon. I have a right to be proud of it."

"Yes, my daughter; and I absolve you from your pride. Besides, I am not allowed to scold you in the presence of Manoel!"

"But, on the other hand," replied she, gayly, "you should teach Manoel to scold me when I deserve it. He is a great deal too indulgent to my little self."

"Well, then, dear Minha," said Manoel, "I shall profit by that permission to remind you----"

"Of what?"

"That you were very busy in the library at the fazenda, and that you promised to make me very learned about everything connected with the Upper Amazon. We know very little about it in Para, and here we have been passing several islands and you have not even told me their names!"

"What is the good of that?" said she.

"Yes; what is the good of it?" repeated Benito. "What can be the use of remembering the hundreds of names in the 'Tupi' dialect with which these islands are dressed out? It is enough to know them. The Americans are much more practical with their Mississippi islands; they number them----"

"As they number the avenues and streets of their towns," replied Manoel. "Frankly, I don't care much for that numerical system; it conveys nothing to the imagination--Sixty-fourth Island or Sixty-fifth Island, any more than Sixth Street or Third Avenue. Don't you agree with me, Minha?"

"Yes, Manoel; though I am of somewhat the same way of thinking as my brother. But even if we do not know their names, the islands of our great river are truly splendid! See how they rest under the shadows of those gigantic palm-trees with their drooping leaves! And the girdle of reeds which encircles them through which a pirogue can with difficulty make its way! And the mangrove trees, whose fantastic roots buttress them to the bank like the claws of some gigantic crab! Yes, the islands are beautiful, but, beautiful as they are, they cannot equal the one we have made our own!"

"My little Minha is enthusiastic to-day," said the padre.

"Ah, padre! I am so happy to see everybody happy around me!"

At this moment the voice of Yaquita was heard calling Minha into the house.

The young girl smilingly ran off.

"You will have an amiable companion," said the padre. "All the joy of the house goes away with you, my friend."

"Brave little sister!" said Benito, "we shall miss her greatly, and the padre is right. However, if you do not marry her, Manoel--there is still time--she will stay with us."

"She will stay with you, Benito," replied Manoel. "Believe me, I have a presentiment that we shall all be reunited!"
The first day passed capitally; breakfast, dinner, siesta, walks, all took place as if Joam Garral and his people were still in the comfortable fazenda of Iquitos.

During these twenty-four hours the mouths of the rivers Bacali, Chochio, Pucalppa, on the left of the stream, and those of the rivers Itinicari, Maniti, Moyoc, Tucuya, and the islands of this name on the right, were passed without accident. The night, lighted by the moon, allowed them to save a halt, and the giant raft glided peacefully on along the surface of the Amazon.

On the morrow, the 7th of June, the jangada breasted the banks of the village of Pucalppa, named also New Oran. Old Oran, situated fifteen leagues down stream on the same left bank of the river, is almost abandoned for the new settlement, whose population consists of Indians belonging to the Mayoruna and Orejone tribes. Nothing can be more picturesque than this village with its ruddy-colored banks, its unfinished church, its cottages, whose chimneys are hidden amid the palms, and its two or three ubas half-stranded on the shore.

During the whole of the 7th of June the jangada continued to follow the left bank of the river, passing several unknown tributaries of no importance. For a moment there was a chance of her grounding on the easterly shore of the island of Sinicure; but the pilot, well served by the crew, ward off the danger and remained in the flow of the stream.

In the evening they arrived alongside a narrow island, called Napo Island, from the name of the river which here comes in from the north-northwest, and mingles its waters with those of the Amazon through a mouth about eight hundred yards across, after having watered the territories of the Coto and Orejone Indians.

It was on the morning of the 7th of June that the jangada was abreast the little island of Mango, which causes the Napo to split into two streams before falling into the Amazon.

Several years later a French traveler, Paul Marcoy, went out to examine the color of the waters of this tributary, which has been graphically compared to the cloudy greenish opal of absinthe. At the same time he corrected some of the measurements of La Condamine. But then the mouth of the Napo was sensibly increased by the floods and it was with a good deal of rapidity that its current, coming from the eastern slopes of Cotopaxi, hurried fiercely to mingle itself with the tawny waters of the Amazon.

A few Indians had wandered to the mouth of this river. They were robust in build, of tall stature, with shaggy hair, and had their noses pierced with a rod of palm, and the lobes of their ears lengthened to their shoulders by the weight of heavy rings of precious wood. Some women were with them. None of them showed any intention of coming on board. It is asserted that these natives are cannibals; but if that is true—and it is said of many of the riverine tribes—there must have been more evidence for the cannibalism than we get to-day.

Some hours later the village of Bella Vista, situated on a somewhat lower bank, appeared, with its cluster of magnificent trees, towering above a few huts roofed with straw, over which there drooped the large leaves of some medium-sized banana-trees, like the waters overflowing from a tazza.

Then the pilot, so as to follow a better current, which turned off from the bank, directed the raft toward the right side of the river, which he had not yet approached. The maneuver was not accomplished without certain difficulties, which were successfully overcome after a good many resorts to the demijohn.

This allowed them to pass in passing some of those numerous lagoons with black waters, which are distributed along the course of the Amazon, and which often have no communication with the river. One of these, bearing the name of the Lagoon of Oran, is of fair size, and receives the water by a large strait. In the middle of the stream are scattered several islands and two or three islets curiously grouped; and on the opposite bank Benito recognized the site of the ancient Oran, of which they could only see a few uncertain traces.

During two days the jangada traveled sometimes under the left bank, sometimes under the right, according to the condition of the current, without giving the least sign of grounding.

The passengers had already become used to this new life. Joam Garral, leaving to his son everything that referred to the commercial side of the expedition, kept himself principally to his room, thinking and writing. What he was writing about he told to nobody, not even Yaquita, and it seemed to have already assumed the importance of a veritable essay.

Benito, all observation, chatted with the pilot and acted as manager. Yaquita, her daughter, and Manoel, nearly always formed a group apart, discussing their future projects just as they had walked and done in the park of the fazenda. The life was, in fact, the same. Not quite, perhaps, to Benito, who had not yet found occasion to participate in the pleasures of the chase. If, however, the forests of Iquitos failed him with their wild beasts, agoutis, peccaries, and cabiais, the birds flew in flocks from the banks of the river and fearlessly perched on the jangada. When they were of such quality as to figure fairly on the table, Benito shot them; and, in the interest of all, his sister raised no objection; but if he came across any gray or yellow herons, or red or white ibises, which haunt the sides, he spared them through love for Minha. One single species of grebe, which is uneatable, found no grace in the eyes of the young merchant; this was the _"caiarara,"_ as quick to dive as to swim or fly; a bird with a disagreeable cry, but
whose down bears a high price in the different markets of the Amazonian basin.

At length, after having passed the village of Omaguas and the mouth of the Ambiacu, the jangada arrived at Pevas on the evening of the 11th of June, and was moored to the bank.

As it was to remain here for some hours before nightfall, Benito disembarked, taking with him the ever-ready Fragosso, and the two sportsmen started off to beat the thickets in the environs of the little place. An agouti and a cabai, not to mention a dozen partridges, enriched the larder after this fortunate excursion. At Pevas, where there is a population of two hundred and sixty inhabitants, Benito would perhaps have done some trade with the lay brothers of the mission, who are at the same time wholesale merchants, but these had just sent away some bales of sarsaparilla and arrobas of caoutchouc toward the Lower Amazon, and their stores were empty.

The jangada departed at daybreak, and passed the little archipelago of the Iatio and Cochiquinas islands, after having left the village of the latter name on the right. Several mouths of smaller unnamed affluents showed themselves on the right of the river through the spaces between the islands.

Many natives, with shaved heads, tattooed cheeks and foreheads, carrying plates of metal in the lobes of their ears, noses, and lower lips, appeared for an instant on the shore. They were armed with arrows and blow tubes, but made no use of them, and did not even attempt to communicate with the jangada.

CHAPTER XI. FROM PEVAS TO THE FRONTIER

DURING THE FEW days which followed nothing occurred worthy of note. The nights were so fine that the long raft went on its way with the stream without even a halt. The two picturesque banks of the river seemed to change like the panoramas of the theaters which unroll from one wing to another. By a kind of optical illusion it appeared as though the raft was motionless between two moving pathways.

Benito had no shooting on the banks, for no halt was made, but game was very advantageously replaced by the results of the fishing.

A great variety of excellent fish were taken—"pacos," "surubis," "gamitanas," of exquisite flavor, and several of those large rays called "duridaris," with rose-colored stomachs and black backs armed with highly poisonous darts. There were also collected by thousands those "candirus," a kind of small silurus, of which many are microscopic, and which so frequently make a pin-cushion of the calves of the bather when he imprudently ventures into their haunts.

The rich waters of the Amazon were also frequented by many other aquatic animals, which escorted the jangada through its waves for whole hours together.

There were the gigantic "pria-rucus," ten and twelve feet long, cuirassed with large scales with scarlet borders, whose flesh was not much appreciated by the natives. Neither did they care to capture many of the graceful dolphins which played about in hundreds, striking with their tails the planks of the raft, gamboling at the bow and stern, and making the water alive with colored reflections and spurs of spray, which the refracted light converted into so many rainbows.

On the 16th of June the jangada, after fortunately clearing several shallows in approaching the banks, arrived near the large island of San Pablo, and the following evening she stopped at the village of Moromoros, which is situated on the left side of the Amazon. Twenty-four hours afterward, passing the mouths of the Atacoari or Cocha— or rather the "furo," or canal, which communicates with the lake of Cabello-Cocha on the right bank—she put in at the rising ground of the mission of Cocha. This was the country of the Marahua Indians, whose long floating hair, and mouths opening in the middle of a kind of fan made of the spines of palm-trees, six inches long, give them a cat-like look—and their endeavor being, according to Paul Marcoy, to resemble the tiger, whose boldness, strength, and cunning they admire above everything. Several women came with these Marahuas, smoking cigars, but holding the lighted ends in their teeth. All of them, like the king of the Amazonian forests, go about almost naked.

The mission of Cocha was then in charge of a Franciscan monk, who was anxious to visit Padre Passanha. Joam Garral received him with a warm welcome, and offered him a seat at the dinner-table.

On that day was given a dinner which did honor to the Indian cook. The traditional soup of fragrant herbs; cake, so often made to replace bread in Brazil, composed of the flour of the manioc thoroughly impregnated with the gravy of meat and tomato jelly; poultry with rice, swimming in a sharp sauce made of vinegar and _"malagueta;"_ a dish of spiced herbs, and cold cake sprinkled with cinnamon, formed enough to tempt a poor monk reduced to the ordinary meager fare of his parish. They tried all they could to detain him, and Yaqita and her daughter did their utmost in persuasion. But the Franciscan had to visit on that evening an Indian who was lying ill at Cocha, and he heartily thanked the hospitable family and departed, not without taking a few presents, which would be well received by the neophytes of the mission.

For two days Araujo was very busy. The bed of the river gradually enlarged, but the islands became more
numerous, and the current, embarrassed by these obstacles, increased in strength. Great care was necessary in passing between the islands of Cabello-Cocha, Tarapote, and Cacao. Many stoppages had to be made, and occasionally they were obliged to pole off the jangada, which now and then threatened to run aground. Every one assisted in the work, and it was under these difficult circumstances that, on the evening of the 20th of June, they found themselves at Nuestra-Senora-di-Loreto.

Loreto is the last Peruvian town situated on the left bank of the river before arriving at the Brazilian frontier. It is only a little village, composed of about twenty houses, grouped on a slightly undulating bank, formed of ochrous earth and clay.

It was in 1770 that this mission was founded by the Jesuit missionaries. The Ticuma Indians, who inhabit the territories on the north of the river, are natives with ruddy skins, bushy hair, and striped designs on their faces, making them look like the lacquer on a Chinese table. Both men and women are simply clothed, with cotton bands bound round their thighs and stomachs. They are now not more than two hundred in number, and on the banks of the Atacoari are found the last traces of a nation which was formerly so powerful under its famous chiefs.

At Loreto there also live a few Peruvian soldiers and two or three Portuguese merchants, trading in cotton stuffs, salt fish, and sarsparilla.

Benito went ashore, to buy, if possible, a few bales of this smilax, which is always so much in demand in the markets of the Amazon. Joam Garral, occupied all the time in the work which gave him not a moment's rest, did not stir. Yaquita, her daughter, and Manoel also remained on board. The mosquitoes of Loreto have a deserved reputation for driving away such visitors as do not care to leave much of their blood with the redoubtable diptera.

Manoel had a few appropriate words to say about these insects, and they were not of a nature to encourage an inclination to brave their stings.

"They say that all the new species which infest the banks of the Amazon collect at the village of Loreto. I believe it, but do not wish to confirm it. There, Minha, you can take your choice between the gray mosquito, the hairy mosquito, the white-clawed mosquito, the dwarf mosquito, the trumpeter, the little fifer, the urtiquis, the harlequin, the big black, and the red of the woods; or rather they make take their choice of you for a little repast, and you will come back hardly recognizable! I fancy these bloodthirsty diptera guard the Brazilian frontier considerably better than the poverty-stricken soldiers we see on the bank."

"But if everything is of use in nature," asked Minha, "what is the use of mosquitoes?"

"They minister to the happiness of entomologists," replied Manoel; "and I should be much embarrassed to find a better explanation."

What Manoel had said of the Loreto mosquitoes was only too true. When Benito had finished his business and returned on board, his face and hands were tattooed with thousands of red points, without counting some chigoes, which, in spite of the leather of his boots, had introduced themselves beneath his toes.

"Let us set off this very instant," said Benito, "or these wretched insects will invade us, and the jangada will become uninhabitable!"

"And we shall take them into Para," said Manoel, "where there are already quite enough for its own needs."

And so, in order not to pass even the night near the banks, the jangada pushed off into the stream.

On leaving Loreto the Amazon turns slightly toward the southwest, between the islands of Arava, Cuyari, and Uruoteca. The jangada then glided along the black waters of the Cajaru, as they mingled with the white stream of the Amazon. After having passed this tributary on the left, it peacefully arrived during the evening of the 23d of June alongside the large island of Jahuma.

The setting of the sun on a clear horizon, free from all haze, announced one of those beautiful tropical nights which are unknown in the temperate zones. A light breeze freshened the air; the moon arose in the constellated depths of the sky, and for several hours took the place of the twilight which is absent from these latitudes. But even during this period the stars shone with unequaled purity. The immense plain seemed to stretch into the infinite like a sea, and at the extremity of the axis, which measures more than two hundred thousand millions of leagues, there appeared on the north the single diamond of the pole star, on the south the four brilliants of the Southern Cross.

The trees on the left bank and on the island of Jahuma stood up in sharp black outline. There were recognizable in the undecided _silhouettes_ the trunks, or rather columns, of _“copahus,”_ which spread out in umbrellas, groups of _“sandis,”_ from which is extracted the thick and sugared milk, intoxicating as wine itself, and _“vignaticos”_ eighty feet high, whose summits shake at the passage of the lightest currents of air. "What a magnificent sermon are these forests of the Amazon!" has been justly said. Yes; and we might add, "What a magnificent hymn there is in the nights of the tropics!"

The birds were giving forth their last evening notes--_“bentivis,”_ who hang their nests on the bank-side reeds; _“niambus,”_ a kind of partridge, whose song is composed of four notes, in perfect accord; _“kamichis,”_ with their plaintive melody; kingfishers, whose call responds like a signal to the last cry of their congeners: _“canindes,”_ with
their sonorous trumpets; and red macaws, who fold their wings in the foliage of the _"jaquetibas,"_ when night comes on to dim their glowing colors.

On the jangada every one was at his post, in the attitude of repose. The pilot alone, standing in the bow, showed his tall stature, scarcely defined in the earlier shadows. The watch, with his long pole on his shoulder, reminded one of an encampment of Tartar horsemen. The Brazilian flag hung from the top of the staff in the bow, and the breeze was scarcely strong enough to lift the bunting.

At eight o'clock the three first tinklings of the Angelus escaped from the bell of the little chapel. The three tinklings of the second and third verses sounded in their turn, and the salutation was completed in the series of more rapid strokes of the little bell.

However, the family after this July day remained sitting under the veranda to breathe the fresh air from the open. It had been so each evening, and while Joam Garral, always silent, was contented to listen, the young people gayly chatted away till bedtime.

"Ah! our splendid river! our magnificent Amazon!" exclaimed the young girl, whose enthusiasm for the immense stream never failed.

"Unequaled river, in very truth," said Manoel; "and I do not understand all its sublime beauties. We are going down it, however, like Orellana and La Condamine did so many centuries ago, and I am not at all surprised at their marvelous descriptions."

"A little fabulous," replied Benito.

"Now, brother," said Minha seriously, "say no evil of our Amazon."

"To remind you that it has its legends, my sister, is to say no ill of it."

"Yes, that is true; and it has some marvelous ones," replied Minha.

"What legends?" asked Manoel. "I dare avow that they have not yet found their way into Para--or rather that, for my part, I am not acquainted with them."

"What, then do you learn in the Belem colleges?" laughingly asked Minha.

"I begin to perceive that they teach us nothing," replied Manoel.

"What, sir!" replied Minha, with a pleasant seriousness, "you do not know, among other fables, that an enormous reptile called the _"minhocao,"_ sometimes visits the Amazon, and that the waters of the river rise or fall according as this serpent plunges in or quits them, so gigantic is he?"

"But have you ever seen this phenomenal minhocao?"

"Alas, no!" replied Lina.

"What a pity!" Fragoso thought it proper to add.

"And the 'Mae d'Aqua,'" continued the girl--"that proud and redoubtable woman whose look fascinates and drags beneath the waters of the river the imprudent ones who gaze on her."

"Oh, as for the 'Mae d'Aqua,' she exists!" cried the naïve Lina; "they say that she still walks on the banks, but disappears like a water sprite as soon as you approach her."

"Very well, Lina," said Benito; "the first time you see her just let me know."

"So that she may seize you and take you to the bottom of the river? Never, Mr. Benito!"

"She believes it!" shouted Minha.

"There are people who believe in the trunk of Manaos," said Fragoso, always ready to intervene on behalf of Lina.

"The 'trunk of Manaos'?" asked Manoel. "What about the trunk of Manaos?"

"Mr. Manoel," answered Fragoso, with comic gravity, "it appears that there is--or rather formerly was--a trunk of _"turuma,"_ which every year at the same time descended the Rio Negro, stopping several days at Manaos, and going on into Para, halting at every port, where the natives ornamented it with little flags. Arrived at Belem, it came to a halt, turned back on its road, remounted the Amazon to the Rio Negro, and returned to the forest from which it had mysteriously started. One day somebody tried to drag it ashore, but the river rose in anger, and the attempt had to be given up. And on another occasion the captain of a ship harpooned it and tried to tow it along. This time again the river, in anger, broke off the ropes, and the trunk mysteriously escaped."

"What became of it?" asked the mulatto.

"It appears that on its last voyage, Miss Lina," replied Fragoso, "it mistook the way, and instead of going up the Negro it continued in the Amazon, and it has never been seen again."

"Oh, if we could only meet it!" said Lina.

"If we meet it," answered Benito, "we will put you on it! It will take you back to the mysterious forest, and you will likewise pass into the state of a legendary mind!"

"And why not?" asked the mulatto.

"So much for your legends," said Manoel; "and I think your river is worthy of them. But it has also its histories,
which are worth something more. I know one, and if I were not afraid of grieving you--for it is a very sad one--I would relate it."

"Oh! tell it, by all means, Mr. Manoel," exclaimed Lina; "I like stories which make you cry!"

"What, do you cry, Lina?" said Benito.

"Yes, Mr. Benito; but I cry when laughing."

"Oh, well! let us save it, Manoel!"

"It is the history of a Frenchwoman whose sorrows rendered these banks memorable in the eighteenth century."

"We are listening," said Minha.

"Here goes, then," said Manoel. "In 1741, at the time of the expedition of the two Frenchmen, Bouguer and La Condamine, who were sent to measure a terrestrial degree on the equator, they were accompanied by a very distinguished astronomer, Godin des Odonais. Godin des Odonais set out then, but he did not set out alone, for the New World; he took with him his young wife, his children, his father-in-law, and his brother-in-law. The travelers arrived at Quito in good health. There commenced a series of misfortunes for Madame Odonais; in a few months she lost some of her children. When Godin des Odonais had completed his work, toward the end of the year 1759, he left Quito and started for Cayenne. Once arrived in this town he wanted his family to come to him, but war had been declared, and he was obliged to ask the Portuguese government for permission for a free passage for Madame Odonais and her people. What do you think? Many years passed before the permission could be given. In 1765 Godin des Odonais, maddened by the delay, resolved to ascend the Amazon in search of his wife at Quito; but at the moment of his departure a sudden illness stopped him, and he could not carry out his intention. However, his application had not been useless, and Madame des Odonais learned at last that the king of Portugal had given the necessary permission, and prepared to embark and descend the river to her husband. At the same time an escort was ordered to be ready in the missions of the Upper Amazon. Madame des Odonais was a woman of great courage, as you will see presently; she never hesitated, and notwithstanding the dangers of such a voyage across the continent, she started."

"It was her duty to her husband, Manoel," said Yaquita, "and I would have done the same."

"Madame des Odonais," continued Manoel, "came to Rio Bamba, at the south of Quito, bringing her brother-in-law, her children, and a French doctor. Their endeavor was to reach the missions on the Brazilian frontier, where they hoped to find a ship and the escort. The voyage at first was favorable; it was made down the tributaries of the Amazon in a canoe. The difficulties, however, gradually increased with the dangers and fatigues of a country decimated by the smallpox. Of several guides who offered their services, the most part disappeared after a few days; one of them, the last who remained faithful to the travelers, was drowned in the Bobonasa, in endeavoring to help the French doctor. At length the canoe, damaged by rocks and floating trees, became useless. It was therefore necessary to get on shore, and there at the edge of the impenetrable forest they built a few huts of foliage. The doctor offered to go on in front with a negro who had never wished to leave Madame des Odonais. The two went off; they waited for them several days, but in vain. They never returned.

"In the meantime the victuals were getting exhausted. The forsaken ones in vain endeavored to descend the Bobonasa on a raft. They had to again take to the forest, and make their way on foot through the almost impenetrable undergrowth. The fatigues were too much for the poor folks! They died off one by one in spite of the cares of the noble Frenchwoman. At the end of a few days children, relations, and servants, were all dead!"

"What an unfortunate woman!" said Lina.

"Madame des Odonais alone remained," continued Manoel. "There she was, at a thousand leagues from the ocean which she was trying to reach! It was no longer a mother who continued her journey toward the river--the mother had lost her children; she had buried them with her own hands! It was a wife who wished to see her husband once again! She traveled night and day, and at length regained the Bobonasa. She was there received by some kind-hearted Indians, who took her to the missions, where the escort was waiting. But she arrived alone, and behind her the stages of the route were marked with graves! Madame des Odonais reached Loreto, where we were a few days back. From this Peruvian village she descended the Amazon, as we are doing at this moment, and at length she rejoined her husband after a separation of nineteen years."

"Poor lady!" said Minha.

"Above all, poor mother!" answered Yaquita.

At this moment Araujo, the pilot, came afg and said:

"Joam Garral, we are off the Ronde Island. We are passing the frontier!"

"The frontier!" replied Joam.

And rising, he went to the side of the jangada, and looked long and earnestly at the Ronde Island, with the waves breaking up against it. Then his hand sought his forehead, as if to rid himself of some remembrance.

"The frontier!" murmured he, bowing his head by an involuntary movement.
CHAPTER XII. FRAGOSO AT WORK

"BRAZÁ" (burning embers) is a word found in the Spanish language as far back as the twelfth century. It has been used to make the word "brazil," as descriptive of certain woods which yield a reddish dye. From this has come the name "Brazil," given to that vast district of South America which is crossed by the equator, and in which these products are so frequently met with. In very early days these woods were the object of considerable trade. Although correctly called "ibirapitunga," from the place of production, the name of "brazil" stuck to them, and it has become that of the country, which seems like an immense heap of embers lighted by the rays of the tropical sun.

Brazil was from the first occupied by the Portuguese. About the commencement of the sixteenth century, Alvarez Cabral, the pilot, took possession of it, and although France and Holland partially established themselves there, it has remained Portuguese, and possesses all the qualities which distinguish that gallant little nation. It is today the largest state of South America, and has at its head the intelligent artist-king Dom Pedro.

"What is your privilege in the tribe?" asked Montaigne of an Indian whom he met at Havre.

"The privilege of marching first to battle!" innocently answered the Indian.

War, we know, was for a long time the surest and most rapid vehicle of civilization. The Brazilians did what this Indian did: they fought, they defended their conquests, they enlarged them, and we see them marching in the first rank of the civilizing advance.

It was in 1824, sixteen years after the foundation of the Portugo-Brazilian Empire, that Brazil proclaimed its independence by the voice of Don Juan, whom the French armies had chased from Portugal.

It remained only to define the frontier between the new empire and that of its neighbor, Peru. This was no easy matter.

If Brazil wished to extend to the Rio Napo in the west, Peru attempted to reach eight degrees further, as far as the Lake of Ega.

But in the meantime Brazil had to interfere to hinder the kidnaping of the Indians from the Amazon, a practice which was engaged in much to the profit of the Hispano-Brazilian missions. There was no better method of checking this trade than that of fortifying the Island of the Ronde, a little above Tabatinga, and there establishing a post.

This afforded the solution, and from that time the frontier of the two countries passed through the middle of this island.

Above, the river is Peruvian, and is called the Marañon, as has been said. Below, it is Brazilian, and takes the name of the Amazon.

It was on the evening of the 25th of June that the jangada stopped before Tabatinga, the first Brazilian town situated on the left bank, at the entrance of the river of which it bears the name, and belonging to the parish of St. Paul, established on the right a little further down stream.

Joam Garral had decided to pass thirty-six hours here, so as to give a little rest to the crew. They would not start, therefore, until the morning of the 27th.

On this occasion Yaquita and her children, less likely, perhaps, than at Iquitos to be fed upon by the native mosquitoes, had announced their intention of going on ashore and visiting the town.

The population of Tabatinga is estimated at four hundred, nearly all Indians, comprising, no doubt, many of those wandering families who are never settled at particular spots on the banks of the Amazon or its smaller tributaries.

The post at the island of the Ronde has been abandoned for some years, and transferred to Tabatinga. It can thus be called a garrison town, but the garrison is only composed of nine soldiers, nearly all Indians, and a sergeant, who is the actual commandant of the place.

A bank about thirty feet high, in which are cut the steps of a not very solid staircase, forms here the curtain of the esplanade which carries the pigmy fort. The house of the commandant consists of a couple of huts placed in a square, and the soldiers occupy an oblong building a hundred feet away, at the foot of a large tree.

The collection of cabins exactly resembles all the villages and hamlets which are scattered along the banks of the river, although in them a staff carrying the Brazilian colors does not rise above a sentry-box, forever destitute of its sentinel, nor are four small mortars present to cannonade on an emergency any vessel which does not come in when ordered.

As for the village properly so called, it is situated below, at the base of the plateau. A road, which is but a ravine shaded by ficuses and miritis, leads to it in a few minutes. There, on a half-cracked hill of clay, stand a dozen houses, covered with the leaves of the "boiassu" palm placed round a central space.

All this is not very curious, but the environs of Tabatinga are charming, particularly at the mouth of the Javary,
which is of sufficient extent to contain the Archipelago of the Aramasa Islands. Hereabouts are grouped many fine
trees, and among them a large number of the palms, whose supple fibers are used in the fabrication of hammocks
and fishing-nets, and are the cause of some trade. To conclude, the place is one of the most picturesque on the Upper
Amazon.

Tabatinga is destined to become before long a station of some importance, and will no doubt rapidly develop, for
there will stop the Brazilian steamers which ascend the river, and the Peruvian steamers which descend it. There
they will tranship passengers and cargoes. It does not require much for an English or American village to become in
a few years the center of considerable commerce.

The river is very beautiful along this part of its course. The influence of ordinary tides is not perceptible at
Tabatinga, which is more than six hundred leagues from the Atlantic. But it is not so with the _"pororoca,"_ that
species of eddy which for three days in the height of the syzygies raises the waters of the Amazon, and turns them
back at the rate of seventeen kilometers per hour. They say that the effects of this bore are felt up to the Brazilian
frontier.

On the morrow, the 26th of June, the Garral family prepared to go off and visit the village. Though Joam,
Benito, and Manoel had already set foot in a Brazilian town, it was otherwise with Yaquita and her daughter; for
them it was, so to speak, a taking possession. It is conceivable, therefore, that Yaquita and Minha should attach
some importance to the event.

If, on his part, Fragoso, in his capacity of wandering barber, had already run through the different provinces of
South America, Lina, like her young mistress, had never been on Brazilian soil.

But before leaving the jangada Fragoso had sought Joam Garral, and had the following conversation with him.

"Mr. Garral," said he, "from the day when you received me at the fazenda of Iquitos, lodged, clothed, fed--in a
word, took me in so hospitably--I have owed you----"

"You owe me absolutely nothing, my friend," answered Joam, "so do not insist----"

"Oh, do not be alarmed!" exclaimed Fragoso, "I am not going to pay it off! Let me add, that you took me on
board the jangada and gave me the means of descending the river. But here we are, on the soil of Brazil, which,
according to all probability, I ought never to have seen again. Without that liana----"

"It is to Lina, and to Lina alone, that you should tender your thanks," said Joam.

"I know," said Fragoso, "and I will never forget what I owe here, any more than what I owe you."

"They tell me, Fragoso," continued Joam, "that you are going to say good-by, and intend to remain at
Tabatinga."

"By no means, Mr. Garral, since you have allowed me to accompany you to Belem, where I hope at the least to
be able to resume my old trade."

"Well, if that is your intention--what were you going to ask me?"

"I was going to ask if you saw any inconvenience in my working at my profession on our route. There is no
necessity for my hand to rust; and, besides, a few handfuls of reis would not be so bad at the bottom of my pocket,
more particularly if I had earned them. You know, Mr. Garral, that a barber who is also a hairdresser--and I hardly
like to say a doctor, out of respect to Mr. Manoel--always finds customers in these Upper Amazon villages."

"Particularly among the Brazilians," answered Joam. "As for the natives----"

"I beg pardon," replied Fragoso, "particularly among the natives. Ah! although there is no beard to trim--for
nature has been very stingy toward them in that way--there are always some heads of hair to be dressed in the latest
fashion. They are very fond of it, these savages, both the men and the women! I shall not be installed ten minutes in
the square at Tabatinga, with my cup and ball in hand--the cup and ball I have brought on board, and which I can
manage with pretty pleasantly--before a circle of braves and squaws will have formed around me. They will struggle
for my favors. I could remain here for a month, and the whole tribe of the Ticunas would come to me to have their
hair looked after! They won't hesitate to make the acquaintance of 'curling tongs'--that is what they will call me--if I
revisit the walls of Tabatinga! I have already had two tries here, and my scissors and comb have done marvels! It
does not do to return too often on the same track. The Indian ladies don't have their hair curled every day, like the
beauties of our Brazilian cities. No; when it is done, it is done for year, and during the twelvemonth they will take
every care not to endanger the edifice which I have raised--with what talent I dare not say. Now it is nearly a year
since I was at Tabatinga; I go to find my monuments in ruin! And if it is not objectionable to you, Mr. Garral, I
would render myself again worthy of the reputation which I have acquired in these parts, the question of reis, and
not that of conceit, being, you understand, the principal."

"Go on, then, friend," replied Joam Garral laughingly; "but be quick! we can only remain a day at Tabatinga, and
we shall start to-morrow at dawn."

"I will not lose a minute," answered Fragoso--"just time to take the tools of my profession, and I am off."

"Off you go, Fragoso," said Joam, "and may the reis rain into your pocket!"
"Yes, and that is a proper sort of rain, and there can never be too much of it for your obedient servant."

And so saying Fragoso rapidly moved away.

A moment afterward the family, with the exception of Joam, went ashore. The jangada was able to approach near enough to the bank for the landing to take place without much trouble. A staircase, in a miserable state, cut in the cliff, allowed the visitors to arrive on the crest of the plateau.

Yaqita and her party were received by the commandant of the fort, a poor fellow who, however, knew the laws of hospitality, and offered them some breakfast in his cottage. Here and there passed and repassed several soldiers on guard, while on the threshold of the barrack appeared a few children, with their mothers of Ticuna blood, affording very poor specimens of the mixed race.

In place of accepting the breakfast of the sergeant, Yaqita invited the commandant and his wife to come and have theirs on board the jangada.

The commandant did not wait for a second invitation, and an appointment was made for eleven o'clock. In the meantime Yaqita, her daughter, and the young mulatto, accompanied by Manoel, went for a walk in the neighborhood, leaving Benito to settle with the commandant about the tolls—he being chief of the custom-house as well as of the military establishment.

That done, Benito, as was his wont, strolled off with his gun into the adjoining woods. On this occasion Manoel had declined to accompany him. Fragoso had left the jangada, but instead of mounting to the fort he had made for the village, crossing the ravine which led off from the right on the level of the bank. He reckoned more on the native custom of Tabatinga than on that of the garrison. Doubtless the soldiers’ wives would not have wished better than to have been put under his hands, but the husbands scarcely cared to part with a few reis for the sake of gratifying the whims of their coquettish partners.

Among the natives it was quite the reverse. Husbands and wives, the jolly barber knew them well, and he knew they would give him a better reception.

Behold, then, Fragoso on the road, coming up the shady lane beneath the ficuses, and arriving in the central square of Tabatinga!

As soon as he set foot in the place the famous barber was signaled, recognized, surrounded. Fragoso had no big box, nor drum, nor cornet to attract the attention of his clients—not even a carriage of shining copper, with resplendent lamps and ornamented glass panels, nor a huge parasol, no anything whatever to impress the public, as they generally have at fairs. No; but Fragoso had his cup and ball, and how that ball were manipulated between his fingers! With what address did he receive the turtle's head, which did for the ball, on the pointed end of the stick! With what grace did he make the ball describe some learned curve of which mathematicians have not yet calculated the value—even those who have determined the wondrous curve of “the dog who follows his master!”

Every native was there—men, women, the old and the young, in their nearly primitive costume, looking on with all their eyes, listening with all their ears. The smiling entertainer, half in Portuguese, half in Ticunian, favored them with his customary oration in a tone of the most rollicking good humor. What he said was what is said by all the charlatans who place their services at the public disposal, whether they be Spanish Figaros or French perruquiers. At the bottom the same self-possession, the same knowledge of human weakness, the same description of threadbare witticisms, the same amusing dexterity, and, on the part of the natives, the same wide-mouth astonishment, the same curiosity, the same credulity as the simple folk of the civilized world.

It followed, then, that ten minutes later the public were completely won, and crowded round Fragoso, who was installed in a _"loja"_ of the place, a sort of serving-bar to the inn.

The _loja_ belonged to a Brazilian settled at Tabatinga. There, for a few vatems, which are the sols of the country, and worth about twenty reis, or half a dozen centimes each, the natives could get drinks of the crudest, and particularly assai, a liquor half-sold, half-liquid, made of the fruit of the palm-tree, and drunk from a _"coui"_ or half-calabash in general use in this district of the Amazon.

And then men and women, with equal eagerness, took their places on the barber's stool. The scissors of Fragoso had little to do, for it was not a question of cutting these wealthy heads of hair, nearly all remarkable for their softness and their quality, but the use to which he could put his comb and the tongs, which were kept warming in the corner in a brasier.

And then the encouragements of the artist to the crowd!

"Look here! look here!" said he; "how will that do, my friends—if you don't sleep on the top of it! There you are, for a twelvemonth! and these are the latest novelties from Belem and Rio de Janeiro! The queen's maids of honor are not more cleverly decked out; and observe, I am not stingy with the pomade!"

No, he was not stingy with it. True, it was only a little grease, with which he had mixed some of the juices of a few flowers, but he plastered it on like cement!

And as to the names of the capillary edifices—for the monuments reared by the hands of Fragoso were of every
order of architecture--buckles, rings, clubs, tresses, crimpings, rolls, corkscrews, curls, everything found there a place. Nothing false; no towers, no chignons, no shams! These head were not enfeebled by cuttings nor thinned by fallings-off, but were forests in all their native virginity! Fragoso, however, was not above adding a few natural flowers, two or three long fish-bones, and some fine bone or copper ornaments, which were brought him by the dandies of the district. Assuredly, the exquisites of the Directory would have envied the arrangement of these high-art coiffures, three and four stories high, and the great Leonard himself would have bowed before his transatlantic rival.

And then the vatems, the handfuls of reis--the only coins for which the natives of the Amazon exchange their goods--which rained into the pocket of Fragoso, and which he collected with evident satisfaction. But assuredly night would come before he could satisfy the demands of the customers, who were so constantly renewed. It was not only the population of Tabatinga which crowded to the door of the loja. The news of the arrival of Fragoso was not slow to get abroad; natives came to him from all sides: Ticunas from the left bank of the river, Mayorunas from the right bank, as well as those who live on the Cajuru and those who come from the villages of the Javary.

A long array of anxious ones formed itself in the square. The happy ones coming from the hands of Fragoso went proudly from one house to another, showed themselves off without daring to shake themselves, like the big children that they were.

It thus happened that when noon came the much-occupied barber had not had time to return on board, but had had to content himself with a little assai, some manioc flour, and turtle eggs, which he rapidly devoured between two applications of the curling-tongs.

But it was a great harvest for the innkeeper, as all the operations could not be conducted without a large absorption of liquors drawn from the cellars of the inn. In fact, it was an event for the town of Tabatinga, this visit of the celebrated Fragoso, barber in ordinary and extraordinary to the tribes of the Upper Amazon!

CHAPTER XIII. TORRES

AT FIVE O'CLOCK in the evening Fragoso was still there, and was asking himself if he would have to pass the night on the spot to satisfy the expectant crowd, when a stranger arrived in the square, and seeing all this native gathering, advanced toward the inn.

For some minutes the stranger eyed Fragoso attentively with some circumspection. The examination was obviously satisfactory, for he entered the loja.

He was a man about thirty-five years of age. He was dressed in a somewhat elegant traveling costume, which added much to his personal appearance. But his strong black beard, which the scissors had not touched for some time, and his hair, a trifle long, imperiously required the good offices of a barber.

"Good-day, friend, good-day!" said he, lightly striking Fragoso on the shoulder.

Fragoso turned round when he heard the words pronounced in pure Brazilian, and not in the mixed idiom of the natives.

"A compatriot?" he asked, without stopping the twisting of the refractory mouth of a Mayouma head.

"Yes," answered the stranger. "A compatriot who has need of your services."

"To be sure! In a minute," said Fragoso. "Wait till I have finished with this lady!"

And this was done in a couple of strokes with the curling-tongs.

Although he was the last comer, and had no right to the vacant place, he sat down on the stool without causing any expostulation on the part of the natives who lost a turn.

Fragoso put down the irons for the scissors, and, after the manner of his brethren, said:

"What can I do for you, sir?"

"Cut my beard and my hair," answered the stranger.

"All right!" said Fragoso, inserting his comb into the mass of hair.

And then the scissors to do their work.

"And you come from far?" asked Fragoso, who could not work without a good deal to say.

"I have come from the neighborhood of Iquitos."

"So have I!" exclaimed Fragoso. "I have come down the Amazon from Iquitos to Tabatinga. May I ask your name?"

"No objection at all," replied the stranger. "My name is Torres."

When the hair was cut in the latest style Fragoso began to thin his beard, but at this moment, as he was looking straight into his face, he stopped, then began again, and then:

"Eh! Mr. Torres," said he; "I seem to know you. We must have seen each other somewhere?"

"I do not think so," quickly answered Torres.
"I am always wrong!" replied Fragoso, and he hurried on to finish his task.

A moment after Torres continued the conversation which this question of Fragoso had interrupted, with:

"How did you come from Iquitos?"

"From Iquitos to Tabatinga?"

"Yes."

"On board a raft, on which I was given a passage by a worthy fazender who is going down the Amazon with his family."

"A friend indeed!" replied Torres. "That is a chance, and if your fazender would take me----"

"Do you intend, then, to go down the river?"

"Precisely."

"Into Para?"

"No, only to Manaos, where I have business."

"Well, my host is very kind, and I think he would cheerfully oblige you."

"Do you think so?"

"I might almost say I am sure."

"And what is the name of this fazender?" asked Torres carelessly.

"Joam Garral," answered Fragoso.

And at the same time he muttered to himself:

"I certainly have seen this fellow somewhere!"

Torres was not the man to allow a conversation to drop which was likely to interest him, and for very good reasons.

"And so you think Joam Garral would give me a passage?"

"I do not doubt it," replied Fragoso. "What he would do for a poor chap like me he would not refuse to do for a compatriot like you."

"Is he alone on board the jangada?"

"No," replied Fragoso. "I was going to tell you that he is traveling with all his family--and jolly people they are, I assure you. He is accompanied by a crew of Indians and negroes, who form part of the staff at the fazenda."

"Is he rich?"

"Oh, certainly!" answered Fragoso--"very rich. Even the timber which forms the jangada, and the cargo it carries, constitute a fortune!"

"The Joam Garral and his whole family have just passed the Brazilian frontier?"

"Yes," said Fragoso; "his wife, his son, his daughter, and Miss Minha's betrothed."

"Ah! he has a daughter?" said Torres.

"A charming girl!"

"Going to get married?"

"Yes, to a brave young fellow," replied Fragoso--"an army surgeon in garrison at Belem, and the wedding is to take place as soon as we get to the end of the voyage."

"Good!" said the smiling Torres; "it is what you might call a betrothal journey."

"A voyage of betrothal, of pleasure, and of business!" said Fragoso. "Madame Yaquita and her daughter have never set foot on Brazilian ground; and as for Joam Garral, it is the first time he has crossed the frontier since he went to the farm of old Magalhaës."

"I suppose," asked Torres, "that there are some servants with the family?"

"Of course," replied Fragoso--"old Cybele, on the farm for the last fifty years, and a pretty mulatto, Miss Lina, who is more of a companion than a servant to her mistress. Ah, what an amiable disposition! What a heart, and what eyes! And the ideas she has about everything, particularly about lianas--" Fragoso, started on this subject, would not have been able to stop himself, and Lina would have been the object of a good many enthusiastic declarations, had Torres not quitted the chair for another customer.

"What do I owe you?" asked he of the barber.

"Nothing," answered Fragoso. "Between compatriots, when they meet on the frontier, there can be no question of that sort."

"But," replied Torres, "I want to----"

"Very well, we will settle that later on, on board the jangada."

"But I do not know that, and I do not like to ask Joam Garral to allow me----"

"Do not hesitate!" exclaimed Fragoso; "I will speak to him if you would like it better, and he will be very happy to be of use to you under the circumstances."

And at that instant Manoel and Benito, coming into the town after dinner, appeared at the door of the loja,
wishing to see Fragoso at work.
Torres turned toward them and suddenly said: "There are two gentlemen I know—or rather I remember."
"You remember them!" asked Fragoso, surprised.
"Yes, undoubtedly! A month ago, in the forest of Iquitos, they got me out of a considerable difficulty."
"But they are Benito Garral and Manoel Valdez."
"I know. They told me their names, but I never expected to see them here."
Torres advanced toward the two young men, who looked at him without recognizing him.
"You do not remember me, gentlemen?" he asked.
"Wait a little," answered Benito; "Mr. Torres, if I remember aright; it was you who, in the forest of Iquitos, got into difficulties with a guariba?"
"Quite true, gentlemen," replied Torres. "For six weeks I have been traveling down the Amazon, and I have just crossed the frontier at the same time as you have."
"Very pleased to see you again," said Benito; "but you have not forgotten that you promised to come to the fazenda to my father?"
"I have not forgotten it," answered Torres.
"And you would have done better to have accepted my offer; it would have allowed you to have waited for our departure, rested from you fatigues, and descended with us to the frontier; so many days of walking saved."
"To be sure!" answered Torres.
"Our compatriot is not going to stop at the frontier," said Fragoso, "he is going on to Manaos."
"Well, then," replied Benito, "if you will come on board the jangada you will be well received, and I am sure my father will give you a passage."
"Willingly," said Torres; "and you will allow me to thank you in advance."
Manoel took no part in the conversation; he let Benito make the offer of his services, and attentively watched Torres, whose face he scarcely remembered. There was an entire want of frankness in the eyes, whose look changed unceasingly, as if he was afraid to fix them anywhere. But Manoel kept this impression to himself, not wishing to injure a compatriot whom they were about to oblige.
"Gentlemen," said Torres, "if you like, I am ready to follow you to the landing-place."
"Come, then," answered Benito.
A quarter of an hour afterward Torres was on board the jangada. Benito introduced him to Joam Garral, acquainting him with the circumstances under which they had previously met him, and asked him to give him a passage down to Manaos.
"I am happy, sir, to be able to oblige you," replied Joam.
"Thank you," said Torres, who at the moment of putting forth his hand kept it back in spite of himself.
"We shall be off at daybreak to-morrow," added Joam Garral, "so you had better get your things on board."
"Oh, that will not take me long!" answered Torres; "there is only myself and nothing else!"
"Make yourself at home," said Joam Garral.
That evening Torres took possession of a cabin near to that of the barber. It was not till eight o'clock that the latter returned to the raft, and gave the young mulatto an account of his exploits, and repeated, with no little vanity, that the renown of the illustrious Fragoso was increasing in the basin of the Upper Amazon.

CHAPTER XIV. STILL DESCENDING

At daybreak on the morrow, the 27th of June, the cables were cast off, and the raft continued its journey down the river.

An extra passenger was on board. Whence came this Torres? No one exactly knew. Where was he going to? "To Manaos," he said. Torres was careful to let no suspicion of his past life escape him, nor of the profession that he had followed till within the last two months, and no one would have thought that the jangada had given refuge to an old captain of the woods. Joam Garral did not wish to mar the service he was rendering by questions of too pressing a nature.

In taking him on board the fazender had obeyed a sentiment of humanity. In the midst of these vast Amazonian deserts, more especially at the time when the steamers had not begun to furrow the waters, it was very difficult to find means of safe and rapid transit. Boats did not ply regularly, and in most cases the traveler was obliged to walk across the forests. This is what Torres had done, and what he would continue to have done, and it was for him unexpected good luck to have got a passage on the raft.

From the moment that Benito had explained under what conditions he had met Torres the introduction was complete, and he was able to consider himself as a passenger on an Atlantic steamer, who is free to take part in the
general life if he cares, or free to keep himself a little apart if of an unsociable disposition.

It was noticed, at least during the first few days, that Torres did not try to become intimate with the Garral family. He maintained a good deal of reserve, answering if addressed, but never provoking a reply.

If he appeared more open with any one, it was with Fragoso. Did he not owe to this gay companion the idea of taking passage on board the raft? Many times he asked him about the position of the Garrals at Iquitos, the sentiments of the daughter for Manoel Valdez, and always discreetly. Generally, when he was not walking alone in the bow of the jangada, he kept to his cabin.

He breakfasted and dined with Joam Garral and his family, but he took little part in their conversation, and retired when the repast was finished.

During the morning the raft passed by the picturesque group of islands situated in the vast estuary of the Javary. This important affluent of the Amazon comes from the southwest, and from source to mouth has not a single island, nor a single rapid, to check its course. The mouth is about three thousand feet in width, and the river comes in some miles above the site formerly occupied by the town of the same name, whose possession was disputed for so long by Spaniards and Portuguese.

Up to the morning of the 30th of June there had been nothing particular to distinguish the voyage. Occasionally they met a few vessels gliding along by the banks attached one to another in such a way that a single Indian could manage the whole—"navigar de bubina," as this kind of navigation is called by the people of the country, that is to say, "confidence navigation."

They had passed the island of Araria, the Archipelago of the Calderon islands, the island of Capiatu, and many others whose names have not yet come to the knowledge of geographers.

On the 30th of June the pilot signaled on the right the little village of Jurupari-Tapera, where they halted for two or three hours.

Manoel and Benito had gone shooting in the neighborhood, and brought back some feathered game, which was well received in the larder. At the same time they had got an animal of whom a naturalist would have made more than did the cook.

It was a creature of a dark color, something like a large Newfoundland dog.

"A great ant-eater!" exclaimed Benito, as he threw it on the deck of the jangada.

"And a magnificent specimen which would not disgrace the collection of a museum!" added Manoel.

"Did you take much trouble to catch the curious animal?" asked Minha.

"Yes, little sister," replied Benito, "and you were not there to ask for mercy! These dogs die hard, and no less than three bullets were necessary to bring this fellow down."

The ant-eater looked superb, with his long tail and grizzly hair; with his pointed snout, which is plunged into the ant-hills whose insects form its principal food; and his long, thin paws, armed with sharp nails, five inches long, and which can shut up like the fingers of one's hand. But what a hand was this hand of the ant-eater! When it has got hold of anything you have to cut it off to make it let go! It is of this hand that the traveler, Emile Carrey, has so justly observed: "The tiger himself would perish in its grasp."

On the 2d of July, in the morning, the jangada arrived at the foot of San Pablo d'Olivença, after having floated through the midst of numerous islands which in all seasons are clad with verdure and shaded with magnificent trees, and the chief of which bear the names of Jurupari, Rita, Maracanatena, and Cururu Sapo. Many times they passed by the mouths of iguarapes, or little affluents, with black waters.

The coloration of these waters is a very curious phenomenon. It is peculiar to a certain number of these tributaries of the Amazon, which differ greatly in importance.

Manoel remarked how thick the cloudiness was, for it could be clearly seen on the surface of the whitish waters of the river.

"They have tried to explain this coloring in many ways," said he, "but I do not think the most learned have yet arrived at a satisfactory explanation."

"The waters are really black with a magnificent reflection of gold," replied Minha, showing a light, reddish-brown cloth, which was floating level with the jangada.

"Yes," said Manoel, "and Humboldt has already observed the curious reflection that you have; but on looking at it attentively you will see that it is rather the color of sepia which pervades the whole."

"Good!" exclaimed Benito. "Another phenomenon on which the savants are not agreed."

"Perhaps," said Fragoso, "they might ask the opinions of the caymans, dolphins, and manatees, for they certainly prefer the black waters to the others to enjoy themselves in."

"They are particularly attractive to those animals," replied Manoel, "but why it is rather embarrassing to say. For instance, is the coloration due to the hydrocarbons which the waters hold in solution, or is it because they flow through districts of peat, coal, and anthracite; or should we not rather attribute it to the enormous quantity of minute
plants which they bear along? There is nothing certain in the matter. Under any circumstances, they are excellent to
drink, of a freshness quite enviable for the climate, and without after-taste, and perfectly harmless. Take a little of
the water, Minha, and drink it; you will find it all right."

The water is in truth limpid and fresh, and would advantageously replace many of the table-waters used in
Europe. They drew several frasques for kitchen use.

It has been said that in the morning of the 2d of July the jangada had arrived at San Pablo d'Olivença, where they
turn out in thousands those long strings of beads which are made from the scales of the "coco de piassaba." This
trade is here extensively followed. It may, perhaps, seem singular that the ancient lords of the country, Tupinambas
and Tupiniquis, should find their principal occupation in making objects for the Catholic religion. But, after all, why
not? These Indians are no longer the Indians of days gone by. Instead of being clothed in the national fashion, with a
frontlet of macaw feathers, bow, and blow-tube, have they not adopted the American costume of white cotton
trousers, and a cotton poncho woven by their wives, who have become thorough adepts in its manufacture?

San Pablo d'Olivença, a town of some importance, has not less than two thousand inhabitants, derived from all
the neighboring tribes. At present the capital of the Upper Amazon, it began as a simple Mission, founded by the
Portuguese Carmelites about 1692, and afterward acquired by the Jesuit missionaries.

From the beginning it has been the country of the Omaguas, whose name means "flat-heads," and is derived
from the barbarous custom of the native mothers of squeezing the heads of their newborn children between two
plates, so as to give them an oblong skull, which was then the fashion. Like everything else, that has changed; heads
have re-taken their natural form, and there is not the slightest trace of the ancient deformity in the skulls of the
chaplet-makers.

Every one, with the exception of Joam Garral, went ashore. Torres also remained on board, and showed no
desire to visit San Pablo d'Olivença, which he did not, however, seem to be acquainted with.

Assuredly if the adventurer was taciturn he was not inquisitive.

Benito had no difficulty in doing a little bartering, and adding slightly to the cargo of the jangada. He and the
family received an excellent reception from the principal authorities of the town, the commandant of the place, and
the chief of the custom-house, whose functions did not in the least prevent them from engaging in trade. They even
intrusted the young merchant with a few products of the country for him to dispose of on their account at Manaos
and Belem.

The town is composed of some sixty houses, arranged on the plain which hereabouts crowns the river-bank.
Some of the huts are covered with tiles—a very rare thing in these countries; but, on the other hand, the humble
church, dedicated to St. Peter and St. Paul, has only a roof of straw, rather more appropriate for a stable of
Bethlehem than for an edifice consecrated to religion in one of the most Catholic countries of the world.

The commandant, his lieutenant, and the head of the police accepted an invitation to dine with the family, and
they were received by Joam Garral with the respect due to their rank.

During dinner Torres showed himself more talkative than usual. He spoke about some of his excursions into the
interior of Brazil like a man who knew the country. But in speaking of these travels Torres did not neglect to ask the
commandant if he knew Manaos, if his colleague would be there at this time, and if the judge, the first magistrate of
the province, was accustomed to absent himself at this period of the hot season. It seemed that in putting this series
of questions Torres looked at Joam Garral. It was marked enough for even Benito to notice it, not without surprise,
and he observed that his father gave particular attention to the questions so curiously propounded by Torres.

The commandant of San Pablo d'Olivença assured the adventurer that the authorities were not now absent from
Manaos, and he even asked Joam Garral to convey to them his compliments. In all probability the raft would arrive
before the town in seven weeks, or a little later, say about the 20th or the 25th of August.

The guests of the fazender took leave of the Garral family toward the evening, and the following morning, that
of the 3d of July, the jangada recommenced its descent of the river.

At noon they passed on the left the mouth of the Yacurupa. This tributary, properly speaking, is a true canal, for
it discharges its waters into the Iça, which is itself an affluent of the Amazon.

A peculiar phenomenon, for the river displaces itself to feed its own tributaries!

Toward three o'clock in the afternoon the giant raft passed the mouth of the Jandiatuba, which brings its
magnificent black waters from the southwest, and discharges them into the main artery by a mouth of four hundred
meters in extent, after having watered the territories of the Culino Indians.

A number of islands were breasted—Pimaicaira, Caturia, Chico, Motachina; some inhabited, others deserted, but
all covered with superb vegetation, which forms an unbroken garland of green from one end of the Amazon to the
other.
CHAPTER XV. THE CONTINUED DESCENT

ON THE EVENING of the 5th of July, the atmosphere had been oppressive since the morning and threatened approaching storms. Large bats of ruddy color skimmed with their huge wings the current of the Amazon. Among them could be distinguished the "_perros voladores,"_ somber brown above and light-colored beneath, for which Minha, and particularly the young mulatto, felt an instinctive aversion.

These were, in fact, the horrible vampires which suck the blood of the cattle, and even attack man if he is imprudent enough to sleep out in the fields.

"Oh, the dreadful creatures!" cried Lina, hiding her eyes; "they fill me with horror!"

"And they are really formidable," added Minha; "are they not, Manoel?"

"To be sure--very formidable," answered he. "These vampires have a particular instinct which leads them to bleed you in the places where the blood most easily comes, and principally behind the ear. During the operation the continue to move their wings, and cause an agreeable freshness which renders the sleep of the sleeper more profound. They tell of people, unconsciously submitted to this hemorrhage for many hours, who have never awoke!"

"Talk no more of things like that, Manoel," said Yaquita, "or neither Minha nor Lina will dare sleep to-night."

"Never fear!" replied Manoel; "if necessary we will watch over them as they sleep."

"Silence!" said Benito.

"What is the matter?" asked Manoel.

"Do you not hear a very curious noise on that side?" continued Benito, pointing to the right bank.

"Certainly," answered Yaquita.

"What causes the noise?" asked Minha. "One would think it was shingle rolling on the beach of the islands."

"Good! I know what it is," answered Benito. "Tomorrow, at daybreak, there will be a rare treat for those who like fresh turtle eggs and little turtles!"

He was not deceived; the noise was produced by innumerable chelonians of all sizes, which were attracted to the islands to lay their eggs.

It is in the sand of the beach that these amphibians choose the most convenient places to deposit their eggs. The operation commences with sunset, and finishes with the dawn.

At this moment the chief turtle had left the bed of the river to reconnoiter for a favorable spot; the others, collected in thousands, were soon after occupied in digging with their hind paddles a trench six hundred feet long, a dozen wide, and six deep. After laying their eggs they cover them with a bed of sand, which they beat down with their carapaces as if they were rammers.

This egg-laying operation is a grand affair for the riverine Indians of the Amazon and its tributaries. They watch for the arrival of the chelonians, and proceed to the extraction of the eggs to the sound of the drum; and the harvest is divided into three parts--one to the watchers, another to the Indians, a third to the state, represented by the captains of the shore, who, in their capacity of police, have to superintend the collection of the dues. To certain beaches which the decrease of the waters has left uncovered, and which have the privilege of attracting the greater number of turtles, there has been given the name of "royal beaches." When the harvest is gathered it is a holiday for the Indians, who give themselves up to games, dancing, and drinking; and it is also a holiday for the alligators of the river, who hold high revelry on the remains of the amphibians.

Turtles, or turtle eggs, are an object of very considerable trade throughout the Amazonian basin. They watch for the arrival of the chelonians, and proceed to the extraction of the eggs to the sound of the drum; and the harvest is divided into three parts--one to the watchers, another to the Indians, a third to the state, represented by the captains of the shore, who, in their capacity of police, have to superintend the collection of the dues. To certain beaches which the decrease of the waters has left uncovered, and which have the privilege of attracting the greater number of turtles, there has been given the name of "royal beaches." When the harvest is gathered it is a holiday for the Indians, who give themselves up to games, dancing, and drinking; and it is also a holiday for the alligators of the river, who hold high revelry on the remains of the amphibians.

Turtles, or turtle eggs, are an object of very considerable trade throughout the Amazonian basin. It is these chelonians whom they "turn"--that is to say, put on their backs--when they come from laying their eggs, and whom they preserve alive, keeping them in palisaded pools like fish-pools, or attaching them to a stake by a cord just long enough to allow them to go and come on the land or under the water. In this way they always have the meat of these animals fresh.

They proceed differently with the little turtles which are just hatched. There is no need to pack them or tie them up. Their shell is still soft, their flesh extremely tender, and after they have cooked them they eat them just like ostriches. In this form large quantities are consumed.

However, this is not the most general use to which the chelonian eggs are put in the provinces of Amazones and Para. The manufacture of _"manteigna de tartaruga,"_ or turtle butter, which will bear comparison with the best products of Normandy or Brittany, does not take less every year that from two hundred and fifty to three hundred millions of eggs. But the turtles are innumerable all along the river, and they deposit their eggs on the sands of the beach in incalculable quantities. However, on account of the destruction caused not only by the natives, but by the water-fowl from the side, the urubus in the air, and the alligators in the river, their number has been so diminished that for every little turtle a Brazilian pataque, or about a franc, has to be paid.

On the morrow, at daybreak, Benito, Fragoso, and a few Indians took a pirogue and landed on the beach of one of the large islands which they had passed during the night. It was not necessary for the jangada to halt. They knew they could catch her up.
On the shore they saw the little hillocks which indicated the places where, that very night, each packet of eggs had been deposited in the trench in groups of from one hundred and sixty to one hundred and ninety. These there was no wish to get out. But an earlier laying had taken place two months before, the eggs had hatched under the action of the heat stored in the sand, and already several thousands of little turtles were running about the beach.

The hunters were therefore in luck. The pirogue was filled with these interesting amphibians, and they arrived just in time for breakfast. The booty was divided between the passengers and crew of the jangada, and if any lasted till the evening it did not last any longer.

In the morning of the 7th of July they were before San Jose de Matura, a town situated near a small river filled up with long grass, and on the borders of which a legend says that Indians with tails once existed.

In the morning of the 8th of July they caught sight of the village of San Antonio, two or three little houses lost in the trees at the mouth of the Iça, or Putumayo, which is about nine hundred meters wide.

The Putumayo is one of the most important affluents of the Amazon. Here in the sixteenth century missions were founded by the Spaniards, which were afterward destroyed by the Portuguese, and not a trace of them now remains.

Representatives of different tribes of Indians are found in the neighborhood, which are easily recognizable by the differences in their tattoo marks.

The Iça is a body of water coming from the east of the Pasto Mountains to the northeast of Quito, through the finest forests of wild cacao-trees. Navigable for a distance of a hundred and forty leagues for steamers of not greater draught than six feet, it may one day become one of the chief waterways in the west of America.

The bad weather was at last met with. It did not show itself in continual rains, but in frequent storms. These could not hinder the progress of the raft, which offered little resistance to the wind. Its great length rendered it almost insensible to the swell of the Amazon, but during the torrential showers the Garral family had to keep indoors. They had to occupy profitably these hours of leisure. They chatted together, communicated their observations, and their tongues were seldom idle.

It was under these circumstances that little by little Torres had begun to take a more active part in the conversation. The details of his many voyages throughout the whole north of Brazil afforded him numerous subjects to talk about. The man had certainly seen a great deal, but his observations were those of a skeptic, and he often shocked the straightforward people who were listening to him. It should be said that he showed himself much impressed toward Minha. But these attentions, although they were displeasing to Manoel, were not sufficiently marked for him to interfere. On the other hand, Minha felt for him an instinctive repulsion which she was at no pains to conceal.

On the 5th of July the mouth of the Tunantins appeared on the left bank, forming an estuary of some four hundred feet across, in which it pours its blackish waters, coming from the west-northwest, after having watered the territories of the Cacena Indians. At this spot the Amazon appears under a truly grandiose aspect, but its course is more than ever encumbered with islands and islets. It required all the address of the pilot to steer through the archipelago, going from one bank to another, avoiding the shallows, shirking the eddies, and maintaining the advance.

They might have taken the Ahuaty Parana, a sort of natural canal, which goes off a little below the mouth of the Tunantins, and re-enters the principal stream a hundred an twenty miles further on by the Rio Japura; but if the larger portion of this measures a hundred and fifty feet across, the narrowest is only sixty feet, and the raft would have met with a difficulty.

On the 13th of July, after having touched at the island of Capuro, passed the mouth of the Jutahy, which, coming from the east-southeast, brings in its black waters by a mouth five hundred feet wide, and admired the legions of monkeys, sulphur-white in color, with cinnabar-red faces, who are insatiable lovers of the nuts produced by the palm-trees from which the river derives its name, the travelers arrived on the 18th of July before the little village of Fonteboa.

At this place the jangada halted for twelve hours, so as to give a rest to the crew.

Fonteboa, like most of the mission villages of the Amazon, has not escaped the capricious fate which, during a lengthened period, moves them about from one place to the other. Probably the hamlet has now finished with its nomadic existence, and has definitely become stationary. So much the better; for it is a charming place, with its thirty houses covered with foliage, and its church dedicated to Notre Dame de Guadaloupe, the Black Virgin of Mexico. Fonteboa has one thousand inhabitants, drawn from the Indians on both banks, who rear numerous cattle in the fields in the neighborhood. These occupations do not end here, for they are intrepid hunters, or, if they prefer it, intrepid fishers for the manatee.

On the morning of their arrival the young fellows assisted at a very interesting expedition of this nature. Two of these herbivorous cetaceans had just been signaled in the black waters of the Cayaratu, which comes in at Fonteboa. Six brown points were seen moving along the surface, and these were the two pointed snouts and four pinions of the
Inexperienced fishermen would at first have taken these moving points for floating wreckage, but the natives of Fonteboa were not to be so deceived. Besides, very soon loud blowings indicated that the spouting animals were vigorously ejecting the air which had become useless for their breathing purposes.

Two ubas, each carrying three fishermen, set off from the bank and approached the manatees, who soon took flight. The black points at first traced a long furrow on the top of the water, and then disappeared for a time. The fishermen continued their cautious advance. One of them, armed with a very primitive harpoon—a long nail at the end of a stick—kept himself in the bow of the boat, while the other two noiselessly paddled on. They waited till the necessity of breathing would bring the manatees up again. In ten minutes or thereabouts the animals would certainly appear in a circle more or less confined.

In fact, this time had scarcely elapsed before the black points emerged at a little distance, and two jets of air mingled with vapor were noiselessly shot forth.

The ubas approached, the harpoons were thrown at the same instant; one missed its mark, but the other struck one of the cetaceans near his tail.

It was only necessary to stun the animal, who rarely defends himself when touched by the iron of the harpoon. In a few pulls the cord brought him alongside the uba, and he was towed to the beach at the foot of the village.

It was not a manatee of any size, for it only measured about three feet long. These poor cetaceans have been so hunted that they have become very rare in the Amazon and its affluents, and so little time is left them to grow that the giants of the species do not now exceed seven feet. What are these, after manatees twelve and fifteen feet long, which still abound in the rivers and lakes of Africa?

But it would be difficult to hinder their destruction. The flesh of the manatee is excellent, superior even to that of pork, and the oil furnished by its lard, which is three inches thick, is a product of great value. When the meat is smoke-dried it keeps for a long time, and is capital food. If to this is added that the animal is easily caught, it is not to be wondered at that the species is on its way to complete destruction.

On the 19th of July, at sunrise, the jangada left Fonteboa, and entered between the two completely deserted banks of the river, and breasted some islands shaded with the grand forests of cacao-trees. The sky was heavily charged with electric cumuli, warning them of renewed storms.

The Rio Jurua, coming from the southwest, soon joins the river on the left. A vessel can go up it into Peru without encountering insurmountable obstacles among its white waters, which are fed by a great number of petty affluents.

"It is perhaps in these parts," said Manoel, "that we ought to look for those female warriors who so much astonished Orellana. But we ought to say that, like their predecessors, they do not form separate tribes; they are simply the wives who accompany their husbands to the fight, and who, among the Jurusas, have a great reputation for bravery."

The jangada continued to descend; but what a labyrinth the Amazon now appeared! The Rio Japura, whose mouth was forty-eight miles on ahead, and which is one of its largest tributaries, runs almost parallel with the river.

Between them were canals, iguarapes, lagoons, temporary lakes, an inextricable network which renders the hydrography of this country so difficult.

But if Araujo had no map to guide him, his experience served him more surely, and it was wonderful to see him unraveling the chaos, without ever turning aside from the main river.

In fact, he did so well that on the 25th of July, in the afternoon, after having passed before the village of Parani-Tapera, the raft was anchored at the entrance of the Lake of Ego, or Tefe, which it was useless to enter, for they would not have been able to get out of it again into the Amazon.

But the town of Ega is of some importance; it was worthy of a halt to visit it. It was arranged, therefore, that the jangada should remain on this spot till the 27th of July, and that on the morrow the large pirogue should take the whole family to Ega. This would give a rest, which was deservedly due to the hard-working crew of the raft.

The night passed at the moorings near a slightly rising shore, and nothing disturbed the quiet. A little sheet-lightning was observable on the horizon, but it came from a distant storm which did not reach the entrance to the lake.

CHAPTER XVI. EGA

At six o'clock in the morning of the 20th of July, Yaquita, Minha, Lina, and the two young men prepared to leave the jangada.

Joam Garral, who had shown no intention of putting his foot on shore, had decided this time, at the request of the ladies of his family, to leave his absorbing daily work and accompany them on their excursion. Torres had evinced
no desire to visit Ega, to the great satisfaction of Manoel, who had taken a great dislike to the man and only waited for an opportunity to declare it.

As to Fragoso, he could not have the same reason for going to Ega as had taken him to Tabatinga, which is a place of little importance compared to this.

Ega is a chief town with fifteen hundred inhabitants, and in it reside all those authorities which compose the administration of a considerable city—considerable for the country; that is to say, the military commandant, the chief of the police, the judges, the schoolmaster, and troops under the command of officers of all ranks.

With so many functionaries living in a town, with their wives and children, it is easy to see that hair-dressers would be in demand. Such was the case, and Fragoso would not have paid his expenses.

Doubtless, however, the jolly fellow, who could do no business in Ega, had thought to be of the party if Lina went with her mistress, but, just as they were leaving the raft, he resolved to remain, at the request of Lina herself.

"Mr. Fragoso!" she said to him, after taking him aside.

"Miss Lina?" answered Fragoso.

"I do not think that your friend Torres intends to go with us to Ega."

"Certainly not, he is going to stay on board, Miss Lina, but you wold oblige me by not calling him my friend!"

"But you undertook to ask a passage for him before he had shown any intention of doing so."

"Yes, and on that occasion, if you would like to know what I think, I made a fool of myself!"

"Quite so! and if you would like to know what I think, I do not like the man at all, Mr. Fragoso."

"Neither do I, Miss Lina, and I have all the time an idea that I have seen him somewhere before. But the remembrance is too vague; the impression, however, is far from being a pleasant one!"

"Where and when could you have met him? Cannot you call it to mind? It might be useful to know who he is and what he has been."

"No--I try all I can. How long was it ago? In what country? Under what circumstances? And I cannot hit upon it."

"Mr. Fragoso!"

"Miss Lina!"

"Stay on board and keep watch on Torres during our absence!"

"What? Not go with you to Ega, and remain a whole day without seeing you?"

"I ask you to do so!"

"Is it an order?"

"It is an entreaty!"

"I will remain!"

"Mr. Fragoso!"

"Miss Lina!"

"I thank you!"

"Thank me, then, with a good shake of the hand," replied Fragoso; "that is worth something."

Lina held out her hand, and Fragoso kept it for a few moments while he looked into her face. And that is the reason why he did not take his place in the pirogue, and became, without appearing to be, the guard upon Torres.

Did the latter notice the feelings of aversion with which he was regarded? Perhaps, but doubtless he had his reasons for taking no account of them.

A distance of four leagues separated the mooring-place from the town of Ega. Eight leagues, there and back, in a pirogue containing six persons, besides two negroes as rowers, would take some hours, not to mention the fatigue caused by the high temperature, though the sky was veiled with clouds.

Fortunately a lovely breeze blew from the northwest, and if it held would be favorable for crossing Lake Teffe. They could go to Ega and return rapidly without having to tack.

So the lateen sail was hoisted on the mast of the pirogue. Benito took the tiller, and off they went, after a last gesture from Lina to Fragoso to keep his eyes open.

The southern shore of the lake had to be followed to get to Ega.

After two hours the pirogue arrived at the port of this ancient mission founded by the Carmelites, which became a town in 1759, and which General Gama placed forever under Brazilian rule.

The passengers landed on a flat beach, on which were to be found not only boats from the interior, but a few of those little schooners which are used in the coasting-trade on the Atlantic seaboard.

When the two girls entered Ega they were at first much astonished.

"What a large town!" said Minha.

"What houses! what people!" replied Lina, whose eyes seemed to have expanded so that she might see better.

"Rather!" said Benito laughingly. "More than fifteen hundred inhabitants! Two hundred houses at the very least!
Some of them with a first floor! And two or three streets! Genuine streets!"

"My dear Manoel!" said Minha, "do protect us against my brother! He is making fun of us, and only because he
had already been in the finest towns in Amazones and Para!"

"Quite so, and he is also poking fun at his mother," added Yaquita, "for I confess I never saw anything equal to
this!"

"Then, mother and sister, you must take great care that you do not fall into a trance when you get to Manaos, and
vanish altogether when you reach Belem!"

"Never fear," answered Manoel; "the ladies will have been gently prepared for these grand wonders by visiting
the principal cities of the Upper Amazon!"

"Now, Manoel," said Minha, "you are talking just like my brother! Are you making fun of us, too?"

"No, Minha, I assure you."

"Laugh on, gentlemen," said Lina, "and let us look around, my dear mistress, for it is very fine!"

Very fine! A collection of houses, built of mud, whitewashed, and principally covered with thatch or palm-
leaves; a few built of stone or wood, with verandas, doors, and shutters painted a bright green, standing in the
middle of a small orchard of orange-trees in flower. But there were two or three public buildings, a barrack, and a
church dedicated to St. Theresa, which was a cathedral by the side of the modest chapel at Iquitos. On looking
ward toward the lake a beautiful panorama unfolded itself, bordered by a frame of cocoanut-trees and assais, which ended
at the edge of the liquid level, and showed beyond the picturesque village of Noqueira, with its few small houses lost
in the mass of the old olive-trees on the beach.

But for the two girls there was another cause of wonderment, quite feminine wonderment too, in the fashions of
the fair Egans, not the primitive costume of the natives, converted Omaas or Muas, but the dress of true Brazilian
ladies. The wives and daughters of the principal functionaries and merchants o the town pretentiously showed off
their Parisian toilettes, a little out of date perhaps, for Ega is five hundred leagues away from Para, and this is itself
many thousands of miles from Paris.

"Just look at those fine ladies in their fine clothes!"

"Lina will go mad!" exclaimed Benito.

"If those dresses were worn properly," said Minha, "they might not be so ridiculous!"

"My dear Minha," said Manoel, "with your simple gown and straw hat, you are better dressed than any one of
these Brazilians, with their headgear and flying petticoats, which are foreign to their country and their race."

"If it pleases you to think so," answered Minha, "I do not envy any of them."

But they had come to see. They walked through the streets, which contained more stalls than shops; they strolled
about the market-place, the rendezvous of the fashionable, who were nearly stifled in their European clothes; they
even breakfasted at an hotel--it was scarcely an inn--whose cookery caused them to deeply regret the excellent
service on the raft.

After dinner, at which only turtle flesh, served up in different forms, appeared, the Garral family went for the last
time to admire the borders of the lake as the setting sun gilded it with its rays; then they rejoined their pirogue,
somewhat disillusioned perhaps as to the magnificence of a town which one hour would give time enough to visit,
and a little tired with walking about its stifling streets which were not nearly so pleasant as the shady pathways of
Iquitos. The inquisitive Lina's enthusiasm alone had not been damped.

They all took their places in the pirogue. The wind remained in the northwest, and had freshened with the
evening. The sail was hoisted. They took the same course as in the morning, across the lake fed by the black waters
of the Rio Teffe, which, according to the Indians, is navigable toward the southwest for forty days' journey. At eight
o'clock the pirogue regained the mooring-place and hailed the jangada.

As soon as Lina could get Fragoso aside--

"Have you seen anything suspicious?" she inquired.

"Nothing, Miss Lina," he replied; "Torres has scarcely left his cabin, where he has been reading and writing."

"He did not get into the house or the dining-room, as I feared?"

"No, all the time he was not in his cabin he was in the bow of the raft."

"And what was he doing?"

"Holding an old piece of paper in his hand, consulting it with great attention, and muttering a lot of
incomprehensible words."

"All that is not so unimportant as you think, Mr. Fragoso. These readings and writings and old papers have their
interest! He is neither a professor nor ä lawyer, this reader and writer!"

"You are right!"

"Still watch him, Mr. Fragoso!"

"I will watch him always, Miss Lina," replied Fragoso.
On the morrow, the 27th of July, at daybreak, Benito gave the pilot the signal to start.

Away between the islands, in the Bay of Arenapo, the mouth of the Japura, six thousand six hundred feet wide, was seen for an instant. This large tributary comes into the Amazon through eight mouths, as if it were pouring into some gulf or ocean. But its waters come from afar, and it is the mountains of the republic of Ecuador which start them on a course that there are no falls to break until two hundred and ten leagues from its junction with the main stream.

All this day was spent in descending to the island of Yapura, after which the river, less interfered with, makes navigation much easier. The current is not so rapid and the islets are easily avoided, so that there were no touchings or groundings.

The next day the jangada coasted along by vast beaches formed by undulating high domes, which served as the barriers of immense pasture grounds, in which the whole of the cattle in Europe could be raised and fed. These sand banks are considered to be the richest turtle grounds in the basin of the Upper Amazon.

On the evening of the 29th of July they were securely moored off the island of Catua, so as to pass the night, which promised to be dark.

On this island, as soon as the sun rose above the horizon, there appeared a party of Muras Indians, the remains of that ancient and powerful tribe, which formerly occupied more than a hundred leagues of the river bank between the Teffe and the Madeira.

These Indians went and came, watching the raft, which remained stationary. There were about a hundred of them armed with blow-tubes formed of a reed peculiar to these parts, and which is strengthened outside by the stem of a dwarf palm from which the pith has been extracted.

Joam Garral quitted for an instant the work which took up all his time, to warn his people to keep a good guard and not to provoke these Indians.

In truth the sides were not well matched. The Muras are remarkably clever at sending through their blow-tubes arrows which cause incurable wounds, even at a range of three hundred paces.

These arrows, made of the "coucourite" palm, are feathered with cotton, and nine or ten inches long, with a point like a needle, and poisoned with "curare."

Curare, or "wourah," the liquor "which kills in a whisper," as the Indians say, is prepared from the sap of one of the euphorbiaceæ and the juice of a bulbous strychnos, not to mention the paste of venomous ants and poisonous serpent fangs which they mix with it.

"It is indeed a terrible poison," said Manoel. "It attacks at once those nerves by which the movements are subordinated to the will. But the heart is not touched, and it does not cease to beat until the extinction of the vital functions, and besides no antidote is known to the poison, which commences by numbness of the limbs."

Very fortunately, these Muras made no hostile demonstrations, although they entertain a profound hatred toward the whites. They have, in truth, no longer the courage of their ancestors.

At nightfall a five-holed flute was heard behind the trees in the island, playing several airs in a minor key. Another flute answered. This interchange of musical phrases lasted for two or three minutes, and the Muras disappeared.

Fragoso, in an exuberant moment, had tried to reply by a song in his own fashion, but Lina had clapped her hand on his mouth, and prevented his showing off his insignificant singing talents, which he was so willinglv lavish of.

On the 2d of August, at three o'clock in the afternoon, the raft arrived twenty leagues away from there at Lake Apoara, which is fed by the black waters of the river of the same name, and two days afterward, about five o'clock, it stopped at the entrance into Lake Coary.

This lake is one of the largest which communicates with the Amazon, and it serves as a reservoir for different rivers. Five or six affluents run into it, and there are stored and mixed up, and emerge by a narrow channel into the main stream.

After catching a glimpse of the hamlet of Tahua-Miri, mounted on its piles as on stilts, as a protection against inundation from the floods, which often sweep up over these low sand banks, the raft was moored for the night.

The stoppage was made in sight of the village of Coary, a dozen houses, considerably dilapidated, built in the midst of a thick mass of orange and calabash trees.

Nothing can be more changeable than the aspect of this village, for according to the rise or fall of the water the lake stretches away on all sides of it, or is reduced to a narrow canal, scarcely deep enough to communicate with the Amazon.

On the following morning, that of the 5th of August, they started at dawn, passing the canal of Yucura, belonging to the tangled system of lakes and furos of the Rio Zapura, and on the morning of the 6th of August they reached the entrance to Lake Miana.

No fresh incident occurred in the life on board, which proceeded with almost methodical regularity.
Fragoso, urged on by Lina, did not cease to watch Torres. Many times he tried to get him to talk about his past life, but the adventurer eluded all conversation on the subject, and ended by maintaining a strict reserve toward the barber.

After catching a glimpse of the hamlet of Tahua-Miri, mounted on its piles as on stilts, as a protection against inundation from the floods, which often sweep up and over these low sand banks, the raft was moored for the night.

His intercourse with the Garral family remained the same. If he spoke little to Joam, he addressed himself more willingly to Yaquita and her daughter, and appeared not to notice the evident coolness with which he was received. They all agreed that when the raft arrived at Manaos, Torres should leave it, and that they would never speak of him again. Yaquita followed the advice of Padre Passanha, who counseled patience, but the good priest had not such an easy task in Manoel, who was quite disposed to put on shore the intruder who had been so unfortunately taken on to the raft.

The only thing that happened on this evening was the following:
A pirogue, going down the river, came alongside the jangada, after being hailed by Joam Garral.
"Are you going to Manaos?" asked he of the Indian who commanded and was steering her.
"Yes," replied he.
"When will you get there?"
"In eight days."
"Then you will arrive before we shall. Will you deliver a letter for me?"
"With pleasure."
"Take this letter, then, my friend, and deliver it at Manaos."

The Indian took the letter which Joam gave him, and a handful of reis was the price of the commission he had undertaken.

No members of the family, then gone into the house, knew anything of this. Torres was the only witness. He heard a few words exchanged between Joam and the Indian, and from the cloud which passed over his face it was easy to see that the sending of this letter considerably surprised him.

CHAPTER XVII. AN ATTACK

HOWEVER, if Manoel, to avoid giving rise to a violent scene on board, said nothing on the subject of Torres, he resolved to have an explanation with Benito.
"Benito," he began, after taking him to the bow of the jangada, "I have something to say to you."

Benito, generally so good-humored, stopped as he looked at Manoel, and a cloud came over his countenance.
"I know why," he said; "it is about Torres."
"Yes, Benito."
"And I also wish to speak to you."

"You have then noticed his attention to Minha?" said Manoel, turning pale.
"Ah! It is not a feeling of jealousy, though, that exasperates you against such a man?" said Benito quickly.
"No!" replied Manoel. "Decidedly not! Heaven forbid I should do such an injury to the girl who is to become my wife. No, Benito! She holds the adventurer in horror! I am not thinking anything of that sort; but it distresses me to see this adventurer constantly obstructing himself by his presence and conversation on your mother and sister, and seeking to introduce himself into that intimacy with your family which is already mine."

"Manoel," gravely answered Benito, "I share your aversion for this dubious individual, and had I consulted my feelings I would already have driven Torres off the raft! But I dare not!"
"You dare not?" said Manoel, seizing the hand of his friend. "You dare not?"
"Listen to me, Manoel," continued Benito. "You have observed Torres well, have you not? You have remarked his attentions to my sister! Nothing can be truer! But while you have been noticing that, have you not seen that this annoying man never keeps his eyes off my father, no matter if he is near to him or far from him, and that he seems to have some spiteful secret intention in watching him with such unaccountable persistency?"

"What are you talking about, Benito? Have you any reason to think that Torres bears some grudge against Joam Garral?"
"No! I think nothing!" replied Benito; "it is only a presentiment! But look well at Torres, study his face with care, and you will see what an evil grin he has whenever my father comes into his sight."
"Well, then," exclaimed Manoel, "if it is so, Benito, the more reason for clearing him out!"
"More reason—or less reason," replied Benito. "Manoel, I fear—what? I know not—but to force my father to get rid of Torres would perhaps be imprudent! I repeat it, I am afraid, though no positive fact enables me to explain my fear to myself!"
And Benito seemed to shudder with anger as he said these words.
"Then," said Manoel, "you think we had better wait?"
"Yes; wait, before doing anything, but above all things let us be on our guard!"
"After all," answered Manoel, "in twenty days we shall be at Manaos. There Torres must stop. There he will leave us, and we shall be relieved of his presence for good! Till then we must keep our eyes on him!"
"You understand me, Manoel?" asked Benito.
"I understand you, my friend, my brother!" replied Manoel, "although I do not share, and cannot share, your fears! What connection can possibly exist between your father and this adventurer? Evidently your father has never seen him!"

"I do not say that my father knows Torres," said Benito; "but assuredly it seems to me that Torres knows my father. What was the fellow doing in the neighborhood of the fazenda when we met him in the forest of Iquitos? Why did he then refuse the hospitality which we offered, so as to afterward manage to force himself on us as our traveling companion? We arrive at Tabatinga, and there he is as if he was waiting for us! The probability is that these meetings were in pursuance of a preconceived plan. When I see the shifty, dogged look of Torres, all this crowds on my mind. I do not know! I am losing myself in things that defy explanation! Oh! why did I ever think of offering to take him on board this raft?"

"Be calm, Benito, I pray you!"

"Manoel!" continued Benito, who seemed to be powerless to contain himself, "think you that if it only concerned me—this man who inspires us all with such aversion and disgust—I should not hesitate to throw him overboard! But when it concerns my father, I fear lest in giving way to my impressions I may be injuring my object! Something tells me that with this scheming fellow there may be danger in doing anything until he has given us the right—the right and the duty—to do it. In short, on the jangada, he is in our power, and if we both keep good watch over my father, we can spoil his game, no matter how sure it may be, and force him to unmask and betray himself! Then wait a little longer!"

The arrival of Torres in the bow of the raft broke off the conversation. Torres looked slyly at the two young men, but said not a word.

Benito was not deceived when he said that the adventurer's eyes were never off Joam Garral as long as he fancied he was unobserved.

No! he was not deceived when he said that Torres' face grew evil when he looked at his father!

By what mysterious bond could these two men—one nobleness itself, that was self-evident—be connected with each other?

Such being the state of affairs it was certainly difficult for Torres, constantly watched as he was by the two young men, by Fragoso and Lina, to make a single movement without having instantly to repress it. Perhaps he understood the position. If he did, he did not show it, for his manner changed not in the least.

Satisfied with their mutual explanation, Manoel and Benito promised to keep him in sight without doing anything to awaken his suspicions.

During the following days the jangada passed on the right the mouths of the rivers Camara, Aru, and Yuripari, whose waters instead of flowing into the Amazon run off to the south to feed the Rio des Purus, and return by it into the main river. At five o'clock on the evening of the 10th of August they put into the island of Cocos.

They there passed a _"seringal."_ This name is applied to a caoutchouc plantation, the caoutchouc being extracted from the _"seringueira"_ tree, whose scientific name is _siphonia elastica_.

It is said that, by negligence or bad management, the number of these trees is decreasing in the basin of the Amazon, but the forests of seringueira trees are still very considerable on the banks of the Madeira, Purus, and other tributaries.

There were here some twenty Indians collecting and working the caoutchouc, an operation which principally takes place during the months of May, June, and July.

After having ascertained that the trees, well prepared by the river floods which have bathed their stems to a height of about four feet, are in good condition for the harvest, the Indians are set to work.

Incisions are made into the albumen of the seringueiras; below the wound small pots are attached, which twenty-four hours suffice to fill with a milky sap. It can also be collected by means of a hollow bamboo, and a receptacle placed on the ground at the foot of the tree.

The sap being obtained, the Indians, to prevent the separation of its peculiar resins, fumigate it over a fire of the nuts of the assai palm. By spreading out the sap on a wooden scoop, and shaking it in the smoke, its coagulation is almost immediately obtained; it assumes a grayish-yellow tinge and solidifies. The layers formed in succession are detached from the scoop, exposed to the sun, hardened, and assume the brownish color with which we are familiar. The manufacture is then complete.
Benito, finding a capital opportunity, bought from the Indians all the caoutchouc stored in their cabins, which, by the way, are mostly built on piles. The price he gave them was sufficiently remunerative, and they were highly satisfied.

Four days later, on the 14th of August, the jangada passed the mouths of the Purus.

This is another of the large affluents of the Amazon, and seems to possess a navigable course, even for large ships, of over five hundred leagues. It rises in the southwest, and measures nearly five thousand feet across at its junction with the main river. After winding beneath the shade of ficuses, tabuaries, nipa palms, and cecropias, it enters the Amazon by five mouths.

Hereabouts Araujo the pilot managed with great ease. The course of the river was but slightly obstructed with islands, and besides, from one bank to another its width is about two leagues.

The current, too, took along the jangada more steadily, and on the 18th of August it stopped at the village of Pasquiero to pass the night.

The sun was already low on the horizon, and with the rapidity peculiar to these low latitudes, was about to set vertically, like an enormous meteor.

Joam Garral and his wife, Lina, and old Cybele, were in front of the house.

Torres, after having for an instant turned toward Joam as if he would speak to him, and prevented perhaps by the arrival of Padre Passanha, who had come to bid the family good-night, had gone back to his cabin.

The Indians and the negroes were at their quarters along the sides. Araujo, seated at the bow, was watching the current which extended straight away in front of him.

Manoel and Benito, with their eyes open, but chatting and smoking with apparent indifference, walked about the central part of the craft awaiting the hour of repose.

All at once Manoel stopped Benito with his hand and said:

"What a queer smell! Am I wrong? Do you not notice it?"

"One would say that it was the odor of burning musk!" replied Benito. "There ought to be some alligators asleep on the neighboring beach!"

"Well, nature has done wisely in allowing them so to betray themselves."

"Yes," said Benito, "it is fortunate, for they are sufficiently formidable creatures!"

Often at the close of the day these saurians love to stretch themselves on the shore, and install themselves comfortably there to pass the night. Crouched at the opening of a hole, into which they have crept back, they sleep with the mouth open, the upper jaw perpendicularly erect, so as to lie in wait for their prey. To these amphibians it is but sport to launch themselves in its pursuit, either by swimming through the waters propelled by their tails or running along the bank with a speed no man can equal.

It is on these huge beaches that the caymans are born, live, and die, not without affording extraordinary examples of longevity. Not only can the old ones, the centenarians, be recognized by the greenish moss which carpets their carcass and is scattered over their protuberances, but by their natural ferocity, which increases with age.

As Benito said, they are formidable creatures, and it is fortunate that their attacks can be guarded against.

Suddenly cries were heard in the bow.

"Caymans! caymans!"

Manoel and Benito came forward and looked.

Three large saurians, from fifteen to twenty feet long, had managed to clamber on to the platform of the raft.

"Bring the guns! Bring the guns!" shouted Benito, making signs to the Indians and the blacks to get behind.

"Into the house!" said Manoel; "make haste!"

And in truth, as they could not attack them at once, the best thing they could do was to get into shelter without delay.

It was done in an instant. The Garral family took refuge in the house, where the two young men joined them.

The Indians and the negroes ran into their huts and cabins. As they were shutting the door:

"And Minha?" said Manoel.

"She is not there!" replied Lina, who had just run to her mistress' room.

"Good heavens! where is she?" exclaimed her mother, and they all shouted at once:

"Minha! Minha!"

No reply.

"There she is, on the bow of the jangada!" said Benito.

"Minha!" shouted Manoel.

The two young men, and Fragoso and Joam Garral, thinking no more of danger, rushed out of the house, guns in hand.

Scarcely were they outside when two of the alligators made a half turn and ran toward them.
A dose of buckshot to the head, close to the eye, from Benito, stopped one of the monsters, who, mortally wounded, writhed in frightful convulsions and fell on his side.

But the second still lived, and came on, and there was no way of avoiding him.

The huge alligator tore up to Joam Garral, and after knocking him over with a sweep of his tail, ran at him with open jaws.

At this moment Torres rushed from the cabin, hatchet in hand, and struck such a terrific blow that its edge sunk into the jaw of the cayman and left him defenseless.

Blinded by the blood, the animal flew to the side, and, designedly or not, fell over and was lost in the stream.

"Minha! Minha!" shouted Manoel in distraction, when he got to the bow of the jangada.

Suddenly she came into view. She had taken refuge in the cabin of Araujo, and the cabin had just been upset by a powerful blow from the third alligator. Minha was flying aft, pursued by the monster, who was not six feet away from her.

Minha fell.

A second shot from Benito failed to stop the cayman. He only struck the animal's carapace, and the scales flew to splinters but the ball did not penetrate.

Manoel threw himself at the girl to raise her, or to snatch her from death! A side blow from the animal's tail knocked him down too.

Minha fainted, and the mouth of the alligator opened to crush her!

And then Fragoso jumped in to the animal, and thrust in a knife to the very bottom of his throat, at the risk of having his arm snapped off by the two jaws, had they quickly closed.

Fragoso pulled out his arm in time, but he could not avoid the chock of the cayman, and was hurled back into the river, whose waters reddened all around.

"Fragoso! Fragoso!" shrieked Lina, kneeling on the edge of the raft.

A second afterward Fragoso reappeared on the surface of the Amazon--safe and sound.

But, at the peril of his life he had saved the young girl, who soon came to. And as all hands were held out to him--Manoel's, Yaquta's, Minha's, and Lina's, and he did not know what to say, he ended by squeezing the hands of the young mulatto.

However, though Fragoso had saved Minha, it was assuredly to the intervention of Torres that Joam Garral owed his safety.

It was not, therefore, the fazender's life that the adventurer wanted. In the face of this fact, so much had to be admitted.

Manoel said this to Benito in an undertone.

"That is true!" replied Benito, embarrassed. "You are right, and in a sense it is one cruel care the less! Nevertheless, Manoel, my suspicions still exist! It is not always a man's worst enemy who wishes him dead!"

Joam Garral walked up to Torres.

"Thank you, Torres!" he said, holding out his hand. The adventurer took a step or two backward without replying.

"Torres," continued Joam, "I am sorry that we are arriving at the end of our voyage, and that in a few days we must part! I owe you----"

"Joam Garral!" answered Torres, "you owe me nothing! Your life is precious to me above all things! But if you will allow me--I have been thinking--in place of stopping at Manaos, I will go on to Belem. Will you take me there?"

Joam Garral replied by an affirmative nod.

In hearing this demand Benito in an unguarded moment was about to intervene, but Manoel stopped him, and the young man checked himself, though not without a violent effort.

CHAPTER XVIII. THE ARRIVAL DINNER

IN THE MORNING, after a night which was scarcely sufficient to calm so much excitement, they unmoored from the cayman beach and departed. Before five days, if nothing interfered with their voyage, the raft would reach the port of Manaos.

Minha had quite recovered from her fright, and her eyes and smiles thanked all those who had risked their lives for her.

As for Lina, it seemed as though she was more grateful to the brave Fragoso than if it was herself that he had saved.

"I will pay you back, sooner or later, Mr. Fragoso," said she, smiling.
"And how, Miss Lina?"

"Oh! You know very well!"

"Then if I know it, let it be soon and not late!" replied the good-natured fellow.

And from this day it began to be whispered about that the charming Lina was engaged to Fragoso, that their marriage would take place at the same time as that of Minha and Manoel, and that the young couple would remain at Belem with the others.

"Capital! capital!" repeated Fragoso unceasingly; "but I never thought Para was such a long way off!"

As for Manoel and Benito, they had had a long conversation about what had passed. There could be no question about obtaining from Joam Garral the dismissal of his rescuer.

"Your life is precious to me above all things!" Torres had said.

This reply, hyperbolical and enigmatical at the time, Benito had heard and remembered.

In the meantime the young men could do nothing. More than ever they were reduced to waiting--to waiting not for four or five days, but for seven or eight weeks--that is to say, for whatever time it would take for the raft to get to Belem.

"There is in all this some mystery that I cannot understand," said Benito.

"Yes, but we are assured on one point," answered Manoel. "It is certain that Torres does not want your father's life. For the rest, we must still watch!"

It seemed that from this day Torres desired to keep himself more reserved. He did not seek to intrude on the family, and was even less assiduous toward Minha. There seemed a relief in the situation of which all, save perhaps Joam Garral, felt the gravity.

On the evening of the same day they left on the right the island of Baroso, formed by a furo of that name, and Lake Manaori, which is fed by a confused series of petty tributaries.

The night passed without incident, though Joam Garral had advised them to watch with great care.

On the morrow, the 20th of August, the pilot, who kept near the right bank on account of the uncertain eddies on the left, entered between the bank and the islands.

Beyond this bank the country was dotted with large and small lakes, much as those of Calderon, Huarandeina, and other black-watered lagoons. This water system marks the approach of the Rio Negro, the most remarkable of all the tributaries of the Amazon. In reality the main river still bore the name of the Solimoens, and it is only after the junction of the Rio Negro that it takes the name which has made it celebrated among the rivers of the globe.

During this day the raft had to be worked under curious conditions.

The arm followed by the pilot, between Calderon Island and the shore, was very narrow, although it appeared sufficiently large. This was owing to a great portion of the island being slightly above the mean level, but still covered by the high flood waters. On each side were massed forests of giant trees, whose summits towered some fifty feet above the ground, and joining one bank to the other formed an immense cradle.

On the left nothing could be more picturesque than this flooded forest, which seemed to have been planted in the middle of a lake. The stems of the trees arose from the clear, still water, in which every interlacement of their boughs was reflected with unequaled purity. They were arranged on an immense sheet of glass, like the trees in miniature on some table _epergne_, and their reflection could not be more perfect. The difference between the image and the reality could scarcely be described. Duplicates of grandeur, terminated above and below by a vast parasol of green, they seemed to form two hemispheres, inside which the jangada appeared to follow one of the great circles.

It had been necessary to bring the raft under these boughs, against which flowed the gentle current of the stream. It was impossible to go back. Hence the task of navigating with extreme care, so as to avoid the collisions on either side.

In this all Araujo's ability was shown, and he was admirably seconded by his crew. The trees of the forest furnished the resting-places for the long poles which kept the jangada in its course. The least blow to the jangada would have endangered the complete demolition of the woodwork, and caused the loss, if not of the crew, of the greater part of the cargo.

"It is truly very beautiful," said Minha, "and it would be very pleasant for us always to travel in this way, on this quiet water, shaded from the rays of the sun."

"At the same time pleasant and dangerous, dear Minha," said Manoel. "In a pirogue there is doubtless nothing to fear in sailing here, but on a huge raft of wood better have a free course and a clear stream."

"We shall be quite through the forest in a couple of hours," said the pilot.

"Look well at it, then!" said Lina. "All these beautiful things pass so quickly! Ah! dear mistress! do you see the troops of monkeys disporting in the higher branches, and the birds admiring themselves in the pellucid water!"

"And the flowers half-opened on the surface," replied Minha, "and which the current dandles like the breeze!"

"And the long lianas, which so oddly stretch from one tree to another!" added the young mulatto.
"And no Fragoso at the end of them!" said Lina's betrothed. "That was rather a nice flower you gathered in the forest of Iquitos!"

"Just behold the flower—the only one in the world," said Lina quizzingly; "and, mistress! just look at the splendid plants!"

And Lina pointed to the nymphæas with their colossal leaves, whose flowers bear buds as large as cocoanuts. Then, just where the banks plunged beneath the waters, there were clumps of "mucumus," reeds with large leaves, whose elastic stems bend to give passage to the pirogues and close again behind them. There was there what would tempt any sportsman, for a whole world of aquatic birds fluttered between the higher clusters, which shook with the stream.

Ibises half-lollingly posed on some old trunk, and gray herons motionless on one leg, solemn flamingoes who from a distance looked like red umbrellas scattered in the foliage, and phœnicopters of every color, enlivened the temporary morass.

And along the top of the water glided long and swiftly-swimming snakes, among them the formidable gymnotus, whose electric discharges successively repeated paralyze the most robust of men or animals, and end by dealing death. Precautions had to be taken against the "sucurijus" serpents, which, coiled round the trunk of some tree, unroll themselves, hang down, seize their prey, and draw into their rings, which are powerful enough to crush a bullock. Have there not been met with in these Amazonian forests reptiles from thirty to thirty-five feet long? and even, according to M. Carrey, do not some exist whose length reaches forty-seven feet, and whose girth is that of a hogshead?

Had one of these sucurijus, indeed, got on to the raft he would have proved as formidable as an alligator.

Very fortunately the travelers had to contend with neither gymnotus nor sucuriju, and the passage across the submerged forest, which lasted about two hours, was effected without accident.

Three days passed. They neared Manaos. Twenty-four hours more and the raft would be off the mouth of the Rio Negro, before the capital of the province of Amazonas.

In fact, on the 23d of August, at five o'clock in the evening, they stopped at the southern point of Muras Island, on the right bank of the stream. They only had to cross obliquely for a few miles to arrive at the port, but the pilot Araujo very properly would not risk it on that day, as night was coming on. The three miles which remained would take three hours to travel, and to keep to the course of the river it was necessary, above all things, to have a clear outlook.

This evening the dinner, which promised to be the last of this first part of the voyage, was not served without a certain amount of ceremony. Half the journey on the Amazon had been accomplished, and the task was worthy of a jovial repast. It was fitting to drink to the health of Amazones a few glasses of that generous liquor which comes from the coasts of Oporto and Setubal. Besides, this was, in a way, the betrothal dinner of Fragoso and the charming Lina—that of Manoel and Minha had taken place at the fazenda of Iquitos several weeks before. After the young master and mistress, it was the turn of the faithful couple who were attached to them by so many bonds of gratitude.

So Lina, who was to remain in the service of Minha, and Fragoso, who was about to enter into that of Manoel Valdez, sat at the common table, and even had the places of honor reserved for them.

Torres, naturally, was present at the dinner, which was worthy of the larder and kitchen of the jangada.

The adventurer, seated opposite to Joam Garral, who was always taciturn, listened to all that was said, but took no part in the conversation. Benito quietly and attentively watched him. The eyes of Torres, with a peculiar expression, constantly sought his father. One would have called them the eyes of some wild beast trying to fascinate his prey before he sprang on it.

Manoel talked mostly with Minha. Between whiles his eyes wandered to Torres, but he acted his part more successfully than Benito in a situation which, if it did not finish at Manaos, would certainly end at Belem.

The dinner was jolly enough. Lina kept it going with her good humor, Fragoso with his witty repartees. The Padre Passanha looked gayly round on the little world he cherished, and on the two young couples which his hands would shortly bless in the waters of Para.

"Eat, padre," said Benito, who joined in the general conversation; "do honor to this betrothal dinner. You will want some strength to celebrate both marriages at once!"

"Well, my dear boy," replied Passanha, "seek out some lovely and gentle girl who wishes you well, and you will see that I can marry you at the same time!"

"Well answered, padre!" exclaimed Manoel. "Let us drink to the coming marriage of Benito."

"We must look out for some nice young lady at Belem," said Minha. "He should do what everybody else does."

"To the wedding of Mr. Benito!" said Fragoso, "who ought to wish all the world to marry him!"

"They are right, sir," said Yaquita. "I also drink to your marriage, and may you be as happy as Minha and Manoel, and as I and your father have been!"
"As you always will be, it is to be hoped," said Torres, drinking a glass of port without having pledged anybody. "All here have their happiness in their own hands."

It was difficult to say, but this wish, coming from the adventurer, left an unpleasant impression.

Manoel felt this, and wishing to destroy its effect, "Look here, padre," said he, "while we are on this subject, are there not any more couples to betroth on the raft?"

"I do not know," answered Padre Passanha, "unless Torres—you are not married, I believe?"

"No; I am, and always shall be, a bachelor."

Benito and Manoel thought that while thus speaking Torres looked toward Minha.

"And what should prevent you marrying?" replied Padre Passanha; "at Belem you could find a wife whose age would suit yours, and it would be possible perhaps for you to settle in that town. That would be better than this wandering life, of which, up to the present, you have not made so very much."

"You are right, padre," answered Torres; "I do not say no. Besides the example is contagious. Seeing all these young couples gives me rather a longing for marriage. But I am quite a stranger in Belem, and, for certain reasons, that would make my settlement more difficult."

"Where do you come from, then?" asked Fragoso, who always had the idea that he had already met Torres somewhere.

"From the province of Minas Geraes."

"And you were born——"?

"In the capital of the diamond district, Tijuco."

Those who had seen Joam Garral at this moment would have been surprised at the fixity of his look which met that of Torres.

CHAPTER XIX. ANCIENT HISTORY

BUT THE CONVERSATION was continued by Fragoso, who immediately rejoined:

"What! you come from Tijuco, from the very capital of the diamond district?"

"Yes," said Torres. "Do you hail from that province?"

"No! I come from the Atlantic seaboard in the north of Brazil," replied Fragoso.

"You do not know this diamond country, Mr. Manoel?" asked Torres.

A negative shake of the head from the young man was the only reply.

"And you, Mr. Benito," continued Torres, addressing the younger Garral, whom he evidently wished to join in the conversation; "you have never had curiosity enough to visit the diamond arraval?"

"Never," dryly replied Benito.

"Ah! I should like to see that country," said Fragoso, who unconsciously played Torres' game. "It seems to me I should finish by picking up a diamond worth something considerable."

"And what would you do with this diamond worth something considerable, Fragoso?" queried Lina.

"Sell it!"

"Then you would get rich all of a sudden!"

"Very rich!"

"Well, if you had been rich three months ago you would never have had the idea of--that liana!"

"And if I had not had that," exclaimed Fragoso, "I should not have found a charming little wife who--well, assuredly, all is for the best!"

"You see, Fragoso," said Minha, "when you marry Lina, diamond takes the place of diamond, and you do not lose by the change!"

"To be sure, Miss Minha," gallantly replied Fragoso; "rather I gain!"

There could be no doubt that Torres did not want the subject to drop, for he went on with:

"It is a fact that at Tijuco sudden fortunes are realized enough to turn any man's head! Have you heard tell of the famous diamond of Abaete, which was valued at more than two million contos of reis? Well, this stone, which weighed an ounce, came from the Brazilian mines! And they were three convicts--yes! three men sentenced to transportation for life--who found it by chance in the River Abaete, at ninety leagues from Terro de Frio."

"At a stroke their fortune was made?" asked Fragoso.

"No," replied Torres; "the diamond was handed over to the governor-general of the mines. The value of the stone was recognized, and King John VI., of Portugal, had it cut, and wore it on his neck on great occasions. As for the convicts, they got their pardon, but that was all, and the cleverest could not get much of an income out of that!"

"You, doubtless?" said Benito very dryly.

"Yes--I? Why not?" answered Torres. "Have you ever been to the diamond district?" added he, this time
addressing Joam Garral.

"Never!" said Joam, looking straight at him.

"That is a pity!" replied he. "You should go there one day. It is a very curious place, I assure you. The diamond valley is an isolated spot in the vast empire of Brazil, something like a park of a dozen leagues in circumference, which in the nature of its soil, its vegetation, and its sandy rocks surrounded by a circle of high mountains, differs considerably from the neighboring provinces. But, as I have told you, it is one of the richest places in the world, for from 1807 to 1817 the annual return was about eighteen thousand carats. Ah! there have been some rare finds there, not only for the climbers who seek the precious stone up to the very tops of the mountains, but also for the smugglers who fraudulently export it. But the work in the mines is not so pleasant, and the two thousand negroes employed in that work by the government are obliged even to divert the watercourses to get at the diamantiferous sand. Formerly it was easier work."

"In short," said Fragoso, "the good time has gone!"

"But what is still easy is to get the diamonds in scoundrel-fashion—that is, by theft; and—stop! in 1826, when I was about eight years old, a terrible drama happened at Tijuco, which showed that criminal would recoil from nothing if they could gain a fortune by one bold stroke. But perhaps you are not interested?"

"On the contrary, Torres; go on," replied Joam Garral, in a singularly calm voice.

"So be it," answered Torres. "Well, the story is about stealing diamonds, and a handful of those pretty stones is worth a million, sometimes two!"

And Torres, whose face expressed the vilest sentiments of cupidity, almost unconsciously made a gesture of opening and shutting his hand.

"This is what happened," he continued. "At Tijuco it is customary to send off in one delivery the diamonds collected during the year. They are divided into two lots, according to their size, after being sorted in a dozen sieves with holes of different dimensions. These lots are put into sacks and forwarded to Rio de Janeiro; but as they are worth many millions you may imagine they are heavily escorted. A workman chosen by the superintendent, four cavalrymen from the district regiment, and ten men on foot, complete the convoy. They first make for Villa Rica, where the commandant puts his seal on the sacks, and then the convoy continues its journey to Rio de Janeiro. I should add, that, for the sake of precaution, the start is always kept secret. Well, in 1826, a young fellow named Dacosta, who was about twenty-two or twenty-three years of age, and who for some years had been employed at Tijuco in the offices of the governor-general, devised the following scheme. He leagued himself with a band of smugglers, and informed them of the date of the departure of the convoy. The scoundrels took their measures accordingly. They were numerous and well armed. Close to Villa Rica, during the night of the 22d of January, the gang suddenly attacked the diamond escort, who defended themselves bravely, but were all massacred, with the exception of one man, who, seriously wounded, managed to escape and bring the news of the horrible deed. The workman was not spared any more than the soldiers. He fell beneath he blows of the thieves, and was doubtless dragged away and thrown over some precipice, for his body was never found."

"And this Dacosta?" asked Joam Garral.

"Well, his crime did not do him much good, for suspicion soon pointed toward him. He was accused of having got up the affair. In vain he protested that he was innocent. Thanks to the situation he held, he was in a position to know the date on which the convoy's departure was to take place. He alone could have informed the smugglers. He was charged, arrested, tried, and sentenced to death. Such a sentence required his execution in twenty-four hours."

"Was the fellow executed?" asked Fragoso.

"No," replied Torres; "they shut him up in the prison at Villa Rica, and during the night, a few hours only before his execution, whether alone or helped by others, he managed to escape."

"Has this young man been heard of since?" asked Joam Garral.

"Never," replied Torres. "He probably left Brazil, and now, in some distant land, lives a cheerful life with the proceeds of the robbery which he is sure to have realized."

"Perhaps, on the other hand, he died miserably!" answered Joam Garral.

"And, perhaps," added Padre Passanha, "Heaven caused him to feel remorse for his crime."

Here they all rose from the table, and, having finished their dinner, went out to breathe the evening air. The sun was low on the horizon, but an hour had still to elapse before nightfall.

"These stories are not very lively," said Fragoso, "and our betrothal dinner was best at the beginning."

"But it was your fault, Fragoso," answered Lina.

"How my fault?"

"It was you who went on talking about the district and the diamonds, when you should not have done so."

"Well, that's true," replied Fragoso; "but I had no idea we were going to wind up in that fashion."

"You are the first to blame!"
"And the first to be punished, Miss Lina; for I did not hear you laugh all through the dessert."
The whole family strolled toward the bow of the jangada. Manoel and Benito walked one behind the other without speaking. Yaquita and her daughter silently followed, and all felt an unaccountable impression of sadness, as if they had a presentiment of some coming calamity.
Torres stepped up to Joam Garral, who, with bowed head, seemed to be lost in thought, and putting his hand on his shoulder, said, "Joam Garral, may I have a few minutes' conversation with you?"
Joam looked at Torres.
"Here?" he asked.
"No; in private."
"Come, then."
They went toward the house, entered it, and the door was shut on them.
It would be difficult to depict what every one felt when Joam Garral and Torres disappeared. What could there be in common between the adventurer and the honest fazender of Iquitos? The menace of some frightful misfortune seemed to hang over the whole family, and they scarcely dared speak to each other.
"Manoel!" said Benito, seizing his friend's arm, "whatever happens, this man must leave us tomorrow at Manaos."
"Yes! it is imperative!" answered Manoel.
"And if through him some misfortune happens to my father--I shall kill him!"

CHAPTER XX. BETWEEN THE TWO MEN
FOR A MOMENT, alone in the room, where none could see or hear them, Joam Garral and Torres looked at each other without uttering a word. Did the adventurer hesitate to speak? Did he suspect that Joam Garral would only reply to his demands by a scornful silence?
Yes! Probably so. So Torres did not question him. At the outset of the conversation he took the affirmative, and assumed the part of an accuser.
"Joam," he said, "your name is not Garral. Your name is Dacosta!"
At the guilty name which Torres thus gave him, Joam Garral could not repress a slight shudder.
"You are Joam Dacosta," continued Torres, "who, twenty-five years ago, were a clerk in the governor-general's office at Tijuco, and you are the man who was sentenced to death in this affair of the robbery and murder!"
No response from Joam Garral, whose strange tranquillity surprised the adventurer. Had he made a mistake in accusing his host? No! For Joam Garral made no start at the terrible accusations. Doubtless he wanted to know to what Torres was coming.
"Joam Dacosta, I repeat! It was you whom they sought for this diamond affair, whom they convicted of crime and sentenced to death, and it was you who escaped from the prison at Villa Rica a few hours before you should have been executed! Do you not answer?"
Rather a long silence followed this direct question which Torres asked. Joam Garral, still calm, took a seat. His elbow rested on a small table, and he looked fixedly at his accuser without bending his head.
"Will you reply?" repeated Torres.
"What reply do you want from me?" said Joam quietly.
"A reply," slowly answered Torres, "that will keep me from finding out the chief of the police at Manaos, and saying to him, 'A man is there whose identity can easily be established, who can be recognized even after twenty-five years' absence, and this man was the instigator of the diamond robbery at Tijuco. He was the accomplice of the murderers of the soldiers of the escort; he is the man who escaped from execution; he is Joam Garral, whose true name is Joam Dacosta.'"
"And so, Torres," said Joam Garral, "I shall have nothing to fear from you if I give the answer you require?"
"Nothing, for neither you nor I will have any interest in talking about the matter."
"Neither you nor I?" asked Joam Garral. "It is not with money, then, that your silence is to be bought?"
"No! No matter how much you offered me!"
"What do you want, then?"
"Joam Garral," replied Torres, "here is my proposal. Do not be in a hurry to reply by a formal refusal. Remember that you are in my power."
"What is this proposal?" asked Joam.
Torres hesitated for a moment.
The attitude of this guilty man, whose life he held in his hands, was enough to astonish him. He had expected a stormy discussion and prayers and tears. He had before him a man convicted of the most heinous of crimes, and the
man never flinched. At length, crossing his arms, he said: "You have a daughter!--I like her--and I want to marry her!"

Apparently Joam Garral expected anything from such a man, and was as quiet as before. "And so," he said, "the worthy Torres is anxious to enter the family of a murderer and a thief?"

"I am the sole judge of what it suits me to do," said Torres. "I wish to be the son-in-law of Joam Garral, and I will."

"You ignore, then, that my daughter is going to marry Manoel Valdez?"

"You will break it off with Manoel Valdez!"

"And if my daughter declines?"

"If you tell her all, I have no doubt she would consent," was the impudent answer.

"All?"

"All, if necessary. Between her own feelings and the honor of her family and the life of her father she would not hesitate."

"You are a consummate scoundrel, Torres," quietly said Joam, whose coolness never forsook him. "A scoundrel and a murderer were made to understand each other."

At these words Joam Garral rose, advanced to the adventurer, and looking him straight in the face, "Torres," he said, "if you wish to become one of the family of Joam Dacosta, you ought to know that Joam Dacosta was innocent of the crime for which he was condemned."

"Really!"

"And I add," replied Joam, "that you hold the proof of his innocence, and are keeping it back to proclaim it on the day when you marry his daughter."

"Fair play, Joam Garral," answered Torres, lowering his voice, "and when you have heard me out, you will see if you dare refuse me your daughter!"

"I am listening, Torres."

"Well," said the adventurer, half keeping back his words, as if he was sorry to let them escape from his lips, "I know you are innocent! I know it, for I know the true culprit, and I am in a position to prove your innocence."

"And the unhappy man who committed the crime?"

"Is dead."

"Dead!" exclaimed Joam Garral; and the word made him turn pale, in spite of himself, as if it had deprived him of all power of reinstatement.

"Dead," repeated Torres; "but this man, whom I knew a long time after his crime, and without knowing that he was a convict, had written out at length, in his own hand, the story of this affair of the diamonds, even to the smallest details. Feeling his end approaching, he was seized with remorse. He knew where Joam Dacosta had taken refuge, and under what name the innocent man had again begun a new life. He knew that he was rich, in the bosom of a happy family, but he knew also that there was no happiness for him. And this happiness he desired to add to the reputation to which he was entitled. But death came--he intrusted to me, his companion, to do what he could no longer do. He gave me the proofs of Dacosta's innocence for me to transmit them to him, and he died."

"The man's name?" exclaimed Joam Garral, in a tone he could not control.

"You will know it when I am one of your family."

"And the writing?"

Joam Garral was ready to throw himself on Torres, to search him, to snatch from him the proofs of his innocence.

"The writing is in a safe place," replied Torres, "and you will not have it until your daughter has become my wife. Now will you still refuse me?"

"Yes," replied Joam, "but in return for that paper the half of my fortune is yours."

"The half of your fortune?" exclaimed Torres; "agreed, on condition that Minha brings it to me at her marriage."

"And it is thus that you respect the wishes of a dying man, of a criminal tortured by remorse, and who has charge you to repair as much as he could the evil which he had done?"

"It is thus."

"Once more, Torres," said Joam Garral, "you are a consummate scoundrel."

"Be it so."

"And as I am not a criminal we were not made to understand one another."

"And your refuse?"

"I refuse."

"It will be your ruin, then, Joam Garral. Everything accuses you in the proceedings that have already taken place.
You are condemned to death, and you know, in sentences for crimes of that nature, the government is forbidden the right of commuting the penalty. Denounced, you are taken; taken, you are executed. And I will denounce you."

Master as he was of himself, Joam could stand it no longer. He was about to rush on Torres.

A gesture from the rascal cooled his anger.

"Take care," said Torres, "your wife knows not that she is the wife of Joam Dacosta, your children do not know they are the children of Joam Dacosta, and you are not going to give them the information."

Joam Garral stopped himself. He regained his usual command over himself, and his features recovered their habitual calm.

"This discussion has lasted long enough," said he, moving toward the door, "and I know what there is left for me to do."

"Take care, Joam Garral!" said Torres, for the last time, for he could scarcely believe that his ignoble attempt at extortion had collapsed.

Joam Garral made him no answer. He threw back the door which opened under the veranda, made a sign to Torres to follow him, and they advanced toward the center of the jangada, where the family were assembled.

Benito, Manoel, and all of them, under a feeling of deep anxiety, had risen. They could see that the bearing of Torres was still menacing, and that the fire of anger still shone in his eyes.

In extraordinary contrast, Joam Garral was master of himself, and almost smiling.

Both of them stopped before Yaquita and her people. Not one dared to say a word to them.

It was Torres who, in a hollow voice, and with his customary impudence, broke the painful silence.

"For the last time, Joam Garral," he said, "I ask you for a last reply!"

"And here is my reply."

And addressing his wife:

"Yaquita," he said, "peculiar circumstances oblige me to alter what we have formerly decided as to the marriage of Minha and Manoel."

"At last!" exclaimed Torres.

Joam Garral, without answering him, shot at the adventurer a glance of the deepest scorn.

But at the words Manoel had felt his heart beat as if it would break. The girl arose, ashy pale, as if she would seek shelter by the side of her mother. Yaquita opened her arms to protect, to defend her.

"Father," said Benito, who had placed himself between Joam Garral and Torres, "what were you going to say?"

"I was going to say," answered Joam Garral, raising his voice, "that to wait for our arrival in Para for the wedding of Minha and Manoel is to wait too long. The marriage will take place here, not later than to-morrow, on the jangada, with the aid of Padre Passanha, if, after a conversation I am about to have with Manoel, he agrees with me to defer it no longer."

"Ah, father, father!" exclaimed the young man.

"Wait a little before you call me so, Manoel," replied Joam, in a tone of unspeakable suffering.

Here Torres, with crossed arms, gave the whole family a look of inconceivable insolence.

"So that is you last word?" said he, extending his hand toward Joam Garral.

"No, that is not my last word."

"What is it, then?"

"This, Torres. I am master here. You will be off, if you please, and even if you do not please, and leave the jangada at this very instant!"

"Yes, this instant!" exclaimed Benito, "or I will throw you overboard."

Torres shrugged his shoulders.

"No threats," he said; "they are of no use. It suits me also to land, and without delay. But you will remember me, Joam Garral. We shall not be long before we meet."

"If it only depends on me," answered Joam Garral, "we shall soon meet, and rather sooner, perhaps, than you will like. To-morrow I shall be with Judge Ribeiro, the first magistrate of the province, whom I have advised of my arrival at Manaos. If you dare, meet me there!"

"At Judge Ribeiro's?" said Torres, evidently disconcerted.


And then, showing the pirogue to Torres, with a gesture of supreme contempt Joam Garral ordered four of his people to land him without delay on the nearest point of the island.

The scoundrel at last disappeared.

The family, who were still appalled, respected the silence of its chief; but Fragoso, comprehending scarce half the gravity of the situation, and carried away by his customary vivacity, came up to Joam Garral.

"If the wedding of Miss Minha and Mr. Manoel is to take place to-morrow on the raft----"
"Yours shall take place at the same time," kindly answered Joam Garral.

And making a sign to Manoel, he retired to his room with him.

The interview between Joam and Manoel had lasted for half an hour, and it seemed a century to the family, when the door of the room was reopened.

Manoel came out alone; his face glowed with generous resolution.

Going up to Yaquita, he said, "My mother!" to Minha he said, "My wife!" and to Benito he said, "My brother!"

And, turning toward Lina and Fragoso, he said to all, "To-morrow!"

He knew all that had passed between Joam Garral and Torres. He knew that, counting on the protection of Judge Ribeiro, by means of a correspondence which he had had with him for a year past without speaking of it to his people, Joam Garral had at last succeeded in clearing himself and convincing him of his innocence. He knew that Joam Garral had boldly undertaken the voyage with the sole object of canceling the hateful proceedings of which he had been the victim, so as not to leave on his daughter and son-in-law the weight of the terrible situation which he had had to endure so long himself.

Yes, Manoel knew all this, and, further, he knew that Joam Garral—or rather Joam Dacosta—was innocent, and his misfortunes made him even dearer and more devoted to him. What he did not know was that the material proof of the innocence of the fazender existed, and that this proof was in the hands of Torres. Joam Garral wished to reserve for the judge himself the use of this proof, which, if the adventurer had spoken truly, would demonstrate his innocence.

Manoel confined himself, then, to announcing that he was going to Padre Passanha to ask him to get things ready for the two weddings.

Next day, the 24th of August, scarcely an hour before the ceremony was to take place, a large pirogue came off from the left bank of the river and hailed the jangada. A dozen paddlers had swiftly brought it from Manaos, and with a few men it carried the chief of the police, who made himself known and came on board.

At the moment Joam Garral and his family, attired for the ceremony, were coming out of the house.

"Joam Garral?" asked the chief of the police.

"I am here," replied Joam.

"Joam Garral," continued the chief of the police, "you have also been Joam Dacosta; both names have been borne by the same man—I arrest you!"

At these words Yaquita and Minha, struck with stupor, stopped without any power to move.

"My father a murderer?" exclaimed Benito, rushing toward Joam Garral.

By a gesture his father silenced him.

"I will only ask you one question," said Joam with firm voice, addressing the chief of police. "Has the warrant in virtue of which you arrest me been issued against me by the justice at Manaos—by Judge Ribeiro?"

"No," answered the chief of the police, "it was given to me, with an order for its immediate execution, by his substitute. Judge Ribeiro was struck with apoplexy yesterday evening, and died during the night at two o'clock, without having recovered his consciousness."

"Dead!" exclaimed Joam Garral, crushed for a moment by the news—"dead! dead!"

But soon raising his head, he said to his wife and children, "Judge Ribeiro alone knew that I was innocent, my dear ones. The death of the judge may be fatal to me, but that is no reason for me to despair."

And, turning toward Manoel, "Heaven help us!" he said to him; "we shall see if truth will come down to the earth from Above."

The chief of the police made a sign to his men, who advanced to secure Joam Garral.

"But speak, father!" shouted Benito, mad with despair; "say one word, and we shall contest even by force this horrible mistake of which you are the victim!"

"There is no mistake here, my son," replied Joam Garral; "Joam Dacosta and Joam Garral are one. I am in truth Joam Dacosta! I am the honest man whom a legal error unjustly doomed to death twenty-five years ago in the place of the true culprit! That I am quite innocent I swear before Heaven, once for all, on your heads, my children, and on the head of your mother!"

"All communication between you and yours is now forbidden," said the chief of the police. "You are my prisoner, Joam Garral, and I will rigorously execute my warrant."

Joam restrained by a gesture his dismayed children and servants.

"Let the justice of man be done while we wait for the justice of God!"

And with his head unbent, he stepped into the pirogue.

It seemed, indeed, as though of all present Joam Garral was the only one whom this fearful thunderbolt, which had fallen so unexpectedly on his head, had failed to overwhelm.
PART II. THE CRYPTOGRAM

CHAPTER I. MANAOS

THE TOWN of Manaos is in 3° 8' 4" south latitude, and 67° 27' west longitude, reckoning from the Paris meridian. It is some four hundred and twenty leagues from Belem, and about ten miles from the _embouchure_ of the Rio Negro.

Manaos is not built on the Amazon. It is on the left bank of the Rio Negro, the most important and remarkable of all the tributaries of the great artery of Brazil, that the capital of the province, with its picturesque group of private houses and public buildings, towers above the surrounding plain.

The Rio Negro, which was discovered by the Spaniard Favella in 1645, rises in the very heart of the province of Popayan, on the flanks of the mountains which separate Brazil from New Grenada, and it communicates with the Orinoco by two of its affluents, the Pimichin and the Cassiquary.

After a noble course of some seventeen hundred miles it mingles its cloudy waters with those of the Amazon through a mouth eleven hundred feet wide, but such is its vigorous influx that many a mile has to be completed before those waters lose their distinctive character. Hereabouts the ends of both its banks trend off and form a huge bay fifteen leagues across, extending to the islands of Anavilhanas; and in one of its indentations the port of Manaos is situated. Vessels of all kinds are there collected in great numbers, some moored in the stream awaiting a favorable wind, others under repair up the numerous _iguarapes_ or canals, which so capriciously intersect the town, and give it its slightly Dutch appearance.

With the introduction of steam vessels, which is now rapidly taking place, the trade of Manaos is destined to increase enormously. Woods used in building and furniture work, cocoa, caoutchouc, coffee, sarsaparilla, sugar-canes, indigo, muscadu nuts, salt fish, turtle butter, and other commodities, are brought here from all parts, down the innumerable streams into the Rio Negro from the west and north, into the Madeira from the west and south, and then into the Amazon, and by it away eastward to the coast of the Atlantic.

Manaos was formerly called Moura, or Barra de Rio Negro. From 1757 to 1804 it was only part of the captaincy which bears the name of the great river at whose mouth it is placed; but since 1826 it has been the capital of the large province of Amazones, borrowing its latest name from an Indian tribe which formerly existed in these parts of equatorial America.

Careless travelers have frequently confounded it with the famous Manoa, a city of romance, built, it was reported, near the legendary lake of Parima--which would seem to be merely the Upper Branco, a tributary of the Rio Negro. Here was the Empire of El Dorado, whose monarch, if we are to believe the fables of the district, was every morning covered with powder of gold, there being so much of the precious metal abounding in this privileged locality that it was swept up with the very dust of the streets. This assertion, however, when put to the test, was disproved, and with extreme regret, for the auriferous deposits which had deceived the greedy scrutiny of the gold-seekers turned out to be only worthless flakes of mica!

In short, Manaos has none of the fabulous splendors of the mythical capital of El Dorado. It is an ordinary town of about five thousand inhabitants, and of these at least three thousand are in government employ. This fact is to be attributed to the number of its public buildings, which consist of the legislative chamber, the government house, the treasury, the post-office, and the custom-house, and, in addition, a college founded in 1848, and a hospital erected in 1851. When with these is also mentioned a cemetery on the south side of a hill, on which, in 1669, a fortress, which has since been demolished, was thrown up against the pirates of the Amazon, some idea can be gained as to the importance of the official establishments of the city. Of religious buildings it would be difficult to find more than two, the small Church of the Conception and the Chapel of Notre Dame des Remedes, built on a knoll which overlooks the town. These are very few for a town of Spanish origin, though to them should perhaps be added the Carmelite Convent, burned down in 1850, of which only the ruins remain. The population of Manaos does not exceed the number above given, and after reckoning the public officials and soldiers, is principally made up of Portuguese and Indian merchants belonging to the different tribes of the Rio Negro.

Three principal thoroughfares of considerable irregularity run through the town, and they bear names highly characteristic of the tone of thought prevalent in these parts--God-the-Father Street, God-the-Son Street, and God-the-Holy Ghost Street!

In the west of the town is a magnificent avenue of centenarian orange trees which were carefully respected by the architects who out of the old city made the new. Round these principal thoroughfares is interwoven a perfect network of unpaved alleys, intersected every now and then by four canals, which are occasionally crossed by wooden bridges. In a few places these iguarapes flow with their brownish waters through large vacant spaces
covered with straggling weeds and flowers of startling hues, and here and there are natural squares shaded by magnificent trees, with an occasional white-barked sumaumeira shooting up, and spreading out its large dome-like parasol above its gnarled branches.

The private houses have to be sought for among some hundreds of dwellings, of very rudimentary type, some roofed with tiles, others with interlaced branches of the palm-tree, and with prominent miradors, and projecting shops for the most part tenanted by Portuguese traders.

And what manner of people are they who stroll on to the fashionable promenade from the public buildings and private residences? Men of good appearance, with black cloth coats, chimney-pot hats, patent-leather boots, highly-colored gloves, and diamond pins in their necktie bows; and women in loud, imposing toilets, with flounced dressed and headgear of the latest style; and Indians, also on the road to Europeanization in a way which bids fair to destroy every bit of local color in this central portion of the district of the Amazon!

Such is Manaos, which, for the benefit of the reader, it was necessary to sketch. Here the voyage of the giant raft, so tragically interrupted, had just come to a pause in the midst of its long journey, and here will be unfolded the further vicissitudes of the mysterious history of the fazender of Iquitos.

CHAPTER II. THE FIRST MOMENTS

SCARCELY HAD the pirogue which bore off Joam Garral, or rather Joam Dacosta--for it is more convenient that he should resume his real name--disappeared, than Benito stepped up to Manoel.

"What is it you know?" he asked.

"I know that your father is innocent! Yes, innocent!" replied Manoel, "and that he was sentenced to death twenty-three years ago for a crime which he never committed!"

"He has told you all about it, Manoel?"

"All about it," replied the young man. "The noble fazender did not wish that any part of his past life should be hidden from him who, when he marries his daughter, is to be his second son."

"And the proof of his innocence my father can one day produce?"

"That proof, Benito, lies wholly in the twenty-three years of an honorable and honored life, lies entirely in the bearing of Joam Dacosta, who comes forward to say to justice, 'Here am I! I do not care for this false existence any more. I do not care to hide under a name which is not my true one! You have condemned an innocent man! Confess your errors and set matters right.'"

"And when my father spoke like that, you did not hesitate for a moment to believe him?"

"Not for an instant," replied Manoel.

The hands of the two young fellows closed in a long and cordial grasp.

Then Benito went up to Padre Passanha.

"Padre," he said, "take my mother and sister away to their rooms. Do not leave them all day. No one here doubts my father's innocence--not one, you know that! To-morrow my mother and I will seek out the chief of the police. They will not refuse us permission to visit the prison. No! that would be too cruel. We will see my father again, and decide what steps shall be taken to procure his vindication."

Yaquita was almost helpless, but the brave woman, though nearly crushed by this sudden blow, arose. With Yaquita Dacosta it was as with Yaquita Garral. She had not a doubt as to the innocence of her husband. The idea even never occurred to her that Joam Dacosta had been to blame in marrying her under a name which was not his own. She only thought of the life of happiness she had led with the noble man who had been injured so unjustly. Yes! On the morrow she would go to the gate of the prison, and never leave it until it was opened!

Padre Passanha took her and her daughter, who could not restrain her tears, and the three entered the house.

The two young fellows found themselves alone.

"And now," said Benito, "I ought to know all that my father has told you."

"I have nothing to hide from you."

"Why did Torres come on board the jangada?"

"To see to Joam Dacosta the secret of his past life."

"And so, when we first met Torres in the forest of Iquitos, his plan had already been formed to enter into communication with my father?"

"There cannot be a doubt of it," replied Manoel. "The scoundrel was on his way to the fazenda with the idea of consummating a vile scheme of extortion which he had been preparing for a long time."

"And when he learned from us that my father and his whole family were about to pass the frontier, he suddenly changed his line of conduct?"

"Yes. Because Joam Dacosta once in Brazilian territory became more at his mercy than while within the
frontiers of Peru. That is why we found Torres at Tabatinga, where he was waiting in expectation of our arrival."

"And it was I who offered him a passage on the raft!" exclaimed Benito, with a gesture of despair.

"Brother," said Manoel, "you need not reproach yourself. Torres would have joined us sooner or later. He was not the man to abandon such a trail. Had we lost him at Tabatinga, we should have found him at Manaos."

"Yes, Manoel, you are right. But we are not concerned with the past now. We must think of the present. An end to useless recriminations! Let us see!" And while speaking, Benito, passing his hand across his forehead, endeavored to grasp the details of the strange affair.

"How," he asked, "did Torres ascertain that my father had been sentenced twenty-three years back for this abominable crime at Tijuco?"

"I do not know," answered Manoel, "and everything leads me to think that your father did not know that."

"But Torres knew that Garral was the name under which Joam Dacosta was living?"

"Evidently."

"And he knew that it was in Peru, at Iquitos, that for so many years my father had taken refuge?"

"He knew it," said Manoel, "but how he came to know it I do not understand."

"One more question," continued Benito. "What was the proposition that Torres made to my father during the short interview which preceded his expulsion?"

"He threatened to denounce Joam Garral as being Joam Dacosta, if he declined to purchase his silence."

"And at what price?"

"At the price of his daughter's hand!" answered Manoel unhesitatingly, but pale with anger.

"The scoundrel dared to do that!" exclaimed Benito.

"To this infamous request, Benito, you saw the reply that your father gave."

"Yes, Manoel, yes! The indignant reply of an honest man. He kicked Torres off the raft. But it is not enough to have kicked him out. No! That will not do for me. It was on Torres' information that they came here and arrested my father; is not that so?"

"Yes, on his denunciation."

"Well," continued Benito, shaking his fist toward the left bank of the river, "I must find out Torres. I must know how he became master of the secret. He must tell me if he knows the real author of this crime. He shall speak out. And if he does not speak out, I know what I shall have to do."

"What you will have to do is for me to do as well!" added Manoel, more coolly, but not less resolutely.

"No! Manoel, no, to me alone!"

"We are brothers, Benito," replied Manoel. "The right of demanding an explanation belongs to us both."

Benito made no reply. Evidently on that subject his decision was irrevocable.

At this moment the pilot Araujo, who had been observing the state of the river, came up to them.

"Have you decided," he asked, "if the raft is to remain at her moorings at the Isle of Muras, or to go on to the port of Manaos?"

The question had to be decided before nightfall, and the sooner it was settled the better.

In fact, the news of the arrest of Joam Dacosta ought already to have spread through the town. That it was of a nature to excite the interest of the population of Manaos could scarcely be doubted. But would it provoke more than curiosity against the condemned man, who was the principal author of the crime of Tijuco, which had formerly created such a sensation? Ought they not to fear that some popular movement might be directed against the prisoner? In the face of this hypothesis was it not better to leave the jangada moored near the Isle of Muras on the right bank of the river at a few miles from Manaos?

The pros and cons of the question were well weighed.

"No!" at length exclaimed Benito; "to remain here would look as though we were abandoning my father and doubting his innocence--as though we were afraid to make common cause with him. We must go to Manaos, and without delay."

"You are right," replied Manoel. "Let us go."

Araujo, with an approving nod, began his preparations for leaving the island. The maneuver necessitated a good deal of care. They had to work the raft slantingly across the current of the Amazon, here doubled in force by that of the Rio Negro, and to make for the embouchure of the tributary about a dozen miles down on the left bank.

The ropes were cast off from the island. The jangada, again started on the river, began to drift off diagonally. Araujo, cleverly profiting by the bendings of the current, which were due to the projections of the banks, and assisted by the long poles of his crew, succeeded in working the immense raft in the desired direction.

In two hours the jangada was on the other side of the Amazon, a little above the mouth of the Rio Negro, and fairly in the current which was to take it to the lower bank of the vast bay which opened on the left side of the stream.
At five o'clock in the evening it was strongly moored alongside this bank, not in the port of Manaos itself, which it could not enter without stemming a rather powerful current, but a short mile below it.

The raft was then in the black waters of the Rio Negro, near rather a high bluff covered with cecropias with buds of reddish-brown, and palisaded with stiff-stalked reeds called _"froxas,"_ of which the Indians make some of their weapons.

A few citizens were strolling about the bank. A feeling of curiosity had doubtless attracted them to the anchorage of the raft. The news of the arrest of Joam Dacosta had soon spread about, but the curiosity of the Manaens did not outrun their discretion, and they were very quiet.

Benito's intention had been to land that evening, but Manoel dissuaded him.

"Wait till to-morrow," he said; "night is approaching, and there is no necessity for us to leave the raft."

"So be it! To-morrow!" answered Benito.

And here Yaquita, followed by her daughter and Padre Passanha, came out of the house. Minha was still weeping, but her mother's face was tearless, and she had that look of calm resolution which showed that the wife was now ready for all things, either to do her duty or to insist on her rights.

Yaquita slowly advanced toward Manoel.

"Manoel," she said, "listen to what I have to say, for my conscience commands me to speak as I am about to do."

"I am listening," replied Manoel.

Yaquita, looking him straight in the face, continued: "Yesterday, after the interview you had with Joam Dacosta, my husband, you came to me and called me--mother! You took Minha's hand, and called her--your wife! You then knew everything, and the past life of Joam Dacosta had been disclosed to you."

"Yes," answered Manoel, "and heaven forbid I should have had any hesitation in doing so!"

"Perhaps so," replied Yaquita; "but then Joam Dacosta had not been arrested. The position is not now the same. However innocent he may be, my husband is in the hands of justice; his past life has been publicly proclaimed. Minha is a convict's daughter."

"Minha Dacosta or Minha Garral, what matters it to me?" exclaimed Manoel, who could keep silent no longer.

"Manoel!" murmured Minha.

And she would certainly have fallen had not Lina's arm supported her.

"Mother, if you do not wish to kill her," said Manoel, "call me your son!"

"My son! my child!"

It was all Yaquita could say, and the tears, which she restrained with difficulty, filled her eyes.

And then they all re-entered the house. But during the long night not an hour's sleep fell to the lot of the unfortunate family who were being so cruelly tried.

CHAPTER III. RETROSPECTIVE

JOAM DACOSTA had relied entirely on Judge Albeiro, and his death was most unfortunate.

Before he was judge at Manaos, and chief magistrate in the province, Ribeiro had known the young clerk at the time he was being prosecuted for the murder in the diamond arrayal. He was then an advocate at Villa Rica, and he it was who defended the prisoner at the trial. He took the cause to heart and made it his own, and from an examination of the papers and detailed information, and not from the simple fact of his position in the matter, he came to the conclusion that his client was wrongfully accused, and that he had taken not the slightest part in the murder of the escort or the theft of the diamonds--in a word, that Joam Dacosta was innocent.

But, notwithstanding this conviction, notwithstanding his talent and zeal, Ribeiro was unable to persuade the jury to take the same view of the matter. How could he remove so strong a presumption? If it was not Joam Dacosta, who had every facility for informing the scoundrels of the convoy's departure, who was it? The official who accompanied the escort had perished with the greater part of the soldiers, and suspicion could not point against him. Everything agreed in distinguishing Dacosta as the true and only author of the crime.

Ribeiro defended him with great warmth and with all his powers, but he could not succeed in saving him. The verdict of the jury was affirmative on all the questions. Joam Dacosta, convicted of aggravated and premeditated murder, did not even obtain the benefit of extenuating circumstances, and heard himself condemned to death.

There was no hope left for the accused. No commutation of the sentence was possible, for the crime was committed in the diamond arrayal. The condemned man was lost. But during the night which preceded his execution, and when the gallows was already erected, Joam Dacosta managed to escape from the prison at Villa Rica. We know the rest.

Twenty years later Ribeiro the advocate became the chief justice of Manaos. In the depths of his retreat the fazender of Iquitos heard of the change, and in it saw a favorable opportunity for bringing forward the revision of
the former proceedings against him with some chance of success. He knew that the old convictions of the advocate would be still unshaken in the mind of the judge. He therefore resolved to try and rehabilitate himself. Had it not been for Ribeiro's nomination to the chief justiceship in the province of Amazones, he might perhaps have hesitated, for he had no new material proof of his innocence to bring forward. Although the honest man suffered acutely, he might still have remained hidden in exile at Iquitos, and still have asked for time to smother the remembrances of the horrible occurrence, but something was urging him to act in the matter without delay.

In fact, before Yaquita had spoken to him, Joam Dacosta had noticed that Manoel was in love with his daughter. The union of the young army doctor and his daughter was in every respect a suitable one. It was evident to Joam that some day or other he would be asked for her hand in marriage, and he did not wish to be obliged to refuse. But then the thought that his daughter would have to marry under a name which did not belong to her, that Manoel Valdez, thinking he was entering the family of Garral, would enter that of Dacosta, the head of which was under sentence of death, was intolerable to him. No! The wedding should not take place unless under proper conditions! Never!

Let us recall what had happened up to this time. Four years after the young clerk, who eventually became the partner of Magalhaës, had arrived at Iquitos, the old Portuguese had been taken back to the farm mortally injured. A few days only were left for him to live. He was alarmed at the thought that his daughter would be left alone and unprotected; but knowing that Joam and Yaquita were in love with each other, he desired their union without delay.

Joan at first refused. He offered to remain the protector or the servant of Yaquita without becoming her husband. The wish of the dying Magalhaës was so urgent that resistance became impossible. Yaquita put her hand into the hand of Joam, and Joam did not withdraw it.

Yes! It was a serious matter! Joam Dacosta ought to have confessed all, or to have fled forever from the house in which he had been so hospitably received, from the establishment of which he had built up the prosperity! Yes! To confess everything rather than to give to the daughter of his benefactor a name which was not his, instead of the name of a felon condemned to death for murder, innocent though he might be!

But the case was pressing, the old fazender was on the point of death, his hands were stretched out toward the young people! Joam was silent, the marriage took place, and the remainder of his life was devoted to the happiness of the girl he had made his wife.

"The day when I confess everything," Joam repeated, "Yaquita will pardon everything! She will not doubt me for an instant! But if I ought not to have deceived her, I certainly will not deceive the honest fellow who wishes to enter our family by marrying Mina! No! I would rather give myself up and have done with this life!"

Many times had Joam thought of telling his wife about his past life. Yes! the avowal was on his lips whenever she asked him to take her into Brazil, and with her and her daughter descend the beautiful Amazon river. He knew sufficient of Yaquita to be sure that her affection for him would not thereby be diminished in the least. But courage failed him!

And this is easily intelligible in the face of the happiness of the family, which increased on every side. This happiness was his work, and it might be destroyed forever by his return.

Such had been his life for those long years; such had been the continuous source of his sufferings, of which he had kept the secret so well; such had been the existence of this man, who had no action to be ashamed of, and whom a great injustice compelled to hide away from himself!

But at length the day arrived when there could no longer remain a doubt as to the affection which Manoel bore to Minha, when he could see that a year would not go by before he was asked to give his consent to her marriage, and after a short delay he no longer hesitated to proceed in the matter.

A letter from him, addressed to Judge Ribeiro, acquainted the chief justice with the secret of the existence of Joam Dacosta, with the name under which he was concealed, with the place where he lived with his family, and at the same time with his formal intention of delivering himself up to justice, and taking steps to procure the revision of the proceedings, which would either result in his rehabilitation or in the execution of the iniquitous judgment delivered at Villa Rica.

What were the feelings which agitated the heart of the worthy magistrate? We can easily divine them. It was no longer to the advocate that the accused applied; it was to the chief justice of the province that the convict appealed. Joam Dacosta gave himself over to him entirely, and did not even ask him to keep the secret.

Judge Ribeiro was at first troubled about this unexpected revelation, but he soon recovered himself, and scrupulously considered the duties which the position imposed on him. It was his place to pursue criminals, and here was one who delivered himself into his hands. This criminal, it was true, he had defended; he had never doubted but that he had been unjustly condemned; his joy had been extreme when he saw him escape by flight from the last penalty; he had even instigated and facilitated his flight! But what the advocate had done in the past could the magistrate do in the present?
"Well, yes!" had the judge said, "my conscience tells me not to abandon this just man. The step he is taking is a fresh proof of his innocence, a moral proof, even if he brings me others, which may be the most convincing of all! No! I will not abandon him!"

From this day forward a secret correspondence took place between the magistrate and Joam Dacosta. Ribeiro at the outset cautioned his client against compromising himself by any imprudence. He had again to work up the matter, again to read over the papers, again to look through the inquiries. He had to find out if any new facts had come to light in the diamond province referring to so serious a case. Had any of the accomplices of the crime, of the smugglers who had attacked the convoy, been arrested since the attempt? Had any confessions or half-confessions been brought forward? Joam Dacosta had done nothing but protest his innocence from the very first. But that was not enough, and Judge Ribeiro was desirous of finding in the case itself the clue to the real culprit.

Joam Dacosta had accordingly been prudent. He had promised to be so. But in all his trials it was an immense consolation for him to find his old advocate, though now a chief justice, so firmly convinced that he was not guilty. Yes! Joam Dacosta, in spite of his condemnation, was a victim, a martyr, an honest man to whom society owed a signal reparation! And when the magistrate knew the past career of the fazender of Iquitos since his sentence, the position of his family, all that life of devotion, of work, employed unceasingly for the happiness of those belonging to him, he was not only more convinced but more affected, and determined to do all that he could to procure the rehabilitation of the felon of Tijuco.

For six months a correspondence had passed between these two men.

One day, the case being pressing, Joam Dacosta wrote to Judge Ribeiro:
"In two months I will be with you, in the power of the chief justice of the province!"
"Come, then," replied Ribeiro.

The jangada was then ready to go down the river. Joam Dacosta embarked on it with all his people. During the voyage, to the great astonishment of his wife and son, he landed but rarely, as we know. More often he remained shut up on his room, writing, working, not at his trading accounts, but, without saying anything about it, at a kind of memoir, which he called “The History of My Life,” and which was meant to be used in the revision of the legal proceedings.

Eight days before his new arrest, made on account of information given by Torres, which forestalled and perhaps would ruin his prospects, he intrusted to an Indian on the Amazon a letter, in which he warned Judge Ribeiro of his approaching arrival.

The letter was sent and delivered as addressed, and the magistrate only waited for Joam Dacosta to commence on the serious undertaking which he hoped to bring to a successful issue.

During the night before the arrival of the raft at Manaos Judge Ribeiro was seized with an attack of apoplexy. But the denunciation of Torres, whose scheme of extortion had collapsed in face of the noble anger of his victim, had produced its effect. Joam Dacosta was arrested in the bosom of his family, and his old advocate was no longer in this world to defend him!

Yes, the blow was terrible indeed. His lot was cast, whatever his fate might be; there was no going back for him! And Joam Dacosta rose from beneath the blow which had so unexpectedly struck him. It was not only his own honor which was in question, but the honor of all who belonged to him.

CHAPTER IV. MORAL PROOFS

THE WARRANT against Joam Dacosta, alias Joam Garral, had been issued by the assistant of Judge Ribeiro, who filled the position of the magistrate in the province of Amazonas, until the nomination of the successor of the late justice.

This assistant bore the name of Vicente Jarriquez. He was a surly little fellow, whom forty years’ practice in criminal procedure had not rendered particularly friendly toward those who came before him. He had had so many cases of this sort, and tried and sentenced so many rascals, that a prisoner's innocence seemed to him _à priori_ inadmissible. To be sure, he did not come to a decision unconscentiously; but his conscience was strongly fortified and was not easily affected by the circumstances of the examination or the arguments for the defense. Like a good many judges, he thought but little of the indulgence of the jury, and when a prisoner was brought before him, after having passed through the sieve of inquest, inquiry, and examination, there was every presumption in his eyes that the man was quite ten times guilty.

Jarriquez, however, was not a bad man. Nervous, fidgety, talkative, keen, crafty, he had a curious look about him, with his big head on his little body; his ruffled hair, which would not have disgraced the judge's wig of the past; his piercing gimlet-like eyes, with their expression of surprising acuteness; his prominent nose, with which he would assuredly have gesticulated had it been movable; his ears wide open, so as to better catch all that was said, even
when it was out of range of ordinary auditory apparatus; his fingers unceasingly tapping the table in front of him, like those of a pianist practicing on the mute; and his body so long and his legs so short, and his feet perpetually crossing and recrossing, as he sat in state in his magistrate's chair.

In private life, Jarriquez, who was a confirmed old bachelor, never left his law-books but for the table which he did not despise; for chess, of which he was a past master; and above all things for Chinese puzzles, enigmas, charades, rebuses, anagrams, riddles, and such things, with which, like more than one European justice--thorough sphinxes by taste as well as by profession--he principally passed his leisure.

It will be seen that he was an original, and it will be seen also how much Joam Dacosta had lost by the death of Judge Ribeiro, inasmuch as his case would come before this not very agreeable judge.

Moreover, the task of Jarriquez was in a way very simple. He had either to inquire nor to rule; he had not even to regulate a discussion nor to obtain a verdict, neither to apply the articles of the penal code nor to pronounce a sentence. Unfortunately for the fazender, such formalities were no longer necessary; Joam Dacosta had been arrested, convicted, and sentenced twenty-three years ago for the crime at Tijuco; no limitation had yet affected his sentence. No demand in commutation of the penalty could be introduced, and no appeal for mercy could be received. It was only necessary then to establish his identity, and as soon as the order arrived from Rio Janeiro justice would have to take its course.

But in the nature of things Joam Dacosta would protest his innocence; he would say he had been unjustly condemned. The magistrate's duty, notwithstanding the opinions he held, would be to listen to him. The question would be, what proofs could the convict offer to make good his assertions? And if he was not able to produce them when he appeared before his first judges, was he able to do so now?

Herein consisted all the interest of the examination. There would have to be admitted the fact of a defaulter, prosperous and safe in a foreign country, leaving his refuge of his own free will to face the justice which his past life should have taught him to dread, and herein would be one of those rare and curious cases which ought to interest even a magistrate hardened with all the surroundings of forensic strife. Was it impudent folly on the part of the doomed man of Tijuco, who was tired of his life, or was it the impulse of a conscience which would at all risks have wrong set right? The problem was a strange one, it must be acknowledged.

On the morrow of Joam Dacosta's arrest, Judge Jarriquez made his way to the prison in God-the-Son Street, where the convict had been placed. The prison was an old missionary convent, situated on the bank of one of the principal iguarapes of the town. To the voluntary prisoners of former times there had succeeded in this building, which was but little adapted for the purpose, the compulsory prisoners of to-day. The room occupied by Joam Dacosta was nothing like one of those sad little cells which form part of our modern penitentiary system: but an old monk's room, with a barred window without shutters, opening on to an uncultivated space, a bench in one corner, and a kind of pallet in the other. It was from this apartment that Joam Dacosta, on this 25th of August, about eleven o'clock in the morning, was taken and brought into the judge's room, which was the old common hall of the convent.

Judge Jarriquez was there in front of his desk, perched on his high chair, his back turned toward the window, so that his face was in shadow while that of the accused remained in full daylight. His clerk, with the indifference which characterizes these legal folks, had taken his seat at the end of the table, his pen behind his ear, ready to record the questions and answers.

Joam Dacosta was introduced into the room, and at a sign from the judge the guards who had brought him withdrew.

Judge Jarriquez looked at the accused for some time. The latter, leaning slightly forward and maintaining a becoming attitude, neither careless nor humble, waited with dignity for the questions to which he was expected to reply.

"Your name?" said Judge Jarriquez.
"Joam Dacosta."
"Your age?"
"Fifty-two."
"Where do you live?"
"In Peru, at the village of Iquitos."
"Under what name?"
"Under that of Garral, which is that of my mother."
"And why do you bear that name?"
"Because for twenty-three years I wished to hide myself from the pursuit of Brazilian justice."

The answers were so exact, and seemed to show that Joam Dacosta had made up his mind to confess everything concerning his past and present life, that Judge Jarriquez, little accustomed to such a course, cocked up his nose more than was usual to him.
"And why," he continued, "should Brazilian justice pursue you?"
"Because I was sentenced to death in 1826 in the diamond affair at Tijuco."
"You confess then that you are Joam Dacosta?"
"I am Joam Dacosta."

All this was said with great calmness, and as simply as possible. The little eyes of Judge Jarriquez, hidden by their lids, seemed to say:

"Never came across anything like this before."

He had put the invariable question which had hitherto brought the invariable reply from culprits of every category protesting their innocence. The fingers of the judge began to beat a gentle tattoo on the table.

"Joam Dacosta," he asked, "what were you doing at Iquitos?"
"I was a fazender, and engaged in managing a farming establishment of considerable size."
"It was prospering."
"Greatly prospering."
"How long ago did you leave your fazenda?"
"About nine weeks."
"Why?"
"As to that, sir," answered Dacosta, "I invented a pretext, but in reality I had a motive."
"What was the pretext?"
"The responsibility of taking into Para a large raft, and a cargo of different products of the Amazon."
"Ah! and what was the real motive of your departure?"

And in asking this question Jarriquez said to himself:

"Now we shall get into denials and falsehoods."

"The real motive," replied Joam Dacosta, in a firm voice, "was the resolution I had taken to give myself up to the justice of my country."

"You give yourself up!" exclaimed the judge, rising from his stool. "You give yourself up of your own free will?"
"Of my own free will."
"And why?"
"Because I had had enough of this lying life, this obligation to live under a false name, of this impossibility to be able to restore to my wife and children that which belongs to them; in short, sir, because----"
"Because?"
"I was innocent!"
"That is what I was waiting for," said Judge Jarriquez.

And while his fingers tattooed a slightly more audible march, he made a sign with his head to Dacosta, which signified as clearly as possible, "Go on! Tell me your history. I know it, but I do not wish to interrupt you in telling it in your own way."

Joam Dacosta, who did not disregard the magistrate's far from encouraging attitude, could not but see this, and he told the history of his whole life. He spoke quietly without departing from the calm he had imposed upon himself, without omitting any circumstances which had preceded or succeeded his condemnation. In the same tone he insisted on the honored and honorable life he had led since his escape, on his duties as head of his family, as husband and father, which he had so worthily fulfilled. He laid stress only on one circumstance—that which had brought him to Manaos to urge on the revision of the proceedings against him, to procure his rehabilitation—and that he was compelled to do.

Judge Jarriquez, who was naturally prepossessed against all criminals, did not interrupt him. He contented himself with opening and shutting his eyes like a man who heard the story told for the hundredth time; and when Joam Dacosta laid on the table the memoir which he had drawn up, he made no movement to take it.

"You have finished?" he said.
"Yes, sir."
"And you persist in asserting that you only left Iquitos to procure the revision of the judgment against you."
"I had no other intention."
"What is there to prove that? Who can prove that, without the denunciation which had brought about your arrest, you would have given yourself up?"
"This memoir, in the first place."
"That memoir was in your possession, and there is nothing to show that had you not been arrested, you would have put it to the use you say you intended."

"At the least, sir, there was one thing that was not in my possession, and of the authenticity of which there can be
no doubt."

"What?"

"The letter I wrote to your predecessor, Judge Ribeiro, the letter which gave him notice of my early arrival."

"Ah! you wrote?"

"Yes. And the letter which ought to have arrived at its destination should have been handed over to you."

"Really!" answered Judge Jarriquez, in a slightly incredulous tone. "You wrote to Judge Ribeiro."

"Before he was a judge in this province," answered Joam Dacosta, "he was an advocate at Villa Rica. He it was who defended me in the trial at Tijuco. He never doubted of the justice of my cause. He did all he could to save me. Twenty years later, when he had become chief justice at Manaos, I let him know who I was, where I was, and what I wished to attempt. His opinion about me had not changed, and it was at his advice I left the fazenda, and came in person to proceed with my rehabilitation. But death had unfortunately struck him, and maybe I shall be lost, sir, if in Judge Jarriquez I do not find another Judge Ribeiro."

The magistrate, appealed to so directly, was about to start up in defiance of all the traditions of the judicial bench, but he managed to restrain himself, and was contented with muttering:

"Very strong, indeed; very strong!"

Judge Jarriquez was evidently hard of heart, and proof against all surprise.

At this moment a guard entered the room, and handed a sealed packet to the magistrate.

He broke the seal and drew a letter from the envelope. He opened it and read it, not without a certain contraction of his eyebrows, and then said:

"I have no reason for hiding from you, Joam Dacosta, that this is the letter you have been speaking about, addressed by you to Judge Ribeiro and sent on to me. I have, therefore, no reason to doubt what you have said on the subject."

"Not only on that subject," answered Dacosta, "but on the subject of all the circumstances of my life which I have brought to your knowledge, and which are none of them open to question."

"Eh! Joam Dacosta," quickly replied Judge Jarriquez. "You protest your innocence; but all prisoners do as much! After all, you only offer moral presumptions. Have you any material proof?"

"Perhaps I have," answered Joam Dacosta.

At these words, Judge Jarriquez left his chair. This was too much for him, and he had to take two or three circuits of the room to recover himself.

CHAPTER V. MATERIAL PROOFS

WHEN THE MAGISTRATE had again taken his place, like a man who considered he was perfectly master of himself, he leaned back in his chair, and with his head raised and his eyes looking straight in front, as though not even noticing the accused, remarked, in a tone of the most perfect indifference:

"Go on." Joam Dacosta reflected for a minute as if hesitating to resume the order of his thoughts, and then answered as follows:

"Up to the present, sir, I have only given you moral presumptions of my innocence grounded on the dignity, propriety, and honesty of the whole of my life. I should have thought that such proofs were those most worthy of being brought forward in matters of justice."

Judge Jarriquez could not restrain a movement of his shoulders, showing that such was not his opinion.

"Since they are not enough, I proceed with the material proofs which I shall perhaps be able to produce," continued Dacosta; "I say perhaps, for I do not yet know what credit to attach to them. And, sir, I have never spoken of these things to my wife or children, not wishing to raise a hope which might be destroyed."

"To the point," answered Jarriquez.

"I have every reason to believe, sir, that my arrest on the eve of the arrival of the raft at Manaos is due to information given to the chief of the police!"

"You are not mistaken, Joam Dacosta, but I ought to tell you that the information is anonymous."

"It matters little, for I know that it could only come from a scoundrel called Torres."

"And what right have you to speak in such a way of this--informer?"

"A scoundrel! Yes, sir!" replied Joam quickly. "This man, whom I received with hospitality, only came to me to propose that I should purchase his silence to offer me an odious bargain that I shall never regret having refused, whatever may be the consequences of his denunciation!"

"Always this method!" thought Judge Jarriquez; "accusing others to clear himself."

But he none the less listened with extreme attention to Joam's recital of his relations with the adventurer up to
the moment when Torres let him know that he knew and could reveal the name of the true author of the crime of Tijuco.

"And what is the name of the guilty man?" asked Jarriquez, shaken in his indifference.

"I do not know," answered Joam Dacosta. "Torres was too cautious to let it out."

"And the culprit is living?"

"He is dead."

The fingers of Judge Jarriquez tattooed more quickly, and he could not avoid exclaiming, "The man who can furnish the proof of a prisoner's innocence is always dead."

"If the real culprit is dead, sir," replied Dacosta, "Torres at least is living, and the proof, written throughout in the handwriting of the author of the crime, he has assured me is in his hands! He offered to sell it to me!"

"Eh! Joam Dacosta!" answered Judge Jarriquez, "that would not have been dear at the cost of the whole of your fortune!"

"If Torres had only asked my fortune, I would have given it to him and not one of my people would have demurred! Yes, you are right, sir; a man cannot pay too dearly for the redemption of his honor! But this scoundrel, knowing that I was at his mercy, required more than my fortune!"

"How so?"

"My daughter's hand was to be the cost of the bargain! I refused; he denounced me, and that is why I am now before you!"

"And if Torres had not informed against you," asked Judge Jarriquez--"if Torres had not met with you on your voyage, what would you have done on learning on your arrival of the death of Judge Ribeiro? Would you then have delivered yourself into the hands of justice?"

"Without the slightest hesitation," replied Joam, in a firm voice; "for, I repeat it, I had no other object in leaving Iquitos to come to Manaos."

This was said in such a tone of truthfulness that Judge Jarriquez experienced a kind of feeling making its way to that corner of the heart where convictions are formed, but he did not yet give in.

He could hardly help being astonished. A judge engaged merely in this examination, he knew nothing of what is known by those who have followed this history, and who cannot doubt but that Torres held in his hands the material proof of Joam Dacosta's innocence. They know that the document existed; that it contained this evidence; and perhaps they may be led to think that Judge Jarriquez was pitilessly incredulous. But they should remember that Judge Jarriquez was not in their position; that he was accustomed to the invariable protestations of the culprits who came before him. The document which Joam Dacosta appealed to was not produced; he did not really know if it actually existed; and to conclude, he had before him a man whose guilt had for him the certainty of a settled thing.

However, he wished, perhaps through curiosity, to drive Joam Dacosta behind his last entrenchments.

"And so," he said, "all your hope now rests on the declaration which has been made to you by Torres."

"Yes, sir, if my whole life does not plead for me."

"Where do you think Torres really is?"

"I think in Manaos."

"And you hope that he will speak--that he will consent to good-naturedly hand over to you the document for which you have declined to pay the price he asked?"

"I hope so, sir," replied Joam Dacosta; "the situation now is not the same for Torres; he has denounced me, and consequently he cannot retain any hope of resuming his bargaining under the previous conditions. But this document might still be worth a fortune if, supposing I am acquitted or executed, it should ever escape him. Hence his interest is to sell me the document, which can thus not injure him in any way, and I think he will act according to his interest."

The reasoning of Joam Dacosta was unanswerable, and Judge Jarriquez felt it to be so. He made the only possible objection.

"The interest of Torres is doubtless to sell you the document--if the document exists."

"If it does not exist," answered Joam Dacosta, in a penetrating voice, "in trusting to the justice of men, I must put my trust only in God!"

At these words Judge Jarriquez rose, and, in not quite such an indifferent tone, said, "Joam Dacosta, in examining you here, in allowing you to relate the particulars of your past life and to protest your innocence, I have gone further than my instructions allow me. An information has already been laid in this affair, and you have appeared before the jury at Villa Rica, whose verdict was given unanimously, and without even the addition of extenuating circumstances. You have been found guilty of the instigation of, and complicity in, the murder of the soldiers and the robbery of the diamonds at Tijuco, the capital sentence was pronounced on you, and it was only by flight that you escaped execution. But that you came here to deliver yourself over, or not, to the hands of justice
twenty-three years afterward, you would never have been retaken. For the last time, you admit that you are Joam Dacosta, the condemned man of the diamond arrayal?"

"I am Joam Dacosta."

"You are ready to sign this declaration?"

"I am ready."

And with a hand without a tremble Joam Dacosta put his name to the foot of the declaration and the report which Judge Jarriquez had made his clerk draw up.

"The report, addressed to the minister of justice, is to be sent off to Rio Janeiro," said the magistrate. "Many days will elapse before we receive orders to carry out your sentence. If then, as you say, Torres possesses the proof of your innocence, do all you can yourself--do all you can through your friends--do everything, so that that proof can be produced in time. Once the order arrives no delay will be possible, and justice must take its course."

Joam Dacosta bowed slightly.

"Shall I be allowed in the meantime to see my wife and children?" he asked.

"After to-day, if you wish," answered Judge Jarriquez; "you are no longer in close confinement, and they can be brought to you as soon as they apply."

The magistrate then rang the bell. The guards entered the room, and took away Joam Dacosta.

Judge Jarriquez watched him as he went out, and shook his head and muttered:

"Well, well! This is a much stranger affair than I ever thought it would be!"

CHAPTER VI. THE LAST BLOW

WHILE JOAM DACOSTA was undergoing this examination, Yaquita, from an inquiry made by Manoel, ascertained that she and her children would be permitted to see the prisoner that very day about four o'clock in the afternoon.

Yaquita had not left her room since the evening before. Minha and Lina kept near her, waiting for the time when she would be admitted to see her husband.

Yaquita Garral or Yaquita Dacosta, he would still find her the devoted wife and brave companion he had ever known her to be.

About eleven o'clock in the morning Benito joined Manoel and Fragoso, who were talking in the bow of the jangada.

"Manoel," said he, "I have a favor to ask you."

"What is it?"

"And you too, Fragoso."

"I am at your service, Mr. Benito," answered the barber.

"What is the matter?" asked Manoel, looking at his friend, whose expression was that of a man who had come to some unalterable resolution.

"You never doubt my father's innocence? Is that so?" said Benito.

"Ah!" exclaimed Fragoso. "Rather I think it was I who committed the crime."

"Well, we must now commence on the project I thought of yesterday."

"To find out Torres?" asked Manoel.

"Yes, and know from him how he found out my father's retreat. There is something inexplicable about it. Did he know it before? I cannot understand it, for my father never left Iquitos for more than twenty years, and this scoundrel is hardly thirty! But the day will not close before I know it; or, woe to Torres!"

Benito's resolution admitted of no discussion; and besides, neither Manoel nor Fragoso had the slightest thought of dissuading him.

"I will ask, then," continued Benito, "for both of you to accompany me. We shall start in a minute or two. It will not do to wait till Torres has left Manaos. He has no longer got his silence to sell, and the idea might occur to him. Let us be off!"

And so all three of them landed on the bank of the Rio Negro and started for the town.

Manaos was not so considerable that it could not be searched in a few hours. They had made up their minds to go from house to house, if necessary, to look for Torres, but their better plan seemed to be to apply in the first instance to the keepers of the taverns and lojas where the adventurer was most likely to put up. There could hardly be a doubt that the ex-captain of the woods would not have given his name; he might have personal reasons for avoiding all communication with the police. Nevertheless, unless he had left Manaos, it was almost impossible for him to escape the young fellows' search. In any case, there would be no use in applying to the police, for it was very probable—in fact, we know that it actually was so—that the information given to them had been anonymous.
For an hour Benito, Manoel, and Fragoso walked along the principal streets of the town, inquiring of the tradesmen in their shops, the tavern-keepers in their cabarets, and even the bystanders, without any one being able to recognize the individual whose description they so accurately gave.

Had Torres left Manaos? Would they have to give up all hope of coming across him?

In vain Manoel tried to calm Benito, whose head seemed on fire. Cost what it might, he must get at Torres! Chance at last favored them, and it was Fragoso who put them on the right track.

In a tavern in Holy Ghost Street, from the description which the people received of the adventurer, they replied that the individual in question had put up at the loja the evening before.

"Did he sleep here?" asked Fragoso.
"Yes," answered the tavern-keeper.
"Is he here now?"
"No. He has gone out."
"But has he settled his bill, as a man would who has gone for good?"
"By no means; he left his room about an hour ago, and he will doubtless come back to supper."
"Do you know what road he took when he went out?"
"We saw him turning toward the Amazon, going through the lower town, and you will probably meet him on that side."

Fragoso did not want any more. A few seconds afterward he rejoined the young fellows, and said:
"I am on the track."
"He is there!" exclaimed Benito.
"No; he has just gone out, and they have seen him walking across to the bank of the Amazon."
"Come on!" replied Benito.

They had to go back toward the river, and the shortest way was for them to take the left bank of the Rio Negro, down to its mouth.

Benito and his companions soon left the last houses of the town behind, and followed the bank, making a slight detour so as not to be observed from the jangada.

The plain was at this time deserted. Far away the view extended across the flat, where cultivated fields had replaced the former forests.

Benito did not speak; he could not utter a word. Manoel and Fragoso respected his silence. And so the three of them went along and looked about on all sides as they traversed the space between the bank of the Rio Negro and that of the Amazon. Three-quarters of an hour after leaving Manaos, and still they had seen nothing!

Once or twice Indians working in the fields were met with. Manoel questioned them, and one of them at length told him that a man, such as he described, had just passed in the direction of the angle formed by the two rivers at their confluence.

Without waiting for more, Benito, by an irresistible movement, strode to the front, and his two companions had to hurry on to avoid being left behind.

The left bank of the Amazon was then about a quarter of a mile off. A sort of cliff appeared ahead, hiding a part of the horizon, and bounding the view a few hundred paces in advance.

Benito, hurrying on, soon disappeared behind one of the sandy knolls.
"Quicker! quicker!" said Manoel to Fragoso. "We must not leave him alone for an instant."
And they were dashing along when a shout struck on their ears.

Had Benito caught sight of Torres? What had he seen? Had Benito and Torres already met?

Manoel and Fragoso, fifty paces further on, after swiftly running round one of the spurs of the bank, saw two men standing face to face to each other.

They were Torres and Benito.

In an instant Manoel and Fragoso had hurried up to them. It might have been supposed that in Benito's state of excitement he would be unable to restrain himself when he found himself once again in the presence of the adventurer. It was not so.

As soon as the young man saw himself face to face with Torres, and was certain that he could not escape, a complete change took place in his manner, his coolness returned, and he became once more master of himself.

The two men looked at one another for a few moments without a word.
Torres first broke silence, and, in the impudent tone habitual to him, remarked:
"Ah! How goes it, Mr. Benito Garral?"
"No, Benito Dacosta!" answered the young man.
"Quite so," continued Torres. "Mr. Benito Dacosta, accompanied by Mr. Manoel Valdez and my friend Fragoso!"
At the irritating qualification thus accorded him by the adventurer, Fragoso, who was by no means loath to do him some damage, was about to rush to the attack, when Benito, quite unmoved, held him back.

"What is the matter with you, my lad?" exclaimed Torres, retreating for a few steps. "I think I had better put myself on guard."

And as he spoke he drew from beneath his poncho his manchetta, the weapon, adapted at will for offense or defense, which a Brazilian is never without. And then, slightly stooping, and planted firmly on his feet, he waited for what was to follow.

"I have come to look for you, Torres," said Benito, who had not stirred in the least at this threatening attitude.

"To look for me?" answered the adventurer. "It is not very difficult to find me. And why have you come to look for me?"

"To know from your own lips what you appear to know of the past life of my father."

"Really?"

"Yes. I want to know how you recognized him, why you were prowling about our fazenda in the forest of Iquitos, and why you were waiting for us at Tabatinga."

"Well! it seems to me nothing could be clearer!" answered Torres, with a grin. "I was waiting to get a passage on the jangada, and I went on board with the intention of making him a very simple proposition--which possibly he was wrong in rejecting."

At these words Manoel could stand it no longer. With pale face and eye of fire he strode up to Torres.

Benito, wishing to exhaust every means of conciliation, thrust himself between them.

"Calm yourself, Manoel!" he said. "I am calm--even I."

And then continuing:

"Quite so, Torres; I know the reason of your coming on board the raft. Possessed of a secret which was doubtless given to you, you wanted to make it a means of extortion. But that is not what I want to know at present."

"What is it, then?"

"I want to know how you recognized Joam Dacosta in the fazenda of Iquitos?"

"How I recognized him?" replied Torres. "That is my business, and I see no reason why I should tell you. The important fact is, that I was not mistaken when I denounced in him the real author of the crime of Tijuco!"

"You say that to me?" exclaimed Benito, who began to lose his self-possession.

"I will tell you nothing," returned Torres; "Joam Dacosta declined my propositions! He refused to admit me into his family! Well! now that his secret is known, now that he is a prisoner, it is I who refuse to enter his family, the family of a thief, of a murderer, of a condemned felon, for whom the gallows now waits!"

"Scoundrel!" exclaimed Benito, who drew his manchetta from his belt and put himself in position.

Manoel and Fragoso, by a similar movement, quickly drew their weapons.

"Three against one!" said Torres.

"No! one against one!" answered Benito.

"Really! I should have thought an assassination would have better suited an assassin's son!"

"Torres!" exclaimed Benito, "defend yourself, or I will kill you like a mad dog!"

"Mad! so be it!" answered Torres. "But I bite, Benito Dacosta, and beware of the wounds!"

And then again grasping his manchetta, he put himself on guard and ready to attack his enemy.

Benito had stepped back a few paces.

"Torres," he said, regaining all his coolness, which for a moment he had lost; "you were the guest of my father, you threatened him, you betrayed him, you denounced him, you accused an innocent man, and with God's help I am going to kill you!"

Torres replied with the most insolent smile imaginable. Perhaps at the moment the scoundrel had an idea of stopping any struggle between Benito and him, and he could have done so. In fact he had seen that Joam Dacosta had said nothing about the document which formed the material proof of his innocence.

Had he revealed to Benito that he, Torres, possessed this proof, Benito would have been that instant disarmed. But his desire to wait till the very last moment, so as to get the very best price for the document he possessed, the recollection of the young man's insulting words, and the hate which he bore to all that belonged to him, made him forget his own interest.

In addition to being thoroughly accustomed to the manchetta, which he often had had occasion to use, the adventurer was strong, active, and artful, so that against an adversary who was scarcely twenty, who could have neither his strength nor his dexterity, the chances were greatly in his favor.

Manoel by a last effort wished to insist on fighting him instead of Benito.

"No, Manoel," was the cool reply, "it is for me alone to avenge my father, and as everything here ought to be in order, you shall be my second."
"Benito!"
"As for you, Fragoso, you will not refuse if I ask you to act as second for that man?"
"So be it," answered Fragoso, "though it is not an office of honor. Without the least ceremony," he added, "I would have killed him like a wild beast."

The place where the duel was about to take place was a level bank about fifty paces long, on the top of a cliff rising perpendicularly some fifty feet above the Amazon. The river slowly flowed at the foot, and bathed the clumps of reeds which bristled round its base.

There was, therefore, none too much room, and the combatant who was the first to give way would quickly be driven over into the abyss.

The signal was given by Manoel, and Torres and Benito stepped forward.

Benito had complete command over himself. The defender of a sacred cause, his coolness was unruffled, much more so than that of Torres, whose conscience insensible and hardened as it was, was bound at the moment to trouble him.

The two met, and the first blow came from Benito. Torres parried it. They then jumped back, but almost at the same instant they rushed together, and with their left hands seized each other by the shoulder--never to leave go again.

Torres, who was the strongest, struck a side blow with his manchetta which Benito could not quite parry. His left side was touched, and his poncho was reddened with his blood. But he quickly replied, and slightly wounded Torres in the hand.

Several blows were then interchanged, but nothing decisive was done. The ever silent gaze of Benito pierced the eyes of Torres like a sword blade thrust to his very heart. Visibly the scoundrel began to quail. He recoiled little by little, pressed back by his implacable foe, who was more determined on taking the life of his father's denouncer than in defending his own. To strike was all that Benito longed for; to parry was all that the other now attempted to do.

Soon Torres saw himself thrust to the very edge of the bank, at a spot where, slightly scooped away, it overhung the river. He perceived the danger; he tried to retake the offensive and regain the lost ground. His agitation increased, his looks grew livid. At length he was obliged to stoop beneath the arm which threatened him.

"Die, then!" exclaimed Benito.

The blow was struck full on its chest, but the point of the manchetta was stopped by a hard substance hidden beneath the poncho of the adventurer.

Benito renewed his attack, and Torres, whose return thrust did not touch his adversary, felt himself lost. He was again obliged to retreat. Then he would have shouted--shouted that the life of Joam Dacosta depended on his own! He had not time!

A second thrust of the manchetta pierced his heart. He fell backward, and the ground suddenly failing him, he was precipitated down the cliff. As a last effort his hands convulsively clutched at a clump of reeds, but they could not stop him, and he disappeared beneath the waters of the river.

Benito was supported on Manoel's shoulder; Fragoso grasped his hands. He would not even give his companions time to dress his wound, which was very slight.

"To the jangada!" he said, "to the jangada!"

Manoel and Fragoso with deep emotion followed him without speaking a word.

A quarter of an hour afterward the three reached the bank to which the raft was moored. Benito and Manoel rushed into the room where were Yaquita and Minha, and told them all that had passed.

"My son!" "My brother!"

The words were uttered at the same moment.

"To the prison!" said Benito.

"Yes! Come! come!" replied Yaquita.

Benito, followed by Manoel, hurried along his mother, and half an hour later they arrived before the prison. Owing to the order previously given by Judge Jarriquez they were immediately admitted, and conducted to the chamber occupied by the prisoner.

The door opened. Joam Dacosta saw his wife, his son, and Manoel enter the room.

"Ah! Joam, my Joam!" exclaimed Yaquita.

"Yaquita! my wife! my children!" replied the prisoner, who opened his arms and pressed them to his heart.

"My Joam, innocent!"

"Innocent and avenged!" said Benito.

"Avenged? What do you mean?"

"Torres is dead, father; killed by my hand!"

"Dead!--Torres!--Dead!" gasped Joam Dacosta. "My son! You have ruined me!"
CHAPTER VII. RESOLUTIONS

A FEW HOURS later the whole family had returned to the raft, and were assembled in the large room. All were there, except the prisoner, on whom the last blow had just fallen. Benito was quite overwhelmed, and accused himself of having destroyed his father, and had it not been for the entreaties of Yaquita, of his sister, of Padre Passanha, and of Manoel, the distracted youth would in the first moments of despair have probably made away with himself. But he was never allowed to get out of sight; he was never left alone. And besides, how could he have acted otherwise? Ah! why had not Joam Dacosta told him all before he left the jangada? Why had he refrained from speaking, except before a judge, of this material proof of his innocence? Why, in his interview with Manoel after the expulsion of Torres, had he been silent about the document which the adventurer pretended to hold in his hands? But, after all, what faith ought he to place in what Torres had said? Could he be certain that such a document was in the rascal's possession?

Whatever might be the reason, the family now knew everything, and that from the lips of Joam Dacosta himself. They knew that Torres had declared that the proof of the innocence of the convict of Tijuco actually existed; that the document had been written by the very hand of the author of the attack; that the criminal, seized by remorse at the moment of his death, had intrusted it to his companion, Torres; and that he, instead of fulfilling the wishes of the dying man, had made the handing over of the document an excuse for extortion. But they knew also that Torres had just been killed, and that his body was engulfed in the waters of the Amazon, and that he died without even mentioning the name of the guilty man.

Unless he was saved by a miracle, Joam Dacosta might now be considered as irrevocably lost. The death of Judge Ribeiro on the one hand, the death of Torres on the other, were blows from which he could not recover! It should here be said that public opinion at Manaos, unreasoning as it always is, was all against he prisoner. The unexpected arrest of Joam Dacosta had revived the memory of the terrible crime of Tijuco, which had lain forgotten for twenty-three years. The trial of the young clerk at the mines of the diamond arrayal, his capital sentence, his escape a few hours before his intended execution—all were remembered, analyzed, and commented on. An article which had just appeared in the _O Diario d'o Grand Para,_ the most widely circulated journal in these parts, after giving a history of the circumstances of the crime, showed itself decidedly hostile to the prisoner. Why should these people believe in Joam Dacosta's innocence, when they were ignorant of all that his friends knew—of what they alone knew?

And so the people of Manaos became excited. A mob of Indians and negroes hurried, in their blind folly, to surround the prison and roar forth tumultuous shouts of death. In this part of the two Americas, where executions under Lynch law are of frequent occurrence, the mob soon surrenders itself to its cruel instincts, and it was feared that on this occasion it would do justice with its own hands.

What a night it was for the passengers from the fazenda! Masters and servants had been affected by the blow! Were not the servants of the fazenda members of one family? Every one of them would watch over the safety of Yaquita and her people! On the bank of the Rio Negro there was a constant coming and going of the natives, evidently excited by the arrest of Joam Dacosta, and who could say to what excesses these half-barbarous men might be led?

The time, however, passed without any demonstration against the jangada.

On the morrow, the 26th of August, as soon as the sun rose, Manoel and Fragoso, who had never left Benito for an instant during this terrible night, attempted to distract his attention from his despair. After taking him aside they made him understand that there was no time to be lost—that they must make up their minds to act.

"Benito," said Manoel, "pull yourself together! Be a man again! Be a son again!"
"My father!" exclaimed Benito. "I have killed him!"
"No!" replied Manoel. "With heaven's help it is possible that all may not be lost!"
"Listen to us, Mr. Benito," said Fragoso.

The young man, passing his hand over his eyes, made a violent effort to collect himself.

"Benito," continued Manoel, "Torres never gave a hint to put us on the track of his past life. We therefore cannot tell who was the author of the crime of Tijuco, or under what conditions it was committed. To try in that direction is to lose our time."

"And time presses!" added Fragoso.

"Besides," said Manoel, "suppose we do find out who this companion of Torres was, he is dead, and he could not testify in any way to the innocence of Joam Dacosta. But it is none the less certain that the proof of this innocence exists, and there is not room to doubt the existence of a document which Torres was anxious to make the subject of a bargain. He told us so himself. The document is a complete avowal written in the handwriting of the culprit, which
relates the attack in its smallest details, and which clears our father! Yes! a hundred times, yes! The document exists!"

"But Torres does not exist!" groaned Benito, "and the document has perished with him!"

"Wait, and don't despair yet!" answered Manoel. "You remember under what circumstances we made the acquaintance of Torres? It was in the depths of the forest of Iquitos. He was in pursuit of a monkey which had stolen a metal case, which it so strangely kept, and the chase had lasted a couple of hours when the monkey fell to our guns. Now, do you think that it was for the few pieces of gold contained in the case that Torres was in such a fury to recover it? and do you not remember the extraordinary satisfaction which he displayed when we gave him back the case which we had taken out of the monkey's paw?"

"Yes! yes!" answered Benito. "This case which I held--which I gave back to him! Perhaps it contained----"

"It is more than probable! It is certain!" replied Manoel.

"And I beg to add," said Fragoso, "for now the fact recurs to my memory, that during the time you were at Ega I remained on board, at Lina's advice, to keep an eye on Torres, and I saw him--yes, I saw him--reading, an old faded paper, and muttering words which I could not understand."

"That was the document!" exclaimed Benito, who snatched at the hope--the only one that was left. "But this document; had he not put it in some place of security?"

"No," answered Manoel--"no; it was too precious for Torres to dream of parting with it. He was bound to carry it always about with him, and doubtless in that very case."

"Wait! wait, Manoel!" exclaimed Benito; "I remember--yes, I remember. During the struggle, at the first blow I struck Torres in his chest, my manchetta was stopped by some hard substance under his poncho, like a plate of metal----"

"That was the case!" said Fragoso.

"Yes," replied Manoel; "doubt is impossible! That was the case; it was in his breast-pocket."

"But the corpse of Torres?"

"We will recover it!"

"But the paper! The water will have stained it, perhaps destroyed it, or rendered it undecipherable!"

"Why," answered Manoel, "if the metal case which held it was water-tight?"

"Manoel," replied Benito, who seized on the last hope, "you are right! The corpse of Torres must be recovered! We will ransack the whole of this part of the river, if necessary, but we will recover it!"

The pilot Araujo was then summoned and informed of what they were going to do.

"Good!" replied he; "I know all the eddies and currents where the Rio Negro and the Amazon join, and we shall succeed in recovering the body. Let us take two pirogues, two ubas, a dozen of our Indians, and make a start."

Padre Passanha was then coming out of Yaquta's room.

Benito went to him, and in a few words told him what they were going to do to get possession of the document.

"Say nothing to my mother or my sister," he added; "if this last hope fails it will kill them!"

"Go, my lad, go," replied Passanha, "and may God help you in your search."

Five minutes afterward the four boats started from the raft. After descending the Rio Negro they arrived near the bank of the Amazon, at the very place where Torres, mortally wounded, had disappeared beneath the waters of the stream.

CHAPTER VIII. THE FIRST SEARCH

THE SEARCH had to commence at once, and that for two weighty reasons.

The first of these was--and this was a question of life or death--that this proof of Joam Dacosta's innocence must be produced before the arrival of the order from Rio Janeiro. Once the identity of the prisoner was established, it was impossible that such an order could be other than the order for his execution.

The second was that the body of Torres should be got out of the water as quickly as possible so as to regain undamaged the metal case and the paper it ought to contain.

At this juncture Araujo displayed not only zeal and intelligence, but also a perfect knowledge of the state of the river at its confluence with the Rio Negro.

"If Torres," he said to the young men, "had been from the first carried away by the current, we should have to drag the river throughout a large area, for we shall have a good many days to wait for his body to reappear on the surface through the effects of decomposition."

"We cannot do that," replied Manoel. "This very day we ought to succeed."

"If, on the contrary," continued the pilot, "the corpse has got stuck among the reeds and vegetation at the foot of the bank, we shall not be an hour before we find it."
"To work, then!" answered Benito.

There was but one way of working. The boats approached the bank, and the Indians, furnished with long poles, began to sound every part of the river at the base of the bluff which had served for the scene of combat.

The place had been easily recognized. A track of blood stained the declivity in its chalky part, and ran perpendicularly down into the water; and there many a clot scattered on the reeds indicated the very spot where the corpse had disappeared.

About fifty feet down stream a point jutted out from the riverside and kept back the waters in a kind of eddy, as in a large basin. There was no current whatever near the shore, and the reeds shot up out of the river unbent. Every hope then existed that Torres' body had not been carried away by the main stream. Where the bed of the river showed sufficient slope, it was perhaps possible for the corpse to have rolled several feet along the ridge, and even there no effect of the current could be traced.

The ubas and the pirogues, dividing the work among them, limited the field of their researches to the extreme edge of the eddy, and from the circumference to the center the crews' long poles left not a single point unexplored. But no amount of sounding discovered the body of the adventurer, neither among the clumps of reeds nor on the bottom of the river, whose slope was then carefully examined.

Two hours after the work had begun they had been led to think that the body, having probably struck against the declivity, had fallen off obliquely and rolled beyond the limits of this eddy, where the action of the current commenced to be felt.

"But that is no reason why we should despair," said Manoel, "still less why we should give up our search."

"Will it be necessary," exclaimed Benito, "to search the river throughout its breadth and its length?"

"Throughout its breadth, perhaps," answered Araujo, "throughout its length, no--fortunately."

"And why?" asked Manoel.

"Because the Amazon, about a mile away from its junction with the Rio Negro, makes a sudden bend, and at the same time its bed rises, so that there is a kind of natural barrier, well known to sailors as the Bar of Frias, which things floating near the surface are alone able to clear. In short, the currents are ponded back, and they cannot possibly have any effect over this depression."

This was fortunate, it must be admitted. But was Araujo mistaken? The old pilot of the Amazon could be relied on. For the thirty years that he had followed his profession the crossing of the Bar of Frias, where the current was increased in force by its decrease in depth, had often given him trouble. The narrowness of the channel and the elevation of the bed made the passage exceedingly difficult, and many a raft had there come to grief.

And so Araujo was right in declaring that if the corpse of Torres was still retained by its weight on the sandy bed of the river, it could not have been dragged over the bar. It is true that later on, when, on account of the expansion of the gases, it would again rise to the surface, the current would bear it away, and it would then be irrevocably lost down the stream, a long way beyond the obstruction. But this purely physical effect would not take place for several days.

They could not have applied to a man who was more skillful or more conversant with the locality than Araujo, and when he affirmed that the body could not have been borne out of the narrow channel for more than a mile or so, they were sure to recover it if they thoroughly sounded that portion of the river.

Not an island, not an islet, checked the course of the Amazon in these parts. Hence, when the foot of the two banks had been visited up to the bar, it was in the bed itself, about five hundred feet in width, that more careful investigations had to be commenced.

The way the work was conducted was this. The boats taking the right and left of the Amazon lay alongside the banks. The reeds and vegetation were tried with the poles. Of the smallest ledges in the banks in which a body could rest, not one escaped the scrutiny of Araujo and his Indians.

But all this labor produced no result, and half the day had elapsed without the body being brought to the surface of the stream.

An hour's rest was given to the Indians. During this time they partook of some refreshment, and then they returned to their task.

Four of the boats, in charge of the pilot, Benito, Fragoso, and Manoel, divided the river between the Rio Negro and the Bar of Frias into four portions. They set to work to explore its very bed. In certain places the poles proved insufficient to thoroughly search among the deeps, and hence a few dredges--or rather harrows, made of stones and old iron, bound round with a solid bar--were taken on board, and when the boats had pushed off these rakes were thrown in and the river bottom stirred up in every direction.

It was in this difficult task that Benito and his companions were employed till the evening. The ubas and pirogues, worked by the oars, traversed the whole surface of the river up to the bar of Frias.

There had been moments of excitement during this spell of work, when the harrows, catching in something at the
bottom, offered some slight resistance. They were then hauled up, but in place of the body so eagerly searched for, there would appear only heavy stones or tufts of herbage which they had dragged from their sandy bed. No one, however, had an idea of giving up the enterprise. They none of them thought of themselves in this work of salvation. Benito, Manoel, Araujo had not even to stir up the Indians or to encourage them. The gallant fellows knew that they were working for the fazender of Iquitos—for the man whom they loved, for the chief of the excellent family who treated their servants so well.

Yes; and so they would have passed the night in dragging the river. Of every minute lost all knew the value. A little before the sun disappeared, Araujo, finding it useless to continue his operations in the gloom, gave the signal for the boats to join company and return together to the confluence of the Rio Negro and regain the jangada.

The work so carefully and intelligently conducted was not, however, at an end. Manoel and Fragoso, as they came back, dared not mention their ill success before Benito. They feared that the disappointment would only force him to some act of despair.

But neither courage nor coolness deserted the young fellow; he was determined to follow to the end this supreme effort to save the honor and the life of his father, and he it was who addressed his companions, and said: "Tomorrow we will try again, and under better conditions if possible."

"Yes," answered Manoel; "you are right, Benito. We can do better. We cannot pretend to have entirely explored the river along the whole of the banks and over the whole of its bed."

"No; we cannot have done that," replied Araujo; "and I maintain what I said—that the body of Torres is there, and that it is there because it has not been carried away, because it could not be drawn over the Bar of Frias, and because it will take many days before it rises to the surface and floats down the stream. Yes, it is there, and not a demijohn of tafia will pass my lips until I find it!"

This affirmation from the pilot was worth a good deal, and was of a hope-inspiring nature.

However, Benito, who did not care so much for words as he did for things, thought proper to reply, "Yes, Araujo; the body of Torres is in the river, and we shall find it if—"

"If?" said the pilot.

"If it has not become the prey of the alligators!"

Manoel and Fragoso waited anxiously for Araujo's reply.

The pilot was silent for a few moments; they felt that he was reflecting before he spoke. "Mr. Benito," he said at length, "I am not in the habit of speaking lightly. I had the same idea as you; but listen. During the ten hours we have been at work have you seen a single cayman in the river?"

"Not one," said Fragoso.

"If you have not seen one," continued the pilot, "it was because there were none to see, for these animals have nothing to keep them in the white waters when, a quarter of a mile off, there are large stretches of the black waters, which they so greatly prefer. When the raft was attacked by some of these creatures it was in a part where there was no place for them to flee to. Here it is quite different. Go to the Rio Negro, and there you will see caymans by the score. Had Torres' body fallen into that tributary there might be no chance of recovering it. But it was in the Amazon that it was lost, and in the Amazon it will be found."

Benito, relieved from his fears, took the pilot's hand and shook it, and contented himself with the reply, "Tomorrow, my friends!"

Ten minutes later they were all on board the jangada. During the day Yaquit had passed some hours with her husband. But before she started, and when she saw neither the pilot, nor Manoel, nor Benito, nor the boats, she had guessed the search on which they had gone, but she said nothing to Joam Dacosta, as she hoped that in the morning she would be able to inform him of their success.

But when Benito set foot on the raft she perceived that their search had been fruitless. However, she advanced toward him. "Nothing?" she asked.

"Nothing," replied Benito. "But the morrow is left to us."

The members of the family retired to their rooms, and nothing more was said as to what had passed. Manoel tried to make Benito lie down, so as to take a few hours' rest.

"What is the good of that?" asked Benito. "Do you think I could sleep?"

CHAPTER IX. THE SECOND ATTEMPT

ON THE MORROW, the 27th of August, Benito took Manoel apart, before the sun had risen, and said to him: "Our yesterday's search was vain. If we begin again under the same conditions we may be just as unlucky."

"We must do so, however," replied Manoel.

"Yes," continued Benito; "but suppose we do not find the body, can you tell me how long it will be before it
rises to the surface?"

"If Torres," answered Manoel, "had fallen into the water living, and not mortally wounded, it would take five or six days; but as he only disappeared after being so wounded, perhaps two or three days would be enough to bring him up again."

This answer of Manoel, which was quite correct, requires some explanation. Every human body which falls into the water will float if equilibrium is established between its density and that of its liquid bed. This is well known to be the fact, even when a person does not know how to swim. Under such circumstances, if you are entirely submerged, and only keep your mouth and nose away from the water, you are sure to float. But this is not generally done. The first movement of a drowning man is to try and hold as much as he can of himself above the water; he holds up his head and lifts up his arms, and these parts of his body, being no longer supported by the liquid, do not lose that amount of weight which they would do if completely immersed. Hence an excess of weight, and eventually entire submersion, for the water makes its way to the lungs through the mouth, takes the place of the air which fills them, and the body sinks to the bottom.

On the other hand, when the man who falls into the water is already dead the conditions are different, and more favorable for his floating, for then the movements of which we have spoken are checked, and the liquid does not make its way to the lungs so copiously, as there is no attempt to respire, and he is consequently more likely to promptly reappear. Manoel then was right in drawing the distinction between the man who falls into the water living and the man who falls into it dead. In the one case the return to the surface takes much longer than in the other.

The reappearance of the body after an immersion more or less prolonged is always determined by the decomposition, which causes the gases to form. These bring about the expansion of the cellular tissues, the volume augments and the weight decreases, and then, weighing less than the water it displaces, the body attains the proper conditions for floating.

"And thus," continued Manoel, "supposing the conditions continue favorable, and Torres did not live after he fell into the water, if the decomposition is not modified by circumstances which we cannot foresee, he will not reappear before three days."

"We have not got three days," answered Benito. "We cannot wait, you know; we must try again, and in some new way."

"What can you do?" answered Manoel.

"Plunge down myself beneath the waters," replied Benito, "and search with my eyes--with my hands."

"Plunge in a hundred times--a thousand times!" exclaimed Manoel. "So be it. I think, like you, that we ought to go straight at what we want, and not struggle on with poles and drags like a blind man who only works by touch. I also think that we cannot wait three days. But to jump in, come up again, and go down again will give only a short period for the exploration. No; it will never do, and we shall only risk a second failure."

"Have you no other plan to propose, Manoel?" asked Benito, looking earnestly at his friend.

"Well, listen. There is what would seem to be a Providential circumstance that may be of use to us."

"What is that?"

"Yesterday, as we hurried through Manaos, I noticed that they were repairing one of the quays on the bank of the Rio Negro. The submarine works were being carried on with the aid of a diving-dress. Let us borrow, or hire, or buy, at any price, this apparatus, and then we may resume our researches under more favorable conditions."

"Tell Araujo, Fragoso, and our men, and let us be off," was the instant reply of Benito.

The pilot and the barber were informed of the decision with regard to Manoel's project. Both were ordered to go with the four boats and the Indians to the basin of Frias, and there to wait for the two young men.

Manoel and Benito started off without losing a moment, and reached the quay at Manaos. There they offered the contractor such a price that he put the apparatus at their service for the whole day.

"Will you not have one of my men," he asked, "to help you?"

"Give us your foreman and one of his mates to work the air-pump," replied Manoel.

"But who is going to wear the diving-dress?"

"I am," answered Benito.

"You!" exclaimed Manoel.

"I intend to do so."

It was useless to resist.

An hour afterward the raft and all the instruments necessary for the enterprise had drifted down to the bank where the boats were waiting.

The diving-dress is well known. By its means men can descend beneath the waters and remain there a certain time without the action of the lungs being in any way injured. The diver is clothed in a waterproof suit of India rubber, and his feet are attached to leaden shoes, which allow him to retain his upright position beneath the surface.
At the collar of the dress, and about the height of the neck, there is fitted a collar of copper, on which is screwed a metal globe with a glass front. In this globe the diver places his head, which he can move about at his ease. To the globe are attached two pipes; one used for carrying off the air ejected from the lungs, and which is unfit for respiration, and the other in communication with a pump worked on the raft, and bringing in the fresh air. When the diver is at work the raft remains immovable above him; when the diver moves about on the bottom of the river the raft follows his movements, or he follows those of the raft, according to his convenience.

These diving-dresses are now much improved, and are less dangerous than formerly. The man beneath the liquid mass can easily bear the additional pressure, and if anything was to be feared below the waters it was rather some cayman who might there be met with. But, as had been observed by Araujo, not one of these amphibians had been seen, and they are well known to prefer the black waters of the tributaries of the Amazon. Besides, in case of danger, the diver has always his check-string fastened to the raft, and at the least warning can be quickly hauled to the surface.

Benito, invariably very cool once his resolution was taken, commenced to put his idea into execution, and got into the diving dress. His head disappeared in the metal globe, his hand grasped a sort of iron spear with which to stir up the vegetation and detritus accumulated in the river bed, and on his giving the signal he was lowered into the stream.

The men on the raft immediately commenced to work the air-pump, while four Indians from the jangada, under the orders of Araujo, gently propelled it with their long poles in the desired direction.

The two pirogues, commanded one by Fragoso, the other by Manoel, escorted the raft, and held themselves ready to start in any direction, should Benito find the corpse of Torres and again bring it to the surface of the Amazon.

CHAPTER X. A CANNON SHOT

Benito then had disappeared beneath the vast sheet which still covered the corpse of the adventurer. Ah! If he had had the power to divert the waters of the river, to turn them into vapor, or to drain them off—if he could have made the Frias basin dry down stream, from the bar up to the influx of the Rio Negro, the case hidden in Torres' clothes would already have been in his hand! His father's innocence would have been recognized! Joam Dacosta, restored to liberty, would have again started on the descent of the river, and what terrible trials would have been avoided!

Benito had reached the bottom. His heavy shoes made the gravel on the bed crunch beneath him. He was in some ten or fifteen feet of water, at the base of the cliff, which was here very steep, and at the very spot where Torres had disappeared.

Near him was a tangled mass of reeds and twigs and aquatic plants, all laced together, which assuredly during the researches of the previous day no pole could have penetrated. It was consequently possible that the body was entangled among the submarine shrubs, and still in the place where it had originally fallen.

Hereabouts, thanks to the eddy produced by the prolongation of one of the spurs running out into the stream, the current was absolutely _nil_. Benito guided his movements by those of the raft, which the long poles of the Indians kept just over his head.

The light penetrated deep through the clear waters, and the magnificent sun, shining in a cloudless sky, shot its rays down into them unchecked. Under ordinary conditions, at a depth of some twenty feet in water, the view becomes exceedingly blurred, but here the waters seemed to be impregnated with a luminous fluid, and Benito was able to descend still lower without the darkness concealing the river bed.

The young man slowly made his way along the bank. With his iron-shod spear he probed the plants and rubbish accumulated along its foot. Flocks of fish, if we can use such an expression, escaped on all sides from the dense thickets like flocks of birds. It seemed as though the thousand pieces of a broken mirror glimmered through the waters. At the same time scores of crustaceans scampered over the sand, like huge ants hurrying from their hills.

Notwithstanding that Benito did not leave a single point of the river unexplored, he never caught sight of the object of his search. He noticed, however, that the slope of the river bed was very abrupt, and he concluded that Torres had rolled beyond the eddy toward the center of the stream. If so, he would probably still recover the body, for the current could hardly touch it at the depth, which was already great, and seemed sensibly to increase. Benito then resolved to pursue his investigations on the side where he had begun to probe the vegetation. This was why he continued to advance in that direction, and the raft had to follow him during a quarter of an hour, as had been previously arranged.

The quarter of an hour had elapsed, and Benito had found nothing. He felt the need of ascending to the surface, so as to once more experience those physiological conditions in which he could recoup his strength. In certain spots,
where the depth of the river necessitated it, he had had to descend about thirty feet. He had thus to support a pressure almost equal to an atmosphere, with the result of the physical fatigue and mental agitation which attack those who are not used to this kind of work. Benito then pulled the communication cord, and the men on the raft commenced to haul him in, but they worked slowly, taking a minute to draw him up two or three feet so as not to produce in his internal organs the dreadful effects of decompression.

As soon as the young man had set foot on the raft the metallic sphere of the diving-dress was raised, and he took a long breath and sat down to rest.

The pirogues immediately rowed alongside. Manoel, Fragoso, and Araujo came close to him, waiting for him to speak.

"Well?" asked Manoel.
"Still nothing! Nothing!"
"Have you not seen a trace?"
"Not one!"
"Shall I go down now?"
"No, Manoel," answered Benito; "I have begun; I know where to go. Let me do it!"

Benito then explained to the pilot that his intention was to visit the lower part of the bank up to the Bar of Frias, for there the slope had perhaps stopped the corpse, if, floating between the two streams, it had in the least degree been affected by the current. But first he wanted to skirt the bank and carefully explore a sort of hole formed in the slope of the bed, to the bottom of which the poles had evidently not been able to penetrate. Araujo approved of this plan, and made the necessary preparations.

Manoel gave Benito a little advice. "As you want to pursue your search on that side," he said, "the raft will have to go over there obliquely; but mind what you are doing, Benito. That is much deeper than where you have been yet; it may be fifty or sixty feet, and you will have to support a pressure of quite two atmospheres. Only venture with extreme caution, or you may lose your presence of mind, or no longer know where you are or what to do. If your head feels as if in a vice, and your ears tingle, do not hesitate to give us the signal, and we will at once haul you up. You can then begin again if you like, as you will have got accustomed to move about in the deeper parts of the river."

Benito promised to attend to these hints, of which he recognized the importance. He was particularly struck with the fact that his presence of mind might abandon him at the very moment he wanted it most.

Benito shook hands with Manoel; the sphere of the diving-dress was again screwed to his neck, the pump began to work, and the diver once more disappeared beneath the stream.

The raft was then taken about forty feet along the left bank, but as it moved toward the center of the river the current increased in strength, the ubas were moored, and the rowers kept it from drifting, so as only to allow it to advance with extreme slowness.

Benito descended very gently, and again found himself on the firm sand. When his heels touched the ground it could be seen, by the length of the haulage cord, that he was at a depth of some sixty-five or seventy feet. He was therefore in a considerable hole, excavated far below the ordinary level.

The liquid medium was more obscure, but the limpidity of these transparent waters still allowed the light to penetrate sufficiently for Benito to distinguish the objects scattered on the bed of the river, and to approach them with some safety. Besides, the sand, sprinkled with mica flakes, seemed to form a sort of reflector, and the very grains could be counted glittering like luminous dust.

Benito moved on, examining and sounding the smallest cavities with his spear. He continued to advance very slowly; the communication cord was paid out, and as the pipes which served for the inlet and outlet of the air were never tightened, the pump was worked under the proper conditions.

Benito turned off so as to reach the middle of the bed of the Amazon, where there was the greatest depression. Sometimes profound obscurity thickened around him, and then he could see nothing, so feeble was the light; but this was a purely passing phenomenon, and due to the raft, which, floating above his head, intercepted the solar rays and made the night replace the day. An instant afterward the huge shadow would be dissipated, and the reflection of the sands appear again in full force.

All the time Benito was going deeper. He felt the increase of the pressure with which his body was wrapped by the liquid mass. His respiration became less easy; the retractibility of his organs no longer worked with as much ease as in the midst of an atmosphere more conveniently adapted for them. And so he found himself under the action of physiological effects to which he was unaccustomed. The rumbling grew louder in his ears, but as his thought was always lucid, as he felt that the action of his brain was quite clear—even a little more so than usual—he delayed giving the signal for return, and continued to go down deeper still.

Suddenly, in the subdued light which surrounded him, his attention was attracted by a confused mass. It seemed
to take the form of a corpse, entangled beneath a clump of aquatic plants. Intense excitement seized him. He stepped toward the mass; with his spear he felt it. It was the carcass of a huge cayman, already reduced to a skeleton, and which the current of the Río Negro had swept into the bed of the Amazon. Benito recoiled, and, in spite of the assertions of the pilot, the thought recurred to him that some living cayman might even then be met with in the deeps near the Bar of Frias!

But he repelled the idea, and continued his progress, so as to reach the bottom of the depression.

And now he had arrived at a depth of from eighty to a hundred feet, and consequently was experiencing a pressure of three atmospheres. If, then, this cavity was also drawn blank, he would have to suspend his researches.

Experience has shown that the extreme limit for such submarine explorations lies between a hundred and twenty and a hundred and thirty feet, and that below this there is great danger, the human organism not only being hindered from performing his functions under such a pressure, but the apparatus failing to keep up a sufficient supply of air with the desirable regularity.

But Benito was resolved to go as far as his mental powers and physical energies would let him. By some strange presentiment he was drawn toward this abyss; it seemed to him as though the corpse was very likely to have rolled to the bottom of the hole, and that Torres, if he had any heavy things about him, such as a belt containing either money or arms, would have sunk to the very lowest point. Of a sudden, in a deep hollow, he saw a body through the gloom! Yes! A corpse, still clothed, stretched out like a man asleep, with his arms folded under his head!

Was that Torres? In the obscurity, then very dense, he found it difficult to see; but it was a human body that lay there, less than ten paces off, and perfectly motionless!

A sharp pang shot through Benito. His heart, for an instant, ceased to beat. He thought he was going to lose consciousness. By a supreme effort he recovered himself. He stepped toward the corpse.

Suddenly a shock as violent as unexpected made his whole frame vibrate! A long whip seemed to twine round his body, and in spite of the thick diving-dress he felt himself lashed again and again.

"A gymnotus!" he said.

It was the only word that passed his lips.

In fact, it was a _"puraque,"_ the name given by the Brazilians to the gymnotus, or electric snake, which had just attacked him.

It is well known that the gymnotus is a kind of eel, with a blackish, slimy skin, furnished along the back and tail with an apparatus composed of plates joined by vertical lamellæ, and acted on by nerves of considerable power. This apparatus is endowed with singular electrical properties, and is apt to produce very formidable results. Some of these gymnotuses are about the length of a common snake, others are about ten feet long, while others, which, however, are rare, even reach fifteen or twenty feet, and are from eight to ten inches in diameter.

Gymnotuses are plentiful enough both in the Amazon and its tributaries; and it was one of these living coils, about ten feet long, which, after uncurving itself like a bow, again attacked the diver.

Benito knew what he had to fear from this formidable animal. His clothes were powerless to protect him. The discharges of the gymnotus, at first somewhat weak, become more and more violent, and there would come a time when, exhausted by the shocks, he would be rendered powerless.

Benito, unable to resist the blows, half-dropped upon the sand. His limbs were becoming paralyzed little by little under the electric influences of the gymnotus, which lightly touched his body as it wrapped him in its folds. His arms even he could not lift, and soon his spear escaped him, and his hand had not strength enough left to pull the cord and give the signal.

Benito felt that he was lost. Neither Manoel nor his companions could suspect the horrible combat which was going on beneath them between the formidable puraque and the unhappy diver, who only fought to suffer, without any power of defending himself.

And that at the moment when a body--the body of Torres without a doubt!--had just met his view.

By a supreme instinct of self-preservation Benito uttered a cry. His voice was lost in the metallic sphere from which not a sound could escape!

And now the puraque redoubled its attacks; it gave forth shock after shock, which made Benito writhe on the sand like the sections of a divided worm, and his muscles were wrenched again and again beneath the living lash.

Benito thought that all was over; his eyes grew dim, his limbs began to stiffen.

But before he quite lost his power of sight and reason he became the witness of a phenomenon, unexpected, inexplicable, and marvelous in the extreme.

A deadened roar resounded through the liquid depths. It was like a thunder-clap, the reverberations of which rolled along the river bed, then violently agitated by the electrical discharges of the gymnotus. Benito felt himself bathed as it were in the dreadful booming which found an echo in the very deepest of the river depths.

And then a last cry escaped him, for fearful was the vision which appeared before his eyes!
The corpse of the drowned man which had been stretched on the sand arose! The undulations of the water lifted up the arms, and they swayed about as if with some peculiar animation. Convulsive throbs made the movement of the corpse still more alarming.

It was indeed the body of Torres. One of the sun’s rays shot down to it through the liquid mass, and Benito recognized the bloated, ashy features of the scoundrel who fell by his own hand, and whose last breath had left him beneath the waters.

And while Benito could not make a single movement with his paralyzed limbs, while his heavy shoes kept him down as if he had been nailed to the sand, the corpse straightened itself up, the head swayed to and fro, and disentangling itself from the hole in which it had been kept by a mass of aquatic weeds, it slowly ascended to the surface of the Amazon.

CHAPTER XI. THE CONTENTS OF THE CASE

WHAT WAS it that had happened? A purely physical phenomenon, of which the following is the explanation.

The gunboat Santa Ana, bound for Manaos, had come up the river and passed the bar at Frias. Just before she reached the _embouchure_ of the Rio Negro she hoisted her colors and saluted the Brazilian flag. At the report vibrations were produced along the surface of the stream, and these vibrations making their way down to the bottom of the river, had been sufficient to raise the corpse of Torres, already lightened by the commencement of its decomposition and the distension of its cellular system. The body of the drowned man had in the ordinary course risen to the surface of the water.

This well-known phenomenon explains the reappearance of the corpse, but it must be admitted that the arrival of the Santa Ana was a fortunate coincidence.

By a shout from Manoel, repeated by all his companions, one of the pirogues was immediately steered for the body, while the diver was at the same time hauled up to the raft.

Great was Manoel’s emotion when Benito, drawn on to the platform, was laid there in a state of complete inertia, not a single exterior movement betraying that he still lived.

Was not this a second corpse which the waters of the Amazon had given up?

As quickly as possible the diving-dress was taken off him.

Benito had entirely lost consciousness beneath the violent shocks of the gymnotus.

Manoel, distracted, called to him, breathed into him, and endeavored to recover the heart’s pulsation.

"It beats! It beats!" he exclaimed.

Yes! Benito’s heart did still beat, and in a few minutes Manoel’s efforts restored him to life.

"The body! the Body!"

Such were the first words, the only ones which escaped from Benito’s lips.

"There it is!" answered Fragoso, pointing to a pirogue then coming up to the raft with the corpse.

"But what has been the matter, Benito?" asked Manoel. "Has it been the want of air?"

"No!" said Benito; "a puraque attacked me! But the noise? the detonation?"

"A cannon shot!" replied Manoel. "It was the cannon shot which brought the corpse to the surface."

At this moment the pirogue came up to the raft with the body of Torres, which had been taken on board by the Indians. His sojourn in the water had not disfigured him very much. He was easily recognizable, and there was no doubt as to his identity.

Fragoso, kneeling down in the pirogue, had already begun to undo the clothes of the drowned man, which came away in fragments.

At the moment Torres’ right arm, which was now left bare, attracted his attention. On it there appeared the distinct scar of an old wound produced by a blow from a knife.

"That scar!" exclaimed Fragoso. "But—that is good! I remember now----"

"What?" demanded Manoel.

"A quarrel! Yes! a quarrel I witnessed in the province of Madeira three years ago. How could I have forgotten it! This Torres was then a captain of the woods. Ah! I know now where I had seen him, the scoundrel!"

"That does not matter to us now!" cried Benito. "The case! the case! Has he still got that?" and Benito was about to tear away the last coverings of the corpse to get at it.

Manoel stopped him.

"One moment, Benito," he said; and then, turning to the men on the raft who did not belong to the jangada, and whose evidence could not be suspected at any future time:

"Just take note, my friends," he said, "of what we are doing here, so that you can relate before the magistrate what has passed."
The men came up to the pirogue.

Fragoso undid the belt which encircled the body of Torres underneath the torn poncho, and feeling his breast-pocket, exclaimed:

"The case!"

A cry of joy escaped from Benito. He stretched forward to seize the case, to make sure than it contained----

"No!" again interrupted Manoel, whose coolness did not forsake him. "It is necessary that not the slightest possible doubt should exist in the mind of the magistrate! It is better that disinterested witnesses should affirm that this case was really found on the corpse of Torres!"

"You are right," replied Benito.

"My friend," said Manoel to the foreman of the raft, "just feel in the pocket of the waistcoat."

The foreman obeyed. He drew forth a metal case, with the cover screwed on, and which seemed to have suffered in no way from its sojourn in the water.

"The paper! Is the paper still inside?" exclaimed Benito, who could not contain himself.

"It is for the magistrate to open this case!" answered Manoel. "To him alone belongs the duty of verifying that the document was found within it."

"Yes, yes. Again you are right, Manoel," said Benito. "To Manaos, my friends--to Manaos!"

Benito, Manoel, Fragoso, and the foreman who held the case, immediately jumped into one of the pirogues, and were starting off, when Fragoso said:

"And the corpse?"

The pirogue stopped.

In fact, the Indians had already thrown back the body into the water, and it was drifting away down the river.

"Torres was only a scoundrel," said Benito. "If I had to fight him, it was God that struck him, and his body ought not to go unburied!"

And so orders were given to the second pirogue to recover the corpse, and take it to the bank to await its burial.

But at the same moment a flock of birds of prey, which skimmed along the surface of the stream, pounced on the floating body. They were urubus, a kind of small vulture, with naked necks and long claws, and black as crows. In South America they are known as gallinazos, and their voracity is unparalleled. The body, torn open by their beaks, gave forth the gases which inflated it, its density increased, it sank down little by little, and for the last time what remained of Torres disappeared beneath the waters of the Amazon.

Ten minutes afterward the pirogue arrived at Manaos. Benito and his companions jumped ashore, and hurried through the streets of the town. In a few minutes they had reached the dwelling of Judge Jarriquez, and informed him, through one of his servants, that they wished to see him immediately.

The judge ordered them to be shown into his study.

There Manoel recounted all that had passed, from the moment when Torres had been killed until the moment when the case had been found on his corpse, and taken from his breast-pocket by the foreman.

Although this recital was of a nature to corroborate all that Joam Dacosta had said on the subject of Torres, and of the bargain which he had endeavored to make, Judge Jarriquez could not restrain a smile of incredulity.

"There is the case, sir," said Manoel. "For not a single instant has it been in our hands, and the man who gives it to you is he who took it from the body of Torres."

The magistrate took the case and examined it with care, turning it over and over as though it were made of some precious material. Then he shook it, and a few coins inside sounded with a metallic ring. Did not, then, the case contain the document which had been so much sought after--the document written in the very hand of the true author of the crime of Tijuco, and which Torres had wished to sell at such an ignoble price to Joam Dacosta? Was this material proof of the convict's innocence irrevocably lost?

We can easily imagine the violent agitation which had seized upon the spectators of this scene. Benito could scarcely utter a word, he felt his heart ready to burst. "Open it, sir! open the case!" he at last exclaimed, in a broken voice.

Judge Jarriquez began to unscrew the lid; then, when the cover was removed, he turned up the case, and from it a few pieces of gold dropped out and rolled on the table.

"But the paper! the paper!" again gasped Benito, who clutched hold of the table to save himself from falling.

The magistrate put his fingers into the case and drew out, not without difficulty, a faded paper, folded with care, and which the water did not seem to have even touched.

"The document! that is the document!" shouted Fragoso; "that is the very paper I saw in the hands of Torres!"

Judge Jarriquez unfolded the paper and cast his eyes over it, and then he turned it over so as to examine it on the back and the front, which were both covered with writing. "A document it really is!" said he; "there is no doubt of that. It is indeed a document!"
"Yes," replied Benito; "and that is the document which proves my father's innocence!"
"I do not know that," replied Judge Jarriquez; "and I am much afraid it will be very difficult to know it."
"Why?" exclaimed Benito, who became pale as death.
"Because this document is a cryptogram, and----"
"Well?"
"We have not got the key!"

CHAPTER XII. THE DOCUMENT

THIS WAS a contingency which neither Joam Dacosta nor his people could have anticipated. In fact, as those who have not forgotten the first scene in this story are aware, the document was written in a disguised form in one of the numerous systems used in cryptography.

But in which of them?

To discover this would require all the ingenuity of which the human brain was capable.

Before dismissing Benito and his companions, Judge Jarriquez had an exact copy made of the document, and, keeping the original, handed it over to them after due comparison, so that they could communicate with the prisoner.

Then, making an appointment for the morrow, they retired, and not wishing to lose an instant in seeing Joam Dacosta, they hastened on to the prison, and there, in a short interview, informed him of all that had passed.

Joam Dacosta took the document and carefully examined it. Shaking his head, he handed it back to his son.

"Perhaps," he said, "there is therein written the proof I shall never be able to produce. But if that proof escapes me, if the whole tenor of my life does not plead for me, I have nothing more to expect from the justice of men, and my fate is in the hands of God!"

And all felt it to be so. If the document remained indecipherable, the position of the convict was a desperate one.

"We shall find it, father!" exclaimed Benito. "There never was a document of this sort yet which could stand examination. Have confidence—yes, confidence! Heaven has, so to speak, miraculously given us the paper which vindicates you, and, after guiding our hands to recover it, it will not refuse to direct our brains to unravel it."

Joam Dacosta shook hands with Benito and Manoel, and then the three young men, much agitated, retired to the jangada, where Yaquita was awaiting them.

Yaquita was soon informed of what had happened since the evening—the reappearance of the body of Torres, the discovery of the document, and the strange form under which the real culprit, the companion of the adventurer, had thought proper to write his confession—doubtless, so that it should not compromise him if it fell into strange hands.

Naturally, Lina was informed of this unexpected complication, and of the discovery made by Fragoso that Torres was an old captain of the woods belonging to the gang who were employed about the mouths of the Madeira.

"But under what circumstances did you meet him?" asked the young mulatto.

"It was during one of my runs across the province of Amazones," replied Fragoso, "when I was going from village to village, working at my trade."

"And the scar?"

"What happened was this: One day I arrived at the mission of Aranas at the moment that Torres, whom I had never before seen, had picked a quarrel with one of his comrades—and a bad lot they are!—and this quarrel ended with a stab from a knife, which entered the arm of the captain of the woods. There was no doctor there, and so I took charge of the wound, and that is how I made his acquaintance."

"What does it matter after all," replied the young girl, "that we know what Torres had been? He was not the author of the crime, and it does not help us in the least."

"No, it does not," answered Fragoso; "for we shall end by reading the document, and then the innocence of Joam Dacosta will be palpable to the eyes of all."

This was likewise the hope of Yaquita, of Benito, of Manoel, and of Minha, and, shut up in the house, they passed long hours in endeavoring to decipher the writing.

But if it was their hope—and there is no need to insist on that point—it was none the less that of Judge Jarriquez.

After having drawn up his report at the end of his examination establishing the identity of Joam Dacosta, the magistrate had sent it off to headquarters, and therewith he thought he had finished with the affair so far as he was concerned. It could not well be otherwise.

On the discovery of the document, Jarriquez suddenly found himself face to face with the study of which he was a master. He, the seeker after numerical combinations, the solver of amusing problems, the answerer of charades, rebuses, logogryphs, and such things, was at last in his true element.

At the thought that the document might perhaps contain the justification of Joam Dacosta, he felt all the instinct of the analyst aroused. Here, before his very eyes, was a cryptogram! And so from that moment he thought of
nothing but how to discover its meaning, and it is scarcely necessary to say that he made up his mind to work at it continuously, even if he forgot to eat or to drink.

After the departure of the young people, Judge Jarriquez installed himself in his study. His door, barred against every one, assured him of several hours of perfect solitude. His spectacles were on his nose, his snuff-box on the table. He took a good pinch so as to develop the finesse and sagacity of his mind. He picked up the document and became absorbed in meditation, which soon became materialized in the shape of a monologue. The worthy justice was one of those unreserved men who think more easily aloud than to himself. "Let us proceed with method," he said. "No method, no logic; no logic, no success."

Then, taking the document, he ran through it from beginning to end, without understanding it in the least.

The document contained a hundred lines, which were divided into half a dozen paragraphs.

"Hum!" said the judge, after a little reflection; "to try every paragraph, one after the other, would be to lose precious time, and be of no use. I had better select one of these paragraphs, and take the one which is likely to prove the most interesting. Which of them would do this better than the last, where the recital of the whole affair is probably summed up? Proper names might put me on the track, among others that of Joam Dacosta; and if he had anything to do with this document, his name will evidently not be absent from its concluding paragraph."

The magistrate's reasoning was logical, and he was decidedly right in bringing all his resources to bear in the first place on the gist of the cryptogram as contained in its last paragraph.

Here is the paragraph, for it is necessary to again bring the eyes of the reader so as to show how an analyst set to work to discover its meaning.

"Phyjslydqdgzgasgzzqeehxgkfndrxujuglcytdxvksbxhhuypohdvyrmhuhpuydkjomphetozslntpmvffovpdajxhynojjgygaymexynuqlnmvlyfgsuzmqitzlbqygsqbvncrdrgruzbirmxyuyhqhpzdrrgcrohepxuxlfvrlplphonthvddqfhqsntzhhhhnhfempqkyuuektogzgkyuumfvljdqdpzzqykrplxhxqyrmvklomhhotozvdkspssuvjhd."_

At the outset, Judge Jarriquez noticed that the lines of the document were not divided either into words or phrases, and that there was a complete absence of punctuation. This fact could but render the reading of the document more difficult.

"Let us see, however," he said, "if there is not some assemblage of letters which appears to form a word--I mean a pronounceable word, whose number of consonants is in proportion to its vowels. And at the beginning I see the word _phy_; further on the word _gas_. Hallow! _ujugi_. Does that mean the African town on the banks of Tanganyika? What has that to do with all this? Further on here is the word _ypo_. Is it Greek, then? Close by here is _rym_ and _puy_; and _jox_; and _pheto_ and _jyggay_; and _mv_; and _qurz_. And before that we have got _red_ and _let_. That is good! those are two English words. Then _ohe--syk;_ then _rym_ once more, and then the word _oto._"

Judge Jarriquez let the paper drop, and thought for a few minutes.

"All the words I see in this thing seem queer!" he said. "In fact, there is nothing to give a clue to their origin. Some look like Greek, some like Dutch; some have an English twist, and some look like nothing at all! To say nothing of these series of consonants which are not wanted in any human pronunciation. Most assuredly it will not be very easy to find the key to this cryptogram."

The magistrate's fingers commenced to beat a tattoo on his desk--a kind of reveille to arouse his dormant faculties.

"Let us see," he said, "how many letters there are in the paragraph."

He counted them, pen in hand.

"Two hundred and seventy-six!" he said. "Well, now let us try what proportion these different letters bear to each other."

This occupied him for some time. The judge took up the document, and, with his pen in his hand, he noted each letter in alphabetical order.

In a quarter of an hour he had obtained the following table:

```
<table>
<thead>
<tr>
<th>Letter</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>3 times</td>
</tr>
<tr>
<td>b</td>
<td>4 times</td>
</tr>
<tr>
<td>c</td>
<td>3 times</td>
</tr>
<tr>
<td>d</td>
<td>16 times</td>
</tr>
<tr>
<td>e</td>
<td>9 times</td>
</tr>
<tr>
<td>f</td>
<td>10 times</td>
</tr>
<tr>
<td>g</td>
<td>13 times</td>
</tr>
<tr>
<td>h</td>
<td>23 times</td>
</tr>
<tr>
<td>i</td>
<td>4 times</td>
</tr>
<tr>
<td>j</td>
<td>8 times</td>
</tr>
<tr>
<td>k</td>
<td>9 times</td>
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<td>l</td>
<td>1 time</td>
</tr>
<tr>
<td>m</td>
<td>9 times</td>
</tr>
<tr>
<td>n</td>
<td>9 times</td>
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<tr>
<td>o</td>
<td>12 times</td>
</tr>
<tr>
<td>p</td>
<td>16 times</td>
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<tr>
<td>q</td>
<td>16 times</td>
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<tr>
<td>r</td>
<td>12 times</td>
</tr>
<tr>
<td>s</td>
<td>10 times</td>
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<tr>
<td>t</td>
<td>8 times</td>
</tr>
<tr>
<td>u</td>
<td>17 times</td>
</tr>
<tr>
<td>v</td>
<td>13 times</td>
</tr>
<tr>
<td>w</td>
<td>12 times</td>
</tr>
<tr>
<td>x</td>
<td>19 times</td>
</tr>
<tr>
<td>y</td>
<td>12 times</td>
</tr>
<tr>
<td>z</td>
<td>12 times</td>
</tr>
</tbody>
</table>
```

"Ah, ah!" he exclaimed. "One thing strikes me at once, and that is that in this paragraph all the letters of the alphabet are not used. That is very strange. If we take up a book and open it by chance it will be very seldom that we shall hit upon two hundred and seventy-six letters without all the signs of the alphabet figuring among them. After all, it may be chance," and then he passed to a different train of thought. "One important point is to see if the vowels and consonants are in their normal proportion."
And so he seized his pen, counted up the vowels, and obtained the following result:
\[ \begin{array}{l}
_a = 3 \text{ times } \_e = 9 \quad \_i = 4 \quad \_o = 12 \quad \_u = 17 \quad \_y = 19 \\
\end{array} \]

"And thus there are in this paragraph, after we have done our subtraction, sixty-four vowels and two hundred and twelve consonants. Good! that is the normal proportion. That is about a fifth, as in the alphabet, where there are six vowels among twenty-six letters. It is possible, therefore, that the document is written in the language of our country, and that only the signification of each letter is changed. If it has been modified in regular order, and a \_b\_ is always represented by an \_l\_ and \_o\_ by a \_v\_, a \_g\_ by a \_k\_, an \_u\_ by an \_r\_, etc., I will give up my judgeship if I do not read it. What can I do better than follow the method of that great analytical genius, Edgar Allan Poe?"

Judge Jarriquez herein alluded to a story by the great American romancer, which is a masterpiece. Who has not read the "Gold Bug?" In this novel a cryptogram, composed of ciphers, letters, algebraic signs, asterisks, full-stops, and commas, is submitted to a truly mathematical analysis, and is deciphered under extraordinary conditions, which the admirers of that strange genius can never forget. On the reading of the American document depended only a treasure, while on that of this one depended a man's life. Its solution was consequently all the more interesting.

The magistrate, who had often read and re-read his "Gold Bug," was perfectly acquainted with the steps in the analysis so minutely described by Edgar Poe, and he resolved to proceed in the same way on this occasion. In doing so he was certain, as he had said, that if the value or signification of each letter remained constant, he would, sooner or later, arrive at the solution of the document.

"What did Edgar Poe do?" he repeated. "First of all he began by finding out the sign--here there are only letters, let us say the letter--which was reproduced the ofteneast. I see that that is \_h\_ for it is met with twenty-three times. This enormous proportion shows, to begin with, that \_h\_ does not stand for \_h\_, but, on the contrary, that it represents the letter which recurs most frequently in our language, for I suppose the document is written in Portuguese. In English or French it would certainly be \_e\_, in Italian it would be \_i\_ or \_a\_ in Portuguese it will be \_a\_ or \_o\_. Now let us say that it signifies \_a\_ or \_o\_."

After this was done, the judge found out the letter which recurred most frequently after \_h\_ and so on, and he formed the following table:
\[ \begin{array}{l}
\_h\_ = 23 \text{ times } \_y\_ = 19 \quad \_u\_ = 17 \quad \_d\_ p \_q\_ = 16 \quad \_g\_ v\_ = 13 \quad \_o\_ r \_x\_ z\_ = 12 \quad \_f\_ s\_ = 10 \quad \_e\_ k\_ l\_ m\_ n\_ = 9 \quad \_j\_ t\_ = 8 \quad \_b\_ i\_ = 8 \quad \_a\_ c\_ = 8 \\
\end{array} \]

"Now the letter \_a\_ only occurs thrice!" exclaimed the judge, "and it ought to occur the ofteneast. Ah! that clearly proves that the meaning had been changed. And now, after \_a\_ or \_o\_ what are the letters which figure ofteneast in our language? Let us see," and Judge Jarriquez, with truly remarkable sagacity, which denoted a very observant mind, started on this new quest. In this he was only imitating the American romancer, who, great analyst as he was, had, by simple induction, been able to construct an alphabet corresponding to the signs of the cryptogram and by means of it to eventually read the pirate's parchment note with ease.

The magistrate set to work in the same way, and we may affirm that he was no whit inferior to his illustrious master. Thanks to his previous work at logogryphs and squares, rectangular arrangements and other enigmas, which depend only on an arbitrary disposition of the letters, he was already pretty strong in such mental pastimes. On this occasion he sought to establish the order in which the letters were reproduced--vowels first, consonants afterward.

Three hours had elapsed since he began. He had before his eyes an alphabet which, if his procedure were right, would give him the right meaning of the letters in the document. He had only to successively apply the letters of his alphabet to those of his paragraph. But before making this application some slight emotion seized upon the judge. He fully experienced the intellectual gratification--much greater than, perhaps, would be thought--of the man who, after hours of obstinate endeavor, saw the impatiently sought-for sense of the logogryph coming into view.

"Now let us try," he said; "and I shall be very much surprised if I have not got the solution of the enigma!"

Judge Jarriquez took off his spectacles and wiped the glasses; then he put them back again and went over the table. His special alphabet was in one hand, the cryptogram in the other. He commenced to write under the first line of the paragraph the true letters, which, according to him, ought to correspond exactly with each of the cryptographic letters. As with the first line so did he with the second, and the third, and the fourth, until he reached the end of the paragraph.

Oddity as he was, he did not stop to see as he wrote if the assemblage of letters made intelligible words. No; during the first stage his mind refused all verification of that sort. What he desired was to give himself the ecstasy of reading it all straight off at once.

And now he had done.
"Let us read!" he exclaimed.

And he read. Good heavens! what cacophony! The lines he had formed with the letters of his alphabet had no more sense in them than those of the document! It was another series of letters, and that was all. They formed no word; they had no value. In short, they were just as hieroglyphic.
CHAPTER XIII. IS IT A MATTER OF FIGURES?

IT WAS SEVEN o'clock in the evening. Judge Jarriquez had all the time been absorbed in working at the puzzle—and was no further advanced—and had forgotten the time of repast and the time of repose, when there came a knock at his study door.

It was time. An hour later, and all the cerebral substance of the vexed magistrate would certainly have evaporated under the intense heat into which he had worked his head.

At the order to enter—which was given in an impatient tone—the door opened and Manoel presented himself.

The young doctor had left his friends on board the jangada at work on the indecipherable document, and had come to see Judge Jarriquez. He was anxious to know if he had been fortunate in his researches. He had come to ask if he had at length discovered the system on which the cryptogram had been written.

The magistrate was not sorry to see Manoel come in. He was in that state of excitement that solitude was exasperating to him. He wanted some one to speak to, some one as anxious to penetrate the mystery as he was. Manoel was just the man.

"Sir," said Manoel as he entered, "one question! Have you succeeded better than we have?"

"Sit down first," exclaimed Judge Jarriquez, who got up and began to pace the room. "Sit down. If we are both of us standing, you will walk one way and I shall walk the other, and the room will be too narrow to hold us."

Manoel sat down and repeated his question.

"No! I have not had any success!" replied the magistrate; "I do not think I am any better off. I have got nothing to tell you; but I have found out a certainty."

"What is that, sir?"

"That the document is not based on conventional signs, but on what is known in cryptology as a cipher, that is to say, on a number."

"Well, sir," answered Manoel, "cannot a document of that kind always be read?"

"Yes," said Jarriquez, "if a letter is invariably represented by the same letter; if an _a_ for example, is always a _p_, and a _p_ is always an _x_; if not, it cannot."

"And in this document?"

"In this document the value of the letter changes with the arbitrarily selected cipher which necessitates it. So a _b_ will in one place be represented by a _k_ will later on become a _z_ later on an _u_ or an _n_ or an _f_ or any other letter."

"And then?"

"And then, I am sorry to say, the cryptogram is indecipherable."

"Indecipherable!" exclaimed Manoel. "No, sir; we shall end by finding the key of the document on which the man's life depends."

Manoel had risen, a prey to the excitement he could not control; the reply he had received was too hopeless, and he refused to accept it for good.

At a gesture from the judge, however, he sat down again, and in a calmer voice asked:

"And in the first place, sir, what makes you think that the basis of this document is a number, or, as you call it, a cipher?"

"Listen to me, young man," replied the judge, "and you will be forced to give in to the evidence."

The magistrate took the document and put it before the eyes of Manoel and showed him what he had done.

"I began," he said, "by treating this document in the proper way, that is to say, logically, leaving nothing to chance. I applied to it an alphabet based on the proportion the letters bear to one another which is usual in our language, and I sought to obtain the meaning by following the precepts of our immortal analyst, Edgar Poe. Well, what succeeded with him collapsed with me."

"Collapsed!" exclaimed Manoel.

"Yes, my dear young man, and I at once saw that success sought in that fashion was impossible. In truth, a stronger man than I might have been deceived."

"But I should like to understand," said Manoel, "and I do not----"

"Take the document," continued Judge Jarriquez; "first look at the disposition of the letters, and read it through."

Manoel obeyed.

"Do you not see that the combination of several of the letters is very strange?" asked the magistrate.

"I do not see anything," said Manoel, after having for perhaps the hundredth time read through the document.

"Well! study the last paragraph! There you understand the sense of the whole is bound to be summed up. Do you
see anything abnormal?"

"Nothing."

"There is, however, one thing which absolutely proves that the language is subject to the laws of number."

"And that is?"

"That is that you see three _h's_ coming together in two different places."

What Jarriquez said was correct, and it was of a nature to attract attention. The two hundred and fourth, two hundred and fifth, and two hundred and sixth letters of the paragraph, and the two hundred and fifty-eighth, two hundred and fifty-ninth, and two hundred and sixtieth letters of the paragraph were consecutive _h's_. At first this peculiarity had not struck the magistrate.

"And that proves?" asked Manoel, without divining the deduction that could be drawn from the combination.

"That simply proves that the basis of the document is a number. It shows _à priori_ that each letter is modified in virtue of the ciphers of the number and according to the place which it occupies."

"And why?"

"Because in no language will you find words with three consecutive repetitions of the letter _h._"

Manoel was struck with the argument; he thought about it, and, in short, had no reply to make.

"And had I made the observation sooner," continued the magistrate, "I might have spared myself a good deal of trouble and a headache which extends from my occiput to my sinciput."

"But, sir," asked Manoel, who felt the little hope vanishing on which he had hitherto rested, "what do you mean by a cipher?"

"Tell me a number."

"Any number you like.

"Give me an example and you will understand the explanation better."

Judge Jarriquez sat down at the table, took up a sheet of paper and a pencil, and said:

"Now, Mr. Manoel, let us choose a sentence by chance, the first that comes; for instance:

_Judge Jarriquez has an ingenious mind._"

I write this phrase so as to space the letters different and I get:

_Judgejarriquezhasaningeniousmind._"

"That done," said the magistrate, to whom the phrase seemed to contain a proposition beyond dispute, looking Manoel straight in the face, "suppose I take a number by chance, so as to give a cryptographic form to this natural succession of words; suppose now this word is composed of three ciphers, and let these ciphers be 2, 3, and 4. Now on the line below I put the number 234, and repeat it as many times as are necessary to get to the end of the phrase, and so that every cipher comes underneath a letter. This is what we get:

_Judgejarriquezhasaningeniousmind._

4 2 3 4 And now, Mr. Manoel, replacing each letter by the letter in advance of it in alphabetical order according to the value of the ciphers, we get:

_j_ + 2 = _l_ _u_ + 3 = _x_ _d_ + 4 = _h_ _g_ + 2 = _i_ _e_ + 3 = _h_ _j_ + 4 = _n_ _a_ + 2 = _c_ _r_ + 3 = _u_ _r_ + 4 = _v_ _i_ + 2 = _k_ _q_ + 3 = _t_ _u_ + 4 = _y_ _e_ + 2 = _g_ _a_ + 3 = _c_ _h_ + 4 = _t_ _a_ + 2 = _c_ _s_ + 3 = _v_ _a_ + 4 = _e_ _n_ + 2 = _p_ _i_ + 3 = _l_ _n_ + 4 = _r_ _g_ + 2 = _i_ _e_ + 3 = _h_ _n_ + 4 = _r_ _i_ + 2 = _k_ _o_ + 3 = _r_ _u_ + 4 = _y_ _s_ + 2 = _u_ and so on.

"If, on account of the value of the ciphers which compose the number I come to the end of the alphabet without having enough complementary letters to deduct, I begin again at the beginning. That is what happens at the end of my name when the _z_ is replaced by the 3. As after _z_ the alphabet has no more letters, I commence to count from _a_, and so get the _c_. That done, when I get to the end of this cryptographic system, made up of the 234—which was arbitrarily selected, do not forget!—the phrase which you recognize above is replaced by

_łxhihncuvktygclvhrkrympg._

"And now, young man, just look at it, and do you not think it is very much like what is in the document? Well, what is the consequence? Why, that the signification of the letters depends on a cipher which chance puts beneath them, and the cryptographic letter which answers to a true one is not always the same. So in this phrase the first _j_ is represented by an _l_, the second by an _n_; the first _e_ by an _h_; the second _a_ by _g_; the third by _r_; the first _d_ is represented by an _h_; the last by _a_; the first _u_ by an _x_; the last by _y_; the first and second _a's_ by _c_ hak, the last by _e_; and in my own name one _r_ is represented by _u_ the other by _v_; and so on. Now do you see that if you do not know the cipher 234 you will never be able to read the lines, and consequently if we do not know the number of the document it remains undecipherable."

On hearing the magistrate reason with such careful logic, Manoel was at first overwhelmed, but, raising his head, he exclaimed:

"No, sir, I will not renounce the hope of finding the number!"
"We might have done so," answered Judge Jarriquez, "if the lines of the document had been divided into words."

"And why?"

"For this reason, young man. I think we can assume that in the last paragraph all that is written in these earlier paragraphs is summed up. Now I am convinced that in it will be found the name of Joam Dacosta. Well, if the lines had been divided into words, in trying the words one after the other--I mean the words composed of seven letters, as the name of Dacosta is--it would not have been impossible to evolve the number which is the key of the document."

"Will you explain to me how you ought to proceed to do that, sir?" asked Manoel, who probably caught a glimpse of one more hope.

"Nothing can be more simple," answered the judge. "Let us take, for example, one of the words in the sentence we have just written--my name, if you like. It is represented in the cryptogram by this queer succession of letters, _ncuvtkygc_. Well, arranging these letters in a column, one under the other, and then placing against them the letters of my name and deducting one from the other the numbers of their places in alphabetical order, I see the following result:

Between _n_ and _j_ we have 4 letters -- _c_ -- _a_ -- 2 -- _u_ -- _r_ -- 3 -- _v_ -- _r_ -- 4 -- _k_ -- _l_ -- 2 -- _t_ -- _q_ -- 3 -- _y_ -- _u_ -- 4 -- _g_ -- _e_ -- 2 -- _c_ -- _z_ -- 3 -- 2 -- _r_ -- _q_ -- 3 -- _y_ -- _u_ -- 4 -- _g_ -- _e_ -- 2 -- _c_ -- _z_ -- 3 --

"Now what is the column of ciphers made up of that we have got by this simple operation? Look here! 423 423 423, that is to say, of repetitions of the numbers 423, or 234, or 342."

"Yes, that is it!" answered Manoel.

"You understand, then, by this means, that in calculating the true letter from the false, instead of the false from the true, I have been able to discover the number with ease; and the number I was in search of is really the 234 which I took as the key of my cryptogram."

"Well, sir!" exclaimed Manoel, "if that is so, the name of Dacosta is in the last paragraph; and taking successively each letter of those lines for the first of the seven letters which compose his name, we ought to get----"

"That would be impossible," interrupted the judge, "except on one condition."

"What is that?"

"That the first cipher of the number should happen to be the first letter of the word Dacosta, and I think you will agree with me that that is not probable."

"Quite so!" sighed Manoel, who, with this improbability, saw the last chance vanish.

"And so we must trust to chance alone," continued Jarriquez, who shook his head, "and chance does not often do much in things of this sort."

"But still," said Manoel, "chance might give us this number."

"This number," exclaimed the magistrate--"this number? But how many ciphers is it composed of? Of two, or three, or four, or nine, or ten? Is it made of different ciphers only or of ciphers in different order many times repeated? Do you not know, young man, that with the ordinary ten ciphers, using all at a time, but without any repetition, you can make three million two hundred and sixty-eight thousand and eight hundred different numbers, and that if you use the same cipher more than once in the number, these millions of combinations will be enormously increased! And do you not know that if we employ every one of the five hundred and twenty-five thousand and six hundred minutes of which the year is composed to try at each of these numbers, it would take you six years, and that you would want three centuries if each operation took you an hour? No! You ask the impossible!"

"Impossible, sir?" answered Manoel. "An innocent man has been branded as guilty, and Joam Dacosta is to lose his life and his honor while you hold in your hands the material proof of his innocence! That is what is impossible!"

"Ah! young man!" exclaimed Jarriquez, "who told you, after all, that Torres did not tell a lie? Who told you that he really did have in his hands a document written by the author of the crime? that this paper was the document, and that this document refers to Joam Dacosta?"

"Who told me so?" repeated Manoel, and his face was hidden in his hands.

In fact, nothing could prove for certain that the document had anything to do with the affair in the diamond province. There was, in fact, nothing to show that it was not utterly devoid of meaning, and that it had been imagined by Torres himself, who was as capable of selling a false thing as a true one!

"It does not matter, Manoel," continued the judge, rising; "it does not matter! Whatever it may be to which the document refers, I have not yet given up discovering the cipher. After all, it is worth more than a logogryph or a rebus!"

At these words Manoel rose, shook hands with the magistrate, and returned to the jangada, feeling more hopeless when he went back than when he set out.

CHAPTER XIV. CHANCE!
A COMPLETE change took place in public opinion on the subject of Joam Dacosta. To anger succeeded pity. The population no longer thronged to the prison of Manaos to roar out cries of death to the prisoner. On the contrary, the most forward of them in accusing him of being the principal author of the crime of Tijuco now averred that he was not guilty, and demanded his immediate restoration to liberty. Thus it always is with the mob--from one extreme they run to the other. But the change was intelligible.

The events which had happened during the last few days--the struggle between Benito and Torres; the search for the corpse, which had reappeared under such extraordinary circumstances; the finding of the "indecipherable" document, if we can so call it; the information it concealed, the assurance that it contained, or rather the wish that it contained, the material proof of the guiltlessness of Joam Dacosta; and the hope that it was written by the real culprit--all these things had contributed to work the change in public opinion. What the people had desired and impatiently demanded forty-eight hours before, they now feared, and that was the arrival of the instructions due from Rio de Janeiro.

These, however, were not likely to be delayed.

Joam Dacosta had been arrested on the 24th of August, and examined next day. The judge's report was sent off on the 26th. It was now the 28th. In three or four days more the minister would have come to a decision regarding the convict, and it was only too certain that justice would take its course.

There was no doubt that such would be the case. On the other hand, that the assurance of Dacosta's innocence would appear from the document, was not doubted by anybody, neither by his family nor by the fickle population of Manaos, who excitedly followed the phases of this dramatic affair.

But, on the other hand, in the eyes of disinterested or indifferent persons who were not affected by the event, what value could be assigned to this document? and how could they even declare that it referred to the crime in the diamond arrayal? It existed, that was undeniable; it had been found on the corpse of Torres, nothing could be more certain. It could even be seen, by comparing it with the letter in which Torres gave the information about Joam Dacosta, that the document was not in the handwriting of the adventurer. But, as had been suggested by Judge Jarriquez, why should not the scoundrel have invented it for the sake of his bargain? And this was less unlikely to be the case, considering that Torres had declined to part with it until after his marriage with Dacosta's daughter--that is to say, when it would have been impossible to undo an accomplished fact.

All these views were held by some people in some form, and we can quite understand what interest the affair created. In any case, the situation of Joam Dacosta was most hazardous. If the document were not deciphered, it would be just the same as if it did not exist; and if the secret of the cryptogram were not miraculously divulged or revealed before the end of the three days, the supreme sentence would inevitably be suffered by the doomed man of Tijuco. And this miracle a man attempted to perform! The man was Jarriquez, and he now really set to work more in the interest of Joam Dacosta than for the satisfaction of his analytical faculties. A complete change had also taken place in his opinion. Was not this man, who had voluntarily abandoned his retreat at Iquitos, who had come at the risk of his life to demand his rehabilitation at the hands of Brazilian justice, a moral enigma worth all the others put together? And so the judge had resolved never to leave the document until he had discovered the cipher. He set to work at it in a fury. He ate no more; he slept no more! All his time was passed in inventing combinations of numbers, in forging a key to force this lock!

This idea had taken possession of Judge Jarriquez's brain at the end of the first day. Suppressed frenzy consumed him, and kept him in a perpetual heat. His whole house trembled; his servants, black or white, dared not come near him. Fortunately he was a bachelor; had there been a Madame Jarriquez she would have had a very uncomfortable time of it. Never had a problem so taken possession of this oddity, and he had thoroughly made up his mind to get at the solution, even if his head exploded like an overheated boiler under the tension of its vapor.

It was perfectly clear to the mind of the worthy magistrate that the key to the document was a number, composed of two or more ciphers, but what this number was all investigation seemed powerless to discover.

This was the enterprise on which Jarriquez, in quite a fury, was engaged, and during this 28th of August he brought all his faculties to bear on it, and worked away almost superhumanly.

To arrive at the number by chance, he said, was to lose himself in millions of combinations, which would absorb the life of a first-rate calculator. But if he could in no respect reckon on chance, was it impossible to proceed by reasoning? Decidedly not! And so it was "to reason till he became unreasoning" that Judge Jarriquez gave himself up after vainly seeking repose in a few hours of sleep. He who ventured in upon him at this moment, after braving the formal defenses which protected his solitude, would have found him, as on the day before, in his study, before his desk, with the document under his eyes, the thousands of letters of which seemed all jumbled together and flying about his head.

"Ah!" he exclaimed, "why did not the scoundrel who wrote this separate the words in this paragraph? We might--we will try--but no! However, if there is anything here about the murder and the robbery, two or three words there
must be in it--'arrayal,' 'diamond,' 'Tijuco,' 'Dacosta,' and others; and in putting down their cryptological equivalents
the number could be arrived at. But there is nothing--not a single break!--not one word by itself! One word of two
hundred and seventy-six letters! I hope the wretch may be blessed two hundred and seventy-six times for
complicating his system in this way! He ought to be hanged two hundred and seventy-six times!"

And a violent thump with his fist on the document emphasized this charitable wish.

"But," continued the magistrate, "if I cannot find one of the words in the body of the document, I might at least
try my hand at the beginning and end of each paragraph. There may be a chance there that I ought not to miss."

And impressed with this idea Judge Jarriquez successively tried if the letters which commenced or finished the
different paragraphs could be made to correspond with those which formed the most important word, which was
sure to be found somewhre, that of _Dacosta_.

He could do nothing of the kind.

In fact, to take only the last paragraph with which he began, the formula was:
\[ P = D \quad h = a \quad y = c \quad f = o \quad s = s \quad l = t \quad y = a \]

Now, at the very first letter Jarriquez was stopped in his calculations, for the difference in alphabetical position
between the _d_ and the _p_ gave him not one cipher, but two, namely, 12, and in this kind of cryptograph only one
letter can take the place of another.

It was the same for the seven last letters of the paragraph, _p s u v j h d_, of which the series also commences
with a _p_ and which in no case could stand for the _d_ in _Dacosta_ because these letters were in like manner
twelve spaces apart.

So it was not his name that figured here.

The same observation applies to the words _arrayal_ and _Tijuco_, which were successively tried, but whose
construction did not correspond with the cryptographic series.

After he had got so far, Judge Jarriquez, with his head nearly splitting, arose and paced his office, went for fresh
air to the window, and gave utterance to a growl, at the noise of which a flock of hummingbirds, murmuring among
the foliage of a mimosa tree, betook themselves to flight. Then he returned to the document.

He picked it up and turned it over and over.

"The humbug! the rascal!" he hissed; "it will end by driving me mad! But steady! Be calm! Don't let our spirits
go down! This is not the time!"

And then, having refreshed himself by giving his head a thorough sluicing with cold water:

"Let us try another way," he said, "and as I cannot hit upon the number from the arrangement of the letters, let us
see what number the author of the document would have chosen in confessing that he was the author of the crime at
Tijuco."

This was another method for the magistrate to enter upon, and maybe he was right, for there was a certain
amount of logic about it.

"And first let us try a date! Why should not the culprit have taken the date of the year in which Dacosta, the
innocent man he allowed to be sentenced in his own place, was born? Was he likely to forget a number which was
so important to him? Then Joam Dacosta was born in 1804. Let us see what 1804 will give us as a cryptographical
number."

And Judge Jarriquez wrote the first letters of the paragraph, and putting over them the number 1804 repeated
thrice, he obtained

\[ 1804 \quad 1804 \quad 1804 \quad _{phyj} \quad slyd \quad dqfd_ \]

Then in counting up the spaces in alphabetical order, he obtained
\[ \_s.yf \quad rdy. \quad cif._ \]

And this was meaningless! And he wanted three letters which he had to replace by points, because the ciphers, 8,
4, and 4, which command the three letters, _h, d_, and _d_, do not give corresponding letters in ascending the series.

"That is not it again!" exclaimed Jarriquez. "Let us try another number."

And he asked himself, if instead of this first date the author of the document had not rather selected the date of
the year in which the crime was committed.

This was in 1826.

And so proceeding as above, he obtained.
\[ 1826 \quad 1826 \quad 1826 \quad _{phyj} \quad slyd \quad dqfd_ \]

and that gave
\[ \_o.vd \quad rdv. \quad cid._ \]

the same meaningless series, the same absence of sense, as many letters wanting as in the former instance, and
for the same reason.

"Bother the number!" exclaimed the magistrate. "We must give it up again. Let us have another one! Perhaps the
rascal chose the number of contos representing the amount of the booty!"

Now the value of the stolen diamonds was estimated at eight hundred and thirty-four contos, or about 2,500,000 francs, and so the formula became

834 834 834 _phy js1 ydd qfd_
and this gave a result as little gratifying as the others----

"Confound the document and him who imagined it!" shouted Jarriquez, throwing down the paper, which was wafted to the other side of the room. "It would try the patience of a saint!"

But the short burst of anger passed away, and the magistrate, who had no idea of being beaten, picked up the paper. What he had done with the first letters of the different paragraphs he did with the last—and to no purpose. Then he tried everything his excited imagination could suggest.

He tried in succession the numbers which represented Dacosta’s age, which would have been known to the author of the crime, the date of his arrest, the date of the sentence at the Villa Rica assizes, the date fixed for the execution, etc., etc., even the number of victims at the affray at Tijuco!

Nothing! All the time nothing!

Judge Jarriquez had worked himself into such a state of exasperation that there really was some fear that his mental faculties would lose their balance. He jumped about, and twisted about, and wrestled about as if he really had got hold of his enemy’s body. Then suddenly he cried, "Now for chance! Heaven help me now, logic is powerless!"

His hand seized a bell-pull hanging near his table. The bell rang furiously, and the magistrate strode up to the door, which he opened. "Bobo!" he shouted.

A moment or two elapsed.

Bobo was a freed negro, who was the privileged servant of Jarriquez. He did not appear; it was evident that Bobo was afraid to come into his master’s room.

Another ring at the bell; another call to Bobo, who, for his own safety, pretended to be deaf on this occasion. And now a third ring at the bell, which unhitched the crank and broke the cord.

This time Bobo came up. "What is it, sir?" asked Bobo, prudently waiting on the threshold.

"Advance, without uttering a single word!" replied the judge, whose flaming eyes made the negro quake again.

Bobo advanced.

"Bobo," said Jarriquez, "attend to what I say, and answer immediately; do not even take time to think, or I----" Bobo, with fixed eyes and open mouth, brought his feet together like a soldier and stood at attention.

"Are you ready?" asked his master.

"I am."

"Now, then, tell me, without a moment's thought—you understand—the first number than comes into your head."

"76223," answered Bobo, all in a breath. Bobo thought he would please his master by giving him a pretty large one!

Judge Jarriquez had run to the table, and, pencil in hand, had made out a formula with the number given by Bobo, and which Bobo had in this way only given him at a venture.

It is obvious that it was most unlikely that a number such as 76223 was the key of the document, and it produced no other result than to bring to the lips of Jarriquez such a vigorous ejaculation that Bobo disappeared like a shot!

CHAPTER XV. THE LAST EFFORTS

THE MAGISTRATE, however, was not the only one who passed his time unprofitably. Benito, Manoel, and Minha tried all they could together to extract the secret from the document on which depended their father’s life and honor. On his part, Fragoso, aided by Lina, could not remain quiet, but all their ingenuity had failed, and the number still escaped them.

"Why don't you find it, Fragoso?" asked the young mulatto.

"I will find it," answered Fragoso.

And he did not find it!

Here we should say that Fragoso had an idea of a project of which he had not even spoken to Lina, but which had taken full possession of his mind. This was to go in search of the gang to which the ex-captain of the woods had belonged, and to find out who was the probable author of this cipher document, which was supposed to be the confession of the culprit of Tijuco. The part of the Amazon where these people were employed, the very place where Fragoso had met Torres a few years before, was not very far from Manaos. He would only have to descend the river for about fifty miles, to the mouth of the Madeira, a tributary coming in on the right, and there he was almost sure to meet the head of these _"capitaes do mato,"_ to which Torres belonged. In two days, or three days at the outside,
Manoel, who neglect nothing that might lead to the penetration of the mystery—not even chance, that "nickname ofPara" had reproduced it in facsimile. Autograph copies were spread about in great numbers at the suggestion of

Every one had been given an opportunity of deciphering its incomprehensible contents, for the "Diario d'o Grand

principal object of conversation.

the midst of this enthralment of public opinion, which evoked so much of the mysterious, the document was the

judge!"

It is none the less true, however, that on the 29th of August, before sunrise, Fragoso, without saying anything to

anybody, secretly left the jangada, arrived at Manaos, and embarked in one of the egariteas which daily descend the

Amazon.

And great was the astonishment when he was not seen on board, and did not appear during the day. No one, not
even Lina, could explain the absence of so devoted a servant at such a crisis.

Some of them even asked, and not without reason, if the poor fellow, rendered desperate at having, when he met
him on the frontier, personally contributed to bringing Torres on board the raft, had not made away with himself.

But if Fragoso could so reproach himself, how about Benito? In the first place at Iquitos he had invited Torres to
visit the fazenda; in the second place he had brought him on board the jangada, to become a passenger on it; and in
the third place, in killing him, he had annihilated the only witness whose evidence could save the condemned man.

And so Benito considered himself responsible for everything—the arrest of his father, and the terrible events of
which it had been the consequence.

In fact, had Torres been alive, Benito could not tell but that, in some way or another, from pity or for reward, he
would have finished by handing over the document. Would not Torres, whom nothing could compromise, have been
persuaded to speak, had money been brought to bear upon him? Would not the long-sought-for proof have been
furnished to the judge? Yes, undoubtedly! And the only man who could have furnished this evidence had been killed
through Benito!

Such was what the wretched man continually repeated to his mother, to Manoel, and to himself. Such were the
cruel responsibilities which his conscience laid to his charge.

Between her husband, with whom she passed all the time that was allowed her, and her son, a prey to despair
which made her tremble for his reason, the brave Yaquita lost none of her moral energy. In her they found the
valiant daughter of Magalhaës, the worthy wife of the fazender of Iquitos.

The attitude of Joam Dacosta was well adapted to sustain her in this ordeal. That gallant man, that rigid Puritan,
that austere worker, whose whole life had been a battle, had not yet shown a moment of weakness.

The most terrible blow which had struck him without prostrating him had been the death of Judge Ribeiro, in
whose mind his innocence did not admit of a doubt. Was it not with the help of his old defender that he had hoped to
strive for his rehabilitation? The intervention of Torres he had regarded throughout as being quite secondary for him.
And of this document he had no knowledge when he left Iquitos to hand himself over to the justice of his country.
He only took with him moral proofs. When a material proof was unexpectedly produced in the course of the affair,
before or after his arrest, he was certainly not the man to despise it. But if, on account of regrettable circumstances,
the proof disappeared, he would find himself once more in the same position as when he passed the Brazilian
frontier—the position of a man who came to say, "Here is my past life; here is my present; here is an entirely honest
existence of work and devotion which I bring you. You passed on me at first an erroneous judgment. After twenty-
three years of exile I have come to give myself up! Here I am; judge me again!"

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existence of work and devotion which I bring you. You passed on me at first an erroneous judgment. After twenty-
three years of exile I have come to give myself up! Here I am; judge me again!"

The death of Torres, the impossibility of reading the document found on him, had thus not produced on Joam
Dacosta the impression which it had on his children, his friends, his household, and all who were interested in him.

"I have faith in my innocence," he repeated to Yaquita, "as I have faith in God. If my life is still useful to my
people, and a miracle is necessary to save me, that miracle will be performed; if not, I shall die! God alone is my
judge!"

The excitement increased in Manaos as the time ran on; the affair was discussed with unexampled acerbity. In
the midst of this enthralment of public opinion, which evoked so much of the mysterious, the document was the
principal object of conversation.

At the end of this fourth day not a single person doubted but that it contained the vindication of the doomed man.
Every one had been given an opportunity of deciphering its incomprehensible contents, for the "Diario d'o Grand
Para" had reproduced it in facsimile. Autograph copies were spread about in great numbers at the suggestion of
Manoel, who neglect nothing that might lead to the penetration of the mystery—not even chance, that "nickname of
Providence," as some one has called it.

In addition, a reward of one hundred contos (or three hundred thousand francs) was promised to any one who could discover the cipher so fruitlessly sought after--and read the document. This was quite a fortune, and so people of all classes forgot to eat, drink, or sleep to attack this unintelligible cryptogram.

Up to the present, however, all had been useless, and probably the most ingenious analysts in the world would have spent their time in vain. It had been advertised that any solution should be sent, without delay, to Judge Jarriquez, to his house in God-the-Son Street; but the evening of the 29th of August came and none had arrived, nor was any likely to arrive.

Of all those who took up the study of the puzzle, Judge Jarriquez was one of the most to be pitied. By a natural association of ideas, he also joined in the general opinion that the document referred to the affair at Tijuco, and that it had been written by the hand of the guilty man, and exonerated Joam Dacosta. And so he put even more ardor into his search for the key. It was not only the art for art's sake which guided him, it was a sentiment of justice, of pity toward a man suffering under an unjust condemnation. If it is the fact that a certain quantity of phosphorus is expended in the work of the brain, it would be difficult to say how many milligrammes the judge had parted with to excite the network of his "sensorium," and after all, to find out nothing, absolutely nothing.

But Jarriquez had no idea of abandoning the inquiry. If he could only now trust to chance, he would work on for that chance. He tried to evoke it by all means possible and impossible. He had given himself over to fury and anger, and, what was worse, to impotent anger!

During the latter part of this day he had been trying different numbers--numbers selected arbitrarily--and how many of them can scarcely be imagined. Had he had the time, he would not have shrunk from plunging into the millions of combinations of which the ten symbols of numeration are capable. He would have given his whole life to it at the risk of going mad before the year was out. Mad! was be not that already? He had had the idea that the document might be read through the paper, and so he turned it round and exposed it to the light, and tried it in that way.

Nothing! The numbers already thought of, and which he tried in this new way, gave no result. Perhaps the document read backward, and the last letter was really the first, for the author would have done this had he wished to make the reading more difficult.

Nothing! The new combination only furnished a series of letters just as enigmatic.

At eight o'clock in the evening Jarriquez, with his face in his hands, knocked up, worn out mentally and physically, had neither strength to move, to speak, to think, or to associate one idea with another.

Suddenly a noise was heard outside. Almost immediately, notwithstanding his formal orders, the door of his study was thrown open. Benito and Manoel were before him, Benito looking dreadfully pale, and Manoel supporting him, for the unfortunate young man had hardly strength to support himself.

The magistrate quickly arose.

"What is it, gentlemen? What do you want?" he asked.

"The cipher! the cipher!" exclaimed Benito, mad with grief--"the cipher of the document."

"Do you know it, then?" shouted the judge.

"No, sir," said Manoel. "But you?"

"Nothing! nothing!"

"Nothing?" gasped Benito, and in a paroxysm of despair he took a knife from his belt and would have plunged it into his breast had not the judge and Manoel jumped forward and managed to disarm him.

"Benito," said Jarriquez, in a voice which he tried to keep calm, "if you father cannot escape the expiation of a crime which is not his, you could do something better than kill yourself."

"What?" said Benito.

"Try and save his life!"

"How?"

"That is for you to discover," answered the magistrate, "and not for me to say."

CHAPTER XVI. PREPARATIONS

ON THE FOLLOWING day, the 30th of August, Benito and Manoel talked matters over together. They had understood the thought to which the judge had not dared to give utterance in their presence, and were engaged in devising some means by which the condemned man could escape the penalty of the law.

Nothing else was left for them to do. It was only too certain that for the authorities at Rio Janeiro the undeciphered document would have no value whatever, that it would be a dead letter, that the first verdict which declared Joam Dacosta the perpetrator of the crime at Tijuco would not be set aside, and that, as in such cases no
commutation of the sentence was possible, the order for his execution would inevitably be received.

Once more, then, Joam Dacosta would have to escape by flight from an unjust imprisonment.

It was at the outset agreed between the two young men that the secret should be carefully kept, and that neither Yaquita nor Minha should be informed of preparations, which would probably only give rise to hopes destined never to be realized. Who could tell if, owing to some unforeseen circumstance, the attempt at escape would not prove a miserable failure?

The presence of Fragoso on such an occasion would have been most valuable. Discreet and devoted, his services would have been most welcome to the two young fellows; but Fragoso had not reappeared. Lina, when asked, could only say that she knew not what had become of him, nor why he had left the raft without telling her anything about it.

And assuredly, had Fragoso foreseen that things would have turned out as they were doing, he would never have left the Dacosta family on an expedition which appeared to promise no serious result. Far better for him to have assisted in the escape of the doomed man than to have hurried off in search of the former comrades of Torres!

But Fragoso was away, and his assistance had to be dispensed with.

At daybreak Benito and Manoel left the raft and proceeded to Manaos. They soon reached the town, and passed through its narrow streets, which at that early hour were quite deserted. In a few minutes they arrived in front of the prison. The waste ground, amid which the old convent which served for a house of detention was built, was traversed by them in all directions, for they had come to study it with the utmost care.

Fifty-five feet from the ground, in an angle of the building, they recognized the window of the cell in which Joam Dacosta was confined. The window was secured with iron bars in a miserable state of repair, which it would be easy to tear down or cut through if they could only get near enough. The badly jointed stones in the wall, which were crumbled away everywhere and there, offered many a ledge for the feet to rest on, if only a rope could be fixed to climb up by. One of the bars had slipped out of its socket, and formed a hook over which it might be possible to throw a rope. That done, one or two of the bars could be removed, so as to permit a man to get through. Benito and Manoel would then have to make their way into the prisoner's room, and without much difficulty the escape could be managed by means of the rope fastened to the projecting iron. During the night, if the sky were very cloudy, none of these operations would be noticed before the day dawned. Joam Dacosta could get safely away.

Manoel and Benito spent an hour about the spot, taking care not to attract attention, but examining the locality with great exactness, particularly as regarded the position of the window, the arrangement of the iron bars, and the place from which it would be best to throw the line.

"That is agreed," said Manoel at length. "And now, ought Joam Dacosta to be told about this?"

"No, Manoel. Neither to him, any more than to my mother, ought we to impart the secret of an attempt in which there is such a risk of failure."

"We shall succeed, Benito!" continued Manoel. "However, we must prepare for everything; and in case the chief of the prison should discover us at the moment of escape---"

"We shall have money enough to purchase his silence," answered Benito.

"Good!" replied Manoel. "But once your father is out of prison he cannot remain hidden in the town or on the jangada. Where is he to find refuge?"

This was the second question to solve: and a very difficult one it was.

A hundred paces away from the prison, however, the waste land was crossed by one of those canals which flow through the town into the Rio Negro. This canal afforded an easy way of gaining the river if a pirogue were in waiting for the fugitive. From the foot of the wall to the canal side was hardly a hundred yards.

Benito and Manoel decided that about eight o'clock in the evening one of the pirogues, with two strong rowers, under the command of the pilot Araujo, should start from the jangada. They could ascend the Rio Negro, enter the canal, and, crossing the waste land, remain concealed throughout the night under the tall vegetation on the banks.

But once on board, where was Joam Dacosta to seek refuge? To return to Iquitos was to follow a road full of difficulties and peril, and a long one in any case, should the fugitive either travel across the country or by the river. Neither by horse nor pirogue could he be got out of danger quickly enough, and the fazenda was no longer a safe retreat. He would not return to it as the fazender, Joam Garral, but as the convict, Joam Dacosta, continually in fear of his extradition. He could never dream of resuming his former life.

To get away by the Rio Negro into the north of the province, or even beyond the Brazilian territory, would require more time than he could spare, and his first care must be to escape from immediate pursuit.

To start again down the Amazon? But stations, village, and towns abounded on both sides of the river. The description of the fugitive would be sent to all the police, and he would run the risk of being arrested long before he reached the Atlantic. And supposing he reached the coast, where and how was he to hide and wait for a passage to put the sea between himself and his pursuers?
On consideration of these various plans, Benito and Manoel agreed that neither of them was practicable. One, however, did offer some chance of safety, and that was to embark in the pirogue, follow the canal into the Rio Negro, descend this tributary under the guidance of the pilot, reach the confluence of the rivers, and run down the Amazon along its right bank for some sixty miles during the nights, resting during the daylight, and so gaining the _embouchure_ of the Madeira.

This tributary, which, fed by a hundred affluents, descends from the watershed of the Cordilleras, is a regular waterway opening into the very heart of Bolivia. A pirogue could pass up it and leave no trace of its passage, and a refuge could be found in some town or village beyond the Brazilian frontier. There Joam Dacosta would be comparatively safe, and there for several months he could wait for an opportunity of reaching the Pacific coast and taking passage in some vessel leaving one of its ports; and if the ship were bound for one of the States of North America he would be free. Once there, he could sell the fazenda, leave his country forever, and seek beyond the sea, in the Old World, a final retreat in which to end an existence so cruelly and unjustly disturbed. Anywhere he might go, his family--not excepting Manoel, who was bound to him by so many ties--would assuredly follow without the slightest hesitation.

"Let us go," said Benito; "we must have all ready before night, and we have no time to lose."

The young men returned on board by way of the canal bank, which led along the Rio Negro. They satisfied themselves that the passage of the pirogue would be quite possible, and that no obstacles such as locks or boats under repair were there to stop it. They then descended the left bank of the tributary, avoiding the slowly-filling streets of the town, and reached the jangada.

Benito's first care was to see his mother. He felt sufficiently master of himself to dissemble the anxiety which consumed him. He wished to assure her that all hope was not lost, that the mystery of the document would be cleared up, that in any case public opinion was in favor of Joam, and that, in face of the agitation which was being made in his favor, justice would grant all the necessary time for the production of the material proof his innocence.

"Yes, mother," he added, "before to-morrow we shall be free from anxiety."

"May heaven grant it so!" replied Yaquita, and she looked at him so keenly that Benito could hardly meet her glance.

On his part, and as if by pre-arrangement, Manoel had tried to reassure Minha by telling her that Judge Jarriquez was convinced of the innocence of Joam, and would try to save him by every means in his power.

"I only wish he would, Manoel," answered she, endeavoring in vain to restrain her tears.

And Manoel left her, for the tears were also welling up in his eyes and witnessing against the words of hope to which he had just given utterance.

And now the time had arrived for them to make their daily visit to the prisoner, and Yaquita and her daughter set off to Manaos.

For an hour the young men were in consultation with Araujo. They acquainted him with their plan in all its details, and they discussed not only the projected escape, but the measures which were necessary for the safety of the fugitive.

Araujo approved of everything; he undertook during the approaching night to take the pirogue up the canal without attracting any notice, and he knew its course thoroughly as far as the spot where he was to await the arrival of Joam Dacosta. To get back to the mouth of the Rio Negro was easy enough, and the pirogue would be able to pass unnoticed among the numerous craft continually descending the river.

Araujo had no objection to offer to the idea of following the Amazon down to its confluence with the Madeira. The course of the Madeira was familiar to him for quite two hundred miles up, and in the midst of these thinly-peopled provinces, even if pursuit took place in their direction, all attempts at capture could be easily frustrated; they could reach the interior of Bolivia, and if Joam decided to leave his country he could procure a passage with less danger on the coast of the Pacific than on that of the Atlantic.

Araujo's approval was most welcome to the young fellows; they had great faith in the practical good sense of the pilot, and not without reason. His zeal was undoubted, and he would assuredly have risked both life and liberty to save the fazender of Iquitos.

With the utmost secrecy Araujo at once set about his preparations. A considerable sum in gold was handed over to him by Benito to meet all eventualities during the voyage on the Madeira. In getting the pirogue ready, he announced his intention of going in search of Fragoso, whose fate excited a good deal of anxiety among his companions. He stowed away in the boat provisions for many days, and did not forget the ropes and tools which would be required by the young men when they reached the canal at the appointed time and place.

These preparations evoked no curiosity on the part of the crew of the jangada, and even the two stalwart negroes were not let into the secret. They, however, could be absolutely depended on. Whenever they learned what the work of safety was in which they were engaged--when Joam Dacosta, once more free, was confided to their charge--
Araujo knew well that they would dare anything, even to the risk of their own lives, to save the life of their master. By the afternoon all was ready, and they had only the night to wait for. But before making a start Manoel wished to call on Judge Jarriquez for the last time. The magistrate might perhaps have found out something new about the document. Benito preferred to remain on the raft and wait for the return of his mother and sister.

Manoel then presented himself at the abode of Judge Jarriquez, and was immediately admitted. The magistrate, in the study which he never quitted, was still the victim of the same excitement. The document crumpled by his impatient fingers, was still there before his eyes on the table.

"Sir," said Manoel, whose voice trembled as he asked the question, "have you received anything from Rio de Janeiro."

"No," answered the judge; "the order has not yet come to hand, but it may at any moment."
"And the document?"
"Nothing yet!" exclaimed he. "Everything my imagination can suggest I have tried, and no result."
"None?"
"Nevertheless, I distinctly see one word in the document--only one!"
"What is that--what is the word?"
"Fly!"

Manoel said nothing, but he pressed the hand which Jarriquez held out to him, and returned to the jangada to wait for the moment of action.

CHAPTER XVII. THE LAST NIGHT

THE VISIT of Yaquita and her daughter had been like all such visits during the few hours which each day the husband and wife spent together. In the presence of the two beings whom Joam so dearly loved his heart nearly failed him. But the husband--the father--retained his self-command. It was he who comforted the two poor women and inspired them with a little of the hope of which so little now remained to him. They had come with the intention of cheering the prisoner. Alas! far more than he they themselves were in want of cheering! But when they found him still bearing himself unflinchingly in the midst of his terrible trial, they recovered a little of their hope.

Once more had Joam spoken encouraging words to them. His indomitable energy was due not only to the feeling of his innocence, but to his faith in that God, a portion of whose justice yet dwells in the hearts of men. No! Joam Dacosta would never lose his life for the crime of Tijuco!

Hardly ever did he mention the document. Whether it were apocryphal or no, whether it were in the handwriting of Torres or in that of the real perpetrator of the crime, whether it contained or did not contain the longed-for vindication, it was on no such doubtful hypothesis that Joam Dacosta presumed to trust. No; he reckoned on a better argument in his favor, and it was to his long life of toil and honor that he relegated the task of pleading for him.

This evening, then, his wife and daughter, strengthened by the manly words, which thrilled them to the core of their hearts, had left him more confident than they had ever been since his arrest. For the last time the prisoner had embraced them, and with redoubled tenderness. It seemed as though the _dénouement_ was nigh.

Joam Dacosta, after they had left, remained for some time perfectly motionless. His arms rested on a small table and supported his head. Of what was he thinking? Had he at last been convinced that human justice, after failing the first time, would at length pronounce his acquittal?

Yes, he still hoped. With the report of Judge Jarriquez establishing his identity, he knew that his memoir, which he had penned with so much sincerity, would have been sent to Rio de Janeiro, and was now in the hands of the chief justice. This memoir, as we know, was the history of his life from his entry into the offices of the diamond arrayal until the very moment when the jangada stopped before Manaos. Joam Dacosta was pondering over his whole career. He again lived his past life from the moment when, as an orphan, he had set foot in Tijuco. There his zeal had raised him high in the offices of the governor-general, into which he had been admitted when still very young. The future smiled on him; he would have filled some important position. Then this sudden catastrophe; the robbery of the diamond convoy, the massacre of the escort, the suspicion directed against him as the only official who could have divulged the secret of the expedition, his arrest, his appearance before the jury, his conviction in spite of all the efforts of his advocate, the last hours spent in the condemned cell at Villa Rica, his escape under conditions which betokened almost superhuman courage, his flight through the northern provinces, his arrival on the Peruvian frontier, and the reception which the starving fugitive had met with from the hospitable fazender Magalhaës.

The prisoner once more passed in review these events, which had so cruelly marred his life. And then, lost in his thoughts and recollections, he sat, regardless of a peculiar noise on the outer wall of the convent, of the jerks of a rope hitched on to a bar of his window, and of grating steel as it cut through iron, which ought at once to have
attracted the attention of a less absorbed man.

Joam Dacosta continued to live the years of his youth after his arrival in Peru. He again saw the fazender, the clerk, the partner of the old Portuguese, toiling hard for the prosperity of the establishment at Iquitos. Ah! why at the outset had he not told all to his benefactor? He would never have doubted him. It was the only error with which he could reproach himself. Why had he not confessed to him whence he had come, and who he was—above all, at the moment when Magalhaës had place in his hand the hand of the daughter who would never have believed that he was the author of so frightful a crime.

And now the noise outside became loud enough to attract the prisoner's attention. For an instant Joam raised his head; his eyes sought the window, but with a vacant look, as though he were unconscious, and the next instant his head again sank into his hands. Again he was in thought back at Iquitos.

There the old fazender was dying; before his end he longed for the future of his daughter to be assured, for his partner to be the sole master of the settlement which had grown so prosperous under his management. Should Dacosta have spoken then? Perhaps; but he dared not do it. He again lived the happy days he had spent with Yaquita, and again thought of the birth of his children, again felt the happiness which had its only trouble in the remembrances of Tijuco and the remorse that he had not confessed his terrible secret.

The chain of events was reproduced in Joam's mind with a clearness and completeness quite remarkable.

And now he was thinking of the day when his daughter's marriage with Manoel had been decided. Could he allow that union to take place under a false name without acquainting the lad with the mystery of his life? No! And so at the advice of Judge Ribeiro he resolved to come and claim the revision of his sentence, to demand the rehabilitation which was his due! He was starting with his people, and then came the intervention of Torres, the detestable bargain proposed by the scoundrel, the indignant refusal of the father to hand over his daughter to save his honor and his life, and then the denunciation and the arrest!

Suddenly the window flew open with a violent push from without.

Joam started up; the souvenire of the past vanished like a shadow.

Benito leaped into the room; he was in the presence of his father, and the next moment Manoel, tearing down the remaining bars, appeared before him.

Joam Dacosta would have uttered a cry of surprise. Benito left him no time to do so.

"Father," he said, "the window grating is down. A rope leads to the ground. A pirogue is waiting for you on the canal not a hundred yards off. Araujo is there ready to take you far away from Manaos, on the other bank of the Amazon where your track will never be discovered. Father, you must escape this very moment! It was the judge's own suggestion!"

"It must be done!" added Manoel.

"Fly! Fly a second time! Escape again?"

And with crossed arms, and head erect, Joam Dacosta stepped forward.

"Never!" he said, in a voice so firm that Benito and Manoel stood bewildered.

The young men had never thought of a difficulty like this. They had never reckoned on the hindrances to escape coming from the prisoner himself.

Benito advanced to his father, and looking him straight in the face, and taking both his hands in his, not to force him, but to try and convince him, said:

"Never, did you say, father?"

"Never!"

"Father," said Manoel--"for I also have the right to call you father--listen to us! If we tell you that you ought to fly without losing an instant, it is because if you remain you will be guilty toward others, toward yourself!"

"To remain," continued Benito, "is to remain to die! The order for execution may come at any moment! If you imagine that the justice of men will nullify a wrong decision, if you think it will rehabilitate you whom it condemned twenty years since, you are mistaken! There is hope no longer! You must escape! Come!"

By an irresistible impulse Benito seized his father and drew him toward the window.

Joam Dacosta struggled from his son's grasp and recoiled a second time.

"To fly," he answered, in the tone of a man whose resolution was unalterable, "is to dishonor myself, and you with me! It would be a confession of my guilt! Of my own free will I surrendered myself to my country's judges, and I will await their decision, whatever that decision may be!"

"But the presumptions on which you trusted are insufficient," replied Manoel, "and the material proof of your innocence is still wanting! If we tell you that you ought to fly, it is because Judge Jarriquez himself told us so. You have now only this one chance left to escape from death!"

"I will die, then," said Joam, in a calm voice. "I will die protesting against the decision which condemned me! The first time, a few hours before the execution--I fled! Yes! I was then young. I had all my life before me in which
to struggle against man's injustice! But to save myself now, to begin again the miserable existence of a felon hiding under a false name, whose every effort is required to avoid the pursuit of the police, again to live the life of anxiety which I have led for twenty-three years, and oblige you to share it with me; to wait each day for a denunciation which sooner or later must come, to wait for the claim for extradition which would follow me to a foreign country! Am I to live for that? No! Never!"

"Father," interrupted Benito, whose mind threatened to give way before such obstinacy, "you shall fly! I will have it so!" And he caught hold of Joam Dacosta, and tried by force to drag him toward the window.

"No! no!"

"You wish to drive me mad?"

"My son," exclaimed Joam Dacosta, "listen to me! Once already I escaped from the prison at Villa Rica, and people believed I fled from well-merited punishment. Yes, they had reason to think so. Well, for the honor of the name which you bear I shall not do so again."

Benito had fallen on his knees before his father. He held up his hands to him; he begged him:

"But this order, father," he repeated, "this order which is due to-day--even now--it will contain your sentence of death."

"The order may come, but my determination will not change. No, my son! Joam Dacosta, guilty, might fly! Joam Dacosta, innocent, will not fly!"

The scene which followed these words was heart-rending. Benito struggled with his father. Manoel, distracted, kept near the window ready to carry off the prisoner--when the door of the room opened.

On the threshold appeared the chief of the police, accompanied by the head warder of the prison and a few soldiers. The chief of the police understood at a glance that an attempt at escape was being made; but he also understood from the prisoner's attitude that he it was who had no wish to go! He said nothing. The sincerest pity was depicted on his face. Doubtless he also, like Judge Jarriquez, would have liked Dacosta to have escaped.

It was too late!

The chief of the police, who held a paper in his hand, advanced toward the prisoner.

"Before all of you," said Joam Dacosta, "let me tell you, sir, that it only rested with me to get away, and that I would not do so."

The chief of the police bowed his head, and then, in a voice which he vainly tried to control:

"Joam Dacosta," he said, "the order has this moment arrived from the chief justice at Rio Janeiro."

"Father!" exclaimed Manoel and Benito.

"This order," asked Joam Dacosta, who had crossed his arms, "this order requires the execution of my sentence?"

"Yes!"

"And that will take place?"

"To-morrow."

Benito threw himself on his father. Again would he have dragged him from his cell, but the soldiers came and drew away the prisoner from his grasp.

At a sign from the chief of the police Benito and Manoel were taken away. An end had to be put to this painful scene, which had already lasted too long.

"Sir," said the doomed man, "before to-morrow, before the hour of my execution, may I pass a few moments with Padre Passanha, whom I ask you to tell?"

"It will be forbidden."

"May I see my family, and embrace for a last time my wife and children?"

"You shall see them."

"Thank you, sir," answered Joam; "and now keep guard over that window; it will not do for them to take me out of here against my will."

And then the chief of the police, after a respectful bow, retired with the warder and the soldiers.

The doomed man, who had now but a few hours to live, was left alone.

CHAPTER XVIII. FRAGOSO

AND SO the order had come, and, as Judge Jarriquez had foreseen, it was an order requiring the immediate execution of the sentence pronounced on Joam Dacosta. No proof had been produced; justice must take its course.

It was the very day--the 31st of August, at nine o'clock in the morning of which the condemned man was to perish on the gallows.

The death penalty in Brazil is generally commuted except in the case of negroes, but this time it was to be suffered by a white man.
Such are the penal arrangements relative to crimes in the diamond arrayal, for which, in the public interest, the law allows no appear to mercy.

Nothing could now save Joam Dacosta. It was not only life, but honor that he was about to lose.

But on the 31st of August a man was approaching Manaos with all the speed his horse was capable of, and such had been the pace at which he had come that half a mile from the town the gallant creature fell, incapable of carrying him any further.

The rider did not even stop to raise his steed. Evidently he had asked and obtained from it all that was possible, and, despite the state of exhaustion in which he found himself, he rushed off in the direction of the city.

The man came from the eastern provinces, and had followed the left bank of the river. All his means had gone in the purchase of this horse, which, swifter far than any pirogue on the Amazon, had brought him to Manaos.

It was Fragoso!

Had, then, the brave fellow succeeded in the enterprise of which he had spoken to nobody? Had he found the party to which Torres belonged? Had he discovered some secret which would yet save Joam Dacosta?

He hardly knew. But in any case he was in great haste to acquaint Judge Jarriquez with what he had ascertained during his short excursion.

And this is what had happened.

Fragoso had made no mistake when he recognized Torres as one of the captains of the party which was employed in the river provinces of the Madeira.

He set out, and on reaching the mouth of that tributary he learned that the chief of these _capitães da mato_ was then in the neighborhood.

Without losing a minute, Fragoso started on the search, and, not without difficulty, succeeded in meeting him.

To Fragoso's questions the chief of the party had no hesitation in replying; he had no interest in keeping silence with regard to the few simple matters on which he was interrogated. In fact, three questions only of importance were asked him by Fragoso, and these were:

"Did not a captain of the woods named Torres belong to your party a few months ago?"
"Yes."
"At that time had he not one intimate friend among his companions who has recently died?"
"Just so!"
"And the name of that friend was?"
"Ortega."

This was all that Fragoso had learned. Was this information of a kind to modify Dacosta's position? It was hardly likely.

Fragoso saw this, and pressed the chief of the band to tell him what he knew of this Ortega, of the place where he came from, and of his antecedents generally. Such information would have been of great importance if Ortega, as Torres had declared, was the true author of the crime of Tijuco. But unfortunately the chief could give him no information whatever in the matter.

What was certain was that Ortega had been a member of the band for many years, that an intimate friendship existed between him and Torres, that they were always seen together, and that Torres had watched at his bedside when he died.

This was all the chief of the band knew, and he could tell no more. Fragoso, then, had to be contented with these insignificant details, and departed immediately.

But if the devoted fellow had not brought back the proof that Ortega was the author of the crime of Tijuco, he had gained one thing, and that was the knowledge that Torres had told the truth when he affirmed that one of his comrades in the band had died, and that he had been present during his last moments.

The hypothesis that Ortega had given him the document in question had now become admissible. Nothing was more probable than that this document had reference to the crime of which Ortega was really the author, and that it contained the confession of the culprit, accompanied by circumstances which permitted of no doubt as to its truth.

And so, if the document could be read, if the key had been found, if the cipher on which the system hung were known, no doubt of its truth could be entertained.

But this cipher Fragoso did not know. A few more presumptions, a half-certainty that the adventurer had invented nothing, certain circumstances tending to prove that the secret of the matter was contained in the document-and that was all that the gallant fellow brought back from his visit to the chief of the gang of which Torres had been a member.

Nevertheless, little as it was, he was in all haste to relate it to Judge Jarriquez. He knew that he had not an hour to lose, and that was why on this very morning, at about eight o'clock, he arrived, exhausted with fatigue, within half a mile of Manaos. The distance between there and the town he traversed in a few minutes. A kind of irresistible
presentiment urged him on, and he had almost come to believe that Joam Dacosta's safety rested in his hands.

Suddenly Fragoso stopped as if his feet had become rooted in the ground. He had reached the entrance to a small square, on which opened one of the town gates.

There, in the midst of a dense crowd, arose the gallows, towering up some twenty feet, and from it there hung the rope!

Fragoso felt his consciousness abandon him. He fell; his eyes involuntarily closed. He did not wish to look, and these words escaped his lips: "Too late! too late!" But by a superhuman effort he raised himself up. No; it was _not_ too late, the corpse of Joam Dacosta was _not_ hanging at the end of the rope!

"Judge Jarriquez! Judge Jarriquez!" shouted Fragoso, and panting and bewildered he rushed toward the city gate, dashed up the principal street of Manaos, and fell half-dead on the threshold of the judge's house. The door was shut. Fragoso had still strength enough left to knock at it.

One of the magistrate's servants came to open it; his master would see no one.

In spite of this denial, Fragoso pushed back the man who guarded the entrance, and with a bound threw himself into the judge's study.

"I come from the province where Torres pursued his calling as captain of the woods!" he gasped. "Mr. Judge, Torres told the truth. Stop--stop the execution?"

"You found the gang?"

"Yes."

"And you have brought me the cipher of the document?"

Fragoso did not reply.

"Come, leave me alone! leave me alone!" shouted Jarriquez, and, a prey to an outburst of rage, he grasped the document to tear it to atoms.

Fragoso seized his hands and stopped him. "The truth is there!" he said.

"I know," answered Jarriquez; "but it is a truth which will never see the light!"

"It will appear--it must! it must!"

"Once more, have you the cipher?"

"No," replied Fragoso; "but, I repeat, Torres has not lied. One of his companions, with whom he was very intimate, died a few months ago, and there can be no doubt but that this man gave him the document he came to sell to Joam Dacosta."

"No," answered Jarriquez--"no, there is no doubt about it--as far as we are concerned; but that is not enough for those who dispose of the doomed man's life. Leave me!"

Fragoso, repulsed, would not quit the spot. Again he threw himself at the judge's feet. "Joam Dacosta is innocent!" he cried; "you will not leave him to die? It was not he who committed the crime of Tijuco; it was the comrade of Torres, the author of that document! It was Ortega!"

As he uttered the name the judge bounded backward. A kind of calm swiftly succeeded to the tempest which raged within him. He dropped the document from his clenched hand, smoothed it out on the table, sat down, and, passing his hand over his eyes--"That name?" he said--"Ortega? Let us see," and then he proceeded with the new name brought back by Fragoso as he had done with the other names so vainly tried by himself.

After placing it above the first six letters of the paragraph he obtained the following formula:

\[ \text{O r t e g a}_\text{P h y j s l} \]

"Nothing!" he said. "That give us--nothing!"

And in fact the \(_h\) placed under the \(_r\) could not be expressed by a cipher, for, in alphabetical order, this letter occupies an earlier position to that of the \(_r\)."

The \(_p\), the \(_y\), the \(_j\), arranged beneath the letters \(_o, t, e\), disclosed the cipher 1, 4, 5, but as for the \(_s_\) and the \(_l\) at the end of the word, the interval which separated them from the \(_g\) and the \(_a\) was a dozen letters, and hence impossible to express by a single cipher, so that they corresponded to neither \(_g\) nor \(_a\)."

And here appalling shouts arose in the streets; they were the cries of despair.

Fragoso jumped to one of the windows, and opened it before the judge could hinder him.

The people filled the road. The hour had come at which the doomed man was to start from the prison, and the crowd was flowing back to the spot where the gallows had been erected.

Judge Jarriquez, quite frightful to look upon, devoured the lines of the document with a fixed stare.

"The last letters!" he muttered. "Let us try once more the last letters!"

It was the last hope.

And then, with a hand whose agitation nearly prevented him from writing at all, he placed the name of Ortega over the six last letters of the paragraph, as he had done over the first.

An exclamation immediately escaped him. He saw, at first glance, that the six last letters were inferior in
alphabetical order to those which composed Ortega's name, and that consequently they might yield the number.

And when he reduced the formula, reckoning each later letter from the earlier letter of the word, he obtained.

O r t e g a 4 3 2 5 1 3 _ S u v j h d_

The number thus disclosed was 432513.

But was this number that which had been used in the document? Was it not as erroneous as those he had previously tried?

At this moment the shouts below redoubled—shouts of pity which betrayed the sympathy of the excited crowd. A few minutes more were all that the doomed man had to live!

Fragoso, maddened with grief, darted from the room! He wished to see, for the last time, his benefactor who was on the road to death! He longed to throw himself before the mournful procession and stop it, shouting, "Do not kill this just man! do not kill him!"

But already Judge Jarriquez had placed the given number above the first letters of the paragraph, repeating them as often as was necessary, as follows:

4 3 2 5 1 3 4 3 2 5 1 3 4 3 2 5 1 3 _ P h y j s l y d q f d z x g a s g z z q e h_

And then, reckoning the true letters according to their alphabetical order, he read:

"Le véritable auteur du vol de----"

A yell of delight escaped him! This number, 432513, was the number sought for so long! The name of Ortega had enabled him to discover it! At length he held the key of the document, which would incontestably prove the innocence of Joam Dacosta, and without reading any more he flew from his study into the street, shouting:

"Halt! Halt!"

To cleave the crowd, which opened as he ran, to dash to the prison, whence the convict was coming at the last moment, with his wife and children clinging to him with the violence of despair, was but the work of a minute for Judge Jarriquez.

Stopping before Joam Dacosta, he could not speak for a second, and then these words escaped his lips:

"Innocent! Innocent!"

CHAPTER XIX. THE CRIME OF TIJUCO

ON THE ARRIVAL of the judge the mournful procession halted. A roaring echo had repeated after him and again repeated the cry which escaped from every mouth:

"Innocent! Innocent!"

Then complete silence fell on all. The people did not want to lose one syllable of what was about to be proclaimed.

Judge Jarriquez sat down on a stone seat, and then, while Minha, Benito, Manoel, and Fragoso stood round him, while Joam Dacosta clasped Yaquita to his heart, he first unraveled the last paragraph of the document by means of the number, and as the words appeared by the institution of the true letters for the cryptological ones, he divided and punctuated them, and then read it out in a loud voice. And this is what he read in the midst of profound silence:

"Le véritable auteur du vol des diamants et de_ 43 2513432513 342513 14 32513432 51 34 _Ph yjsylddf dzxgas gz zqq ehx gkfndrxu ju gi l'assassinat des soldats qui escortaient le convoi, _32513432513 432 5134325 134 32513432 513 432513 _ocytidxvksbx bhu yphohdy rym huhpuydkjox ph etozsl

commis dans la nuit du vingt-deux janvier mil_ 251343 2513 43 2513 43 2513432513 432513 432 _etnpmv ffov pd pajx hy ynojyggay mejynfu qln

huit-cent vingt-six, n'est donc pas Joam Dacosta, injustement condamné à mort, c'est moi, les misérable_ 3432513432513 4 32513432 513 43 251343251 _mvly

_4msyuhpzq drggreh e pxxu fivv rpl ph onthvddqf

employé de l'administration du district diamantin, _3432513 43 251343251342513 34 3251342 513432513 _hqnsntzh hh nfpqykuwuxekto gz gkyuumfv iqdpqypzq

out, moi seul, qui signe de mon vrai nom, Ortega, _432 513 4325 134 32513 43 2513 43 342513 _3syk rpl xhxq rym vkloh hh oto zvdk spp suvhdj_

"The real author of the robbery of the diamonds and of the murder of the soldiers who escorted the convoy, committed during the night of the twenty-second of January, one thousand eight hundred and twenty-six, was thus not Joam Dacosta, unjustly condemned to death; it was I, the wretched servant of the Administration of the diamond district; yes, I alone, who sign this with my true name, Ortega."

The reading of this had hardly finished when the air was rent with prolonged hurrahs.

What could be more conclusive than this last paragraph, which summarized the whole of the document, and
proclaimed so absolutely the innocence of the fazender of Iquitos, and which snatched from the gallows this victim of a frightful judicial mistake!

Joam Dacosta, surrounded by his wife, his children, and his friends, was unable to shake the hands which were held out to him. Such was the strength of his character that a reaction occurred, tears of joy escaped from his eyes, and at the same instant his heart was lifted up to that Providence which had come to save him so miraculously at the moment he was about to offer the last expiation to that God who would not permit the accomplishment of that greatest of crimes, the death of an innocent man!

Yes! There could be no doubt as to the vindication of Joam Dacosta. The true author of the crime of Tijuco confessed of his own free will, and described the circumstances under which it had been perpetrated!

By means of the number Judge Jarriquez interpreted the whole of the cryptogram.

And this was what Ortega confessed.

He had been the colleague of Joam Dacosta, employed, like him, at Tijuco, in the offices of the governor of the diamond arrayal. He had been the official appointed to accompany the convoy to Rio de Janeiro, and, far from recoiling at the horrible idea of enriching himself by means of murder and robbery, he had informed the smugglers of the very day the convoy was to leave Tijuco.

During the attack of the scoundrels, who awaited the convoy just beyond Villa Rica, he pretended to defend himself with the soldiers of the escort, and then, falling among the dead, he was carried away by his accomplices. Hence it was that the solitary soldier who survived the massacre had reported that Ortega had perished in the struggle.

But the robbery did not profit the guilty man in the long run, for, a little time afterward, he was robbed by those whom he had helped to commit the crime.

Penniless, and unable to enter Tijuco again, Ortega fled away to the provinces in the north of Brazil, to those districts of the Upper Amazon where the capitaeas da mato are to be found. He had to live somehow, and so he joined this not very honorable company; they neither asked him who he was nor whence he came, and so Ortega became a captain of the woods, and for many years he followed the trade of a chaser of men.

During this time Torres, the adventurer, himself in absolute want, became his companion. Ortega and he became most intimate. But, as he had told Torres, remorse began gradually to trouble the scoundrel's life. The remembrance of his crime became horrible to him. He knew that another had been condemned in his place! He knew subsequently that the innocent man had escaped from the last penalty, but that he would never be free from the shadow of the capital sentence! And then, during an expedition of his party for several months beyond the Peruvian frontier, chance caused Ortega to visit the neighborhood of Iquitos, and there in Joam Garral, who did not recognize him, he recognized Joam Dacosta.

Henceforth he resolved to make all the reparation he could for the injustice of which his old comrade had been the victim. He committed to the document all the facts relative to the crime of Tijuco, writing it first in French, which had been his mother's native tongue, and then putting it into the mysterious form we know, his intention being to transmit it to the fazender of Iquitos, with the cipher by which it could be read.

Death prevented his completing his work of reparation. Mortally wounded in a scuffle with some negroes on the Madeira, Ortega felt he was doomed. His comrade Torres was then with him. He thought he could intrust to his friend the secret which had so grievously darkened his life. He gave him the document, and made him swear to convey it to Joam Dacosta, whose name and address he gave him, and with his last breath he whispered the number 432513, without which the document would remain undecipherable.

Ortega dead, we know how the unworthy Torres acquitted himself of his mission, how he resolved to turn to his own profit the secret of which he was the possessor, and how he tried to make it the subject of an odious bargain.

Torres died without accomplishing his work, and carried his secret with him. But the name of Ortega, brought back by Fragoso, and which was the signature of the document, had afforded the means of unraveling the cryptogram, thanks to the sagacity of Judge Jarriquez. Yes, the material proof sought after for so long was the incontestable witness of the innocence of Joam Dacosta, returned to life, restored to honor.

The cheers redoubled when the worthy magistrate, in a loud voice, and for the edification of all, read from the document this terrible history.

And from that moment Judge Jarriquez, who possessed this indubitable proof, arranged with the chief of the police, and declined to allow Joam Dacosta, while waiting new instructions from Rio Janeiro, to stay in any prison but his own house.

There could be no difficulty about this, and in the center of the crowd of the entire population of Manaos, Joam Dacosta, accompanied by all his family, beheld himself conducted like a conqueror to the magistrate's residence.

And in that minute the honest fazender of Iquitos was well repaid for all that he had suffered during the long years of exile, and if he was happy for his family's sake more than for his own, he was none the less proud for his
country's sake that this supreme injustice had not been consummated!

And in all this what had become of Fragoso?

Well, the good-hearted fellow was covered with caresses! Benito, Manoel, and Minha had overwhelmed him, and Lina had by no means spared him. He did not know what to do, he defended himself as best he could. He did not deserve anything like it. Chance alone had done it. Were any thanks due to him for having recognized Torres as a captain of the woods? No, certainly not. As to his idea of hurrying off in search of the band to which Torres had belonged, he did not think it had been worth much, and as to the name of Ortega, he did not even know its value.

Gallant Fragoso! Whether he wished it or no, he had none the less saved Joam Dacosta!

And herein what a strange succession of different events all tending to the same end. The deliverance of Fragoso at the time when he was dying of exhaustion in the forest of Iquitos; the hospitable reception he had met with at the fazenda, the meeting with Torres on the Brazilian frontier, his embarkation on the jangada; and lastly, the fact that Fragoso had seen him somewhere before.

"Well, yes!" Fragoso ended by exclaiming; "but it is not to me that all this happiness is due, it is due to Lina!"

"To me?" replied the young mulatto.

"No doubt of it. Without the liana, without the idea of the liana, could I ever have been the cause of so much happiness?"

So that Fragoso and Lina were praised and petted by all the family, and by all the new friends whom so many trials had procured them at Manaos, need hardly be insisted on.

But had not Judge Jarriquez also had his share in this rehabilitation of an innocent man? If, in spite of all the shrewdness of his analytical talents, he had not been able to read the document, which was absolutely undecipherable to any one who had not got the key, had he not at any rate discovered the system on which the cryptogram was composed? Without him what could have been done with only the name of Ortega to reconstitute the number which the author of the crime and Torres, both of whom were dead, alone knew?

And so he also received abundant thanks.

Needless to say that the same day there was sent to Rio de Janeiro a detailed report of the whole affair, and with it the original document and the cipher to enable it to be read. New instructions from the minister of justice had to be waited for, though there could be no doubt that they would order the immediate discharge of the prisoner. A few days would thus have to be passed at Manaos, and then Joam Dacosta and his people, free from all constraint, and released from all apprehension, would take leave of their host to go on board once more and continue their descent of the Amazon to Para, where the voyage was intended to terminate with the double marriage of Minha and Manoel and Lina and Fragoso.

Four days afterward, on the fourth of September, the order of discharge arrived. The document had been recognized as authentic. The handwriting was really that of Ortega, who had been formerly employed in the diamond district, and there could be no doubt that the confession of his crime, with the minutest details that were given, had been entirely written with his own hand.

The innocence of the convict of Villa Rica was at length admitted. The rehabilitation of Joam Dacosta was at last officially proclaimed.

That very day Judge Jarriquez dined with the family on board the giant raft, and when evening came he shook hands with them all. Touching were the adieus, but an engagement was made for them to see him again on their return at Manaos, and later on the fazenda of Iquitos.

On the morning of the morrow, the fifth of September, the signal for departure was given. Joam Dacosta and Yaquita, with their daughter and sons, were on the deck of the enormous raft. The jangada had its moorings slackened off and began to move with the current, and when it disappeared round the bend of the Rio Negro, the hurrahs of the whole population of Manaos, who were assembled on the bank, again and again re-echoed across the stream.

CHAPTER XX. THE LOWER AMAZON

LITTLE REMAINS to tell of the second part of the voyage down the mighty river. It was but a series of days of joy. Joam Dacosta returned to a new life, which shed its happiness on all who belonged to him.

The giant raft glided along with greater rapidity on the waters now swollen by the floods. On the left they passed the small village of Don Jose de Matuni, and on the right the mouth of that Madeira which owes its name to the floating masses of vegetable remains and trunks denuded of their foliage which it bears from the depths of Bolivia. They passed the archipelago of Caniny, whose islets are veritable boxes of palms, and before the village of Serpa, which, successively transported from one back to the other, has definitely settled on the left of the river, with its little houses, whose thresholds stand on the yellow carpet of the beach.
The village of Silves, built on the left of the Amazon, and the town of Villa Bella, which is the principal guarana market in the whole province, were soon left behind by the giant raft. And so was the village of Faro and its celebrated river of the Nhamundas, on which, in 1539, Orellana asserted he was attacked by female warriors, who have never been seen again since, and thus gave us the legend which justifies the immortal name of the river of the Amazons.

Here it is that the province of Rio Negro terminates. The jurisdiction of Para then commences; and on the 22d of September the family, marveling much at a valley which has no equal in the world, entered that portion of the Brazilian empire which has no boundary to the east except the Atlantic.

"How magnificent!" remarked Minha, over and over again.
"How long!" murmured Manoel.
"How beautiful!" repeated Lina.
"When shall we get there?" murmured Fragoso.

And this was what might have been expected of these folks from the different points of view, though time passed pleasantly enough with them all the same. Benito, who was neither patient nor impatient, had recovered all his former good humor.

Soon the jangada glided between interminable plantations of cocoa-trees with their somber green flanked by the yellow thatch or ruddy tiles of the roofs of the huts of the settlers on both banks from Obidos up to the town of Monto Alegre.

Then there opened out the mouth of the Rio Trombetas, bathing with its black waters the houses of Obidos, situated at about one hundred and eighty miles from Belem, quite a small town, and even a _"citade"_ with large streets bordered with handsome habitations, and a great center for cocoa produce. Then they saw another tributary, the Tapajos, with its greenish-gray waters descending from the south-west; and then Santarem, a wealthy town of not less than five thousand inhabitants, Indians for the most part, whose nearest houses were built on the vast beach of white sand.

After its departure from Manaos the jangada did not stop anywhere as it passed down the much less encumbered course of the Amazon. Day and night it moved along under the vigilant care of its trusty pilot; no more stoppages either for the gratification of the passengers or for business purposes. Unceasingly it progressed, and the end rapidly grew nearer.

On leaving Alemquer, situated on the left bank, a new horizon appeared in view. In place of the curtain of forests which had shut them in up to then, our friends beheld a foreground of hills, whose undulations could be easily described, and beyond them the faint summits of veritable mountains vandyked across the distant depth of sky. Neither Yaquita, nor her daughter, nor Lina, nor old Cybele, had ever seen anything like this.

But in this jurisdiction of Para, Manoel was at home, and he could tell them the names of the double chain which gradually narrowed the valley of the huge river.

"To the right," said he, "that is the Sierra de Paracuarta, which curves in a half-circle to the south! To the left, that is the Sierra de Curuva, of which we have already passed the first outposts."

"Then they close in?" asked Fragoso.
"They close in!" replied Manoel.

And the two young men seemed to understand each other, for the same slight but significant nodding of the head accompanied the question and reply.

At last, notwithstanding the tide, which since leaving Obidos had begun to be felt, and which somewhat checked the progress of the raft, the town of Monto Alegre was passed, then that of Pravnha de Outeiro, then the mouth of the Xingu, frequented by Yurumas Indians, whose principal industry consists in preparing their enemies' heads for natural history cabinets.

To what a superb size the Amazon had now developed as already this monarch of rivers gave signs of opening out like a sea! Plants from eight to ten feet high clustered along the beach, and bordered it with a forest of reeds. Porto de Mos, Boa Vista, and Gurupa, whose prosperity is on the decline, were soon among the places left in the rear.

Then the river divided into two important branches, which flowed off toward the Atlantic, one going away northeastward, the other eastward, and between them appeared the beginning of the large island of Marajo. This island is quite a province in itself. It measures no less than a hundred and eighty leagues in circumference. Cut up by marshes and rivers, all savannah to the east, all forest to the west, it offers most excellent advantages for the raising of cattle, which can here be seen in their thousands. This immense barricade of Marajo is the natural obstacle which has compelled the Amazon to divide before precipitating its torrents of water into the sea. Following the upper branch, the jangada, after passing the islands of Caviana and Mexiana, would have found an _embouchure_ of some fifty leagues across, but it would also have met with the bar of the prororoca, that terrible eddy which, for the three
days preceding the new or full moon, takes but two minutes instead of six hours to raise the river from twelve to fifteen feet above ordinary high-water mark.

This is by far the most formidable of tide-races. Most fortunately the lower branch, known as the Canal of Breves, which is the natural area of the Para, is not subject to the visitations of this terrible phenomenon, and its tides are of a more regular description. Araujo, the pilot, was quite aware of this. He steered, therefore, into the midst of magnificent forests, here and there gliding past island covered with muritis palms; and the weather was so favorable that they did not experience any of the storms which so frequently rage along this Breves Canal.

A few days afterward the jangada passed the village of the same name, which, although built on the ground flooded for many months in the year, has become, since 1845, an important town of a hundred houses. Throughout these districts, which are frequented by Tapuyas, the Indians of the Lower Amazon become more and more commingled with the white population, and promise to be completely absorbed by them.

And still the jangada continued its journey down the river. Here, at the risk of entanglement, it grazed the branches of the mangliers, whose roots stretched down into the waters like the claws of gigantic crustaceans; then the smooth trunks of the paletuviers, with their pale-green foliage, served as the resting-places for the long poles of the crew as they kept the raft in the strength of the current.

Then came the Tocantins, whose waters, due to the different rivers of the province of Goyaz, mingle with those of the Amazon by an _embouchure_ of great size, then the Moju, then the town of Santa Ana.

Majestically the panorama of both banks moved along without a pause, as though some ingenious mechanism necessitated its unrolling in the opposite direction to that of the stream.

Already numerous vessels descending the river, ubas, egariteas, vigilandas, pirogues of all builds, and small coasters from the lower districts of the Amazon and the Atlantic seaboard, formed a procession with the giant raft, and seemed like sloops beside some might man-of-war.

At length there appeared on the left Santa Maria de Belem do Para--the "town" as they call it in that country--with its picturesque lines of white houses at many different levels, its convents nestled among the palm-trees, the steeples of its cathedral and of Nostra Senora de Merced, and the flotilla of its brigantines, brigs, and barks, which form its commercial communications with the old world.

The hearts of the passengers of the giant raft beat high. At length they were coming to the end of the voyage which they had thought they would never reach. While the arrest of Joam detained them at Manaos, halfway on their journey, could they ever have hoped to see the capital of the province of Para?

It was in the course of this day, the 15th of October--four months and a half after leaving the fazenda of Iquitos--that, as they rounded a sharp bend in the river, Belem came into sight.

The arrival of the jangada had been signaled for some days. The whole town knew the story of Joam Dacosta. They came forth to welcome him, and to him and his people accorded a most sympathetic reception.

Hundreds of craft of all sorts conveyed them to the fazender, and soon the jangada was invaded by all those who wished to welcome the return of their compatriot after his long exile. Thousands of sight-seers--or more correctly speaking, thousands of friends crowded on to the floating village as soon as it came to its moorings, and it was vast and solid enough to support the entire population. Among those who hurried on board one of the first pirogues had brought Madame Valdez. Manoel's mother was at last able to clasp to her arms the daughter whom her son had chosen. If the good lady had not been able to come to Iquitos, was it not as though a portion of the fazenda, with her new family, had come down the Amazon to her?

Before evening the pilot Araujo had securely moored the raft at the entrance of a creek behind the arsenal. That was to be its last resting-place, its last halt, after its voyage of eight hundred leagues on the great Brazilian artery. There the huts of the Indians, the cottage of the negroes, the store-rooms which held the valuable cargo, would be gradually demolished; there the principal dwelling, nestled beneath its verdant tapestry of flowers and foliage, and the little chapel whose humble bell was then replying to the sounding clangor from the steeples of Belem, would each in its turn disappear.

But, ere this was done, a ceremony had to take place on the jangada--the marriage of Manoel and Minha, the marriage of Lina and Fragoso. To Father Passanha fell the duty of celebrating the double union which promised so happily. In that little chapel the two couples were to receive the nuptial benediction from his hands.

If it happened to be so small as to be only capable of holding the members of Dacosta's family, was not the giant raft large enough to receive all those who wished to assist at the ceremony? and if not, and the crowd became so great, did not the ledges of the river banks afford sufficient room for as many others of the sympathizing crowd as were desirous of welcoming him whom so signal a reparation had made the hero of the day?

It was on the morrow, the 16th of October, that with great pomp the marriages were celebrated.

It was a magnificent day, and from about ten o'clock in the morning the raft began to receive its crowd of guests. On the bank could be seen almost the entire population of Belem in holiday costume. On the river, vessels of all
sorts crammed with visitors gathered round the enormous mass of timber, and the waters of the Amazon literally disappeared even up to the left bank beneath the vast flotilla.

When the chapel bell rang out its opening note it seemed like a signal of joy to ear and eye. In an instant the churches of Belem replied to the bell of the jangada. The vessels in the port decked themselves with flags up to their mastheads, and the Brazilian colors were saluted by the many other national flags. Discharges of musketry reverberated on all sides, and it was only with difficulty that their joyous detonations could cope with the loud hurrahs from the assembled thousands.

The Dacosta family came forth from their house and moved through the crowd toward the little chapel. Joam was received with absolutely frantic applause. He gave his arm to Madame Valdez; Yaquita was escorted by the governor of Belem, who, accompanied by the friends of the young army surgeon, had expressed a wish to honor the ceremony with his presence. Manoel walked by the side of Minha, who looked most fascinating in her bride's costume, and then came Fragoso, holding the hand of Lina, who seemed quite radiant with joy. Then followed Benito, then old Cybele and the servants of the worthy family between the double ranks of the crew of the jangada.

Padre Passanha awaited the two couples at the entrance of the chapel. The ceremony was very simple, and the same bands which had formerly blessed Joam and Yaquita were again stretched forth to give the nuptial benediction to their child.

So much happiness was not likely to be interrupted by the sorrow of long separation. In fact, Manoel Valdez almost immediately sent in his resignation, so as to join the family at Iquitos, where he is still following the profession of a country doctor.

Naturally the Fragosos did not hesitate to go back with those who were to them friends rather than masters.

Madame Valdez had no desire to separate so happy a group, but she insisted on one thing, and that was that they should often come and see her at Belem. Nothing could be easier. Was not the mighty river a bond of communication between Belem and Iquitos? In a few days the first mail steamer was to begin a regular and rapid service, and it would then only take a week to ascend the Amazon, on which it had taken the giant raft so many months to drift. The important commercial negotiations, ably managed by Benito, were carried through under the best of conditions, and soon of what had formed this jangada—that is to say, the huge raft of timber constructed from an entire forest at Iquitos—there remained not a trace.

A month afterward the fazender, his wife, his son, Manoel and Minha Valdez, Lina and Fragoso, departed by one of the Amazon steamers for the immense establishment at Iquitos of which Benito was to take the management.

Joam Dacosta re-entered his home with his head erect, and it was indeed a family of happy hearts which he brought back with him from beyond the Brazilian frontier. As for Fragoso, twenty times a day was he heard to repeat, "What! without the liana?" and he wound up by bestowing the name on the young mulatto who, by her affection for the gallant fellow, fully justified its appropriateness. "If it were not for the one letter," he said, "would not Lina and Liana be the same?"

FACING THE FLAG
BY JULES VERNE

CHAPTER I.
HEALTHFUL HOUSE.

The carte de visite received that day, June 15, 189-, by the director of the establishment of Healthful House was a very neat one, and simply bore, without escutcheon or coronet, the name:
COUNT D'ARTIGAS.

Below this name, in a corner of the card, the following address was written in lead pencil:
"On board the schooner Ebba, anchored off New-Berne, Pamlico Sound."

The capital of North Carolina--one of the forty-four states of the Union at this epoch--is the rather important town of Raleigh, which is about one hundred and fifty miles in the interior of the province. It is owing to its central position that this city has become the seat of the State legislature, for there are others that equal and even surpass it in industrial and commercial importance, such as Wilmington, Charlotte, Fayetteville, Edenton, Washington, Salisbury, Tarborough, Halifax, and New-Berne. The latter town is situated on estuary of the Neuse River, which empties itself into Pamlico Sound, a sort of vast maritime lake protected by a natural dyke formed by the isles and islets of the Carolina coast.

The director of Healthful House could never have imagined why the card should have been sent to him, had it
not been accompanied by a note from the Count d'Artigas soliciting permission to visit the establishment. The
personage in question hoped that the director would grant his request, and announced that he would present himself
in the afternoon, accompanied by Captain Spade, commander of the schooner Ebba.

This desire to penetrate to the interior of the celebrated sanitarium, then in great request by the wealthy invalids
of the United States, was natural enough on the part of a foreigner. Others who did not bear such a high-sounding
name as the Count d'Artigas had visited it, and had been unstinting in their compliments to the director. The latter
therefore hastened to accord the authorization demanded, and added that he would be honored to open the doors of
the establishment to the Count d'Artigas.

Healthful House, which contained a select personnel, and was assured of the co-operation of the most celebrated
doctors in the country, was a private enterprise. Independent of hospitals and almshouses, but subjected to the
surveillance of the State, it comprised all the conditions of comfort and salubrity essential to establishments of this
description designed to receive an opulent clientele.

It would have been difficult to find a more agreeable situation than that of Healthful House. On the landward
slope of a hill extended a park of two hundred acres planted with the magnificent vegetation that grows so
luxuriantly in that part of North America, which is equal in latitude to the Canary and Madeira Islands. At the
furthest limit of the park lay the wide estuary of the Neuse, swept by the cool breezes of Pamlico Sound and by
the winds that blew from the ocean beyond the narrow lido of the coast.

Healthful House, where rich invalids were cared for under such excellent hygienic conditions, was more
generally reserved for the treatment of chronic complaints; but the management did not decline to admit patients
affected by mental troubles, when the latter were not of an incurable nature.

It thus happened--a circumstance that was bound to attract a good deal of attention to Healthful House, and
which perhaps was the motive for the visit of the Count d'Artigas--that a person of world-wide notoriety had for
eighteen months been under special observation there.

This person was a Frenchman named Thomas Roch, forty-five years of age. He was, beyond question, suffering
from some mental malady, but expert alienists admitted that he had not entirely lost the use of his reasoning
faculties. It was only too evident that he had lost all notion of things as far as the ordinary acts of life were
concerned; but in regard to subjects demanding the exercise of his genius, his sanity was unimpaired and
unassailable--a fact which demonstrates how true is the dictum that genius and madness are often closely allied!
Otherwise his condition manifested itself by complete loss of memory;--the impossibility of concentrating his
attention upon anything, lack of judgment, delirium and incoherence. He no longer even possessed the natural
animal instinct of self-preservation, and had to be watched like an infant whom one never permits out of one's sight.
Therefore a warder was detailed to keep close watch over him by day and by night in Pavilion No. 17, at the end of
Healthful House Park, which had been specially set apart for him.

Ordinary insanity, when it is not incurable, can only be cured by moral means. Medicine and therapeutics are
powerless, and their inefficacy has long been recognized by specialists. Were these moral means applicable to the
case of Thomas Roch? One may be permitted to doubt it, even amid the tranquil and salubrious surroundings of
Healthful House. As a matter of fact the very symptoms of uneasiness, changes of temper, irritability, queer traits of
character, melancholy, apathy, and a repugnance for serious occupations were distinctly apparent; no treatment
seemed capable of curing or even alleviating these symptoms. This was patent to all his medical attendants.

It has been justly remarked that madness is an excess of subjectivity; that is to say, a state in which the mind
accords too much to mental labor and not enough to outward impressions. In the case of Thomas Roch this
indifference was practically absolute. He lived but within himself, so to speak, a prey to a fixed idea which had
brought him to the condition in which we find him. Could any circumstance occur to counteract it--to "exteriorize"
him, as it were? The thing was improbable, but it was not impossible.

It is now necessary to explain how this Frenchman came to quit France, what motive attracted him to the United
States, why the Federal government had judged it prudent and necessary to intern him in this sanitarium, where
every utterance that unconsciously escaped him during his crises were noted and recorded with the minutest care.

Eighteen months previously the Secretary of the Navy at Washington, had received a demand for an audience in
gard to a communication that Thomas Roch desired to make to him.

As soon as he glanced at the name, the secretary perfectly understood the nature of the communication and the
terms which would accompany it, and an immediate audience was unhesitatingly accorded.

Thomas Roch's notoriety was indeed such that, out of solicitude for the interests confided to his keeping, and
which he was bound to safeguard, he could not hesitate to receive the petitioner and listen to the proposals which the
latter desired personally to submit to him.

Thomas Roch was an inventor--an inventor of genius. Several important discoveries had brought him
prominently to the notice of the world. Thanks to him, problems that had previously remained purely theoretical had
received practical application. He occupied a conspicuous place in the front rank of the army of science. It will be seen how worry, deceptions, mortification, and the outrages with which he was overwhelmed by the cynical wits of the press combined to drive him to that degree of madness which necessitated his internment in Healthful House.

His latest invention in war-engines bore the name of Roch's Fulgurator. This apparatus possessed, if he was to be believed, such superiority over all others, that the State which acquired it would become absolute master of earth and ocean.

The deplorable difficulties inventors encounter in connection with their inventions are only too well known, especially when they endeavor to get them adopted by governmental commissions. Several of the most celebrated examples are still fresh in everybody's memory. It is useless to insist upon this point, because there are sometimes circumstances underlying affairs of this kind upon which it is difficult to obtain any light. In regard to Thomas Roch, however, it is only fair to say that, as in the case of the majority of his predecessors, his pretensions were excessive. He placed such an exorbitant price upon his new engine that it was practicably impossible to treat with him.

This was due to the fact—and it should not be lost sight of—that in respect of previous inventions which had been most fruitful in result, he had been imposed upon with the greatest audacity. Being unable to obtain therefrom the profits which he had a right to expect, his temper had become soured. He became suspicious, would give up nothing without knowing just what he was doing, impose conditions that were perhaps unacceptable, wanted his mere assertions accepted as sufficient guarantee, and in any case asked for such a large sum of money on account before condescending to furnish the test of practical experiment that his overtures could not be entertained.

In the first place he had offered the fulgurator to France, and made known the nature of it to the commission appointed to pass upon his proposition. The fulgurator was a sort of auto-propulsive engine, of peculiar construction, charged with an explosive composed of new substances and which only produced its effect under the action of a deflagrator that was also new.

When this engine, no matter in what way it was launched, exploded, not on striking the object aimed at, but several hundred yards from it, its action upon the atmospheric strata was so terrific that any construction, warship or floating battery, within a zone of twelve thousand square yards, would be blown to atoms. This was the principle of the shell launched by the Zalinski pneumatic gun which experiments had already been made at that epoch, but its results were multiplied at least a hundred-fold.

If, therefore, Thomas Roch's invention possessed this power, it assured the offensive and defensive superiority of his native country. But might not the inventor be exaggerating, notwithstanding that the tests of other engines he had conceived had proved incontestably that they were all he had claimed them to be? This, experiment could alone show, and it was precisely here where the rub came in. Roch would not agree to experiment until the millions at which he valued his fulgurator had first been paid to him.

It is certain that a sort of disequilibrium had then occurred in his mental faculties. It was felt that he was developing a condition of mind that would gradually lead to definite madness. No government could possibly condescend to treat with him under the conditions he imposed.

The French commission was compelled to break off all negotiations with him, and the newspapers, even those of the Radical Opposition, had to admit that it was difficult to follow up the affair.

In view of the excess of subjectivity which was unceasingly augmenting in the profoundly disturbed mind of Thomas Roch, no one will be surprised at the fact that the cord of patriotism gradually relaxed until it ceased to vibrate. For the honor of human nature be it said that Thomas Roch was by this time irresponsible for his actions. He preserved his whole consciousness only in so far as subjects bearing directly upon his invention were concerned. In this particular he had lost nothing of his mental power. But in all that related to the most ordinary details of existence his moral decrepitude increased daily and deprived him of complete responsibility for his acts.

Thomas Roch's invention having been refused by the commission, steps ought to have been taken to prevent him from offering it elsewhere. Nothing of the kind was done, and there a great mistake was made.

The inevitable was bound to happen, and it did. Under a growing irritability the sentiment of patriotism, which is the very essence of the citizen—who before belonging to himself belongs to his country—became extinct in the soul of the disappointed inventor. His thoughts turned towards other nations. He crossed the frontier, and forgetting the ineffaceable past, offered the fulgurator to Germany.

There, as soon as his exorbitant demands were made known, the government refused to receive his communication. Besides, it so happened that the military authorities were just then absorbed by the construction of a new ballistic engine, and imagined they could afford to ignore that of the French inventor.

As the result of this second rebuff Roch's anger became coupled with hatred—an instinctive hatred of humanity—especially after his pourparlers with the British Admiralty came to naught. The English being practical people, did not at first repulse Thomas Roch. They sounded him and tried to get round him; but Roch would listen to nothing. His secret was worth millions, and these millions he would have, or they would not have his secret. The Admiralty
at last declined to have anything more to do with him.

It was in these conditions, when his intellectual trouble was growing daily worse, that he made a last effort by approaching the American Government. That was about eighteen months before this story opens.

The Americans, being even more practical than the English, did not attempt to bargain for Roch's fulgurator, to which, in view of the French chemist's reputation, they attached exceptional importance. They rightly esteemed him a man of genius, and took the measures justified by his condition, prepared to indemnify him equitably later.

As Thomas Roch gave only too visible proofs of mental alienation, the Administration, in the very interest of his invention, judged it prudent to sequestrate him.

As is already known, he was not confined in a lunatic asylum, but was conveyed to Healthful House, which offered every guarantee for the proper treatment of his malady. Yet, though the most careful attention had been devoted to him, no improvement had manifested itself.

Thomas Roch, let it be again remarked--this point cannot be too often insisted upon--incapable though he was of comprehending and performing the ordinary acts and duties of life, recovered all his powers when the field of his discoveries was touched upon. He became animated, and spoke with the assurance of a man who knows whereof he is descanting, and an authority that carried conviction with it. In the heat of his eloquence he would describe the marvellous qualities of his fulgurator and the truly extraordinary effects it caused. As to the nature of the explosive and of the deflagrator, the elements of which the latter was composed, their manufacture, and the way in which they were employed, he preserved complete silence, and all attempts to worm the secret out of him remained ineffectual. Once or twice, during the height of the paroxysms to which he was occasionally subject, there had been reason to believe that his secret would escape him, and every precaution had been taken to note his slightest utterance. But Thomas Roch had each time disappointed his watchers. If he no longer preserved the sentiment of self-preservation, he at least knew how to preserve the secret of his discovery.

Pavilion No. 17 was situated in the middle of a garden that was surrounded by hedges, and here Roch was accustomed to take exercise under the surveillance of his guardian. This guardian lived in the same pavilion, slept in the same room with him, and kept constant watch upon him, never leaving him for an hour. He hung upon the lightest words uttered by the patient in the course of his hallucinations, which generally occurred in the intermediary state between sleeping and waking--watched and listened while he dreamed.

This guardian was known as Gaydon. Shortly after the sequestration of Thomas Roch, having learned that an attendant speaking French fluently was wanted, he had applied at Healthful House for the place, and had been engaged to look after the new inmate.

In reality the alleged Gaydon was a French engineer named Simon Hart, who for several years past had been connected with a manufactory of chemical products in New Jersey. Simon Hart was forty years of age. His high forehead was furrowed with the wrinkle that denoted the thinker, and his resolute bearing denoted energy combined with tenacity. Extremely well versed in the various questions relating to the perfecting of modern armaments, Hart knew everything that had been invented in the shape of explosives, of which there were over eleven hundred at that time, and was fully able to appreciate such a man as Thomas Roch. He firmly believed in the power of the latter's fulgurator, and had no doubt whatever that the inventor had conceived an engine that was capable of revolutionizing the condition of both offensive and defensive warfare on land and sea. He was aware that the demon of insanity had respected the man of science, and that in Roch's partially diseased brain the flame of genius still burned brightly. Then it occurred to him that if, during Roch's crises, his secret was revealed, this invention of a Frenchman would be seized upon by some other country to the detriment of France. Impelled by a spirit of patriotism, he made up his mind to offer himself as Thomas Roch's guardian, by passing himself off as an American thoroughly conversant with the French language, in order that if the inventor did at any time disclose his secret, France alone should benefit thereby. On pretext of returning to Europe, he resigned his position at the New Jersey manufactory, and changed his name so that none should know what had become of him.

Thus it came to pass that Simon Hart, alias Gaydon, had been an attendant at Healthful House for fifteen months. It required no little courage on the part of a man of his position and education to perform the menial and exacting duties of an insane man's attendant; but, as has been before remarked, he was actuated by a spirit of the purest and noblest patriotism. The idea of depriving Roch of the legitimate benefits due to the inventor, if he succeeded in learning his secret, never for an instant entered his mind.

He had kept the patient under the closest possible observation for fifteen months yet had not been able to learn anything from him, or worm out of him a single reply to his questions that was of the slightest value. But he had become more convinced than ever of the importance of Thomas Roch's discovery, and was extremely apprehensive lest the partial madness of the inventor should become general, or lest he should die during one of his paroxysms and carry his secret with him to the grave.

This was Simon Hart's position, and this the mission to which he had wholly devoted himself in the interest of
his native country.

However, notwithstanding his deceptions and troubles, Thomas Roch's physical health, thanks to his vigorous constitution, was not particularly affected. A man of medium height, with a large head, high, wide forehead, strongly-cut features, iron-gray hair and moustache, eyes generally haggard, but which became piercing and imperious when illuminated by his dominant idea, thin lips closely compressed, as though to prevent the escape of a word that could betray his secret--such was the inventor confined in one of the pavilions of Healthful House, probably unconscious of his sequestration, and confided to the surveillance of Simon Hart the engineer, become Gaydon the warder.

CHAPTER II.
COUNT D'ARTIGAS.

Just who was this Count d'Artigas? A Spaniard? So his name would appear to indicate. Yet on the stern of his schooner, in letters of gold, was the name Ebba, which is of pure Norwegian origin. And had you asked him the name of the captain of the Ebba, he would have replied, Spade, and would doubtless have added that that of the boatswain was Effrondat, and that of the ship's cook, Helim--all singularly dissimilar and indicating very different nationalities.

Could any plausible hypothesis be deducted from the type presented by Count d'Artigas? Not easily. If the color of his skin, his black hair, and the easy grace of his attitude denoted a Spanish origin, the ensemble of his person showed none of the racial characteristics peculiar to the natives of the Iberian peninsula.

He was a man of about forty-five years of age, about the average height, and robustly constituted. With his calm and haughty demeanor he resembled an Hindoo lord in whose blood might mingle that of some superb type of Malay. If he was not naturally of a cold temperament, he at least, with his imperious gestures and brevity of speech, endeavored to make it appear that he was. As to the language usually spoken by him and his crew, it was one of those idioms current in the islands of the Indian Ocean and the adjacent seas. Yet when his maritime excursions brought him to the coasts of the old or new world he spoke English with remarkable facility, and with so slight an accent as to scarcely betray his foreign origin.

None could have told anything about his past, nor even about his present life, nor from what source he derived his fortune,—obviously a large one, inasmuch as he was able to gratify his every whim and lived in the greatest luxury whenever he visited America,—nor where he resided when at home, nor where was the port from which his schooner hailed, and none would have ventured to question him upon any of these points so little disposed was he to be communicative. He was not the kind of man to give anything away or compromise himself in the slightest degree, even when interviewed by American reporters.

All that was known about him was what was published in the papers when the arrival of the Ebba was reported in some port, and particularly in the ports of the east coast of the United States, where the schooner was accustomed to put in at regular periods to lay in provisions and stores for a lengthy voyage. She would take on board not only flour, biscuits, preserves, fresh and dried meat, live stock, wines, beers, and spirits, but also clothing, household utensils, and objects of luxury—all of the finest quality and highest price, and which were paid for either in dollars, guineas, or other coins of various countries and denominations.

Consequently, if no one knew anything about the private life of Count d'Artigas, he was nevertheless very well known in the various ports of the United States from the Florida peninsula to New England.

It is therefore in no way surprising that the director of Healthful House should have felt greatly flattered by the Count's visit, and have received him with every mark of honor and respect.

It was the first time that the schooner Ebba had dropped anchor in the port of New-Berne, and no doubt a mere whim of her owner had brought him to the mouth of the Neuse. Otherwise why should he have come to such a place? Certainly not to lay in stores, for Pamlico Sound offered neither the resources nor facilities to be found in such ports as Boston, New York, Dover, Savannah, Wilmington in North Carolina, and Charleston in South Carolina. What could he have procured with his piastres and bank-notes in the small markets of New-Berne? This chief town of Craven County contained barely six thousand inhabitants. Its commerce consisted principally in the exportation of grain, pigs, furniture, and naval munitions. Besides, a few weeks previously, the schooner had loaded up for some destination which, as usual, was unknown.

Had this enigmatical personage then come solely for the purpose of visiting Healthful House? Very likely. There would have been nothing surprising in the fact, seeing that the establishment enjoyed a high and well-merited reputation.

Or perhaps the Count had been inspired by curiosity to meet Thomas Roch? This curiosity would have been legitimate and natural enough in view of the universal renown of the French inventor. Fancy--a mad genius who
claimed that his discoveries were destined to revolutionize the methods of modern military art!

As he had notified the director he would do, the Count d'Artigas presented himself in the afternoon at the door of Healthful House, accompanied by Captain Spade, the commander of the Ebba.

In conformity with orders given, both were admitted and conducted to the office of the director. The latter received his distinguished visitor with empressement, placed himself at his disposal, and intimated his intention of personally conducting him over the establishment, not being willing to concede to anybody else the honor of being his cicerone. The Count on his part was profuse in the expression of his thanks for the considerations extended to him.

They went over the common rooms and private habitations of the establishment, the director prattling unceasingly about the care with which the patients were tended—much better care, if he was to be believed, than they could possibly have had in the bosoms of their families—and priding himself upon the results achieved, and which had earned for the place its well-merited success.

The Count d'Artigas listened to his ceaseless chatter with apparent interest, probably in order the better to dissemble the real motive of his visit. However, after going the rounds for an hour he ventured to remark:

"Have you not among your patients, sir, one anent whom there was a great deal of talk some time ago, and whose presence here contributed in no small measure to attract public attention to Healthful House?"

"You refer to Thomas Roch, I presume, Count?" queried the director.

"Precisely—that Frenchman—that inventor—whose mental condition is said to be very precarious."

"Very precarious, Count, and happily so, perhaps! In my opinion humanity has nothing to gain by his discoveries, the application of which would increase the already too numerous means of destruction."

"You speak wisely, sir, and I entirely agree with you. Real progress does not lie in that direction, and I regard as inimical to society all those who seek to follow it. But has this inventor entirely lost the use of his intellectual faculties?"

"Entirely, no; save as regards the ordinary things of life. In this respect he no longer possesses either comprehension or responsibility. His genius as an inventor, however, remains intact; it has survived his moral degeneracy, and, had his insensate demands been complied with, I have no doubt he would have produced a new war engine—which the world can get along very well without."

"Very well without, as you say, sir," re-echoed the Count d'Artigas, and Captain Spade nodded approval.

"But you will be able to judge for yourself, Count, for here is the pavilion occupied by Thomas Roch. If his confinement is well justified from the point of view of public security he is none the less treated with all the consideration due to him and the attention which his condition necessitates. Besides, Healthful House is beyond the reach of indiscreet persons who might...."

The director completed the phrase with a significant motion of his head—which brought an imperceptible smile to the lips of the stranger.

"But," asked the Count, "is Thomas Roch never left alone?"

"Never, Count, never. He has a permanent attendant in whom we have implicit confidence, who speaks his language and keeps the closest possible watch upon him. If in some way or other some indication relative to his discovery were to escape him, it would be immediately noted down and its value would be passed upon by those competent to judge."

Here the Count d'Artigas stole a rapid and meaning glance at Captain Spade, who responded with a gesture which said plainly enough: "I understand." And had any one observed the captain during the visit, they could not have failed to remark that he examined with the greatest minuteness that portion of the park surrounding Pavilion No. 17, and the different paths leading to the latter—probably in view of some prearranged scheme.

The garden of the pavilion was near the high wall surrounding the property, from the foot of which on the other side the hill sloped gently to the right bank of the Neuse.

The pavilion itself was a one-story building surmounted by a terrace in the Italian style. It contained two rooms and an ante-room with strongly-barred windows. On each side and in rear of the habitation were clusters of fine trees, which were then in full leaf. In front was a cool, green velvety lawn, ornamented with shrubs and brilliantly tinted flowers. The whole garden extended over about half an acre, and was reserved exclusively for the use of Thomas Roch, who was free to wander about it at pleasure under the surveillance of his guardian.

When the Count d'Artigas, Captain Spade, and the director entered the garden, the first person they saw was the warder Gaydon, standing at the door of the pavilion. Unnoticed by the director the Count d'Artigas eyed the attendant with singular persistency.

It was not the first time that strangers had come to see the occupant of Pavilion No. 17, for the French inventor was justly regarded as the most interesting inmate of Healthful House. Nevertheless, Gaydon's attention was attracted by the originality of the type presented by the two visitors, of whose nationality he was ignorant. If the
name of the Count d'Artigas was not unfamiliar to him, he had never had occasion to meet that wealthy gentleman
during the latter's sojourn in the eastern ports. He therefore had no idea as to who the Count was. Neither was he
aware that the schooner Ebba was then anchored at the entrance to the Neuse, at the foot of the hill upon which
Healthful House was situated.

"Gaydon," demanded the director, "where is Thomas Roch?"
"Yonder," replied the warder, pointing to a man who was walking meditatively under the trees in rear of the
pavilion.

"The Count d'Artigas has been authorized to visit Healthful House," the director explained; "and does not wish
to go away without having seen Thomas Roch, who was lately the subject of a good deal too much discussion."

"And who would be talked about a great deal more," added the Count, "had the Federal Government not taken
the precaution to confine him in this establishment."

"A necessary precaution, Count."

"Necessary, as you observe, Mr. Director. It is better for the peace of the world that his secret should die with
him."

After having glanced at the Count d'Artigas, Gaydon had not uttered a word; but preceding the two strangers he
walked towards the clump of trees where the inventor was pacing back and forth.

Thomas Roch paid no attention to them. He appeared to be oblivious of their presence.

Meanwhile, Captain Spade, while being careful not to excite suspicion, had been minutely examining the
immediate surroundings of the pavilion and the end of the park in which it was situated. From the top of the sloping
alleys he could easily distinguish the peak of a mast which showed above the wall of the park. He recognized the
peak at a glance as being that of the Ella, and knew therefore that the wall at this part skirted the right bank of the
Neuse.

The Count d'Artigas' whole attention was concentrated upon the French inventor. The latter's health appeared to
have suffered in no way from his eighteen months' confinement; but his queer attitude, his incoherent gestures, his
haggard eye, and his indifference to what was passing around him testified only too plainly to the degeneration of
his mental faculties.

At length Thomas Roch dropped into a seat and with the end of a switch traced in the sand of the alley the
outline of a fortification. Then kneeling down he made a number of little mounds that were evidently intended to
represent bastions. He next plucked some leaves from a neighboring tree and stuck them in the mounds like so many
tiny flags. All this was done with the utmost seriousness and without any attention whatever being paid to the
onlookers.

It was the amusement of a child, but a child would have lacked this characteristic gravity.

"Is he then absolutely mad?" demanded the Count d'Artigas, who in spite of his habitual impassibility appeared
to be somewhat disappointed.

"I warned you, Count, that nothing could be obtained from him."
"Couldn't he at least pay some attention to us?"
"It would perhaps be difficult to induce him to do so."
Then turning to the attendant:
"Speak to him, Gaydon. Perhaps he will answer you."
"Oh! he'll answer me right enough, sir, never fear," replied Gaydon.
He went up to the inventor and touching him on the shoulder, said gently: "Thomas Roch!"

The latter raised his head, and of the persons present he doubtless saw but his keeper, though Captain Spade had
come up and all formed a circle about him.

"Thomas Roch," continued Gaydon, speaking in English, "here are some visitors to see you. They are interested
in your health—in your work."

The last word alone seemed to rouse him from his indifference.

"My work?" he replied, also in English, which he spoke like a native.

Then taking a pebble between his index finger and bent thumb, as a boy plays at marbles, he projected it against
one of the little sand-heaps. It scattered, and he jumped for joy.

"Blown to pieces! The bastion is blown to pieces! My explosive has destroyed everything at one blow!" he
shouted, the light of triumph flashing in his eyes.

"You see," said the director, addressing the Count d'Artigas. "The idea of his invention never leaves him."
"And it will die with him," affirmed the attendant.

"Couldn't you, Gaydon, get him to talk about his fulgurator?" asked his chief.
"I will try, if you order me to do so, sir."

"Well, I do order you, for I think it might interest the Count d'Artigas."
"Certainly," assented the Count, whose physiognomy betrayed no sign of the sentiments which were agitating him.

"I ought to warn you that I risk bringing on another fit," observed Gaydon.

"You can drop the conversation when you consider it prudent. Tell Thomas Roch that a foreigner wishes to negotiate with him for the purchase of his fulgurator."

"But are you not afraid he may give his secret away?" questioned the Count.

He spoke with such vivacity that Gaydon could not restrain a glance of distrust, which, however, did not appear to disturb the equanimity of that impenetrable nobleman.

"No fear of that," said the warder. "No promise would induce him to divulge his secret. Until the millions he demands are counted into his hand he will remain as mute as a stone."

"I don't happen to be carrying those millions about me," remarked the Count quietly.

Gaydon again touched Roch on the shoulder and repeated:

"Thomas Roch, here are some foreigners who are anxious to acquire your invention."

The madman started.

"My invention?" he cried. "My deflagrator?"

And his growing animation plainly indicated the imminence of the fit that Gaydon had been apprehensive about, and which questions of this character invariably brought on.

"How much will you give me for it--how much?" continued Roch. "How much--how much?"

"Ten million dollars," replied Gaydon.

"Ten millions! Ten millions! A fulgurator ten million times more powerful than anything hitherto invented! Ten millions for an autopropulsive projectile which, when it explodes, destroys everything in sight within a radius of over twelve thousand square yards! Ten millions for the only deflagrator that can provoke its explosion! Why, all the wealth of the world wouldn't suffice to purchase the secret of my engine, and rather than sell it at such a price I would cut my tongue in half with my teeth. Ten millions, when it is worth a billion--a billion--a billion!"

It was clear that Roch had lost all notion of things, and had Gaydon offered him ten billions the madman would have replied in exactly the same manner.

The Count d'Artigas and Captain Spade had not taken their eyes off him. The Count was impassible as usual, though his brow had darkened, but the captain shook his head in a manner that implied plainly: "Decidedly there is nothing to hope from this poor devil!"

After his outburst Roch fled across the garden crying hoarsely:

"Billions! Billions!"

Gaydon turned to the director and remarked:

"I told you how it would be."

Then he rushed after his patient, caught him by the arm, and led him, without any attempt at resistance, into the pavilion and closed the door.

The Count d'Artigas remained alone with the director, Captain Spade having strolled off again in the direction of the wall at the bottom of the park.

"You see I was not guilty of exaggeration, Count," said the director. "It is obvious to every one that Thomas Roch is becoming daily worse. In my opinion his case is a hopeless one. If all the money he asks for were offered to him, nothing could be got from him."

"Very likely," replied the Count, "still, if his pecuniary demands are supremely absurd, he has none the less invented an engine the power of which is infinite, one might say."

"That is the opinion expressed by competent persons, Count. But what he has discovered will ere long be lost with himself in one of these fits which are becoming more frequent and intense. Very soon even the motive of interest, the only sentiment that appears to have survived in his mind, will become extinct."

"Mayhap the sentiment of hatred will remain, though," muttered the Count, as Spade joined them at the garden gate.

CHAPTER III.

KIDNAPPED.

Half an hour later the Count d'Artigas and Captain Spade were following the beech-lined road that separated the Healthful House estate from the right bank of the Neuse. Both had taken leave of the director, the latter declaring himself greatly honored by their visit, and the former thanking him warmly for his courteous reception. A hundred-dollar bill left as a tip for the staff of the establishment had certainly not belied the Count's reputation for generosity. He was--there could be no doubt about it--a foreigner of the highest distinction, if distinction be measured by
generosity.
Issuing by the gate at the main entrance to Healthful House, they had skirted the wall that surrounded the property, and which was high enough to preclude the possibility of climbing it. Not a word passed between them for some time; the Count was deep in thought and Captain Spade was not in the habit of addressing him without being first spoken to.

At last when they stood beneath the rear wall behind which, though it was not visible, the Count knew Pavilion No. 17 was situated, he said:

"You managed, I presume, to thoroughly explore the place, and are acquainted with every detail of it?"
"Certainly, Count" replied Captain Spade, emphasizing the title.
"You are perfectly sure about it?"
"Perfectly. I could go through the park with my eyes shut. If you still persist in carrying out your scheme the pavilion can be easily reached."
"I do persist, Spade."
"Notwithstanding Thomas Roch's mental condition?"
"Notwithstanding his condition; and if we succeed in carrying him off----"
"That is my affair. When night comes on I undertake to enter the park of Healthful House, and then the pavilion garden without being seen by anybody."
"By the entrance gate?"
"No, on this side."
"Yes, but on this side there is the wall, and if you succeed in climbing it, how are you going to get over it again with Thomas Roch? What if the madman cries out--what if he should resist--what if his keeper gives the alarm?"
"Don't worry yourself in the least about that. We have only got to go in and come out by this door."

Captain Spade pointed to a narrow door let into the wall a few paces distant, and which was doubtless used by the staff of the establishment when they had occasion to go out by the river.
"That is the way I propose to go in. It's much easier than scaling the wall with a ladder."
"But the door is closed."
"It will open."
"Has it no bolts?"
"Yes, but I shot them back while we were strolling about, and the director didn't notice what I had done."
"How are you going to open it?" queried the Count, going to the door.
"Here is the key," replied Spade, producing it.

He had withdrawn it from the lock, where it happened to be, when he had unbolted the door.
"Capital!" exclaimed the Count. "It couldn't be better. The business will be easier than I expected. Let us get back to the schooner. At eight o'clock one of the boats will put you ashore with five men."
"Yes, five men will do," said Captain Spade. "There will be enough of them to effect our object even if the keeper is aroused and it becomes necessary to put him out of the way."
"Put him out of the way--well, if it becomes absolutely necessary of course you must, but it would be better to seize him too and bring him aboard the Ebba Who knows but what he has already learned a part of Roch's secret?"
"True."
"Besides, Thomas Roch is used to him, and I don't propose to make him change his habits in any way."

This observation was accompanied by such a significant smile that Captain Spade could entertain no doubt as to the rôle reserved for the warder of Healthful House.

The plan to kidnap them both was thus settled, and appeared to have every chance of being successful; unless during the couple of hours of daylight that yet remained it was noticed that the key of the door had been stolen and the bolts drawn back, Captain Spade and his men could at least count upon being able to enter the park, and the rest, the captain affirmed, would be easy enough.

Thomas Roch was the only patient in the establishment isolated and kept under special surveillance. All the other invalids lived in the main building, or occupied pavilions in the front of the park. The plan was to try and seize Roch and Gaydon separately and bind and gag them before they could cry out.

The Count d'Artigas and his companion wended their way to a creek where one of the Ebba's boats awaited them. The schooner was anchored two cable lengths from the shore, her sails neatly rolled upon her yards, which were squared as neatly as those of a pleasure yacht or of a man-of-war. At the peak of the mainmast a narrow red pennant was gently swayed by the wind, which came in fitful puffs from the east.

The Count and the captain jumped into the boat and a few strokes of the four oars brought them alongside of the schooner. They climbed on deck and going forward to the jib-boom, leaned over the starboard bulwark and gazed at an object that floated on the water a few strokes ahead of the vessel. It was a small buoy that was rocked by the
ripple of the ebbing tide.

Twilight gradually set in, and the outline of New-Berne on the left bank of the sinuous Neuse became more and more indistinct until it disappeared in the deepening shades of night. A mist set in from the sea, but though it obscured the moon it brought no sign of rain. The lights gleamed out one by one in the houses of the town. The fishing smacks came slowly up the river to their anchorage, impelled by the oars of their crews which struck the water with sharp, rhythmical strokes, and with their sails distended on the chance of catching an occasional puff of the dropping wind to help them along. A couple of steamers passed, sending up volumes of black smoke and myriads of sparks from their double stacks, and lashing the water into foam with their powerful paddles.

At eight o'clock the Count d'Artigas appeared on the schooner's deck accompanied by a man about fifty years of age, to whom he remarked:

"It is time to go, Serko."

"Very well, I will tell Spade," replied Serko.

At that moment the captain joined them.

"You had better get ready to go," said the Count.

"All is ready."

"Be careful to prevent any alarm being given, and arrange matters so that no one will for a minute suspect that Thomas Roch and his keeper have been brought on board the Ebba."

"They wouldn't find them if they came to look for them," observed Serko, shrugging his shoulders and laughing heartily as though he had perpetrated a huge joke.

"Nevertheless, it is better not to arouse their suspicion," said d'Artigas.

The boat was lowered, and Captain Spade and five sailors took their places in it. Four of the latter got out the oars. The boatswain, Effrondat, who was to remain in charge of the boat, went to the stern beside Captain Spade and took the tiller.

"Good luck, Spade," said Serko with a smile, "and don't make more noise about it than if you were a gallant carrying off his lady-love."

"I won't--unless that Gaydon chap--"

"We must have both Roch and Gaydon," insisted the Count d'Artigas.

"That is understood," replied Spade.

The boat pushed off, and the sailors on the deck of the schooner watched it till it was lost to sight in the darkness.

Pending its return, no preparations for the Ebba's departure were made. Perhaps there was no intention of quitting the port after the men had been kidnapped. Besides, how could the vessel have reached the open sea? Not a breath of air was now stirring, and in half an hour the tide would be setting in again, and rising strongly and rapidly for several miles above New-Berne.

Anchored, as has already been said, a couple of cable-lengths from the shore, the Ebba might have been brought much nearer to it, for the water was deep enough, and this would have facilitated the task of the kidnappers when they returned from their expedition. If, however, the Count d'Artigas preferred to let the vessel stay where she was, he probably had his reasons.

Not a soul was in sight on the bank, and the road, with its borders of beech trees that skirted the wall of Healthful House estate, was equally deserted. The boat was made fast to the shore. Then Captain Spade and his four sailors landed, leaving the boatswain in charge, and disappeared amid the trees.

When they reached the wall Captain Spade stopped and the sailors drew up on each side of the doorway. The captain had only to turn the key in the lock and push the door, unless one of the servants, noticing that the door was not secured as usual, had bolted it. In this event their task would be an extremely difficult one, even if they succeeded in scaling the high wall.

The captain put his ear to the key-hole and listened.

Not a sound was to be heard in the park. Not even a leaf was rustling in the branches of the beeches under which they were standing. The surrounding country was wrapt in the profoundest silence.

Captain Spade drew the key from his pocket, inserted it in the lock and turned it noiselessly. Then he cautiously pushed the door, which opened inward.

Things were, then, just as he had left them, and no one had noticed the theft of the key.

After assuring himself that nobody happened to be in the neighborhood of the pavilion the captain entered, followed by his men. The door was left wide open, so that they could beat a hurried and uninterrupted retreat in case of necessity. The trees and bushes in this shady part of the park were very thick, and it was so dark that it would not have been easy to distinguish the pavilion had not a light shone brightly in one of the windows.

No doubt this was the window of the room occupied by Roch and his guardian, Gaydon, seeing that the latter
never left the patient placed in his charge either by night or day. Captain Spade had expected to find him there.

The party approached cautiously, taking the utmost precaution to avoid kicking a pebble or stepping on a twig, the noise of which might have revealed their presence. In this way they reached the door of the pavilion near which was the curtained window of the room in which the light was burning.

But if the door was locked, how were they going to get in? Captain Spade must have asked himself. He had no key, and to attempt to effect an entrance through the window would be hazardous, for, unless Gaydon could be prevented from giving the alarm, he would rouse the whole establishment.

There was no help for it, however. The essential was to get possession of Roch. If they could kidnap Gaydon, too, in conformity with the intentions of the Count d'Artigas, so much the better. If not--

Captain Spade crept stealthily to the window, and standing on tiptoe, looked in. Through an aperture in the curtain he could see all over the room.

Gaydon was standing beside Thomas Roch, who had not yet recovered from the fit with which he had been attacked during the Count d'Artigas' visit. His condition necessitated special attention, and the warder was ministering to the patient under the direction of a third person.

The latter was one of the doctors attached to Healthful House, and had been at once sent to the pavilion by the director when Roch's paroxysm came on. His presence of course rendered the situation more complicated and the work of the kidnappers more difficult.

Roch, fully dressed, was extended upon a sofa. He was now fairly calm. The paroxysm, which was abating, would be followed by several hours of torpor and exhaustion.

Just as Captain Spade peeped through the window the doctor was making preparations to leave. The Captain heard him say to Gaydon that his (the doctor's) presence was not likely to be required any more that night, and that there was nothing to be done beyond following the instructions he had given.

The doctor then walked towards the door, which, it will be remembered, was close to the window in front of which Spade and his men were standing. If they remained where they were they could not fail to be seen, not only by the doctor, but by the warder, who was accompanying him to the door.

Before they made their appearance, however, the sailors, at a sign from their chief, had dispersed and hidden themselves behind the bushes, while Spade himself crouched in the shadow beneath the window. Luckily Gaydon had not brought the lamp with him, so that the captain was in no danger of being seen.

As he was about to take leave of Gaydon, the doctor stopped on the step and remarked:

"This is one of the worst attacks our patient has had. One or two more like that and he will lose the little reason he still possesses."

"Just so," said Gaydon. "I wonder that the director doesn't prohibit all visitors from entering the pavilion. Roch owes his present attack to a Count d'Artigas, for whose amusement harmful questions were put to him."

"I will call the director's attention to the matter," responded the doctor.

He then descended the steps and Gaydon, leaving the door of the pavilion ajar, accompanied him to the end of the path.

When they had gone Captain Spade stood up, and his men rejoined him.

Had they not better profit by the chance thus unexpectedly afforded them to enter the room and secure Roch, who was in a semi-comatose condition, and then await Gaydon's return, and seize the warder as he entered?

This would have involved considerable risk. Gaydon, at a glance, would perceive that his patient was missing and raise an alarm; the doctor would come running back; the whole staff of Healthful House would turn out, and Spade would not have time to escape with his precious prisoner and lock the door in the wall after him.

He did not have much chance to deliberate about it, for the warder was heard returning along the gravel path. Spade decided that the best thing to be done was to spring upon him as he passed and stifle his cries and overpower him before he could attempt to offer any resistance. The carrying off of the mad inventor would be easy enough, inasmuch as he was unconscious, and could not raise a finger to help himself.

Gaydon came round a clump of bushes and approached the entrance to the pavilion. As he raised his foot to mount the steps the four sailors sprang upon him, bore him backwards to the ground, and had gagged him, securely bound him hand and foot, and bandaged his eyes before he began to realize what had happened.

Two of the men then kept guard over him, while Captain Spade and the others entered the house.

As the captain had surmised, Thomas Roch had sunk into such a torpor that he could have heard nothing of what had been going on outside. Reclining at full length, with his eyes closed, he might have been taken for a dead man but for his heavy breathing. There was no need either to bind or gag him. One man took him by the head and another by the feet and started off with him to the schooner.

Captain Spade was the last to quit the house after extinguishing the lamp and closing the door behind him. In this way there was no reason to suppose that the inmates would be missed before morning.
Gaydon was carried off in the same way as Thomas Roch had been. The two remaining sailors lifted him and bore him quietly but rapidly down the path to the door in the wall. The park was pitch dark. Not even a glimmer of the lights in the windows of Healthful House could be seen through the thick foliage.

Arrived at the wall, Spade, who had led the way, stepped aside to allow the sailors with their burdens to pass through, then followed and closed and locked the door. He put the key in his pocket, intending to throw it into the Neuse as soon as they were safely on board the schooner.

There was no one on the road, nor on the bank of the river.

The party made for the boat, and found that Effrondat, the boatswain, had made all ready to receive them.

Thomas Roch and Gaydon were laid in the bottom of the boat, and the sailors again took their places at the oars.

"Hurry up, Effrondat, and cast off the painter," ordered the captain.

The boatswain obeyed, and pushed the boat off with his foot as he scrambled in.

The men bent to their oars and rowed rapidly to the schooner, which was easily distinguishable, having hung out a light at her mizzenmast head.

In two minutes they were alongside.

The Count d'Artigas was leaning on the bulwarks by the gangway.

"All right, Spade?" he questioned.

"Yes, sir, all right!"
"Both of them?"
"Both the madman and his keeper."
"Doesn't anybody know about it up at Healthful House?"
"Not a soul."

It was not likely that Gaydon, whose eyes and ears were bandaged, but who preserved all his sang-froid, could have recognized the voices of the Count d'Artigas and Captain Spade. Nor did he have the chance to. No attempt was immediately made to hoist him on board. He had been lying in the bottom of the boat alongside the schooner for fully half an hour, he calculated, before he felt himself lifted, and then lowered, doubtless to the bottom of the hold.

The kidnapping having been accomplished it would seem that it only remained for the Ebba to weigh anchor, descend the estuary and make her way out to sea through Pamlico Sound. Yet no preparations for departure were made.

Was it not dangerous to stay where they were after their daring raid? Had the Count d'Artigas hidden his prisoners so securely as to preclude the possibility of their being discovered if the Ebba, whose presence in proximity to Healthful House could not fail to excite suspicion, received a visit from the New-Berne police?

However this might have been, an hour after the return of the expedition, every soul on board save the watch—the Count d'Artigas, Serko, and Captain Spade in their respective cabins, and the crew in the fore-castle, were sound asleep.

CHAPTER IV.
THE SCHOOENER EBBBA.

It was not till the next morning, and then very leisurely, that the Ebba began to make preparations for her departure. From the extremity of New-Berne quay the crew might have been seen holystoning the deck, after which they loosened the reef lines, under the direction of Effrondat, the boatswain, hoisted in the boats and cleared the halyards.

At eight o'clock the Count d'Artigas had not yet appeared on deck. His companion, Serko the engineer, as he was called on board, had not quitted his cabin. Captain Spade was strolling quietly about giving orders.

The Ebba would have made a splendid racing yacht, though she had never participated in any of the yacht races either on the North American or British coasts. The height of her masts, the extent of the canvas she carried, her shapely, raking hull, denoted her to be a craft of great speed, and her general lines showed that she was also built to weather the roughest gales at sea. In a favorable wind she would probably make twelve knots an hour.

Notwithstanding these advantages, however, she must in a dead calm necessarily suffer from the same disadvantages as other sailing vessels, and it might have been supposed that the Count d'Artigas would have preferred a steam-yacht with which he could have gone anywhere, at any time, in any weather. But apparently he was satisfied to stick to the old method, even when he made his long trips across the Atlantic.

On this particular morning the wind was blowing gently from the west, which was very favorable to the Ebba, and would enable her to stand straight out of the Neuse, across Pamlico Sound, and through one of the inlets that led to the open sea.

At ten o'clock the Ebba was still rocking lazily at anchor, her stem up stream and her cable tautened by the
rapidly ebbing tide. The small buoy that on the previous evening had been moored near the schooner was no longer to be seen, and had doubtless been hoisted in.

Suddenly a gun boomed out and a slight wreath of white smoke arose from the battery. It was answered by other reports from the guns on the chain of islands along the coast.

"Guns barking," he said laconically.
"We expected it," replied Serko, shrugging his shoulders. "They are signals to close the passes."
"What has that to do with us?" asked the Count d'Artigas quietly.
"Nothing at all," said the engineer.

They all, of course, knew that the alarm-guns indicated that the disappearance of Thomas Roch and the warder Gaydon from Healthful House had been discovered.

At daybreak the doctor had gone to Pavilion No. 17 to see how his patient had passed the night, and had found no one there. He immediately notified the director, who had the grounds thoroughly searched. It was then discovered that the door in rear of the park was unbolted, and that, though locked, the key had been taken away. It was evident that Roch and his attendant had been carried out that way. But who were the kidnappers? No one could possibly imagine. All that could be ascertained was that at half-past seven on the previous night one of the doctors had attended Thomas Roch, who was suffering from one of his fits, and that when the medical man had left him the invalid was in an unconscious condition. What had happened after the doctor took leave of Gaydon at the end of the garden-path could not even be conjectured.

The news of the disappearance was telegraphed to New Berne, and thence to Raleigh. On receipt of it the Governor had instantly wired orders that no vessel was to be allowed to quit Pamlico Sound without having been first subjected to a most rigorous search. Another dispatch ordered the cruiser Falcon, which was stationed in the port, to carry out the Governor's instructions in this respect. At the same time measures were taken to keep a strict lookout in every town and village in the State.

The Count d'Artigas could see the Falcon, which was a couple of miles away to the east in the estuary, getting steam up and making hurried preparations to carry out her mission. It would take at least an hour before the warship could be got ready to steam out, and the schooner might by that time have gained a good start.

"Shall I weigh anchor?" demanded Captain Spade.
"Yes, as we have a fair wind; but you can take your time about it," replied the Count d'Artigas.
"The passes of Pamlico Sound will be under observation," observed Engineer Serko, "and no vessel will be able to get out without receiving a visit from gentlemen as inquisitive as they will be indiscreet."
"Never mind, get under way all the same," ordered the Count. "When the officers of the cruiser or the Custom-House officers have been over the Ebba the embargo will be raised. I shall be indeed surprised if we are not allowed to go about our business."

"With a thousand pardons for the liberty taken, and best wishes for a good voyage and speedy return," chuckled Engineer Serko, following the phrase with a loud and prolonged laugh.

When the news was received at New-Berne, the authorities at first were puzzled to know whether the missing inventor and his keeper had fled or been carried off. As, however, Roch's flight could not have taken place without the connivance of Gaydon, this supposition was speedily abandoned. In the opinion of the director and management of Healthful House the warder was absolutely above suspicion. They must both, then, have been kidnapped.

It can easily be imagined what a sensation the news caused in the town. What! the French inventor who had been so closely guarded had disappeared, and with him the secret of the wonderful fulgurator that nobody had been able to worm out of him? Might not the most serious consequences follow? Might not the discovery of the new engine be lost to America forever? If the daring act had been perpetrated on behalf of another nation, might not that nation, having Thomas Roch in its power, be eventually able to extract from him what the Federal Government had vainly endeavored to obtain? And was it reasonable, was it permissible, to suppose for an instant that he had been carried off for the benefit of a private individual?

Certainly not, was the emphatic reply to the latter question, which was too ridiculous to be entertained. Therefore the whole power of the State was employed in an effort to recover the inventor. In every county of North Carolina a special surveillance was organized on every road and at every railroad station, and every house in town and country was searched. Every port from Wilmington to Norfolk was closed, and no craft of any description could leave without being thoroughly overhauled. Not only the cruiser Falcon, but every available cutter and launch was sent out with orders to patrol Pamlico Sound and board yachts, merchant vessels and fishing smacks indiscriminately whether anchored or not and search them down to the keelson.

Still the crew of the Ebba prepared calmly to weigh anchor, and the Count d'Artigas did not appear to be in the least concerned at the orders of the authorities and at the consequences that would ensue, if Thomas Roch and his
keeper, Gaydon, were found on board.

At last all was ready, the crew manned the capstan bars, the sails were hoisted, and the schooner glided gracefully through the water towards the Sound.

Twenty miles from New-Berne the estuary curves abruptly and shoots off towards the northwest for about the same distance, gradually widening until it empties itself into Pamlico Sound.

The latter is a vast expanse about seventy miles across from Sivan Island to Roanoke. On the seaward side stretches a chain of long and narrow islands, forming a natural breakwater north and south from Cape Lookout to Cape Hatteras and from the latter to Cape Henry, near Norfolk City, in Virginia.

Numerous beacons on the islands and islets form an easy guide for vessels at night seeking refuge from the Atlantic gales, and once inside the chain they are certain of finding plenty of good anchoring grounds.

Several passes afford an outlet from the Sound to the sea. Beyond Sivan Island lighthouse is Ocracoke inlet, and next is the inlet of Hatteras. There are also three others known as Logger Head inlet, New inlet, and Oregon inlet. The Ocracoke was the one nearest the Ebba, and she could make it without tacking, but the Falcon was searching all vessels that passed through. This did not, however, make any particular difference, for by this time all the passes, upon which the guns of the forts had been trained, were guarded by government vessels.

The Ebba, therefore, kept on her way, neither trying to avoid nor offering to approach the searchers. She seemed to be merely a pleasure-yacht out for a morning sail.

No attempt had up to that time been made to accost her. Was she, then, specially privileged, and to be spared the bother of being searched? Was the Count d'Artigas considered too high and mighty a personage to be thus molested, and delayed even for an hour? It was unlikely, for though he was regarded as a distinguished foreigner who lived the life of luxury enjoyed by the favored of fortune, no one, as a matter of fact, knew who he was, nor whence he came, nor whither he was going.

The schooner sped gracefully over the calm waters of the sound, her flag—a gold crescent in the angle of a red field—streaming proudly in the breeze. Count d'Artigas was cosily ensconced in a basket-work chair on the after-deck, conversing with Engineer Serko and Captain Spade.

"They don't seem in a hurry to board us," remarked Serko.

"They can come whenever they think proper," said the Count in a tone of supreme indifference.

"No doubt they are waiting for us at the entrance to the inlet," suggested Captain Spade.

"Let them wait," grunted the wealthy nobleman.

Then he relapsed into his customary unconcerned impassibility.

Captain Spade's hypothesis was doubtless correct. The Falcon had as yet made no move towards the schooner, but would almost certainly do so as soon as the latter reached the inlet, and the Count would have to submit to a search of his vessel if he wished to reach the open sea.

How was it then that he manifested such extraordinary unconcern? Were Thomas Roch and Gaydon so safely hidden that their hiding-place could not possibly be discovered?

The thing was possible, but perhaps the Count d'Artigas would not have been quite so confident had he been aware that the Ebba had been specially signalled to the warship and revenue cutters as a suspect.

The Count's visit to Healthful House on the previous day had now attracted particular attention to him and his schooner. Evidently, at the time, the director could have had no reason to suspect the motive of his visit. But a few hours later, Thomas Roch and his keeper had been carried off. No one else from outside had been near the pavilion that day. It was admitted that it would have been an easy matter for the Count's companion, while the former distracted the director's attention, to push back the bolts of the door in the wall and steal the key. Then the fact that the Ebba was anchored in rear of, and only a few hundred yards from, the estate, was in itself suspicious. Nothing would have been easier for the desperadoes than to enter by the door, surprise their victims, and carry them off to the schooner.

These suspicions, neither the director nor the personnel of the establishment had at first liked to give expression to, but when the Ebba was seen to weigh anchor and head for the open sea, they appeared to be confirmed.

They were communicated to the authorities of New-Berne, who immediately ordered the commander of the Falcon to intercept the schooner, to search her minutely high and low, and from stem to stern, and on no account to let her proceed, unless he was absolutely certain that Roch and Gaydon were not on board.

Assuredly the Count d'Artigas could have had no idea that his vessel was the object of such stringent orders; but even if he had, it is questionable whether this superbly haughty and disdainful nobleman would have manifested any particular anxiety.

Towards three o'clock, the warship which was cruising before the inlet, after having sent search parties aboard a few fishing-smacks, suddenly manoeuvred to the entrance of the pass, and awaited the approaching schooner. The latter surely did not imagine that she could force a passage in spite of the cruiser, or escape from a vessel propelled
by steam. Besides, had she attempted such a foolhardy trick, a couple of shots from the Falcon's guns would speedily have constrained her to lay to.

Presently a boat, manned by two officers and ten sailors, put off from the cruiser and rowed towards the Ebba. When they were only about half a cable's length off, one of the men rose and waved a flag.

"That's a signal to stop," said Engineer Serko.

"Precisely," remarked the Count d'Artigas.

"We shall have to lay to."

"Then lay to."

Captain Spade went forward and gave the necessary orders, and in a few minutes the vessel slackened speed, and was soon merely drifting with the tide.

The Falcon's boat pulled alongside, and a man in the bows held on to her with a boat-hook. The gangway was lowered by a couple of hands on the schooner, and the two officers, followed by eight of their men, climbed on deck.

They found the crew of the Ebba drawn up in line on the forecastle.

The officer in command of the boarding-party--a first lieutenant--advanced towards the owner of the schooner, and the following questions and answers were exchanged:

"This schooner belongs to the Count d'Artigas, to whom, I presume, I have the honor of speaking?"

"Yes, sir."

"What is her name?"

"The Ebba."

"She is commanded by?--"

"Captain Spade."

"What is his nationality?"

"Hindo-Malay."

The officer scrutinized the schooner's flag, while the Count d'Artigas added:

"Will you be good enough to tell me, sir, to what circumstance I owe the pleasure of your visit on board my vessel?"

"Orders have been received," replied the officer, "to search every vessel now anchored in Pamlico Sound, or which attempts to leave it."

He did not deem it necessary to insist upon this point since the Ebba, above every other, was to be subjected to the bother of a rigorous examination.

"You, of course, sir, have no intention of refusing me permission to go over your schooner?"

"Assuredly not, sir. My vessel is at your disposal from peaks to bilges. Only I should like to know why all the vessels which happen to be in Pamlico Sound to-day are being subjected to this formality."

"I see no reason why you should not be informed, Monsieur the Count," replied the officer. "The governor of North Carolina has been apprised that Healthful House has been broken into and two persons kidnapped, and the authorities merely wish to satisfy themselves that the persons carried off have not been embarked during the night."

"Is it possible?" exclaimed the Count, feigning surprise. "And who are the persons who have thus disappeared from Healthful House?"

"An inventor--a madman--and his keeper."

"A madman, sir? Do you, may I ask, refer to the Frenchman, Thomas Roch?"

"The same."

"The Thomas Roch whom I saw yesterday during my visit to the establishment--whom I questioned in presence of the director--who was seized with a violent paroxysm just as Captain Spade and I were leaving?"

The officer observed the stranger with the keenest attention, in an effort to surprise anything suspicious in his attitude or remarks.

"It is incredible!" added the Count, as though he had just heard about the outrage for the first time.

"I can easily understand, sir, how uneasy the authorities must be," he went on, "in view of Thomas Roch's personality, and I cannot but approve of the measures taken. I need hardly say that neither the French inventor nor his keeper is on board the Ebba. However, you can assure yourself of the fact by examining the schooner as minutely as you desire. Captain Spade, show these gentlemen over the vessel."

Then saluting the lieutenant of the Falcon coldly, the Count d'Artigas sank into his deck-chair again and replaced his cigar between his lips, while the two officers and eight sailors, conducted by Captain Spade, began their search.

In the first place they descended the main hatchway to the after saloon--a luxuriously-appointed place, filled with art objects of great value, hung with rich tapestries and hangings, and wainscotted with costly woods.

It goes without saying that this and the adjoining cabins were searched with a care that could not have been
surpassed by the most experienced detectives. Moreover, Captain Spade assisted them by every means in his power, obviously anxious that they should not preserve the slightest suspicion of the Ebba's owner.

After the grand saloon and cabins, the elegant dining-saloon was visited. Then the cook's galley, Captain Spade's cabin, and the quarters of the crew in the forecastle were overhauled, but no sign of Thomas Roch or Gaydon was to be seen.

Next, every inch of the hold, etc., was examined, with the aid of a couple of lanterns. Water-kegs, wine, brandy, whisky and beer barrels, biscuit-boxes, in fact, all the provision boxes and everything the hold contained, including the stock of coal, was moved and probed, and even the bilges were scrutinized, but all in vain.

Evidently the suspicion that the Count d'Artigas had carried off the missing men was unfounded and unjust. Even a rat could not have escaped the notice of the vigilant searchers, leave alone two men.

When they returned on deck, however, the officers, as a matter of precaution looked into the boats hanging on the davits, and punched the lowered sails, with the same result.

"You must pardon us for having disturbed you, Monsieur the Count," said the lieutenant.
"You were compelled to obey your orders, gentlemen."
"It was merely a formality, of course," ventured the officer.
"I assure you, gentlemen, that I have had no hand in this kidnapping."
"We can no longer believe so, Monsieur the Count, and will withdraw."
"As you please. Is the Ebba now free to proceed?"
"Certainly."
"Then au revoir, gentlemen, au revoir, for I am an habitué of this coast and shall soon be back again. I hope that ere my return you will have discovered the author of the outrage, and have Thomas Roch safely back in Healthful House. It is a consummation devoutly to be wished in the interest of the United States— I might even say of the whole world."

The two officers courteously saluted the Count, who responded with a nod. Captain Spade accompanied them to the gangway, and they were soon making for the cruiser, which had steamed near to pick them up.

Meanwhile the breeze had freshened considerably, and when, at a sign from d'Artigas, Captain Spade set sail again, the Ebba skimmed swiftly through the inlet, and half an hour after was standing out to sea.

For an hour she continued steering east-northeast, and then, the wind, being merely a land breeze, dropped, and the schooner lay becalmed, her sails limp, and her flag drooping like a wet rag. It seemed that it would be impossible for the vessel to continue her voyage that night unless a breeze sprang up, and of this there was no sign.

Since the schooner had cleared the inlet Captain Spade had stood in the bows gazing into the water, now to port, now to starboard, as if on the lookout for something. Presently he shouted in a stentorian voice:
"Furl sail!"
The sailors rushed to their posts, and in an instant the sails came rattling down and were furled.

Was it Count d'Artigas' intention to wait there till daybreak brought a breeze with it? Presumably, or the sails would have remained hoisted to catch the faintest puff.

A boat was lowered and Captain Spade jumped into it, accompanied by a sailor, who paddled it towards an object that was floating on the water a few yards away.

This object was a small buoy, similar to that which had floated on the bosom of the Neuse when the Ebba lay off Healthful House.

The buoy, with a towline affixed to it, was lifted into the boat that was then paddled to the bow of the Ella, from the deck of which another hawser was cast to the captain, who made it fast to the towline of the buoy. Having dropped the latter overboard again, the captain and the sailor returned to the ship and the boat was hoisted in.

Almost immediately the hawser tautened, and the Elba, though not a stitch of canvas had been set, sped off in an easterly direction at a speed that could not have been less than ten knots an hour.

Night was falling fast, and soon the rapidly receding lights along the American coast were lost in the mist on the horizon.

CHAPTER V.
WHERE AM I?
(Notes by Simon Hart, the Engineer.)
Where am I? What has happened since the sudden aggression of which I was the victim near the pavilion.
I had just quitted the doctor, and was about to mount the steps, close the door and resume my post beside
Thomas Roch when several men sprang upon me and knocked me down. Who are they? My eyes having been bandaged I was unable to recognize them. I could not cry for help, having been gagged. I could make no resistance, for they had bound me hand and foot. Thus powerless, I felt myself lifted and carried about one hundred paces, then hoisted, then lowered, then laid down.

Where? Where?

And Thomas Roch, what has become of him? It must have been he rather than I they were after. I was but Gaydon, the warden. None suspected that I was Simon Hart, the engineer, nor could they have suspected my nationality. Why, therefore, should they have desired to kidnap a mere hospital attendant?

There can consequently be no doubt that the French inventor has been carried off; and if he was snatched from Healthful House it must have been in the hope of forcing his secret from him.

But I am reasoning on the supposition that Thomas Roch was carried off with me. Is it so? Yes--it must be--it is. I can entertain no doubt whatever about it. I have not fallen into the hands of malefactors whose only intention is robbery. They would not have acted in this way. After rendering it impossible for me to cry out, after having thrown me into a clump of bushes in the corner of the garden, after having kidnapped Thomas Roch they would not have shut me up--where I now am.

Where? This is the question which I have been asking myself for hours without being able to answer it.

However, one thing is certain, and that is that I have embarked upon an extraordinary adventure, that will end?--In what manner I know not--I dare not even imagine what the upshot of it will be. Anyhow, it is my intention to commit to memory, minute by minute, the least circumstance, and then, if it be possible, to jot down my daily impressions. Who knows what the future has in store for me? And who knows but what, in my new position, I may finally discover the secret of Roth's fulgurator? If I am to be delivered one day, this secret must be made known, as well as who is the author, or who are the authors, of this criminal outrage, which may be attended with such serious consequences.

I continually revert to this question, hoping that some incident will occur to enlighten me:

Where am I?

Let me begin from the beginning.

After having been carried by the head and feet from Healthful House, I felt that I was laid, without any brutality, I must admit, upon the stretchers of a row-boat of small dimensions.

The rocking caused by the weight of my body was succeeded shortly afterwards by a further rocking--which I attribute to the embarking of a second person. Can there be room for doubt that it was Thomas Roch? As far as he was concerned they would not have had to take the precaution of gagging him, or of bandaging his eyes, or of binding him. He must still have been in a state of prostration which precluded the possibility of his making any resistance, or even of being conscious of what was being done. The proof that I am not deceiving myself is that I could smell the unmistakable odor of ether. Now, yesterday, before taking leave of us, the doctor administered a few drops of ether to the invalid and--I remember distinctly--a little of this extremely volatile substance fell upon his clothing while he was struggling in his fit. There is therefore nothing astonishing in the fact that this odor should have clung to him, nor that I should have distinguished it, even beneath the bandages that covered my face.

Yes, Thomas Roch was extended near me in the boat. And to think that had I not returned to the pavilion when I did, had I delayed a few minutes longer, I should have found him gone!

Let me think. What could have inspired that Count d'Artigas with the unfortunate curiosity to visit Healthful House? If he had not been allowed to see my patient nothing of the kind would have happened. Talking to Thomas Roch about his inventions brought on a fit of exceptional violence. The director is primarily to blame for not heeding my warning. Had he listened to me the doctor would not have been called upon to attend him, the door of the pavilion would have been locked, and the attempt of the band would have been frustrated.

As to the interest there could have been in carrying off Thomas Roch, either on behalf of a private person or of one of the states of the Old World, it is so evident that there is no need to dwell upon it. However, I can be perfectly easy about the result. No one can possibly succeed in learning what for fifteen months I have been unable to ascertain. In the condition of intellectual collapse into which my fellow-countryman has fallen, all attempts to force his secret from him will be futile. Moreover, he is bound to go from bad to worse until he is hopelessly insane, even as regards those points upon which he has hitherto preserved his reason intact.

After all, however, it is less about Thomas Roch than myself that I must think just now, and this is what I have experienced, to resume the thread of my adventure where I dropped it:

After more rocking caused by our captors jumping into it, the boat is rowed off. The distance must be very short, for a minute after we bumped against something. I surmise that this something must be the hull of a ship, and that we have run alongside. There is some scurrying and excitement. Indistinctly through my bandages I can hear orders being given and a confused murmur of voices that lasts for about five minutes, but I cannot distinguish a word that is
said.

The only thought that occurs to me now is that they will hoist me on board and lower me to the bottom of the hold and keep me there till the vessel is far out at sea. Obviously they will not allow either Thomas Roch or his keeper to appear on deck as long as she remains in Pamlico Sound.

My conjecture is correct. Still gagged and bound I am at last lifted by the legs and shoulders. My impression, however, is that I am not being raised over a ship's bulwark, but on the contrary am being lowered. Are they going to drop me overboard to drown like a rat, so as to get rid of a dangerous witness? This thought flashes into my brain, and a quiver of anguish passes through my body from head to foot. Instinctively I draw a long breath, and my lungs are filled with the precious air they will speedily lack.

No, there is no immediate cause for alarm. I am laid with comparative gentleness upon a hard floor, which gives me the sensation of metallic coldness. I am lying at full length. To my extreme surprise, I find that the ropes with which I was bound have been untied and loosened. The trampling about around me has ceased. The next instant I hear a door closed with a bang.

Where am I? And, in the first place, am I alone? I tear the gag from my mouth, and the bandages from my head. It is dark--pitch dark. Not a ray of light, not even the vague perception of light that the eyes preserve when the lids are tightly closed.

I shout--I shout repeatedly. No response. My voice is smothered. The air I breathe is hot, heavy, thick, and the working of my lungs will become difficult, impossible, unless the store of air is renewed.

I extend my arms and feel about me, and this is what I conclude:

I am in a compartment with sheet-iron walls, which cannot measure more than four cubic yards. I can feel that the walls are of bolted plates, like the sides of a ship's water-tight compartment.

I can feel that the entrance to it is by a door on one side, for the hinges protrude somewhat. This door must open inwards, and it is through here, no doubt, that I was carried in.

I place my ear to the door, but not a sound can be heard. The silence is as profound as the obscurity--a strange silence that is only broken by the sonorousness of the metallic floor when I move about. None of the dull noises usually to be heard on board a ship is perceptible, not even the rippling of the water along the hull. Nor is there the slightest movement to be felt; yet, in the estuary of the Neuse, the current is always strong enough, to cause a marked oscillation to any vessel.

But does the compartment in which I am confined, really belong to a ship? How do I know that I am afloat on the Neuse, though I was conveyed a short distance in a boat? Might not the latter, instead of heading for a ship in waiting for it, opposite Healthful House, have been rowed to a point further down the river? In this case is it not possible that I was carried into the collar of a house? This would explain the complete immobility of the compartment. It is true that the walls are of bolted plates, and that there is a vague smell of salt water, that odor sui generis which generally pervades the interior of a ship, and which there is no mistaking.

An interval, which I estimate at about four hours, must have passed since my incarceration. It must therefore be near midnight. Shall I be left here in this way till morning? Luckily, I dined at six o'clock, which is the regular dinner-hour at Healthful House. I am not suffering from hunger. In fact I feel more inclined to sleep than to eat. Still, I hope I shall have energy enough to resist the inclination. I will not give way to it. I must try and find out what is going on outside. But neither sound nor light can penetrate this iron box. Wait a minute, though; perhaps by listening intently I may hear some sound, however feeble. Therefore I concentrate all my vital power in my sense of hearing. Moreover, I try--in case I should really not be on terra firma--to distinguish some movement, some oscillation of my prison. Admitting that the ship is still at anchor, it cannot be long before it will start--otherwise I shall have to give up imagining why Thomas Roch and I have been carried off.

Let me consider the matter calmly. I am on board a vessel that was anchored in the Neuse, waiting under sail or steam, for the result of the expedition. A boat brought me aboard, but, I repeat, I did not feel that I was lifted over her bulwarks. Was I passed through a porthole? But after all, what does it matter? Whether I was lowered into the hold or not, I am certainly upon something that is floating and moving.

At last--it is no illusion--a slight rolling proves to me, beyond a doubt, that I am not on land. We are evidently moving, but the motion is scarcely perceptible. It is not a jerky, but rather a gliding movement, as though we were skimming through the water without effort, on an even keel.

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No doubt I shall soon be let out, together with Thomas Roch, supposing them to have locked him up as carefully as they have me. By being let out, I mean being accorded permission to go on deck. It will not be for some hours to come, however, that is certain, for they won't want us to be seen, so that there is no chance of getting a whiff of fresh air till we are well out at sea. If it is a sailing vessel, she must have waited for a breeze--for the breeze that freshens off shore at daybreak, and is favorable to ships navigating Pamlico Sound.

It certainly cannot be a steamer. I could not have failed to smell the oil and other odors of the engine-room. And
then I should feel the trembling of the machinery, the jerks of the pistons, and the movements of the screws or paddles.

The best thing to do is to wait patiently. I shan't be taken out of this hole until to-morrow, anyway. Moreover, if I am not released, somebody will surely bring me something to eat. There is no reason to suppose that they intend to starve me to death. They wouldn't have taken the trouble to bring me aboard, but would have dropped me to the bottom of the river had they been desirous of getting rid of me. Once we are out at sea, what will they have to fear from me? No one could hear my shouts. As to demanding an explanation and making a fuss, it would be useless. Besides, what am I to the men who have carried us off? A mere hospital attendant—one Gaydon, who is of no consequence. It is Thomas Roch they were after. I was taken along too because I happened to return to the pavilion at the critical moment.

At any rate, no matter what happens, no matter who our kidnappers may be, no matter where we are taken, I shall stick to this resolution: I will continue to play my role of warder. No one, no! none, can suspect that Gaydon is Simon Hart, the engineer. There are two advantages in this: in the first place, they will take no notice of a poor devil of a warder, and in the second, I may be able to solve the mystery surrounding this plot and turn my knowledge to profit, if I succeed in making my escape.

But whither are my thoughts wandering? I must perforce wait till we arrive at our destination before thinking of escaping. It will be time enough to bother about that when the occasion presents itself. Until then the essential is that they remain ignorant as to my identity, and they cannot, and shall not, know who I am.

I am now certain that we are going through the water. But there is one thing that puzzles me. It is hot a sailing vessel, neither can it be a steamer. Yet it is incontestably propelled by some powerful machine. There are none of the noises, nor is there the trembling that accompanies the working of steam engines. The movement of the vessel is more continuous and regular, it is a sort of direct rotation that is communicated by the motor, whatever the latter may be. No mistake is possible: the ship is propelled by some special mechanism. But what is it?

Is it one of those turbines that have been spoken of lately, which, fitted into a submerged tube, are destined to replace the ordinary screw, it being claimed that they utilize the resistance of the water better than the latter and give increased speed to a ship?

In a few hours' time I shall doubtless know all about this means of locomotion.

Meanwhile there is another thing that equally puzzles me. There is not the slightest rolling or pitching. How is it that Pamlico Sound is so extraordinarily calm? The varying currents continuously ruffle the surface of the Sound, even if nothing else does.

It is true the tide may be out, and I remember that last night the wind had fallen altogether. Still, no matter, the thing is inexplicable, for a ship propelled by machinery, no matter at what speed she may be going, always oscillates more or less, and I cannot perceive the slightest rocking.

Such are the thoughts with which my mind is persistently filled. Despite an almost overpowering desire to sleep, despite the torpor that is coming upon me in this suffocating atmosphere, I am resolved not to close my eyes. I will keep awake till daylight, and there will be no daylight for me till it is let into my prison from the outside. Perhaps even if the door were open it would not penetrate to this black hole, and I shall probably not see it again until I am taken on deck.

I am squatting in a corner of my prison, for I have no stool or anything to sit upon, but as my eyelids are heavy and I feel somnolent in spite of myself, I get up and walk about. Then I wax wrathful, anger fills my soul, I beat upon the iron walls with my fists, and shout for help. In vain! I hurt my hands against the bolts of the plates, and no one answers my cries.

Such conduct is unworthy of me. I flattered myself that I would remain calm under all circumstances and here I am acting like a child.

The absence of any rolling or lurching movement at least proves that we are not yet at sea. Instead of crossing Pamlico Sound, may we not be going in the opposite direction, up the River Neuse? No! What would they go further inland for? If Thomas Roch has been carried off from Healthful House, his captors obviously mean to take him out of the United States—probably to a distant island in the Atlantic, or to some point on the European continent. It is, therefore, not up the Neuse that our maritime machine, whatever it may be, is going, but across Pamlico Sound, which must be as calm as a mirror.

Very well, then, when we get to sea I shall soon, know, for the vessel will rock right enough in the swell off shore, even though there be no wind,—unless I am aboard a battleship, or big cruiser, and this I fancy can hardly be!

But hark! If I mistake not—no, it was not imagination—I hear footsteps. Some one is approaching the side of the compartment where the door is. One of the crew no doubt. Are they going to let me out at last? I can now hear voices. A conversation is going on outside the door, but it is carried on in a language that I do not understand. I shout to them—I shout again, but no answer is vouchsafed.
There is nothing to do, then, but wait, wait, wait! I keep repeating the word and it rings in my ears like a bell. Let me try to calculate how long I have been here. The ship must have been under way for at least four or five hours. I reckon it must be past midnight, but I cannot tell, for unfortunately my watch is of no use to me in this Cimmerian darkness.

Now, if we have been going for five hours, we must have cleared Pamlico Sound, whether we issued by Ocracoke or Hatteras inlet, and must be off the coast a good mile, at least. Yet I haven't felt any motion from the swell of the sea.

It is inexplicable, incredible! Come now, have I made a mistake? Am I the dupe of an illusion? Am I not imprisoned in the hold of a ship under way?

Another hour has passed and the movement of the ship suddenly ceases; I realize perfectly that she is stationary. Has she reached her destination? In this event we can only be in one of the coast ports to the north or south of Pamlico Sound. But why should Thomas Roch be landed again? The abduction must soon have been discovered, and our kidnappers would run the greatest risk of falling into the hands of the authorities if they attempted to disembark.

However this may be, if the vessel is coming to anchor I shall hear the noise of the chain as it is paid out, and feel the jerk as the ship is brought up. I know that sound and that jerk well from experience, and I am bound to hear and feel them in a minute or two.

I wait--I listen.

A dead and disquieting silence reigns on board. I begin to wonder whether I am not the only living being in the ship.

Now I feel an irresistible torpor coming over me. The air is vitiated. I cannot breathe. My chest is bursting. I try to resist, but it is impossible to do so. The temperature rises to such a degree that I am compelled to divest myself of part of my clothing. Then I lie me down in a corner. My heavy eyelids close, and I sink into a prostration that eventually forces me into heavy slumber.

How long have I been asleep? I cannot say. Is it night? Is it day? I know not. I remark, however, that I breathe more easily, and that the air is no longer poisoned carbonic acid.

Was the air renewed while I slept? Has the door been opened? Has anybody been in here?

Yes, here is the proof of it!

In feeling about, my hand has come in contact with a mug filled with a liquid that exhales an inviting odor. I raise it to my lips, which, are burning, for I am suffering such an agony of thirst that I would even drink brackish water.

It is ale--an ale of excellent quality--which refreshes and comforts me, and I drain the pint to the last drop.

But if they have not condemned me to die of thirst, neither have they condemned me to die of hunger, I suppose?

No, for in one of the corners I find a basket, and this basket contains some bread and cold meat.

I fall to, eating greedily, and my strength little by little returns.

Decidedly, I am not so abandoned as I thought I was. Some one entered this obscure hole, and the open door admitted a little of the oxygen from the outside, without which I should have been suffocated. Then the wherewithal to quench my thirst and appease the pangs of hunger was placed within my reach.

How much longer will this incarceration last? Days? Months? I cannot estimate the hours that have elapsed since I fell asleep, nor have I any idea as to what time of the day or night it may be. I was careful to wind up my watch, though, and perhaps by feeling the hands--Yes, I think the little hand marks eight o'clock--in the morning, no doubt. What I do know, however, is that the ship is not in motion. There is not the slightest quiver.

Hours and hours, weary, interminable hours go by, and I wonder whether they are again waiting till night comes on to renew my stock of air and provisions. Yes, they are waiting to take advantage of my slumbers. But this time I am resolved to resist. I will feign to be asleep--and I shall know how to force an answer from whoever enters!

CHAPTER VI.
ON DECK.

Here I am in the open air, breathing freely once more. I have at last been hauled out of that stifling box and taken on deck. I gaze around me in every direction and see no sign of land. On every hand is that circular line which defines earth and sky. No, there is not even a speck of land to be seen to the west, where the coast of North America extends for thousands of miles.

The setting sun now throws but slanting rays upon the bosom of the ocean. It must be about six o'clock in the evening. I take out my watch and it marks thirteen minutes past six.

As I have already mentioned, I waited for the door of my prison to open, thoroughly resolved not to fall asleep
again, but to spring upon the first person who entered and force him to answer my questions. I was not aware then that it was day, but it was, and hour after hour passed and no one came. I began to suffer again from hunger and thirst, for I had not preserved either bite or sup.

As soon as I awoke I felt that the ship was in motion again, after having, I calculated, remained stationary since the previous day--no doubt in some lonely creek, since I had not heard or felt her come to anchor.

A few minutes ago--it must therefore have been six o'clock--I again heard footsteps on the other side of the iron wall of my compartment. Was anybody coming to my cell? Yes, for I heard the creaking of the bolts as they were drawn back, and then the door opened, and the darkness in which I had been plunged since the first hour of my captivity was illumined by the light of a lantern.

Two men, whom I had no time to look at, entered and seized me by the arms. A thick cloth was thrown over my head, which was enveloped in such a manner that I could see absolutely nothing.

What did it all mean? What were they going to do with me? I struggled, but they held me in an iron grasp. I questioned them, but they made no reply. The men spoke to each other in a language that I could not understand, and had never heard before.

They stood upon no ceremony with me. It is true I was only a madhouse warder, and they probably did not consider it necessary to do so; but I question very much whether Simon Hart, the engineer, would have received any more courtesy at their hands.

This time, however, no attempt was made to gag me nor to bind either my arms or legs. I was simply restrained by main force from breaking away from them.

In a moment I was dragged out of the compartment and pushed along a narrow passage. Next, the steps of a metallic stairway resounded under our feet. Then the fresh air blew in my face and I inhaled it with avidity. Finally they took their hands from off me, and I found myself free. I immediately tore the cloth off my head and gazed about me.

I am on board a schooner which is ripping through the water at a great rate and leaving a long white trail behind her.

I had to clutch at one of the stays for support, dazzled as I was by the light after my forty-eight hours' imprisonment in complete obscurity.

On the deck a dozen men with rough, weather-beaten faces come and go--very dissimilar types of men, to whom it would be impossible to attribute any particular nationality. They scarcely take any notice of me.

As to the schooner, I estimate that she registers from two hundred and fifty to three hundred tons. She has a fairly wide beam, her masts are strong and lofty, and her large spread of canvas must carry her along at a spanking rate in a good breeze.

Aft, a grizzly-faced man is at the wheel, and he is keeping her head to the sea that is running pretty high.

I try to find out the name of the vessel, but it is not to be seen anywhere, even on the life-buoys.

I walk up to one of the sailors and inquire:

"What is the name of this ship?"

No answer, and I fancy the man does not understand me.

"Where is the captain?" I continue.

But the sailor pays no more heed to this than he did to the previous question.

I turn on my heel and go forward.

Above the forward hatchway a bell is suspended. Maybe the name of the schooner is engraved upon it. I examine it, but can find no name upon it.

I then return to the stern and address the man at the wheel. He gazes at me sourly, shrugs his shoulders, and bending, grasps the spokes of the wheel solidly, and brings the schooner, which had been headed off by a large wave from port, stern on to sea again.

Seeing that nothing is to be got from that quarter, I turn away and look about to see if I can find Thomas Roch, but I do not perceive him anywhere. Is he not on board? He must be. They could have had no reason for carrying me off alone. No one could have had any idea that I was Simon Hart, the engineer, and even had they known it what interest could they have had in me, and what could they expect of me?

Therefore, as Roch is not on deck, I conclude that he is locked in one of the cabins, and trust he has met with better treatment than his ex-guardian.

But what is this--and how on earth could I have failed to notice it before? How is this schooner moving? Her sails are furled--there is not an inch of canvas set--the wind has fallen, and the few puffs that occasionally come from the east are unfavorable, in view of the fact that we are going in that very direction. And yet the schooner speeds through the sea, her bows down, throwing off clouds of foam, and leaving a long, milky, undulating trail in her wake.
Is she a steam-yacht? No--there is not a smokestack about her. Is she propelled by electricity--by a battery of accumulators, or by piles of great power that work her screw and send her along at this rate?

I can come to no other conclusion. In any case she must be fitted with a screw, and by leaning over the stern I shall be able to see it, and can find out what sets it working afterwards.

The man at the wheel watches me ironically as I approach, but makes no effort to prevent me from looking over.

I gaze long and earnestly, but there is no foaming and seething of the water such as is invariably caused by the revolutions of the screw--naught but the long white furrow that a sailing vessel leaves behind is discernible in the schooner's wake.

Then, what kind of a machine is it that imparts such a marvellous speed to the vessel? As I have already said, the wind is against her, and there is a heavy swell on.

I must--I will know. No one pays the slightest attention, and I again go forward.

As I approach the forecastle I find myself face to face with a man who is leaning nonchalantly on the raised hatchway and who is watching me. He seems to be waiting for me to speak to him.

I recognize him instantly. He is the person who accompanied the Count d'Artigas during the latter's visit to Healthful House. There can be no mistake--it is he right enough.

It was, then, that rich foreigner who abducted Thomas Roch, and I am on board the Ebba his schooner-yacht which is so well known on the American coast!

The man before me will enlighten me about what I want to know. I remember that he and the Count spoke English together.

I take him to be the captain of the schooner.

"Captain," I say, "you are the person I saw at Healthful House. You remember me, of course?"

He looks me up and down but does not condescend to reply.

"I am Warder Gaydon, the attendant of Thomas Roch," I continue, "and I want to know why you have carried me off and placed me on board this schooner?"

The captain interrupts me with a sign. It is not made to me, however, but to some sailors standing near.

They catch me by the arms, and taking no notice of the angry movement that I cannot restrain, bundle me down the hatchway. The hatchway stair in reality, I remark, is a perpendicular iron ladder, at the bottom of which, to right and left, are some cabins, and forward, the men's quarters.

Are they going to put me back in my dark prison at the bottom of the hold?

No. They turn to the left and push me into a cabin. It is lighted by a port-hole, which is open, and through which the fresh air comes in gusts from the briny. The furniture consists of a bunk, a chair, a chest of drawers, a wash-hand-stand and a table.

The latter is spread for dinner, and I sit down. Then the cook's mate comes in with two or three dishes. He is a colored lad, and as he is about to withdraw, I try to question him, but he, too, vouchsafes no reply. Perhaps he doesn't understand me.

The door is closed, and I fall to and eat with an excellent appetite, with the intention of putting off all further questioning till some future occasion when I shall stand a chance of getting answered.

It is true I am a prisoner, but this time I am comfortable enough, and I hope I shall be permitted to occupy this cabin for the remainder of the voyage, and not be lowered into that black hole again.

I now give myself up to my thoughts, the first of which is that it was the Count d'Artigas who planned the abduction; that it was he who is responsible for the kidnapping of Thomas Roch, and that consequently the French inventor must be just as comfortably installed somewhere on board the schooner.

But who is this Count d'Artigas? Where does he hail from? If he has seized Thomas Roch, is it not because he is determined to secure the secret of the fulgurator at no matter what cost? Very likely, and I must therefore be careful not to betray my identity, for if they knew the truth, I should never be afforded a chance to get away.

But what a lot of mysteries to clear up, how many inexplicable things to explain--the origin of this d'Artigas, his intentions as to the future, whether we are bound, the port to which the schooner belongs, and this mysterious progress through the water without sails and without screws, at a speed of at least ten knots an hour!

The air becoming keener as night deepens, I close and secure the port-hole, and as my cabin is bolted on the outside, the best thing I can do is to get into my bunk and let myself be gently rocked to sleep by the broad Atlantic in this mysterious cradle, the Ebba.

The next morning I rise at daybreak, and having performed my ablutions, dress myself and wait.

Presently the idea of trying the door occurs to me. I find that it has been unbolted, and pushing it open, climb the iron ladder and emerge on deck.

The crew are washing down the deck, and standing aft and conversing are two men, one of whom is the captain. The latter manifests no surprise at seeing me, and indicates my presence to his companion by a nod.
This other man, whom I have never before seen, is an individual of about fifty years of age, whose dark hair is streaked with gray. His features are delicately chiselled, his eyes are bright, and his expression is intelligent and not at all displeasing. He is somewhat of the Grecian type, and I have no doubt that he is of Hellenic origin when I hear him called Serko—Engineer Serko—by the Captain of the Ebba.

As to the latter, he is called Spade—Captain Spade—and this name has an Italian twang about it. Thus there is a Greek, an Italian, and a crew recruited from every corner of the earth to man a schooner with a Norwegian name! This mixture strikes me as being suspicious.

And that Count d'Artigas, with his Spanish name and Asiatic type, where does he come from?

Captain Spade and Engineer Serko continue to converse in a low tone of voice. The former is keeping a sharp eye on the man at the wheel, who does not appear to pay any particular attention to the compass in front of him. He seems to pay more heed to the gestures of one of the sailors stationed forward, and who signals to him to put the helm to port or to starboard.

Thomas Roch is near them, gazing vacantly out upon the vast expanse which is not limited on the horizon by a single speck of land. Two sailors watch his every movement. It is evidently feared that the madman may possibly attempt to jump overboard.

I wonder whether I shall be permitted to communicate with my ward.

I walk towards him, and Captain Spade and Engineer Serko watch me.

Thomas Roch doesn't see me coming, and I stand beside him. Still he takes no notice of me, and makes no movement. His eyes, which sparkle brightly, wander over the ocean, and he draws in deep breaths of the salt, vivifying atmosphere. Added to the air surcharged with oxygen is a magnificent sunset in a cloudless sky. Does he perceive the change in his situation? Has he already forgotten about Healthful House, the pavilion in which he was a prisoner, and Gaydon, his keeper? It is highly probable. The past has presumably been effaced from his memory and he lives solely in the present.

In my opinion, even on the deck of the Ebba, in the middle of the sea, Thomas Roch is still the helpless, irresponsible man whom I tended for fifteen months. His intellectual condition has undergone no change, and his reason will return only when he is spoken to about his inventions. The Count d'Artigas is perfectly aware of this mental disposition, having had a proof of it during his visit, and he evidently relies thereon to surprise sooner or later the inventor's secret. But with what object?

"Thomas Roch!" I exclaim.

My voice seems to strike him, and after gazing at me fixedly for an instant he averts his eyes quickly.

I take his hand and press it. He withdraws it brusquely and walks away, without having recognized me, in the direction of Captain Spade and Engineer Serko.

Does he think of speaking to one or other of these men, and if they speak to him will he be more reasonable than he was with me, and reply to them?

At this moment his physiognomy lights up with a gleam of intelligence. His attention, obviously, has been attracted by the queer progress of the schooner. He gazes at the masts and the furled sails. Then he turns back and stops at the place where, if the Ebba were a steamer, the funnel ought to be, and which in this case ought to be belching forth a cloud of black smoke.

What appeared so strange to me evidently strikes Thomas Roch as being strange, too. He cannot explain what I found inexplicable, and, as I did, he walks aft to see if there is a screw.

On the flanks of the Ebba a shoal of porpoises are sporting. Swift as is the schooner's course they easily pass her, leaping and gambolling in their native element with surprising grace and agility.

Thomas Roch pays no attention to them, but leans over the stern.

Engineer Serko and Captain Spade, fearful lest he should fall overboard, hurry to him and drag him gently, but firmly, away.

I observe from long experience that Roch is a prey to violent excitement. He turns about and gesticulates, uttering incoherent phrases the while.

It is plain to me that another fit is coming on, similar to the one he had in the pavilion of Healthful House on the night we were abducted. He will have to be seized and carried down to his cabin, and I shall perhaps be summoned to attend to him.

Meanwhile Engineer Serko and Captain Spade do not lose sight of him for a moment. They are evidently curious to see what he will do.

After walking towards the mainmast and assuring himself that the sails are not set, he goes up to it and flinging his arms around it, tries with all his might to shake it, as though seeking to pull it down.

Finding his efforts futile, he quits it and goes to the foremost, where the same performance is gone through. He waxes more and more excited. His vague utterances are followed by inarticulate cries.
Suddenly he rushes to the port stays and clings to them, and I begin to fear that he will leap into the rigging and climb to the cross-tree, where he might be precipitated into the sea by a lurch of the ship.

On a sign from Captain Spade, some sailors run up and try to make him relinquish his grasp of the stays, but are unable to do so. I know that during his fits he is endowed with the strength of ten men, and many a time I have been compelled to summon assistance in order to overpower him.

Other members of the crew, however, come up, and the unhappy madman is borne to the deck, where two big sailors hold him down, despite his extraordinary strength.

The only thing to do is to convey him to his cabin, and let him lie there till he gets over his fit. This is what will be done in conformity with orders given by a new-comer whose voice seems familiar to me.

I turn and recognize him.

He is the Count d'Artigas, with a frown on his face and an imperious manner, just as I had seen him at Healthful House.

I at once advance toward him. I want an explanation and mean to have it.

"By what right, sir?"--I begin.

"By the right of might," replies the Count.

Then he turns on his heel, and Thomas Roch is carried below.

CHAPTER VII.
TWO DAYS AT SEA.

Perhaps--should circumstances render it necessary--I may be induced to tell the Count d'Artigas that I am Simon Hart, the engineer. Who knows but what I may receive more consideration than if I remain Warder Gaydon? This measure, however, demands reflection. I have always been dominated by the thought that if the owner of the Ebba kidnapped the French inventor, it was in the hope of getting possession of Roch's fulgurator, for which, neither the old nor new continent would pay the impossible price demanded. In that case the best thing I can do is to remain Warder Gaydon, on the chance that I may be allowed to continue in attendance upon him. In this way, if Thomas Roch should ever divulge his secret, I may learn what it was impossible to do at Healthful House, and can act accordingly.

Meanwhile, where is the Ebba bound?--first question.

Who and what is the Count d'Artigas?--second question.

The first will be answered in a few days' time, no doubt, in view of the rapidity with which we are ripping through the water, under the action of a means of propulsion that I shall end by finding out all about. As regards the second, I am by no means so sure that my curiosity will ever be gratified.

In my opinion this enigmatical personage has an all important reason for hiding his origin, and I am afraid there is no indication by which I can gauge his nationality. If the Count d'Artigas speaks English fluently--and I was able to assure myself of that fact during his visit to Pavilion No. 17,--he pronounces it with a harsh, vibrating accent, which is not to be found among the peoples of northern latitudes. I do not remember ever to have heard anything like it in the course of my travels either in the Old or New World--unless it be the harshness characteristic of the idioms in use among the Malays. And, in truth, with his olive, verging on copper-tinted skin, his jet-black, crinkly hair, his piercing, deep-set, restless eyes, his square shoulders and marked muscular development, it is by no means unlikely that he belongs to one of the extreme Eastern races.

I believe this name of d'Artigas is an assumed one, and his title of Count likewise. If his schooner bears a Norwegian name, he at any rate is not of Scandinavian origin. He has nothing of the races of Northern Europe about him.

But whoever and whatever he may be, this man abducted Thomas Roch--and me with him--with no good intention, I'll be bound.

But what I should like to know is, has he acted as the agent of a foreign power, or on his own account? Does he wish to profit alone by Thomas Roch's invention, and is he in the position to dispose of it profitably? That is another question that I cannot yet answer. Maybe I shall be able to find out from what I hear and see ere I make my escape, if escape be possible.

The Ebba continues on her way in the same mysterious manner. I am free to walk about the deck, without, however, being able to go beyond the fore hatchway. Once I attempted to go as far as the bows where I could, by leaning over, perceive the schooner's stem as it cut through the water, but acting, it was plain, on orders received, the watch on deck turned me back, and one of them, addressing me brusquely in harsh, grating English, said:

"Go back! Go back! You are interfering with the working of the ship!"

With the working of the ship! There was no working.
Did they realize that I was trying to discover by what means the schooner was propelled? Very likely, and Captain Spade, who had looked on, must have known it, too. Even a hospital attendant could not fail to be astonished at the fact that a vessel without either screw or sails was going along at such a speed. However this may be, for some reason or other, the bows of the Ebba are barred to me.

Toward ten o'clock a breeze springs up—a northwest wind and very favorable—and Captain Spade gives an order to the boatswain. The latter immediately pipes all hands on deck, and the mainsail, the foresail, staysail and jibs are hoisted. The work could not have been executed with greater regularity and discipline on board a man-of-war.

The Ebba now has a slight list to port, and her speed is notably increased. But the motor continues to push her along, as is evident from the fact that the sails are not always as full as they ought to be if the schooner were bowling along solely under their action. However, they continue to render yeoman's service, for the breeze has set in steadily.

The sky is clear, for the clouds in the west disappear as soon as they attain the horizon, and the sunlight dances on the water.

My preoccupation now is to find out as near as possible where we are bound for. I am a good-enough sailor to be able to estimate the approximate speed of a ship. In my opinion the Ebba has been travelling at the rate of from ten to eleven knots an hour. As to the direction we have been going in, it is always the same, and I have been able to verify this by casual glances at the binnacle. If the fore part of the vessel is barred to Warder Gaydon he has been allowed a free run of the remainder of it. Time and again I have glanced at the compass, and noticed that the needle invariably pointed to the east, or to be exact, east-southeast.

These are the conditions in which we are navigating this part of the Atlantic Ocean, which is bounded on the west by the coast of the United States of America.

I appeal to my memory. What are the islands or groups of islands to be found in the direction we are going, ere the continent of the Old World is reached?

North Carolina, which the schooner quitted forty-eight hours ago, is traversed by the thirty-fifth parallel of latitude, and this parallel, extending eastward, must, if I mistake not, cut the African coast at Morocco. But along the line, about three thousand miles from America, are the Azores. Is it presumable that the Ebba is heading for this archipelago, that the port to which she belongs is somewhere in these islands which constitute one of Portugal's insular domains? I cannot admit such an hypothesis.

Besides, before the Azores, on the line of the thirty-fifth parallel, is the Bermuda group, which belongs to England. It seems to me to be a good deal less hypothetical that, if the Count d'Artigas was entrusted with the abduction of Thomas Roch by a European Power at all, it was by the United Kingdom of Great Britain and Ireland. The possibility, however, remains that he may be acting solely in his own interest.

Three or four times during the day Count d'Artigas has come aft and remained for some time scanning the surrounding horizon attentively. When a sail or the smoke from a steamer heaves in sight he examines the passing vessel for a considerable time with a powerful telescope. I may add that he has not once condescended to notice my presence on deck.

Now and then Captain Spade joins him and both exchange a few words in a language that I can neither understand nor recognize.

It is with Engineer Serko, however, that the owner of the Ebba converses more readily than with anybody else, and the latter appears to be very intimate with him. The engineer is a good deal more free, more loquacious and less surly than his companions, and I wonder what position he occupies on the schooner. Is he a personal friend of the Count d'Artigas? Does he scour the seas with him, sharing the enviable life enjoyed by the rich yachtsman? He is the only man of the lot who seems to manifest, if not sympathy with, at least some interest in me.

I have not seen Thomas Roch all day. He must be shut in his cabin, still under the influence of the fit that came upon him last night.

I feel certain that this is so, when about three o'clock in the afternoon, just as he is about to go below, the Count beckons me to approach.

I do not know what he wishes to say to me, this Count d'Artigas, but I do know what I will say to him.

"Do these fits to which Thomas Roch is subject last long?" he asks me in English.

"Sometimes forty-eight hours," I reply.

"What is to be done?"

"Nothing at all. Let him alone until he falls asleep. After a night's sleep the fit will be over and Thomas Roch will be his own helpless self again."

"Very well, Warder Gaydon, you will continue to attend him as you did at Healthful House, if it be necessary."

"To attend to him!"

"Yes--on board the schooner--pending our arrival."

"Where?"
"Where we shall be to-morrow afternoon," replies the Count.
To-morrow, I say to myself. Then we are not bound for the coast of Africa, nor even the Azores. There only remains the hypothesis that we are making for the Bermudas.

Count d'Artigas is about to go down the hatchway when I interrogate him in my turn:
"Sir," I exclaim, "I desire to know, I have the right to know, where I am going, and----"
"Here, Warder Gaydon," he interrupted, "you have no rights. All you have to do is to answer when you are spoken to." "I protest!"
"Protest, then," replies this haughty and imperious personage, glancing at me menacingly.

Then he disappears down the hatchway, leaving me face to face with Engineer Serko.
"If I were you, Warder Gaydon, I would resign myself to the inevitable," remarks the latter with a smile. "When one is caught in a trap----"
"One can cry out, I suppose?"
"What is the use when no one is near to hear you?"
"I shall be heard some day, sir."

"Some day--that's a long way off. However, shout as much as you please."

And with this ironical advice, Engineer Serko leaves me to my own reflections.

Towards four o'clock a big ship is reported about six miles off to the east, coming in our direction. She is moving rapidly and grows perceptibly larger. Black clouds of smoke pour out of her two funnels. She is a warship, for a narrow pennant floats from her main-mast, and though she is not flying any flag I take her to be an American cruiser.

I wonder whether the Ebba will render her the customary salute as she passes.

No; for the schooner suddenly changes her course with the evident intention of avoiding her.

This proceeding on the part of such a suspicious yacht does not astonish me greatly. But what does cause me extreme surprise is Captain Spade's way of manoeuvring.
He runs forward to a signalling apparatus in the bows, similar to that by which orders are transmitted to the engine room of a steamer. As soon as he presses one of the buttons of this apparatus the Ebba veers off a point to the south-west.

Evidently an order of "some kind" has been transmitted to the driver of the machine of "some kind" which causes this inexplicable movement of the schooner by the action of a motor of "some kind" the principle of which I cannot guess at.

The result of this manoeuvre is that the Ebba slants away from the cruiser, whose course does not vary. Why should this warship cause a pleasure-yacht to turn out of its way? I have no idea.

But the Ebba behaves in a very different manner when about six o'clock in the evening a second ship comes in sight on the port bow. This time, instead of seeking to avoid her, Captain Spade signals an order by means of the apparatus above referred to, and resumes his course to the east--which will bring him close to the said ship.

An hour later, the two vessels are only about four miles from each other.

The wind has dropped completely. The strange ship, which is a three-masted merchantman, is taking in her top-gallant sails. It is useless to expect the wind to spring up again during the night, and she will lay becalmed till morning. The Ebba, however, propelled by her mysterious motor, continues to approach her.

It goes without saying, that Captain Spade has also begun to take in sail, and the work, under the direction of the boatswain Effondat, is executed with the same precision and promptness that struck me before.

When the twilight deepens into darkness, only a mile and a half separates the vessels.

Captain Spade then comes up to me--I am standing on the starboard side--and unceremoniously orders me to go below.

I can but obey. I remark, however, ere I go, that the boatswain has not lighted the head-lamps, whereas the lamps of the three-master shine brightly--green to starboard, and red to port.

I entertain no doubt that the schooner intends to pass her without being seen; for though she has slackened speed somewhat, her direction has not been in any way modified.

I enter my cabin under the impression of a vague foreboding. My supper is on the table, but uneasy, I know not why, I hardly touch it, and lie down to wait for sleep that does not come.

I remain in this condition for two hours. The silence is unbroken save by the water that ripples along the vessel's sides.

My mind is full of the events of the past two days, and other thoughts crowd thickly upon me. To-morrow afternoon we shall reach our destination. To-morrow, I shall resume, on land, my attendance upon Thomas Roch, "if it be necessary," said the Count d'Artigas.

If, when I was thrown into that black hole at the bottom of the hold, I was able to perceive when the schooner
started off across Pamlico Sound, I now feel that she has come to a stop. It must be about ten o'clock.

Why has she stopped? When Captain Spade ordered me below, there was no land in sight. In this direction, there is no island until the Bermuda group is reached—-at least there is none on the map—and we shall have to go another fifty or sixty miles before the Bermudas can be sighted by the lookout men. Not only has the Ebba stopped, but her immobility is almost complete. There is not a breath of wind, and scarcely any swell, and her slight, regular rocking is hardly perceptible.

Then my thoughts turn to the merchantman, which was only a mile and a half off, on our bow, when I came below. If the schooner continued her course towards her, she must be almost alongside now. We certainly cannot be lying more than one or two cables' length from her. The three-master, which was becalmed at sundown, could not have gone west. She must be close by, and if the night is clear, I shall be able to see her through the porthole.

It occurs to me, that perhaps a chance of escape presents itself. Why should I not attempt it, since no hope of being restored to liberty is held out to me? It is true I cannot swim, but if I seize a life buoy and jump overboard, I may be able to reach the ship, if I am not observed by the watch on deck.

I must quit my cabin and go up by the forward hatchway. I listen. I hear no noise, either in the men's quarters, or on deck. The sailors must all be asleep at this hour. Here goes.

I try to open the door, and find it is bolted on the outside, as I might have expected.

I must give up the attempt, which, after all, had small chance of success.

The best thing I can do, is to go to sleep, for I am weary of mind, if not of body. I am restless and racked by conflicting thoughts, and apprehensions of I know not what. Oh! if I could but sink into the blessed oblivion of slumber!

I must have managed to fall asleep, for I have just been awakened by a noise—an unusual noise, such as I have not hitherto heard on board the schooner.

Day begins to peer through the glass of my port-hole, which is turned towards the east. I look at my watch. It is half-past four.

The first thing I wonder is, whether the Ebba has resumed her voyage.

No, I am certain she has not, either by sail, or by her motor. The sea is as calm at sunrise as it was at sunset. If the Ebba has been going ahead while I slept, she is at any rate, stationary now.

The noise to which I referred, is caused by men hurrying to and fro on deck—by men heavily laden. I fancy I can also hear a similar noise in the hold beneath my cabin floor, the entrance to which is situated abaft the foremast. I also feel that something is scraping against the schooner's hull. Have boats come alongside? Are the crew engaged in loading or unloading merchandise?

And yet we cannot possibly have reached our journey's end. The Count d'Artigas said that we should not reach our destination till this afternoon. Now, I repeat, she was, last night, fully fifty or sixty miles from the nearest land, the group of the Bermudas. That she could have returned westward, and can be in proximity to the American coast, is inadmissible, in view of the distance. Moreover, I have reason to believe that the Ebba has remained stationary all night. Before I fell asleep, I know she had stopped, and I now know that she is not moving.

However, I shall see when I am allowed to go on deck. My cabin door is still bolted, I find on trying it; but I do not think they are likely to keep me here when broad daylight is on.

An hour goes by, and it gradually gets lighter. I look out of my porthole. The ocean is covered by a mist, which the first rays of the sun will speedily disperse.

I can, however, see for a half a mile, and if the three-masted merchantman is not visible, it is probably because she is lying off the other, or port, side of the Ebba.

Presently I hear a key turned in my door, and the bolts drawn. I push the door open and clamber up the iron ladder to the deck, just as the men are battening down the cover of the hold.

I look for the Count d'Artigas, but do not see him. He has not yet left his cabin.

Aft, Captain Spade and Engineer Serko are superintending the stowing of some bales, which have doubtless been hoisted from the hold. This explains the noisy operations that were going on when I was awakened. Obviously, if the crew are getting out the cargo, we are approaching the end of our voyage. We are not far from port, and perhaps in a few hours, the schooner will drop anchor.

But what about the sailing ship that was to port of us? She ought to be in the same place, seeing that there has been and is no wind.

I look for her, but she is nowhere to be seen. There is not a sail, not a speck on the horizon either east, west, north or south.

After cogitating upon the circumstance I can only arrive at the following conclusion, which, however, can only be accepted under reserve: Although I did not notice it, the Ebba resumed her voyage while I slept, leaving the three-master becalmed behind her, and this is why the merchantman is no longer visible.
I am careful not to question Captain Spade about it, nor even Engineer Serko, as I should certainly receive no
answer.

Besides, at this moment Captain Spade goes to the signalling apparatus and presses one of the buttons on the
upper disk. Almost immediately the Ebba gives a jerk, then with her sails still furled, she starts off eastward again.

Two hours later the Count d’Artigas comes up through the main hatchway and takes his customary place aft.
Serko and Captain Spade at once approach and engage in conversation with him.

All three raise their telescopes and sweep the horizon from southeast to northeast.

No one will be surprised to learn that I gaze intently in the same direction; but having no telescope I cannot
distinguish anything.

The midday meal over we all return on deck—all with the exception of Thomas Roch, who has not quitted his
cabin.

Towards one o’clock land is sighted by the lookout man on the foretop cross-tree. Inasmuch as the Elba is
bowling along at great speed I shall soon be able to make out the coast line.

In effect, two hours later a vague semicircular line that curves outward is discernible about eight miles off. As
the schooner approaches it becomes more distinct. It is a mountain, or at all events very high ground, and from its
summit a cloud of smoke ascends.

What! A volcano in these parts? It must then be----

CHAPTER VIII.
BACK CUP.

In my opinion the Ebba could have struck no other group of islands but the Bermudas in this part of the Atlantic.
This is clear from the distance covered from the American coast and the direction sailed in since we issued from
Pamlico Sound. This direction has constantly been south-southeast, and the distance, judging from the Ebba’s rate of
speed, which has scarcely varied, is approximately seven hundred and fifty miles.

Still, the schooner does not slacken speed. The Count d’Artigas and Engineer Serko remain aft, by the man at the
wheel. Captain Spade has gone forward.

Are we not going to leave this island, which appears to be isolated, to the west?

It does not seem likely, since it is still broad daylight, and the hour at which the Ebba was timed to arrive.

All the sailors are drawn up on deck, awaiting orders, and Boatswain Effrondat is making preparations to anchor.

Ere a couple of hours have passed I shall know all about it. It will be the first answer to one of the many
questions that have perplexed me since the schooner put to sea.

And yet it is most unlikely that the port to which the Ebba belongs is situated on one of the Bermuda islands, in
the middle of an English archipelago—unless the Count d’Artigas has kidnapped Thomas Roch for the British
government, which I cannot believe.

I become aware that this extraordinary man is gazing at me with singular persistence. Although he can have no
suspicion that I am Simon Hart, the engineer, he must be asking himself what I think of this adventure. If Warder
Gaydon is but a poor devil, this poor devil will manifest as much unconcern as to what is in store for him as any
gentleman could—even though he were the proprietor of this queer pleasure yacht. Still I am a little uneasy under his
gaze.

I dare say that if the Count d’Artigas could guess how certain things have suddenly become clear to me, he
would not hesitate to have me thrown overboard.

Prudence therefore commands me to be more circumspect than ever.

Without giving rise to any suspicion—even in the mind of Engineer Serko—I have succeeded in raising a corner
of the mysterious veil, and I begin to see ahead a bit.

As the Ebba draws nearer, the island, or rather islet, towards which she is speeding shows more sharply against
the blue background of the sky. The sun which has passed the zenith, shines full upon the western side. The islet is
isolated, or at any rate I cannot see any others of the group to which it belongs, either to north or south.

This islet, of curious contexture, resembles as near as possible a cup turned upside down, from which a
fuliginous vapor arises. Its summit—the bottom of the cup, if you like—is about three hundred feet above the level of
the sea, and its flanks, which are steep and regular, are as bare as the sea-washed rocks at its base.

There is another peculiarity about it which must render the islet easily recognizable by mariners approaching it
from the west, and this is a rock which forms a natural arch at the base of the mountain—the handle of the cup, so to
speak—and through which the waves wash as freely as the sunshine passes. Seen this way the islet fully justifies the
name of Back Cup given to it.

Well, I know and recognize this islet! It is situated at the extremity of the archipelago of the Bermudas. It is the
"reversed cup" that I had occasion to visit a few years ago--No, I am not mistaken. I then climbed over the calcareous and crooked rocks at its base on the east side. Yes, it is Back Cup, sure enough!

Had I been less self-possessed I might have uttered an exclamation of surprise--and satisfaction--which, with good reason, would have excited the attention and suspicion of the Count d'Artigas.

These are the circumstances under which I came to explore Back Cup while on a visit to Bermuda.

This archipelago, which is situated about seven hundred and fifty miles from North Carolina is composed of several hundred islands or islets. Its centre is crossed by the sixty-fourth meridian and the thirty-second parallel. Since the Englishman Lomer was shipwrecked and cast up there in 1609, the Bermudas have belonged to the United Kingdom, and in consequence the colonial population has increased to ten thousand inhabitants. It was not for its productions of cotton, coffee, indigo, and arrowroot that England annexed the group--seized it, one might say; but because it formed a splendid maritime station in that part of the Ocean, and in proximity to the United States of America. Possession was taken of it without any protest on the part of other powers, and Bermuda is now administered by a British governor with the addition of a council and a General Assembly.

The principal islands of the archipelago are called St. David, Somerset, Hamilton, and St. George. The latter has a free port, and the town of the same name is also the capital of the group.

The largest of these isles is not more than seventeen miles long and five wide. Leaving out the medium-sized ones, there remains but an agglomeration of islets and reefs scattered over an area of twelve square leagues.

Although the climate of Bermuda is very healthy, very salubrious, the isles are nevertheless frightfully beaten by the heavy winter tempests of the Atlantic, and their approach by navigators presents certain difficulties.

What the archipelago especially lacks are rivers and rios. However, as abundant rains fall frequently, this drawback is got over by the inhabitants, who treasure up the heaven-sent water for household and agricultural purposes. This has necessitated the construction of vast cisterns which the downfalls keep filled. These works of engineering skill justly merit the admiration they receive and do honor to the genius of man.

It was in connection with the setting up of these cisterns that I made the trip, as well as out of curiosity to inspect the fine works.

I obtained from the company of which I was the engineer in New Jersey a vacation of several weeks, and embarked at New York for the Bermudas.

While I was staying on Hamilton Island, in the vast port of Southampton, an event occurred of great interest to geologists.

One day a whole flotilla of fishers, men, women and children, entered Southampton Harbor. For fifty years these families had lived on the east coast of Back Cup, where they had erected log-cabins and houses of stone. Their position for carrying on their industry was an exceptionally favorable one, for the waters teem with fish all the year round, and in March and April whales abound.

Nothing had hitherto occurred to disturb their tranquil existence. They were quite contented with their rough lot, which was rendered less onerous by the facility of communication with Hamilton and St. George. Their solid barks took cargoes of fish there, which they exchanged for the necessities of life.

Why had they thus abandoned the islet with the intention, as it pretty soon appeared, of never returning to it? The reason turned out to be that they no longer considered themselves in safety there.

A couple of months previously they had been at first surprised, then alarmed, by several distinct detonations that appeared to have taken place in the interior of the mountain. At the same time smoke and flames issued from the summit--or the bottom of the reversed cup, if you like. Now no one had ever suspected that the islet was of volcanic origin, or that there was a crater at the top, no one having been able to climb its sides. Now, however, there could be no possible doubt that the mountain was an ancient volcano that had suddenly become active again and threatened the village with destruction.

During the ensuing two months internal rumblings and explosions continued to be heard, which were accompanied by bursts of flame from the top--especially at night. The island was shaken by the explosions--the shocks could be distinctly felt. All these phenomena were indicative of an imminent eruption, and there was no spot at the base of the mountain that could afford any protection from the rivers of lava that would inevitably pour down its smooth, steep slopes and overwhelm the village in their boiling flood. Besides, the very mountain might be destroyed in the eruption.

There was nothing for the population exposed to such a dire catastrophe to do but leave. This they did. Their humble Lares and Penates, in fact all their belongings, were loaded into the fishing-smacks, and the entire colony sought refuge in Southampton Harbor.

The news that a volcano, that had presumably been smouldering for centuries at the western extremity of the group, showed signs of breaking out again, caused a sensation throughout the Bermudas. But while some were terrified, the curiosity of others was aroused, mine included. The phenomenon was worth investigation, even if the
simple fisher-folk had exaggerated.

Back Cup, which, as already stated, lies at the western extremity of the archipelago, is connected therewith by a chain of small islets and reefs, which cannot be approached from the east. Being only three hundred feet in altitude, it cannot be seen either from St. George or Hamilton. I joined a party of explorers and we embarked in a cutter that landed us on the island, and made our way to the abandoned village of the Bermudan fishers.

The internal crackings and detonations could be plainly heard, and a sheaf of smoke was swayed by the wind at the summit.

Beyond a peradventure the ancient volcano had been started again by the subterranean fire, and an eruption at any moment was to be apprehended.

In vain we attempted to climb to the mouth of the crater. The mountain sheered down at an angle of from seventy-five to eighty degrees, and its smooth, slippery sides afforded absolutely no foothold. Anything more barren than this rocky freak of nature it would be difficult to conceive. Only a few tufts of wild herbs were to be seen upon the whole island, and these seemed to have no raison d'être.

Our explorations were therefore necessarily limited, and in view of the active symptoms of danger that manifested themselves, we could but approve the action of the villagers in abandoning the place; for we entertained no doubt that its destruction was imminent.

These were the circumstances in which I was led to visit Back Cup, and no one will consequently be surprised at the fact that I recognized it immediately we hove in sight of the queer structure.

No, I repeat, the Count d'Artigas would probably not be overpleased if he were aware that Warder Gaydon is perfectly acquainted with this islet, even if the Ebba was to anchor there—which, as there is no port, is, to say the least, extremely improbable.

As we draw nearer, I attentively examine Back Cup. Not one of its former inhabitants has been induced to return, and, as it is absolutely deserted, I cannot imagine why the schooner should visit the place.

Perhaps, however, the Count d'Artigas and his companions have no intention of landing there. Even though the Ebba should find temporary shelter between the rocky sides of a narrow creek there is nothing to give ground to the supposition that a wealthy yachtsman would have the remotest idea of fixing upon as his residence an arid cone exposed to all the terrible tempests of the Western Atlantic. To live hero is all very well for rustic fishermen, but not for the Count d'Artigas, Engineer Serko, Captain Spade and his crew.

Back Cup is now only half a mile off, and the seaweed thrown up on its rocky base is plainly discernible. The only living things upon it are the sea-gulls and other birds that circle in clouds around the smoking crater.

When she is only two cable's lengths off, the schooner slackens speed, and then stops at the entrance of a sort of natural canal formed by a couple of reefs that barely rise above the water.

I wonder whether the Ebba will venture to try the dangerous feat of passing through it. I do not think so. She will probably lay where she is--though why she should do so I do not know--for a few hours, and then continue her voyage towards the east.

However this may be I see no preparations in progress for dropping anchor. The anchors are suspended in their usual places, the cables have not been cleared, and no motion has been made to lower a single boat.

At this moment Count d'Artigas, Engineer Serko and Captain Spade go forward and perform some manoeuvre that is inexplicable to me.

I walk along the port side of the deck until I am near the foremast, and then I can see a small buoy that the sailors are hoisting in. Almost immediately the water, at the same spot becomes dark and I observe a black mass rising to the surface. Is it a big whale rising for air, and is the Ebba in danger of being shattered by a blow from the monster's tail?

Now I understand! At last the mystery is solved. I know what was the motor that caused the schooner to go at such an extraordinary speed without sails and without a screw. Her indefatigable motor is emerging from the sea, after having towed her from the coast of America to the archipelago of the Bermudas. There it is, floating alongside—a submersible boat, a submarine tug, worked by a screw set in motion by the current from a battery of accumulators or powerful electric piles.

On the upper part of the long cigar-shaped iron tug is a platform in the middle of which is the "lid" by which an entrance is effected. In the fore part of the platform projects a periscope, or lookout, formed by port-holes or lenses through which an electric searchlight can throw its gleam for some distance under water in front of and on each side of the tug. Now relieved of its ballast of water the boat has risen to the surface. Its lid will open and fresh air will penetrate it to every part. In all probability, if it remained submerged during the day it rose at night and towed the Ebba on the surface.

But if the mechanical power of the tug is produced by electricity the latter must be furnished by some manufactory where it is stored, and the means of procuring the batteries is not to be found on Back Cup, I suppose.
And then, why does the Ebba have recourse to this submarine towing system? Why is she not provided with her own means of propulsion, like other pleasure-boats?

These are things, however, upon which I have at present no leisure to ruminate.

The lid of the tug opens and several men issue on to the platform. They are the crew of this submarine boat, and Captain Spade has been able to communicate with them and transmit his orders as to the direction to be taken by means of electric signals connected with the tug by a wire that passes along the stem of the schooner.

Engineer Serko approaches me and says, pointing to the boat:

"Get in."

"Get in!" I exclaim.

"Yes, in the tug, and look sharp about it."

As usual there is nothing for it but to obey. I hasten to comply with the order and clamber over the side.

At the same time Thomas Roch appears on deck accompanied by one of the crew. He appears to be very calm, and very indifferent too, and makes no resistance when he is lifted over and lowered into the tug. When he has been taken in, Count d'Artigas and Engineer Serko follow.

Captain Spade and the crew of the Ebba remain behind, with the exception of four men who man the dinghy, which has been lowered. They have hold of a long hawser, with which the schooner is probably to be towed through the reef. Is there then a creek in the middle of the rocks where the vessel is secure from the breakers? Is this the port to which she belongs?

They row off with the hawser and make the end fast to a ring in the reef. Then the crew on board haul on it and in five minutes the schooner is so completely lost to sight among the rocks that even the tip of her mast could not be seen from the sea.

Who in Bermuda imagines that a vessel is accustomed to lay up in this secret creek? Who in America would have any idea that the rich yachtsman so well known in all the eastern ports abides in the solitude of Back Cup mountain?

Twenty minutes later the dinghy returns with the four men towards the tug which was evidently waiting for them before proceeding--where?

They climb on board, the little boat is made fast astern, a movement is felt, the screw revolves rapidly and the tug skims along the surface to Back Cup, skirting the reefs to the south.

Three cable's lengths further on, another tortuous canal is seen that leads to the island. Into this the tug enters. When it gets close inshore, an order is given to two men who jump out and haul the dinghy up on a narrow sandy beach out of the reach of wave or weed, and where it will be easily get-at-able when wanted.

This done the sailors return to the tug and Engineer Serko signs to me to go below.

A short iron ladder leads into a central cabin where various bales and packages are stored, and for which no doubt there was not room in the hold of the schooner. I am pushed into a side cabin, the door is shut upon me, and here I am once more a prisoner in profound darkness.

I recognize the cabin the moment I enter it. It is the place in which I spent so many long hours after our abduction from Healthful House, and in which I was confined until well out at sea off Pamlico Sound.

It is evident that Thomas Roch has been placed in a similar compartment.

A loud noise is heard, the banging of the lid as it closes, and the tug begins to sink as the water is admitted to the tanks.

This movement is succeeded by another--a movement that impels the boat through the water.

Three minutes later it stops, and I feel that we are rising to the surface again.

Another noise made by the lid being raised.

The door of my cabin opens, and I rush out and clamber on to the platform.

I look around and find that the tug has penetrated to the interior of Back Cup mountain.

This is the mysterious retreat where Count d'Artigas lives with his companions--out of the world, so to speak.

CHAPTER IX.
INSIDE BACK CUP.

The next morning I am able to make a first inspection of the vast cavern of Back Cup. No one seeks to prevent me.

What a night I have passed! What strange visions I have seen! With what impatience I waited for morning!

I was conducted to a grotto about a hundred paces from the edge of the lake where the tug stopped. The grotto, twelve feet by ten, was lighted by an incandescent lamp, and fitted with an entrance door that was closed upon me.

I am not surprised that electricity is employed in lighting the interior of the cavern, as it is also used in the
submarine boat. But where is it generated? Where does it come from? Is there a manufactory installed somewhere or
other in this vast crypt, with machinery, dynamos and accumulators?

My cell is neatly furnished with a table on which provisions are spread, a bunk with bedding, a basket chair, a
wash-hand-stand with toilet set, and a closet containing linen and various suits of clothes. In a drawer of the table I
find paper, ink and pens.

My dinner consists of fresh fish, preserved meat, bread of excellent quality, ale and whisky; but I am so excited
that I scarcely touch it. Yet I feel that I ought to fortify myself and recover my calmness of mind. I must and will
solve the mystery surrounding the handful of men who burrow in the bowels of this island.

So it is under the carapace of Back Cup that Count d'Artigas has established himself! This cavity, the existence
of which is not even suspected, is his home when he is not sailing in the Ebba along the coasts of the new world or
the old. This is the unknown retreat he has discovered, to which access is obtained by a submarine passage twelve or
fifteen feet below the surface of the ocean.

Why has he severed himself from the world? What has been his past? If, as I suspect, this name of d'Artigas and
this title of Count are assumed, what motive has he for hiding his identity? Has he been banished, is he an outcast of
society that he should have selected this place above all others? Am I not in the power of an evildoer anxious to
ensure impunity for his crimes and to defy the law by seeking refuge in this undiscoverable burrow? I have the right
of supposing anything in the case of this suspicious foreigner, and I exercise it.

Then the question to which I have never been able to suggest a satisfactory answer once more surges into my
mind. Why was Thomas Roch abducted from Healthful House in the manner already fully described? Does the
Count d'Artigas hope to force from him the secret of his fulgurator with a view to utilizing it for the defence of Back
Cup in case his retreat should by chance be discovered? Hardly. It would be easy enough to starve the gang out of
Back Cup, by preventing the tug from supplying them with provisions. On the other hand, the schooner could never
break through the investing lines, and if she did her description would be known in every port. In this event, of what
possible use would Thomas Roch's invention be to the Count d'Artigas Decidedly, I cannot understand it!

About seven o'clock in the morning I jump out of bed. If I am a prisoner in the cavern I am at least not
imprisoned in my grotto cell. The door yields when I turn the handle and push against it, and I walk out.

Thirty yards in front of me is a rocky plane, forming a sort of quay that extends to right and left. Several sailors
of the Ebba are engaged in landing bales and stores from the interior of the tug, which lays alongside a little stone
jetty.

A dim light to which my eyes soon grow accustomed envelops the cavern and comes from a hole in the centre of
the roof, through which the blue sky can be seen.

"It is from that hole that the smoke which can be seen for such a distance issues," I say to myself, and this
discovery suggests a whole series of reflections.

Back Cup, then, is not a volcano, as was supposed—as I supposed myself. The flames that were seen a few years
ago, and the columns of smoke that still rise were and are produced artificially. The detonations and rumblings that
so alarmed the Bermudan fishers were not caused by the internal workings of nature. These various phenomena
were fictitious. They manifested themselves at the mere will of the owner of the island, who wanted to scare away
the inhabitants who resided on the coast. He succeeded, this Count d'Artigas, and remains the sole and undisputed
monarch of the mountain. By exploding gunpowder, and burning seaweed swept up in inexhaustible quantities by
the ocean, he has been able to simulate a volcano upon the point of eruption and effectually scare away!

The light becomes stronger as the sun rises higher, the daylight streams through the fictitious crater, and I shall
soon be able to estimate the cavern's dimensions. This is how I calculate:

Exteriorly the island of Back Cup, which is as nearly as possible circular, measures two hundred and fifty yards
in circumference, and presents an interior superficies of about six acres. The sides of the mountain at its base vary in
thickness from thirty to a hundred yards.

It therefore follows that this excavation practically occupies the whole of that part of Back Cup island which
appears above water. As to the length of the submarine tunnel by which communication is obtained with the outside,
and through which the tug passed, I estimate that it is fifty yards in length.

The size of the cavern can be judged from these approximate figures. But vast as it is, I remember that there are
caverns of larger dimensions both in the old and new worlds. For instance in Carniole, Northumberland, Derbyshire,
Piedmont, the Balearics, Hungary and California are larger grottoes than Back Cup, and those at Han-sur-Lesse in
Belgium, and the Mammoth Caves in Kentucky, are also more extensive. The latter contain no fewer than two
hundred and twenty-six domes, seven rivers, eight cataracts, thirty two wells of unknown depth, and an immense
lake which extends over six or seven leagues, the limit of which has never been reached by explorers.

I know these Kentucky grottoes, having visited them, as many thousands of tourists have done. The principal
one will serve as a comparison to Back Cup. The roof of the former, like that of the latter, is supported by pillars of various lengths, which give it the appearance of a Gothic cathedral, with naves and aisles, though it lacks the architectural regularity of a religious edifice. The only difference is that whereas the roof of the Kentucky grotto is over four hundred feet high, that of Back Cup is not above two hundred and twenty at that part of it where the round hole through which issue the smoke and flames is situated.

Another peculiarity, and a very important one, that requires to be pointed out, is that whereas the majority of the grottoes referred to are easily accessible, and were therefore bound to be discovered some time or other, the same remark does not apply to Back Cup. Although it is marked on the map as an island forming part of the Bermuda group, how could any one imagine that it is hollow, that its rocky sides are only the walls of an enormous cavern? In order to make such a discovery it would be necessary to get inside, and to get inside a submarine apparatus similar to that of the Count d'Artigas would be necessary.

In my opinion this strange yachtsman's discovery of the tunnel by which he has been able to found this disquieting colony of Back Cup must have been due to pure chance.

Now I turn my attention to the lake and observe that it is a very small one, measuring not more than four hundred yards in circumference. It is, properly speaking, a lagoon, the rocky sides of which are perpendicular. It is large enough for the tug to work about in it, and holds enough water too, for it must be one hundred and twenty-five feet deep.

It goes without saying that this crypt, given its position and structure, belongs to the category of those which are due to the encroachments of the sea. It is at once of Neptunian and Plutonian origin, like the grottoes of Crozon and Morgate in the bay of Douarnenez in France, of Bonifacio on the Corsican coast, Thorogatten in Norway, the height of which is estimated at over three hundred feet, the catavauls of Greece, the grottoes of Gibraltar in Spain, and Tourana in Cochin China, whose carapace indicates that they are all the product of this dual geological labor.

The islet of Back Cup is in great part formed of calcareous rocks, which slope upwards gently from the lagoon towards the sides and are separated from each other by narrow beaches of fine sand. Thick layers of seaweed that have been swept through the tunnel by the tide and thrown up around the lake have been piled into heaps, some of which are dry and some still wet, but all of which exhale the strong odor of the briny ocean. This, however, is not the only combustible employed by the inhabitants of Back Cup, for I see an enormous store of coal that must have been brought by the schooner and the tug. But it is the incineration of masses of dried seaweed that causes the smoke vomited forth by the crater of the mountain.

Continuing my walk I perceive on the northern side of the lagoon the habitations of this colony of troglodytes--do they not merit the appellation? This part of the cavern, which is known as the Beehive, fully justifies its name, for it is honeycombed by cells excavated in the limestone rock and in which these human bees--or perhaps they should rather be called wasps--reside.

The lay of the cavern to the east is very different. Here hundreds of pillars of all shapes rise to the dome, and form a veritable forest of stone trees through the sinuous avenues of which one can thread one's way to the extreme limit of the place.

By counting the cells of the Beehive I calculate that Count d'Artigas' companions number from eighty to one hundred.

As my eye wanders over the place I notice that the Count is standing in front of one of the cells, which is isolated from the others, and talking to Engineer Serko and Captain Spade. After a while they stroll down to the jetty alongside which the tug is lying.

A dozen men have been emptying the merchandise out of the tug and transporting the goods in boats to the other side, where great cellars have been excavated in the rocks and form the storehouses of the band.

The orifice of the tunnel is not visible in the waters of the lagoon, and I remember that when I was brought here I felt the tug sink several feet before it entered. In this respect therefore Back Cup does not resemble either the grottoes of Staffa or Morgate, entrance to which is always open, even at high tide. There may be another passage communicating with the coast, either natural or artificial, and this I shall have to make my business to find out.

The island well merits its name of Back Cup. It is indeed a gigantic cup turned upside down, not only to outward appearance, but inwardly, too, though people are ignorant of the fact. I have already remarked that the Beehive is situated to the north of the lagoon, that is to say to the left on entering by the tunnel. On the opposite side are the storerooms filled with provisions of all kinds, bales of merchandise, barrels of wine, beer, and spirits and various packets bearing different marks and labels that show that they came from all parts of the world. One would think that the cargoes of a score of ships had been landed here.

A little farther on is a large wooden shed the nature of which is easily distinguishable. From a pole above it a network of thick copper wires extends which conducts the current to the powerful electric lights suspended from the roof or dome, and to the incandescent lamps in each of the cells of the hive. A large number of lamps are also
installed among the stone pillars and light up the avenues to their extremities.

"Shall I be permitted to roam about wherever I please?" I ask myself. I hope so. I cannot for the life of me see why the Count d'Artigas should prohibit me from doing so, for I cannot get farther than the surrounding walls of his mysterious domain. I question whether there is any other issue than the tunnel, and how on earth could I get through that?

Besides, admitting that I am able to get through it, I cannot get off the island. My disappearance would be soon noticed, and the tug would take out a dozen men who would explore every nook and cranny. I should inevitably be recaptured, brought back to the Beehive, and deprived of my liberty for good.

I must therefore give up all idea of making my escape, unless I can see that it has some chance of being successful, and if ever an opportunity does present itself I shall not be slow to take advantage of it.

On strolling round by the rows of cells I am able to observe a few of these companions of the Count d'Artigas who are content to pass their monotonous existence in the depths of Back Cup. As I said before, calculating from the number of cells in the Beehive, there must be between eighty and a hundred of them.

They pay no attention whatever to me as I pass, and on examining them closely it seems to me that they must have been recruited from every country. I do not distinguish any community of origin among them, not even a similarity by which they might be classed as North Americans, Europeans or Asiatics. The color of their skin shades from white to yellow and black--the black peculiar to Australia rather than to Africa. To sum up, they appear for the most part to pertain to the Malay races. I may add that the Count d'Artigas certainly belongs to that particular race which peoples the Dutch isles in the West Pacific, while Engineer Serko must be Levantine and Captain Spade of Italian origin.

But if the inhabitants of Back Cup are not bound to each other by ties of race, they certainly are by instinct and inclination. What forbidding, savage-looking faces they have, to be sure! They are men of violent character who have probably never placed any restraint upon their passions, nor hesitated at anything, and it occurs to me that in all likelihood they have sought refuge in this cavern, where they fancy they can continue to defy the law with impunity, after a long series of crimes--robbery, murder, arson, and excesses of all descriptions committed together. In this case Back Cup is nothing but a lair of pirates, the Count d'Artigas is the leader of the band and Serko and Spade are his lieutenants.

I cannot get this idea out of my head, and the more I consider the more convinced I am that I am right, especially as everything I see during my stroll about the cavern seems to confirm my opinion.

However this may be, and whatever may be the circumstances that have brought them together in this place, Count d'Artigas' companions appear to accept his all-powerful domination without question. On the other hand, if he keeps them under his iron heel by enforcing the severest discipline, certain advantages, some compensation, must accrue from the servitude to which they bow. What can this compensation be?

Having turned that part of the bank under which the tunnel passes, I find myself on the opposite side of the lagoon, where are situated the storerooms containing the merchandise brought by the Ebba on each trip, and which contain a great quantity of bales.

Beyond is the manufactory of electric energy. I gaze in at the windows as I pass and notice that it contains machines of the latest invention and highest attained perfection, which take up little space. Not one steam engine, with its more or less complicated mechanism and need of fuel, is to be seen in the place. As I had surmised, piles of extraordinary power supply the current to the lamps in the cavern, as well as to the dynamos of the tug. No doubt the current is also utilized for domestic purposes, such as warming the Beehive and cooking food, I can see that in a neighboring cavity it is applied to the alembics used to produce fresh water. At any rate the colonists of Back Cup are not reduced to catching the rain water that falls so abundantly upon the exterior of the mountain.

A few paces from the electric power house is a large cistern that, save in the matter of proportions, is the counterpart of those I visited in Bermuda. In the latter place the cisterns have to supply the needs of over ten thousand people, this one of a hundred--what?

I am not sure yet what to call them. That their chief had serious reasons for choosing the bowels of this island for his abiding place is obvious. But what were those reasons? I can understand monks shutting themselves behind their monastery walls with the intention of separating themselves from the world, but these subjects of the Count d'Artigas have nothing of the monk about them, and would not be mistaken for such by the most simple-minded of mortals.

I continue my way through the pillars to the extremity of the cavern. No one has sought to stop me, no one has spoken to me, not a soul apparently has taken the very slightest notice of me. This portion of Back Cup is extremely curious, and comparable to the most marvellous of the grottoes of Kentucky or the Balears. I need hardly say that nowhere is the labor of man apparent. All this is the handiwork of nature, and it is not without wonder, mingled with awe, that I reflect upon the telluric forces capable of engendering such prodigious substructions. The daylight from
the crater in the centre only strikes this part of the cavern obliquely, so that it is very imperfectly lighted, but at night, when illuminated by the electric lamps, its aspect must be positively fantastic.

I have examined the walls everywhere with minute attention, but have been unable to discover any means of communicating with the outside.

Quite a colony of birds—gulls, sea-swallows and other feathery denizens of the Bermudan beaches have made their home in the cavern. They have apparently never been hunted, for they are in no way disturbed by the presence of man.

But besides sea-birds, which are free to come and go as they please by the orifice in the dome, there is a whole farmyard of domestic poultry, and cows and pigs. The food supply is therefore no less assured than it is varied, when the fish of all kinds that abound in the lagoon and around the island are taken into consideration.

Moreover, a mere glance at the colonists of Back Cup amply suffices to show that they are not accustomed to fare scantily. They are all vigorous, robust seafaring men, weatherbeaten and seasoned in the burning beat of tropical latitudes, whose rich blood is surcharged with oxygen by the breezes of the ocean. There is not a youth nor an old man among them. They are all in their prime, their ages ranging from thirty to fifty.

But why do they submit to such an existence? Do they never leave their rocky retreat?

Perhaps I shall find out ere I am much older.

CHAPTER X.
KER KARRAJE.

The cell in which I reside is about a hundred paces from the habitation of the Count d'Artigas, which is one of the end ones of this row of the Beehive. If I am not to share it with Thomas Roch, I presume the latter's cell is not far off, for in order that Warder Gaydon may continue to care for the ex-patient of Healthful House, their respective apartments will have to be contiguous. However, I suppose I shall soon be enlightened on this point.

Captain Spade and Engineer Serko reside separately in proximity to D'Artigas' mansion.

Mansion? Yes, why not dignify it with the title since this habitation has been arranged with a certain art? Skillful hands have carved an ornamental façade in the rock. A large door affords access to it. Colored glass windows in wooden frames let into the limestone walls admit the light. The interior comprises several chambers, a dining-room and a drawing-room lighted by a stained-glass window, the whole being perfectly ventilated. The furniture is of various styles and shapes and of French, English and American make. The kitchen, larder, etc., are in adjoining cells in rear of the Beehive.

In the afternoon, just as I issue from my cell with the firm intention of "obtaining an audience" of the Count d'Artigas, I catch sight of him coming along the shore of the lagoon towards the hive. Either he does not see me, or wishes to avoid me, for he quickens his steps and I am unable to catch him.

"Well, he will have to receive me, anyhow!" I mutter to myself.

I hurry up to the door through which he has just disappeared and which has closed behind him.

It is guarded by a gigantic, dark-skinned Malay, who orders me away in no amiable tone of voice.

I decline to comply with his injunction, and repeat to him twice the following request in my very best English:

"Tell the Count d'Artigas that I desire to be received immediately."

I might just as well have addressed myself to the surrounding rock. This savage, no doubt, does not understand a word of English, for he scowls at me and orders me away again with a menacing cry.

I have a good mind to attempt to force the door and shout so that the Count d'Artigas cannot fail to hear me, but in all probability I shall only succeed in rousing the wrath of the Malay, who appears to be endowed with herculean strength. I therefore judge discretion to be the better part of valor, and put off the explanation that is owing to me—and which, sooner or later, I will have—to a more propitious occasion.

I meander off in front of the Beehive towards the east, and my thoughts revert to Thomas Roch. I am surprised that I have not seen him yet. Can he be in the throes of a fresh paroxysm?

This hypothesis is hardly admissible, for if the Count d'Artigas is to be believed, he would in this event have summoned me to attend to the inventor.

A little farther on I encounter Engineer Serko.

With his inviting manner and usual good-humor this ironical individual smiles when he perceives me, and does not seek to avoid me. If he knew I was a colleague, an engineer—providing he himself really is one—perhaps he might receive me with more cordiality than I have yet encountered, but I am not going to be such a fool as to tell him who and what I am.

He stops, with laughing eyes and mocking mouth, and accompanies a "Good day, how do you do?" with a gracious gesture of salutation.
I respond coldly to his politeness—a fact which he affects not to notice.

"May Saint Jonathan protect you, Mr. Gaydon!" he continues in his clear, ringing voice. "You are not, I presume, disposed to regret the fortunate circumstance by which you were permitted to visit this surpassingly marvellous cavern—and it really is one of the finest, although the least known on this spheroid."

This word of a scientific language used in conversation with a simple hospital attendant surprises me, I admit, and I merely reply:

"I should have no reason to complain, Mr. Serko, if, after having had the pleasure of visiting this cavern, I were at liberty to quit it."

"What! Already thinking of leaving us, Mr. Gaydon,—of returning to your dismal pavilion at Healthful House? Why, you have scarcely had time to explore our magnificent domain, or to admire the incomparable beauty with which nature has endowed it."

"What I have seen suffices," I answer; "and should you perchance be talking seriously I will assure you seriously that I do not want to see any more of it."

"Come, now, Mr. Gaydon, permit me to point out that you have not yet had the opportunity of appreciating the advantages of an existence passed in such unrivalled surroundings. It is a quiet life, exempt from care, with an assured future, material conditions such as are not to be met with anywhere, an even climate and no more to fear from the tempests which desolate the coasts in this part of the Atlantic than from the cold of winter, or the heat of summer. This temperate and salubrious atmosphere is scarcely affected by changes of season. Here we have no need to apprehend the wrath of either Pluto or Neptune."

"Sir," I reply, "it is impossible that this climate can suit you, that you can appreciate living in this grotto of----"

I was on the point of pronouncing the name of Back Cup. Fortunately I restrained myself in time. What would happen if they suspected that I am aware of the name of their island, and, consequently, of its position at the extremity of the Bermuda group?

"However," I continue, "if this climate does not suit me, I have, I presume, the right to make a change."

"The right, of course."

"I understand from your remark that I shall be furnished with the means of returning to America when I want to go?"

"I have no reason for opposing your desires, Mr. Gaydon," Engineer Serko replies, "and I regard your presumption as a very natural one. Observe, however, that we live here in a noble and superb independence, that we acknowledge the authority of no foreign power, that we are subject to no outside authority, that we are the colonists of no state, either of the old or new world. This is worth consideration by whomsoever has a sense of pride and independence. Besides, what memories are evoked in a cultivated mind by these grottoes which seem to have been chiselled by the hands of the gods and in which they were wont to render their oracles by the mouth of Trophonius."

Decidedly, Engineer Serko is fond of citing mythology! Trophonius after Pluto and Neptune? Does he imagine that Warder Gaydon ever heard of Trophonius? It is clear this mocker continues to mock, and I have to exercise the greatest patience in order not to reply in the same tone.

"A moment ago," I continue shortly, "I wanted to enter yon habitation, which, if I mistake not, is that of the Count d'Artigas, but I was prevented."

"By whom, Mr. Gaydon?"

"By a man in the Count's employ."

"He probably had received strict orders about it."

"Possibly, yet whether he likes it or not, Count d'Artigas will have to see me and listen to me."

"Maybe it would be difficult, and even impossible to get him to do so," says Engineer Serko with a smile.

"Why so?"

"Because there is no such person as Count d'Artigas here."

"You are jesting, I presume; I have just seen him."

"It was not the Count d'Artigas whom you saw, Mr. Gaydon."

"Who was it then, may I ask?"

"The pirate Ker Karraje."

This name was thrown at me in a hard tone of voice, and Engineer Serko walked off before I had presence of mind enough to detain him.

The pirate Ker Karraje!

Yes, this name is a revelation to me. I know it well, and what memories it evokes! It by itself explains what has hitherto been inexplicable to me. I now know into whose hands I have fallen.

With what I already knew, with what I have learned since my arrival in Back Cup from Engineer Serko, this is what I am able to tell about the past and present of Ker Karraje:
Eight or nine years ago, the West Pacific was infested by pirates who acted with the greatest audacity. A band of criminals of various origins, composed of escaped convicts, military and naval deserters, etc., operated with incredible audacity under the orders of a redoubtable chief. The nucleus of the band had been formed by men pertaining to the scum of Europe who had been attracted to New South Wales, in Australia, by the discovery of gold there. Among these gold-diggers, were Captain Spade and Engineer Serko, two outcasts, whom a certain community of ideas and character soon bound together in close friendship.

These intelligent, well educated, resolute men would most assuredly have succeeded in any career. But being without conscience or scruples, and determined to get rich at no matter what cost, deriving from gambling and speculation what they might have earned by patient and steady work, they engaged in all sorts of impossible adventures. One day they were rich, the next day poor, like most of the questionable individuals who had hurried to the gold-fields in search of fortune.

Among the diggers in New South Wales was a man of incomparable audacity, one of those men who stick at nothing—not even at crime—and whose influence upon bad and violent natures is irresistible.

That man's name was Ker Karraje.

The origin or nationality or antecedents of this pirate were never established by the investigations ordered in regard to him. He eluded all pursuit, and his name—or at least the name he gave himself—was known all over the world, and inspired horror and terror everywhere, as being that of a legendary personage, a bogey, invisible and unseizable.

I have now reason to believe that Ker Karraje is a Malay. However, it is of little consequence, after all. What is certain is that he was with reason regarded as a formidable and dangerous villain who had many crimes, committed in distant seas, to answer for.

After spending a few years on the Australian goldfields, where he made the acquaintance of Engineer Serko and Captain Spade, Ker Karraje managed to seize a ship in the port of Melbourne, in the province of Victoria. He was joined by about thirty rascals whose number was speedily tripled. In that part of the Pacific Ocean where piracy is still carried on with great facility, and I may say, profit, the number of ships pillaged, crews massacred, and raids committed in certain western islands which the colonists were unable to defend, cannot be estimated.

Although the whereabouts of Ker Karraje's vessel, commanded by Captain Spade, was several times made known to the authorities, all attempts to capture it proved futile. The marauder would disappear among the innumerable islands of which he knew every cove and creek, and it was impossible to come across him.

He maintained a perfect reign of terror. England, France, Germany, Russia and America vainly dispatched warships in pursuit of the phantom vessel which disappeared, no one knew whither, after robberies and murders that could not be prevented or punished had been committed by her crew.

One day this series of crimes came to an end, and no more was heard of Ker Karraje. Had he abandoned the Pacific for other seas? Would this pirate break out in a fresh place? It was argued that notwithstanding what they must have spent in orgies and debauchery the pirate and his companions must still have an enormous amount of wealth hidden in some place known only to themselves, and that they were enjoying their ill-gotten gains.

Where had the band hidden themselves since they had ceased their depredations? This was a question which everybody asked and none was able to answer. All attempts to run them to earth were vain. Terror and uneasiness having ceased with the danger, Ker Karraje's exploits soon began to be forgotten, even in the West Pacific.

This is what had happened—and what will never be known unless I succeed in escaping from Back Cup: These wretches were, as a matter of fact, possessed of great wealth when they abandoned the Southern Seas. Having destroyed their ship they dispersed in different directions after having arranged to meet on the American continent.

Engineer Serko, who was well versed in his profession, and was a clever mechanic to boot, and who had made a special study of submarine craft, proposed to Ker Karraje that they should construct one of these boats in order to continue their criminal exploits with greater secrecy and effectiveness.

Ker Karraje at once saw the practical nature of the proposition, and as they had no lack of money the idea was soon carried out.

While the so-called Count d'Artigas ordered the construction of the schooner Ebba at the shipyards of Gotteborg, in Sweden, he gave to the Cramps of Philadelphia, in America, the plans of a submarine boat whose construction excited no suspicion. Besides, as will be seen, it soon disappeared and was never heard of again.

The boat was constructed from a model and under the personal supervision of Engineer Serko, and fitted with all the known appliances of nautical science. The screw was worked with electric piles of recent invention which imparted enormous propulsive power to the motor.

It goes without saying that no one imagined that Count d'Artigas was none other than Ker Karraje, the former pirate of the Pacific, and that Engineer Serko was the most formidable and resolute of his accomplices. The former
was regarded as a foreigner of noble birth and great fortune, who for several months had been frequenting the ports of the United States, the Ebba having been launched long before the tug was ready.

Work upon the latter occupied fully eighteen months, and when the boat was finished it excited the admiration of all those interested in these engines of submarine navigation. By its external form, its interior arrangements, its air-supply system, the rapidity with which it could be immersed, the facility with which it could be handled and controlled, and its extraordinary speed, it was conceded to be far superior to the Goubet, the Gymnote, the Zede, and other similar boats which had made great strides towards perfection.

After several extremely successful experiments a public test was given in the open sea, four miles off Charleston, in presence of several American and foreign warships, merchant vessels, and pleasure boats invited for the occasion.

Of course the Ebba was among them, with the Count d’Artigas, Engineer Serko, and Captain Spade on board, and the old crew as well, save half a dozen men who manned the submarine machine, which was worked by a mechanical engineer named Gibson, a bold and very clever Englishman.

The programme of this definite experiment comprised various evolutions on the surface of the water, which were to be followed by an immersion to last several hours, the boat being ordered not to rise again until a certain buoy stationed many miles out at sea had been attained.

At the appointed time the lid was closed and the boat at first manoeuvred on the surface. Her speed and the ease with which she turned and twisted were loudly praised by all the technical spectators.

Then at a signal given on board the Ebba the tug sank slowly out of sight, and several vessels started for the buoy where she was to reappear.

Three hours went by, but there was no sign of the boat.

No one could suppose that in accordance with instructions received from the Count d’Artigas and Engineer Serko this submarine machine, which was destined to act as the invisible tug of the schooner, would not emerge till it had gone several miles beyond the rendezvous. Therefore, with the exception of those who were in the secret, no one entertained any doubt that the boat and all inside her had perished as the result of an accident either to her metallic covering or machinery.

On board the Ebba consternation was admirably simulated. On board the other vessels it was real. Drags were used and divers sent down along the course the boat was supposed to have taken, but it could not be found, and it was agreed that it had been swallowed up in the depths of the Atlantic.

Two days later the Count d’Artigas put to sea again, and in forty-eight hours came up with the tug at the place appointed.

This is how Ker Karraje became possessed of the admirable vessel which was to perform the double function of towing the schooner and attacking ships. With this terrible engine of destruction, whose very existence was ignored, the Count d’Artigas was able to recommence his career of piracy with security and impunity.

These details I have learned from Engineer Serko, who is very proud of his handiwork,—and also very positive that the prisoner of Back Cup will never be able to disclose the secret.

It will easily be realized how powerful was the offensive weapon Ker Karraje now possessed. During the night the tug would rush at a merchant vessel, and bore a hole in her with its powerful ram. At the same time the schooner which could not possibly have excited any suspicion, would run alongside and her horde of cutthroats would pour on to the doomed vessel’s deck and massacre the helpless crew, after which they would hurriedly transfer that part of the cargo that was worth taking to the Ebba. Thus it happened that ship after ship was added to the long list of those that never reached port and were classed as having gone down with all on board.

For a year after the odious comedy in the bay of Charleston Ker Karraje operated in the Atlantic, and his wealth increased to enormous proportions. The merchandise for which he had no use was disposed of in distant markets in exchange for gold and silver. But what was sadly needed was a place where the profits could be safely hidden pending the time when they were to be finally divided.

Chance came to their aid. While exploring the bottom of the sea in the neighborhood of the Bermudas, Engineer Serko and Driver Gibson discovered at the base of Back Cup island the tunnel which led to the interior of the mountain. Would it have been possible for Ker Karraje to have found a more admirable refuge than this, absolutely safe as it was from any possible chance of discovery? Thus it came to pass that one of the islands of the Archipelago of Bermuda, erstwhile the haunt of buccaneers, became the lair of another gang a good deal more to be dreaded.

This retreat having been definitely adopted, Count d’Artigas and his companions set about getting their place in order. Engineer Serko installed an electric power house, without having recourse to machines whose construction abroad might have aroused suspicion, simply employing piles that could be easily mounted and required but metal plates and chemical substances that the Ebba procured during her visits to the American coast.

What happened on the night of the 19th inst. can easily be divined. If the three-masted merchantman which lay
becalmed was not visible at break of day it was because she had been scuttled by the tug, boarded by the cut-throat band on the Ebba, and sunk with all on board after being pillaged. The bales and things that I had seen on the schooner were a part of her cargo, and all unknown to me the gallant ship was lying at the bottom of the broad Atlantic!

How will this adventure end? Shall I ever be able to escape from Back Cup, denounce the false Count d'Artigas and rid the seas of Ker Karraje's pirates?

And if Ker Karraje is terrible as it is, how much more so will he become if he ever obtains possession of Roch's fulgurator! His power will be increased a hundred-fold? If he were able to employ this new engine of destruction no merchantman could resist him, no warship escape total destruction.

I remain for some time absorbed and oppressed by the reflections with which the revelation of Ker Karraje's name inspires me. All that I have ever heard about this famous pirate recurs to me--his existence when he skimmed the Southern Seas, the useless expeditions organized by the maritime powers to hunt him down. The unaccountable loss of so many vessels in the Atlantic during the past few years is attributable to him. He had merely changed the scene of his exploits. It was supposed that he had been got rid of, whereas he is continuing his piratical practices in the most frequented ocean on the globe, by means of the tug which is believed to be lying at the bottom of Charleston Bay.

"Now," I say to myself, "I know his real name and that of his lair--Ker Karraje and Back Cup;" and I surmise that if Engineer Serko has let me into the secret he must have been authorized to do so. Am I not meant to understand from this that I must give up all hope of ever recovering my liberty?

Engineer Serko had manifestly remarked the impression created upon me by this revelation. I remember that on leaving me he went towards Ker Karraje's habitation, no doubt with the intention of apprising him of what had passed.

After a rather long walk around the lagoon I am about to return to my cell, when I hear footsteps behind me. I turn and find myself face to face with the Count d'Artigas, who is accompanied by Captain Spade. He glances at me sharply, and in a burst of irritation that I cannot suppress, I exclaim:

"You are keeping me here, sir, against all right. If it was to wait upon Thomas Roch that you carried me off from Healthful House, I refuse to attend to him, and insist upon being sent back."

The pirate chief makes a gesture, but does not reply.

Then my temper gets the better of me altogether.

"Answer me, Count d'Artigas--or rather, for I know who you are--answer me, Ker Karraje!" I shout.

"The Count d'Artigas is Ker Karraje," he coolly replies, "just as Warder Gaydon is Engineer Simon Hart; and Ker Karraje will never restore to liberty Engineer Simon Hart, who knows his secrets."

CHAPTER XI.

FIVE WEEKS IN BACK CUP.

The situation is plain. Ker Karraje knows who I am. He knew who I was when he kidnapped Thomas Roch and his attendant.

How did this man manage to find out what I was able to keep from the staff of Healthful House? How comes it that he knew that a French engineer was performing the duties of attendant to Thomas Roch? I do not know how he discovered it, but the fact remains that he did.

Evidently he had means of information which must have been costly, but from which he has derived considerable profit. Besides, men of his kidney do not count the cost when they wish to attain an end they have in view.

Henceforward Ker Karraje, or rather Engineer Serko, will replace me as attendant upon Thomas Roch. Will he succeed better than I did? God grant that he may not, that the civilized world may be spared such a misfortune!

I did not reply to Ker Karraje's Parthian shot, for I was stricken dumb. I did not, however, collapse, as the alleged Count d'Artigas perhaps expected I would.

No! I looked him straight in the eyes, which glittered angrily, and crossed my arms defiantly, as he had done. And yet he held my life in his hands! At a sign a bullet would have laid me dead at his feet. Then my body, cast into the lagoon, would have been borne out to sea through the tunnel and there would have been an end of me.

After this scene I am left at liberty, just as before. No measure is taken against me, I can walk among the pillars to the very end of the cavern, which--it is only too clear--possesses no other issue except the tunnel.

When I return to my cell, at the extremity of the Beehive, a prey to a thousand thoughts suggested by my situation, I say to myself:

"If Ker Karraje knows I am Simon Hart, the engineer, he must at any rate never know that I am aware of the
position of Back Cup Island."

As to the plan of confiding Thomas Roch to my care, I do not think he ever seriously entertained it, seeing that my identity had been revealed to him. I regret this, inasmuch as the inventor will indubitably be the object of pressing solicitations, and as Engineer Serko will employ every means in his power to obtain the composition of the explosive and deflagrator, of which he will make such detestable use during future piratical exploits. Yes, it would have been far better if I could have remained Thomas Roch's keeper here, as in Healthful House.

For fifteen days I see nothing of my late charge. No one, I repeat, has placed any obstacles in the way of my daily peregrinations. I have no need to occupy myself about the material part of my existence. My meals are brought to me regularly, direct from the kitchen of the Count d'Artigas--I cannot accustom myself to calling him by any other name. The food leaves nothing to be desired, thanks to the provisions that the Ebba brings on her return from each voyage.

It is very fortunate, too, that I have been supplied with all the writing materials I require, for during my long hours of idleness I have been able to jot down in my notebook the slightest incidents that have occurred since I was abducted from Healthful House, and to keep a diary day by day. As long as I am permitted to use a pen I shall continue my notes. Mayhap some day, they will help to clear up the mysteries of Back Cup.

From July 5 to July 25.--A fortnight has passed, and all my attempts to get near Thomas Roch have been frustrated. Orders have evidently been given to keep him away from my influence, inefficacious though the latter has hitherto been. My only hope is that the Count d'Artigas, Engineer Serko, and Captain Spade will waste their time trying to get at the inventor's secrets.

Three or four times to my knowledge, at least, Thomas Roch and Engineer Serko have walked together around the lagoon. As far as I have been able to judge, the former listened with some attention to what the other was saying to him. Serko has conducted him over the whole cavern, shown him the electric power house and the mechanism of the tug. Thomas Roch's mental condition has visibly improved since his departure from Healthful House.

Thomas Roch lives in a private room in Ker Karraje's "mansion." I have no doubt that he is daily sounded in regard to his discoveries, especially by Engineer Serko. Will he be able to resist the temptation if they offer him the exorbitant price that he demands? Has he any idea of the value of money? These wretches may dazzle him with the gold that they have accumulated by years of rapine. In the present state of his mind may he not be induced to disclose the composition of his fulgurator? They would then only have to fetch the necessary substances and Thomas Roch would have plenty of time in Back Cup to devote to his chemical combinations. As to the war-engines themselves nothing would be easier than to have them made in sections in different parts of the American continent. My hair stands on end when I think what they could and would do with them if once they gained possession of them.

These intolerable apprehensions no longer leave me a minute's peace; they are wearing me out and my health is suffering in consequence. Although the air in the interior of Back Cup is pure, I become subject to attacks of suffocation, and I feel as though my prison walls were falling upon me and crushing me under their weight. I am, besides, oppressed by the feeling that I am cut off from the world, as effectually as though I were no longer upon our planet--for I know nothing of what is going on outside.

Ah! if it were only possible to escape through that submarine tunnel, or through the hole in the dome and slide to the base of the mountain!

On the morning of the 25th I at last encounter Thomas Roch. He is alone on the other side of the lagoon, and I wonder, inasmuch as I have not seen them since the previous day, whether Ker Karraje, Engineer Serko, and Captain Spade have not gone off on some expedition.

I walk round towards Thomas Roch, and before he can see me I examine him attentively.

His serious, thoughtful physiognomy is no longer that of a madman. He walks slowly, with his eyes bent on the ground, and under his arm a drawing-board upon which is stretched a sheet of paper covered with designs.

Suddenly he raises his head, advances a step and recognizes me.

"Ah! Gaydon, it is you, is it?" he cries, "I have then escaped from you! I am free!"

He can, indeed, regard himself as being free--a good deal more at liberty in Back Cup than he was in Healthful House. But maybe my presence evokes unpleasant memories, and will bring on another fit, for he continues with extraordinary animation:

"Yes, I know you, Gaydon.--Do not approach me! Stand off! stand off! You would like to get me back in your clutches, incarcerate me again in your dungeon! Never! I have friends here who will protect me. They are powerful, they are rich. The Count d'Artigas is my backer and Engineer Serko is my partner. We are going to exploit my invention! We are going to make my fulgurator! Hence! Get you gone!"

Thomas Roch is in a perfect fury. He raises his voice, agitates his arms, and finally pulls from his pockets many rolls of dollar bills and banknotes, and handfuls of English, French, American and German gold coins, which slip through his fingers and roll about the cavern.
How could he get all this money except from Ker Karraje, and as the price of his secret? The noise he makes attracts a number of men to the scene. They watch us for a moment, then seize Thomas Roch and drag him away. As soon as I am out of his sight he ceases to struggle and becomes calm again.

July 27.--Two hours after meeting with Thomas Roch, I went down to the lagoon and walked out to the edge of the stone jetty.

The tug is not moored in its accustomed place, nor can I see it anywhere about the lake. Ker Karraje and Engineer Serko had not gone yesterday, as I supposed, for I saw them in the evening.

To-day, however, I have reason to believe that they really have gone away in the tug with Captain Spade and the crew of the Ebba, and that the latter must be sailing away.

Have they set out on a piracy expedition? Very likely. It is equally likely that Ker Karraje, become once more the Count d'Artigas, travelling for pleasure on board his yacht, intends to put into some port on the American coast to procure the substances necessary to the preparation of Roch's fulgurator.

Ah! if it had only been possible for me to hide in the tug, to slip into the Ebba's hold, and stow myself away until the schooner arrived in port! Then perchance I might have escaped and delivered the world from this band of pirates.

It will be seen how tenaciously I cling to the thought of escape--of fleeing--fleeing at any cost from this lair. But flight is impossible, except through the tunnel, by means of a submarine boat. Is it not folly to think of such a thing? Sheer folly, and yet what other way is there of getting out of Back Cup?

While I give myself up to these reflections the water of the lagoon opens a few yards from me and the tug appears. The lid is raised and Gibson, the engineer, and the men issue on to the platform. Other men come up and catch the line that is thrown to them. They haul upon it, and the tug is soon moored in its accustomed place.

This time, therefore, at any rate, the schooner is not being towed, and the tug merely went out to put Ker Karraje and his companions aboard the Ebba.

This only confirms my impression that the sole object of their trip is to reach an American port where the Count d'Artigas can procure the materials for making the explosive, and order the machines in some foundry. On the day fixed for their return the tug will go out through the tunnel again to meet the schooner and Ker Karraje will return to Back Cup.

Decidedly, this evildoer is carrying out his designs and has succeeded sooner than I thought would be possible.

August 3.--An incident occurred to-day of which the lagoon was the theatre--a very curious incident that must be exceedingly rare.

Towards three o'clock in the afternoon there was a prodigious bubbling in the water, which ceased for a minute or two and then recommenced in the centre of the lagoon.

About fifteen pirates, whose attention had been attracted by this unaccountable phenomenon, hurried down to the bank manifesting signs of astonishment not unmixed with fear--at least I thought so.

The agitation of the water was not caused by the tug, as the latter was lying alongside the jetty, and the idea that some other submarine boat had found its way through the tunnel was highly improbable.

Almost at the same instant cries were heard on the opposite bank. The newcomers shouted something in a hoarse voice to the men on the side where I was standing, and these immediately rushed off towards the Beehive.

I conjectured that they had caught sight of some sea-monster that had found its way in, and was floundering in the lagoon, and that they had rushed off to fetch arms and harpoons to try and capture it.

I was right, for they speedily returned with the latter weapons and rifles loaded with explosive bullets.

The monster in question was a whale, of the species that is common enough in Bermudan waters, which after swimming through the tunnel was plunging about in the narrow limits of the lake. As it was constrained to take refuge in Back Cup I concluded that it must have been hard pressed by whalers.

Some minutes elapsed before the monster rose to the surface. Then the green shiny mass appeared spouting furiously and darting to and fro as though fighting with some formidable enemy.

"If it was driven in here by whalers," I said to myself, "there must be a vessel in proximity to Back Cup--peradventure within a stone's throw of it. Her boats must have entered the western passes to the very foot of the mountain. And to think I am unable to communicate with them! But even if I could, I fail to see how I could go to them through these massive walls."

I soon found, however, that it was not fishers, but sharks that had driven the whale through the tunnel, and which infest these waters in great numbers. I could see them plainly as they darted about, turning upon their backs and displaying their enormous mouths which were bristling with their cruel teeth. There were five or six of the monsters, and they attacked the whale with great viciousness. The latter's only means of defence was its tail, with which it lashed at them with terrific force and rapidity. But the whale had received several wounds and the water was tinged with its life-blood; for plunge and lash as it would, it could not escape the bites of its enemies.
However, the voracious sharks were not permitted to vanquish their prey, for man, far more powerful with his instruments of death, was about to take a hand and snatch it from them. Gathered around the lagoon were the companions of Ker Karraje, every whit as ferocious as the sharks themselves, and well deserving the same name, for what else are they?

Standing amid a group, at the extremity of the jetty, and armed with a harpoon, was the big Malay who had prevented me from entering Ker Karraje's house. When the whale got within shot, he hurled the harpoon with great force and skill, and it sank into the leviathan's flesh just under the left fin. The whale plunged immediately, followed by the relentless sharks. The rope attached to the weapon ran out for about sixty yards, and then slackened. The men at once began to haul on it, and the monster rose to the surface again near the end of the tunnel, struggling desperately in its death agony, and spouting great columns of water tinged with blood. One blow of its tail struck a shark, and hurled it clean out of water against the rocky side, where it dropped in again, badly, if not fatally injured.

The harpoon was torn from the flesh by the jerk, and the whale went under. It came up again for the last time, and lashed the water so that it washed up from the tunnel end, disclosing the top of the orifice.

Then the sharks again rushed on their prey, but were scared off by a hail of the explosive bullets. Two men then jumped into a boat and attached a line to the dead monster. The latter was hauled into the jetty, and the Malays started to cut it up with a dexterity that showed they were no novices at the work.

No more sharks were to be seen, but I concluded that it would be as well to refrain from taking a bath in the lagoon for some days to come.

I now know exactly where the entrance to the tunnel is situated. The orifice on this side is only ten feet below the edge of the western bank. But of what use is this knowledge to me?

August 7.--Twelve days have elapsed since the Count d'Artigas, Engineer Serko, and Captain Spade put to sea. There is nothing to indicate that their return is expected, though the tug is always kept in readiness for immediate departure by Gibson, the engine-driver. If the Ebba is not afraid to enter the ports of the United States by day, I rather fancy she prefers to enter the rocky channel of Back Cup at nightfall. I also fancy, somehow, that Ker Karraje and his companions will return to-night.

August 10.--At ten o'clock last night, as I anticipated, the tug went under and out, just in time to meet the Ebba and tow her through the channel to her creek, after which she returned with Ker Karraje and the others.

When I look out this morning, I see Thomas Roch and Engineer Serko walking down to the lagoon, and talking. What they are talking about I can easily guess. I go forward and take a good look at my ex-patient. He is asking questions of Engineer Serko With great animation. His eyes gleam, his face is flushed, and he is all eagerness to reach the jetty. Engineer Serko can hardly keep up with him.

The crew of the tug are unloading her, and they have just brought ashore ten medium-sized boxes. These boxes bear a peculiar red mark, which Thomas Roch examines closely.

Engineer Serko orders the men to transport them to the storehouses on the left bank, and the boxes are forthwith loaded on a boat and rowed over.

In my opinion, these boxes contain the substances by the combination or mixture of which, the fulgurator and deflagrator are to be made. The engines, doubtless, are being made in an American foundry, and when they are ready, the schooner will fetch them and bring them to Back Cup.

For once in a while, anyhow, the Ebba has not returned with any stolen merchandise. She went out and has returned with a clear bill. But with what terrible power Ker Karraje will be armed for both offensive and defensive operations at sea! If Thomas Roch is to be credited, this fulgurator could shatter the terrestrial spheroid at one blow. And who knows but what one day, he will try the experiment?

CHAPTER XII.

ENGINEER SERKO'S ADVICE.

Thomas Roch has started work and spends hours and hours in a wooden shed on the left bank of the lagoon that has been set apart as his laboratory and workshop. No one enters it except himself. Does he insist upon preparing the explosive in secret and does he intend to keep the formula thereof to himself? I should not wonder.

The manner of employing Roch's fulgurator is, I believe, very simple indeed. The projectile in which it is used requires neither gun nor mortar to launch it, nor pneumatic tube like the Zalinski shell. It is autopropulsive, it projects itself, and no ship within a certain zone when the engine explodes could escape utter destruction. With such a weapon as this at his command Ker Karraje would be invincible.

From August 11 to August 17.--During the past week Thomas Roch has been working without intermission. Every morning the inventor goes to his laboratory and does not issue therefrom till night. I have made no attempt to stop him or speak to him, knowing that it would be useless to do so.
Although he is still indifferent to everything that does not touch upon his work he appears to be perfectly self-
possessed. Why should he not have recovered his reason? Has he not obtained what he has so long sought for? Is he
not at last able to carry out the plans he formed years and years ago?

August 18.--At one o'clock this morning I was roused by several detonations.

"Has Back Cup been attacked?" was my first thought. "Has the schooner excited suspicion, and been chased to
the entrance to the passes? Is the island being bombarded with a view to its destruction? Has justice at last overtaken
these evil-doers ere Thomas Roch has been able to complete the manufacture of his explosive, and before the
autopropulsive engine could be fetched from the continent?"

The detonations, which are very violent, continue, succeeding each other at regular intervals, and it occurs to me
that if the schooner has been destroyed, all communication with the bases of supply being impossible, Back Cup
cannot be provisioned.

It is true the tug would be able to land the Count d'Artigas somewhere on the American coast where, money
being no object, he could easily buy or order another vessel. But no matter. If Back Cup is only destroyed before
Ker Karraje has Roch's fulgurator at his disposal I shall render thanks to heaven.

A few hours later, at the usual time, I quit my cell. All is quiet at the Beehive. The men are going about their
business as usual. The tug is moored near the jetty. Thomas Roch is going to his laboratory, and Ker Karraje and
Engineer Serko are tranquilly pacing backwards and forwards by the lake and chatting. The island therefore could
not have been attacked during the night. Yet I was awakened by the report of cannon, this I will swear.

At this moment Ker Karraje goes off towards his abode and Engineer Serko, smilingly ironical, as usual,
advances to meet me.

"Well, Mr. Simon Hart," he says, "are you getting accustomed to your tranquil existence? Do you appreciate at
their just merit the advantages of this enchanted grotto? Have you given up all hope of recovering your liberty some
day or other?"

What is the use of waxing wroth with this jester? I reply calmly:

"No, sir. I have not given up hope, and I still expect that I shall be released."

"What! Mr. Hart, separate ourselves from a man whom we all esteem--and I from a colleague who perhaps, in
the course of Thomas Roch's fits of delirium, has learned some of his secrets? You are not serious!"

So this is why they are keeping me a prisoner in Back Cup! They suppose that I am in part familiar with Koch's
invention, and they hope to force me to tell what I know if Thomas Koch refuses to give up his secret. This is the
reason why I was kidnapped with him, and why I have not been accommodated with an involuntary plunge in the
lagoon with a stone fastened to my neck. I see it all now, and it is just as well to know it.

"Very serious," I affirm, in response to the last remark of my interlocutor.

"Well," he continues, "if I had the honor to be Simon Hart, the engineer, I should reason as follows: 'Given, on
the one hand, the personality of Ker Karraje, the reasons which incited him to select such a mysterious retreat as this
cavern, the necessity of the said cavern being kept from any attempt to discover it, not only in the interest of the
Count d'Artigas, but in that of his companions--'

"Of his accomplices, if you please."

"Of his accomplices," then--'and on the other hand, given the fact that I know the real name of the Count
d'Artigas and in what mysterious safe he keeps his riches--'

"Riches stolen, and stained with blood, Mr. Serko."

"Riches stolen and stained with blood,' if you like--'I ought to understand that this question of liberty cannot be
settled in accordance with my desires.'"

It is useless to argue the point under these conditions, and I switch the conversation on to another line.

"May I ask," I continue, "how you came to find out that Gaydon, the warder, was Simon Hart, the engineer?"

"I see no reason for keeping you in ignorance on the subject, my dear colleague. It was largely by hazard. We
had certain relations with the manufactory in New Jersey with which you were connected, and which you quitted
suddenly one day under somewhat singular circumstances. Well, during a visit I made to Healthful House some
months before the Count d'Artigas went there, I saw and recognized you."

"You?"

"My very self, and from that moment I promised myself the pleasure of having you for a fellow-passenger on
board the Ebba."

I do not recall ever having seen this Serko at Healthful House, but what he says is very likely true.

"I hope your whim of having me for a companion will cost you dear, some day or other," I say to myself.

Then, abruptly, I go on:

"If I am not mistaken, you have succeeded in inducing Thomas Roch to disclose the secret of his fulgurator?"

"Yes, Mr. Hart. We paid millions for it. But millions, you know, are nothing to us. We have only the trouble of
taking them! Therefore we filled all his pockets--covered him with millions!"

"Of what use are these millions to him if he is not allowed to enjoy them outside?"

"That, Mr. Hart, is a matter that does not trouble him a little bit! This man of genius thinks nothing of the future:
he lives but in the present. While engines are being constructed from his plans over yonder in America, he is
preparing his explosive with chemical substances with which he has been abundantly supplied. He! he! What an
invention it is, this autopropulsive engine, which flies through the air of its own power and accelerates its speed till
the goal is reached, thanks to the properties of a certain powder of progressive combustion! Here we have an
invention that will bring about a radical change in the art of war."

"Defensive war, Mr. Serko."

"And offensive war, Mr. Hart."

"Naturally," I answer.

Then pumping him still more closely, I go on:

"So, what no one else has been able to obtain from Thomas Roch--"

"We obtained without much difficulty."

"By paying him."

"By paying him an incredible price--and, moreover, by causing to vibrate what in him is a very sensitive chord."

"What chord?"

"That of vengeance!"

"Vengeance?--against whom?"

"Against all those who have made themselves his enemies by discouraging him, by spurning him, expelling him,
by constraining him to go a-begging from country to country with an invention of incontestable superiority! Now all
notion of patriotism is extinct in his soul. He has now but one thought, one ferocious desire: to avenge himself upon
those who have denied him--and even upon all mankind! Really, Mr. Hart, your governments of Europe and
America committed a stupendous blunder in refusing to pay Roch the price his fulgurator is worth!"

And Engineer Serko describes enthusiastically the various advantages of the new explosive which, he says, is
incontestably superior to any yet invented.

"And what a destructive effect it has," he adds. "It is analogous to that of the Zalinski shell, but is a hundred
times more powerful, and requires no machine for firing it, as it flies through the air on its own wings, so to speak."

I listen in the hope that Engineer Serko will give away a part of the secret, but in vain. He is careful not to say
more than he wants to.

"Has Thomas Roch," I ask, "made you acquainted with the composition of his explosive?"

"Yes, Mr. Hart--if it is all the same to you--and we shall shortly have considerable quantities of it stored in a safe
place."

"But will there not be a great and ever-impending danger in accumulating large quantities of it? If an accident
were to happen it would be all up with the island of----!"

Once more the name of Back Cup was on the point of escaping me. They might consider me too well-informed
if they were aware that in addition to being acquainted with the Count d'Artigas' real name I also know where his
stronghold is situated.

Luckily Engineer Serko has not remarked my reticence, and he replies:

"There will be no cause for alarm. Thomas Roch's explosive will not burst unless subjected to a special
deflagrator. Neither fire nor shock will explode it."

"And has Thomas Roch also sold you the secret of his deflagrator?"

"Not yet, Mr. Hart, but it will not be long before the bargain is concluded. Therefore, I repeat, no danger is to be
apprehended, and you need not keep awake of nights on that account. A thousand devils, sir! We have no desire to
be blown up with our cavern and treasures! A few more years of good business and we shall divide the profits,
which will be large enough to enable each one of us to live as he thinks proper and enjoy life to the top of his bent--
after the dissolution of the firm of Ker Karraje and Co. I may add that though there is no danger of an explosion, we
have everything to fear from a denunciation--which you are in the position to make, Mr. Hart. Therefore, if you take
my advice, you will, like a sensible man, resign yourself to the inevitable until the disbanding of the company. We
shall then see what in the interest of our security is best to be done with you!"

It will be admitted that these words are not exactly calculated to reassure me. However, a lot of things may
happen ere then. I have learned one good thing from this conversation, and that is that if Thomas Roch has sold his
explosive to Ker Karraje and Co., he has at any rate, kept the secret of his deflagrator, without which the explosive is
of no more value than the dust of the highway.

But before terminating the interview I think I ought to make a very natural observation to Mr. Serko.

"Sir," I say, "you are now acquainted with the composition of Thomas Roch's explosive. Does it really possess
the destructive power that the inventor attributes to it? Has it ever been tried? May you not have purchased a composition as inert as a pinch of snuff?"

"You are doubtless better informed upon this point than you pretend, Mr. Hart. Nevertheless, I thank you for the interest you manifest in our affairs, and am able to reassure you. The other night we made a series of decisive experiments. With only a few grains of this substance great blocks of rock were reduced to impalpable dust!"

This explanation evidently applies to the detonation I heard.

"Thus, my dear colleague," continues Engineer Serko, "I can assure you that our expectations have been answered. The effects of the explosive surpass anything that could have been imagined. A few thousand tons of it would burst our spheroid and scatter the fragments into space. You can be absolutely certain that it is capable of destroying no matter what vessel at a distance considerably greater than that attained by present projectiles and within a zone of at least a mile. The weak point in the invention is that rather too much time has to be expended in regulating the firing."

Engineer Serko stops short, as though reluctant to give any further information, but finally adds:

"Therefore, I end as I began, Mr. Hart. Resign yourself to the inevitable. Accept your new existence without reserve. Give yourself up to the tranquil delights of this subterranean life. If one is in good health, one preserves it; if one has lost one's health, one recovers it here. That is what is happening to your fellow countryman. Yes, the best thing you can do is to resign yourself to your lot."

Thereupon this giver of good advice leaves me, after saluting me with a friendly gesture, like a man whose good intentions merit appreciation. But what irony there is in his words, in his glance, in his attitude. Shall I ever be able to get even with him?

I now know that at any rate it is not easy to regulate the aim of Roch's auto-propulsive engine. It is probable that it always bursts at the same distance, and that beyond the zone in which the effects of the fulgurator are so terrible, and once it has been passed, a ship is safe from its effects. If I could only inform the world of this vital fact!

August 20.--For two days no incident worth recording has occurred. I have explored Back Cup to its extreme limits. At night when the long perspective of arched columns are illuminated by the electric lamps, I am almost religiously impressed when I gaze upon the natural wonders of this cavern, which has become my prison. I have never given up hope of finding somewhere in the walls a fissure of some kind of which the pirates are ignorant and through which I could make my escape. It is true that once outside I should have to wait till a passing ship hove in sight. My evasion would speedily be known at the Beehive, and I should soon be recaptured, unless--a happy thought strikes me--unless I could get at the Ebba's boat that was drawn up high and dry on the little sandy beach in the creek. In this I might be able to make my way to St. George or Hamilton.

This evening--it was about nine o'clock--I stretched myself on a bed of sand at the foot of one of the columns, about one hundred yards to the east of the lagoon. Shortly afterwards I heard footsteps, then voices. Hiding myself as best I could behind the rocky base of the pillar, I listened with all my ears.

I recognized the voices as those of Ker Karraje and Engineer Serko. The two men stopped close to where I was lying, and continued their conversation in English—which is the language generally used in Back Cup. I was therefore able to understand all that they said.

They were talking about Thomas Roch, or rather his fulgurator.

"In a week's time," said Ker Karraje, "I shall put to sea in the Ebba, and fetch the sections of the engines that are being cast in that Virginian foundry."

"And when they are here," observed Engineer Serko, "I will piece them together and fix up the frames for firing them. But beforehand, there is a job to be done which it seems to me is indispensable."

"What is that?"

"To cut a tunnel through the wall of the cavern."

"Through the wall of the cavern?"

"Oh! nothing but a narrow passage through which only one man at a time could squeeze, a hole easy enough to block, and the outside end of which would be hidden among the rocks."

"Of what use could it be to us, Serko?"

"I have often thought about the utility of having some other way of getting out besides the submarine tunnel. We never know what the future may have in store for us."

"But the walls are so thick and hard," objected Ker Karraje.

"Oh, with a few grains of Roch's explosive I undertake to reduce the rock to such fine powder that we shall be able to blow it away with our breath," Serko replied.

It can easily be imagined with what interest and eagerness I listened to this. Here was a ray of hope. It was proposed to open up communication with the outside by a tunnel in the wall, and this held out the possibility of escape.
As this thought flashed through my mind, Ker Karraje said:
"Very well, Serko, and if it becomes necessary some day to defend Back Cup and prevent any ship from approaching it----. It is true," he went on, without finishing the reflection, "our retreat would have to have been discovered by accident—or by denunciation."
"We have nothing to fear either from accident or denunciation," affirmed Serko.
"By one of our band, no, of course not, but by Simon Hart, perhaps."
"Hart!" exclaimed Serko. "He would have to escape first and no one can escape from Back Cup. I am, by the bye, interested in this Hart. He is a colleague, after all, and I have always suspected that he knows more about Roch's invention than he pretends. I will get round him so that we shall soon be discussing physics, mechanics, and matters ballistic like a couple of friends."
"No matter," replied the generous and sensible Count d'Artigas, "when we are in full possession of the secret we had better get rid of the fellow."
"We have plenty of time to do that, Ker Karraje."
"If God permits you to, you wretches," I muttered to myself, while my heart thumped against my ribs.
And yet, without the intervention of Providence, what hope is there for me?
The conversation then took another direction.
"Now that we know the composition of the explosive, Serko," said Ker Karraje, "we must, at all cost, get that of the deflagrator from Thomas Roch."
"Yes," replied Engineer Serko, "that is what I am trying to do. Unfortunately, however, Roch positively refuses to discuss it. Still he has already made a few drops of it with which those experiments were made, and he will furnish as with some more to blow a hole through the wall."
"But what about our expeditions at sea?" queried Ker Karraje.
"Patience! We shall end by getting Roch's thunderbolts entirely in our own hand, and then----"
"Are you sure, Serko?"
"Quite sure,--by paying the price, Ker Karraje."
The conversation dropped at this point, and they strolled off without having seen me--very luckily for me, I guess. If Engineer Serko spoke up somewhat in defence of a colleague, Ker Karraje is apparently animated with much less benevolent sentiments in regard to me. On the least suspicion they would throw me into the lake, and if I ever got through the tunnel, it would only be as a corpse carried out by the ebbing tide.
August 21.--Engineer Serko has been prospecting with a view to piercing the proposed passage through the wall, in such a way that its existence will never be dreamed of outside. After a minute examination he decided to tunnel through the northern end of the cavern about sixty feet from the first cells of the Beehive.
I am anxious for the passage to be made, for who knows but what it may be the way to freedom for me? Ah! if I only knew how to swim, perhaps I should have attempted to escape through the submarine tunnel, as since it was disclosed by the lashing back of the waters by the whale in its death-struggle, I know exactly where the orifice is situated. It seems to me that at the time of the great tides, this orifice must be partly uncovered. At the full and new moon, when the sea attains its maximum depression below the normal level, it is possible that—I must satisfy myself about this.
I do not know how the fact will help me in any way, even if the entrance to the tunnel is partly uncovered, but I cannot afford to miss any detail that may possibly aid in my escape from Back Cup.
August 29.--This morning I am witnessing the departure of the tug. The Count d'Artigas is, no doubt, going off in the Ebba to fetch the sections of Thomas Roch's engines. Before embarking, the Count converses long and earnestly with Engineer Serko, who, apparently, is not going to accompany him on this trip, and is evidently giving him some recommendations, of which I may be the object. Then, having stepped on to the platform, he goes below, the lid shuts with a bang, and the tug sinks out of sight, leaving a trail of bubbles behind it.
The hours go by, night is coming on, yet the tug does not return. I conclude that it has gone to tow the schooner, and perhaps to destroy any merchant vessels that may come in their way.
It cannot, however, be absent very long, as the trip to America and back will not take more than a week.
Besides, if I can judge from the calm atmosphere in the interior of the cavern, the Ebba must be favored with beautiful weather. This is, in fact, the fine season in this part of the world. Ah! if only I could break out of my prison!

CHAPTER XIII.
GOD BE WITH IT.
From August 29 to September 10.--Thirteen days have gone by and the Ebba has not returned. Did she then not
make straight for the American coast? Has she been delayed by a buccaneering cruise in the neighborhood of Back Cup? It seems to me that Ker Karraje's only desire would be to get back with the sections of Roch's engines as soon as possible. Maybe the Virginian foundry had not quite finished them.

Engineer Serko does not display the least anxiety or impatience. He continues to greet me with his accustomed ironical cordiality, and with a kindly air that I distrust—with good reason. He affects to be solicitous as to my health, urges me to make the best of a bad job, calls me Ali Baba, assures me that there is not, in the whole world, such an enchanting spot as this Arabian Nights cavern, observes that I am fed, warmed, lodged, and clothed, that I have no taxes to pay, and that even the inhabitants of the favored principality of Monaco do not enjoy an existence more free from care.

Sometimes this ironical verbiage brings the blood to my face, and I am tempted to seize this cynical banterer by the throat and choke the life out of him. They would kill me afterwards. Still, what would that matter! Would it not be better to end in this way than to spend years and years amid these infernal and infamous surroundings? However, while there is life there is hope, I reflect, and this thought restrains me.

I have scarcely set eyes upon Thomas Roch since the Ebba went away. He shuts himself up in his laboratory and works unremittingly. If he utilizes all the substances placed at his disposition there will be enough to blow up Back Cup and the whole Bermudan archipelago with it!

I cling to the hope that he will never consent to give up the secret of his deflagrator, and that Engineer Serko's efforts to acquire it will remain futile.

September 3.--To-day I have been able to witness with my own eyes the power of Roch's explosive, and also the manner in which the fulgurator is employed.

During the morning the men began to pierce the passage through the wall of the cavern at the spot fixed upon by Engineer Serko, who superintended the work in person. The work began at the base, where the rock is as hard as granite. To have continued it with pickaxes would have entailed long and arduous labor, inasmuch as the wall at this place is not less than from twenty to thirty yards in thickness, but thanks to Roch's fulgurator the passage will be completed easily and rapidly.

I may well be astonished at what I have seen. The pickaxes hardly made any impression on the rock, but its disaggregation was effected with really remarkable facility by means of the fulgurator.

A few grains of this explosive shattered the rocky mass and reduced it to almost impalpable powder that one's breath could disperse as easily as vapor. The explosion produced an excavation measuring fully a cubic yard. It was accompanied by a sharp detonation that may be compared to the report of a cannon.

The first charge used, although a very small one, a mere pinch, blew the men in every direction, and two of them were seriously injured. Engineer Serko himself was projected several yards, and sustained some rather severe contusions.

Here is how this substance, whose bursting force surpasses anything hitherto conceived, is employed.

A small hole about an inch and a half in length is pierced obliquely in the rock. A few grains of the explosive are then inserted, but no wad is used.

Then Thomas Roch steps forward. In his hand is a little glass phial containing a bluish, oily liquid that congeals almost as soon as it comes in contact with the air. He pours one drop on the entrance of the hole, and draws back, but not with undue haste. It takes a certain time—about thirty-five seconds, I reckon—before the combination of the fulgurator and deflagrator is effected. But when the explosion does take place its power of disaggregation is such—I repeat—that it may be regarded as unlimited. It is at any rate a thousand times superior to that of any known explosive.

Under these circumstances it will probably not take more than a week to complete the tunnel.

September 19.--For some time past I have observed that the tide rises and falls twice every twenty-four hours, and that the ebb and flow produce a rather swift current through the submarine tunnel. It is pretty certain therefore that a floating object thrown into the lagoon when the top of the orifice is uncovered would be carried out by the receding tide. It is just possible that during the lowest equinoctial tides the top of the orifice is uncovered. This I shall be able to ascertain, as this is precisely the time they occur. To-day, September 19, I could almost distinguish the summit of the hole under the water. The day after to-morrow, if ever, it will be uncovered.

Very well then, if I cannot myself attempt to get through, may be a bottle thrown into the lagoon might be carried out during the last few minutes of the ebb. And might not this bottle by chance—an ultra-providential chance, I must avow—be picked up by a ship passing near Back Cup? Perhaps even it might be borne away by a friendly current and cast upon one of the Bermudan beaches. What if that bottle contained a letter?

I cannot get this thought out of my mind, and it works me up into a great state of excitement. Then objections crop up—this one among others: the bottle might be swept against the rocks and smashed ere ever it could get out of the tunnel. Very true, but what if, instead of a bottle a diminutive, tightly closed keg were used? It would not run any
danger of being smashed and would besides stand a much better chance of reaching the open sea.

September 20.--This evening, I, unperceived, entered one of the store houses containing the booty pillaged from various ships and procured a keg very suitable for my experiment.

I hid the keg under my coat, and returned to the Beehive and my cell. Then without losing an instant I set to work. Paper, pen, ink, nothing was wanting, as will be supposed from the fact that for three months I have been making notes and dotting down my impressions daily.

I indite the following message:

"On June 15 last Thomas Roch and his keeper Gaydon, or rather Simon Hart, the French engineer who occupied Pavilion No. 17, at Healthful House, near New-Berne, North Carolina, United States of America, were kidnapped and carried on board the schooner Ebba, belonging to the Count d'Artigas. Both are now confined in the interior of a cavern which serves as a lair for the said Count d'Artigas—who is really Ker Karraje, the pirate who some time ago carried on his depredations in the West Pacific—and for about a hundred men of which his band is composed.

"When he has obtained possession of Roch's fulgurator whose power is, so to speak, without limit, Ker Karraje will be in a position to carry on his crimes with complete impunity.

"It is therefore urgent that the states interested should destroy his lair without delay.

"The cavern in which the pirate Ker Karraje has taken refuge is in the interior of the islet of Back Cup, which is wrongly regarded as an active volcano. It is situated at the western extremity of the archipelago of Bermuda, and on the east is bounded by a range of reefs, but on the north, south, and west is open.

"Communication with the inside of the mountain is only possible through a tunnel a few yards under water in a narrow pass on the west. A submarine apparatus therefore is necessary to effect an entrance, at any rate until a tunnel they are boring through the northwestern wall of the cavern is completed.

"The pirate Ker Karraje employs an apparatus of this kind—the submarine boat that the Count d'Artigas ordered of the Cramps and which was supposed to have been lost during the public experiment with it in Charleston Bay. This boat is used not only for the purpose of entering and issuing from Back Cup, but also to tow the schooner and attack merchant vessels in Bermudan waters.

"This schooner Ebba, so well known on the American coast, is kept in a small creek on the western side of the island, behind a mass of rocks, and is invisible from the sea.

"The best place to land is on the west coast formerly occupied by the colony of Bermudan fishers; but it would first be advisable to effect a breach in the side of the cavern by means of the most powerful melinite shells.

"The fact that Ker Karraje may be in the position to use Roch's fulgurator for the defence of the island must also be taken into consideration. Let it be well borne in mind that if its destructive power surpasses anything ever conceived or dreamed of, it extends over a zone not exceeding a mile in extent. The distance of this dangerous zone is variable, but once the engines have been set, the modification of the distance occupies some time, and a warship that succeeds in passing the zone has nothing further to fear.

"This document is written on the twentieth day of September at eight o'clock in the evening and is signed with my name

"THOMAS HART, Engineer."

The above is the text of the statement I have just drawn up. It says all that is necessary about the island, whose exact situation is marked on all modern charts and maps, and points out the expediency of acting without delay, and what to do in case Ker Karraje is in the position to employ Roch's fulgurator.

I add a plan of the cavern showing its internal configuration, the situation of the lagoon, the lay of the Beehive, Ker Karraje's habitation, my cell, and Thomas Roch's laboratory.

I wrap the document in a piece of tarpaulin and insert the package in the little keg, which measures six inches by three and a half. It is perfectly watertight and will stand any amount of knocking about against the rocks.

There is one danger, however, and that is, that it may be swept back by the returning tide, cast up on the island, and fall into the hands of the crew of the Ebba when the schooner is hauled into her creek. If Ker Karraje ever gets hold of it, it will be all up with me.

It will be readily conceived with what anxiety I have awaited the moment to make the attempt: I am in a perfect fever of excitement, for it is a matter of life or death to me. I calculate from previous observations that the tide will be very low at about a quarter to nine. The top of the tunnel ought then to be a foot and a half above water, which is more than enough to permit of the keg passing through it. It will be another half hour at least before the flow sets in again, and by that time the keg may be far enough away to escape being thrown back on the coast.

I peer out of my cell. There is no one about, and I advance to the side of the lagoon, where by the light of a nearby lamp, I perceive the arch of the tunnel, towards which the current seems to be setting pretty swiftly.

I go down to the very edge, and cast in the keg which contains the precious document and all my hopes.

"God be with it!" I fervently exclaim. "God be with it!"
For a minute or two the little barrel remains stationary, and then floats back to the side again. I throw it out once more with all my strength.

This time it is in the track of the current, which to my great joy sweeps it along and in twenty seconds, it has disappeared in the tunnel.

Yes, God be with it! May Heaven guide thee, little barrel! May it protect all those whom Ker Karraje menaces and grant that this band of pirates may not escape from the justice of man!

CHAPTER XIV.

BATTLE BETWEEN THE "SWORD" AND THE TUG.

Through all this sleepless night I have followed the keg in fancy. How many times I seem to see it swept against the rocks in the tunnel into a creek, or some excavation. I am in a cold perspiration from head to foot. Then I imagine that it has been carried out to sea. Heavens! if the returning tide should sweep it back to the entrance and then through the tunnel into the lagoon! I must be on the lookout for it.

I rise before the sun and saunter down to the lagoon. Not a single object is floating on its calm surface.

The work on the tunnel through the side of the cavern goes on, and at four o'clock in the afternoon on September 23, Engineer Serko blows away the last rock obstructing the issue, and communication with the outer world is established. It is only a very narrow hole, and one has to stoop to go through it. The exterior orifice is lost among the crannies of the rocky coast, and it would be easy to obstruct it, if such a measure became necessary.

It goes without saying that the passage will be strictly guarded. No one without special authorization will be able either to go out or come in, therefore there is little hope of escape in that direction.

September 25.--This morning the tug rose from the depth of the lagoon to the surface, and has now run alongside the jetty. The Count d'Artigas and Captain Spade disembark, and the crew set to work to land the provisions--boxes of canned meat, preserves, barrels of wine and spirits, and other things brought by the Ebba, among which are several packages destined for Thomas Roch. The men also land the various sections of Roch's engines which are discoid in shape.

The inventor watches their operations, and his eyes glisten with eagerness. He examines one of the sections, and nods approval. I notice that his joy no longer finds expression in incoherent utterances, that he is completely transformed from what he was while a patient at Healthful House. So much is this the case that I begin to ask myself whether his madness which was asserted to be incurable, has not been radically cured.

At last Thomas Roch embarks in the boat used for crossing the lake and is rowed over to his laboratory. Engineer Serko accompanies him. In an hour's time the tug's cargo has all been taken out and transported to the storehouses.

Ker Karraje exchanges a word or two with Engineer Serko and then enters his mansion. Later, in the afternoon, I see them walking up and down in front of the Beehive and talking earnestly together.

Then they enter the new tunnel, followed by Captain Spade. If I could but follow them! If I could but breathe for awhile the bracing air of the Atlantic, of which the interior of Back Cup only receives attenuated puffs, so to speak.

From September 26 to October 10.--Fifteen days have elapsed. Under the directions of Engineer Serko and Thomas Roch the sections of the engines have been fitted together. Then the construction of their supports is begun. These supports are simple trestles, fitted with transverse troughs or grooves of various degrees of inclination, and which could be easily installed on the deck of the Ebba, or even on the platform of the tug, which can be kept on a level with the surface.

Thus Ker Karraje, will be ruler of the seas, with his yacht. No warship, however big, however powerful, will be able to cross the zone of danger, whereas the Ebba will be out of range of its guns. If only my notice were found! If only the existence of this lair of Back Cup were known! Means would soon be found, if not of destroying the place, at least of starving the band into submission!

October 20.--To my extreme surprise I find this morning that the tug has gone away again. I recall that yesterday the elements of the piles were renewed, but I thought it was only to keep them in order. In view of the fact that the outside can now be reached through the new tunnel, and that Thomas Roch has everything he requires, I can only conclude that the tug has gone off on another marauding expedition.

Yet this is the season of the equinoctial gales, and the Bermudan waters are swept by frequent tempests. This is evident from the violent gusts that drive back the smoke through the crater and the heavy rain that accompanies it, as well as by the water in the lagoon, which swells and washes over the brown rocks on its shores.

But it is by no means sure that the Ebba has quitted her cove. However staunch she may be, she is, it seems to me, of too light a build to face such tempests as now rage, even with the help of the tug.

On the other hand, although the tug has nothing to fear from the heavy seas, as it would be in calm water a few
yards below the surface, it is hardly likely that it has gone on a trip unless to accompany the schooner.

I do not know to what its departure can be attributed, but its absence is likely to be prolonged, for it has not yet returned.

Engineer Serko has remained behind, but Ker Karraje, Captain Spade, and the crew of the schooner, I find, have left.

Life in the cavern goes on with its usual dispiriting monotony. I pass hour after hour in my cell, meditating, hoping, despairing, following in fancy the voyage of my little barrel, tossed about at the mercy of the currents and whose chances of being picked up, I fear, are becoming fainter each day, and killing time by writing my diary, which will probably not survive me.

Thomas Roch is constantly occupied in his laboratory manufacturing his deflagrator. I still entertain the conviction that nothing will ever induce him to give up the secret of the liquid's composition; but I am perfectly aware that he will not hesitate to place his invention at Ker Karraje's service.

I often meet Engineer Serko when my strolls take me in the direction of the Beehive. He always shows himself disposed to chat with me, though, it is true, he does so in a tone of impertinent frivolity. We converse upon all sorts of subjects, but rarely of my position. Recrimination thereanent is useless and only subjects me to renewed bantering.

October 22.--To-day I asked Engineer Serko whether the Ebba had put to sea again with the tug.

"Yes, Mr. Simon Hart," he replied, "and though the clouds gather and loud the tempest roars, be in no uneasiness in regard to our dear Ebba."

"Will she be gone long?"

"We expect her back within forty-eight hours. It is the last voyage Count d'Artigas proposes to make before the winter gales render navigation in these parts impracticable."

"Is her voyage one of business or pleasure?"

"Of business, Mr. Hart, of business," answered Engineer Serko with a smile. "Our engines are now completed, and when the fine weather returns we shall resume offensive operations."

"Against unfortunate merchantmen."

"As unfortunate as they are richly laden."

"Acts of piracy, whose impunity will, I trust, not always be assured," I cried.

"Calm yourself, dear colleague, be calm! Be calm! No one, you know, can ever discover our retreat, and none can ever disclose the secret! Besides, with these engines, which are so easily handled and are of such terrible power, it would be easy for us to blow to pieces any ship that attempted to get within a certain radius of the island."

"Providing," I said, "that Thomas Roch has sold you the composition of his deflagrator as he has sold you that of his fulgurator."

"That he has done, Mr. Hart, and it behooves me to set your mind at rest upon that point."

From this categorical response I ought to have concluded that the misfortune had been consummated, but a certain hesitation in the intonation of his voice warned me that implicit reliance was not to be placed upon Engineer Serko's assertions.

October 25.--What a frightful adventure I have just been mixed up in, and what a wonder I did not lose my life! It is only by a miracle that I am able to resume these notes, which have been interrupted for forty-eight hours. With a little luck, I should have been delivered! I should now be in one of the Bermudan ports--St. George or Hamilton. The mysteries of Back Cup would have been cleared up. The description of the schooner would have been wired all over the world, and she would not dare to put into any port. The provisioning of Back Cup would be impossible, and Ker Karraje's bandits would be condemned to starve to death!

This is what occurred:

At eight o'clock in the evening on October 23, I quitted my cell in an indefinable state of nervousness, and with a presentiment that a serious event was imminent. In vain I had tried to seek calmness in sleep. It was impossible to do so, and I rose and went out.

Outside Back Cup the weather must have been very rough. Violent gusts of wind swept in through the crater and agitated the water of the lagoon.

I walked along the shore on the Beehive side. No one was about. It was rather cold, and the air was damp. The pirates were all snugly ensconced in their cells, with the exception of one man, who stood guard over the new passage, notwithstanding that the outer entrance had been blocked. From where he was this man could not see the lagoon, moreover there were only two lamps alight, one on each side of the lake, and the forest of pillars was wrapt in the profoundest obscurity.

I was walking about in the shadow, when some one passed me.

I saw that he was Thomas Roch.
He was walking slowly, absorbed by his thoughts, his brain at work, as usual.

Was this not a favorable opportunity to talk to him, to enlighten him about what he was probably ignorant, namely, the character of the people into whose hands he had fallen?

"He cannot," I argued, "know that the Count d'Artigas is none other than Ker Karraje, the pirate. He cannot be aware that he has given up a part of his invention to such a bandit. I must open his eyes to the fact that he will never be able to enjoy his millions, that he is a prisoner in Back Cup, and will never be allowed to leave it, any more than I shall. Yes, I will make an appeal to his sentiments of humanity, and point out to him what frightful misfortunes he will be responsible for if he does not keep the secret of his deflagrator."

All this I had said to myself, and was preparing to carry out my resolution, when I suddenly felt myself seized from behind.

Two men held me by the arms, and another appeared in front of me. Before I had time to cry out the man exclaimed in English:

"Hush! not a word! Are you not Simon Hart?"

"Yes, how did you know?"

"I saw you come out of your cell."

"Who are you, then?"

"Lieutenant Davon, of the British Navy, of H.M.S. Standard, which is stationed at the Bermudas."

Emotion choked me so that it was impossible for me to utter a word.

"We have come to rescue you from Ker Karraje, and also propose to carry off Thomas Roch," he added.

"Thomas Roch?" I stammered.

"In a keg, Lieutenant Davon, which I committed to the waters of the lagoon."

"And which contained," went on the officer, "the notice by which we were apprised that the island of Back Cup served as a refuge for Ker Karraje and his band—Ker Karraje, this false Count d'Artigas, the author of the double abduction from Healthful House."

"Ah! Lieutenant Davon——"

"Now we have not a moment to spare, we must profit by the obscurity."

"One word, Lieutenant Davon, how did you penetrate to the interior of Back Cup?"

"By means of the submarine boat Sword, with which we have been making experiments at St. George for six months past."

"A submarine boat!"

"Yes, it awaits us at the foot of the rocks. And now, Mr. Hart, where is Ker Karraje's tug?"

"It has been away for three weeks."

"Ker Karraje is not here, then?"

"No, but we expect him back every day—every hour, I might say."

"It matters little," replied Lieutenant Davon. "It is not after Ker Karraje, but Thomas Roch, we have come—and you also, Mr. Hart. The Sword will not leave the lagoon till you are both on board. If she does not turn up at St. George again, they will know that I have failed—and they will try again."

"Where is the Sword, Lieutenant?"

"On this side, in the shadow of the bank, where it cannot be seen. Thanks to your directions, I and my crew were able to locate the tunnel. We came through all right, and ten minutes ago rose to the surface of the lake. Two men landed with me. I saw you issue from the cell marked on your plan. Do you know where Thomas Roch is?"

"A few paces off. He has just passed me, on his way to his laboratory."

"God be praised, Mr. Hart!"

"Amen, Lieutenant Davon."

The lieutenant, the two men and I took the path around the lagoon. We had not gone far when we perceived Thomas Roch in front of us. To throw ourselves upon him, gag him before he could utter a cry, bind him before he could offer any resistance, and bear him off to the place where the Sword was moored was the work of a minute.

The Sword was a submersible boat of only twelve tons, and consequently much inferior to the tug, both in respect of dimensions and power. Her screw was worked by a couple of dynamos fitted with accumulators that had been charged twelve hours previously in the port of St. George. However, the Sword would suffice to take us out of this prison, to restore us to liberty—that liberty of which I had given up all hope. Thomas Roch was at last to be rescued from the clutches of Ker Karraje and Engineer Serko. The rascals would not be able to utilize his invention, and nothing could prevent the warships from landing a storming party on the island, who would force the tunnel in the wall and secure the pirates!

We saw no one while the two men were conveying Thomas Roch to the Sword, and all got on board without
incident. The lid was shut and secured, the water compartments filled, and the Sword sank out of sight. We were saved!

The Sword was divided into three water-tight compartments. The after one contained the accumulators and machinery. The middle one, occupied by the pilot, was surmounted by a periscope fitted with lenticular portholes, through which an electric search-lamp lighted the way through the water. Forward, in the other compartment, Thomas Roch and I were shut in.

My companion, though the gag which was choking him had been removed, was still bound, and, I thought, knew what was going on.

But we were in a hurry to be off, and hoped to reach St. George that very night if no obstacle was encountered.

I pushed open the door of the compartment and rejoined Lieutenant Davon, who was standing by the man at the wheel. In the after compartment three other men, including the engineer, awaited the lieutenant's orders to set the machinery in motion.

"Lieutenant Davon," I said, "I do not think there is any particular reason why I should stay in there with Roch. If I can help you to get through the tunnel, pray command me."

"Yes, I shall be glad to have you by me, Mr. Hart."

It was then exactly thirty-seven minutes past eight.

The search-lamp threw a vague light through the water ahead of the Sword. From where we were, we had to cross the lagoon through its entire length to get to the tunnel. It would be pretty difficult to fetch it, we knew, but, if necessary, we could hug the sides of the lake until we located it. Once outside the tunnel the Sword would rise to the surface and make for St. George at full speed.

"At what depth are we now?" I asked the lieutenant.

"About a fathom."

"It is not necessary to go any lower," I said. "From what I was able to observe during the equinoctial tides, I should think that we are in the axis of the tunnel."

"All right," he replied.

Yes, it was all right, and I felt that Providence was speaking by the mouth of the officer. Certainly Providence could not have chosen a better agent to work its will.

In the light of the lamp I examined him. He was about thirty years of age, cool, phlegmatic, with resolute physiognomy--the English officer in all his native impassibility--no more disturbed than if he had been on board the Standard, operating with extraordinary sang-froid, I might even say, with the precision of a machine.

"On coming through the tunnel I estimated its length at about fifty yards," he remarked.

"Yes, Lieutenant, about fifty yards from one extremity to the other."

This calculation must have been pretty exact, since the new tunnel cut on a level with the coast is thirty-five feet in length.

The order was given to go ahead, and the Sword moved forward very slowly for fear of colliding against the rocky side.

Sometimes we came near enough to it to distinguish a black mass ahead of it, but a turn of the wheel put us in the right direction again. Navigating a submarine boat in the open sea is difficult enough. How much more so in the confines of a lagoon!

After five minutes' manoeuvring, the Sword, which was kept at about a fathom below the surface, had not succeeded in sightting the orifice.

"Perhaps it would be better to return to the surface, Lieutenant," I said. "We should then be able to see where we are."

"I think you are right, Mr. Hart, if you can point out just about where the tunnel is located."

"I think I can."

"Very well, then."

As a precaution the light was turned off. The engineer set the pumps in motion, and, lightened of its water ballast, the boat slowly rose in the darkness to the surface.

I remained at my post so that I could peer through the lookouts.

At last the ascensional movement of the Sword stopped, and the periscope emerged about a foot.

On one side of me, lighted by the lamp by the shore, I could see the Beehive.

"What is your opinion?" demanded the lieutenant.

"We are too far north. The orifice is in the west side of the cavern."

"Is anybody about?"

"Not a soul."

"Capital, Mr. Hart. Then we will keep on a level with the surface, and when we are in front of the tunnel, and
you give the signal, we will sink."

It was the best thing to be done. We moved off again and the pilot kept her head towards the tunnel.

When we were about twelve yards off I gave the signal to stop. As soon as the current was turned off the Sword stopped, opened her water tanks and slowly sank again.

Then the light in the lookout was turned on again, and there in front of us was a black circle that did not reflect the lamp's rays.

"There it is, there is the tunnel!" I cried.

Was it not the door by which I was going to escape from my prison? Was not liberty awaiting me on the other side?

Gently the Sword moved towards the orifice.

Oh! the horrible mischance! How have I survived it? How is it that my heart is not broken?

A dim light appeared in the depth of the tunnel, about twenty-five yards in front of us. The advancing light could be none other than that, projected through the lookout of Ker Karraje's submarine boat.

"The tug! The tug!" I exclaimed. "Lieutenant, here is the tug returning to Back Cup!"

"Full speed astern," ordered the officer, and the Sword drew back just as she was about to enter the tunnel.

One chance remained. The lieutenant had swiftly turned off the light, and it was just possible that we had not been seen by the people in the tug. Perhaps, in the dark waters of the lagoon, we should escape notice, and when the oncoming boat had risen and moored to the jetty, we should be able to slip out unperceived.

We had backed close in to the south side and the Sword was about to stop, but alas, for our hopes! Captain Spade had seen that another submarine boat was about to issue through the tunnel, and he was making preparations to chase us. How could a frail craft like the Sword defend itself against the attacks of Ker Karraje's powerful machine?

Lieutenant Davon turned to me and said: "Go back to the compartment where Thomas Roch is and shut yourself in. I will close the after-door. There is just a chance that if the tug rams us the water-tight compartments will keep us up."

After shaking hands with the lieutenant, who was as cool as though we were in no danger, I went forward and rejoined Thomas Roch. I closed the door and awaited the issue in profound darkness.

Then I could feel the desperate efforts made by the Sword to escape from or ram her enemy. I could feel her rushing, gyrating and plunging. Now she would twist to avoid a collision. Now she would rise to the surface, then sink to the bottom of the lagoon. Can any one conceive such a struggle as that in which, like two marine monsters, these machines were engaged in beneath the troubled waters of this inland lake?

A few minutes elapsed, and I began to think that the Sword had eluded the tug and was rushing through the tunnel.

Suddenly there was a collision. The shock was not, it seemed to me, very violent, but I could be under no illusion: the Sword had been struck on her starboard quarter. Perhaps her plates had resisted, and if not, the water would only invade one of her compartments, I thought.

Almost immediately after, however, there was another shock that pushed the Sword with extreme violence. She was raised by the ram of the tug which sawed and ripped its way into her side. Then I could feel her heel over and sink straight down, stern foremost.

Thomas Roch and I were tumbled over violently by this movement. There was another bump, another ripping sound, and the Sword lay still.

Just what happened after that I am unable to say, for I lost consciousness.

I have since learned that all this occurred many hours ago.

I however distinctly remember that my last thought was:

"If I am to die, at any rate Thomas Roch and his secret perish with me--and the pirates of Back Cup will not escape punishment for their crimes."

CHAPTER XV.

EXPECTATION.

As soon as I recover my senses I find myself lying on my bed in my cell, where it appears I have been lying for thirty-six hours.

I am not alone. Engineer Serko is near me. He has attended to me himself, not because he regards me as a friend, I surmise, but as a man from whom indispensable explanations are awaited, and who afterwards can be done away with if necessary.

I am still so weak that I could not walk a step. A little more and I should have been asphyxiated in that narrow
Am I in condition to reply to the questions that Engineer Serko is dying to put to me? Yes—but I shall maintain the utmost reserve.

In the first place I wonder what has become of Lieutenant Davon and the crew of the Sword. Did those brave Englishmen perish in the collision? Are they safe and sound like us—for I suppose that Thomas Roch has also survived?

The first question that Engineer Serko puts to me is this: "Will you explain to me what happened, Mr. Hart?"

Instead of replying it occurs to me to question him myself. "And Thomas Roch?" I inquire.

"In good health, Mr. Hart." Then he adds in an imperious tone: "Tell me what occurred!"

"In the first place, tell me what became of the others."

"What others?" replies Serko, glancing at me savagely.

"Why, those men who threw themselves upon Thomas Roch and me, who gagged, bound, and carried us off and shut us up,ail know not where?"

On reflection I had come to the conclusion that the best thing to do was to pretend that I had been surprised before I knew where I was or who my aggressors were.

"You will know what became of them later. But first, tell me how, the thing was done."

By the threatening tone of his voice, as he for the third time puts this question, I understand the nature of the suspicions entertained of me. Yet to be in the position to accuse me of having had relations with the outside he would have had to get possession of my keg. This he could not have done, seeing that it is in the hands of the Bermudan authorities. The pirates cannot, I am convinced, have a single proof to back up their suspicions.

I therefore recount how about eight o'clock on the previous evening I was walking along the edge of the lagoon, after Thomas Roch had passed me, going towards his laboratory, when I felt myself seized from behind; how having been gagged, bound, and blindfolded, I felt myself carried off and lowered into a hole with another person whom I thought I recognized from his groans as Thomas Roch; how I soon felt that I was on board a boat of some description and naturally concluded that it was the tug; how I felt it sink; how I felt a shock that threw me violently against the side, and how I felt myself suffocating and lost consciousness, since I remember nothing further.

Engineer Serko listens with profound attention, a stern look in his eyes and a frown on his brow; and yet he can have no reason that authorizes him to doubt my word.

"You claim that three men threw themselves upon you?" he asks.

"Yes. I thought they were some of your people, for I did not see them coming. Who were they?"

"Strangers, as you must have known from their language."

"They did not utter a word!"

"Have you no idea as to their nationality?"

"Not the remotest."

Do you know what were their intentions in entering the cavern?"

"I do not."

"What is your opinion about it?"

"My opinion, Mr. Serko? I repeat I thought they were two or three of your pirates who had come to throw me into the lagoon by the Count d'Artigas' orders, and that they were going to do the same thing to Thomas Roch. I supposed that having obtained his secrets—as you informed me was the case—you had no further use for him and were about to get rid of us both."

"Is it possible, Mr. Hart, that you could have thought such a thing!" continued Serko in his sarcastic way.

"I did, until having been able to remove the bandage from my eyes, I perceived that I was in the tug."

"It was not the tug, but a boat of the same kind that had got through the tunnel."

"A submarine boat?" I ejaculate.

"Yes, and manned by persons whose mission was to kidnap you and Thomas Roch."

"Kidnap us?" I echo, continuing to feign surprise.

"And," adds Engineer Serko, "I want to know what you think about the matter."

"What I think about it? Well, it appears to me that there is only one plausible explanation possible. If the secret of your retreat has not been betrayed—and I cannot conceive how you could have been betrayed or what imprudence you or yours could have committed—my opinion is that this submarine boat was exploring the bottom of the sea in this neighborhood, that she must have found her way into the tunnel, that she rose to the surface of the lagoon, that her crew, greatly surprised to find themselves inside an inhabited cavern, seized hold of the first persons they came across, Thomas Roch and myself, and others as well perhaps, for of course I do not know—"
Engineer Serko has become serious again. Does he realize the inanity of the hypothesis I try to pass off on him? Does he think I know more than I will say? However this may be, he accepts my professed view, and says:

"In effect, Mr. Hart, it must have happened as you suggest, and when the stranger tried to make her way out through the tunnel just as the tug was entering, there was a collision—a collision of which she was the victim. But we are not the kind of people to allow our fellow-men to perish before our eyes. Moreover, the disappearance of Thomas Roch and yourself was almost immediately discovered. Two such valuable lives had to be saved at all hazards. We set to work. There are many expert divers among our men. They hastily donned their suits and descended to the bottom of the lagoon. They passed lines around the hull of the Sword—"

"The Sword?" I exclaim.

"That is the name we saw painted on the bow of the vessel when we raised her to the surface. What satisfaction we experienced when we recovered you—unconscious, it is true, but still breathing—and were able to bring you back to life! Unfortunately all our attentions to the officer who commanded the Sword, and to his crew were useless. The shock had torn open the after and middle compartments, and they paid with their lives the misfortune—due to chance, as you observe—of having discovered our mysterious retreat."

On learning that Lieutenant Davon and his companions are dead, my heart is filled with anguish; but to keep up my role—as they were persons with whom, presumably, I was not acquainted, and had never seen—I am careful not to display any emotion. I must, on no account, afford ground for the suspicion that there was any connivance between the commander of the Sword and me. For aught I know, Engineer Serko may have reason to be very skeptical about the discovery of the tunnel being accidental.

What, however, I am most concerned about is that the unlooked-for occasion to recover my liberty was lost. Shall I ever be afforded another chance? However this may be, my notice reached the English authorities of the archipelago, and they now know where Ker Karraje is to be found. When it is seen that the Sword does not return to Bermuda, there can be no doubt that another attempt will be made to get inside Back Cup, in which, had it not been for the inopportune return of the tug, I should no longer be a prisoner.

I have resumed my usual existence, and having allayed all mistrust, am permitted to wander freely about the cavern, as usual.

It is patent that the adventure has had no ill effect upon Thomas Roch. Intelligent nursing brought him around, as it did me. In full possession of his mental faculties he has returned to work, and spends the entire day in his laboratory.

The Ebba brought back from her last trip bales, boxes, and a quantity of objects of varied origin, and I conclude that a number of ships must have been pillaged during this marauding expedition.

The work on the trestles for Roch's engine goes steadily forward, and there are now no fewer than fifty engines. If Ker Karraje and Engineer Serko are under the necessity of defending Back Cup, three or four will be sufficient to render the island unapproachable, as they will cover a zone which no vessel could enter without being blown to pieces. And it occurs to me that they intend to put Back Cup in a state of defence after having argued as follows:

"If the appearance of the Sword in the lagoon was due to chance the situation remains unchanged, and no power, not even England, will think of seeking for the Sword inside the cavern. If, on the other hand, as the result of an incomprehensible revelation, it has been learned that Back Cup is become the retreat of Ker Karraje, if the expedition of the Sword was a first effort against the island, another of a different kind—either a bombardment from a distance, or an attack by a landing party—is to be expected. Therefore, ere we can quit Back Cup and carry away our plunder, we shall have to defend ourselves by means of Roch's fulgurator."

In my opinion the rascals must have gone on to reason still further in this wise:

"Is there any connection between the disclosure of our secret—if it was, and however it may have been made—and the double abduction from Healthful House? Is it known that Thomas Roch and his keeper are confined in Back Cup? Is it known that the abduction was effected in the interest of Ker Karraje? Have Americans, English, French, Germans, and Russians reason to fear that an attack in force against the island would be doomed to failure?"

Ker Karraje must know very well that these powers would not hesitate to attack him, however great the danger might be. The destruction of his lair is an urgent duty in the interest of public security and of humanity. After sweeping the West Pacific the pirate and his companions are infesting the West Atlantic, and must be wiped out at all costs.

In any case, it is imperative that the inhabitants of Back Cup should be on their guard. This fact is realized, and, from the day on which the Sword was destroyed, strict watch has been kept. Thanks to the new passage, they are able to hide among the rocks without having recourse to the submarine tunnel to get there, and day and night a dozen sentries are posted about the island. The moment a ship appears in sight the fact is at once made known inside the cavern.

Nothing occurs for some days, and the latter succeed each other with dreadful monotony. The pirates, however,
feel that Back Cup no longer enjoys its former security. Every moment an alarm from the sentries posted outside is expected. The situation is no longer the same since the advent of the Sword. Gallant Lieutenant Davon, gallant crew, may England, may the civilized nations, never forget that you have sacrificed your lives in the cause of humanity!

It is evident that now, however powerful may be their means of defence, even more powerful than a network of torpedoes, Engineer Serko and Captain Spade are filled with an anxiety that they vainly essay to dissemble. They hold frequent conferences together. Maybe they discuss the advisability of quitting Back Cup with their wealth, for they are aware that if the existence of the cavern is known means will be found to reduce it, even if the inmates have to be starved out.

This is, of course, mere conjecture on my part. What is essential to me is that they do not suspect me of having launched the keg that was so providentially picked up at Bermuda. Never, I must say, has Engineer Serko ever made any allusion to any such probability. No, I am not even suspected. If the contrary were the case I am sufficiently acquainted with Ker Karraje to know that he would long ago have sent me to rejoin Lieutenant Davon and the Sword at the bottom of the lagoon.

The winter tempests have set in with a vengeance. The wind howls though the hole in the roof, and rude gusts sweep through the forest of pillars producing sonorous sounds, so sonorous, so deep, that one might sometimes almost fancy they were produced by the firing of the guns of a squadron. Flocks of seabirds take refuge in the cavern from the gale, and at intervals, when it lulls, almost deafen us with their screaming.

It is to be presumed that in such weather the schooner will make no attempt to put to sea, for the stock of provisions is ample enough to last all the season. Moreover, I imagine the Count d'Artigas will not be so eager in future to show his Ebba along the American coast, where he risks being received, not, as hitherto, with the consideration due to a wealthy yachtsman, but in the manner Ker Karraje so richly merits.

It occurs to me that if the apparition of the Sword was the commencement of a campaign against the island, a question of great moment relative to the future of Back Cup arises.

Therefore, one day, prudently, so as not to excite any suspicion, I ventured to pump Engineer Serko about it. We were in the neighborhood of Thomas Roch's laboratory, and had been conversing for some time, when Engineer Serko touched upon the extraordinary apparition of an English submarine boat in the lagoon. On this occasion he seemed to incline to the view that it might have been a premeditated expedition against Ker Karraje.

"That is not my opinion," I replied, in order to bring him to the question that I wanted to put to him.

"Why?" he demanded.

"Because if your retreat were known a fresh attempt, if not to penetrate to the cavern, at least to destroy Back Cup, would ere this have been made."

"Destroy it!" cried Serko. "It would be a dangerous undertaking, in view of the means of defence of which we now dispose."

"They can know nothing about this matter, Mr. Serko. It is not imagined, either in the new world or the old, that the abduction from Healthful House was effected for your especial benefit, or that you have succeeded in coming to terms with Thomas Roch for his invention."

Engineer Serko made no response to this observation, which, for that matter, was unanswerable.

I continued:

"Therefore a squadron sent by the maritime powers who have an interest in breaking up this island would not hesitate to approach and shell it. Now, I argue from this that as this squadron has not yet appeared, it is not likely to come at all, and that nothing is known as to Ker Karraje's whereabouts, and you must admit that this hypothesis is the most cheerful one, as far as you are concerned."

"That may be," Engineer Serko replied, "but what is, is. Whether they are aware of the fact or no, if warships approach within five or six miles of this island they will be sunk before they have had time to fire a single shot!"

"Well, and what then?"

"What then? Why the probability is that no others would care to repeat the experiment."

"That, again, may be. But these warships would invest you beyond the dangerous zone, and the Ebba would not be able to put in to the ports she previously visited with the Count d'Artigas. In this event, how would you be able to provision the island?"

Engineer Serko remained silent.

This argument, which he must already have brooded over, was too logical to be refuted or dismissed, and I have an idea that the pirates contemplate abandoning Back Cup.

Nevertheless, not relishing being cornered, he continued:

"We should still have the tug, and what the Ebba could not do, this would."

"The tug?" I cried. "But if Ker Karraje's secrets are known, do you suppose the powers are not also aware of the existence of the Count d'Artigas' submarine boat?"
Engineer Serko looked at me suspiciously.
"Mr. Hart," he said, "you appear to me to carry your deductions rather far."
"I, Mr. Serko?"
"Yes, and I think you talk about all this like a man who knows more than he ought to."
This remark brought me up abruptly. It was evident that my arguments might give rise to the suspicion that I was not altogether irresponsible for the recent incident. Engineer Serko scrutinized me sharply as though he would read my innermost thoughts.
"Mr. Serko," I observed, "by profession, as well as by inclination, I am accustomed to reason upon everything. This is why I communicated to you the result of my reasoning, which you can take into consideration or not, as you like."

Thereupon we separate. But I fancy my lack of reserve may have excited suspicions which may not be easy to allay.

From this interview, however, I gleaned a precious bit of information, namely, that the dangerous zone of Roch's fulgurator is between five and six miles off. Perhaps, during the next equinoctial tides, another notice to this effect in another keg may also reach a safe destination.

But how many weary months to wait before the orifice of the tunnel will again be uncovered!

The rough weather continues, and the squalls are more violent than ever. Is it the state of the sea that delays another campaign against Back Cup? Lieutenant Davon certainly assured me that if his expedition failed, if the Sword did not return to St. George, another attempt under different conditions would be made with a view to breaking up this bandits' lair. Sooner or later the work of justice must be done, and Back Cup be destroyed, even though I may not survive its destruction.

Ah! why can I not go and breathe, if only for a single instant, the vivifying air outside? Why am I not permitted to cast one glance over the ocean towards the distant horizon of the Bermudas? My whole life is concentrated in one desire: to get through the tunnel in the wall and hide myself among the rocks. Perchance I might be the first to catch sight of the smoke of a squadron heading for the island.

This project, alas! is unrealizable, as sentries are posted day and night at each extremity of the passage. No one can enter it without Engineer Serko's authorization. Were I to attempt it, I should risk being deprived of my liberty to walk about the cavern, and even worse might happen to me.

Since our last conversation, Engineer Serko's attitude towards me has undergone a change. His gaze has lost its old-time sarcasm and is distrustful, suspicious, searching and as stern as Ker Karraje's.

November 17.--This afternoon there was a great commotion in the Beehive, and the men rushed out of their cells with loud cries.

I was reclining on my bed, but immediately rose and hurried out.

All the pirates were making for the passage, in front of which were Ker Karraje, Engineer Serko, Captain Spade, Boatswain Effrondat, Engine-driver Gibson and the Count d'Artigas' big Malay attendant.

I soon learn the reason for the tumult, for the sentries rush in with shouts of alarm.

Several vessels have been sighted to the northwest--warships steaming at full speed in the direction of Back Cup.
squadron is in view of Back Cup, and that his fulgurator will be employed to defend the island?

What is certain is that half a hundred engines, each charged with several pounds of the explosive and of the substance that ensures a trajectory superior to that of any other projectile, are ready for their work of destruction.

As to the deflagrator liquid, Thomas Roch has a certain number of phials of it, and--I know only too well--will not refuse to help Ker Karraje's pirates with it.

During these preparations night has come on. Only the lamps of the Beehive are lighted and a semi-obscurity reigns in the cavern.

I return to my cell. It is to my interest to keep out of the way as much as possible, for Engineer Serko's suspicions might be revived now that the squadron is approaching Back Cup.

But will the vessels sighted continue on their course in this direction? May they not be merely passing on their way to Bermuda? For an instant this doubt enters my mind. No, no, it cannot be! Besides, I have just heard Captain Spade declare that they are lying to in view of the island.

To what nation do they belong? Have the English, desirous of avenging the destruction of the Sword, alone undertaken the expedition? May not cruisers of other nations be with them? I know not, and it is impossible to ascertain. And what does it matter, after all, so long as this haunt is destroyed, even though I should perish in the ruins like the heroic Lieutenant Davon and his brave crew?

Preparations for defence continue with coolness and method under Engineer Serko's superintendence. These pirates are obviously certain that they will be able to annihilate their assailants as soon as the latter enter the dangerous zone. Their confidence in Roch's fulgurator is absolute. Absorbed by the idea that these warship are powerless against them, they think neither of the difficulties nor menaces held out by the future.

I surmise that the trestles have been set up on the northwest coast with the grooves turned to send the engines to the north, west, and south. On the east, as already stated, the island is defended by the chain of reefs that stretches away to the Bermudas.

About nine o'clock I venture out of my cell. They will pay little attention to me, and perhaps I may escape notice in the obscurity. Ah! if I could get through that passage and hide behind some rock, so that I could witness what goes on at daybreak! And why should I not succeed now that Ker Karraje, Engineer Serko, Captain Spade, and the pirates have taken their posts outside?

The shores of the lake are deserted, but the entrance to the passage is kept by Count d'Artigas' Malay. I saunter, without any fixed idea, towards Thomas Roch's laboratory. This reminds me of my compatriot. I am, on reflection, disposed to think that he knows nothing about the presence of a squadron off Back Cup. Probably not until the last moment will Engineer Serko apprise him of its proximity, not till he brusquely points out to him the vengeance he can accomplish.

Then I conceive the idea of enlightening Thomas Roch, myself, of the responsibility he is incurring and of revealing to him in this supreme hour the character of the men who want him to co-operate in their criminal projects.

Yes, I will, attempt it, and may I succeed in fanning into a flame any spark of patriotism that may still linger in his rebellious soul!

Roch is shut up in his laboratory. He must be alone, for never does he allow any one to enter while he is preparing his deflagrator.

As I pass the jetty I notice that the tug is moored in its accustomed place. Here I judge it prudent to walk behind the first row of pillars and approach the laboratory laterally--which will enable me to see whether anybody is with him. When I have gone a short distance along the sombre avenue I see a bright light on the opposite side of the lagoon. It is the electric light in Roch's laboratory as seen through a narrow window in the front.

Except in that particular spot, the southern shore of the lake is in darkness, whereas, in the opposite direction, the Beehive is lit up to its extremity at the northern wall. Through the opening in the dome, over the lake I can see the stars shining. The sky is clear, the tempest has abated, and the squalls no longer penetrate to the interior of Back Cup.

When near the laboratory, I creep along the wall and peep in at the window.

Thomas Roch is there alone. The light shines full on his face. If it is somewhat drawn, and the lines on the forehead are more pronounced, his physiognomy, at least, denotes perfect calmness and self-possession. No, he is no longer the inmate of Pavilion No. 17, the madman of Healthful House, and I ask myself whether he is not radically cured, whether there is no further danger of his reason collapsing in a final paroxysm.

He has just laid two glass phials upon the table, and holds a third in his hand. He holds it up to the light, and observes the limpidity of the liquid it contains.

I have half a mind to rush in, seize the tubes and smash them, but I reflect that he would have time to make some more of the stuff. Better stick to my first plan.

I push the door open and enter.
"Thomas Roch!" I exclaim.
He has not heard, nor has he seen me.
"Thomas Roch!" I repeat.
He raises his head, turns and gazes at me.
"Ah! it is you, Simon Hart!" he replies calmly, even indifferently.
He knows my name. Engineer Serko must have informed him that it was Simon Hart, and not Keeper Gaydon who was watching over him at Healthful House.
"You know who I am?" I say.
"Yes, as I know what your object was in undertaking such a position. You lived in hopes of surprising a secret that they would not pay for at its just value!"

Thomas Roch knows everything, and perhaps it is just as well, in view of what I am going to say.
"Well, you did not succeed, Simon Hart, and as far as this is concerned," he added, flourishing the phial, "no one else has succeeded, or ever will succeed."

As I conjectured, he has not, then, made known the composition of his deflagrator. Looking him straight in the face, I reply:
"You know who I am, Thomas Roch, but do you know in whose place you are?"
"In my own place!" he cries.
That is what Ker Karraje has permitted him to believe. The inventor thinks he is at home in Back Cup, that the riches accumulated in this cavern are his, and that if an attack is made upon the place, it will be with the object of stealing what belongs to him! And he will defend it under the impression that he has the right to do so!

"Thomas Roch," I continue, "listen to me."
"What do you want to say to me, Simon Hart?"
"This cavern into which we have been dragged, is occupied by a band of pirates, and--"
Roch does not give me time to complete the sentence--I doubt even whether he has understood me.
"I repeat," he interrupts vehemently, "that the treasures stored here are the price of my invention. They have paid me what I asked for my fulgurator--what I was everywhere refused--even in my own country--which is also yours--and I will not allow myself to be despoiled!

What can I reply to such insensate assertions? I, however, go on:
"Thomas Roch, do you remember Healthful House?"
"Healthful House, where I was sequestrated after Warder Gaydon had been entrusted with the mission of spying upon me in order to rob me of my secret? I do, indeed."
"I never dreamed of depriving you of the benefit of your secret, Thomas Roch. I would never have accepted such a mission. But you were ill, your reason was affected, and your invention was too valuable to be lost. Yes, had you disclosed the secret during one of your fits you would have preserved all the benefit and all the honor of it."
"Really, Simon Hart!" Roch replies disdainfully. "Honor and benefit! Your assurances come somewhat late in the day. You forget that on the pretext of insanity, I was thrown into a dungeon. Yes, it was a pretext; for my reason has never left me, even for an hour, as you can see from what I have accomplished since I am free."

"Free! Do you imagine you are free, Thomas Roch? Are you not more closely confined within the walls of this cavern than you ever were at Healthful House?"
"A man who is in his own home," he replies angrily, "goes out as he likes and when he likes. I have only to say the word and all the doors will open before me. This place is mine. Count d'Artigas gave it to me with everything it contains. Woe to those who attempt to attack it. I have here the wherewithal to annihilate them, Simon Hart!" The inventor waves the phial feverishly as he speaks.
"The Count d'Artigas has deceived you," I cry, "as he has deceived so many others. Under this name is dissembled one of the most formidable monsters who ever scoured the Pacific and Atlantic oceans. He is a bandit steeped in crime--he is the odious Ker Karraje!"
"Ker Karraje!" echoes Thomas Roch.

And I wonder if this name has not impressed him, if he remembers who the man is who bears it. If it did impress him, it was only momentarily.
"I do not know this Ker Karraje," he says, pointing towards the door to order me out. "I only know the Count d'Artigas."
"Thomas Roch," I persist, in a final effort, "the Count d'Artigas and Ker Karraje are one and the same person. If this man has purchased your secret, it is with the intention of ensuring impunity for his crimes and facilities for committing fresh ones. He is the chief of these pirates."
"Pirates!" cries Roch, whose irritation increases the more I press him. "The real pirates are those who dare to menace me even in this retreat, who tried it on with the Sword--for Serko has told me everything--who sought to
steal in my own home what belongs to me, what is but the just price of my discovery."

"No, Thomas Roch, the pirates are those who have imprisoned you in this cavern of Back Cup, who will utilize your genius to defend it, and who will get rid of you when they are in entire possession of your secrets!"

Thomas Roch here interrupts me. He does not appear to listen to what I say. He has a fixed idea, that of vengeance, which has been skilfully worked upon by Engineer Serko, and in which his hatred is concentrated to the exclusion of everything else.

"The bandits," he hisses, "are those who spurned me without a hearing, who heaped injustice and ignominy upon me, who drove me from country to country, whereas I offered them superiority, invincibleness, omnipotence!"

It is the eternal story of the unappreciated inventor, to whom the indifferent or envious refuse the means of testing his inventions, to pay him the value he sets upon them. I know it well—and also know all the exaggeration that has been written upon this subject.

It is clearly no time for reasoning with Thomas Roch. My arguments are entirely lost upon the hapless dupe of Ker Karraje and his accomplices. In revealing to him the real name of the Count d'Artigas, and denouncing to him this band and their chief I had hoped to wean him from their influence and make him realize the criminal end they have in view. My hope was vain. He does not believe me. And then what does he care whether the brigand's name is Count d'Artigas or Ker Karraje? Is not he, Thomas Roch, master of Back Cup? Is he not the owner of these riches accumulated by twenty years of murder and rapine?

Disarmed before such moral degeneracy, knowing not how I can touch his ulcerated, irresponsible heart, I turn towards the door. It only remains for me to withdraw. What is to be, will be, since it is out of my power to prevent the frightful dénouement that will occur in a few hours.

Thomas Roch takes no more notice of me. He seems to have forgotten that I am here. He has resumed his manipulations without realizing that he is not alone.

There is only one means of preventing the imminent catastrophe. Throw myself upon Roch, place him beyond the power of doing harm—strike him—kill him—yes, kill him! It is my right—it is my duty!

I have no arms, but on a near-by shelf I see some tools—a chisel and a hammer. What is to prevent me from knocking his brains out? Once he is dead I have but to smash the phials and his invention dies with him. The warships can approach, land their men upon the island, demolish Back Cup with their shells. Ker Karraje and his band will be killed to a man. Can I hesitate at a murder that will bring about the chastisement of so many crimes?

I advance to the shelf and stretch forth my hand to seize the chisel.

As I do so, Thomas Roch turns round.

It is too late to strike. A struggle would ensue. The noise and his cries would be heard, for there are still some pirates not far off, I can even now hear some one approaching, and have only just time to fly if I would not be seen.

Nevertheless, I make one last attempt to awaken the sentiment of patriotism within him.

"Thomas Roch," I say, "warships are in sight. They have come to destroy this lair. Maybe one of them flies the French flag!"

He gazes at me. He was not aware that Back Cup is going to be attacked, and I have just apprised him of the fact. His brow darkens and his eyes flash.

"Thomas Roch, would you dare to fire upon your country's flag--the tricolor flag?"

He raises his head, shakes it nervously, and with a disdainful gesture:

"What do you mean by 'your country'? I no longer have any country, Simon Hart. The inventor spurned no longer has a country. Where he finds an asylum, there is his fatherland! They seek to take what is mine. I will defend it, and woe, woe to those who dare to attack me!"

Then rushing to the door of the laboratory and throwing it violently open he shouts so loudly that he must be heard at the Beehive:

"Go! Get you gone!"

I have not a second to lose, and I dash out.

CHAPTER XVII.
ONE AGAINST FIVE.

For a whole hour I wander about among Back Cup's dark vaults, amid the stone trees, to the extreme limit of the cavern. It is here that I have so often sought an issue, a crevice, a crack through which I might squeeze to the shore of the island.

My search has been futile. In my present condition, a prey to indefinable hallucinations it seems to me that these walls are thicker than ever, that they are gradually closing in upon and will crush me.

How long this mental trouble lasts I cannot say. But I afterwards find myself on the Beehive side, opposite the
cell in which I cannot hope for either repose or sleep. Sleep, when my brain is in a whirl of excitement? Sleep, when I am near the end of a situation that threatened to be prolonged for years and years?

What will the end be as far as I am personally concerned? What am I to expect from the attack upon Back Cup, the success of which I have been unable to assure by placing Thomas Roch beyond the possibility of doing harm? His engines are ready to be launched, and as soon as the vessels have reached the dangerous zone they will be blown to atoms.

However this may be, I am condemned to pass the remaining hours of the night in my cell. The time has come for me to go in. At daybreak I shall see what is best for me to do. Meanwhile, for aught I know I may hear the thunder of Roch's fulgurator as it destroys the ships approaching to make a night attack.

I take a last look round. On the opposite side a light, a single light, is burning. It is the lamp in Roch's laboratory and it casts its reflection upon the waters of the lake.

No one is about, and it occurs to me that the pirates must have taken up their lighting positions outside and that the Beehive is empty.

Then, impelled by an irresistible instinct, instead of returning to my cell, I creep along the wall, listening, spying, ready to hide if I hear voices or footsteps.

I at length reach the passage.

God in heaven! No one is on guard there--the passage is free!

Without giving myself time to reflect I dart into the dark hole, and grope my way along it. Soon I feel a fresher air--the salt, vivifying air of the sea, that I have not breathed for five months. I inspire it with avidity, with all the power of my lungs.

The outer extremity of the passage appears against the star-studded sky. There is not even a shadow in the way. Perhaps I shall be able to get outside.

I lay down, and crawl along noiselessly to the orifice and peer out.

Not a soul is in sight!

By skirting the rocks towards the east, to the side which cannot be approached from the sea on account of the reefs and which is not likely to be watched, I reach a narrow excavation about two hundred and twenty-five yards from where the point of the coast extends towards the northwest.

At last I am out of the cavern. I am not free, but it is the beginning of freedom.

On the point the forms of a few sentries stand out against the clear sky, so motionless that they might be mistaken for pieces of the rock.

On the horizon to the west the position lights of the warship show in a luminous line.

From a few gray patches discernable in the east, I calculate that it must be about five o'clock in the morning.

November 18.--It is now light enough for me to be able to complete my notes relating the details of my visit to Thomas Roch's laboratory--the last lines my hand will trace, perhaps.

I have begun to write, and shall dot down the incidents of the attack as they occur.

The light damp mist that hangs over the water soon lifts under the influence of the breeze, and at last I can distinguish the warships.

There are five of them, and they are lying in a line about six miles off, and consequently beyond the range of Roch's engines.

My fear that after passing in sight of the Bermudas the squadron would continue on its way to the Antilles or Mexico was therefore unfounded. No, there it is, awaiting broad daylight in order to attack Back Cup.

There is a movement on the coast. Three or four pirates emerge from the rocks, the sentries are recalled and draw in, and the entire band is soon assembled. They do not seek shelter inside the cavern, knowing full well that the ships can never get near enough for the shells of the big guns to reach, the island.

I run no risk of being discovered, for only my head protrudes above the hole in the rock and no one is likely to come this way. The only thing that worries me is that Serko, or somebody else may take it into his head to see if I am in my cell, and if necessary to lock me in, though what they have to fear from me I cannot conceive.

At twenty-five minutes past seven: Ker Karraje, Engineer Serko and Captain Spade advance to the extremity of the point, where they sweep the north-western horizon with their telescopes. Behind them the six trestles are installed, in the grooves of which are Roch's autopropulsive engines.

Thirty-five minutes past seven: Smoke arises from the stacks of the warships, which are getting under way and will soon be within range of the engines.

Horrible cries of joy, salvos of hurrahs--howls of wild beasts I might more appropriately say--arise from the pirate horde.

At this moment Engineer Serko quits Ker Karraje, whom he leaves with Captain Spade, and enters the cavern, no doubt to fetch Thomas Roch.
When Ker Karraje orders the latter to launch his engines against the ships will he remember what I told him? Will not his crime appear to him in all its horror? Will he refuse to obey? No, I am only too convinced of the contrary. It is useless to entertain any illusion on the subject. The inventor believes he is on his own property. They are going to attack it. He will defend it.

The five warships slowly advance, making for the point. Perhaps they imagine on board that Thomas Roch has not given up his last and greatest secret to the pirates—and, as a matter of fact, he had not done so when I threw the keg into the lagoon. If the commanders propose to land storming parties and the ships advance into the zone of danger there will soon be nothing left of them but bits of shapeless floating wreckage.

Here comes Thomas Roch accompanied by Engineer Serko. On issuing from the passage both go to the trestle that is pointing towards the leading warship.

Ker Karraje and Captain Spade are awaiting them.

As far as I am able to judge, Roch is calm. He knows what he is going to do. No hesitation troubles the soul of the hapless man whom hatred has led astray.

Between his fingers shines the glass phial containing the deflagrator liquid.

He then gazes towards the nearest ship, which is about five miles distant.

She is a cruiser of about two thousand five hundred tons—not more.

She flies no flag, but from her build I take her to belong to a nation for which no Frenchman can entertain any particular regard.

The four other warships remain behind.

It is this cruiser which is to begin the attack.

Let her use her guns, then, since the pirates allow her to approach, and may the first of her projectiles strike Thomas Roch!

While Engineer Serko is estimating the distance, Roch places himself behind the trestle. Three engines are resting on it, charged with the explosive, and which are assured a long trajectory by the fusing matter without it being necessary to impart a gyratory movement to them—as in the case of Inventor Turpin's gyroscopic projectiles. Besides, if they drop within a few hundred yards of the vessel, they will be quite near enough to utterly destroy it.

The time has come.

"Thomas Roch!" Engineer Serko cries, and points to the cruiser.

The latter is steaming slowly towards the northwestern point of the island and is between four and five miles off. Roch nods assent, and waves them back from the trestle.

Ker Karraje, Captain Spade and the others draw back about fifty paces.

Thomas Roch then takes the stopper from the phial which he holds in his right hand, and successively pours into a hole in the rear-end of each engine a few drops of the liquid, which mixes with the fusing matter.

Forty-five seconds elapse—the time necessary for the combination to be effected—forty-five seconds during which it seems to me that my heart ceases to beat.

A frightful whistling is then heard, and the three engines tear through the air, describing a prolonged curve at a height of three hundred feet, and pass the cruiser.

Have they missed it? Is the danger over?

No! the engines, after the manner of Artillery Captain Chapel's discoid projectile, return towards the doomed vessel like an Australian boomerang.

The next instant the air is shaken with a violence comparable to that which would be caused by the explosion of a magazine of melinite or dynamite, Back Cup Island trembles to its very foundations.

The cruiser has disappeared,—blown to pieces. The effect is that of the Zalinski shell, but centupled by the infinite power of Roch's fulgurator.

What shouts the bandits raise as they rush towards the extremity of the point! Ker Karraje, Engineer Serko, and Captain Spade remain rooted to the spot, hardly able to credit the evidence of their own eyes.

As to Thomas Roch, he stands with folded arms, and flashing eyes, his face radiant with pride and triumph.

I understand, while I abhor his feelings.

If the other warships approach they will share the same fate as the cruiser. They will inevitably be destroyed. Oh! if they would but give up the struggle and withdraw to safety, even though my last hope would go with them! The nations can consult and arrive at some other plan for destroying the island. They can surround the place with a belt of ships that the pirates cannot break through and starve them to death like so many rats in a hole.

But I know that the warships will not retire, even though they know they are going to certain death. One after the other they will all make the attempt.

And I am right. Signals are exchanged between them. Almost immediately clouds of black smoke arise and the vessels again advance.
One of them, under forced draught, distances the others in her anxiety to bring her big guns quickly into action. At all risks I issue from my hole, and gaze at the on-coming warship with feverish eyes, awaiting, without being able to prevent it, another catastrophe.

This vessel, which visibly grows larger as it comes nearer, is a cruiser of about the same tonnage as the one that preceded her. No flag is flying and I cannot guess her nationality. She continues steaming at full speed in an effort to pass the zone of danger before other engines can be launched. But how can she escape them since they will swoop back upon her?

Thomas Roch places himself behind the second trestle as the cruiser passes on to the surface of the abysm in which she will in turn soon be swallowed up.

No sound disturbs the stillness. Suddenly the rolling of drums and the blare of bugles is heard on board the warship.

I know those bugle calls: they are French bugles! Great God! She is one of the ships of my own country's navy and a French inventor is about to destroy her!

No! it shall not be. I will rush towards Thomas Roch—shout to him that she is a French ship. He does not, cannot, know it.

At a sign from Engineer Serko the inventor has raised the phial. The bugles sound louder and more strident. It is the salute to the flag. A flag unfurls to the breeze—the tricolor, whose blue, white and red sections stand out luminously against the sky.

Ah! What is this? I understand! Thomas Roch is fascinated at the sight of his national emblem. Slowly he lowers his arm as the flag flutters up to the mast-head. Then he draws back and covers his eyes with his hand.

Heavens above! All sentiment of patriotism is not then dead in his ulcerated heart, seeing that it beats at the sight of his country's flag!

My emotion is not less than his. At the risk of being seen—and what do I now care if I am seen?—I creep over the rocks. I will be there to sustain Thomas Roch and prevent him from weakening. If I pay for it with my life I will once more adjure him in the name of his country. I will cry to him:

"Frenchman, it is the tricolor that flies on yonder ship! Frenchman, it is a very part of France that is approaching you! Frenchman, would you be so criminal as to strike it?"

But my intervention will not be necessary. Thomas Roch is not a prey to one of the fits to which he was formerly subject. He is perfectly sane.

When he found himself facing the flag he understood—and drew back.

A few pirates approach to lead him to the trestle again. He struggles and pushes them from him. Ker Karraje and Engineer Serko run up. They point to the rapidly advancing ship. They order him to launch his engines.

Thomas Roch refuses. Captain Spade and the others, mad with rage, menace him—curse him—strike him—try to wrest the phial from him.

Roch throws it on the ground and crushes it under foot. Then panic seizes upon the crowd of wretches. The cruiser has passed the zone and they cannot return her fire. Shells begin to rain all over the island, bursting the rocks in every direction.

But where is Thomas Roch? Has he been killed by one of the projectiles? No, I see him for the last time as he dashes into the passage.

Ker Karraje, Engineer Serko and the others follow him to seek shelter inside of Back Cup.

I will not return to the cavern at any price, even if I get killed by staying where I am. I will jot down my final notes and when the French sailors land on the point I will go—

END OF ENGINEER SIMON HART'S NOTES.

CHAPTER XVIII.

ON BOARD THE "TONNANT."

After the failure of Lieutenant Davon's mission with the Sword, the English authorities waited in vain for the expedition to return, and the conviction at length gained ground that the bold sailors had perished; but whether the Sword had been lost by striking against a rock or had been destroyed by Ker Karraje's pirates, could not, of course, be ascertained.

The object of the expedition, based upon the indications of the document found in the keg that was thrown up on the shore at St. George, was to carry off Thomas Roch ere his engines were completed. The French inventor having been recovered—without forgetting Engineer Simon Hart—he was to be handed over to the care of the Bermudan
authorities. That done, there would be nothing to fear from his fulgurator when the island was attacked.

When, however, the Sword had been given up for lost, another expedition of a different kind, was decided upon.
The time that had elapsed--nearly eight weeks--from the date of the document found in the keg, had to be taken
into consideration. It was thought that during the interval, Ker Karraje might have gained possession of Roch's
secrets.

An entente concluded between the maritime powers, resulted in the sending of five warships to Bermudan
waters. As there was a vast cavern inside Back Cup mountain, it was decided to attempt to bring the latter down like
the walls of a bastion, by bombarding it with powerful modern artillery.

The squadron assembled at the entrance to the Chesapeake, in Virginia, and sailed for the archipelago, which
was sighted on the evening of November 17.
The next morning the vessel selected for the first attack, steamed forward. It was about four and a half miles
from the island, when three engines, after passing the vessel, swerved round and exploded about sixty yards from
her. She sank immediately.
The effect of the explosion, which was superior to any previously obtained by new explosives, was
instantaneous. Even at the distance they were from the spot where it occurred, the four remaining ships felt the
shock severely.

Two things were to be deduced from this sudden catastrophe:
1.--The pirate Ker Karraje was in possession of Roch's fulgurator.
2.--The new engine possessed the destructive power attributed to it by its inventor.

After the disappearance of the unfortunate cruiser, the other vessels lowered boats to pick up a few survivors
who were clinging to the floating wreckage.

Then it was that the signals were exchanged and the warships started towards the island.
The swiftest of them, the Tonnant, a French cruiser, forged ahead while the others forced their draught in an
effort to catch up with her.
The Tonnant, at the risk of being blown to pieces in turn, penetrated the danger zone half a mile, and then ran up
her flag while manoeuvring to bring her heavy guns into action.

From the bridge the officers could see Ker Karraje's band scattered on the rocks of the island.
The occasion was an excellent one for getting a shot at them before the bombardment of their retreat was begun,
and fire was opened with the result that the pirates made a rush to get into the cavern.

A few minutes later there was a shock terrific enough to shake the sky down.

Where the mountain had been, naught but a heap of smoking, crumbling rocks was to be seen. Back Cup had
become a group of jagged reefs against which the sea, that had been thrown back like a gigantic tidal wave, was
beating and frothing.

What was the cause of the explosion?
Had it been voluntarily caused by the pirates when they realized that escape was impossible?
The Tonnant had not been seriously damaged by the flying rocks. Her boats were lowered and made towards all
that was left of Back Cup.
The landing parties explored the ruins, and found a few horribly mangled corpses. Not a vestige of the cavern
was to be seen.

One body, and one only, was found intact. It was lying on the northeast side of the reefs. In one hand, tightly
clapsed, was a note-book, the last line of which was incomplete.

A close examination showed that the man was still breathing. He was conveyed on board the Tonnant, where it
was learned from the note-book that he was Simon Hart.

For some time his life was despaired of, but he was eventually brought round, and from the answers made to the
questions addressed to him the following conclusion was reached:

Moved to his very soul at the sight of the tricolor flag, being at last conscious of the crime of lèse-patrie he was
about to commit, Thomas Roch rushed through the passage to the magazine where a considerable quantity of his
explosive was stored. Then, before he could be prevented, brought about the terrible explosion which destroyed the
island of Back Cup.

And now Ker Karraje and his pirates have disappeared--and with them Thomas Roch and the secret of his
invention.

THE END.
End of the Voyage Extraordinaire

FIVE WEEKS IN A BALLOON;
OR,
CHAPTER FIRST.

The End of a much-applauded Speech.--The Presentation of Dr. Samuel Ferguson.--Excelsior.--Full-length Portrait of the Doctor.--A Fatalist convinced.--A Dinner at the Travellers' Club.--Several Toasts for the Occasion.

There was a large audience assembled on the 14th of January, 1862, at the session of the Royal Geographical Society, No. 3 Waterloo Place, London. The president, Sir Francis M----, made an important communication to his colleagues, in an address that was frequently interrupted by applause.

This rare specimen of eloquence terminated with the following sonorous phrases bubbling over with patriotism:

"England has always marched at the head of nations" (for, the reader will observe, the nations always march at the head of each other), "by the intrepidity of her explorers in the line of geographical discovery." (General assent).

"Dr. Samuel Ferguson, one of her most glorious sons, will not reflect discredit on his origin." ("No, indeed!" from all parts of the hall.)

"This attempt, should it succeed" ("It will succeed!")", will complete and link together the notions, as yet disjointed, which the world entertains of African cartology" (vehement applause); "and, should it fail, it will, at least, remain on record as one of the most daring conceptions of human genius!" (Tremendous cheering.)

"Huzza! huzza!" shouted the immense audience, completely electrified by these inspiring words.

"Huzza for the intrepid Ferguson!" cried one of the most excitable of the enthusiastic crowd.

The wildest cheering resounded on all sides; the name of Ferguson was in every mouth, and we may safely believe that it lost nothing in passing through English throats. Indeed, the hall fairly shook with it.

And there were present, also, those fearless travellers and explorers whose energetic temperaments had borne them through every quarter of the globe, many of them grown old and worn out in the service of science. All had, in some degree, physically or morally, undergone the sorest trials. They had escaped shipwreck; conflagration; Indian tomahawks and war-clubs; the fagot and the stake; nay, even the cannibal maws of the South Sea Islanders. But still their hearts beat high during Sir Francis M----'s address, which certainly was the finest oratorical success that the Royal Geographical Society of London had yet achieved.

But, in England, enthusiasm does not stop short with mere words. It strikes off money faster than the dies of the Royal Mint itself. So a subscription to encourage Dr. Ferguson was voted there and then, and it at once attained the handsome amount of two thousand five hundred pounds. The sum was made commensurate with the importance of the enterprise.

A member of the Society then inquired of the president whether Dr. Ferguson was not to be officially introduced.

"The doctor is at the disposition of the meeting," replied Sir Francis.

"Let him come in, then! Bring him in!" shouted the audience. "We'd like to see a man of such extraordinary daring, face to face!"

"Perhaps this incredible proposition of his is only intended to mystify us," growled an apoplectic old admiral.

"Suppose that there should turn out to be no such person as Dr. Ferguson?" exclaimed another voice, with a malicious twang.

"Why, then, we'd have to invent one!" replied a facetious member of this grave Society.

"Ask Dr. Ferguson to come in," was the quiet remark of Sir Francis M----.

And come in the doctor did, and stood there, quite unmoved by the thunders of applause that greeted his appearance.

He was a man of about forty years of age, of medium height and physique. His sanguine temperament was disclosed in the deep color of his cheeks. His countenance was coldly expressive, with regular features, and a large nose--one of those noses that resemble the prow of a ship, and stamp the faces of men predestined to accomplish great discoveries. His eyes, which were gentle and intelligent, rather than bold, lent a peculiar charm to his physiognomy. His arms were long, and his feet were planted with that solidity which indicates a great pedestrian.

A calm gravity seemed to surround the doctor's entire person, and no one would dream that he could become the agent of any mystification, however harmless.

Hence, the applause that greeted him at the outset continued until he, with a friendly gesture, claimed silence on his own behalf. He stepped toward the seat that had been prepared for him on his presentation, and then, standing erect and motionless, he, with a determined glance, pointed his right forefinger upward, and pronounced aloud the
Never had one of Bright's or Cobden's sudden onslaughts, never had one of Palmerston's abrupt demands for funds to plate the rocks of the English coast with iron, made such a sensation. Sir Francis M----'s address was completely overshadowed. The doctor had shown himself moderate, sublime, and self-contained, in one; he had uttered the word of the situation--

"Excelsior!"

The gouty old admiral who had been finding fault, was completely won over by the singular man before him, and immediately moved the insertion of Dr. Ferguson's speech in "The Proceedings of the Royal Geographical Society of London."

Who, then, was this person, and what was the enterprise that he proposed?

Ferguson's father, a brave and worthy captain in the English Navy, had associated his son with him, from the young man's earliest years, in the perils and adventures of his profession. The fine little fellow, who seemed to have never known the meaning of fear, early revealed a keen and active mind, an investigating intelligence, and a remarkable turn for scientific study; moreover, he disclosed uncommon address in extricating himself from difficulty; he was never perplexed, not even in handling his fork for the first time—an exercise in which children generally have so little success.

His fancy kindled early at the recitals he read of daring enterprise and maritime adventure, and he followed with enthusiasm the discoveries that signalized the first part of the nineteenth century. He mused over the glory of the Mungo Parks, the Bruces, the Caillies, the Levaillants, and to some extent, I verily believe, of Selkirk (Robinson Crusoe), whom he considered in no wise inferior to the rest. How many a well-employed hour he passed with that hero on his isle of Juan Fernandez! Often he criticised the ideas of the shipwrecked sailor, and sometimes discussed his plans and projects. He would have done differently, in such and such a case, or quite as well at least--of that he felt assured. But of one thing he was satisfied, that he never should have left that pleasant island, where he was as happy as a king without subjects—no, not if the inducement held out had been promotion to the first lordship in the admiralty!

It may readily be conjectured whether these tendencies were developed during a youth of adventure, spent in every nook and corner of the Globe. Moreover, his father, who was a man of thorough instruction, omitted no opportunity to consolidate this keen intelligence by serious studies in hydrography, physics, and mechanics, along with a slight tincture of botany, medicine, and astronomy.

Upon the death of the estimable captain, Samuel Ferguson, then twenty-two years of age, had already made his voyage around the world. He had enlisted in the Bengalese Corps of Engineers, and distinguished himself in several affairs; but this soldier's life had not exactly suited him; caring but little for command, he had not been fond of obedience. He, therefore, sent in his resignation, and half botanizing, half playing the hunter, he made his way toward the north of the Indian Peninsula, and crossed it from Calcutta to Surat—a mere amateur trip for him.

From Surat we see him going over to Australia, and in 1845 participating in Captain Sturt's expedition, which had been sent out to explore the new Caspian Sea, supposed to exist in the centre of New Holland.

Samuel Ferguson returned to England about 1850, and, more than ever possessed by the demon of discovery, he spent the intervening time, until 1853, in accompanying Captain McClure on the expedition that went around the American Continent from Behring's Straits to Cape Farewell.

Notwithstanding fatigues of every description, and in all climates, Ferguson's constitution continued marvellously sound. He felt at ease in the midst of the most complete privations; in fine, he was the very type of the thoroughly accomplished explorer whose stomach expands or contracts at will; whose limbs grow longer or shorter according to the resting-place that each stage of a journey may bring; who can fall asleep at any hour of the day or awake at any hour of the night.

Nothing, then, was less surprising, after that, than to find our traveller, in the period from 1855 to 1857, visiting the whole region west of the Thibet, in company with the brothers Schlagintweit, and bringing back some curious ethnographic observations from that expedition.

During these different journeys, Ferguson had been the most active and interesting correspondent of the Daily Telegraph, the penny newspaper whose circulation amounts to 140,000 copies, and yet scarcely suffices for its many legions of readers. Thus, the doctor had become well known to the public, although he could not claim membership in either of the Royal Geographical Societies of London, Paris, Berlin, Vienna, or St. Peters burg, or yet with the Travellers' Club, or even the Royal Polytechnic Institute, where his friend the statistician Cockburn ruled in state.

The latter savant had, one day, gone so far as to propose to him the following problem: Given the number of miles travelled by the doctor in making the circuit of the Globe, how many more had his head described than his feet, by reason of the different lengths of the radii?—or, the number of miles traversed by the doctor's head and feet...
respectively being given, required the exact height of that gentleman?

This was done with the idea of complimenting him, but the doctor had held himself aloof from all the learned bodies—belonging, as he did, to the church militant and not to the church polemical. He found his time better employed in seeking than in discussing, in discovering rather than discoursing.

There is a story told of an Englishman who came one day to Geneva, intending to visit the lake. He was placed in one of those odd vehicles in which the passengers sit side by side, as they do in an omnibus. Well, it so happened that the Englishman got a seat that left him with his back turned toward the lake. The vehicle completed its circular trip without his thinking to turn around once, and he went back to London delighted with the Lake of Geneva.

Doctor Ferguson, however, had turned around to look about him on his journeyings, and turned to such good purpose that he had seen a great deal. In doing so, he had simply obeyed the laws of his nature, and we have good reason to believe that he was, to some extent, a fatalist, but of an orthodox school of fatalism withal, that led him to rely upon himself and even upon Providence. He claimed that he was impelled, rather than drawn by his own volition, to journey as he did, and that he traversed the world like the locomotive, which does not direct itself, but is guided and directed by the track it runs on.

"I do not follow my route;" he often said, "it is my route that follows me."

The reader will not be surprised, then, at the calmness with which the doctor received the applause that welcomed him in the Royal Society. He was above all such trifles, having no pride, and less vanity. He looked upon the proposition addressed to him by Sir Francis M---- as the simplest thing in the world, and scarcely noticed the immense effect that it produced.

When the session closed, the doctor was escorted to the rooms of the Travellers' Club, in Pall Mall. A superb entertainment had been prepared there in his honor. The dimensions of the dishes served were made to correspond with the importance of the personage entertained, and the boiled sturgeon that figured at this magnificent repast was not an inch shorter than Dr. Ferguson himself.

Numerous toasts were offered and quaffed, in the wines of France, to the celebrated travellers who had made their names illustrious by their explorations of African territory. The guests drank to their health or to their memory, in alphabetical order, a good old English way of doing the thing. Among those remembered thus, were: Abbadie, Adams, Adamson, Anderson, Arnaud, Baikie, Baldwin, Barth, Batouda, Beke, Beltram, Du Berba, Bimbachi, Bolognesi, Bolwik, Belzoni, Bonnemain, Brisson, Browne, Bruce, Brun-Rollet, Burchell, Burckhardt, Burton, Cailland, Caillie, Campbell, Chapman, Clapperton, Clot-Bey, Colombieu, Courval, Cumming, Cuny, Debono, Decken, Denham, Desavanchers, Dickson, Dickson, Dochard, Du Chaillu, Duncan, Durand, Duroule, Duveyrier, D'Escayrac, De Lauture, Erhardt, Ferret, Fresnel, Galinier, Galton, Geoffroy, Golberry, Hahn, Halm, Harnier, Hecquart, Heuglin, Hornemann, Houghton, Imbert, Kauffmann, Knoblecher, Krapf, Kummer, Lafargue, Laing, Lafaille, Lambert, Lamiral, Lampriere, John Lander, Richard Lander, Lefebvre, Lejean, Levaillet, Livingstone, MacCarthy, Maggier, Maizan, Malzac, Moffat, Mollien, Monteiro, Morrison, Mungo Park, Neimans, Overweg, Panet, Partarrieau, Pascal, Pearse, Peddie, Penney, Petherick, Poncet, Prax, Raffenen, Rahb, Rehmann, Richardson, Riley, Ritchey, Rochet d'Héricourt, Rongawi, Roscher, Ruppel, Saugnier, Speke, Steidner, Thibaud, Thompson, Thornton, Toole, Tousny, Trotter, Tuckey, Tyrwhitt, Vaudey, Veyssiere, Vincent, Vinco, Vogel, Wahlberg, Warrington, Washington, Werne, Wild, and last, but not least, Dr. Ferguson, who, by his incredible attempt, was to link together the achievements of all these explorers, and complete the series of African discovery.

CHAPTER SECOND.

The Article in the Daily Telegraph.--War between the Scientific Journals.-- Mr. Petermann backs his Friend Dr. Ferguson.--Reply of the Savant Koner. --Bets made.--Sundry Propositions offered to the Doctor.

On the next day, in its number of January 15th, the Daily Telegraph published an article couched in the following terms:

"Africa is, at length, about to surrender the secret of her vast solitudes; a modern OEdipus is to give us the key to that enigma which the learned men of sixty centuries have not been able to decipher. In other days, to seek the sources of the Nile—fontes Nili quoerere—was regarded as a mad endeavor, a chimera that could not be realized.

"Dr. Barth, in following out to Soudan the track traced by Denham and Clapperton; Dr. Livingstone, in multiplying his fearless explorations from the Cape of Good Hope to the basin of the Zambesi; Captains Burton and Speke, in the discovery of the great interior lakes, have opened three highways to modern civilization. THEIR POINT OF INTERSECTION, which no traveller has yet been able to reach, is the very heart of Africa, and it is thither that all efforts should now be directed.

"The labors of these hardy pioneers of science are now about to be knit together by the daring project of Dr. Samuel Ferguson, whose fine explorations our readers have frequently had the opportunity of appreciating.
"This intrepid discoverer proposes to traverse all Africa from east to west IN A BALLOON. If we are well informed, the point of departure for this surprising journey is to be the island of Zanzibar, upon the eastern coast. As for the point of arrival, it is reserved for Providence alone to designate.

The proposal for this scientific undertaking was officially made, yesterday, at the rooms of the Royal Geographical Society, and the sum of twenty-five hundred pounds was voted to defray the expenses of the enterprise.

We shall keep our readers informed as to the progress of this enterprise, which has no precedent in the annals of exploration."

As may be supposed, the foregoing article had an enormous echo among scientific people. At first, it stirred up a storm of incredulity; Dr. Ferguson passed for a purely chimerical personage of the Barnum stamp, who, after having gone through the United States, was proposed to "do" the British Isles.

A humorous reply appeared in the February number of the Bulletins de la Societe Geographique of Geneva, which very wittily showed up the Royal Society of London and their phenomenal sturgeon.

But Herr Petermann, in his Mittheilungen, published at Gotha, reduced the Geneva journal to the most absolute silence. Herr Petermann knew Dr. Ferguson personally, and guaranteed the intrepidity of his dauntless friend.

Besides, all manner of doubt was quickly put out of the question: preparations for the trip were set on foot at London; the factories of Lyons received a heavy order for the silk required for the body of the balloon; and, finally, the British Government placed the transport-ship Resolute, Captain Bennett, at the disposal of the expedition.

At once, upon word of all this, a thousand encouragements were offered, and felicitations came pouring in from all quarters. The details of the undertaking were published in full in the bulletins of the Geographical Society of Paris; a remarkable article appeared in the Nouvelles Annales des Voyages, de la Geographie, de l'Histoire, et de l'Archaeologie de M. V. A. Malte-Brun ("New Annals of Travels, Geography, History, and Archaeology, by M. V. A. Malte-Brun"); and a searching essay in the Zeitschrift fur Allgemeine Erdkunde, by Dr. W. Koner, triumphantly demonstrated the feasibility of the journey, its chances of success, the nature of the obstacles existing, the immense advantages of the aerial mode of locomotion, and found fault with nothing but the selected point of departure, which it contended should be Massowah, a small port in Abyssinia, whence James Bruce, in 1768, started upon his explorations in search of the sources of the Nile. Apart from that, it mentioned, in terms of unreserved admiration, the energetic character of Dr. Ferguson, and the heart, thrice panoplied in bronze, that could conceive and undertake such an enterprise.

The North American Review could not, without some displeasure, contemplate so much glory monopolized by England. It therefore rather ridiculed the doctor's scheme, and urged him, by all means, to push his explorations as far as America, while he was about it.

In a word, without going over all the journals in the world, there was not a scientific publication, from the Journal of Evangelical Missions to the Revue Algerienne et Coloniale, from the Annales de la Propagation de la Foi to the Church Missionary Intelligencer, that had not something to say about the affair in all its phases.

Many large bets were made at London and throughout England generally, first, as to the real or supposititious existence of Dr. Ferguson; secondly, as to the trip itself, which, some contended, would not be undertaken at all, and which was really contemplated, according to others; thirdly, upon the success or failure of the enterprise; and fourthly, upon the probabilities of Dr. Ferguson's return. The betting-books were covered with entries of immense sums, as though the Epsom races were at stake.

Thus, believers and unbelievers, the learned and the ignorant, alike had their eyes fixed on the doctor, and he became the lion of the day, without knowing that he carried such a mane. On his part, he willingly gave the most accurate information touching his project. He was very easily approached, being naturally the most affable man in the world. More than one bold adventurer presented himself, offering to share the dangers as well as the glory of the undertaking; but he refused them all, without giving his reasons for rejecting them.

Numerous inventors of mechanism applicable to the guidance of balloons came to propose their systems, but he would accept none; and, when he was asked whether he had discovered something of his own for that purpose, he constantly refused to give any explanation, and merely busied himself more actively than ever with the preparations for his journey.

CHAPTER THIRD.
The Doctor's Friend.--The Origin of their Friendship.--Dick Kennedy at London.--An unexpected but not very consoling Proposal.--A Proverb by no means cheering.--A few Names from the African Martyrology.--The Advantages of a Balloon.--Dr. Ferguson's Secret.

Dr. Ferguson had a friend--not another self, indeed, an alter ego, for friendship could not exist between two
beings exactly alike.

But, if they possessed different qualities, aptitudes, and temperaments, Dick Kennedy and Samuel Ferguson lived with one and the same heart, and that gave them no great trouble. In fact, quite the reverse.

Dick Kennedy was a Scotchman, in the full acceptation of the word—open, resolute, and headstrong. He lived in the town of Leith, which is near Edinburgh, and, in truth, is a mere suburb of Auld Reekie. Sometimes he was a fisherman, but he was always and everywhere a determined hunter, and that was nothing remarkable for a son of Caledonia, who had known some little climbing among the Highland mountains. He was cited as a wonderful shot with the rifle, since not only could he split a bullet on a knife-blade, but he could divide it into two such equal parts that, upon weighing them, scarcely any difference would be perceptible.

Kennedy's countenance strikingly recalled that of Herbert Glendinning, as Sir Walter Scott has depicted it in "The Monastery"; his stature was above six feet; full of grace and easy movement, he yet seemed gifted with herculean strength; a face embrowned by the sun; eyes keen and black; a natural air of daring courage; in fine, something sound, solid, and reliable in his entire person, spoke, at first glance, in favor of the bonny Scot.

The acquaintanceship of these two friends had been formed in India, when they belonged to the same regiment. While Dick would be out in pursuit of the tiger and the elephant, Samuel would be in search of plants and insects. Each could call himself expert in his own province, and more than one rare botanical specimen, that to science was as great a victory won as the conquest of a pair of ivory tusks, became the doctor's booty.

These two young men, moreover, never had occasion to save each other's lives, or to render any reciprocal service. Hence, an unalterable friendship. Destiny sometimes bore them apart, but sympathy always united them again.

Since their return to England they had been frequently separated by the doctor's distant expeditions; but, on his return, the latter never failed to go, not to ASK for hospitality, but to bestow some weeks of his presence at the home of his crony Dick.

The Scot talked of the past; the doctor busily prepared for the future. The one looked back, the other forward. Hence, a restless spirit personified in Ferguson; perfect calmness typified in Kennedy—such was the contrast.

After his journey to the Thibet, the doctor had remained nearly two years without hinting at new explorations; and Dick, supposing that his friend's instinct for travel and thirst for adventure had at length died out, was perfectly enchanted. They would have ended badly, some day or other, he thought to himself; no matter what experience one has with men, one does not travel always with impunity among cannibals and wild beasts. So, Kennedy besought the doctor to tie up his bark for life, having done enough for science, and too much for the gratitude of men.

The doctor contented himself with making no reply to this. He remained absorbed in his own reflections, giving himself up to secret calculations, passing his nights among heaps of figures, and making experiments with the strangest-looking machinery, inexplicable to everybody but himself. It could readily be guessed, though, that some great thought was fermenting in his brain.

"What can he have been planning?" wondered Kennedy, when, in the month of January, his friend quitted him to return to London.

He found out one morning when he looked into the Daily Telegraph.

"Merciful Heaven!" he exclaimed, "the lunatic! the madman! Cross Africa in a balloon! Nothing but that was wanted to cap the climax! That's what he's been bothering his wits about these two years past!"

Now, reader, substitute for all these exclamation points, as many ringing thumps with a brawny fist upon the table, and you have some idea of the manual exercise that Dick went through while he thus spoke.

When his confidential maid-of-all-work, the aged Elspeth, tried to insinuate that the whole thing might be a hoax--

"Not a bit of it!" said he. "Don't I know my man? Isn't it just like him? Travel through the air! There, now, he's jealous of the eagles, next! No! I warrant you, he'll not do it! I'll find a way to stop him! He! why if they'd let him alone, he'd start some day for the moon!"

On that very evening Kennedy, half alarmed, and half exasperated, took the train for London, where he arrived next morning.

Three-quarters of an hour later a cab deposited him at the door of the doctor's modest dwelling, in Soho Square, Greek Street. Forthwith he bounded up the steps and announced his arrival with five good, hearty, sounding raps at the door.

Ferguson opened, in person.

"Dick! you here?" he exclaimed, but with no great expression of surprise, after all.

"Dick himself!" was the response.

"What, my dear boy, you at London, and this the mid-season of the winter shooting?"

"Yes! here I am, at London!"
"And what have you come to town for?"
"To prevent the greatest piece of folly that ever was conceived."
"Folly!" said the doctor.
"Is what this paper says, the truth?" rejoined Kennedy, holding out the copy of the Daily Telegraph, mentioned above.
"Ah! that's what you mean, is it? These newspapers are great tattlers! But, sit down, my dear Dick."
"No, I won't sit down!--Then, you really intend to attempt this journey?"
"Most certainly! all my preparations are getting along finely, and I--"
"Where are your traps? Let me have a chance at them! I'll make them fly! I'll put your preparations in fine order." And so saying, the gallant Scot gave way to a genuine explosion of wrath.
"Come, be calm, my dear Dick!" resumed the doctor. "You're angry at me because I did not acquaint you with my new project."
"He calls this his new project!"
"I have been very busy," the doctor went on, without heeding the interruption; "I have had so much to look after! But rest assured that I should not have started without writing to you."
"Oh, indeed! I'm highly honored."
"Because it is my intention to take you with me."
Upon this, the Scotchman gave a leap that a wild goat would not have been ashamed of among his native crags.
"Ah! really, then, you want them to send us both to Bedlam!"
"I have counted positively upon you, my dear Dick, and I have picked you out from all the rest."
Kennedy stood speechless with amazement.
"After listening to me for ten minutes," said the doctor, "you will thank me!"
"Are you speaking seriously?"
"Very seriously."
"And suppose that I refuse to go with you?"
"But you won't refuse."
"But, suppose that I were to refuse?"
"Well, I'd go alone."
"Let us sit down," said Kennedy, "and talk without excitement. The moment you give up jesting about it, we can discuss the thing."
"Let us discuss it, then, at breakfast, if you have no objections, my dear Dick."
The two friends took their seats opposite to each other, at a little table with a plate of toast and a huge tea-urn before them.
"My dear Samuel," said the sportsman, "your project is insane! it is impossible! it has no resemblance to anything reasonable or practicable!"
"That's for us to find out when we shall have tried it!"
"But trying it is exactly what you ought not to attempt."
"Why so, if you please?"
"Well, the risks, the difficulty of the thing."
"As for difficulties," replied Ferguson, in a serious tone, "they were made to be overcome; as for risks and dangers, who can flatter himself that he is to escape them? Every thing in life involves danger; it may even be dangerous to sit down at one's own table, or to put one's hat on one's own head. Moreover, we must look upon what is to occur as having already occurred, and see nothing but the present in the future, for the future is but the present a little farther on."
"There it is!" exclaimed Kennedy, with a shrug. "As great a fatalist as ever!"
"Yes! but in the good sense of the word. Let us not trouble ourselves, then, about what fate has in store for us, and let us not forget our good old English proverb: 'The man who was born to be hung will never be drowned!'"
There was no reply to make, but that did not prevent Kennedy from resuming a series of arguments which may be readily conjectured, but which were too long for us to repeat.
"Well, then," he said, after an hour's discussion, "if you are absolutely determined to make this trip across the African continent—if it is necessary for your happiness, why not pursue the ordinary routes?"
"Why?" ejaculated the doctor, growing animated. "Because, all attempts to do so, up to this time, have utterly failed. Because, from Mungo Park, assassinated on the Niger, to Vogel, who disappeared in the Wadai country; from Oudney, who died at Murmur, and Clapperton, lost at Sackatou, to the Frenchman Maizan, who was cut to pieces; from Major Laing, killed by the Touaregs, to Roscher, from Hamburg, massacred in the beginning of 1860, the names of victim after victim have been inscribed on the lists of African martyrdom! Because, to contend
successfully against the elements; against hunger, and thirst, and fever; against savage beasts, and still more savage men, is impossible! Because, what cannot be done in one way, should be tried in another. In fine, because what one cannot pass through directly in the middle, must be passed by going to one side or overhead!

"If passing over it were the only question!" interposed Kennedy; "but passing high up in the air, doctor, there's the rub!"

"Come, then," said the doctor, "what have I to fear? You will admit that I have taken my precautions in such manner as to be certain that my balloon will not fall; but, should it disappoint me, I should find myself on the ground in the normal conditions imposed upon other explorers. But, my balloon will not deceive me, and we need make no such calculations."

"Yes, but you must take them into view."

"No, Dick. I intend not to be separated from the balloon until I reach the western coast of Africa. With it, every thing is possible; without it, I fall back into the dangers and difficulties as well as the natural obstacles that ordinarily attend such an expedition: with it, neither heat, nor torrents, nor tempests, nor the simoom, nor unhealthy climates, nor wild animals, nor savage men, are to be feared! If I feel too hot, I can ascend; if too cold, I can come down. Should there be a mountain, I can pass over it; a precipice, I can sweep across it; a river, I can sail beyond it; a storm, I can rise away above it; a torrent, I can skim it like a bird! I can advance without fatigue, I can halt without need of repos; I can soar above the nascent cities! I can speed onward with the rapidity of a tornado, sometimes at the loftiest heights, sometimes only a hundred feet above the soil, while the map of Africa unrolls itself beneath my gaze in the great atlas of the world."

Even the stubborn Kennedy began to feel moved, and yet the spectacle thus conjured up before him gave him the vertigo. He riveted his eyes upon the doctor with wonder and admiration, and yet with fear, for he already felt himself swinging aloft in space.

"Come, come," said he, at last. "Let us see, Samuel. Then you have discovered the means of guiding a balloon?"

"Not by any means. That is a Utopian idea."

"Then, you will go--"

"Whithersoever Providence wills; but, at all events, from east to west."

"Why so?"

"Because I expect to avail myself of the trade-winds, the direction of which is always the same."

"Ah! yes, indeed!" said Kennedy, reflecting; "the trade-winds--yes--truly--one might--there's something in that!"

"Something in it--yes, my excellent friend--there's EVERY THING in it. The English Government has placed a transport at my disposal, and three or four vessels are to cruise off the western coast of Africa, about the presumed period of my arrival. In three months, at most, I shall be at Zanzibar, where I will inflate my balloon, and from that point we shall launch ourselves."

"We!" said Dick.

"Have you still a shadow of an objection to offer? Speak, friend Kennedy."

"An objection! I have a thousand; but among other things, tell me, if you expect to see the country. If you expect to mount and descend at pleasure, you cannot do so, without losing your gas. Up to this time no other means have been devised, and it is this that has always prevented long journeys in the air."

"My dear Dick, I have only one word to answer--I shall not lose one particle of gas."

"And yet you can descend when you please?"

"I shall descend when I please."

"And how will you do that?"

"Ah, ha! therein lies my secret, friend Dick. Have faith, and let my device be yours--"Excelsior!"

"Excelsior be it then," said the sportsman, who did not understand a word of Latin.

But he made up his mind to oppose his friend's departure by all means in his power, and so pretended to give in, at the same time keeping on the watch. As for the doctor, he went on diligently with his preparations.

CHAPTER FOURTH.

African Explorations.--Barth, Richardson, Overweg, Werne, Brun-Rollet, Penney, Andrea, Debono, Miani, Guillaume Lejean, Bruce, Krapf and Rebmann, Maizan, Roscher, Burton and Speke.

The aerial line which Dr. Ferguson counted upon following had not been chosen at random; his point of departure had been carefully studied, and it was not without good cause that he had resolved to ascend at the island of Zanzibar. This island, lying near to the eastern coast of Africa, is in the sixth degree of south latitude, that is to say, four hundred and thirty geographical miles below the equator.

From this island the latest expedition, sent by way of the great lakes to explore the sources of the Nile, had just
set out.

But it would be well to indicate what explorations Dr. Ferguson hoped to link together. The two principal ones were those of Dr. Barth in 1849, and of Lieutenants Burton and Speke in 1858.

Dr. Barth is a Hamburger, who obtained permission for himself and for his countryman Overweg to join the expedition of the Englishman Richardson. The latter was charged with a mission in the Soudan.

This vast region is situated between the fifteenth and tenth degrees of north latitude; that is to say, that, in order to approach it, the explorer must penetrate fifteen hundred miles into the interior of Africa.

Until then, the country in question had been known only through the journeys of Denham, of Clapperton, and of Oudney, made from 1822 to 1824. Richardson, Barth, and Overweg, jealously anxious to push their investigations farther, arrived at Tunis and Tripoli, like their predecessors, and got as far as Mourzouk, the capital of Fezzan.

They then abandoned the perpendicular line, and made a sharp turn westward toward Ghat, guided, with difficulty, by the Touaregs. After a thousand scenes of pillage, of vexation, and attacks by armed forces, their caravan arrived, in October, at the vast oasis of Asben. Dr. Barth separated from his companions, made an excursion to the town of Aghades, and rejoined the expedition, which resumed its march on the 12th of December. At length it reached the province of Damergou; there the three travellers parted, and Barth took the road to Kano, where he arrived by dint of perseverance, and after paying considerable tribute.

In spite of an intense fever, he quitted that place on the 7th of March, accompanied by a single servant. The principal aim of his journey was to reconnoitre Lake Tchad, from which he was still three hundred and fifty miles distant. He therefore advanced toward the east, and reached the town of Zouricolo, in the Bornou country, which is the core of the great central empire of Africa. There he heard of the death of Richardson, who had succumbed to fatigue and privation. He next arrived at Kouka, the capital of Bornou, on the borders of the lake. Finally, at the end of three weeks, on the 14th of April, twelve months after having quitted Tripoli, he reached the town of Ngornou.

We find him again setting forth on the 29th of March, 1851, with Overweg, to visit the kingdom of Adamaoua, to the south of the lake, and from there he pushed on as far as the town of Yola, a little below nine degrees north latitude. This was the extreme southern limit reached by that daring traveller.

He returned in the month of August to Kouka; from there he successively traversed the Mandara, Barghimi, and Klanem countries, and reached his extreme limit in the east, the town of Masena, situated at seventeen degrees twenty minutes west longitude.

On the 25th of November, 1852, after the death of Overweg, his last companion, he plunged into the west, visited Sockoto, crossed the Niger, and finally reached Timbuctoo, where he had to languish, during eight long months, under vexations inflicted upon him by the sheik, and all kinds of ill-treatment and wretchedness. But the presence of a Christian in the city could not long be tolerated, and the Foullans threatened to besiege it. The doctor, therefore, left it on the 17th of March, 1854, and fled to the frontier, where he remained for thirty-three days in the most abject destitution. He then managed to get back to Kano in November, thence to Kouka, where he resumed Denham's route after four months' delay. He regained Tripoli toward the close of August, 1855, and arrived in London on the 6th of September, the only survivor of his party.

Such was the venturesome journey of Dr. Barth.

Dr. Ferguson carefully noted the fact, that he had stopped at four degrees north latitude and seventeen degrees west longitude.

Now let us see what Lieutenants Burton and Speke accomplished in Eastern Africa.

The various expeditions that had ascended the Nile could never manage to reach the mysterious source of that river. According to the narrative of the German doctor, Ferdinand Werne, the expedition attempted in 1840, under the auspices of Mehemet Ali, stopped at Gondokoro, between the fourth and fifth parallels of north latitude.

In 1855, Brun-Rollet, a native of Savoy, appointed consul for Sardinia in Eastern Soudan, to take the place of Vaudey, who had just died, set out from Karthoum, and, under the name of Yacoub the merchant, trading in gums and ivory, got as far as Belenia, beyond the fourth degree, but had to return in ill-health to Karthoum, where he died in 1857.

Neither Dr. Penney--the head of the Egyptian medical service, who, in a small steamer, penetrated one degree beyond Gondokoro, and then came back to die of exhaustion at Karthoum--nor Miani, the Venetian, who, turning the cataracts below Gondokoro, reached the second parallel-- nor the Maltese trader, Andrea Debono, who pushed his journey up the Nile still farther--could work their way beyond the apparently impassable limit.

In 1859, M. Guillaume Lejean, intrusted with a mission by the French Government, reached Karthoum by way of the Red Sea, and embarked upon the Nile with a retinue of twenty-one hired men and twenty soldiers, but he could not get past Gondokoro, and ran extreme risk of his life among the negro tribes, who were in full revolt. The expedition directed by M. d'Escayrac de Lauture made an equally unsuccessful attempt to reach the famous sources of the Nile.
This fatal limit invariably brought every traveller to a halt. In ancient times, the ambassadors of Nero reached the ninth degree of latitude, but in eighteen centuries only from five to six degrees, or from three hundred to three hundred and sixty geographical miles, were gained.

Many travellers endeavored to reach the sources of the Nile by taking their point of departure on the eastern coast of Africa.

Between 1768 and 1772 the Scotch traveller, Bruce, set out from Massowah, a port of Abyssinia, traversed the Tigre, visited the ruins of Axum, saw the sources of the Nile where they did not exist, and obtained no serious result.

In 1844, Dr. Krapf, an Anglican missionary, founded an establishment at Monbaz, on the coast of Zanguebar, and, in company with the Rev. Dr. Rebmann, discovered two mountain-ranges three hundred miles from the coast. These were the mountains of Kilimandjaro and Kenia, which Messrs. de Heuglin and Thornton have partly scaled so recently.

In 1845, Maizan, the French explorer, disembarked, alone, at Bagamayo, directly opposite to Zanzibar, and got as far as Deje-la-Mhora, where the chief caused him to be put to death in the most cruel torment.

In 1859, in the month of August, the young traveller, Roscher, from Hamburg, set out with a caravan of Arab merchants, reached Lake Nyassa, and was there assassinated while he slept.

Finally, in 1857, Lieutenants Burton and Speke, both officers in the Bengal army, were sent by the London Geographical Society to explore the great African lakes, and on the 17th of June they quitted Zanzibar, and plunged directly into the west.

After four months of incredible suffering, their baggage having been pillaged, and their attendants beaten and slain, they arrived at Kazeh, a sort of central rendezvous for traders and caravans. They were in the midst of the country of the Moon, and there they collected some precious documents concerning the manners, government, religion, fauna, and flora of the region. They next made for the first of the great lakes, the one named Tanganayika, situated between the third and eighth degrees of south latitude. They reached it on the 14th of February, 1858, and visited the various tribes residing on its banks, the most of whom are cannibals.

They departed again on the 26th of May, and reentered Kazeh on the 20th of June. There Burton, who was completely worn out, lay ill for several months, during which time Speke made a push to the northward of more than three hundred miles, going as far as Lake Okeracua, which he came in sight of on the 3d of August; but he could descry only the opening of it at latitude two degrees thirty minutes.

He reached Kazeh, on his return, on the 25th of August, and, in company with Burton, again took up the route to Zanzibar, where they arrived in the month of March in the following year. These two daring explorers then reembarked for England; and the Geographical Society of Paris decreed them its annual prize medal.

Dr. Ferguson carefully remarked that they had not gone beyond the second degree of south latitude, nor the twenty-ninth of east longitude.

The problem, therefore, was how to link the explorations of Burton and Speke with those of Dr. Barth, since to do so was to undertake to traverse an extent of more than twelve degrees of territory.

CHAPTER FIFTH.

Kennedy's Dreams.--Articles and Pronouns in the Plural.--Dick's Insinuations. --A Promenade over the Map of Africa.--What is contained between two Points of the Compass.--Expeditions now on foot.--Speke and Grant.--Krapf, De Decken, and De Heuglin.

Dr. Ferguson energetically pushed the preparations for his departure, and in person superintended the construction of his balloon, with certain modifications; in regard to which he observed the most absolute silence. For a long time past he had been applying himself to the study of the Arab language and the various Mandingoe idioms, and, thanks to his talents as a polyglot, he had made rapid progress.

In the mean while his friend, the sportsman, never let him out of his sight--afraid, no doubt, that the doctor might take his departure, without saying a word to anybody. On this subject, he regaled him with the most persuasive arguments, which, however, did NOT persuade Samuel Ferguson, and wasted his breath in pathetic entreaties, by which the latter seemed to be but slightly moved. In fine, Dick felt that the doctor was slipping through his fingers.

The poor Scot was really to be pitied. He could not look upon the azure vault without a sombre terror: when asleep, he felt oscillations that made the head reel; and every night he had visions of being swung aloft at immeasurable heights.

We must add that, during these fearful nightmares, he once or twice fell out of bed. His first care then was to show Ferguson a severe contusion that he had received on the cranium. "And yet," he would add, with warmth, "that was at the height of only three feet--not an inch more--and such a bump as this! Only think, then!"

This insinuation, full of sad meaning as it was, did not seem to touch the doctor's heart.
"We'll not fall," was his invariable reply.
"But, still, suppose that we WERE to fall!"
"We will NOT fall!"
This was decisive, and Kennedy had nothing more to say.
What particularly exasperated Dick was, that the doctor seemed completely to lose sight of his personality--of his--Kennedy's--and to look upon him as irrevocably destined to become his aerial companion. Not even the shadow of a doubt was ever suggested; and Samuel made an intolerable misuse of the first person plural:
"'We' are getting along; 'we' shall be ready on the ----; 'we' shall start on the ----," etc., etc.
And then there was the singular possessive adjective:
"'Our' balloon; 'our' car; 'our' expedition."
And the same in the plural, too:
"'Our' preparations; 'our' discoveries; 'our' ascensions."
Dick shuddered at them, although he was determined not to go; but he did not want to annoy his friend. Let us also disclose the fact that, without knowing exactly why himself, he had sent to Edinburgh for a certain selection of heavy clothing, and his best hunting-gear and fire-arms.
One day, after having admitted that, with an overwhelming run of good-luck, there MIGHT be one chance of success in a thousand, he pretended to yield entirely to the doctor's wishes; but, in order to still put off the journey, he opened the most varied series of subterfuges. He threw himself back upon questioning the utility of the expedition--its opportuneness, etc. This discovery of the sources of the Nile, was it likely to be of any use?--Would one have really labored for the welfare of humanity?--When, after all, the African tribes should have been civilized, would they be any happier?--Were folks certain that civilization had not its chosen abode there rather than in Europe?--Perhaps!--And then, couldn't one wait a little longer?--The trip across Africa would certainly be accomplished some day, and in a less hazardous manner.--In another month, or in six months before the year was over, some explorer would undoubtedly come in--etc., etc.
These hints produced an effect exactly opposite to what was desired or intended, and the doctor trembled with impatience.
"Are you willing, then, wretched Dick--are you willing, false friend--that this glory should belong to another? Must I then be untrue to my past history; recoil before obstacles that are not serious; requite with cowardly hesitation what both the English Government and the Royal Society of London have done for me?"
"But," resumed Kennedy, who made great use of that conjunction.
"But," said the doctor, "are you not aware that my journey is to compete with the success of the expeditions now on foot? Don't you know that fresh explorers are advancing toward the centre of Africa?"
"Still--"
"Listen to me, Dick," and cast your eyes over that map."
Dick glanced over it, with resignation.
"Now, ascend the course of the Nile."
"I have ascended it," replied the Scotchman, with docility.
"Stop at Gondokoro."
"I am there."
And Kennedy thought to himself how easy such a trip was--on the map!
"Now, take one of the points of these dividers and let it rest upon that place beyond which the most daring explorers have scarcely gone."
"I have done so."
"And now look along the coast for the island of Zanzibar, in latitude six degrees south."
"I have it."
"Now, follow the same parallel and arrive at Kazeh."
"I have done so."
"Run up again along the thirty-third degree of longitude to the opening of Lake Oukereoue, at the point where Lieutenant Speke had to halt."
"I am there; a little more, and I should have tumbled into the lake."
"Very good! Now, do you know what we have the right to suppose, according to the information given by the tribes that live along its shores?"
"I haven't the least idea."
"Why, that this lake, the lower extremity of which is in two degrees and thirty minutes, must extend also two degrees and a half above the equator."
"Really!"
"Well from this northern extremity there flows a stream which must necessarily join the Nile, if it be not the Nile itself."
"That is, indeed, curious."
"Then, let the other point of your dividers rest upon that extremity of Lake Oukereoue."
"It is done, friend Ferguson."
"Now, how many degrees can you count between the two points?"
"Scarcely two."
"And do you know what that means, Dick?"
"Not the least in the world."
"Why, that makes scarcely one hundred and twenty miles—in other words, a nothing."
"Almost nothing, Samuel."
"Well, do you know what is taking place at this moment?"
"No, upon my honor, I do not."
"Very well, then, I'll tell you. The Geographical Society regard as very important the exploration of this lake of which Speke caught a glimpse. Under their auspices, Lieutenant (now Captain) Speke has associated with him Captain Grant, of the army in India; they have put themselves at the head of a numerous and well-equipped expedition; their mission is to ascend the lake and return to Gondokoro; they have received a subsidy of more than five thousand pounds, and the Governor of the Cape of Good Hope has placed Hottentot soldiers at their disposal; they set out from Zanzibar at the close of October, 1860. In the mean while John Petherick, the English consul at the city of Karthoum, has received about seven hundred pounds from the foreign office; he is to equip a steamer at Karthoum, stock it with sufficient provisions, and make his way to Gondokoro; there, he will await Captain Speke's caravan, and be able to replenish its supplies to some extent."
"Well planned," said Kennedy.
"You can easily see, then, that time presses if we are to take part in these exploring labors. And that is not all, since, while some are thus advancing with sure steps to the discovery of the sources of the Nile, others are penetrating to the very heart of Africa."
"On foot?" said Kennedy.
"Yes, on foot," rejoined the doctor, without noticing the insinuation. "Doctor Krapf proposes to push forward, in the west, by way of the Djob, a river lying under the equator. Baron de Decken has already set out from Monbaz, has reconnoitred the mountains of Kenaia and Kilimandjaro, and is now plunging in toward the centre."
"But all this time on foot?"
"On foot or on mules."
"Exactly the same, so far as I am concerned," ejaculated Kennedy.
"Lastly," resumed the doctor, "M. de Heuglin, the Austrian vice-consul at Karthoum, has just organized a very important expedition, the first aim of which is to search for the traveller Vogel, who, in 1853, was sent into the Soudan to associate himself with the labors of Dr. Barth. In 1856, he quitted Bornou, and determined to explore the unknown country that lies between Lake Tchad and Darfur. Nothing has been seen of him since that time. Letters that were received in Alexandria, in 1860, said that he was killed at the order of the King of Wadai; but other letters, addressed by Dr. Hartmann to the traveller's father, relate that, according to the recital of a felatah of Bornou, Vogel was merely held as a prisoner at Wara. All hope is not then lost. Hence, a committee has been organized under the presidency of the Regent of Saxe-Cogurg-Gotha; my friend Petermann is its secretary; a national subscription has provided for the expense of the expedition, whose strength has been increased by the voluntary accession of several learned men, and M. de Heuglin set out from Massowah, in the month of June. While engaged in looking for Vogel, he is also to explore all the country between the Nile and Lake Tchad, that is to say, to knit together the operations of Captain Speke and those of Dr. Barth, and then Africa will have been traversed from east to west."
* After the departure of Dr. Ferguson, it was ascertained that M. de Heuglin, owing to some disagreement, took a route different from the one assigned to his expedition, the command of the latter having been transferred to Mr. Muntzinger.
"Well," said the canny Scot, "since every thing is getting on so well, what's the use of our going down there?"
Dr. Ferguson made no reply, but contented himself with a significant shrug of the shoulders.

CHAPTER SIXTH.
A Servant--match him!—He can see the Satellites of Jupiter.—Dick and Joe hard at it.—Doubt and Faith.—The Weighing Ceremony.—Joe and Wellington.—He gets a Half-crown.
Dr. Ferguson had a servant who answered with alacrity to the name of Joe. He was an excellent fellow, who
testified the most absolute confidence in his master, and the most unlimited devotion to his interests, even anticipating his wishes and orders, which were always intelligently executed. In fine, he was a Caleb without the growling, and a perfect pattern of constant good-humor. Had he been made on purpose for the place, it could not have been better done. Ferguson put himself entirely in his hands, so far as the ordinary details of existence were concerned, and he did well. Incomparable, whole-souled Joe! a servant who orders your dinner; who likes what you like; who packs your trunk, without forgetting your socks or your linen; who has charge of your keys and your secrets, and takes no advantage of all this!

But then, what a man the doctor was in the eyes of this worthy Joe! With what respect and what confidence the latter received all his decisions! When Ferguson had spoken, he would be a fool who should attempt to question the matter. Every thing he thought was exactly right; every thing he said, the perfection of wisdom; every thing he ordered to be done, quite feasible; all that he undertook, practicable; all that he accomplished, admirable. You might have cut Joe to pieces— not an agreeable operation, to be sure—and yet he would not have altered his opinion of his master.

So, when the doctor conceived the project of crossing Africa through the air, for Joe the thing was already done; obstacles no longer existed; from the moment when the doctor had made up his mind to start, he had arrived—along with his faithful attendant, too, for the noble fellow knew, without a word uttered about it, that he would be one of the party.

Moreover, he was just the man to render the greatest service by his intelligence and his wonderful agility. Had the occasion arisen to name a professor of gymnastics for the monkeys in the Zoological Garden (who are smart enough, by-the-way!), Joe would certainly have received the appointment. Leaping, climbing, almost flying— these were all sport to him.

If Ferguson was the head and Kennedy the arm, Joe was to be the right hand of the expedition. He had, already, accompanied his master on several journeys, and had a smattering of science appropriate to his condition and style of mind, but he was especially remarkable for a sort of mild philosophy, a charming turn of optimism. In his sight every thing was easy, logical, natural, and, consequently, he could see no use in complaining or grumbling.

Among other gifts, he possessed a strength and range of vision that were perfectly surprising. He enjoyed, in common with Moestlin, Kepler's professor, the rare faculty of distinguishing the satellites of Jupiter with the naked eye, and of counting fourteen of the stars in the group of Pleiades, the remotest of them being only of the ninth magnitude. He presumed none of the more for that; on the contrary, he made his bow to you, at a distance, and when occasion arose he bravely knew how to use his eyes.

With such profound faith as Joe felt in the doctor, it is not to be wondered at that incessant discussions sprang up between him and Kennedy, without any lack of respect to the latter, however.

One doubted, the other believed; one had a prudent foresight, the other blind confidence. The doctor, however, vibrated between doubt and confidence; that is to say, he troubled his head with neither one nor the other.

"Well, Mr. Kennedy," Joe would say.
"Well, my boy?"
"The moment's at hand. It seems that we are to sail for the moon."
"You mean the Mountains of the Moon, which are not quite so far off. But, never mind, one trip is just as dangerous as the other!"
"Dangerous! What! with a man like Dr. Ferguson?"
"I don't want to spoil your illusions, my good Joe; but this undertaking of his is nothing more nor less than the act of a madman. He won't go, though!"
"He won't go, eh? Then you haven't seen his balloon at Mitchell's factory in the Borough?"
"I'll take precious good care to keep away from it!"
"Well, you'll lose a fine sight, sir. What a splendid thing it is! What a pretty shape! What a nice car! How snug we'll feel in it!"
"Then you really think of going with your master?"
"I?" answered Joe, with an accent of profound conviction. "Why, I'd go with him wherever he pleases! Who ever heard of such a thing? Leave him to go off alone, after we've been all over the world together! Who would help him, when he was tired? Who would give him a hand in climbing over the rocks? Who would attend him when he was sick? No, Mr. Kennedy, Joe will always stick to the doctor!"
"You're a fine fellow, Joe!"
"But, then, you're coming with us!"
"Oh! certainly," said Kennedy; "that is to say, I will go with you up to the last moment, to prevent Samuel even then from being guilty of such an act of folly! I will follow him as far as Zanzibar, so as to stop him there, if possible."
"You'll stop nothing at all, Mr. Kennedy, with all respect to you, sir. My master is no hare-brained person; he takes a long time to think over what he means to do, and then, when he once gets started, the Evil One himself couldn't make him give it up."

"Well, we'll see about that."

"Don't flatter yourself, sir--but then, the main thing is, to have you with us. For a hunter like you, sir, Africa's a great country. So, either way, you won't be sorry for the trip."

"No, that's a fact, I shan't be sorry for it, if I can get this crazy man to give up his scheme."

"By-the-way," said Joe, "you know that the weighing comes off to-day."

"The weighing--what weighing?"

"Why, my master, and you, and I, are all to be weighed to-day!"

"What! like horse-jockeys?"

"Yes, like jockeys. Only, never fear, you won't be expected to make yourself lean, if you're found to be heavy. You'll go as you are."

"Well, I can tell you, I am not going to let myself be weighed," said Kennedy, firmly.

"But, sir, it seems that the doctor's machine requires it."

"Well, his machine will have to do without it."

"Humph! and suppose that it couldn't go up, then?"

"Egad! that's all I want!"

"Come! come, Mr. Kennedy! My master will be sending for us directly."

"I shan't go."

"Oh! now, you won't vex the doctor in that way!"

"Aye! that I will."

"Well!" said Joe with a laugh, "you say that because he's not here; but when he says to your face, 'Dick!' (with all respect to you, sir,) 'Dick, I want to know exactly how much you weigh,' you'll go, I warrant it."

"No, I will NOT go!"

At this moment the doctor entered his study, where this discussion had been taking place; and, as he came in, cast a glance at Kennedy, who did not feel altogether at his ease.

"Dick," said the doctor, "come with Joe; I want to know how much you both weigh."

"But--"

"You may keep your hat on. Come!" And Kennedy went.

They repaired in company to the workshop of the Messrs. Mitchell, where one of those so-called "Roman" scales was in readiness. It was necessary, by the way, for the doctor to know the weight of his companions, so as to fix the equilibrium of his balloon; so he made Dick get up on the platform of the scales. The latter, without making any resistance, said, in an undertone:

"Oh! well, that doesn't bind me to any thing."

"One hundred and fifty-three pounds," said the doctor, noting it down on his tablets.

"Am I too heavy?"

"Why, no, Mr. Kennedy!" said Joe; "and then, you know, I am light to make up for it."

So saying, Joe, with enthusiasm, took his place on the scales, and very nearly upset them in his ready haste. He struck the attitude of Wellington where he is made to ape Achilles, at Hyde-Park entrance, and was superb in it, without the shield.

"One hundred and twenty pounds," wrote the doctor.

"Ah! ha!" said Joe, with a smile of satisfaction And why did he smile? He never could tell himself.

"It's my turn now," said Ferguson--and he put down one hundred and thirty-five pounds to his own account.

"All three of us," said he, "do not weigh much more than four hundred pounds."

"But, sir," said Joe, "if it was necessary for your expedition, I could make myself thinner by twenty pounds, by not eating so much."

"Useless, my boy!" replied the doctor. "You may eat as much as you like, and here's half-a-crown to buy you the ballast."

CHAPTER SEVENTH.


Dr. Ferguson had long been engaged upon the details of his expedition. It is easy to comprehend that the balloon--that marvellous vehicle which was to convey him through the air--was the constant object of his solicitude.
At the outset, in order not to give the balloon too ponderous dimensions, he had decided to fill it with hydrogen gas, which is fourteen and a half times lighter than common air. The production of this gas is easy, and it has given the greatest satisfaction hitherto in aerostatic experiments.

The doctor, according to very accurate calculations, found that, including the articles indispensable to his journey and his apparatus, he should have to carry a weight of 4,000 pounds; therefore he had to find out what would be the ascensional force of a balloon capable of raising such a weight, and, consequently, what would be its capacity.

A weight of four thousand pounds is represented by a displacement of the air amounting to forty-four thousand eight hundred and forty-seven cubic feet; or, in other words, forty-four thousand eight hundred and forty-seven cubic feet of air weigh about four thousand pounds.

By giving the balloon these cubic dimensions, and filling it with hydrogen gas, instead of common air—the former being fourteen and a half times lighter and weighing therefore only two hundred and seventy-six pounds—a difference of three thousand seven hundred and twenty-four pounds in equilibrium is produced; and it is this difference between the weight of the gas contained in the balloon and the weight of the surrounding atmosphere that constitutes the ascensional force of the former.

However, were the forty-four thousand eight hundred and forty-seven cubic feet of gas of which we speak, all introduced into the balloon, it would be entirely filled; but that would not do, because, as the balloon continued to mount into the more rarefied layers of the atmosphere, the gas within would dilate, and soon burst the cover containing it. Balloons, then, are usually only two-thirds filled.

But the doctor, in carrying out a project known only to himself, resolved to fill his balloon only one-half; and, since he had to carry forty-four thousand eight hundred and forty-seven cubic feet of gas, to give his balloon nearly double capacity he arranged it in that elongated, oval shape which has come to be preferred. The horizontal diameter was fifty feet, and the vertical diameter seventy-five feet. He thus obtained a spheroid, the capacity of which amounted, in round numbers, to ninety thousand cubic feet.

Could Dr. Ferguson have used two balloons, his chances of success would have been increased; for, should one burst in the air, he could, by throwing out ballast, keep himself up with the other. But the management of two balloons would, necessarily, be very difficult, in view of the problem how to keep them both at an equal ascensional force.

After having pondered the matter carefully, Dr. Ferguson, by an ingenious arrangement, combined the advantages of two balloons, without incurring their inconveniences. He constructed two of different sizes, and inclosed the smaller in the larger one. His external balloon, which had the dimensions given above, contained a less one of the same shape, which was only forty-five feet in horizontal, and sixty-eight feet in vertical diameter. The capacity of this interior balloon was only sixty-seven thousand cubic feet: it was to float in the fluid surrounding it. A valve opened from one balloon into the other, and thus enabled the aeronaut to communicate with both.

This arrangement offered the advantage, that if gas had to be let off, so as to descend, that which was in the outer balloon would go first; and, were it completely emptied, the smaller one would still remain intact. The outer envelope might then be cast off as a useless encumbrance; and the second balloon, left free to itself, would not offer the same hold to the currents of air as a half-inflated one must needs present.

Moreover, in case of an accident happening to the outside balloon, such as getting torn, for instance, the other would remain intact.

The balloons were made of a strong but light Lyons silk, coated with gutta percha. This gummy, resinous substance is absolutely water-proof, and also resists acids and gas perfectly. The silk was doubled, at the upper extremity of the oval, where most of the strain would come.

Such an envelope as this could retain the inflating fluid for any length of time. It weighed half a pound per nine square feet. Hence the surface of the outside balloon being about eleven thousand six hundred square feet, its envelope weighed six hundred and fifty pounds. The envelope of the second or inner balloon, having nine thousand two hundred square feet of surface, weighed only about five hundred and ten pounds, or say eleven hundred and sixty pounds for both.

The network that supported the car was made of very strong hempen cord, and the two valves were the object of the most minute and careful attention, as the rudder of a ship would be.

The car, which was of a circular form and fifteen feet in diameter, was made of wicker-work, strengthened with a slight covering of iron, and protected below by a system of elastic springs, to deaden the shock of collision. Its weight, along with that of the network, did not exceed two hundred and fifty pounds.

In addition to the above, the doctor caused to be constructed two sheet-iron chests two lines in thickness. These were connected by means of pipes furnished with stopcocks. He joined to these a spiral, two inches in diameter, which terminated in two branch pieces of unequal length, the longer of which, however, was twenty-five feet in
height and the shorter only fifteen feet.

These sheet-iron chests were embedded in the car in such a way as to take up the least possible amount of space. The spiral, which was not to be adjusted until some future moment, was packed up, separately, along with a very strong Buntzen electric battery. This apparatus had been so ingeniously combined that it did not weigh more than seven hundred pounds, even including twenty-five gallons of water in another receptacle.

The instruments provided for the journey consisted of two barometers, two thermometers, two compasses, a sextant, two chronometers, an artificial horizon, and an altazimuth, to throw out the height of distant and inaccessible objects.

The Greenwich Observatory had placed itself at the doctor's disposal. The latter, however, did not intend to make experiments in physics; he merely wanted to be able to know in what direction he was passing, and to determine the position of the principal rivers, mountains, and towns.

He also provided himself with three thoroughly tested iron anchors, and a light but strong silk ladder fifty feet in length.

He at the same time carefully weighed his stores of provision, which consisted of tea, coffee, biscuit, salted meat, and pemmican, a preparation which comprises many nutritive elements in a small space. Besides a sufficient stock of pure brandy, he arranged two water-tanks, each of which contained twenty-two gallons.

The consumption of these articles would necessarily, little by little, diminish the weight to be sustained, for it must be remembered that the equilibrium of a balloon floating in the atmosphere is extremely sensitive. The loss of an almost insignificant weight suffices to produce a very noticeable displacement.

Nor did the doctor forget an awning to shelter the car, nor the coverings and blankets that were to be the bedding of the journey, nor some fowling pieces and rifles, with their requisite supply of powder and ball.

Here is the summation of his various items, and their weight, as he computed it:

Ferguson........................... 135 pounds. Kennedy............................ 153 " Joe................................ 120 " Weight of the outside balloon..... 650 " Weight of the second balloon...... 510 " Car and network.................... 280 " Anchors, instruments, awnings, and sundry utensils, guns, coverings, etc............... 190 " Meat, pemmican, biscuits, tea, coffee, brandy...................... 386 " Water................................ 400 " Apparatus.......................... 700 " Weight of the hydrogen............. 276 " Ballast........................... 200 " ----- 4,000 pounds.

Such were the items of the four thousand pounds that Dr. Ferguson proposed to carry up with him. He took only two hundred pounds of ballast for "unforeseen emergencies," as he remarked, since otherwise he did not expect to use any, thanks to the peculiarity of his apparatus.

CHAPTER EIGHTH.

Joe's Importance.--The Commander of the Resolute.--Kennedy's Arsenal.--Mutual Amenities.--The Farewell Dinner.--Departure on the 21st of February.--The Doctor's Scientific Sessions.-- Duveyrier.--Livingstone.--Details of the Aerial Voyage.--Kennedy silenced.

About the 10th of February, the preparations were pretty well completed; and the balloons, firmly secured, one within the other, were altogether finished. They had been subjected to a powerful pneumatic pressure in all parts, and the test gave excellent evidence of their solidity and of the care applied in their construction.

Joe hardly knew what he was about, with delight. He trotted incessantly to and fro between his home in Greek Street, and the Mitchell establishment, always full of business, but always in the highest spirits, giving details of the affair to people who did not even ask him, so proud was he, above all things, of being permitted to accompany his master. I have even a shrewd suspicion that what with showing the balloon, explaining the plans and views of the doctor, giving folks a glimpse of the latter, through a half-opened window, or pointing him out as he passed along the streets, the clever scamp earned a few half-crowns, but we must not find fault with him for that. He had as much right as anybody else to speculate upon the admiration and curiosity of his contemporaries.

On the 16th of February, the Resolute cast anchor near Greenwich. She was a screw propeller of eight hundred tons, a fast sailer, and the very vessel that had been sent out to the polar regions, to revictual the last expedition of Sir James Ross. Her commander, Captain Bennet, had the name of being a very amiable person, and he took a particular interest in the doctor's expedition, having been one of that gentleman's admirers for a long time. Bennet was rather a man of science than a man of war, which did not, however, prevent his vessel from carrying four carronades, that had never hurt any body, to be sure, but had performed the most pacific duty in the world.

The hold of the Resolute was so arranged as to find a stowing-place for the balloon. The latter was shipped with the greatest precaution on the 18th of February, and was then carefully deposited at the bottom of the vessel in such a way as to prevent accident. The car and its accessories, the anchors, the cords, the supplies, the water-tanks, which were to be filled on arriving, all were embarked and put away under Ferguson's own eyes.
Ten tons of sulphuric acid and ten tons of iron filings, were put on board for the future production of the hydrogen gas. The quantity was more than enough, but it was well to be provided against accident. The apparatus to be employed in manufacturing the gas, including some thirty empty casks, was also stowed away in the hold.

These various preparations were terminated on the 18th of February, in the evening. Two state-rooms, comfortably fitted up, were ready for the reception of Dr. Ferguson and his friend Kennedy. The latter, all the while swearing that he would not go, went on board with a regular arsenal of hunting weapons, among which were two double-barrelled breech-loading fowling-pieces, and a rifle that had withstood every test, of the make of Purdey, Moore & Dickson, at Edinburgh. With such a weapon a marksman would find no difficulty in lodging a bullet in the eye of a chamois at the distance of two thousand paces. Along with these implements, he had two of Colt's six-shooters, for unforeseen emergencies. His powder-case, his cartridge-pouch, his lead, and his bullets, did not exceed a certain weight prescribed by the doctor.

The three travellers got themselves to rights on board during the working-hours of February 19th. They were received with much distinction by the captain and his officers, the doctor continuing as reserved as ever, and thinking of nothing but his expedition. Dick seemed a good deal moved, but was unwilling to betray it; while Joe was fairly dancing and breaking out in laughable remarks. The worthy fellow soon became the jester and merry-andrew of the boatswain's mess, where a berth had been kept for him.

On the 20th, a grand farewell dinner was given to Dr. Ferguson and Kennedy by the Royal Geographical Society. Commander Bennet and his officers were present at the entertainment, which was signalized by copious libations and numerous toasts. Healths were drunk, in sufficient abundance to guarantee all the guests a lifetime of centuries. Sir Francis M---- presided, with restrained but dignified feeling.

To his own supreme confusion, Dick Kennedy came in for a large share in the jovial felicitations of the night. After having drunk to the "intrepid Ferguson, the glory of England," they had to drink to "the no less courageous Kennedy, his daring companion."

Dick blushed a good deal, and that passed for modesty; whereupon the applause redoubled, and Dick blushed again.

A message from the Queen arrived while they were at dessert. Her Majesty offered her compliments to the two travellers, and expressed her wishes for their safe and successful journey. This, of course, rendered imperative fresh toasts to "Her most gracious Majesty."

At midnight, after touching farewells and warm shaking of hands, the guests separated.

The boats of the Resolute were in waiting at the stairs of Westminster Bridge. The captain leaped in, accompanied by his officers and passengers, and the rapid current of the Thames, aiding the strong arms of the rowers, bore them swiftly to Greenwich. In an hour's time all were asleep on board.

The next morning, February 21st, at three o'clock, the furnaces began to roar; at five, the anchors were weighed, and the Resolute, powerfully driven by her screw, began to plough the water toward the mouth of the Thames.

It is needless to say that the topic of conversation with every one on board was Dr. Ferguson's enterprise. Seeing and hearing the doctor soon inspired everybody with such confidence that, in a very short time, there was no one, excepting the incredulous Scotchman, on the steamer who had the least doubt of the perfect feasibility and success of the expedition.

During the long, unoccupied hours of the voyage, the doctor held regular sittings, with lectures on geographical science, in the officers' mess-room. These young men felt an intense interest in the discoveries made during the last forty years in Africa; and the doctor related to them the explorations of Barth, Burton, Speke, and Grant, and depicted the wonders of this vast, mysterious country, now thrown open on all sides to the investigations of science. On the north, the young Duveyrier was exploring Sahara, and bringing the chiefs of the Touaregs to Paris. Under the inspiration of the French Government, two expeditions were preparing, which, descending from the north, and coming from the west, would cross each other at Timbuctoo. In the south, the indefatigable Livingstone was still advancing toward the equator; and, since March, 1862, he had, in company with Mackenzie, ascended the river Rovoonia. The nineteenth century would, assuredly, not pass, contended the doctor, without Africa having been compelled to surrender the secrets she has kept locked up in her bosom for six thousand years.

But the interest of Dr. Ferguson's hearers was excited to the highest pitch when he made known to them, in detail, the preparations for his own journey. They took pleasure in verifying his calculations; they discussed them; and the doctor frankly took part in the discussion.

As a general thing, they were surprised at the limited quantity of provision that he took with him; and one day one of the officers questioned him on that subject.

"That peculiar point astonishes you, does it?" said Ferguson.

"It does, indeed."

"But how long do you think my trip is going to last? Whole months? If so, you are greatly mistaken. Were it to
be a long one, we should be lost; we should never get back. But you must know that the distance from Zanzibar to
the coast of Senegal is only thirty-five hundred--say four thousand miles. Well, at the rate of two hundred and forty
miles every twelve hours, which does not come near the rapidity of our railroad trains, by travelling day and night, it
would take only seven days to cross Africa!"
"But then you could see nothing, make no geographical observations, or reconnoitre the face of the country."
"Ah!" replied the doctor, "if I am master of my balloon--if I can ascend and descend at will, I shall stop when I
please, especially when too violent currents of air threaten to carry me out of my way with them."
"And you will encounter such," said Captain Bennet. "There are tornadoes that sweep at the rate of more than
two hundred and forty miles per hour."
"You see, then, that with such speed as that, we could cross Africa in twelve hours. One would rise at Zanzibar,
and go to bed at St. Louis!"
"But," rejoined the officer, "could any balloon withstand the wear and tear of such velocity?"
"It has happened before," replied Ferguson.
"And the balloon withstand it?"
"Perfectly well. It was at the time of the coronation of Napoleon, in 1804. The aeronaut, Gernerin, sent up a
balloon at Paris, about eleven o'clock in the evening. It bore the following inscription, in letters of gold: 'Paris, 25
Frimaire; year XIII; Coronation of the Emperor Napoleon by his Holiness, Pius VII.' On the next morning, the
inhabitants of Rome saw the same balloon soaring above the Vatican, whence it crossed the Campagna, and finally
fluttered down into the lake of Bracciano. So you see, gentlemen, that a balloon can resist such velocities."
"A balloon--that might be; but a man?" insinuated Kennedy.
"Yes, a man, too!--for the balloon is always motionless with reference to the air that surrounds it. What moves is
the mass of the atmosphere itself: for instance, one may light a taper in the car, and the flame will not even waver.
An aeronaut in Garnerin's balloon would not have suffered in the least from the speed. But then I have no occasion
to attempt such velocity; and if I can anchor to some tree, or some favorable inequality of the ground, at night, I
shall not fail to do so. Besides, we take provision for two months with us, after all; and there is nothing to prevent
our skilful huntsman here from furnishing game in abundance when we come to alight."
"Ah! Mr. Kennedy," said a young midshipman, with envious eyes, "what splendid shots you'll have!"
"Without counting," said another, "that you'll have the glory as well as the sport!"
"Gentlemen," replied the hunter, stammering with confusion, "I greatly--appreciate--your compliments-- but
they--don't--belong to me."
"You!" exclaimed every body, "don't you intend to go?"
"I am not going!"
"You won't accompany Dr. Ferguson?"
"Not only shall I not accompany him, but I am here so as to be present at the last moment to prevent his going."
Every eye was now turned to the doctor.
"Never mind him!" said the latter, calmly. "This is a matter that we can't argue with him. At heart he knows
perfectly well that he IS going."
"By Saint Andrew!" said Kennedy, "I swear--"
"Swear to nothing, friend Dick; you have been ganged and weighed--you and your powder, your guns, and your
bullets; so don't let us say anything more about it."

And, in fact, from that day until the arrival at Zanzibar, Dick never opened his mouth. He talked neither about
that nor about anything else. He kept absolutely silent.

CHAPTER NINTH.
They double the Cape.--The Forecastle.--A Course of Cosmography by Professor Joe.--Concerning the Method
of guiding Balloons.--How to seek out Atmospheric Currents.--Eureka.

The Resolute plunged along rapidly toward the Cape of Good Hope, the weather continuing fine, although the
sea ran heavier.
On the 30th of March, twenty-seven days after the departure from London, the Table Mountain loomed up on
the horizon. Cape City lying at the foot of an amphitheatre of hills, could be distinguished through the ship's glasses,
and soon the Resolute cast anchor in the port. But the captain touched there only to replenish his coal bunkers, and
that was but a day's job. On the morrow, he steered away to the south'ard, so as to double the southernmost point of
Africa, and enter the Mozambique Channel.
This was not Joe's first sea-voyage, and so, for his part, he soon found himself at home on board; every body
liked him for his frankness and good-humor. A considerable share of his master's renown was reflected upon him.
He was listened to as an oracle, and he made no more mistakes than the next one.

So, while the doctor was pursuing his descriptive course of lecturing in the officers' mess, Joe reigned supreme on the forecastle, holding forth in his own peculiar manner, and making history to suit himself—a style of procedure pursued, by the way, by the greatest historians of all ages and nations.

The topic of discourse was, naturally, the aerial voyage. Joe had experienced some trouble in getting the rebellious spirits to believe in it; but, once accepted by them, nothing connected with it was any longer an impossibility to the imaginations of the seamen stimulated by Joe's harangues.

Our dazzling narrator persuaded his hearers that, after this trip, many others still more wonderful would be undertaken. In fact, it was to be but the first of a long series of superhuman expeditions.

"You see, my friends, when a man has had a taste of that kind of travelling, he can't get along afterward with any other; so, on our next expedition, instead of going off to one side, we'll go right ahead, going up, too, all the time."

"Humph! then you'll go to the moon!" said one of the crowd, with a stare of amazement.

"To the moon!" exclaimed Joe, "To the moon! pooh! that's too common. Everybody might go to the moon, that way. Besides, there's no water there, and you have to carry such a lot of it along with you. Then you have to take air along in bottles, so as to breathe."

"Ay! ay! that's all right! But can a man get a drop of the real stuff there?" said a sailor who liked his toddy.

"Not a drop!" was Joe's answer. "No! old fellow, not in the moon. But we're going to skip round among those little twinklers up there--the stars--and the splendid planets that my old man so often talks about. For instance, we'll commence with Saturn--"

"That one with the ring?" asked the boatswain.

"Yes! the wedding-ring--only no one knows what's become of his wife!"

"What? will you go so high up as that?" said one of the ship-boys, gaping with wonder. "Why, your master must be Old Nick himself."

"Oh! no, he's too good for that."

"But, after Saturn--what then?" was the next inquiry of his impatient audience.

"After Saturn? Well, we'll visit Jupiter. A funny place that is, too, where the days are only nine hours and a half long--a good thing for the lazy fellows--and the years, would you believe it--last twelve of ours, which is fine for folks who have only six months to live. They get off a little longer by that."

"Twelve years!" ejaculated the boy.

"Yes, my youngster; so that in that country you'd be toddling after your mammy yet, and that old chap yonder, who looks about fifty, would only be a little shaver of four and a half."

"Blazes! that's a good 'un!" shouted the whole forecastle together.

"Solemn truth!" said Joe, stoutly.

"But what can you expect? When people will stay in this world, they learn nothing and keep as ignorant as bears. But just come along to Jupiter and you'll see. But they have to look out up there, for he's got satellites that are not just the easiest things to pass."

All the men laughed, but they more than half believed him. Then he went on to talk about Neptune, where seafaring men get a jovial reception, and Mars, where the military get the best of the sidewalk to such an extent that folks can hardly stand it. Finally, he drew them a heavenly picture of the delights of Venus.

"And when we get back from that expedition," said the indefatigable narrator, "they'll decorate us with the Southern Cross that shines up there in the Creator's button-hole."

"Ay, and you'd have well earned it!" said the sailors.

Thus passed the long evenings on the forecastle in merry chat, and during the same time the doctor went on with his instructive discourses.

One day the conversation turned upon the means of directing balloons, and the doctor was asked his opinion about it.

"I don't think," said he, "that we shall succeed in finding out a system of directing them. I am familiar with all the plans attempted and proposed, and not one has succeeded, not one is practicable. You may readily understand that I have occupied my mind with this subject, which was, necessarily, so interesting to me, but I have not been able to solve the problem with the appliances now known to mechanical science. We would have to discover a motive power of extraordinary force, and almost impossible lightness of machinery. And, even then, we could not resist atmospheric currents of any considerable strength. Until now, the effort has been rather to direct the car than the balloon, and that has been one great error."

"Still there are many points of resemblance between a balloon and a ship which is directed at will."

"Not at all," retorted the doctor, "there is little or no similarity between the two cases. Air is infinitely less dense than water, in which the ship is only half submerged, while the whole bulk of a balloon is plunged in the
atmosphere, and remains motionless with reference to the element that surrounds it."

"You think, then, that aerostatic science has said its last word?"

"Not at all! not at all! But we must look for another point in the case, and if we cannot manage to guide our balloon, we must, at least, try to keep it in favorable aerial currents. In proportion as we ascend, the latter become much more uniform and flow more constantly in one direction. They are no longer disturbed by the mountains and valleys that traverse the surface of the globe, and these, you know, are the chief cause of the variations of the wind and the inequality of their force. Therefore, these zones having been once determined, the balloon will merely have to be placed in the currents best adapted to its destination."

"But then," continued Captain Bennet, "in order to reach them, you must keep constantly ascending or descending. That is the real difficulty, doctor."

"And why, my dear captain?"

"Let us understand one another. It would be a difficulty and an obstacle only for long journeys, and not for short aerial excursions."

"And why so, if you please?"

"Because you can ascend only by throwing out ballast; you can descend only after letting off gas, and by these processes your ballast and your gas are soon exhausted."

"My dear sir, that's the whole question. There is the only difficulty that science need now seek to overcome. The problem is not how to guide the balloon, but how to take it up and down without expending the gas which is its strength, its life-blood, its soul, if I may use the expression."

"You are right, my dear doctor; but this problem is not yet solved; this means has not yet been discovered."

"I beg your pardon, it HAS been discovered."

"By whom?"

"By me!"

"By you?"

"You may readily believe that otherwise I should not have risked this expedition across Africa in a balloon. In twenty-four hours I should have been without gas!"

"But you said nothing about that in England?"

"No! I did not want to have myself overhauled in public. I saw no use in that. I made my preparatory experiments in secret and was satisfied. I have no occasion, then, to learn any thing more from them."

"Well! doctor, would it be proper to ask what is your secret?"

"Here it is, gentlemen--the simplest thing in the world!"

The attention of his auditory was now directed to the doctor in the utmost degree as he quietly proceeded with his explanation.

CHAPTER TENTH.
Former Experiments.--The Doctor's Five Receptacles.--The Gas Cylinder.--The Calorifere.--The System of Manoeuvring.--Success certain.

"The attempt has often been made, gentlemen," said the doctor, "to rise and descend at will, without losing ballast or gas from the balloon. A French aeronaut, M. Meunier, tried to accomplish this by compressing air in an inner receptacle. A Belgian, Dr. Van Hecke, by means of wings and paddles, obtained a vertical power that would have sufficed in most cases, but the practical results secured from these experiments have been insignificant.

"I therefore resolved to go about the thing more directly; so, at the start, I dispensed with ballast altogether, excepting as a provision for cases of special emergency, such as the breakage of my apparatus, or the necessity of ascending very suddenly, so as to avoid unforeseen obstacles.

"My means of ascent and descent consist simply in dilating or contracting the gas that is in the balloon by the application of different temperatures, and here is the method of obtaining that result.

"You saw me bring on board with the car several cases or receptacles, the use of which you may not have understood. They are five in number.

"The first contains about twenty-five gallons of water, to which I add a few drops of sulphuric acid, so as to augment its capacity as a conductor of electricity, and then I decompose it by means of a powerful Buntzen battery. Water, as you know, consists of two parts of hydrogen to one of oxygen gas.

"The latter, through the action of the battery, passes at its positive pole into the second receptacle. A third receptacle, placed above the second one, and of double its capacity, receives the hydrogen passing into it by the negative pole.

"Stopcocks, of which one has an orifice twice the size of the other, communicate between these receptacles and a
fourth one, which is called the mixture reservoir, since in it the two gases obtained by the decomposition of the water do really commingle. The capacity of this fourth tank is about forty-one cubic feet.

"On the upper part of this tank is a platinum tube provided with a stopcock.

"You will now readily understand, gentlemen, the apparatus that I have described to you is really a gas cylinder and blow-pipe for oxygen and hydrogen, the heat of which exceeds that of a forge fire.

"This much established, I proceed to the second part of my apparatus. From the lowest part of my balloon, which is hermetically closed, issue two tubes a little distance apart. The one starts among the upper layers of the hydrogen gas, the other amid the lower layers.

"These two pipes are provided at intervals with strong jointings of india-rubber, which enable them to move in harmony with the oscillations of the balloon.

"Both of them run down as far as the car, and lose themselves in an iron receptacle of cylindrical form, which is called the heat-tank. The latter is closed at its two ends by two strong plates of the same metal.

"The pipe running from the lower part of the balloon runs into this cylindrical receptacle through the lower plate; it penetrates the latter and then takes the form of a helicoidal or screw-shaped spiral, the rings of which, rising one over the other, occupy nearly the whole of the height of the tank. Before again issuing from it, this spiral runs into a small cone with a concave base, that is turned downward in the shape of a spherical cap.

"It is from the top of this cone that the second pipe issues, and it runs, as I have said, into the upper beds of the balloon.

"The spherical cap of the small cone is of platinum, so as not to melt by the action of the cylinder and blow-pipe, for the latter are placed upon the bottom of the iron tank in the midst of the helicoidal spiral, and the extremity of their flame will slightly touch the cap in question.

"You all know, gentlemen, what a calorifere, to heat apartments, is. You know how it acts. The air of the apartments is forced to pass through its pipes, and is then released with a heightened temperature. Well, what I have just described to you is nothing more nor less than a calorifere.

"In fact, what is it that takes place? The cylinder once lighted, the hydrogen in the spiral and in the concave cone becomes heated, and rapidly ascends through the pipe that leads to the upper part of the balloon. A vacuum is created below, and it attracts the gas in the lower parts; this becomes heated in its turn, and is continually replaced; thus, an extremely rapid current of gas is established in the pipes and in the spiral, which issues from the balloon and then returns to it, and is heated over again, incessantly.

"Now, the cases increase 1/480 of their volume for each degree of heat applied. If, then, I force the temperature 18 degrees, the hydrogen of the balloon will dilate 18/480 or 1614 cubic feet, and will, therefore, displace 1614 more cubic feet of air, which will increase its ascensional power by 160 pounds. This is equivalent to throwing out 18 degrees, the hydrogen of the balloon will dilate 18/480 or 1614 cubic feet, and will, therefore, displace 1614 more cubic feet of air, which will increase its ascensional power by 160 pounds. This is equivalent to throwing out a weight of ballast. If I augment the temperature by 180 degrees, the gas will dilate 180/480 and will displace 16,740 cubic feet more, and its ascensional force will be augmented by 1,600 pounds.

"Thus, you see, gentlemen, that I can easily effect very considerable changes of equilibrium. The volume of the balloon has been calculated in such manner that, when half inflated, it displaces a weight of air exactly equal to that of the envelope containing the hydrogen gas, and of the car occupied by the passengers, and all its apparatus and accessories. At this point of inflation, it is in exact equilibrium with the air, and neither mounts nor descends.

"In order, then, to effect an ascent, I give the gas a temperature superior to the temperature of the surrounding air by means of my cylinder. By this excess of heat it obtains a larger distention, and inflates the balloon more. The latter, then, ascends in proportion as I heat the hydrogen.

"The descent, of course, is effected by lowering the heat of the cylinder, and letting the temperature abate. The ascent would be, usually, more rapid than the descent; but that is a fortunate circumstance, since it is of no importance to me to descend rapidly, while, on the other hand, it is by a very rapid ascent that I avoid obstacles. The real danger lurks below, and not above.

"Besides, as I have said, I have a certain quantity of ballast, which will enable me to ascend more rapidly still, when necessary. My valve, at the top of the balloon, is nothing more nor less than a safety-valve. The balloon always retains the same quantity of hydrogen, and the variations of temperature that I produce in the midst of this shut-up gas are, of themselves, sufficient to provide for all these ascending and descending movements.

"Now, gentlemen, as a practical detail, let me add this:

"The combustion of the hydrogen and of the oxygen at the point of the cylinder produces solely the vapor or steam of water. I have, therefore, provided the lower part of the cylindrical iron box with a scape-pipe, with a valve operating by means of a pressure of two atmospheres; consequently, so soon as this amount of pressure is attained, the steam escapes of itself.

"Here are the exact figures: 25 gallons of water, separated into its constituent elements, yield 200 pounds of oxygen and 25 pounds of hydrogen. This represents, at atmospheric tension, 1,800 cubic feet of the former and
3,780 cubic feet of the latter, or 5,670 cubic feet, in all, of the mixture. Hence, the stopcock of my cylinder, when fully open, expends 27 cubic feet per hour, with a flame at least six times as strong as that of the large lamps used for lighting streets. On an average, then, and in order to keep myself at a very moderate elevation, I should not burn more than nine cubic feet per hour, so that my twenty-five gallons of water represent six hundred and thirty-six hours of aerial navigation, or a little more than twenty-six days.

"Well, as I can descend when I please, to replenish my stock of water on the way, my trip might be indefinitely prolonged.

"Such, gentlemen, is my secret. It is simple, and, like most simple things, it cannot fail to succeed. The dilation and contraction of the gas in the balloon is my means of locomotion, which calls for neither cumbersome wings, nor any other mechanical motor. A calorifere to produce the changes of temperature, and a cylinder to generate the heat, are neither inconvenient nor heavy. I think, therefore, that I have combined all the elements of success."

Dr. Ferguson here terminated his discourse, and was most heartily applauded. There was not an objection to make to it; all had been foreseen and decided.

"However," said the captain, "the thing may prove dangerous."

"What matters that," replied the doctor, "provided that it be practicable?"

CHAPTER ELEVENTH.

The Arrival at Zanzibar.--The English Consul.--Ill-will of the Inhabitants.--The Island of Koumbeni.--The Rain-Makers.--Inflation of the Balloon.--Departure on the 18th of April.--The last Good-by. --The Victoria.

An invariably favorable wind had accelerated the progress of the Resolute toward the place of her destination. The navigation of the Mozambique Channel was especially calm and pleasant. The agreeable character of the trip by sea was regarded as a good omen of the probable issue of the trip through the air. Every one looked forward to the hour of arrival, and sought to give the last touch to the doctor's preparations.

At length the vessel hove in sight of the town of Zanzibar, upon the island of the same name, and, on the 15th of April, at 11 o'clock in the morning, she anchored in the port.

The island of Zanzibar belongs to the Imaum of Muscat, an ally of France and England, and is, undoubtedly, his finest settlement. The port is frequented by a great many vessels from the neighboring countries.

The island is separated from the African coast only by a channel, the greatest width of which is but thirty miles. It has a large trade in gums, ivory, and, above all, in "ebony," for Zanzibar is the great slave-market. Thither converges all the booty captured in the battles which the chiefs of the interior are continually fighting. This traffic extends along the whole eastern coast, and as far as the Nile latitudes. Mr. G. Lejean even reports that he has seen it carried on, openly, under the French flag.

Upon the arrival of the Resolute, the English consul at Zanzibar came on board to offer his services to the doctor, of whose projects the European newspapers had made him aware for a month past. But, up to that moment, he had remained with the numerous phalanx of the incredulous.

"I doubted," said he, holding out his hand to Dr. Ferguson, "but now I doubt no longer."

He invited the doctor, Kennedy, and the faithful Joe, of course, to his own dwelling. Through his courtesy, the doctor was enabled to have knowledge of the various letters that he had received from Captain Speke. The captain and his companions had suffered dreadfully from hunger and bad weather before reaching the Ugogo country. They could advance only with extreme difficulty, and did not expect to be able to communicate again for a long time.

"Those are perils and privations which we shall manage to avoid," said the doctor.

The baggage of the three travellers was conveyed to the consul's residence. Arrangements were made for disembarking the balloon upon the beach at Zanzibar. There was a convenient spot, near the signal-mast, close by an immense building, that would serve to shelter it from the east winds. This huge tower, resembling a tun standing on one end, beside which the famous Heidelberg tun would have seemed but a very ordinary barrel, served as a fortification, and on its platform were stationed Belootchees, armed with lances. These Belootchees are a kind of brawling, good-for-nothing Janizaries.

But, when about to land the balloon, the consul was informed that the population of the island would oppose their doing so by force. Nothing is so blind as fanatical passion. The news of the arrival of a Christian, who was to ascend into the air, was received with rage. The negroes, more exasperated than the Arabs, saw in this project an attack upon their religion. They took it into their heads that some mischief was meant to the sun and the moon. Now, these two luminaries are objects of veneration to the African tribes, and they determined to oppose so sacrilegious an enterprise.

The consul, informed of their intentions, conferred with Dr. Ferguson and Captain Bennet on the subject. The latter was unwilling to yield to threats, but his friend dissuaded him from any idea of violent retaliation.
"We shall certainly come out winners," he said. "Even the imaum's soldiers will lend us a hand, if we need it. But, my dear captain, an accident may happen in a moment, and it would require but one unlucky blow to do the balloon an irreparable injury, so that the trip would be totally defeated; therefore we must act with the greatest caution."

"But what are we to do? If we land on the coast of Africa, we shall encounter the same difficulties. What are we to do?"

"Nothing is more simple," replied the consul. "You observe those small islands outside of the port; land your balloon on one of them; surround it with a guard of sailors, and you will have no risk to run."

"Just the thing!" said the doctor, "and we shall be entirely at our ease in completing our preparations."

The captain yielded to these suggestions, and the Resolute was headed for the island of Koumbeni. During the morning of the 16th April, the balloon was placed in safety in the middle of a clearing in the great woods, with which the soil is studded.

Two masts, eighty feet in height, were raised at the same distance from each other. Blocks and tackle, placed at their extremities, afforded the means of elevating the balloon, by the aid of a transverse rope. It was then entirely uninflated. The interior balloon was fastened to the exterior one, in such manner as to be lifted up in the same way. To the lower end of each balloon were fixed the pipes that served to introduce the hydrogen gas.

The whole day, on the 17th, was spent in arranging the apparatus destined to produce the gas; it consisted of some thirty casks, in which the decomposition of water was effected by means of iron-filings and sulphuric acid placed together in a large quantity of the first-named fluid. The hydrogen passed into a huge central cask, after having been washed on the way, and thence into each balloon by the conduit-pipes. In this manner each of them received a certain accurately-ascertained quantity of gas. For this purpose, there had to be employed eighteen hundred and sixty-six pounds of sulphuric acid, sixteen thousand and fifty pounds of iron, and nine thousand one hundred and sixty-six gallons of water. This operation commenced on the following night, about three A.M., and lasted nearly eight hours. The next day, the balloon, covered with its network, undulated gracefully above its car, which was held to the ground by numerous sacks of earth. The inflating apparatus was put together with extreme care, and the pipes issuing from the balloon were securely fitted to the cylindrical case.

The anchors, the cordage, the instruments, the travelling-wraps, the awning, the provisions, and the arms, were put in the place assigned to them in the car. The supply of water was procured at Zanzibar. The two hundred pounds of ballast were distributed in fifty bags placed at the bottom of the car, but within arm's-reach.

These preparations were concluded about five o'clock in the evening, while sentinels kept close watch around the island, and the boats of the Resolute patrolled the channel.

The blacks continued to show their displeasure by grimaces and contortions. Their obi-men, or wizards, went up and down among the angry throngs, pouring fuel on the flame of their fanaticism; and some of the excited wretches, more furious and daring than the rest, attempted to get to the island by swimming, but they were easily driven off.

Thereupon the sorceries and incantations commenced; the "rain-makers," who pretend to have control over the clouds, invoked the storms and the "stone-showers," as the blacks call hail, to their aid. To compel them to do so, they plucked leaves of all the different trees that grow in that country, and boiled them over a slow fire, while, at the same time, a sheep was killed by thrusting a long needle into its heart. But, in spite of all their ceremonies, the sky remained clear and beautiful, and they profited nothing by their slaughtered sheep and their ugly grimaces.

The blacks then abandoned themselves to the most furious orgies, and got fearfully drunk on "tembo," a kind of ardent spirits drawn from the cocoa-nut tree, and an extremely heady sort of beer called "togwa." Their chants, which were destitute of all melody, but were sung in excellent time, continued until far into the night.

About six o'clock in the evening, the captain assembled the travellers and the officers of the ship at a farewell repast in his cabin. Kennedy, whom nobody ventured to question now, sat with his eyes riveted on Dr. Ferguson, murmuring indistinguishable words. In other respects, the dinner was a gloomy one. The approach of the final repast in his cabin. Kennedy, whom nobody ventured to question now, sat with his eyes riveted on Dr. Ferguson, murmuring indistinguishable words. In other respects, the dinner was a gloomy one. The approach of the final moment filled everybody with the most serious reflections. What had fate in store for these daring adventurers? Should they ever again find themselves in the midst of their friends, or seated at the domestic hearth? Were their ardent spirits drawn from the cocoa-nut tree, and an extremely heady sort of beer called "togwa." Their chants, which were destitute of all melody, but were sung in excellent time, continued until far into the night.

Such thoughts as these, which had been dim and vague until then, or but slightly regarded when they came up, returned upon their excited fancies with intense force at this parting moment. Dr. Ferguson, still cold and impassible, talked of this, that, and the other; but he strove in vain to overcome this infectious gloominess. He utterly failed.

As some demonstration against the personal safety of the doctor and his companions was feared, all three slept that night on board the Resolute. At six o'clock in the morning they left their cabin, and landed on the island of Koumbeni.

The balloon was swaying gently to and fro in the morning breeze; the sand-bags that had held it down were now
replaced by some twenty strong-armed sailors, and Captain Bennet and his officers were present to witness the solemn departure of their friends.

At this moment Kennedy went right up to the doctor, grasped his hand, and said:
"Samuel, have you absolutely determined to go?"
"Solemnly determined, my dear Dick."
"I have done every thing that I could to prevent this expedition, have I not?"
"Every thing!"
"Well, then, my conscience is clear on that score, and I will go with you."
"I was sure you would!" said the doctor, betraying in his features swift traces of emotion.

At last the moment of final leave-taking arrived. The captain and his officers embraced their dauntless friends with great feeling, not excepting even Joe, who, worthy fellow, was as proud and happy as a prince. Every one in the party insisted upon having a final shake of the doctor's hand.

At nine o'clock the three travellers got into their car. The doctor lit the combustible in his cylinder and turned the flame so as to produce a rapid heat, and the balloon, which had rested on the ground in perfect equipoise, began to rise in a few minutes, so that the seamen had to slacken the ropes they held it by. The car then rose about twenty feet above their heads.

"My friends!" exclaimed the doctor, standing up between his two companions, and taking off his hat, "let us give our aerial ship a name that will bring her good luck! let us christen her Victoria!"

This speech was answered with stentorian cheers of "Huzza for the Queen! Huzza for Old England!"

At this moment the ascensional force of the balloon increased prodigiously, and Ferguson, Kennedy, and Joe, waved a last good-by to their friends.

"Let go all!" shouted the doctor, and at the word the Victoria shot rapidly up into the sky, while the four carronades on board the Resolute thundered forth a parting salute in her honor.

CHAPTER TWELFTH
Crossing the Strait.--The Mrima.--Dick's Remark and Joe's Proposition.--A Recipe for Coffee-making.--The Uzaramo.--The Unfortunate Maizan.--Mount Dathumi.--The Doctor's Cards.--Night under a Nopal.

The air was pure, the wind moderate, and the balloon ascended almost perpendicularly to a height of fifteen hundred feet, as indicated by a depression of two inches in the barometric column.

At this height a more decided current carried the balloon toward the southwest. What a magnificent spectacle was then outspread beneath the gaze of the travellers! The island of Zanzibar could be seen in its entire extent, marked out by its deeper color upon a vast planisphere; the fields had the appearance of patterns of different colors, and thick clumps of green indicated the groves and thickets.

The inhabitants of the island looked no larger than insects. The huzzaing and shouting were little by little lost in the distance, and only the discharge of the ship's guns could be heard in the concavity beneath the balloon, as the latter sped on its flight.

"How fine that is!" said Joe, breaking silence for the first time.

He got no reply. The doctor was busy observing the variations of the barometer and noting down the details of his ascent.

Kennedy looked on, and had not eyes enough to take in all that he saw.

The rays of the sun coming to the aid of the heating cylinder, the tension of the gas increased, and the Victoria attained the height of twenty-five hundred feet.

The Resolute looked like a mere cockle-shell, and the African coast could be distinctly seen in the west marked out by a fringe of foam.

"You don't talk?" said Joe, again.

"We are looking!" said the doctor, directing his spy-glass toward the mainland.

"For my part, I must talk!"

"As much as you please, Joe; talk as much as you like!"

And Joe went on alone with a tremendous volley of exclamations. The "ohs!" and the "ahs!" exploded one after the other, incessantly, from his lips.

During his passage over the sea the doctor deemed it best to keep at his present elevation. He could thus reconnoitre a greater stretch of the coast. The thermometer and the barometer, hanging up inside of the half-opened awning, were always within sight, and a second barometer suspended outside was to serve during the night watches.

At the end of about two hours the Victoria, driven along at a speed of a little more than eight miles, very visibly neared the coast of the mainland. The doctor, thereupon, determined to descend a little nearer to the ground. So he
moderated the flame of his cylinder, and the balloon, in a few moments, had descended to an altitude only three
hundred feet above the soil.

It was then found to be passing just over the Mrima country, the name of this part of the eastern coast of Africa.
Dense borders of mango-trees protected its margin, and the ebb-tide disclosed to view their thick roots, chafed
and gnawed by the teeth of the Indian Ocean. The sands which, at an earlier period, formed the coast-line, rounded away
along the distant horizon, and Mount Nguru reared aloft its sharp summit in the northwest.

The Victoria passed near to a village which the doctor found marked upon his chart as Kaole. Its entire
population had assembled in crowds, and were yelling with anger and fear, at the same time vainly directing their
arrows against this monster of the air that swept along so majestically away above all their powerless fury.

The wind was setting to the southward, but the doctor felt no concern on that score, since it enabled him the
better to follow the route traced by Captains Burton and Speke.

Kennedy had, at length, become as talkative as Joe, and the two kept up a continual interchange of admiring
interjections and exclamations.

"Out upon stage-coaches!" said one.
"Steamers indeed!" said the other.
"Railroads! eh? rubbish!" put in Kennedy, "that you travel on, without seeing the country!"
"Balloons! they're the sort for me!" Joe would add. "Why, you don't feel yourself going, and Nature takes the
trouble to spread herself out before one's eyes!"
"What a splendid sight! What a spectacle! What a delight! a dream in a hammock!"
"Suppose we take our breakfast?" was Joe's unpoetical change of tune, at last, for the keen, open air had mightily
sharpened his appetite.

"Good idea, my boy!"
"Oh! it won't take us long to do the cooking--biscuit and potted meat?"
"And as much coffee as you like," said the doctor. "I give you leave to borrow a little heat from my cylinder.
There's enough and to spare, for that matter, and so we shall avoid the risk of a conflagration."
"That would be a dreadful misfortune!" ejaculated Kennedy. "It's the same as a powder-magazine suspended
over our heads."
"Not precisely," said Ferguson, "but still if the gas were to take fire it would burn up gradually, and we should
settle down on the ground, which would be disagreeable; but never fear--our balloon is hermetically sealed."
"Let us eat a bite, then," replied Kennedy.
"Now, gentlemen," put in Joe, "while doing the same as you, I'm going to get you up a cup of coffee that I think
you'll have something to say about."
"The fact is," added the doctor, "that Joe, along with a thousand other virtues, has a remarkable talent for the
preparation of that delicious beverage: he compounds it of a mixture of various origin, but he never would reveal to
me the ingredients."

"Well, master, since we are so far above-ground, I can tell you the secret. It is just to mix equal quantities of
Mocha, of Bourbon coffee, and of Rio Nunez."

A few moments later, three steaming cups of coffee were served, and topped off a substantial breakfast, which
was additionally seasoned by the jokes and repartees of the guests. Each one then resumed his post of observation.

The country over which they were passing was remarkable for its fertility. Narrow, winding paths plunged in
beneath the overarching verdure. They swept along above cultivated fields of tobacco, maize, and barley, at full
maturity, and here and there immense rice-fields, full of straight stalks and purple blossoms. They could distinguish
sheep and goats too, confined in large cages, set up on piles to keep them out of reach of the leopards' fangs.
Luxuriant vegetation spread in wild profuseness over this prodigal soil.

Village after village rang with yells of terror and astonishment at the sight of the Victoria, and Dr. Ferguson
prudently kept her above the reach of the barbarian arrows. The savages below, thus baffled, ran together from their
huddle of huts and followed the travellers with their vain imprecations while they remained in sight.

At noon, the doctor, upon consulting his map, calculated that they were passing over the Uzaramo* country. The
soil was thickly studded with cocoa-nut, papaw, and cotton-wood trees, above which the balloon seemed to disport
itself like a bird. Joe found this splendid vegetation a matter of course, seeing that they were in Africa. Kennedy
described some hares and quails that asked nothing better than to get a good shot from his fowling-piece, but it would
have been powder wasted, since there was no time to pick up the game.

* U and Ou signify country in the language of that region.

The aeronauts swept on with the speed of twelve miles per hour, and soon were passing in thirty-eight degrees
twenty minutes east longitude, over the village of Tounda.

"It was there," said the doctor, "that Burton and Speke were seized with violent fevers, and for a moment thought
their expedition ruined. And yet they were only a short distance from the coast, but fatigue and privation were beginning to tell upon them severely."

In fact, there is a perpetual malaria reigning throughout the country in question. Even the doctor could hope to escape its effects only by rising above the range of the miasma that exhalates from this damp region whence the blazing rays of the sun pump up its poisonous vapors. Once in a while they could descry a caravan resting in a "kraal," awaiting the freshness and cool of the evening to resume its route. These kraals are wide patches of cleared land, surrounded by hedges and jungles, where traders take shelter against not only the wild beasts, but also the robber tribes of the country. They could see the natives running and scattering in all directions at the sight of the Victoria. Kennedy was keen to get a closer look at them, but the doctor invariably held out against the idea.

"The chiefs are armed with muskets," he said, "and our balloon would be too conspicuous a mark for their bullets."

"Would a bullet-hole bring us down?" asked Joe.

"Not immediately; but such a hole would soon become a large torn orifice through which our gas would escape."

"Then, let us keep at a respectful distance from yon miscreants. What must they think as they see us sailing in the air? I'm sure they must feel like worshipping us!"

"Let them worship away, then," replied the doctor, "but at a distance. There is no harm done in getting as far away from them as possible. See! the country is already changing its aspect: the villages are fewer and farther between; the mango-trees have disappeared, for their growth ceases at this latitude. The soil is becoming hilly and portends mountains not far off."

"Yes," said Kennedy, "it seems to me that I can see some high land on this side."

"In the west--those are the nearest ranges of the Ourizara--Mount Duthumi, no doubt, behind which I hope to find shelter for the night. I'll stir up the heat in the cylinder a little, for we must keep at an elevation of five or six hundred feet."

"That was a grant idea of yours, sir," said Joe. "It's mighty easy to manage it; you turn a cock, and the thing's done."

"Ah! here we are more at our ease," said the sportsman, as the balloon ascended; "the reflection of the sun on those red sands was getting to be insupportable."

"What splendid trees!" cried Joe. "They're quite natural, but they are very fine! Why a dozen of them would make a forest!"

"Those are baobabs," replied Dr. Ferguson. "See, there's one with a trunk fully one hundred feet in circumference. It was, perhaps, at the foot of that very tree that Maizan, the French traveller, expired in 1845, for we are over the village of Deje-la-Mhora, to which he pushed on alone. He was seized by the chief of this region, fastened to the foot of a baobab, and the ferocious black then severed all his joints while the war-song of his tribe was chanted; he then made a gash in the prisoner's neck, stopped to sharpen his knife, and fairly tore away the poor wretch's head before it had been cut from the body. The unfortunate Frenchman was but twenty-six years of age."

"And France has never avenged so hideous a crime?" said Kennedy.

"France did demand satisfaction, and the Said of Zanzibar did all in his power to capture the murderer, but in vain."

"I move that we don't stop here!" urged Joe; "let us go up, master, let us go up higher by all means."

"All the more willingly, Joe, that there is Mount Duthumi right ahead of us. If my calculations be right we shall have passed it before seven o'clock in the evening."

"Shall we not travel at night?" asked the Scotchman.

"No, as little as possible. With care and vigilance we might do so safely, but it is not enough to sweep across Africa. We want to see it."

"Up to this time we have nothing to complain of, master. The best cultivated and most fertile country in the world instead of a desert! Believe the geographers after that!"

"Let us wait, Joe! we shall see by-and-by."

About half-past six in the evening the Victoria was directly opposite Mount Duthumi; in order to pass, it had to ascend to a height of more than three thousand feet, and to accomplish that the doctor had only to raise the temperature of his gas eighteen degrees. It might have been correctly said that he held his balloon in his hand. Kennedy had only to indicate to him the obstacles to be surmounted, and the Victoria sped through the air, skimming the summits of the range.

At eight o'clock it descended the farther slope, the acclivity of which was much less abrupt. The anchors were thrown out from the car and one of them, coming in contact with the branches of an enormous nopal, caught on it firmly. Joe at once let himself slide down the rope and secured it. The silk ladder was then lowered to him and he remounted to the car with agility. The balloon now remained perfectly at rest sheltered from the eastern winds.
The evening meal was got ready, and the aeronauts, excited by their day's journey, made a heavy onslaught upon the provisions.

"What distance have we traversed to-day?" asked Kennedy, disposing of some alarming mouthfuls.

The doctor took his bearings, by means of lunar observations, and consulted the excellent map that he had with him for his guidance. It belonged to the Atlas of "Der Neuester Endeckungen in Afrika" ("The Latest Discoveries in Africa"), published at Gotha by his learned friend Dr. Petermann, and by that savant sent to him. This Atlas was to serve the doctor on his whole journey; for it contained the itinerary of Burton and Speke to the great lakes; the Soudan, according to Dr. Barth; the Lower Senegal, according to Guillaume Lejean; and the Delta of the Niger, by Dr. Blaikie.

Ferguson had also provided himself with a work which combined in one compilation all the notions already acquired concerning the Nile. It was entitled "The Sources of the Nile; being a General Survey of the Basin of that River and of its Head-Stream, with the History of the Nilotic Discovery, by Charles Beke, D.D."

He also had the excellent charts published in the "Bulletins of the Geographical Society of London;" and not a single point of the countries already discovered could, therefore, escape his notice.

Upon tracing on his maps, he found that his latitudinal route had been two degrees, or one hundred and twenty miles, to the westward.

Kennedy remarked that the route tended toward the south; but this direction was satisfactory to the doctor, who desired to reconnoitre the tracks of his predecessors as much as possible. It was agreed that the night should be divided into three watches, so that each of the party should take his turn in watching over the safety of the rest. The doctor took the watch commencing at nine o'clock; Kennedy, the one commencing at midnight; and Joe, the three o'clock morning watch.

So Kennedy and Joe, well wrapped in their blankets, stretched themselves at full length under the awning, and slept quietly; while Dr. Ferguson kept on the lookout.

CHAPTER THIRTEENTH.

Change of Weather.--Kennedy has the Fever.--The Doctor's Medicine.--Travels on Land.--The Basin of Imenge.--Mount Rubeho.--Six Thousand Feet Elevation.--A Halt in the Daytime.

The night was calm. However, on Saturday morning, Kennedy, as he awoke, complained of lassitude and feverish chills. The weather was changing. The sky, covered with clouds, seemed to be laying in supplies for a fresh deluge. A gloomy region is that Zungomoro country, where it rains continually, excepting, perhaps, for a couple of weeks in the month of January.

A violent shower was not long in drenching our travellers. Below them, the roads, intersected by "nullahs," a sort of instantaneous torrent, were soon rendered impracticable, entangled as they were, besides, with thorny thickets and gigantic lianas, or creeping vines. The sulphuretted hydrogen emanations, which Captain Burton mentions, could be distinctly smelt.

"According to his statement, and I think he's right," said the doctor, "one could readily believe that there is a corpse hidden behind every thicket."

"An ugly country this!" sighed Joe; "and it seems to me that Mr. Kennedy is none the better for having passed the night in it."

"To tell the truth, I have quite a high fever," said the sportsman.

"There's nothing remarkable about that, my dear Dick, for we are in one of the most unhealthy regions in Africa; but we shall not remain here long; so let's be off."

Thanks to a skilful manoeuvre achieved by Joe, the anchor was disengaged, and Joe reascended to the car by means of the ladder. The doctor vigorously dilated the gas, and the Victoria resumed her flight, driven along by a spanking breeze.

Only a few scattered huts could be seen through the pestilential mists; but the appearance of the country soon changed, for it often happens in Africa that some of the unhealthiest districts lie close beside others that are perfectly salubrious.

Kennedy was visibly suffering, and the fever was mastering his vigorous constitution.

"It won't do to fall ill, though," he grumbled; and so saying, he wrapped himself in a blanket, and lay down under the awning.

"A little patience, Dick, and you'll soon get over this," said the doctor.

"Get over it! Egad, Samuel, if you've any drug in your travelling-chest that will set me on my feet again, bring it without delay. I'll swallow it with my eyes shut!"

"Oh, I can do better than that, friend Dick; for I can give you a febrifuge that won't cost any thing."
"And how will you do that?"

"Very easily. I am simply going to take you up above these clouds that are now deluging us, and remove you from this pestilential atmosphere. I ask for only ten minutes, in order to dilate the hydrogen."

The ten minutes had scarcely elapsed ere the travellers were beyond the rainy belt of country.

"Wait a little, now, Dick, and you'll begin to feel the effect of pure air and sunshine."

"There's a cure for you!" said Joe; "why, it's wonderful!"

"No, it's merely natural."

"Oh! natural; yes, no doubt of that!"

"I bring Dick into good air, as the doctors do, every day, in Europe, or, as I would send a patient at Martinique to the Pitons, a lofty mountain on that island, to get clear of the yellow fever."

"Ah! by Jove, this balloon is a paradise!" exclaimed Kennedy, feeling much better already.

"It leads to it, anyhow!" replied Joe, quite gravely.

It was a curious spectacle--that mass of clouds piled up, at the moment, away below them! The vapors rolled over each other, and mingled together in confused masses of superb brilliance, as they reflected the rays of the sun. The Victoria had attained an altitude of four thousand feet, and the thermometer indicated a certain diminution of temperature. The land below could no longer be seen. Fifty miles away to the westward, Mount Rubeho raised its sparkling crest, marking the limit of the Ugogo country in east longitude thirty-six degrees twenty minutes. The wind was blowing at the rate of twenty miles an hour, but the aeronauts felt nothing of this increased speed. They observed no jar, and had scarcely any sense of motion at all.

Three hours later, the doctor's prediction was fully verified. Kennedy no longer felt a single shiver of the fever, but partook of some breakfast with an excellent appetite.

That beats sulphate of quinine!" said the energetic Scot, with hearty emphasis and much satisfaction.

"Positively," said Joe, "this is where I'll have to retire to when I get old!"

About ten o'clock in the morning the atmosphere cleared up, the clouds parted, and the country beneath could again be seen, the Victoria meanwhile rapidly descending. Dr. Ferguson was in search of a current that would carry him more to the northeast, and he found it about six hundred feet from the ground. The country was becoming more broken, and even mountainous. The Zungomoro district was fading out of sight in the east with the last cocoa-nut-trees of that latitude.

Ere long, the crests of a mountain-range assumed a more decided prominence. A few peaks rose here and there, and it became necessary to keep a sharp lookout for the pointed cones that seemed to spring up every moment.

"We're right among the breakers!" said Kennedy.

"Keep cool, Dick. We shan't touch them," was the doctor's quiet answer.

"It's a jolly way to travel, anyhow!" said Joe, with his usual flow of spirits.

In fact, the doctor managed his balloon with wondrous dexterity.

"Now, if we had been compelled to go afoot over that drenched soil," said he, "we should still be dragging along in a pestilential mire. Since our departure from Zanzibar, half our beasts of burden would have died with fatigue. We should be looking like ghosts ourselves, and despair would be seizing on our hearts. We should be in continual squabbles with our guides and porters, and completely exposed to their unbridled brutality. During the daytime, a damp, penetrating, unendurable humidity! At night, a cold frequently intolerable, and the stings of a kind of fly whose bite pierces the thickest cloth, and drives the victim crazy! All this, too, without saying anything about wild beasts and ferocious native tribes!"

"I move that we don't try it!" said Joe, in his droll way.

"I exaggerate nothing," continued Ferguson, "for, upon reading the narratives of such travellers as have had the hardihood to venture into these regions, your eyes would fill with tears."

About eleven o'clock they were passing over the basin of Imenge, and the tribes scattered over the adjacent hills were impotently menacing the Victoria with their weapons. Finally, she sped along as far as the last undulations of the country which precede Rubeho. These form the last and loftiest chain of the mountains of Usagara.

The aeronauts took careful and complete note of the orographic conformation of the country. The three ramifications mentioned, of which the Duthumi forms the first link, are separated by immense longitudinal plains. These elevated summits consist of rounded cones, between which the soil is bestrewn with erratic blocks of stone and gravelly bowlders. The most abrupt declivity of these mountains confronts the Zanzibar coast, but the western slopes are merely inclined planes. The depressions in the soil are covered with a black, rich loam, on which there is a vigorous vegetation. Various water-courses filter through, toward the east, and work their way onward to flow into the Kingani, in the midst of gigantic clumps of sycamore, tamarind, calabash, and palmyra trees.

"Attention!" said Dr. Ferguson. "We are approaching Rubeho, the name of which signifies, in the language of the country, the 'Passage of the Winds,' and we would do well to double its jagged pinnacles at a certain height. If
my chart be exact, we are going to ascend to an elevation of five thousand feet."
"Shall we often have occasion to reach those far upper belts of the atmosphere?"
"Very seldom: the height of the African mountains appears to be quite moderate compared with that of the European and Asiatic ranges; but, in any case, our good Victoria will find no difficulty in passing over them."

In a very little while, the gas expanded under the action of the heat, and the balloon took a very decided ascensional movement. Besides, the dilation of the hydrogen involved no danger, and only three-fourths of the vast capacity of the balloon was filled when the barometer, by a depression of eight inches, announced an elevation of six thousand feet.

"Shall we go this high very long?" asked Joe.
"The atmosphere of the earth has a height of six thousand fathoms," said the doctor; "and, with a very large balloon, one might go far. That is what Messrs. Brioschi and Gay-Lussac did; but then the blood burst from their mouths and ears. Respirable air was wanting. Some years ago, two fearless Frenchmen, Messrs. Barral and Bixio, also ventured into the very lofty regions; but their balloon burst--""

"And they fell?" asked Kennedy, abruptly.
"Certainly they did; but as learned men should always fall--namely, without hurting themselves."
"Well, gentlemen," said Joe, "you may try their fall over again, if you like; but, as for me, who am but a dolt, I prefer keeping at the medium height--neither too far up, nor too low down. It won't do to be too ambitious."

At the height of six thousand feet, the density of the atmosphere has already greatly diminished; sound is conveyed with difficulty, and the voice is not so easily heard. The view of objects becomes confused; the gaze no longer takes in any but large, quite ill-distinguishable masses; men and animals on the surface become absolutely invisible; the roads and rivers get to look like threads, and the lakes dwindle to ponds.

The doctor and his friends felt themselves in a very anomalous condition; an atmospheric current of extreme velocity was bearing them away beyond arid mountains, upon whose summits vast fields of snow surprised the gaze; while their convulsed appearance told of Titanic travail in the earliest epoch of the world's existence.

The sun shone at the zenith, and his rays fell perpendicularly upon those lonely summits. The doctor took an accurate design of these mountains, which form four distinct ridges almost in a straight line, the northernmost being the longest.

The Victoria soon descended the slope opposite to the Rubeho, skirting an acclivity covered with woods, and dotted with trees of very deep-green foliage. Then came crests and ravines, in a sort of desert which preceded the Ugogo country; and lower down were yellow plains, parched and fissured by the intense heat, and, here and there, bestrewn with saline plants and brambly thickets.

Some underbrush, which, farther on, became forests, embellished the horizon. The doctor went nearer to the ground; the anchors were thrown out, and one of them soon caught in the boughs of a huge sycamore.

Joe, slipping nimbly down the tree, carefully attached the anchor, and the doctor left his cylinder at work to a certain degree in order to retain sufficient ascensional force in the balloon to keep it in the air. Meanwhile the wind had suddenly died away.

"Now," said Ferguson, "take two guns, friend Dick--one for yourself and one for Joe--and both of you try to bring back some nice cuts of antelope-meat; they will make us a good dinner."
"Off to the hunt!" exclaimed Kennedy, joyously.
He climbed briskly out of the car and descended. Joe had swung himself down from branch to branch, and was waiting for him below, stretching his limbs in the mean time.
"Don't fly away without us, doctor!" shouted Joe.
"Never fear, my boy!--I am securely lashed. I'll spend the time getting my notes into shape. A good hunt to you! but be careful. Besides, from my post here, I can observe the face of the country, and, at the least suspicious thing I notice, I'll fire a signal-shot, and with that you must rally home."
"Agreed!" said Kennedy; and off they went.

CHAPTER FOURTEENTH.
The Forest of Gum-Trees.--The Blue Antelope.--The Rallying-Signal.--An Unexpected Attack.--The Kanyeme.--A Night in the Open Air.--The Mabunguru.--Jihoue-la-Mkoa.--A Supply of Water.--Arrival at Kazeh.

The country, dry and parched as it was, consisting of a clayey soil that cracked open with the heat, seemed, indeed, a desert: here and there were a few traces of caravans; the bones of men and animals, that had been half-gnawed away, mouldering together in the same dust.

After half an hour's walking, Dick and Joe plunged into a forest of gum-trees, their eyes alert on all sides, and their fingers on the trigger. There was no foreseeing what they might encounter. Without being a rifleman, Joe could
handle fire-arms with no trifling dexterity.

"A walk does one good, Mr. Kennedy, but this isn't the easiest ground in the world," he said, kicking aside some fragments of quartz with which the soil was bestrewn.

Kennedy motioned to his companion to be silent and to halt. The present case compelled them to dispense with hunting-dogs, and, no matter what Joe's agility might be, he could not be expected to have the scent of a setter or a greyhound.

A herd of a dozen antelopes were quenching their thirst in the bed of a torrent where some pools of water had lodged. The graceful creatures, sniffing danger in the breeze, seemed to be disturbed and uneasy. Their beautiful heads could be seen between every draught, raised in the air with quick and sudden motion as they sniffed the wind in the direction of our two hunters, with their flexible nostrils.

Kennedy stole around behind some clumps of shrubbery, while Joe remained motionless where he was. The former, at length, got within gunshot and fired.

The herd disappeared in the twinkling of an eye; one male antelope only, that was hit just behind the shoulder-joint, fell headlong to the ground, and Kennedy leaped toward his booty.

It was a blaubrok, a superb animal of a pale-bluish color shading upon the gray, but with the belly and the inside of the legs as white as the driven snow.

"A splendid shot!" exclaimed the hunter. "It's a very rare species of the antelope, and I hope to be able to prepare his skin in such a way as to keep it."

"Indeed!" said Joe, "do you think of doing that, Mr. Kennedy?"

"Why, certainly I do! Just see what a fine hide it is!"

"But Dr. Ferguson will never allow us to take such an extra weight!"

"You're right, Joe. Still it is a pity to have to leave such a noble animal."

"The whole of it? Oh, we won't do that, sir; we'll take all the good eatable parts of it, and, if you'll let me, I'll cut him up just as well as the chairman of the honorable corporation of butchers of the city of London could do."

"As you please, my boy! But you know that in my hunter's way I can just as easily skin and cut up a piece of game as kill it."

"I'm sure of that, Mr. Kennedy. Well, then, you can build a fireplace with a few stones; there's plenty of dry dead-wood, and I can make the hot coals tell in a few minutes."

"Oh! that won't take long," said Kennedy, going to work on the fireplace, where he had a brisk flame crackling and sparkling in a minute or two.

Joe had cut some of the nicest steaks and the best parts of the tenderloin from the carcass of the antelope, and these were quickly transformed to the most savory of broils.

"There, those will tickle the doctor!" said Kennedy.

"Do you know what I was thinking about?" said Joe.

"Why, about the steaks you're broiling, to be sure!" replied Dick.

"Not the least in the world. I was thinking what a figure we'd cut if we couldn't find the balloon again."

"By George, what an idea! Why, do you think the doctor would desert us?"

"No; but suppose his anchor were to slip!"

"Impossible! and, besides, the doctor would find no difficulty in coming down again with his balloon; he handles it at his ease."

"But suppose the wind were to sweep it off, so that he couldn't come back toward us?"

"Come, come, Joe! a truce to your suppositions; they're any thing but pleasant."

"Ah! sir, every thing that happens in this world is natural, of course; but, then, any thing may happen, and we ought to look out beforehand."

At this moment the report of a gun rang out upon the air.

"What's that?" exclaimed Joe.

"It's my rifle, I know the ring of her!" said Kennedy.

"A signal!"

"Yes; danger for us!"

"For him, too, perhaps."

"Let's be off!"

And the hunters, having gathered up the product of their expedition, rapidly made their way back along the path that they had marked by breaking boughs and bushes when they came. The density of the underbrush prevented their seeing the balloon, although they could not be far from it.

A second shot was heard.

"We must hurry!" said Joe.
"There! a third report!"
"Why, it sounds to me as if he was defending himself against something."
"Let us make haste!"
They now began to run at the top of their speed. When they reached the outskirts of the forest, they, at first glance, saw the balloon in its place and the doctor in the car.
"What's the matter?" shouted Kennedy.
"Good God!" suddenly exclaimed Joe.
"What do you see?"
"Down there! look! a crowd of blacks surrounding the balloon!"
And, in fact, there, two miles from where they were, they saw some thirty wild natives close together, yelling, gesticulating, and cutting all kinds of antics at the foot of the sycamore. Some, climbing into the tree itself, were making their way to the topmost branches. The danger seemed pressing.
"My master is lost!" cried Joe.
"Come! a little more coolness, Joe, and let us see how we stand. We hold the lives of four of those villains in our hands. Forward, then!"
They had made a mile with headlong speed, when another report was heard from the car. The shot had, evidently, told upon a huge black demon, who had been hoisting himself up by the anchor-rope. A lifeless body fell from bough to bough, and hung about twenty feet from the ground, its arms and legs swaying to and fro in the air.
"Hi!" said Joe, halting, "what does that fellow hold by?"
"No matter what!" said Kennedy; "let us run! let us run!"
"Ah! Mr. Kennedy," said Joe, again, in a roar of laughter, "by his tail! by his tail! it's an ape! They're all apes!"
"Well, they're worse than men!" said Kennedy, as he dashed into the midst of the howling crowd.
It was, indeed, a troop of very formidable baboons of the dog-faced species. These creatures are brutal, ferocious, and horrible to look upon, with their dog-like muzzles and savage expression. However, a few shots scattered them, and the chattering horde scampered off, leaving several of their number on the ground.
In a moment Kennedy was on the ladder, and Joe, clambering up the branches, detached the anchor; the car then dipped to where he was, and he got into it without difficulty. A few minutes later, the Victoria slowly ascended and soared away to the eastward, wafted by a moderate wind.
"That was an attack for you!" said Joe.
"We thought you were surrounded by natives."
"Well, fortunately, they were only apes," said the doctor.
"At a distance there's no great difference," remarked Kennedy.
"Nor close at hand, either," added Joe.
"Well, however that may be," resumed Ferguson, "this attack of apes might have had the most serious consequences. Had the anchor yielded to their repeated efforts, who knows whither the wind would have carried me?"
"What did I tell you, Mr. Kennedy?"
"You were right, Joe; but, even right as you may have been, you were, at that moment, preparing some antelope-steaks, the very sight of which gave me a monstrous appetite."
"I believe you!" said the doctor; "the flesh of the antelope is exquisite."
"You may judge of that yourself, now, sir, for supper's ready."
"Upon my word as a sportsman, those venison-steaks have a gamy flavor that's not to be sneezed at, I tell you."
"Good!" said Joe, with his mouth full, "I could live on antelope all the days of my life; and all the better with a glass of grog to wash it down."
So saying, the good fellow went to work to prepare a jorum of that fragrant beverage, and all hands tasted it with satisfaction.
"Every thing has gone well thus far," said he.
"Very well indeed!" assented Kennedy.
"Come, now, Mr. Kennedy, are you sorry that you came with us?"
"I'd like to see anybody prevent my coming!"
It was now four o'clock in the afternoon. The Victoria had struck a more rapid current. The face of the country was gradually rising, and, ere long, the barometer indicated a height of fifteen hundred feet above the level of the sea. The doctor was, therefore, obliged to keep his balloon up by a quite considerable dilation of gas, and the cylinder was hard at work all the time.
Toward seven o'clock, the balloon was sailing over the basin of Kanyeme. The doctor immediately recognized that immense clearing, ten miles in extent, with its villages buried in the midst of baobab and calabash trees. It is the
residence of one of the sultans of the Ugogo country, where civilization is, perhaps, the least backward. The natives there are less addicted to selling members of their own families, but still, men and animals all live together in round huts, without frames, that look like haystacks.

Beyond Kanye the soil becomes arid and stony, but in an hour's journey, in a fertile dip of the soil, vegetation had resumed all its vigor at some distance from Mbaburu. The wind fell with the close of the day, and the atmosphere seemed to sleep. The doctor vainly sought for a current of air at different heights, and, at last, seeing this calm of all nature, he resolved to pass the night afloat, and, for greater safety, rose to the height of one thousand feet, where the balloon remained motionless. The night was magnificent, the heavens glittering with stars, and profoundly silent in the upper air.

Dick and Joe stretched themselves on their peaceful couch, and were soon sound asleep, the doctor keeping the first watch. At twelve o'clock the latter was relieved by Kennedy.

"Should the slightest accident happen, waken me," said Ferguson, "and, above all things, don't lose sight of the barometer. To us it is the compass!"

The night was cold. There were twenty-seven degrees of difference between its temperature and that of the daytime. With nightfall had begun the nocturnal concert of animals driven from their hiding-places by hunger and thirst. The frogs struck in their guttural soprano, redoubled by the yelping of the jackals, while the imposing bass of the African lion sustained the accords of this living orchestra.

Upon resuming his post, in the morning, the doctor consulted his compass, and found that the wind had changed during the night. The balloon had been bearing about thirty miles to the northwest during the last two hours. It was then passing over Mabunguru, a stony country, strewn with blocks of syenite of a fine polish, and knobbed with huge bowlders and angular ridges of rock; conic masses, like the rocks of Karnak, studded the soil like so many Druidic dolmens; the bones of buffaloes and elephants whitened it here and there; but few trees could be seen, excepting in the east, where there were dense woods, among which a few villages lay half concealed.

Toward seven o'clock they saw a huge round rock nearly two miles in extent, like an immense tortoise.

"We are on the right track," said Dr. Ferguson. "There's Jihoue-la-Mkoa, where we must halt for a few minutes. I am going to renew the supply of water necessary for my cylinder, and so let us try to anchor somewhere."

"There are very few trees," replied the hunger.

"Never mind, let us try. Joe, throw out the anchors!"

The balloon, gradually losing its ascensional force, approached the ground; the anchors ran along until, at last, one of them caught in the fissure of a rock, and the balloon remained motionless.

It must not be supposed that the doctor could entirely extinguish his cylinder, during these halts. The equilibrium of the balloon had been calculated at the level of the sea; and, as the country was continually ascending, and had reached an elevation of from six to seven hundred feet, the balloon would have had a tendency to go lower than the surface of the soil itself. It was, therefore, necessary to sustain it by a certain dilation of the gas. But, in case the doctor, in the absence of all wind, had let the car rest upon the ground, the balloon, thus relieved of a considerable weight, would have kept up of itself, without the aid of the cylinder.

The maps indicated extensive ponds on the western slope of the Jihoue-la-Mkoa. Joe went thither alone with a cask that would hold about ten gallons. He found the place pointed out to him, without difficulty, near to a deserted village; got his stock of water, and returned in less than three-quarters of an hour. He had seen nothing particular excepting some immense elephant-pits. In fact, he came very near falling into one of them, at the bottom of which lay a half-eaten carcass.

He brought back with him a sort of clover which the apes eat with avidity. The doctor recognized the fruit of the "mnenbu"-tree which grows in profusion, on the western part of Jihoue-la-Mkoa. Ferguson waited for Joe with a certain feeling of impatience, for even a short halt in this inhospitable region always inspires a degree of fear.

The water was got aboard without trouble, as the car was nearly resting on the ground. Joe then found it easy to loosen the anchor and leaped lightly to his place beside the doctor. The latter then replenished the flame in the cylinder, and the balloon majestically soared into the air.

It was then about one hundred miles from Kazeh, an important establishment in the interior of Africa, where, thanks to a south-southeasterly current, the travellers might hope to arrive on that same day. They were moving at the rate of fourteen miles per hour, and the guidance of the balloon was becoming difficult, as they dared not rise very high without extreme dilation of the gas, the country itself being at an average height of three thousand feet. Hence, the doctor preferred not to force the dilation, and so adroitly followed the sinuosities of a pretty sharply-inclined plane, and swept very close to the villages of Thembo and Tura-Wels. The latter forms part of the Unyamwezy, a magnificent country, where the trees attain enormous dimensions; among them the cactus, which grows to gigantic size.

About two o'clock, in magnificent weather, but under a fiery sun that devoured the least breath of air, the balloon
was floating over the town of Kazeh, situated about three hundred and fifty miles from the coast.

"We left Zanzibar at nine o'clock in the morning," said the doctor, consulting his notes, "and, after two days' passage, we have, including our deviations, travelled nearly five hundred geographical miles. Captains Burton and Speke took four months and a half to make the same distance!"

CHAPTER FIFTEENTH.


Kazeh, an important point in Central Africa, is not a city; in truth, there are no cities in the interior. Kazeh is but a collection of six extensive excavations. There are enclosed a few houses and slave-huts, with little courtyards and small gardens, carefully cultivated with onions, potatoes, cucumbers, pumpkins, and mushrooms, of perfect flavor, growing most luxuriantly.

The Unyamwezy is the country of the Moon--above all the rest, the fertile and magnificent garden-spot of Africa. In its centre is the district of Unyanembe--a delicious region, where some families of Omani, who are of very pure Arabic origin, live in luxurious idleness.

They have, for a long period, held the commerce between the interior of Africa and Arabia: they trade in gums, ivory, fine muslin, and slaves. Their caravans traverse these equatorial regions on all sides; and they even make their way to the coast in search of those articles of luxury and enjoyment which the wealthy merchants covet; while the latter, surrounded by their wives and their attendants, lead in this charming country the least disturbed and most horizontal of lives--always stretched at full length, laughing, smoking, or sleeping.

Around these excavations are numerous native dwellings; wide, open spaces for the markets; fields of cannabis and datura; superb trees and depths of freshest shade--such is Kazeh!

There, too, is held the general rendezvous of the caravans --those of the south, with their slaves and their freightage of ivory; and those of the west, which export cotton, glassware, and trinkets, to the tribes of the great lakes.

So in the market-place there reigns perpetual excitement, a nameless hubbub, made up of the cries of mixed-breed porters and carriers, the beating of drums, and the twangling of horns, the neighing of mules, the braying of donkeys, the singing of women, the squalling of children, and the banging of the huge rattan, wielded by the jemadar or leader of the caravans, who beats time to this pastoral symphony.

There, spread forth, without regard to order--indeed, we may say, in charming disorder--are the showy stuffs, the glass beads, the ivory tusks, the rhinoceros'-teeth, the shark's-teeth, the honey, the tobacco, and the cotton of these regions, to be purchased at the strangest of bargains by customers in whose eyes each article has a price only in proportion to the desire it excites to possess it.

All at once this agitation, movement and noise stopped as though by magic. The balloon had just come in sight, far aloft in the sky, where it hovered majestically for a few moments, and then descended slowly, without deviating from its perpendicular. Men, women, children, merchants and slaves, Arabs and negroes, as suddenly disappeared within the "tembes" and the huts.

"My dear doctor," said Kennedy, "if we continue to produce such a sensation as this, we shall find some difficulty in establishing commercial relations with the people hereabouts."

"There's one kind of trade that we might carry on, though, easily enough," said Joe; "and that would be to go down there quietly, and walk off with the best of the goods, without troubling our heads about the merchants; we'd get rich that way!"

"Ah!" said the doctor, "these natives are a little scared at first; but they won't be long in coming back, either through suspicion or through curiosity."

"Do you really think so, doctor?"

"Well, we'll see pretty soon. But it wouldn't be prudent to go too near to them, for the balloon is not iron-clad, and is, therefore, not proof against either an arrow or a bullet."

"Then you expect to hold a parley with these blacks?"

"If we can do so safely, why should we not? There must be some Arab merchants here at Kazeh, who are better informed than the rest, and not so barbarous. I remember that Burton and Speke had nothing but praises to utter concerning the hospitality of these people; so we might, at least, make the venture."

The balloon having, meanwhile, gradually approached the ground, one of the anchors lodged in the top of a tree near the market-place.
By this time the whole population had emerged from their hiding-places stealthily, thrusting their heads out first. Several "waganga," recognizable by their badges of conical shellwork, came boldly forward. They were the sorcerers of the place. They bore in their girdles small gourds, coated with tallow, and several other articles of witchcraft, all of them, by-the-way, most professionally filthy.

Little by little the crowd gathered beside them, the women and children grouped around them, the drums renewed their deafening uproar, hands were violently clapped together, and then raised toward the sky.

"That's their style of praying," said the doctor; "and, if I'm not mistaken, we're going to be called upon to play a great part."

"Well, sir, play it!"

"You, too, my good Joe--perhaps you're to be a god!"

"Well, master, that won't trouble me much. I like a little flattery!"

At this moment, one of the sorcerers, a "myanga," made a sign, and all the clamor died away into the profoundest silence. He then addressed a few words to the strangers, but in an unknown tongue.

Dr. Ferguson, not having understood them, shouted some sentences in Arabic, at a venture, and was immediately answered in that language.

The speaker below then delivered himself of a very copious harangue, which was also very flowery and very gravely listened to by his audience. From it the doctor was not slow in learning that the balloon was mistaken for nothing less than the moon in person, and that the amiable goddess in question had condescended to approach the town with her three sons—an honor that would never be forgotten in this land so greatly loved by the god of day.

The doctor responded, with much dignity, that the moon made her provincial tour every thousand years, feeling the necessity of showing herself nearer at hand to her worshippers. He, therefore, begged them not to be disturbed by her presence, but to take advantage of it to make known all their wants and longings.

The sorcerer, in his turn, replied that the sultan, the "mwani," who had been sick for many years, implored the aid of heaven, and he invited the son of the moon to visit him.

The doctor acquainted his companions with the invitation.

"And you are going to call upon this negro king?" asked Kennedy.

"Undoubtedly so; these people appear well disposed; the air is calm; there is not a breath of wind, and we have nothing to fear for the balloon?"

"But, what will you do?"

"Be quiet on that score, my dear Dick. With a little medicine, I shall work my way through the affair!"

Then, addressing the crowd, he said:

"The moon, taking compassion on the sovereign who is so dear to the children of Unyamwezy, has charged us to restore him to health. Let him prepare to receive us!"

The clamor, the songs and demonstrations of all kinds increased twofold, and the whole immense ants' nest of black heads was again in motion.

"Now, my friends," said Dr. Ferguson, "we must look out for every thing beforehand; we may be forced to leave this at any moment, unexpectedly, and be off with extra speed. Dick had better remain, therefore, in the car, and keep the cylinder warm so as to secure a sufficient ascensional force for the balloon. The anchor is solidly fastened, and there is nothing to fear in that respect. I shall descend, and Joe will go with me, only that he must remain at the foot of the ladder."

"What! are you going alone into that blackamoor's den?"

"How! doctor, am I not to go with you?"

"No! I shall go alone; these good folks imagine that the goddess of the moon has come to see them, and their superstition protects me; so have no fear, and each one remain at the post that I have assigned to him."

"Well, since you wish it," sighed Kennedy.

"Look closely to the dilation of the gas."

"Agreed!"

By this time the shouts of the natives had swelled to double volume as they vehemently implored the aid of the heavenly powers.

"There, there," said Joe, "they're rather rough in their orders to their good moon and her divine sons."

The doctor, equipped with his travelling medicine-chest, descended to the ground, preceded by Joe, who kept a straight countenance and looked as grave and knowing as the circumstances of the case required. He then seated himself at the foot of the ladder in the Arab fashion, with his legs crossed under him, and a portion of the crowd collected around him in a circle, at respectful distances.

In the meanwhile the doctor, escorted to the sound of savage instruments, and with wild religious dances, slowly proceeded toward the royal "tembe," situated a considerable distance outside of the town. It was about three o'clock,
and the sun was shining brilliantly. In fact, what less could it do upon so grand an occasion!

The doctor stepped along with great dignity, the waganga surrounding him and keeping off the crowd. He was soon joined by the natural son of the sultan, a handsomely-built young fellow, who, according to the custom of the country, was the sole heir of the paternal goods, to the exclusion of the old man's legitimate children. He prostrated himself before the son of the moon, but the latter graciously raised him to his feet.

Three-quarters of an hour later, through shady paths, surrounded by all the luxuriance of tropical vegetation, this enthusiastic procession arrived at the sultan's palace, a sort of square edifice called ititenya, and situated on the slope of a hill.

A kind of veranda, formed by the thatched roof, adorned the outside, supported upon wooden pillars, which had some pretensions to being carved. Long lines of dark-red clay decorated the walls in characters that strove to reproduce the forms of men and serpents, the latter better imitated, of course, than the former. The roofing of this abode did not rest directly upon the walls, and the air could, therefore, circulate freely, but windows there were none, and the door hardly deserved the name.

Dr. Ferguson was received with all the honors by the guards and favorites of the sultan; these were men of a fine race, the Wanyamwezi so-called, a pure type of the central African populations, strong, robust, well-made, and in splendid condition. Their hair, divided into a great number of small tresses, fell over their shoulders, and by means of black-and-blue incisions they had tattooed their cheeks from the temples to the mouth. Their ears, frightfully distended, held dangling to them disks of wood and plates of gum copal. They were clad in brilliantly-painted cloths, and the soldiers were armed with the saw-toothed war-club, the bow and arrows barbed and poisoned with the juice of the euphorbium, the cutlass, the "sima," a long sabre (also with saw-like teeth), and some small battle-axes.

The doctor advanced into the palace, and there, notwithstanding the sultan's illness, the din, which was terrific before, redoubled the instant that he arrived. He noticed, at the lintels of the door, some rabbits' tails and zebras' manes, suspended as talismans. He was received by the whole troop of his majesty's wives, to the harmonious accords of the "upatu," a sort of cymbal made of the bottom of a copper kettle, and to the uproar of the "kilindo," a drum five feet high, hollowed out from the trunk of a tree, and hammered by the ponderous, horny fists of two jet-black virtuosi.

Most of the women were rather good-looking, and they laughed and chattered merrily as they smoked their tobacco and "thang" in huge black pipes. They seemed to be well made, too, under the long robes that they wore gracefully flung about their persons, and carried a sort of "kilt" woven from the fibres of calabash fastened around their girdles.

Six of them were not the least merry of the party, although put aside from the rest, and reserved for a cruel fate. On the death of the sultan, they were to be buried alive with him, so as to occupy and divert his mind during the period of eternal solitude.

Dr. Ferguson, taking in the whole scene at a rapid glance, approached the wooden couch on which the sultan lay reclining. There he saw a man of about forty, completely brutalized by orgies of every description, and in a condition that left little or nothing to be done. The sickness that had afflicted him for so many years was simply perpetual drunkenness. The royal sot had nearly lost all consciousness, and all the ammonia in the world would not have set him on his feet again.

His favorites and the women kept on bended knees during this solemn visit. By means of a few drops of powerful cordial, the doctor for a moment reanimated the imbruted carcass that lay before him. The sultan stirred, and, for a dead body that had given no sign whatever of life for several hours previously, this symptom was received with a tremendous repetition of shouts and cries in the doctor's honor.

The latter, who had seen enough of it by this time, by a rapid motion put aside his too demonstrative admirers and went out of the palace, directing his steps immediately toward the balloon, for it was now six o'clock in the evening.

Joe, during his absence, had been quietly waiting at the foot of the ladder, where the crowd paid him their most humble respects. Like a genuine son of the moon, he let them keep on. For a divinity, he had the air of a very clever sort of fellow, by no means proud, nay, even pleasantly familiar with the young negresses, who seemed never to tire of looking at him. Besides, he went so far as to chat agreeably with them.

"Worship me, ladies! worship me!" he said to them. "I'm a clever sort of devil, if I am the son of a goddess."

They brought him propitiatory gifts, such as are usually deposited in the fetish huts or mzimu. These gifts consisted of stalks of barley and of "pombe." Joe considered himself in duty bound to taste the latter species of strong beer, but his palate, although accustomed to gin and whiskey, could not withstand the strength of the new beverage, and he had to make a horrible grimace, which his dusky friends took to be a benevolent smile.

Thereupon, the young damsels, conjoining their voices in a drawling chant, began to dance around him with the utmost gravity.
"Ah! you're dancing, are you?" said he. "Well, I won't be behind you in politeness, and so I'll give you one of my country reels."

So at it he went, in one of the wildest jigs that ever was seen, twisting, turning, and jerking himself in all directions; dancing with his hands, dancing with his body, dancing with his knees, dancing with his feet; describing the most fearful contortions and extravagant evolutions; throwing himself into incredible attitudes; grimacing beyond all belief, and, in fine giving his savage admirers a strange idea of the style of ballet adopted by the deities in the moon.

Then, the whole collection of blacks, naturally as imitative as monkeys, at once reproduced all his airs and graces, his leaps and shakes and contortions; they did not lose a single gesticulation; they did not forget an attitude; and the result was, such a pandemonium of movement, noise, and excitement, as it would be out of the question even feebly to describe. But, in the very midst of the fun, Joe saw the doctor approaching.

The latter was coming at full speed, surrounded by a yelling and disorderly throng. The chiefs and sorcerers seemed to be highly excited. They were close upon the doctor's heels, crowding and threatening him.

Singular reaction! What had happened? Had the sultan unluckily perished in the hands of his celestial physician? Kennedy, from his post of observation, saw the danger without knowing what had caused it, and the balloon, powerfully urged by the dilation of the gas, strained and tugged at the ropes that held it as though impatient to soar away.

The doctor had got as far as the foot of the ladder. A superstitious fear still held the crowd aloof and hindered them from committing any violence on his person. He rapidly scaled the ladder, and Joe followed him with his usual agility.

"Not a moment to lose!" said the doctor. "Don't attempt to let go the anchor! We'll cut the cord! Follow me!"
"But what's the matter?" asked Joe, clambering into the car.
"What's happened?" questioned Kennedy, rifle in hand.
"Look!" replied the doctor, pointing to the horizon.
"Well?" ejaculated the Scot.
"Well! the moon!"

And, in fact, there was the moon rising red and magnificent, a globe of fire in a field of blue! It was she, indeed--she and the balloon!--both in one sky!

Either there were two moons, then, or these strangers were imposters, designing scamps, false deities!

Such were the very natural reflections of the crowd, and hence the reaction in their feelings.

Joe could not, for the life of him, keep in a roar of laughter; and the population of Kazeh, comprehending that their prey was slipping through their clutches, set up prolonged howlings, aiming, the while, their bows and muskets at the balloon.

But one of the sorcerers made a sign, and all the weapons were lowered. He then began to climb into the tree, intending to seize the rope and bring the machine to the ground.

Joe leaned out with a hatchet ready. "Shall I cut away?" said he.
"No; wait a moment," replied the doctor.
"But this black?"
"We may, perhaps, save our anchor--and I hold a great deal by that. There'll always be time enough to cut loose."

The sorcerer, having climbed to the right place, worked so vigorously that he succeeded in detaching the anchor, and the latter, violently jerked, at that moment, by the start of the balloon, caught the rascal between the limbs, and carried him off astride of it through the air.

The stupefaction of the crowd was indescribable as they saw one of their waganga thus whirled away into space.

"Huzza!" roared Joe, as the balloon--thanks to its ascensional force--shot up higher into the sky, with increased rapidity.

"He holds on well," said Kennedy; "a little trip will do him good."
"Shall we let this darky drop all at once?" inquired Joe.
"Oh no," replied the doctor, "we'll let him down easily; and I warrant me that, after such an adventure, the power of the wizard will be enormously enhanced in the sight of his comrades."

"Why, I wouldn't put it past them to make a god of him!" said Joe, with a laugh.

The Victoria, by this time, had risen to the height of one thousand feet, and the black hung to the rope with desperate energy. He had become completely silent, and his eyes were fixed, for his terror was blended with amazement. A light west wind was sweeping the balloon right over the town, and far beyond it.

Half an hour later, the doctor, seeing the country deserted, moderated the flame of his cylinder, and descended toward the ground. At twenty feet above the turf, the affrighted sorcerer made up his mind in a twinkling: he let himself drop, fell on his feet, and scampered off at a furious pace toward Kazeh; while the balloon, suddenly
relieved of his weight, again shot up on her course.

CHAPTER SIXTEENTH.

Symptoms of a Storm.--The Country of the Moon.--The Future of the African Continent.--The Last Machine of all.--A View of the Country at Sunset.--Flora and Fauna.--The Tempest.--The Zone of Fire.--The Starry Heavens.

"See," said Joe, "what comes of playing the sons of the moon without her leave! She came near serving us an ugly trick. But say, master, did you damage your credit as a physician?"

"Yes, indeed," chimed in the sportsman. "What kind of a dignitary was this Sultan of Kazeh?"

"An old half-dead sot," replied the doctor, "whose loss will not be very severely felt. But the moral of all this is that honors are fleeting, and we must not take too great a fancy to them."

"So much the worse!" rejoined Joe. "I liked the thing--to be worshipped!--Play the god as you like! Why, what would any one ask more than that? By-the-way, the moon did come up, too, and all red, as if she was in a rage."

While the three friends went on chatting of this and other things, and Joe examined the luminary of night from an entirely novel point of view, the heavens became covered with heavy clouds to the northward, and the lowering masses assumed a most sinister and threatening look. Quite a smart breeze, found about three hundred feet from the earth, drove the balloon toward the north-northeast; and above it the blue vault was clear; but the atmosphere felt close and dull.

The aeronauts found themselves, at about eight in the evening, in thirty-two degrees forty minutes east longitude, and four degrees seventeen minutes latitude. The atmospheric currents, under the influence of a tempest not far off, were driving them at the rate of from thirty to thirty-five miles an hour; the undulating and fertile plains of Mfuto were passing swiftly beneath them. The spectacle was one worthy of admiration--and admire it they did.

"We are now right in the country of the Moon," said Dr. Ferguson; "for it has retained the name that antiquity gave it, undoubtedly, because the moon has been worshipped there in all ages. It is, really, a superb country."

"It would be hard to find more splendid vegetation."

"If we found the like of it around London it would not be natural, but it would be very pleasant," put in Joe. "Why is it that such savage countries get all these fine things?"

"And who knows," said the doctor, "that this country may not, one day, become the centre of civilization? The races of the future may repair hither, when Europe shall have become exhausted in the effort to feed her inhabitants."

"Do you think so, really?" asked Kennedy.

"Undoubtedly, my dear Dick. Just note the progress of events: consider the migrations of races, and you will arrive at the same conclusion assuredly. Asia was the first nurse of the world, was she not? For about four thousand years she travailed, she grew pregnant, she produced, and then, when stones began to cover the soil where the golden harvests sung by Homer had flourished, her children abandoned her exhausted and barren bosom. You next see them precipitating themselves upon young and vigorous Europe, which has nourished them for the last two thousand years. But already her fertility is beginning to die out; her productive powers are diminishing every day. Those new diseases that annually attack the products of the soil, those defective crops, those insufficient resources, are all signs of a vitality that is rapidly wearing out and of an approaching exhaustion. Thus, we already see the millions rushing to the luxuriant bosom of America, as a source of help, not inexhaustible indeed, but not yet exhausted. In its turn, that new continent will grow old; its virgin forests will fall before the axe of industry, and its soil will become weak through having too fully produced what had been demanded of it. Where two harvests bloomed every year, hardly one will be gathered from a soil completely drained of its strength. Then, Africa will be there to offer to new races the treasures that for centuries have been accumulating in her breast. Those climates now so fatal to strangers will be purified by cultivation and by drainage of the soil, and those scattered water supplies will be gathered into one common bed to form an artery of navigation. Then this country over which we are now passing, more fertile, richer, and fuller of vitality than the rest, will become some grand realm where more astonishing discoveries than steam and electricity will be brought to light."

"Ah! sir," said Joe, "I'd like to see all that."

"You got up too early in the morning, my boy!"

"Besides," said Kennedy, "that may prove to be a very dull period when industry will swallow up every thing for its own profit. By dint of inventing machinery, men will end in being eaten up by it! I have always fancied that the end of the earth will be when some enormous boiler, heated to three thousand millions of atmospheric pressure, shall explode and blow up our Globe!"

"And I add that the Americans," said Joe, "will not have been the last to work at the machine!"

"In fact," assented the doctor, "they are great boiler-makers! But, without allowing ourselves to be carried away
by such speculations, let us rest content with enjoying the beauties of this country of the Moon, since we have been permitted to see it."

The sun, darting his last rays beneath the masses of heaped-up cloud, adorned with a crest of gold the slightest inequalities of the ground below; gigantic trees, arborescent bushes, mosses on the even surface--all had their share of this luminous effulgence. The soil, slightly undulating, here and there rose into little conical hills; there were no mountains visible on the horizon; immense brambly palisades, impenetrable hedges of thorny jungle, separated the clearings dotted with numerous villages, and immense euphorbiae surrounded them with natural fortifications, interlacing their trunks with the coral-shaped branches of the shrubbery and undergrowth.

Ere long, the Malagazeri, the chief tributary of Lake Tanganayika, was seen winding between heavy thickets of verdure, offering an asylum to many water-courses that spring from the torrents formed in the season of freshets, or from ponds hollowed in the clayey soil. To observers looking from a height, it was a chain of waterfalls thrown across the whole western face of the country.

Animals with huge humps were feeding in the luxuriant prairies, and were half hidden, sometimes, in the tall grass; spreading forests in bloom redolent of spicy perfumes presented themselves to the gaze like immense bouquets; but, in these bouquets, lions, leopards, hyenas, and tigers, were then crouching for shelter from the last hot rays of the setting sun. From time to time, an elephant made the tall tops of the undergrowth sway to and fro, and you could hear the crackling of huge branches as his ponderous ivory tusks broke them in his way.

"What a sporting country!" exclaimed Dick, unable longer to restrain his enthusiasm; "why, a single ball fired at random into those forests would bring down game worthy of it. Suppose we try it once!"

"No, my dear Dick; the night is close at hand--a threatening night with a tempest in the background--and the storms are awful in this country, where the heated soil is like one vast electric battery."

"You are right, sir," said Joe, "the heat has got to be enough to choke one, and the breeze has died away. One can feel that something's coming."

"The atmosphere is saturated with electricity," replied the doctor; "every living creature is sensible that this state of the air portends a struggle of the elements, and I confess that I never before was so full of the fluid myself."

"Well, then," suggested Dick, "would it not be advisable to alight?"

"On the contrary, Dick, I'd rather go up, only that I am afraid of being carried out of my course by these counter-currents contending in the atmosphere."

"Have you any idea, then, of abandoning the route that we have followed since we left the coast?"

"If I can manage to do so," replied the doctor, "I will turn more directly northward, by from seven to eight degrees; I shall then endeavor to ascend toward the presumed latitudes of the sources of the Nile; perhaps we may discover some traces of Captain Speke's expedition or of M. de Heuglin's caravan. Unless I am mistaken, we are at thirty-two degrees forty minutes east longitude, and I should like to ascend directly north of the equator."

"Look there!" exclaimed Kennedy, suddenly, "see those hippopotami sliding out of the pools--those masses of blood-colored flesh--and those crocodiles snuffing the air aloud!"

"They're choking!" ejaculated Joe. "Ah! what a fine way to travel this is; and how one can snap his fingers at all that vermin!--Doctor! Mr. Kennedy! see those packs of wild animals hurrying along close together. There are fully two hundred. Those are wolves."

"No! Joe, not wolves, but wild dogs; a famous breed that does not hesitate to attack the lion himself. They are the worst customers a traveller could meet, for they would instantly tear him to pieces."

"Well, it isn't Joe that'll undertake to muzzle them!" responded that amiable youth. "After all, though, if that's the nature of the beast, we mustn't be too hard on them for it!"

Silence gradually settled down under the influence of the impending storm: the thickened air actually seemed no longer adapted to the transmission of sound; the atmosphere appeared MUFFLED, and, like a room hung with tapestry, lost all its sonorous reverberation. The "rover bird" so-called, the coroneted crane, the red and blue jays, the mocking-bird, the flycatcher, disappeared among the foliage of the immense trees, and all nature revealed symptoms of some approaching catastrophe.

At nine o'clock the Victoria hung motionless over Msene, an extensive group of villages scarcely distinguishable in the gloom. Once in a while, the reflection of a wandering ray of light in the dull water disclosed a succession of ditches regularly arranged, and, by one last gleam, the eye could make out the calm and sombre forms of palm-trees, sycamores, and gigantic euphorbiae.

"I am stifling!" said the Scot, inhaling, with all the power of his lungs, as much as possible of the rarefied air. "We are not moving an inch! Let us descend!"

"But the tempest!" said the doctor, with much uneasiness.

"If you are afraid of being carried away by the wind, it seems to me that there is no other course to pursue."

"Perhaps the storm won't burst to-night," said Joe; "the clouds are very high."
"That is just the thing that makes me hesitate about going beyond them; we should have to rise still higher, lose
sight of the earth, and not know all night whether we were moving forward or not, or in what direction we were
going."

"Make up your mind, dear doctor, for time presses!"

"It's a pity that the wind has fallen," said Joe, again; "it would have carried us clear of the storm."

"It is, indeed, a pity, my friends," rejoined the doctor. "The clouds are dangerous for us; they contain opposing
currents which might catch us in their eddies, and lightnings that might set on fire. Again, those perils avoided, the
force of the tempest might hurl us to the ground, were we to cast our anchor in the tree-tops."

"Then what shall we do?"

"Well, we must try to get the balloon into a medium zone of the atmosphere, and there keep her suspended
between the perils of the heavens and those of the earth. We have enough water for the cylinder, and our two
hundred pounds of ballast are untouched. In case of emergency I can use them."

"We will keep watch with you," said the hunter.

"No, my friends, put the provisions under shelter, and lie down; I will rouse you, if it becomes necessary."

"But, master, wouldn't you do well to take some rest yourself, as there's no danger close on us just now?"
insisted poor Joe.

"No, thank you, my good fellow, I prefer to keep awake. We are not moving, and should circumstances not
change, we'll find ourselves to-morrow in exactly the same place."

"Good-night, then, sir!"

"Good-night, if you can only find it so!"

Kennedy and Joe stretched themselves out under their blankets, and the doctor remained alone in the immensity
of space.

However, the huge dome of clouds visibly descended, and the darkness became profound. The black vault closed
in upon the earth as if to crush it in its embrace.

All at once a violent, rapid, incisive flash of lightning pierced the gloom, and the rent it made had not closed ere
a frightful clap of thunder shook the celestial depths.

"Up! up! turn out!" shouted Ferguson.

The two sleepers, aroused by the terrible concussion, were at the doctor's orders in a moment.

"Shall we descend?" said Kennedy.

"No! the balloon could not stand it. Let us go up before those clouds dissolve in water, and the wind is let loose!"

and, so saying, the doctor actively stirred up the flame of the cylinder, and turned it on the spirals of the serpentine
siphon.

The tempests of the tropics develop with a rapidity equalled only by their violence. A second flash of lightningent the darkness, and was followed by a score of others in quick succession. The sky was crossed and dotted, like
the zebra's hide, with electric sparks, which danced and flickered beneath the great drops of rain.

"We have delayed too long," exclaimed the doctor; "we must now pass through a zone of fire, with our balloon
filled as it is with inflammable gas!"

"But let us descend, then! let us descend!" urged Kennedy.

"The risk of being struck would be just about even, and we should soon be torn to pieces by the branches of the
trees!"

"We are going up, doctor!"

"Quicker, quicker still!"

In this part of Africa, during the equatorial storms, it is not rare to count from thirty to thirty-five flashes of
lightning per minute. The sky is literally on fire, and the crashes of thunder are continuous.

The wind burst forth with frightful violence in this burning atmosphere; it twisted the blazing clouds; one might
have compared it to the breath of some gigantic bellows, fanning all this conflagration.

Dr. Ferguson kept his cylinder at full heat, and the balloon dilated and went up, while Kennedy, on his knees,
held together the curtains of the awning. The balloon whirled round wildly enough to make their heads turn, and the
aeronauts got some very alarming jolts, indeed, as their machine swung and swayed in all directions. Huge cavities
would form in the silk of the balloon as the wind fiercely bent it in, and the stuff fairly cracked like a pistol as it flew
back from the pressure. A sort of hail, preceded by a rumbling noise, hissed through the air and rattled on the
covering of the Victoria. The latter, however, continued to ascend, while the lightning described tangents to the
convexity of her circumference; but she bore on, right through the midst of the fire.

"God protect us!" said Dr. Ferguson, solemnly, "we are in His hands; He alone can save us--but let us be ready
for every event, even for fire--our fall could not be very rapid."

The doctor's voice could scarcely be heard by his companions; but they could see his countenance calm as ever
even amid the flashing of the lightnings; he was watching the phenomena of phosphorescence produced by the fires of St. Elmo, that were now skipping to and fro along the network of the balloon.

The latter whirled and swung, but steadily ascended, and, ere the hour was over, it had passed the stormy belt. The electric display was going on below it like a vast crown of artificial fireworks suspended from the car.

Then they enjoyed one of the grandest spectacles that Nature can offer to the gaze of man. Below them, the tempest; above them, the starry firmament, tranquil, mute, impassible, with the moon projecting her peaceful rays over these angry clouds.

Dr. Ferguson consulted the barometer; it announced twelve thousand feet of elevation. It was then eleven o'clock at night.

"Thank Heaven, all danger is past; all we have to do now, is, to keep ourselves at this height," said the doctor.

"It was frightful!" remarked Kennedy.

"Oh!" said Joe, "it gives a little variety to the trip, and I'm not sorry to have seen a storm from a trifling distance up in the air. It's a fine sight!"

CHAPTER SEVENTEENTH.
The Mountains of the Moon.--An Ocean of Verdure.--They cast Anchor.--The Towing Elephant.--A Running Fire.--Death of the Monster.--The Field-Oven.--A Meal on the Grass.--A Night on the Ground.

About four in the morning, Monday, the sun reappeared in the horizon; the clouds had dispersed, and a cheery breeze refreshed the morning dawn.

The earth, all redolent with fragrant exhalations, reappeared to the gaze of our travellers. The balloon, whirled about by opposing currents, had hardly budged from its place, and the doctor, letting the gas contract, descended so as to get a more northerly direction. For a long while his quest was fruitless; the wind carried him toward the west until he came in sight of the famous Mountains of the Moon, which grouped themselves in a semicircle around the extremity of Lake Tanganayika; their ridges, but slightly indented, stood out against the bluish horizon, so that they might have been mistaken for a natural fortification, not to be passed by the explorers of the centre of Africa. Among them were a few isolated cones, revealing the mark of the eternal snows.

"Here we are at last," said the doctor, "in an unexplored country! Captain Burton pushed very far to the westward, but he could not reach those celebrated mountains; he even denied their existence, strongly as it was affirmed by Speke, his companion. He pretended that they were born in the latter's fancy; but for us, my friends, there is no further doubt possible."

"Shall we cross them?" asked Kennedy.

"Not, if it please God. I am looking for a wind that will take me back toward the equator. I will even wait for one, if necessary, and will make the balloon like a ship that casts anchor, until favorable breezes come up."

But the foresight of the doctor was not long in bringing its reward; for, after having tried different heights, the Victoria at length began to sail off to the northeastward with medium speed.

"We are in the right track," said the doctor, consulting his compass, "and scarcely two hundred feet from the surface; lucky circumstances for us, enabling us, as they do, to reconnoitre these new regions. When Captain Speke set out to discover Lake Ukereoue, he ascended more to the eastward in a straight line above Kazeh."

"Shall we keep on long in this way?" inquired the Scot.

"Perhaps. Our object is to push a point in the direction of the sources of the Nile; and we have more than six hundred miles to make before we get to the extreme limit reached by the explorers who came from the north."

"And we shan't set foot on the solid ground?" murmured Joe; "it's enough to cramp a fellow's legs!"

"Oh, yes, indeed, my good Joe," said the doctor, reassuring him; "we have to economize our provisions, you know; and on the way, Dick, you must get us some fresh meat."

"Whenever you like, doctor."

"We shall also have to replenish our stock of water. Who knows but we may be carried to some of the dried-up regions? So we cannot take too many precautions."

At noon the Victoria was at twenty-nine degrees fifteen minutes east longitude, and three degrees fifteen minutes south latitude. She passed the village of Uyofu, the last northern limit of the Unyamwezi, opposite to the Lake Ukereoue, which could still be seen.

The tribes living near to the equator seem to be a little more civilized, and are governed by absolute monarchs, whose control is an unlimited despotism. Their most compact union of power constitutes the province of Karagwah.

It was decided by the aeronauts that they would alight at the first favorable place. They found that they should have to make a prolonged halt, and take a careful inspection of the balloon: so the flame of the cylinder was moderated, and the anchors, flung out from the car, ere long began to sweep the grass of an immense prairie, that,
from a certain height, looked like a shaven lawn, but the growth of which, in reality, was from seven to eight feet in height.

The balloon skimmed this tall grass without bending it, like a gigantic butterfly: not an obstacle was in sight; it was an ocean of verdure without a single breaker.

"We might proceed a long time in this style," remarked Kennedy; "I don't see one tree that we could approach, and I'm afraid that our hunt's over."

"Wait, Dick; you could not hunt anyhow in this grass, that grows higher than your head. We'll find a favorable place presently."

In truth, it was a charming excursion that they were making now—a veritable navigation on this green, almost transparent sea, gently undulating in the breath of the wind. The little car seemed to cleave the waves of verdure, and, from time to time, coveys of birds of magnificent plumage would rise fluttering from the tall herbage, and speed away with joyous cries. The anchors plunged into this lake of flowers, and traced a furrow that closed behind them, like the wake of a ship.

All at once a sharp shock was felt—the anchor had caught in the fissure of some rock hidden in the high grass.

"We are fast!" exclaimed Joe.

These words had scarcely been uttered when a shrill cry rang through the air, and the following phrases, mingled with exclamations, escaped from the lips of our travellers:

"What's that?"
"A strange cry!"
"Look! Why, we're moving!"
"The anchor has slipped!"
"No; it holds, and holds fast too!" said Joe, who was tugging at the rope.
"It's the rock, then, that's moving!"

An immense rustling was noticed in the grass, and soon an elongated, winding shape was seen rising above it.

"A serpent!" shouted Joe.
"A serpent!" repeated Kennedy, handling his rifle.
"No," said the doctor, "it's an elephant's trunk!"
"An elephant, Samuel?"

And, as Kennedy said this, he drew his rifle to his shoulder.

"Wait, Dick; wait!"
"That's a fact! The animal's towing us!"
"And in the right direction, Joe—in the right direction."

The elephant was now making some headway, and soon reached a clearing where his whole body could be seen. By his gigantic size, the doctor recognized a male of a superb species. He had two whitish tusks, beautifully curved, and about eight feet in length; and in these the shanks of the anchor had firmly caught. The animal was vainly trying with his trunk to disengage himself from the rope that attached him to the car.

"Get up—go ahead, old fellow!" shouted Joe, with delight, doing his best to urge this rather novel team. "Here is a new style of travelling!—no more horses for me. An elephant, if you please!"

"But where is he taking us to?" said Kennedy, whose rifle itched in his grasp.
"He's taking us exactly to where we want to go, my dear Dick. A little patience!"
"Wig-a-more! wig-a-more!" as the Scotch country folks say," shouted Joe, in high glee. "Gee-up! gee-up there!"

The huge animal now broke into a very rapid gallop. He flung his trunk from side to side, and his monstrous bounds gave the car several rather heavy thumps. Meanwhile the doctor stood ready, hatchet in hand, to cut the rope, should need arise.

"But," said he, "we shall not give up our anchor until the last moment."

This drive, with an elephant for the team, lasted about an hour and a half; yet the animal did not seem in the least fatigued. These immense creatures can go over a great deal of ground, and, from one day to another, are found at enormous distances from there they were last seen, like the whales, whose mass and speed they rival.

"In fact," said Joe, "it's a whale that we have harpooned; and we're only doing just what whalemen do when out fishing."

But a change in the nature of the ground compelled the doctor to vary his style of locomotion. A dense grove of calmadores was descried on the horizon, about three miles away, on the north of the prairie. So it became necessary to detach the balloon from its draught-animal at last.

Kennedy was intrusted with the job of bringing the elephant to a halt. He drew his rifle to his shoulder, but his position was not favorable to a successful shot; so that the first ball fired flattened itself on the animal's skull, as it would have done against an iron plate. The creature did not seem in the least troubled by it; but, at the sound of the
discharge, he had increased his speed, and now was going as fast as a horse at full gallop.

"The deuce!" ejaculated Kennedy.

"What a solid head!" commented Joe.

"We'll try some conical balls behind the shoulder-joint," said Kennedy, reloading his rifle with care. In another moment he fired.

The animal gave a terrible cry, but went on faster than ever.

"Come!" said Joe, taking aim with another gun, "I must help you, or we'll never end it." And now two balls penetrated the creature's side.

The elephant halted, lifted his trunk, and resumed his run toward the wood with all his speed; he shook his huge head, and the blood began to gush from his wounds.

"Let us keep up our fire, Mr. Kennedy."

"And a continuous fire, too," urged the doctor, "for we are close on the woods."

Ten shots more were discharged. The elephant made a fearful bound; the car and balloon cracked as though every thing were going to pieces, and the shock made the doctor drop his hatchet on the ground.

The situation was thus rendered really very alarming; the anchor-rope, which had securely caught, could not be disengaged, nor could it yet be cut by the knives of our aeronauts, and the balloon was rushing headlong toward the wood, when the animal received a ball in the eye just as he lifted his head. On this he halted, faltered, his knees bent under him, and he uncovered his whole flank to the assaults of his enemies in the balloon.

"A bullet in his heart!" said Kennedy, discharging one last rifle-shot.

The elephant uttered a long bellow of terror and agony, then raised himself up for a moment, twirling his trunk in the air, and finally fell with all his weight upon one of his tusks, which he broke off short. He was dead.

"His tusk's broken!" exclaimed Kennedy--"ivory too that in England would bring thirty-five guineas per hundred pounds."

"As much as that?" said Joe, scrambling down to the ground by the anchor-rope.

"What's the use of sighing over it, Dick?" said the doctor. "Are we ivory merchants? Did we come hither to make money?"

Joe examined the anchor and found it solidly attached to the unbroken tusk. The doctor and Dick leaped out on the ground, while the balloon, now half emptied, hovered over the body of the huge animal.

"What a splendid beast!" said Kennedy, "what a mass of flesh! I never saw an elephant of that size in India!"

"There's nothing surprising about that, my dear Dick; the elephants of Central Africa are the finest in the world. The Andersons and the Cummings have hunted so incessantly in the neighborhood of the Cape, that these animals have migrated to the equator, where they are often met with in large herds."

"In the mean while, I hope," added Joe, "that we'll taste a morsel of this fellow. I'll undertake to get you a good dinner at his expense. Mr. Kennedy will go off and hunt for an hour or two; the doctor will make an inspection of the balloon, and, while they're busy in that way, I'll do the cooking."

"A good arrangement!" said the doctor; "so do as you like, Joe."

"As for me," said the hunter, "I shall avail myself of the two hours' recess that Joe has condescended to let me have."

"Go, my friend, but no imprudence! Don't wander too far away."

"Never fear, doctor!" and, so saying, Dick, shouldering his gun, plunged into the woods.

Forthwith Joe went to work at his vocation. At first he made a hole in the ground two feet deep; this he filled with the dry wood that was so abundantly scattered about, where it had been strewn by the elephants, whose tracks could be seen where they had made their way through the forest. This hole filled, he heaped a pile of fagots on it a foot in height, and set fire to it.

Then he went back to the carcass of the elephant, which had fallen only about a hundred feet from the edge of the forest; he next proceeded adroitly to cut off the trunk, which might have been two feet in diameter at the base; of this he selected the most delicate portion, and then took with it one of the animal's spongy feet. In fact, these are the finest morsels, like the hump of the bison, the paws of the bear, and the head of the wild boar.

When the pile of fagots had been thoroughly consumed, inside and outside, the hole, cleared of the cinders and hot coals, retained a very high temperature. The pieces of elephant-meat, surrounded with aromatic leaves, were placed in this extempore oven and covered with hot coals. Then Joe piled up a second heap of sticks over all, and when it had burned out the meat was cooked to a turn.

Then Joe took the viands from the oven, spread the savory mess upon green leaves, and arranged his dinner upon a magnificent patch of greensward. He finally brought out some biscuit, some coffee, and some cognac, and got a can of pure, fresh water from a neighboring streamlet.

The repast thus prepared was a pleasant sight to behold, and Joe, without being too proud, thought that it would
also be pleasant to eat.

"A journey without danger or fatigue," he soliloquized; "your meals when you please; a swinging hammock all the time! What more could a man ask? And there was Kennedy, who didn't want to come!"

On his part, Dr. Ferguson was engrossed in a serious and thorough examination of the balloon. The latter did not appear to have suffered from the storm; the silk and the gutta percha had resisted wonderfully, and, upon estimating the exact height of the ground and the ascensional force of the balloon, our aeronaut saw, with satisfaction, that the hydrogen was in exactly the same quantity as before. The covering had remained completely waterproof.

It was now only five days since our travellers had quitted Zanzibar; their pemmican had not yet been touched; their stock of biscuit and potted meat was enough for a long trip, and there was nothing to be replenished but the water.

The pipes and spiral seemed to be in perfect condition, since, thanks to their india-rubber jointings, they had yielded to all the oscillations of the balloon. His examination ended, the doctor betook himself to setting his notes in order. He made a very accurate sketch of the surrounding landscape, with its long prairie stretching away out of sight, the forest of calmadores, and the balloon resting motionless over the body of the dead elephant.

At the end of his two hours, Kennedy returned with a string of fat partridges and the haunch of an oryx, a sort of gemsbok belonging to the most agile species of antelopes. Joe took upon himself to prepare this surplus stock of provisions for a later repast.

"But, dinner's ready!" he shouted in his most musical voice.

And the three travellers had only to sit down on the green turf. The trunk and feet of the elephant were declared to be exquisite. Old England was toasted, as usual, and delicious Havanas perfumed this charming country for the first time.

Kennedy ate, drank, and chatted, like four; he was perfectly delighted with his new life, and seriously proposed to the doctor to settle in this forest, to construct a cabin of boughs and foliage, and, there and then, to lay the foundation of a Robinson Crusoe dynasty in Africa.

The proposition went no further, although Joe had, at once, selected the part of Man Friday for himself.

The country seemed so quiet, so deserted, that the doctor resolved to pass the night on the ground, and Joe arranged a circle of watch-fires as an indispensable barrier against wild animals, for the hyenas, cougars, and jackals, attracted by the smell of the dead elephant, were prowling about in the neighborhood. Kennedy had to fire his rifle several times at these unceremonious visitors, but the night passed without any untoward occurrence.

CHAPTER EIGHTEENTH.
The Karagwah.--Lake Ukereoue.--A Night on an Island.--The Equator.--Crossing the Lake.--The Cascades.--A View of the Country.--The Sources of the Nile.--The Island of Benga.--The Signature of Andrea Debono.--The Flag with the Arms of England.

At five o'clock in the morning, preparations for departure commenced. Joe, with the hatchet which he had fortunately recovered, broke the elephant's tusks. The balloon, restored to liberty, sped away to the northwest with our travellers, at the rate of eighteen miles per hour.

The doctor had carefully taken his position by the altitude of the stars, during the preceding night. He knew that he was in latitude two degrees forty minutes below the equator, or at a distance of one hundred and sixty geographical miles. He swept along over many villages without heeding the cries that the appearance of the balloon excited; he took note of the conformation of places with quick sights; he passed the slopes of the Rubembe, which are nearly as abrupt as the summits of the Ousagara, and, farther on, at Tenga, encountered the first projections of the Karagwah chains, which, in his opinion, are direct spurs of the Mountains of the Moon. So, the ancient legend which made these mountains the cradle of the Nile, came near to the truth, since they really border upon Lake Ukereoue, the conjectured reservoir of the waters of the great river.

From Kafuro, the main district of the merchants of that country, he descried, at length, on the horizon, the lake so much desired and so long sought for, of which Captain Speke caught a glimpse on the 3d of August, 1858.

Samuel Ferguson felt real emotion: he was almost in contact with one of the principal points of his expedition, and, with his spy-glass constantly raised, he kept every nook and corner of the mysterious region in sight. His gaze wandered over details that might have been thus described:

"Beneath him extended a country generally destitute of cultivation; only here and there some ravines seemed under tillage; the surface, dotted with peaks of medium height, grew flat as it approached the lake; barley-fields took the place of rice-plantations, and there, too, could be seen growing the species of plantain from which the wine of the country is drawn, and mwani, the wild plant which supplies a substitute for coffee. A collection of some fifty or more circular huts, covered with a flowering thatch, constituted the capital of the Karagwah country."
He could easily distinguish the astonished countenances of a rather fine-looking race of natives of yellowish-brown complexion. Women of incredible corpulence were dawdling about through the cultivated grounds, and the doctor greatly surprised his companions by informing them that this rotundity, which is highly esteemed in that region, was obtained by an obligatory diet of curdled milk.

At noon, the Victoria was in one degree forty-five minutes south latitude, and at one o'clock the wind was driving her directly toward the lake.

This sheet of water was christened Uyanza Victoria, or Victoria Lake, by Captain Speke. At the place now mentioned it might measure about ninety miles in breadth, and at its southern extremity the captain found a group of islets, which he named the Archipelago of Bengal. He pushed his survey as far as Muanza, on the eastern coast, where he was received by the sultan. He made a triangulation of this part of the lake, but he could not procure a boat, either to cross it or to visit the great island of Ukereoue which is very populous, is governed by three sultans, and appears to be only a promontory at low tide.

The doctor experienced some difficulty in guiding his course; he was afraid of being carried toward the east, but, fortunately, a current bore him directly toward the north, and at six o'clock in the evening the balloon alighted on a small desert island in thirty minutes south latitude, and thirty-two degrees fifty-two minutes east longitude, about twenty miles from the shore.

The travellers succeeded in making fast to a tree, and, the wind having fallen calm toward evening, they remained quietly at anchor. They dared not dream of taking the ground, since here, as on the shores of the Uyanza, legions of mosquitoes covered the soil in dense clouds. Joe even came back, from securing the anchor in the tree, speckled with bites, but he kept his temper, because he found it quite the natural thing for mosquitoes to treat him as they had done.

Nevertheless, the doctor, who was less of an optimist, let out as much rope as he could, so as to escape these pitiless insects, that began to rise toward him with a threatening hum.

The doctor ascertained the height of the lake above the level of the sea, as it had been determined by Captain Speke, say three thousand seven hundred and fifty feet.

"Here we are, then, on an island!" said Joe, scratching as though he'd tear his nails out.

"We could make the tour of it in a jiffy," added Kennedy, "and, excepting these confounded mosquitoes, there's not a living being to be seen on it."

"The islands with which the lake is dotted," replied the doctor, "are nothing, after all, but the tops of submerged hills; but we are lucky to have found a retreat among them, for the shores of the lake are inhabited by ferocious tribes. Take your sleep, then, since Providence has granted us a tranquil night."

"Won't you do the same, doctor?"

"No, I could not close my eyes. My thoughts would banish sleep. To-morrow, my friends, should the wind prove favorable, we shall go due north, and we shall, perhaps, discover the sources of the Nile, that grand secret which has so long remained impenetrable. Near as we are to the sources of the renowned river, I could not sleep."

Kennedy and Joe, whom scientific speculations failed to disturb to that extent, were not long in falling into sound slumber, while the doctor held his post.

On Wednesday, April 23d, the balloon started at four o'clock in the morning, with a grayish sky overhead; night was slow in quitting the surface of the lake, which was enveloped in a dense fog, but presently a violent breeze scattered all the mists, and, after the balloon had been swung to and fro for a moment, in opposite directions, it at length veered in a straight line toward the north.

Dr. Ferguson fairly clapped his hands for joy.

"We are on the right track!" he exclaimed. "To-day or never we shall see the Nile! Look, my friends, we are crossing the equator! We are entering our own hemisphere!"

"Ah!" said Joe, "do you think, doctor, that the equator passes here?"

"Just here, my boy!"

"Well, then, with all respect to you, sir, it seems to me that this is the very time to moisten it."

"Good!" said the doctor, laughing. "Let us have a glass of punch. You have a way of comprehending
cosmography that is any thing but dull."

And thus was the passage of the Victoria over the equator duly celebrated.

The balloon made rapid headway. In the west could be seen a low and but slightly-diversified coast, and, farther away in the background, the elevated plains of the Uganda and the Usoga. At length, the rapidity of the wind became excessive, approaching thirty miles per hour.

The waters of the Nyanza, violently agitated, were foaming like the billows of a sea. By the appearance of certain long swells that followed the sinking of the waves, the doctor was enabled to conclude that the lake must have great depth of water. Only one or two rude boats were seen during this rapid passage.

"This lake is evidently, from its elevated position, the natural reservoir of the rivers in the eastern part of Africa, and the sky gives back to it in rain what it takes in vapor from the streams that flow out of it. I am certain that the Nile must here take its rise."

"Well, we shall see!" said Kennedy.

About nine o'clock they drew nearer to the western coast. It seemed deserted, and covered with woods; the wind freshened a little toward the east, and the other shore of the lake could be seen. It bent around in such a curve as to end in a wide angle toward two degrees forty minutes north latitude. Lofty mountains uplifted their arid peaks at this extremity of Nyanza; but, between them, a deep and winding gorge gave exit to a turbulent and foaming river.

While busy managing the balloon, Dr. Ferguson never ceased reconnoitring the country with eager eyes.

"Look!" he exclaimed, "look, my friends! the statements of the Arabs were correct! They spoke of a river by which Lake Ukereoue discharged its waters toward the north, and this river exists, and we are descending it, and it flows with a speed analogous to our own! And this drop of water now gliding away beneath our feet is, beyond all question, rushing on, to mingle with the Mediterranean! It is the Nile!"

"It is the Nile!" reechoed Kennedy, carried away by the enthusiasm of his friend.

"Hurrah for the Nile!" shouted Joe, glad, and always ready to cheer for something.

Enormous rocks, here and there, embarrassed the course of this mysterious river. The water foamed as it fell in rapids and cataracts, which confirmed the doctor in his preconceived ideas on the subject. From the environing mountains numerous torrents came plunging and seething down, and the eye could take them in by hundreds. There could be seen, starting from the soil, delicate jets of water scattering in all directions, crossing and recrossing each other, mingling, contending in the swiftness of their progress, and all rushing toward that nascent stream which became a river after having drunk them in.

"Here is, indeed, the Nile!" reiterated the doctor, with the tone of profound conviction. "The origin of its name, like the origin of its waters, has fired the imagination of the learned; they have sought to trace it from the Greek, the Coptic, the Sanscrit; but all that matters little now, since we have made it surrender the secret of its source!"

"But," said the Scotchman, "how are you to make sure of the identity of this river with the one recognized by the travellers from the north?"

"We shall have certain, irrefutable, convincing, and infallible proof," replied Ferguson, "should the wind hold another hour in our favor!"

The mountains drew farther apart, revealing in their place numerous villages, and fields of white Indian corn, doura, and sugar-cane. The tribes inhabiting the region seemed excited and hostile; they manifested more anger than adoration, and evidently saw in the aeronauts only obtrusive strangers, and not condescending deities. It appeared as though, in approaching the sources of the Nile, these men came to rob them of something, and so the Victoria had to keep out of range of their muskets.

"To land here would be a ticklish matter!" said the Scot.

"Well!" said Joe, "so much the worse for these natives. They'll have to do without the pleasure of our conversation."

"Nevertheless, descend I must," said the doctor, "were it only for a quarter of an hour. Without doing so I cannot verify the results of our expedition."

"It is indispensable, then, doctor?"

"Indispensable; and we will descend, even if we have to do so with a volley of musketry."

"The thing suits me," said Kennedy, toying with his pet rifle.

"And I'm ready, master, whenever you say the word!" added Joe, preparing for the fight.

"It would not be the first time," remarked the doctor, "that science has been followed up, sword in hand. The same thing happened to a French savant among the mountains of Spain, when he was measuring the terrestrial meridian."

"Be easy on that score, doctor, and trust to your two body-guards."

"Are we there, master?"

"Not yet. In fact, I shall go up a little, first, in order to get an exact idea of the configuration of the country."
The hydrogen expanded, and in less than ten minutes the balloon was soaring at a height of twenty-five hundred feet above the ground.

From that elevation could be distinguished an inextricable network of smaller streams which the river received into its bosom; others came from the west, from between numerous hills, in the midst of fertile plains.

"We are not ninety miles from Gondokoro," said the doctor, measuring off the distance on his map, "and less than five miles from the point reached by the explorers from the north. Let us descend with great care."

And, upon this, the balloon was lowered about two thousand feet.

"Now, my friends, let us be ready, come what may."

"Ready it is!" said Dick and Joe, with one voice.

"Good!"

In a few moments the balloon was advancing along the bed of the river, and scarcely one hundred feet above the ground. The Nile measured but fifty fathoms in width at this point, and the natives were in great excitement, rushing to and fro, tumultuously, in the villages that lined the banks of the stream. At the second degree it forms a perpendicular cascade of ten feet in height, and consequently impassable by boats.

"Here, then, is the cascade mentioned by Debono!" exclaimed the doctor.

The basin of the river spread out, dotted with numerous islands, which Dr. Ferguson devoured with his eyes. He seemed to be seeking for a point of reference which he had not yet found.

By this time, some blacks, having ventured in a boat just under the balloon, Kennedy saluted them with a shot from his rifle, that made them regain the bank at their utmost speed.

"A good journey to you," bawled Joe, "and if I were in your place, I wouldn't try coming back again. I should be mightily afraid of a monster that can hurl thunderbolts when he pleases."

But, all at once, the doctor snatched up his spy-glass, and directed it toward an island reposing in the middle of the river.

"Four trees!" he exclaimed; "look, down there!" Sure enough, there were four trees standing alone at one end of it.

"It is Bengal Island! It is the very same," repeated the doctor, exultingly.

"And what of that?" asked Dick.

"It is there that we shall alight, if God permits."

"But, it seems to be inhabited, doctor."

"Joe is right; and, unless I'm mistaken, there is a group of about a score of natives on it now."

"We'll make them scatter; there'll be no great trouble in that," responded Ferguson.

"So be it," chimed in the hunter.

The sun was at the zenith as the balloon approached the island.

The blacks, who were members of the Makado tribe, were howling lustily, and one of them waved his bark hat in the air. Kennedy took aim at him, fired, and his hat flew about him in pieces. Thereupon there was a general scamper. The natives plunged headlong into the river, and swam to the opposite bank. Immediately, there came a shower of balls from both banks, along with a perfect cloud of arrows, but without doing the balloon any damage, where it rested with its anchor snugly secured in the fissure of a rock. Joe lost no time in sliding to the ground.

"The ladder!" cried the doctor. "Follow me, Kennedy."

"What do you wish, sir?"

"Let us alight. I want a witness."

"Here I am!"

"Mind your post, Joe, and keep a good lookout."

"Never fear, doctor; I'll answer for all that."

"Come, Dick," said the doctor, as he touched the ground.

So saying, he drew his companion along toward a group of rocks that rose upon one point of the island; there, after searching for some time, he began to rummage among the brambles, and, in so doing, scratched his hands until they bled.

Suddenly he grasped Kennedy's arm, exclaiming: "Look! look!"

"Letters!"

Yes; there, indeed, could be descried, with perfect precision of outline, some letters carved on the rock. It was quite easy to make them out:

"A. D."

"A.D.!" repeated Dr. Ferguson. "Andrea Debono-- the very signature of the traveller who farthest ascended the current of the Nile."

"No doubt of that, friend Samuel," assented Kennedy.
"Are you now convinced?"

"It is the Nile! We cannot entertain a doubt on that score now," was the reply.

The doctor, for the last time, examined those precious initials, the exact form and size of which he carefully noted.

"And now," said he--"now for the balloon!"

"Quickly, then, for I see some of the natives getting ready to recross the river."

"That matters little to us now. Let the wind but send us northward for a few hours, and we shall reach Gondokoro, and press the hands of some of our countrymen."

Ten minutes more, and the balloon was majestically ascending, while Dr. Ferguson, in token of success, waved the English flag triumphantly from his car.

CHAPTER NINETEENTH.


"Which way do we head?" asked Kennedy, as he saw his friend consulting the compass.

"North-northeast."

"The deuce! but that's not the north?"

"No, Dick; and I'm afraid that we shall have some trouble in getting to Gondokoro. I am sorry for it; but, at last, we have succeeded in connecting the explorations from the east with those from the north; and we must not complain."

The balloon was now receding gradually from the Nile.

"One last look," said the doctor, "at this impassable latitude, beyond which the most intrepid travellers could not make their way. There are those intractable tribes, of whom Petherick, Arnaud, Miuni, and the young traveller Lejean, to whom we are indebted for the best work on the Upper Nile, have spoken."

"Thus, then," added Kennedy, inquiringly, "our discoveries agree with the speculations of science."

"Absolutely so. The sources of the White Nile, of the Bahr-el-Abiad, are immersed in a lake as large as a sea; it is there that it takes its rise. Poesy, undoubtedly, loses something thereby. People were fond of ascribing a celestial origin to this king of rivers. The ancients gave it the name of an ocean, and were not far from believing that it flowed directly from the sun; but we must come down from these flights from time to time, and accept what science teaches us. There will not always be scientific men, perhaps; but there always will be poets."

"We can still see cataracts," said Joe.

"Those are the cataracts of Makedo, in the third degree of latitude. Nothing could be more accurate. Oh, if we could only have followed the course of the Nile for a few hours!"

"And down yonder, below us, I see the top of a mountain," said the hunter.

"That is Mount Longwek, the Trembling Mountain of the Arabs. This whole country was visited by Debono, who went through it under the name of Latif-Effendi. The tribes living near the Nile are hostile to each other, and are continually waging a war of extermination. You may form some idea, then, of the difficulties he had to encounter."

The wind was carrying the balloon toward the northwest, and, in order to avoid Mount Longwek, it was necessary to seek a more slanting current.

"My friends," said the doctor, "here is where OUR passage of the African Continent really commences; up to this time we have been following the traces of our predecessors. Henceforth we are to launch ourselves upon the unknown. We shall not lack the courage, shall we?"

"Never!" said Dick and Joe together, almost in a shout.

"Onward, then, and may we have the help of Heaven!"

At ten o'clock at night, after passing over ravines, forests, and scattered villages, the aeronauts reached the side of the Trembling Mountain, along whose gentle slopes they went quietly gliding. In that memorable day, the 23d of April, they had, in fifteen hours, impelled by a rapid breeze, traversed a distance of more than three hundred and fifteen miles.

But this latter part of the journey had left them in dull spirits, and complete silence reigned in the car. Was Dr. Ferguson absorbed in the thought of his discoveries? Were his two companions thinking of their trip through those unknown regions? There were, no doubt, mingled with these reflections, the keenest reminiscences of home and distant friends. Joe alone continued to manifest the same careless philosophy, finding it QUITE NATURAL that home should not be there, from the moment that he left it; but he respected the silent mood of his friends, the doctor
and Kennedy.

About ten the balloon anchored on the side of the Trembling Mountain, so called, because, in Arab tradition, it is said to tremble the instant that a Mussulman sets foot upon it. The travellers then partook of a substantial meal, and all quietly passed the night as usual, keeping the regular watches.

On awaking the next morning, they all had pleasanter feelings. The weather was fine, and the wind was blowing from the right quarter; so that a good breakfast, seasoned with Joe's merry pranks, put them in high good-humor.

The region they were now crossing is very extensive. It borders on the Mountains of the Moon on one side, and those of Darfur on the other—a space about as broad as Europe.

"We are, no doubt, crossing what is supposed to be the kingdom of Usoga. Geographers have pretended that there existed, in the centre of Africa, a vast depression, an immense central lake. We shall see whether there is any truth in that idea," said the doctor.

"But how did they come to think so?" asked Kennedy.

"From the recitals of the Arabs. Those fellows are great narrators—too much so, probably. Some travellers, who had got as far as Kazeh, or the great lakes, saw slaves that had been brought from this region; interrogated them concerning it, and, from their different narratives, made up a jumble of notions, and deduced systems from them. Down at the bottom of it all there is some appearance of truth; and you see that they were right about the sources of the Nile."

"Nothing could be more correct," said Kennedy. "It was by the aid of these documents that some attempts at maps were made, and so I am going to try to follow our route by one of them, rectifying it when need be."

"Is all this region inhabited?" asked Joe.

"Undoubtedly; and disagreeably inhabited, too."

"I thought so."

"These scattered tribes come, one and all, under the title of Nyam-Nyams, and this compound word is only a sort of nickname. It imitates the sound of chewing."

"That's it! Excellent!" said Joe, champing his teeth as though he were eating; "Nyam-Nyam."

"My good Joe, if you were the immediate object of this chewing, you wouldn't find it so excellent."

"Why, what's the reason, sir?"

"These tribes are considered man-eaters."

"Is that really the case?"

"Not a doubt of it! It has also been asserted that these natives had tails, like mere quadrupeds; but it was soon discovered that these appendages belonged to the skins of animals that they wore for clothing."

"More's the pity! a tail's a nice thing to chase away mosquitoes."

"That may be, Joe; but we must consign the story to the domain of fable, like the dogs' heads which the traveller, Brun-Rollet, attributed to other tribes."

"Dogs' heads, eh? Quite convenient for barking, and even for man-eating!"

"But one thing that has been, unfortunately, proven true, is, the ferocity of these tribes, who are really very fond of human flesh, and devour it with avidity."

"I only hope that they won't take such a particular fancy to mine!" said Joe, with comic solemnity.

"See that!" said Kennedy.

"Yes, indeed, sir; if I have to be eaten, in a moment of famine, I want it to be for your benefit and my master's; but the idea of feeding those black fellows--gracious! I'd die of shame!"

"Well, then, Joe," said Kennedy, "that's understood; we count upon you in case of need!"

"At your service, gentlemen!"

"Joe talks in this way so as to make us take good care of him, and fatten him up."

"Maybe so!" said Joe. "Every man for himself."

In the afternoon, the sky became covered with a warm mist, that oozed from the soil; the brownish vapor scarcely allowed the beholder to distinguish objects, and so, fearing collision with some unexpected mountain-peak, the doctor, about five o'clock, gave the signal to halt.

The night passed without accident, but in such profound obscurity, that it was necessary to use redoubled vigilance.

The monsoon blew with extreme violence during all the next morning. The wind buried itself in the lower cavities of the balloon and shook the appendage by which the dilating-pipes entered the main apparatus. They had, at last, to be tied up with cords, Joe acquitting himself very skilfully in performing that operation.

He had occasion to observe, at the same time, that the orifice of the balloon still remained hermetically sealed.

"That is a matter of double importance for us," said the doctor; "in the first place, we avoid the escape of precious gas, and then, again, we do not leave behind us an inflammable train, which we should at last inevitably set
fire to, and so be consumed."

"That would be a disagreeable travelling incident!" said Joe.

"Should we be hurled to the ground?" asked Kennedy.

"Hurled! No, not quite that. The gas would burn quietly, and we should descend little by little. A similar accident
happened to a French aeronaut, Madame Blanchard. She ignited her balloon while sending off fireworks, but she did
not fall, and she would not have been killed, probably, had not her car dashed against a chimney and precipitated her
to the ground."

"Let us hope that nothing of the kind may happen to us," said the hunter. "Up to this time our trip has not seemed
to me very dangerous, and I can see nothing to prevent us reaching our destination."

"Nor can I either, my dear Dick; accidents are generally caused by the imprudence of the aeronauts, or the
defective construction of their apparatus. However, in thousands of aerial ascensions, there have not been twenty
fatal accidents. Usually, the danger is in the moment of leaving the ground, or of alighting, and therefore at those
junctures we should never omit the utmost precaution."

"It's breakfast-time," said Joe; "we'll have to put up with preserved meat and coffee until Mr. Kennedy has had
another chance to get us a good slice of venison."

CHAPTER TWENTIETH.
The Celestial Bottle.--The Fig-Palms.--The Mammoth Trees.--The Tree of War.--The Winged Team.--Two
Native Tribes in Battle.--A Massacre.--An Intervention from above.

The wind had become violent and irregular; the balloon was running the gantlet through the air. Tossed at one
moment toward the north, at another toward the south, it could not find one steady current.

"We are moving very swiftly without advancing much," said Kennedy, remarking the frequent oscillations of the
needle of the compass.

"The balloon is rushing at the rate of at least thirty miles an hour. Lean over, and see how the country is gliding
away beneath us!" said the doctor.

"See! that forest looks as though it were precipitating itself upon us!"

"The forest has become a clearing!" added the other.

"And the clearing a village!" continued Joe, a moment or two later. "Look at the faces of those astonished
darkys!"

"Oh! it's natural enough that they should be astonished," said the doctor. "The French peasants, when they first
saw a balloon, fired at it, thinking that it was an aerial monster. A Soudan negro may be excused, then, for opening
his eyes VERY wide!"

"Faith!" said Joe, as the Victoria skimmed closely along the ground, at scarcely the elevation of one hundred
feet, and immediately over a village, "I'll throw them an empty bottle, with your leave, doctor, and if it reaches them
safe and sound, they'll worship it; if it breaks, they'll make talismans of the pieces."

So saying, he flung out a bottle, which, of course, was broken into a thousand fragments, while the negroes
scampered into their round huts, uttering shrill cries.

A little farther on, Kennedy called out: "Look at that strange tree! The upper part is of one kind and the lower
part of another!"

"Well!" said Joe, "here's a country where the trees grow on top of each other."

"It's simply the trunk of a fig-tree," replied the doctor, "on which there is a little vegetating earth. Some fine day,
the wind left the seed of a palm on it, and the seed has taken root and grown as though it were on the plain ground."

"A fine new style of gardening," said Joe, "and I'll import the idea to England. It would be just the thing in the
London parks; without counting that it would be another way to increase the number of fruit-trees. We could have
gardens up in the air; and the small house-owners would like that!"

At this moment, they had to raise the balloon so as to pass over a forest of trees that were more than three
hundred feet in height—a kind of ancient banyan.

"What magnificent trees!" exclaimed Kennedy. "I never saw anything so fine as the appearance of these
venerable forests. Look, doctor!"

"The height of these banyans is really remarkable, my dear Dick; and yet, they would be nothing astonishing in
the New World."

"Why, are there still loftier trees in existence?"

"Undoubtedly; among the 'mammoth trees' of California, there is a cedar four hundred and eighty feet in height.
It would overtop the Houses of Parliament, and even the Great Pyramid of Egypt. The trunk at the surface of the
ground was one hundred and twenty feet in circumference, and the concentric layers of the wood disclosed an age of
more than four thousand years."

"But then, sir, there was nothing wonderful in it! When one has lived four thousand years, one ought to be pretty tall!" was Joe's remark.

Meanwhile, during the doctor's recital and Joe's response, the forest had given place to a large collection of huts surrounding an open space. In the middle of this grew a solitary tree, and Joe exclaimed, as he caught sight of it:

"Well! if that tree has produced such flowers as those, for the last four thousand years, I have to offer it my compliments, anyhow," and he pointed to a gigantic sycamore, whose whole trunk was covered with human bones. The flowers of which Joe spoke were heads freshly severed from the bodies, and suspended by daggers thrust into the bark of the tree.

"The war-tree of these cannibals!" said the doctor; "the Indians merely carry off the scalp, but these negroes take the whole head."

"A mere matter of fashion!" said Joe. But, already, the village and the bleeding heads were disappearing on the horizon. Another place offered a still more revolting spectacle--half-devoured corpses; skeletons mouldering to dust; human limbs scattered here and there, and left to feed the jackals and hyenas.

"No doubt, these are the bodies of criminals; according to the custom in Abyssinia, these people have left them a prey to the wild beasts, who kill them with their terrible teeth and claws, and then devour them at their leisure."

"Not a whit more cruel than hanging!" said the Scot; "filthier, that's all!"

"In the southern regions of Africa, they content themselves," resumed the doctor, "with shutting up the criminal in his own hut with his cattle, and sometimes with his family. They then set fire to the hut, and the whole party are burned together. I call that cruel; but, like friend Kennedy, I think that the gallows is quite as cruel, quite as barbarous."

Joe, by the aid of his keen sight, which he did not fail to use continually, noticed some flocks of birds of prey flitting about the horizon.

"They are eagles!" exclaimed Kennedy, after reconnoitring them through the glass, "magnificent birds, whose flight is as rapid as ours."

"Heaven preserve us from their attacks!" said the doctor, "they are more to be feared by us than wild beasts or savage tribes."

"Bah!" said the hunter, "we can drive them off with a few rifle-shots."

"Nevertheless, I would prefer, dear Dick, not having to rely upon your skill, this time, for the silk of our balloon could not resist their sharp beaks; fortunately, the huge birds will, I believe, be more frightened than attracted by our machine."

"Yes! but a new idea, and I have dozens of them," said Joe; "if we could only manage to capture a team of live eagles, we could hitch them to the balloon, and they'd haul us through the air!"

"The thing has been seriously proposed," replied the doctor, "but I think it hardly practicable with creatures naturally so restive."

"Oh! we'd tame them," said Joe. "Instead of driving them with bits, we'd do it with eye-blinkers that would cover their eyes. Half blinded in that way, they'd go to the right or to the left, as we desired; when blinded completely, they would stop."

"Allow me, Joe, to prefer a favorable wind to your team of eagles. It costs less for fodder, and is more reliable."

"Well, you may have your choice, master, but I stick to my idea."

It now was noon. The Victoria had been going at a more moderate speed for some time; the country merely passed below it; it no longer flew.

Suddenly, shouts and whistlings were heard by our aeronauts, and, leaning over the edge of the car, they saw on the open plain below them an exciting spectacle.

Two hostile tribes were fighting furiously, and the air was dotted with volleys of arrows. The combatants were so intent upon their murderous work that they did not notice the arrival of the balloon; there were about three hundred mingled confusedly in the deadly struggle: most of them, red with the blood of the wounded, in which they fairly wallowed, were horrible to behold.

As they at last caught sight of the balloon, there was a momentary pause; but their yells redoubled, and some arrows were shot at the Victoria, one of them coming close enough for Joe to catch it with his hand.

"Let us rise out of range," exclaimed the doctor; "there must be no rashness! We are forbidden any risk."

Meanwhile, the massacre continued on both sides, with battle-axes and war-clubs; as quickly as one of the combatants fell, a hostile warrior ran up to cut off his head, while the women, mingling in the fray, gathered up these bloody trophies, and piled them together at either extremity of the battle-field. Often, too, they even fought for these hideous spoils.

"What a frightful scene!" said Kennedy, with profound disgust.
"They're ugly acquaintances!" added Joe; "but then, if they had uniforms they'd be just like the fighters of all the rest of the world!"

"I have a keen hankering to take a hand in at that fight," said the hunter, brandishing his rifle.

"No! no!" objected the doctor, vehemently; "no, let us not meddle with what don't concern us. Do you know which is right or which is wrong, that you would assume the part of the Almighty? Let us, rather, hurry away from this revolting spectacle. Could the great captains of the world float thus above the scenes of their exploits, they would at last, perhaps, conceive a disgust for blood and conquest."

The chieftain of one of the contending parties was remarkable for his athletic proportions, his great height, and herculean strength. With one hand he plunged his spear into the compact ranks of his enemies, and with the other mowed large spaces in them with his battle-axe. Suddenly he flung away his war-club, red with blood, rushed upon a wounded warrior, and, chopping off his arm at a single stroke, carried the dissevered member to his mouth, and bit it again and again.

"Ah!" ejaculated Kennedy, "the horrible brute! I can hold back no longer," and, as he spoke, the huge savage, struck full in the forehead with a rifle-ball, fell headlong to the ground.

Upon this sudden mishap of their leader, his warriors seemed struck dumb with amazement; his supernatural death awed them, while it reanimated the courage and ardor of their adversaries, and, in a twinkling, the field was abandoned by half the combatants.

"Come, let us look higher up for a current to bear us away. I am sick of this spectacle," said the doctor.

But they could not get away so rapidly as to avoid the sight of the victorious tribe rushing upon the dead and the wounded, scrambling and disputing for the still warm and reeking flesh, and eagerly devouring it.

"Faugh!" uttered Joe, "it's sickening."

The balloon rose as it expanded; the howlings of the brutal horde, in the delirium of their orgy, pursued them for a few minutes; but, at length, borne away toward the south, they were carried out of sight and hearing of this horrible spectacle of cannibalism.

The surface of the country was now greatly varied, with numerous streams of water, bearing toward the east. The latter, undoubtedly, ran into those affluents of Lake Nu, or of the River of the Gazelles, concerning which M. Guillaume Lejean has given such curious details.

At nightfall, the balloon cast anchor in twenty-seven degrees east longitude, and four degrees twenty minutes north latitude, after a day's trip of one hundred and fifty miles.

CHAPTER TWENTY-FIRST.

The night came on very dark. The doctor had not been able to reconnoitre the country. He had made fast to a very tall tree, from which he could distinguish only a confused mass through the gloom.

As usual, he took the nine-o'clock watch, and at midnight Dick relieved him.

"Keep a sharp lookout, Dick!" was the doctor's good-night injunction.

"Is there any thing new on the carpet?"

"No; but I thought that I heard vague sounds below us, and, as I don't exactly know where the wind has carried us to, even an excess of caution would do no harm."

"You've probably heard the cries of wild beasts."

"No! the sounds seemed to me something altogether different from that; at all events, on the least alarm don't fail to waken us."

"I'll do so, doctor; rest easy."

After listening attentively for a moment or two longer, the doctor, hearing nothing more, threw himself on his blankets and went asleep.

The sky was covered with dense clouds, but not a breath of air was stirring; and the balloon, kept in its place by only a single anchor, experienced not the slightest oscillation.

Kennedy, leaning his elbow on the edge of the car, so as to keep an eye on the cylinder, which was actively at work, gazed out upon the calm obscurity; he eagerly scanned the horizon, and, as often happens to minds that are uneasy or possessed with preconceived notions, he fancied that he sometimes detected vague gleams of light in the distance.

At one moment he even thought that he saw them only two hundred paces away, quite distinctly, but it was a mere flash that was gone as quickly as it came, and he noticed nothing more. It was, no doubt, one of those luminous illusions that sometimes impress the eye in the midst of very profound darkness.
Kennedy was getting over his nervousness and falling into his wandering meditations again, when a sharp whistle pierced his ear.

Was that the cry of an animal or of a night-bird, or did it come from human lips?

Kennedy, perfectly comprehending the gravity of the situation, was on the point of waking his companions, but he reflected that, in any case, men or animals, the creatures that he had heard must be out of reach. So he merely saw that his weapons were all right, and then, with his night-glass, again plunged his gaze into space.

It was not long before he thought he could perceive below him vague forms that seemed to be gliding toward the tree, and then, by the aid of a ray of moonlight that shot like an electric flash between two masses of cloud, he distinctly made out a group of human figures moving in the shadow.

The adventure with the dog-faced baboons returned to his memory, and he placed his hand on the doctor's shoulder.

The latter was awake in a moment.

"Silence!" said Dick, "Let us speak below our breath."

"Has anything happened?"

"Yes, let us waken Joe."

The instant that Joe was aroused, Kennedy told him what he had seen.

"Those confounded monkeys again!" said Joe.

"Possibly, but we must be on our guard."

"Joe and I," said Kennedy, "will climb down the tree by the ladder."

"And, in the meanwhile," added the doctor, "I will take my measures so that we can ascend rapidly at a moment's warning."

"Agreed!"

"Let us go down, then!" said Joe.

"Don't use your weapons, excepting at the last extremity! It would be a useless risk to make the natives aware of our presence in such a place as this."

Dick and Joe replied with signs of assent, and then letting themselves slide noiselessly toward the tree, took their position in a fork among the strong branches where the anchor had caught.

For some moments they listened minutely and motionlessly among the foliage, and ere long Joe seized Kennedy's hand as he heard a sort of rubbing sound against the bark of the tree.

"Don't you hear that?" he whispered.

"Yes, and it's coming nearer."

"Suppose it should be a serpent? That hissing or whistling that you heard before--"

"No! there was something human in it."

"I'd prefer the savages, for I have a horror of those snakes."

"The noise is increasing," said Kennedy, again, after a lapse of a few moments.

"Yes! something's coming up toward us--climbing."

"Keep watch on this side, and I'll take care of the other."

"Very good!"

There they were, isolated at the top of one of the larger branches shooting out in the midst of one of those miniature forests called baobab-trees. The darkness, heightened by the density of the foliage, was profound; however, Joe, leaning over to Kennedy's ear and pointing down the tree, whispered:

"The blacks! They're climbing toward us."

The two friends could even catch the sound of a few words uttered in the lowest possible tones.

Joe gently brought his rifle to his shoulder as he spoke.

"Wait!" said Kennedy.

Some of the natives had really climbed the baobab, and now they were seen rising on all sides, winding along the boughs like reptiles, and advancing slowly but surely, all the time plainly enough discernible, not merely to the eye but to the nostrils, by the horrible odors of the rancid grease with which they bedaub their bodies.

Ere long, two heads appeared to the gaze of Kennedy and Joe, on a level with the very branch to which they were clinging.

"Attention!" said Kennedy. "Fire!"

The double concussi0n resounded like a thunderbolt and died away into cries of rage and pain, and in a moment the whole horde had disappeared.

But, in the midst of these yells and howls, a strange, unexpected--nay what seemed an impossible--cry had been heard! A human voice had, distinctly, called aloud in the French language--

"Help! help!"
Kennedy and Joe, dumb with amazement, had regained the car immediately.

"Did you hear that?" the doctor asked them.

"Undoubtedly, that supernatural cry, 'A moi! a moi!' comes from a Frenchman in the hands of these barbarians!"

"A traveller."

"A missionary, perhaps."

"Poor wretch!" said Kennedy, "they're assassinating him--making a martyr of him!"

The doctor then spoke, and it was impossible for him to conceal his emotions.

"There can be no doubt of it," he said; "some unfortunate Frenchman has fallen into the hands of these savages.

We must not leave this place without doing all in our power to save him. When he heard the sound of our guns, he recognized an unlooked-for assistance, a providential interposition. We shall not disappoint his last hope. Are such your views?"

"They are, doctor, and we are ready to obey you."

"Let us, then, lay our heads together to devise some plan, and in the morning we'll try to rescue him."

"But how shall we drive off those abominable blacks?" asked Kennedy.

"It's quite clear to me, from the way in which they made off, that they are unacquainted with fire-arms. We must, therefore, profit by their fears; but we shall await daylight before acting, and then we can form our plans of rescue according to circumstances."

"The poor captive cannot be far off," said Joe, "because--"

"Help! help!" repeated the voice, but much more feebly this time.

"The savage wretches!" exclaimed Joe, trembling with indignation. "Suppose they should kill him to-night!"

"Do you hear, doctor," resumed Kennedy, seizing the doctor's hand. "Suppose they should kill him to-night!"

"It is not at all likely, my friends. These savage tribes kill their captives in broad daylight; they must have the sunshine."

"Now, if I were to take advantage of the darkness to slip down to the poor fellow?" said Kennedy.

"And I'll go with you," said Joe, warmly.

"Pause, my friends--pause! The suggestion does honor to your hearts and to your courage; but you would expose us all to great peril, and do still greater harm to the unfortunate man whom you wish to aid."

"Why so?" asked Kennedy. "These savages are frightened and dispersed: they will not return."

"Dick, I implore you, heed what I say. I am acting for the common good; and if by any accident you should be taken by surprise, all would be lost."

"But, think of that poor wretch, hoping for aid, waiting there, praying, calling aloud. Is no one to go to his assistance? He must think that his senses deceived him; that he heard nothing!"

"We can reassure him, on that score," said Dr. Ferguson --and, standing erect, making a speaking-trumpet of his hands, he shouted at the top of his voice, in French: "Whoever you are, be of good cheer! Three friends are watching over you."

A terrific howl from the savages responded to these words--no doubt drowning the prisoner's reply.

"They are murdering him! they are murdering him!" exclaimed Kennedy. "Our interference will have served no other purpose than to hasten the hour of his doom. We must act!"

"But how, Dick? What do you expect to do in the midst of this darkness?"

"Oh, if it was only daylight!" sighed Joe.

"Well, and suppose it were daylight?" said the doctor, in a singular tone.

"Nothing more simple, doctor," said Kennedy. "I'd go down and scatter all these savage villains with powder and ball!"

"And you, Joe, what would you do?"

"I, master? why, I'd act more prudently, maybe, by telling the prisoner to make his escape in a certain direction that we'd agree upon."

"And how would you get him to know that?"

"By means of this arrow that I caught flying the other day. I'd tie a note to it, or I'd just call out to him in a loud voice what you want him to do, because these black fellows don't understand the language that you'd speak in!"

"Your plans are impracticable, my dear friends. The greatest difficulty would be for this poor fellow to escape at all--even admitting that he should manage to elude the vigilance of his captors. As for you, my dear Dick, with determined daring, and profiting by their alarm at our fire-arms, your project might possibly succeed; but, were it to fail, you would be lost, and we should have two persons to save instead of one. No! we must put ALL the chances on OUR side, and go to work differently."

"But let us act at once!" said the hunter.

"Perhaps we may," said the doctor, throwing considerable stress upon the words.
"Why, doctor, can you light up such darkness as this?"
"Who knows, Joe?"
"Ah! if you can do that, you're the greatest learned man in the world!"

The doctor kept silent for a few moments; he was thinking. His two companions looked at him with much emotion, for they were greatly excited by the strangeness of the situation. Ferguson at last resumed:

"Here is my plan: We have two hundred pounds of ballast left, since the bags we brought with us are still untouched. I'll suppose that this prisoner, who is evidently exhausted by suffering, weighs as much as one of us; there will still remain sixty pounds of ballast to throw out, in case we should want to ascend suddenly."

"How do you expect to manage the balloon?" asked Kennedy.

"This is the idea, Dick: you will admit that if I can get to the prisoner, and throw out a quantity of ballast, equal to his weight, I shall have in no wise altered the equilibrium of the balloon. But, then, if I want to get a rapid ascension, so as to escape these savages, I must employ means more energetic than the cylinder. Well, then, in throwing out this overplus of ballast at a given moment, I am certain to rise with great rapidity."

"That's plain enough."

"Yes; but there is one drawback: it consists in the fact that, in order to descend after that, I should have to part with a quantity of gas proportionate to the surplus ballast that I had thrown out. Now, the gas is precious; but we must not haggle over it when the life of a fellow-creature is at stake."

"You are right, sir; we must do every thing in our power to save him."

"Let us work, then, and get these bags all arranged on the rim of the car, so that they may be thrown overboard at one movement."

"But this darkness?"

"It hides our preparations, and will be dispersed only when they are finished. Take care to have all our weapons close at hand. Perhaps we may have to fire; so we have one shot in the rifle; four for the two muskets; twelve in the two revolvers; or seventeen in all, which might be fired in a quarter of a minute. But perhaps we shall not have to resort to all this noisy work. Are you ready?"

"We're ready," responded Joe.

The sacks were placed as requested, and the arms were put in good order.

"Very good!" said the doctor. "Have an eye to every thing. Joe will see to throwing out the ballast, and Dick will carry off the prisoner; but let nothing be done until I give the word. Joe will first detach the anchor, and then quickly make his way back to the car."

Joe let himself slide down by the rope; and, in a few moments, reappeared at his post; while the balloon, thus liberated, hung almost motionless in the air.

In the mean time the doctor assured himself of the presence of a sufficient quantity of gas in the mixing-tank to feed the cylinder, if necessary, without there being any need of resorting for some time to the Buntzen battery. He then took out the two perfectly-isolated conducting-wires, which served for the decomposition of the water, and, searching in his travelling-sack, brought forth two pieces of charcoal, cut down to a sharp point, and fixed one at the end of each wire.

His two friends looked on, without knowing what he was about, but they kept perfectly silent. When the doctor had finished, he stood up erect in the car, and, taking the two pieces of charcoal, one in each hand, drew their points nearly together.

In a twinkling, an intense and dazzling light was produced, with an insupportable glow between the two pointed ends of charcoal, and a huge jet of electric radiance literally broke the darkness of the night.

"Oh!" ejaculated the astonished friends.

"Not a word!" cautioned the doctor.

CHAPTER TWENTY-SECOND.

The Jet of Light.--The Missionary.--The Rescue in a Ray of Electricity.--A Lazarist Priest.--But little Hope.--The Doctor's Care.--A Life of Self-Denial.--Passing a Volcano.

Dr. Ferguson darted his powerful electric jet toward various points of space, and caused it to rest on a spot from which shouts of terror were heard. His companions fixed their gaze eagerly on the place.

The baobab, over which the balloon was hanging almost motionless, stood in the centre of a clearing, where, between fields of Indian-corn and sugar-cane, were seen some fifty low, conical huts, around which swarmed a numerous tribe.

A hundred feet below the balloon stood a large post, or stake, and at its foot lay a human being—a young man of thirty years or more, with long black hair, half naked, wasted and wan, bleeding, covered with wounds, his head
bowed over upon his breast, as Christ's was, when He hung upon the cross.

The hair, cut shorter on the top of his skull, still indicated the place of a half-effaced tonsure.

"A missionary! a priest!" exclaimed Joe.

"Poor, unfortunate man!" said Kennedy.

"We must save him, Dick!" responded the doctor; "we must save him!"

The crowd of blacks, when they saw the balloon over their heads, like a huge comet with a train of dazzling light, were seized with a terror that may be readily imagined. Upon hearing their cries, the prisoner raised his head. His eyes gleamed with sudden hope, and, without too thoroughly comprehending what was taking place, he stretched out his hands to his unexpected deliverers.

"He is alive!" exclaimed Ferguson. "God be praised! The savages have got a fine scare, and we shall save him! Are you ready, friends?"

"Ready, doctor, at the word."

"Joe, shut off the cylinder!"

The doctor's order was executed. An almost imperceptible breath of air impelled the balloon directly over the prisoner, at the same time that it gently lowered with the contraction of the gas. For about ten minutes it remained floating in the midst of luminous waves, for Ferguson continued to flash right down upon the throng his glowing sheaf of rays, which, here and there, marked out swift and vivid sheets of light. The tribe, under the influence of an indescribable terror, disappeared little by little in the huts, and there was complete solitude around the stake. The doctor had, therefore, been right in counting upon the fantastic appearance of the balloon throwing out rays, as vivid as the sun's, through this intense gloom.

The car was approaching the ground; but a few of the savages, more audacious than the rest, guessing that their victim was about to escape from their clutches, came back with loud yells, and Kennedy seized his rifle. The doctor, however, besought him not to fire.

The priest, on his knees, for he had not the strength to stand erect, was not even fastened to the stake, his weakness rendering that precaution superfluous. At the instant when the car was close to the ground, the brawny Scot, laying aside his rifle, and seizing the priest around the waist, lifted him into the car, while, at the same moment, Joe tossed over the two hundred pounds of ballast.

The doctor had expected to ascend rapidly, but, contrary to his calculations, the balloon, after going up some three or four feet, remained perfectly motionless.

"What holds us?" he asked, with an accent of terror.

Some of the savages were running toward them, uttering ferocious cries.

"Ah, ha!" said Joe, "one of those cursed blacks is hanging to the car!"

"Dick! Dick!" cried the doctor, "the water-tank!"

Kennedy caught his friend's idea on the instant, and, snatching up with desperate strength one of the water-tanks weighing about one hundred pounds, he tossed it overboard. The balloon, thus suddenly lightened, made a leap of three hundred feet into the air, amid the howlings of the tribe whose prisoner thus escaped them in a blaze of dazzling light.

"Hurrah!" shouted the doctor's comrades.

Suddenly, the balloon took a fresh leap, which carried it up to an elevation of a thousand feet.

"What's that?" said Kennedy, who had nearly lost his balance.

"Oh! nothing; only that black villain leaving us!" replied the doctor, tranquilly, and Joe, leaning over, saw the savage that had clung to the car whirling over and over, with his arms outstretched in the air, and presently dashed to pieces on the ground. The doctor then separated his electric wires, and every thing was again buried in profound obscurity. It was now one o'clock in the morning.

The Frenchman, who had swooned away, at length opened his eyes.

"You are saved!" were the doctor's first words.

"Saved!" he with a sad smile replied in English, "saved from a cruel death! My brethren, I thank you, but my days are numbered, nay, even my hours, and I have but little longer to live."

With this, the missionary, again yielding to exhaustion, relapsed into his fainting-fit.

"He is dying!" said Kennedy.

"No," replied the doctor, bending over him, "but he is very weak; so let us lay him under the awning."

And they did gently deposit on their blankets that poor, wasted body, covered with scars and wounds, still bleeding where fire and steel had, in twenty places, left their agonizing marks. The doctor, taking an old handkerchief, quickly prepared a little lint, which he spread over the wounds, after having washed them. These rapid attentions were bestowed with the celerity and skill of a practised surgeon, and, when they were complete, the doctor, taking a cordial from his medicine-chest, poured a few drops upon his patient's lips.
The latter feebly pressed his kind hands, and scarcely had the strength to say, "Thank you! thank you!"

The doctor comprehended that he must be left perfectly quiet; so he closed the folds of the awning and resumed the guidance of the balloon.

The latter, after taking into account the weight of the new passenger, had been lightened of one hundred and eighty pounds, and therefore kept aloft without the aid of the cylinder. At the first dawn of day, a current drove it gently toward the west-northwest. The doctor went in under the awning for a moment or two, to look at his still sleeping patient.

"May Heaven spare the life of our new companion! Have you any hope?" said the Scot.

"Yes, Dick, with care, in this pure, fresh atmosphere."

"How that man has suffered!" said Joe, with feeling. "He did bolder things than we've done, in venturing all alone among those savage tribes!"

"That cannot be questioned," assented the hunter.

During the entire day the doctor would not allow the sleep of his patient to be disturbed. It was really a long stupor, broken only by an occasional murmur of pain that continued to disquiet and agitate the doctor greatly.

Toward evening the balloon remained stationary in the midst of the gloom, and during the night, while Kennedy and Joe relieved each other in carefully tending the sick man, Ferguson kept watch over the safety of all.

By the morning of the next day, the balloon had moved, but very slightly, to the westward. The dawn came up pure and magnificent. The sick man was able to call his friends with a stronger voice. They raised the curtains of the awning, and he inhaled with delight the keen morning air.

"How do you feel to-day?" asked the doctor.

"Better, perhaps," he replied. "But you, my friends, I have not seen you yet, excepting in a dream! I can, indeed, scarcely recall what has occurred. Who are you --that your names may not be forgotten in my dying prayers?"

"We are English travellers," replied Ferguson. "We are trying to cross Africa in a balloon, and, on our way, we have had the good fortune to rescue you."

"Science has its heroes," said the missionary.

"But religion its martyrs!" rejoined the Scot.

"Are you a missionary?" asked the doctor.

"I am a priest of the Lazarist mission. Heaven sent you to me--Heaven be praised! The sacrifice of my life had been accomplished! But you come from Europe; tell me about Europe, about France! I have been without news for the last five years!"

"Five years! alone! and among these savages!" exclaimed Kennedy with amazement.

"They are souls to redeem! ignorant and barbarous brethren, whom religion alone can instruct and civilize."

Dr. Ferguson, yielding to the priest's request, talked to him long and fully about France. He listened eagerly, and his eyes filled with tears. He seized Kennedy's and Joe's hands by turns in his own, which were burning with fever. The doctor prepared him some tea, and he drank it with satisfaction. After that, he had strength enough to raise himself up a little, and smiled with pleasure at seeing himself borne along through so pure a sky.

"You are daring travellers!" he said, "and you will succeed in your bold enterprise. You will again behold your relatives, your friends, your country--you--"

At this moment, the weakness of the young missionary became so extreme that they had to lay him again on the bed, where a prostration, lasting for several hours, held him like a dead man under the eye of Dr. Ferguson. The latter could not suppress his emotion, for he felt that this life now in his charge was ebbing away. Were they then so soon to lose him whom they had snatched from an agonizing death? The doctor again washed and dressed the young martyr's frightful wounds, and had to sacrifice nearly his whole stock of water to refresh his burning limbs. He surrounded him with the tenderest and most intelligent care, until, at length, the sick man revived, little by little, in his arms, and recovered his consciousness if not his strength.

The doctor was able to gather something of his history from his broken murmurs.

"Speak in your native language," he said to the sufferer; "I understand it, and it will fatigue you less."

The missionary was a poor young man from the village of Aradon, in Brittany, in the Morbihan country. His earliest instincts had drawn him toward an ecclesiastical career, but to this life of self-sacrifice he was also desirous of joining a life of danger, by entering the mission of the order of priesthood of which St. Vincent de Paul was the founder, and, at twenty, he quit his country for the inhospitable shores of Africa. From the sea-coast, overcoming obstacles, little by little, braving all privations, pushing onward, afoot, and praying, he had advanced to the very centre of those tribes that dwell among the tributary streams of the Upper Nile. For two years his faith was spurned, his zeal denied recognition, his charities taken in ill part, and he remained a prisoner to one of the cruelest tribes of the Nyamburra, the object of every species of maltreatment. But still he went on teaching, instructing, and praying. The tribe having been dispersed and he left for dead, in one of those combats which are so frequent between the
tribes, instead of retracing his steps, he persisted in his evangelical mission. His most tranquil time was when he was taken for a madman. Meanwhile, he had made himself familiar with the idioms of the country, and he catechised in them. At length, during two more long years, he traversed these barbarous regions, impelled by that superhuman energy that comes from God. For a year past he had been residing with that tribe of the Nyam-Nyams known as the Barafri, one of the wildest and most ferocious of them all. The chief having died a few days before our travellers appeared, his sudden death was attributed to the missionary, and the tribe resolved to immolate him. His sufferings had already continued for the space of forty hours, and, as the doctor had supposed, he was to have perished in the blaze of the noonday sun. When he heard the sound of fire-arms, nature got the best of him, and he had cried out, "Help! help!" He then thought that he must have been dreaming, when a voice, that seemed to come from the sky, had uttered words of consolation.

"I have no regrets," he said, "for the life that is passing away from me; my life belongs to God!"

"Hope still!" said the doctor; "we are near you, and we will save you now, as we saved you from the tortures of the stake."

"I do not ask so much of Heaven," said the priest, with resignation. "Blessed be God for having vouchsafed to me the joy before I die of having pressed your friendly hands, and having heard, once more, the language of my country!"

The missionary here grew weak again, and the whole day went by between hope and fear, Kennedy deeply moved, and Joe drawing his hand over his eyes more than once when he thought that no one saw him.

The balloon made little progress, and the wind seemed as though unwilling to jostle its precious burden.

Toward evening, Joe discovered a great light in the west. Under more elevated latitudes, it might have been mistaken for an immense aurora borealis, for the sky appeared on fire. The doctor very attentively examined the phenomenon.

"It is, perhaps, only a volcano in full activity," said he.

"But the wind is carrying us directly over it," replied Kennedy.

"Very well, we shall cross it then at a safe height!" said the doctor.

Three hours later, the Victoria was right among the mountains. Her exact position was twenty-four degrees fifteen minutes east longitude, and four degrees forty-two minutes north latitude, and four degrees forty-two minutes north latitude. In front of her a volcanic crater was pouring forth torrents of melted lava, and hurling masses of rock to an enormous height. There were jets, too, of liquid fire that fell back in dazzling cascades--a superb but dangerous spectacle, for the wind with unswerving certainty was carrying the balloon directly toward this blazing atmosphere.

This obstacle, which could not be turned, had to be crossed, so the cylinder was put to its utmost power, and the balloon rose to the height of six thousand feet, leaving between it and the volcano a space of more than three hundred fathoms.

From his bed of suffering, the dying missionary could contemplate that fiery crater from which a thousand jets of dazzling flame were that moment escaping.

"How grand it is!" said he, "and how infinite is the power of God even in its most terrible manifestations!"

This overflow of blazing lava wrapped the sides of the mountain with a veritable drapery of flame; the lower half of the balloon glowed redly in the upper night; a torrid heat ascended to the car, and Dr. Ferguson made all possible haste to escape from this perilous situation.

By ten o'clock the volcano could be seen only as a red point on the horizon, and the balloon tranquilly pursued her course in a less elevated zone of the atmosphere.

CHAPTER TWENTY-THIRD.


A magnificent night overspread the earth, and the missionary lay quietly asleep in utter exhaustion.

"He'll not get over it!" sighed Joe. "Poor young fellow--scarcely thirty years of age!"

"He'll die in our arms. His breathing, which was so feeble before, is growing weaker still, and I can do nothing to save him," said the doctor, despairingly.

"The infamous scoundrels!" exclaimed Joe, grinding his teeth, in one of those fits of rage that came over him at long intervals; "and to think that, in spite of all, this good man could find words only to pity them, to excuse, to pardon them!"

"Heaven has given him a lovely night, Joe--his last on earth, perhaps! He will suffer but little more after this, and his dying will be only a peaceful falling asleep."
The dying man uttered some broken words, and the doctor at once went to him. His breathing became difficult, and he asked for air. The curtains were drawn entirely back, and he inhaled with rapture the light breezes of that clear, beautiful night. The stars sent him their trembling rays, and the moon wrapped him in the white winding-sheet of its effulgence.

"My friends," said he, in an enfeebled voice, "I am going. May God requite you, and bring you to your safe harbor! May he pay for me the debt of gratitude that I owe to you!"

"You must still hope," replied Kennedy. "This is but a passing fit of weakness. You will not die. How could any one die on this beautiful summer night?"

"Death is at hand," replied the missionary, "I know it! Let me look it in the face! Death, the commencement of things eternal, is but the end of earthly cares. Place me upon my knees, my brethren, I beseech you!"

Kennedy lifted him up, and it was distressing to see his weakened limbs bend under him.

"My God! my God!" exclaimed the dying apostle, "have pity on me!"

His countenance shone. Far above that earth on which he had known no joys; in the midst of that night which sent to him its softest radiance; on the way to that heaven toward which he uplifted his spirit, as though in a miraculous assumption, he seemed already to live and breathe in the new existence.

His last gesture was a supreme blessing on his new friends of only one day. Then he fell back into the arms of Kennedy, whose countenance was bathed in hot tears.

"Dead!" said the doctor, bending over him, "dead!" And with one common accord, the three friends knelt together in silent prayer.

"To-morrow," resumed the doctor, "we shall bury him in the African soil which he has besprinkled with his blood."

During the rest of the night the body was watched, turn by turn, by the three travellers, and not a word disturbed the solemn silence. Each of them was weeping.

The next day the wind came from the south, and the balloon moved slowly over a vast plateau of mountains: there, were extinct craters; here, barren ravines; not a drop of water on those parched crests; piles of broken rocks; huge stony masses scattered hither and thither, and, interspersed with whitish marl, all indicated the most complete sterility.

Toward noon, the doctor, for the purpose of burying the body, decided to descend into a ravine, in the midst of some plutonic rocks of primitive formation. The surrounding mountains would shelter him, and enable him to bring his car to the ground, for there was no tree in sight to which he could make it fast.

But, as he had explained to Kennedy, it was now impossible for him to descend, except by releasing a quantity of gas proportionate to his loss of ballast at the time when he had rescued the missionary. He therefore opened the valve of the outside balloon. The hydrogen escaped, and the Victoria quietly descended into the ravine.

As soon as the car touched the ground, the doctor shut the valve. Joe leaped out, holding on the while to the rim of the car with one hand, and with the other gathering up a quantity of stones equal to his own weight. He could then use both hands, and had soon heaped into the car more than five hundred pounds of stones, which enabled both the doctor and Kennedy, in their turn, to get out. Thus the Victoria found herself balanced, and her ascensional force insufficient to raise her.

Moreover, it was not necessary to gather many of these stones, for the blocks were extremely heavy, so much so, indeed, that the doctor's attention was attracted by the circumstance. The soil, in fact, was bestrewn with quartz and porphyritic rocks.

"This is a singular discovery!" said the doctor, mentally.

In the mean while, Kennedy and Joe had strolled away a few paces, looking up a proper spot for the grave. The heat was extreme in this ravine, shut in as it was like a sort of furnace. The noonday sun poured down its rays perpendicularly into it.

The first thing to be done was to clear the surface of the fragments of rock that encumbered it, and then a quite deep grave had to be dug, so that the wild animals should not be able to disinter the corpse.

The body of the martyred missionary was then solemnly placed in it. The earth was thrown in over his remains, and above it masses of rock were deposited, in rude resemblance to a tomb.

The doctor, however, remained motionless, and lost in his reflections. He did not even heed the call of his companions, nor did he return with them to seek a shelter from the heat of the day.

"What are you thinking about, doctor?" asked Kennedy.

"About a singular freak of Nature, a curious effect of chance. Do you know, now, in what kind of soil that man of self-denial, that poor one in spirit, has just been buried?"

"No! what do you mean, doctor?"

"That priest, who took the oath of perpetual poverty, now reposes in a gold-mine!"
"A gold-mine!" exclaimed Kennedy and Joe in one breath.
"Yes, a gold-mine," said the doctor, quietly. "Those blocks which you are trampling under foot, like worthless stones, contain gold-ore of great purity."
"Impossible! impossible!" repeated Joe.
"You would not have to look long among those fissures of slaty schist without finding peptites of considerable value."

Joe at once rushed like a crazy man among the scattered fragments, and Kennedy was not long in following his example.

"Keep cool, Joe," said his master.
"Why, doctor, you speak of the thing quite at your ease."
"What! a philosopher of your mettle--"
"Ah, master, no philosophy holds good in this case!"
"Come! come! Let us reflect a little. What good would all this wealth do you? We cannot carry any of it away with us."
"We can't take any of it with us, indeed?"
"It's rather too heavy for our car! I even hesitated to tell you any thing about it, for fear of exciting your regret!"
"What!" said Joe, again, "abandon these treasures --a fortune for us!--really for us--our own--leave it behind!"
"Take care, my friend! Would you yield to the thirst for gold? Has not this dead man whom you have just helped to bury, taught you the vanity of human affairs?"
"All that is true," replied Joe, "but gold! Mr. Kennedy, won't you help to gather up a trifle of all these millions?"
"What could we do with them, Joe?" said the hunter, unable to repress a smile. "We did not come hither in search of fortune, and we cannot take one home with us."
"The millions are rather heavy, you know," resumed the doctor, "and cannot very easily be put into one's pocket."
"But, at least," said Joe, driven to his last defences, "couldn't we take some of that ore for ballast, instead of sand?"
"Very good! I consent," said the doctor, "but you must not make too many wry faces when we come to throw some thousands of crowns' worth overboard."
"Thousands of crowns!" echoed Joe; "is it possible that there is so much gold in them, and that all this is the same?"
"Yes, my friend, this is a reservoir in which Nature has been heaping up her wealth for centuries! There is enough here to enrich whole nations! An Australia and a California both together in the midst of the wilderness!"
"And the whole of it is to remain useless!"
"Perhaps! but at all events, here's what I'll do to console you."
"That would be rather difficult to do!" said Joe, with a contrite air.
"Listen! I will take the exact bearings of this spot, and give them to you, so that, upon your return to England, you can tell our countrymen about it, and let them have a share, if you think that so much gold would make them happy."
"Ah! master, I give up; I see that you are right, and that there is nothing else to be done. Let us fill our car with the precious mineral, and what remains at the end of the trip will be so much made."

And Joe went to work. He did so, too, with all his might, and soon had collected more than a thousand pieces of quartz, which contained gold enclosed as though in an extremely hard crystal casket.

The doctor watched him with a smile; and, while Joe went on, he took the bearings, and found that the missionary's grave lay in twenty-two degrees twenty-three minutes east longitude, and four degrees fifty-five minutes north latitude.

Then, casting one glance at the swelling of the soil, beneath which the body of the poor Frenchman reposed, he went back to his car.

He would have erected a plain, rude cross over the tomb, left solitary thus in the midst of the African deserts, but not a tree was to be seen in the environs.
"God will recognize it!" said Kennedy.

An anxiety of another sort now began to steal over the doctor's mind. He would have given much of the gold before him for a little water--for he had to replace what had been thrown overboard when the negro was carried up into the air. But it was impossible to find it in these arid regions; and this reflection gave him great uneasiness. He had to feed his cylinder continually; and he even began to find that he had not enough to quench the thirst of his party. Therefore he determined to lose no opportunity of replenishing his supply.

Upon getting back to the car, he found it burdened with the quartz-blocks that Joe's greed had heaped in it. He
got in, however, without saying anything. Kennedy took his customary place, and Joe followed, but not without casting a covetous glance at the treasures in the ravine.

The doctor rekindled the light in the cylinder; the spiral became heated; the current of hydrogen came in a few minutes, and the gas dilated; but the balloon did not stir an inch.

Joe looked on uneasily, but kept silent.

"Joe!" said the doctor.

Joe made no reply.

"Joe! Don't you hear me?"

Joe made a sign that he heard; but he would not understand.

"Do me the kindness to throw out some of that quartz!"

"But, doctor, you gave me leave--"

"I gave you leave to replace the ballast; that was all!"

"But--"

"Do you want to stay forever in this desert?"

Joe cast a despairing look at Kennedy; but the hunter put on the air of a man who could do nothing in the matter.

"Well, Joe?"

"Then your cylinder don't work," said the obstinate fellow.

"My cylinder? It is lit, as you perceive. But the balloon will not rise until you have thrown off a little ballast."

Joe scratched his ear, picked up a piece of quartz, the smallest in the lot, weighed and reweighed it, and tossed it up and down in his hand. It was a fragment of about three or four pounds. At last he threw it out.

But the balloon did not budge.

"Humph!" said he; "we're not going up yet."

"Not yet," said the doctor. "Keep on throwing."

Kennedy laughed. Joe now threw out some ten pounds, but the balloon stood still.

Joe got very pale.

"Poor fellow!" said the doctor. "Mr. Kennedy, you and I weigh, unless I am mistaken, about four hundred pounds--so that you'll have to get rid of at least that weight, since it was put in here to make up for us."

"Throw away four hundred pounds!" said Joe, piteously.

"And some more with it, or we can't rise. Come, courage, Joe!"

The brave fellow, heaving deep sighs, began at last to lighten the balloon; but, from time to time, he would stop, and ask:

"Are you going up?"

"No, not yet," was the invariable response.

"It moves!" said he, at last.

"Keep on!" replied the doctor.

"It's going up; I'm sure."

"Keep on yet," said Kennedy.

And Joe, picking up one more block, desperately tossed it out of the car. The balloon rose a hundred feet or so, and, aided by the cylinder, soon passed above the surrounding summits.

"Now, Joe," resumed the doctor, "there still remains a handsome fortune for you; and, if we can only keep the rest of this with us until the end of our trip, there you are--rich for the balance of your days!"

Joe made no answer, but stretched himself out luxuriously on his heap of quartz.

"See, my dear Dick!" the doctor went on. "Just see the power of this metal over the cleverest lad in the world! What passions, what greed, what crimes, the knowledge of such a mine as that would cause! It is sad to think of it!"

By evening the balloon had made ninety miles to the westward, and was, in a direct line, fourteen hundred miles from Zanzibar.

CHAPTER TWENTY-FOURTH.

The Wind dies away.--The Vicinity of the Desert.--The Mistake in the Water-Supply.--The Nights of the Equator.--Dr. Ferguson's Anxieties.--The Situation flatly stated.--Energetic Replies of Kennedy and Joe.--One Night more.

The balloon, having been made fast to a solitary tree, almost completely dried up by the aridity of the region in which it stood, passed the night in perfect quietness; and the travellers were enabled to enjoy a little of the repose which they so greatly needed. The emotions of the day had left sad impressions on their minds.

Toward morning, the sky had resumed its brilliant purity and its heat. The balloon ascended, and, after several
ineffectual attempts, fell into a current that, although not rapid, bore them toward the northwest.

"We are not making progress," said the doctor. "If I am not mistaken, we have accomplished nearly half of our journey in ten days; but, at the rate at which we are going, it would take months to end it; and that is all the more vexatious, that we are threatened with a lack of water."

"But we'll find some," said Joe. "It is not to be thought of that we shouldn't discover some river, some stream, or pond, in all this vast extent of country."

"I hope so." Kennedy asked this question only to tease Joe; and he did so the more willingly because he had, for a moment, shared the poor lad's hallucinations; but, not finding any thing in them, he had fallen back into the attitude of a strong-minded looker-on, and turned the affair off with a laugh.

Joe cast a mournful glance at him; but the doctor made no reply. He was thinking, not without secret terror, probably, of the vast solitudes of Sahara--for there whole weeks sometimes pass without the caravans meeting with a single spring of water. Occupied with these thoughts, he scrutinized every depression of the soil with the closest attention.

These anxieties, and the incidents recently occurring, had not been without their effect upon the spirits of our three travellers. They conversed less, and were more wrapt in their own thoughts.

Joe, clever lad as he was, seemed no longer the same person since his gaze had plunged into that ocean of gold. He kept entirely silent, and gazed incessantly upon the stony fragments heaped up in the car--worthless to-day, but of inestimable value to-morrow.

The appearance of this part of Africa was, moreover, quite calculated to inspire alarm: the desert was gradually expanding around them; not another village was to be seen--not even a collection of a few huts; and vegetation also was disappearing. Barely a few dwarf plants could now be noticed, like those on the wild heaths of Scotland; then came the first tract of grayish sand and flint, with here and there a lentisk tree and brambles. In the midst of this sterility, the rudimental carcass of the Globe appeared in ridges of sharply-jutting rock. These symptoms of a totally dry and barren region greatly disquieted Dr. Ferguson.

It seemed as though no caravan had ever braved this desert expanse, or it would have left visible traces of its encampments, or the whitened bones of men and animals. But nothing of the kind was to be seen, and the aeronauts felt that, ere long, an immensity of sand would cover the whole of this desolate region.

However, there was no going back; they must go forward; and, indeed, the doctor asked for nothing better; he would even have welcomed a tempest to carry him beyond this country. But, there was not a cloud in the sky. At the close of the day, the balloon had not made thirty miles.

If there had been no lack of water! But, there remained only three gallons in all! The doctor put aside one gallon, destined to quench the burning thirst that a heat of ninety degrees rendered intolerable. Two gallons only then remained to supply the cylinder. Hence, they could produce no more than four hundred and eighty cubic feet of gas; yet the cylinder consumed about nine cubic feet per hour. Consequently, they could not keep on longer than fifty-four hours--and all this was a mathematical calculation!

"Fifty-four hours!" said the doctor to his companions. "Therefore, as I am determined not to travel by night, for fear of passing some stream or pool, we have but three days and a half of journeying during which we must find water, at all hazards. I have thought it my duty to make you aware of the real state of the case, as I have retained only one gallon for drinking, and we shall have to put ourselves on the shortest allowance."

"Put us on short allowance, then, doctor," responded Kennedy, "but we must not despair. We have three days left, you say?"

"Yes, my dear Dick!"

"Well, as grieving over the matter won't help us, in three days there will be time enough to decide upon what is to be done; in the meanwhile, let us redouble our vigilance!"

At their evening meal, the water was strictly measured out, and the brandy was increased in quantity in the punch they drank. But they had to be careful with the spirits, the latter being more likely to produce than to quench thirst.

The car rested, during the night, upon an immense plateau, in which there was a deep hollow; its height was scarcely eight hundred feet above the level of the sea. This circumstance gave the doctor some hope, since it recalled to his mind the conjectures of geographers concerning the existence of a vast stretch of water in the centre of Africa. But, if such a lake really existed, the point was to reach it, and not a sign of change was visible in the motionless sky.

To the tranquil night and its starry magnificence succeeded the unchanging daylight and the blazing rays of the sun; and, from the earliest dawn, the temperature became scorching. At five o'clock in the morning, the doctor gave
the signal for departure, and, for a considerable time, the balloon remained immovable in the leaden atmosphere.

The doctor might have escaped this intense heat by rising into a higher range, but, in order to do so, he would have had to consume a large quantity of water, a thing that had now become impossible. He contented himself, therefore, with keeping the balloon at one hundred feet from the ground, and, at that elevation, a feeble current drove it toward the western horizon.

The breakfast consisted of a little dried meat and pemmican. By noon, the Victoria had advanced only a few miles.

"We cannot go any faster," said the doctor; "we no longer command--we have to obey."

"Ah! doctor, here is one of those occasions when a propeller would not be a thing to be despised."

"Undoubtedly so, Dick, provided it would not require an expenditure of water to put it in motion, for, in that case, the situation would be precisely the same; moreover, up to this time, nothing practical of the sort has been invented. Balloons are still at that point where ships were before the invention of steam. It took six thousand years to invent propellers and screws; so we have time enough yet."

"Confounded heat!" said Joe, wiping away the perspiration that was streaming from his forehead.

"If we had water, this heat would be of service to us, for it dilates the hydrogen in the balloon, and diminishes the amount required in the spiral, although it is true that, if we were not short of the useful liquid, we should not have to economize it. Ah! that rascally savage who cost us the tank!*"* The water-tank had been thrown overboard when the native clung to the car.

"You don't regret, though, what you did, doctor?"

"No, Dick, since it was in our power to save that unfortunate missionary from a horrible death. But, the hundred pounds of water that we threw overboard would be very useful to us now; it would be thirteen or fourteen days more of progress secured, or quite enough to carry us over this desert."

"We've made at least half the journey, haven't we?" asked Joe.

"In distance, yes; but in duration, no, should the wind leave us; and it, even now, has a tendency to die away altogether."

"Come, sir," said Joe, again, "we must not complain; we've got along pretty well, thus far, and whatever happens to me, I can't get desperate. We'll find water; mind, I tell you so."

The soil, however, ran lower from mile to mile; the undulations of the gold-bearing mountains they had left died away into the plain, like the last throes of exhausted Nature. Scanty grass took the place of the fine trees of the east; only a few belts of half-scorched herbage still contended against the invasion of the sand, and the huge rocks, that had rolled down from the distant summits, crushed in their fall, had scattered in sharp-edged pebbles which soon again became coarse sand, and finally impalpable dust.

"Here, at last, is Africa, such as you pictured it to yourself, Joe! Was I not right in saying, 'Wait a little?' eh?"

"Well, master, it's all natural, at least--heat and dust. It would be foolish to look for any thing else in such a country. Do you see," he added, laughing, "I had no confidence, for my part, in your forests and your prairies; they were out of reason. What was the use of coming so far to find scenery just like England? Here's the first time that I believe in Africa, and I'm not sorry to get a taste of it."

Toward evening, the doctor calculated that the balloon had not made twenty miles during that whole burning day, and a heated gloom closed in upon it, as soon as the sun had disappeared behind the horizon, which was traced against the sky with all the precision of a straight line.

The next day was Thursday, the 1st of May, but the days followed each other with desperate monotony. Each morning was like the one that had preceded it; noon poured down the same exhaustless rays, and night condensed in its shadow the scattered heat which the ensuing day would again bequeath to the succeeding night. The wind, now scarcely observable, was rather a gasp than a breath, and the morning could almost be foreseen when even that gasp would cease.

The doctor reacted against the gloominess of the situation and retained all the coolness and self-possession of a disciplined heart. With his glass he scrutinized every quarter of the horizon; he saw the last rising ground gradually melting to the dead level, and the last vegetation disappearing, while, before him, stretched the immensity of the desert.

The responsibility resting upon him pressed sorely, but he did not allow his disquiet to appear. Those two men, Dick and Joe, friends of his, both of them, he had induced to come with him almost by the force alone of friendship and of duty. Had he done well in that? Was it not like attempting to tread forbidden paths? Was he not, in this trip, trying to pass the borders of the impossible? Had not the Almighty reserved for later ages the knowledge of this inhospitable continent?

All these thoughts, of the kind that arise in hours of discouragement, succeeded each other and multiplied in his mind, and, by an irresistible association of ideas, the doctor allowed himself to be carried beyond the bounds of
logic and of reason. After having established in his own mind what he should NOT have done, the next question was, what he should do, then. Would it be impossible to retrace his steps? Were there not currents higher up that would waft him to less arid regions? Well informed with regard to the countries over which he had passed, he was utterly ignorant of those to come, and thus his conscience speaking aloud to him, he resolved, in his turn, to speak frankly to his two companions. He thereupon laid the whole state of the case plainly before them; he showed them what had been done, and what there was yet to do; at the worst, they could return, or attempt it, at least.--What did they think about it?

"I have no other opinion than that of my excellent master," said Joe; "what he may have to suffer, I can suffer, and that better than he can, perhaps. Where he goes, there I'll go!"

"And you, Kennedy?"

"I, doctor, I'm not the man to despair; no one was less ignorant than I of the perils of the enterprise, but I did not want to see them, from the moment that you determined to brave them. Under present circumstances, my opinion is, that we should persevere--go clear to the end. Besides, to return looks to me quite as perilous as the other course. So onward, then! you may count upon us!"

"Thanks, my gallant friends!" replied the doctor, with much real feeling, "I expected such devotion as this; but I needed these encouraging words. Yet, once again, thank you, from the bottom of my heart!"

And, with this, the three friends warmly grasped each other by the hand.

"Now, hear me!" said the doctor. "According to my solar observations, we are not more than three hundred miles from the Gulf of Guinea; the desert, therefore, cannot extend indefinitely, since the coast is inhabited, and the country has been explored for some distance back into the interior. If needs be, we can direct our course to that quarter, and it seems out of the question that we should not come across some oasis, or some well, where we could replenish our stock of water. But, what we want now, is the wind, for without it we are held here suspended in the air at a dead calm.

"Let us wait with resignation," said the hunter.

But, each of the party, in his turn, vainly scanned the space around him during that long wearisome day. Nothing could be seen to form the basis of a hope. The very last inequalities of the soil disappeared with the setting sun, whose horizontal rays stretched in long lines of fire over the flat immensity. It was the Desert!

Our aeronauts had scarcely gone a distance of fifteen miles, having expended, as on the preceding day, one hundred and thirty-five cubic feet of gas to feed the cylinder, and two pints of water out of the remaining eight had been sacrificed to the demands of intense thirst.

The night passed quietly--too quietly, indeed, but the doctor did not sleep!

CHAPTER TWENTY-FIFTH.

A Little Philosophy.--A Cloud on the Horizon.--In the Midst of a Fog.--The Strange Balloon.--An Exact View of the Victoria.--The Palm-Trees.--Traces of a Caravan.--The Well in the Midst of the Desert.

On the morrow, there was the same purity of sky, the same stillness of the atmosphere. The balloon rose to an elevation of five hundred feet, but it had scarcely changed its position to the westward in any perceptible degree.

"We are right in the open desert," said the doctor. "Look at that vast reach of sand! What a strange spectacle! What a singular arrangement of nature! Why should there be, in one place, such extreme luxuriance of vegetation yonder, and here, this extreme aridity, and that in the same latitude, and under the same rays of the sun?"

"The why concerns me but little," answered Kennedy, "the reason interests me less than the fact. The thing is so; that's the important part of it!"

"Oh, it is well to philosophize a little, Dick; it does no harm."

"Let us philosophize, then, if you will; we have time enough before us; we are hardly moving; the wind is afraid to blow; it sleeps."

"That will not last forever," put in Joe; "I think I see some banks of clouds in the east."

"Joe's right!" said the doctor, after he had taken a look.

"Good!" said Kennedy; "now for our clouds, with a fine rain, and a fresh wind to dash it into our faces!"

"Well, we'll see, Dick, we'll see!"

"But this is Friday, master, and I'm afraid of Fridays!"

"Well, I hope that this very day you'll get over those notions."

"I hope so, master, too. Whew!" he added, mopping his face, "heat's a good thing, especially in winter, but in summer it don't do to take too much of it."

"Don't you fear the effect of the sun's heat on our balloon?" asked Kennedy, addressing the doctor.

"No! the gutta-percha coating resists much higher temperatures than even this. With my spiral I have subjected it
inside to as much as one hundred and fifty-eight degrees sometimes, and the covering does not appear to have suffered."

"A cloud! a real cloud!" shouted Joe at this moment, for that piercing eyesight of his beat all the glasses.

And, in fact, a thick bank of vapor, now quite distinct, could be seen slowly emerging above the horizon. It appeared to be very deep, and, as it were, puffed out. It was, in reality, a conglomeration of smaller clouds. The latter invariably retained their original formation, and from this circumstance the doctor concluded that there was no current of air in their collected mass.

This compact body of vapor had appeared about eight o'clock in the morning, and, by eleven, it had already reached the height of the sun's disk. The latter then disappeared entirely behind the murky veil, and the lower belt of cloud, at the same moment, lifted above the line of the horizon, which was again disclosed in a full blaze of daylight.

"It's only an isolated cloud," remarked the doctor. "It won't do to count much upon that."

"Look, Dick, its shape is just the same as when we saw it this morning!"

"Then, doctor, there's to be neither rain nor wind, at least for us!"

"I fear so; the cloud keeps at a great height."

"Well, doctor, suppose we were to go in pursuit of this cloud, since it refuses to burst upon us?"

"I fancy that to do so wouldn't help us much; it would be a consumption of gas, and, consequently, of water, to little purpose; but, in our situation, we must not leave anything untried; therefore, let us ascend!"

And with this, the doctor put on a full head of flame from the cylinder, and the dilation of the hydrogen, occasioned by such sudden and intense heat, sent the balloon rapidly aloft.

About fifteen hundred feet from the ground, it encountered an opaque mass of cloud, and entered a dense fog, suspended at that elevation; but it did not meet with the least breath of wind. This fog seemed even destitute of humidity, and the articles brought in contact with it were scarcely dampened in the slightest degree. The balloon, completely enveloped in the vapor, gained a little increase of speed, perhaps, and that was all.

The doctor gloomily recognized what trifling success he had obtained from his manoeuvre, and was relapsing into deep meditation, when he heard Joe exclaim, in tones of most intense astonishment:

"Ah! by all that's beautiful!"

"What's the matter, Joe?"

"Doctor! Mr. Kennedy! Here's something curious!"

"What is it, then?"

"We are not alone, up here! There are rogues about! They've stolen our invention!"

"Has he gone crazy?" asked Kennedy.

Joe stood there, perfectly motionless, the very picture of amazement.

"Can the hot sun have really affected the poor fellow's brain?" said the doctor, turning toward him.

"Will you tell me?--"

"Look!" said Joe, pointing to a certain quarter of the sky.

"By St. James!" exclaimed Kennedy, in turn, "why, who would have believed it? Look, look! doctor!"

"I see it!" said the doctor, very quietly.

"Another balloon! and other passengers, like ourselves!"

And, sure enough, there was another balloon about two hundred paces from them, floating in the air with its car and its aeronauts. It was following exactly the same route as the Victoria.

"Well," said the doctor, "nothing remains for us but to make signals; take the flag, Kennedy, and show them our colors."

It seemed that the travellers by the other balloon had just the same idea, at the same moment, for the same kind of flag repeated precisely the same salute with a hand that moved in just the same manner.

"What does that mean?" asked Kennedy.

"They are apes," said Joe, "imitating us."

"It means," said the doctor, laughing, "that it is you, Dick, yourself, making that signal to yourself; or, in other words, that we see ourselves in the second balloon, which is no other than the Victoria."

"As to that, master, with all respect to you," said Joe, "you'll never make me believe it."

"Climb up on the edge of the car, Joe; wave your arms, and then you'll see."

Joe obeyed, and all his gestures were instantaneously and exactly repeated.

"It is merely the effect of the MIRAGE," said the doctor, "and nothing else--a simple optical phenomenon due to the unequal refraction of light by different layers of the atmosphere, and that is all."

"It's wonderful," said Joe, who could not make up his mind to surrender, but went on repeating his gesticulations.

"What a curious sight! Do you know," said Kennedy, "that it's a real pleasure to have a view of our noble balloon
in that style? She's a beauty, isn't she?-- and how stately her movements as she sweeps along!"

"You may explain the matter as you like," continued Joe, "it's a strange thing, anyhow!"

But ere long this picture began to fade away; the clouds rose higher, leaving the balloon, which made no further attempt to follow them, and in about an hour they disappeared in the open sky.

The wind, which had been scarcely perceptible, seemed still to diminish, and the doctor in perfect desperation descended toward the ground, and all three of the travellers, whom the incident just recorded had, for a few moments, diverted from their anxieties, relapsed into gloomy meditation, sweltering the while beneath the scorching heat.

About four o'clock, Joe descried some object standing out against the vast background of sand, and soon was able to declare positively that there were two palm-trees at no great distance.

"Palm-trees!" exclaimed Ferguson; "why, then there's a spring--a well!"

He took up his glass and satisfied himself that Joe's eyes had not been mistaken.

"At length!" he said, over and over again, "water! water! and we are saved; for if we do move slowly, still we move, and we shall arrive at last!"

"Good, master! but suppose we were to drink a mouthful in the mean time, for this air is stifling?"

"Let us drink then, my boy!"

No one waited to be coaxed. A whole pint was swallowed then and there, reducing the total remaining supply to three pints and a half.

"Ah! that does one good!" said Joe; "wasn't it fine? Barclay and Perkins never turned out ale equal to that!"

"See the advantage of being put on short allowance!" moralized the doctor.

"It is not great, after all," retorted Kennedy; "and if I were never again to have the pleasure of drinking water, I should agree on condition that I should never be deprived of it."

At six o'clock the balloon was floating over the palm-trees.

They were two shrivelled, stunted, dried-up specimens of trees--two ghosts of palms--without foliage, and more dead than alive. Ferguson examined them with terror.

At their feet could be seen the half-worn stones of a spring, but these stones, pulverized by the baking heat of the sun, seemed to be nothing now but impalpable dust. There was not the slightest sign of moisture. The doctor's heart shrunk within him, and he was about to communicate his thoughts to his companions, when their exclamations attracted his attention. As far as the eye could reach to the eastward, extended a long line of whitened bones; pieces of skeletons surrounded the fountain; a caravan had evidently made its way to that point, marking its progress by its bleaching remains; the weaker had fallen one by one upon the sand; the stronger, having at length reached this spring for which they panted, had there found a horrible death.

Our travellers looked at each other and turned pale.

"Let us not alight!" said Kennedy, "let us fly from this hideous spectacle! There's not a drop of water here!"

"No, Dick, as well pass the night here as elsewhere; let us have a clear conscience in the matter. We'll dig down to the very bottom of the well. There has been a spring here, and perhaps there's something left in it!"

The Victoria touched the ground; Joe and Kennedy put into the car a quantity of sand equal to their weight, and leaped out. They then hastened to the well, and penetrated to the interior by a flight of steps that was now nothing but dust. The spring appeared to have been dry for years. They dug down into a parched and powdery sand--the very dryest of all sand, indeed--there was not one trace of moisture!

The doctor saw them come up to the surface of the desert, saturated with perspiration, worn out, covered with fine dust, exhausted, discouraged and despairing.

He then comprehended that their search had been fruitless. He had expected as much, and he kept silent, for he felt that, from this moment forth, he must have courage and energy enough for three.

Joe brought up with him some pieces of a leathern bottle that had grown hard and horn-like with age, and angrily flung them away among the bleaching bones of the caravan.

At supper, not a word was spoken by our travellers, and they even ate without appetite. Yet they had not, up to this moment, endured the real agonies of thirst, and were in no desponding mood, excepting for the future.

CHAPTER TWENTY-SIXTH.

One Hundred and Thirteen Degrees.--The Doctor's Reflections.--A Desperate Search.--The Cylinder goes out.--One Hundred and Twenty-two Degrees.-- Contemplation of the Desert.--A Night Walk.--Solitude.--Debility.--Joe's Prospects.--He gives himself One Day more.

The distance made by the balloon during the preceding day did not exceed ten miles, and, to keep it afloat, one hundred and sixty-two cubic feet of gas had been consumed.
On Saturday morning the doctor again gave the signal for departure. "The cylinder can work only six hours longer; and, in that time we shall not have found either a well or a spring of water, God alone knows what will become of us!"

"Not much wind this morning, master," said Joe; "but it will come up, perhaps," he added, suddenly remarking the doctor's ill-concealed depression.

Vain hope! The atmosphere was in a dead calm—one of those calms which hold vessels captive in tropical seas. The heat had become intolerable; and the thermometer, in the shade under the awning, indicated one hundred and thirteen degrees.

Joe and Kennedy, reclining at full length near each other, tried, if not in slumber, at least in torpor, to forget their situation, for their forced inactivity gave them periods of leisure far from pleasant. That man is to be pitied the most who cannot wean himself from gloomy reflections by actual work, or some practical pursuit. But here there was nothing to look after, nothing to undertake, and they had to submit to the situation, without having it in their power to ameliorate it.

The pangs of thirst began to be severely felt; brandy, far from appeasing this imperious necessity, augmented it, and richly merited the name of "tiger's milk" applied to it by the African natives. Scarcely two pints of water remained, and that was heated. Each of the party devoured the few precious drops with his gaze, yet neither of them dared to moisten his lips with them. Two pints of water in the midst of the desert!

Then it was that Dr. Ferguson, buried in meditation, asked himself whether he had acted with prudence. Would he not have done better to have kept the water that he had decomposed in pure loss, in order to sustain him in the air? He had gained a little distance, to be sure; but was he any nearer to his journey's end? What difference did sixty miles to the rear make in this region, when there was no water to be had where they were? The wind, should it rise, would blow there as it did here, only less strongly at this point, if it came from the east. But hope urged him onward. And yet those two gallons of water, expended in vain, would have sufficed for nine days' halt in the desert. And what changes might not have occurred in nine days! Perhaps, too, while retaining the water, he might have ascended by throwing out ballast, at the cost merely of discharging some gas, when he had again to descend. But the gas in his balloon was his blood, his very life!

A thousand one such reflections whirled in succession through his brain; and, resting his head between his hands, he sat there for hours without raising it.

"We must make one final effort," he said, at last, about ten o'clock in the morning. "We must endeavor, just once more, to find an atmospheric current to bear us away from here, and, to that end, must risk our last resources."

Therefore, while his companions slept, the doctor raised the hydrogen in the balloon to an elevated temperature, and the huge globe, filling out by the dilation of the gas, rose straight up in the perpendicular rays of the sun. The doctor searched vainly for a breath of wind, from the height of one hundred feet to that of five miles; his starting-point remained fatally right below him, and absolute calm seemed to reign, up to the extreme limits of the breathing atmosphere.

At length the feeding-supply of water gave out; the cylinder was extinguished for lack of gas; the Buntzen battery ceased to work, and the balloon, shrinking together, gently descended to the sand, in the very place that the car had hollowed out there.

It was noon; and solar observations gave nineteen degrees thirty-five minutes east longitude, and six degrees fifty-one minutes north latitude, or nearly five hundred miles from Lake Tchad, and more than four hundred miles from the western coast of Africa.

On the balloon taking ground, Kennedy and Joe awoke from their stupor.

"We have halted," said the Scot.

"We had to do so," replied the doctor, gravely.

His companions understood him. The level of the soil at that point corresponded with the level of the sea, and, consequently, the balloon remained in perfect equilibrium, and absolutely motionless.

The weight of the three travellers was replaced with an equivalent quantity of sand, and they got out of the car. Each was absorbed in his own thoughts; and for many hours neither of them spoke. Joe prepared their evening meal, which consisted of biscuit and pemmican, and was hardly tasted by either of the party. A mouthful of scalding water from their little store completed this gloomy repast.

During the night none of them kept awake; yet none could be precisely said to have slept. On the morrow there remained only half a pint of water, and this the doctor put away, all three having resolved not to touch it until the last extremity.

It was not long, however, before Joe exclaimed:

"I'm choking, and the heat is getting worse! I'm not surprised at that, though," he added, consulting the thermometer; "one hundred and forty degrees!"
"The sand scorches me," said the hunter, "as though it had just come out of a furnace; and not a cloud in this sky of fire. It's enough to drive one mad!"

"Let us not despair," responded the doctor. "In this latitude these intense heats are invariably followed by storms, and the latter come with the suddenness of lightning. Notwithstanding this disheartening clearness of the sky, great atmospheric changes may take place in less than an hour."

"But," asked Kennedy, "is there any sign whatever of that?"

"Well," replied the doctor, "I think that there is some slight symptom of a fall in the barometer."

"May Heaven hearken to you, Samuel! for here we are pinned to the ground, like a bird with broken wings."

"With this difference, however, my dear Dick, that our wings are unhurt, and I hope that we shall be able to use them again."

"Ah! wind! wind!" exclaimed Joe; "enough to carry us to a stream or a well, and we'll be all right. We have provisions enough, and, with water, we could wait a month without suffering; but thirst is a cruel thing!"

It was not thirst alone, but the unchanging sight of the desert, that fatigued the mind. There was not a variation in the surface of the soil, not a hillock of sand, not a pebble, to relieve the gaze. This unbroken level discouraged the beholder, and gave him that kind of malady called the "desert-sickness." The impassible monotonity of the arid blue sky, and the vast yellow expanse of the desert-sand, at length produced a sensation of terror. In this inflamed atmosphere the heat appeared to vibrate as it does above a blazing hearth, while the mind grew desperate in contemplating the limitless calm, and could see no reason why the thing should ever end, since immensity is a species of eternity.

Thus, at last, our hapless travellers, deprived of water in this torrid heat, began to feel symptoms of mental disorder. Their eyes swelled in their sockets, and their gaze became confused.

When night came on, the doctor determined to combat this alarming tendency by rapid walking. His idea was to pace the sandy plain for a few hours, not in search of any thing, but simply for exercise.

"Come along!" he said to his companions; "believe me, it will do you good."

"Out of the question!" said Kennedy; "I could not walk a step."

"And I," said Joe, "would rather sleep!"

"But sleep, or even rest, would be dangerous to you, my friends; you must react against this tendency to stupor. Come with me!"

But the doctor could do nothing with them, and, therefore, set off alone, amid the starry clearness of the night. The first few steps he took were painful, for they were the steps of an enfeebled man quite out of practice in walking. However, he quickly saw that the exercise would be beneficial to him, and pushed on several miles to the westward. Once in rapid motion, he felt his spirits greatly cheered, when, suddenly, a vertigo came over him; he seemed to be poised on the edge of an abyss; his knees bent under him; the vast solitude struck terror to his heart; he found himself the minute mathematical point, the centre of an infinite circumference, that is to say--a nothing! The balloon had disappeared entirely in the deepening gloom. The doctor, cool, impassible, reckless explorer that he was, felt himself at last seized with a nameless dread. He strove to retrace his steps, but in vain. He called aloud. Not even an echo replied, and his voice died out in the empty vastness of surrounding space, like a pebble cast into a bottomless gulf; then, down he sank, fainting, on the sand, alone, amid the eternal silence of the desert.

At midnight he came to, in the arms of his faithful follower, Joe. The latter, uneasy at his master's prolonged absence, had set out after him, easily tracing him by the clear imprint of his feet in the sand, and had found him lying in a swoon.

"What has been the matter, sir?" was the first inquiry.

"Nothing, Joe, nothing! Only a touch of weakness, that's all. It's over now." "Oh! it won't amount to any thing, sir, I'm sure of that; but get up on your feet, if you can. There! lean upon me, and let us get back to the balloon."

And the doctor, leaning on Joe's arm, returned along the track by which he had come.

"You were too bold, sir; it won't do to run such risks. You might have been robbed," he added, laughing. "But, sir, come now, let us talk seriously."

"Speak! I am listening to you."

"We must positively make up our minds to do something. Our present situation cannot last more than a few days longer, and if we get no wind, we are lost."

The doctor made no reply.

"Well, then, one of us must sacrifice himself for the good of all, and it is most natural that it should fall to me to do so."

"What have you to propose? What is your plan?"

"A very simple one! It is to take provisions enough, and to walk right on until I come to some place, as I must
do, sooner or later. In the mean time, if Heaven sends you a good wind, you need not wait, but can start again. For my part, if I come to a village, I'll work my way through with a few Arabic words that you can write for me on a slip of paper, and I'll bring you help or lose my hide. What do you think of my plan?"

"It is absolute folly, Joe, but worthy of your noble heart. The thing is impossible. You will not leave us."

"But, sir, we must do something, and this plan can't do you any harm, for, I say again, you need not wait; and then, after all, I may succeed."

"No, Joe, no! We will not separate. That would only be adding sorrow to trouble. It was written that matters should be as they are; and it is very probably written that it shall be quite otherwise by-and-by. Let us wait, then, with resignation."

"So be it, master; but take notice of one thing: I give you a day longer, and I'll not wait after that. To-day is Sunday; we might say Monday, as it is one o'clock in the morning, and if we don't get off by Tuesday, I'll run the risk. I've made up my mind to that!"

The doctor made no answer, and in a few minutes they got back to the car, where he took his place beside Kennedy, who lay there plunged in silence so complete that it could not be considered sleep.

CHAPTER TWENTY-SEVENTH.

Terrific Heat.--Hallucinations.--The Last Drops of Water.--Nights of Despair.--An Attempt at Suicide.--The Simoom.--The Oasis.--The Lion and Lioness.

The doctor's first care, on the morrow, was to consult the barometer. He found that the mercury had scarcely undergone any perceptible depression.

"Nothing!" he murmured, "nothing!"

He got out of the car and scrutinized the weather; there was only the same heat, the same cloudless sky, the same merciless drought.

"Must we, then, give up to despair?" he exclaimed, in agony.

Joe did not open his lips. He was buried in his own thoughts, and planning the expedition he had proposed.

Kennedy got up, feeling very ill, and a prey to nervous agitation. He was suffering horribly with thirst, and his swollen tongue and lips could hardly articulate a syllable.

There still remained a few drops of water. Each of them knew this, and each was thinking of it, and felt himself drawn toward them; but neither of the three dared to take a step.

Those three men, friends and companions as they were, fixed their haggard eyes upon each other with an instinct of ferocious longing, which was most plainly revealed in the hardy Scot, whose vigorous constitution yielded the soonest to these unnatural privations.

Throughout the day he was delirious, pacing up and down, uttering hoarse cries, gnawing his clinched fists, and ready to open his veins and drink his own hot blood.

"Ah!" he cried, "land of thirst! Well might you be called the land of despair!"

At length he sank down in utter prostration, and his friends heard no other sound from him than the hissing of his breath between his parched and swollen lips.

Toward evening, Joe had his turn of delirium. The vast expanse of sand appeared to him an immense pond, full of clear and limpid water; and, more than once, he dashed himself upon the scorching waste to drink long draughts, and rose again with his mouth clogged with hot dust.

"Curses on it!" he yelled, in his madness, "it's nothing but salt water!"

Then, while Ferguson and Kennedy lay there motionless, the resistless longing came over him to drain the last few drops of water that had been kept in reserve. The natural instinct proved too strong. He dragged himself toward the car, on his knees; he glared at the bottle containing the precious fluid; he gave one wild, eager glance, seized the treasured store, and bore it to his lips.

At that instant he heard a heart-rending cry close beside him--"Water! water!"

It was Kennedy, who had crawled up close to him, and was begging there, upon his knees, and weeping piteously.

Joe, himself in tears, gave the poor wretch the bottle, and Kennedy drained the last drop with savage haste.

"Thanks!" he murmured hoarsely, but Joe did not hear him, for both alike had dropped fainting on the sand.

What took place during that fearful night neither of them knew, but, on Tuesday morning, under those showers of heat which the sun poured down upon them, the unfortunate men felt their limbs gradually drying up, and when Joe attempted to rise he found it impossible.

He looked around him. In the car, the doctor, completely overwhelmed, sat with his arms folded on his breast, gazing with idiotic fixedness upon some imaginary point in space. Kennedy was frightful to behold. He was rolling
his head from right to left like a wild beast in a cage.

All at once, his eyes rested on the butt of his rifle, which jutted above the rim of the car.

"Ah!" he screamed, raising himself with a superhuman effort.

Desperate, mad, he snatched at the weapon, and turned the barrel toward his mouth.

"Kennedy!" shouted Joe, throwing himself upon his friend.

"Let go! hands off!" moaned the Scot, in a hoarse, grating voice--and then the two struggled desperately for the rifle.

"Let go, or I'll kill you!" repeated Kennedy. But Joe clung to him only the more fiercely, and they had been contending thus without the doctor seeing them for many seconds, when, suddenly the rifle went off. At the sound of its discharge, the doctor rose up erect, like a spectre, and glared around him.

But all at once his glance grew more animated; he extended his hand toward the horizon, and in a voice no longer human shrieked:

"There! there--off there!"

There was such fearful force in the cry that Kennedy and Joe released each other, and both looked where the doctor pointed.

The plain was agitated like the sea shaken by the fury of a tempest; billows of sand went tossing over each other amid blinding clouds of dust; an immense pillar was seen whirling toward them through the air from the southeast, with terrific velocity; the sun was disappearing behind an opaque veil of cloud whose enormous barrier extended clear to the horizon, while the grains of fine sand went gliding together with all the supple ease of liquid particles, and the rising dust-tide gained more and more with every second.

Ferguson's eyes gleamed with a ray of energetic hope.

"The simoom!" he exclaimed.

"The simoom!" repeated Joe, without exactly knowing what it meant.

"So much the better!" said Kennedy, with the bitterness of despair. "So much the better--we shall die!"

"So much the better!" echoed the doctor, "for we shall live!" and, so saying, he began rapidly to throw out the sand that encumbered the car.

At length his companions understood him, and took their places at his side.

"And now, Joe," said the doctor, "throw out some fifty pounds of your ore, there!"

Joe no longer hesitated, although he still felt a fleeting pang of regret. The balloon at once began to ascend.

"It was high time!" said the doctor.

The simoom, in fact, came rushing on like a thunderbolt, and a moment later the balloon would have been crushed, torn to atoms, annihilated. The awful whirlwind was almost upon it, and it was already pelted with showers of sand driven like hail by the storm.

"Out with more ballast!" shouted the doctor.

"There!" responded Joe, tossing over a huge fragment of quartz.

With this, the Victoria rose swiftly above the range of the whirling column, but, caught in the vast displacement of the atmosphere thereby occasioned, it was borne along with incalculable rapidity away above this foaming sea.

The three travellers did not speak. They gazed, and hoped, and even felt refreshed by the breath of the tempest.

About three o'clock, the whirlwind ceased; the sand, falling again upon the desert, formed numberless little hillocks, and the sky resumed its former tranquillity.

The balloon, which had again lost its momentum, was floating in sight of an oasis, a sort of islet studded with green trees, thrown up upon the surface of this sandy ocean.

"Water! we'll find water there!" said the doctor.

And, instantly, opening the upper valve, he let some hydrogen escape, and slowly descended, taking the ground at about two hundred feet from the edge of the oasis.

In four hours the travellers had swept over a distance of two hundred and forty miles!

The car was at once ballasted, and Kennedy, closely followed by Joe, leaped out.

"Take your guns with you!" said the doctor; "take your guns, and be careful!"

Dick grasped his rifle, and Joe took one of the fowling-pieces. They then rapidly made for the trees, and disappeared under the fresh verdure, which announced the presence of abundant springs. As they hurried on, they had not taken notice of certain large footprints and fresh tracks of some living creature marked here and there in the damp soil.

Suddenly, a dull roar was heard not twenty paces from them.

"The roar of a lion!" said Joe.

"Good for that!" said the excited hunter; "we'll fight him. A man feels strong when only a fight's in question."

"But be careful, Mr. Kennedy; be careful! The lives of all depend upon the life of one."
But Kennedy no longer heard him; he was pushing on, his eye blazing; his rifle cocked; fearful to behold in his daring rashness. There, under a palm-tree, stood an enormous black-maned lion, crouching for a spring on his antagonist. Scarcely had he caught a glimpse of the hunter, when he bounded through the air; but he had not touched the ground ere a bullet pierced his heart, and he fell to the earth dead.

"Hurrah! hurrah!" shouted Joe, with wild exultation.

Kennedy rushed toward the well, slid down the dampened steps, and flung himself at full length by the side of a fresh spring, in which he plunged his parched lips. Joe followed suit, and for some minutes nothing was heard but the sound they made with their mouths, drinking more like maddened beasts than men.

"Take care, Mr. Kennedy," said Joe at last; "let us not overdo the thing!" and he panted for breath.

But Kennedy, without a word, drank on. He even plunged his hands, and then his head, into the delicious tide—he fairly revelled in its coolness.

"But the doctor?" said Joe; "our friend, Dr. Ferguson?"

That one word recalled Kennedy to himself, and, hastily filling a flask that he had brought with him, he started on a run up the steps of the well.

But what was his amazement when he saw an opaque body of enormous dimensions blocking up the passage! Joe, who was close upon Kennedy's heels, recoiled with him.

"We are blocked in—entrapped!"

"Impossible! What does that mean?--"

Dick had no time to finish; a terrific roar made him only too quickly aware what foe confronted him.

"Another lion!" exclaimed Joe.

"A lioness, rather," said Kennedy. "Ah! ferocious brute!" he added, "I'll settle you in a moment more!" and swiftly reloaded his rifle.

In another instant he fired, but the animal had disappeared.

"Onward!" shouted Kennedy.

"No!" interposed the other, "that shot did not kill her; her body would have rolled down the steps; she's up there, ready to spring upon the first of us who appears, and he would be a lost man!"

"But what are we to do? We must get out of this, and the doctor is expecting us."

"Let us decoy the animal. Take my piece, and give me your rifle."

"What is your plan?"

"You'll see."

And Joe, taking off his linen jacket, hung it on the end of the rifle, and thrust it above the top of the steps. The lioness flung herself furiously upon it. Kennedy was on the alert for her, and his bullet broke her shoulder. The lioness, with a frightful howl of agony, rolled down the steps, overturning Joe in her fall. The poor fellow imagined that he could already feel the enormous paws of the savage beast in his flesh, when a second detonation resounded in the narrow passage, and Dr. Ferguson appeared at the opening above with his gun in hand, and still smoking from the discharge.

Joe leaped to his feet, clambered over the body of the dead lioness, and handed up the flask full of sparkling water to his master.

To carry it to his lips, and to half empty it at a draught, was the work of an instant, and the three travellers offered up thanks from the depths of their hearts to that Providence who had so miraculously saved them.

CHAPTER TWENTY-EIGHTH.

An Evening of Delight.--Joe's Culinary Performance.--A Dissertation on Raw Meat.--The Narrative of James Bruce.--Camping out.--Joe's Dreams.--The Barometer begins to fall.--The Barometer rises again.--Preparations for Departure.--The Tempest.

The evening was lovely, and our three friends enjoyed it in the cool shade of the mimosas, after a substantial repast, at which the tea and the punch were dealt out with no niggardly hand.

Kennedy had traversed the little domain in all directions. He had ransacked every thicket and satisfied himself that the balloon party were the only living creatures in this terrestrial paradise; so they stretched themselves upon their blankets and passed a peaceful night that brought them forgetfulness of their past sufferings.

On the morrow, May 7th, the sun shone with all his splendor, but his rays could not penetrate the dense screen of the palm-tree foliage, and as there was no lack of provisions, the doctor resolved to remain where he was while waiting for a favorable wind.

Joe had conveyed his portable kitchen to the oasis, and proceeded to indulge in any number of culinary combinations, using water all the time with the most profuse extravagance.
"What a strange succession of annoyances and enjoyments!" moralized Kennedy. "Such abundance as this after such privations; such luxury after such want! Ah! I nearly went mad!"

"My dear Dick," replied the doctor, "had it not been for Joe, you would not be sitting here, to-day, discoursing on the instability of human affairs."

"Whole-hearted friend!" said Kennedy, extending his hand to Joe.

"There's no occasion for all that," responded the latter; "but you can take your revenge some time, Mr. Kennedy, always hoping though that you may never have occasion to do the same for me!"

"It's a poor constitution this of ours to succumb to so little," philosophized Dr. Ferguson.

"So little water, you mean, doctor," interposed Joe; "that element must be very necessary to life."

"Undoubtedly, and persons deprived of food hold out longer than those deprived of water."

"I believe it. Besides, when needs must, one can eat any thing he comes across, even his fellow-creatures, although that must be a kind of food that's pretty hard to digest."

"The savages don't boggle much about it!" said Kennedy.

"Yes; but then they are savages, and accustomed to devouring raw meat; it's something that I'd find very disgusting, for my part."

"It is disgusting enough," said the doctor, "that's a fact; and so much so, indeed, that nobody believed the narratives of the earliest travellers in Africa who brought back word that many tribes on that continent subsisted upon raw meat, and people generally refused to credit the statement. It was under such circumstances that a very singular adventure befell James Bruce."

"Tell it to us, doctor; we've time enough to hear it," said Joe, stretching himself voluptuously on the cool greensward.

"By all means.--James Bruce was a Scotchman, of Stirlingshire, who, between 1768 and 1772, traversed all Abyssinia, as far as Lake Tyana, in search of the sources of the Nile. He afterward returned to England, but did not publish an account of his journeys until 1790. His statements were received with extreme incredulity, and such may be the reception accorded to our own. The manners and customs of the Abyssinians seemed so different from those of the English, that no one would credit the description of them. Among other details, Bruce had put forward the assertion that the tribes of Eastern Africa fed upon raw flesh, and this set everybody against him. He might say so as much as he pleased; there was no one likely to go and see! One day, in a parlor at Edinburgh, a Scotch gentleman took up the subject in his presence, as it had become the topic of daily pleasantry, and, in reference to the eating of raw flesh, said that the thing was neither possible nor true. Bruce made no reply, but went out and returned a few minutes later with a raw steak, seasoned with pepper and salt, in the African style."

"'Sir,' said he to the Scotchman, 'in doubting my statements, you have grossly affronted me; in believing the thing to be impossible, you have been egregiously mistaken; and, in proof thereof, you will now eat this beef-steak raw, or you will give me instant satisfaction!' The Scotchman had a wholesome dread of the brawny traveller, and DID eat the steak, although not without a good many wry faces. Thereupon, with the utmost coolness, James Bruce added: 'Even admitting, sir, that the thing were untrue, you will, at least, no longer maintain that it is impossible.'"

"Well put in!" said Joe, "and if the Scotchman found it lie heavy on his stomach, he got no more than he deserved. If, on our return to England, they dare to doubt what we say about our travels--"

"Well, Joe, what would you do?"

"Why, I'll make the doubters swallow the pieces of the balloon, without either salt or pepper!"

All burst out laughing at Joe's queer notions, and thus the day slipped by in pleasant chat. With returning strength, hope had revived, and with hope came the courage to do and to dare. The past was obliterated in the presence of the future with providential rapidity.

Joe would have been willing to remain forever in this enchanting asylum; it was the realm he had pictured in his dreams; he felt himself at home; his master had to give him his exact location, and it was with the gravest air imaginable that he wrote down on his tablets fifteen degrees forty-three minutes east longitude, and eight degrees thirty-two minutes north latitude.

Kennedy had but one regret, to wit, that he could not hunt in that miniature forest, because, according to his ideas, there was a slight deficiency of ferocious wild beasts in it.

"But, my dear Dick," said the doctor, "haven't you rather a short memory? How about the lion and the lioness?"

"Oh, that!" he ejaculated with the contempt of a thorough-bred sportsman for game already killed. "But the fact is, that finding them here would lead one to suppose that we can't be far from a more fertile country."

"It don't prove much, Dick, for those animals, when goaded by hunger or thirst, will travel long distances, and I think that, to-night, we had better keep a more vigilant lookout, and light fires, besides."

"What, in such heat as this?" said Joe. "Well, if it's necessary, we'll have to do it, but I do think it a real pity to burn this pretty grove that has been such a comfort to us!"
"Oh! above all things, we must take the utmost care not to set it on fire," replied the doctor, "so that others in the same strait as ourselves may some day find shelter here in the middle of the desert."

"I'll be very careful, indeed, doctor; but do you think that this oasis is known?"

"Undoubtedly; it is a halting-place for the caravans that frequent the centre of Africa, and a visit from one of them might be any thing but pleasant to you, Joe."

"Why, are there any more of those rascally Nyam-Nyams around here?"

"Certainly; that is the general name of all the neighboring tribes, and, under the same climates, the same races are likely to have similar manners and customs."

"Pah!" said Joe, "but, after all, it's natural enough. If savages had the ways of gentlemen, where would be the difference? By George, these fine fellows wouldn't have to be coaxed long to eat the Scotchman's raw steak, nor the Scotchman either, into the bargain!"

With this very sensible observation, Joe began to get ready his firewood for the night, making just as little of it as possible. Fortunately, these precautions were superfluous; and each of the party, in his turn, dropped off into the soundest slumber.

On the next day the weather still showed no sign of change, but kept provokingly and obstinately fair. The balloon remained motionless, without any oscillation to betray a breath of wind.

The doctor began to get uneasy again. If their stay in the desert were to be prolonged like this, their provisions would give out. After nearly perishing for want of water, they would, at last, have to starve to death!

But he took fresh courage as he saw the mercury fall considerably in the barometer, and noticed evident signs of an early change in the atmosphere. He therefore resolved to make all his preparations for a start, so as to avail himself of the first opportunity. The feeding-tank and the water-tank were both completely filled.

Then he had to reestablish the equilibrium of the balloon, and Joe was obliged to part with another considerable portion of his precious quartz. With restored health, his ambitious notions had come back to him, and he made more than one wry face before obeying his master; but the latter convinced him that he could not carry so considerable a weight with him through the air, and gave him his choice between the water and the gold. Joe hesitated no longer, but flung out the requisite quantity of his much-prized ore upon the sand.

"The next people who come this way," he remarked, "will be rather surprised to find a fortune in such a place."

"And suppose some learned traveller should come across these specimens, eh?" suggested Kennedy.

"You may be certain, Dick, that they would take him by surprise, and that he would publish his astonishment in several folios; so that some day we shall hear of a wonderful deposit of gold-bearing quartz in the midst of the African sands!"

"And Joe there, will be the cause of it all!"

This idea of mystifying some learned sage tickled Joe hugely, and made him laugh.

During the rest of the day the doctor vainly kept on the watch for a change of weather. The temperature rose, and, had it not been for the shade of the oasis, would have been insupportable. The thermometer marked a hundred and forty-nine degrees in the sun, and a veritable rain of fire filled the air. This was the most intense heat that they had yet noted.

Joe arranged their bivouac for that evening, as he had done for the previous night; and during the watches kept by the doctor and Kennedy there was no fresh incident.

But, toward three o'clock in the morning, while Joe was on guard, the temperature suddenly fell; the sky became overcast with clouds, and the darkness increased.

"Turn out!" cried Joe, arousing his companions. "Turn out! Here's the wind!"

"At last!" exclaimed the doctor, eying the heavens. "But it is a storm! The balloon! Let us hasten to the balloon!"

It was high time for them to reach it. The Victoria was bending to the force of the hurricane, and dragging along the car, the latter grazing the sand. Had any portion of the ballast been accidentally thrown out, the balloon would have been swept away, and all hope of recovering it have been forever lost.

But fleet-footed Joe put forth his utmost speed, and checked the car, while the balloon beat upon the sand, at the risk of being torn to pieces. The doctor, followed by Kennedy, leaped in, and lit his cylinder, while his companions threw out the superfluous ballast.

The travellers took one last look at the trees of the oasis bowing to the force of the hurricane, and soon, catching the wind at two hundred feet above the ground, disappeared in the gloom.

CHAPTER TWENTY-NINTH.

Signs of Vegetation.--The Fantastic Notion of a French Author.--A Magnificent Country.--The Kingdom of Adamova.--The Explorations of Speke and Burton connected with those of Dr. Barth.--The Atlantika Mountains.--
The River Benoue.--The City of Yola.--The Bagele.--Mount Mendif.

From the moment of their departure, the travellers moved with great velocity. They longed to leave behind them the desert, which had so nearly been fatal to them.

About a quarter-past nine in the morning, they caught a glimpse of some signs of vegetation: herbage floating on that sea of sand, and announcing, as the weeds upon the ocean did to Christopher Columbus, the nearness of the shore--green shoots peeping up timidly between pebbles that were, in their turn, to be the rocks of that vast expanse. Hills, but of trifling height, were seen in wavy lines upon the horizon. Their profile, muffled by the heavy mist, was defined but vaguely. The monotony, however, was beginning to disappear.

The doctor hailed with joy the new country thus disclosed, and, like a seaman on lookout at the mast-head, he was ready to shout aloud:

"Land, ho! land!"

An hour later the continent spread broadly before their gaze, still wild in aspect, but less flat, less denuded, and with a few trees standing out against the gray sky.

"We are in a civilized country at last!" said the hunter.

"Civilized? Well, that's one way of speaking; but there are no people to be seen yet."

"It will not be long before we see them," said Ferguson, "at our present rate of travel."

"Are we still in the negro country, doctor?"

"Yes, and on our way to the country of the Arabs."

"What! real Arabs, sir, with their camels?"

"No, not many camels; they are scarce, if not altogether unknown, in these regions. We must go a few degrees farther north to see them."

"What a pity!"

"And why, Joe?"

"Because, if the wind fell contrary, they might be of use to us."

"How so?"

"Well, sir, it's just a notion that's got into my head: we might hitch them to the car, and make them tow us along. What do you say to that, doctor?"

"Poor Joe! Another person had that idea in advance of you. It was used by a very gifted French author-- M. Mery--in a romance, it is true. He has his travellers drawn along in a balloon by a team of camels; then a lion comes up, devours the camels, swallows the tow-rope, and hauls the balloon in their stead; and so on through the story. You see that the whole thing is the top-flower of fancy, but has nothing in common with our style of locomotion."

Joe, a little cut down at learning that his idea had been used already, cudgelled his wits to imagine what animal could have devoured the lion; but he could not guess it, and so quietly went on scanning the appearance of the country.

A lake of medium extent stretched away before him, surrounded by an amphitheatre of hills, which yet could not be dignified with the name of mountains. There were winding valleys, numerous and fertile, with their tangled thickets of the most various trees. The African oil-tree rose above the mass, with leaves fifteen feet in length upon its stalk, the latter studded with sharp thorns; the bombax, or silk-cotton-tree, filled the wind, as it swept by, with the fine down of its seeds; the pungent odors of the pendanus, the "kenda" of the Arabs, perfumed the air up to the height where the Victoria was sailing; the papaw-tree, with its palm-shaped leaves; the sterculier, which produces the Soudan-nut; the baobab, and the banana-tree, completed the luxuriant flora of these inter-tropical regions.

"The country is superb!" said the doctor.

"Here are some animals," added Joe. "Men are not far away."

"Oh, what magnificent elephants!" exclaimed Kennedy. "Is there no way to get a little shooting?"

"How could we manage to halt in a current as strong as this? No, Dick; you must taste a little of the torture of Tantalus just now. You shall make up for it afterward."

And, in truth, there was enough to excite the fancy of a sportsman. Dick's heart fairly leaped in his breast as he grasped the butt of his Purdy.

The fauna of the region were as striking as its flora. The wild-ox revelled in dense herbage that often concealed his whole body; gray, black, and yellow elephants of the most gigantic size burst headlong, like a living hurricane, through the forests, breaking, rending, tearing down, devastating every thing in their path; upon the woody slopes of the hills trickled cascades and springs flowing northward; there, too, the hippopotami bathed their huge forms, splashing and snorting as they frolicked in the water, and lamantines, twelve feet long, with bodies like seals, stretched themselves along the banks, turning up toward the sun their rounded teats swollen with milk.

It was a whole menagerie of rare and curious beasts in a wondrous hot-house, where numberless birds with plumage of a thousand hues gleamed and fluttered in the sunshine.
By this prodigality of Nature, the doctor recognized the splendid kingdom of Adamova.

"We are now beginning to trench upon the realm of modern discovery. I have taken up the lost scent of preceding travellers. It is a happy chance, my friends, for we shall be enabled to link the toils of Captains Burton and Speke with the explorations of Dr. Barth. We have left the Englishmen behind us, and now have caught up with the Hamburger. It will not be long, either, before we arrive at the extreme point attained by that daring explorer."

"It seems to me that there is a vast extent of country between the two explored routes," remarked Kennedy; "at least, if I am to judge by the distance that we have made."

"It is easy to determine: take the map and see what is the longitude of the southern point of Lake Ukereoue, reached by Speke."

"It is near the thirty-seventh degree."

"And the city of Yola, which we shall sight this evening, and to which Barth penetrated, what is its position?"

"It is about in the twelfth degree of east longitude."

"Then there are twenty-five degrees, or, counting sixty miles to each, about fifteen hundred miles in all."

"A nice little walk," said Joe, "for people who have to go on foot."

"It will be accomplished, however. Livingstone and Moffat are pushing on up this line toward the interior. Nyassa, which they have discovered, is not far from Lake Tanganayika, seen by Burton. Ere the close of the century these regions will, undoubtedly, be explored. But," added the doctor, consulting his compass, "I regret that the wind is carrying us so far to the westward. I wanted to get to the north."

After twelve hours of progress, the Victoria found herself on the confines of Nigritia. The first inhabitants of this region, the Chouas Arabs, were feeding their wandering flocks. The immense summits of the Atlantika Mountains seen above the horizon--mountains that no European foot had yet scaled, and whose height is computed to be ten thousand feet! Their western slope determines the flow of all the waters in this region of Africa toward the ocean. They are the Mountains of the Moon to this part of the continent.

At length a real river greeted the gaze of our travellers, and, by the enormous ant-hills seen in its vicinity, the doctor recognized the Benoue, one of the great tributaries of the Niger, the one which the natives have called "The Fountain of the Waters."

"This river," said the doctor to his companions, "will, one day, be the natural channel of communication with the interior of Nigritia. Under the command of one of our brave captains, the steamer Pleiad has already ascended as far as the town of Yola. You see that we are not in an unknown country."

Numerous slaves were engaged in the labors of the field, cultivating sorgho, a kind of millet which forms the chief basis of their diet; and the most stupid expressions of astonishment ensued as the Victoria sped past like a meteor. That evening the balloon halted about forty miles from Yola, and ahead of it, but in the distance, rose the two sharp cones of Mount Mendif.

The doctor threw out his anchors and made fast to the top of a high tree; but a very violent wind beat upon the balloon with such force as to throw it over on its side, thus rendering the position of the car sometimes extremely dangerous. Ferguson did not close his all night, and he was repeatedly on the point of cutting the anchor-rope and scudding away before the gale. At length, however, the storm abated, and the oscillations of the balloon ceased to be alarming.

On the morrow the wind was more moderate, but it carried our travellers away from the city of Yola, which recently rebuilt by the Fouillans, excited Ferguson's curiosity. However, he had to make up his mind to being borne farther to the northward and even a little to the east.

Kennedy proposed to halt in this fine hunting-country, and Joe declared that the need of fresh meat was beginning to be felt; but the savage customs of the country, the attitude of the population, and some shots fired at the Victoria, admonished the doctor to continue his journey. They were then crossing a region that was the scene of massacres and burnings, and where warlike conflicts between the barbarian sultans, contending for their power amid the most atrocious carnage, never cease.

Numerous and populous villages of long low huts stretched away between broad pasture-fields whose dense herbage was besprinkled with violet-colored blossoms. The huts, looking like huge beehives, were sheltered behind bristling palisades. The wild hill-sides and hollows frequently reminded the beholder of the glens in the Highlands of Scotland, as Kennedy more than once remarked.

In spite of all he could do, the doctor bore directly to the northeast, toward Mount Mendif, which was lost in the midst of environing clouds. The lofty summits of these mountains separate the valley of the Niger from the basin of Lake Tchad.

Soon afterward was seen the Bagele, with its eighteen villages clinging to its flanks like a whole brood of children to their mother's bosom--a magnificent spectacle for the beholder whose gaze commanded and took in the entire picture at one view. Even the ravines were seen to be covered with fields of rice and of arachides.
By three o’clock the Victoria was directly in front of Mount Mendif. It had been impossible to avoid it; the only thing to be done was to cross it. The doctor, by means of a temperature increased to one hundred and eighty degrees, gave the balloon a fresh ascensional force of nearly sixteen hundred pounds, and it went up to an elevation of more than eight thousand feet, the greatest height attained during the journey. The temperature of the atmosphere was so much cooler at that point that the aeronauts had to resort to their blankets and thick coverings.

Ferguson was in haste to descend; the covering of the balloon gave indications of bursting, but in the meanwhile he had time to satisfy himself of the volcanic origin of the mountain, whose extinct craters are now but deep abysses. Immense accumulations of bird-guano gave the sides of Mount Mendif the appearance of calcareous rocks, and there was enough of the deposit there to manure all the lands in the United Kingdom.

At five o’clock the Victoria, sheltered from the south winds, went gently gliding along the slopes of the mountain, and stopped in a wide clearing remote from any habitation. The instant it touched the soil, all needful precautions were taken to hold it there firmly; and Kennedy, fowling-piece in hand, sallied out upon the sloping plain. Ere long, he returned with half a dozen wild ducks and a kind of snipe, which Joe served up in his best style. The meal was heartily relished, and the night was passed in undisturbed and refreshing slumber.

CHAPTER THIRTIETH.

Mosfeia.—The Sheik.—Denham, Clapperton, and Oudney.—Vogel.—The Capital of Loggoum.—Toole.—Becalmed above Kernak.—The Governor and his Court.—The Attack.—The Incendiary Pigeons.

On the next day, May 11th, the Victoria resumed her adventurous journey. Her passengers had the same confidence in her that a good seaman has in his ship.

In terrific hurricanes, in tropical heats, when making dangerous departures, and descents still more dangerous, it had, at all times and in all places, come out safely. It might almost have been said that Ferguson managed it with a wave of the hand; and hence, without knowing in advance, where the point of arrival would be, the doctor had no fears concerning the successful issue of his journey. However, in this country of barbarians and fanatics, prudence obliged him to take the strictest precautions. He therefore counselled his companions to have their eyes wide open for every thing and at all hours.

The wind drifted a little more to the northward, and, toward nine o’clock, they sighted the larger city of Mosfeia, built upon an eminence which was itself enclosed between two lofty mountains. Its position was impregnable, a narrow road running between a marsh and a thick wood being the only channel of approach to it.

At the moment of which we write, a sheik, accompanied by a mounted escort, and clad in a garb of brilliant colors, preceded by couriers and trumpeters, who put aside the boughs of the trees as he rode up, was making his grand entry into the place.

The doctor lowered the balloon in order to get a better look at this cavalcade of natives; but, as the balloon grew larger to their eyes, they began to show symptoms of intense affright, and at length made off in different directions as fast as their legs and those of their horses could carry them.

The sheik alone did not budge an inch. He merely grasped his long musket, cocked it, and proudly waited in silence. The doctor came on to within a hundred and fifty feet of him, and then, with his roundest and fullest voice, saluted him courteously in the Arabic tongue.

But, upon hearing these words falling, as it seemed, from the sky, the sheik dismounted and prostrated himself in the dust of the highway, where the doctor had to leave him, finding it impossible to divert him from his adoration.

"Unquestionably," Ferguson remarked, "those people take us for supernatural beings. When Europeans came among them for the first time, they were mistaken for creatures of a higher race. When this sheik comes to speak of to-day's meeting, he will not fail to embellish the circumstance with all the resources of an Arab imagination. You may, therefore, judge what an account their legends will give of us some day."

"Not such a desirable thing, after all," said the Scot, "in the point of view that affects civilization; it would be better to pass for mere men. That would give these negro races a superior idea of European power."

"Very good, my dear Dick; but what can we do about it? You might sit all day explaining the mechanism of a balloon to the savants of this country, and yet they would not comprehend you, but would persist in ascribing it to supernatural aid."

"Doctor, you spoke of the first time Europeans visited these regions. Who were the visitors?" inquired Joe.

"My dear fellow, we are now upon the very track of Major Denham. It was at this very city of Mosfeia that he was received by the Sultan of Mandara; he had quitted the Bornou country; he accompanied the sheik in an expedition against the Fellatahs; he assisted in the attack on the city, which, with its arrows alone, bravely resisted the bullets of the Arabs, and put the sheik's troops to flight. All this was but a pretext for murders, raids, and pillage. The major was completely plundered and stripped, and had it not been for his horse, under whose stomach he clung
with the skill of an Indian rider, and was borne with a headlong gallop from his barbarous pursuers, he never could have made his way back to Kouka, the capital of Bornou."

"Who was this Major Denham?"

"A fearless Englishman, who, between 1822 and 1824, commanded an expedition into the Bornou country, in company with Captain Clapperton and Dr. Oudney. They set out from Tripoli in the month of March, reached Mbourouzouk, the capital of Fez, and, following the route which at a later period Dr. Barth was to pursue on his way back to Europe, they arrived, on the 16th of February, 1823, at Kouka, near Lake Chad. Denham made several explorations in Bornou, in Mandara, and to the eastern shores of the lake. In the mean time, on the 15th of December, 1823, Captain Clapperton and Dr. Oudney had pushed their way through the Soudan country as far as Sackatooh, and Oudney died of fatigue and exhaustion in the town of Murmur."

"This part of Africa has, therefore, paid a heavy tribute of victims to the cause of science," said Kennedy.

"Yes, this country is fatal to travellers. We are moving directly toward the kingdom of Baghirmi, which Vogel traversed in 1856, so as to reach the Wadai country, where he disappeared. This young man, at the age of twenty-three, had been sent to cooperate with Dr. Barth. They met on the 1st of December, 1854, and thereupon commenced his explorations of the country. Toward 1856, he announced, in the last letters received from him, his intention to reconnoitre the kingdom of Wadai, which no European had yet penetrated. It appears that he got as far as Wara, the capital, where, according to some accounts, he was made prisoner, and, according to others, was put to death for having attempted to ascend a sacred mountain in the environs. But, we must not too lightly admit the death of travellers, since that does away with the necessity of going in search of them. For instance, how often was the death of Dr. Barth reported, to his own great annoyance! It is, therefore, very possible that Vogel may still be held as a prisoner by the Sultan of Wadai, in the hope of obtaining a good ransom for him.

"Baron de Neimans was about starting for the Wadai country when he died at Cairo, in 1855; and we now know that De Heuglin has set out on Vogel's track with the expedition sent from Leipsic, so that we shall soon be accurately informed as to the fate of that young and interesting explorer."

* Since the doctor's departure, letters written from El'Obeid by Mr. Muntzinger, the newly-appointed head of the expedition, unfortunately place the death of Vogel beyond a doubt.

Mosfeia had disappeared from the horizon long ere this, and the Mandara country was developing to the gaze of our aeronauts its astonishing fertility, with its forests of acacias, its locust-trees covered with red flowers, and the herbaceous plants of its fields of cotton and indigo trees. The river Shari, which eighty miles farther on rolled its impetuous waters into Lake Chad, was quite distinctly seen.

The doctor got his companions to trace its course upon the maps drawn by Dr. Barth.

"You perceive," said he, "that the labors of this savant have been conducted with great precision; we are moving directly toward the Loggoum region, and perhaps toward Kernak, its capital. It was there that poor Toole died, at the age of scarcely twenty-two. He was a young Englishman, an ensign in the 80th regiment, who, a few weeks before, had joined Major Denham in Africa, and it was not long ere he there met his death. Ah! this vast country might well be called the graveyard of European travellers."

Some boats, fifty feet long, were descending the current of the Shari. The Victoria, then one thousand feet above the soil, hardly attracted the attention of the natives; but the wind, which until then had been blowing with a certain degree of strength, was falling off.

"Is it possible that we are to be caught in another dead calm?" sighed the doctor.

"Well, we've no lack of water, nor the desert to fear, anyhow, master," said Joe.

"No; but there are races here still more to be dreaded."

"Why!" said Joe, again, "there's something like a town."

"That is Kernak. The last puffs of the breeze are wafting us to it, and, if we choose, we can take an exact plan of the place."

"Shall we not go nearer to it?" asked Kennedy.

"Nothing easier, Dick! We are right over it. Allow me to turn the stopcock of the cylinder, and we'll not be long in descending."

Half an hour later the balloon hung motionless about two hundred feet from the ground.

"Here we are!" said the doctor, "nearer to Kernak than a man would be to London, if he were perched in the cupola of St. Paul's. So we can take a survey at our ease."

"What is that tick-tacking sound that we hear on all sides?"

Joe looked attentively, and at length discovered that the noise they heard was produced by a number of weavers beating cloth stretched in the open air, on large trunks of trees.

The capital of Loggoum could then be seen in its entire extent, like an unrolled chart. It is really a city with straight rows of houses and quite wide streets. In the midst of a large open space there was a slave-market, attended
by a great crowd of customers, for the Mandara women, who have extremely small hands and feet, are in excellent request, and can be sold at lucrative rates.

At the sight of the Victoria, the scene so often produced occurred again. At first there were outcries, and then followed general stupefaction; business was abandoned; work was flung aside, and all noise ceased. The aeronauts remained as they were, completely motionless, and lost not a detail of the populous city. They even went down to within sixty feet of the ground.

Hereupon the Governor of Loggoum came out from his residence, displaying his green standard, and accompanied by his musicians, who blew on hoarse buffalo-horns, as though they would split their cheeks or any thing else, excepting their own lungs. The crowd at once gathered around him. In the mean while Dr. Ferguson tried to make himself heard, but in vain.

This population looked like proud and intelligent people, with their high foreheads, their almost aquiline noses, and their curling hair; but the presence of the Victoria troubled them greatly. Horsemen could be seen galloping in all directions, and it soon became evident that the governor's troops were assembling to oppose so extraordinary a foe. Joe wore himself out waving handkerchiefs of every color and shape to them; but his exertions were all to no purpose.

However, the sheik, surrounded by his court, proclaimed silence, and pronounced a discourse, of which the doctor could not understand a word. It was Arabic, mixed with Baghirmi. He could make out enough, however, by the universal language of gestures, to be aware that he was receiving a very polite invitation to depart. Indeed, he would have asked for nothing better, but for lack of wind, the thing had become impossible. His noncompliance, therefore, exasperated the governor, whose courtiers and attendants set up a furious howl to enforce immediate obedience on the part of the aerial monster.

They were odd-looking fellows those courtiers, with their five or six shirts swathed around their bodies! They had enormous stomachs, some of which actually seemed to be artificial. The doctor surprised his companions by informing them that this was the way to pay court to the sultan. The rotundity of the stomach indicated the ambition of its possessor. These corpulent gentry gesticulated and bawled at the top of their voices--one of them particularly distinguishing himself above the rest--to such an extent, indeed, that he must have been a prime minister--at least, if the disturbance he made was any criterion of his rank. The common rabble of dusky denizens united their howlings with the uproar of the court, repeating their gesticulations like so many monkeys, and thereby producing a single and instantaneous movement of ten thousand arms at one time.

To these means of intimidation, which were presently deemed insufficient, were added others still more formidable. Soldiers, armed with bows and arrows, were drawn up in line of battle; but by this time the balloon was expanding, and rising quietly beyond their reach. Upon this the governor seized a musket and aimed it at the balloon; but, Kennedy, who was watching him, shattered the uplifted weapon in the sheik's grasp.

At this unexpected blow there was a general rout. Every mother's son of them scampered for his dwelling with the utmost celerity, and stayed there, so that the streets of the town were absolutely deserted for the remainder of that day.

Night came, and not a breath of wind was stirring. The aeronauts had to make up their minds to remain motionless at the distance of but three hundred feet above the ground. Not a fire or light shone in the deep gloom, and around reigned the silence of death; but the doctor only redoubled his vigilance, as this apparent quiet might conceal some snare.

And he had reason to be watchful. About midnight, the whole city seemed to be in a blaze. Hundreds of streaks of flame crossed each other, and shot to and fro in the air like rockets, forming a regular network of fire.

"That's really curious!" said the doctor, somewhat puzzled to make out what it meant.

"By all that's glorious!" shouted Kennedy, "it looks as if the fire were ascending and coming up toward us!"

And, sure enough, with an accompaniment of musket-shots, yelling, and din of every description, the mass of fire was, indeed, mounting toward the Victoria. Joe got ready to throw out ballast, and Ferguson was not long at guessing the truth. Thousands of pigeons, their tails garnished with combustibles, had been set loose and driven toward the Victoria; and now, in their terror, they were flying high up, zigzagging the atmosphere with lines of fire. Kennedy was preparing to discharge all his batteries into the middle of the ascending multitude, but what could he have done against such a numberless army? The pigeons were already whisking around the car; they were even surrounding the balloon, the sides of which, reflecting their illumination, looked as though enveloped with a network of fire.

The doctor dared hesitate no longer; and, throwing out a fragment of quartz, he kept himself beyond the reach of these dangerous assailants; and, for two hours afterward, he could see them wandering hither and thither through the darkness of the night, until, little by little, their light diminished, and they, one by one, died out.

"Now we may sleep in quiet," said the doctor.
"Not badly got up for barbarians," mused friend Joe, speaking his thoughts aloud.
"Oh, they employ these pigeons frequently, to set fire to the thatch of hostile villages; but this time the village mounted higher than they could go."
"Why, positively, a balloon need fear no enemies!"
"Yes, indeed, it may!" objected Ferguson.
"What are they, then, doctor?"
"They are the careless people in the car! So, my friends, let us have vigilance in all places and at all times."

CHAPTER THIRTY-FIRST.
Departure in the Night-time.--All Three.--Kennedy's Instincts.--Precautions.--The Course of the Shari River.--Lake Tchad.--The Water of the Lake.--The Hippopotamus.--One Bullet thrown away.
About three o'clock in the morning, Joe, who was then on watch, at length saw the city move away from beneath his feet. The Victoria was once again in motion, and both the doctor and Kennedy awoke.
The former consulted his compass, and saw, with satisfaction, that the wind was carrying them toward the northwest.
"We are in luck!" said he; "every thing works in our favor: we shall discover Lake Tchad this very day."
"Is it a broad sheet of water?" asked Kennedy.
"Somewhat, Dick. At its greatest length and breadth, it measures about one hundred and twenty miles."
"It will spice our trip with a little variety to sail over a spacious sheet of water."
"After all, though, I don't see that we have much to complain of on that score. Our trip has been very much varied, indeed; and, moreover, we are getting on under the best possible conditions."
"Unquestionably so; excepting those privations on the desert, we have encountered no serious danger."
"It is not to be denied that our noble balloon has behaved wonderfully well. To-day is May 12th, and we started on the 18th of April. That makes twenty-five days of journeying. In ten days more we shall have reached our destination."
"Where is that?"
"I do not know. But what does that signify?"
"You are right again, Samuel! Let us intrust to Providence the care of guiding us and of keeping us in good health as we are now. We don't look much as though we had been crossing the most pestilential country in the world!"
"We had an opportunity of getting up in life, and that's what we have done!"
"Hurrah for trips in the air!" cried Joe. "Here we are at the end of twenty-five days in good condition, well fed, and well rested. We've had too much rest in fact, for my legs begin to feel rusty, and I wouldn't be vexed a bit to stretch them with a run of thirty miles or so!"
"You can do that, Joe, in the streets of London, but in fine we set out three together, like Denham, Clapperton, and Overweg; like Barth, Richardson, and Vogel, and, more fortunate than our predecessors here, we are three in number still. But it is most important for us not to separate. If, while one of us was on the ground, the Victoria should have to ascend in order to escape some sudden danger, who knows whether we should ever see each other again? Therefore it is that I say again to Kennedy frankly that I do not like his going off alone to hunt."
"But still, Samuel, you will permit me to indulge that fancy a little. There is no harm in renewing our stock of provisions. Besides, before our departure, you held out to me the prospect of some superb hunting, and thus far I have done but little in the line of the Andersons and Cummings."
"But, my dear Dick, your memory fails you, or your modesty makes you forget your own exploits. It really seems to me that, without mentioning small game, you have already an antelope, an elephant, and two lions on your conscience."
"But what's all that to an African sportsman who sees all the animals in creation strutting along under the muzzle of his rifle? There! there! look at that troop of giraffes!"
"Those giraffes," roared Joe; "why, they're not as big as my fist."
"Because we are a thousand feet above them; but close to them you would discover that they are three times as tall as you are!"
"And what do you say to yon herd of gazelles, and those ostriches, that run with the speed of the wind?" resumed Kennedy.
"Those ostriches?" remonstrated Joe, again; "those are chickens, and the greatest kind of chickens!"
"Come, doctor, can't we get down nearer to them?" pleaded Kennedy.
"We can get closer to them, Dick, but we must not land. And what good will it do you to strike down those poor
animals when they can be of no use to you? Now, if the question were to destroy a lion, a tiger, a cat, a hyena, I
could understand it; but to deprive an antelope or a gazelle of life, to no other purpose than the gratification of your
instincts as a sportsman, seems hardly worth the trouble. But, after all, my friend, we are going to keep at about one
hundred feet only from the soil, and, should you see any ferocious wild beast, oblige us by sending a ball through its
heart!"

The Victoria descended gradually, but still keeping at a safe height, for, in a barbarous, yet very populous
country, it was necessary to keep on the watch for unexpected perils.

The travellers were then directly following the course of the Shari. The charming banks of this river were hidden
beneath the foliage of trees of various dyes; lianas and climbing plants wound in and out on all sides and formed the
most curious combinations of color. Crocodiles were seen basking in the broad blaze of the sun or plunging beneath
the waters with the agility of lizards, and in their gambols they sported about among the many green islands that
intercept the current of the stream.

It was thus, in the midst of rich and verdant landscapes that our travellers passed over the district of Maffatay,
and about nine o'clock in the morning reached the southern shore of Lake Tchad.

There it was at last, outstretched before them, that Caspian Sea of Africa, the existence of which was so long
consigned to the realms of fable—that interior expanse of water to which only Denham's and Barth's expeditions had
been able to force their way.

The doctor strove in vain to fix its precise configuration upon paper. It had already changed greatly since 1847.
In fact, the chart of Lake Tchad is very difficult to trace with exactitude, for it is surrounded by muddy and almost
impassable morasses, in which Barth thought that he was doomed to perish. From year to year these marshes,
covered with reeds and papyrus fifteen feet high, become the lake itself. Frequently, too, the villages on its shores
are half submerged, as was the case with Ngornou in 1856, and now the hippopotamus and the alligator frisk and
dive where the dwellings of Bornou once stood.

The sun shot his dazzling rays over this placid sheet of water, and toward the north the two elements merged into
one and the same horizon.

The doctor was desirous of determining the character of the water, which was long believed to be salt. There was
no danger in descending close to the lake, and the car was soon skimming its surface like a bird at the distance of
only five feet.

Joe plunged a bottle into the lake and drew it up half filled. The water was then tasted and found to be but little
fit for drinking, with a certain carbonate-of-soda flavor.

While the doctor was jotting down the result of this experiment, the loud report of a gun was heard close beside
him. Kennedy had not been able to resist the temptation of firing at a huge hippopotamus. The latter, who had been
basking quietly, disappeared at the sound of the explosion, but did not seem to be otherwise incommoded by
Kennedy's conical bullet.

"You'd have done better if you had harpooned him," said Joe.

"But how?"

"With one of our anchors. It would have been a hook just big enough for such a rousing beast as that!"

"Humph!" ejaculated Kennedy, "Joe really has an idea this time—"

"Which I beg of you not to put into execution," interposed the doctor. "The animal would very quickly have
dragged us where we could not have done much to help ourselves, and where we have no business to be."

"Especially now since we've settled the question as to what kind of water there is in Lake Tchad. Is that sort of
fish good to eat, Dr. Ferguson?"

"That fish, as you call it, Joe, is really a mammiferous animal of the pachydermal species. Its flesh is said to be
excellent and is an article of important trade between the tribes living along the borders of the lake."

"Then I'm sorry that Mr. Kennedy's shot didn't do more damage."

"The animal is vulnerable only in the stomach and between the thighs. Dick's ball hasn't even marked him; but
should the ground strike me as favorable, we shall halt at the northern end of the lake, where Kennedy will find
himself in the midst of a whole menagerie, and can make up for lost time."

"Well," said Joe. "I hope then that Mr. Kennedy will hunt the hippopotamus a little; I'd like to taste the meat of
that queer-looking beast. It doesn't look exactly natural to get away into the centre of Africa, to feed on snipe and
partridge, just as if we were in England."

CHAPTER THIRTY-SECOND.
The Capital of Bornou.--The Islands of the Biddiomahs.--The Condors.--The Doctor's Anxieties.--His
Precautions.--An Attack in Mid-air.--The Balloon Covering tom.--The Fall.--Sublime Self-Sacrifice.--The Northern
Coast of the Lake.

Since its arrival at Lake Tchad, the balloon had struck a current that edged it farther to the westward. A few clouds tempered the heat of the day, and, besides, a little air could be felt over this vast expanse of water; but about one o’clock, the Victoria, having slanted across this part of the lake, again advanced over the land for a space of seven or eight miles.

The doctor, who was somewhat vexed at first at this turn of his course, no longer thought of complaining when he caught sight of the city of Kouka, the capital of Bornou. He saw it for a moment, encircled by its walls of white clay, and a few rudely-constructed mosques rising clumsily above that conglomeration of houses that look like playing-dice, which form most Arab towns. In the court-yards of the private dwellings, and on the public squares, grew palms and caoutchouc-trees topped with a dome of foliage more than one hundred feet in breadth. Joe called attention to the fact that these immense parasols were in proper accordance with the intense heat of the sun, and made thereon some pious reflections which it were needless to repeat.

Kouka really consists of two distinct towns, separated by the "Dendal," a large boulevard three hundred yards wide, at that hour crowded with horsemen and foot passengers. On one side, the rich quarter stands squarely with its airy and lofty houses, laid out in regular order; on the other, is huddled together the poor quarter, a miserable collection of low hovels of a conical shape, in which a poverty-stricken multitude vegetate rather than live, since Kouka is neither a trading nor a commercial city.

Kennedy thought it looked something like Edinburgh, were that city extended on a plain, with its two distinct boroughs.

But our travellers had scarcely the time to catch even this glimpse of it, for, with the fickleness that characterizes the air-currents of this region, a contrary wind suddenly swept them some forty miles over the surface of Lake Tchad.

Then then were regaled with a new spectacle. They could count the numerous islets of the lake, inhabited by the Biddiomahs, a race of bloodthirsty and formidable pirates, who are as greatly feared when neighbors as are the Touaregs of Sahara.

These estimable people were in readiness to receive the Victoria bravely with stones and arrows, but the balloon quickly passed their islands, fluttering over them, from one to the other with butterfly motion, like a gigantic beetle.

At this moment, Joe, who was scanning the horizon, said to Kennedy:

"There, sir, as you are always thinking of good sport, yonder is just the thing for you!"

"What is it, Joe?"

"This time, the doctor will not disapprove of your shooting."

"But what is it?"

"Don't you see that flock of big birds making for us?"

"Birds?" exclaimed the doctor, snatching his spyglass.

"I see them," replied Kennedy; "there are at least a dozen of them."

"Fourteen, exactly!" said Joe.

"Heaven grant that they may be of a kind sufficiently noxious for the doctor to let me peg away at them!"

"I should not object, but I would much rather see those birds at a distance from us!"

"Why, are you afraid of those fowls?"

"They are condors, and of the largest size. Should they attack us--"

"Well, if they do, we'll defend ourselves. We have a whole arsenal at our disposal. I don't think those birds are so very formidable."

"Who can tell?" was the doctor's only remark.

Ten minutes later, the flock had come within gunshot, and were making the air ring with their hoarse cries. They came right toward the Victoria, more irritated than frightened by her presence.

"How they scream! What a noise!" said Joe.

"Perhaps they don't like to see anybody poaching in their country up in the air, or daring to fly like themselves!"

"Well, now, to tell the truth, when I take a good look at them, they are an ugly, ferocious set, and I should think them dangerous enough if they were armed with Purdy-Moore rifles," admitted Kennedy.

"They have no need of such weapons," said Ferguson, looking very grave.

The condors flew around them in wide circles, their flight growing gradually closer and closer to the balloon. They swept through the air in rapid, fantastic curves, occasionally precipitating themselves headlong with the speed of a bullet, and then breaking their line of projection by an abrupt and daring angle.

The doctor, much disquieted, resolved to ascend so as to escape this dangerous proximity. He therefore dilated the hydrogen in his balloon, and it rapidly rose.

But the condors mounted with him, apparently determined not to part company.
"They seem to mean mischief!" said the hunter, cocking his rifle. 
And, in fact, they were swooping nearer, and more than one came within fifty feet of them, as if defying the fire-arms.
"By George, I'm itching to let them have it!" exclaimed Kennedy.
"No, Dick; not now! Don't exasperate them needlessly. That would only be exciting them to attack us!"
"But I could soon settle those fellows!"
"You may think so, Dick. But you are wrong!"
"Why, we have a bullet for each of them!"
"And suppose that they were to attack the upper part of the balloon, what would you do? How would you get at them? Just imagine yourself in the presence of a troop of lions on the plain, or a school of sharks in the open ocean! For travellers in the air, this situation is just as dangerous."
"Are you speaking seriously, doctor?"
"Very seriously, Dick."
"Let us wait, then!"
"Wait! Hold yourself in readiness in case of an attack, but do not fire without my orders."

The birds then collected at a short distance, yet to near that their naked necks, entirely bare of feathers, could be plainly seen, as they stretched them out with the effort of their cries, while their gristy crests, garnished with a comb and gills of deep violet, stood erect with rage. They were of the very largest size, their bodies being more than three feet in length, and the lower surface of their white wings glittering in the sunlight. They might well have been considered winged sharks, so striking was their resemblance to those ferocious rangers of the deep.
"They are following us!" said the doctor, as he saw them ascending with him, "and, mount as we may, they can fly still higher!"

"Well, what are we to do?" asked Kennedy.

The doctor made no answer.
"Listen, Samuel!" said the sportsman. "There are fourteen of those birds; we have seventeen shots at our disposal if we discharge all our weapons. Have we not the means, then, to destroy them or disperse them? I will give a good account of some of them!"
"I have no doubt of your skill, Dick; I look upon all as dead that may come within range of your rifle, but I repeat that, if they attack the upper part of the balloon, you could not get a sight at them. They would tear the silk covering that sustains us, and we are three thousand feet up in the air!"

At this moment, one of the ferocious birds darted right at the balloon, with outstretched beak and claws, ready to rend it with either or both.
"Fire! fire at once!" cried the doctor.

He had scarcely ceased, ere the huge creature, stricken dead, dropped headlong, turning over and over in space as he fell.
Kennedy had already grasped one of the two-barrelled fowling-pieces and Joe was taking aim with another.
Frightened by the report, the condors drew back for a moment, but they almost instantly returned to the charge with extreme fury. Kennedy severed the head of one from its body with his first shot, and Joe broke the wing of another.
"Only eleven left," said he.
Thereupon the birds changed their tactics, and by common consent soared above the balloon. Kennedy glanced at Ferguson. The latter, in spite of his imperturbability, grew pale. Then ensued a moment of terrifying silence. In the next they heard a harsh tearing noise, as of something rending the silk, and the car seemed to sink from beneath the feet of our three aeronauts.
"We are lost!" exclaimed Ferguson, glancing at the barometer, which was now swiftly rising.
"Over with the ballast!" he shouted, "over with it!"
And in a few seconds the last lumps of quartz had disappeared.
"We are still falling! Empty the water-tanks! Do you hear me, Joe? We are pitching into the lake!"

Joe obeyed. The doctor leaned over and looked out. The lake seemed to come up toward him like a rising tide. Every object around grew rapidly in size while they were looking at it. The car was not two hundred feet from the surface of Lake Tchad.
"The provisions! the provisions!" cried the doctor.
And the box containing them was launched into space.
Their descent became less rapid, but the luckless aeronauts were still falling, and into the lake.
"Throw out something--something more!" cried the doctor.
"There is nothing more to throw!" was Kennedy's despairing response.
"Yes, there is!" called Joe, and with a wave of the hand he disappeared like a flash, over the edge of the car.

"Joe! Joe!" exclaimed the doctor, horror-stricken.

The Victoria thus relieved resumed her ascending motion, mounted a thousand feet into the air, and the wind, burying itself in the disinflated covering, bore them away toward the northern part of the lake.

"Lost!" exclaimed the sportsman, with a gesture of despair.

"Lost to save us!" responded Ferguson.

And these men, intrepid as they were, felt the large tears streaming down their cheeks. They leaned over with the vain hope of seeing some trace of their heroic companion, but they were already far away from him.

"What course shall we pursue?" asked Kennedy.

"Alight as soon as possible, Dick, and then wait."

After a sweep of some sixty miles the Victoria halted on a desert shore, on the north of the lake. The anchors caught in a low tree and the sportsman fastened it securely. Night came, but neither Ferguson nor Kennedy could find one moment's sleep.

CHAPTER THIRTY-THIRD.

Conjectures.--Reestablishment of the Victoria's Equilibrium.--Dr. Ferguson's New Calculations.--Kennedy's Hunt.--A Complete Exploration of Lake Tchad.--Tangalia.--The Return.--Lari.

On the morrow, the 13th of May, our travellers, for the first time, reconnoitred the part of the coast on which they had landed. It was a sort of island of solid ground in the midst of an immense marsh. Around this fragment of terra firma grew reeds as lofty as trees are in Europe, and stretching away out of sight.

These impenetrable swamps gave security to the position of the balloon. It was necessary to watch only the borders of the lake. The vast stretch of water broadened away from the spot, especially toward the east, and nothing could be seen on the horizon, neither mainland nor islands.

The two friends had not yet ventured to speak of their recent companion. Kennedy first imparted his conjectures to the doctor.

"Perhaps Joe is not lost after all," he said. "He was a skilful lad, and had few equals as a swimmer. He would find no difficulty in swimming across the Firth of Forth at Edinburgh. We shall see him again--but how and where I know not. Let us omit nothing on our part to give him the chance of rejoining us."

"May God grant it as you say, Dick!" replied the doctor, with much emotion. "We shall do everything in the world to find our lost friend again. Let us, in the first place, see where we are. But, above all things, let us rid the Victoria of this outside covering, which is of no further use. That will relieve us of six hundred and fifty pounds, a weight not to be despised--and the end is worth the trouble!"

The doctor and Kennedy went to work at once, but they encountered great difficulty. They had to tear the strong silk away piece by piece, and then cut it in narrow strips so as to extricate it from the meshes of the network. The tear made by the beaks of the condors was found to be several feet in length.

This operation took at least four hours, but at length the inner balloon once completely extricated did not appear to have suffered in the least degree. The Victoria was thus diminished in size by one fifth, and this difference was sufficiently noticeable to excite Kennedy's surprise.

"Will it be large enough?" he asked.

"Have no fears on that score, I will reestablish the equilibrium, and should our poor Joe return we shall find a way to start off with him again on our old route."

"At the moment of our fall, unless I am mistaken, we were not far from an island."

"Yes, I recollect it," said the doctor, "but that island, like all the islands on Lake Tchad, is, no doubt, inhabited by a gang of pirates and murderers. They certainly witnessed our misfortune, and should Joe fall into their hands, what will become of him unless protected by their superstitions?"

"Oh, he's just the lad to get safely out of the scrape, I repeat. I have great confidence in his shrewdness and skill."

"I hope so. Now, Dick, you may go and hunt in the neighborhood, but don't get far away whatever you do. It has become a pressing necessity for us to renew our stock of provisions, since we had to sacrifice nearly all the old lot."

"Very good, doctor, I shall not be long absent."

Hereupon, Kennedy took a double-barrelled fowling-piece, and strode through the long grass toward a thicket not far off, where the frequent sound of shooting soon let the doctor know that the sportsman was making a good use of his time.

Meanwhile Ferguson was engaged in calculating the relative weight of the articles still left in the car, and in establishing the equipoise of the second balloon. He found that there were still left some thirty pounds of pemmican,
a supply of tea and coffee, about a gallon and a half of brandy, and one empty water-tank. All the dried meat had disappeared.

The doctor was aware that, by the loss of the hydrogen in the first balloon, the ascensional force at his disposal was now reduced to about nine hundred pounds. He therefore had to count upon this difference in order to rearrange his equilibrium. The new balloon measured sixty-seven thousand cubic feet, and contained thirty-three thousand four hundred and eighty feet of gas. The dilating apparatus appeared to be in good condition, and neither the battery nor the spiral had been injured.

The ascensional force of the new balloon was then about three thousand pounds, and, in adding together the weight of the apparatus, of the passengers, of the stock of water, of the car and its accessories, and putting aboard fifty gallons of water, and one hundred pounds of fresh meat, the doctor got a total weight of twenty-eight hundred and thirty pounds. He could then take with him one hundred and seventy pounds of ballast, for unforeseen emergencies, and the balloon would be in exact balance with the surrounding atmosphere.

His arrangements were completed accordingly, and he made up for Joe's weight with a surplus of ballast. He spent the whole day in these preparations, and the latter were finished when Kennedy returned. The hunter had been successful, and brought back a regular cargo of geese, wild-duck, snipe, teal, and plover. He went to work at once to draw and smoke the game. Each piece, suspended on a small, thin skewer, was hung over a fire of green wood. When they seemed in good order, Kennedy, who was perfectly at home in the business, packed them away in the car.

On the morrow, the hunter was to complete his supplies.

Evening surprised our travellers in the midst of this work. Their supper consisted of pemmican, biscuit, and tea; and fatigue, after having given them appetite, brought them sleep. Each of them strained eyes and ears into the gloom during his watch, sometimes fancying that they heard the voice of poor Joe; but, alas! the voice that they so longed to hear, was far away.

"At the first streak of day, the doctor aroused Kennedy.
"I have been long and carefully considering what should be done," said he, "to find our companion."
"Whatever your plan may be, doctor, it will suit me. Speak!"
"Above all things, it is important that Joe should hear from us in some way."
"Undoubtedly. Suppose the brave fellow should take it into his head that we have abandoned him?"
"He! He knows us too well for that. Such a thought would never come into his mind. But he must be informed as to where we are."
"How can that be managed?"
"We shall get into our car and be off again through the air."
"But, should the wind bear us away?"

"Happily, it will not. See, Dick! it is carrying us back to the lake; and this circumstance, which would have been vexatious yesterday, is fortunate now. Our efforts, then, will be limited to keeping ourselves above that vast sheet of water throughout the day. Joe cannot fail to see us, and his eyes will be constantly on the lookout in that direction. Perhaps he will even manage to let us know the place of his retreat."
"If he be alone and at liberty, he certainly will."
"And if a prisoner," resumed the doctor, "it not being the practice of the natives to confine their captives, he will see us, and comprehend the object of our researches."
"But, at last," put in Kennedy--"for we must anticipate every thing--should we find no trace--if he should have left no mark to follow him by, what are we to do?"

"We shall endeavor to regain the northern part of the lake, keeping ourselves as much in sight as possible. There we'll wait; we'll explore the banks; we'll search the water's edge, for Joe will assuredly try to reach the shore; and we will not leave the country without having done every thing to find him."
"Let us set out, then!" said the hunter.

The doctor hereupon took the exact bearings of the patch of solid land they were about to leave, and arrived at the conclusion that it lay on the north shore of Lake Tchad, between the village of Lari and the village of Ingemini, both visited by Major Denham. During this time Kennedy was completing his stock of fresh meat. Although the neighboring marshes showed traces of the rhinoceros, the lamantiné (or manatee), and the hippopotamus, he had no opportunity to see a single specimen of those animals.

At seven in the morning, but not without great difficulty --which to Joe would have been nothing--the balloon's anchor was detached from its hold, the gas dilated, and the new Victoria rose two hundred feet into the air. It seemed to hesitate at first, and went spinning around, like a top; but at last a brisk current caught it, and it advanced over the lake, and was soon borne away at a speed of twenty miles per hour.

The doctor continued to keep at a height of from two hundred to five hundred feet. Kennedy frequently
discharged his rifle; and, when passing over islands, the aeronauts approached them even imprudently, scrutinizing
the thickets, the bushes, the underbrush—in fine, every spot where a mass of shade or jutting rock could have
afforded a retreat to their companion. They swooped down close to the long pirogues that navigated the lake; and the
wild fishermen, terrified at the sight of the balloon, would plunge into the water and regain their islands with every
symptom of undisguised affright.

"We can see nothing," said Kennedy, after two hours of search.
"Let us wait a little longer, Dick, and not lose heart. We cannot be far away from the scene of our accident."

By eleven o'clock the balloon had gone ninety miles. It then fell in with a new current, which, blowing almost at
right angles to the other, drove them eastward about sixty miles. It next floated over a very large and populous
island, which the doctor took to be Farram, on which the capital of the Biddiomahs is situated. Ferguson expected at
every moment to see Joe spring up out of some thicket, flying for his life, and calling for help. Were he free, they
could pick him up without trouble; were he a prisoner, they could rescue him by repeating the manoeuvre they had
practised to save the missionary, and he would soon be with his friends again; but nothing was seen, not a sound was
heard. The case seemed desperate.

About half-past two o'clock, the Victoria hove in sight of Tangalia, a village situated on the eastern shore of
Lake Tchad, where it marks the extreme point attained by Denham at the period of his exploration.

The doctor became uneasy at this persistent setting of the wind in that direction, for he felt that he was being
thrown back to the eastward, toward the centre of Africa, and the interminable deserts of that region.

"We must absolutely come to a halt," said he, "and even alight. For Joe's sake, particularly, we ought to go back
to the lake; but, to begin with, let us endeavor to find an opposite current."

During more than an hour he searched at different altitudes: the balloon always came back toward the mainland.
But at length, at the height of a thousand feet, a very violent breeze swept to the northwestward.

It was out of the question that Joe should have been detained on one of the islands of the lake; for, in such case
he would certainly have found means to make his presence there known. Perhaps he had been dragged to the
mainland. The doctor was reasoning thus to himself, when he again came in sight of the northern shore of Lake
Tchad.

As for supposing that Joe had been drowned, that was not to be believed for a moment. One horrible thought
 glanced across the minds of both Kennedy and the doctor: caymans swarm in these waters! But neither one nor the
other had the courage to distinctly communicate this impression. However, it came up to them so forcibly at last that
the doctor said, without further preface:

"Crocodiles are found only on the shores of the islands or of the lake, and Joe will have skill enough to avoid
them. Besides, they are not very dangerous; and the Africans bathe with impunity, and quite fearless of their
attacks."

Kennedy made no reply. He preferred keeping quiet to discussing this terrible possibility.

The doctor made out the town of Lari about five o'clock in the evening. The inhabitants were at work gathering
in their cotton-crop in front of their huts, constructed of woven reeds, and standing in the midst of clean and neatly-
kept enclosures. This collection of about fifty habitations occupied a slight depression of the soil, in a valley
extending between two low mountains. The force of the wind carried the doctor farther onward than he wanted to
go; but it changed a second time, and bore him back exactly to his starting-point, on the sort of enclosed island
where he had passed the preceding night. The anchor, instead of catching the branches of the tree, took hold in the
masses of reeds mixed with the thick mud of the marshes, which offered considerable resistance.

The doctor had much difficulty in restraining the balloon; but at length the wind died away with the setting in of
nightfall; and the two friends kept watch together in an almost desperate state of mind.

CHAPTER THIRTY-FOURTH.
The Hurricane.--A Forced Departure.--Loss of an Anchor.--Melancholy Reflections.--The Resolution adopted.--
The Sand-Storm.--The Buried Caravan.--A Contrary yet Favorable Wind.--The Return southward.--Kennedy at his
Post.

At three o'clock in the morning the wind was raging. It beat down with such violence that the Victoria could not
stay near the ground without danger. It was thrown almost flat over upon its side, and the reeds chafed the silk so
roughly that it seemed as though they would tear it.

"We must be off, Dick," said the doctor; "we cannot remain in this situation."

"But, doctor, what of Joe?"

"I am not likely to abandon him. No, indeed! and should the hurricane carry me a thousand miles to the
northward, I will return! But here we are endangering the safety of all."
"Must we go without him?" asked the Scot, with an accent of profound grief.

"And do you think, then," rejoined Ferguson, "that my heart does not bleed like your own? Am I not merely obeying an imperious necessity?"

"I am entirely at your orders," replied the hunter; "let us start!"

But their departure was surrounded with unusual difficulty. The anchor, which had caught very deeply, resisted all their efforts to disengage it; while the balloon, drawing in the opposite direction, increased its tension. Kennedy could not get it free. Besides, in his present position, the manoeuvre had become a very perilous one, for the Victoria threatened to break away before he should be able to get into the car again.

The doctor, unwilling to run such a risk, made his friend get into his place, and resigned himself to the alternative of cutting the anchor-rope. The Victoria made one bound of three hundred feet into the air, and took her route directly northward.

Ferguson had no other choice than to scud before the storm. He folded his arms, and soon became absorbed in his own melancholy reflections.

After a few moments of profound silence, he turned to Kennedy, who sat there no less taciturn.

"We have, perhaps, been tempting Providence," said he; "it does not belong to man to undertake such a journey!" --and a sigh of grief escaped him as he spoke.

"It is but a few days," replied the sportsman, "since we were congratulating ourselves upon having escaped so many dangers! All three of us were shaking hands!"

"Poor Joe! kindly and excellent disposition! brave and candid heart! Dazzled for a moment by his sudden discovery of wealth, he willingly sacrificed his treasures! And now, he is far from us; and the wind is carrying us still farther away with resistless speed!"

"Come, doctor, admitting that he may have found refuge among the lake tribes, can he not do as the travellers who visited them before us, did;--like Denham, like Barth? Both of those men got back to their own country."

"Ah! my dear Dick! Joe doesn't know one word of the language; he is alone, and without resources. The travellers of whom you speak did not attempt to go forward without sending many presents in advance of them to the chiefs, and surrounded by an escort armed and trained for these expeditions. Yet, they could not avoid sufferings of the worst description! What, then, can you expect the fate of our companion to be? It is horrible to think of, and this is one of the worst calamities that it has ever been my lot to endure!"

"But, we'll come back again, doctor!"

"Come back, Dick? Yes, if we have to abandon the balloon! if we should be forced to return to Lake Tchad on foot, and put ourselves in communication with the Sultan of Bornou! The Arabs cannot have retained a disagreeable remembrance of the first Europeans."

"I will follow you, doctor," replied the hunter, with emphasis. "You may count upon me! We would rather give up the idea of prosecuting this journey than not return. Joe forgot himself for our sake; we will sacrifice ourselves for his!"

This resolve revived some hope in the hearts of these two men; they felt strong in the same inspiration. Ferguson forthwith set every thing at work to get into a contrary current, that might bring him back again to Lake Tchad; but this was impracticable at that moment, and even to alight was out of the question on ground completely bare of trees, and with such a hurricane blowing.

The Victoria thus passed over the country of the Tibbous, crossed the Belad el Djerid, a desert of briers that forms the border of the Soudan, and advanced into the desert of sand streaked with the long tracks of the many caravans that pass and repass there. The last line of vegetation was speedily lost in the dim southern horizon, not far from the principal oasis in this part of Africa, whose fifty wells are shaded by magnificent trees; but it was impossible to stop. An Arab encampment, tents of striped stuff, some camels, stretching out their viper-like heads and necks along the sand, gave life to this solitude, but the Victoria sped by like a shooting-star, and in this way traversed a distance of sixty miles in three hours, without Ferguson being able to check or guide her course.

"We cannot halt, we cannot alight!" said the doctor; "not a tree, not an inequality of the ground! Are we then to be driven clear across Sahara? Surely, Heaven is indeed against us!"

He was uttering these words with a sort of despairing rage, when suddenly he saw the desert sands rising aloft in the midst of a dense cloud of dust, and go whirling through the air, impelled by opposing currents.

Amid this tornado, an entire caravan, disorganized, broken, and overthrown, was disappearing beneath an avalanche of sand. The camels, flung pell-mell together, were uttering dull and pitiful groans; cries and howls of despair were heard issuing from that dusty and stifling cloud, and, from time to time, a parti-colored garment cut the chaos of the scene with its vivid hues, and the moaning and shrieking sounded over all, a terrible accompaniment to this spectacle of destruction.

Ere long the sand had accumulated in compact masses; and there, where so recently stretched a level plain as far
as the eye could see, rose now a ridgy line of hillocks, still moving from beneath--the vast tomb of an entire caravan!

The doctor and Kennedy, pallid with emotion, sat transfixed by this fearful spectacle. They could no longer manage their balloon, which went whirling round and round in contending currents, and refused to obey the different dilations of the gas. Caught in these eddies of the atmosphere, it spun about with a rapidity that made their heads reel, while the car oscillated and swung to and fro violently at the same time. The instruments suspended under the awning clattered together as though they would be dashed to pieces; the pipes of the spiral bent to and fro, threatening to break at every instant; and the water-tanks jostled and jarred with tremendous din. Although but two feet apart, our aeronauts could not hear each other speak, but with firmly-clinched hands they clung convulsively to the cordage, and endeavored to steady themselves against the fury of the tempest.

Kennedy, with his hair blown wildly about his face, looked on without speaking; but the doctor had regained all his daring in the midst of this deadly peril, and not a sign of his emotion was betrayed in his countenance, even when, after a last violent twirl, the Victoria stopped suddenly in the midst of a most unlooked-for calm; the north wind had abruptly got the upper hand, and now drove her back with equal rapidity over the route she had traversed in the morning.

"Whither are we going now?" cried Kennedy.

"Let us leave that to Providence, my dear Dick; I was wrong in doubting it. It knows better than we, and here we are, returning to places that we had expected never to see again!"

The surface of the country, which had looked so flat and level when they were coming, now seemed tossed and uneven, like the ocean-billows after a storm; a long succession of hillocks, that had scarcely settled to their places yet, indented the desert; the wind blew furiously, and the balloon fairly flew through the atmosphere.

The direction taken by our aeronauts differed somewhat from that of the morning, and thus about nine o'clock, instead of finding themselves again near the borders of Lake Tchad, they saw the desert still stretching away before them.

Kennedy remarked the circumstance.

"It matters little," replied the doctor, "the important point is to return southward; we shall come across the towns of Bornou, Woudie, or Kouka, and I should not hesitate to halt there."

"If you are satisfied, I am content," replied the Scot, "but Heaven grant that we may not be reduced to cross the desert, as those unfortunate Arabs had to do! What we saw was frightful!"

"It often happens, Dick; these trips across the desert are far more perilous than those across the ocean. The desert has all the dangers of the sea, including the risk of being swallowed up, and added thereto are unendurable fatigues and privations."

"I think the wind shows some symptoms of moderating; the sand-dust is less dense; the undulations of the surface are diminishing, and the sky is growing clearer."

"So much the better! We must now reconnoitre attentively with our glasses, and take care not to omit a single point."

"I will look out for that, doctor, and not a tree shall be seen without my informing you of it."

And, SUITING THE ACTION TO THE WORD, Kennedy took his station, spy-glass in hand, at the forward part of the car.

CHAPTER THIRTY-FIFTH.

What happened to Joe.--The Island of the Biddiomahs.--The Adoration shown him.--The Island that sank.--The Shores of the Lake.--The Tree of the Serpents.--The Foot-Tramp.--Terrible Suffering.--Mosquitoes and Ants.--Hunger.--The Victoria seen.--She disappears.--The Swamp.--One Last Despairing Cry.

What had become of Joe, while his master was thus vainly seeking for him? When he had dashed headlong into the lake, his first movement on coming to the surface was to raise his eyes and look upward. He saw the Victoria already risen far above the water, still rapidly ascending and growing smaller and smaller. It was soon caught in a rapid current and disappeared to the northward. His master--both his friends were saved!

"How lucky it was," thought he, "that I had that idea to throw myself out into the lake! Mr. Kennedy would soon have jumped at it, and he would not have hesitated to do as I did, for nothing's more natural than for one man to give himself up to save two others. That's mathematics!"

Satisfied on this point, Joe began to think of himself. He was in the middle of a vast lake, surrounded by tribes unknown to him, and probably ferocious. All the greater reason why he should get out of the scrape by depending only on himself. And so he gave himself no farther concern about it.

Before the attack by the birds of prey, which, according to him, had behaved like real condors, he had noticed an island on the horizon, and determining to reach it, if possible, he put forth all his knowledge and skill in the art of
swimming, after having relieved himself of the most troublesome part of his clothing. The idea of a stretch of five or six miles by no means disconcerted him; and therefore, so long as he was in the open lake, he thought only of striking out straight ahead and manfully.

In about an hour and a half the distance between him and the island had greatly diminished.

But as he approached the land, a thought, at first fleeting and then tenacious, arose in his mind. He knew that the shores of the lake were frequented by huge alligators, and was well aware of the voracity of those monsters.

Now, no matter how much he was inclined to find every thing in this world quite natural, the worthy fellow was no little disturbed by this reflection. He feared greatly lest white flesh like his might be particularly acceptable to the dreaded brutes, and advanced only with extreme precaution, his eyes on the alert on both sides and all around him. At length, he was not more than one hundred yards from a bank, covered with green trees, when a puff of air strongly impregnated with a musky odor reached him.

"There!" said he to himself, "just what I expected. The crocodile isn't far off!"

With this he dived swiftly, but not sufficiently so to avoid coming into contact with an enormous body, the scaly surface of which scratched him as he passed. He thought himself lost and swam with desperate energy. Then he rose again to the top of the water, took breath and dived once more. Thus passed a few minutes of unspeakable anguish, which all his philosophy could not overcome, for he thought, all the while, that he heard behind him the sound of those huge jaws ready to snap him up forever. In this state of mind he was striking out under the water as noiselessly as possible when he felt himself seized by the arm and then by the waist.

Poor Joe! he gave one last thought to his master; and began to struggle with all the energy of despair, feeling himself the while drawn along, but not toward the bottom of the lake, as is the habit of the crocodile when about to devour its prey, but toward the surface.

So soon as he could get breath and look around him, he saw that he was between two natives as black as ebony, who held him, with a firm gripe, and uttered strange cries.

"Ha!" said Joe, "blacks instead of crocodiles! Well, I prefer it as it is; but how in the mischief dare these fellows go in bathing in such places?"

Joe was not aware that the inhabitants of the islands of Lake Tchad, like many other negro tribes, plunge with impunity into sheets of water infested with crocodiles and caymans, and without troubling their heads about them. The amphibious denizens of this lake enjoy the well-deserved reputation of being quite inoffensive.

But had not Joe escaped one peril only to fall into another? That was a question which he left events to decide; and, since he could not do otherwise, he allowed himself to be conducted to the shore without manifesting any alarm.

"Evidently," thought he, "these chaps saw the Victoria skimming the waters of the lake, like a monster of the air. They were the distant witnesses of my tumble, and they can't fail to have some respect for a man that fell from the sky! Let them have their own way, then."

Joe was at this stage of his meditations, when he was landed amid a yelling crowd of both sexes, and all ages and sizes, but not of all colors. In fine, he was surrounded by a tribe of Biddiomahs as black as jet. Nor had he to blush for the scantiness of his costume, for he saw that he was in "undress" in the highest style of that country.

But before he had time to form an exact idea of the situation, there was no mistaking the agitation of which he instantly became the object, and this soon enabled him to pluck up courage, although the adventure of Kazah did come back rather vividly to his memory.

"I foresee that they are going to make a god of me again," thought he, "some son of the moon most likely. Well, one trade's as good as another when a man has no choice. The main thing is to gain time. Should the Victoria pass this way again, I'll take advantage of my new position to treat my worshippers here to a miracle when I go sailing up into the sky!"

While Joe's thoughts were running thus, the throng pressed around him. They prostrated themselves before him; they howled; they felt him; they became even annoyingly familiar; but at the same time they had the consideration to offer him a superb banquet consisting of sour milk and rice pounded in honey. The worthy fellow, making the best of every thing, took one of the heartiest luncheons he ever ate in his life, and gave his new adorers an exalted idea of how the gods tuck away their food upon grand occasions.

When evening came, the sorcerers of the island took him respectfully by the hand, and conducted him to a sort of house surrounded with talismans; but, as he was entering it, Joe cast an uneasy look at the heaps of human bones that lay scattered around this sanctuary. But he had still more time to think about them when he found himself at last shut up in the cabin.

During the evening and through a part of the night, he heard festive chantings, the reverberations of a kind of drum, and a clatter of old iron, which were very sweet, no doubt, to African ears. Then there were howling choruses, accompanied by endless dances by gangs of natives who circled round and round the sacred hut with contortions and
grimaces.

Joe could catch the sound of this deafening orchestra, through the mud and reeds of which his cabin was built; and perhaps under other circumstances he might have been amused by these strange ceremonies; but his mind was soon disturbed by quite different and less agreeable reflections. Even looking at the bright side of things, he found it both stupid and sad to be left alone in the midst of this savage country and among these wild tribes. Few travellers who had penetrated to these regions had ever again seen their native land. Moreover, could he trust to the worship of which he saw himself the object? He had good reason to believe in the vanity of human greatness; and he asked himself whether, in this country, adoration did not sometimes go to the length of eating the object adored!

But, notwithstanding this rather perplexing prospect, after some hours of meditation, fatigue got the better of his gloomy thoughts, and Joe fell into a profound slumber, which would have lasted no doubt until sunrise, had not a very unexpected sensation of dampness awakened the sleeper. Ere long this dampness became water, and that water gained so rapidly that it had soon mounted to Joe's waist.

"What can this be?" said he; "a flood! a water-spout! or a new torture invented by these blacks? Faith, though, I'm not going to wait here till it's up to my neck!"

And, so saying, he burst through the frail wall with a jog of his powerful shoulder, and found himself--where? --in the open lake! Island there was none. It had sunk during the night. In its place, the watery immensity of Lake Tchad!

"A poor country for the land-owners!" said Joe, once more vigorously resorting to his skill in the art of natation.

One of those phenomena, which are by no means unusual on Lake Tchad, had liberated our brave Joe. More than one island, that previously seemed to have the solidity of rock, has been submerged in this way; and the people living along the shores of the mainland have had to pick up the unfortunate survivors of these terrible catastrophes.

Joe knew nothing about this peculiarity of the region, but he was none the less ready to profit by it. He caught sight of a boat drifting about, without occupants, and was soon aboard of it. He found it to be but the trunk of a tree rudely hollowed out; but there were a couple of paddles in it, and Joe, availing himself of a rapid current, allowed his craft to float along.

"But let us see where we are," he said. "The polar-star there, that does its work honorably in pointing out the direction due north to everybody else, will, most likely, do me that service."

He discovered, with satisfaction, that the current was taking him toward the northern shore of the lake, and he allowed himself to glide with it. About two o'clock in the morning he disembarked upon a promontory covered with prickly reeds, that proved very provoking and inconvenient even to a philosopher like him; but a tree grew there expressly to offer him a bed among its branches, and Joe climbed up into it for greater security, and there, without sleeping much, however, awaited the dawn of day.

When morning had come with that suddenness which is peculiar to the equatorial regions, Joe cast a glance at the tree which had sheltered him during the last few hours, and beheld a sight that chilled the marrow in his bones. The branches of the tree were literally covered with snakes and chameleons! The foliage actually was hidden beneath their coils, so that the beholder might have fancied that he saw before him a new kind of tree that bore reptiles for its leaves and fruit. And all this horrible living mass writhed and twisted in the first rays of the morning sun! Joe experienced a keen sensation or terror mingled with disgust, as he looked at it, and he leaped precipitately from the tree amid the hissings of these new and unwelcome bedfellows.

"Now, there's something that I would never have believed!" said he.

He was not aware that Dr. Vogel's last letters had made known this singular feature of the shores of Lake Tchad, where reptiles are more numerous than in any other part of the world. But after what he had just seen, Joe determined to be more circumspect for the future; and, taking his bearings by the sun, he set off afoot toward the northeast, avoiding with the utmost care cabins, huts, hovels, and dens of every description, that might serve in any manner as a shelter for human beings.

How often his gaze was turned upward to the sky! He hoped to catch a glimpse, each time, of the Victoria; and, although he looked vainly during all that long, fatiguing day of sore foot-travel, his confident reliance on his master remained undiminished. Great energy of character was needed to enable him thus to sustain the situation with philosophy. Hunger conspired with fatigue to crush him, for a man's system is not greatly restored and fortified by a diet of roots, the pith of plants, such as the Mele, or the fruit of the doum palm-tree; and yet, according to his own calculations, Joe was enabled to push on about twenty miles to the westward.

His body bore in scores of places the marks of the thorns with which the lake-reeds, the acacias, the mimosas, and other wild shrubbery through which he had to force his way, were thickly studded; and his torn and bleeding feet rendered walking both painful and difficult. But at length he managed to react against all these sufferings; and when evening came again, he resolved to pass the night on the shores of Lake Tchad.

There he had to endure the bites of myriads of insects --gnats, mosquitoes, ants half an inch long, literally
covered the ground; and, in less than two hours, Joe had not a rag remaining of the garments that had covered him, the insects having devoured them! It was a terrible night, that did not yield our exhausted traveller an hour of sleep. During all this time the wild-boars and native buffaloes, reenforced by the ajoub--a very dangerous species of lamantin--carried on their ferocious revels in the bushes and under the waters of the lake, filling the night with a hideous concert. Joe dared scarcely breathe. Even his courage and coolness had hard work to bear up against so terrible a situation.

At length, day came again, and Joe sprang to his feet precipitately; but judge of the loathing he felt when he saw what species of creature had shared his couch--a toad!--but a toad five inches in length, a monstrous, repulsive specimen of vermin that sat there staring at him with huge round eyes. Joe felt his stomach revolt at the sight, and, regaining a little strength from the intensity of his repugnance, he rushed at the top of his speed and plunged into the lake. This sudden bath somewhat allayed the pangs of the itching that tortured his whole body; and, chewing a few leaves, he set forth resolutely, again feeling an obstinate resolution in the act, for which he could hardly account even to his own mind. He no longer seemed to have entire control of his own acts, and, nevertheless, he felt within him a strength superior to despair.

However, he began now to suffer terribly from hunger. His stomach, less resigned than he was, rebelled, and he was obliged to fasten a tendril of wild-vine tightly about his waist. Fortunately, he could quench his thirst at any moment, and, in recalling the sufferings he had undergone in the desert, he experienced comparative relief in his exemption from that other distressing want.

"What can have become of the Victoria?" he wondered. "The wind blows from the north, and she should be carried back by it toward the lake. No doubt the doctor has gone to work to right her balance, but yesterday would have given him time enough for that, so that may be to-day--but I must act just as if I was never to see him again. After all, if I only get to one of the large towns on the lake, I'll find myself no worse off than the travellers my master used to talk about. Why shouldn't I work my way out of the scrape as well as they did? Some of them got back home again. Come, then! the deuce! Cheer up, my boy!"

Thus talking to himself and walking on rapidly, Joe came right upon a horde of natives in the very depths of the forest, but he halted in time and was not seen by them. The negroes were busy poisoning arrows with the juice of the euphorbium--a piece of work deemed a great affair among these savage tribes, and carried on with a sort of ceremonial solemnity.

Joe, entirely motionless and even holding his breath, was keeping himself concealed in a thicket, when, happening to raise his eyes, he saw through an opening in the foliage the welcome apparition of the balloon--the Victoria herself--moving toward the lake, at a height of only about one hundred feet above him. But he could not make himself heard; he dared not, could not make his friends even see him!

Tears came to his eyes, not of grief but of thankfulness; his master was then seeking him; his master had not left him to perish! He would have to wait for the departure of the blacks; then he could quit his hiding-place and run toward the borders of Lake Tchad!

But by this time the Victoria was disappearing in the distant sky. Joe still determined to wait for her; she would come back again, undoubtedly. She did, indeed, return, but farther to the eastward. Joe ran, gesticulated, shouted--but all in vain! A strong breeze was sweeping the balloon away with a speed that deprived him of all hope.

For the first time, energy and confidence abandoned the heart of the unfortunate man. He saw that he was lost. He thought his master gone beyond all prospect of return. He dared no longer think; he would no longer reflect!

Like a crazy man, his feet bleeding, his body cut and torn, he walked on during all that day and a part of the next night. He even dragged himself along, sometimes on his knees, sometimes with his hands. He saw the moment nigh when all his strength would fail, and nothing would be left to him but to sink upon the ground and die.

Thus working his way along, he at length found himself close to a marsh, or what he knew would soon become a marsh, for night had set in some hours before, and he fell by a sudden misstep into a thick, clinging mire. In spite of all his efforts, in spite of his desperate struggles, he felt himself sinking gradually in the swampy ooze, and in a few minutes he was buried to his waist.

"Here, then, at last, is death!" he thought, in agony, "and what a death!"

He now began to struggle again, like a madman; but his efforts only served to bury him deeper in the tomb that the poor doomed lad was hollowing for himself; not a log of wood or a branch to buoy him up; not a reed to which he might cling! He felt that all was over! His eyes convulsively closed!

"Master! master!--Help!" were his last words; but his voice, despairing, unaided, half stifled already by the rising mire, died away feebly on the night.

CHAPTER THIRTY-SIXTH.
A Throng of People on the Horizon.—A Troop of Arabs.—The Pursuit. —It is He.—Fall from Horseback.—The Strangled Arab.—A Ball from Kennedy.—Adroit Manoeuvres.—Caught up flying.—Joe saved at last.

From the moment when Kennedy resumed his post of observation in the front of the car, he had not ceased to watch the horizon with his utmost attention.

After the lapse of some time he turned toward the doctor and said:

"If I am not greatly mistaken I can see, off yonder in the distance, a throng of men or animals moving. It is impossible to make them out yet, but I observe that they are in violent motion, for they are raising a great cloud of dust."

"May it not be another contrary breeze?" said the doctor, "another whirlwind coming to drive us back northward again?" and while speaking he stood up to examine the horizon.

"I think not, Samuel; it is a troop of gazelles or of wild oxen."

"Perhaps so, Dick; but yon throng is some nine or ten miles from us at least, and on my part, even with the glass, I can make nothing of it!"

"At all events I shall not lose sight of it. There is something remarkable about it that excites my curiosity. Sometimes it looks like a body of cavalry manoeuvring. Ah! I was not mistaken. It is, indeed, a squadron of horsemen. Look—look there!"

The doctor eyed the group with great attention, and, after a moment's pause, remarked:

"I believe that you are right. It is a detachment of Arabs or Tibbous, and they are galloping in the same direction with us, as though in flight, but we are going faster than they, and we are rapidly gaining on them. In half an hour we shall be near enough to see them and know what they are."

Kennedy had again lifted his glass and was attentively scrutinizing them. Meanwhile the crowd of horsemen was becoming more distinctly visible, and a few were seen to detach themselves from the main body.

"It is some hunting manoeuvre, evidently," said Kennedy. "Those fellows seem to be in pursuit of something. I would like to know what they are about."

"Patience, Dick! In a little while we shall overtake them, if they continue on the same route. We are going at the rate of twenty miles per hour, and no horse can keep up with that."

Kennedy again raised his glass, and a few minutes later he exclaimed:

"They are Arabs, galloping at the top of their speed; I can make them out distinctly. They are about fifty in number. I can see their bournouses puffed out by the wind. It is some cavalry exercise that they are going through. Their chief is a hundred paces ahead of them and they are rushing after him at headlong speed."

"Whoever they may be, Dick, they are not to be feared, and then, if necessary, we can go higher."

"Wait, doctor—wait a little!"

"It's curious," said Kennedy again, after a brief pause, "but there's something going on that I can't exactly explain. By the efforts they make, and the irregularity of their line, I should fancy that those Arabs are pursuing some one, instead of following."

"Are you certain of that, Dick?"

"Oh! yes, it's clear enough now. I am right! It is a pursuit—a hunt—but a man-hunt! That is not their chief riding ahead of them, but a fugitive."

"A fugitive!" exclaimed the doctor, growing more and more interested.

"Yes!"

"Don't lose sight of him, and let us wait!"

Three or four miles more were quickly gained upon these horsemen, who nevertheless were dashing onward with incredible speed.

"Doctor! doctor!" shouted Kennedy in an agitated voice.

"What is the matter, Dick?"

"Is it an illusion? Can it be possible?"

"What do you mean?"

"Wait!" and so saying, the Scot wiped the sights of his spy-glass carefully, and looked through it again intently.

"Well?" questioned the doctor.

"It is he, doctor!"

"He!" exclaimed Ferguson with emotion.

"It is he! no other!" and it was needless to pronounce the name.

"Yes! it is he! on horseback, and only a hundred paces in advance of his enemies! He is pursued!"

"It is Joe—Joe himself!" cried the doctor, turning pale.

"He cannot see us in his flight!"

"He will see us, though!" said the doctor, lowering the flame of his blow-pipe.
"But how?"
"In five minutes we shall be within fifty feet of the ground, and in fifteen we shall be right over him!"
"We must let him know it by firing a gun!"
"No! he can't turn back to come this way. He's headed off!"
"What shall we do, then?"
"We must wait."
"Wait?--and these Arabs!"
"We shall overtake them. We'll pass them. We are not more than two miles from them, and provided that Joe's horse holds out!"
"Great God!" exclaimed Kennedy, suddenly.
"What is the matter?"
Kennedy had uttered a cry of despair as he saw Joe fling himself to the ground. His horse, evidently exhausted, had just fallen headlong.
"He sees us!" cried the doctor, "and he motions to us, as he gets upon his feet!"
"But the Arabs will overtake him! What is he waiting for? Ah! the brave lad! Huzza!" shouted the sportsman, who could no longer restrain his feelings.
Joe, who had immediately sprung up after his fall, just as one of the swiftest horsemen rushed upon him, bounded like a panther, avoided his assailant by leaping to one side, jumped up behind him on the crupper, seized the Arab by the throat, and, strangling him with his sinewy hands and fingers of steel, flung him on the sand, and continued his headlong flight.
A tremendous howl was heard from the Arabs, but, completely engrossed by the pursuit, they had not taken notice of the balloon, which was now but five hundred paces behind them, and only about thirty feet from the ground. On their part, they were not twenty lengths of their horses from the fugitive.
One of them was very perceptibly gaining on Joe, and was about to pierce him with his lance, when Kennedy, with fixed eye and steady hand, stopped him short with a ball, that hurled him to the earth.
Joe did not even turn his head at the report. Some of the horsemen reined in their barbs, and fell on their faces in the dust as they caught sight of the Victoria; the rest continued their pursuit.
"But what is Joe about?" said Kennedy; "he don't stop!"
"He's doing better than that, Dick! I understand him! He's keeping on in the same direction as the balloon. He relies upon our intelligence. Ah! the noble fellow! We'll carry him off in the very teeth of those Arab rascals! We are not more than two hundred paces from him!"
"What are we to do?" asked Kennedy.
"Lay aside your rifle, Dick."
And the Scot obeyed the request at once.
"Do you think that you can hold one hundred and fifty pounds of ballast in your arms?"
"Ay, more than that!"
"No! That will be enough!"
And the doctor proceeded to pile up bags of sand in Kennedy's arms.
"Hold yourself in readiness in the back part of the car, and be prepared to throw out that ballast at a single effort. But, for your life, don't do so until I give the word!"
"Be easy on that point."
"Otherwise, we should miss Joe, and he would be lost."
"Count upon me!"
The Victoria at that moment almost commanded the troop of horsemen who were still desperately urging their steeds at Joe's heels. The doctor, standing in the front of the car, held the ladder clear, ready to throw it at any moment. Meanwhile, Joe had still maintained the distance between himself and his pursuers--say about fifty feet. The Victoria was now ahead of the party.
"Attention!" exclaimed the doctor to Kennedy.
"I'm ready!"
"Joe, look out for yourself!" shouted the doctor in his sonorous, ringing voice, as he flung out the ladder, the lowest ratlines of which tossed up the dust of the road.
As the doctor shouted, Joe had turned his head, but without checking his horse. The ladder dropped close to him, and at the instant he grasped it the doctor again shouted to Kennedy:
"Throw ballast!"
"It's done!"
And the Victoria, lightened by a weight greater than Joe's, shot up one hundred and fifty feet into the air.
Joe clung with all his strength to the ladder during the wide oscillations that it had to describe, and then making an indescribable gesture to the Arabs, and climbing with the agility of a monkey, he sprang up to his companions, who received him with open arms.

The Arabs uttered a scream of astonishment and rage. The fugitive had been snatched from them on the wing, and the Victoria was rapidly speeding far beyond their reach.

"Master! Kennedy!" ejaculated Joe, and overwhelmed, at last, with fatigue and emotion, the poor fellow fainted away, while Kennedy, almost beside himself, kept exclaiming:

"Saved--saved!"

"Saved indeed!" murmured the doctor, who had recovered all his phlegmatic coolness.

Joe was almost naked. His bleeding arms, his body covered with cuts and bruises, told what his sufferings had been. The doctor quietly dressed his wounds, and laid him comfortably under the awning.

Joe soon returned to consciousness, and asked for a glass of brandy, which the doctor did not see fit to refuse, as the faithful fellow had to be indulged.

After he had swallowed the stimulant, Joe grasped the hands of his two friends and announced that he was ready to relate what had happened to him.

But they would not allow him to talk at that time, and he sank back into a profound sleep, of which he seemed to have the greatest possible need.

The Victoria was then taking an oblique line to the westward. Driven by a tempestuous wind, it again approached the borders of the thorny desert, which the travellers descried over the tops of palm-trees, bent and broken by the storm; and, after having made a run of two hundred miles since rescuing Joe, it passed the tenth degree of east longitude about nightfall.

CHAPTER THIRTY-SEVENTH.
The Western Route.--Joe wakes up.--His Obstinacy.--End of Joe's Narrative.--Tagelei.--Kennedy's Anxieties.--The Route to the North.--A Night near Aghades.

During the night the wind lulled as though reposing after the boisterousness of the day, and the Victoria remained quietly at the top of the tall sycamore. The doctor and Kennedy kept watch by turns, and Joe availed himself of the chance to sleep most sturdily for twenty-four hours at a stretch.

"That's the remedy he needs," said Dr. Ferguson. "Nature will take charge of his care."

With the dawn the wind sprang up again in quite strong, and moreover capricious gusts. It shifted abruptly from south to north, but finally the Victoria was carried away by it toward the west.

The doctor, map in hand, recognized the kingdom of Damerghou, an undulating region of great fertility, in which the huts that compose the villages are constructed of long reeds interwoven with branches of the asclepia. The grain-mills were seen raised in the cultivated fields, upon small scaffoldings or platforms, to keep them out of the reach of the mice and the huge ants of that country.

They soon passed the town of Zinder, recognized by its spacious place of execution, in the centre of which stands the "tree of death." At its foot the executioner stands waiting, and whoever passes beneath its shadow is immediately hung!

Upon consulting his compass, Kennedy could not refrain from saying:

"Look! we are again moving northward."

"No matter; if it only takes us to Timbuctoo, we shall not complain. Never was a finer voyage accomplished under better circumstances!"

"Nor in better health," said Joe, at that instant thrusting his jolly countenance from between the curtains of the awning.

"There he is! there's our gallant friend--our preserver!" exclaimed Kennedy, cordially.""How goes it, Joe?"

"Oh! why, naturally enough, Mr. Kennedy, very naturally! I never felt better in my life! Nothing sets a man up like a little pleasure-trip with a bath in Lake Tchad to start on--eh, doctor?"

"Brave fellow!" said Ferguson, pressing Joe's hand, "what terrible anxiety you caused us!"

"Humph! and you, sir? Do you think that I felt easy in my mind about you, gentlemen? You gave me a fine fright, let me tell you!"

"We shall never agree in the world, Joe, if you take things in that style."

"I see that his tumble hasn't changed him a bit," added Kennedy.

"Your devotion and self-forgetfulness were sublime, my brave lad, and they saved us, for the Victoria was falling into the lake, and, once there, nobody could have extricated her."

"But, if my devotion, as you are pleased to call my summerset, saved you, did it not save me too, for here we are,
all three of us, in first-rate health? Consequently we have nothing to squabble about in the whole affair."

"Oh! we can never come to a settlement with that youth," said the sportsman.

"The best way to settle it," replied Joe, "is to say nothing more about the matter. What's done is done. Good or bad, we can't take it back."

"You obstinate fellow!" said the doctor, laughing; "you can't refuse, though, to tell us your adventures, at all events."

"Not if you think it worth while. But, in the first place, I'm going to cook this fat goose to a turn, for I see that Mr. Kennedy has not wasted his time."

"All right, Joe!"

"Well, let us see then how this African game will sit on a European stomach!"

The goose was soon roasted by the flame of the blow-pipe, and not long afterward was comfortably stowed away. Joe took his own good share, like a man who had eaten nothing for several days. After the tea and the punch, he acquainted his friends with his recent adventures. He spoke with some emotion, even while looking at things with his usual philosophy. The doctor could not refrain from frequently pressing his hand when he saw his worthy servant more considerate of his master's safety than of his own, and, in relation to the sinking of the island of the Biddiomahs, he explained to him the frequency of this phenomenon upon Lake Tchad.

At length Joe, continuing his recital, arrived at the point where, sinking in the swamp, he had uttered a last cry of despair.

"I thought I was gone," said he, "and as you came right into my mind, I made a hard fight for it. How, I couldn't tell you--but I'd made up my mind that I wouldn't go under without knowing why. Just then, I saw--two or three feet from me--what do you think? the end of a rope that had been fresh cut; so I took leave to make another jerk, and, by hook or by crook, I got to the rope. When I pulled, it didn't give; so I pulled again and hauled away and there I was on dry ground! At the end of the rope, I found an anchor! Ah, master, I've a right to call that the anchor of safety, anyhow, if you have no objection. I knew it again! It was the anchor of the Victoria! You had grounded there! So I followed the direction of the rope and that gave me your direction, and, after trying hard a few times more, I got out of the swamp. I had got my strength back with my spunk, and I walked on part of the night away from the lake, until I got to the edge of a very big wood. There I saw a fenced-in place, where some horses were grazing, without thinking of any harm. Now, there are times when everybody knows how to ride a horse, are there not, doctor? So I didn't spend much time thinking about it, but jumped right on the back of one of those innocent animals and away we went galloping north as fast as our legs could carry us. I needn't tell you about the towns that I didn't see nor the villages that I took good care to go around. No! I crossed the ploughed fields; I leaped the hedges; I scrambled over the fences; I dug my heels into my nag; I thrashed him; I fairly lifted the poor fellow off his feet! At last I got to the end of the tilled land. Good! There was the desert. 'That suits me!' said I, 'for I can see better ahead of me and farther too.' I was hoping all the time to see the balloon tacking about and waiting for me. But not a bit of it; and so, in about three hours, I go plump, like a fool, into a camp of Arabs! Whew! what a hunt that was! You see, Mr. Kennedy, a hunter don't know what a real hunt is until he's been hunted himself! Still I advise him not to try it if he can keep out of it! My horse was so tired, he was ready to drop off his legs; they were close on me; I threw myself to the ground; then I jumped up again behind an Arab! I didn't mean the fellow any harm, and I hope he has no grudge against me for choking him, but I saw you--and you know the rest. The Victoria came on at my heels, and you caught me up flying, as a circus-rider does a ring. Wasn't I right in counting on you? Now, doctor, you see how simple all that was! Nothing more natural in the world! I'm ready to begin over again, if it would be of any service to you. And besides, master, as I said a while ago, it's not worth mentioning."

"My noble, gallant Joe!" said the doctor, with great feeling. "Heart of gold! we were not astray in trusting to your intelligence and skill."

"Poh! doctor, one has only just to follow things along as they happen, and he can always work his way out of a scrape! The safest plan, you see, is to take matters as they come."

While Joe was telling his experience, the balloon had rapidly passed over a long reach of country, and Kennedy soon pointed out on the horizon a collection of structures that looked like a town. The doctor glanced at his map and recognized the place as the large village of Tagelei, in the Damergou country.

"Here," said he, "we come upon Dr. Barth's route. It was at this place that he parted from his companions, Richardson and Overweg; the first was to follow the Zinder route, and the second that of Maradi; and you may remember that, of these three travellers, Barth was the only one who ever returned to Europe."

"Then," said Kennedy, following out on the map the direction of the Victoria, "we are going due north."

"Due north, Dick."

"And don't that give you a little uneasiness?"

"Why should it?"
"Because that line leads to Tripoli, and over the Great Desert."
"Oh, we shall not go so far as that, my friend--at least, I hope not."
"But where do you expect to halt?"
"Come, Dick, don't you feel some curiosity to see Timbuctoo?"
"Timbuctoo?"
"Certainly," said Joe; "nobody nowadays can think of making the trip to Africa without going to see Timbuctoo."
"You will be only the fifth or sixth European who has ever set eyes on that mysterious city."
"Ho, then, for Timbuctoo!"
"Well, then, let us try to get as far as between the seventeenth and eighteenth degrees of north latitude, and there we will seek a favorable wind to carry us westward."
"Good!" said the hunter. "But have we still far to go to the northward?"
"One hundred and fifty miles at least."
"In that case," said Kennedy, "I'll turn in and sleep a bit."
"Sleep, sir; sleep!" urged Joe. "And you, doctor, do the same yourself: you must have need of rest, for I made you keep watch a little out of time."

The sportsman stretched himself under the awning; but Ferguson, who was not easily conquered by fatigue, remained at his post.

In about three hours the Victoria was crossing with extreme rapidity an expanse of stony country, with ranges of lofty, naked mountains of granitic formation at the base. A few isolated peaks attained the height of even four thousand feet. Giraffes, antelopes, and ostriches were seen running and bounding with marvellous agility in the midst of forests of acacias, mimosas, souahs, and date-trees. After the barrenness of the desert, vegetation was now resuming its empire. This was the country of the Kailouas, who veil their faces with a bandage of cotton, like their dangerous neighbors, the Touaregs.

At ten o'clock in the evening, after a splendid trip of two hundred and fifty miles, the Victoria halted over an important town. The moonlight revealed glimpses of one district half in ruins; and some pinnacles of mosques and minarets shot up here and there, glistening in the silvery rays. The doctor took a stellar observation, and discovered that he was in the latitude of Aghades.

This city, once the seat of an immense trade, was already falling into ruin when Dr. Barth visited it.

The Victoria, not being seen in the obscurity of night, descended about two miles above Aghades, in a field of millet. The night was calm, and began to break into dawn about three o'clock A.M.; while a light wind coaxed the balloon westward, and even a little toward the south.

Dr. Ferguson hastened to avail himself of such good fortune, and rapidly ascending resumed his aerial journey amid a long wake of golden morning sunshine.

CHAPTER THIRTY-EIGHTH.

The 17th of May passed tranquilly, without any remarkable incident; the desert gained upon them once more; a moderate wind bore the Victoria toward the southwest, and she never swerved to the right or to the left, but her shadow traced a perfectly straight line on the sand.

Before starting, the doctor had prudently renewed his stock of water, having feared that he should not be able to touch ground in these regions, infested as they are by the Aouelim-Minian Touaregs. The plateau, at an elevation of eighteen hundred feet above the level of the sea, sloped down toward the south. Our travellers, having crossed the Aghades route at Murzouk--a route often pressed by the feet of camels--arrived at that evening, in the sixteenth degree of north latitude, and four degrees fifty-five minutes east longitude, after having passed over one hundred and eighty miles of a long and monotonous day's journey.

During the day Joe dressed the last pieces of game, which had been only hastily prepared, and he served up for supper a mess of snipe, that were greatly relished. The wind continuing good, the doctor resolved to keep on during the night, the moon, still nearly at the full, illumining it with her radiance. The Victoria ascended to a height of five hundred feet, and, during her nocturnal trip of about sixty miles, the gentle slumbers of an infant would not have been disturbed by her motion.

On Sunday morning, the direction of the wind again changed, and it bore to the northwestward. A few crows were seen sweeping through the air, and, off on the horizon, a flock of vultures which, fortunately, however, kept at a distance.
The sight of these birds led Joe to compliment his master on the idea of having two balloons.

"Where would we be," said he, "with only one balloon? The second balloon is like the life-boat to a ship; in case of wreck we could always take to it and escape."

"You are right, friend Joe," said the doctor, "only that my life-boat gives me some uneasiness. It is not so good as the main craft."

"What do you mean by that, doctor?" asked Kennedy.

"I mean to say that the new Victoria is not so good as the old one. Whether it be that the stuff it is made of is too much worn, or that the heat of the spiral has melted the gutta-percha, I can observe a certain loss of gas. It don't amount to much thus far, but still it is noticeable. We have a tendency to sink, and, in order to keep our elevation, I am compelled to give greater dilation to the hydrogen."

"The deuce!" exclaimed Kennedy with concern; "I see no remedy for that."

"There is none, Dick, and that is why we must hasten our progress, and even avoid night halts."

"Are we still far from the coast?" asked Joe.

"Which coast, my boy? How are we to know whither chance will carry us? All that I can say is, that Timbuctoo is still about four hundred miles to the westward."

"And how long will it take us to get there?"

"Should the wind not carry us too far out of the way, I hope to reach that city by Tuesday evening."

"Then," remarked Joe, pointing to a long file of animals and men winding across the open desert, "we shall arrive there sooner than that caravan."

Ferguson and Kennedy leaned over and saw an immense cavalcade. There were at least one hundred and fifty camels of the kind that, for twelve muckals of gold, or about twenty-five dollars, go from Timbuctoo to Tafilet with a load of five hundred pounds upon their backs. Each animal had dangling to its tail a bag to receive its excrement, the only fuel on which the caravans can depend when crossing the desert.

These Touareg camels are of the very best race. They can go from three to seven days without drinking, and for two without eating. Their speed surpasses that of the horse, and they obey with intelligence the voice of the khabir, or guide of the caravan. They are known in the country under the name of mehari.

Such were the details given by the doctor while his companions continued to gaze upon that multitude of men, women, and children, advancing on foot and with difficulty over a waste of sand half in motion, and scarcely kept in its place by scanty nettles, withered grass, and stunted bushes that grew upon it. The wind obliterated the marks of their feet almost instantly.

Joe inquired how the Arabs managed to guide themselves across the desert, and come to the few wells scattered far between throughout this vast solitude.

"The Arabs," replied Dr. Ferguson, "are endowed by nature with a wonderful instinct in finding their way. Where a European would be at a loss, they never hesitate for a moment. An insignificant fragment of rock, a pebble, a tuft of grass, a different shade of color in the sand, suffice to guide them with accuracy. During the night they go by the polar star. They never travel more than two miles per hour, and always rest during the noonday heat. You may judge from that how long it takes them to cross Sahara, a desert more than nine hundred miles in breadth."

But the Victoria had already disappeared from the astonished gaze of the Arabs, who must have envied her rapidity. That evening she passed two degrees twenty minutes east longitude, and during the night left another degree behind her.

On Monday the weather changed completely. Rain began to fall with extreme violence, and not only had the balloon to resist the power of this deluge, but also the increase of weight which it caused by wetting the whole machine, car and all. This continuous shower accounted for the swamps and marshes that formed the sole surface of the country. Vegetation reappeared, however, along with the mimosas, the baobabs, and the tamarind-trees.

Such was the Sonray country, with its villages topped with roofs turned over like Armenian caps. There were few mountains, and only such hills as were enough to form the ravines and pools where the pintadoes and snipes went sailing and diving through. Here and there, an impetuous torrent cut the roads, and had to be crossed by the natives on long vines stretched from tree to tree. The forests gave place to jungles, which alligators, hippopotami, and the rhinoceroses, made their haunts.

"It will not be long before we see the Niger," said the doctor. "The face of the country always changes in the vicinity of large rivers. These moving highways, as they are sometimes correctly called, have first brought vegetation with them, as they will at last bring civilization. Thus, in its course of twenty-five hundred miles, the Niger has scattered along its banks the most important cities of Africa."

"By-the-way," put in Joe, "that reminds me of what was said by an admirer of the goodness of Providence, who praised the foresight with which it had generally caused rivers to flow close to large cities!"

At noon the Victoria was passing over a petty town, a mere assemblage of miserable huts, which once was Goa,
a great capital.

"It was there," said the doctor, "that Barth crossed the Niger, on his return from Timbuctoo. This is the river so famous in antiquity, the rival of the Nile, to which pagan superstition ascribed a celestial origin. Like the Nile, it has engaged the attention of geographers in all ages; and like it, also, its exploration has cost the lives of many victims; yes, even more of them than perished on account of the other."

The Niger flowed broadly between its banks, and its waters rolled southward with some violence of current; but our travellers, borne swiftly by as they were, could scarcely catch a glimpse of its curious outline.

"I wanted to talk to you about this river," said Dr. Ferguson, "and it is already far from us. Under the names of Dhiouleba, Mayo, Egghireou, Quorra, and other titles besides, it traverses an immense extent of country, and almost competes in length with the Nile. These appellations signify simply 'the River,' according to the dialects of the countries through which it passes."

"Did Dr. Barth follow this route?" asked Kennedy.

"No, Dick: in quitting Lake Tchad, he passed through the different towns of Bornou, and intersected the Niger at Say, four degrees below Goa; then he penetrated to the bosom of those unexplored countries which the Niger embraces in its elbow; and, after eight months of fresh fatigues, he arrived at Timbuctoo; all of which we may do in about three days with as swift a wind as this."

"Have the sources of the Niger been discovered?" asked Joe.

"Long since," replied the doctor. "The exploration of the Niger and its tributaries was the object of several expeditions, the principal of which I shall mention: Between 1749 and 1758, Adamson made a reconnaissance of the river, and visited Gorea; from 1785 to 1788, Golberry and Geoffroy travelled across the deserts of Senegambia, and ascended as far as the country of the Moors, who assassinated Saugnier, Brisson, Adam, Riley, Cochelet, and so many other unfortunate men. Then came the illustrious Mungo Park, the friend of Sir Walter Scott, and, like him, a Scotchman by birth. Sent out in 1795 by the African Society of London, he got as far as Bambarra, saw the Niger, travelled five hundred miles with a slave-merchant, reconnoitred the Gambia River, and returned to England in 1797. He again set out, on the 30th of January, 1805, with his brother-in-law Anderson, Scott, the designer, and a gang of workmen; he reached Gorea, there added a detachment of thirty-five soldiers to his party, and saw the Niger again on the 19th of August. But, by that time, in consequence of fatigue, privations, ill-usage, the inclemencies of the weather, and the unhealthiness of the country, only eleven persons remained alive of the forty Europeans in the party. On the 16th of November, the last letters from Mungo Park reached his wife; and, a year later a trader from that country gave information that, having got as far as Boussa, on the Niger, on the 23d of December, the unfortunate traveller's boat was upset by the cataracts in that part of the river, and he was murdered by the natives."

"And his dreadful fate did not check the efforts of others to explore that river?"

"On the contrary, Dick. Since then, there were two objects in view: namely, to recover the lost man's papers, as well as to pursue the exploration. In 1816, an expedition was organized, in which Major Grey took part. It arrived in Senegal, penetrated to the Fonta-Jallon, visited the Foullah and Mandingo populations, and returned to England without further results. In 1822, Major Laing explored all the western part of Africa near to the British possessions; and he it was who got so far as the sources of the Niger; and, according to his documents, the spring in which that immense river takes its rise is not two feet broad.

"Easy to jump over," said Joe.

"How's that? Easy you think, eh?" retorted the doctor. "If we are to believe tradition, whoever attempts to pass that spring, by leaping over it, is immediately swallowed up; and whoever tries to draw water from it, feels himself repulsed by an invisible hand."

"I suppose a man has a right not to believe a word of that!" persisted Joe.

"Oh, by all means!--Five years later, it was Major Laing's destiny to force his way across the desert of Sahara, penetrate to Timbuctoo, and perish a few miles above it, by strangling, at the hands of the Ouelad-shiman, who wanted to compel him to turn Mussulman."

"Still another victim!" said the sportsman.

"It was then that a brave young man, with his own feeble resources, undertook and accomplished the most astonishing of modern journeys--I mean the Frenchman Rene Caillie, who, after sundry attempts in 1819 and 1824, set out again on the 19th of April, 1827, from Rio Nunez. On the 3d of August he arrived at Time, so thoroughly exhausted and ill that he could not resume his journey until six months later, in January, 1828. He then joined a caravan, and, protected by his Oriental dress, reached the Niger on the 10th of March, penetrated to the city of Jenne, embarked on the river, and descended it, as far as Timbuctoo, where he arrived on the 30th of April. In 1760, another Frenchman, Imbert by name, and, in 1810, an Englishman, Robert Adams, had seen this curious place; but Rene Caillie was to be the first European who could bring back any authentic data concerning it. On the 4th of May he quitted this 'Queen of the desert;' on the 9th, he surveyed the very spot where Major Laing had been murdered; on
the 19th, he arrived at El-Arouan, and left that commercial town to brave a thousand dangers in crossing the vast solitudes comprised between the Soudan and the northern regions of Africa. At length he entered Tangiers, and on the 28th of September sailed for Toulon. In nineteen months, notwithstanding one hundred and eighty days' sickness, he had traversed Africa from west to north. Ah! had Callie been born in England, he would have been honored as the most intrepid traveller of modern times, as was the case with Mungo Park. But in France he was not appreciated according to his worth."

"He was a sturdy fellow!" said Kennedy, "but what became of him?"

"He died at the age of thirty-nine, from the consequences of his long fatigues. They thought they had done enough in decreeing him the prize of the Geographical Society in 1828; the highest honors would have been paid to him in England.

"While he was accomplishing this remarkable journey, an Englishman had conceived a similar enterprise and was trying to push it through with equal courage, if not with equal good fortune. This was Captain Clapperton, the companion of Denham. In 1829 he reentered Africa by the western coast of the Gulf of Benin; he then followed in the track of Mungo Park and of Laing, recovered at Boussa the documents relative to the death of the former, and arrived on the 20th of August at Sackatoo, where he was seized and held as a prisoner, until he expired in the arms of his faithful attendant Richard Lander."

"And what became of this Lander?" asked Joe, deeply interested.

"He succeeded in regaining the coast and returned to London, bringing with him the captain's papers, and an exact narrative of his own journey. He then offered his services to the government to complete the reconnoissance of the Niger. He took with him his brother John, the second child of a poor couple in Cornwall, and, together, these men, between 1829 and 1831, redescended the river from Boussa to its mouth, describing it village by village, mile by mile."

"So both the brothers escaped the common fate?" queried Kennedy.

"Yes, on this expedition, at least; but in 1833 Richard undertook a third trip to the Niger, and perished by a bullet, near the mouth of the river. You see, then, my friends, that the country over which we are now passing has witnessed some noble instances of self-sacrifice which, unfortunately, have only too often had death for their reward."

CHAPTER THIRTY-NINTH.

During this dull Monday, Dr. Ferguson diverted his thoughts by giving his companions a thousand details concerning the country they were crossing. The doctor's sole anxiety arose from the obstinate northeast wind which continued to blow furiously, and bore them away from the latitude of Timbuctoo.

The Niger, after running northward as far as that city, sweeps around, like an immense water-jet from some fountain, and falls into the Atlantic in a broad sheaf. In the elbow thus formed the country is of varied character, sometimes luxuriantly fertile, and sometimes extremely bare; fields of maize succeeded by wide spaces covered with broom-corn and uncultivated plains. All kinds of aquatic birds--pelicans, wild-duck, kingfishers, and the rest--were seen in numerous flocks hovering about the borders of the pools and torrents.

From time to time there appeared an encampment of Touaregs, the men sheltered under their leather tents, while their women were busied with the domestic toil outside, milking their camels and smoking their huge-bowed pipes.

By eight o'clock in the evening the Victoria had advanced more than two hundred miles to the westward, and our aeronauts became the spectators of a magnificent scene.

A mass of moonbeams forcing their way through an opening in the clouds, and gliding between the long lines of falling rain, descended in a golden shower on the ridges of the Hombori Mountains. Nothing could be more weird than the appearance of these seemingly basaltic summits; they stood out in fantastic profile against the sombre sky, and the beholder might have fancied them to be the legendary ruins of some vast city of the middle ages, such as the icebergs of the polar seas sometimes mimic them in nights of gloom.

"An admirable landscape for the 'Mysteries of Udolpho!'" exclaimed the doctor. "Ann Radcliffe could not have depicted you mountains in a more appalling aspect."

"Faith!" said Joe, "I wouldn't like to be strolling alone in the evening through this country of ghosts. Do you see now, master, if it wasn't so heavy, I'd like to carry that whole landscape home to Scotland! It would do for the borders of Loch Lomond, and tourists would rush there in crowds."

"Our balloon is hardly large enough to admit of that little experiment--but I think our direction is changing.
Bravo!—the elves and fairies of the place are quite obliging. See, they've sent us a nice little southeast breeze, that will put us on the right track again."

In fact, the Victoria was resuming a more northerly route, and on the morning of the 20th she was passing over an inextricable network of channels, torrents, and streams, in fine, the whole complicated tangle of the Niger's tributaries. Many of these channels, covered with a thick growth of herbage, resembled luxuriant meadow-lands. There the doctor recognized the route followed by the explorer Barth when he launched upon the river to descend to Timbuctoo. Eight hundred fathoms broad at this point, the Niger flowed between banks richly grown with cruciferous plants and tamarind-trees. Herds of agile gazelles were seen skipping about, their curling horns mingling with the tall herbage, within which the alligator, half concealed, lay silently in wait for them with watchful eyes.

Long files of camels and asses laden with merchandise from Jenne were winding in under the noble trees. Ere long, an amphitheatre of low-built houses was discovered at a turn of the river, their roofs and terraces heaped up with hay and straw gathered from the neighboring districts.

"There's Kabra!" exclaimed the doctor, joyously; "there is the harbor of Timbuctoo, and the city is not five miles from here!"

"Then, sir, you are satisfied?" half queried Joe.
"Delighted, my boy!"
"Very good; then every thing's for the best!"

In fact, about two o'clock, the Queen of the Desert, mysterious Timbuctoo, which once, like Athens and Rome, had her schools of learned men, and her professorships of philosophy, stretched away before the gaze of our travellers.

Ferguson followed the most minute details upon the chart traced by Barth himself, and was enabled to recognize its perfect accuracy.

The city forms an immense triangle marked out upon a vast plain of white sand, its acute angle directed toward the north and piercing a corner of the desert. In the environs there was almost nothing, hardly even a few grasses, with some dwarf mimosas and stunted bushes.

As for the appearance of Timbuctoo, the reader has but to imagine a collection of billiard-balls and thimbles—such is the bird's-eye view! The streets, which are quite narrow, are lined with houses only one story in height, built of bricks dried in the sun, and huts of straw and reeds, the former square, the latter conical. Upon the terraces were seen some of the male inhabitants, carelessly lounging at full length in flowing apparel of bright colors, and lance or musket in hand; but no women were visible at that hour of the day.

"Yet they are said to be handsome," remarked the doctor. "You see the three towers of the three mosques that are the only ones left standing of a great number— the city has indeed fallen from its ancient splendor! At the top of the triangle rises the Mosque of Sankore, with its ranges of galleries resting on arcades of sufficiently pure design. Farther on, and near to the Sane-Gungu quarter, is the Mosque of Sidi-Yahia and some two-story houses. But do not look for either palaces or monuments: the sheik is a mere son of traffic, and his royal palace is a counting-house."

"It seems to me that I can see half-ruined ramparts," said Kennedy.

"They were destroyed by the Fouillanes in 1826; the city was one-third larger then, for Timbuctoo, an object generally coveted by all the tribes, since the eleventh century, has belonged in succession to the Touaregs, the Sonrayans, the Moroccans, and the Fouillanes; and this great centre of civilization, where a sage like Ahmed-Baba owned, in the sixteenth century, a library of sixteen hundred manuscripts, is now nothing but a mere half-way house for the trade of Central Africa."

The city, indeed, seemed abandoned to supreme neglect; it betrayed that indifference which seems epidemic to cities that are passing away. Huge heaps of rubbish encumbered the suburbs, and, with the hill on which the marketplace stood, formed the only inequalities of the ground.

When the Victoria passed, there was some slight show of movement; drums were beaten; but the last learned man still lingering in the place had hardly time to notice the new phenomenon, for our travellers, driven onward by the wind of the desert, resumed the winding course of the river, and, ere long, Timbuctoo was nothing more than one of the fleeting reminiscences of their journey.

"And now," said the doctor, "Heaven may waft us whither it pleases!"
"Provided only that we go westward," added Kennedy.
"Bah!" said Joe; "I wouldn't be afraid if it was to go back to Zanzibar by the same road, or to cross the ocean to America."
"We would first have to be able to do that, Joe!"
"And what's wanting, doctor?"
"Gas, my boy; the ascending force of the balloon is evidently growing weaker, and we shall need all our management to make it carry us to the sea-coast. I shall even have to throw over some ballast. We are too heavy."
"That's what comes of doing nothing, doctor; when a man lies stretched out all day long in his hammock, he gets fat and heavy. It's a lazybones trip, this of ours, master, and when we get back every body will find us big and stout."

"Just like Joe," said Kennedy; "just the ideas for him: but wait a bit! Can you tell what we may have to go through yet? We are still far from the end of our trip. Where do you expect to strike the African coast, doctor?"

"I should find it hard to answer you, Kennedy. We are at the mercy of very variable winds; but I should think myself fortunate were we to strike it between Sierra Leone and Portendick. There is a stretch of country in that quarter where we should meet with friends."

"And it would be a pleasure to press their hands; but, are we going in the desirable direction?"

"Not any too well, Dick; not any too well! Look at the needle of the compass; we are bearing southward, and ascending the Niger toward its sources."

"A fine chance to discover them," said Joe, "if they were not known already. Now, couldn't we just find others for it, on a pinch?"

"Not exactly, Joe; but don't be alarmed: I hardly expect to go so far as that."

At nightfall the doctor threw out the last bags of sand. The Victoria rose higher, and the blow-pipe, although working at full blast, could scarcely keep her up. At that time she was sixty miles to the southward of Timbuctoo, and in the morning the aeronauts awoke over the banks of the Niger, not far from Lake Debo.

CHAPTER FORTIETH.

Dr. Ferguson's Anxieties.--Persistent Movement southward.--A Cloud of Grasshoppers.--A View of Jenne.--A View of Sego.--Change of the Wind.--Joe's Regrets.

The flow of the river was, at that point, divided by large islands into narrow branches, with a very rapid current. Upon one among them stood some shepherds' huts, but it had become impossible to take an exact observation of them, because the speed of the balloon was constantly increasing. Unfortunately, it turned still more toward the south, and in a few moments crossed Lake Debo.

Dr. Ferguson, forcing the dilation of his aerial craft to the utmost, sought for other currents of air at different heights, but in vain; and he soon gave up the attempt, which was only augmenting the waste of gas by pressing it against the well-worn tissue of the balloon.

He made no remark, but he began to feel very anxious. This persistence of the wind to head him off toward the southern part of Africa was defeating his calculations, and he no longer knew upon whom or upon what to depend. Should he not reach the English or French territories, what was to become of him in the midst of the barbarous tribes that infest the coasts of Guinea? How should he there get to a ship to take him back to England? And the actual direction of the wind was driving him along to the kingdom of Dahomey, among the most savage races, and into the power of a ruler who was in the habit of sacrificing thousands of human victims at his public orgies. There he would be lost!

On the other hand, the balloon was visibly wearing out, and the doctor felt it failing him. However, as the weather was clearing up a little, he hoped that the cessation of the rain would bring about a change in the atmospheric currents.

It was therefore a disagreeable reminder of the actual situation when Joe said aloud:

"There! the rain's going to pour down harder than ever; and this time it will be the deluge itself, if we're to judge by yon cloud that's coming up!"

"What! another cloud?" asked Ferguson.

"Yes, and a famous one," replied Kennedy.

"I never saw the like of it," added Joe.

"I breathe freely again!" said the doctor, laying down his spy-glass. "That's not a cloud!"

"Not a cloud?" queried Joe, with surprise.

"No; it is a swarm."

"Eh?"

"A swarm of grasshoppers!"

"That? Grasshoppers!"

"Myriads of grasshoppers, that are going to sweep over this country like a water-spout; and woe to it! for, should these insects alight, it will be laid waste."

"That would be a sight worth beholding!"

"Wait a little, Joe. In ten minutes that cloud will have arrived where we are, and you can then judge by the aid of your own eyes."

The doctor was right. The cloud, thick, opaque, and several miles in extent, came on with a deafening noise,
casting its immense shadow over the fields. It was composed of numberless legions of that species of grasshopper called crickets. About a hundred paces from the balloon, they settled down upon a tract full of foliage and verdure. Fifteen minutes later, the mass resumed its flight, and our travellers could, even at a distance, see the trees and the bushes entirely stripped, and the fields as bare as though they had been swept with the scythe. One would have thought that a sudden winter had just descended upon the earth and struck the region with the most complete sterility.

"Well, Joe, what do you think of that?"

"Well, doctor, it's very curious, but quite natural. What one grasshopper does on a small scale, thousands do on a grand scale."

"It's a terrible shower," said the hunter; "more so than hail itself in the devastation it causes."

"It is impossible to prevent it," replied Ferguson. "Sometimes the inhabitants have had the idea to burn the forests, and even the standing crops, in order to arrest the progress of these insects; but the first ranks plunging into the flames would extinguish them beneath their mass, and the rest of the swarm would then pass irresistibly onward. Fortunately, in these regions, there is some sort of compensation for their ravages, since the natives gather these insects in great numbers and greedily eat them."

"They are the prawns of the air," said Joe, who added that he was sorry that he had never had the chance to taste them--just for information's sake!

The country became more marshy toward evening; the forests dwindled to isolated clumps of trees; and on the borders of the river could be seen plantations of tobacco, and swampy meadow-lands fat with forage. At last the city of Jenne, on a large island, came in sight, with the two towers of its clay-built mosque, and the putrid odor of the millions of swallows' nests accumulated in its walls. The tops of some baobabs, mimosas, and date-trees peeped up between the houses; and, even at night, the activity of the place seemed very great. Jenne is, in fact, quite a commercial city: it supplies all the wants of Timbuctoo. Its boats on the river, and its caravans along the shaded roads, bear thither the various products of its industry.

"Were it not that to do so would prolong our journey," said the doctor, "I should like to alight at this place. There must be more than one Arab there who has travelled in England and France, and to whom our style of locomotion is not altogether new. But it would not be prudent."

"Let us put off the visit until our next trip," said Joe, laughing.

"Besides, my friends, unless I am mistaken, the wind has a slight tendency to veer a little more to the eastward, and we must not lose such an opportunity."

The doctor threw overboard some articles that were no longer of use--some empty bottles, and a case that had contained preserved-meat--and thereby managed to keep the balloon in a belt of the atmosphere more favorable to his plans. At four o'clock in the morning the first rays of the sun lighted up Sego, the capital of Bambarra, which could be recognized at once by the four towns that compose it, by its Saracenic mosques, and by the incessant going and coming of the flat-bottomed boats that convey its inhabitants from one quarter to the other. But the travellers were not more seen than they saw. They sped rapidly and directly to the northwest, and the doctor's anxiety gradually subsided.

"Two more days in this direction, and at this rate of speed, and we'll reach the Senegal River."

"And we'll be in a friendly country?" asked the hunter.

"Not altogether; but, if the worst came to the worst, and the balloon were to fail us, we might make our way to the French settlements. But, let it hold out only for a few hundred miles, and we shall arrive without fatigue, alarm, or danger, at the western coast."

"And the thing will be over!" added Joe. "Heigh-ho! so much the worse. If it wasn't for the pleasure of telling about it, I would never want to set foot on the ground again! Do you think anybody will believe our story, doctor?"

"Who can tell, Joe? One thing, however, will be undeniable: a thousand witnesses saw us start on one side of the African Continent, and a thousand more will see us arrive on the other."

"And, in that case, it seems to me that it would be hard to say that we had not crossed it," added Kennedy.

"Ah, doctor!" said Joe again, with a deep sigh, "I'll think more than once of my lumps of solid gold-ore! There was something that would have given WEIGHT to our narrative! At a grain of gold per head, I could have got together a nice crowd to listen to me, and even to admire me!"

CHAPTER FORTY-FIRST.
The Approaches to Senegal.--The Balloon sinks lower and lower.--They keep throwing out, throwing out.--The Marabout Al-Hadji.--Messrs. Pascal, Vincent, and Lambert.--A Rival of Mohammed.--The Difficult Mountains.--Kennedy's Weapons.--One of Joe's Manoeuvres.--A Halt over a Forest.
On the 27th of May, at nine o'clock in the morning, the country presented an entirely different aspect. The slopes, extending far away, changed to hills that gave evidence of mountains soon to follow. They would have to cross the chain which separates the basin of the Niger from the basin of the Senegal, and determines the course of the water-shed, whether to the Gulf of Guinea on the one hand, or to the bay of Cape Verde on the other.

As far as Senegal, this part of Africa is marked down as dangerous. Dr. Ferguson knew it through the recitals of his predecessors. They had suffered a thousand privations and been exposed to a thousand dangers in the midst of these barbarous negro tribes. It was this fatal climate that had devoured most of the companions of Mungo Park. Ferguson, therefore, was more than ever decided not to set foot in this inhospitable region.

But he had not enjoyed one moment of repose. The Victoria was descending very perceptibly, so much so that he had to throw overboard a number more of useless articles, especially when there was a mountain-top to pass. Things went on thus for more than one hundred and twenty miles; they were worn out with ascending and falling again; the balloon, like another rock of Sisyphus, kept continually sinking back toward the ground. The rotundity of the covering, which was now but little inflated, was collapsing already. It assumed an elongated shape, and the wind hollowed large cavities in the silken surface.

Kennedy could not help observing this.

"Is there a crack or a tear in the balloon?" he asked.

"No, but the gutta percha has evidently softened or melted in the heat, and the hydrogen is escaping through the silk."

"How can we prevent that?"

"It is impossible. Let us lighten her. That is the only help. So let us throw out every thing we can spare."

"But what shall it be?" said the hunter, looking at the car, which was already quite bare.

"Well, let us get rid of the awning, for its weight is quite considerable."

Joe, who was interested in this order, climbed up on the circle which kept together the cordage of the network, and from that place easily managed to detach the heavy curtains of the awning and throw them overboard.

"There's something that will gladden the hearts of a whole tribe of blacks," said he; "there's enough to dress a thousand of them, for they're not very extravagant with cloth."

The balloon had risen a little, but it soon became evident that it was again approaching the ground.

"Let us alight," suggested Kennedy, "and see what can be done with the covering of the balloon."

"I tell you, again, Dick, that we have no means of repairing it."

"Then what shall we do?"

"We'll have to sacrifice every thing not absolutely indispensable; I am anxious, at all hazards, to avoid a detention in these regions. The forests over the tops of which we are skimming are any thing but safe."

"What! are there lions in them, or hyenas?" asked Joe, with an expression of sovereign contempt.

"Worse than that, my boy! There are men, and some of the most cruel, too, in all Africa."

"How is that known?"

"By the statements of travellers who have been here before us. Then the French settlers, who occupy the colony of Senegal, necessarily have relations with the surrounding tribes. Under the administration of Colonel Faidherbe, reconnoissances have been pushed far up into the country. Officers such as Messrs. Pascal, Vincent, and Lambert, have brought back precious documents from their expeditions. They have explored these countries formed by the elbow of the Senegal in places where war and pillage have left nothing but ruins."

"What, then, took place?"

"I will tell you. In 1854 a Marabout of the Senegalese Fouta, Al-Hadji by name, declaring himself to be inspired like Mohammed, stirred up all the tribes to war against the infidels--that is to say, against the Europeans. He carried destruction and desolation over the regions between the Senegal River and its tributary, the Fateme. Three hordes of fanatics led on by him scour ed the country, sparing neither a village nor a hut in their pillaging, massacring career. He advanced in person on the town of Sego, which was a long time threatened. In 1857 he worked up farther to the northward, and invested the fortification of Medina, built by the French on the bank of the river. This stronghold was defended by Paul Holl, who, for several months, without provisions or ammunition, held out until Colonel Faidherbe came to his relief. Al-Hadji and his bands then repassed the Senegal, and reappeared in the Kaarta, continuing their rapine and murder. --Well, here below us is the very country in which he has found refuge with his hordes of banditti; and I assure you that it would not be a good thing to fall into his hands."
"What is that?"
"We shall have mountains to pass, and that will be difficult to do, since I cannot augment the ascensional force
of the balloon, even with the greatest possible heat that I can produce."
"Well, wait a bit," said Kennedy, "and we shall see!"
"The poor Victoria!" sighed Joe; "I had got fond of her as the sailor does of his ship, and I'll not give her up so
easily. She may not be what she was at the start—granted; but we shouldn't say a word against her. She has done us
good service, and it would break my heart to desert her."
"Be at your ease, Joe; if we leave her, it will be in spite of ourselves. She'll serve us until she's completely worn
out, and I ask of her only twenty-four hours more!"
"Ah, she's getting used up! She grows thinner and thinner," said Joe, dolefully, while he eyed her. "Poor
balloon!"
"Unless I am deceived," said Kennedy, "there on the horizon are the mountains of which you were speaking,
doctor."
"Yes, there they are, indeed!" exclaimed the doctor, after having examined them through his spy-glass, "and they
look very high. We shall have some trouble in crossing them."
"Can we not avoid them?"
"I am afraid not, Dick. See what an immense space they occupy—nearly one-half of the horizon!"
"They even seem to shut us in," added Joe. "They are gaining on both our right and our left."
"We must then pass over them."
These obstacles, which threatened such imminent peril, seemed to approach with extreme rapidity, or, to speak
more accurately, the wind, which was very fresh, was hurrying the balloon toward the sharp peaks. So rise it must,
or be dashed to pieces.
"Let us empty our tank of water," said the doctor, "and keep only enough for one day."
"There it goes," shouted Joe.
"Does the balloon rise at all?" asked Kennedy.
"A little—some fifty feet," replied the doctor, who kept his eyes fixed on the barometer. "But that is not enough."
In truth the lofty peaks were starting up so swiftly before the travellers that they seemed to be rushing down
upon them. The balloon was far from rising above them. She lacked an elevation of more than five hundred feet
more.
The stock of water for the cylinder was also thrown overboard and only a few pints were retained, but still all
this was not enough.
"We must pass them though!" urged the doctor.
"Let us throw out the tanks—we have emptied them." said Kennedy.
"Over with them!"
"There they go!" panted Joe. "But it's hard to see ourselves dropping off this way by piecemeal."
"Now, for your part, Joe, make no attempt to sacrifice yourself as you did the other day! Whatever happens,
swear to me that you will not leave us!"
"Have no fears, my master, we shall not be separated."
The Victoria had ascended some hundred and twenty feet, but the crest of the mountain still towered above it. It
was an almost perpendicular ridge that ended in a regular wall rising abruptly in a straight line. It still rose more than
two hundred feet over the aeronauts.
"In ten minutes," said the doctor to himself, "our car will be dashed against those rocks unless we succeed in
passing them!"
"Well, doctor?" queried Joe.
"Keep nothing but our pemmican, and throw out all the heavy meat."
Thereupon the balloon was again lightened by some fifty pounds, and it rose very perceptibly, but that was of
little consequence, unless it got above the line of the mountain-tops. The situation was terrifying. The Victoria was
rushing on with great rapidity. They could feel that she would be dashed to pieces—that the shock would be fearful.
The doctor glanced around him in the car. It was nearly empty.
"If needs be, Dick, hold yourself in readiness to throw over your fire-arms!"
"Sacrifice my fire-arms?" repeated the sportsman, with intense feeling.
"My friend, I ask it; it will be absolutely necessary!"
"Samuel! Doctor!"
"Your guns, and your stock of powder and ball might cost us our lives."
"We are close to it!" cried Joe.
Sixty feet! The mountain still overtopped the balloon by sixty feet.
Joe took the blankets and other coverings and tossed them out; then, without a word to Kennedy, he threw over several bags of bullets and lead.

The balloon went up still higher; it surmounted the dangerous ridge, and the rays of the sun shone upon its uppermost extremity; but the car was still below the level of certain broken masses of rock, against which it would inevitably be dashed.

“Kennedy! Kennedy! throw out your fire-arms, or we are lost!” shouted the doctor.

“Wait, sir; wait one moment!” they heard Joe exclaim, and, looking around, they saw Joe disappear over the edge of the balloon.

“Joe! Joe!” cried Kennedy.

“Wretched man!” was the doctor’s agonized expression.

The flat top of the mountain may have had about twenty feet in breadth at this point, and, on the other side, the slope presented a less declivity. The car just touched the level of this plane, which happened to be quite even, and it glided over a soil composed of sharp pebbles that grated as it passed.

“We’re over it! we’re over it! we’re clear!” cried out an exulting voice that made Ferguson’s heart leap to his throat.

The daring fellow was there, grasping the lower rim of the car, and running afoot over the top of the mountain, thus lightening the balloon of his whole weight. He had to hold on with all his strength, too, for it was likely to escape his grasp at any moment.

When he had reached the opposite declivity, and the abyss was before him, Joe, by a vigorous effort, hoisted himself from the ground, and, clambering up by the cordage, rejoined his friends.

“That was all!” he coolly ejaculated.

“My brave Joe! my friend!” said the doctor, with deep emotion.

“Oh! what I did,” laughed the other, “was not for you; it was to save Mr. Kennedy’s rifle. I owed him that good turn for the affair with the Arab! I like to pay my debts, and now we are even,” added he, handing to the sportsman his favorite weapon. “I’d feel very badly to see you deprived of it.”

Kennedy heartily shook the brave fellow’s hand, without being able to utter a word.

The Victoria had nothing to do now but to descend. That was easy enough, so that she was soon at a height of only two hundred feet from the ground, and was then in equilibrium. The surface seemed very much broken as though by a convulsion of nature. It presented numerous inequalities, which would have been very difficult to avoid during the night with a balloon that could no longer be controlled. Evening was coming on rapidly, and, notwithstanding his repugnance, the doctor had to make up his mind to halt until morning.

“We’ll now look for a favorable stopping-place,” said he.

“Ah!” replied Kennedy, “you have made up your mind, then, at last?”

“Yes, I have for a long time been thinking over a plan which we’ll try to put into execution; it is only six o’clock in the evening, and we shall have time enough. Throw out your anchors, Joe!”

Joe immediately obeyed, and the two anchors dangled below the balloon.

“I see large forests ahead of us,” said the doctor; “we are going to sweep along their tops, and we shall grapple to some tree, for nothing would make me think of passing the night below, on the ground.”

“But can we not descend?” asked Kennedy.

“To what purpose? I repeat that it would be dangerous for us to separate, and, besides, I claim your help for a difficult piece of work.”

The Victoria, which was skimming along the tops of immense forests, soon came to a sharp halt. Her anchors had caught, and, the wind falling as dusk came on, she remained motionlessly suspended above a vast field of verdure, formed by the tops of a forest of sycamores.

CHAPTER FORTY-SECOND.

A Struggle of Generosity.--The Last Sacrifice.--The Dilating Apparatus.--Joe’s Adroitness.--Midnight.--The Doctor’s Watch.--Kennedy’s Watch.--The Latter falls asleep at his Post.--The Fire.--The Howlings of the Natives.--Out of Range.

Doctor Ferguson’s first care was to take his bearings by stellar observation, and he discovered that he was scarcely twenty-five miles from Senegal.

“All that we can manage to do, my friends,” said he, after having pointed his map, “is to cross the river; but, as there is neither bridge nor boat, we must, at all hazards, cross it with the balloon, and, in order to do that, we must still lighten up.”

“But I don’t exactly see how we can do that?” replied Kennedy, anxious about his fire-arms, “unless one of us
makes up his mind to sacrifice himself for the rest,—that is, to stay behind, and, in my turn, I claim that honor."
"You, indeed!" remonstrated Joe; "ain't I used to—"
"The question now is, not to throw ourselves out of the car, but simply to reach the coast of Africa on foot. I am a first-rate walker, a good sportsman, and—"
"I'll never consent to it!" insisted Joe.
"Your generous rivalry is useless, my brave friends," said Ferguson; "I trust that we shall not come to any such extremity: besides, if we did, instead of separating, we should keep together, so as to make our way across the country in company."
"That's the talk," said Joe; "a little tramp won't do us any harm."
"But before we try that," resumed the doctor, "we must employ a last means of lightening the balloon."
"What will that be? I should like to see it," said Kennedy, incredulously.
"We must get rid of the cylinder-chests, the spiral, and the Buntzen battery. Nine hundred pounds make a rather heavy load to carry through the air."
"But then, Samuel, how will you dilate your gas?"
"I shall not do so at all. We'll have to get along without it."
"But—"
"Listen, my friends: I have calculated very exactly the amount of ascensional force left to us, and it is sufficient to carry us every one with the few objects that remain. We shall make in all a weight of hardly five hundred pounds, including the two anchors which I desire to keep."
"Dear doctor, you know more about the matter than we do; you are the sole judge of the situation. Tell us what we ought to do, and we will do it."
"I am at your orders, master," added Joe.
"I repeat, my friends, that however serious the decision may appear, we must sacrifice our apparatus."
"Let it go, then!" said Kennedy, promptly.
"To work!" said Joe.

It was no easy job. The apparatus had to be taken down piece by piece. First, they took out the mixing reservoir, then the one belonging to the cylinder, and lastly the tank in which the decomposition of the water was effected. The united strength of all three travellers was required to detach these reservoirs from the bottom of the car in which they had been so firmly secured; but Kennedy was so strong, Joe so adroit, and the doctor so ingenious, that they finally succeeded. The different pieces were thrown out, one after the other, and they disappeared below, making huge gaps in the foliage of the sycamores.
"The black fellows will be mightily astonished," said Joe, "at finding things like those in the woods; they'll make idols of them!"

The next thing to be looked after was the displacement of the pipes that were fastened in the balloon and connected with the spiral. Joe succeeded in cutting the caoutchouc jointings above the car, but when he came to the pipes he found it more difficult to disengage them, because they were held by their upper extremity and fastened by wires to the very circle of the valve.
Then it was that Joe showed wonderful adroitness. In his naked feet, so as not to scratch the covering, he succeeded by the aid of the network, and in spite of the oscillations of the balloon, in climbing to the upper extremity, and after a thousand difficulties, in holding on with one hand to that slippery surface, while he detached the outside screws that secured the pipes in their place. These were then easily taken out, and drawn away by the lower end, which was hermetically sealed by means of a strong ligature.

The Victoria, relieved of this considerable weight, rose upright in the air and tugged strongly at the anchor-rope. About midnight this work ended without accident, but at the cost of most severe exertion, and the trio partook of a luncheon of pemmican and cold punch, as the doctor had no more fire to place at Joe's disposal.
Besides, the latter and Kennedy were dropping off their feet with fatigue.
"Lie down, my friends, and get some rest," said the doctor. "I'll take the first watch; at two o'clock I'll waken Kennedy; at four, Kennedy will waken Joe, and at six we'll start; and may Heaven have us in its keeping for this last day of the trip!"

Without waiting to be coaxed, the doctor's two companions stretched themselves at the bottom of the car and dropped into profound slumber on the instant.

The night was calm. A few clouds broke against the last quarter of the moon, whose uncertain rays scarcely pierced the darkness. Ferguson, resting his elbows on the rim of the car, gazed attentively around him. He watched with close attention the dark screen of foliage that spread beneath him, hiding the ground from his view. The least noise aroused his suspicions, and he questioned even the slightest rustling of the leaves.
He was in that mood which solitude makes more keenly felt, and during which vague terrors mount to the brain.
At the close of such a journey, after having surmounted so many obstacles, and at the moment of touching the goal, one's fears are more vivid, one's emotions keener. The point of arrival seems to fly farther from our gaze.

Moreover, the present situation had nothing very consolatory about it. They were in the midst of a barbarous country, and dependent upon a vehicle that might fail them at any moment. The doctor no longer counted implicitly on his balloon; the time had gone by when he manoevred it boldly because he felt sure of it.

Under the influence of these impressions, the doctor, from time to time, thought that he heard vague sounds in the vast forests around him; he even fancied that he saw a swift gleam of fire shining between the trees. He looked sharply and turned his night-glass toward the spot; but there was nothing to be seen, and the profoundest silence appeared to return.

He had, no doubt, been under the dominion of a mere hallucination. He continued to listen, but without hearing the slightest noise. When his watch had expired, he woke Kennedy, and, enjoining upon him to observe the extremest vigilance, took his place beside Joe, and fell sound asleep.

Kennedy, while still rubbing his eyes, which he could scarcely keep open, calmly lit his pipe. He then ensconced himself in a corner, and began to smoke vigorously by way of keeping awake.

The most absolute silence reigned around him; a light wind shook the tree-tops and gently rocked the car, inviting the hunter to taste the sleep that stole over him in spite of himself. He strove hard to resist it, and repeatedly opened his eyes to plunge into the outer darkness one of those looks that see nothing; but at last, yielding to fatigue, he sank back and slumbered.

How long he had been buried in this stupor he knew not, but he was suddenly aroused from it by a strange, unexpected crackling sound.

He rubbed his eyes and sprang to his feet. An intense glare half-blinded him and heated his cheek--the forest was in flames!

"Fire! fire!" he shouted, scarcely comprehending what had happened.

His two companions started up in alarm.

"What's the matter?" was the doctor's immediate exclamation.

"Fire!" said Joe. "But who could--"

At this moment loud yells were heard under the foliage, which was now illuminated as brightly as the day.

"Ah! the savages!" cried Joe again; "they have set fire to the forest so as to be the more certain of burning us up."

"The Talabas! Al-Hadji's marabouts, no doubt," said the doctor.

A circle of fire hemmed the Victoria in; the crackling of the dry wood mingled with the hissing and sputtering of the green branches; the clambering vines, the foliage, all the living part of this vegetation, writhed in the destructive element. The eye took in nothing but one vast ocean of flame; the large trees stood forth in black relief in this huge furnace, their branches covered with glowing coals, while the whole blazing mass, the entire conflagration, was reflected on the clouds, and the travellers could fancy themselves enveloped in a hollow globe of fire.

"Let us escape to the ground!" shouted Kennedy, "it is our only chance of safety!"

But Ferguson checked him with a firm grasp, and, dashing at the anchor-rope, severed it with one well-directed blow of his hatchet. Meanwhile, the flames, leaping up at the balloon, already quivered on its illuminated sides; but the Victoria, released from her fastenings, spun upward a thousand feet into the air. Frightful yells resounded through the forest, along with the report of fire-arms, while the balloon, caught in a current of air that rose with the dawn of day, was borne to the westward.

It was now four o'clock in the morning.

CHAPTER FORTY-THIRD.

The Talabas.--The Pursuit.--A Devastated Country.--The Wind begins to fall.--The Victoria sinks.--The last of the Provisions.--The Leaps of the Balloon.--A Defence with Fire-arms.--The Wind freshens.--The Senegal River.--The Cataracts of Gouina.--The Hot Air.--The Passage of the River.

"Had we not taken the precaution to lighten the balloon yesterday evening, we should have been lost beyond redemption," said the doctor, after a long silence.

"See what's gained by doing things at the right time!" replied Joe. "One gets out of scrapes then, and nothing is more natural."

"We are not out of danger yet," said the doctor.

"What do you still apprehend?" queried Kennedy. "The balloon can't descend without your permission, and even were it to do so--"

"Were it to do so, Dick? Look!"

They had just passed the borders of the forest, and the three friends could see some thirty mounted men clad in
broad pantaloons and the floating bournouses. They were armed, some with lances, and others with long muskets, and they were following, on their quick, fiery little steeds, the direction of the balloon, which was moving at only moderate speed.

When they caught sight of the aeronauts, they uttered savage cries, and brandished their weapons. Anger and menace could be read upon their swarthy faces, made more ferocious by thin but bristling beards. Meanwhile they galloped along without difficulty over the low levels and gentle declivities that lead down to the Senegal.

"It is, indeed, they!" said the doctor; "the cruel Talabas! the ferocious marabouts of Al-Hadji! I would rather find myself in the middle of the forest encircled by wild beasts than fall into the hands of these banditti."

"They haven't a very obliging look!" assented Kennedy; "and they are rough, stalwart fellows."

"Happily those brutes can't fly," remarked Joe; "and that's something."

"See," said Ferguson, "those villages in ruins, those huts burned down--that is their work! Where vast stretches of cultivated land were once seen, they have brought barrenness and devastation."

"At all events, however," interposed Kennedy, "they can't overtake us; and, if we succeed in putting the river between us and them, we are safe."

"Perfectly, Dick," replied Ferguson; "but we must not fall to the ground!" and, as he said this, he glanced at the barometer.

"In any case, Joe," added Kennedy, "it would do us no harm to look to our fire-arms."

"No harm in the world, Mr. Dick! We are lucky that we didn't scatter them along the road."

"My rifle!" said the sportsman. "I hope that I shall never be separated from it!"

And so saying, Kennedy loaded the pet piece with the greatest care, for he had plenty of powder and ball remaining.

"At what height are we?" he asked the doctor.

"About seven hundred and fifty feet; but we no longer have the power of seeking favorable currents, either going up or coming down. We are at the mercy of the balloon!"

"That is vexatious!" rejoined Kennedy. "The wind is poor; but if we had come across a hurricane like some of those we met before, these vile brigands would have been out of sight long ago."

"The rascals follow us at their leisure," said Joe. "They're only at a short gallop. Quite a nice little ride!"

"If we were within range," sighed the sportsman, "I should amuse myself with dismounting a few of them."

"Exactly," said the doctor; "but then they would have you within range also, and our balloon would offer only too plain a target to the bullets from their long guns; and, if they were to make a hole in it, I leave you to judge what our situation would be!"

The pursuit of the Talabas continued all morning; and by eleven o'clock the aeronauts had made scarcely fifteen miles to the westward.

The doctor was anxiously watching for the least cloud on the horizon. He feared, above all things, a change in the atmosphere. Should he be thrown back toward the Niger, what would become of him? Besides, he remarked that the balloon tended to fall considerably. Since the start, he had already lost more than three hundred feet, and the Senegal must be about a dozen miles distant. At his present rate of speed, he could count upon travelling only three hours longer.

At this moment his attention was attracted by fresh cries. The Talabas appeared to be much excited, and were spurring their horses.

The doctor consulted his barometer, and at once discovered the cause of these symptoms.

"Are we descending?" asked Kennedy.

"Yes!" replied the doctor.

"The mischief!" thought Joe.

In the lapse of fifteen minutes the Victoria was only one hundred and fifty feet above the ground; but the wind was much stronger than before.

The Talabas checked their horses, and soon a volley of musketry pealed out on the air.

"Too far, you fools!" bawled Joe. "I think it would be well to keep those scamps at a distance."

And, as he spoke, he aimed at one of the horsemen who was farthest to the front, and fired. The Talaba fell headlong, and, his companions halting for a moment, the balloon gained upon them.

"They are prudent!" said Kennedy.

"Because they think that they are certain to take us," replied the doctor; "and, they will succeed if we descend much farther. We must, absolutely, get higher into the air."

"What can we throw out?" asked Joe.

"All that remains of our stock of pemmican; that will be thirty pounds less weight to carry."

"Out it goes, sir!" said Joe, obeying orders.
The car, which was now almost touching the ground, rose again, amid the cries of the Talabas; but, half an hour later, the balloon was again falling rapidly, because the gas was escaping through the pores of the covering.

Ere long the car was once more grazing the soil, and Al-Hadji’s black riders rushed toward it; but, as frequently happens in like cases, the balloon had scarcely touched the surface ere it rebounded, and only came down again a mile away.

"So we shall not escape!" said Kennedy, between his teeth.

"Throw out our reserved store of brandy, Joe," cried the doctor; "our instruments, and everything that has any weight, even to our last anchor, because go they must!"

Joe flung out the barometers and thermometers, but all that amounted to little; and the balloon, which had risen for an instant, fell again toward the ground.

The Talabas flew toward it, and at length were not more than two hundred paces away.

"Throw out the two fowling-pieces!" shouted Ferguson.

"Not without discharging them, at least," responded the sportsman; and four shots in quick succession struck the thick of the advancing group of horsemen. Four Talabas fell, amid the frantic howls and imprecations of their comrades.

The Victoria ascended once more, and made some enormous leaps, like a huge gum-elastic ball, bounding and rebounding through the air. A strange sight it was to see these unfortunate men endeavoring to escape by those huge aerial strides, and seeming, like the giant Antaeus, to receive fresh strength every time they touched the earth. But this situation had to terminate. It was now nearly noon; the Victoria was getting empty and exhausted, and assuming a more and more elongated form every instant. Its outer covering was becoming flaccid, and floated loosely in the air, and the folds of the silk rustled and grated on each other.

"Heaven abandons us!" said Kennedy; "we have to fall!"

Joe made no answer. He kept looking intently at his master.

"No!" said the latter; "we have more than one hundred and fifty pounds yet to throw out."

"What can it be, then?" said Kennedy, thinking that the doctor must be going mad.

"The car!" was his reply; "we can cling to the network. There we can hang on in the meshes until we reach the river. Quick! quick!"

And these daring men did not hesitate a moment to avail themselves of this last desperate means of escape. They clutched the network, as the doctor directed, and Joe, holding on by one hand, with the other cut the cords that suspended the car; and the latter dropped to the ground just as the balloon was sinking for the last time.

"Hurrah! hurrah!" shouted the brave fellow exultingly, as the Victoria, once more relieved, shot up again to a height of three hundred feet.

The Talabas spurred their horses, which now came tearing on at a furious gallop; but the balloon, falling in with a much more favorable wind, shot ahead of them, and was rapidly carried toward a hill that stretched across the horizon to the westward. This was a circumstance favorable to the aeronauts, because they could rise over the hill, while Al-Hadji’s horde had to diverge to the northward in order to pass this obstacle.

The three friends still clung to the network. They had been able to fasten it under their feet, where it had formed a sort of swinging pocket.

Suddenly, after they had crossed the hill, the doctor exclaimed: "The river! the river! the Senegal, my friends!"

And about two miles ahead of them, there was indeed the river rolling along its broad mass of water, while the farther bank, which was low and fertile, offered a sure refuge, and a place favorable for a descent.

"Another quarter of an hour," said Ferguson, "and we are saved!"

But it was not to happen thus; the empty balloon descended slowly upon a tract almost entirely bare of vegetation. It was made up of long slopes and stony plains, a few bushes and some coarse grass, scorched by the sun.

The Victoria touched the ground several times, and rose again, but her rebound was diminishing in height and length. At the last one, it caught by the upper part of the network in the lofty branches of a baobab, the only tree that stood there, solitary and alone, in the midst of the waste.

"It’s all over," said Kennedy.

"And at a hundred paces only from the river!" groaned Joe.

The three hapless aeronauts descended to the ground, and the doctor drew his companions toward the Senegal.

At this point the river sent forth a prolonged roaring; and when Ferguson reached its bank, he recognized the falls of Gouina. But not a boat, not a living creature was to be seen. With a breadth of two thousand feet, the Senegal precipitates itself for a height of one hundred and fifty, with a thundering reverberation. It ran, where they saw it, from east to west, and the line of rocks that barred its course extended from north to south. In the midst of the falls, rocks of strange forms started up like huge ante-diluvian animals, petrified there amid the waters.
The impossibility of crossing this gulf was self-evident, and Kennedy could not restrain a gesture of despair.

But Dr. Ferguson, with an energetic accent of undaunted daring, exclaimed—

"All is not over!"

"I knew it," said Joe, with that confidence in his master which nothing could ever shake.

The sight of the dried-up grass had inspired the doctor with a bold idea. It was the last chance of escape. He led his friends quickly back to where they had left the covering of the balloon.

"We have at least an hour's start of those banditti," said he; "let us lose no time, my friends; gather a quantity of this dried grass; I want a hundred pounds of it, at least."

"For what purpose?" asked Kennedy, surprised.

"I have no more gas; well, I'll cross the river with hot air!"

"Ah, doctor," exclaimed Kennedy, "you are, indeed, a great man!"

Joe and Kennedy at once went to work, and soon had an immense pile of dried grass heaped up near the baobab.

In the mean time, the doctor had enlarged the orifice of the balloon by cutting it open at the lower end. He then was very careful to expel the last remnant of hydrogen through the valve, after which he heaped up a quantity of grass under the balloon, and set fire to it.

It takes but a little while to inflate a balloon with hot air. A head of one hundred and eighty degrees is sufficient to diminish the weight of the air it contains to the extent of one-half, by rarefying it. Thus, the Victoria quickly began to assume a more rounded form. There was no lack of grass; the fire was kept in full blast by the doctor's assiduous efforts, and the balloon grew fuller every instant.

It was then a quarter to four o'clock.

At this moment the band of Talabas reappeared about two miles to the northward, and the three friends could hear their cries, and the clatter of their horses galloping at full speed.

"In twenty minutes they will be here!" said Kennedy.

"More grass! more grass, Joe! In ten minutes we shall have her full of hot air."

"Here it is, doctor!"

The Victoria was now two-thirds inflated.

"Come, my friends, let us take hold of the network, as we did before."

"All right!" they answered together.

In about ten minutes a few jerking motions by the balloon indicated that it was disposed to start again. The Talabas were approaching. They were hardly five hundred paces away.

"Hold on fast!" cried Ferguson.

"Have no fear, master—have no fear!"

And the doctor, with his foot pushed another heap of grass upon the fire.

With this the balloon, now completely inflated by the increased temperature, moved away, sweeping the branches of the baobab in her flight.

"We're off!" shouted Joe.

A volley of musketry responded to his exclamation. A bullet even ploughed his shoulder; but Kennedy, leaning over, and discharging his rifle with one hand, brought another of the enemy to the ground.

Cries of fury exceeding all description hailed the departure of the balloon, which had at once ascended nearly eight hundred feet. A swift current caught and swept it along with the most alarming oscillations, while the intrepid doctor and his friends saw the gulf of the cataracts yawning below them.

Ten minutes later, and without having exchanged a word, they descended gradually toward the other bank of the river.

There, astonished, speechless, terrified, stood a group of men clad in the French uniform. Judge of their amazement when they saw the balloon rise from the right bank of the river. They had well-nigh taken it for some celestial phenomenon, but their officers, a lieutenant of marines and a naval ensign, having seen mention made of Dr. Ferguson's daring expedition, in the European papers, quickly explained the real state of the case.

The balloon, losing its inflation little by little, settled with the daring travellers still clinging to its network; but it was doubtful whether it would reach the land. At once some of the brave Frenchmen rushed into the water and caught the three aeronauts in their arms just as the Victoria fell at the distance of a few fathoms from the left bank of the Senegal.

"Dr. Ferguson!" exclaimed the lieutenant.

"The same, sir," replied the doctor, quietly, "and his two friends."

The Frenchmen escorted our travellers from the river, while the balloon, half-empty, and borne away by a swift current, sped on, to plunge, like a huge bubble, headlong with the waters of the Senegal, into the cataracts of Gouina.
"The poor Victoria!" was Joe's farewell remark.

The doctor could not restrain a tear, and extending his hands his two friends wrung them silently with that deep emotion which requires no spoken words.

CHAPTER FORTY-FOURTH.


The expedition upon the bank of the river had been sent by the governor of Senegal. It consisted of two officers, Messrs. Dufraisse, lieutenant of marines, and Rodamel, naval ensign, and with these were a sergeant and seven soldiers. For two days they had been engaged in reconnoitring the most favorable situation for a post at Gouina, when they became witnesses of Dr. Ferguson's arrival.

The warm greetings and felicitations of which our travellers were the recipients may be imagined. The Frenchmen, and they alone, having had ocular proof of the accomplishment of the daring project, naturally became Dr. Ferguson's witnesses. Hence the doctor at once asked them to give their official testimony of his arrival at the cataracts of Gouina.

"You would have no objection to signing a certificate of the fact, would you?" he inquired of Lieutenant Dufraisse.

"At your orders!" the latter instantly replied.

The Englishmen were escorted to a provisional post established on the bank of the river, where they found the most assiduous attention, and every thing to supply their wants. And there the following certificate was drawn up in the terms in which it appears to-day, in the archives of the Royal Geographical Society of London:

"We, the undersigned, do hereby declare that, on the day herein mentioned, we witnessed the arrival of Dr. Ferguson and his two companions, Richard Kennedy and Joseph Wilson, clinging to the cordage and network of a balloon, and that the said balloon fell at a distance of a few paces from us into the river, and being swept away by the current was lost in the cataracts of Gouina. In testimony whereof, we have hereunto set our hands and seals beside those of the persons hereinaabove named, for the information of all whom it may concern.

"Done at the Cataracts of Gouina, on the 24th of May, 1862. "(Signed), "SAMUEL FERGUSON "RICHARD KENNEDY, "JOSEPH WILSON, "DUFRAISSE, Lieutenant of Marines, "RODAMEL, Naval Ensign, "DUFAYS, Sergeant, "FLIPPEAU, MAYOR, } "PELISSIER, LOROIS, } Privates." RASCAGNET, GUIL- } LON, LEBEL, }"

Here ended the astonishing journey of Dr. Ferguson and his brave companions, as vouched for by undeniable testimony; and they found themselves among friends in the midst of most hospitable tribes, whose relations with the French settlements are frequent and amicable.

They had arrived at Senegal on Saturday, the 24th of May, and on the 27th of the same month they reached the post of Medina, situated a little farther to the north, but on the river.

There the French officers received them with open arms, and lavished upon them all the resources of their hospitality. Thus aided, the doctor and his friends were enabled to embark almost immediately on the small steamer called the Basilic, which ran down to the mouth of the river.

Two weeks later, on the 10th of June, they arrived at Saint Louis, where the governor gave them a magnificent reception, and they recovered completely from their excitement and fatigue.

Besides, Joe said to every one who chose to listen:

That was a stupid trip of ours, after all, and I wouldn't advise any body who is greedy for excitement to undertake it. It gets very tiresome at the last, and if it hadn't been for the adventures on Lake Tchad and at the Senegal River, I do believe that we'd have died of yawnig."

An English frigate was just about to sail, and the three travellers procured passage on board of her. On the 25th of June they arrived at Portsmouth, and on the next day at London.

We will not describe the reception they got from the Royal Geographical Society, nor the intense curiosity and consideration of which they became the objects. Kennedy set off, at once, for Edinburgh, with his famous rifle, for he was in haste to relieve the anxiety of his faithful old housekeeper.

The doctor and his devoted Joe remained the same men that we have known them, excepting that one change took place at their own suggestion.

They ceased to be master and servant, in order to become bosom friends.

The journals of all Europe were untiring in their praises of the bold explorers, and the Daily Telegraph struck off an edition of three hundred and seventy-seven thousand copies on the day when it published a sketch of the trip.

Doctor Ferguson, at a public meeting of the Royal Geographical Society, gave a recital of his journey through the air, and obtained for himself and his companions the golden medal set apart to reward the most remarkable
exploring expedition of the year 1862.

The first result of Dr. Ferguson's expedition was to establish, in the most precise manner, the facts and geographical surveys reported by Messrs. Barth, Burton, Speke, and others. Thanks to the still more recent expeditions of Messrs. Speke and Grant, De Heuglin and Muntzinger, who have been ascending to the sources of the Nile, and penetrating to the centre of Africa, we shall be enabled ere long to verify, in turn, the discoveries of Dr. Ferguson in that vast region comprised between the fourteenth and thirty-third degrees of east longitude.

GODFREY MORGAN
A CALIFORNIAN MYSTERY
BY
JULES VERNE

CHAPTER I.
IN WHICH THE READER HAS THE OPPORTUNITY OF BUYING AN ISLAND IN THE PACIFIC OCEAN.

"An island to sell, for cash, to the highest bidder!" said Dean Felporg, the auctioneer, standing behind his rostrum in the room where the conditions of the singular sale were being noisily discussed.

"Island for sale! island for sale!" repeated in shrill tones again and again Gingrass, the crier, who was threading his way in and out of the excited crowd closely packed inside the largest saloon in the auction mart at No. 10, Sacramento Street.

The crowd consisted not only of a goodly number of Americans from the States of Utah, Oregon, and California, but also of a few Frenchmen, who form quite a sixth of the population.

Mexicans were there enveloped in their sarapes; Chinamen in their large-sleeved tunics, pointed shoes, and conical hats; one or two Kanucks from the coast; and even a sprinkling of Black Feet, Grosventres, or Flatheads, from the banks of the Trinity river.

The scene is in San Francisco, the capital of California, but not at the period when the placer-mining fever was raging--from 1849 to 1852. San Francisco was no longer what it had been then, a caravanserai, a terminus, an _inn_, where for a night there slept the busy men who were hastening to the gold-fields west of the Sierra Nevada. At the end of some twenty years the old unknown Yerba-Buena had given place to a town unique of its kind, peopled by 100,000 inhabitants, built under the shelter of a couple of hills, away from the shore, but stretching off to the farthest heights in the background--a city in short which has dethroned Lima, Santiago, Valparaiso, and every other rival, and which the Americans have made the queen of the Pacific, the "glory of the western coast!"

It was the 15th of May, and the weather was still cold. In California, subject as it is to the direct action of the polar currents, the first weeks of this month are somewhat similar to the last weeks of March in Central Europe. But the cold was hardly noticeable in the thick of the auction crowd. The bell with its incessant clangour had brought together an enormous throng, and quite a summer temperature caused the drops of perspiration to glisten on the foreheads of the spectators which the cold outside would have soon solidified.

Do not imagine that all these folks had come to the auction-room with the intention of buying. I might say that all of them had but come to see. Who was going to be mad enough, even if he were rich enough, to purchase an isle of the Pacific, which the government had in some eccentric moment decided to sell? Would the reserve price ever be reached? Could anybody be found to work up the bidding? If not, it would scarcely be the fault of the public crier, who tried his best to tempt buyers by his shoutings and gestures, and the flowery metaphors of his harangue. People laughed at him, but they did not seem much influenced by him.

"An island! an isle to sell!" repeated Gingrass.

"But not to buy!" answered an Irishman, whose pocket did not hold enough to pay for a single pebble.

"An island which at the valuation will not fetch six dollars an acre!" said the auctioneer.

"And which won't pay an eighth per cent.!" replied a big farmer, who was well acquainted with agricultural speculations.

"An isle which measures quite sixty-four miles round and has an area of two hundred and twenty-five thousand acres!"

"Is it solid on its foundation?" asked a Mexican, an old customer at the liquor-bars, whose personal solidity
seemed rather doubtful at the moment.

"An isle with forests still virgin!" repeated the crier, "with prairies, hills, watercourses--"

"Warranted?" asked a Frenchman, who seemed rather inclined to nibble.

"Yes! warranted!" added Felporg, much too old at his trade to be moved by the chaff of the public.

"For two years?"

"To the end of the world!"

"Beyond that?"

"A freehold island!" repeated the crier, "an island without a single noxious animal, no wild beasts, no reptiles!--"

"No birds?" added a wag.

"No insects?" inquired another.

"An island for the highest bidder!" said Dean Felporg, beginning again. "Come, gentlemen, come! Have a little courage in your pockets! Who wants an island in perfect state of repair, never been used, an island in the Pacific, that ocean of oceans? The valuation is a mere nothing! It is put at eleven hundred thousand dollars, is there any one will bid? Who speaks first? You, sir?--you, over there nodding your head like a porcelain mandarin? Here is an island! a really good island! Who says an island?"

"Pass it round!" said a voice as if they were dealing with a picture or a vase.

And the room shouted with laughter, but not a half-dollar was bid.

However, if the lot could not be passed round, the map of the island was at the public disposal. The whereabouts of the portion of the globe under consideration could be accurately ascertained. There was neither surprise nor disappointment to be feared in that respect. Situation, orientation, outline, altitudes, levels, hydrography, climatology, lines of communication, all these were easily to be verified in advance. People were not buying a pig in a poke, and most undoubtedly there could be no mistake as to the nature of the goods on sale. Moreover, the innumerable journals of the United States, especially those of California, with their dailies, bi-weeklies, weeklies, bi-monthlies, monthlies, their reviews, magazines, bulletins, &c., had been for several months directing constant attention to the island whose sale by auction had been authorized by Act of Congress.

The island was Spencer Island, which lies in the west-south-west of the Bay of San Francisco, about 460 miles from the Californian coast, in 32° 15' north latitude, and 145° 18' west longitude, reckoning from Greenwich. It would be impossible to imagine a more isolated position, quite out of the way of all maritime or commercial traffic, although Spencer Island was relatively, not very far off, and situated practically in American waters. But thereabouts the regular currents diverging to the north and south have formed a kind of lake of calms, which is sometimes known as the "Whirlpool of Fleurieu."

It is in the centre of this enormous eddy, which has hardly an appreciable movement, that Spencer Island is situated. And so it is sighted by very few ships. The main routes of the Pacific, which join the new to the old continent, and lead away to China or Japan, run in a more southerly direction. Sailing-vessels would meet with endless calms in the Whirlpool of Fleurieu; and steamers, which always take the shortest road, would gain no advantage by crossing it. Hence ships of neither class know anything of Spencer Island, which rises above the waters like the isolated summit of one of the submarine mountains of the Pacific. Truly, for a man wishing to flee from the noise of the world, seeking quiet in solitude, what could be better than this island, lost within a few hundred miles of the coast? For a voluntary Robinson Crusoe, it would be the very ideal of its kind! Only of course he must pay for it.

And now, why did the United States desire to part with the island? Was it for some whim? No! A great nation cannot act on caprice in any matter, however simple. The truth was this: situated as it was, Spencer Island had for a long time been known as a station perfectly useless. There could be no practical result from settling there. In a military point of view it was of no importance, for it only commanded an absolutely deserted portion of the Pacific. In a commercial point of view there was a similar want of importance, for the products would not pay the freight either inwards or outwards. For a criminal colony it was too far from the coast. And to occupy it in any way, would be a very expensive undertaking. So it had remained deserted from time immemorial, and Congress, composed of "eminently practical" men, had resolved to put it up for sale--on one condition only, and that was, that its purchaser should be a free American citizen. There was no intention of giving away the island for nothing, and so the reserve price had been fixed at $1,100,000. This amount for a financial society dealing with such matters was a mere bagatelle, if the transaction could offer any advantages; but as we need hardly repeat, it offered none, and competent men attached no more value to this detached portion of the United States, than to one of the islands lost beneath the glaciers of the Pole.

In one sense, however, the amount was considerable. A man must be rich to pay for this hobby, for in any case it would not return him a halfpenny per cent. He would even have to be immensely rich for the transaction was to be a "cash" one, and even in the United States it is as yet rare to find citizens with $1,100,000 in their pockets, who
would care to throw them into the water without hope of return.

And Congress had decided not to sell the island under the price. Eleven hundred thousand dollars, not a cent less, or Spencer Island would remain the property of the Union.

It was hardly likely that any one would be mad enough to buy it on the terms.

Besides, it was expressly reserved that the proprietor, if one offered, should not become king of Spencer Island, but president of a republic. He would gain no right to have subjects, but only fellow-citizens, who could elect him for a fixed time, and would be free from re-electing him indefinitely. Under any circumstances he was forbidden to play at monarchy. The Union could never tolerate the foundation of a kingdom, no matter how small, in American waters.

This reservation was enough to keep off many an ambitious millionaire, many an aged nabob, who might like to compete with the kings of the Sandwich, the Marquesas, and the other archipelagoes of the Pacific.

In short, for one reason or other, nobody presented himself. Time was getting on, the crier was out of breath in his efforts to secure a buyer, the auctioneer orated without obtaining a single specimen of those nods which his estimable fraternity are so quick to discover; and the reserve price was not even mentioned.

However, if the hammer was not wearied with oscillating above the rostrum, the crowd was not wearied with waiting around it. The joking continued to increase, and the chaff never ceased for a moment. One individual offered two dollars for the island, costs included. Another said that a man ought to be paid that for taking it.

And all the time the crier was heard with,--

"An island to sell! an island for sale!"

And there was no one to buy it.

"Will you guarantee that there are flats there?" said Stumpy, the grocer of Merchant Street, alluding to the deposits so famous in alluvial gold-mining.

"No," answered the auctioneer, "but it is not impossible that there are, and the State abandons all its rights over the gold lands."

"Haven't you got a volcano?" asked Oakhurst, the bar-keeper of Montgomery Street.

"No volcanoes," replied Dean Felporg, "if there were, we could not sell at this price!"

An immense shout of laughter followed.

"An island to sell! an island for sale!" yelled Gingrass, whose lungs tired themselves out to no purpose.

"Only a dollar! only a half-dollar! only a cent above the reserve!" said the auctioneer for the last time, "and I will knock it down! Once! Twice!"

Perfect silence.

"If nobody bids we must put the lot back! Once! Twice!"

"Twelve hundred thousand dollars!"

The four words rang through the room like four shots from a revolver.

The crowd, suddenly speechless, turned towards the bold man who had dared to bid.

It was William W. Kolderup, of San Francisco.

CHAPTER II.

HOW WILLIAM W. KOLDERUP, OF SAN FRANCISCO, WAS AT LOGGERHEADS WITH J. R. TASKINAR, OF STOCKTON.

A man extraordinarily rich, who counted dollars by the million as other men do by the thousand; such was William W. Kolderup.

People said he was richer than the Duke of Westminster, whose income is some $4,000,000 a year, and who can spend his $10,000 a day, or seven dollars every minute; richer than Senator Jones, of Nevada, who has $35,000,000 in the funds; richer than Mr. Mackay himself, whose annual $13,750,000 give him $1560 per hour, or half-a-dollar to spend every second of his life.

I do not mention such minor millionaires as the Rothschilds, the Vanderbilts, the Dukes of Northumberland, or the Stewarts, nor the directors of the powerful bank of California, and other opulent personages of the old and new worlds whom William W. Kolderup would have been able to comfortably pension. He could, without inconvenience, have given away a million just as you and I might give away a shilling.

It was in developing the early placer-mining enterprises in California that our worthy speculator had laid the solid foundations of his incalculable fortune. He was the principal associate of Captain Sutter, the Swiss, in the localities, where, in 1848, the first traces were discovered. Since then, luck and shrewdness combined had helped him on, and he had interested himself in all the great enterprises of both worlds. He threw himself boldly into commercial and industrial speculations. His inexhaustible funds were the life of hundreds of factories, his ships were
on every sea. His wealth increased not in arithmetical but in geometrical progression. People spoke of him as one of those few "milliardaires" who never know how much they are worth. In reality he knew almost to a dollar, but he never boasted of it.

At this very moment when we introduce him to our readers with all the consideration such a many-sided man merits, William W. Kolderup had 2000 branch offices scattered over the globe, 80,000 employés in America, Europe, and Australia, 300,000 correspondents, a fleet of 500 ships which continually ploughed the ocean for his profit, and he was spending not less than a million a year in bill-stamps and postages. In short, he was the honour and glory of opulent Frisco--the nickname familiarly given by the Americans to the Californian capital.

A bid from William W. Kolderup could not but be a serious one. And when the crowd in the auction room had recognized who it was that by $100,000 had capped the reserve price of Spencer Island, there was an irresistible sensation, the chaffing ceased instantly, jokes gave place to interjections of admiration, and cheers resounded through the saloon. Then a deep silence succeeded to the hubbub, eyes grew bigger, and ears opened wider. For our part had we been there we would have had to hold our breath that we might lose nothing of the exciting scene which would follow should any one dare to bid against William W. Kolderup.

But was it probable? Was it even possible?

No! And at the outset it was only necessary to look at William W. Kolderup to feel convinced that he could never yield on a question where his financial gallantry was at stake.

He was a big, powerful man, with huge head, large shoulders, well-built limbs, firmly knit, and tough as iron. His quiet but resolute look was not willingly cast downwards, his grey hair, brushed up in front, was as abundant as if he were still young. The straight lines of his nose formed a geometrically-drawn right-angled triangle. No moustache; his beard cut in Yankee fashion bedecked his chin, and the two upper points met at the opening of the lips and ran up to the temples in pepper-and-salt whiskers; teeth of snowy whiteness were symmetrically placed on the borders of a clean-cut mouth. The head of one of those true kings of men who rise in the tempest and face the storm. No hurricane could bend that head, so solid was the neck which supported it. In these battles of the bidders each of its nods meant an additional hundred thousand dollars.

There was no one to dispute with him.

"Twelve hundred thousand dollars--twelve hundred thousand!" said the auctioneer, with that peculiar accent which men of his vocation find most effective.

"Going at twelve hundred thousand dollars!" repeated Gingrass the crier.

"You could safely bid more than that," said Oakhurst, the bar-keeper; "William Kolderup will never give in."

"He knows no one will chance it," answered the grocer from Merchant Street.

Repeated cries of "Hush!" told the two worthy tradesmen to be quiet. All wished to hear. All hearts palpitated. Dare any one raise his voice in answer to the voice of William W. Kolderup? He, magnificent to look upon, never moved. There he remained as calm as if the matter had no interest for him. But--and this those near to him noticed--his eyes were like revolvers loaded with dollars, ready to fire.

"Nobody speaks?" asked Dean Felporg.

Nobody spoke.

"Once! Twice!"

"Once! Twice!" repeated Gingrass, quite accustomed to this little dialogue with his chief.

"Going!"

"Going!"

"For twelve--hundred--thousand--dollars--Spencer--Island--com--plete!"

"For twelve--hundred--thousand--dollars!"

"That is so? No mistake?"

"No withdrawal?"

"For twelve hundred thousand dollars, Spencer Island!"

The waistcoats rose and fell convulsively. Could it be possible that at the last second a higher bid would come? Felporg with his right hand stretched on the table was shaking his ivory hammer--one rap, two raps, and the deed would be done.

The public could not have been more absorbed in the face of a summary application of the law of Justice Lynch! The hammer slowly fell, almost touched the table, rose again, hovered an instant like a sword which pauses ere the drawer cleaves the victim in twain; then it flashed swiftly downwards.

But before the sharp rap could be given, a voice was heard giving utterance to these four words,--

"Thirteen--hundred--thousand--dollars!"

There was a preliminary "Ah!" of general stupefaction, then a second "Ah!" of not less general satisfaction. Another bidder had presented himself! There was going to be a fight after all!
But who was the reckless individual who had dared to come to dollar strokes with William W. Kolderup of San Francisco?

It was J. R. Taskinar, of Stockton.

J. R. Taskinar was rich, but he was more than proportionately fat. He weighed 490 lbs. If he had only run second in the last fat-man show at Chicago, it was because he had not been allowed time to finish his dinner, and had lost about a dozen pounds.

This colossus, who had had to have special chairs made for his portly person to rest upon, lived at Stockton, on the San Joachim. Stockton is one of the most important cities in California, one of the dépôt centres for the mines of the south, the rival of Sacramento the centre for the mines of the north. There the ships embark the largest quantity of Californian corn.

Not only had the development of the mines and speculations in wheat furnished J. R. Taskinar with the occasion of gaining an enormous fortune, but petroleum, like another Pactolus, had run through his treasury. Besides, he was a great gambler, a lucky gambler, and he had found "poker" most prodigal of its favours to him.

But if he was a Croesus, he was also a rascal; and no one would have addressed him as "honourable," although the title in those parts is so much in vogue. After all, he was a good war-horse, and perhaps more was put on his back than was justly his due. One thing was certain, and that was that on many an occasion he had not hesitated to use his "Derringer"--the Californian revolver.

Now J. R. Taskinar particularly detested William W. Kolderup. He envied him for his wealth, his position, and his reputation. He despised him as a fat man despises a lean one. It was not the first time that the merchant of Stockton had endeavoured to do the merchant of San Francisco out of some business or other, good or bad, simply owing to a feeling of rivalry. William W. Kolderup thoroughly knew his man, and on all occasions treated him with scorn enough to drive him to distraction.

The last success which J. R. Taskinar could not forgive his opponent was that gained in the struggle over the state elections. Notwithstanding his efforts, his threats, and his libels, not to mention the millions of dollars squandered by his electoral courtiers, it was William W. Kolderup who sat in his seat in the Legislative Council of Sacramento.

J. R. Taskinar had learnt--how, I cannot tell--that it was the intention of William W. Kolderup to acquire possession of Spencer Island. This island seemed doubtless as useless to him as it did to his rival. No matter. Here was another chance for fighting, and perhaps for conquering. J. R. Taskinar would not allow it to escape him.

And that is why J. R. Taskinar had come to the auction room among the curious crowd who could not be aware of his designs, why at all points he had prepared his batteries, why before opening fire, he had waited till his opponent had covered the reserve, and why when William W. Kolderup had made his bid of--

"Twelve hundred thousand dollars!"

J. R. Taskinar at the moment when William W. Kolderup thought he had definitely secured the island, woke up with the words shouted in stentorian tones,--

"Thirteen hundred thousand dollars!"

Everybody as we have seen turned to look at him.

"Fat Taskinar!"

The name passed from mouth to mouth. Yes. Fat Taskinar! He was known well enough! His corpulence had been the theme of many an article in the journals of the Union.

I am not quite sure which mathematician it was who had demonstrated by transcendental calculations, that so great was his mass that it actually influenced that of our satellite and in an appreciable manner disturbed the elements of the lunar orbit.

But it was not J. R. Taskinar's physical composition which interested the spectators in the room. It was something far different which excited them; it was that he had entered into direct public rivalry with William W. Kolderup. It was a fight of heroes, dollar versus dollar, which had opened, and I do not know which of the two coffers would turn out to be best lined. Enormously rich were both these mortal enemies! After the first sensation, which was rapidly suppressed, renewed silence fell on the assembly. You could have heard a spider weaving his web.

It was the voice of Dean Felporg which broke the spell.

"For thirteen hundred thousand dollars, Spencer Island!" exclaimed he, drawing himself up so as to better command the circle of bidders.

William W. Kolderup had turned towards J. R. Taskinar. The bystanders moved back, so as to allow the adversaries to behold each other. The man of Stockton and the man of San Francisco were face to face, mutually staring, at their ease. Truth compels me to state that they made the most of the opportunity. Never would one of them consent to lower his eyes before those of his rival.
"Fourteen hundred thousand dollars," said William W. Kolderup.
"Fifteen hundred thousand!" retorted J. R. Taskinar.
"Sixteen hundred thousand!"
"Seventeen hundred thousand!"

Have you ever heard the story of the two mechanics of Glasgow, who tried which should raise the other highest up the factory chimney at the risk of a catastrophe? The only difference was that here the chimney was of ingots of gold.

Each time after the capping bid of J. R. Taskinar, William W. Kolderup took a few moments to reflect before he bid again. On the contrary Taskinar burst out like a bomb, and did not seem to require a second to think.
"Seventeen hundred thousand dollars!" repeated the auctioneer. "Now, gentlemen, that is a mere nothing! It is giving it away!"

And one can well believe that, carried away by the jargon of his profession, he was about to add,--
"The frame alone is worth more than that!" When--
"Seventeen hundred thousand dollars!" howled Gingrass, the crier.
"Eighteen hundred thousand!" replied William W. Kolderup.
"Nineteen hundred thousand!" retorted J. R. Taskinar.
"'Two millions!"' quoth William W. Kolderup, and so quickly that this time he evidently had not taken the trouble to think. His face was a little pale when these last words escaped his lips, but his whole attitude was that of a man who did not intend to give in.

J. R. Taskinar was simply on fire. His enormous face was like one of those gigantic railway bull's-eyes which, screened by the red, signal the stoppage of the train. But it was highly probable that his rival would disregard the block, and decline to shut off steam.

This J. R. Taskinar felt. The blood mounted to his brows, and seemed apoplextically congested there. He wriggled his fat fingers, covered with diamonds of great price, along the huge gold chain attached to his chronometer. He glared at his adversary, and then shutting his eyes so as to open them with a more spiteful expression a moment afterwards.

"Two million, four hundred thousand dollars!" he remarked, hoping by this tremendous leap to completely rout his rival.
"Two million, seven hundred thousand!" replied William W. Kolderup in a peculiarly calm voice.
"Two million, nine hundred thousand!"
"Three millions!"

Yes! William W. Kolderup, of San Francisco, said three millions of dollars!

Applause rang through the room, hushed, however, at the voice of the auctioneer, who repeated the bid, and whose oscillating hammer threatened to fall in spite of himself by the involuntary movement of his muscles. It seemed as though Dean Felporg, surfeited with the surprises of public auction sales, would be unable to contain himself any longer.

All glances were turned on J. R. Taskinar. That voluminous personage was sensible of this, but still more was he sensible of the weight of these three millions of dollars, which seemed to crush him. He would have spoken, doubtless to bid higher--but he could not. He would have liked to nod his head--he could do so no more.

After a long pause, however, his voice was heard; feeble it is true, but sufficiently audible.
"Three millions, five hundred thousand!"

"Four millions," was the answer of William W. Kolderup.

It was the last blow of the bludgeon. J. R. Taskinar succumbed. The hammer gave a hard rap on the marble table and--

Spencer Island fell for four millions of dollars to William W. Kolderup, of San Francisco.
"I will be avenged!" muttered J. R. Taskinar, and throwing a glance of hatred at his conqueror, he returned to the Occidental Hotel.

But "hip, hip, hurrah," three times thrice, smote the ears of William W. Kolderup, then cheers followed him to Montgomery Street, and such was the delirious enthusiasm of the Americans that they even forgot to favour him with the customary bars of "Yankee Doodle."

CHAPTER III.

THE CONVERSATION OF PHINA HOLLaney AND GODFREY MORGAN, WITH A PIANO ACCOMPANIMENT.

William W. Kolderup had returned to his mansion in Montgomery Street. This thoroughfare is the Regent Street,
the Broadway, the Boulevard des Italiens of San Francisco. Throughout its length, the great artery which crosses the
city parallel with its quays is astir with life and movement; trams there are innumerable; carriages with horses,
carriages with mules; men bent on business, hurrying to and fro over its stone pavements, past shops thronged with
customers; men bent on pleasure, crowding the doors of the "bars," where at all hours are dispensed the Californian's
drinks.

There is no need for us to describe the mansion of a Frisco nabob. With so many millions, there was
proportionate luxury. More comfort than taste. Less of the artistic than the practical. One cannot have everything.

So the reader must be contented to know that there was a magnificent reception-room, and in this reception-
room a piano, whose chords were permeating the mansion's warm atmosphere when the opulent Kolderup walked in.

"Good!" he said. "She and he are there! A word to my cashier, and then we can have a little chat."

And he stepped towards his office to arrange the little matter of Spencer Island, and then dismiss it from his
mind. He had only to realize a few certificates in his portfolio and the acquisition was settled for. Half-a-dozen lines
to his broker--no more. Then William W. Kolderup devoted himself to another "combination" which was much
more to his taste.

Yes! she and he were in the drawing-room--she, in front of the piano; he, half reclining on the sofa, listening
vaguely to the pearly arpeggios which escaped from the fingers of the charmer.

"Are you listening?" she said.
"Of course."
"Yes! but do you understand it?"
"Do I understand it, Phina! Never have you played those 'Auld Robin Gray' variations more superbly."
"But it is not 'Auld Robin Gray,' Godfrey: it is 'Happy Moments.'"
"Oh! ah! yes! I remember!" answered Godfrey, in a tone of indifference which it was difficult to mistake. The
lady raised her two hands, held them suspended for an instant above the keys as if they were about to grasp another
chord, and then with a half-turn on her music-stool she remained for a moment looking at the too tranquil Godfrey,
whose eyes did their best to avoid hers.

Phina Hollaney was the goddaughter of William W. Kolderup. An orphan, he had educated her, and given her
the right to consider herself his daughter, and to love him as her father. She wanted for nothing. She was young,
"handsome in her way" as people say, but undoubtedly fascinating, a blonde of sixteen with the ideas of a woman
much older, as one could read in the crystal of her blue-black eyes. Of course, we must compare her to a lily, for all
beauties are compared to lilies in the best American society. She was then a lily, but a lily grafted into an eglantine.
She certainly had plenty of spirit, but she had also plenty of practical common-sense, a somewhat selfish
demeanour, and but little sympathy with the illusions and dreams so characteristic of her sex and age.

Her dreams were when she was asleep, not when she was awake. She was not asleep now, and had no intention
of being so.

"Godfrey?" she continued.
"Phina?" answered the young man.
"Where are you now?"
"Near you--in this room--"
"Not near me, Godfrey! Not in this room! But far far away, over the seas, is it not so?"

And mechanically Phina's hand sought the key-board and rippled along a series of sinking sevenths, which spoke
of a plaintive sadness, unintelligible perhaps to the nephew of William W. Kolderup.

For such was this young man, such was the relationship he bore towards the master of the house. The son of a
sister of this buyer of islands, fatherless and motherless for a good many years, Godfrey Morgan, like Phina, had
been brought up in the house of his uncle, in whom the fever of business had still left a place for the idea of
marrying these two to each other.

Godfrey was in his twenty-third year. His education now finished, had left him with absolutely nothing to do. He
had graduated at the University, but had found it of little use. For him life opened out but paths of ease; go where he
would, to the right or the left, whichever way he went, fortune would not fail him.

Godfrey was of good presence, gentlemanly, elegant--never tying his cravat in a ring, nor starring his fingers, his
wrists or his shirt-front with those jewelled gimcracks so dear to his fellow-citizens.

I shall surprise no one in saying that Godfrey Morgan was going to marry Phina Hollaney. Was he likely to do
otherwise? All the proprieties were in favour of it. Besides, William W. Kolderup desired the marriage. The two
people whom he loved most in this world were sure of a fortune from him, without taking into consideration
whether Phina cared for Godfrey, or Godfrey cared for Phina. It would also simplify the bookkeeping of the
commercial house. Ever since their births an account had been opened for the boy, another for the girl. It would then
be only necessary to rule these off and transfer the balances to a joint account for the young couple. The worthy merchant hoped that this would soon be done, and the balances struck without error or omission.

But it is precisely that there had been an omission and perhaps an error that we are about to show. An error, because at the outset Godfrey felt that he was not yet old enough for the serious undertaking of marriage; an omission, because he had not been consulted on the subject.

In fact, when he had finished his studies Godfrey had displayed a quite premature indifference to the world, in which he wanted for nothing, in which he had no wish remaining ungratified, and nothing whatever to do. The thought of travelling round the world was always present to him. Of the old and new continents he knew but one spot--San Francisco, where he was born, and which he had never left except in a dream. What harm was there in a young man making the tour of the globe twice or thrice--especially if he were an American? Would it do him any good? Would he learn anything in the different adventures he would meet with in a voyage of any length? If he were not already satiated with a life of adventure, how could he be answered? Finally, how many millions of leagues of observation and instruction were indispensable for the completion of the young man's education?

Things had reached this pass; for a year or more Godfrey had been immersed in books of voyages of recent date, and had passionately devoured them. He had discovered the Celestial Empire with Marco Polo, America with Columbus, the Pacific with Cook, the South Pole with Dumont d'Urville. He had conceived the idea of going where these illustrious travellers had been without him. In truth, he would not have considered an exploring expedition of several years to cost him too dear at the price of a few attacks of Malay pirates, several ocean collisions, and a shipwreck or two on a desert island where he could live the life of a Selkirk or a Robinson Crusoe! A Crusoe! To become a Crusoe! What young imagination has not dreamt of this in reading as Godfrey had often, too often done, the adventures of the imaginary heroes of Daniel de Foe and De Wyss?

Yes! The nephew of William W. Kolderup was in this state when his uncle was thinking of binding him in the chains of marriage. To travel in this way with Phina, then become Mrs. Morgan, would be clearly impossible! He must go alone or leave it alone. Besides, once his fancy had passed away, would not she be better disposed to sign the settlements? Was it for the good of his wife that he had not been to China or Japan, not even to Europe? Decidedly not.

And hence it was that Godfrey was now absent in the presence of Phina, indifferent when she spoke to him, deaf when she played the airs which used to please him; and Phina, like a thoughtful, serious girl, soon noticed this.

To say that she did not feel a little annoyance mingled with some chagrin, is to do her a gratuitous injustice. But accustomed to look things in the face, she had reasoned thus,--

"If we must part, it had better be before marriage than afterwards!"

And thus it was that she had spoken to Godfrey in these significant words.

"No! You are not near me at this moment--you are beyond the seas!"

Godfrey had risen. He had walked a few steps without noticing Phina, and unconsciously his index finger touched one of the keys of the piano. A loud C# of the octave below the staff, a note dismal enough, answered for him.

Phina had understood him, and without more discussion was about to bring matters to a crisis, when the door of the room opened.

William W. Kolderup appeared, seemingly a little preoccupied as usual. Here was the merchant who had just finished one negotiation and was about to begin another.

"Well," said he, "there is nothing more now than for us to fix the date."

"The date?" answered Godfrey, with a start. "What date, if you please, uncle?"

"The date of your wedding!" said William W. Kolderup. "Not the date of mine, I suppose!"

"Perhaps that is more urgent?" said Phina.

"Hey?--what?" exclaimed the uncle--"what does that matter? We are only talking of current affairs, are we not?"

"Godfather Will," answered the lady. "It is not of a wedding that we are going to fix the date to-day, but of a departure."

"A departure!"

"Yes, the departure of Godfrey," continued Phina, "of Godfrey who, before he gets married, wants to see a little of the world!"

"You want to go away--you?" said William W. Kolderup, stepping towards the young man and raising his arms as if he were afraid that this "rascal of a nephew" would escape him.

"Yes; I do, uncle," said Godfrey gallantly.

"And for how long?"

"For eighteen months, or two years, or more, if--"

"If--"
"If you will let me, and Phina will wait for me."
"Wait for you! An intended who intends until he gets away!" exclaimed William W. Kolderup.
"You must let Godfrey go," pleaded Phina; "I have thought it carefully over. I am young, but really Godfrey is younger. Travel will age him, and I do not think it will change his taste! He wishes to travel, let him travel! The need of repose will come to him afterwards, and he will find me when he returns."
"What!" exclaimed William W. Kolderup, "you consent to give your bird his liberty?"
"Yes, for the two years he asks."
"And you will wait for him?"
"Uncle Will, if I could not wait for him I could not love him!" and so saying Phina returned to the piano, and whether she willed it or no, her fingers softly played a portion of the then fashionable "Départ du Fiancé," which was very appropriate under the circumstances. But Phina, without perceiving it perhaps, was playing in "A minor," whereas it was written in "A major," and all the sentiment of the melody was transformed, and its plaintiveness chimed in well with her hidden feelings.

But Godfrey stood embarrassed, and said not a word. His uncle took him by the head and turning it to the light looked fixedly at him for a moment or two. In this way he questioned him without having to speak, and Godfrey was able to reply without having occasion to utter a syllable.

And the lamentations of the "Départ du Fiancé" continued their sorrowful theme, and then William W. Kolderup, having made the turn of the room, returned to Godfrey, who stood like a criminal before the judge. Then raising his voice,--
"You are serious," he asked.
"Quite serious!" interrupted Phina, while Godfrey contented himself with making a sign of affirmation.
"You want to try travelling before you marry Phina! Well! You shall try it, my nephew!"
He made two or three steps and stopping with crossed arms before Godfrey, asked,--
"Where do you want to go to?"
" Everywhere."
"And when do you want to start?"
"When you please, Uncle Will."
"All right," replied William W. Kolderup, fixing a curious look on his nephew.
Then he muttered between his teeth,--
"The sooner the better."

At these last words came a sudden interruption from Phina. The little finger of her left hand touched a G#, and the fourth had, instead of falling on the key-note, rested on the "sensible," like Ralph in the "Huguenots," when he leaves at the end of his duet with Valentine.
Perhaps Phina's heart was nearly full, she had made up her mind to say nothing.

It was then that William W. Kolderup, without noticing Godfrey, approached the piano.
"Phina," said he gravely, "you should never remain on the 'sensible'!"
And with the tip of his large finger he dropped vertically on to one of the keys and an "A natural" resounded through the room.

CHAPTER IV.
IN WHICH T. ARTELETT, OTHERWISE TARTLET, IS DULY INTRODUCED TO THE READER.
If T. Artelett had been a Parisian, his compatriots would not have failed to nickname him Tartlet, but as he had already received this title we do not hesitate to describe him by it. If Tartlet was not a Frenchman he ought to have been one.
In his "Itinéraire de Paris à Jérusalem," Chateaubriand tells of a little man "powdered and frizzed in the old-fashioned style, with a coat of apple green, a waistcoat of drouget, shirt-frill and cuffs of muslin, who scraped a violin and made the Iroquois dance 'Madeleine Friquet.'"

The Californians are not Iroquois, far from it; but Tartlet was none the less professor of dancing and deportment in the capital of their state. If they did not pay him for his lessons, as they had his predecessor in beaver-skins and bear-hams, they did so in dollars. If in speaking of his pupils he did not talk of the "bucks and their squaws," it was because his pupils were highly civilized, and because in his opinion he had contributed considerably to their civilization.

Tartlet was a bachelor, and aged about forty-five at the time we introduce him to our readers. But for a dozen years or so his marriage with a lady of somewhat mature age had been expected to take place.
Under present circumstances it is perhaps advisable to give "two or three lines" concerning his age, appearance,
and position in life. He would have responded to such a request we imagine as follows, and thus we can dispense with drawing his portrait from a moral and physical point of view.

"He was born on the 17th July, 1835, at a quarter-past three in the morning.
"His height is five feet, two inches, three lines.
"His girth is exactly two feet, three inches.
"His weight, increased by some six pounds during the last year, is one hundred and fifty one pounds, two ounces.
"He has an oblong head.
"His hair, very thin above the forehead, is grey chestnut, his forehead is high, his face oval, his complexion fresh coloured.
"His eyes--sight excellent--a greyish brown, eyelashes and eyebrows clear chestnut, eyes themselves somewhat sunk in their orbits beneath the arches of the brows.
"His nose is of medium size, and has a slight indentation towards the end of the left nostril.
"His cheeks and temples are flat and hairless.
"His ears are large and flat.
"His mouth, of middling size, is absolutely free from bad teeth.
"His lips, thin and slightly pinched, are covered with a heavy moustache and imperial, his chin is round and also shaded with a many-tinted beard.
"A small mole ornaments his plump neck--in the nape.
"Finally, when he is in the bath it can be seen that his skin is white and smooth.
"His life is calm and regular. Without being robust, thanks to his great temperance, he has kept his health uninjured since his birth. His lungs are rather irritable, and hence he has not contracted the bad habit of smoking. He drinks neither spirits, coffee, liqueurs, nor neat wine. In a word, all that could prejudicially affect his nervous system is vigorously excluded from his table. Light beer, and weak wine and water are the only beverages he can take without danger. It is on account of his carefulness that he has never had to consult a doctor since his life began.
"His gesture is prompt, his walk quick, his character frank and open. His thoughtfulness for others is extreme, and it is on account of this that in the fear of making his wife unhappy, he has never entered into matrimony."

Such would have been the report furnished by Tartlet, but desirable as he might be to a lady of a certain age, the projected union had hitherto failed. The professor remained a bachelor, and continued to give lessons in dancing and deportment.

It was in this capacity that he entered the mansion of William W. Kolderup. As time rolled on his pupils gradually abandoned him, and he ended by becoming one wheel more in the machinery of the wealthy establishment.

After all, he was a brave man, in spite of his eccentricities. Everybody liked him. He liked Godfrey, he liked Phina, and they liked him. He had only one ambition in the world, and that was to teach them all the secrets of his art, to make them in fact, as far as deportment was concerned, two highly accomplished individuals.

Now, what would you think? It was he, this Professor Tartlet, whom William W. Kolderup had chosen as his nephew's companion during the projected voyage. Yes! He had reason to believe that Tartlet had not a little contributed to imbue Godfrey with this roaming mania, so as to perfect himself by a tour round the world. William W. Kolderup had resolved that they should go together. On the morrow, the 16th of April, he sent for the professor to his office.

The request of the nabob was an order for Tartlet. The professor left his room, with his pocket violin--generally known as a kit--so as to be ready for all emergencies. He mounted the great staircase of the mansion with his feet academically placed as was fitting for a dancing-master; knocked at the door of the room, entered--his body half inclined, his elbows rounded, his mouth on the grin—and waited in the third position, after having crossed his feet one before the other, at half their length, his ankles touching and his toes turned out. Any one but Professor Tartlet placed in this sort of unstable equilibrium would have tottered on his base, but the professor preserved an absolute perpendicularly.

"Mr. Tartlet," said William W. Kolderup, "I have sent for you to tell you some news which I imagine will rather surprise you."
"As you think best!" answered the professor.
"My nephew's marriage is put off for a year or eighteen months, and Godfrey, at his own request, is going to visit the different countries of the old and new world."
"Sir," answered Tartlet, "my pupil, Godfrey, will do honour to the country of his birth, and—"
"And, to the professor of deportment who has initiated him into etiquette," interrupted the merchant, in a tone of which the guileless Tartlet failed to perceive the irony.
And, in fact, thinking it the correct thing to execute an "assemblée," he first moved one foot and then the other, by a sort of semi-circular side slide, and then with a light and graceful bend of the knee, he bowed to William W. Kolderup.

"I thought," continued the latter, "that you might feel a little regret at separating from your pupil?"

"The regret will be extreme," answered Tartlet, "but should it be necessary--"

"It is not necessary," answered William W. Kolderup, knitting his bushy eyebrows.

"Ah!" replied Tartlet.

Slightly troubled, he made a graceful movement to the rear, so as to pass from the third to the fourth position; but he left the breadth of a foot between his feet, without perhaps being conscious of what he was doing.

"Yes!" added the merchant in a peremptory tone, which admitted not of the ghost of a reply; "I have thought it would really be cruel to separate a professor and a pupil so well made to understand each other!"

"Assuredly!--the journey?" answered Tartlet, who did not seem to want to understand.

"Yes! Assuredly!" replied William W. Kolderup; "not only will his travels bring out the talents of my nephew, but the talents of the professor to whom he owes so correct a bearing."

Never had the thought occurred to this great baby that one day he would leave San Francisco, California, America, to roam the seas. Such an idea had never entered the brain of a man more absorbed in choreography than geography, and who was still ignorant of the suburbs of the capital beyond ten miles radius. And now this was offered to him. He was to understand that _nolens volens_ he was to expatriate himself, he himself was to experience with all their costs and inconveniences the very adventures he had recommended to his pupil! Here, decidedly, was something to trouble a brain much more solid than his, and the unfortunate Tartlet for the first time in his life felt an involuntary yielding in the muscles of his limbs, suppled as they were by thirty-five years' exercise.

"Perhaps," said he, trying to recall to his lips the stereotyped smile of the dancer which had left him for an instant,--"perhaps--am I not--"

"You will go!" answered William W. Kolderup like a a man with whom discussion was useless.

To refuse was impossible. Tartlet did not even think of such a thing. What was he in the house? A thing, a parcel, a package to be sent to every corner of the world. But the projected expedition troubled him not a little.

"And when am I to start?" demanded he, trying to get back into an academical position.

"In a month."

"And on what raging ocean has Mr. Kolderup decided that his vessel should bear his nephew and me?"

"The Pacific, at first."

"And on what point of the terrestrial globe shall I first set foot?"

"On the soil of New Zealand," answered William W. Kolderup; "I have remarked that the New Zealanders always stick their elbows out! Now you can teach them to turn them in!"

And thus was Professor Tartlet selected as the travelling-companion of Godfrey Morgan.

A nod from the merchant gave him to understand that the audience had terminated. He retired, considerably agitated, and the performance of the special graces which he usually displayed in this difficult act left a good deal to be desired. In fact, for the first time in his life, Professor Tartlet, forgetting in his preoccupation the most elementary principles of his art, went out with his toes turned in!

CHAPTER V.

IN WHICH THEY PREPARE TO GO, AND AT THE END OF WHICH THEY GO FOR GOOD.

Before the long voyage together through life, which men call marriage, Godfrey then was to make the tour of the world--a journey sometimes even more dangerous. But he reckoned on returning improved in every respect; he left a lad, he would return a man. He would have seen, noted, compared. His curiosity would be satisfied. There would only remain for him to settle down quietly, and live happily at home with his wife, whom no temptation would take him from. Was he wrong or right? Was he to learn a valuable lesson? The future will show.

In short, Godfrey was enchanted.

Phina, anxious without appearing to be so, was resigned to this apprenticeship.

Professor Tartlet, generally so firm on his limbs, had lost all his dancing equilibrium. He had lost all his usual self-possession, and tried in vain to recover it; he even tottered on the carpet of his room as if he were already on the floor of a cabin, rolling and pitching on the ocean.

As for William W. Kolderup, since he had arrived at a decision, he had become very uncommunicative, especially to his nephew. The closed lips, and eyes half hidden beneath their lids, showed that there was some fixed idea in the head where generally floated the highest commercial speculations.

"Ah! you want to travel," muttered he every now and then; "travel instead of marrying and staying at home!
Well, you shall travel."

Preparations were immediately begun.

In the first place, the itinerary had to be projected, discussed, and settled.

Was Godfrey to go south, or east, or west? That had to be decided in the first place.

If he went southwards, the Panama, California and British Columbia Company, or the Southampton and Rio Janeiro Company would have to take him to Europe.

If he went eastwards, the Union Pacific Railway would take him in a few days to New York, and then the Cunard, Inman, White Star, Hamburg-American, or French-Transatlantic Companies would land him on the shores of the old world.

If he went westwards, the Golden Age Steam Transoceanic would render it easy for him to reach Melbourne, and then he could get to the Isthmus of Suez by the boats of the Peninsular and Oriental Company.

The means of transport were abundant, and thanks to their mathematical agreement the round of the world was but a simple pleasure tour.

But it was not thus that the nephew and heir of the nabob of Frisco was to travel.

No! William W. Kolderup possessed for the requirements of his business quite a fleet of steam and sailing-vessels. He had decided that one of these ships should be "put at the disposal" of Godfrey Morgan, as if he were a prince of the blood, travelling for his pleasure—at the expense of his father's subjects.

By his orders the _Dream_, a substantial steamer of 600 tons and 200 horse-power, was got ready. It was to be commanded by Captain Turcott, a tough old salt, who had already sailed in every latitude in every sea. A thorough sailor, this friend of tornadoes, cyclones, and typhoons, had already spent of his fifty years of life, forty at sea. To bring to in a hurricane was quite child's play to this mariner, who was never disconcerted, except by land-sickness when he was in port. His incessantly unsteady existence on a vessel's deck had endowed him with the habit of constantly balancing himself to the right or the left, or behind or in front, as though he had the rolling and pitching variety of St. Vitus's dance.

A mate, an engineer, four stokers, a dozen seamen, eighteen men in all, formed the crew of the _Dream_. And if the ship was contented to get quietly through eight miles an hour, she possessed a great many excellent nautical qualities. If she was not swift enough to race the waves when the sea was high, the waves could not race over her, and that was an advantage which quite compensated for the mediocrity of her speed, particularly when there was no hurry. The _Dream_ was brigantine rigged, and in a favourable wind, with her 400 square yards of canvas, her steaming rate could be considerably increased.

It should be borne in mind all through that the voyage of the _Dream_ was carefully planned, and would be punctually performed. William W. Kolderup was too practical a man not to put to some purpose a journey of 15,000 or 16,000 leagues across all the oceans of the globe. His ship was to go without cargo, undoubtedly, but it was easy to get her down to her right trim by means of water ballast, and even to sink her to her deck, if it proved necessary.

The _Dream_ was instructed to communicate with the different branch establishments of the wealthy merchant. She was to go from one market to another.

Captain Turcott, never fear, would not find it difficult to pay the expenses of the voyage! Godfrey Morgan's whim would not cost the avuncular purse a single dollar! That is the way they do business in the best commercial houses!

All this was decided at long, very secret interviews between William W. Kolderup and Captain Turcott. But it appeared that the regulation of this matter, simple as it seemed, could not be managed alone, for the captain paid numerous visits to the merchant's office. When he came away, it would be noticed that his face bore a curious expression, that his hair stood on end as if he had been ruffling it up with fevered hands, and that all his body rolled and pitched more than usual. High words were constantly heard, proving that the interviews were stormy. Captain Turcott, with his plain speaking, knew how to withstand William W. Kolderup, who loved and esteemed him enough to permit him to contradict him.

And now all was arranged. Who had given in? William W. Kolderup or Turcott? I dare not say, for I do not even know the subject of their discussion. However, I rather think it must have been the captain.

Anyhow, after eight days of interviewing, the merchant and the captain were in accord, but Turcott did not cease to grumble between his teeth.

"May five hundred thousand Davy Joneses drag me to the bottom if ever I had a job like this before!"

However, the _Dream_ fitted out rapidly, and her captain neglected nothing which would enable him to put to sea in the first fortnight in June. She had been into dock, and the hull had been gone over with composition, whose brilliant red contrasted vividly with the black of her upper works.

A great number of vessels of all kinds and nationalities came into the port of San Francisco. In a good many years the old quays of the town, built straight along the shore, would have been insufficient for the embarkation and
disembarkation of their cargoes, if engineers had not devised subsidiary wharves. Piles of red deal were driven into
the water, and many square miles of planks were laid on them and formed huge platforms. A good deal of the bay
was thus taken up, but the bay is enormous. There were also regular landing-stages, with numberless cranes and
crabs, at which steamers from both oceans, steamboats from the Californian rivers, clippers from all countries, and
coasters from the American seaboard were ranged in proper order, so as not to interfere one with the other.

It was at one of these artificial quays, at the extremity of Mission Wharf Street, that the _Dream_ had been
securely moored after she had come out of dock.

Nothing was neglected, and the steamer would start under the most favourable conditions. Provisioning, outfit,
all were minutely studied. The rigging was perfect, the boilers had been tested and the screw was an excellent one. A
steam launch was even carried, to facilitate communication with the shore, and this would probably be of great
service during the voyage.

Everything was ready on the 10th of June. They had only to put to sea. The men shipped by Captain Turcott to
work the sails or drive the engine were a picked crew, and it would have been difficult to find a better one. Quite a
stock of live animals, agouties, sheep, goats, poultry, &c., were stowed between decks, the material wants of the
travellers were likewise provided for by numerous cases of preserved meats of the best brands.

The route the _Dream_ was to follow had doubtless been the subject of the long conferences which William W.
Kolderup had had with his captain. All knew that they were first bound for Auckland, in New Zealand, unless want
of coal necessitated by the persistence of contrary winds obliged them to refill perhaps at one of the islands of the
Pacific or some Chinese port.

All this detail mattered little to Godfrey once he was on the sea, and still less to Tartlet, whose troubled spirit
exaggerated from day to day the dangers of navigation. There was only one formality to be gone through—the
formality of being photographed.

An engaged man could not decently start on a long voyage round the world without taking with him the image of
her he loved, and in return leaving his own image behind him.

Godfrey in tourist costume accordingly handed himself over to Messrs Stephenson and Co., photographers of
Montgomery Street, and Phina, in her walking-dress, confided in like manner to the sun the task of fixing her
charming but somewhat sorrowing features on the plate of those able operators.

It is also the custom to travel together, and so Phina's portrait had its allotted place in Godfrey's cabin, and
Godfrey's portrait its special position in Phina's room. As for Tartlet, who had no betrothed and who was not
thinking of having one at present, he thought it better to confide his image to sensitised paper. But although great
was the talent of the photographers they failed to present him with a satisfactory proof. The negative was a confused
fog in which it was impossible to recognize the celebrated professor of dancing and deportment.

This was because the patient could not keep himself still, in spite of all that was said about the invariable rule in
studios devoted to operations of this nature.

They tried other means, even the instantaneous process. Impossible. Tartlet pitched and rolled in anticipation as
violently as the captain of the _Dream_.

The idea of obtaining a picture of the features of this remarkable man had thus to be abandoned. Irreparable
would be the misfortune if--but far from us be the thought!--if in imagining he was leaving the new world for the old
world Tartlet had left the new world for the other world from which nobody returns.

On the 9th of June all was ready. The _Dream_ was complete. Her papers, bills of lading, charter-party,
assurance policy, were all in order, and two days before the ship-broker had sent on the last signatures.

On that day a grand farewell breakfast was given at the mansion in Montgomery Street. They drank to the happy
voyage of Godfrey and his safe return.

Godfrey was rather agitated, and he did not strive to hide it. Phina showed herself much the most composed. As
for Tartlet he drowned his apprehensions in several glasses of champagne, whose influence was perceptible up to the
moment of departure. He even forgot his kit, which was brought to him as they were casting off the last hawser of
the _Dream_.

The last adieux were said on board, the last handshakings took place on the poop, then the engine gave two or
three turns of the screw and the steamer was under way.

"Good-bye, Phina!"
"Good-bye, Godfrey!"
"May Heaven protect you!" said the uncle.
"And above all may it bring us back!" murmured Professor Tartlet.
"And never forget, Godfrey," added William W. Kolderup, "the device which the _Dream_ bears on her stern,
'Confide, recte agens.'"
"Never, Uncle Will! Good-bye, Phina!"
"Good-bye, Godfrey!"

The steamer moved off, handkerchiefs were shaken as long as she remained in sight from the quay, and even after. Soon the bay of San Francisco, the largest in the world, was crossed, the _Dream_ passed the narrow throat of the Golden Gate and then her prow cleft the waters of the Pacific Ocean. It was as though the Gates of Gold had closed upon her.

CHAPTER VI.
IN WHICH THE READER MAKES THE ACQUAINTANCE OF A NEW PERSONAGE.
The voyage had begun. There had not been much difficulty so far, it must be admitted.
Professor Tartlet, with incontestable logic, often repeated,--
"Any voyage can begin! But where and how it finishes is the important point."
The cabin occupied by Godfrey was below the poop of the _Dream_ and opened on to the dining-saloon. Our young traveller was lodged there as comfortably as possible. He had given Phina's photograph the best place on the best lighted panel of his room. A cot to sleep on, a lavatory for toilet purposes, some chests of drawers for his clothes and his linen, a table to work at, an armchair to sit upon, what could a young man in his twenty-second year want more? Under such circumstances he might have gone twenty-two times round the world! Was he not at the age of that practical philosophy which consists in good health and good humour? Ah! young people, travel if you can, and if you cannot--travel all the same!

Tartlet was not in a good humour. His cabin, near that of his pupil, seemed to him too narrow, his bed too hard, the six square yards which he occupied quite insufficient for his steps and strides. Would not the traveller in him absorb the professor of dancing and deportment? No! It was in the blood, and when Tartlet reached the hour of his last sleep his feet would be found placed in a horizontal line with the heels one against the other, in the first position.

Meals were taken in common. Godfrey and Tartlet sat opposite to each other, the captain and mate occupying each end of the rolling table. This alarming appellation, the "rolling table," is enough to warn us that the professor's place would too often be vacant.

At the start, in the lovely month of June, there was a beautiful breeze from the north-east, and Captain Turcott was able to set his canvas so as to increase his speed. The _Dream_ thus balanced hardly rolled at all, and as the waves followed her, her pitching was but slight. This mode of progressing was not such as to affect the looks of the passengers and give them pinched noses, hollow eyes, livid foreheads, or colourless cheeks. It was supportable.

They steered south-west over a splendid sea, hardly lifting in the least, and the American coast soon disappeared below the horizon.

For two days nothing occurred worthy of mention. The _Dream_ made good progress. The commencement of the voyage promised well--so that Captain Turcott seemed occasionally to feel an anxiety which he tried in vain to hide. Each day as the sun crossed the meridian he carefully took his observations. But it could be noticed that immediately afterwards he retired with the mate into his cabin, and then they remained in secret conclave as if they were discussing some grave eventuality. This performance passed probably unnoticed by Godfrey, who understood nothing about the details of navigation, but the boatswain and the crew seemed somewhat astonished at it, particularly as for two or three times during the first week, when there was not the least necessity for the manoeuvre, the course of the _Dream_ at night was completely altered, and resumed again in the morning. In a sailing-ship this might be intelligible; but in a steamer, which could keep on the great circle line and only use canvas when the wind was favourable, it was somewhat extraordinary.

During the morning of the 12th of June a very unexpected incident occurred on board.
Captain Turcott, the mate, and Godfrey, were sitting down to breakfast when an unusual noise was heard on deck. Almost immediately afterwards the boatswain opened the door and appeared on the threshold.
"Captain!" he said.
"What's up?" asked Turcott, sailor as he was, always on the alert.
"Here's a--Chinee!" said the boatswain.
"A Chinese!"
"Yes! a genuine Chinese we have just found by chance at the bottom of the hold!"
"At the bottom of the hold!" exclaimed Turcott. "Well, by all the--somethings--of Sacramento, just send him to the bottom of the sea!"
"All right!" answered the boatswain.
And that excellent man with all the contempt of a Californian for a son of the Celestial Empire, taking the order as quite a natural one, would have had not the slightest compunction in executing it.
However, Captain Turcott rose from his chair, and followed by Godfrey and the mate, left the saloon and walked
towards the forecastle of the _Dream_.

There stood a Chinaman, tightly handcuffed, and held by two or three sailors, who were by no means sparing of their nudges and knocks. He was a man of from five-and-thirty to forty, with intelligent features, well built, of lithe figure, but a little emaciated, owing to his sojourn for sixteen hours at the bottom of a badly ventilated hold.

Captain Turcott made a sign to his men to leave the unhappy intruder alone.

"Who are you?" he asked.

"A son of the sun."

"And what is your name?"

"Seng Vou," answered the Chinese, whose name in the Celestial language signifies "he who does not live."

"And what are you doing on board here?"

"I am out for a sail!" coolly answered Seng Vou, "but am doing you as little harm as I can."

"Really! as little harm!--and you stowed yourself away in the hold when we started?"

"Just so, captain."

"So that we might take you for nothing from America to China, on the other side of the Pacific?"

"If you will have it so."

"And if I don't wish to have it so, you yellow-skinned nigger. If I will have it that you have to swim to China."

"I will try," said the Chinaman with a smile, "but I shall probably sink on the road!"

"Well, John," exclaimed Captain Turcott, "I am going to show you how to save your passage-money."

And Captain Turcott, much more angry than circumstances necessitated, was perhaps about to put his threat into execution, when Godfrey intervened.

"Captain," he said, "one more Chinee on board the _Dream_ is one Chinee less in California, where there are too many."

"A great deal too many!" answered Captain Turcott.

"Yes, too many. Well, if this poor beggar wishes to relieve San Francisco of his presence, he ought to be pitied! Bah! we can throw him on shore at Shanghai, and there needn't be any fuss about it!"

In saying that there were too many Chinese in California Godfrey held the same language as every true Californian. The emigration of the sons of the Celestial Empire--there are 300,000,000 in China as against 30,000,000 of Americans in the United States--has become dangerous to the provinces of the Far West; and the legislators of these States of California, Lower California, Oregon, Nevada, Utah, and even Congress itself, are much concerned at this new epidemic of invasion, to which the Yankees have given the name of the "yellow-plague."

At this period there were more than 50,000 Chinese, in the State of California alone. These people, very industrious at gold-washing, very patient, living on a pinch of rice, a mouthful of tea, and a whiff of opium, did an immense deal to bring down the price of manual labour, to the detriment of the native workmen. They had to submit to special laws, contrary to the American constitution--laws which regulated their immigration, and withheld from them the right of naturalization, owing to the fear that they would end by obtaining a majority in the Congress. Generally ill-treated, much as Indians or negroes, so as to justify the title of "pests" which was applied to them, they herded together in a sort of ghetto, where they carefully kept up the manners and customs of the Celestial Empire.

In the Californian capital, it is in the Sacramento Street district, decked with their banners and lanterns, that this foreign race has taken up its abode. There they can be met in thousands, trotting along in their wide-sleeved blouses, conical hats, and turned-up shoes. Here, for the most part, they live as grocers, gardeners, or laundresses--unless they are working as cooks or belong to one of those dramatic troupes which perform Chinese pieces in the French theatre at San Francisco.

And--there is no reason why we should conceal the fact--Seng Vou happened to form part of one of these troupes, in which he filled the rôle of "comic lead," if such a description can apply to any Chinese artiste. As a matter of fact they are so serious, even in their fun, that the Californian romancer, Bret Harte, has told us that he never saw a genuine Chinaman laugh, and has even confessed that he is unable to say whether one of the national pieces he witnessed was a tragedy or a farce.

In short, Seng Vou was a comedian. The season had ended, crowned with success--perhaps out of proportion to the gold pieces he had amassed--he wished to return to his country otherwise than as a corpse, for Chinamen always like to get buried at home and there are special steamers who carry dead Celestials and nothing else. At all risks, therefore, he had secretly slipped on board the _Dream_.

Loaded with provisions, did he hope to get through, incognito, a passage of several weeks, and then to land on the coast of China without being seen?

It is just possible. At any rate, the case was hardly one for a death penalty.

So Godfrey had good reason to interfere in favour of the intruder, and Captain Turcott, who pretended to be
angrier than he really was, gave up the idea of sending Seng Vou overboard to battle with the waves of the Pacific.

Seng Vou, however, did not return to his hiding-place in the hold, though he was rather an incubus on board. Phlegmatic, methodic, and by no means communicative, he carefully avoided the seamen, who had always some prank to play off on him, and he kept to his own provisions. He was thin enough in all conscience, and his additional weight but imperceptibly added to the cost of navigating the _Dream_. If Seng Vou got a free passage it was obvious that his carriage did not cost William W. Kolderup very much.

His presence on board put into Captain Turcott's head an idea which his mate probably was the only one to understand thoroughly.
"He will bother us a bit--this confounded Chinee!--after all, so much the worse for him."
"What ever made him stow himself away on board the _Dream_?" answered the mate.
"To get to Shanghai!" replied Captain Turcott. "Bless John and all John's sons too!"

CHAPTER VII.
IN WHICH IT WILL BE SEEN THAT WILLIAM W. KOLDERUP WAS PROBABLY RIGHT IN INSURING HIS SHIP.

During the following days, the 13th, 14th, and 15th of June, the barometer slowly fell, without an attempt to rise in the slightest degree, and the weather became variable, hovering between rain and wind or storm. The breeze strengthened considerably, and changed to south-westerly. It was a head-wind for the _Dream_, and the waves had now increased enormously, and lifted her forward. The sails were all furled, and she had to depend on her screw alone; under half steam, however, so as to avoid excessive labouring.

Godfrey bore the trial of the ship's motion without even losing his good-humour for a moment. Evidently he was fond of the sea.

But Tartlet was not fond of the sea, and it served him out. It was pitiful to see the unfortunate professor of deportment deporting himself no longer, the professor of dancing dancing contrary to every rule of his art. Remain in his cabin, with the seas shaking the ship from stem to stern, he could not.

"Air! air!" he gasped.

And so he never left the deck. A roll sent him rolling from one side to the other, a pitch sent him pitching from one end to the other. He clung to the rails, he clutched the ropes, he assumed every attitude that is absolutely condemned by the principles of the modern choregraphic art. Ah! why could he not raise himself into the air by some balloon-like movement, and escape the eccentricities of that moving plane? A dancer of his ancestors had said that he only consented to set foot to the ground so as not to humiliate his companions, but Tartlet would willingly never have come down at all on the deck, whose perpetual agitation threatened to hurl him into the abyss.

What an idea it was for the rich William W. Kolderup to send him here.
"Is this bad weather likely to last?" asked he of Captain Turcott twenty times a day.
"Dunno! barometer is not very promising!" was the invariable answer of the captain, knitting his brows.
"Shall we soon get there?"
"Soon, Mr. Tartlet? Hum! soon!"
"And they call this the Pacific Ocean!" repeated the unfortunate man, between a couple of shocks and oscillations.

It should be stated that, not only did Professor Tartlet suffer from sea-sickness, but also that fear had seized him as he watched the great seething waves breaking into foam level with the bulwarks of the _Dream_, and heard the valves, lifted by the violent beats, letting the steam off through the waste-pipes, as he felt the steamer tossing like a cork on the mountains of water.

"No," said he with a lifeless look at his pupil, "it is not impossible for us to capsize."
"Take it quietly, Tartlet," replied Godfrey. "A ship was made to float! There are reasons for all this."
"I tell you there are none."

And, thinking thus, the professor had put on his life-belt. He wore it night and day, tightly buckled round his waist. He would not have taken it off for untold gold. Every time the sea gave him a moment's respite he would replenish it with another puff. In fact, he never blew it out enough to please him.

We must make some indulgence for the terrors of Tartlet. To those unaccustomed to the sea, its rolling is of a nature to cause some alarm, and we know that this passenger-in-spite-of-himself had not even till then risked his safety on the peaceable waters of the Bay of San Francisco; so that we can forgive his being ill on board a ship in a stiffish breeze, and his feeling terrified at the playfulness of the waves.

The weather became worse and worse, and threatened the _Dream_ with a gale, which, had she been near the
shore, would have been announced to her by the semaphores.

During the day the ship was dreadfully knocked about, though running at half steam so as not to damage her engines. Her screw was continually immersing and emerging in the violent oscillations of her liquid bed. Hence, powerful strokes from its wings in the deeper water, or fearful tremors as it rose and ran wild, causing heavy thunderings beneath the stern, and furious gallopings of the pistons which the engineer could master but with difficulty.

One observation Godfrey made, of which at first he could not discover the cause. This was, that during the night the shocks experienced by the steamer were infinitely less violent than during the day. Was he then to conclude that the wind then fell, and that a calm set in after sundown?

This was so remarkable that, on the night between the 21st and 22nd of June, he endeavoured to find out some explanation of it. The day had been particularly stormy, the wind had freshened, and it did not appear at all likely that the sea would fall at night, lashed so capriciously as it had been for so many hours.

Towards midnight then Godfrey dressed, and, wrapping himself up warmly, went on deck.

The men on watch were forward, Captain Turcott was on the bridge.

The force of the wind had certainly not diminished. The shock of the waves, which should have dashed on the bows of the _Dream_, was, however, very much less violent. But in raising his eyes towards the top of the funnel, with its black canopy of smoke, Godfrey saw that the smoke, instead of floating from the bow aft, was, on the contrary, floating from aft forwards, and following the same direction as the ship.

"Has the wind changed?" he said to himself.

And extremely glad at the circumstance he mounted the bridge. Stepping up to Turcott,--

"Captain!" he said.

The latter, enveloped in his oilskins, had not heard him approach, and at first could not conceal a movement of annoyance in seeing him close to him.

"You, Mr. Godfrey, you--on the bridge?"

"Yes, I, captain. I came to ask--"

"What?" answered Captain Turcott sharply.

"If the wind has not changed?"

"No, Mr. Godfrey, no. And, unfortunately, I think it will turn to a storm!"

"But we now have the wind behind us!"

"Wind behind us--yes--wind behind us!" replied the captain, visibly disconcerted at the observation. "But it is not my fault."

"What do you mean?"

"I mean that in order not to endanger the vessel's safety I have had to put her about and run before the storm."

"That will cause us a most lamentable delay!" said Godfrey.

"Very much so," answered Captain Turcott, "but when day breaks, if the sea falls a little, I shall resume our westerly route. I should recommend you, Mr. Godfrey, to get back to your cabin. Take my advice, try and sleep while we are running before the wind. You will be less knocked about."

Godfrey made a sign of affirmation; turning a last anxious glance at the low clouds which were chasing each other with extreme swiftness, he left the bridge, returned to his cabin, and soon resumed his interrupted slumbers.

Properly speaking, they were not regular waves on which the sea rose and fell, but only lengthened undulations which gently rocked the steamer.

Undulations or waves, it is true, it was all one to Professor Tartlet, as unwell when it was "too mild," as when it was "too rough." There he was, half crouching on the deck, with his mouth open like a carp fainted out of water.

The mate on the poop, his telescope at his eye, was looking towards the north-east.

Godfrey approached him.

"Well, sir," said he gaily, "to-day is a little better than yesterday."
"Yes, Mr. Godfrey," replied the mate, "we are now in smooth water."

"And the _Dream_ is on the right road!"

"Not yet."

"Not yet? and why?"

"Because we have evidently drifted north-eastwards during this last spell, and we must find out our position exactly."

"But there is a good sun and a horizon perfectly clear."

"At noon in taking its height we shall get a good observation, and then the captain will give us our course."

"Where is the captain?" asked Godfrey.

"He has gone off."

"Gone off?"

"Yes! our look-outs saw from the whiteness of the sea that there were some breakers away to the east; breakers which are not shown on the chart. So the steam launch was got out, and with the boatswain and three men, Captain Turcott has gone off to explore."

"How long ago?"

"About an hour and a half!"

"Ah!" said Godfrey, "I am sorry he did not tell me. I should like to have gone too."

"You were asleep, Mr. Godfrey," replied the mate, "and the captain did not like to wake you."

"I am sorry; but tell me, which way did the launch go?"

"Over there," answered the mate, "over the starboard bow, north-eastwards."

"And can you see it with the telescope?"

"No, she is too far off."

"But will she be long before she comes back?"

"She won’t be long, for the captain is going to take the sights himself, and to do that he must be back before noon."

At this Godfrey went and sat on the forecastle, having sent some one for his glasses. He was anxious to watch the return of the launch. Captain Turcott’s reconnaissance did not cause him any surprise. It was natural that the _Dream_ should not be run into danger on a part of the sea where breakers had been reported.

Two hours passed. It was not until half-past ten that a light line of smoke began to rise on the horizon. It was evidently the steam launch which, having finished the reconnaissance, was making for the ship.

It amused Godfrey to follow her in the field of his glasses. He saw her little by little reveal herself in clearer outline, he saw her grow on the surface of the sea, and then give definite shape to her smoke wreath, as it mingled with a few curls of steam on the clear depth of the horizon.

She was an excellent little vessel, of immense speed, and as she came along at full steam, she was soon visible to the naked eye. Towards eleven o’clock, the wash from her bow as she tore through the waves was perfectly distinct, and behind her the long furrow of foam gradually growing wider and fainter like the tail of a comet.

At a quarter-past eleven, Captain Turcott hailed and boarded the _Dream_.

"Well, captain, what news?" asked Godfrey, shaking his hand.

"Ah! Good morning, Mr. Godfrey!"

"And the breakers?"

"Only show!" answered Captain Turcott. "We saw nothing suspicious, our men must have been deceived, but I am rather surprised at that, all the same."

"We are going ahead then?" said Godfrey.

"Yes, we are going on now, but I must first take an observation."

"Shall we get the launch on board?" asked the mate.

"No," answered the captain, "we may want it again. Leave it in tow!"

The captain’s orders were executed, and the launch, still under steam, dropped round to the stern of the _Dream_.

Three-quarters of an hour afterwards, Captain Turcott, with his sextant in his hand, took the sun’s altitude, and having made his observation, he gave the course. That done, having given a last look at the horizon, he called the mate, and taking him into his cabin, the two remained there in a long consultation.

The day was a very fine one. The sails had been furled, and the _Dream_ steamed rapidly without their help. The wind was very slight, and with the speed given by the screw there would not have been enough to fill them.

Godfrey was thoroughly happy. This sailing over a beautiful sea, under a beautiful sky, could anything be more cheering, could anything give more impulse to thought, more satisfaction to the mind? And it is scarcely to be wondered at that Professor Tartlet also began to recover himself a little. The state of the sea did not inspire him with immediate inquietude, and his physical being showed a little reaction. He tried to eat, but without taste or appetite.
Godfrey would have had him take off the life-belt which encircled his waist, but this he absolutely refused to do. Was there not a chance of this conglomeration of wood and iron, which men call a vessel, gaping asunder at any moment.

The evening came, a thick mist spread over the sky, without descending to the level of the sea. The night was to be much darker than would have been thought from the magnificent daytime.

There was no rock to fear in these parts, for Captain Turcott had just fixed his exact position on the charts; but collisions are always possible, and they are much more frequent on foggy nights.

The lamps were carefully put into place as soon as the sun set. The white one was run up the mast, and the green light to the right and the red one to the left gleamed in the shrouds. If the _Dream_ was run down, at the least it would not be her fault—had was one consolation. To founder even when one is in order is to founder nevertheless, and if any one on board made this observation it was of course Professor Tartlet. However, the worthy man, always on the roll and the pitch, had regained his cabin, Godfrey his; the one with the assurance, the other in the hope that he would pass a good night, for the _Dream_ scarcely moved on the crest of the lengthened waves.

Captain Turcott, having handed over the watch to the mate, also came under the poop to take a few hours' rest. All was in order. The steamer could go ahead in perfect safety, although it did not seem as though the thick fog would lift.

In about twenty minutes Godfrey was asleep, and the sleepless Tartlet, who had gone to bed with his clothes on as usual, only betrayed himself by distant sighs. All at once—at about one in the morning—Godfrey was awakened by a dreadful clamour.

He jumped out of bed, slipped on his clothes, his trousers, his waistcoat and his sea-boots.

Almost immediately a fearful cry was heard on deck, "We are sinking! we are sinking!"

In an instant Godfrey was out of his cabin and in the saloon. There he cannoned against an inert mass which he did not recognize. It was Professor Tartlet.

The whole crew were on deck, hurrying about at the orders of the mate and captain. "A collision?" asked Godfrey.

"I don't know, I don't know—this beastly fog—" answered the mate; "but we are sinking!"

"Sinking?" exclaimed Godfrey.

And in fact the _Dream_, which had doubtless struck on a rock was sensibly foundering. The water was creeping up to the level of the deck. The engine fires were probably already out below.

"To the sea! to the sea, Mr. Morgan!" exclaimed the captain. "There is not a moment to lose! You can see the ship settling down! It will draw you down in the eddy!"

"And Tartlet?"

"I'll look after him!—We are only half a cable from the shore!"

"But you?"

"My duty compels me to remain here to the last, and I remain!" said the captain. "But get off! get off!"

Godfrey still hesitated to cast himself into the waves, but the water was already up to the level of the deck.

Captain Turcott knowing that Godfrey swam like a fish, seized him by the shoulders, and did him the service of throwing him overboard.

It was time! Had it not been for the darkness, there would doubtless have been seen a deep raging vortex in the place once occupied by the _Dream_.

But Godfrey, in a few strokes in the calm water, was able to get swiftly clear of the whirlpool, which would have dragged him down like a maelstrom.

All this was the work of a minute. A few minutes afterwards, amid shouts of despair, the lights on board went out one after the other. Doubt existed no more; the _Dream_ had sunk head downwards!

As for Godfrey he had been able to reach a large lofty rock away from the surf. There, shouting vainly in the darkness, hearing no voice in reply to his own, not knowing if he should find himself on an isolated rock or at the extremity of a line of reefs, and perhaps the sole survivor of the catastrophe, he waited for the dawn.

CHAPTER VIII.

WHICH LEADS GODFREY TO BITTER REFLECTIONS ON THE MANIA FOR TRAVELLING.

Three long hours had still to pass before the sun reappeared above the horizon. These were such hours that they might rather be called centuries.

The trial was a rough one to begin with, but, we repeat, Godfrey had not come out for a simple promenade. He himself put it very well when he said he had left behind him quite a lifetime of happiness and repose, which he
would never find again in his search for adventures. He tried his utmost therefore to rise to the situation.

He was, temporarily, under shelter. The sea after all could not drive him off the rock which lay anchored alone amid the spray of the surf. Was there any fear of the incoming tide soon reaching him? No, for on reflection he concluded that the wreck had taken place at the highest tide of the new moon.

But was the rock isolated? Did it command a line of breakers scattered on this portion of the sea? What was this coast which Captain Turcott had thought he saw in the darkness? To which continent did it belong? It was only too certain that the _Dream_ had been driven out of her route during the storm of the preceding days. The position of the ship could not have been exactly fixed. How could there be a doubt of this when the captain had two hours before affirmed that his charts bore no indication of breakers in these parts! He had even done better and had gone himself to reconnoitre these imaginary reefs which his look-outs had reported they had seen in the east.

It nevertheless had been only too true, and Captain Turcott's reconnaissance would have certainly prevented the catastrophe if it had only been pushed far enough. But what was the good of returning to the past?

The important question in face of what had happened—a question of life or death—was for Godfrey to know if he was near to some land. In what part of the Pacific there would be time later on to determine. Before everything he must think as soon as the day came of how to leave the rock, which in its biggest part could not measure more than twenty yards square. But people do not leave one place except to go to another. And if this other did not exist, if the captain had been deceived in the fog, if around the breakers there stretched a boundless sea, if at the extreme point of view the sky and the water seemed to meet all round the horizon?

The thoughts of the young man were thus concentrated on this point. All his powers of vision did he employ to discover through the black night if any confused mass, any heap of rocks or cliffs, would reveal the neighbourhood of land to the eastward of the reef.

Godfrey saw nothing. Not a smell of earth reached his nose, not a sensation of light reached his eyes, not a sound reached his ears. Not a bird traversed the darkness. It seemed that around him there was nothing but a vast desert of water.

Godfrey did not hide from himself that the chances were a thousand to one that he was lost. He no longer thought of making the tour of the world, but of facing death, and calmly and bravely his thoughts rose to that Providence which can do all things for the feeblest of its creatures, though the creatures can do nothing of themselves. And so Godfrey had to wait for the day to resign himself to his fate, if safety was impossible; and, on the contrary, to try everything, if there was any chance of life.

Calmed by the very gravity of his reflections, Godfrey had seated himself on the rock. He had stripped off some of his clothes which had been saturated by the sea-water, his woollen waistcoat and his heavy boots, so as to be ready to jump into the sea if necessary.

However, was it possible that no one had survived the wreck? What! not one of the men of the _Dream_ carried to shore? Had they all been sucked in by the terrible whirlpool which the ship had drawn round herself as she sank? The last to whom Godfrey had spoken was Captain Turcott, resolved not to quit his ship while one of his sailors was still there! It was the captain himself who had hurled him into the sea at the moment the _Dream_ was disappearing.

But the others, the unfortunate Tartlet, and the unhappy Chinese, surprised without doubt, and swallowed up, the one in the poop, the other in the depths of the hold, what had become of them? Of all those on board the _Dream_, was he the only one saved? And had the steam launch remained at the stern of the steamer? Could not a few passengers or sailors have saved themselves therein, and found time to flee from the wreck? But was it not rather to be feared that the launch had been dragged down by the ship under several fathoms of water?

Godfrey then said to himself, that if in this dark night he could not see, he could at least make himself heard. There was nothing to prevent his shouting and hailing in the deep silence. Perhaps the voice of one of his companions would respond to his.

Over and over again then did he call, giving forth a prolonged shout which should have been heard for a considerable distance round. Not a cry answered to his.

He began again, many times, turning successively to every point of the horizon.

Absolute silence.

"Alone! alone!" he murmured.

Not only had no cry answered to his, but no echo had sent him back the sound of his own voice. Had he been near a cliff, not far from a group of rocks, such as generally border the shore, it was certain that his shouts, repelled by the obstacles, would have returned to him. Either eastwards of the reef, therefore, stretched a low-lying shore ill-adapted for the production of an echo, or there was no land in his vicinity, the bed of breakers on which he had found refuge was isolated.

Three hours were passed in these anxieties. Godfrey, quite chilled, walked about the top of the rock, trying to battle with the cold. At last a few pale beams of light tinged the clouds in the zenith. It was the reflection of the first
colouring of the horizon.

Godfrey turned to this side—the only one towards which there could be land—to see if any cliff outlined itself in
the shadow. With its early rays the rising sun might disclose its features more distinctly.

But nothing appeared through the misty dawn. A light fog was rising over the sea, which did not even admit of
his discovering the extent of the breakers.

[Illustration: Nothing appeared through the mist. _page 82._]

He had, therefore, to satisfy himself with illusions. If Godfrey were really cast on an isolated rock in the Pacific,
it was death to him after a brief delay, death by hunger, by thirst, or if necessary, death at the bottom of the sea as a
last resource!

However, he kept constantly looking, and it seemed as though the intensity of his gaze increased enormously, for
all his will was concentrated therein.

At length the morning mist began to fade away. Godfrey saw the rocks which formed the reef successively
defined in relief on the sea, like a troop of marine monsters. It was a long and irregular assemblage of dark boulders,
strangely worn, of all sizes and forms, whose direction was almost west and east. The enormous block on the top of
which Godfrey found himself emerged from the sea on the western edge of the bank scarcely thirty fathoms from the
spot where the _Dream_ had gone down. The sea hereabouts appeared to be very deep, for of the steamer nothing
was to be seen, not even the ends of her masts. Perhaps by some under-current she had been drawn away from the
reefs.

A glance was enough for Godfrey to take in this state of affairs. There was no safety on that side. All his
attention was directed towards the other side of the breakers, which the lifting fog was gradually disclosing. The sea,
now that the tide had retired, allowed the rocks to stand out very distinctly. They could be seen to lengthen as there
humid bases widened. Here were vast intervals of water, there a few shallow pools. If they joined on to any coast, it
would not be difficult to reach it.

Up to the present, however, there was no sign of any shore. Nothing yet indicated the proximity of dry land,
even in this direction.

The fog continued to lift, and the field of view persistently watched by Godfrey continued to grow. Its wreaths
had now rolled off for about half a mile or so. Already a few sandy flats appeared among the rocks, carpeted with
their slimy sea-weed.

Did not this sand indicate more or less the presence of a beach, and if the beach existed, could there be a doubt
but what it belonged to the coast of a more important land? At length a long profile of low hills, buttressed with
huge granitic rocks, became clearly outlined and seemed to shut in the horizon on the east. The sun had drunk up all
the morning vapours, and his disc broke forth in all its glory.

"Land! land!" exclaimed Godfrey.

And he stretched his hands towards the shore-line, as he knelt on the reef and offered his thanks to Heaven.

It was really land. The breakers only formed a projecting ridge, something like the southern cape of a bay, which
curved round for about two miles or more. The bottom of the curve seemed to be a level beach, bordered by trifling
hills, contoured here and there with lines of vegetation, but of no great size.

From the place which Godfrey occupied, his view was able to grasp the whole of this side.

Borders north and south by two unequal promontories, it stretched away for, at the most, five or six miles. It
was possible, however, that it formed part of a large district. Whatever it was, it offered at the least temporary safety.
Godfrey, at the sight, could not conceive a doubt but that he had not been thrown on to a solitary reef, and that this
morsel of ground would satisfy his earliest wants.

"To land! to land!" he said to himself.

But before he left the reef, he gave a look round for the last time. His eyes again interrogated the sea away up to
the horizon. Would some raft appear on the surface of the waves, some fragment of the _Dream_, some survivor,
perhaps?

Nothing. The launch even was not there, and had probably been dragged into the common abyss.

Then the idea occurred to Godfrey that among the breakers some of his companions might have found a refuge,
and were, like him, waiting for the day to try and reach the shore.

There was nobody, neither on the rocks, nor on the beach! The reef was as deserted as the ocean!

But in default of survivors, had not the sea thrown up some of the corpses? Could not Godfrey find among the
rocks, along to the utmost boundary of the surf, the inanimate bodies of some of his companions?

No! Nothing along the whole length of the breakers, which the last ripples of the ebb had now left bare.

Godfrey was alone! He could only count on himself to battle with the dangers of every sort which environed
him!

Before this reality, however, Godfrey, let it be said to his credit, did not quail. But as before everything it was
best for him to ascertain the nature of the ground from which he was separated by so short a distance, he left the
summit of the rock and began to approach the shore.

When the interval which separated the rocks was too great to be cleared at a bound, he got down into the water,
and sometimes walking and sometimes swimming he easily gained the one next in order. When there was but a yard
or two between, he jumped from one rock to the other. His progress over these slimy stones, carpeted with glistening
sea-weeds, was not easy, and it was long. Nearly a quarter of a mile had thus to be traversed.

But Godfrey was active and handy, and at length he set foot on the land where there probably awaited him, if not
early death, at least a miserable life worse than death. Hunger, thirst, cold, and nakedness, and perils of all kinds;
without a weapon of defence, without a gun to shoot with, without a change of clothes--such the extremities to
which he was reduced.

How imprudent he had been! He had been desirous of knowing if he was capable of making his way in the world
under difficult circumstances! He had put himself to the proof! He had envied the lot of a Crusoe! Well, he would
see if the lot were an enviable one!

And then there returned to his mind the thought of his happy existence, that easy life in San Francisco, in the
midst of a rich and loving family, which he had abandoned to throw himself into adventures. He thought of his
Uncle Will, of his betrothed Phina, of his friends who would doubtless never see him again.

As he called up these remembrances his heart swelled, and in spite of his resolution a tear rose to his eyes.

And again, if he was not alone, if some other survivor of the shipwreck had managed, like him, to reach the
shore, and even in default of the captain or the mate, this proved to be Professor Tartlet, how little he could depend
on that frivolous being, and how slightly improved the chances of the future appeared! At this point, however, he
still had hope. If he had found no trace among the breakers, would he meet with any on the beach?

Who else but he had already touched the shore, seeking a companion who was seeking him?

Godfrey took another long look from north to south. He did not notice a single human being. Evidently this
portion of the earth was uninhabited. In any case there was no sign, not a trace of smoke in the air, not a vestige.

"Let us get on!" said Godfrey to himself.

And he walked along the beach towards the north, before venturing to climb the sand dunes, which would allow
him to reconnoitre the country over a larger extent.

The silence was absolute. The sand had received no other footprint. A few sea-birds, gulls or guillemots, were
skimming along the edge of the rocks, the only living things in the solitude.

Godfrey continued his walk for a quarter of an hour. At last he was about to turn on to the talus of the most
elevated of the dunes, dotted with rushes and brushwood, when he suddenly stopped.

A shapeless object, extraordinarily distended, something like the corpse of a sea monster, thrown there,
doubtless, by the late storm, was lying about thirty paces off on the edge of the reef.

Godfrey hastened to run towards it.

The nearer he approached the more rapidly did his heart beat. In truth, in this stranded animal he seemed to
recognize a human form.

Godfrey was not ten paces away from it, when he stopped as if rooted to the soil, and exclaimed,--
"Tartlet!"

It was the professor of dancing and deportment.

Godfrey rushed towards his companion, who perhaps still breathed.

A moment afterwards he saw that it was the life-belt which produced this extraordinary distension, and gave the
aspect of a monster of the sea to the unfortunate professor.

But although Tartlet was motionless, was he dead? Perhaps this natatory clothing had kept him above water,
while the surf had borne him to shore?

Godfrey set to work. He knelt down by Tartlet; he unloosed the life-belt and rubbed him vigorously. He noticed
at last a light breath on the half-opened lips! He put his hand on his heart! The heart still beat.

Godfrey spoke to him.

Tartlet shook his head, then he gave utterance to a hoarse exclamation, followed by incoherent words.

Godfrey shook him violently.

Tartlet then opened his eyes, passed his left hand over his brow, lifted his right hand and assured himself that his
precious kit and bow, which he tightly held, had not abandoned him.

"Tartlet! My dear Tartlet!" shouted Godfrey, lightly raising his head.

The head with his mass of tumbled hair gave an affirmative nod.

"It is I! I! Godfrey!"

"Godfrey?" asked the professor.

And then he turned over, and rose on to his knees, and looked about, and smiled, and rose to his feet! He had
discovered that at last he was on a solid base! He had gathered that he was no longer on the ship's deck, exposed to all the uncertainties of its pitches and its rolls! The sea had ceased to carry him! He stood on firm ground!

And then Professor Tartlet recovered the aplomb which he had lost since his departure; his feet placed themselves naturally, with their toes turned out, in the regulation position; his left hand seized his kit, his right hand grasped his bow.

Then, while the strings, vigorously attacked, gave forth a humid sound of melancholy sonorousness, these words escaped his smiling lips,--

"In place, miss!"

The good man was thinking of Phina.

CHAPTER IX.
IN WHICH IT IS SHOWN THAT CRUSOECS DO NOT HAVE EVERYTHING AS THEY WISH.

That done, the professor and his pupil rushed into one another's arms.

"My dear Godfrey!" exclaimed Tartlet.

"My good Tartlet!" replied Godfrey.

"At last we are arrived in port!" observed the professor in the tone of a man who had had enough of navigation and its accidents.

He called it arriving in port!

Godfrey had no desire to contradict him.

"Take off your life-belt," he said. "It suffocates you and hampers your movements."

"Do you think I can do so without inconvenience?" asked Tartlet.

"Without any inconvenience," answered Godfrey. "Now put up your fiddle, and let us take a look round."

"Come on," replied the professor; "but if you don't mind, Godfrey, let us go to the first restaurant we see. I am dying of hunger, and a dozen sandwiches washed down with a glass or two of wine will soon set me on my legs again."

"Yes! to the first restaurant!" answered Godfrey, nodding his head; "and even to the last, if the first does not suit us."

"And," continued Tartlet, "we can ask some fellow as we go along the road to the telegraph office so as to send a message off to your Uncle Kolderup. That excellent man will hardly refuse to send on some necessary cash for us to get back to Montgomery Street, for I have not got a cent with me!"

"Agreed, to the first telegraph office," answered Godfrey, "or if there isn't one in this country, to the first post office. Come on, Tartlet."

The professor took off his swimming apparatus, and passed it over his shoulder like a hunting-horn, and then both stepped out for the edge of the dunes which bordered the shore.

What more particularly interested Godfrey, whom the encounter with Tartlet had imbued with some hope, was to see if they too were the only survivors of the _Dream_.

A quarter of an hour after the explorers had left the edge of the reef they had climbed a dune about sixty or eighty feet high, and stood on its crest. Thence they looked on a large extent of coast, and examined the horizon in the east, which till then had been hidden by the hills on the shore.

Two or three miles away in that direction a second line of hills formed the background, and beyond them nothing was seen of the horizon.

Towards the north the coast trended off to a point, but it could not be seen if there was a corresponding cape behind. On the south a creek ran some distance into the shore, and on this side it looked as though the ocean closed the view. Whence this land in the Pacific was probably a peninsula, and the isthmus which joined it to the continent would have to be sought for towards the north or north-east.

The country, however, far from being barren, was hidden beneath an agreeable mantle of verdure; long prairies, amid which meandered many limpid streams, and high and thick forests, whose trees rose above one another to the very backbone of hills. It was a charming landscape.

But of houses forming town, village, or hamlet, not one was in sight! Of buildings grouped and arranged as a farm of any sort, not a sign! Of smoke in the sky, betraying some dwelling hidden among the trees, not a trace. Not a steeple above the branches, not a windmill on an isolated hill. Not even in default of houses a cabin, a hut, an ajoupa, or a wigwam? No! nothing. If human beings inhabited this unknown land, they must live like troglodytes, below, and not above the ground. Not a road was visible, not a footpath, not even a track. It seemed that the foot of man had never trod either a rock of the beach or a blade of the grass on the prairies.

"I don't see the town," remarked Tartlet, who, however, remained on tiptoe.
"That is perhaps because it is not in this part of the province!" answered Godfrey.
"But a village?"
"There's nothing here."
"Where are we then?"
"I know nothing about it."
"What! You don't know! But Godfrey, we had better make haste and find out."
"Who is to tell us?"
"What will become of us then?" exclaimed Tartlet, rounding his arms and lifting them to the sky.
"Become a couple of Crusoes!"

At this answer the professor gave a bound such as no clown had ever equalled.

Crusoes! They! A Crusoe! He! Descendants of that Selkirk who had lived for long years on the island of Juan Fernandez! Imitators of the imaginary heroes of Daniel Defoe and De Wyss whose adventures they had so often read! Abandoned, far from their relatives, their friends; separated from their fellow-men by thousands of miles, destined to defend their lives perhaps against wild beasts, perhaps against savages who would land there, wretches without resources, suffering from hunger, suffering from thirst, without weapons, without tools, almost without clothes, left to themselves. No, it was impossible!

"Don't say such things, Godfrey," exclaimed Tartlet. "No! Don't joke about such things! The mere supposition will kill me! You are laughing at me, are you not?"

"Yes, my gallant Tartlet," answered Godfrey. "Reassure yourself. But in the first place, let us think about matters that are pressing."

In fact, they had to try and find some cavern, a grotto or hole, in which to pass the night, and then to collect some edible mollusks so as to satisfy the cravings of their stomachs.

Godfrey and Tartlet then commenced to descend the talus of the dunes in the direction of the reef. Godfrey showed himself very ardent in his researches, and Tartlet considerably stupefied by his shipwreck experiences. The first looked before him, behind him, and all around him; the second hardly saw ten paces in front of him.

"If there are no inhabitants on this land, are there any animals?" asked Godfrey.

He meant to say domestic animals, such as furred and feathered game, not wild animals which abound in tropical regions, and with which they were not likely to have to do.

Several flocks of birds were visible on the shore, bitterns, curlews, bernicle geese, and teal, which hovered and chirped and filled the air with their flutterings and cries, doubtless protesting against the invasion of their domain.

Godfrey was justified in concluding that where there were birds there were nests, and where there were nests there were eggs. The birds congregated here in such numbers, because rocks provided them with thousands of cavities for their dwelling-places. In the distance a few herons and some flocks of snipe indicated the neighbourhood of a marsh.

Birds then were not wanting, the only difficulty was to get at them without fire-arms. The best thing to do now was to make use of them in the egg state, and consume them under that elementary but nourishing form.

But if the dinner was there, how were they to cook it? How were they to set about lighting a fire? An important question, the solution of which was postponed.

Godfrey and Tartlet returned straight towards the reef, over which some sea-birds were circling. An agreeable surprise there awaited them.

Among the indigenous fowl which ran along the sand of the beach and pecked about among the sea-weed and under the tufts of aquatic plants, was it a dozen hens and two or three cocks of the American breed that they beheld? No! There was no mistake, for at their approach did not a resounding cock-a-doodle-do-oo-oo rend the air like the sound of a trumpet?

And farther off, what were those quadrupeds which were gliding in and out of the rocks, and making their way towards the first slopes of the hills, or grubbing beneath some of the green shrubs? Godfrey could not be mistaken. There were a dozen agouties, five or six sheep, and as many goats, who were quietly browsing on the first vegetation on the very edge of the prairie.

"Look there, Tartlet!" he exclaimed.

And the professor looked, but saw nothing, so much was he absorbed with the thought of this unexpected situation.

A thought flashed across the mind of Godfrey, and it was correct: it was that these hens, agouties, goats, and sheep had belonged to the _Dream_. At the moment she went down, the fowls had easily been able to reach the reef and then the beach. As for the quadrupeds, they could easily have swum ashore.

"And so," remarked Godfrey, "what none of our unfortunate companions have been able to do, these simple animals, guided by their instinct, have done! And of all those on board the _Dream_, none have been saved but a
"few beasts!"
"Including ourselves!" answered Tartlet naively.
As far as he was concerned, he had come ashore unconsciously, very much like one of the animals. It mattered little. It was a very fortunate thing for the two shipwrecked men that a certain number of these animals had reached the shore. They would collect them, fold them, and with the special fecundity of their species, if their stay on this land was a lengthy one, it would be easy to have quite a flock of quadrupeds, and a yard full of poultry.

But on this occasion, Godfrey wished to keep to such alimentary resources as the coast could furnish, either in eggs or shell-fish. Professor Tartlet and he set to work to forage among the interstices of the stones, and beneath the carpet of sea-weeds, and not without success. They soon collected quite a notable quantity of mussels and periwinkles, which they could eat raw. A few dozen eggs of the bernicle geese were also found among the higher rocks which shut in the bay on the north. They had enough to satisfy a good many; and, hunger pressing, Godfrey and Tartlet hardly thought of making difficulties about their first repast.

"And the fire?" said the professor.
"Yes! The fire!" said Godfrey.
It was the most serious of questions, and it led to an inventory being made of the contents of their pockets. Those of the professor were empty or nearly so. They contained a few spare strings for his kit, and a piece of rosin for his bow. How would you get a light from that, I should like to know? Godfrey was hardly better provided. However, it was with extreme satisfaction that he discovered in his pocket an excellent knife, whose leather case had kept it from the sea-water. This knife, with blade, gimlet, hook, and saw, was a valuable instrument under the circumstances. But besides this tool, Godfrey and his companion had only their two hands; and as the hands of the professor had never been used except in playing his fiddle, and making his gestures, Godfrey concluded that he would have to trust to his own.

He thought, however, of utilizing those of Tartlet for procuring a fire by means of rubbing two sticks of wood rapidly together. A few eggs cooked in the embers would be greatly appreciated at their second meal at noon.

While Godfrey then was occupied in robbing the nests in spite of the proprietors, who tried to defend their progeny in the shell, the professor went off to collect some pieces of wood which had been dried by the sun at the foot of the dunes. These were taken behind a rock sheltered from the wind from the sea. Tartlet then chose two very dry pieces, with the intention of gradually obtaining sufficient heat by rubbing them vigorously and continuously together. What simple Polynesian savages commonly did, why should not the professor, so much their superior in his own opinion, be able to do?

Behold him then, rubbing and rubbing, in a way to dislocate the muscles of his arm and shoulder. He worked himself into quite a rage, poor man! But whether it was that the wood was not right, or its dryness was not sufficient, or the professor held it wrongly, or had not got the peculiar turn of hand necessary for operations of this kind, if he did not get much heat out of the wood, he succeeded in getting a good deal out of himself. In short, it was his own forehead alone which smoked under the vapours of his own perspiration.

When Godfrey returned with his collection of eggs, he found Tartlet in a rage, in a state to which his choregraphic exercises had never doubtless provoked him.
"Doesn't it do?" he asked.
"No, Godfrey, it does not do," replied the professor. "And I begin to think that these inventions of the savages are only imaginations to deceive the world."
"No," answered Godfrey. "But in that, as in all things, you must know how to do it."
"These eggs, then?"
"There is another way. If you attach one of these eggs to the end of a string and whirl it round rapidly, and suddenly arrest the movement of rotation, the movement may perhaps transform itself into heat, and then--"
"And then the egg will be cooked?"
"Yes, if the rotation has been swift enough and the stoppage sudden enough. But how do you produce the stoppage without breaking the egg? Now, there is a simpler way, dear Tartlet. Behold!"

And carefully taking one of the eggs of the bernicle goose, he broke the shell at its end, and adroitly swallowed the inside without any further formalities.

Tartlet could not make up his mind to imitate him, and contented himself with the shell-fish.
It now remained to look for a grotto or some shelter in which to pass the night.
"It is an unheard-of thing," observed the professor, "that Crusoes cannot at the least find a cavern, which, later on, they can make their home!"
"Let us look," said Godfrey.
It was unheard of. We must avow, however, that on this occasion the tradition was broken. In vain did they search along the rocky shore on the southern part of the bay. Not a cavern, not a grotto, not a hole was there that
would serve as a shelter. They had to give up the idea. Godfrey resolved to reconnoitre up to the first trees in the background beyond the sandy coast.

Tartlet and he then remounted the first line of sandhills and crossed the verdant prairies which they had seen a few hours before.

A very odd circumstance, and a very fortunate one at the time, that the other survivors of the wreck voluntarily followed them. Evidently, cocks and hens, and sheep, goats and agouties, driven by instinct, had resolved to go with them. Doubtless they felt too lonely on the beach, which did not yield sufficient food.

Three-quarters of an hour later Godfrey and Tartlet—they had scarcely spoken during the exploration—arrived at the outskirt of the trees. Not a trace was there of habitation or inhabitant. Complete solitude. It might even be doubted if this part of the country had ever been trodden by human feet.

In this place were a few handsome trees, in isolated groups, and others more crowded about a quarter of a mile in the rear formed a veritable forest of different species.

Godfrey looked out for some old trunk, hollowed by age, which could offer a shelter among its branches, but his researches were in vain, although he continued them till night was falling.

Hunger made itself sharply felt, and the two contented themselves with mussels, of which they had thoughtfully brought an ample supply from the beach. Then, quite tired out, they lay down at the foot of a tree, and trusting to Providence, slept through the night.

CHAPTER X.
IN WHICH GODFREY DOES WHAT ANY OTHER SHIPWRECKED MAN WOULD HAVE DONE UNDER THE CIRCUMSTANCES.

The night passed without incident. The two men, quite knocked up with excitement and fatigue, had slept as peacefully as if they had been in the most comfortable room in the mansion in Montgomery Street.

On the morrow, the 27th of June, at the first rays of the rising sun, the crow of the cock awakened them.

Godfrey immediately recognized where he was, but Tartlet had to rub his eyes and stretch his arms for some time before he did so.

"Is breakfast this morning to resemble dinner yesterday?" was his first observation.
"I am afraid so," answered Godfrey. "But I hope we shall dine better this evening."

The professor could not restrain a significant grimace. Where were the tea and sandwiches which had hitherto been brought to him when he awoke? How could he wait till breakfast-time, the bell for which would perhaps never sound, without this preparatory repast?

But it was necessary to make a start. Godfrey felt the responsibility which rested on him, on him alone, for he could in no way depend on his companion. In that empty box which served the professor for a cranium there could be born no practical idea; Godfrey would have to think, contrive, and decide for both.

His first thought was for Phina, his betrothed, whom he had so stupidly refused to make his wife; his second for his Uncle Will, whom he had so imprudently left, and then turning to Tartlet,—

"To vary our ordinary," he said, "here are some shell-fish and half a dozen eggs."

"And nothing to cook them with!"

"Nothing!" said Godfrey. "But if the food itself was missing, what would you say then, Tartlet?"

"I should say that nothing was not enough," said Tartlet dryly.

Nevertheless, they had to be content with this repast.

The very natural idea occurred to Godfrey to push forward the reconnaissance commenced the previous evening. Above it was necessary to know as soon as possible in what part of the Pacific Ocean the _Dream_ had been lost, so as to discover some inhabited place on the shore, where they could either arrange the way of returning home or await the passing of some ship.

Godfrey observed that if he could cross the second line of hills, whose picturesque outline was visible beyond the first, that he might perhaps be able to do this. He reckoned that they could get there in an hour or two, and it was to this urgent exploration that he resolved to devote the first hours of the day. He looked round him. The cocks and hens were beginning to peck about among the high vegetation. Agouties, goats, sheep, went and came on the skirt of the forest.

Godfrey did not care to drag all this flock of poultry and quadrupeds about with him. But to keep them more safely in this place, it would be necessary to leave Tartlet in charge of them.

Tartlet agreed to remain alone, and for several hours to act as shepherd of the flock.

He made but one observation,—

"If you lose yourself, Godfrey?"
"Have no fear of that," answered the young man, "I have only this forest to cross, and as you will not leave its edge I am certain to find you again."

"Don't forget the telegram to your Uncle Will, and ask him for a good many hundred dollars."

"The telegram--or the letter! It is all one!" answered Godfrey, who so long as he had not fixed on the position of this land was content to leave Tartlet to his illusions.

Then having shaken hands with the professor, he plunged beneath the trees, whose thick branches scarcely allowed the sun's rays to penetrate. It was their direction, however, which was to guide our young explorer towards the high hill whose curtain hid from his view the whole of the eastern horizon.

Footpath there was none. The ground, however, was not free from all imprint. Godfrey in certain places remarked the tracks of animals. On two or three occasions he even believed he saw some rapid ruminants moving off, either elans, deer, or wapiti, but he recognized no trace of ferocious animals such as tigers or jaguars, whose absence, however, was no cause for regret.

The first floor of the forest, that is to say all that portion of the trees comprised between the first fork and the branches, afforded an asylum to a great number of birds--wild pigeons by the hundred beneath the trees, ospreys, grouse, aracaris with beaks like a lobster's claw, and higher, hovering above the glades, two or three of those lammergeiers whose eye resembles a cockade. But none of the birds were of such special kinds that he could therefrom make out the latitude of this continent.

So it was with the trees of this forest. Almost the same species as those in that part of the United States which comprises Lower California, the Bay of Monterey, and New Mexico.

Arbutus-trees, large-flowered cornels, maples, birches, oaks, four or five varieties of magnolias and sea-pines, such as are met with in South Carolina, then in the centre of vast clearances, olive-trees, chestnuts, and small shrubs. Tufts of tamarinds, myrtles, and mastic-trees, such as are produced in the temperate zone. Generally, there was enough space between the trees to allow him to pass without being obliged to call on fire or the axe. The sea breeze circulated amid the higher branches, and here and there great patches of light shone on the ground.

And so Godfrey went along striking an oblique line beneath these large trees. To take any precautions never occurred to him. The desire to reach the heights which bordered the forest on the east entirely absorbed him. He sought among the foliage for the direction of the solar rays so as to march straight on his goal. He did not even see the guide-birds, so named because they fly before the steps of the traveller, stopping, returning, and darting on ahead as if they were showing the way. Nothing could distract him.

His state of mind was intelligible. Before an hour had elapsed his fate would be settled! Before an hour he would know if it were possible to reach some inhabited portion of the continent.

Already Godfrey, reasoning on what had been the route followed and the way made by the _Dream_ during a navigation of seventeen days, had concluded that it could only be on the Japanese or Chinese coast that the ship had gone down.

Besides the position of the sun, always in the south, rendered it quite certain that the _Dream_ had not crossed the line.

Two hours after he had started Godfrey reckoned the distance he had travelled at about five miles, considering several circuits which he had had to make owing to the density of the forest. The second group of hills could not be far away.

Already the trees were getting farther apart from each other, forming isolated groups, and the rays of light penetrated more easily through the lofty branches. The ground began slightly to slope, and then abruptly to rise.

Although he was somewhat fatigued, Godfrey had enough will not to slacken his pace. He would doubtless have run had it not been for the steepness of the earlier ascents.

He had soon got high enough to overlook the general mass of the verdant dome which stretched away behind him, and whence several heads of trees here and there emerged.

But Godfrey did not dream of looking back. His eyes never quitted the line of the denuded ridge, which showed itself about 400 or 500 feet before and above him. That was the barrier which all the time hid him from the eastern horizon.

A tiny cone, obliquely truncated, overlooked this rugged line and joined on with its gentle slope to the sinuous crest of the hills.

"There! there!" said Godfrey, "that is the point I must reach! The top of that cone! And from there what shall I see?--A town?--A village?--A desert?"

Highly excited, Godfrey mounted the hill, keeping his elbows at his chest to restrain the beating of his heart. His panting tired him, but he had not the patience to stop so as to recover himself. Were he to have fallen half fainting on the summit of the cone which shot up about 100 feet above his head, he would not have lost a minute in hastening towards it.
A few minutes more and he would be there. The ascent seemed to him steep enough on his side, an angle perhaps of thirty or thirty-five degrees. He helped himself up with hands and feet; he seized on the tufts of slender herbs on the hill-side, and on a few meagre shrubs, masticis and myrtles, which stretched away up to the top.

A last effort was made! His head rose above the platform of the cone, and then, lying on his stomach, his eyes gazed at the eastern horizon.

It was the sea which formed it. Twenty miles off it united with the line of the sky!

He turned round.

Still sea--west of him, south of him, north of him! The immense ocean surrounding him on all sides!

"An island!"

As he uttered the word Godfrey felt his heart shrink. The thought had not occurred to him that he was on an island. And yet such was the case! The terrestrial chain which should have attached him to the continent was abruptly broken. He felt as though he had been a sleeping man in a drifted boat, who awoke with neither oar nor sail to help him back to shore.

But Godfrey was soon himself again. His part was taken, to accept the situation. If the chances of safety did not come from without, it was for him to contrive them.

He set to work at first then as exactly as possible to ascertain the disposition of this island which his view embraced over its whole length. He estimated that it ought to measure about sixty miles round, being, as far as he could see, about twenty miles long from south to north, and twelve miles wide from east to west.

Its central part was screened by the green depths of forest which extended up to the ridge dominated by the cone, whose slope died away on the shore.

All the rest was prairie, with clumps of trees, or beach with rocks, whose outer ring was capriciously tapered off in the form of capes and promontories. A few creeks cut out the coast, but could only afford refuge for two or three fishing-boats.

The bay at the bottom of which the _Dream_ lay shipwrecked was the only one of any size, and that extended over some seven or eight miles. An open roadstead, no vessel would have found it a safe shelter, at least unless the wind was blowing from the east.

But what was this island? To what geographical group did it belong? Did it form part of an archipelago, or was it alone in this portion of the Pacific?

In any case, no other island, large or small, high or low, appeared within the range of vision.

Godfrey rose and gazed round the horizon. Nothing was to be seen along the circular line where sea and sky ran into each other. If, then, there existed to windward or to leeward any island or coast of a continent, it could only be at a considerable distance.

Godfrey called up all his geographical reminiscences, in order to discover what island of the Pacific this could be. In reasoning it out he came to this conclusion.

The _Dream_ for seventeen days had steered very nearly south-west. Now with a speed of from 150 to 180 miles every four-and-twenty hours, she ought to have covered nearly fifty degrees. Now it was obvious that she had not crossed the equator.

The situation of the island, or of the group to which it belonged, would therefore have to be looked for in that part of the ocean comprised between the 160th and 170th degrees of west longitude.

In this portion of the Pacific it seemed to Godfrey that the map showed no other archipelago than that of the Sandwich Islands, but outside this archipelago were there not any isolated islands whose names escaped him and which were dotted here and there over the sea up to the coast of the Celestial Empire?

It was not of much consequence. There existed no means of his going in search of another spot on the ocean which might prove more hospitable.

"Well," said Godfrey to himself, "if I don't know the name of this island, I'll call it Phina Island, in memory of her I ought never to have left to run about the world, and perhaps the name will bring us some luck."

Godfrey then occupied himself in trying to ascertain if the island was inhabited in the part which he had not yet been able to visit.

From the top of the cone he saw nothing which betrayed the presence of aborigines, neither habitations on the prairie nor houses on the skirt of the trees, not even a fisherman's hut on the shore.

But if the island was deserted, the sea which surrounded it was none the less so, for not a ship showed itself within the limits of what, from the height of the cone, was a considerable circuit.

Godfrey having finished his exploration had now only to get down to the foot of the hill and retake the road through the forest so as to rejoin Tartlet. But before he did so his eyes were attracted by a sort of cluster of trees of huge stature, which rose on the boundary of the prairie towards the north. It was a gigantic group, it exceeded by a
head all those which Godfrey had previously seen.

"Perhaps," he said, "it would be better to take up our quarters over there, more especially as if I am not mistaken I can see a stream which should rise in the central chain and flow across the prairie."

This was to be looked into on the morrow.

Towards the south the aspect of the island was slightly different. Forests and prairies rapidly gave place to the yellow carpet of the beach, and in places the shore was bounded with picturesque rocks.

But what was Godfrey's surprise, when he thought he saw a light smoke, which rose in the air beyond this rocky barrier.

"Are there any of our companions?" he exclaimed. "But no, it is not possible! Why should they have got so far from the bay since yesterday, and round so many miles of reef? Is it a village of fishermen, or the encampment of some indigenous tribe?"

Godfrey watched it with the closest attention. Was this gentle vapour which the breeze softly blew towards the west a smoke? Could he be mistaken? Anyhow it quickly vanished, a few minutes afterwards nothing could be seen of it.

It was a false hope.

Godfrey took a last look in its direction, and then seeing nothing, glided down the slope, and again plunged beneath the trees.

An hour later he had traversed the forest and found himself on its skirt.

There Tartlet awaited him with his two-footed and four-footed flock. And how was the obstinate professor occupying himself? In the same way. A bit of wood was in his right hand another piece in his left, and he still continued his efforts to set them alight. He rubbed and rubbed with a constancy worthy of a better fate.

"Well," he shouted as he perceived Godfrey some distance off--"and the telegraph office?"

"It is not open!" answered Godfrey, who dared not yet tell him anything of the situation.

"And the post?"

"It is shut! But let us have something to eat!--I am dying with hunger! We can talk presently."

And this morning Godfrey and his companion had again to content themselves with a too meagre repast of raw eggs and shell-fish.

"Wholesome diet!" repeated Godfrey to Tartlet, who was hardly of that opinion and picked his food with considerable care.

CHAPTER XI.

IN WHICH THE QUESTION OF LODGING IS SOLVED AS WELL AS IT COULD BE.

The day was already far advanced. Godfrey resolved to defer till the morrow the task of proceeding to a new abode. But to the pressing questions which the professor propounded on the results of his exploration he ended by replying that it was an island, Phina Island, on which they both had been cast, and that they must think of the means of living before dreaming of the means of departing.

"An island!" exclaimed Tartlet.

"Yes! It is an island!"

"Which the sea surrounds?"

"Naturally."

"But what is it?"

"I have told you, Phina Island, and you understand why I gave it that name."

"No, I do not understand!" answered Tartlet, making a grimace; "and I don't see the resemblance! Miss Phina is surrounded by land, not water!"

After this melancholy reflection, he prepared to pass the night with as little discomfort as possible. Godfrey went off to the reef to get a new stock of eggs and mollusks, with which he had to be contented, and then, tired out, he came back to the tree and soon fell asleep, while Tartlet, whose philosophy would not allow him to accept such a state of affairs, gave himself over to the bitterest meditations. On the morrow, the 28th of June, they were both afoot before the cock had interrupted their slumbers.

To begin with, a hasty breakfast, the same as the day before. Only water from a little brook was advantageously replaced by a little milk given by one of the goats.

Ah! worthy Tartlet! Where were the "mint julep," the "port wine sangaree," the "sherry cobbler," the "sherry cocktail," which he hardly drank, but which were served him at all hours in the bars and taverns of San Francisco? How he envied the poultry, the agouties, and the sheep, who cheerfully quenched their thirst without the addition of such saccharine or alcoholic mixtures to their water from the stream! To these animals no fire was necessary to cook
their food; roots and herbs and seeds sufficed, and their breakfast was always served to the minute on their tablecloth of green.

"Let us make a start," said Godfrey.

And behold the two on their way, followed by a procession of domestic animals, who refused to be left behind. Godfrey's idea was to explore, in the north of the island, that portion of the coast on which he had noticed the group of gigantic trees in his view from the cone. But to get there he resolved to keep along the shore. The surf might perhaps have cast up some fragment of the wreck. Perhaps they might find on the beach some of their companions in the _Dream_ to which they could give Christian burial. As for finding any one of them living, it was hardly to be hoped for, after a lapse of six-and-thirty hours.

The first line of hills was surmounted, and Godfrey and his companion reached the beginning of the reef, which looked as deserted as it had when they had left it. There they renewed their stock of eggs and mollusks, in case they should fail to find even such meagre resources away to the north. Then, following the fringe of sea-weed left by the last tide, they again ascended the dunes, and took a good look round.

Nothing! always nothing!

We must certainly say that if misfortune had made Crusoes of these survivors of the _Dream_, it had shown itself much more rigorous towards them than towards their predecessors, who always had some portion of the vessel left to them, and who, after bringing away crowds of objects of necessity had been able to utilize the timbers of the wreck. Victuals for a considerable period, clothes, tools, weapons, had always been left them with which to satisfy the elementary exigencies of existence. But here there was nothing of all this! In the middle of that dark night the ship had disappeared in the depths of the sea, without leaving on the reefs the slightest traces of its wreck! It had not been possible to save a thing from her--not even a lucifer-match--and to tell the truth, the want of that match was the most serious of all wants.

I know well, good people comfortably installed in your easy-chairs before a comfortable hearth at which is blazing brightly a fire of wood or coals, that you will be apt to say,--

"But nothing was more easy than for them to get a fire! There are a thousand ways of doing that! Two pebbles! A little dry moss! A little burnt rag,"--and how do you burn the rag? "The blade of a knife would do for a steel, or two bits of wood rubbed briskly together in Polynesian fashion!"

Well, try it!

It was about this that Godfrey was thinking as he walked, and this it was that occupied his thoughts more than anything else. Perhaps he too, poking his coke fire and reading his travellers' tales, had thought the same as you good people! But now he had to put matters to the test, and he saw with considerable disquietude the want of a fire, that indispensable element which nothing could replace.

He kept on ahead, then, lost in thought, followed by Tartlet, who by his shouts and gestures, kept together the flock of sheep, agouties, goats, and poultry.

Suddenly his look was attracted by the bright colours of a cluster of small apples which hung from the branches of certain shrubs, growing in hundreds at the foot of the dunes. He immediately recognized them as "manzanillas," which serve as food to the Indians in certain parts of California.

"At last," he exclaimed, "there is something which will be a change from our eggs and mussels."

"What? Do you eat those things?" said Tartlet with his customary grimace.

"You shall soon see!" answered Godfrey.

And he set to work to gather the manzanillas, and eat them greedily.

They were only wild apples, but even their acidity did not prevent them from being agreeable. The professor made little delay in imitating his companion, and did not show himself particularly discontented at the work. Godfrey thought, and with reason, that from these fruits there could be made a fermented liquor which would be preferable to the water.

The march was resumed. Soon the end of the sand dunes died away in a prairie traversed by a small stream. This was the one Godfrey had seen from the top of the cone. The large trees appeared further on, and after a journey of about nine miles the two explorers, tired enough by their four hours' walk, reached them a few minutes after noon.

The site was well worth the trouble of looking at, of visiting, and, doubtless, occupying.

On the edge of a vast prairie, dotted with manzanilla bushes and other shrubs, there rose a score of gigantic trees which could have even borne comparison with the same species in the forests of California. They were arranged in a semi-circle. The carpet of verdure, which stretched at their feet, after bordering the stream for some hundreds of feet, gave place to a long beach, covered with rocks, and shingle, and sea-weed, which ran out into the water in a narrowing point to the north.

These "big trees," as they are commonly called in Western America, belong to the genus _Sequoia_, and are conifers of the fir family. If you ask the English for their distinguishing name, you will be told "Wellingtonias," if
you ask the Americans they will reply "Washingtonias." But whether they recall the memory of the phlegmatic victor of Waterloo, or of the illustrious founder of the American Republic, they are the hugest products known of the Californian and Nevadan floras. In certain districts in these states there are entire forests of these trees, such as the groups at Mariposa and Calaveras, some of the trees of which measure from sixty to eighty feet in circumference, and some 300 feet in height. One of them, at the entrance of the Yosemite Valley, is quite 100 feet round. When living--for it is now prostrate--its first branches could have overtopped Strasburg Cathedral, or, in other words, were above eighty feet from the ground.

Besides this tree there are "The Mother of the Forest," "The Beauty of the Forest," "The Hut of the Pioneer," "The Two Sentinels," "General Grant," "Miss Emma," "Miss Mary," "Brigham Young and his Wife," "The Three Graces," "The Bear," &c., &c.; all of them veritable vegetable phenomena. One of the trees has been sawn across at its base, and on it there has been built a ball-room, in which a quadrille of eight or ten couples can be danced with ease.

But the giant of giants, in a forest which is the property of the state, about fifteen miles from Murphy, is "The Father of the Forest," an old sequoia, 4000 years old, which rises 452 feet from the ground, higher than the cross of St. Peter's, at Rome, higher than the great pyramid of Ghizeh, higher than the iron bell-turret which now caps one of the towers of Rouen Cathedral, and which ought to be looked upon as the highest monument in the world.

It was a group of some twenty of these colossi that nature had planted on this point of the island, at the epoch, probably, when Solomon was building that temple at Jerusalem which has never risen from its ruins. The largest was, perhaps, 300 feet high, the smallest nearly 200.

Some of them, hollowed out by age, had enormous arches through their bases, beneath which a troop of horsemen could have ridden with ease.

Godfrey was struck with admiration in the presence of these natural phenomena, as they are not generally found at altitudes of less than from 5000 to 6000 feet above the level of the sea. He even thought that the view alone was worth the journey. Nothing he had seen was comparable to these columns of clear brown, which outlined themselves almost without sensible diminution of their diameters to their lowest fork. The cylindrical trunks rising from 80 to 100 feet above the earth, ramified into such thick branches that they themselves looked like tree-stems of huge dimensions bearing quite a forest in the air.

One of these specimens of _Sequoia gigantea_--one of the biggest in the group--more particularly attracted Godfrey's attention.

Gazing at its base it displayed an opening of from four to five feet in width, and ten feet high, which gave entrance to its interior. The giant's heart had disappeared, the alburnum had been dissipated into soft whitish dust; but if the tree did not depend so much on its powerful roots as on its solid bark, it could still keep its position for centuries.

"In default of a cavern or a grotto," said Godfrey, "here is a ready-made dwelling. A wooden house, a tower, such as there is in no inhabited land. Here we can be sheltered and shut in. Come along, Tartlet! come!"

And the young man, catching hold of his companion, dragged him inside the sequoia.

The base was covered with a bed of vegetable dust, and in diameter could not be less than twenty feet.

As for the height to which its vault extended, the gloom prevented even an estimate. For not a ray of light found its way through the bark wall. Neither cleft nor fault was there through which the wind or rain could come. Our two Crusoes would therein find themselves in a position to brave with impunity the inclemency of the weather. No cave could be firmer, or drier, or compacter. In truth it would have been difficult to have anywhere found a better.

"Eh, Tartlet, what do you think of our natural house?" asked Godfrey.

"Yes, but the chimney?" answered Tartlet.

"Before we talk about the chimney," replied Godfrey, "let us wait till we have got the fire!"

This was only logical.

Godfrey went to reconnoitre the neighbourhood. As we have said, the prairie extended to this enormous mass of sequoias which formed its edge. The small stream meandering through the grassy carpet gave a healthy freshness to its borders, and thereon grew shrubs of different kinds; myrtles, mastic bushes, and among others a quantity of manzanillas, which gave promise of a large crop of their wild apples.

Farther off, on ground that grew gradually higher, were scattered several clumps of trees, made up of oaks and beeches, sycamores and nettle-trees, but trees of great stature as they were, they seemed but simple underwood by the side of the "mammoths," whose huge shadows the sun was throwing even into the sea. Across the prairie lay minor lines of bushes, and vegetable clumps and verdant thickets, which Godfrey resolved to investigate on the following day.

If the site pleased him, it did not displease the domestic animals. Agouties, goats, and sheep had soon taken possession of this domain, which offered them roots to nibble at, and grass to browse on far beyond their needs. As
for the fowls they were greedily pecking away at the seeds and worms in the banks of the rivulet. Animal life was already manifesting itself in such goings and comings, such flights and gambols, such bleatings and gruntings and cluckings as had doubtless never been heard of in these parts before.

Then Godfrey returned to the clump of sequoias, and made a more attentive examination of the tree in which he had chosen to take up his abode. It appeared to him that it would be difficult, if not impossible, to climb into the first branches, at least by the exterior; for the trunk presented no protuberances. Inside it the ascent might be easier, if the tree were hollow up to the fork.

In case of danger it would be advisable to seek refuge among the thick boughs borne by the enormous trunk. But this matter could be looked into later on.

When he had finished his inquiries the sun was low on horizon, and it seemed best to put off till to-morrow the preparations for their definitely taking up their abode.

But, after a meal with dessert composed of wild apples, what could they do better than pass the night on a bed of the vegetable dust which covered the ground inside the sequoia?

And this, under the keeping of Providence, was what was done, but not until after Godfrey, in remembrance of his uncle, William W. Kolderup, had given to the giant the name of “Will Tree,” just as its prototypes in the forests of California and the neighbouring states bear the names of the great citizens of the American Republic.

CHAPTER XII.
WHICH ENDS WITH A THUNDER-BOLT.

It must be acknowledged that Godfrey was in a fair way to become a new man in this completely novel position to one so frivolous, so light-minded, and so thoughtless. He had hitherto only had to allow himself to live. Never had care for the morrow disquieted his rest. In the opulent mansion in Montgomery Street, where he slept his ten hours without a break, not the fall of a rose leaf had ever troubled his slumbers.

It was so no longer. On this unknown land he found himself thoroughly shut off from the rest of the world, left entirely to his own resources, obliged to face the necessities of life under conditions in which a man even much more practical might have been in great difficulty. Doubtless when it was found that the _Dream_ did not return, a search for him would be made. But what were these two? Less than a needle in a hayrick or a sand-grain on the sea-bottom! The incalculable fortune of Uncle Kolderup could not do everything.

When Godfrey had found his fairly acceptable shelter, his sleep in it was by no means undisturbed. His brain travelled as it had never done before. Ideas of all kinds were associated together: those of the past which he bitterly regretted, those of the present of which he sought the realization, those of the future which disquieted him more than all!

But in these rough trials, the reason and, in consequence, the reasoning which naturally flows from it, were little by little freed from the limbo in which they had hitherto slept. Godfrey was resolved to strive against his ill-luck, and to do all he could to get out of his difficulties. If he escaped, the lesson would certainly not be lost on him for the future.

At daybreak he was astir, with the intention of proceeding to a more complete installation. The question of food, above all that of fire, which was connected with it, occupied the first place; then there were tools or arms to make, clothes to procure, unless they were anxious of soon appearing attired in Polynesian costume.

Tartlet still slumbered. You could not see him in the shadow, but you could hear him. That poor man, spared from the wreck, remained as frivolous at forty-five as his pupil had formerly been. He was a gain in no sense. He even might be considered an incubus, for he had to be cared for in all ways. But he was a companion! He was worth more in that than the most intelligent dog, although he was probably of less use! He was a creature able to talk—although only at random; to converse—if the matter were never serious; to complain—and this he did most frequently! As it was, Godfrey was able to hear a human voice. That was worth more than the parrot's in Robinson Crusoe! Even with a Tartlet he would not be alone, and nothing was so disheartening as the thought of absolute solitude.

"Crusoe before Friday, Crusoe after Friday; what a difference!" thought he.

However, on this morning, that of June 29th, Godfrey was not sorry to be alone, so as to put into execution his project of exploring the group of sequoias. Perhaps he would be fortunate enough to discover some fruit, some edible root, which he could bring back—to the extreme satisfaction of the professor. And so he left Tartlet to his dreams, and set out.

A light fog still shrouded the shore and the sea, but already it had commenced to lift in the north and east under the influence of the solar rays, which little by little were condensing it. The day promised to be fine. Godfrey, after having cut himself a substantial walking-stick, went for two miles along that part of the beach which he did not
know, and whose return formed the outstretched point of Phina Island.

There he made a first meal of shell-fish, mussels, clams, and especially some capital little oysters which he found in great abundance.

"If it comes to the worst," he said to himself, "we need never die of hunger! Here are thousands of dozens of oysters to satisfy the calls of the most imperious stomach! If Tartlet complains, it is because he does not like mollusks! Well, he will have to like them!"

Decidedly, if the oyster did not absolutely replace bread and meat, it furnished an aliment in no whit less nutritive and in a condition capable of being absorbed in large quantities. But as this mollusk is of very easy digestion, it is somewhat dangerous in its use, to say nothing of its abuse.

This breakfast ended, Godfrey again seized his stick, and struck off obliquely towards the south-east, so as to walk up the right bank of the stream. In this direction, he would cross the prairie up to the groups of trees observed the night before beyond the long lines of shrubs and underwood, which he wished to carefully examine.

Godfrey then advanced in this direction for about two miles. He followed the bank of the stream, carpeted with short herbage and smooth as velvet. Flocks of aquatic birds noisily flew round this being, who, new to them, had come to trouble their domain. Fish of many kinds were seen darting about in the limpid waters of the brook, here abouts some four or five yards wide.

It was evident that there would be no difficulty in catching these fish, but how to cook them? Always this insoluble question!

Fortunately, when Godfrey reached the first line of shrubs he recognized two sorts of fruits or roots. One sort had to pass through the fiery trial before being eaten, the other was edible in its natural state. Of these two vegetables the American Indians make constant use.

The first was a shrub of the kind called "camas," which thrives even in lands unfit for culture. With these onion-like roots, should it not be found preferable to treat them as potatoes, there is made a sort of flour very rich and glutinous. But either way, they have to be subjected to a certain cooking, or drying.

The other bush produces a species of bulb of oblong form, bearing the indigenous name of "yamph," and if it possesses less nutritive principles than the camas, it is much the better for one thing,—it can be eaten raw.

Godfrey, highly pleased at his discovery, at once satisfied his hunger on a few of these excellent roots, and not forgetting Tartlet's breakfast, collected a large bundle, and throwing it over his shoulder, retook the road to Will Tree.

That he was well received on his arrival with the crop of yamphs need not be insisted on. The professor greedily regaled himself, and his pupil had to caution him to be moderate.

"Ah!" he said. "We have got some roots to-day. Who knows whether we shall have any to-morrow?"

"Without any doubt," replied Godfrey, "to-morrow and the day after, and always. There is only the trouble of going and fetching them."

"Well, Godfrey, and the camas?"

"Of the camas we will make flour and bread when we have got a fire."

"Fire!" exclaimed the professor, shaking his head. "Fire! And how shall we make it?"

"I don't know yet, but somehow or other we will get at it."

"May Heaven hear you, my dear Godfrey! And when I think that there are so many fellows in this world who have only got to rub a bit of wood on the sole of their boot to get it, it annoys me! No! Never would I have believed that ill-luck would have reduced me to this state! You need not take three steps down Montgomery Street, before you will meet with a gentleman, cigar in mouth, who thinks it a pleasure to give you a light, and here--"

"Here we are not in San Francisco, Tartlet, nor in Montgomery Street, and I think it would be wiser for us not to reckon on the kindness of those we meet!"

"But, why is cooking necessary for bread and meat? Why did not nature make us so that we might live upon nothing?"

"That will come, perhaps!" answered Godfrey with a good-humoured smile.

"Do you think so?"

"I think that our scientists are probably working out the subject."

"Is it possible! And how do they start on their research as to this new mode of alimentation?"

"On this line of reasoning," answered Godfrey, "as the functions of digestion and respiration are connected, the endeavour is to substitute one for the other. Hence the day when chemistry has made the almonds necessary for the food of man capable of assimilation by respiration, the problem will be solved. There is nothing wanted beyond rendering the air nutritious. You will breathe your dinner instead of eating it, that is all!"

"Ah! Is it not a pity that this precious discovery is not yet made!" exclaimed the professor. "How cheerfully would I breathe half a dozen sandwiches and a silverside of beef, just to give me an appetite!"
And Tartlet plunged into a semi-sensuous reverie, in which he beheld succulent atmospheric dinners, and at them unconsciously opened his mouth and breathed his lungs full, oblivious that he had scarcely the wherewithal to feed upon in the ordinary way.

Godfrey roused him from his meditation, and brought him back to the present. He was anxious to proceed to a more complete installation in the interior of Will Tree.

The first thing to do was to clean up their future dwelling-place. It was at the outset necessary to bring out several bushels of that vegetable dust which covered the ground and in which they sank almost up to their knees. Two hours' work hardly sufficed to complete this troublesome task, but at length the chamber was clear of the pulverulent bed, which rose in clouds at the slightest movement.

The ground was hard and firm, as if floored with joists, the large roots of the sequoia ramifying over its surface. It was uneven but solid. Two corners were selected for the beds and of these several bundles of herbage, thoroughly dried in the sun, were to form the materials. As for other furniture, benches, stools, or tables, it was not impossible to make the most indispensable things, for Godfrey had a capital knife, with its saw and gimlet. The companions would have to keep inside during rough weather, and they could eat and work there. Daylight did not fail them, for it streamed through the opening. Later on, if it became necessary to close this aperture for greater safety, Godfrey could try and pierce one or two embrasures in the bark of the sequoia to serve as windows.

As for discovering to what height the opening ran up into the trunk, Godfrey could not do so without a light. All that he could do was to find out with the aid of a pole ten or twelve feet long, held above his head, that he could not touch the top.

The question, however, was not an urgent one. It would be solved eventually.

The day passed in these labours, which were not ended at sunset. Godfrey and Tartlet, tired as they were, found their novel bed-clothes formed of the dried herbage, of which they had an ample supply, most excellent; but they had to drive away the poultry who would willingly have roosted in the interior of Will Tree. Then occurred to Godfrey the idea of constructing a poultry-house in some other sequoia, as to keep them out of the common room, he was building up a hurdle of brushwood. Fortunately neither the sheep nor the agouties, nor the goats experienced the like temptation. These animals remained quietly outside, and had no fancy to get through the insufficient barrier.

The following days were employed in different jobs, in fitting up the house or bringing in food; eggs and shell-fish were collected, yamph roots and manzanilla apples were brought in, and oysters, for which each morning they went to the bank or the shore. All this took time, and the hours passed away quickly.

The "dinner things" consisted now of large bivalve shells, which served for dishes or plates. It is true that for the kind of food to which the hosts of Will Tree were reduced, others were not needed.

There was also the washing of the linen in the clear water of the stream, which occupied the leisure of Tartlet. It was to him that this task fell; but he only had to see to the two shirts, two handkerchiefs, and two pairs of socks, which composed the entire wardrobe of both.

While this operation was in progress, Godfrey and Tartlet had to wear only waistcoat and trousers, but in the blazing sun of that latitude the clothes quickly dried. And so matters went on without either rain or wind till July 3rd. Already they had begun to be fairly comfortable in their new home, considering the condition in which they had been cast on the island.

However, it was advisable not to neglect the chances of safety which might come from without. Each day Godfrey examined the whole sector of sea which extended from the east to the north-west beyond the promontory. This part of the Pacific was always deserted. Not a vessel, not a fishing-boat, not a ribbon of smoke detaching itself from the horizon, proclaimed the passage of a steamer. It seemed that Phina Island was situated out of the way of all the itineraries of commerce. All they could do was to wait, trusting in the Almighty who never abandons the weak.

Meanwhile, when their immediate necessities allowed them leisure, Godfrey, incited by Tartlet, returned to that important and vexed question of the fire.

He tried at first to replace amadou, which he so unfortunately lacked, by another and analogous material. It was possible that some of the varieties of mushrooms which grew in the crevices of the old trees, after having been subjected to prolonged drying, might be transformed into a combustible substance.

Many of these mushrooms were collected and exposed to the direct action of the sun, until they were reduced to powder. Then with the back of his knife, Godfrey endeavoured to strike some sparks off with a flint, so that they might fall on this substance. It was useless. The spongy stuff would not catch fire. Godfrey then tried to use that fine vegetable dust, dried during so many centuries, which he had found in the interior of Will Tree. The result was equally discouraging.

In desperation he then, by means of his knife and flint, strove to secure the ignition of a sort of sponge which grew under the rocks. He fares no better. The particle of steel, lighted by the impact of the silex, fell on to the
substance, but went out immediately. Godfrey and Tartlet were in despair. To do without fire was impossible. Of their fruits and mollusks they were getting tired, and their stomachs began to revolt at such food. They eyed, the professor especially, the sheep, agouties, and fowls which went and came round Will Tree. The pangs of hunger seized them as they gazed. With their eyes they ate the living meat!

No! It could not go on like this!

But an unexpected circumstance, a providential one if you will, came to their aid.

In the night of the 3rd of July the weather, which had been on the change for a day or so, grew stormy, after an oppressive heat which the sea-breeze had been powerless to temper.

Godfrey and Tartlet at about one o'clock in the morning were awakened by heavy claps of thunder, and most vivid flashes of lightning. It did not rain as yet, but it soon promised to do so, and then regular cataracts would be precipitated from the cloudy zone, owing to the rapid condensation of the vapour.

Godfrey got up and went out so as to observe the state of the sky.

There seemed quite a conflagration above the domes of the giant trees and the foliage appeared on fire against the sky, like the fine network of a Chinese shadow.

Suddenly, in the midst of the general uproar, a vivid flash illuminated the atmosphere. The thunder-clap followed immediately, and Will Tree was permeated from top to bottom with the electric force.

Godfrey, staggered by the return shock, stood in the midst of a rain of fire which showered around him. The lightning had ignited the dry branches above him. They were incandescent particles of carbon which crackled at his feet.

Godfrey with a shout awoke his companion.

"Fire! Fire!"

"Fire!" answered Tartlet. "Blessed be Heaven which sends it to us!"

Instantly they possessed themselves of the flaming twigs, of which some still burned, while others had been consumed in the flames. Hurriedly, at the same time, did they heap together a quantity of dead wood such as was never wanting at the foot of the sequoia, whose trunk had not been touched by the lightning.

Then they returned into their gloomy habitation as the rain, pouring down in sheets, extinguished the fire which threatened to devour the upper branches of Will Tree.

CHAPTER XIII.

IN WHICH GODFREY AGAIN SEES A SLIGHT SMOKE OVER ANOTHER PART OF THE ISLAND.

That was a storm which came just when it was wanted! Godfrey and Tartlet had not, like Prometheus, to venture into space to bring down the celestial fire! "It was," said Tartlet, "as if the sky had been obliging enough to send it down to them on a lightning flash."

With them now remained the task of keeping it!

"No! we must not let it go out!" Godfrey had said.

"Not until the wood fails us to feed it!" had responded Tartlet, whose satisfaction showed itself in little cries of joy.

"Yes! but who will keep it in?"

"I! I will! I will watch it day and night, if necessary," replied Tartlet, brandishing a flaming bough.

And he did so till the sun rose.

Dry wood, as we have said, abounded beneath the sequoias. Until the dawn Godfrey and the professor, after heaping up a considerable stock, did not spare to feed the fire. By the foot of one of the large trees in a narrow space between the roots the flames leapt up, crackling clearly and joyously. Tartlet exhausted his lungs blowing away at it, although his doing so was perfectly useless. In this performance he assumed the most characteristic attitudes in following the greyish smoke whose wreaths were lost in the foliage above.

But it was not that they might admire it that they had so longingly asked for this indispensable fire, not to warm themselves at it. It was destined for a much more interesting use. There was to be an end of their miserable meals of raw mollusks and yamph roots, whose nutritive elements boiling water and simple cooking in the ashes had never developed. It was in this way that Godfrey and Tartlet employed it during the morning.

"We could eat a fowl or two!" exclaimed Tartlet, whose jaws moved in anticipation. "Not to mention an agouti ham, a leg of mutton, a quarter of goat, some of the game on the prairie, without counting two or three freshwater fish and a sea fish or so."

"Not so fast," answered Godfrey, whom the declaration of this modest bill of fare had put in good humour. "We need not risk indigestion to satisfy a fast! We must look after our reserves, Tartlet! Take a couple of fowls--one apiece--and if we want bread, I hope that our cansa roots can be so prepared as to replace it with advantage!"
cost the lives of two innocent hens, who, plucked, trussed, and dressed by the professor, were stuck on a stick, and
soon roasted before the crackling flames.

Meanwhile, Godfrey was getting the camas roots in a state to figure creditably at the first genuine breakfast on
Phina Island. To render them edible it was only necessary to follow the Indian method, which the Californians were
well acquainted with.

This was what Godfrey did.

A few flat stones selected from the beach were thrown in the fire so as to get intensely hot. Tartlet seemed to
think it a great shame to use such a good fire “to cook stones with,” but as it did not hinder the preparation of his
fowls in any way he had no other complaint to make.

While the stones were getting warm Godfrey selected a piece of ground about a yard square from which he tore
up the grass; then with his hands armed with large scallop shells he dug the soil to the depth of about ten inches.
That done he laid at the bottom of the cavity a fire of dry wood, which he so arranged as to communicate to the earth
heaped up at its bottom some considerable heat.

When all the wood had been consumed and the cinders taken away, the camas roots, previously cleaned and
scraped, were strewn in the hole, a thin layer of sods thrown over them and the glowing stones placed on the top, so
as to serve as the basis of a new fire which was lighted on their surface.

In fact, it was a kind of oven which had been prepared; and in a very short time—about half an hour or so—the
operation was at an end.

Beneath the double layer of stones and sods lay the roots cooked by this violent heating. On crushing them there
was obtainable a flour well fitted for making into bread, but, even eaten as they were, they proved much like
potatoes of highly nutritive quality.

It was thus that this time the roots were served and we leave our readers to imagine what a breakfast our two
friends made on the chickens which they devoured to the very bones, and on the excellent camas roots, of which
they had no need to be sparing. The field was not far off where they grew in abundance. They could be picked up in
hundreds by simply stooping down for them.

The repast over, Godfrey set to work to prepare some of the flour, which keeps for any length of time, and which
could be transformed into bread for their daily wants.

The day was passed in different occupations. The fire was kept up with great care. Particularly was the fuel
heaped on for the night; and Tartlet, nevertheless, arose on many occasions to sweep the ashes together and provoke
a more active combustion. Having done this, he would go to bed again, to get up as soon as the fire burnt low, and
thus he occupied himself till the day broke. The night passed without incident, the cracklings of the fire and the crow
of the cock awoke Godfrey and his companion, who had ended his performances by falling off to sleep.

At first Godfrey was surprised at feeling a current of air coming down from above in the interior of Will Tree.
He was thus led to think that the sequoia was hollow up to the junction of the lower branches where there was an
opening which they would have to stop up if they wished to be snug and sheltered.

“But it is very singular!” said Godfrey to himself.

“How was it that during the preceding nights I did not feel this current of air? Could it have been the lightning?”

And to get an answer to this question, the idea occurred to him to examine the trunk of the sequoia from the out
side.

When he had done so, he understood what had happened during the storm.

The track of the lightning was visible on the tree, which had had a long strip of its bark torn off from the fork
down to the roots.

Had the electric spark found its way into the interior of the sequoia in place of keeping to the outside, Godfrey
and his companion would have been struck. Most decidedly they had had a narrow escape.

“It is not a good thing to take refuge under trees during a storm,” said Godfrey. "That is all very well for people
who can do otherwise. But what way have we to avoid the danger who live inside the tree? We must see!"

Then examining the sequoia from the point where the long lightning trace began--"It is evident," said he, "that
where the flash struck the tree has been cracked. But since the air penetrates by this orifice the tree must be hollow
along its whole length and only lives in its bark? Now that is what I ought to see about!"

And Godfrey went to look for a resinous piece of wood that might do for a torch.

A bundle of pine twigs furnished him with the torch he needed, as from them exuded a resin which, once
inflamed, gave forth a brilliant light.

Godfrey then entered the cavity which served him for his house. To darkness immediately succeeded light, and it
was easy to see the state of the interior of Will Tree. A sort of vault of irregular formation stretched across in a
ceiling some fifteen feet above the ground. Lifting his torch Godfrey distinctly saw that into this there opened a
narrow passage whose further development was lost in the shadow. The tree was evidently hollow throughout its
length; but perhaps some portion of the albumen still remained intact. In that case, by the help of the outgrowths it would be possible if not easy to get up to the fork.

Godfrey, who was thinking of the future, resolved to know without delay if this were so.

He had two ends in view; one, to securely close the opening by which the rain and wind found admission, and so render Will Tree almost habitable; the other, to see if in case of danger, or an attack from animals or savages, the upper branches of the tree would not afford a convenient refuge.

He could but try. If he encountered any insurmountable obstacle in the narrow passage, Godfrey could be got down again.

After firmly sticking his torch between two of the roots below, behold him then commencing to raise himself on to the first interior knots of the bark. He was lithe, strong, and accustomed to gymnastics like all young Americans. It was only sport to him. Soon he had reached in this uneven tube a part much narrower, in which, with the aid of his back and knees, he could work his way upwards like a chimney-sweep. All he feared was that the hole would not continue large enough for him to get up.

However, he kept on, and each time he reached a projection he would stop and take breath.

Three minutes after leaving the ground, Godfrey had mounted about sixty feet, and consequently could only have about twenty feet further to go.

In fact, he already felt the air blowing more strongly on his face. He inhaled it greedily, for the atmosphere inside the sequoia was not, strictly speaking, particularly fresh.

After resting a minute, and shaking off the fine dust which he had rubbed on to him off the wall, Godfrey started again up the long tunnel, which gradually narrowed.

But at this moment his attention was attracted by a peculiar noise, which appeared to him somewhat suspicious. There was a sound as of scratching, up the tree. Almost immediately a sort of hissing was heard.

Godfrey stopped.

"What is that?" he asked. "Some animal taken refuge in the sequoia? Was it a snake? No! We have not yet seen one on the island! Perhaps it is a bird that wants to get out!"

Godfrey was not mistaken; and as he continued to mount, a cawing, followed by a rapid flapping of wings, showed him that it was some bird ensconced in the tree whose sleep he was doubtless disturbing.

Many a "frrr-frrr!" which he gave out with the whole power of his lungs, soon determined the intruder to clear off.

It proved to be a kind of jackdaw, of huge stature, which scuttled out of the opening, and disappeared into the summit of Will Tree.

A few seconds afterwards, Godfrey's head appeared through the same opening, and he soon found himself quite at his ease, installed on a fork of the tree where the lower branches gave off, at about eighty feet from the ground.

There, as has been said, the enormous stem of the sequoia supported quite a forest. The capricious network of its upper boughs presented the aspect of a wood crowded with trees, which no gap rendered passable.

However, Godfrey managed, not without difficulty, to get along from one branch to another, so as to gain little by little the upper story of this vegetable phenomenon.

A number of birds with many a cry flew off at his approach, and hastened to take refuge in the neighbouring members of the group, above which Will Tree towered by more than a head.

Godfrey continued to climb as well as he could, and did not stop until the ends of the higher branches began to bend beneath his weight.

A huge horizon of water surrounded Phina Island, which lay unrolled like a relief-map at his feet. Greedily his eyes examined that portion of the sea. It was still deserted. He had to conclude once more, that the island lay away from the trade routes of the Pacific.

Godfrey uttered a heavy sigh; then his look fell on the narrow domain on which fate had condemned him to live, doubtless for long, perhaps for ever.

But what was his surprise when he saw, this time away to the north, a smoke similar to that which he had already thought he had seen in the south. He watched it with the keenest attention.

[A illustration: There was the column of smoke. _page 152._]

A very light vapour, calm and pure, greyish blue at its tip, rose straight in the air.

"No! I am not mistaken!" exclaimed Godfrey. "There is a smoke, and therefore a fire which produces it! And that fire could not have been lighted except by--By whom?"

Godfrey then with extreme precision took the bearings of the spot in question.

The smoke was rising in the north-east of the island, amid the high rocks which bordered the beach. There was no mistake about that. It was less than five miles from Will Tree. Striking straight to the north-east across the prairie, and then following the shore, he could not fail to find the rocks above which the vapour rose.
With beating heart Godfrey made his way down the scaffolding of branches until he reached the fork. There he stopped an instant to clear off the moss and leaves which clung to him, and that done he slid down the opening, which he enlarged as much as possible, and rapidly gained the ground. A word to Tartlet not to be uneasy at his absence, and Godfrey hastened off in the north-easterly direction so as to reach the shore.

It was a two hours' walk across the verdant prairie, through clumps of scattered trees, or hedges of spiny shrubs, and then along the beach. At length the last chain of rocks was reached.

But the smoke which Godfrey had seen from the top of the tree he searched for in vain when he had reached the ground. As he had taken the bearings of the spot with great care, he came towards it without any mistake.

There Godfrey began his search. He carefully explored every nook and corner of this part of the shore. He called. No one answered to his shout. No human being appeared on the beach. Not a rock gave him a trace of a newly lighted fire--nor of a fire now extinct, which could have been fed by sea herbs and dry algæ thrown up by the tide.

"But it is impossible that I should have been mistaken!" repeated Godfrey to himself. "I am sure it was smoke that I saw! And besides!--"

As Godfrey could not admit that he had been the dupe of a delusion, he began to think that there must exist some well of heated water, or kind of intermittent geyser, which he could not exactly find, but which had given forth the vapour.

There was nothing to show that in the island there were not many of such natural wells, and the apparition of the column of smoke could be easily explained by so simple a geological phenomenon.

Godfrey left the shore and returned towards Will Tree, observing the country as he went along a little more carefully than he had done as he came. A few ruminants showed themselves, amongst others some wapiti, but they dashed past with such speed that it was impossible to get near them.

In about four hours Godfrey got back. Just before he reached the tree he heard the shrill "twang! squeak!" of the kit, and soon found himself face to face with Professor Tartlet, who, in the attitude of a vestal, was watching the sacred fire confided to his keeping.

CHAPTER XIV.
WHEREIN GODFREY FINDS SOME WRECKAGE, TO WHICH HE AND HIS COMPANION GIVE A HEARTY WELCOME.

To put up with what you cannot avoid is a philosophical principle, that may not perhaps lead you to the accomplishment of great deeds, but is assuredly eminently practical. On this principle Godfrey had resolved to act for the future. If he had to live in this island, the wisest thing for him to do was to live there as comfortably as possible until an opportunity offered for him to leave it.

And so, without delay, he set to work to get the interior of Will Tree into some order. Cleanliness was of the first importance. The beds of dried grass were frequently renewed. The plates and dishes were only scallop shells, it is true, but no American kitchen could show cleaner ones. It should be said to his praise that Professor Tartlet was a capital washer. With the help of his knife Godfrey, by flattening out a large piece of bark, and sticking four uprights into the ground, had contrived a table in the middle of the room. Some large stumps served for stools. The comrades were no longer reduced to eating on their knees, when the weather prevented their dining in the open air.

There was still the question of clothing, which was of great interest to them, and they did the best they could. In that climate, and under that latitude, there was no reason why they should not go about half naked; but, at length, trousers, waistcoat, and linen shirt were all worn out. How could they replace them? Were the sheep and the goats to provide them with skins for clothing, after furnishing them with flesh for food? It looked like it. Meanwhile, Godfrey had the few garments he possessed frequently washed. It was on Tartlet, transformed into a laundress, that this task fell, and he acquitted himself of it to the general satisfaction.

Godfrey busied himself specially in providing food, and in arranging matters generally. He was, in fact, the caterer. Collecting the edible roots and the manzanilla fruit occupied him some hours every day; and so did fishing with plaited rushes, sometimes in the waters of the stream, and sometimes in the hollows of the rocks on the beach when the tide had gone out. The means were primitive, no doubt, but from time to time a fine crustacean or a succulent fish figured on the table of Will Tree, to say nothing of the mollusks, which were easily caught by hand.

But we must confess that the pot--of all the pieces in the battery of the cook undoubtedly the most essential--the simple iron pot, was wanting. Its absence could not but be deeply felt. Godfrey knew not how to replace the vulgar pipkin, whose use is universal. No hash, no stew, no boiled meat, no fish, nothing but roasts and grills. No soup appeared at the beginning of a meal. Constantly and bitterly did Tartlet complain--but how to satisfy the poor man?

Godfrey was busied with other cares. In visiting the different trees of the group he had found a second sequoia of
great height, of which the lower part, hollowed out by the weather, was very rugged and uneven.

Here he devised his poultry-house, and in it the fowls took up their abode. The hens soon became accustomed to their home, and settled themselves to set on eggs placed in the dried grass, and chickens began to multiply. Every evening the broods were driven in and shut up, so as to keep them from birds of prey, who, aloft in the branches, watched their easy victims, and would, if they could, have ended by destroying them.

As for the agoutis, the sheep, and the goats, it would have been useless then to have looked out a stable or a shelter for them. When the bad weather came, there would be time enough to see to that. Meanwhile they prospered on the luxuriant pasturage of the prairie, with its abundance of sainfoin and edible roots, of which the porcine representatives showed genuine appreciation. A few kids had been dropped since the arrival in the island, and as much milk as possible was left to the goats with which to nourish their little ones.

From all this it resulted that the surroundings of Will Tree were quite lively. The well-fed domestic animals came during the warm hours of the day to find there a refuge from the heat of the sun. No fear was there of their wandering abroad, or of their falling a prey to wild beasts, of which Phina Island seemed to contain not a single specimen.

And so things went on, with a present fairly comfortable perhaps, but a future very disquieting, when an unexpected incident occurred which bettered the position considerably.

It was on the 29th of July.

Godfrey was strolling in the morning along that part of the shore which formed the beach of the large bight to which he had given the name of Dream Bay. He was exploring it to see if it was as rich in shell-fish as the coast on the north. Perhaps he still hoped that he might yet come across some of the wreck, of which it seemed to him so strange that the tide had as yet brought in not a single fragment.

On this occasion he had advanced to the northern point which terminated in a sandy spit, when his attention was attracted by a rock of curious shape, rising near the last group of algæ and sea-weeds.

A strange presentiment made him hasten his steps. What was his surprise, and his joy, when he saw that what he had taken for a rock was a box, half buried in the sand.

Was it one of the packages of the _Dream_? Had it been here ever since the wreck? Was it not rather all that remained of another and more recent catastrophe? It was difficult to say. In any case no matter whence it came or what it held, the box was a valuable prize.

Godfrey examined it outwardly. There was no trace of an address not even a name, not even one of those huge initials cut out of thin sheet metal which ornament the boxes of the Americans. Perhaps he would find inside it some paper which would indicate the origin, or nationality, or name of the proprietor? Any how it was apparently hermetically sealed, and there was hope that its contents had not been spoiled by their sojourn in the sea-water. It was a very strong wooden box, covered with thick leather, with copper corner plates at the angles, and large straps all over it.

Impatient as he was to view the contents of the box, Godfrey did not think of damaging it, but of opening it after destroying the lock; as to transporting it from the bottom of Dream Bay to Will Tree, its weight forbade it, and he never gave that a thought.

"Well," said Godfrey to himself, "we must empty it where it is, and make as many journeys as may be necessary to take away all that is inside."

It was about four miles from the end of the promontory to the group of sequoias. It would therefore take some time to do this, and occasion considerable fatigue. Time did not press, however. As for the fatigue, it was hardly worth thinking about.

What did the box contain? Before returning to Will Tree, Godfrey had a try at opening it.

He began by unbuckling the straps, and once they were off he very carefully lifted the leather shield which protected the lock. But how was he to force it?

"Well," said Godfrey to himself, "we must empty it where it is, and make as many journeys as may be necessary to take away all that is inside."

It was a difficult job. Godfrey had no lever with which to bring his strength to bear. He had to guard against the risk of breaking his knife, and so he looked about for a heavy stone with which he could start the staple.

The beach was strewn with lumps of hard silex in every form which could do for a hammer.

Godfrey picked out one as thick as his wrist, and with it he gave a tremendous whack on the plate of copper.

To his extreme surprise the bolt shot through the staple immediately gave way.

Either the staple was broken by the blow, or the lock was not turned.

Godfrey's heart beat high as he stooped to lift up the box lid.

It rose unchecked, and in truth had Godfrey had to get it to pieces he would not have done so without trouble. The trunk was a regular strong-box. The interior was lined with sheet zinc, so that the sea-water had failed to penetrate. The objects it contained, however delicate they might be, would be found in a perfect state of preservation.
And what objects! As he took them out Godfrey could not restrain exclamations of joy! Most assuredly the box must have belonged to some highly practical traveller, who had reckoned on getting into a country where he would have to trust to his own resources.

In the first place there was linen—shirts, tablecloths, sheets, counterpanes; then clothes—woollen jerseys, woollen socks, cotton socks, cloth trousers, velveteen trousers, knitted waistcoats, waistcoats of good heavy stuffs; then two pairs of strong boots, and hunting-shoes and felt hats.

Then came a few kitchen and toilet utensils; and an iron pot—the famous pot which was wanted so badly—a kettle, a coffee-pot, a tea-pot, some spoons, some forks, some knives, a looking-glass, and brushes of all kinds, and, what was by no means to be despised, three cans, containing about fifteen pints of brandy and tafia, and several pounds of tea and coffee.

Then, in the third place, came some tools—an auger, a gimlet, a handsaw, an assortment of nails and brads, a spade, a shovel, a pickaxe, a hatchet, an adze, &c., &c.

In the fourth place, there were some weapons, two hunting-knives in their leather sheaths, a carbine and two muskets, three six-shooter revolvers, a dozen pounds of powder, many thousand caps, and an important stock of lead and bullets, all the arms seeming to be of English make. There was also a small medicine-chest, a telescope, a compass, and a chronometer. There were also a few English books, several quires of blank paper, pencils, pens, and ink, an almanac, a Bible with a New York imprint, and a "Complete Cook's Manual."

Verily this is an inventory of what under the circumstances was an inestimable prize.

Godfrey could not contain himself for joy. Had he expressly ordered the trousseau for the use of shipwrecked folks in difficulties, he could not have made it more complete.

Abundant thanks were due for it to Providence. And Providence had the thanks, and from an overflowing heart.

Godfrey indulged himself in the pleasure of spreading out all his treasure on the beach. Every object was looked over, but not a scrap of paper was there in the box to indicate to whom it belonged, or the ship on which it had been embarked.

Around, the sea showed no signs of a recent wreck.

Nothing was there on the rocks, nothing on the sands. The box must have been brought in by the flood, after being afloat for perhaps many days. In fact, its size in proportion to its weight had assured for it sufficient buoyancy.

The two inhabitants of Phina Island would for some time be kept provided in a large measure with the material wants of life, tools, arms, instruments, utensils, clothes—due to the luckiest of chances.

Godfrey did not dream of taking all the things to Will Tree at once. Their transport would necessitate several journeys but he would have to make haste for fear of bad weather.

Godfrey then put back most of the things in the box. A gun, a revolver, a certain quantity of powder and lead, a hunting-knife, the telescope, and the iron pot, he took as his first load.

The box was carefully closed and strapped up, and with a rapid step Godfrey strode back along the shore.

Ah! What a reception he had from Tartlet, an hour later! And the delight of the Professor when his pupil ran over the list of their new riches! The pot—above everything—threw him into transports of joy, culminating in a series of "hornpipes" and "cellar-flaps," wound up by a triumphant "six-eight breakdown."

It was only noon as yet. Godfrey wished after the meal to get back at once to Dream Bay. He would never rest until the whole was in safety at Will Tree.

Tartlet made no objection, and declared himself ready to start. It was no longer necessary to watch the fire. With the powder they could always get a light. But the Professor was desirous that during their absence the soup which he was thinking about might be kept gently on the simmer. The wonderful pot was soon filled with water from the stream, a whole quarter of a goat was thrown in, accompanied by a dozen yamph roots, to take the place of vegetables, and then a pinch or two of salt found in the crevices of the rocks gave seasoning to the mixture.

"It must skim itself," exclaimed Tartlet, who seemed highly satisfied at his performance.

And off they started for Dream Bay by the shortest road. The box had not been disturbed. Godfrey opened it with care. Amid a storm of admiring exclamations from Tartlet, he began to pick out the things.

In this first journey Godfrey and his companion, transformed into beasts of burden, carried away to Will Tree the arms, the ammunition, and a part of the wearing apparel.

Then they rested from their fatigue beside the table, on which there smoked the stewed agouti, which they pronounced most excellent. As for the meat, to listen to the Professor it would have been difficult even to imagine anything more exquisite! Oh! the marvellous effect of privation!

On the 30th, the next day, Godfrey and Tartlet set forth at dawn, and in three other journeys succeeded in emptying and carrying away all that the box contained. Before the evening, tools, weapons, instruments, utensils, were all brought, arranged, and stowed away in Will Tree.

On the 1st of August, the box itself, dragged along the beach not without difficulty, found a place in the tree, and
was transformed into a linen-closet.

Tartlet, with the fickleness of his mind, now looked upon the future through none but rosy glasses. We can hardly feel astonished then that on this day, with his kit in his hand, he went out to find his pupil, and said to him in all seriousness, as if he were in the drawing-room of Kolderup's mansion,—

"Well, Godfrey, my boy, don't you think it is time to resume our dancing lessons?"

CHAPTER XV.

IN WHICH THERE HAPPENS WHAT HAPPENS AT LEAST ONCE IN THE LIFE OF EVERY CRUSOE, REAL OR IMAGINARY.

And now the future looked less gloomy. But if Tartlet saw in the possession of the instruments, the tools, and the weapons only the means of making their life of isolation a little more agreeable, Godfrey was already thinking of how to escape from Phina Island. Could he not now construct a vessel strong enough to enable them to reach if not some neighbouring land, at least some ship passing within sight of the island?

Meanwhile the weeks which followed were principally spent in carrying out not these ideas, but those of Tartlet. The wardrobe at Will Tree was now replenished, but it was decided to use it with all the discretion which the uncertainty of the future required. Never to wear any of the clothes unless necessity compelled him to do so, was the rule to which the professor was forced to submit.

"What is the good of that?" grumbled he. "It is a great deal too stingy, my dear Godfrey! Are we savages, that we should go about half naked?"

"I beg your pardon, Tartlet," replied Godfrey; "we are savages, and nothing else."

"As you please; but you will see that we shall leave the island before we have worn the clothes!"

"I know nothing about it, Tartlet, and it is better to have than to want."

"But on Sunday now, surely on Sunday, we might dress up a little?"

"Very well, on Sundays then, and perhaps on public holidays," answered Godfrey, who did not wish to anger his frivolous companion; "but as to day is Monday we shall have to wait a whole week before we come out in our best."

We need hardly mention that from the moment he arrived on the island Godfrey had not omitted to mark each day as it passed. By the aid of the calendar he found in the box he was able to verify that the day was really Monday. Each performed his daily task according to his ability. It was no longer necessary for them to keep watch by day and night over a fire which they had now the means of relighting.

Tartlet therefore abandoned, not without regret, a task which suited him so well. Henceforward he took charge of the provisioning with yamph and camas roots—of that in short which formed the daily bread of the establishment, so that the professor went every day and collected them, up to the lines of shrubs with which the prairie was bordered behind Will Tree. It was one or two miles to walk, but he accustomed himself to it. Between whiles he occupied his time in collecting oysters or other mollusks, of which they consumed a great quantity.

Godfrey reserved for himself the care of the domestic animals and the poultry. The butchering trade was hardly to his taste, but he soon overcame his repugnance. Thanks to him, boiled meats appeared frequently on the table, followed by an occasional joint of roast meat to afford a sufficiently varied bill of fare. Game abounded in the woods of Phina Island, and Godfrey proposed to begin his shooting when other more pressing cares allowed him time. He thought of making good use of the guns, powder, and bullets in his arsenal, but he in the first place wished to complete his preparations. His tools enabled him to make several benches inside and outside Will Tree. The stools were cut out roughly with the axe, the table made a little less roughly became more worthy of the dishes and dinner things with which Professor Tartlet adored it. The beds were arranged in wooden boxes and their litter of dry grass assumed a more inviting aspect. If mattresses and palliasses were still wanting, counterpanes at least were not. The various cooking utensils stood no longer on the ground, but had their places on planks fixed along the walls. Stores, linen, and clothes were carefully put away in cavities hollowed out in the bark of the sequoia. From strong pegs were suspended the arms and instruments, forming quite a trophy on the walls.

Godfrey was also desirous of putting a door to the house, so that the other living creatures—the domestic animals—should not come during the night and trouble their sleep. As he could not cut out boards with his only saw, the handsaw, he used large and thick pieces of bark, which he got off very easily. With these he made a door sufficiently massive to close the opening into Will Tree, at the same time he made two little windows, one opposite to the other, so as to let light and air into the room. Shutters allowed him to close them at night, but from the morning to the evening it was no longer necessary to take refuge in flaring resinous torches which filled the dwelling with smoke. What Godfrey would think of to yield them light during the long nights of winter he had as yet no idea. He might take to making candles with the mutton fat, or he might be contented with resinous torches more carefully prepared. We shall see.
Another of his anxieties was how to construct a chimney in Will Tree. While the fine weather lasted, the fire outside among the roots of the sequoia sufficed for all the wants of the kitchen, but when the bad weather came and the rain fell in torrents, and they would have to battle with the cold, whose extreme rigour during a certain time they reasonably feared, they would have to have a fire inside their house, and the smoke from it must have some vent. This important question therefore had to be settled.

One very useful work which Godfrey undertook was to put both banks of the river in communication with each other on the skirt of the sequoia-trees.

He managed, after some difficulty, to drive a few stakes into the river-bed, and on them he fixed a staging of planks, which served for a bridge. They could thus get away to the northern shore without crossing the ford, which led them a couple of miles out of their road.

But if Godfrey took all these precautions so as to make existence a little more possible on this lone isle of the Pacific, in case he and his companion were destined to live on it for some time, or perhaps live on it for ever, he had no intention of neglecting in any way the chances of rescue.

Phina Island was not on the routes taken by the ships--that was only too evident. It offered no port of call, nor means of revictualling. There was nothing to encourage ships to take notice of it. At the same time it was not impossible that a war-ship or a merchant-vessel might come in sight. It was advisable therefore to find some way of attracting attention, and showing that the island was inhabited.

With this object Godfrey erected a flagstaff at the end of the cape which ran out to the north, and for a flag he sacrificed a piece of one of the cloths found in the trunk. As he thought that the white colour would only be visible in a strong light, he tried to stain his flag with the berries of a sort of shrub which grew at the foot of the dunes. He obtained a very vivid red, which he could not make indelible owing to his having no mordant, but he could easily re-dye the cloth when the wind or rain had faded it.

These varied employments occupied him up to the 15th of August. For many weeks the sky had been constantly clear, with the exception of two or three storms of extreme violence which had brought down a large quantity of water, to be greedily drunk in by the soil.

About this time Godfrey began his shooting expeditions. But if he was skilful enough in the use of the gun, he could not reckon on Tartlet, who had yet to fire his first shot.

Many days of the week did Godfrey devote to the pursuit of fur and feather, which, without being abundant, were yet plentiful enough for the requirements of Will Tree.

A few partridges, some of the red-legged variety, and a few snipes, came as a welcome variation of the bill of fare. Two or three antelopes fell to the prowess of the young stalker; and although he had had nothing to do with their capture, the professor gave them a no less welcome than he did when they appeared as haunches and cutlets.

But while he was out shooting, Godfrey did not forget to take a more complete survey of the island. He penetrated the depths of the dense forests which occupied the central districts. He ascended the river to its source. He again mounted the summit of the cone, and redescended by the talus on the eastern shore, which he had not, up to then, visited.

"After all these explorations," repeated Godfrey to himself, "there can be no doubt that Phina Island has no dangerous animals, neither wild beasts, snakes, nor saurians! I have not caught sight of one! Assuredly if there had been any, the report of the gun would have woke them up! It is fortunate, indeed. If it were to become necessary to fortify Will Tree against their attacks, I do not know how we should get on!"

Then passing on to quite a natural deduction--

"It must also be concluded," continued he, "that the island is not inhabited at all. Either natives or people shipwrecked here would have appeared before now at the sound of the gun! There is, however, that inexplicable smoke which I twice thought I saw."

The fact is, that Godfrey had never been able to trace any fire. As for the hot water springs to which he attributed the origin of the vapour he had noticed, Phina Island being in no way volcanic did not appear to contain any, and he had to content himself with thinking that he had twice been the victim of an illusion.

Besides, this apparition of the smoke or the vapour was not repeated. When Godfrey the second time ascended the central cone, as also when he again climbed up into Will Tree, he saw nothing to attract his attention. He ended by forgetting the circumstance altogether.

Many weeks passed in different occupations about the tree, and many shooting excursions were undertaken. With every day their mode of life improved.

Every Sunday, as had been agreed, Tartlet donned his best clothes. On that day he did nothing but walk about under the big trees, and indulge in an occasional tune on the kit. Many were the glissades he performed, giving lessons to himself, as his pupil had positively refused to continue his course.

"What is the good of it?" was Godfrey's answer to the entreaties of the professor. "Can you imagine Robinson
Crusoe taking lessons in dancing and deportment?"

"And why not?" asked Tartlet seriously. "Why should Robinson Crusoe dispense with deportment? Not for the
good of others, but of himself, he should acquire refined manners."

To which Godfrey made no reply. And as he never came for his lesson, the professor became professor
"emeritus."

The 13th of September was noted for one of the greatest and cruellest deceptions to which, on a desert island, the
unfortunate survivors of a shipwreck could be subjected.

Godfrey had never again seen that inexplicable and undiscoverable smoke on the island; but on this day, about
three o'clock in the afternoon, his attention was attracted by a long line of vapour, about the origin of which he could
not be deceived.

He had gone for a walk to the end of Flag Point--the name which he had given to the cape on which he had
erected his flagstaff. While he was looking through his glass he saw above the horizon a smoke driven by the west
wind towards the island.

Godfrey's heart beat high.

"A ship!" he exclaimed.

But would this ship, this steamer, pass in sight of Phina Island? And if it passed, would it come near enough for
the signal thereon to be seen on board?

Or would not rather the semi-visible smoke disappear with the vessel towards the north-west or south-west of the
horizon?

For two hours Godfrey was a prey to alternating emotions more easy to indicate than to describe.

The smoke got bigger and bigger. It increased when the steamer re-stoked her fires, and diminished almost to
vanishing-point as the fuel was consumed. Continually did the vessel visibly approach. About four o'clock her hull
had come up on the line between the sky and the sea.

She was a large steamer, bearing north-east. Godfrey easily made that out. If that direction was maintained, she
would inevitably approach Phina Island.

Godfrey had at first thought of running back to Will Tree to inform Tartlet. What was the use of doing so? The
sight of one man making signals could do as much good as that of two. He remained there, his glass at his eye,
losing not a single movement of the ship.

The steamer kept on her course towards the coast, her bow steered straight for the cape. By five o'clock the
horizon-line was already above her hull, and her rig was visible. Godfrey could even recognize the colours at her
gaff.

She carried the United States' ensign.

"But if I can see their flag, cannot they see mine? The wind keeps it out, so that they could easily see my flag
with their glasses. Shall I make signals, by raising it and lowering it a few times, so as to show that I want to enter
into communication with them? Yes! I have not an instant to lose."

It was a good idea. Godfrey ran to the end of Flag Point, and began to haul his flag up and down, as if he were
saluting. Then he left it half-mast high, so as to show, in the way usual with seafaring people, that he required help
and succour.

The steamer still approached to within three miles of the shore, but her flag remained immovable at the peak,
and replied not to that on Flag Point. Godfrey felt his heart sink. He would not be noticed! It was half-past six, and
the sun was about to set!

The steamer was now about two miles from the cape, which she was rapidly nearing. At this moment the sun
disappeared below the horizon. With the first shadows of night, all hope of being seen had to be given up.

Godfrey again, with no more success, began to raise and lower his flag. There was no reply.

He then fired his gun two or three times, but the distance was still great, and the wind did not set in that
direction! No report would be heard on board!

The night gradually came on; soon the steamer's hull grew invisible. Doubtless in another hour she would have
passed Phina Island.

Godfrey, not knowing what to do, thought of setting fire to a group of resinous trees which grew at the back of
Flag Point. He lighted a heap of dry leaves with some gunpowder, and then set light to the group of pines, which
flared up like an enormous torch.

But no fire on the ship answered to the one on the land, and Godfrey returned sadly to Will Tree, feeling perhaps
more desolate than he had ever felt till then.

CHAPTER XVI.
IN WHICH SOMETHING HAPPENS WHICH CANNOT FAIL TO SURPRISE THE READER.

To Godfrey the blow was serious. Would this unexpected chance which had just escaped him ever offer again? Could he hope so? No! The indifference of the steamer as she passed in sight of the island, without even taking a look at it, was obviously shared in by all the vessels venturing in this deserted portion of the Pacific. Why should they put into port more than she had done? The island did not possess a single harbour.

Godfrey passed a sorrowful night. Every now and then jumping up as if he heard a cannon out at sea, he would ask himself if the steamer had not caught sight of the huge fire which still burnt on the coast, and if she were not endeavouring to answer the signal by a gun-shot?

Godfrey listened. It was only an illusion of his over-excited brain. When the day came, he had come to look upon the apparition of the ship as but a dream, which had commenced about three o'clock on the previous afternoon.

But no! He was only too certain that a ship had been in sight of Phina Island, maybe within two miles of it, and certainly she had not put in.

Of this deception Godfrey said not a word to Tartlet. What was the good of talking about it? Besides, his frivolous mind could not see more than twenty-four hours ahead. He was no longer thinking of the chances of escaping from the island which might offer. He no longer imagined that the future had great things in store for them. San Francisco was fading out of his recollection. He had no sweetheart waiting for him, no Uncle Will to return to. If at this end of the world he could only commence a course of lessons on dancing, his happiness would be complete--were it only with one pupil.

If the professor dreamt not of immediate danger, such as to compromise his safety in this island--bare, as it was, of wild beasts and savages--he was wrong. This very day his optimism was to be put to a rude test.

About four o'clock in the afternoon Tartlet had gone, according to his custom, to collect some oysters and mussels, on that part of the shore behind Flag Point, when Godfrey saw him coming back as fast as his legs could carry him to Will Tree. His hair stood on end round his temples. He looked like a man in flight, who dared not turn his head to the right or to the left.

"What is the matter?" shouted Godfrey, not without alarm, running to meet his companion.

"There! there!" answered Tartlet, pointing with his finger towards the narrow strip of sea visible to the north between the trees.

"A canoe!"

"Yes! Savages! Quite a fleet of savages! Cannibals, perhaps!"

Godfrey looked in the direction pointed out.

It was not a fleet, as the distracted Tartlet had said; but he was only mistaken about the quantity.

In fact, there was a small vessel gliding through the water, now very calm, about half-a-mile from the coast, so as to double Flag Point.

"But what is it?" asked Godfrey, whose first movement was to run to the edge of the sequoias.

"A canoe!"

"A canoe?"

"Yes! Savages! Quite a fleet of savages! Cannibals, perhaps!"

Godfrey looked in the direction pointed out.

It was not a fleet, as the distracted Tartlet had said; but he was only mistaken about the quantity.

In fact, there was a small vessel gliding through the water, now very calm, about half-a-mile from the coast, so as to double Flag Point.

"And why should they be cannibals?" asked Godfrey, turning towards the professor.

"Because in Crusoe Islands," answered Tartlet, "there are always cannibals, who arrive sooner or later."

"Is it not a boat from some merchant-ship?"

"From a ship?"

"Yes. From a steamer which passed here yesterday afternoon, in sight of our island?"

"And you said nothing to me about it!" exclaimed Tartlet, lifting his hands to the sky.

"What good should I have done?" asked Godfrey. "Besides, I thought that the vessel had disappeared! But that boat might belong to her! Let us go and see!"

Godfrey ran rapidly back to Will Tree, and, seizing his glass, returned to the edge of the trees.

He then examined with extreme attention the little vessel, which would ere then have perceived the flag on Flag Point as it fluttered in the breeze.

The glass fell from his hands.

"Savages! Yes! They are really savages!" he exclaimed.

Tartlet felt his knees knock together, and a tremor of fright ran through his body.

It was a vessel manned by savages which Godfrey saw approaching the island. Built like a Polynesian canoe, she carried a large sail of woven bamboo; an outrigger on the weather side kept her from capsizing as she heeled down to the wind.

Godfrey easily distinguished the build of the vessel. She was a proa, and this would indicate that Phina Island was not far from Malaysia. But they were not Malays on board; they were half-naked blacks, and there were about a dozen of them.
The danger of being found was thus great. Godfrey regretted that he had hoisted the flag, which had not been seen by the ship, but would be by these black fellows. To take it down now would be too late.

It was, in truth, very unfortunate. The savages had probably come to the island thinking it was uninhabited, as indeed it had been before the wreck of the _Dream_. But there was the flag, indicating the presence of human beings on the coast! How were they to escape them if they landed?

Godfrey knew not what to do. Anyhow his immediate care must be to watch if they set foot on the island. He could think of other things afterwards.

With his glass at his eye he followed the proa; he saw it turn the point of the promontory, then run along the shore and then approach the mouth of the small stream, which, two miles up, flowed past Will Tree.

If the savages intended to paddle up the river, they would soon reach the group of sequoias--and nothing could hinder them. Godfrey and Tartlet ran rapidly back to their dwelling. They first of all set about guarding themselves against surprise, and giving themselves time to prepare their defence.

At least that is what Godfrey thought of. The ideas of the professor took quite a different turn.

"Ah!" he exclaimed. "It is destiny! This is as it was written? We could not escape it! You cannot be a Crusoe without a canoe coming to your island, without cannibals appearing one day or another! Here we have been for only three months, and there they are already! Assuredly, neither Defoe, nor De Wyss exaggerated matters! You can make yourself a Crusoe, if you like!"

Worthy Tartlet, folks do not make themselves Crusoes, they become Crusoes, and you are not sure that you are wise in comparing your position with that of the heroes of the two English and Swiss romances!

The precautions taken by Godfrey as soon as he returned to Will Tree were as follows. The fire burning among the roots of the sequoia was extinguished, and the embers scattered broadcast, so as to leave no trace; cocks, hens, and chickens were already in their house for the night, and the entrance was hidden with shrubs and twigs as much as possible; the other animals, the goats, agoutis, and sheep, were driven on to the prairie, but it was unlucky that there was no stable to shut them up in; all the instruments and tools were taken into the tree. Nothing was left outside that could indicate the presence or the passage of human beings.

Then the door was closely shut, after Godfrey and Tartlet had gone in. The door made of the sequoia bark was indistinguishable from the bark of the trunk, and might perhaps escape the eyes of the savages, who would not look at it very closely. It was the same with the two windows, in which the lower boards were shut. Then all light was extinguished in the dwelling, and our friends remained in total darkness. How long that night was! Godfrey and Tartlet heard the slightest sounds outside. The creaking of a dry branch, even a puff of wind, made them start. They thought they heard some one walking under the trees. It seemed that they were prowling round Will Tree. Then Godfrey climbed up to one of the windows, opened one of the boards, and anxiously peered into the gloom.

Nothing!

However, Godfrey at last heard footsteps on the ground. His ear could not deceive him this time. He still looked, but could only see one of the goats come for shelter beneath the trees.

Had any of the savages happened to discover the house hidden in the enormous sequoia, Godfrey had made up his mind what to do: he would drag up Tartlet with him by the chimney inside, and take refuge in the higher branches, where he would be better able to resist. With guns and revolvers in his possession, and ammunition in abundance, he would there have some chance against a dozen savages devoid of fire-arms.

If in the event of their being armed with bows and arrows they attacked from below, it was not likely that they would have the best of it against fire-arms aimed from above. If on the other hand they forced the door of the dwelling and tried to reach the branches from the inside, they would find it very difficult to get there, owing to the narrow opening, which the besieged could easily defend.

Godfrey said nothing about this to Tartlet. The poor man had been almost out of his mind with fright since he had seen the proa. The thought that he might be obliged to take refuge in the upper part of a tree, as if in an eagle's nest, would not have soothed him in the least. If it became necessary, Godfrey decided to drag him up before he had time to think about it.

The night passed amid these alternations of fear and hope. No attack occurred. The savages had not yet come to the sequoia group. Perhaps they would wait for the day before venturing to cross the island.

"That is probably what they will do," said Godfrey, "since our flag shows that it is inhabited! But there are only a dozen of them, and they will have to be cautious! How are they to know that they have only to deal with a couple of shipwrecked men? No! They will risk nothing except by daylight--at least, if they are going to stop."

"Supposing they go away when the daylight comes?" answered Tartlet.

"Go away? Why should they have come to Phina Island for one night?"

"I do not know," replied the professor, who in his terror could only explain the arrival of the blacks by supposing that they had come to feed on human flesh.
"Anyhow," continued Godfrey; "to-morrow morning, if they have not come to Will Tree, we will go out and reconnoitre."
"We?"
"Yes! we! Nothing would be more imprudent than for us to separate! Who knows whether we may not have to run to the forest in the centre of the island and hide there for some days--until the departure of the proa! No! We will keep together, Tartlet!"
"Hush!" said the professor in a low voice; "I think I hear something outside."
Godfrey climbed up again to the window, and got down again almost immediately.
"No!" he said. "Nothing suspicious! It is only our cattle coming back to the wood."
"Hunted perhaps!" exclaimed Tartlet.
"They seem very quiet then," replied Godfrey; "I fancy they have only come in search of shelter against the morning dew."
"Ah!" murmured Tartlet in so piteous a tone that Godfrey could hardly help laughing, "these things could not happen at your uncle's place in Montgomery Street!"
"Day will soon break," said Godfrey, after a pause. "In an hour's time, if the savages have not appeared, we will leave Will Tree and reconnoitre towards the north of the island. You are able to carry a gun, Tartlet?"
"Carry? Yes!"
"And to fire it in a stated direction?"
"I do not know! I have never tried such a thing, and you may be sure, Godfrey, that my bullet will not go--"
"Who knows if the report alone might not frighten the savages?"
An hour later, it was light enough to see beyond the sequoias.
Godfrey then cautiously reopened the shutters.
From that looking to the south he saw nothing extraordinary. The domestic animals wandered peacefully under the trees, and did not appear in the least alarmed. The survey completed, Godfrey carefully shut this window. Through the opening to the north there was a view up to the shore. Two miles off even the end of Flag Point could be seen; but the mouth of the river at the place where the savages had landed the evening before was not visible. Godfrey at first looked around without using his glass, so as to examine the environs of Will Tree on this side of Phina Island.
All was quite peaceful.
Godfrey then taking his glass swept round the coast to the promontory at Flag Point. Perhaps, as Tartlet had said, though it was difficult to find the reason, the savages had embarked, after a night spent on shore, without attempting to see if the island were inhabited.

CHAPTER XVII.
IN WHICH PROFESSOR TARTLET'S GUN REALLY DOES MARVELS.
But Godfrey suddenly uttered an exclamation which made the professor jump. There could be no doubt that the savages knew the island was inhabited, for the flag hitherto hoisted at the extremity of the cape had been carried away by them and no longer floated on the mast at Flag Point. The moment had then come to put the project into execution, to reconnoitre if the savages were still in the island, and to see what they were doing.
"Let us go," said he to his companion.
"Go! But--" answered Tartlet.
"Would you rather stay here?"
"With you, Godfrey--yes!"
"No--alone!"
"Alone! Never!"
"Come along then!"
Tartlet, thoroughly understanding that Godfrey would not alter his decision, resolved to accompany him. He had not courage enough to stay behind at Will Tree.
Before starting, Godfrey assured himself that the fire-arms were ready for action. The two guns were loaded, and one passed into the hands of the professor, who seemed as much embarrassed with it as might have been a savage of Pomotou. He also hung one of the hunting-knives to his belt, to which he had already attached his cartridge-pouch. The thought had occurred to him to also take his fiddle, imagining perhaps that they would be sensible to the charm of its squeaking, of which all the talent of a virtuoso could not conceal the harshness.
Godfrey had some trouble in getting him to abandon this idea, which was as ridiculous as it was impracticable.
It was now six o'clock in the morning. The summits of the sequoias were glowing in the first rays of the sun.
Godfrey opened the door; he stepped outside; he scanned the group of trees.

Complete solitude.
The animals had returned to the prairie. There they were, tranquilly browsing, about a quarter of a mile away. Nothing about them denoted the least uneasiness.

Godfrey made a sign to Tartlet to join him. The professor, as clumsy as could be in his fighting harness, followed—not without some hesitation.

Then Godfrey shut the door, and saw that it was well hidden in the bark of the sequoia. Then, having thrown at the foot of the tree a bundle of twigs, which he weighted with a few large stones, he set out towards the river, whose banks he intended to descend, if necessary, to its mouth. Tartlet followed him not without giving before each of his steps an uneasy stare completely round him up to the very limits of the horizon; but the fear of being left alone impelled him to advance.

Arrived at the edge of the group of trees, Godfrey stopped.

Taking his glasses from their case, he scanned with extreme attention all that part of the coast between the Flag Point promontory and the north-east angle of the island.

Not a living being showed itself, not a single smoke wreath was rising in the air.

The end of the cape was equally deserted, but they would there doubtless find numberless footprints freshly made. As for the mast, Godfrey had not been deceived. If the staff still rose above the last rock on the cape, it was bereft of its flag. Evidently the savages after coming to the place had gone off with the red cloth which had excited their covetousness, and had regained their boat at the mouth of the river.

Godfrey then turned off so as to examine the western shore.

It was nothing but a vast desert from Flag Point right away beyond the curve of Dream Bay.

No boat of any kind appeared on the surface of the sea. If the savages had taken to their proa, it only could be concluded that they were hugging the coast sheltered by the rocks, and so closely that they could not be seen.

However, Godfrey could not and would not remain in doubt. He was determined to ascertain, yes or no, if the proa had definitely left the island.

To do this it was necessary to visit the spot where the savages had landed the night before, that is to say, the narrow creek at the mouth of the river.

This he immediately attempted.

The borders of the small watercourse were shaded by occasional clumps of trees encircled by shrubs, for a distance of about two miles. Beyond that for some five or six hundred yards down to the sea the river ran between naked banks. This state of affairs enabled him to approach close to the landing-place without being perceived. It might be, however, that the savages had ascended the stream, and to be prepared for this eventuality the advance had to be made with extreme caution.

Godfrey, however thought, not without reason, that, at this early hour the savages, fatigued by their long voyage, would not have quitted their anchorage. Perhaps they were still sleeping either in their canoe or on land; in which case it would be seen if they could not be surprised.

This idea was acted upon at once. It was important that they should get on quickly. In such circumstances the advantage is generally gained at the outset. The fire-arms were again examined, the revolvers were carefully looked at, and then Godfrey and Tartlet commenced the descent of the left bank of the river in Indian file. All around was quiet. Flocks of birds flew from one bank to the other, pursuing each other among the higher branches without showing any uneasiness.

Godfrey went first, but it can easily be believed that his companion found the attempt to cover step rather tiring. Moving from one tree to another they advanced towards the shore without risk of discovery. Here the clumps of bushes hid them from the opposite bank, there even their heads disappeared amid the luxurious vegetation. But no matter where they were, an arrow from a bow or a stone from a sling might at any moment reach them. And so they had to be constantly on their guard.

However, in spite of the recommendations which were addressed to him, Tartlet, tripping against an occasional stump, had two or three falls which might have complicated matters. Godfrey was beginning to regret having brought such a clumsy assistant. Indeed, the poor man could not be much help to him. Doubtless he would have been worth more left behind at Will Tree; or, if he would not consent to that, hidden away in some nook in the forest. But it was too late. An hour after he had left the sequoia group, Godfrey and his companion had come a mile-only a mile—for the path was not easy beneath the high vegetation and between the luxuriant shrubs. Neither one nor the other of our friends had seen anything suspicious.

Hereabouts the trees thinned out for about a hundred yards or less, the river ran between naked banks, the country round was barer.

Godfrey stopped. He carefully observed the prairie to the right and left of the stream.
Still there was nothing to disquiet him, nothing to indicate the approach of savages. It is true that as they could not but believe the island inhabited, they would not advance without precaution, in fact they would be as careful in ascending the little river as Godfrey was in descending it. It was to be supposed therefore that if they were prowling about the neighbourhood, they would also profit by the shelter of the trees or the high bushes of mastics and myrtles which formed such an excellent screen.

It was a curious though very natural circumstance that, the farther they advanced, Tartlet, perceiving no enemy, little by little lost his terror, and began to speak with scorn of "those cannibal laughing-stocks." Godfrey, on the contrary, became more anxious, and it was with greater precaution than ever that he crossed the open space and regained the shadow of the trees. Another hour led them to the place where the banks, beginning to feel the effects of the sea's vicinity, were only bordered with stunted shrubs, or sparse grasses.

Under these circumstances it was difficult to keep hidden or rather impossible to proceed without crawling along the ground.

This is what Godfrey did, and also what he advised Tartlet to do.

"There are not any savages! There are not any cannibals! They have all gone!" said the professor.

"There are!" answered Godfrey quickly, in a low voice, "They ought to be here! Down Tartlet, get down! Be ready to fire, but don't do so till I tell you."

Godfrey had said these words in such a tone of authority that the professor, feeling his limbs give way under him, had no difficulty in at once assuming the required position.

And he did well!

In fact, it was not without reason that Godfrey had spoken as he had.

From the spot which they then occupied, they could see neither the shore, nor the place where the river entered the sea. A small spur of hills shut out the view about a hundred yards ahead, but above this near horizon a dense smoke was rising straight in the air.

Godfrey, stretched at full length in the grass, with his finger on the trigger of his musket, kept looking towards the coast.

"This smoke," he said, "is it not of the same kind that I have already seen twice before? Should I conclude that savages have previously landed on the north and south of the island, and that the smoke came from fires lighted by them? But no! That is not possible, for I found no cinders, nor traces of a fireplace, nor embers! Ah! this time I'll know the reason of it."

And by a clever reptilian movement, which Tartlet imitated as well as he could, he managed, without showing his head above the grass, to reach the bend of the river.

Thence he could command, at his ease, every part of the bank through which the river ran.

An exclamation could not but escape him! His hand touched the professor's shoulder to prevent any movement of his! Useless to go further! Godfrey saw what he had come to see!

A large fire of wood was lighted on the beach, among the lower rocks, and from it a canopy of smoke rose slowly to the sky. Around the fire, feeding it with fresh armfuls of wood, of which they had made a heap, went and came the savages who had landed the evening before. Their canoe was moored to a large stone, and, lifted by the rising tide, oscillated on the ripples of the shore.

Godfrey could distinguish all that was passing on the sands without using his glasses. He was not more than two hundred yards from the fire, and he could even hear it crackling. He immediately perceived that he need fear no surprise from the rear, for all the blacks he had counted in the proa were in the group.

Ten out of the twelve were occupied in looking after the fire and sticking stakes in the ground with the evident intention of rigging up a spit in the Polynesian manner. An eleventh, who appeared to be the chief, was walking along the beach, and constantly turning his glances towards the interior of the island, as if he were afraid of an attack.

Godfrey recognized as a piece of finery on his shoulders the red stuff of his flag.

The twelfth savage was stretched on the ground, tied tightly to a post.

Godfrey recognized at once the fate in store for the wretched man. The spit was for him! The fire was to roast him at! Tartlet had not been mistaken, when, the previous evening, he had spoken of these folks as cannibals!

It must be admitted that neither was he mistaken in saying that the adventures of Crusoes, real or imaginary, were all copied one from the other!

Most certainly Godfrey and he did then find themselves in the same position as the hero of Daniel Defoe when the savages landed on his island. They were to assist, without doubt, at the same scene of cannibalism.

Godfrey decided to act as this hero did! He would not permit the massacre of the prisoner for which the stomachs of the cannibals were waiting! He was well armed. His two muskets--four shots--his two revolvers--a dozen shots--could easily settle these eleven rascals, whom the mere report of one of the fire-arms might perhaps be
sufficient to scatter. Having taken his decision he coolly waited for the moment to interfere like a thunder-clap. He had not long to wait!

Twenty minutes had barely elapsed, when the chief approached the fire. Then by a gesture he pointed out the prisoner to the savages who were expecting his orders.

Godfrey rose. Tartlet, without knowing why, followed the example. He did not even comprehend where his companion was going, for he had said nothing to him of his plans.

Godfrey imagined, evidently, that at sight of him the savages would make some movement, perhaps to rush to their boat, perhaps to rush at him.

They did nothing. It did not even seem as though they saw him; but at this moment the chief made a significant gesture. Three of his companions went towards the prisoner, unloosed him, and forced him near the fire.

He was still a young man, who, feeling that his last hour had come, resisted with all his might.

Assuredly, if he could, he would sell his life dearly. He began by throwing off the savages who held him, but he was soon knocked down, and the thief, seizing a sort of stone axe, jumped forward to beat in his head.

Godfrey uttered a cry, followed by a report. A bullet whistled through the air, and it seemed as though the chief were mortally wounded, for he fell on the ground.

At the report, the savages, surprised as though they had never heard the sound of fire-arms, stopped. At the sight of Godfrey those who held the prisoner instantly released him.

Immediately the poor fellow arose, and ran towards the place where he perceived his unexpected liberator.

At this moment a second report was heard.

It was Tartlet, who, without looking—for the excellent man kept his eyes shut—had just fired, and the stock of the musket on his right shoulder delivered the hardest knock which had ever been received by the professor of dancing and deportment.

But—what a chance it was!—a second savage fell close to his chief.

The rout at once began. Perhaps the savages thought they had to do with a numerous troop of natives whom they could not resist. Perhaps they were simply terrified at the sight of the two white men who seemed to keep the lightning in their pockets. There they were, seizing the two who were wounded, carrying them off, rushing to the proa, driving it by their paddles out of the little creek, hoisting their sail, steering before the wind, making for the Flag Point promontory, and doubling it in hot haste.

Godfrey had no thought of pursuing them. What was the good of killing them? They had saved the victim. They had put them to flight, that was the important point. This had been done in such a way that the cannibals would never dare to return to Phina Island.

All was then for the best. They had only to rejoice in their victory, in which Tartlet did not hesitate to claim the greatest share.

Meanwhile the prisoner had come to his rescuer. For an instant he stopped, with the fear inspired in him by superior beings, but almost immediately he resumed his course. When he arrived before the two whites, he bowed to the ground; then catching hold of Godfrey's foot, he placed it on his head in sign of servitude.

One would almost have thought that this Polynesian savage had also read Robinson Crusoe!

CHAPTER XVIII.
WHICH TREATS OF THE MORAL AND PHYSICAL EDUCATION OF A SIMPLE NATIVE OF THE PACIFIC.

Godfrey at once raised the poor fellow, who lay prostrate before him. He looked in his face.

He was a man of thirty-five or more, wearing only a rag round his loins. In his features, as in the shape of his head, there could be recognized the type of the African negro. It was not possible to confound him with the debased wretches of the Polynesian islands, who, with their depressed crania and elongated arms, approach so strangely to the monkey.

Now, as he was a negro from Soudan or Abyssinia who had fallen into the hands of the natives of an archipelago of the Pacific, it might be that he could speak English or one or two words of the European languages which Godfrey understood. But it was soon apparent that the unhappy man only used an idiom that was absolutely incomprehensible—probably the language of the aborigines among whom he had doubtless arrived when very young. In fact, Godfrey had immediately interrogated him in English, and had obtained no reply. He then made him understand by signs, not without difficulty, that he would like to know his name.

After many fruitless essays, the negro, who had a very intelligent and even honest face, replied to the demand which was made of him in a single word,—
"Carefinotu."
"Carefinotu!" exclaimed Tartlet. "Do you hear the name? I propose that we call him 'Wednesday,' for to-day is Wednesday, and that is what they always do in these Crusoe islands! Is he to be allowed to call himself Carefinotu?"

"If that is his name," said Godfrey; "why should he not keep it?"

And at the moment he felt a hand placed on his chest, while all the black's physiognomy seemed to ask him what his name was.

"Godfrey!" answered he.

The black endeavoured to say the word, but although Godfrey repeated it several times, he could not succeed in pronouncing it in an intelligible fashion. Then he turned towards the professor, as if to know his name.

"Tartlet," was the reply of that individual in a most amiable tone.

"Tartlet!" repeated Carefinotu.

And it seemed as though this assemblage of syllables was more agreeable to his vocal chords, for he pronounced it distinctly.

The professor appeared to be extremely flattered. In truth he had reason to be.

Then Godfrey, wishing to put the intelligence of the black to some profit, tried to make him understand that he wished to know the name of the island. He pointed with his hand to the woods and prairies and hills, and then the shore which bound them, and then the horizon of the sea, and he interrogated him with a look.

Carefinotu did not at first understand what was meant, and imitating the gesture of Godfrey he also turned and ran his eyes over the space.

"Arneka," said he at length.

"Arneka?" replied Godfrey, striking the soil with his foot so as to accentuate his demand.

"Arneka!" repeated the negro.

This told Godfrey nothing, neither the geographical name borne by the island, nor its position in the Pacific. He could not remember such a name; it was probably a native one, little known to geographers.

However, Carefinotu did not cease from looking at the two white men, not without some stupor, going from one to the other as if he wished to fix in his mind the differences which characterized them. The smile on his mouth disclosed abundant teeth of magnificent whiteness which Tartlet did not examine without a certain reserve.

"If those teeth," he said, "have never eaten human flesh may my fiddle burst up in my hand."

"Anyhow, Tartlet," answered Godfrey; "our new companion no longer looks like the poor beggar they were going to cook and feed on! That is the main point!"

What particularly attracted the attention of Carefinotu were the weapons carried by Godfrey and Tartlet—as much the musket in the hand as the revolver in the belt.

Godfrey easily understood this sentiment of curiosity. It was evident that the savage had never seen a fire-arm. He said to himself that this was one of those iron tubes which had launched the thunder-bolt that had delivered him? There could be no doubt of it.

Godfrey, wishing to give him, not without reason, a high idea of the power of the whites, loaded his gun, and then, showing to Carefinotu a red-legged partridge that was flying across the prairie about a hundred yards away, he shouldered it quickly, and fired. The bird fell.

At the report the black gave a prodigious leap, which Tartlet could not but admire from a choreographic point of view. Then repressing his fear, and seeing the bird with broken wing running through the grass, he started off and swift as a greyhound ran towards it, and with many a caper, half of joy, half of stupefaction, brought it back to his master.

Tartlet then thought of displaying to Carefinotu that the Great Spirit had also favoured him with the power of the lightning; and perceiving a kingfisher tranquilly seated on an old stump near the river was bringing the stock up to his cheek, when Godfrey stopped him with—

"No! Don't fire, Tartlet!"

"Why not?"

"Suppose that by some mishap you were not to hit the bird, think how we would fall in the estimation of the nigger!"

"And why should I not hit him?" replied Tartlet with some acerbity. "Did I not, during the battle, at more than a hundred paces, the very first time I handled a gun, hit one of the cannibals full in the chest?"

"You touched him evidently," said Godfrey; "for he fell. But take my advice, Tartlet, and in the common interest do not tempt fortune twice!"

The professor, slightly annoyed, allowed himself to be convinced; he threw the gun on to his shoulder with a swagger, and both our heroes, followed by Carefinotu, returned to Will Tree.

There the new guest of Phina Island met with quite a surprise in the habitation so happily contrived in the lower part of the sequoia. First he had to be shown, by using them while he looked on, the use of the tools, instruments,
and utensils. It was obvious that Carefinotu belonged to, or had lived amongst savages in the lowest rank of the human scale, for fire itself seemed to be unknown to him. He could not understand why the pot did not take fire when they put it on the blazing wood; he would have hurried away from it, to the great displeasure of Tartlet, who was watching the different phases of the cooking of the soup. At a mirror, which was held out to him, he betrayed consummate astonishment; he turned round, and turned it round to see if he himself were not behind it.

"The fellow is hardly a monkey!" exclaimed the professor with a disdainful grimace.

"No, Tartlet," answered Godfrey; "he is more than a monkey, for his looks behind the mirror show good reasoning power."

"Well, I will admit that he is not a monkey," said Tartlet, shaking his head as if only half convinced; "but we shall see if such a being can be of any good to us."

"I am sure he will be!" replied Godfrey.

In any case Carefinotu showed himself quite at home with the food placed before him. He first tore it apart, and then tasted it; and then I believe that the whole breakfast of which they partook the--agouti soup, the partridge killed by Godfrey, and the shoulder of mutton with camas and yamph roots--would hardly have sufficed to calm the hunger which devoured him.

"The poor fellow has got a good appetite!" said Godfrey.

"Yes," responded Tartlet; "and we shall have to keep a watch on his cannibal instinct."

"Well, Tartlet! We shall make him get over the taste of human flesh if he ever had it!"

"I would not swear that," replied the professor. "It appears that once they have acquired this taste--"

While they were talking, Carefinotu was listening with extreme attention. His eyes sparkled with intelligence. One could see that he understood what was being said in his presence. He then spoke with extreme volubility, but it was only a succession of onomatopoeias devoid of sense, of harsh interjections with _a_ and _ou_ predominant, as in the majority of Polynesian idioms.

Whatever the negro was, he was a new companion; he might become a devoted servant, which the most unexpected chance had sent to the hosts of Will Tree.

He was powerful, adroit, active; no work came amiss to him. He showed a real aptitude to imitate what he saw being done. It was in this way that Godfrey proceeded with his education. The care of the domestic animals, the collection of the roots and fruits, the cutting up of the sheep or agouties, which were to serve for food for the day, the fabrication of a sort of cider they extracted from the wild manzanilla apples,—he acquitted himself well in all these tasks, after having seen them done.

Whatever Tartlet thought, Godfrey felt no distrust in the savage, and never seemed to regret having come across him. What disquieted him was the possible return of the cannibals who now knew the situation of Phina Island.

From the first, a bed had been reserved for Carefinotu in the room at Will Tree, but generally, unless it was raining, he preferred to sleep outside in some hole in the tree, as though he were on guard over the house.

During the fortnight which followed his arrival on the island, Carefinotu many times accompanied Godfrey on his shooting excursions. His surprise was always extreme when he saw the game fall hit at such a distance; but in his character of retriever, he showed a dash and daring which no obstacles, hedge or bush, or stream, could stop.

Gradually, Godfrey became greatly attached to this negro. There was only one part of his progress in which Carefinotu showed refractoriness; that was in learning the English language. Do what he might he could not be prevailed upon to pronounce the most ordinary words which Godfrey, and particularly Professor Tartlet tried to teach him.

So the time passed. But if the present was fairly supportable, thanks to a happy accident, if no immediate danger menaced them, Godfrey could not help asking himself, if they were ever to leave this island, by what means they were to rejoin their country! Not a day passed but he thought of Uncle Will and his betrothed. It was not without secret apprehension that he saw the bad season approaching, which would put between his friends and him a barrier still more impassable.

On the 27th of September a circumstance occurred deserving of note.

If it gave more work to Godfrey and his two companions, it at least assured them of an abundant reserve of food.

Godfrey and Carefinotu were busied in collecting the mollusks, at the extreme end of Dream Bay, when they perceived out at sea an innumerable quantity of small moving islets which the rising tide was bringing gently to shore. It was a sort of floating archipelago, on the surface of which there walked, or flew, a few of those sea-birds, with great expanse of wing, known as sea-hawks.

What then were these masses which floated landwards, rising and falling with the undulations of the waves?

Godfrey did not know what to think, when Carefinotu threw himself down on his stomach, and then drawing his head back into his shoulders, folded beneath him his arms and legs, and began to imitate the movements of an animal crawling slowly along the ground.
Godfrey looked at him without understanding these extraordinary gymnastics. Then suddenly--
"Turtles!" he exclaimed.
Carefinotu was right. There was quite a square mile of myriads of turtles, swimming on the surface of the water.
About a hundred fathoms from the shore the greater part of them dived and disappeared, and the sea-hawks, finding their footing gone, flew up into the air in large spirals. But luckily about a hundred of the amphibians came on to the beach.
Godfrey and the negro had quickly run down in front of these creatures, each of which measured at the least from three to four feet in diameter. Now the only way of preventing turtles from regaining the sea is to turn them on their backs; and it was in this rough work that Godfrey and Carefinotu employed themselves, not without great fatigue.

The following days were spent in collecting the booty. The flesh of the turtle, which is excellent either fresh or preserved, could perhaps be kept for a time in both forms. In preparation for the winter, Godfrey had the greater part salted in such a way as to serve for the needs of each day. But for some time the table was supplied with turtle soup, on which Tartlet was not the only one to regale himself.

Barring this incident, the monotony of existence was in no way ruffled. Every day the same hours were devoted to the same work. Would not the life become still more depressing when the winter season would oblige Godfrey and his companions to shut themselves up in Will Tree? Godfrey could not think of it without anxiety. But what could he do?
Meanwhile, he continued the exploration of the island, and all the time not occupied with more pressing tasks he spent in roaming about with his gun. Generally Carefinotu accompanied him, Tartlet remaining behind at the dwelling. Decidedly he was no hunter, although his first shot had been a master-stroke!

Now on one of these occasions an unexpected incident happened, of a nature to gravely compromise the future safety of the inmates of Will Tree.
Godfrey and the black had gone out hunting in the central forest, at the foot of the hill which formed the principal ridge of Phina Island. Since the morning they had seen nothing pass but two or three antelopes through the high underwood, but at too great a distance for them to fire with any chance of hitting them.

As Godfrey was not in search of game for dinner, and did not seek to destroy for destruction's sake, he resigned himself to return empty-handed. If he regretted doing so it was not so much for the meat of the antelope, as for the skin, of which he intended to make good use.

It was about three o'clock in the afternoon. He and his companion after lunch were no more fortunate than before. They were preparing to return to Will Tree for dinner, when, just as they cleared the edge of the wood, Carefinotu made a bound; then precipitating himself on Godfrey, he seized him by the shoulders, and dragged him along with such vigour that resistance was impossible.

After going about twenty yards they stopped. Godfrey took breath, and, turning towards Carefinotu, interrogated him with a look.

The black, exceedingly frightened, stretched out his hand towards an animal which was standing motionless about fifty yards off.

It was a grizzly bear, whose paws held the trunk of a tree, and who was swaying his big head up and down, as if he were going to rush at the two hunters.

Immediately, without pausing to think, Godfrey loaded his gun, and fired before Carefinotu could hinder him.

Was the enormous plantigrade hit by the bullet? Probably. Was he killed? They could not be sure, but his paws unclasped, and he rolled at the foot of the tree. Delay was dangerous. A struggle with so formidable an animal might have the worst results. In the forests of California the pursuit of the grizzly is fraught with the greatest danger, even to professional hunters of the beast.

And so the black seized Godfrey by the arms to drag him away in the direction of Will Tree, and Godfrey, understanding that he could not be too cautious, made no resistance.

CHAPTER XIX.
IN WHICH THE SITUATION ALREADY GRAVELY COMPROMISED BECOMES MORE AND MORE COMPLICATED.

The presence of a formidable wild beast in Phina Island was, it must be confessed, calculated to make our friends think the worst of the ill-fortune which had fallen on them.

Godfrey--perhaps he was wrong--did not consider that he ought to hide from Tartlet what had passed.

"A bear!" screamed the professor, looking round him with a bewildered glare as if the environs of Will Tree were being assailed by a herd of wild beasts. "Why, a bear? Up to now we had not even got a bear in our island! If
there is one there may be many, and even numbers of other ferocious beasts—jaguars, panthers, tigers, hyænas, lions!"

Tartlet already beheld Phina Island given over to quite a menagerie escaped from their cages.

Godfrey answered that there was no need for him to exaggerate. He had seen one bear, that was certain. Why one of these animals had never been seen before in his wanderings on the island he could not explain, and it was indeed inexplicable. But to conclude from this that wild animals of all kinds were prowling in the woods and prairies was to go too far. Nevertheless, they would have to be cautious and never go out unarmed.

Unhappy Tartlet! From this day there commenced for him an existence of anxieties, emotions, alarms, and irrational terrors which gave him nostalgia for his native land in a most acute form.

"No!" repeated he. "No! If there are animals—I have had enough of it, and I want to get off!"

He had not the power.

Godfrey and his companions then had henceforth to be on their guard. An attack might take place not only on the shore side or the prairie side, but even in the group of sequoias. This is why serious measures were taken to put the habitation in a state to repel a sudden attack. The door was strengthened, so as to resist the clutches of a wild beast. As for the domestic animals Godfrey would have built a stable to shut them up in at least at night, but it was not easy to do so. He contented himself at present with making a sort of enclosure of branches not far from Will Tree, which would keep them as in a fold. But the enclosure was not solid enough nor high enough to hinder a bear or hyæna from upsetting it or getting over it.

Notwithstanding the remonstrances made to him, Carefinotu persisted in watching outside during the night, and Godfrey hoped thus to receive warning of a direct attack.

Decidedly Carefinotu endangered his life in thus constituting himself the guardian of Will Tree; but he had understood that he could thus be of service to his liberators, and he persisted, in spite of all Godfrey said to him, in watching as usual over the general safety.

A week passed without any of these formidable visitors appearing in the neighbourhood. Godfrey did not go very far from the dwelling, unless there was a necessity for his doing so. While the sheep and goats grazed on the neighbouring prairie, they were never allowed out of sight. Generally Carefinotu acted as shepherd. He did not take a gun, for he did not seem to understand the management of fire-arms, but one of the hunting-knives hung from his belt, and he carried an axe in his right hand. Thus armed the active negro would not have hesitated to throw himself before a tiger or any animal of the worst description.

However, as neither a bear nor any of his congers had appeared since the last encounter Godfrey began to gather confidence. He gradually resumed his hunting expeditions, but without pushing far into the interior of the island. Frequently the black accompanied him; Tartlet, safe in Will Tree, would not risk himself in the open, not even if he had the chance of giving a dancing lesson. Sometimes Godfrey would go alone, and then the professor had a companion to whose instruction he obstinately devoted himself.

Yes! Tartlet had at first thought of teaching Carefinotu the most ordinary words in the English language, but he had to give this up, as the negro seemed to lack the necessary phonetic apparatus for that kind of pronunciation. "Then," had Tartlet said, "if I cannot be his professor, I will be his pupil!"

And he it was who attempted to learn the idiom spoken by Carefinotu. Godfrey had warned him that the accomplishment would be of little use. Tartlet was not dissuaded. He tried to get Carefinotu to name the objects he pointed at with his hand. In truth Tartlet must have got on excellently, for at the end of fifteen days he actually knew fifteen words! He knew that Carefinotu said "birsi" for fire, "aradore" for the sky, "mervira" for the sea, "doura" for a tree, &c. He was as proud of this as if he had taken the first prize for Polynesian at some examination!

It was then with a feeling of gratitude that he wished to make some recognition of what had been done for him, and instead of torturing the negro with English words, he resolved on teaching him deportment and the true principles of European choreography.

At this Godfrey could not restrain his peals of laughter. After all it would pass the time away, and on Sunday, when there was nothing else to do, he willingly assisted at the course of lectures delivered by the celebrated Professor Tartlet of San Francisco. Indeed, we ought to have seen them! The unhappy Carefinotu perspired profusely as he went through the elementary exercises. He was docile and willing, nevertheless; but like all his fellows, his shoulders did not set back, nor did his chest throw out, nor did his knees or his feet point apart! To make a Vestris or a Saint Leon of a savage of this sort!

The professor pursued his task in quite a fury. Carefinotu, tortured as he was, showed no lack of zeal. What he suffered, even to get his feet into the first position can be imagined! And when he passed to the second and then to the third, it was still more agonizing.

"But look at me, you blockhead!" exclaimed Tartlet, who added example to precept. "Put your feet out! Further out! The heel of one to the heel of the other! Open your knees, you duffer! Put back your shoulders, you idiot! Stick
But you ask what is impossible!" said Godfrey.
"Nothing is impossible to an intelligent man!" was Tartlet's invariable response.
"But his build won't allow of it."
"Well, his build must allow of it! He will have to do it sooner or later, for the savage must at least know how to
present himself properly in a drawing-room!"
"But, Tartlet, he will never have the opportunity of appearing in a drawing-room!"
"Ah! How do you know that, Godfrey?" replied the professor, drawing himself up. "Do you know what the
future may bring forth?"
This was the last word in all discussions with Tartlet. And then the professor taking his kit would with the bow
extract from it some squeaky little air to the delight of Carefinotu. It required but this to excite him. Oblivious of
choregraphic rules, what leaps, what contortions, what capers!

And Tartlet, in a reverie, as he saw this child of Polynesia so demean himself, inquired if these steps, perhaps a
little too characteristic, were not natural to the human being, although outside all the principles of his art.

But we must leave the professor of dancing and deportment to his philosophical meditations, and return to
questions at once more practical and pressing.

During his last excursions into the plain, either by himself or with Carefinotu, Godfrey had seen no wild animal.
He had even come upon no traces of such. The river to which they would come to drink bore no footprint on its
banks. During the night there were no howlings nor suspicious noises. Besides the domestic animals continued to
give no signs of uneasiness.

"This is singular," said Godfrey several times; "but I was not mistaken! Carefinotu certainly was not! It was
really a bear that he showed me! It was really a bear that I shot! Supposing I killed him, was he the last
representative of the plantigrades on the island?"

It was quite inexplicable! Besides, if Godfrey had killed this bear, he would have found the body where he had
shot it. Now they searched for it in vain! Were they to believe then that the animal mortally wounded had died far
off in some den. It was possible after all, but then at this place, at the foot of this tree, there would have been traces
of blood, and there were none.

"Whatever it is," thought Godfrey, "it does not much matter; and we must keep on our guard."

With the first days of November it could be said that the wet season had commenced in this unknown latitude.
Cold rains fell for many hours. Later on probably they would experience those interminable showers which do not
cease for weeks at a time, and are characteristic of the rainy period of winter in these latitudes.

Godfrey had then to contrive a fireplace in the interior of Will Tree--an indispensable fireplace that would serve
as well to warm the dwelling during the winter months as to cook their food in shelter from the rain and tempest.
The hearth could at any time be placed in a corner of the chamber between big stones, some placed on the
ground and others built up round them; but the question was how to get the smoke out, for to leave it to escape by
the long chimney, which ran down the centre of the sequoia, proved impracticable.

Godfrey thought of using as a pipe some of those long stout bamboos which grew on certain parts of the river
banks. It should be said that on this occasion he was greatly assisted by Carefinotu. The negro, not without effort,
understood what Godfrey required. He it was who accompanied him for a couple of miles from Will Tree to select
the larger bamboos, he it was who helped him build his hearth. The stones were placed on the ground opposite to the
door; the bamboos, emptied of their pith and bored through at the knots, afforded, when joined one to another, a tube
of sufficient length, which ran out through an apertured made for it in the sequoia bark, and would serve every
purpose, provided it did not catch fire. Godfrey soon had the satisfaction of seeing a good fire burning without
filling the interior of Will Tree with smoke.

He was quite right in hastening on these preparations, for from the 3rd to the 10th of November the rain never
ceased pouring down. It would have been impossible to keep a fire going in the open air. During these miserable
days they had to keep indoors and did not venture out except when the flocks and poultry urgently required them to
do so. Under these circumstances the reserve of camas roots began to fail; and these were what took the place of
bread, and of which the want would be immediately felt.

Godfrey then one day, the 10th of November, informed Tartlet that as soon as the weather began to mend a little
he and Carefinotu would go out and collect some. Tartlet, who was never in a hurry to run a couple of miles across a
soaking prairie, decided to remain at home during Godfrey's absence.

In the evening the sky began to clear of the heavy clouds which the west wind had been accumulating since the
commencement of the month, the rain gradually ceased, the sun gave forth a few crepuscular rays. It was to be
hoped that the morning would yield a lull in the storm, of which it was advisable to make the most.

"To-morrow," said Godfrey, "I will go out, and Carefinotu will go with me."
"Agreed!" answered Tartlet.

The evening came, and when supper was finished and the sky, cleared of clouds, permitted a few brilliant stars to appear, the black wished to take up his accustomed place outside, which he had had to abandon during the preceding rainy nights. Godfrey tried to make him understand that he had better remain indoors, that there was no necessity to keep a watch as no wild animal had been noticed; but Carefinotu was obstinate. He therefore had to have his way.

The morning was as Godfrey had foreseen, no rain had fallen since the previous evening, and when he stepped forth from Will Tree, the first rays of the sun were lightly gilding the thick dome of the sequoias.

Carefinotu was at his post, where he had passed the night. He was waiting. Immediately, well armed and provided with large sacks, the two bid farewell to Tartlet, and started for the river, which they intended ascending along the left bank up to the camas bushes.

An hour afterwards they arrived there without meeting with any unpleasant adventure.

The roots were rapidly torn up and a large quantity obtained, so as to fill the sacks. This took three hours, so that it was about eleven o'clock in the morning when Godfrey and his companion set out on their return to Will Tree.

Walking close together, keeping a sharp look-out, for they could not talk to each other, they had reached a bend in the small river where there were a few large trees, grown like a natural cradle across the stream, when Godfrey suddenly stopped.

This time it was he who showed to Carefinotu a motionless animal at the foot of a tree whose eyes were gleaming with a singular light.

"A tiger!" he exclaimed.

He was not mistaken. It was really a tiger of large stature resting on its hind legs with its forepaws on the trunk of a tree, and ready to spring.

In a moment Godfrey had dropped his sack of roots. The loaded gun passed into his right hand; he cocked it, presented it, aimed it, and fired.

"Hurrah! hurrah!" he exclaimed.

This time there was no room for doubt; the tiger, struck by the bullet, had bounded backwards. But perhaps he was not mortally wounded, perhaps rendered still more furious by his wound he would spring on to them!

Godfrey held his gun pointed, and threatened the animal with his second barrel.

But before Godfrey could stop him, Carefinotu had rushed at the place where the tiger disappeared, his hunting-knife in his hand.

Godfrey shouted for him to stop, to come back! It was in vain. The black, resolved even at the risk of his life to finish the animal which perhaps was only wounded, did not or would not hear.

Godfrey rushed after him.

When he reached the bank, he saw Carefinotu struggling with the tiger, holding him by the throat, and at last stabbing him to the heart with a powerful blow.

The tiger then rolled into the river, of which the waters, swollen by the rains, carried it away with the quickness of a torrent. The corpse, which floated only for an instant, was swiftly borne off towards the sea.

A bear! A tiger! There could be no doubt that the island did contain formidable beasts of prey!

Godfrey, after rejoining Carefinotu, found that in the struggle the black had only received a few scratches. Then, deeply anxious about the future, he retook the road to Will Tree.

CHAPTER XX.

IN WHICH TARTLET REITERATES IN EVERY KEY THAT HE WOULD RATHER BE OFF.

When Tartlet learnt that there were not only bears in the island, but tigers too, his lamentations again arose. Now he would never dare to go out! The wild beasts would end by discovering the road to Will Tree! There was no longer any safety anywhere! In his alarm the professor wanted for his protection quite a fortification! Yes! Stone walls with scarpes and counterscarps, curtains and bastions, and ramparts, for what was the use of a shelter under a group of sequoias? Above all things, he would at all risks, like to be off.

"So would I," answered Godfrey quietly.

In fact, the conditions under which the castaways on Phina Island had lived up to now were no longer the same. To struggle to the end, to struggle for the necessaries of life, they had been able, thanks to fortunate circumstances. Against the bad season, against winter and its menaces, they knew how to act, but to have to defend themselves against wild animals, whose attack was possible every minute, was another thing altogether; and in fact they could not do it.

The situation, already complicated, had become very serious, for it had become intolerable.
"But," repeated Godfrey to himself, without cessation, "how is it that for four months we did not see a single
beast of prey in the island, and why during the last fortnight have we had to encounter a bear and a tiger? What shall
we say to that?"

The fact might be inexplicable, but it was none the less real.

Godfrey, whose coolness and courage increased, as difficulties grew, was not cast down. If dangerous animals
menaced their little colony, it was better to put themselves on guard against their attacks, and that without delay.

But what was to be done?

It was at the outset decided that excursions into the woods or to the sea-shore should be rarer, and that they
should never go out unless well armed, and only when it was absolutely necessary for their wants.

"We have been lucky enough in our two encounters!" said Godfrey frequently; "but there may come a time when
we may not shoot so straight! So there is no necessity for us to run into danger!"

At the same time they had not only to settle about the excursions, but to protect Will Tree--not only the dwelling,
but the annexes, the poultry roost, and the fold for the animals, where the wild beasts could easily cause irreparable
disaster.

Godfrey thought then, if not of fortifying Will Tree according to the famous plans of Tartlet, at least of
connecting the four or five large sequoias which surrounded it.

If he could devise a high and strong palisade from one tree to another, they would be in comparative security at
any rate from a surprise.

It was practicable--Godfrey concluded so after an examination of the ground--but it would cost a good deal of
labour. To reduce this as much as possible, he thought of erecting the palisade around a perimeter of only some three
hundred feet. We can judge from this the number of trees he had to select, cut down, carry, and trim until the
enclosure was complete.

Godfrey did not quail before his task. He imparted his projects to Tartlet, who approved them, and promised his
active co-operation; but what was more important, he made his plans understood to Carefinotu, who was always
ready to come to his assistance.

They set to work without delay.

There was at a bend in the stream, about a mile from Will Tree, a small wood of stone pines of medium height,
whose trunks, in default of beams and planks, without wanting to be squared, would, by being placed close together,
form a solid palisade.

It was to this wood that, at dawn on the 12th of November, Godfrey and his two companions repaired. Though
well armed they advanced with great care.

"You can have too much of this sort of thing," murmured Tartlet, whom these new difficulties had rendered still
more discontented, "I would rather be off!"

But Godfrey did not take the trouble to reply to him.

On this occasion his tastes were not being consulted, his intelligence even was not being appealed to. It was the
assistance of his arms that the common interest demanded. In short, he had to resign himself to his vocation of beast
of burden.

No unpleasant accident happened in the mile which separated the wood from Will Tree. In vain they had
carefully beaten the underwood, and swept the horizon all around them. The domestic animals they had left out at
pasture gave no sign of alarm. The birds continued their frolics with no more anxiety than usual.

Work immediately began. Godfrey, very properly did not want to begin carrying until all the trees he wanted had
been felled. They could work at them in greater safety on the spot.

Carefinotu was of great service during this toilsome task. He had become very clever in the use of the axe and
saw. His strength even allowed him to continue at work when Godfrey was obliged to rest for a minute or so, and
when Tartlet, with bruised hands and aching limbs, had not even strength left to lift his fiddle.

However, although the unfortunate professor of dancing and deportment had been transformed into a wood-
cutter, Godfrey had reserved for him the least fatiguing part, that is, the clearing off of the smaller branches. In spite
of this, if Tartlet had only been paid half a dollar a day, he would have stolen four-fifths of his salary!

For six days, from the 12th to the 17th of November, these labours continued. Our friends went off in the
morning at dawn, they took their food with them, and they did not return to Will Tree until evening. The sky was not
very clear. Heavy clouds frequently accumulated over it. It was harvest weather, with alternating showers and
sunshine; and during the showers the wood-cutters would take shelter under the trees, and resume their task when
the rain had ceased.

On the 18th all the trees, topped and cleared of branches, were lying on the ground, ready for transport to Will
Tree.

During this time no wild beast had appeared in the neighbourhood of the river. The question was, were there any
more in the island, or had the bear and the tiger been—a most improbable event—the last of their species?

Whatever it was, Godfrey had no intention of abandoning his project of the solid palisade so as to be prepared against a surprise from savages, or bears, or tigers. Besides, the worst was over, and there only remained to take the wood where it was wanted.

We say "the worst was over," though the carriage promised to be somewhat laborious. If it were not so, it was because Godfrey had had a very practical idea, which materially lightened the task; this was to make use of the current of the river, which the flood occasioned by the recent rains had rendered very rapid, to transport the wood. Small rafts could be formed, and they would quietly float down to the sequoias, where a bar, formed by the small bridge, would stop them. From thence to Will Tree was only about fifty-five paces.

If any of them showed particular satisfaction at this mode of procedure, it was Tartlet.

On the 18th the first rafts were formed, and they arrived at the barrier without accident. In less than three days on the evening of the 25th, the palisade had been all sent down to its destination.

On the morrow, the first trunks, sunk two feet in the soil, began to rise in such a manner as to connect the principal sequoias which surrounded Will Tree. A capping of strong flexible branches, pointed by the axe, assured the solidity of the wall.

Godfrey saw the work progress with extreme satisfaction, and delayed not until it was finished.

"Once the palisade is done," he said to Tartlet, "we shall be really at home."

"We shall not be really at home," replied the professor drily, "until we are in Montgomery Street, with your Uncle Kolderup."

There was no disputing this opinion.

On the 26th of November the palisade was three parts done. It comprised among the sequoias attached one to another that in which the poultry had established themselves, and Godfrey's intention was to build a stable inside it.

In three or four days the fence was finished. There only remained to fit in a solid door, which would assure the closure of Will Tree.

But on the morning of the 27th of November the work was interrupted by an event which we had better explain with some detail, for it was one of those unaccountable things peculiar to Phina Island.

About eight o'clock, Carefinotu had climbed up to the fork of the sequoia, so as to more carefully close the hole by which the cold and rain penetrated, when he uttered a singular cry.

Godfrey, who was at work at the palisade, raised his head and saw the black, with expressive gestures, motioning to him to join him without delay.

Godfrey, thinking Carefinotu would not have disturbed him unless he had serious reason, took his glasses with him and climbed up the interior passage, and passing through the hole, seated himself astride of one of the main branches.

Carefinotu, pointing with his arm towards the rounded angle which Phina Island made to the north-east, showed a column of smoke rising in the air like a long plume.

"Again!" exclaimed Godfrey.

And putting his glasses in the direction, he assured himself that this time there was no possible error, that it must escape from some important fire, which he could distinctly see must be about five miles off.

Godfrey turned towards the black.

Carefinotu expressed his surprise, by his looks, his exclamations, in fact by his whole attitude. Assuredly he was no less astounded than Godfrey at this apparition.

Besides, in the offing, there was no ship, not a vessel native or other, nothing which showed that a landing had recently been made on the shore.

"Ah! This time I will find out the fire which produces that smoke!" exclaimed Godfrey.

And pointing to the north-east angle of the island, and then to the foot of the tree, he gesticulated to Carefinotu that he wished to reach the place without losing an instant.

Carefinotu understood him. He even gave him to understand that he approved of the idea.

"Yes," said Godfrey to himself, "if there is a human being there, we must know who he is and whence he comes! We must know why he hides himself! It will be for the safety of all!"

A moment afterwards Carefinotu and he descended to the foot of Will Tree. Then Godfrey, informing Tartlet of what had passed and what he was going to do, proposed for him to accompany them to the north coast.

A dozen miles to traverse in one day was not a very tempting suggestion to a man who regarded his legs as the most precious part of his body, and only designed for noble exercises. And so he replied that he would prefer to remain at Will Tree.

"Very well, we will go alone," answered Godfrey, "but do not expect us until the evening."

So saying, and Carefinotu and he carrying some provisions for lunch on the road, they set out, after taking leave
of the professor, whose private opinion it was that they would find nothing, and that all their fatigue would be useless.

Godfrey took his musket and revolver; the black the axe and the hunting-knife which had become his favourite weapon. They crossed the plank bridge to the right bank of the river, and then struck off across the prairie to the point on the shore where the smoke had been seen rising amongst the rocks.

It was rather more easterly than the place which Godfrey had uselessly visited on his second exploration.

They progressed rapidly, not without a sharp look-out that the wood was clear and that the bushes and underwood did not hide some animal whose attack might be formidable.

Nothing disquieting occurred.

At noon, after having had some food, without, however, stopping for an instant, they reached the first line of rocks which bordered the beach. The smoke, still visible, was rising about a quarter of a mile ahead. They had only to keep straight on to reach their goal.

Nothing disquieting occurred.

They hastened their steps, but took precautions so as to surprise, and not be surprised.

Two minutes afterwards the smoke disappeared, as if the fire had been suddenly extinguished.

But Godfrey had noted with exactness the spot whence it arose. It was at the point of a strangely formed rock, a sort of truncated pyramid, easily recognizable. Showing this to his companion, he kept straight on.

The quarter of a mile was soon traversed, then the last line was climbed, and Godfrey and Carefinotu gained the beach about fifty paces from the rock.

They ran up to it. Nobody! But this time half-smouldering embers and half-burnt wood proved clearly that the fire had been alight on the spot.

"There has been some one here!" exclaimed Godfrey. "Some one not a moment ago! We must find out who!"

He shouted. No response! Carefinotu gave a terrible yell. No one appeared!

Behold them then hunting amongst the neighbouring rocks, searching a cavern, a grotto, which might serve as a refuge for a shipwrecked man, an aboriginal, a savage--

It was in vain that they ransacked the slightest recesses of the shore. There was neither ancient nor recent camp in existence, not even the traces of the passage of a man.

"But," repeated Godfrey, "it was not smoke from a warm spring this time! It was from a fire of wood and grass, and that fire could not light itself."

Vain was their search. Then about two o'clock Godfrey and Carefinotu, as weary as they were disconcerted at their fruitless endeavours, retook their road to Will Tree.

There was nothing astonishing in Godfrey being deep in thought. It seemed to him that the island was now under the empire of some occult power. The reappearance of this fire, the presence of wild animals, did not all this denote some extraordinary complication?

And was there not cause for his being confirmed in this idea when an hour after he had regained the prairie, he heard a singular noise, a sort of hard jingling.

Carefinotu pushed him aside at the same instant as a serpent glided beneath the herbage, and was about to strike at him.

"Snakes, now. Snakes in the island, after the bears and the tigers!" he exclaimed.

Yes! It was one of those reptiles well-known by the noise they make, a rattlesnake of the most venomous species: a giant of the Crotalus family!

Carefinotu threw himself between Godfrey and the reptile, which hurried off under a thick bush.

But the negro pursued it and smashed in its head with a blow of the axe. When Godfrey rejoined him, the two halves of the reptile were writhing on the blood-stained soil.

Then other serpents, not less dangerous, appeared in great abundance on this part of the prairie which was separated by the stream from Will Tree.

Was it then a sudden invasion of reptiles? Was Phina Island going to become the rival of ancient Tenos, whose formidable ophidians rendered it famous in antiquity, and which gave its name to the viper?

"Come on! come on!" exclaimed Godfrey, motioning to Carefinotu to quicken the pace.

He was uneasy. Strange presentiments agitated him without his being able to control them.

Under their influence, fearing some approaching misfortune, he had hastened his return to Will Tree.

But matters became serious when he reached the planks across the river.

Screams of terror resounded from beneath the sequoias--cries for help in a tone of agony which it was impossible to mistake!

"It is Tartlet!" exclaimed Godfrey. "The unfortunate man has been attacked! Quick! quick!"

Once over the bridge, about twenty paces further on, Tartlet was perceived running as fast as his legs could carry him.
An enormous crocodile had come out of the river and was pursuing him with its jaws wide open. The poor man, distracted, mad with fright, instead of turning to the right or the left, was keeping in a straight line, and so running the risk of being caught. Suddenly he stumbled. He fell. He was lost.

Godfrey halted. In the presence of this imminent danger his coolness never forsook him for an instant. He brought his gun to his shoulder, and aimed at the crocodile. The well-aimed bullet struck the monster, and it made a bound to one side and fell motionless on the ground.

Carefinotu rushed towards Tartlet and lifted him up. Tartlet had escaped with a fright! But what a fright!

It was six o'clock in the evening.

A moment afterwards Godfrey and his two companions had reached Will Tree.

How bitter were their reflections during their evening repast! What long sleepless hours were in store for the inhabitants of Phina Island, on whom misfortunes were now crowding.

As for the professor, in his anguish he could only repeat the words which expressed the whole of his thoughts, "I had much rather be off!"

CHAPTER XXI.

WHICH ENDS WITH QUITE A SURPRISING REFLECTION BY THE NEGRO CAREFINOTU.

The winter season, so severe in these latitudes, had come at last. The first frosts had already been felt, and there was every promise of rigorous weather. Godfrey was to be congratulated on having established his fireplace in the tree. It need scarcely be said that the work at the palisade had been completed, and that a sufficiently solid door now assured the closure of the fence.

During the six weeks which followed, that is to say, until the middle of December, there had been a good many wretched days on which it was impossible to venture forth. At the outset there came terrible squalls. They shook the group of sequoias to their very roots. They strewed the ground with broken branches, and so furnished an ample reserve for the fire.

Then it was that the inhabitants of Will Tree clothed themselves as warmly as they could. The woollen stuffs found in the box were used during the few excursions necessary for revictualling, until the weather became so bad that even these were forbidden. All hunting was at an end, and the snow fell in such quantity that Godfrey could have believed himself in the inhospitable latitudes of the Arctic Ocean.

It is well known that Northern America, swept by the Polar winds, with no obstacle to check them, is one of the coldest countries on the globe. The winter there lasts until the month of April. Exceptional precautions have to be taken against it. It was the coming of the winter as it did which gave rise to the thought that Phina Island was situated in a higher latitude than Godfrey had supposed.

Hence the necessity of making the interior of Will Tree as comfortable as possible. But the suffering from rain and cold was cruel. The reserves of provisions were unfortunately insufficient, the preserved turtle flesh gradually disappeared. Frequently there had to be sacrificed some of the sheep or goats or agouties, whose numbers had but slightly increased since their arrival in the island.

With these new trials, what sad thoughts haunted Godfrey!

It happened also that for a fortnight he fell into a violent fever. Without the tiny medicine-chest which afforded the necessary drugs for his treatment, he might never have recovered. Tartlet was ill-suited to attend to the petty cares that were necessary during the continuance of the malady. It was to Carefinotu that he mainly owed his return to health.

But what remembrances and what regrets! Who but himself could he blame for having got into a situation of which he could not even see the end? How many times in his delirium did he call Phina, whom he never should see again, and his Uncle Will, from whom he beheld himself separated for ever! Ah! he had to alter his opinion of this Crusoe life which his boyish imagination had made his ideal! Now he was contending with reality! He could no longer even hope to return to the domestic hearth.

So passed this miserable December, at the end of which Godfrey began to recover his strength.

As for Tartlet, by special grace, doubtless, he was always well. But what incessant lamentations! What endless jeremiads! As the grotto of Calypso after the departure of Ulysses, Will Tree "resounded no more to his song"--that of his fiddle--for the cold had frozen the strings!

It should be said too that one of the gravest anxieties of Godfrey was not only the re-appearance of dangerous animals, but the fear of the savages returning in great numbers to Phina Island, the situation of which was known to them. Against such an invasion the palisade was but an insufficient barrier. All things considered, the refuge offered by the high branches of the sequoia appeared much safer, and the rendering the access less difficult was taken in hand. It would always be easy to defend the narrow orifice by which the top of the trunk was reached.
With the aid of Carefinotu Godfrey began to cut regular ledges on each side, like the steps of a staircase, and these, connected by a long cord of vegetable fibre, permitted of rapid ascent up the interior.

"Well," said Godfrey, when the work was done, "that gives us a town house below and a country house above!"

"I had rather have a cellar, if it was in Montgomery Street!" answered Tartlet.

Christmas arrived. Christmas kept in such style throughout the United States of America! The New Year's Day, full of memories of childhood, rainy, snowy, cold, and gloomy, began the new year under the most melancholy auspices.

It was six months since the survivors of the _Dream_ had remained without communication with the rest of the world.

The commencement of the year was not very cheering. It made Godfrey and his companions anticipate that they would still have many trials to encounter.

The snow never ceased falling until January 18th. The flocks had to be let out to pasture to get what feed they could. At the close of the day, a very cold damp night enveloped the island, and the space shaded by the sequoias was plunged in profound obscurity.

Tartlet and Carefinotu, stretched on their beds inside Will Tree, were trying in vain to sleep. Godfrey, by the struggling light of a torch, was turning over the pages of his Bible.

About ten o'clock a distant noise, which came nearer and nearer, was heard outside away towards the north. There could be no mistake. It was the wild beasts prowling in the neighbourhood, and, alarming to relate, the howling of the tiger and of the hyæna, and the roaring of the panther and the lion were this time blended in one formidable concert.

Godfrey, Tartlet, and the negro sat up, each a prey to indescribable anguish. If at this unaccountable invasion of ferocious animals Carefinotu shared the alarm of his companions, his astonishment was quite equal to his fright.

During two mortal hours all three kept on the alert. The howlings sounded at times close by; then they suddenly ceased, as if the beasts, not knowing the country, were roaming about all over it. Perhaps then Will Tree would escape an attack!

"It doesn't matter if it does," thought Godfrey. "If we do not destroy these animals to the very last one, there will be no safety for us in the island!"

A little after midnight the roaring began again in full strength at a moderate distance away. Impossible now to doubt but that the howling army was approaching Will Tree!

Yes! It was only too certain! But whence came these wild animals? They could not have recently landed on Phina Island! They must have been there then before Godfrey's arrival! But how was it that all of them had remained hidden during his walks and hunting excursions, as well across the centre as in the most out-of-the-way parts to the south? For Godfrey had never found a trace of them. Where was the mysterious den which vomited forth lions, hyænas, panthers, tigers? Amongst all the unaccountable things up to now this was indeed the most unaccountable.

Carefinotu could not believe what he heard. We have said that his astonishment was extreme. By the light of the fire which illuminated the interior of Will Tree there could be seen on his black face the strangest of grimaces.

Tartlet in the corner, groaned and lamented, and moaned again. He would have asked Godfrey all about it, but Godfrey was not in the humour to reply. He had a presentiment of a very great danger, he was seeking for a way to retreat from it.

Once or twice Carefinotu and he went out to the centre of the palisade. They wished to see that the door was firmly and strongly shut.

Suddenly an avalanche of animals appeared with a huge tumult along the front of Will Tree.

It was only the goats and sheep and agouties. Terrified at the howling of the wild beasts, and scenting their approach, they had fled from their pasturage to take shelter behind the palisade.

"We must open the door!" exclaimed Godfrey.

Carefinotu nodded his head. He did not want to know the language to understand what Godfrey meant.

The door was opened, and the frightened flock rushed into the enclosure.

But at that instant there appeared through the opening a gleaming of eyes in the depths of the darkness which the shadow of the sequoias rendered still more profound.

There was no time to close the enclosure!

To jump at Godfrey, seize him in spite of himself, push him into the dwelling and slam the door, was done by Carefinotu like a flash of lightning.

New roarings indicated that three or four wild beasts had just cleared the palisade.

Then these horrible roarings were mingled with quite a concert of bleatings and groanings of terror. The domestic flock were taken as in a trap and delivered over to the clutches of the assailants.

Godfrey and Carefinotu, who had climbed up to the two small windows in the bark of the sequoia, endeavoured
to see what was passing in the gloom.

Evidently the wild animals--tigers or lions, panthers or hyænas, they did not know which yet--had thrown themselves on the flock and begun their slaughter.

At this moment, Tartlet, in a paroxysm of blind terror, seized one of the muskets, and would have taken a chance shot out of one of the windows.

Godfrey stopped him.

"No!" said he. "In this darkness our shots will be lost, and we must not waste our ammunition! Wait for daylight!"

He was right. The bullets would just as likely have struck the domestic as the wild animals--more likely in fact, for the former were the most numerous. To save them was now impossible. Once they were sacrificed, the wild beasts, thoroughly gorged, might quit the enclosure before sunrise. They would then see how to act to guard against a fresh invasion.

It was most important too, during the dark night, to avoid as much as possible revealing to these animals the presence of human beings, whom they might prefer to the flock. Perhaps they would thus avoid a direct attack against Will Tree.

As Tartlet was incapable of understanding either this reasoning or any other, Godfrey contented himself with depriving him of his weapon. The professor then went and threw himself on his bed and freely anathematized all travels and travellers and maniacs who could not remain quietly at their own firesides.

Both his companions resumed their observations at the windows.

Thence they beheld, without the power of interference, the horrible massacre which was taking place in the gloom. The cries of the sheep and the goats gradually diminished as the slaughter of the animals was consummated, although the greater part had escaped outside, where death, none the less certain, awaited them. This loss was irreparable for the little colony; but Godfrey was not then anxious about the future. The present was disquieting enough to occupy all his thoughts.

There was nothing they could do, nothing they could try, to hinder this work of destruction.

Godfrey and Carefinotu kept constant watch, and now they seemed to see new shadows coming up and passing into the palisade, while a fresh sound of footsteps struck on their ears.

Evidently certain belated beasts, attracted by the odour of the blood which impregnated the air, had traced the scent up to Will Tree.

They ran to and fro, they rushed round and round the tree and gave forth their hoarse and angry growls. Some of the shadows jumped on the ground like enormous cats. The slaughtered flock had not been sufficient to satisfy their rage.

Neither Godfrey nor his companions moved. In keeping completely motionless they might avoid a direct attack.

An unlucky shot suddenly revealed their presence and exposed them to the greatest danger.

Tartlet, a prey to a veritable hallucination, had risen. He had seized a revolver; and this time, before Godfrey and Carefinotu could hinder him, and not knowing himself what he did, but believing that he saw a tiger standing before him, he had fired! The bullet passed through the door of Will Tree.

"Fool!" exclaimed Godfrey, throwing himself on Tartlet, while the negro seized the weapon.

It was too late. The alarm was given, and growlings still more violent resounded without. Formidable talons were heard tearing the bark of the sequoia. Terrible blows shook the door, which was too feeble to resist such an assault.

"We must defend ourselves!" shouted Godfrey.

And, with his gun in his hand and his cartridge-pouch round his waist, he took his post at one of the windows.

To his great surprise, Carefinotu had done the same! Yes! the black, seizing the second musket--a weapon which he had never before handled--had filled his pockets with cartridges and taken his place at the second window.

Then the reports of the guns began to echo from the embrasures. By the flashes, Godfrey on the one side, and Carefinotu on the other, beheld the foes they had to deal with.

There, in the enclosure, roaring with rage, howling at the reports, rolling beneath the bullets which struck many of them, leapt of lions and tigers, and hyænas and panthers, at least a score. To their roarings and growlings which reverberated from afar, there echoed back those of other ferocious beasts running up to join them. Already the now distant roaring could be heard as they approached the environs of Will Tree. It was as though quite a menagerie of wild animals had been suddenly set free on the island!

[Illustration: Of lions and tigers quite a score. _page 252_]
grief told them that the animal had been hit.

A quarter of an hour elapsed, and then came a respite. Had the wild beasts given up the attack which had cost the lives of so many amongst them? Were they waiting for the day to recommence the attempt under more favourable conditions?

Whatever might be the reason, neither Godfrey nor Carefinotu desired to leave his post. The black had shown himself no less ready with the gun than Godfrey. If that was due only to the instinct of imitation, it must be admitted that it was indeed surprising.

About two o'clock in the morning there came a new alarm—more furious than before. The danger was imminent, the position in the interior of Will Tree was becoming untenable. New growlings resounded round the foot of the sequoia. Neither Godfrey nor Carefinotu, on account of the situation of the windows, which were cut straight through, could see the assailants, nor, in consequence, could they fire with any chance of success.

It was now the door which the beasts attacked, and it was only too evident that it would be beaten in by their weight or torn down by their claws.

Godfrey and the black had descended to the ground. The door was already shaking beneath the blows from without. They could feel the heated breath making its way in through the cracks in the bark.

Godfrey and Carefinotu attempted to prop back the door with the stakes which kept up the beds, but these proved quite useless.

It was obvious that in a little while it would be driven in, for the beasts were mad with rage—particularly as no shots could reach them.

Godfrey was powerless. If he and his companions were inside Will Tree when the assailants broke in, their weapons would be useless to protect them.

Godfrey had crossed his arms. He saw the boards of the door open little by little. He could do nothing. In a moment of hesitation, he passed his hand across his forehead, as if in despair. But soon recovering his self-possession, he shouted,—

"Up we go! Up! All of us!"

And he pointed to the narrow passage which led up to the fork inside Will Tree.

Carefinotu and he, taking their muskets and revolvers, supplied themselves with cartridges.

And now he turned to make Tartlet follow them into these heights where he had never ventured before.

Tartlet was no longer there. He had started up while his companions were firing.
"Up!" repeated Godfrey.

It was a last retreat, where they would assuredly be sheltered from the wild beasts. If any tiger or panther attempted to come up into the branches of the sequoia, it would be easy to defend the hole through which he would have to pass.

Godfrey and Carefinotu had scarcely ascended thirty feet, when the roaring was heard in the interior of Will Tree. A few moments more and they would have been surprised. The door had just fallen in. They both hurried along, and at last reached the upper end of the hole.

A scream of terror welcomed them. It was Tartlet, who imagined he saw a panther or tiger! The unfortunate professor was clasping a branch, frightened almost out of his life lest he should fall.

Carefinotu went to him, and compelled him to lean against an upright bough, to which he firmly secured him with his belt.

Then, while Godfrey selected a place whence he could command the opening, Carefinotu went to another spot whence he could deliver a cross fire.

And they waited.

Under these circumstances it certainly looked as though the besieged were safe from attack.

Godfrey endeavoured to discover what was passing beneath them; but the night was still too dark. Then he tried to hear; and the growlings, which never ceased, showed that the assailants had no thought of abandoning the place.

Suddenly, towards four o'clock in the morning, a great light appeared at the foot of the tree. At once it shot out through the door and windows. At the same time a thick smoke spread forth from the upper opening and lost itself in the higher branches.

"What is that now?" exclaimed Godfrey.

It was easily explained. The wild beasts, in ravaging the interior of Will Tree, had scattered the remains of the fire. The fire had spread to the things in the room. The flame had caught the bark, which had dried and become combustible. The gigantic sequoia was ablaze below.

The position was now more terrible than it had ever been. By the light of the flames, which illuminated the space beneath the grove, they could see the wild beasts leaping round the foot of Will Tree.

At the same instant, a fearful explosion occurred. The sequoia, violently wrenched, trembled from its roots to its
It was the reserve of gunpowder which had exploded inside Will Tree, and the air, violently expelled from the opening, rushed forth like the gas from a discharging cannon.

Godfrey and Carefinotu were almost torn from their resting-places. Had Tartlet not been lashed to the branch, he would assuredly have been hurled to the ground.

The wild beasts, terrified at the explosion, and more or less wounded, had taken to flight.

But at the same time the conflagration, fed by the sudden combustion of the powder, had considerably extended. It swiftly grew in dimensions as it crept up the enormous stem.

Large tongues of flame lapped the interior, and the highest soon reached the fork, and the dead wood snapped and crackled like shots from a revolver. A huge glare lighted up, not only the group of giant trees, but even the whole of the coast from Flag Point to the southern cape of Dream Bay.

Soon the fire had reached the lower branches of the sequoia, and threatened to invade the spot where Godfrey and his companions had taken refuge. Were they then to be devoured by the flames, with which they could not battle, or had they but the last resource of throwing themselves to the ground to escape being burnt alive? In either case they must die!

Godfrey sought about for some means of escape. He saw none!

Already the lower branches were ablaze and a dense smoke was struggling with the first gleams of dawn which were rising in the east.

At this moment there was a horrible crash of rending and breaking. The sequoia, burnt to the very roots, cracked violently—it toppled over—it fell!

But as it fell the stem met the stems of the trees which environed it; their powerful branches were mingled with its own, and so it remained obliquely cradled at an angle of about forty-five degrees from the ground.

At the moment that the sequoia fell, Godfrey and his companions believed themselves lost!

"Nineteenth of January!" exclaimed a voice, which Godfrey, in spite of his astonishment, immediately recognized.

It was Carefinotu! Yes, Carefinotu had just pronounced these words, and in that English language which up to then he had seemed unable to speak or to understand!

"What did you say?" asked Godfrey, as he followed him along the branches.

"I said, Mr. Morgan," answered Carefinotu, "that to-day your Uncle Will ought to reach us, and that if he doesn't turn up we are done for!"

CHAPTER XXII.

WHICH CONCLUDES BY EXPLAINING WHAT UP TO NOW HAD APPEARED INEXPLICABLE.

At that instant, and before Godfrey could reply, the report of fire-arms was heard not far from Will Tree.

At the same time one of those rain storms, regular cataracts in their fury, fell in a torrential shower just as the flames devouring the lower branches were threatening to seize upon the trees against which Will Tree was resting.

What was Godfrey to think after this series of inexplicable events? Carefinotu speaking English like a cockney, calling him by his name, announcing the early arrival of Uncle Will, and then the sudden report of the fire-arms?

He asked himself if he had gone mad; but he had no time for insoluble questions, for below him—hardly five minutes after the first sound of the guns—a body of sailors appeared hurrying through the trees.

Godfrey and Carefinotu slipped down along the stem, the interior of which was still burning.

But the moment that Godfrey touched the ground, he heard himself spoken to, and by two voices which even in his trouble it was impossible for him not to recognize.

"Nephew Godfrey, I have the honour to salute you!"

"Godfrey! Dear Godfrey!"

"Uncle Will! Phina! You!" exclaimed Godfrey, astounded.

Three seconds afterwards he was in somebody's arms, and was clasping that somebody in his own.

At the same time two sailors, at the order of Captain Turcott who was in command, climbed up along the sequoia to set Tartlet free, and, with all due respect, pluck him from the branch as if he were a fruit.

And then the questions, the answers, the explanations which passed!

"Uncle Will! You?"

"Yes! me!"

"And how did you discover Phina Island?"

"Phina Island!" answered William W. Kolderup. "You should say Spencer Island! Well, it wasn't very difficult. I bought it six months ago!"
"Spencer Island!"
"And you gave my name to it, you dear Godfrey!" said the young lady.
"The new name is a good one, and we will keep to it," answered the uncle; "but for geographers this is Spencer Island, only three days' journey from San Francisco, on which I thought it would be a good plan for you to serve your apprenticeship to the Crusoe business!"
"Oh! Uncle! Uncle Will! What is it you say?" exclaimed Godfrey. "Well, if you are in earnest, I can only answer that I deserved it! But then, Uncle Will, the wreck of the _Dream_?"
"Sham!" replied William W. Kolderup, who had never seemed in such a good humour before. "The _Dream_ was quietly sunk by means of her water ballast, according to the instructions I had given Turcott. You thought she sank for good, but when the captain saw that you and Tartlet had got safely to land he brought her up and steamed away. Three days later he got back to San Francisco, and he it is who has brought us to Spencer Island on the date we fixed!"
"Then none of the crew perished in the wreck?"
"None--unless it was the unhappy Chinaman who hid himself away on board and could not be found!"
"But the canoe?"
"Sham! The canoe was of my own make."
"But the savages?"
"Sham! The savages whom luckily you did not shoot!"
"But Carefinotu?"
"Sham! Carefinotu was my faithful Jup Brass, who played his part of Friday marvellously well, as I see."
"Yes," answered Godfrey. "He twice saved my life--once from a bear, once from a tiger--"
"The bear was sham! the tiger was sham!" laughed William W. Kolderup. "Both of them were stuffed with straw, and landed before you saw them with Jup Brass and his companions!"
"But he moved his head and his paws!"
"By means of a spring which Jup Brass had fixed during the night a few hours before the meetings which were prepared for you."
"What! all of them?" repeated Godfrey, a little ashamed at having been taken in by these artifices.
"Yes! Things were going too smoothly in your island, and we had to get up a little excitement!"
"Then," answered Godfrey, who had begun to laugh, "if you wished to make matters unpleasant for us, why did you send us the box which contained everything we wanted?"
And as he said so he looked towards Phina, who cast down her eyes and turned away her head.
"Oh! indeed!--a box! but then Phina must have had an accomplice--"
And Uncle Will turned towards Captain Turcott, who laughingly answered,--
"What could I do, Mr. Kolderup? I can sometimes resist you--but Miss Phina--it was too difficult! And four months ago, when you sent me to look round the island, I landed the box from my boat--"
"Dearest Phina!" said Godfrey, seizing the young lady's hand.
"Turcott, you promised to keep the secret!" said Phina with a blush.
And Uncle William W. Kolderup, shaking his big head, tried in vain to hide that he was touched.
But if Godfrey could not restrain his smiles as he listened to the explanations of Uncle Will, Professor Tartlet did not laugh in the least! He was excessively mortified at what he heard! To have been the object of such a mystification, he, a professor of dancing and deportment! And so advancing with much dignity he observed,--
"Mr. William Kolderup will hardly assert, I imagine, that the enormous crocodile, of which I was nearly the unhappy victim, was made of pasteboard and wound up with a spring?"
"A crocodile?" replied the uncle.
"Yes, Mr. Kolderup," said Carefinotu, to whom we had better return his proper name of Jup Brass. "Yes, a real live crocodile, which went for Mr. Tartlet, and which I did not have in my collection!"
Godfrey then related what had happened, the sudden appearance of the wild beasts in such numbers, real lions, real tigers, real panthers, and then the invasion of the snakes, of which during four months they had not seen a single specimen in the island!
William W. Kolderup at this was quite disconcerted. He knew nothing about it. Spencer Island--it had been known for a long time--never had any wild beasts, did not possess even a single noxious animal; it was so stated in the deeds of sale.
Neither did he understand what Godfrey told him of the attempts he had made to discover the origin of the smoke which had appeared at different points on the island. And he seemed very much troubled to find that all had not passed on the island according to his instructions, and that the programme had been seriously interfered with.
As for Tartlet, he was not the sort of man to be humbugged. For his part he would admit nothing, neither the sham shipwreck, nor the sham savages, nor the sham animals, and above all he would never give up the glory which he had gained in shooting with the first shot from his gun the chief of the Polynesian tribe—one of the servants of the Kolderup establishment, who turned out to be as well as he was.

All was described, all was explained, except the serious matter of the real wild beasts and the unknown smoke. Uncle Will became very thoughtful about this. But, like a practical man, he put off, by an effort of the will, the solution of the problems, and addressing his nephew,—

"Godfrey," said he, "you have always been so fond of islands, that I am sure it will please you to hear that this is yours—wholly yours! I make you a present of it! You can do what you like with it! I never dreamt of bringing you away by force; and I would not take you away from it! Be then a Crusoe for the rest of your life, if your heart tells you so—"

"I!" answered Godfrey. "I! All my life!"

Phina stepped forward.
"Godfrey," she asked, "would you like to remain on your island?"
"I would rather die!" he exclaimed.

But immediately he added, as he took the young lady's hand,—

"Well, yes, I will remain; but on three conditions. The first is, you stay with me, dearest Phina; the second is, that Uncle Will lives with us; and the third is, that the chaplain of the _Dream_ marries us this very day!"

"There is no chaplain on board the _Dream_. Godfrey!" replied Uncle Will. "You know that very well. But I think there is still one left in San Francisco, and that we can find some worthy minister to perform the service! I believe I read your thoughts when I say that before to-morrow we shall put to sea again!"

Then Phina and Uncle Will asked Godfrey to do the honours of his island. Behold them then walking under the group of sequoias, along the stream up to the little bridge.

Alas! of the habitation at Will Tree nothing remained. The fire had completely devoured the dwelling in the base of the tree! Without the arrival of William W. Kolderup, what with the approaching winter, the destruction of their stores, and the genuine wild beasts in the island, our Crusoes would have deserved to be pitied.

"Uncle Will!" said Godfrey. "If I gave the island the name of Phina, let me add that I gave our dwelling the name of Will Tree!"

"Well," answered the uncle, "we will take away some of the seed, and plant it in my garden at 'Frisco!"

During the walk they noticed some wild animals in the distance; but they dared not attack so formidable a party as the sailors of the _Dream_. But none the less was their presence absolutely incomprehensible.

Then they returned on board, not without Tartlet asking permission to bring off "his crocodile"—a permission which was granted.

That evening the party were united in the saloon of the _Dream_. and there was quite a cheerful dinner to celebrate the end of the adventures of Godfrey Morgan and his marriage with Phina Hollaney.

On the morrow, the 20th of January, the _Dream_ set sail under the command of Captain Turcott. At eight o'clock in the morning Godfrey, not without emotion, saw the horizon in the west wipe out, as if it were a shadow, the island on which he had been to school for six months—a school of which he never forgot the lessons.

The passage was rapid; the sea magnificent; the wind favourable. This time the _Dream_ went straight to her destination! There was no one to be mystified! She made no tackings without number as on the first voyage! She did not lose during the night what she had gained during the day!

And so on the 23rd of January, after passing at noon through the Golden Gate, she entered the vast bay of San Francisco, and came alongside the wharf in Merchant Street.

And what did they then see?
They saw issue from the hold a man who, having swum to the _Dream_ during the night while she was anchored at Phina Island, had succeeded in stowing himself away for the second time!
And who was this man?
It was the Chinaman, Seng Vou, who had made the passage back as he had made the passage out!
Seng Vou advanced towards William W. Kolderup.

"I hope Mr. Kolderup will pardon me," said he very politely. "When I took my passage in the _Dream_, I thought she was going direct to Shanghai, and then I should have reached my country, but I leave her now, and return to San Francisco."

Every one, astounded at the apparition, knew not what to answer, and laughingly gazed at the intruder.
"But," said William W. Kolderup at last, "you have not remained six months in the hold, I suppose?"
"No!" answered Seng Vou.
"Where have you been, then?"
"On the island!"
"You!" exclaimed Godfrey.
"Yes."
"Then the smoke?"
"A man must have a fire!"
"And you did not attempt to come to us, to share our living?"
"A Chinaman likes to live alone," quietly replied Seng Vou. "He is sufficient for himself, and he wants no one!"
And thereupon this eccentric individual bowed to William W. Kolderup, landed, and disappeared.
"That is the stuff they make real Crusoes of!" observed Uncle Will. "Look at him and see if you are like him! It does not matter, the English race would do no good by absorbing fellows of that stamp!"
"Good!" said Godfrey, "the smoke is explained by the presence of Seng Vou; but the beasts?"
"And my crocodile!" added Tartlet; "I should like some one to explain my crocodile!"
William W. Kolderup seemed much embarrassed, and feeling in turn quite mystified, passed his hand over his forehead as if to clear the clouds away.
"We shall know later on," he said. "Everything is found by him who knows how to seek!"
A few days afterwards there was celebrated with great pomp the wedding of the nephew and pupil of William W. Kolderup. That the young couple were made much of by all the friends of the wealthy merchant can easily be imagined.
At the ceremony Tartlet was perfect in bearing, in everything, and the pupil did honour to the celebrated professor of dancing and deportment.
Now Tartlet had an idea. Not being able to mount his crocodile on a scarf-pin--and much he regretted it--he resolved to have it stuffed. The animal prepared in this fashion--hung from the ceiling, with the jaws half open, and the paws outspread--would make a fine ornament for his room. The crocodile was consequently sent to a famous taxidermist, and he brought it back to Tartlet a few days afterwards. Every one came to admire the monster who had almost made a meal of Tartlet.
"You know, Mr. Kolderup, where the animal came from?" said the celebrated taxidermist, presenting his bill.
"No, I do not," answered Uncle Will.
"But it had a label underneath its carapace."
"A label!" exclaimed Godfrey.
"Here it is," said the celebrated taxidermist.
And he held out a piece of leather on which, in indelible ink, were written these words,—

"From Hagenbeck, Hamburg, "To J. R. Taskinar, Stockton, U.S.A."—

When William W. Kolderup had read these words he burst into a shout of laughter. He understood all.
It was his enemy, J. R. Taskinar, his conquered competitor, who, to be revenged, had bought a cargo of wild beasts, reptiles, and other objectionable creatures from a well-known purveyor to the menageries of both hemispheres, and had landed them at night in several voyages to Spencer Island. It had cost him a good deal, no doubt, to do so; but he had succeeded in infesting the property of his rival, as the English did Martinique, if we are to believe the legend, before it was handed over to France.
There was thus no more to explain of the remarkable occurrences on Phina Island.
"Well done!" exclaimed William W. Kolderup. "I could not have done better myself!"
"But with those terrible creatures," said Phina, "Spencer Island—"
"Phina Island—" interrupted Godfrey.
"Phina Island," continued the bride, with a smile, "is quite uninhabitable."
"Bah!" answered Uncle Will; "we can wait till the last lion has eaten up the last tiger!"
"And then, dearest Phina," said Godfrey, "you will not be afraid to pass a season there with me?"
"With you, my dear husband, I fear nothing from anywhere," answered Phina, "and as you have not had your voyage round the world—"
"We will have it together," said Godfrey, "and if an unlucky chance should ever make me a real Crusoe—"
"You will ever have near you the most devoted of Crusoe-esses!"

THE END.
CHAPTER I
THE "FORWARD"

"To-morrow, at low tide, the brig _Forward_, Captain K. Z----, Richard Shandon mate, will start from New Prince's Docks for an unknown destination."

The foregoing might have been read in the _Liverpool Herald_ of April 5th, 1860. The departure of a brig is an event of little importance for the most commercial port in England. Who would notice it in the midst of vessels of all sorts of tonnage and nationality that six miles of docks can hardly contain? However, from daybreak on the 6th of April a considerable crowd covered the wharfs of New Prince's Docks--the innumerable companies of sailors of the town seemed to have met there. Workmen from the neighbouring wharfs had left their work, merchants their dark counting-houses, tradesmen their shops. The different-coloured omnibuses that ran along the exterior wall of the docks brought cargoes of spectators at every moment; the town seemed to have but one pre-occupation, and that was to see the _Forward_ go out.

The _Forward_ was a vessel of a hundred and seventy tons, charged with a screw and steam-engine of a hundred and twenty horse-power. It might easily have been confounded with the other brigs in the port. But though it offered nothing curious to the eyes of the public, connoisseurs remarked certain peculiarities in it that a sailor cannot mistake. On board the _Nautilus_, anchored at a little distance, a group of sailors were hazarding a thousand conjectures about the destination of the _Forward_.

"I don't know what to think about its masting," said one; "it isn't usual for steamboats to have so much sail."

"That ship," said a quartermaster with a big red face--"that ship will have to depend more on her masts than her engine, and the topsails are the biggest because the others will be often useless. I haven't got the slightest doubt that the _Forward_ is destined for the Arctic or Antarctic seas, where the icebergs stop the wind more than is good for a brave and solid ship."

"You must be right, Mr. Cornhill," said a third sailor. "Have you noticed her stern, how straight it falls into the sea?"

"Yes," said the quartermaster, "and it is furnished with a steel cutter as sharp as a razor and capable of cutting a three-decker in two if the _Forward_ were thrown across her at top speed."

"That's certain," said a Mersey pilot; "for that 'ere vessel runs her fourteen knots an hour with her screw. It was marvellous to see her cutting the tide when she made her trial trip. I believe you, she's a quick un."

"The canvas isn't intricate either," answered Mr. Cornhill; "it goes straight before the wind, and can be managed by hand. That ship is going to try the Polar seas, or my name isn't what it is. There's something else--do you see the wide helm-port that the head of her helm goes through?"

"It's there, sure enough," answered one; "but what does that prove?"

"That proves, my boys," said Mr. Cornhill with disdainful satisfaction, "that you don't know how to put two and two together and make it four; it proves that they want to be able to take off the helm when they like, and you know it's a manoeuvre that's often necessary when you have ice to deal with."

"That's certain," answered the crew of the _Nautilus_.

"Besides," said one of them, "the way she's loaded confirms Mr. Cornhill's opinion. Clifton told me. The _Forward_ is victualled and carries coal enough for five or six years. Coals and victuals are all its cargo, with a stock of woollen garments and sealskins."

"Then," said the quartermaster, "there is no more doubt on the matter; but you, who know Clifton, didn't he tell you anything about her destination?"

"He couldn't tell me; he doesn't know; the crew was engaged without knowing. He'll only know where he's going when he gets there."

"I shouldn't wonder if they were going to the devil," said an unbeliever: "it looks like it."

"And such pay," said Clifton's friend, getting warm--"five times more than the ordinary pay. If it hadn't been for that, Richard Shandon wouldn't have found a soul to go with him. A ship with a queer shape, going nobody knows where, and looking more like not coming back than anything else, it wouldn't have suited this child."

"Whether it would have suited you or not," answered Cornhill, "you couldn't have been one of the crew of the _Forward_."

"And why, pray?"

"Because you don't fulfil the required conditions. I read that all married men were excluded, and you are in the category, so you needn't talk. Even the very name of the ship is a bold one. The _Forward_--where is it to be forwarded to? Besides, nobody knows who the captain is."
"Yes, they do," said a simple-faced young sailor.

"Why, you don't mean to say that you think Shandon is the captain of the _Forward_?" said Cornhill.

"But----" answered the young sailor--

"Why, Shandon is commander, and nothing else; he's a brave and bold sailor, an experienced whaler, and a jolly fellow worthy in every respect to be the captain, but he isn't any more captain than you or I. As to who is going to command after God on board he doesn't know any more than we do. When the moment has come the true captain will appear, no one knows how nor where, for Richard Shandon has not said and hasn't been allowed to say to what quarter of the globe he is going to direct his ship."

"But, Mr. Cornhill," continued the young sailor, "I assure you that there is someone on board who was announced in the letter, and that Mr. Shandon was offered the place of second to."

"What!" said Cornhill, frowning, "do you mean to maintain that the _Forward_ has a captain on board?"

"Yes, Mr. Cornhill."

"Where did you get your precious information from?"

"From Johnson, the boatswain."

"From Johnson?"

"Yes, sir."

"Johnson told you so?"

"He not only told me so, but he showed me the captain."

"He showed him to you!" said Cornhill, stupefied. "And who is it, pray?"

"A dog."

"What do you mean by a dog?"

"A dog on four legs."

Stupefaction reigned amongst the crew of the _Nautilus_. Under any other circumstances they would have burst out laughing. A dog captain of a vessel of a hundred and seventy tons burden! It was enough to make them laugh. But really the _Forward_ was such an extraordinary ship that they felt it might be no laughing matter, and they must be sure before they denied it. Besides, Cornhill himself didn't laugh.

"So Johnson showed you the new sort of captain, did he?" added he, addressing the young sailor, "and you saw him?"

"Yes, sir, as plainly as I see you now."

"Well, and what do you think about it?" asked the sailors of the quartermaster.

"I don't think anything," he answered shortly. "I don't think anything, except that the _Forward_ is a ship belonging to the devil, or madmen fit for nothing but Bedlam."

The sailors continued silently watching the _Forward_, whose preparations for departure were drawing to an end; there was not one of them who pretended that Johnson had only been laughing at the young sailor. The history of the dog had already made the round of the town, and amongst the crowd of spectators many a one looked out for the dog-captain and believed him to be a supernatural animal. Besides, the _Forward_ had been attracting public attention for some months past. Everything about her was marvellous; her peculiar shape, the mystery which surrounded her, the incognito kept by the captain, the way Richard Shandon had received the proposition to direct her, the careful selection of the crew, her unknown destination, suspected only by a few--all about her was strange.

To a thinker, dreamer, or philosopher nothing is more affecting than the departure of a ship; his imagination plays round the sails, sees her struggles with the sea and the wind in the adventurous journey which does not always end in port; when in addition to the ordinary incidents of departure there are extraordinary ones, even minds little given to credulity let their imagination run wild.

So it was with the _Forward_, and though the generality of people could not make the knowing remarks of Quartermaster Cornhill, it did not prevent the ship forming the subject of Liverpool gossip for three long months. The ship had been put in dock at Birkenhead, on the opposite side of the Mersey. The builders, Scott and Co., amongst the first in England, had received an estimate and detailed plan from Richard Shandon; it informed them of the exact tonnage, dimensions, and store room that the brig was to have. They saw by the details given that they had to do with a consummate seaman. As Shandon had considerable funds at his disposal, the work advanced rapidly, according to the recommendation of the owner. The brig was constructed of a solidity to withstand all tests; it was evident that she was destined to resist enormous pressure, for her ribs were built of teak-wood, a sort of Indian oak, remarkable for its extreme hardness, and were, besides, plated with iron. Sailors asked why the hull of a vessel made so evidently for resistance was not built of sheet-iron like other steamboats, and were told it was because the mysterious engineer had his own reasons for what he did.

Little by little the brig grew on the stocks, and her qualities of strength and delicacy struck connoisseurs. As the sailors of the _Nautilus_ had remarked, her stern formed a right angle with her keel; her steel prow, cast in the
workshop of R. Hawthorn, of Newcastle, shone in the sun and gave a peculiar look to the brig, though otherwise she had nothing particularly warlike about her. However, a 16-pounder cannon was installed on the forecastle; it was mounted on a pivot, so that it might easily be turned in any direction; but neither the cannon nor the stern, steel-clad as they were, succeeded in looking warlike.

On the 5th of February, 1860, this strange vessel was launched in the midst of an immense concourse of spectators, and the trial trip was perfectly successful. But if the brig was neither a man-of-war, a merchant vessel, nor a pleasure yacht--for a pleasure trip is not made with six years' provisions in the hold--what was it? Was it a vessel destined for another Franklin expedition? It could not be, because in 1859, the preceding year, Captain McClintock had returned from the Arctic seas, bringing the certain proof of the loss of the unfortunate expedition.

Was the _Forward_ going to attempt the famous North-West passage? What would be the use? Captain McClure had discovered it in 1853, and his lieutenant, Creswell, was the first who had the honour of rounding the American continent from Behring's Straits to Davis's Straits. Still it was certain to competent judges that the _Forward_ was prepared to face the ice regions. Was it going to the South Pole, farther than the whaler Weddell or Captain James Ross? But, if so, what for?

The day after the brig was floated her engine was sent from Hawthorn's foundry at Newcastle. It was of a hundred and twenty horse-power, with oscillating cylinders, taking up little room; its power was considerable for a hundred-and-seventy-ton brig, with so much sail, too, and of such fleetness. Her trial trips had left no doubt on that subject, and even the boatswain, Johnson, had thought right to express his opinion to Clifton's friend--

"When the _Forward_ uses her engine and sails at the same time, her sails will make her go the quickest."

Clifton's friend did not understand him, but he thought anything possible of a ship commanded by a dog. After the engine was installed on board, the stowage of provisions began. This was no slight work, for the vessel was to carry enough for six years. They consisted of dry and salted meat, smoked fish, biscuit, and flour; mountains of tea and coffee were thrown down the shafts in perfect avalanches. Richard Shandon presided over the management of this precious cargo like a man who knows what he is about; all was stowed away, ticketed, and numbered in perfect order; a very large provision of the Indian preparation called pemmican, which contains many nutritive elements in a small volume, was also embarked. The nature of the provisions left no doubt about the length of the cruise, and the sight of the barrels of lime-juice, lime-drops, packets of mustard, grains of sorrel and _cochlearia_, all antiscorbutic, confirmed the opinion on the destination of the brig for the ice regions; their influence is so necessary in Polar navigation. Shandon had doubtless received particular instructions about this part of the cargo, which, along with the medicine-chest, he attended to particularly.

Although arms were not numerous on board, the powder-magazine overflowed. The one cannon could not pretend to use the contents. That gave people more to think about. There were also gigantic saws and powerful instruments, such as levers, leaden maces, handsaws, enormous axes, etc., without counting a considerable quantity of blasting cylinders, enough to blow up the Liverpool Customs—all that was strange, not to say fearful, without mentioning rockets, signals, powder-chests, and beacons of a thousand different sorts. The numerous spectators on the wharfs of Prince's Docks admired likewise a long mahogany whaler, a tin _pirogue_ covered with gutta-percha, and a certain quantity of halkett-boats, a sort of indiarubber cloaks that can be transformed into canoes by blowing in their lining. Expectation was on the _qui vive_, for the _Forward_ was going out with the tide.

CHAPTER II
AN UNEXPECTED LETTER

The letter received by Richard Shandon, eight months before, ran as follows:--

"ABERDEEN,
"August 2nd, 1859.
"To Mr. Richard Shandon,
"Liverpool.

"SIR,—I beg to advise you that the sum of sixteen thousand pounds sterling has been placed in the hands of Messrs. Marcuart and Co., bankers, of Liverpool. I join herewith a series of cheques, signed by me, which will allow you to draw upon the said Messrs. Marcuart for the above-mentioned sum. You do not know me, but that is of no consequence. I know you: that is sufficient. I offer you the place of second on board the brig _Forward_ for a voyage that may be long and perilous. If you agree to my conditions you will receive a salary of 500 pounds, and all through the voyage it will be augmented one-tenth at the end of each year. The _Forward_ is not yet in existence. You must have it built so as to be ready for sea at the beginning of April, 1860, at the latest. Herewith is a detailed plan and estimate. You will take care that it is scrupulously followed. The ship is to be built by Messrs. Scott and Co., who will settle with you. I particularly recommend you the choice of the _Forward's_ crew; it will be composed
of a captain, myself, of a second, you, of a third officer, a boatswain, two engineers, an ice pilot, eight sailors, and
two others, eighteen men in all, comprising Dr. Clawbonny, of this town, who will introduce himself to you when
necessary. The _Forward’s_ crew must be composed of Englishmen without incumbrance; they should be all
bachelors and sober—for no spirits, nor even beer, will be allowed on board—ready to undertake anything, and to
bear with anything. You will give the preference to men of a sanguine constitution, as they carry a greater amount
of animal heat. Offer them five times the usual pay, with an increase of one-tenth for each year of service. At the end of
the voyage five hundred pounds will be placed at the disposition of each, and two thousand at yours. These funds
will be placed with Messrs. Marcuart and Co. The voyage will be long and difficult, but honourable, so you need not
hesitate to accept my conditions. Be good enough to send your answer to K. Z., Poste Restante, Goteborg, Sweden.

"P.S.--On the 15th of February next you will receive a large Danish dog, with hanging lips, and tawny coat with
black stripes. You will take it on board and have it fed with oaten bread, mixed with tallow grease. You will
acknowledge the reception of the said dog to me under the same initials as above, Poste Restante, Leghorn, Italy.

"The captain of the _Forward_ will introduce himself to you when necessary. When you are ready to start you
will receive further instructions.

"THE CAPTAIN OF THE 'FORWARD,'

"K. Z."

CHAPTER III

DR. CLAWBONNY

Richard Shandon was a good sailor; he had been commander of whalers in the Arctic seas for many years, and
had a wide reputation for skill. He might well be astonished at such a letter, and so he was, but astonished like a man
used to astonishments. He fulfilled, too, all the required conditions: he had no wife, children, or relations; he was as
free as a man could be. Having no one to consult, he went straight to Messrs. Marcuart's bank.

"If the money is there," he said to himself, "I'll undertake the rest."

He was received by the firm with all the attention due to a man with sixteen thousand pounds in their safes. Sure
of that fact, Shandon asked for a sheet of letter-paper, and sent his acceptance in a large sailor's hand to the address
indicated. The same day he put himself in communication with the Birkenhead shipbuilders, and twenty-four hours
later the keel of the _Forward_ lay on the stocks in the dockyard.

Richard Shandon was a bachelor of forty, robust, energetic, and brave, three sailor-like qualities, giving their
possessor confidence, vigour, and _sang-froid_. He was reputed jealous and hard to be pleased, so he was more
feared than loved by his sailors. But this reputation did not increase the difficulty of finding a crew, for he was
known to be a clever commander. He was afraid that the mystery of the enterprise would embarrass his movements,
and he said to himself, "The best thing I can do is to say nothing at all; there are sea-dogs who will want to know the
why and the wherefore of the business, and as I know nothing myself, I can't tell them. K. Z. is a queer fish, but after
all he knows me, and has confidence in me; that's enough. As to the ship, she will be a handsome lass, and my name
isn't Richard Shandon if she is not destined for the Frozen Seas. But I shall keep that to myself and my officers."

Upon which Richard Shandon set about recruiting his crew upon the conditions of family and health exacted by
the captain. He knew a brave fellow and capital sailor, named James Wall. Wall was about thirty, and had made
more than one trip to the North Seas. Shandon offered him the post of third officer, and he accepted blindly; all he
cared for was to sail, as he was devoted to his profession. Shandon told him and Johnson (whom he engaged as
boatswain) all he knew about the business.

"Just as soon go there as anywhere else," answered Wall. "If it's to seek the North-West passage, many have
been and come back."

"Been, yes; but come back I don't answer for," said Johnson; "but that's no reason for not going."

"Besides, if we are not mistaken in our conjectures," said Shandon, "the voyage will be undertaken under good
conditions. The _Forward's_ a bonny lass, with a good engine, and will stand wear and tear. Eighteen men are all the
crew we want."

"Eighteen men?" said Johnson. "That's just the number that the American, Kane, had on board when he made his
famous voyage towards the North Pole."

"It's a singular fact that there's always some private individual trying to cross the sea from Davis's Straits to
Behring's Straits. The Franklin expeditions have already cost England more than seven hundred and sixty thousand
pounds without producing any practical result. Who the devil means to risk his fortune in such an enterprise?"

"We are reasoning now on a simple hypothesis," said Shandon. "I don't know if we are really going to the
Northern or Southern Seas. Perhaps we are going on a voyage of discovery. We shall know more when Dr.
Clawbonny comes; I daresay he will tell us all about it."
"There's nothing for it but to wait," answered Johnson; "I'll go and hunt up some solid subjects, captain; and as to their animal heat, I guarantee beforehand you can trust me for that."

Johnson was a valuable acquisition; he understood the navigation of these high latitudes. He was quartermaster on board the _Phoenix_, one of the vessels of the Franklin expedition of 1853. He was witness of the death of the French lieutenant Bellot, whom he had accompanied in his expedition across the ice. Johnson knew the maritime population of Liverpool, and started at once on his recruiting expedition. Shandon, Wall, and he did their work so well that the crew was complete in the beginning of December. It had been a difficult task; many, tempted by the high pay, felt frightened at the risk, and more than one enlisted boldly who came afterwards to take back his word and enlistment money, dissuaded by his friends from undertaking such an enterprise. All of them tried to pierce the mystery, and worried Shandon with questions; he sent them to Johnson.

"I can't tell you what I don't know," he answered invariably; "you'll be in good company, that's all I can tell you. You can take it or leave it alone."

And the greater number took it. "I have only to choose," added the boatswain; "such salary has never been heard of in the memory of sailors, and then the certainty of finding a handsome capital when we come back. Only think: it's tempting enough."

"The fact is," answered the sailor, "it is tempting; enough to live on till the end of one's days."

"I don't hide from you," continued Johnson, "that the cruise will be long, painful, and perilous; that is formally stated in our instructions, and you ought to know what you undertake; you will very likely be required to attempt all that it is possible for human beings to do, and perhaps more. If you are the least bit frightened, if you don't think you may just as well finish yonder as here, you'd better not enlist, but give way to a bolder man."

"But, Mr. Johnson," continued the sailor, for the want of something better to say, "at least you know the captain?"

"The captain is Richard Shandon till another comes."

Richard Shandon, in his secret heart, hoped that the command would remain with him, and that at the last moment he should receive precise instructions as to the destination of the _Forward_. He did all he could to spread the report in his conversations with his officers, or when following the construction of the brig as it grew in the Birkenhead dockyard, looking like the ribs of a whale turned upside down. Shandon and Johnson kept strictly to their instructions touching the health of the sailors who were to form the crew; they all looked hale and hearty, and had enough heat in their bodies to suffice for the engine of the _Forward_; their supple limbs, their clear and florid complexions were fit to react against the action of intense cold. They were confident and resolute men, energetically and solidly constituted. Of course they were not all equally vigorous; Shandon had even hesitated about taking some of them, such as the sailors Gripper and Garry, and the harpooner Simpson, because they looked rather thin; but, on the whole, their build was good; they were a warm-hearted lot, and their engagement was signed.

All the crew belonged to the same sect of the Protestant religion; during these long campaigns prayer in common and the reading of the Bible have a good influence over the men and sustain them in the hour of discouragement; it was therefore important that they should be all of the same way of thinking. Shandon knew by experience the utility of these practices, and their influence on the mind of the crew; they are always employed on board ships that are intended to winter in the Polar Seas. The crew once got together, Shandon and his two officers set about the provisions; they strictly followed the instructions of the captain; these instructions were clear, precise, and detailed, and the least articles were put down with their quality and quantity. Thanks to the cheques at the commander's disposition, every article was paid for at once with a discount of 8 per cent, which Richard carefully placed to the credit of K. Z.

Crew, provisions, and cargo were ready by January, 1860; the _Forward_ began to look shipshape, and Shandon went daily to Birkenhead. On the morning of the 23rd of January he was, as usual, on board one of the Mersey ferry-boats with a helm at either end to prevent having to turn it; there was a thick fog, and the sailors of the river were obliged to direct their course by means of the compass, though the passage lasts scarcely ten minutes. But the thickness of the fog did not prevent Shandon seeing a man of short stature, rather fat, with an intelligent and merry face and an amiable look, who came up to him, took him by the two hands, and shook them with an ardour, a petulance, and a familiarity "quite meridional," as a Frenchman would have said. But if this person did not come from the South, he had got his temperament there; he talked and gesticulated with volubility; his thought must come out or the machine would burst. His eyes, small as those of witty men generally are, his mouth, large and mobile, were safety-pipes which allowed him to give passage to his overflowing thoughts; he talked, and talked, and talked so much and so fast that Shandon couldn't understand a word he said. However, this did not prevent the _Forward_'s mate from recognising the little man he had never seen before; a lightning flash traversed his mind, and when the other paused to take breath, Shandon made haste to get out the words, "Doctor Clawbonny!"

"Himself in person, commander! I've been at least half a quarter of an hour looking for you, asking everybody
everywhere! Just think how impatient I got; five minutes more and I should have lost my head! And so you are the commander Richard? You really exist? You are not a myth? Your hand, your hand! I want to shake it again. It is Richard Shandon's hand, and if there is a commander Shandon, there's a brig _Forward_ to command; and if he commands he will start, and if he starts he'll take Dr. Clawbonny on board."

"Well, yes, doctor, I am Richard Shandon; there is a brig _Forward_, and it will start."

"That's logic," answered the doctor, after taking in a large provision of breathing air--"that's logic. And I am ready to jump for joy at having my dearest wishes gratified. I've wanted to undertake such a voyage. Now with you, commander---"

"I don't----" began Shandon.

"With you," continued Clawbonny, without hearing him, "we are sure to go far and not to draw back for a trifle."

"But----" began Shandon again.

"For you have shown what you are made of, commander; I know your deeds of service. You are a fine sailor!"

"If you will allow me----"

"No, I won't have your bravery, audacity, and skill put an instant in doubt, even by you! The captain who chose you for his mate is a man who knows what he's about, I can tell you."

"But that's nothing to do with it," said Shandon, impatient.

"What is it, then? Don't keep me in suspense another minute."

"You don't give me time to speak. Tell me, if you please, doctor, how it comes that you are to take part in the expedition of the _Forward_."

"Read this letter, this worthy letter, the letter of a brave captain--very laconic, but quite sufficient."

Saying which the doctor held out the following letter to Shandon:--

"INVERNESS,

Jan. 22nd, 1860.

"To Dr. Clawbonny.

"If Dr. Clawbonny wishes to embark on board the _Forward_ for a long cruise, he may introduce himself to the commander, Richard Shandon, who has received orders concerning him.

"THE CAPTAIN OF THE 'FORWARD,'

"K. Z."

"This letter reached me this morning, and here I am, ready to embark."

"But, doctor, do you know where we are going to?"

"I haven't the slightest idea, and I do not care so that it is somewhere. They pretend that I am learned; they are mistaken, commander. I know nothing, and if I have published a few books that don't sell badly, I ought not to have done it; the public is silly for buying them. I know nothing, I tell you. I am only an ignorant man. When I have the offer of completing, or rather of going over again, my knowledge of medicine, surgery, history, geography, botany, mineralogy, conchology, geodesy, chemistry, natural philosophy, mechanics, and hydrography, why I accept, of course."

"Then," said Shandon, disappointed, "you do not know where the _Forward_ is bound for?"

"Yes, I do; it is bound for where there is something to learn, to discover, and to compare--where we shall meet with other customs, other countries, other nations, to study in the exercise of their functions; it is going, in short, where I have never been."

"But I want to know something more definite than that," cried Shandon.

"Well, I have heard that we are bound for the Northern Seas."

"At least," asked Shandon, "you know the captain?"

"Not the least bit in the world! But he is an honest fellow, you may believe me."

The commander and the doctor disembarked at Birkenhead; the former told the doctor all he knew about the situation of things, and the mystery inflamed the imagination of the doctor. The sight of the brig caused him transports of joy. From that day he stopped with Shandon, and went every day to pay a visit to the shell of the _Forward_. Besides, he was specially appointed to overlook the installation of the ship's medicine-chest. For Dr. Clawbonny was a doctor, and a good one, though practising little. At the age of twenty-five he was an ordinary practitioner; at the age of forty he was a _savant_, well known in the town; he was an influential member of all the literary and scientific institutions of Liverpool. His fortune allowed him to distribute counsels which were none the worse for being gratuitous; beloved as a man eminently lovable must always be, he had never wronged any one, not even himself; lively and talkative, he carried his heart in his hand, and put his hand into that of everybody. When it was known in Liverpool that he was going to embark on board the _Forward_ his friends did all they could to dissuade him, and only fixed him more completely in his determination, and when the doctor was determined to do anything no one could prevent him. From that time the suppositions and apprehensions increased, but did not
CHAPTER IV
DOG-CAPTAIN

The day of departure arrived with the 5th of April. The admission of the doctor on board had given the crew more confidence. They knew that where the worthy doctor went they could follow. However, the sailors were still uneasy, and Shandon, fearing that some of them would desert, wished to be off. With the coast out of sight, they would make up their mind to the inevitable.

Dr. Clawbonny's cabin was situated at the end of the poop, and occupied all the stern of the vessel. The captain's and mate's cabins gave upon deck. The captain's remained hermetically closed, after being furnished with different instruments, furniture, travelling garments, books, clothes for changing, and utensils, indicated in a detailed list. According to the wish of the captain, the key of the cabin was sent to Lubeck; he alone could enter his room. This detail vexed Shandon, and took away all chance of the chief command. As to his own cabin, he had perfectly appropriated it to the needs of the presumed voyage, for he thoroughly understood the needs of a Polar expedition. The room of the third officer was placed under the lower deck, which formed a vast sleeping-room for the sailors' use; the men were very comfortably lodged, and would not have found anything like the same convenience on board any other ship; they were cared for like the most priceless cargo: a vast stove occupied all the centre of the common room. Dr. Clawbonny was in his element; he had taken possession of his cabin on the 6th of February, the day after the _Forward_ was launched.

"The happiest of animals," he used to say, "is a snail, for it can make a shell exactly to fit it; I shall try to be an intelligent snail."

And considering that the shell was to be his lodging for a considerable time, the cabin began to look like home; the doctor had a _savant's_ or a child's pleasure in arranging his scientific traps. His books, his herbs, his set of pigeon-holes, his instruments of precision, his chemical apparatus, his collection of thermometers, barometers, hygrometers, rain-gauges, spectacles, compasses, sextants, maps, plans, flasks, powders, bottles for medicine-chest, were all classed in an order that would have shamed the British Museum. The space of six square feet contained incalculable riches: the doctor had only to stretch out his hand without moving to become instantaneously a doctor, a mathematician, an astronomer, a geographer, a botanist, or a conchologist. It must be acknowledged that he was proud of his management and happy in his floating sanctuary, which three of his thinnest friends would have sufficed to fill. His friends came to it in such numbers that even a man as easy-going as the doctor might have said with Socrates, "My house is small, but may it please Heaven never to fill it with friends!"

To complete the description of the _Forward_ it is sufficient to say that the kennel of the large Danish dog was constructed under the window of the mysterious cabin but its savage inhabitant preferred wandering between decks and in the hold; it seemed impossible to tame him, and no one had been able to become his master; during the night he howled lamentably, making the hollows of the ship ring in a sinister fashion. Was it regret for his absent master? Was it the instinct of knowing that he was starting for a perilous voyage? Was it a presentiment of dangers to come? The sailors decided that it was for the latter reason, and more than one pretended to joke who believed seriously that the dog was of a diabolical kind. Pen, who was a brutal man, was going to strike him once, when he fell, unfortunately, against the angle of the capstan, and made a frightful wound in his head. Of course this accident was placed to the account of the fantastic animal. Clifton, the most superstitious of the crew, made the singular observation that when the dog was on the poop he always walked on the windward side, and afterwards, when the brig was out at sea, and altered its tack, the surprising animal changed its direction with the wind the same as the captain of the _Forward_ would have done in his place. Dr. Clawbonny, whose kindness and caresses would have tamed a tiger, tried in vain to win the good graces of the dog; he lost his time and his pains. The animal did not answer to any name ever written in the dog calendar, and the crew ended by calling him Captain, for he appeared perfectly conversant with ship customs; it was evident that it was not his first trip. From such facts it is easy to
understand the boatswain's answer to Clifton's friend, and the credulity of those who heard it; more than one repeated jokingly that he expected one day to see the dog take human shape and command the manoeuvres with a resounding voice.

If Richard Shandon did not feel the same apprehensions he was not without anxiety, and the day before the departure, in the evening of April 5th, he had a conversation on the subject with the doctor, Wall, and Johnson in the poop cabin. These four persons were tasting their tenth grog, and probably their last, for the letter from Aberdeen had ordered that all the crew, from the captain to the stoker, should be teetotallers, and that there should be no wine, beer, nor spirits on board except those given by the doctor's orders. The conversation had been going on about the departure for the last hour. If the instructions of the captain were realised to the end, Shandon would receive his last instructions the next day.

"If the letter," said the commander, "does not tell me the captain's name, it must at least tell me the destination of the brig, or I shall not know where to take her to."

"If I were you," said the impatient doctor, "I should start whether I get a letter or no; they'll know how to send after you, you may depend."

"You are ready for anything, doctor; but if so, to what quarter of the globe should you set sail?"

"To the North Pole, of course; there's not the slightest doubt about that."

"Why should it not be the South Pole?" asked Wall.

"The South Pole is out of the question. No one with any sense would send a brig across the whole of the Atlantic. Just reflect a minute, and you'll see the impossibility."

"The doctor has an answer to everything," said Wall.

"Well, we'll say north," continued Shandon. "But where north? To Spitzbergen or Greenland? Labrador or Hudson's Bay? Although all directions end in insuperable icebergs, I am not less puzzled as to which to take. Have you an answer to that, doctor?"

"No," he answered, vexed at having nothing to say; "but if you don't get a letter what shall you do?"

"I shall do nothing; I shall wait."

"Do you mean to say you won't start?" cried Dr. Clawbonny, agitating his glass in despair.

"Certainly I do."

"And that would be the wisest plan," said Johnson tranquilly, while the doctor began marching round the table, for he could not keep still; "but still, if we wait too long, the consequences may be deplorable; the season is good now if we are really going north, as we ought to profit by the breaking up of the ice to cross Davis's Straits; besides, the crew gets more and more uneasy; the friends and companions of our men do all they can to persuade them to leave the _Forward_, and their influence may be pernicious for us."

"Besides," added Wall, "if one of them deserted they all would, and then I don't know how you would get another crew together."

"But what can I do?" cried Shandon.

"What you said you would do," replied the doctor; "wait and wait till to-morrow before you despair. The captain's promises have all been fulfilled up to now with the greatest regularity, and there's no reason to believe we shan't be made acquainted with our destination when the proper time comes. I haven't the slightest doubt that to-morrow we shall be sailing in the Irish Channel, and I propose we drink a last grog to our pleasant voyage. It begins in an unaccountable fashion, but with sailors like you there are a thousand chances that it will end well."

And all four drank to their safe return.

"Now, commander," continued Johnson, "if you will allow me to advise you, you will prepare everything to start; the crew must think that you know what you are about. If you don't get a letter to-morrow, set sail; do not get up the steam, the wind looks like holding out, and it will be easy enough to sail; let the pilot come on board; go out of the docks with the tide, and anchor below Birkenhead; our men won't be able to communicate with land, and if the devil of a letter comes it will find us as easily there as elsewhere."

"By heavens! you are right, Johnson!" cried the doctor, holding out his hand to the old sailor.

"So be it," answered Shandon.

Then each one entered his cabin, and waited in feverish sleep for the rising of the sun. The next day the first distribution of letters took place in the town, and not one bore the address of the commander, Richard Shandon. Nevertheless, he made his preparations for departure, and the news spread at once all over Liverpool, and, as we have already seen, an extraordinary affluence of spectators crowded the wharfs of New Prince's Docks. Many of them came on board to shake hands for the last time with a comrade, or to try and dissuade a friend, or to take a look at the brig, and to know its destination; they were disappointed at finding the commander more taciturn and reserved than ever. He had his reasons for that.

Ten o'clock struck. Eleven followed. The tide began to go out that day at about one o'clock in the afternoon.
Shandon from the top of the poop was looking at the crowd with uneasy eyes, trying to read the secret of his destiny on one of the faces. But in vain. The sailors of the _Forward_ executed his orders in silence, looking at him all the time, waiting for orders which did not come. Johnson went on preparing for departure. The weather was cloudy and the sea rough; a south-easter blew with violence, but it was easy to get out of the Mersey.

At twelve o'clock nothing had yet been received. Dr. Clawbonny marched up and down in agitation, looking through his telescope, gesticulating, impatient for the sea, as he said. He felt moved, though he struggled against it. Shandon bit his lips till the blood came. Johnson came up to him and said--

"Commander, if we want to profit by the tide, there is no time to be lost; we shall not be clear of the docks for at least an hour."

Shandon looked round him once more and consulted his watch. The twelve o'clock letters had been distributed. In despair he told Johnson to start. The boatswain ordered the deck to be cleared of spectators, and the crowd made a general movement to regain the wharves while the last moorings were unloosed. Amidst the confusion a dog's bark was distinctly heard, and all at once the animal broke through the compact mass, jumped on to the poop, and, as a thousand spectators can testify, dropped a letter at Shandon's feet.

"A letter!" cried Shandon. "He is on board, then?"

"He was, that's certain, but he isn't now," said Johnson, pointing to the deserted deck.

Shandon held the letter without opening it in his astonishment.

"But read it, read it, I say," said the doctor.

Shandon looked at it. The envelope had no postmark or date; it was addressed simply to:

"RICHARD SHANDON,
"Commander on board the brig
"_Forward_."

Shandon opened the letter and read as follows:---

"Sail for Cape Farewell. You will reach it by the 20th of April. If the captain does not appear on board, cross Davis's Straits, and sail up Baffin's Sea to Melville Bay.

"THE CAPTAIN OF THE 'FORWARD',
"K. Z."

Shandon carefully folded this laconic epistle, put it in his pocket, and gave the order for departure. His voice, which rang above the east wind, had something solemn in it.

Soon the _Forward_ had passed the docks, and directed by a Liverpool pilot whose little cutter followed, went down the Mersey with the current. The crowd precipitated itself on to the exterior wharf along the Victoria Docks in order to get a last glimpse of the strange brig. The two topsails, the foresail and the brigantine sail were rapidly set up, and the _Forward_, worthy of its name, after having rounded Birkenhead Point, sailed with extraordinary fleetness into the Irish Sea.

CHAPTER V
OUT AT SEA

The wind was favourable, though it blew in April gales. The _Forward_ cut through the waves, and towards three o'clock crossed the mail steamer between Liverpool and the Isle of Man. The captain hailed from his deck the last adieu that the _Forward_ was destined to hear.

At five o'clock the pilot left the command in the hands of Richard Shandon, the commander of the brig, and regained his cutter, which, turning round, soon disappeared on the south-west. Towards evening the brig doubled the Calf of Man at the southern extremity of the island. During the night the sea was very rough, but the _Forward_ behaved well, left the point of Ayr to the north-west, and directed its course for the Northern Channel. Johnson was right; once out at sea the maritime instinct of the sailors gained the upper hand. Life on board went on with regularity.

The doctor breathed in the sea air with delight; he walked about vigorously in the squalls, and for a _savant_ he was not a bad sailor.

"The sea is splendid," said he to Johnson, coming up on deck after breakfast. "I have made its acquaintance rather late, but I shall make up for lost time."

"You are right, Mr. Clawbonny. I would give all the continents of the world for a corner of the ocean. They pretend that sailors soon get tired of their profession, but I've been forty years on the sea and I love it as much as the first day."

"It is a great pleasure to feel a good ship under one's feet, and if I'm not a bad judge the _Forward_ behaves herself well."
"You judge rightly, doctor," answered Shandon, who had joined the talkers; "she is a good ship, and I acknowledge that a vessel destined for navigation amongst ice has never been better equipped. That reminds me that thirty years ago Captain James Ross, sailing for the North-West passage-----"

"In the _Victory_," added the doctor quickly, "a brig about the same tonnage as ours, with a steam-engine too."

"What! you know about that?"

"Judge if I do," answered the doctor. "Machines were then in their infancy, and the _Victory's_ kept her back; the captain, James Ross, after having vainly repaired it bit by bit, finished by taking it down, and abandoned it at his first winter quarters."

"The devil!" said Shandon. "You know all about it, I see."

"Yes. I've read the works of Parry, Ross, and Franklin, and the reports of McClure, Kennedy, Kane, and McClintock, and I remember something of what I've read. I can tell you, too, that this same McClintock, on board the _Fox_, a screw brig in the style of ours, went easier to his destination than any of the men who preceded him."

"That's perfectly true," answered Shandon; "he was a bold sailor was McClintock; I saw him at work. You may add that, like him, we shall find ourselves in Davis's Straits in April, and if we succeed in passing the ice our voyage will be considerably advanced."

"Unless," added the doctor, "it happens to us like it did to the _Fox_ in 1857, to be caught the very first year by the ice in Baffin's Sea, and have to winter in the midst of the icebergs."

"We must hope for better luck," answered Johnson. "If a ship like the _Forward_ can't take us where we want to go, we must renounce all hope for ever."

"Besides," said the doctor, "if the captain is on board he will know better than we do what must be done. We know nothing as yet; his letter says nothing about what our voyage is for."

"It is a good deal to know which way to go," answered Shandon quickly. "We can do without the captain and his instructions for another month at least. Besides, you know what I think about it."

"A short time ago," said the doctor, "I thought like you that the captain would never appear, and that you would remain commander of the ship; but now---"

"Now what?" replied Shandon in an impatient tone.

"Since the arrival of the second letter I have modified that opinion."

"Why, doctor?"

"Because the letter tells you the route to follow, but leaves you ignorant of the _Forward's_ destination; and we must know where we are going to. How the deuce are you to get a letter now we are out at sea? On the coast of Greenland the service of the post must leave much to wish for. I believe that our gentleman is waiting for us in some Danish settlement--at Holsteinborg or Uppernawik; he has evidently gone there to complete his cargo of sealskins, buy his sledges and dog, and, in short, get together all the tackle wanted for a voyage in the Arctic Seas. I shouldn't be at all surprised to see him come out of his cabin one of these fine mornings and begin commanding the ship in anything but a supernatural way."

"It's possible," answered Shandon drily; "but in the meantime the wind is getting up, and I can't risk my gallant sails in such weather."

Shandon left the doctor and gave the order to reef the topsails.

"He takes it to heart," said the doctor to the boatswain.

"Yes," answered the latter, "and it's a great pity, for you may be right, Mr. Clawbonny."

In the evening of Saturday the _Forward_ doubled the Mull of Galloway, whose lighthouse shone to the north-east; during the night they left the Mull of Cantyre to the north, and Cape Fair, on the coast of Ireland, to the east. Towards three o'clock in the morning, the brig, leaving Rathlin Island on her starboard side, disembogued by the Northern Channel into the ocean. It was Sunday, the 8th of April, and the doctor read some chapters of the Bible to the assembled seamen. The wind then became a perfect hurricane, and tended to throw the brig on to the Irish coast; she pitched, and rolled, and tossed, and if the doctor was not seasick it was because he would not be, for nothing was easier. At noon Cape Malinhead disappeared towards the south; it was the last European ground that these bold sailors were to perceive, and more than one watched it out of sight, destined never to see it again. They were then in 55 degrees 57 minutes latitude and 7 degrees 40 minutes longitude by the Greenwich meridian.

The storm spent itself out about nine o'clock in the evening; the _Forward_, like a good sailor, maintained her route north-west. She showed by her behaviour during the day what her sailing capacities were, and as the Liverpool connoisseurs had remarked, she was above all, a sailing vessel. During the following days the _Forward_ gained the north-west with rapidity; the wind veered round south, and the sea had a tremendous swell on; the brig was then going along under full sail. Some petrels and puffins came sailing over the poop; the doctor skilfully shot one of the latter, and it fell, fortunately, on the deck. The harpooner, Simpson, picked it up and brought it to its owner.

"Nasty game that, Mr. Clawbonny," he said.
"It will make an excellent meal, on the contrary," said the doctor.

"You don't mean to say you are going to eat that thing?"

"And so are you, old fellow," said the doctor, laughing.

"Poh!" replied Simpson, "but it's oily and rancid, like all other sea birds."

"Never mind!" answered the doctor, "I have a peculiar way of cooking that game, and if you recognise it for a sea bird I'll consent never to kill another in my life."

"Do you know how to cook, then?"

"A _savant_ ought to know how to do a little of everything."

"You'd better take care, Simpson," said the boatswain; "the doctor's a clever man, and he'll make you take this puffin for a grouse."

The fact is that the doctor was quite right about his fowl; he took off all the fat, which all lies under the skin, principally on the thighs, and with it disappeared the rancidity and taste of fish which is so disagreeable in a sea bird. Thus prepared the puffin was declared excellent, and Simpson acknowledged it the first.

During the late storm Richard Shandon had been able to judge of the qualities of his crew; he had watched each man narrowly, and knew how much each was to be depended upon.

James Wall was devoted to Richard, understood quickly and executed well, but he might fail in initiative; he placed him in the third rank. Johnson was used to struggle with the sea; he was an old stager in the Arctic Ocean, and had nothing to learn either in audacity or _sang-froid_. The harpooner, Simpson, and the carpenter, Bell, were sure men, faithful to duty and discipline. The ice-master, Foker, was an experienced sailor, and, like Johnson, was capable of rendering important service. Of the other sailors Garry and Bolton seemed to be the best; Bolton was a gay and talkative fellow; Garry was thirty-five, with an energetic face, but rather pale and sad-looking. The three sailors, Clifton, Gripper, and Pen, seemed less ardent and resolute; they easily grumbled. Gripper wanted to break his engagement even before the departure of the _Forward_; a sort of shame kept him on board. If things went on all right, if there were not too many risks to run, no dangers to encounter, these three men might be depended upon; but they must be well fed, for it might be said that they were led by their stomachs. Although warned beforehand, they grumbled at having to be teetotallers; at their meals they regretted the brandy and gin; it did not, however, make them spare the tea and coffee, which was prodigally given out on board. As to the two engineers, Brunton and Plover, and the stoker, Warren, there had been nothing for them to do as yet, and Shandon could not tell anything about their capabilities.

On the 14th of April the _Forward_ got into the grand current of the Gulf Stream, which, after ascending the eastern coast of America to Newfoundland, inclines to the north-east along the coast of Norway. They were then in 57 degrees 37 minutes latitude by 22 degrees 58 minutes longitude, at two hundred miles from the point of Greenland. The weather grew colder, and the thermometer descended to thirty-two degrees, that is to say to freezing point.

The doctor had not yet begun to wear the garments he destined for the Arctic Seas, but he had donned a sailor's dress like the rest; he was a queer sight with his top-boots, in which his legs disappeared, his vast oilcloth hat, his jacket and trousers of the same; when drenched with heavy rains or enormous waves the doctor looked like a sort of sea-animal, and was proud of the comparison.

During two days the sea was extremely rough; the wind veered round to the north-west, and delayed the progress of the _Forward_. From the 14th to the 16th of April the swell was great, but on the Monday there came such a torrent of rain that the sea became calm immediately. Shandon spoke to the doctor about this phenomenon.

"It confirms the curious observations of the whaler Scoresby, who laid it before the Royal Society of Edinburgh, of which I have the honour to be an honorary member. You see that when it rains the waves are not very high, even under the influence of a violent wind, and when the weather is dry the sea is more agitated, even when there is less wind."

"But how is this phenomenon accounted for?"

"Very simply; it is not accounted for at all."

Just then the ice-master, who was keeping watch on the crossbars of the topsails, signalled a floating mass on the starboard, at about fifteen miles distance before the wind.

"An iceberg here!" cried the doctor.

Shandon pointed his telescope in the direction indicated, and confirmed the pilot's announcement.

"That is curious!" said the doctor.

"What! you are astonished at last!" said the commander, laughing.

"I am surprised, but not astonished," answered the doctor, laughing; "for the brig _Ann_ of Poole, from Greenspon'd, was caught in 1813 in perfect ice-fields, in the forty-fourth degree of north latitude, and her captain, Dayerment, counted them by hundreds!"
"I see you can teach us something, even upon that subject."

"Very little," answered Clawbonny modestly; "it is only that ice has been met with in even lower latitudes."

"I knew that already, doctor, for when I was cabinboy on board the war-sloop _Fly_."

"In 1818," continued the doctor, "at the end of March, almost in April, you passed between two large islands of floating ice under the forty-second degree of latitude."

"Well, I declare you astonish me!" cried Shandon.

"But the iceberg doesn't astonish me, as we are two degrees further north."

"You are a well, doctor," answered the commander; "and all we have to do is to be water-buckets."

"You will draw me dry sooner than you think for; and now, Shandon, if we could get a nearer look at this phenomenon, I should be the happiest of doctors."

"Just so, Johnson," said Shandon, calling his boatswain. "It seems to me that the breeze is getting up."

"Yes, commander," answered Johnson; "we are making very little way, and the currents of Davis's Straits will soon be against us."

"You are right, Johnson, and if we wish to be in sight of Cape Farewell on the 20th of April we must put the steam on, or we shall be thrown on the coasts of Labrador. Mr. Wall, will you give orders to light the fires?"

The commander's orders were executed, an hour afterwards the steam was up, the sails were furled, and the screw cutting the waves sent the _Forward_ against the north-west wind.

CHAPTER VI
THE GREAT POLAR CURRENT

A short time after the flights of birds became more and more numerous. Petrels, puffins, and mates, inhabitants of those desolate quarters, signalled the approach of Greenland. The _Forward_ was rapidly nearing the north, leaving to her leeward a long line of black smoke.

On Tuesday the 17th of April, about eleven o'clock in the morning, the ice-master signalled the first sight of the ice-blink; it was about twenty miles to the N.N.W. This glaring white strip was brilliantly lighted up, in spite of the presence of thick clouds in the neighbouring parts of the sky. Experienced people on board could make no mistake about this phenomenon, and declared, from its whiteness, that the blink was owing to a large ice-field, situated at about thirty miles out of sight, and that it proceeded from the reflection of luminous rays. Towards evening the wind turned round to the south, and became favourable; Shandon put on all sail, and for economy's sake caused the fires to be put out. The _Forward_, under her topsails and foresails, glided on towards Cape Farewell.

At three o'clock on the 18th they came across the ice-stream, and a white thick line of a glaring colour cut brilliantly the lines of the sea and sky. It was evidently drifting from the eastern coast of Greenland more than from Davis's Straits, for ice generally keeps to the west coast of Baffin's Sea. An hour afterwards the _Forward_ passed in the midst of isolated portions of the ice-stream, and in the most compact parts, the icebergs, though welded together, obeyed the movements of the swell. The next day the man at the masthead signalled a vessel. It was the _Valkirien_, a Danish corvette, running alongside the _Forward_, and making for the bank of Newfoundland. The current of the Strait began to make itself felt, and Shandon had to put on sail to go up it. At this moment the commander, the doctor, James Wall, and Johnson were assembled on the poop examining the direction and strength of the current. The doctor wanted to know if the current existed also in Baffin's Sea.

"Without the least doubt," answered Shandon, "and the sailing vessels have much trouble to stem it."

"Besides there," added Wall, "you meet with it on the eastern coast of America, as well as on the western coast of Greenland."

"There," said the doctor, "that is what gives very singular reason to the seekers of the North-West passage! That current runs about five miles an hour, and it is a little difficult to suppose that it springs from the bottom of a gulf."

"It is so much the more probable, doctor," replied Shandon, "that if this current runs from north to south we find in Behring's Straits a contrary current which runs from south to north, and which must be the origin of this one."

"According to that," replied the doctor, "we must admit that America is totally unconnected with the Polar lands, and that the waters of the Pacific run round the coasts of America into the Atlantic. On the other hand, the greater elevation of the waters of the Pacific gives reason to the supposition that they fall into the European seas."

"But," sharply replied Shandon, "there must be facts to establish that theory, and if there are any," added he with irony, "our universally well-informed doctor ought to know them."

"Well," replied the above-mentioned, with amiable satisfaction, "if it interests you, I can tell you that whales, wounded in Davis's Straits, are caught some time afterwards in the neighbourhood of Tartary with the European harpoon still in their flanks."

"And unless they have been able to double Cape Horn or the Cape of Good Hope," replied Shandon, "they must
necessarily have rounded the septentrional coasts of America--that's what I call indisputable, doctor."

"However, if you were not convinced, my dear fellow," said the doctor, smiling, "I could still produce other facts, such as drift-wood, of which Davis's Straits are full, larch, aspen, and other tropical trees. Now we know that the Gulf Stream hinders those woods from entering the Straits. If, then, they come out of it they can only get in from Behring's Straits."

"I am convinced, doctor, and I avow that it would be difficult to remain incredulous with you."

"Upon my honour," said Johnson, "there's something that comes just in time to help our discussion. I perceive in the distance a lump of wood of certain dimensions; if the commander permits it we'll haul it in, and ask it the name of its country."

"That's it," said the doctor, "the example after the rule."

Shandon gave the necessary orders; the brig was directed towards the piece of wood signalled, and soon afterwards, not without trouble, the crew hoisted it on deck. It was the trunk of a mahogany tree, gnawed right into the centre by worms, but for which circumstance it would not have floated.

"This is glorious," said the doctor enthusiastically, "for as the currents of the Atlantic could not carry it to Davis's Straits, and as it has not been driven into the Polar basin by the streams of septentrionial America, seeing that this tree grew under the Equator, it is evident that it comes in a straight line from Behring; and look here, you see those sea-worms which have eaten it, they belong to a hot-country species."

"It is evident," replied Wall, "that the people who do not believe in the famous passage are wrong."

"Why, this circumstance alone ought to convince them," said the doctor; "I will just trace you out the itinerary of that mahogany; it has been floated towards the Pacific by some river of the Isthmus of Panama or Guatemala, from whence the current has dragged it along the American coast as far as Behring's Straits, and in spite of everything it was obliged to enter the Polar Seas. It is neither so old nor so soaked that we need fear to assign a recent date to its setting out; it has had the good luck to get clear of the obstacles in that long suite of straits which lead out of Baffin's Bay, and quickly seized by the boreal current came by Davis's Straits to be made prisoner by the _Forward_ to the great joy of Dr. Clawbonny, who asks the commander's permission to keep a sample of it."

"Do so," said Shandon, "but allow me to tell you that you will not be the only proprietor of such a wreck. The Danish governor of the Isle of Disko----"

"On the coast of Greenland," continued the doctor, "possesses a mahogany table made from a trunk fished up under the same circumstances. I know it, but I don't envy him his table, for if it were not for the bother, I should have enough there for a whole bedroom."

During the night, from Wednesday to Thursday, the wind blew with extreme violence, and driftwood was seen more frequently. Nearing the coast offered many dangers at an epoch in which icebergs were so numerous; the commander caused some of the sails to be furled, and the _Forward_ glided away under her foresail and foremast only. The thermometer sank below freezing-point. Shandon distributed suitable clothing to the crew, a woollen jacket and trousers, a flannel shirt, wadmel stockings, the same as those the Norwegian country-people wear, and a pair of perfectly waterproof sea-boots. As to the captain, he contented himself with his natural fur, and appeared little sensible to the change in the temperature; he had, no doubt, gone through more than one trial of this kind, and besides, a Dane had no right to be difficult. He was seen very little, as he kept himself concealed in the darkest parts of the vessel.

Towards evening the coast of Greenland peeped out through an opening in the fog. The doctor, armed with his glass, could distinguish for an instant a line of peaks, ridged with large blocks of ice; but the fog closed rapidly on this vision, like the curtain of a theatre falling in the most interesting moment of the piece.

On the morning of the 20th of April the _Forward_ was in sight of an iceberg a hundred and fifty feet high, stranded there from time immemorial; the thaws had taken no effect on it, and had respected its strange forms. Snow saw it; James Ross took an exact sketch of it in 1829; and in 1851 the French lieutenant Bellot saw it from the deck of the _Prince Albert_. Of course the doctor wished to keep a memento of the celebrated mountain, and made a clever sketch of it. It is not surprising that such masses should be stranded and adhere to the land, for to each foot above water they have two feet below, giving, therefore, to this one about eighty fathoms of depth.

At last, under a temperature which at noon was only 12 degrees, under a snowy and foggy sky, Cape Farewell was perceived. The _Forward_ arrived on the day fixed; if it pleased the unknown captain to come and occupy his position in such diabolical weather he would have no cause to complain.

"There you are, then," said the doctor to himself, "cape so celebrated and so well named! Many have cleared it like we who were destined never to see it again. Is it, then, an eternal adieu said to one's European friends? You have all passed it. Frobisher, Knight, Barlow, Vaughan, Scroggs, Barentz, Hudson, Blösseville, Franklin, Crozier, Bellot, never to come back to your domestic hearth, and that cape has been really for you the cape of adieus."

It was about the year 970 that some navigators left Iceland and discovered Greenland. Sebastian Cabot forced his
way as far as latitude 56 degrees in 1498. Gaspard and Michel Cotreal, in 1500 and 1502, went as far north as 60 degrees; and Martin Frobisher, in 1576, arrived as far as the bay that bears his name. To John Davis belongs the honour of having discovered the Straits in 1585; and two years later, in a third voyage, that bold navigator and great whaler reached the sixty-third parallel, twenty-seven degrees from the Pole.

Barentz in 1596, Weymouth in 1602, James Hall in 1605 and 1607, Hudson, whose name was given to that vast bay which hollows out so profoundly the continent of America, James Poole, in 1611, advanced far into the Strait in search of that North-West passage the discovery of which would have considerably shortened the track of communication between the two worlds. Baffin, in 1616, found the Straits of Lancaster in the sea that bears his own name; he was followed, in 1619, by James Munk, and in 1719 by Knight, Barlow, Vaughan, and Scroggs, of whom no news has ever been heard. In 1776 Lieutenant Pickersgill, sent out to meet Captain Cook, who tried to go up Behring's Straits, reached the sixty-eighth degree; the following year Young, for the same purpose, went as far north as Woman's Island.

Afterwards came Captain James Ross, who, in 1818, rounded the coasts of Baffin's Sea, and corrected the hydrographic errors of his predecessors. Lastly, in 1819 and 1820, the celebrated Parry passed through Lancaster Straits, and penetrated, in spite of unnumbered difficulties, as far as Melville Island, and won the prize of 5,000 pounds promised by Act of Parliament to the English sailors who would reach the hundred and seventeenth meridian by a higher latitude than the seventy-seventh parallel.

In 1826 Beechey touched Chamisso Island; James Ross wintered from 1829 to 1833 in Prince Regent Straits, and amongst other important works discovered the magnetic pole. During this time Franklin, by an overland route, traversed the septentrional coasts of America from the River Mackenzie to Turnagain Point. Captain Back followed in his steps from 1823 to 1835, and these explorations were completed in 1839 by Messrs. Dease and Simpson and Dr. Rae.

Lastly, Sir John Franklin, wishing to discover the North-West passage, left England in 1845 on board the _Erebus_ and the _Terror_; he penetrated into Baffin's Sea, and since his passage across Disko Island no news had been heard of his expedition.

That disappearance determined the numerous investigations which have brought about the discovery of the passage, and the survey of these Polar continents, with such indented coast lines. The most daring English, French, and American sailors made voyages towards these terrible countries, and, thanks to their efforts, the maps of that country, so difficult to make, figured in the list of the Royal Geographical Society of London. The curious history of these countries was thus presented to the doctor's imagination as he leaned on the rail, and followed with his eyes the long track left by the brig. Thoughts of the bold navigators weighed upon his mind, and he fancied he could perceive under the frozen arches of the icebergs the pale ghosts of those who were no more.

CHAPTER VII

DAVIS'S STRAITS

During that day the _Forward_ cut out an easy road amongst the half-broken ice; the wind was good, but the temperature very low; the currents of air blowing across the ice-fields brought with them their penetrating cold. The night required the severest attention; the floating icebergs drew together in that narrow pass; a hundred at once were often counted on the horizon; they broke off from the elevated coasts under the teeth of the grinding waves and the influence of the spring season, in order to go and melt or to be swallowed up in the depths of the ocean. Long rafts of wood, with which it was necessary to escape collision, kept the crew on the alert; the crow's nest was put in its place on the mizenmast; it consisted of a cask, in which the ice-master was partly hidden to protect him from the cold winds while he kept watch over the sea and the icebergs in view, and from which he signalled danger and sometimes gave orders to the crew. The nights were short; the sun had reappeared since the 31st of January in consequence of the refraction, and seemed to get higher and higher above the horizon. But the snow impeded the view, and if it did not cause complete obscurity it rendered navigation laborious.

On the 21st of April Desolation Cape appeared in the midst of thick mists; the crew were tired out with the constant strain on their energies rendered necessary ever since they had got amongst the icebergs; the sailors had not had a minute's rest; it was soon necessary to have recourse to steam to cut a way through the heaped-up blocks. The doctor and Johnson were talking together on the stern, whilst Shandon was snatching a few hours' sleep in his cabin. Clawbonny was getting information from the old sailor, whose numerous voyages had given him an interesting and sensible education. The doctor felt much friendship for him, and the boatswain repaid it with interest.

"You see, Mr. Clawbonny," Johnson used to say, "this country is not like all others; they call it _Green_land, but there are very few weeks in the year when it justifies its name."

"Who knows if in the tenth century this land did not justify its name?" added the doctor. "More than one
revolution of this kind has been produced upon our globe, and I daresay I should astonish you if I were to tell you
that according to Icelandic chronicles two thousand villages flourished upon this continent about eight or nine
hundred years ago."

"You would so much astonish me, Mr. Clawbonny, that I should have some difficulty in believing you, for it is a
miserable country."

"However miserable it may be, it still offers a sufficient retreat to its inhabitants, and even to civilised
Europeans."

"Without doubt! We met men at Disko and Uppernawik who consented to live in such climates; but my ideas
upon the matter were that they lived there by compulsion and not by choice."

"I daresay you are right, though men get accustomed to everything, and the Greenlanders do not appear to me so
unfortunate as the workmen of our large towns; they may be unfortunate, but they are certainly not unhappy. I say
unhappy, but the word does not translate my thought, for if these people have not the comforts of temperate
countries, they are formed for a rude climate, and find pleasures in it which we are not able to conceive."

"I suppose we must think so, as Heaven is just. Many, many voyages have brought me upon these coasts, and my
heart always shrinks at the sight of these wretched solitudes; but they ought to have cheered up these capes,
promontories, and bays with more engaging names, for Farewell Cape and Desolation Cape are not names made to
attract navigators."

"I have also remarked that," replied the doctor, "but these names have a geographical interest that we must not
overlook. They describe the adventures of those who gave them those names. Next to the names of Davis, Baffin,
Hudson, Ross, Parry, Franklin, and Bellot, if I meet with Cape Desolation I soon find Mercy Bay; Cape Providence
is a companion to Port Anxiety; Repulsion Bay brings me back to Cape Eden, and leaving Turnagain Point I take
refuge in Refuge Bay. I have there under my eyes an unceasing succession of perils, misfortunes, obstacles,
successes, despairs, and issues, mixed with great names of my country, and, like a series of old-fashioned medals,
that nomenclature retraces in my mind the whole history of these seas."

"You are quite right, Mr. Clawbonny, and I hope we shall meet with more Success Bays than Despair Capes in
our voyage."

"I hope so too, Johnson; but, I say, is the crew come round a little from its terrors?"

"Yes, a little; but since we got into the Straits they have begun to talk about the fantastic captain; more than one
of them expected to see him appear at the extremity of Greenland; but between you and me, doctor, doesn't it
astonish you a little too?"

"It does indeed, Johnson."

"Do you believe in the captain's existence?"

"Of course I do."

"But what can be his reasons for acting in that manner?"

"If I really must tell you the whole of my thoughts, Johnson, I believe that the captain wished to entice the crew
far enough out to prevent them being able to come back. Now if he had been on board when we started they would
all have wanted to know our destination, and he might have been embarrassed."

"But why so?"

"Suppose he should wish to attempt some superhuman enterprise, and to penetrate where others have never been
able to reach, do you believe if the crew knew it they would ever have enlisted? As it is, having got so far, going
farther becomes a necessity."

"That's very probable, Mr. Clawbonny. I have known more than one intrepid adventurer whose name alone was
a terror, and who would never have found any one to accompany him in his perilous expeditions-----"

"Excepting me," ventured the doctor.

"And me, after you," answered Johnson, "and to follow you; I can venture to affirm that our captain is amongst
the number of such adventurers. No matter, we shall soon see; I suppose the unknown will come as captain on board
from the coast of Uppernawik or Melville Bay, and will tell us at last where it is his good pleasure to conduct the
ship."

"I am of your opinion, Johnson, but the difficulty will be to get as far as Melville Bay. See how the icebergs
encircle us from every point! They scarcely leave a passage for the _Forward_. Just examine that immense plain
over there."

"The whalers call that in our language an ice-field, that is to say a continued surface of ice the limits of which
cannot be perceived."

"And on that side, that broken field, those long pieces of ice more or less joined at their edges?"

"That is a pack; if it was of a circular form we should call it a patch; and, if the form was longer, a stream."

"And there, those floating icebergs?"
"Those are drift-ice; if they were a little higher they would be icebergs or hills; their contact with vessels is dangerous, and must be carefully avoided. Here, look over there: on that ice-field there is a protuberance produced by the pressure of the icebergs; we call that a hummock; if that protuberance was submerged to its base we should call it a calf. It was very necessary to give names to all those forms in order to recognise them."

"It is truly a marvellous spectacle!" exclaimed the doctor, contemplating the wonders of the Boreal Seas; "there is a field for the imagination in such pictures!"

"Yes," answered Johnson, "ice often takes fantastic shapes, and our men are not behindhand in explaining them according to their own notions."

"Isn't that assemblage of ice-blocks admirable? Doesn't it look like a foreign town, an Eastern town, with its minarets and mosques under the pale glare of the moon? Further on there is a long series of Gothic vaults, reminding one of Henry the Seventh's chapel or the Houses of Parliament."

"They would be houses and towns very dangerous to inhabit, and we must not sail too close to them. Some of those minarets yonder totter on their base, and the least of them would crush a vessel like the _Forward_."

"And yet sailors dared to venture into these seas before they had steam at their command! How ever could a sailing vessel be steered amongst these moving rocks?"

"Nevertheless, it has been accomplished, Mr. Clawbonny. When the wind became contrary--and that has happened to me more than once--we quietly anchored to one of those blocks, and we drifted more or less with it and waited for a favourable moment to set sail again. I must acknowledge that such a manner of voyaging required months, whilst with a little good fortune we shall only want a few days."

"It seems to me," said the doctor, "that the temperature has a tendency to get lower."

"That would be a pity," answered Johnson, "for a thaw is necessary to break up these masses and drive them away into the Atlantic; besides, they are more numerous in Davis's Straits, for the sea gets narrower between Capes Walsingham and Holsteinborg; but on the other side of the 67th degree we shall find the seas more navigable during the months of May and June."

"Yes; but first of all we must get to the other side."

"Yes, we must get there, Mr. Clawbonny. In June and July we should have found an open passage, like the whalers do, but our orders were precise; we were to be here in April. I am very much mistaken if our captain has not his reasons for getting us out here so early."

The doctor was right in stating that the temperature was lowering; the thermometer at noon only indicated 6 degrees, and a north-west breeze was getting up, which, although it cleared the sky, assisted the current in precipitating the floating masses of ice into the path of the _Forward_. All of them did not obey the same impulsion, and it was not uncommon to encounter some of the highest masses drifting in an opposite direction, seized at their base by an undercurrent.

It is easy to understand the difficulties of this kind of navigation; the engineers had not a minute's rest; the engines were worked from the deck by means of levers, which opened, stopped, and reversed them according to the orders of the officers on watch. Sometimes the brig had to hasten through an opening in the ice-fields, sometimes to struggle against the swiftness of an iceberg which threatened to close the only practicable issue, or, again, some block, suddenly overturned, compelled the brig to back quickly so as not to be crushed to pieces. This mass of ice, carried along, broken up and amalgamated by the northern current, crushed up the passage, and if seized by the frost would oppose an impassable barrier to the passage of the _Forward_.

Birds were found in innumerable quantities on these coasts, petrels and other sea-birds fluttered about here and there with deafening cries, a great number of big-headed, short-necked sea-gulls were amongst them; they spread out their long wings and braved in their play the snow whipped by the hurricane. This animation of the winged tribe made the landscape more lively.

Numerous pieces of wood were floating to leeway, clashing with noise; a few enormous, bloated-headed sharks approached the vessel, but there was no question of chasing them, although Simpson, the harpooner, was longing to have a hit at them. Towards evening several seals made their appearance, nose above water, swimming between the blocks.

On the 22nd the temperature again lowered; the _Forward_ put on all steam to catch the favourable passes: the wind was decidedly fixed in the north-west; all sails were furled.

During that day, which was Sunday, the sailors had little to do. After the reading of Divine service, which was conducted by Shandon, the crew gave chase to sea-birds, of which they caught a great number. They were suitably prepared according to the doctor's method, and furnished an agreeable increase of provisions to the tables of the officers and crew.

At three o'clock in the afternoon the _Forward_ had attained Thin de Sael, Sukkertop Mountain; the sea was very rough; from time to time a vast and inopportunity fog fell from the grey sky; however, at noon an exact observation
could be taken. The vessel was in 65 degrees 20 minutes latitude by 54 degrees 22 minutes longitude. It was necessary to attain two degrees more in order to meet with freer and more favourable navigation.

During the three following days, the 24th, 25th, and 26th of April, the _Forward_ had a continual struggle with the ice; the working of the machines became very fatiguing. The steam was turned off quickly or got up again at a moment's notice, and escaped whistling from its valves. During the thick mist the nearing of icebergs was only known by dull thundering produced by the avalanches; the brig was instantly veered; it ran the risk of being crushed against the heaps of fresh-water ice, remarkable for its crystal transparency, and as hard as a rock.

Richard Shandon never missed completing his provision of water by embarking several tons of ice every day. The doctor could not accustom himself to the optical delusions that refraction produces on these coasts. An iceberg sometimes appeared to him like a small white lump within reach, when it was at least at ten or twelve miles' distance. He endeavoured to accustom his eyesight to this singular phenomenon, so that he might be able to correct its errors rapidly.

At last the crew were completely worn out by their labours in hauling the vessel alongside of the ice-fields and by keeping it free from the most menacing blocks by the aid of long perches. Nevertheless, the _Forward_ was still held back in the impassable limits of the Polar Circle on Friday, the 27th of April.

CHAPTER VIII
GOSSIP OF THE CREW

However, the _Forward_ managed, by cunningly slipping into narrow passages, to gain a few more minutes north; but instead of avoiding the enemy, it was soon necessary to attack it. The ice-fields, several miles in extent, were getting nearer, and as these moving heaps often represent a pressure of more than ten millions of tons, it was necessary to give a wide berth to their embraces. The ice-saws were at once installed in the interior of the vessel, in such a manner as to facilitate immediate use of them. Part of the crew philosophically accepted their hard work, but the other complained of it, if it did not refuse to obey. At the same time that they assisted in the installation of the instruments, Garry, Bolton, Pen and Gripper exchanged their opinions.

"By Jingo!" said Bolton gaily, "I don't know why the thought strikes me that there's a very jolly tavern in Waterstreet where it's comfortable to be between a glass of gin and a bottle of porter. Can't you imagine it, Gripper?"

"To tell you the truth," quickly answered the questioned sailor, who generally professed to be in a bad temper, "I don't imagine it here."

"It's for the sake of talking, Gripper; it's evident that the snow towns Dr. Clawbonny admires so don't contain the least public where a poor sailor can get a half-pint of brandy."

"That's sure enough, Bolton; and you may as well add that there's nothing worth drinking here. It's a nice idea to deprive men of their grog when they are in the Northern Seas."

"But you know," said Garry, "that the doctor told us it was to prevent us getting the scurvy. It's the only way to make us go far."

"But I don't want to go far, Garry; it's pretty well to have come this far without trying to go where the devil is determined we shan't."

"Well, we shan't go, that's all," replied Pen. "I declare I've almost forgotten the taste of gin."

"But remember what the doctor says," replied Bolton.

"It's all very fine for them to talk. It remains to be seen if it isn't an excuse for being skinny with the drink."

"Pen may be right, after all," said Gripper.

"His nose is too red for that," answered Bolton. "Pen needn't grumble if it loses a little of its colour in the voyage."

"What's my nose got to do with you?" sharply replied the sailor, attacked in the most sensitive place. "My nose doesn't need any of your remarks; take care of your own."

"Now, then, don't get angry, Pen; I didn't know your nose was so touchy. I like a glass of whisky as well as anybody, especially in such a temperature; but if I know it'll do me more harm than good, I go without."

"You go without," said Warren, the stoker; "but everyone don't go without."

"What do you mean, Warren?" asked Garry, looking fixedly at him.

"I mean that for some reason or other there are spirits on board, and I know they don't go without in the stern."

"And how do you know that?" asked Garry.

Warren did not know what to say; he talked for the sake of talking.

"You see Warren don't know anything about it, Garry," said Bolton.

"Well," said Pen, "we'll ask the commander for a ration of gin; we've earned it well and we'll see what he says."

"I wouldn't if I were you," answered Garry.
"Why?" cried Pen and Gripper.
"Because he'll refuse. You knew you weren't to have any when you enlisted; you should have thought of it then."
"Besides," replied Bolton, who took Garry's part because he liked his character, "Richard Shandon isn't master on board; he obeys, like us."
"Who is master if he isn't?"
"The captain."
"Always that unfortunate captain!" exclaimed Pen. "Don't you see that on these ice-banks there's no more a captain than there is a public? It's a polite way of refusing us what we've a right to claim."
"But if there's a captain," replied Bolton, "I'll bet two months' pay we shall see him before long."
"I should like to tell the captain a bit of my mind," said Pen.
"Who's talking about the captain?" said a new-comer. It was Clifton, the sailor, a superstitious and envious man.
"Is anything new known about the captain?" he asked.
"No," they all answered at once.
"Well, I believe we shall find him one fine morning installed in his cabin, and no one will know how he got there."
"Get along, do!" replied Bolton. "Why, Clifton, you imagine that he's a hobgoblin--a sort of wild child of the Highlands."
"Laugh as much as you like, Bolton, you won't change my opinion. Every day as I pass his cabin I look through the keyhole. One of these fine mornings I shall come and tell you what he's like."
"Why, he'll be like everyone else," said Pen, "and if he thinks he'll be able to do what he likes with us, he'll find himself mistaken, that's all!"
"Pen don't know him yet," said Bolton, "and he's beginning to quarrel with him already."
"Who doesn't know him?" said Clifton, looking knowing; "I don't know that he don't!"
"What the devil do you mean?" asked Gripper.
"I know very well what I mean."
"But we don't."
"Well, Pen has quarrelled with him before."
"With the captain?"
"Yes, the dog-captain--it's all one."
The sailors looked at one another, afraid to say anything.
"Man or dog," muttered Pen, "I declare that that animal will have his account one of these days."
"Come, Clifton," asked Bolton seriously, "you don't mean to say that you believe the dog is the real captain?"
"Indeed I do," answered Clifton with conviction. "If you noticed things like I do, you would have noticed what a queer beast it is."
"Well, tell us what you've noticed."
"Haven't you noticed the way he walks on the poop with such an air of authority, looking up at the sails as if he were on watch?"
"That's true enough," added Gripper, "and one evening I actually found him with his paws on the paddle-wheel."
"You don't mean it!" said Bolton.
"And now what do you think he does but go for a walk on the ice-fields, minding neither the bears nor the cold?"
"That's true enough," said Bolton.
"Do you ever see that 'ere animal, like an honest dog, seek men's company, sneak about the kitchen, and set his eyes on Mr. Strong when's he taking something good to the commander? Don't you hear him in the night when he goes away two or three miles from the vessel, howling fit to make your blood run cold, as if it weren't easy enough to feel that sensation in such a temperature as this? Again, have you ever seen him feed? He takes nothing from any one. His food is always untouched and unless a secret hand feeds him on board, I may say that he lives without eating, and if he's not unearthly, I'm a fool!"
"Upon my word," said Bell, the carpenter, who had heard all Clifton's reasoning, "I shouldn't be surprised if such was the case." The other sailors were silenced.
"Well, at any rate, where's the _Forward_ going to?"
"I don't know anything about it," replied Bell. "Richard Shandon will receive the rest of his instructions in due time."
"But from whom?"
"From whom?"
"Yes, how?" asked Bolton, becoming pressing.
"Now then, answer, Bell!" chimed in all the other sailors.
"By whom? how? Why, I don't know," said the carpenter, embarrassed in his turn.
"Why, by the dog-captain," exclaimed Clifton. "He has written once already; why shouldn't he again? If I only knew half of what that 'ere animal knows, I shouldn't be embarrassed at being First Lord of the Admiralty!"
"So then you stick to your opinion that the dog is the captain?"
"Yes."
"Well," said Pen in a hoarse voice, "if that 'ere animal don't want to turn up his toes in a dog's skin, he's only got to make haste and become a man, or I'm hanged if I don't settle him."
"What for?" asked Garry.
"Because I choose," replied Pen brutally; "besides, it's no business of any one."
"Enough talking, my boys," called out Mr. Johnson, interfering just in time, for the conversation was getting hot. "Get on with your work, and set up your saws quicker than that. We must clear the iceberg."
"What! on a Friday?" replied Clifton, shrugging his shoulders. "You'll see she won't get over the Polar circle as easily as you think."

The efforts of the crew were almost powerless during the whole day. The _Forward_ could not separate the ice-fields even by going against them full speed, and they were obliged to anchor for the night. On Saturday the temperature lowered again under the influence of an easterly wind. The weather cleared up, and the eye could sweep over the white plains in the distance, which the reflection of the sun's rays rendered dazzling. At seven in the morning the thermometer marked eight degrees below zero. The doctor was tempted to stay quietly in his cabin, and read the Arctic voyages over again; but, according to his custom, he asked himself what would be the most disagreeable thing he could do, which he settled was to go on deck and assist the men to work in such a temperature. Faithful to the line of conduct he had traced out for himself, he left his well-warmed cabin and came to help in hauling the vessel. His was a pleasant face, in spite of the green spectacles by which he preserved his eyes from the biting of the reflected rays; in his future observations he was always careful in making use of his snow spectacles, in order to avoid ophthalmia, very frequent in these high latitudes.

Towards evening the _Forward_ had made several miles further north, thanks to the activity of the men and Shandon's skill, which made him take advantage of every favourable circumstance; at midnight he had got beyond the sixty-sixth parallel, and the fathom line declared twenty-three fathoms of water; Shandon discovered that he was on the shoal where Her Majesty's ship _Victoria_ struck, and that land was drawing near, thirty miles to the east. But now the heaps of ice, which up till now had been motionless, divided and began to move; icebergs seemed coming from every point of the horizon; the brig was entangled in a series of moving rocks, the crushing force of which it was impossible to resist. Moving became so difficult that Garry, the best helmsman, took the wheel; the mountains had a tendency to close up behind the brig; it then became essential to cut through the floating ice, and prudence as well as duty ordered them to go ahead. Difficulties became greater from the impossibility that Shandon found in establishing the direction of the vessel amongst such changing points, which kept moving without offering one firm perspective. The crew was divided into two tacks, larboard and starboard; each one, armed with a long perch with an iron point, drove back the two threatening blocks. Soon the _Forward_ entered into a pass so narrow, between two high blocks, that the extremity of her yards struck against the walls, hard as rock; by degrees she entangled herself in the midst of a winding valley, filled up with eddies of snow, whilst the floating ice was crashing and splitting with sinister cracklings. But it soon became certain that there was no egress from this gullet. An enormous block, caught in the channel, was driving rapidly on to the _Forward_! It seemed impossible to avoid it, and equally impossible to back out along a road already obstructed.

Shandon and Johnson, standing on the prow, were contemplating the position. Shandon was pointing with his right hand at the direction the helmsman was to take, and with his left was conveying to James Wall, posted near the engineer, his orders for the working of the machine.
"How will this end?" asked the doctor of Johnson.
"As it may please God," replied the boatswain.

The block of ice, at least a hundred feet high, was only about a cable's length from the _Forward_, and threatened to pound her under it.
"Cursed luck!" exclaimed Pen, swearing frightfully.
"Silence!" exclaimed a voice which it was impossible to recognise in the midst of the storm.

The block seemed to be precipitating itself upon the brig; there was a moment of undefinable anguish; the men forsook their poles and flocked to the stern in spite of Shandon's orders.

Suddenly a frightful sound was heard; a genuine waterspout fell upon deck, heaved up by an enormous wave. A cry of terror rang out from the crew whilst Garry, at the helm, held the _Forward_ in a straight line in spite of the frightful incumbrance. When their frightened looks were drawn towards the mountain of ice it had disappeared; the pass was free, and further on a long channel, illuminated by the oblique rays of the sun, allowed the brig to pursue
"Well, Mr. Clawbonny," said Johnson, "can you explain to me the cause of that phenomenon?"

"It is a very simple one," answered the doctor, "and happens very often. When those floating bodies are disengaged from each other by the thaw, they sail away separately, maintaining their balance; but by degrees, as they near the south, where the water is relatively warmer, their base, shaken by the collision with other icebergs, begins to melt and weaken; it then happens that their centre of gravity is displaced, and, naturally, they overturn. Only, if that one had turned over two minutes later, it would have crushed our vessel to pieces."

CHAPTER IX

NEWS

The Polar circle was cleared at last. On the 30th of April, at midday, the _Forward_ passed abreast of Holsteinborg; picturesque mountains rose up on the eastern horizon. The sea appeared almost free from icebergs, and the few there were could easily be avoided. The wind veered round to the south-east, and the brig, under her mizensail, brigantine, topsails, and her topgallant sail, sailed up Baffin's Sea. It had been a particularly calm day, and the crew were able to take a little rest. Numerous birds were swimming and fluttering about round the vessel; amongst others, the doctor observed some _alca-alla_, very much like the teal, with black neck, wings and back, and white breast; they plunged with vivacity, and their immersion often lasted forty seconds.

The day would not have been remarkable if the following fact, however extraordinary it may appear, had not occurred on board. At six o'clock in the morning Richard Shandon, re-entering his cabin after having been relieved, found upon the table a letter with this address:

"To the Commander,

RICHARD SHANDON,

On board the 'FORWARD,'

'Baffin's Sea.'

Shandon could not believe his own eyes, and before reading such a strange epistle he caused the doctor, James Wall and Johnson to be called, and showed them the letter.

"That grows very strange," said Johnson.

"It's delightful!" thought the doctor.

"At last," cried Shandon, "we shall know the secret."

With a quick hand he tore the envelope and read as follows:

"COMMANDER,—The captain of the _Forward_ is pleased with the coolness, skill, and courage that your men, your officers, and yourself have shown on the late occasions, and begs you to give evidence of his gratitude to the crew.

'Have the goodness to take a northerly direction towards Melville Bay, and from thence try and penetrate into Smith's Straits.

'THE CAPTAIN OF THE _Forward_,

'K. Z.

'Monday, April 30th,

'Abreast of Cape Walsingham.'

'Is that all?"' cried the doctor.

'That's all," replied Shandon, and the letter fell from his hands.

'Well," said Wall, "this chimerical captain doesn't even mention coming on board, so I conclude that he never will come."

'But how did this letter get here?" said Johnson.

Shandon was silent.

'Mr. Wall is right," replied the doctor, after picking up the letter and turning it over in every direction; "the captain won't come on board for an excellent reason----"

'And what's that?" asked Shandon quickly.

'Because he is here already," replied the doctor simply.

'Already!" said Shandon. "What do you mean?"

'How do you explain the arrival of this letter if such is not the case?"

Johnson nodded his head in sign of approbation.

'It is not possible!" said Shandon energetically. "I know every man of the crew. We should have to believe, in that case, that the captain has been with us ever since we set sail. It is not possible, I tell you. There isn't one of them that I haven't seen for more than two years in Liverpool; doctor, your supposition is inadmissible."
"Then what do you admit, Shandon?"

"Everything but that! I admit that the captain, or one of his men, has profited by the darkness, the fog, or anything you like, in order to slip on board; we are not very far from land; there are Esquimaux kayaks that pass unperceived between the icebergs; someone may have come on board and left the letter; the fog was intense enough to favour their design."

"And to hinder them from seeing the brig," replied the doctor; "if we were not able to perceive an intruder slip on board, how could _he_ have discovered the _Forward_ in the midst of a fog?"

"That is evident," exclaimed Johnson.

"I come back, then," said the doctor, "to my first hypothesis. What do you think about it, Shandon?"

"I think what you please," replied Shandon fiercely, "with the exception of supposing that this man is on board my vessel."

"Perhaps," added Wall, "there may be amongst the crew a man of his who has received instructions from him."

"That's very likely," added the doctor.

"But which man?" asked Shandon. "I tell you I have known all my men a long time."

"Anyhow," replied Johnson, "if this captain shows himself, let him be man or devil, we'll receive him; but we have another piece of information to draw from this letter."

"What's that?" asked Shandon.

"Why, that we are to direct our path not only towards Melville Bay, but again into Smith's Straits."

"You are right," answered the doctor.

"Smith's Straits?" echoed Shandon mechanically.

"It is evident," replied Johnson, "that the destination of the _Forward_ is not to seek a North-West passage, as we shall leave to our left the only track that leads to it--that is to say, Lancaster Straits; that's what forebodes us difficult navigation in unknown seas."

"Yes, Smith's Straits," replied Shandon, "that's the route the American Kane followed in 1853, and at the price of what dangers! For a long time he was thought to be lost in those dreadful latitudes! However, as we must go, go we must. But where? how far? To the Pole?"

"And why not?" cried the doctor.

The idea of such an insane attempt made the boatswain shrug his shoulders.

"After all," resumed James Wall, "to come back to the captain, if he exists, I see nowhere on the coast of Greenland except Disko or Uppernawik where he can be waiting for us; in a few days we shall know what we may depend upon."

"But," asked the doctor of Shandon, "aren't you going to make known the contents of that letter to the crew?"

"With the commander's permission," replied Johnson, "I should do nothing of the kind."

"And why so?" asked Shandon.

"Because all that mystery tends to discourage the men: they are already very anxious about the fate of our expedition, and if the supernatural side of it is increased it may produce very serious results, and in a critical moment we could not rely upon them. What do you say about it, commander?"

"And you, doctor--what do you think?" asked Shandon.

"I think Johnson's reasoning is just."

"And you, Wall?"

"Unless there's better advice forthcoming, I shall stick to the opinion of these gentlemen."

Shandon reflected seriously during a few minutes, and read the letter over again carefully.

"Gentlemen," said he, "your opinion on this subject is certainly excellent, but I cannot adopt it."

"Why not, Shandon?" asked the doctor.

"Because the instructions of this letter are formal: they command me to give the captain's congratulations to the crew, and up till to-day I have always blindly obeyed his orders in whatever manner they have been transmitted to me, and I cannot----"

"But----" said Johnson, who rightly dreaded the effect of such a communication upon the minds of the sailors.

"My dear Johnson," answered Shandon, "your reasons are excellent, but read--'he begs you to give evidence of his gratitude to the crew.'"

"Act as you think best," replied Johnson, who was besides a very strict observer of discipline. "Are we to muster the crew on deck?"

"Do so," replied Shandon.

The news of a communication having been received from the captain spread like wildfire on deck; the sailors quickly arrived at their post, and the commander read out the contents of the mysterious letter. The reading of it was received in a dead silence; the crew dispersed, a prey to a thousand suppositions. Clifton had heard enough to give
himself up to all the wanderings of his superstitious imagination; he attributed a considerable share in this incident to the dog-captain, and when by chance he met him in his passage he never failed to salute him. "I told you the animal could write," he used to say to the sailors. No one said anything in answer to this observation, and even Bell, the carpenter himself, would not have known what to answer.

Nevertheless it was certain to all that, in default of the captain, his spirit or his shadow watched on board; and henceforward the wisest of the crew abstained from exchanging their opinions about him.

On the 1st of May, at noon, they were in 68 degrees latitude and 56 degrees 32 minutes longitude. The temperature was higher and the thermometer marked twenty-five degrees above zero. The doctor was amusing himself with watching the antics of a white bear and two cubs on the brink of a pack that lengthened out the land. Accompanied by Wall and Simpson, he tried to give chase to them by means of the canoe; but the animal, of a rather warlike disposition, rapidly led away its offspring, and consequently the doctor was compelled to renounce following them up.

Chilly Cape was doubled during the night under the influence of a favourable wind, and soon the high mountains of Disko rose in the horizon. Godhavn Bay, the residence of the Governor-General of the Danish Settlements, was left to the right. Shandon did not consider it worth while to stop, and soon outran the Esquimaux pirogues who were endeavouring to reach his ship.

The Island of Disko is also called Whale Island. It was from this point that on the 12th of July, 1845, Sir John Franklin wrote to the Admiralty for the last time. It was also on that island on the 27th of August, 1859, that Captain McClintock set foot on his return, bringing back, alas! proofs too complete of the loss of the expedition. The coincidence of these two facts were noted by the doctor; that melancholy conjunction was prolific in memories, but soon the heights of Disko disappeared from his view.

There were, at that time, numerous icebergs on the coasts, some of those which the strongest thaws are unable to detach; the continual series of ridges showed themselves under the strangest forms.

The next day, towards three o'clock, they were bearing on to Sanderson Hope to the north-east. Land was left on the starboard at a distance of about fifteen miles; the mountains seemed tinged with a red-coloured bistre. During the evening, several whales of the finners species, which have fins on their backs, came playing about in the midst of the ice-trails, throwing out air and water from their blow-holes. It was during the night between the 3rd and 4th of May that the doctor saw for the first time the sun graze the horizon without dipping his luminous disc into it. Since the 31st of January the days had been getting longer and longer till the sun went down no more. To strangers not accustomed to the persistence of this perpetual light it was a constant subject of astonishment, and even of fatigue; it is almost impossible to understand to what extent obscurity is requisite for the well-being of our eyes. The doctor experienced real pain in getting accustomed to this light, rendered still more acute by the reflection of the sun's rays upon the plains of ice.

On May 5th the _Forward_ headed the seventy-second parallel; two months later they would have met with numerous whalers under these high latitudes, but at present the straits were not sufficiently open to allow them to penetrate into Baffin's Bay. The following day the brig, after having headed Woman's Island, came in sight of Uppernawik, the most northerly settlement that Denmark possesses on these coasts.

CHAPTER X
DANGEROUS NAVIGATION

Shandon, Dr. Clawbonny, Johnson, Foker, and Strong, the cook, went on shore in the small boat. The governor, his wife, and five children, all of the Esquimaux race, came politely to meet the visitors. The doctor knew enough Danish to enable him to establish a very agreeable acquaintance with them; besides, Foker, who was interpreter of the expedition, as well as ice-master, knew about twenty words of the Greenland language, and if not ambitious, twenty words will carry you far. The governor was born on the island, and had never left his native country. He did the honours of the town, which is composed of three wooden huts, for himself and the Lutheran minister, of a school, and magazines stored with the produce of wrecks. The remainder consists of snow-huts, the entrance to which is attained by creeping through a hole.

The greater part of the population came down to greet the _Forward_, and more than one native advanced as far as the middle of the bay in his kayak, fifteen feet long and scarcely two wide. The doctor knew that the word Esquimaux signified raw-fish-eater, and he likewise knew that the name was considered an insult in the country, for which reason he did not fail to address them by the title of Greenlanders, and nevertheless only by the look of their oily sealskin clothing, their boots of the same material, and all their greasy tainted appearance, it was easy to discover their accustomed food. Like all Ichthyophagans, they were half-eaten up with leprosy; and yet, for all that, were in no worse health.
On the 8th of May, at six o'clock in the morning, the _Forward_ under her topsails, foresails, and topgallant, lost sight of the Uppernawik settlement, and the hideous stakes to which were hung seal-guts and deer-paunches. The wind was blowing from the south-east, and the temperature went up to thirty-two degrees. The sun pierced through the fog, and the ice was getting a little loosened under its dissolving action. But the reflection of the white rays produced a sad effect on the eyesight of several of the crew. Wolsten, the gunsmith, Gripper, Clifton, and Bell were struck with snow blindness, a kind of weakness in the eyes very frequent in spring, and which determines, amongst the Esquimaux, numerous cases of blindness. The doctor advised those who were so afflicted and their companions in general to cover their faces with green gauze, and he was the first to put his own prescription into execution.

The dogs bought by Shandon at Uppernawik were of a rather savage nature, but in the end they became accustomed to the ship; the captain did not take the arrival of these new comrades too much to heart, and he seemed to know their habits. Clifton was not the last to remark the fact that the captain must already have been in communication with his Greenland brethren, as on land they were always famished and reduced by incomplete nourishment; they only thought of recruiting themselves by the diet on board.

On the 9th of May the _Forward_ touched within a few cables' length the most westerly of the Baffin Isles. The land offered a very different aspect from that of Uppernawik; immense glaciers were outlined on the tendency to rise, it was easy enough to see that the icebergs and ice-streams were accumulating to the north of the Uppernawik settlement, and the hideous stakes to which were hung seal-guts and deer-paunches. The doctor noticed several rocks in the bay between the islands and the continent, those called Crimson Cliffs; they were covered over with snow as red as carmine, to which Dr. Kane gives a purely vegetable origin. Clawbonny wanted to know their habits. Clifton was not the last to remark the fact that the captain must already have been in communication with his Greenland brethren, as on land they were always famished and reduced by incomplete nourishment; they only thought of recruiting themselves by the diet on board.
the horizon against a greyish sky. On the 10th the _Forward_ left Hingston Bay on the right, near to the seventy-fourth degree of latitude. Several hundred miles westward the Lancaster Channel opened out into the sea.

But afterwards that immense extent of water disappeared under enormous fields of ice, upon which hummocks rose up as regularly as a crystallisation of the same substance. Shandon had the steam put on, and up to the 11th of May the _Forward_ wound amongst the sinuous rocks, leaving the print of a track on the sky, caused by the black smoke from her funnels. But new obstacles were soon encountered; the paths were getting closed up in consequence of the incessant displacement of the floating masses; at every minute a failure of water in front of the _Forward's_ prow became imminent, and if she had been nipped it would have been difficult to extricate her. They all knew it, and thought about it.

On board this vessel, without aim or known destination, foolishly seeking to advance towards the north, some symptoms of hesitation were manifested amongst those men, accustomed to an existence of danger; many, forgetting the advantages offered, regretted having ventured so far, and already a certain demoralisation prevailed in their minds, still more increased by Clifton's fears, and the idle talk of two or three of the leaders, such as Pen, Gripper, Warren, and Wolston.

To the uneasiness of the crew were joined overwhelming fatigues, for on the 12th of May the brig was closed in on every side; her steam was powerless, and it was necessary to force a road through the ice-fields. The working of the saws was very difficult in the floes, which measured from six to seven feet in thickness. When two parallel grooves divided the ice for the length of a hundred feet, they had to break the interior part with hatchets or handspikes; then took place the elongation of the anchors, fixed in a hole by means of a thick auger; afterwards the working of the capstan began, and in this way the vessel was hauled over. The greatest difficulty consisted in driving the smashed pieces under the floes in order to open up a free passage for the ship, and to thrust them away they were compelled to use long iron-spiked poles.

At last, what with the working of the saws, the hauling, the capstan and poles, incessant, dangerous, and forced work, in the midst of fogs or thick snow, the temperature relatively low, ophthalmic suffering and moral uneasiness, all contributed to discourage the crew, and react on the men's imagination. When sailors have an energetic, audacious, and convinced man to do with, who knows what he wants, where he is bound for, and what end he has in view, confidence sustains them in spite of everything. They make one with their chief, feeling strong in his strength, and quiet in his tranquillity; but on the brig it was felt that the commander was not sure of himself, that he hesitated before his unknown end and destination. In spite of his energetic nature, his weakness showed itself in his changing orders, incomplete manoeuvres, stormy reflections, and a thousand details which could not escape the notice of the crew.

Besides, Shandon was not captain of the ship, a sufficient reason for argument about his orders; from argument to a refusal to obey the step is easy. The discontented soon added to their number the first engineer, who up to now had remained a slave to his duty.

On May 16th, six days after the _Forward's_ arrival at the icebergs, Shandon had not gained two miles northward, and the ice threatened to freeze in the brig till the following season. This was becoming dangerous. Towards eight in the evening Shandon and the doctor, accompanied by Garry, went on a voyage of discovery in the midst of the immense plains; they took care not to go too far away from the vessel, as it was difficult to fix any landmarks in those white solitudes, the aspects of which changed constantly.

The refraction produced strange effects; they still astonished the doctor; where he thought he had only one foot to leap he found it was five or six, or the contrary; and in both cases the result was a fall, if not dangerous, at least painful, on the frozen ice as hard as glass.

Shandon and his two companions went in search of a practicable passage. Three miles from the ship they succeeded, not without trouble, in climbing the iceberg, which was perhaps three hundred feet high.

From this point their view extended over that desolated mass which looked like the ruins of a gigantic town with its beaten-down obelisks, its overthrown steeples and palaces turned upside down all in a lump--in fact, a genuine chaos. The sun threw long oblique rays of a light without warmth, as if heat-absorbing substances were placed between it and that gloomy country. The sea seemed to be frozen to the remotest limits of view.

"How shall we get through?" exclaimed the doctor.

"I have not the least idea," replied Shandon; "but we will get through, even if we are obliged to employ powder to blow up those mountains, for I certainly won't let that ice shut me up till next spring."

"Nevertheless, such was the fate of the _Fox_, almost in these same quarters. Never mind," continued the doctor, "we shall get through with a little philosophy. Believe me, that is worth all the engines in the world."

"You must acknowledge," replied Shandon, "that the year doesn't begin under very favourable auspices."

"That is incontestable, and I notice that Baffin's Sea has a tendency to return to the same state in which it was before 1817."
"Then you think, doctor, that the present state of things has not always existed?"

"Yes; from time to time there are vast breakings up which scientific men can scarcely explain; thus, up to 1817 this sea was constantly obstructed, when suddenly an immense cataclysm took place which drove back these icebergs into the ocean, the great part of which were stranded on Newfoundland Bank. From that time Baffin's Bay has been almost free, and has become the haunt of numerous whalers."

"Then, since that epoch, voyages to the north have been easier?"

"Incomparably so; but for the last few years it has been observed that the bay has a tendency to be closed up again, and according to investigations made by navigators, it may probably be so for a long time—a still greater reason for us to go on as far as possible. Just now we look like people who get into unknown galleries, the doors of which are always shut behind them."

"Do you advise me to back out?" asked Shandon, endeavouring to read the answer in the doctor's eyes.

"I! I have never known how to take a step backward, and should we never return, I say 'Go ahead.' However, I should like to make known to you that if we do anything imprudent, we know very well what we are exposed to."

"Well, Garry, what do you think about it?" asked Shandon of the sailor.

"I? Commander, I should go on; I'm of the same opinion as Mr. Clawbonny; but you do as you please; command, and we will obey."

"They don't all speak like you, Garry," replied Shandon. "They aren't all in an obedient humour! Suppose they were to refuse to execute my orders?"

"Commander," replied Garry coldly, "I have given you my advice because you asked me for it; but you are not obliged to act upon it."

Shandon did not reply; he attentively examined the horizon, and descended with his two companions on to the ice-field.

CHAPTER XI
THE DEVIL'S THUMB

During the commander's absence the men had gone through divers works in order to make the ship fit to avoid the pressure of the ice-fields. Pen, Clifton, Gripper, Bolton, and Simpson were occupied in this laborious work; the stoker and the two engineers were even obliged to come to the aid of their comrades, for, from the instant they were not wanted at the engine, they again became sailors, and, as such, they could be employed in all kinds of work on board. But this was not accomplished without a great deal of grumbling.

"I'll tell you what," said Pen, "I've had enough of it, and if in three days the breaking up isn't come, I'll swear to God that I'll chuck up!"

"You'll chuck up?" replied Gripper; "you'd do better to help us to back out. Do you think we are in the humour to winter here till next year?"

"To tell you the truth, it would be a dreary winter," said Plover, "for the ship is exposed from every quarter."

"And who knows," added Brunton, "if even next spring we should find the sea freer than it is now?"

"We aren't talking about next spring," said Pen; "to-day's Thursday; if next Sunday morning the road ain't clear, we'll back out south."

"That's the ticket!" cried Clifton.

"Are you all agreed?" said Pen.

"Yes," answered all his comrades.

"That's right enough," answered Warren, "for if we are obliged to work like this, hauling the ship by the strength of our arms, my advice is to backwater."

"We'll see about that on Sunday," answered Wolsten.

"As soon as I get the order," said Brunton, "I'll soon get my steam up."

"Or we'd manage to get it up ourselves," said Clifton.

"If any of the officers," said Pen, "wants to have the pleasure of wintering here, we'll let him. He can build himself a snow-hut like the Esquimaux."

"Nothing of the kind, Pen," replied Brunton; "we won't leave anybody. You understand that, you others. Besides, I don't think it would be difficult to persuade the commander; he already seems very uncertain, and if we were quietly to propose it----"

"I don't know that," said Plover; "Richard Shandon is a hard, headstrong man, and we should have to sound him carefully."

"When I think," replied Bolton, with a covetous sigh, "that in a month we might be back in Liverpool; we could soon clear the southern ice-line. The pass in Davis's Straits will be open in the beginning of June, and we shall only
have to let ourselves drift into the Atlantic."

"Besides," said the prudent Clifton, "if we bring back the commander with us, acting under his responsibility, our pay and bounty money will be sure; whilst if we return alone it won't be so certain."

"That's certain!" said Plover; "that devil of a Clifton speaks like a book. Let us try to have nothing to explain to the Admiralty; it's much safer to leave no one behind us."

"But if the officers refuse to follow us?" replied Pen, who wished to push his comrades to an extremity.

To such a question they were puzzled to reply.

"We shall see about it when the time comes," replied Bolton; "besides, it would be enough to win Richard Shandon over to our side. We shall have no difficulty about that."

"Anyhow," said Pen, swearing, "there's something I'll leave here if I get an arm eaten in the attempt."

"Ah! you mean the dog," said Plover.

"Yes, the dog; and before long I'll settle his hash!"

"The more so," replied Clifton, coming back to his favourite theme, "that the dog is the cause of all our misfortunes."

"He's cast an evil spell over us," said Plover.

"It's through him we're in an iceberg," said Gripper.

"He's the cause that we've had more ice against us than has ever been seen at this time of year," said Wolsten.

"He's the cause of my bad eyes," said Brunton.

"He's cut off the gin and brandy," added Pen.

"He's the cause of everything," said the assembly, getting excited.

"And he's captain into the bargain!" cried Clifton.

"Well, captain of ill-luck," said Pen, whose unreasonable fury grew stronger at every word; "you wanted to come here, and here you'll stay."

"But how are we to nap him?" said Plover.

"We've a good opportunity," replied Clifton; "the commander isn't on deck, the lieutenant is asleep in his cabin, and the fog's thick enough to stop Johnson seeing us."

"But where's the dog?" cried Pen.

"He's asleep near the coahole," replied Clifton, "and if anybody wants----"

"I'll take charge of him," answered Pen furiously.

"Look out, Pen; he's got teeth that could snap an iron bar in two."

"If he moves I'll cut him open," cried Pen, taking his knife in one hand. He bounced in between decks, followed by Warren, who wanted to help him in his undertaking. They quickly came back, carrying the animal in their arms, strongly muzzled, with his paws bound tightly together. They had taken him by surprise whilst he slept, so that the unfortunate dog could not escape them.

"Hurrah for Pen!" cried Plover.

"What do you mean to do with him now you've got him?" asked Clifton.

"Why, drown him, and if ever he gets over it----" replied Pen, with a fearful smile of satisfaction.

About two hundred steps from the vessel there was a seal-hole, a kind of circular crevice cut out by the teeth of that amphibious animal, hollowed out from underneath, and through which the seal comes up to breathe on to the surface of the ice. To keep this aperture from closing up he has to be very careful because the formation of his jaws would not enable him to bore through the hole again from the outside, and in a moment of danger he would fall a prey to his enemies. Pen and Warren directed their steps towards this crevice, and there, in spite of the dog's energetic efforts, he was unmercifully precipitated into the sea. An enormous lump of ice was then placed over the opening, thus closing all possible issue to the poor animal, walled up in a watery prison.

"Good luck to you, captain," cried the brutal sailor.

Shortly afterwards Pen and Warren returned on deck. Johnson had seen nothing of this performance. The fog thickened round about the ship, and snow began to fall with violence. An hour later, Richard Shandon, the doctor, and Garry rejoined the _Forward_. Shandon had noticed a pass in a north-eastern direction of which he was resolved to take advantage, and gave his orders in consequence. The crew obeyed with a certain activity, not without hinting to Shandon that it was impossible to go further on, and that they only gave him three more days' obedience. During a part of the night and the following day the working of the saws and the hauling were actively kept up; the _Forward_ gained about two miles further north. On the 18th she was in sight of land, and at five or six cable-lengths from a peculiar peak, called from its strange shape the Devil's Thumb.

It was there that the _Prince Albert_ in 1851, and the _Advance_ with Kane, in 1853, were kept prisoners by the ice for several weeks. The odd form of the Devil's Thumb, the dreary deserts in its vicinity, the vast circus of icebergs--some of them more than three hundred feet high--the cracking of the ice, reproduced by the echo in so
sinister a manner, rendered the position of the _Forward_ horribly dreary. Shandon understood the necessity of getting out of it and going further ahead. Twenty-four hours later, according to his estimation, he had been able to clear the fatal coast for about two miles, but this was not enough. Shandon, overwhelmed with fear, and the false situation in which he was placed, lost both courage and energy; in order to obey his instructions and get further north, he had thrown his vessel into an excessively perilous situation. The men were worn out by the hauling; it required more than three hours to hollow out a channel twenty feet long, through ice that was usually from four to five feet thick. The health of the crew threatened to break down. Shandon was astonished at the silence of his men and their unaccustomed obedience, but he feared that it was the calm before the storm. Who can judge, then, of his painful disappointment, surprise, and despair when he perceived that in consequence of an insensible movement of the ice-field the _Forward_ had, during the night from the 18th to the 19th, lost all the advantage she had gained with so much toil? On the Saturday morning they were once more opposite the ever-threatening Devil's Thumb, and in a still more critical position. The icebergs became more numerous, and drifted by in the fog like phantoms. Shandon was in a state of complete demoralisation, for fright had taken possession of the dauntless man and his crew. Shandon had heard the dog's disappearance spoken about, but dared not punish those who were guilty of it. He feared that a rebellion might be the consequence. The weather was fearful during the whole day; the snow rose up in thick whirlpools, wrapping up the _Forward_ in an impenetrable cloak. Sometimes, under the action of the storm, the fog was torn asunder, and displayed towards land, raised up like a spectre, the Devil's Thumb.

The _Forward_ was anchored to an immense block of ice; it was all that could be done; there was nothing more to attempt; the obscurity became denser, and the man at the helm could not see James Wall, who was on duty in the bow. Shandon withdrew to his cabin, a prey to unremitting uneasiness; the doctor was putting his voyage notes in order; one half the crew remained on deck, the other half stayed in the common cabin. At one moment, when the storm increased in fury, the Devil's Thumb seemed to rise up out of all proportion in the midst of the fog.

"Good God!" cried Simpson, drawing back with fright.
"What the devil's that?" said Foker, and exclamations rose up in every direction.
"It is going to smash us!"
"We are lost!"
"Mr. Wall! Mr. Wall!"
"It's all over with us!"
"Commander! Commander!"

These cries were simultaneously uttered by the men on watch. Wall fled to the quarter-deck, and Shandon, followed by the doctor, rushed on deck to look. In the midst of the fog the Devil's Thumb seemed to have suddenly neared the brig, and seemed to have grown in a most fantastic manner. At its summit rose up a second cone, turned upside down and spindled on its point; its enormous mass threatened to crush the ship, as it was oscillating and ready to fall. It was a most fearful sight; every one instinctively drew back, and several sailors, leaping on to the ice, abandoned the ship.

"Let no one move!" cried the commander in a severe voice. "Every one to his post!"
"How now, my friends? There's nothing to be frightened at!" said the doctor. "There's no danger! Look, commander, look ahead, Mr. Wall; it's only an effect of the mirage, nothing else."
"You are quite right, Mr. Clawbonny," answered Johnson; "those fools were frightened at a shadow."

After the doctor had spoken most of the sailors drew near, and their fear changed to admiration at the wonderful phenomenon, which shortly disappeared from sight.

"They call that a mirage?" said Clifton. "Well, you may believe me that the devil has something to do with it."
"That's certain!" replied Gripper.

But when the fog cleared away it disclosed to the eyes of the commander an immense free and unexpected passage; it seemed to run away from the coast, and he therefore determined to seize such a favourable hazard. Men were placed on each side of the creek, hawsers were lowered down to them, and they began to tow the vessel in a northerly direction. During long hours this work was actively executed in silence. Shandon caused the steam to be got up, in order to take advantage of the fortunate discovery of this channel.

"This," said he to Johnson, "is a most providential hazard, and if we can only get a few miles ahead, we shall probably get to the end of our misfortunes."
"Brunton! stir up the fires, and as soon as there's enough pressure let me know. In the meantime our men will pluck up their courage--that will be so much gained. They are in a hurry to run away from the Devil's Thumb; we'll take advantage of their good inclinations!"

All at once the progress of the _Forward_ was abruptly arrested.
"What's up?" cried Shandon. "I say, Wall! have we broken our tow-ropes?"
"Not at all, commander," answered Wall, looking over the side. "Hallo! Here are the men coming back again.
They are climbing the ship's side as if the devil was at their heels."
"What the deuce can it be?" cried Shandon, rushing forward.
"On board! On board!" cried the terrified sailors.

Shandon looked in a northerly direction, and shuddered in spite of himself. A strange animal, with appalling movements, whose foaming tongue emerged from enormous jaws, was leaping about at a cable's length from the ship. In appearance he seemed to be about twenty feet high, with hair like bristles; he was following up the sailors, whilst his formidable tail, ten feet long, was sweeping the snow and throwing it up in thick whirlwinds. The sight of such a monster riveted the most daring to the spot.

"It's a bear!" said one.
"It's the Gevaudan beast!"
"It's the lion of the Apocalypse!"

Shandon ran to his cabin for a gun he always kept loaded. The doctor armed himself, and held himself in readiness to fire upon an animal which, by its dimensions, recalled the antediluvian quadrupeds. He neared the ship in immense leaps; Shandon and the doctor fired at the same time, when, suddenly, the report of their firearms, shaking the atmospheric stratum, produced an unexpected effect. The doctor looked attentively, and burst out laughing.

"It's the refraction!" he exclaimed.
"Only the refraction!" repeated Shandon. But a fearful exclamation from the crew interrupted them.
"The dog!" said Clifton.
"The dog, captain!" repeated all his comrades.
"Himself!" cried Pen; "always that cursed brute."

They were not mistaken--it was the dog. Having got loose from his shackles, he had regained the surface by another crevice. At that instant the refraction, through a phenomenon common to these latitudes, caused him to appear under formidable dimensions, which the shaking of the air had dispersed; but the vexatious effect was none the less produced upon the minds of the sailors, who were very little disposed to admit an explanation of the fact by purely physical reasons. The adventure of the Devil's Thumb, the reappearance of the dog under such fantastic circumstances, gave the finishing touch to their mental faculties, and murmurs broke out on all sides.

CHAPTER XII
CAPTAIN HATTERAS

The _Forward_ under steam, rapidly made its way between the ice-mountains and the icebergs. Johnson was at the wheel. Shandon, with his snow spectacles, was examining the horizon, but his joy was of short duration, for he soon discovered that the passage ended in a circus of mountains. However, he preferred going on, in spite of the difficulty, to going back. The dog followed the brig at a long distance, running along the plain, but if he lagged too far behind a singular whistle could be distinguished, which he immediately obeyed. The first time this whistle was heard the sailors looked round about them; they were alone on deck all together, and no stranger was to be seen; and yet the whistle was again heard from time to time. Clifton was the first alarmed.

"Do you hear?" said he. "Just look how that animal answers when he hears the whistle."
"I can scarcely believe my eyes," answered Gripper.
"It's all over!" cried Pen. "I don't go any further."
"Pen's right!" replied Brunton; "it's tempting God!"
"Tempting the devil!" replied Clifton. "I'd sooner lose my bounty money than go a step further."
"We shall never get back!" said Bolton in despair.

The crew had arrived at the highest pitch of insubordination.
"Not a step further!" cried Wolsten. "Are you all of the same mind?"
"Ay! ay!" answered all the sailors.
"Come on, then," said Bolton; "let's go and find the commander; I'll undertake the talking."

The sailors in a tight group swayed away towards the poop. The _Forward_ at the time was penetrating into a vast circus, which measured perhaps 800 feet in diameter, and with the exception of one entrance--that by which the vessel had come--was entirely closed up.

Shandon said that he had just imprisoned himself; but what was he to do? How were they to retrace their steps? He felt his responsibility, and his hand grasped the telescope. The doctor, with folded arms, kept silent; he was contemplating the walls of ice, the medium altitude of which was over 300 feet. A foggy dome remained suspended above the gulf. It was at this instant that Bolton addressed his speech to the commander.

"Commander!" said he in a trembling voice, "we can't go any further."
"What do you say?" replied Shandon, whose consciousness of disregarded authority made the blood rise to the roots of his hair.

"Commander," replied Bolton, "we say that we've done enough for that invisible captain, and we are decided to go no further ahead."

"You are decided?" cried Shandon. "You talk thus, Bolton? Take care!"

"Your threats are all the same to us," brutally replied Pen; "we won't go an inch further."

Shandon advanced towards the mutineers; at the same time the mate came up and said in a whisper: "Commander, if you wish to get out of here we haven't a minute to lose; there's an iceberg drifting up the pass, and it is very likely to cork up all issue and keep us prisoners."

Shandon examined the situation.

"You will give an account of your conduct later on, you fellows," said he. "Now heave aboard!"

The sailors rushed to their posts, and the _Forward_ quickly veered round; the fires were stuffed with coals; the great question was to outrun the floating mountain. It was a struggle between the brig and the iceberg. The former, in order to get through, was running south; the latter was drifting north, ready to close up every passage.

"Steam up! steam up!" cried Shandon. "Do you hear, Brunton?"

The _Forward_ glided like a bird amidst the struggling icebergs, which her prow sent to the right-about; the brig's hull shivered under the action of the screw, and the manometer indicated a prodigious tension of steam, for it whistled with a deafening noise.

"Load the valves!" cried Shandon, and the engineer obeyed at the risk of blowing up the ship; but his despairing efforts were in vain. The iceberg, caught up by an undercurrent, rapidly approached the pass. The brig was still about three cables' length from it, when the mountain, entering like a corner-stone into the open space, strongly adhered to its neighbours and closed up all issue.

"We are lost!" cried Shandon, who could not retain the imprudent words.

"Lost!" repeated the crew.

"Let them escape who can!" said some.

"Lower the shore boats!" said others.

"To the steward's room!" cried Pen and several of his band, "and if we are to be drowned, let's drown ourselves in gin!"

Disorder among the men was at its height. Shandon felt himself overcome; when he wished to command, he stammered and hesitated. His thought was unable to make way through his words. The doctor was walking about in agitation. Johnson stoically folded his arms and said nothing. All at once a strong, imperious, and energetic voice was heard to pronounce these words:

"Every man to his post and tack about!"

Johnson started, and, hardly knowing what he did, turned the wheel rapidly. He was just in time, for the brig, launched at full speed, was about to crush herself against her prison walls. But while Johnson was instinctively obeying, Shandon, Clawbonny, the crew, and all down to the stoker Warren, who had abandoned his fires, even black Strong, who had left his cooking, were all mustered on deck, and saw emerge from that cabin the only man who was in possession of the key, and that man was Garry, the sailor.

"Sir!" cried Shandon, becoming pale. "Garry--you--by what right do you command here?"

"Dick," called out Garry, reproducing that whistle which had so much surprised the crew. The dog, at the sound of his right name, jumped with one bound on to the poop and lay quietly down at his master's feet. The crew did not say a word. The key which the captain of the _Forward_ alone possessed, the dog sent by him, and who came thus to verify his identity, that commanding accent which it was impossible to mistake--all this acted strongly on the minds of the sailors, and was sufficient to establish Garry's authority.

Besides, Garry was no longer recognisable; he had cut off the long whiskers which had covered his face, which made it look more energetic and imperious than ever; dressed in the clothes of his rank which had been deposited in the cabin, he appeared in the insignia of commander.

Then immediately, with that mobility which characterised them, the crew of the _Forward_ cried out--"Three cheers for the captain!"

"Shandon!" said the latter to his second, "muster the crew; I am going to inspect it!"

Shandon obeyed and gave orders with an altered voice. The captain advanced to meet his officers and men, saying something suitable to each, and treating each according to his past conduct. When he had finished the inspection, he returned on to the poop, and with a calm voice pronounced the following words:

"Officers and sailors, like you, I am English, and my motto is that of Nelson, 'England expects that every man will do his duty.' As an Englishman I am resolved, we are resolved, that no bolder men shall go further than we have been. As an Englishman I will not allow, we will not allow, other people to have the glory of pushing further north
themselves. If ever human foot can step upon the land of the North Pole, it shall be the foot of an Englishman. Here is our country's flag. I have equipped this vessel, and consecrated my fortune to this enterprise, and, if necessary, I shall consecrate to it my life and yours; for I am determined that these colours shall float on the North Pole. Take courage. From this day, for every degree we can gain northwards the sum of a thousand pounds will be awarded to you. There are ninety, for we are now in the seventy-second. Count them. Besides, my name is enough. It means energy and patriotism. I am Captain Hatteras!"
"Captain Hatteras!" exclaimed Shandon, and that name, well known to English sailors, was whispered amongst the crew.

"Now," continued Hatteras, "anchor the brig to the ice, put out the fires, and each of you return to your usual work. Shandon, I wish to hold a council with you relative to affairs on board. Join me with the doctor, Wall, and the boatswain in my cabin. Johnson, disperse the men."

Hatteras, calm and haughty, quietly left the poop. In the meantime Shandon was anchoring the brig.

Who, then, was this Hatteras, and for what reason did his name make such a profound impression upon the crew? John Hatteras was the only son of a London brewer, who died in 1852 worth six millions of money. Still young, he embraced the maritime career in spite of the splendid fortune awaiting him. Not that he felt any vocation for commerce, but the instinct of geographical discoveries was dear to him. He had always dreamt of placing his foot where no mortal foot had yet soiled the ground.

At the age of twenty he was already in possession of the vigorous constitution of a thin and sanguine man; an energetic face, with lines geometrically traced; a high and perpendicular forehead; cold but handsome eyes; thin lips, which set off a mouth from which words rarely issued; a middle stature; solidly-jointed limbs, put in motion by iron muscles; the whole forming a man endowed with a temperament fit for anything. When you saw him you knew he was daring; when you heard him you felt he was coldly determined; his was a character that never drew back, ready to stake the lives of others as well as his own. It was well to think twice before following him in his expeditions.

John Hatteras was proud of being an Englishman. A Frenchman once said to him, with what he thought was refined politeness and amiability:

"If I were not a Frenchman I should like to be an Englishman."

"And if I were not an Englishman," answered Hatteras, "I should like to be an Englishman."

That answer revealed the character of the man. It was a great grief to him that Englishmen had not the monopoly of geographical discoveries, and were, in fact, rather behind other nations in that field.

Christopher Columbus, the discoverer of America, was a Genoese; Vasco da Gama, a Portuguese, discovered India; another Portuguese, Fernando de Andrade, China; and a third, Magellan, the Terra del Fuego. Canada was discovered by Jacques Cartier, a Frenchman; Labrador, Brazil, the Cape of Good Hope, the Azores, Madeira, Newfoundland, Guinea, Congo, Mexico, Cape Blanco, Greenland, Iceland, the South Seas, California, Japan, Cambodia, Peru, Kamtchatka, the Philippines, Spitzbergen, Cape Horn, Behring's Straits, Tasmania, New Zealand, New Britanny, New Holland, Louisiana, Jean Mayen Island, were discovered by Icelanders, Scandinavians, French, Russians, Portuguese, Danes, Spaniards, Genoese, and Dutch, but not one by an Englishman. Captain Hatteras could not reconcile himself to the fact that Englishmen were excluded from the glorious list of navigators who made the great discoveries of the 15th and 16th centuries.

Hatteras consoled himself a little when he turned to more modern times. Then Englishmen had the best of it with Sturt, Burke, Wills, King, and Grey in Australia; with Palliser in America; with Cyril Graham, Waddington, and Cunningham in India; with Burton, Speke, Grant, and Livingstone in Africa.

But for a man like Hatteras this was not enough; from his point of view these bold travellers were _improvers_ rather than _inventors_; and he was determined to do something better, and he would have invented a country if he could, only to have the honour of discovering it. Now he had noticed that, although Englishmen did not form a majority amongst ancient discoverers, and that he had to go back to Cook in 1774 to obtain New Caledonia and the Sandwich Isles, where the unfortunate captain perished in 1778, yet there existed, nevertheless, a corner of the globe where they seemed to have united all their efforts. This corner was precisely the boreal lands and seas of North America. The list of Polar discoveries may be thus written:

Nova Zembla, discovered by Willoughby, in 1553; Weigatz Island, by Barrough, in 1556; the West Coast of Greenland, by Davis, in 1585; Davis's Straits, by Davis, in 1587; Spitzbergen, by Willoughby, in 1596; Hudson's Bay, by Hudson, in 1610; Baffin's Bay, by Baffin, in 1616.

In more modern times, Hearne, Mackenzie, John Ross, Parry, Franklin, Richardson, Beechey, James Ross, Back, Dease, Simpson, Rae, Inglefield, Belcher, Austin, Kellett, Moore, McClure, Kennedy, and McClintock have continually searched those unknown lands.

The limits of the northern coasts of America had been fixed, and the North-West passage almost discovered, but this was not enough; there was something better still to be done, and John Hatteras had twice attempted it by
equipping two ships at his own expense. He wanted to reach the North Pole, and thus crown the series of English
discoveries by one of the most illustrious attempts. To attain the Pole was the aim of his life.

After a few successful cruises in the Southern seas, Hatteras endeavoured for the first time, in 1846, to go north
by Baffin's Sea; but he could not get beyond the seventy-fourth degree of latitude; he was then commanding the
sloop _Halifax_. His crew suffered atrocious torments, and John Hatteras pushed his adventurous rashness so far,
that, afterwards, sailors were little tempted to re-commence similar expeditions under such a chief.

However, in 1850 Hatteras succeeded in enrolling on the schooner _Farewell_ about twenty determined men,
tempted principally by the high prize offered for their audacity. It was upon that occasion that Dr. Clawbonny
entered into correspondence with John Hatteras, whom he did not know, requesting to join the expedition, but
happily for the doctor the post was already filled up. The _Farewell_, following the track taken in 1817 by the
_Neptune_ from Aberdeen, got up to the north of Spitzbergen as far as the seventy-sixth degree of latitude. There
the expedition was compelled to winter. But the sufferings of the crew from the intense cold were so great that not a
single man saw England again, with the exception of Hatteras himself, who was brought back to his own country by
a Danish whaler after a walk of more than two hundred miles across the ice.

The sensation produced by the return of this one man was immense. Who in future would dare to follow Hatteras
in his mad attempts? However, he did not despair of beginning again. His father, the brewer, died, and he became
possessor of a nabob's fortune. Soon after a geographical fact bitterly stirred up John Hatteras. A brig, the
_Advance_, manned by seventeen men, equipped by a merchant named Grinnell, under the command of Dr. Kane,
and sent in search of Sir John Franklin, advanced in 1853 through Baffin's Sea and Smith's Strait, beyond the eighty-
second degree of boreal latitude, much nearer the Pole than any of his predecessors. Now, this vessel was American,
Grinnell was American, and Kane was American. The Englishman's disdain for the Yankee will be easily
understood; in the heart of Hatteras it changed to hatred; he was resolved to outdo his audacious competitor and
reach the Pole itself.

For two years he had been living incognito in Liverpool, passing himself off as a sailor; he recognised in Richard
Shandon the man he wanted; he sent him an offer by an anonymous letter, and one to Dr. Clawbonny at the same
time. The _Forward_ was built, armed, and equipped. Hatteras took great care to conceal his name, for had it been
known he would not have found a single man to accompany him. He was determined not to take the command of the
brig except in a moment of danger, and when his crew had gone too far to draw back. He had in reserve, as we have
seen, such offers of money to make to the men that not one of them would refuse to follow him to the other end of
the world; and, in fact, it was right to the other end of the world that he meant to go. Circumstances had become
critical, and John Hatteras had made himself known. His dog, the faithful Dick, the companion of his voyages, was
the first to recognise him. Luckily for the brave and unfortunately for the timid, it was well and duly established that
John Hatteras was the captain of the _Forward_.

CHAPTER XIII
THE PROJECTS OF HATTERAS

The appearance of this bold personage was appreciated in different ways by the crew; part of them completely
rallied round him, either from love of money or daring; others submitted because they could not help themselves,
reserving their right to protest later on; besides, resistance to such a man seemed, for the present, difficult. Each man
went back to his post. The 20th of May fell on a Sunday, and was consequently a day of rest for the crew. A council
was held by the captain, composed of the officers, Shandon, Wall, Johnson, and the doctor.

"Gentlemen," said the captain in that voice at the same time soft and imperious which characterised him, "you
are aware that I intend to go as far as the Pole. I wish to know your opinion about this enterprise. Shandon, what do
you think about it?"

"It is not for me to think, captain," coldly replied Shandon; "I have only to obey."

Hatteras was not surprised at the answer.

"Richard Shandon," continued he, not less coldly, "I beg you will say what you think about our chance of
success."

"Very well, captain," answered Shandon, "facts are there, and answer for me; attempts of the same kind up till
now have always failed; I hope we shall be more fortunate."

"We shall be. What do you think, gentlemen?"

"As far as I am concerned," replied the doctor, "I consider your plan practicable, as it is certain that some day
navigators will attain the boreal Pole. I don't see why the honour should not fall to our lot."

"There are many things in our favour," answered Hatteras; "our measures are taken in consequence, and we shall
profit by the experience of those who have gone before us. And thereupon, Shandon, accept my thanks for the care
you have taken in fitting out this ship; there are a few evil-disposed fellows amongst the crew that I shall have to
bring to reason, but on the whole I have only praises to give you."

Shandon bowed coldly. His position on the _Forward_, which he thought to command, was a false one. Hatteras
understood this, and did not insist further.

"As to you, gentlemen," he continued, turning to Wall and Johnson, "I could not have secured officers more
distinguished for courage and experience."

"Well, captain, I'm your man," answered Johnson, "and although your enterprise seems to me rather daring, you
may rely upon me till the end."

"And on me too," said James Wall.

"As to you, doctor, I know what you are worth."

"You know more than I do, then," quickly replied the doctor.

"Now, gentlemen," continued Hatteras, "it is well you should learn upon what undeniable facts my pretension to
arrive at the Pole is founded. In 1817 the _Neptune_ got up to the north of Spitzbergen, as far as the eighty-second
degree. In 1826 the celebrated Parry, after his third voyage to the Polar Seas, started also from Spitzbergen Point,
and by the aid of sledge-boats went a hundred and fifty miles northward. In 1852 Captain Inglefield penetrated into
Smith's Inlet as far as seventy-eight degrees thirty-five minutes latitude. All these vessels were English, and
Englishmen, our countrymen, commanded them." Here Hatteras paused. "I ought to add," he continued, with a
constrained look, and as though the words were unable to leave his lips—"I must add that, in 1854, Kane, the
American, commanding the brig _Advance_, went still higher, and that his lieutenant, Morton, going across the ice-
fields, hoisted the United States standard on the other side of the eighty-second degree. This said, I shall not return
to the subject. Now what remains to be known is this, that the captains of the _Neptune_, the _Enterprise_, the
_Isabel_, and the _Advance_ ascertained that proceeding from the highest latitudes there existed a Polar basin
entirely free from ice."

"Free from ice!" exclaimed Shandon, interrupting the captain, "that is impossible!"

You will notice, Shandon," quietly replied Hatteras, whose eye shone for an instant, "that I quote names and
facts as a proof. I may even add that during Captain Parry's station on the border of Wellington Channel, in 1851, his
lieutenant, Stewart, also found himself in the presence of open sea, and this peculiarity was confirmed during Sir
Edward Beecher's wintering in 1853, in Northumberland Bay, in 76 degrees 52 minutes N. latitude, and 99 degrees
20 minutes longitude. The reports are incontestable, and it would be most unjust not to admit them."

"However, captain," continued Shandon, "those reports are so contradictory."

"You are mistaken, Shandon," cried Dr. Clawbonny. "These reports do not contradict any scientific assertion, the
captain will allow me to tell you."

"Go on, doctor," answered Hatteras.

"Well, listen, Shandon; it evidently follows from geographical facts, and from the study of isotherm lines, that
the coldest point of the globe is not at the Pole itself; like the magnetic point, it deviates several degrees from the
Pole. The calculations of Brewster, Bergham, and several other natural philosophers show us that in our hemisphere
there are two cold Poles; one is situated in Asia at 79 degrees 30 minutes N. latitude, and by 120 degrees E.
longitude, and the other in America at 78 degrees N. latitude, and 97 degrees W. longitude. It is with the latter that
we have to do, and you see, Shandon, we have met with it at more than twelve degrees below the Pole. Well, why
should not the Polar Sea be as equally disengaged from ice as the sixty-sixth parallel is in summer—that is to say, the
south of Baffin's Bay?"

"That's what I call well pleaded," replied Johnson. "Mr. Clawbonny speaks upon these matters like a professional
man."

"It appears very probable," chimed in James Wall.

"All guess-work," answered Shandon obstinately.

"Well, Shandon," said Hatteras, "let us take into consideration either case; either the sea is free from ice or it is
not so, and neither of these suppositions can hinder us from attaining the Pole. If the sea is free the _Forward_ will
take us there without trouble; if it is frozen we will attempt the adventure upon our sledges. This, you will allow, is
not impracticable. When once our brig has attained the eighty-third degree we shall only have six hundred miles to
traverse before reaching the Pole."

"And what are six hundred miles?" quickly answered the doctor, "when it is known that a Cossack, Alexis
Markoff, went over the ice sea along the northern coast of the Russian Empire, in sledges drawn by dogs, for the
space of eight hundred miles in twenty-four days?"

"Do you hear that, Shandon?" said Hatteras; "can't Englishmen do as much as a Cossack?"

"Of course they can," cried the impetuous doctor.

"Of course," added the boatswain.
"Well, Shandon?" said the captain.
"I can only repeat what I said before, captain," said Shandon--"I will obey."
"Very good. And now," continued Hatteras, "let us consider our present situation. We are caught by the ice, and it seems to me impossible, for this year at least, to get into Smith's Strait. Well, here, then, this is what I propose."

Hatteras laid open upon the table one of the excellent maps published in 1859 by the order of the Admiralty.
"Be kind enough to follow me. If Smith's Strait is closed up from us, Lancaster Strait, on the west coast of Baffin's Sea, is not. I think we ought to ascend that strait as far as Barrow Strait, and from there sail to Beechey Island; the same track has been gone over a hundred times by sailing vessels; consequently with a screw we can do it easily. Once at Beechey Island we will go north as far as possible, by Wellington Channel, up to the outlet of the creek which joins Wellington's and Queen's Channels, at the very point where the open sea was perceived. It is now only the 20th of May; in a month, if circumstances favour us, we shall have attained that point, and from there we'll drive forward towards the Pole. What do you think about it, gentlemen?"

"It is evidently the only track to follow," replied Johnson.

"Very well, we will take it from to-morrow. I shall let them rest to-day as it is Sunday. Shandon, you will take care that religious service be attended to; it has a beneficial effect on the minds of men, and a sailor above all needs to place confidence in the Almighty."

"It shall be attended to, captain," answered Shandon, who went out with the lieutenant and the boatswain.

"Doctor!" said Hatteras, pointing towards Shandon, "there's a man whose pride is wounded; I can no longer rely upon him."

Early the following day the captain caused the pirogue to be lowered in order to reconnoitre the icebergs in the vicinity, the breadth of which did not exceed 200 yards. He remarked that through a slow pressure of the ice the basin threatened to become narrower. It became urgent, therefore, to make an aperture to prevent the ship being crushed in a vice of the mountains. By the means employed by John Hatteras, it is easy to observe that he was an energetic man.

He first had steps cut out in the walls of ice, and by their means climbed to the summit of an iceberg. From that point he saw that it was easy for him to cut out a road towards the south-west. By his orders a blasting furnace was hollowed nearly in the heart of the mountain. This work, rapidly put into execution, was terminated by noon on Monday. Hatteras could not rely on his eight or ten pound blasting cylinders, which would have had no effect on such masses as those. They were only sufficient to shatter ice-fields. He therefore had a thousand pounds of powder placed in the blasting furnace, of which the diffusive direction was carefully calculated. This mine was provided with a long wick, bound in gutta-percha, the end of which was outside. The gallery conducting to the mine was filled up with snow and lumps of ice, which the cold of the following night made as hard as granite. The temperature, under the influence of an easterly wind, came down to twelve degrees.

At seven the next morning the _Forward_ was held under steam, ready to profit by the smallest issue. Johnson was charged with setting fire to the wick, which, according to calculation, would burn for half an hour before setting fire to the mine. Johnson had, therefore, plenty of time to regain the brig; ten minutes after having executed Hatteras's order he was again at his post. The crew remained on deck, for the weather was dry and bright; it had left off snowing.

Hatteras was on the poop, chronometer in hand, counting the minutes; Shandon and the doctor were with him. At eight thirty-five a dull explosion was heard, much less loud than any one would have supposed. The outline of the mountains was changed all at once as if by an earthquake; thick white smoke rose up to a considerable height in the sky, leaving long crevices in the iceberg, the top part of which fell in pieces all round the _Forward_. But the path was not yet free; large blocks of ice remained suspended above the pass on the adjacent mountains, and there was every reason to fear that they would fall and close up the passage. Hatteras took in the situation at one glance.

"Wolsten!" cried he.
The gunsmith hastened up.
"Yes, captain?" cried he.
"Load the gun in the bow with a triple charge," said Hatteras, "and wad it as hard as possible."
"Are we going to attack the mountain with cannon-balls?" asked the doctor.
"No," answered Hatteras, "that would be useless. No bullet, Wolsten, but a triple charge of powder. Look sharp!"

A few minutes after the gun was loaded.
"What does he mean to do without a bullet?" muttered Shandon between his teeth.
"We shall soon see," answered the doctor.
"Ready, captain!" called out Wolsten.
"All right!" replied Hatteras.
"Brunton!" he called out to the engineer, "a few turns ahead."
Brunton opened the sliders, and the screw being put in movement, the _Forward_ neared the mined mountain.

"Aim at the pass!" cried the captain to the gunsmith. The latter obeyed, and when the brig was only half a cable's length from it, Hatteras called out:

"Fire!"

A formidable report followed his order, and the blocks, shaken by the atmospheric commotion, were suddenly precipitated into the sea; the disturbance amongst the strata of the air had been sufficient to accomplish this.

"All steam on, Brunton! Straight for the pass, Johnson!"

The latter was at the helm; the brig, driven along by her screw, which turned in the foaming waves, dashed into the middle of the then opened pass; it was time, for scarcely had the _Forward_ cleared the opening than her prison closed up again behind her. It was a thrilling moment, and on board there was only one stout and undisturbed heart—that of the captain. The crew, astonished at the manoeuvre, cried out:

"Hurrah for the captain!"

CHAPTER XIV
EXPEDITION IN SEARCH OF FRANKLIN

On Wednesday, the 23rd of May, the _Forward_ had again taken up her adventurous navigation, cleverly tacking amongst the packs and icebergs. Thanks to steam, that obedient force which so many of our Polar sea navigators have had to do without, she appeared to be playing in the midst of the moving rocks. She seemed to recognise the hand of an experienced master, and like a horse under an able rider, she obeyed the thought of her captain. The temperature rose. At six o'clock in the morning the thermometer marked twenty-six degrees, at six in the evening twenty-nine degrees, and at midnight twenty-five degrees; the wind was lightly blowing from the south-east.

On Thursday, towards three in the morning, the _Forward_ was in sight of Possession Bay, on the coast of America. At the entrance to Lancaster Strait, shortly after, the crew caught a glimpse of Burney Cape. A few Esquimaux pulled off towards the vessel, but Hatteras did not take the trouble to wait for them. The Byam-Martin peaks, which overlook Cape Liverpool, were sighted to the left, and soon disappeared in the evening mists, which also prevented any observation being taken from Cape Hay. This cape is so low that it gets confounded with the ice on the coast, a circumstance which often renders the hydrographic determination of the Polar seas extremely difficult.

Puffins, ducks, and white sea-gulls showed up in very great numbers. The _Forward_ was then in latitude 74 degrees 1 minute, and in longitude 77 degrees 15 minutes. The snowy hoods of the two mountains, Catherine and Elizabeth, rose up above the clouds.

On Friday, at six o'clock, Cape Warender was passed on the right side of the strait, and on the left Admiralty Inlet, a bay that has been little explored by navigators, who are generally in a hurry to sail away west. The sea became rather rough, and the waves often swept the deck of the brig, throwing up pieces of ice. The land on the north coast, with its high table lands almost level, and which reverberated the sun's rays, offered a very curious appearance.

Hatteras wanted to run along the north coast, in order to reach Beechey Island and the entrance to Wellington Channel sooner; but continual icebergs compelled him, to his great annoyance, to follow the southern passes. That was why, on the 26th of May, the _Forward_ was abreast of Cape York in a thick fog interspersed with snow; a very high mountain, almost perpendicular, caused it to be recognised. The weather cleared up a little, and the sun, towards noon, appeared for an instant, allowing a tolerably good observation to be taken; 74 degrees 4 minutes latitude and 84 degrees 23 minutes longitude. The _Forward_ was then at the extremity of Lancaster Strait.

Hatteras pointed out to the doctor on his map the route already taken, and the one he meant to follow. The position of the brig at the time was very interesting.

"I should like to have been further north," said he, "but no one can do the impossible; see, this is our exact situation."

And the captain pricked his map at a short distance from Cape York.

"We are in the centre of this four-road way, open to every wind, fenced by the outlets of Lancaster Strait, Barrow Strait, Wellington Channel, and Regent's Passage; it is a point that all navigators in these seas have been obliged to come to."

"Well," replied the doctor, "it must have puzzled them greatly; four cross-roads with no sign-posts to tell them which to take. How did Parry, Ross, and Franklin manage?"

"They did not manage at all, they were managed; they had no choice, I can assure you; sometimes Barrow Strait was closed to one of them, and the next year another found it open; sometimes the vessel was irresistibly drawn towards Regent's Passage, so that we have ended by becoming acquainted with these inextricable seas."
"What a singular country!" said the doctor, examining the map. "It is all in pieces, and they seem to have no logical connection. It seems as if the land in the vicinity of the North Pole had been cut up like this on purpose to make access to it more difficult. Whilst that in the other hemisphere quietly terminates in tapered-out points like those of Cape Horn, the Cape of Good Hope, and the Indian Peninsula. Is it the greater rapidity of the equator which has thus modified matters, whilst the land at the extremities, yet fluid from the creation, has not been able to get condensed or agglomerated together, for want of a sufficiently rapid rotation?"

"That must be the case, for everything on earth is logical, and 'nothing is that errs from law,' and God often allows men to discover His laws; make use of His permission, doctor."

"Unfortunately, I shall not be able to take much advantage of it," said the doctor, "but the wind here is something dreadful," added he, muffling himself up as well as he could.

"Yes, we are quite exposed to the north wind, and it is turning us out of our road."

"Anyhow it ought to drive the ice down south, and level a clear road."

"It ought to do so, doctor, but the wind does not always do what it ought. Look, that ice-bank seems impenetrable. Never mind, we will try to reach Griffith Island, sail round Cornwallis Island, and get into Queen's Channel without going by Wellington Channel. Nevertheless I positively desire to touch at Beechey Island in order to renew my coal provision."

"What do you mean?" asked the astonished doctor.

"I mean that, according to orders from the Admiralty, large provisions have been deposited on that island in order to provide for future expeditions, and although Captain McClintock took some in 1859, I assure you that there will be some left for us."

"By-the-bye," said the doctor, "these parts have been explored for the last fifteen years, and since the day when the proof of the loss of Franklin was acquired, the Admiralty has always kept five or six cruisers in these seas. If I am not mistaken, Griffith Island, which I see there on the map, almost in the middle of the cross-roads, has become a general meeting-place for navigators."

"It is so, doctor; and Franklin's unfortunate expedition resulted in making known these distant countries to us."

"That is true, captain; for since 1845 expeditions have been very numerous. It was not until 1848 that we began to be uneasy about the disappearance of the _Erebus_ and the _Terror_, Franklin's two vessels. It was then that we saw the admiral's old friend, Dr. Richardson, at the age of seventy, go to Canada, and ascend Coppermine River as far as the Polar Sea; and James Ross, commanding the _Enterprise_ and _Investigation_, set out from Uppernawk in 1848 and arrived at Cape York, where we now are. Every day he threw a tub containing papers into the sea, for the purpose of making known his whereabouts. During the mists he caused the cannon to be fired, and had sky-rockets sent up at night along with Bengal lights, and kept under sail continually. He wintered in Port Leopold from 1848 to 1849, where he took possession of a great number of white foxes, and caused brass collars, upon which was engraved the indication of the whereabouts of ships and the store depots, to be riveted on their necks. Afterwards they were dispersed in all directions; in the following spring he began to search the coasts of North Somerset on sledges in the midst of dangers and privations from which almost all his men fell ill or lame. He built up cairns in which he inclosed brass cylinders with the necessary memoranda for rallying the lost expedition. While he was away his lieutenant McClure explored the northern coasts of Barrow Strait, but without result. James Ross had under his orders two officers who, later on, were destined to become celebrities--McClure, who cleared the North-West passage, and McClintock, who discovered the remains of Sir John Franklin."

"Yes; they are now two good and brave English captains. You know the history of these seas well, doctor, and you will benefit us by telling us about it. There is always something to be gained by hearing about such daring attempts."

"Well, to finish all I know about James Ross: he tried to reach Melville Island by a more westerly direction, but he nearly lost his two vessels, for he was caught by the ice and driven back into Baffin's Sea."

"Driven back?" repeated Hatteras, contracting his brows; "forced back in spite of himself?"

"Yes, and without having discovered anything," continued the doctor; "and ever since that year, 1850, English vessels have never ceased to plough these seas, and a reward of twenty thousand pounds was offered to any one who might find the crews of the _Erebus_ and _Terror_. Captains Kellett and Moore had already, in 1848, attempted to get through Behring's Strait. In 1850 and 1851 Captain Austin wintered in Cornwallis Island; Captain Parry, on board the _Assistance_ and the _Resolute_, explored Wellington Channel; John Ross, the venerable hero of the magnetic pole, set out again with his yacht, the _Felix_, in search of his friend; the brig _Prince Albert_ went on a first cruise at the expense of Lady Franklin; and, lastly, two American ships, sent out by Grinnell with Captain Haven, were drifted out of Wellington Channel and thrown back into Lancaster Strait. It was during this year that McClintock, who was then Austin's lieutenant, pushed on as far as Melville Island and Cape Dundas, the extreme points attained by Parry in 1819; it was then that he found traces of Franklin's wintering on Beechey Island in 1845."
"Yes," answered Hatteras, "three of his sailors had been buried there--three men more fortunate than the others!"

The doctor nodded in approval of Hatteras's remark, and continued:

"During 1851 and 1852 the _Prince Albert_ went on a second voyage under the French lieutenant, Bellot; he wintered at Batty Bay, in Prince Regent Strait, explored the south-west of Somerset, and reconnoitred the coast as far as Cape Walker. During that time the _Enterprise_ and the _Investigator_ returned to England and passed under the command of Collinson and McClure for the purpose of rejoining Kellett and Moore in Behring's Straits; whilst Collinson came back to winter at Hong-Kong, McClure made the best of his way onward, and after being obliged to winter three times--from 1850 to '51; from 1851 to '52; and from 1852 to '53--he discovered the North-West passage without learning anything of Franklin's fate. During 1852 and '53 a new expedition composed of three sailing vessels, the _Resolute_, the _Assistance_, the _North Star_, and two steamers, the _Pioneer_ and _Intrepid_, set sail under the command of Sir Edward Belcher, with Captain Kellett under him; Sir Edward visited Wellington Channel, wintered in Northumberland Bay, and went over the coast, whilst Kellett, pushing on to Bridport in Melville Island, explored, without success, that part of the boreal land. It was at this time that news was spread in England that two ships, abandoned in the midst of icebergs, had been descried near the coast of New Scotland. Lady Franklin immediately had prepared the little screw _Isabelle_, and Captain Inglefield, after having steamed up Baffin's Bay as far as Victoria Point on the eightieth parallel, came back to Beechey Island no more successful than his predecessors. At the beginning of 1855, Grinnell, an American, fitted up a fresh expedition, and Captain Kane tried to penetrate to the Pole----"

"But he didn't do it," cried Hatteras violently; "and what he didn't do we will, with God's help!"

"I know, captain," answered the doctor, "and I mention it because this expedition is of necessity connected with the search for Franklin. But it had no result. I was almost forgetting to tell you that the Admiralty, considering Beechey Island as the general rendezvous of expeditions, charged Captain Inglefield, who then commanded the steamer _Phoenix_, to transport provisions there in 1853; Inglefield set out with Lieutenant Bellot, and lost the brave officer who for the second time had devoted his services to England; we can have more precise details upon this catastrophe, as our boatswain, Johnson, was witness to the misfortune."

"Lieutenant Bellot was a brave Frenchman," said Hatteras, "and his memory is honoured in England."

"By that time," continued the doctor, "Belcher's fleet began to come back little by little; not all of it, for Sir Edward had been obliged to abandon the _Assistance_ in 1854, as McClure had done with the _Investigator_ in 1853. In the meantime, Dr. Rae, in a letter dated the 29th of July, 1854, and addressed from Repulse Bay, which he had succeeded in reaching through America, sent word that the Esquimaux of King William's Land were in possession of different objects taken from the wrecks of the _Erebus_ and _Terror_; there was then not the least doubt about the fate of the expedition; the _Phoenix_, the _North Star_, and Collinson's vessel then came back to England, leaving the Arctic Seas completely abandoned by English ships. But if the Government seemed to have lost all hope it was not so with Lady Franklin, and with the remnants of her fortune she fitted out the _Fox_, commanded by McClintock, who set sail in 1857, and wintered in the quarters where you made your apparition; he reached Beechey Island on the 11th of August, 1858, wintered a second time in Bellot's Strait, began his search again in February, 1859, and on the 6th of May found the document which cleared away all doubt about the fate of the _Erebus_ and the _Terror_, and returned to England at the end of the year. That is all that has happened for fifteen years in these fateful countries, and since the return of the _Fox_ not a single vessel has returned to attempt success in the midst of these dangerous seas."

"Well," replied Hatteras, "we will attempt it."

CHAPTER XV
THE "FORWARD" DRIVEN BACK SOUTH

The weather cleared up towards evening, and land was clearly distinguished between Cape Sepping and Cape Clarence, which runs east, then south, and is joined to the coast on the west by a rather low neck of land. The sea at the entrance to Regent Strait was free from ice, with the exception of an impenetrable ice-bank, a little further than Port Leopold, which threatened to stop the _Forward_ in her north-westerly course. Hatteras was greatly vexed, but he did not show it; he was obliged to have recourse to petards in order to force an entrance to Port Leopold; he reached it on Sunday, the 27th of May; the brig was solidly anchored to the enormous icebergs, which were as upright, hard, and solid as rocks.

The captain, followed by the doctor, Johnson, and his dog Dick, immediately leaped upon the ice, and soon reached land. Dick leaped with joy, for since he had recognised the captain he had become more sociable, keeping his grudge against certain men of the crew for whom his master had no more friendship than he. The port was not then blocked up with ice that the east winds generally heaped up there; the earth, intersected with peaks, offered at
their summits graceful undulations of snow. The house and lantern erected by James Ross were still in a tolerable state of preservation; but the provisions seemed to have been ransacked by foxes and bears, the recent traces of which were easily distinguished. Men, too, had something to do with the devastation, for a few remains of Esquimaux huts remained upon the shores of the Bay. The six graves inclosing the remains of the six sailors of the _Enterprise_ and the _Investigator_ were recognisable by a slight swelling of the ground; they had been respected both by men and animals. In placing his foot for the first time on boreal land, the doctor experienced much emotion. It is impossible to imagine the feelings with which the heart is assailed at the sight of the remains of houses, tents, huts, and magazines that Nature so marvellously preserves in those cold countries.

"There is that residence," he said to his companions, "which James Ross himself called the Camp of Refuge; if Franklin's expedition had reached this spot, it would have been saved. There is the engine which was abandoned here, and the stove at which the crew of the _Prince Albert_ warmed themselves in 1851. Things have remained just as they were, and any one would think that Captain Kennedy had only left yesterday. Here is the long boat which sheltered him and his for a few days, for this Kennedy, separated from his ship, was in reality saved by Lieutenant Bellot, who braved the October temperature in order to go to his assistance."

"I knew that brave and worthy officer," said Johnson.

Whilst the doctor was examining with all an antiquarian's enthusiasm the vestiges of previous winterings, Hatters was occupied in piling together the various provisions and articles of fuel, which were only to be found in very small quantities. The following day was employed in transporting them on board. The doctor, without going too far from the ship, surveyed the country, and took sketches of the most remarkable points of view. The temperature rose by degrees, and the heaped-up snow began to melt. The doctor made an almost complete collection of northern birds, such as gulls, divers, eider-down ducks, which are very much like common ducks, with white breasts and backs, blue bellies, the top of the head blue, and the remainder of the plumage white, shaded with green; several of them had already their breasts stripped of that beautiful down with which the male and female line their nests. The doctor also perceived large seals taking breath on the surface of the ice, but could not shoot one. In his excursions he discovered the high water mark, a stone upon which the following signs are engraved:

(E. I.) 1849,

and which indicate the passage of the _Enterprise_ and _Investigator_; he pushed forward as far as Cape Clarence to the spot where John and James Ross, in 1833, waited with so much impatience for the breaking up of the ice. The land was strewn with skulls and bones of animals, and traces of Esquimaux habitations could be still distinguished.

The doctor wanted to raise up a cairn on Port Leopold, and deposit in it a note indicating the passage of the _Forward_, and the aim of the expedition. But Hatters would not hear of it; he did not want to leave traces behind of which a competitor might take advantage. In spite of his good motives the doctor was forced to yield to the captain's will. Shandon blamed the captain's obstinacy, which prevented any ships following the trace of the _Forward_ in case of accident. Hatters would not give way. His lading was finished on Monday night, and he attempted once more to gain the north by breaking open the ice-bank; but after dangerous efforts he was forced to resign himself, and to go down Regent's Channel again; he would not stop at Port Leopold, which, open to-day, might be closed again to-morrow by an unexpected displacement of ice-fields, a very frequent phenomenon in these seas, and which navigators ought particularly to take into consideration.

If Hatters did not allow his uneasiness to be outwardly perceived, it did not prevent him feeling it inwardly. His desire was to push northward, whilst, on the contrary, he found himself constrained to put back southward. Where should he get to in that case? Should he be obliged to put back to Victoria Harbour, in Boothia Gulf, where Sir John Ross wintered in 1833? Would he find Bellot Strait open at that epoch, and could he ascend Peel Strait by rounding North Somerset? Or, again, should he, like his predecessors, find himself captured during several winters, and be compelled to exhaust his strength and provisions? These fears were fermenting in his brain; he must decide one way or other. He heaved about, and struck out south. The width of Prince Regent's Channel is about the same from Port Leopold to Adelaide Bay. The _Forward_, more favoured than the ships which had preceded her, and of which the greater number had required more than a month to descend the channel, even in a more favourable season, made her way rapidly amongst the icebergs; it is true that other ships, with the exception of the _Fox_, had no steam at their disposal, and had to endure the caprices of an uncertain and often foul wind.

In general the crew showed little wish to push on with the enterprising Hatters; the men were only too glad to perceive that the vessel was taking a southerly direction. Hatters would have liked to go on regardless of consequences.

The _Forward_ rushed along under the pressure of her engines, the smoke from which twisted round the shining points of the icebergs; the weather was constantly changing from dry cold to snowy fogs. The brig, which drew little water, sailed along the west coast; Hatters did not wish to miss the entrance to Bellot Strait, as the only outlet to the
Gulf of Boothia on the south was the strait, only partially known to the _Fury_ and the _Hecla_; if he missed the Bellot Strait, he might be shut up without possibility of egress.

In the evening the _Forward_ was in sight of Elwin Bay, known by its high perpendicular rocks; on the Tuesday morning Batty Bay was sighted, where the _Prince Albert_ anchored for its long wintering on the 10th of September, 1851. The doctor swept the whole coast with his telescope. It was from this point that the expeditions radiated that established the geographical configuration of North Somerset. The weather was clear, and the profound ravines by which the bay is surrounded could be clearly distinguished.

The doctor and Johnson were perhaps the only beings on board who took any interest in these deserted countries. Hatteras was always intent upon his maps, and said little; his taciturnity increased as the brig got more and more south; he often mounted the poop, and there with folded arms, and eyes lost in vacancy, he stood for hours. His orders, when he gave any, were curt and rough. Shandon kept a cold silence, and kept himself so much aloof by degrees that at last he had no relations with Hatteras except those exacted by the service; James Wall remained devoted to Shandon, and regulated his conduct accordingly. The remainder of the crew waited for something to turn up, ready to take any advantage in their own interest. There was no longer that unity of thought and communion of ideas on board which are so necessary for the accomplishment of anything great, and this Hatteras knew to his sorrow.

During the day two whales were perceived rushing towards the south; a white bear was also seen, and was shot at without any apparent success. The captain knew the value of an hour under the circumstances, and would not allow the animal to be chased.

On Wednesday morning the extremity of Regent's Channel was passed; the angle on the west coast was followed by a deep curve in the land. By consulting his map the doctor recognised the point of Somerset House, or Fury Point.

"There," said he to his habitual companion—"there is the very spot where the first English ship, sent into these seas in 1815, was lost, during the third of Parry's voyages to the Pole; the _Fury_ was so damaged by the ice on her second wintering, that her crew were obliged to desert her and return to England on board her companion ship the _Hecla_.

"That shows the advantage of having a second ship," answered Johnson. "It is a precaution that Polar navigators ought not to neglect, but Captain Hatteras wasn't the sort of man to trouble himself with another ship."

"Do you think he is imprudent, Johnson?" asked the doctor.

"I? I think nothing, Mr. Clawbonny. Do you see those stakes over there with some rotten tent-rags still hanging to them?"

"Yes; that's where Parry disembarked his provisions from his ship, and, if I remember rightly, the roof of his tent was a topsail."

"Everything must be greatly changed since 1825!"

"Not so much as any one might think. John Ross owed the health and safety of his crew to that fragile habitation in 1829. When the _Prince Albert_ sent an expedition there in 1851, it was still existing; Captain Kennedy had it repaired, nine years ago now. It would be interesting to visit it, but Hatteras isn't in the humour to stop!"

"I daresay he is right, Mr. Clawbonny; if time is money in England, here it is life, and a day's or even an hour's delay might make all the difference."

During the day of Thursday, the 1st of June, the _Forward_ cut across Creswell Bay; from Fury Point the coast rose towards the north in perpendicular rocks three hundred feet high; it began to get lower towards the south; some snow summits looked like neatly-cut tables, whilst others were shaped like pyramids, and had other strange forms.

The weather grew milder during that day, but was not so clear; land was lost to sight, and the thermometer went up to thirty-two degrees; seafowl fluttered about, the flocks of wild ducks were seen flying north; the crew could divest themselves of some of their garments, and the influence of the Arctic summer began to be felt. Towards evening the _Forward_ doubled Cape Garry at a quarter of a mile from the shore, where the soundings gave from ten to twelve fathoms; from thence she kept near the coast as far as Brentford Bay. It was under this latitude that Bellot Strait was to be met with; a strait the existence of which Sir John Ross did not even guess at during his expedition in 1828; his maps indicated an uninterrupted coast-line, whose irregularities he noted with the utmost care; the entrance to the strait must therefore have been blocked up by ice at the time. It was really discovered by Kennedy in April, 1852, and he gave it the name of his lieutenant, Bellot, as "a just tribute," he said, "to the important services rendered to our expedition by the French officer."

CHAPTER XVI
THE MAGNETIC POLE
Hatteras felt his anxiety increase as he neared the strait; the fate of his voyage depended upon it; up till now he had done more than his predecessors, the most fortunate of whom, McClintock, had taken fifteen months to reach this part of the Polar Seas; but it was little or nothing if he did not succeed in clearing Bellot Strait; he could not retrace his steps, and would be blocked up till the following year.

He trusted the care of examining the coast to no one but himself; he mounted the crow's nest and passed several hours there during the morning of Saturday. The crew perfectly understood the ship's position; profound silence reigned on board; the engine slackened steam, and the _Forward_ kept as near land as possible; the coast bristled with icebergs, which the warmest summers do not melt; an experienced eye alone could distinguish an opening between them. Hatteras compared his maps with the land. As the sun showed himself for an instant towards noon, he caused Shandon and Wall to take a pretty exact observation, which was shouted to him. All the crew suffered the tortures of anxiety for half the day, but towards two o'clock these words were shouted from the top of the mizenmast:

"Veer to the west, all steam on."

The brig instantly obeyed; her prow was directed towards the point indicated; the sea foamed under the screws, and the _Forward_, with all speed on, entered between two ice-streams. The road was found, Hatteras descended upon deck, and the ice-master took his place.

"Well, captain," said the doctor, "we are in the famous strait at last."

"Yes," answered Hatteras, lowering his voice; "but getting in isn't everything; we must get out too," and so saying he regained his cabin.

"He's right," said the doctor; "we are here in a sort of mousetrap, with scarcely enough space for working the brig, and if we are forced to winter in the strait!... Well, we shan't be the first that have had to do it, and they got over it, and so shall we."

The doctor was not mistaken. It was in that very place, in a little sheltered harbour called Kennedy Harbour by McClintock himself, that the _Fox_ wintered in 1858. The high granite chain and the steep cliffs of the two banks were clearly discernible.

Bellot Strait is seventeen miles long and a mile wide, and about six or seven fathoms deep. It lies between mountains whose height is estimated at 1,600 feet. It separates North Somerset from Boothia Land.

It is easy to understand that there is not much elbow-room for vessels in such a strait. The _Forward_ advanced slowly, but it did advance; tempests are frequent in the strait, and the brig did not escape them; by Hatteras's order all sails were furled; but, notwithstanding all precautions, the brig was much knocked about; the waves dashed over her, and her smoke fled towards the east with astonishing rapidity; her course was not certain amongst the moving ice; the barometer fell; it was difficult to stop on deck, and most of the men stayed below to avoid useless suffering.

Hatteras, Johnson, and Shandon remained on the poop in spite of the gales of snow and rain; as usual the doctor had asked himself what would be the most disagreeable thing he could do, and answered himself by going on deck at once; it was impossible to hear and difficult to see one another, so that he kept his reflections to himself. Hatteras tried to see through the fog; he calculated that they would be at the mouth of the strait at six o'clock, but when the time came all issue seemed closed up; he was obliged to wait and anchor the brig to an iceberg; but he stopped under pressure all night.

The weather was frightful. The _Forward_ threatened to break her chains at every instant; it was feared that the iceberg to which they were anchored, torn away at its base under the violent west wind, would float away with the brig. The officers were constantly on the look-out and under extreme apprehension; along with the snow there fell a perfect hail of ice torn off from the surface of the icebergs by the strength of the wind; it was like a shower of arrows bristling in the atmosphere. The temperature rose singularly during this terrible night; the thermometer marked fifty-seven degrees, and the doctor, to his great astonishment, thought he saw flashes of lightning in the south, followed by the roar of far-off thunder that seemed to corroborate the testimony of the whaler Scoresby, who observed a similar phenomenon above the sixty-fifth parallel. Captain Parry was also witness to a similar meteorological wonder in 1821.

Towards five o'clock in the morning the weather changed with astonishing rapidity; the temperature went down to freezing point, the wind turned north, and became calmer. The western opening to the strait was in sight, but entirely obstructed. Hatteras looked eagerly at the coast, asking himself if the passage really existed. However, the brig got under way, and glided slowly amongst the ice-streams, whilst the icebergs pressed noisily against her planks, the packs at that epoch were still from six to seven feet thick; they were obliged carefully to avoid their pressure, for if the brig had resisted them she would have run the risk of being lifted up and turned over on her side. At noon, for the first time, they could admire a magnificent solar phenomenon, a halo with two parhelia; the doctor observed it, and took its exact dimensions; the exterior bow was only visible over an extent of thirty degrees on each side of its horizontal diameter; the two images of the sun were remarkably clear; the colours of the luminous bows
proceeded from inside to outside, and were red, yellow, green, and very light blue—in short, white light without any assignable exterior limit. The doctor remembered the ingenious theory of Thomas Young about these meteors; this natural philosopher supposed that certain clouds composed of prisms of ice are suspended in the atmosphere; the rays of the sun that fall on the prisms are decomposed at angles of sixty and ninety degrees. Halos cannot, therefore, exist in a calm atmosphere. The doctor thought this theory very probable. Sailors accustomed to the boreal seas generally consider this phenomenon as the precursor of abundant snow. If their observation was just, the position of the _Forward_ became very difficult. Hatteras, therefore, resolved to go on fast; during the remainder of the day and following night he did not take a minute's rest, sweeping the horizon with his telescope, taking advantage of the least opening, and losing no occasion of getting out of the strait.

But in the morning he was obliged to stop before the insuperable ice-bank. The doctor joined him on the poop. Hatteras went with him apart where they could talk without fear of being overheard.

"We are in for it," began Hatteras; "it is impossible to go any further."
"Is there no means of getting out?" asked the doctor.
"None. All the powder in the _Forward_ would not make us gain half a mile!"
"What shall we do, then?" said the doctor.
"I don't know. This cursed year has been unfavourable from the beginning."
"Well," answered the doctor, "if we must winter here, we must. One place is as good as another."
"But," said Hatteras, lowering his voice, "we must not winter here, especially in the month of June. Wintering is full of physical and moral danger. The crew would be unmanageable during a long inaction in the midst of real suffering. I thought I should be able to stop much nearer the Pole than this!"
"Luck would have it so, or Baffin's Bay wouldn't have been closed."
"It was open enough for that American!" cried Hatteras in a rage.
"Come, Hatteras," said the doctor, interrupting him on purpose, "to-day is only the 5th of June; don't despair; a passage may suddenly open up before us; you know that the ice has a tendency to break up into several blocks, even in the calmest weather, as if a force of repulsion acted upon the different parts of it; we may find the sea free at any minute."
"If that minute comes we shall take advantage of it. It is quite possible that, once out of Bellot Strait, we shall be able to go north by Peel Strait or McClintock Channel, and then----"
"Captain," said James Wall, who had come up while Hatteras was speaking, "the ice nearly carries off our rudder."
"Well," answered Hatteras, "we must risk it. We must be ready day and night. You must do all you can to protect it, Mr. Wall, but I can't have it removed."
"But----" added Wall.
"That is my business," said Hatteras severely, and Wall went back to his post.
"I would give five years of my life," said Hatteras, in a rage, "to be up north. I know no more dangerous passage. To add to the difficulty, the compass is no guide at this distance from the magnetic pole: the needle is constantly shifting its direction."
"I acknowledge," answered the doctor, "that navigation is difficult, but we knew what we had to expect when we began our enterprise, and we ought not to be surprised at it."
"Ah, doctor, my crew is no longer what it was; the officers are spoiling the men. I could make them do what I want by offering them a pecuniary reward, but I am not seconded by my officers, but they shall pay dearly for it!"
"You are exaggerating, Hatteras."
"No, I am not. Do you think the crew is sorry for the obstacles that I meet with? On the contrary, they hope they will make me abandon my projects. They do not complain now, and they won't as long as the _Forward_ is making for the south. The fools! They think they are getting nearer England! But once let me go north and you'll see how they'll change! I swear, though, that no living being will make me deviate from my line of conduct. Only let me find a passage, that's all!"

One of the captain's wishes was fulfilled soon enough. There was a sudden change during the evening; under some influence of the wind, the current, or the temperature, the ice-fields were separated; the _Forward_ went along boldly, breaking up the ice with her steel prow; she sailed along all night, and the next morning about six cleared Bellot Strait. But that was all; the northern passage was completely obstructed—to the great disgust of Hatteras. However, he had sufficient strength of character to hide his disappointment, and as if the only passage open was the one he preferred, he let the _Forward_ sail down Franklin Strait again; not being able to get up Peel Strait, he resolved to go round Prince of Wales's Land to get into McClintock Channel. But he felt he could not deceive Shandon and Wall as to the extent of his disappointment. The day of the 6th of June was uneventful; the sky was full of snow, and the prognostics of the halo were fulfilled.
During thirty-six hours the _Forward_ followed the windings of Boothia Land, unable to approach Prince of Wales's Land; the captain counted upon getting supplies at Beechey Island; he arrived on the Thursday at the extremity of Franklin Strait, where he again found the road to the north blocked up. It was enough to make him despair; he could not even retrace his steps; the icebergs pushed him onwards, and he saw the passages close up behind him as if there never had existed open sea where he had passed an hour before. The _Forward_ was, therefore, not only prevented from going northwards, but could not stop still an instant for fear of being caught, and she fled before the ice as a ship flies before a storm.

On Friday, the 8th of June, they arrived near the shore of Boothia, at the entrance to James Ross Strait, which they were obliged to avoid, as its only issue is on the west, near the American coasts.

Observations taken at noon from this point gave 70 degrees 5 minutes 17 seconds latitude, and 96 degrees 46 minutes 45 seconds longitude; when the doctor heard that he consulted his map, and saw they were at the magnetic pole, at the very place where James Ross, the nephew of Sir John, had fixed it. The land was low near the coast, and at about a mile's distance became slightly elevated, sixty feet only. The _Forward's_ boiler wanted cleaning, and the captain caused the brig to be anchored to an ice-field, and allowed the doctor and the boatswain to land. He himself cared for nothing but his pet project, and stayed in his cabin, consulting his map of the Pole.

The doctor and his companion easily succeeded in reaching land; the doctor took a compass to make experiments with. He wished to try if James Ross's conclusions hold good. He easily discovered the limestone heap raised by Ross; he ran to it; an opening allowed him to see, in the interior, the tin case in which James Ross had placed the official report of his discoveries. No living being seemed to have visited this desolate coast for the last thirty years. In this spot a loadstone needle, suspended as delicately as possible, immediately moved into an almost vertical position under the magnetic influence; if the centre of attraction was not immediately under the needle, it could only be at a trifling distance. The doctor made the experiment carefully, and found that the imperfect instruments of James Ross had given his vertical needle an inclination of 89 degrees 59 minutes, making the real magnetic point at a minute's distance from the spot, but that his own at a little distance gave him an inclination of 90 degrees.

"Here is the exact spot of the world's magnetic pole," said the doctor, rapping the earth.
"Then," said the boatswain, "there's no loadstone mountain, after all."
"Of course not; that mountain was only a credulous hypothesis. As you see, there isn't the least mountain capable of attracting ships, of attracting their iron anchor after anchor and nail after nail, and you see it respects your shoes as much as any other land on the globe."
"Then how do you explain----"
"Nothing is explained, Johnson; we don't know enough for that yet. But it is certain, exact, mathematical, that the magnetic pole is in this very spot!"
"Ah, Mr. Clawbonny! how happy the captain would be to say as much of the boreal pole!"
"He will some day, Johnson, you will see."
"I hope he will," answered the boatswain.
He and the doctor elevated a cairn on the exact spot where the experiment had been made, and returned on board at five o'clock in the evening.

CHAPTER XVII
THE FATE OF SIR JOHN FRANKLIN

The _Forward_ succeeded in cutting straight across James Ross Strait, but not without difficulty; the crew were obliged to work the saws and use petards, and they were worn out with fatigue. Happily the temperature was bearable, and thirty degrees higher than that experienced by James Ross at the same epoch. The thermometer marked thirty-four degrees.

On Saturday they doubled Cape Felix at the northern extremity of King William's Land, one of the middle-sized isles of the northern seas. The crew there experienced a strong and painful sensation, and many a sad look was turned towards the island as they sailed by the coast. This island had been the theatre of the most terrible tragedy of modern times. Some miles to the west the _Erebus_ and the _Terror_ had been lost for ever. The sailors knew about the attempts made to find Admiral Franklin and the results, but they were ignorant of the affecting details of the catastrophe. While the doctor was following the progress of the ship on his map, several of them, Bell, Bolton, and Simpson, approached and entered into conversation with him. Their comrades, animated by curiosity, soon followed them; while the brig flew along with extreme rapidity, and the coast with its bays, capes, and promontories passed before their eyes like a gigantic panorama.

Hatteras was marching up and down the poop with quick steps. The doctor, on the deck, looked round, and saw
herself surrounded by almost the whole crew. He saw how powerful a recital would be in such a situation, and he
continued the conversation begun with Johnson as follows:--

"You know how Franklin began, my friends; he was a cabin-boy like Cook and Nelson; after having employed
his youth in great maritime expeditions, he resolved in 1845 to launch out in search of the North-West passage; he
commanded the _Erebus_ and the _Terror_, two vessels, already famous, that had just made an Antarctic campaign
under James Ross, in 1840. The _Erebus_, equipped by Franklin, carried a crew of seventy men, officers and sailors,
with Fitz-James as captain; Gore and Le Vesconte, lieutenants; Des Voeux, Sargent, and Couch, boatswains; and
Stanley as surgeon. The _Terror_ had sixty-eight men, Captain Crozier; Lieutenants Little, Hodgson, and Irving;
Horesby and Thomas were the boatswains, and Peddie the surgeon. In the names on the map of the capes, straits,
points, and channels, you may read those of these unfortunate men, not one of whom was destined ever again to see
his native land. There were a hundred and thirty-eight men in all! We know that Franklin's last letters were
addressed from Disko Island, and were dated July 12th, 1845. 'I hope,' he said, 'to get under way to-night for
Lancaster Strait.' What happened after his departure from Disko Bay? The captains of two whalers, the _Prince of
Wales_ and the _Enterprise_, perceived the two ships in Melville Bay for the last time, and after that day nothing
was heard of them. However, we can follow Franklin in his westerly course: he passed through Lancaster and
Barrow Straits, and arrived at Beechey Island, where he passed the winter of 1845 and '46."

"But how do you know all this?" asked Bell, the carpenter.

"By three tombs which Austin discovered on that island in 1850. Three of Franklin's sailors were buried there,
and by a document which was found by Lieutenant Hobson, of the _Fox_, which bears the date of April 25th, 1848,
we know that after their wintering the _Erebus_ and the _Terror_ went up Wellington Strait as far as the seventy-
seventh parallel; but instead of continuing their route northwards, which was, probably, not practicable, they
returned south."

"And that was their ruin!" said a grave voice. "Safety lay to the north."

Every one turned round. Hatteras, leaning on the rail of the poop, had just uttered that terrible observation.

"There is not a doubt," continued the doctor, "that Franklin's intention was to get back to the American coast; but
tempests stopped him, and on the 12th September, 1846, the two ships were seized by the ice, at a few miles from
here, to the north-west of Cape Felix; they were dragged along N.N.W. to Victoria Point over there," said the doctor,
pointing to a part of the sea. "Now," he continued, "the ships were not abandoned till the 22nd of April, 1848. What
happened during these nineteen months? What did the poor unfortunate men do? They, doubtless, explored the
surrounding land, attempting any chance of safety, for the admiral was an energetic man, and if he did not succeed--
"

"Very likely his crew betrayed him," added Hatteras.

The sailors dared not raise their eyes; these words pricked their conscience.

"To end my tale, the fatal document informs us also that John Franklin succumbed to fatigue on the 11th of June,
1847. Honour to his memory!" said the doctor, taking off his hat. His audience imitated him in silence.

"What became of the poor fellows for the next ten months after they had lost their chief? They remained on
board their vessels, and only resolved to abandon them in April, 1848; a hundred and five men out of a hundred and
thirty-eight were still living; thirty-three were dead! Then Captain Crozier and Captain Fitz-James raised a cairn on
Victory Point, and there deposited their last document. See, my friends, we are passing the point now! You can still
see the remains of the cairn placed on the extreme point, reached by John Ross in 1831. There is Jane Franklin Cape.
There is Franklin Point. There is Le Vesconte Point. There is Erebus Bay, where the boat made out of the _debris_ of
one of the vessels was found on a sledge. Silver spoons, provisions in abundance, chocolate, tea, and religious
books were found there too. The hundred and five survivors, under Captain Crozier, started for Great Fish River.
Where did they get to? Did they succeed in reaching Hudson's Bay? Did any survive? What became of them after
this last departure?"

"I will tell you what became of them," said John Hatteras in a firm voice. "Yes, they did try to reach Hudson's
Bay, and they split up into several parties! Yes, they did make for the south! A letter from Dr. Rae in 1854 contained
the information that in 1850 the Esquimaux had met on King William's Land a detachment of forty men travelling
on the ice, and dragging a boat, thin, emaciated, worn out by fatigue and suffering! Later on they discovered thirty
corpses on the continent and five on a neighbouring island, some half-buried, some left without burial, some under a
boat turned upside down, others under the remains of a tent; here an officer with his telescope on his shoulder and a
loaded gun at his side, further on a boiler with the remnants of a horrible meal! When the Admiralty received these
tidings it begged the Hudson's Bay Company to send its most experienced agents to the scene. They descended Back
River to its mouth. They visited the islands of Montreal, Maconochie, and Ogle Point. But they discovered nothing.
All the poor wretches had died from misery, suffering, and hunger, whilst trying to prolong their existence by the
dreadful resource of cannibalism. That is what became of them on the southern route. Well! Do you still wish to
march in their footsteps?"

His trembling voice, his passionate gestures and beaming face, produced an indescribable effect. The crew, excited by its emotion before this fatal land, cried out with one voice: "To the north! To the north!"

"Yes, to the north! Safety and glory lie to the north. Heaven is for us! The wind is changing; the pass is free!"

So saying, Hatteras gave orders to turn the vessel; the sailors went to work with alacrity; the ice streams got clear little by little; the _Forward_, with all steam on, made for McClintock Channel. Hatteras was right when he counted upon a more open sea; he followed up the supposed route taken by Franklin, sailing along the western coast of Prince of Wales's Land, then pretty well known, whilst the opposite shore is still unknown. It was evident that the breaking up of the ice had taken place in the eastern locks, for this strait appeared entirely free; the _Forward_ made up for lost time; she fled along so quickly that she passed Osborne Bay on the 14th of June, and the extreme points attained by the expeditions of 1851. Icebergs were still numerous, but the sea did not threaten to quit the keel of the _Forward_.

CHAPTER XVIII
THE NORTHERN ROUTE

The crew seemed to have returned to its habits of discipline and obedience. There was little fatiguing work to do, and they had a good deal of leisure. The temperature kept above freezing point, and it seemed as if the thaw had removed the great obstacles to navigation.

Dick, now sociable and familiar, had made great friends with Dr. Clawbonny. But as in most friendships one friend has to give way to the other, it must be acknowledged it was not the dog. Dick did what he liked with the doctor, who obeyed him as if he were the dog. He was amiable with most of the sailors and officers on board, only by instinct, doubtless, he shunned Shandon's society; he also kept up a grudge against Pen and Foker; he vented his hatred of them by growling at their approach. But they dare not now attack the captain's dog--his "familiar," as Clifton called him. On the whole the crew had plucked up courage again and worked well.

"It seems to me," said James Wall one day to Richard Shandon, "that our men took the captain's speech seriously; they no longer seem to be doubtful of success."

"The more fools they!" answered Shandon. "If they reflected, if they examined the situation, they would see that we are going out of one imprudence into another."

"But," continued Wall, "the sea is open now, and we are getting back into well-known tracks; aren't you exaggerating a bit, Shandon?"

"No, I am not exaggerating; the dislike I feel to Hatteras is not blinding me. Have you seen the coal-holes lately?"

"No," answered Wall.

"Well, then, go and examine them: you will see how much there's left. He ought to have navigated under sail, and have kept the engine for currents and contrary winds; he ought only to have used his coal where he was obliged; who can tell where we shall be kept, and for how many years? But Hatteras only thinks about getting north. Whether the wind is contrary or not, he goes along at full steam, and if things go on as they are doing now, we shall soon be in a pretty pickle."

"If what you say is true, it is very serious."

"Yes, it is, because of the wintering. What shall we do without coal in a country where even the thermometer freezes?"

"But, if I am not mistaken, the captain counts upon renewing his stock of coal at Beechey Island. It appears there is a large provision there."

"And suppose we can't reach Beechey Island, what will become of us then?"

"You are right, Shandon; Hatteras seems to me very imprudent; but why don't you expostulate with him on the subject?"

"No," said Shandon, with ill-concealed bitterness, "I won't say a word. It is nothing to do with me now. I shall wait to see what turns up; I shall obey orders, and not give my opinion where it isn't wanted."

"Allow me to tell you that you are in the wrong, Shandon; you have as much interest in setting yourself against the captain's imprudence as we have."

"He wouldn't listen to me if I were to speak; do you think he would?"

Wall dared not answer in the affirmative, and he added--

"But perhaps he would listen to the crew."

"The crew!" answered Shandon, shrugging his shoulders; "you don't know the crew. The men know they are nearing the 72nd parallel, and that they will earn a thousand pounds for every degree above that."
"The captain knew what he was doing when he offered them that."
"Of course he did, and for the present he can do what he likes with them."
"What do you mean?"
"I mean that while they have nothing to do, and there is an open sea, they will go on right enough; but wait till difficulty and danger come, and you will see how much they'll think about the money!"
"Then you don't think Hatteras will succeed?"
"No, he will not; to succeed in such an enterprise there must be a good understanding between him and his officers, and that does not exist. Hatteras is a madman; all his past career proves it. Well, we shall see; perhaps circumstances will force them to give the command to a less adventurous captain."
"Still," said Wall, shaking his head, "he will always have on his side----"
"Dr. Clawbonny, a man who only cares for science, and Johnson, a sailor who only cares to obey, and perhaps two more men like Bell, the carpenter; four at the most, and we are eighteen on board! No, Wall, Hatteras has not got the confidence of his men, and he knows it, so he bribes them; he profited cleverly by the Franklin affair, but that won't last, I tell you, and if he doesn't reach Beechey Island he's a lost man!"
"Suppose the crew should take it into its head----"
"Don't tell the crew what I think," answered Shandon quickly; "the men will soon see for themselves. Besides, just now we must go north. Who knows if Hatteras won't find that way will bring us back sooner? At the end of McClintock Channel lies Melville Bay, and from thence go the straits that lead to Baffin's Bay. Hatteras must take care! The way to the east is easier than the road to the north!"

Hatteras was not mistaken in his opinion that Shandon would betray him if he could. Besides, Shandon was right in attributing the contentment of the men to the hope of gain. Clifton had counted exactly how much each man would have. Without reckoning the captain and the doctor, who would not expect a share in the bounty-money, there remained sixteen men to divide it amongst. If ever they succeeded in reaching the Pole, each man would have 1,125 pounds—that is to say, a fortune. It would cost the captain 18,000 pounds, but he could afford it. The thoughts of the money inflamed the minds of the crew, and they were now as anxious to go north as before they had been eager to turn south. The _Forward_ during the day of June 16th passed Cape Aworth. Mount Rawlinson raised its white peaks towards the sky; the snow and fog made it appear colossal, as they exaggerated its distance; the temperature still kept some degrees above freezing point; improvised cascades and cataracts showed themselves on the sides of the mountains, and avalanches roared down with the noise of artillery discharges. The glaciers, spread out in long white sheets, projected an immense reverberation into space. Boreal nature, in its struggle with the frost, presented a splendid spectacle. The brig went very near the coast; on some sheltered rocks rare heaths were to be seen, the pink flowers lifting their heads timidly out of the snows, and some meagre lichens of a reddish colour and the shoots of a dwarf willow.

At last, on the 19th of June, at the famous seventy-third parallel, they doubled Cape Minto, which forms one of the extremities of Ommaney Bay; the brig entered Melville Bay, surnamed by Bolton Money Bay; the merry sailors joked about the name, and made Dr. Clawbonny laugh heartily. Notwithstanding a strong breeze from the northeast, the _Forward_ made considerable progress, and on the 23rd of June she passed the 74th degree of latitude. She was in the midst of Melville Bay, one of the most considerable seas in these regions. This sea was crossed for the first time by Captain Parry in his great expedition of 1819, and it was then that his crew earned the prize of 5,000 pounds promised by Act of Parliament. Clifton remarked that there were two degrees from the 72nd to the 74th; that already placed 125 pounds to his credit. But they told him that a fortune was not worth much there, and that it was of no use being rich if he could not drink his riches, and he had better wait till he could roll under a Liverpool table before he rejoiced and rubbed his hands.

CHAPTER XIX
A WHALE IN SIGHT

Melville Bay, though easily navigable, was not free from ice; ice-fields lay as far as the utmost limits of the horizon; a few icebergs appeared here and there, but they were immovable, as if anchored in the midst of the frozen fields. The _Forward_, with all steam on, followed the wide passes where it was easy to work her. The wind changed frequently from one point of the compass to another. The variability of the wind in the Arctic Seas is a remarkable fact; sometimes a dead calm is followed in a few minutes by a violent tempest, as the _Forward_ found to her cost on the 23rd of June in the midst of the immense bay. The more constant winds blow from off the ice-bank on to the open sea, and are intensely cold. On that day the thermometer fell several degrees; the wind veered round to the south, and violent gusts, sweeping over the ice-fields, brought a thick snow along with them. Hatteras immediately caused the sails that helped the screw to be furled, but not quickly enough to prevent his little foresail
being carried away in the twinkling of an eye. Hatteras worked his ship with the greatest composure, and did not
leave the deck during the tempest; he was obliged to fly before the weather and to turn westward. The wind raised
up enormous waves, in the midst of which blocks of ice balanced themselves; these blocks were of all sizes and
shapes, and had been struck off the surrounding ice-fields; the brig was tossed about like a child's plaything, and
morsels of the packs were thrown over her hull; at one instant she was lying perpendicularly along the side of a
liquid mountain; her steel prow concentrated the light, and shone like a melting metal bar; at another she was down
an abyss, plunging her head into whirlwinds of snow, whilst her screws, out of the water, turned in space with a
sinister noise, striking the air with their paddles. Rain mixed with the snow and fell in torrents.

The doctor could not miss such an occasion of getting wet to the skin; he remained on deck, a prey to that
emotional admiration which a scientific man must necessarily feel during such a spectacle. His nearest neighbour
could not have heard him speak, so he said nothing and watched; but whilst watching he was witness to an odd
phenomenon, peculiar to hyperborean regions. The tempest was confined to a restricted area, and only extended for
about three or four miles; the wind that passes over ice-fields loses much of its strength and cannot carry its violence
far out; the doctor perceived from time to time, through an opening in the tempest, a calm sky and a quiet sea
beyond some ice-fields. The _Forward_ would therefore only have to take advantage of some channels left by the
ice to find a peaceful navigation again, but she ran the risk of being thrown on to one of the moving banks which
followed the movement of the swell. However, in a few hours Hatteras succeeded in getting his ship into a calm sea,
whilst the violence of the hurricane spent itself at a few cables' length from the _Forward_. Melville Bay no longer
presented the same aspect; under the influence of the winds and the waves a great number of icebergs, detached
from the coast, floated northward, running against one another in every direction. There were several hundreds of
them, but the bay is very wide, and the brig easily avoided them. The spectacle of these floating masses was
magnificent; they seemed to be having a grand race for it on the open sea. The doctor was getting quite excited with
watching them, when the harpooner, Simpson, came up and made him look at the changing tints in the sea; they
varied from a deep blue to olive green; long stripes stretched north and south in such decided lines that the eye could
follow each shade out of sight. Sometimes a transparent sheet of water would follow a perfectly opaque sheet.

"Well, Mr. Clawbonny, what do you think of that?" said Simpson.

"I am of the same opinion as the whaler Scoresby on the nature of the different coloured waters; blue water has
no animalculae, and green water is full of them. Scoresby has made several experiments on this subject, and I think
he is right."

"Well, sir, I know something else about the colours in the sea, and if I were a whaler I should be precious glad to
see them."

"But I don't see any whales," answered the doctor.

"You won't be long before you do, though, I can tell you. A whaler is lucky when he meets with those green
stripes under this latitude."

"Why?" asked the doctor, who always liked to get information from anybody who understood what they were
talking about.

"Because whales are always found in great quantities in green water."

"What's the reason of that?"

"Because they find plenty of food in them."

"Are you sure of that?"

"I've seen it a hundred times, at least, in Baffin Sea; why shouldn't it be the same in Melville Bay? Besides, look
there, Mr. Clawbonny," added Simpson, leaning over the barricading.

"Why any one would think it was the wake of a ship!"

"It is an oily substance that the whale leaves behind. The animal can't be far off!"

The atmosphere was impregnated with a strong oily odour, and the doctor attentively watched the surface of the
water. The prediction of the harpooner was soon accomplished. Foker called out from the masthead--

"A whale alee!"

All looks turned to the direction indicated. A small spout was perceived coming up out of the sea about a mile
from the brig.

"There she spouts!" cried Simpson, who knew what that meant.

"She has disappeared!" answered the doctor.

"Oh, we could find her again easily enough if necessary!" said Simpson, with an accent of regret. To his great
astonishment, and although no one dared ask for it, Hatteras gave orders to man the whaler. Johnson went aft to the
stem, while Simpson, harpoon in hand, stood in the bow. They could not prevent the doctor joining the expedition.
The sea was pretty calm. The whaler soon got off, and in ten minutes was a mile from the brig. The whale had taken
in another provision of air, and had plunged again; but she soon returned to the surface and spouted out that mixture
of gas and mucus that escapes from her air-holes.

"There! There!" said Simpson, pointing to a spot about eight hundred yards from the boat. It was soon alongside the animal, and as they had seen her from the brig too, she came nearer, keeping little steam on. The enormous cetacean disappeared and reappeared as the waves rose and fell, showing its black back like a rock in open sea. Whales do not swim quickly unless they are pursued, and this one only rocked itself in the waves. The boat silently approached along the green water; its opacity prevented the animal seeing the enemy. It is always an agitating spectacle when a fragile boat attacks one of these monsters; this one was about 130 feet long, and it is not rare, between the 72nd and the 80th degree, to meet with whales more than 180 feet long. Ancient writers have described animals more than 700 feet long, but they drew upon their imagination for their facts. The boat soon neared the whale; on a sign from Simpson the men rested on their oars, and brandishing his harpoon, the experienced sailor threw it with all his strength; it went deep into the thick covering of fat. The wounded whale struck the sea with its tail and plunged. The four oars were immediately raised perpendicularly; the cord fastened to the harpoon, and attached to the bow, rolled rapidly out and dragged the boat along, steered cleverly by Johnson.

The whale got away from the brig and made for the moving icebergs; she kept on for more than half-an-hour; they were obliged to wet the cord fastened to the harpoon to prevent it catching fire by rubbing against the boat. When the whale seemed to be going along a little more slowly, the cord was pulled in little by little and rolled up; the whale soon reappeared on the surface of the sea, which she beat with her formidable tail: veritable waterspouts fell in a violent rain on to the boat. It was getting nearer. Simpson had seized a long lance, and was preparing to give close battle to the animal, when all at once the whale glided into a pass between two mountainous icebergs. The pursuit then became really dangerous.

"The devil!" said Johnson.
"Go ahead," cried Simpson; "we've got her!"
"But we can't follow her into the icebergs!" said Johnson, steering steadily.
"Yes we can!" cried Simpson.
"No, no!" cried some of the sailors.
"Yes, yes!" said others.

During the discussion the whale had got between two floating mountains which the swell was bringing close together. The boat was being dragged into this dangerous part when Johnson rushed to the fore, an axe in his hand, and cut the cord. He was just in time; the two mountains came together with a tremendous crash, crushing the unfortunate animal.

"The whale's lost!" cried Simpson.
"But we are saved!" answered Johnson.
"Well," said the doctor, who had not moved, "that was worth seeing!"

The crushing force of these ice-mountains is enormous. The whale was victim to an accident that often happens in these seas. Scoresby relates that in the course of a single summer thirty whales perished in the same way in Baffin's Sea; he saw a three-master flattened in a minute between two immense walls of ice. Other vessels were split through, as if with a lance, by pointed icicles a hundred feet long, meeting through the planks. A few minutes afterwards the boat hailed the brig, and was soon in its accustomed place on deck.

"It is a lesson for those who are imprudent enough to adventure into the channels amongst the ice!" said Shandon in a loud voice.

CHAPTER XX
BEECHEY ISLAND

On the 25th of June the _Forward_ arrived in sight of Cape Dundas at the north-western extremity of Prince of Wales's Land. There the difficulty of navigating amongst the ice grew greater. The sea is narrower there, and the line made by Crozier, Young, Day, Lowther, and Garret Islands, like a chain of forts before a roadstead, forced the ice-streams to accumulate in this strait. The brig took from the 25th to the 30th of June to make as much way as she would have done in one day under any other circumstances; she stopped, retraced her steps, waiting for a favourable occasion so as not to miss Beechey Island, using a great deal of coal, as the fires were only moderated when she had to halt, but were never put out, so that she might be under pressure day and night. Hatteras knew the extent of his coal provision as well as Shandon, but as he was certain of getting his provision renewed at Beechey Island he would not lose a minute for the sake of economy; he had been much delayed by his forced march southward, and although he had taken the precaution of leaving England before the month of April, he did not find himself more advanced than preceding expeditions had been at the same epoch. On the 30th they sighted Cape Walker at the north-eastern extremity of Prince of Wales's Land; it was the extreme point that Kennedy and Bellot perceived on
the 3rd of May, 1852, after an excursion across the whole of North Somerset. Before that, in 1851, Captain Ommaney, of the Austin expedition, had the good luck to revictual his detachments there. This cape is very high, and remarkable for its reddish-brown colour; from there, when the weather is clear, the view stretches as far as the entrance to Wellington Channel. Towards evening they saw Cape Bellot, separated from Cape Walker by McLeon Bay. Cape Bellot was so named in the presence of the young French officer, for whom the English expedition gave three cheers. At this spot the coast is made of yellow limestone, presenting a very rugged outline; it is defended by enormous icebergs which the north winds pile up there in a most imposing way. It was soon lost to sight by the _Forward_ as she opened a passage amongst the ice to get to Beechey Island through Barrow Strait. Hatteras resolved to go straight on, and, so as not to be drifted further than the island, scarcely quitted his post during the following days; he often went to the masthead to look out for the most advantageous channels. All that pluck, skill, and genius could do he did while they were crossing the strait. Fortune did not favour him, for the sea is generally more open at this epoch. But at last, by dint of sparing neither his steam, his crew, nor himself, he attained his end.

On the 3rd of July, at 11 o’clock in the morning, the ice-master signalled land to the north. After taking an observation Hatteras recognised Beechey Island, that general meeting-place of Arctic navigators. Almost all ships that adventure in these seas stop there. Franklin wintered there for the first time before getting into Wellington Strait, and Creswell, with Lieutenant McClure, after having cleared 170 miles on the ice, rejoined the _Phoenix_ and returned to England. The last ship which anchored at Beechey Island before the _Forward_ was the _Fox_; McClintock revictualled there the 11th of August, 1858, and repaired the habitations and magazines; only two years had elapsed since then, and Hatteras knew all these details. The boatswain's heart beat with emotion at the sight of this island; when he had visited it he was quartermaster on board the _Phoenix_; Hatteras questioned him about the coast line, the facilities for anchoring, how far they could go inland, &c.; the weather was magnificent, and the temperature kept at 57 degrees.

"Well, Johnson," said the captain, "do you know where you are?"
"Yes, sir, that is Beechey Island; only you must let us get further north--the coast is more easy of access."
"But where are the habitations and the magazines?" said Hatteras.
"Oh, you can't see them till you land; they are sheltered behind those little hills you see yonder."
"And is that where you transported a considerable quantity of provisions?"
"Yes, sir; the Admiralty sent us here in 1853, under the command of Captain Inglefield, with the steamer _Phoenix_ and a transport ship, the _Breadalbane_, loaded with provisions; we brought enough with us to revictual a whole expedition."

"But the commander of the _Fox_ took a lot of them in 1858," said Hatteras.
"That doesn't matter, sir; there'll be plenty left for you; the cold preserves them wonderfully, and we shall find them as fresh and in as good a state of preservation as the first day."
"What I want is coal," said Hatteras; "I have enough provisions for several years."
"We left more than a thousand tons there, so you can make your mind easy."
"Are we getting near?" said Hatteras, who, telescope in hand, was watching the coast.
"You see that point?" continued Johnson. "We have doubled it shall we be very near where we drop anchor. It was from that place that we started for England with Lieutenant Creswell and the twelve invalids from the _Investigator_. We were fortunate enough to bring back McClure's lieutenant, but the officer Bellot, who accompanied us on board the _Phoenix_, never saw his country again! It is a painful thing to think about. But, captain, I think we ought to drop anchor here."

"Very well," answered Hatteras, and he gave his orders in consequence. The _Forward_ was in a little bay naturally sheltered on the north, east, and south, and at about a cable's length from the coast.

"Mr. Wall," said Hatteras, "have the long boat got ready to transport the coal on board. I shall land in the pirogue with the doctor and the boatswain. Will you accompany us, Mr. Shandon?"

"As you please," answered Shandon.

A few minutes later the doctor, armed as a sportsman and a _savant_, took his place in the pirogue along with his companions; in ten minutes they landed on a low and rocky coast.

"Lead the way, Johnson," said Hatteras. "You know it, I suppose?"
"Perfectly, sir; only there's a monument here that I did not expect to find!"
"That!" cried the doctor; "I know what it is; let us go up to it; the stone itself will tell us."

The four men advanced, and the doctor said, after taking off his hat--
"This, my friends, is a monument in memory of Franklin and his companions."

Lady Franklin had, in 1855, confided a black marble tablet to Doctor Kane, and in 1858 she gave a second to McClintock to be raised on Beechey Island. McClintock accomplished this duty religiously, and placed the stone near a funeral monument erected to the memory of Bellot by Sir John Barrow.
The tablet bore the following inscription:

"TO THE MEMORY OF FRANKLIN, CROZIER, FITZ-JAMES, AND ALL THEIR VALIANT BRETHREN OFFICERS AND FAITHFUL COMPANIONS who suffered for the cause of science and for their country's glory.

"This stone is erected near the place where they passed their first Arctic winter, and from whence they departed to conquer obstacles or to die.

"It perpetuates the regret of their countrymen and friends who admire them, and the anguish, conquered by Faith, of her who lost in the chief of the expedition the most devoted and most affectionate of husbands.

"It is thus that He led them to the supreme haven where all men take their rest.

"1855."

This stone, on a forlorn coast of these far-off regions, appealed mournfully to the heart; the doctor, in presence of these touching regrets, felt his eyes fill with tears. At the very same place which Franklin and his companions passed full of energy and hope, there only remained a block of marble in remembrance! And notwithstanding this sombre warning of destiny, the _Forward_ was going to follow in the track of the _Erebus_ and the _Terror_.

Hatteras was the first to rouse himself from the perilous contemplation, and quickly climbed a rather steep hill, almost entirely bare of snow.

"Captain," said Johnson, following him, "we shall see the magazines from here."

Shandon and the doctor joined them on the summit. But from there the eye contemplated the vast plains, on which there remained no vestige of a habitation.

"That is singular!" cried the boatswain.

"Well, and where are the magazines?" said Hatteras quickly.

"I don't know--I don't see----" stammered Johnson.

"You have mistaken the way," said the doctor.

"It seemed to me that this was the very place," continued Johnson.

"Well," said Hatteras, impatiently "where are we to go now?"

"We had better go down, for I may be mistaken. I may have forgotten the exact locality in seven years!"

"Especially when the country is so uniformly monotonous!" added the doctor.

"And yet----" murmured Johnson.

Shandon had not spoken a word. After walking for a few minutes, Johnson stopped.

"But no," he cried, "I am not mistaken!"

"Well?" said Hatteras, looking round him.

"Do you see that swell of the ground?" asked the boatswain, pointing to a sort of mound with three distinct swells on it.

"What do you conclude from that?" asked the doctor.

"Those are the three graves of Franklin's sailors. I am sure now that I am not mistaken; the habitations ought to be about a hundred feet from here, and if they are not, they----"

He dared not finish his sentence; Hatteras had rushed forward, a prey to violent despair. There, where the wished-for stores on which he had counted ought to have been, there ruin, pillage and destruction had been before him. Who had done it? Animals would only have attacked the provisions, and there did not remain a single rag from the tent, a piece of wood or iron, and, more terrible still, not a fragment of coal! It was evident that the Esquimaux had learnt the value of these objects from their frequent relations with Europeans; since the departure of the _Fox_ they had fetched everything away, and had not left a trace even of their passage. A slight coating of snow covered the ground. Hatteras was confounded. The doctor looked and shook his head. Shandon still said nothing, but an attentive observer would have noticed his lips curl with a cruel smile. At this moment the men sent by Lieutenant Wall came up; they soon saw the state of affairs. Shandon advanced towards the captain, and said:

"Mr. Hatteras, we need not despair; happily we are near the entrance to Barrow Strait, which will take us back to Baffin's Sea!"

"Mr. Shandon," answered Hatteras, "happily we are near the entrance to Wellington Strait, and that will take us north!"

"But how shall we get along, captain?"

"With the sails, sir. We have two months' firing left, and that is enough for our wintering."

"But allow me to tell you----" added Shandon.

"I will allow you to follow me on board my ship, sir," answered Hatteras, and turning his back on his second, he returned to the brig and shut himself up in his cabin. For the next two days the wind was contrary, and the captain did not show up on deck. The doctor profited by the forced sojourn to go over Beechey Island; he gathered some plants, which the temperature, relatively high, allowed to grow here and there on the rocks that the snow had left, some heaths, a few lichens, a sort of yellow ranunculus, a sort of plant something like sorrel, with wider leaves and
more veins, and some pretty vigorous saxifrages. He found the fauna of this country much richer than the flora; he perceived long flocks of geese and cranes going northward, partridges, eider ducks of a bluish black, sandpipers, a sort of wading bird of the scolopax class, northern divers, plungers with very long bodies, numerous ptarmites, a sort of bird very good to eat, dovekies with black bodies, wings spotted with white, feet and beak red as coral; noisy bands of kittywakes and fat loons with white breasts, represented the ornithology of the island. The doctor was fortunate enough to kill a few grey hares, which had not yet put on their white winter fur, and a blue fox which Dick ran down skilfully. Some bears, evidently accustomed to dread the presence of men, would not allow themselves to be got at, and the seals were extremely timid, doubtless for the same reason as their enemies the bears. The class of articulated animals was represented by a single mosquito, which the doctor caught to his great delight, though not till it had stung him. As a conchologist he was less favoured, and only found a sort of mussel and some bivalve shells.

CHAPTER XXI
THE DEATH OF BELLOT

The temperature during the days of the 3rd and 4th of July kept up to 57 degrees; this was the highest thermometric point observed during the campaign. But on Thursday, the 5th, the wind turned to the south-east, and was accompanied by violent snow-storms. The thermometer fell during the preceding night to 23 degrees. Hatteras took no notice of the murmurs of the crew, and gave orders to get under way. For the last thirteen days, from Cape Dundas, the _Forward_ had not been able to gain one more degree north, so the party represented by Clifton was no longer satisfied, but wished like Hatteras to get into Wellington Channel, and worked away with a will. The brig had some difficulty in getting under sail; but Hatteras having set his mizensail, his topsails, and his gallantsails during the night, advanced boldly in the midst of fields of ice which the current was drifting south. The crew were tired out with this winding navigation, which kept them constantly at work at the sails. Wellington Channel is not very wide; it is bounded by North Devon on the east and Cornwallis Island on the west; this island was long believed to be a peninsula. It was Sir John Franklin who first sailed round it in 1846, starting west, and coming back to the same point to the north of the channel. The exploration of Wellington Channel was made in 1851 by Captain Penny in the whalers _Lady Franklin_ and _Sophia_; one of his lieutenants, Stewart, reached Cape Beecher in latitude 76 degrees 20 minutes, and discovered the open sea--that open sea which was Hatteras's dream!

"What Stewart found I shall find," said he to the doctor; "then I shall be able to set sail to the Pole."

"But aren't you afraid that your crew----"

"My crew!" said Hatteras severely. Then in a low tone--"Poor fellows!" murmured he, to the great astonishment of the doctor. It was the first expression of feeling he had heard the captain deliver.

"No," he repeated with energy, "they must follow me! They shall follow me!"

However, although the _Forward_ had nothing to fear from the collision of the ice-streams, which were still pretty far apart, they made very little progress northward, for contrary winds often forced them to stop. They passed Capes Spencer and Innis slowly, and on Tuesday, the 10th, cleared 75 degrees to the great delight of Clifton. The _Forward_ was then at the very place where the American ships, the _Rescue_ and the _Advance_, encountered such terrible dangers. Doctor Kane formed part of this expedition; towards the end of September, 1850, these ships got caught in an ice-bank, and were forcibly driven into Lancaster Strait. It was Shandon who related this catastrophe to James Wall before some of the brig's crew.

"The _Advance_ and the _Rescue_," he said to them, "were so knocked about by the ice, that they were obliged to leave off fires on board; but that did not prevent the temperature sinking 18 degrees below zero. During the whole winter the unfortunate crews were kept prisoners in the ice-bank, ready to abandon their ships at any moment; for three weeks they did not even change their clothes. They floated along in that dreadful situation for more than a thousand miles, when at last they were thrown into the middle of Baffin's Sea."

The effect of this speech upon a crew already badly disposed can be well imagined. During this conversation Johnson was talking to the doctor about an event that had taken place in those very quarters; he asked the doctor to tell him when the brig was in latitude 75 degrees 30 minutes, and when they passed it he cried:

"Yes, it was just there!" in saying which tears filled his eyes.

"You mean that Lieutenant Bellot died there?" said the doctor.

"Yes, Mr. Clawbonny. He was as good and brave a fellow as ever lived! It was upon this very North Devon coast! It was to be, I suppose, but if Captain Pullen had returned on board sooner it would not have happened."

"What do you mean, Johnson?"

"Listen to me, Mr. Clawbonny, and you will see on what a slight thread existence often hangs. You know that Lieutenant Bellot went his first campaign in search of Franklin in 1850?"
"Yes, on the _Prince Albert._"

"Well, when he got back to France he obtained permission to embark on board the _Phoenix_ under Captain Inglefield; I was a sailor on board. We came with the _Breadalbane_ to transport provisions to Beechey Island!"

"Those provisions we, unfortunately, did not find. Well?"

"We reached Beechey Island in the beginning of August; on the 10th Captain Inglefield left the _Phoenix_ to rejoin Captain Pullen, who had been separated from his ship, the _North Star_, for a month. When he came back he thought of sending his Admiralty despatches to Sir Edward Belcher, who was wintering in Wellington Channel. A little while after the departure of our captain, Captain Pullen got back to his ship. Why did he not arrive before the departure of Captain Inglefield? Lieutenant Bellot, fearing that our captain would be long away, and knowing that the Admiralty despatches ought to be sent at once, offered to take them himself. He left the command of the two ships to Captain Pullen, and set out on the 12th of August with a sledge and an indiarubber boat. He took the boatswain of the _North Star_ (Harvey) with him, and three sailors, Madden, David Hook, and me. We supposed that Sir Edward Belcher was to be found in the neighbourhood of Beecher Cape, to the north of the channel; we made for it with our sledge along the eastern coast. The first day we encamped about three miles from Cape Innis; the next day we stopped on a block of ice about three miles from Cape Bowden. As land lay at about three miles' distance, Lieutenant Bellot resolved to go and encamp there during the night, which was as light as the day; he tried to get to it in his indiarubber canoe; he was twice repulsed by a violent breeze from the south-east; Harvey and Madden attempted the passage in their turn, and were more fortunate; they took a cord with them, and established a communication between the coast and the sledge; three objects were transported by means of the cord, but at the fourth attempt we felt our block of ice move; Mr. Bellot called out to his companions to drop the cord, and we were dragged to a great distance from the coast. The wind blew from the south-east, and it was snowing; but we were not in much danger, and the lieutenant might have come back as we did."

Here Johnson stopped an instant to take a glance at the fatal coast, and continued:

"After our companions were lost to sight we tried to shelter ourselves under the tent of our sledge, but in vain; then, with our knives, we began to cut out a house in the ice. Mr. Bellot helped us for half an hour, and talked to us about the danger of our situation. I told him I was not afraid. 'By God's help,' he answered, 'we shall not lose a hair of our heads.' I asked him what o'clock it was, and he answered, 'About a quarter-past six.' It was a quarter-past six in the morning of Thursday, August 18th. Then Mr. Bellot tied up his books, and said he would go and see how the ice floated; he had only been gone four minutes when I went round the block of ice to look for him; I saw his stick on the opposite side of a crevice, about five fathoms wide, where the ice was broken, but I could not see him anywhere. I called out, but no one answered. The wind was blowing great guns. I looked all round the block of ice, but found no trace of the poor lieutenant."

"What do you think had become of him?" said the doctor, much moved.

"I think that when Mr. Bellot got out of shelter the wind blew him into the crevice, and, as his greatcoat was buttoned up he could not swim. Oh! Mr. Clawbonny, I never was more grieved in my life! I could not believe it! He was a victim to duty, for it was in order to obey Captain Pullen's instructions that he tried to get to land. He was a good fellow, everybody liked him; even the Esquimaux, when they learnt his fate from Captain Inglefield on his return from Pound Bay, cried while they wept, as I am doing now, 'Poor Bellot! poor Bellot!'"

"But you and your companion, Johnson," said the doctor, "how did you manage to reach land?"

"Oh! we stayed twenty-four hours more on the block of ice, without food or firing; but at last we met with an ice-field; we jumped on to it, and with the help of an oar we fastened ourselves to an iceberg that we could guide like a raft, and we got to land, but without our brave officer."

By the time Johnson had finished his story the _Forward_ had passed the fatal coast, and Johnson lost sight of the place of the painful catastrophe. The next day they left Griffin Bay to the starboard, and, two days after, Capes Grinnell and Helpmann; at last, on the 14th of July, they doubled Osborn Point, and on the 15th the brig anchored in Baring Bay, at the extremity of the channel. Navigation had not been very difficult; Hatteras met with a sea almost as free as that of which Belcher profited to go and winter with the _Pioneer_ and the _Assistance_ as far north as 77 degrees. It was in 1852 and 1853, during his first wintering, for he passed the winter of 1853 to 1854 in Baring Bay, where the _Forward_ was now at anchor. He suffered so much that he was obliged to leave the _Assistance_ in the midst of the ice. Shandon told all these details to the already discontented sailors. Did Hatteras know how he was betrayed by his first officer? It is impossible to say; if he did, he said nothing about it.

At the top of Baring Bay there is a narrow channel which puts Wellington and Queen's Channel into communication with each other. There the rafts of ice lie closely packed. Hatteras tried, in vain, to clear the passes to the north of Hamilton Island; the wind was contrary; five precious days were lost in useless efforts. The temperature still lowered, and, on the 19th of July, fell to 26 degrees; it got higher the following day; but this foretaste of winter made Hatteras afraid of waiting any longer. The wind seemed to be going to keep in the west, and to stop the
progress of the ship. However, he was in a hurry to gain the point where Stewart had met with the open sea. On the 19th he resolved to get into the Channel at any price; the wind blew right on the brig, which might, with her screw, have stood against it, had not Hatteras been obliged to economise his fuel; on the other hand, the Channel was too wide to allow the men to haul the brig along. Hatteras, not considering the men's fatigue, resolved to have recourse to means often employed by whalers under similar circumstances. The men took it in turns to row, so as to push the brig on against the wind. The _Forward_ advanced slowly up the Channel. The men were worn out and murmured loudly. They went on in that manner till the 23rd of July, when they reached Baring Island in Queen's Channel. The wind was still against them. The doctor thought the health of the men much shaken, and perceived the first symptoms of scurvy amongst them; he did all he could to prevent the spread of the wretched malady, and distributed lime-juice to the men.

Hatteras saw that he could no longer count upon his crew; reasoning and kindness were ineffectual, so he resolved to employ severity for the future; he suspected Shandon and Wall, though they dare not speak out openly. Hatteras had the doctor, Johnson, Bell, and Simpson for him; they were devoted to him body and soul; amongst the undecided were Foker, Bolton, Wolsten the gunsmith, and Brunton the first engineer; and they might turn against the captain at any moment; as to Pen, Gripper, Clifton, and Warren, they were in open revolt; they wished to persuade their comrades to force the captain to return to England. Hatteras soon saw that he could not continue to work his ship with such a crew. He remained twenty-four hours at Baring Island without taking a step forward. The weather grew cooler still, for winter begins to be felt in July in these high latitudes. On the 24th the thermometer fell to 22 degrees. Young ice formed during the night, and if snow fell it would soon be thick enough to bear the weight of a man. The sea began already to have that dirty colour which precedes the formation of the first crystals. Hatteras could not mistake these alarming symptoms; if the channels got blocked up, he should be obliged to winter there at a great distance from the point he had undertaken the voyage in order to reach, without having caught a glimpse of that open sea which his predecessors made out was so near. He resolved, then, to gain several degrees further north, at whatever cost; seeing that he could not employ oars without the rowers were willing, nor sail in a contrary wind, he gave orders to put steam on again.

CHAPTER XXII
BEGINNING OF REVOLT

At this unexpected command, the surprise was great on board the _Forward_.

"Light the fires!" exclaimed some.

"What with?" asked others.

"When we've only two months' coal in the hold!" said Pen.

"What shall we warm ourselves with in the winter?" asked Clifton.

"We shall be obliged to burn the brig down to her water-line," answered Gripper.

"And stuff the stove with the masts," added Warren. Shandon looked at Wall. The stupefied engineers hesitated to go down to the machine-room.

"Did you hear me?" cried the captain in an irritated tone.

Brunton made for the hatchway, but before going down he stopped.

"Don't go, Brunton!" called out a voice.

"Who spoke?" cried Hatteras.

"I did," said Pen, advancing towards the captain.

"And what did you say?" asked Hatteras.

"I say," answered Pen with an oath--"I say, we've had enough of it, and we won't go any further. You shan't kill us with hunger and work in the winter, and they shan't light the fires!"

"Mr. Shandon," answered Hatteras calmly, "have that man put in irons!"

"But, captain," replied Shandon, "what the man says----"

"If you repeat what the man says," answered Hatteras, "I'll have you shut up in your cabin and guarded! Seize that man! Do you hear?" Johnson, Bell, and Simpson advanced towards the sailor, who was in a terrible passion.

"The first who touches me----" he said, brandishing a handspike. Hatteras approached him.

"Pen," said he tranquilly, "if you move, I shall blow out your brains!" So speaking, he cocked a pistol and aimed it at the sailor. A murmur was heard.

"Not a word, men," said Hatteras, "or that man falls dead!" Johnson and Bell disarmed Pen, who no longer made any resistance, and placed him in the hold.

"Go, Brunton," said Hatteras. The engineer, followed by Plover and Warren, went down to his post. Hatteras returned to the poop.
"That Pen is a wretched fellow!" said the doctor.
"No man has ever been nearer death!" answered the captain, simply.

The steam was soon got up, the anchors were weighed, and the _Forward_ veered away east, cutting the young ice with her steel prow. Between Baring Island and Beecher Point there are a considerable quantity of islands in the midst of ice-fields; the streams crowd together in the little channels which cut up this part of the sea; they had a tendency to agglomerate under the relatively low temperature; hummocks were formed here and there, and these masses, already more compact, denser, and closer together, would soon form an impenetrable mass. The _Forward_ made its way with great difficulty amidst the snowstorms. However, with the mobility that characterises the climate of these regions, the sun appeared from time to time, the temperature went up several degrees, obstacles melted as if by magic, and a fine sheet of water lay where icebergs bristled all the passes. The horizon glowed with those magnificent orange shades which rest the eye, tired with the eternal white of the snow.

On the 26th of July the _Forward_ passed Dundas Island, and veered afterwards more to the north; but there Hatteras found himself opposite an ice-bank eight or nine feet high, formed of little icebergs detached from the coast; he was obliged to turn west. The uninterrupted cracking of the ice, added to the noise of the steamer, was like sighs or groans. At last the brig found a channel, and advanced painfully along it; often an enormous iceberg hindered her course for hours; the fog hindered the pilot's look-out; as long as he can see for a mile in front of him, he can easily avoid obstacles; but in the midst of the fog it was often impossible to see a cable's length, and the swell was very strong. Sometimes the clouds looked smooth and white as though they were reflections of the ice-banks; but there were entire days when the yellow rays of the sun could not pierce the tenacious fog. Birds were still very numerous, and their cries were deafening; seals, lying idle on the floating ice, raised their heads, very little frightened, and moved their long necks as the brig passed. Pieces from the ship's sheathing were often rubbed off in her contact with the ice. At last, after six days of slow navigation, Point Beecher was sighted to the north on the 1st of August. Hatteras passed the last few hours at his masthead; the open sea that Stewart had perceived on May 30th, 1851, about latitude 76 degrees 20 minutes, could not be far off; but as far as the eye could reach, Hatteras saw no indication of it. He came down without saying a word.

"Do you believe in an open sea?" asked Shandon of the lieutenant.
"I am beginning not to," answered Wall.

"Wasn't I right to say the pretended discovery was purely imagination? But they would not believe me, and even you were against me, Wall."

"We shall believe in you for the future, Shandon."

"Yes," said he, "when it's too late," and so saying he went back to his cabin, where he had stopped almost ever since his dispute with the captain. The wind veered round south towards evening; Hatteras ordered the brig to be put under sail and the fires to be put out; the crew had to work very hard for the next few days; they were more than a week getting to Barrow Point. The _Forward_ had only made thirty miles in ten days. There the wind turned north again, and the screw was set to work; Hatteras still hoped to find an open sea beyond the 77th parallel, as Sir Edward Belcher had done. Ought he to treat these accounts as apocryphal? or had the winter come upon him earlier? On the 15th of August Mount Percy raised its peak, covered with eternal snow, through the mist. The next day the sun set for the first time, ending thus the long series of days with twenty-four hours in them. The men had ended by getting accustomed to the continual daylight, but it had never made any difference to the animals; the Greenland dogs went to their rest at their accustomed hour, and Dick slept as regularly every evening as though darkness had covered the sky. Still, during the nights which followed the 15th of August, darkness was never profound; although the sun set, he still gave sufficient light by refraction. On the 19th of August, after a pretty good observation, they sighted Cape Franklin on the east coast and Cape Lady Franklin on the west coast; the gratitude of the English people had given these names to the two opposite points—probably the last reached by Franklin: the name of the devoted wife, opposite to that of her husband, is a touching emblem of the sympathy which always united them.

The doctor, by following Johnson's advice, accustomed himself to support the low temperature; he almost always stayed on deck braving the cold, the wind, and the snow. He got rather thinner, but his constitution did not suffer. Besides, he expected to be much worse off, and joyfully prepared for the approaching winter.

"Look at those birds," he said to Johnson one day; "they are emigrating south in flocks! They are shrieking out their good-byes!"

"Yes, Mr. Clawbonny, some instinct tells them they must go, and they set out."
"There's more than one amongst us who would like to imitate them, I think."

"They are cowards, Mr. Clawbonny; those animals have no provisions as we have, and are obliged to seek their food where it is to be found. But sailors, with a good ship under their feet, ought to go to the world's end."

"You hope that Hatteras will succeed, then?"

"He certainly will, Mr. Clawbonny."
"I am of the same opinion as you, Johnson, and if he only wanted one faithful companion----"

"He'll have two!"

"Yes, Johnson," answered the doctor, shaking hands with the brave sailor.

Prince Albert Land, which the _Forward_ was then coasting, bears also the name of Grinnell Land, and though Hatteras, from his hatred to the Yankees, would never call it by its American name, it is the one it generally goes by. It owes its double appellation to the following circumstances: At the same time that Penny, an Englishman, gave it the name of Prince Albert, Lieutenant Haven, commander of the _Rescue_, called it Grinnell Land in honour of the American merchant who had fitted out the expedition from New York at his own expense. Whilst the brig was coasting it, she experienced a series of unheard-of difficulties, navigating sometimes under sail, sometimes by steam. On the 18th of August they sighted Britannia Mountain, scarcely visible through the mist, and the _Forward_ weighed anchor the next day in Northumberland Bay. She was hemmed in on all sides.

CHAPTER XXIII
ATTACKED BY ICEBERGS

Hatteras, after seeing to the anchoring of his ship, re-entered his cabin and examined his map attentively. He found himself in latitude 76 degrees 57 minutes and longitude 99 degrees 20 minutes—that is to say, at only three minutes from the 77th parallel. It was at this very spot that Sir Edward Belcher passed his first winter with the _Pioneer_ and the _Assistance_. It was thence that he organised his sledge and boat excursions. He discovered Table Isle, North Cornwall, Victoria Archipelago, and Belcher Channel. He reached the 78th parallel, and saw that the coast was depressed on the south-east. It seemed to go down to Jones's Strait, the entrance to which lies in Baffin's Bay. But to the north-west, on the contrary, says his report, an open sea lay as far as the eye could reach.

Hatteras considered attentively the white part of the map, which represented the Polar basin free from ice.

"After such testimony as that of Stewart, Penny, and Belcher, I can't have a doubt about it," he said to himself. "They saw it with their own eyes. But if the winter has already frozen it! But no; they made their discoveries at intervals of several years. It exists, and I shall find it! I shall see it."

Hatteras went on to the poop. An intense fog enveloped the _Forward_; the masthead could scarcely be distinguished from the deck. However, Hatteras called down the ice-master from his crow's nest, and took his place. He wished to profit by the shortest clear interval to examine the north-western horizon. Shandon did not let the occasion slip for saying to the lieutenant:

"Well, Wall, where is the open sea?"

"You were right, Shandon, and we have only six weeks' coal in the hold."

"Perhaps the doctor will find us some scientific fuel to warm us in the place of coal," answered Shandon. "I have heard say you can turn fire to ice; perhaps he'll turn ice to fire." And he entered his cabin, shrugging his shoulders. The next day was the 20th of August, and the fog cleared away for several minutes. They saw Hatteras look eagerly at the horizon, and then come down without speaking; but it was easy to see that his hopes had again been crushed. The _Forward_ weighed anchor, and took up her uncertain march northward. As the _Forward_ began to be weather-worn, the masts were unreved, for they could no longer rely on the variable wind, and the sails were nearly useless in the winding channels. Large white marks appeared here and there on the sea like oil spots; they presaged an approaching frost; as soon as the breeze dropped the sea began to freeze immediately; but as soon as the wind got up again, the young ice was broken up and dispersed. Towards evening the thermometer went down to 17 degrees.

When the brig came to a closed-up pass she acted as a battering ram, and ran at full steam against the obstacle, which she sunk. Sometimes they thought she was stopped for good; but an unexpected movement of the streams opened her a new passage, and she took advantage of it boldly. When the brig stopped, the steam which escaped from the safety-pipes was condensed by the cold air and fell in snow on to the deck. Another impediment came in the way; the ice-blocks sometimes got entangled in the paddles, and they were so hard that all the strength of the machine was not sufficient to break them; it was then necessary to back the engine and send men to clear the screws with their handspikes. All this delayed the brig; it lasted thirteen days. The _Forward_ dragged herself painfully along Penny Strait; the crew grumbled, but obeyed: the men saw now that it was impossible to go back. Keeping north was less dangerous than retreating south. They were obliged to think about wintering. The sailors talked together about their present position, and one day they mentioned it to Richard Shandon, who, they knew, was on their side. The second officer forgot his duty as an officer, and allowed them to discuss the authority of the captain before him.

"You say, then, Mr. Shandon, that we can't go back now?" said Gripper.

"No, it's too late now," answered Shandon.

"Then we must think about wintering," said another sailor.
"It's the only thing we can do. They wouldn't believe me."

"Another time," said Pen, who had been released, "we shall believe you."

"But as I am not the master----" replied Shandon.

"Who says you mayn't be?" answered Pen. "John Hatteras may go as far as he likes, but we aren't obliged to follow him."

"You all know what became of the crew that did follow him in his first cruise to Baffin's Sea?" said Gripper.

"And the cruise of the _Farewell_ under him that got lost in the Spitzbergen seas!" said Clifton.

"He was the only man that came back," continued Gripper.

"He and his dog," answered Clifton.

"We won't die for his pleasure," added Pen.

"Nor lose the bounty we've been at so much trouble to earn," cried Clifton. "When we've passed the 78th degree-and we aren't far off it, I know—that will make just the 375 pounds each."

"But," answered Gripper, "shan't we lose it if we go back without the captain?"

"Not if we prove that we were obliged to," answered Clifton.

"But it's the captain----"

"You never mind, Gripper," answered Pen; "we'll have a captain and a good one—that Mr. Shandon knows. When one commander goes mad, folks have done with him, and they take another; don't they, Mr. Shandon?"

Shandon answered evasively that they could reckon upon him, but that they must wait to see what turned up. Difficulties were getting thick round Hatteras, but he was as firm, calm, energetic, and confident as ever. After all, he had done in five months what other navigators had taken two or three years to do! He should be obliged to winter now, but there was nothing to frighten brave sailors in that. Sir John Ross and McClure had passed three successive winters in the Arctic regions. What they had done he could do too!

"If I had only been able to get up Smith Strait at the north of Baffin's Sea, I should be at the Pole by now!" he said to the doctor regretfully.

"Never mind, captain!" answered the doctor, "we shall get at it by the 99th meridian instead of by the 75th; if all roads lead to Rome, it's more certain still that all meridians lead to the Pole."

On the 31st of August the thermometer marked 13 degrees. The end of the navigable season was approaching; the _Forward_ left Exmouth Island to the starboard, and three days after passed Table Island in the middle of Belcher Channel. At an earlier period it would perhaps have been possible to regain Baffin's Sea by this channel, but it was not to be dreamt of then; this arm of the sea was entirely barricaded by ice; ice-fields extended as far as the eye could reach, and would do so for eight months longer. Happily they could still gain a few minutes further north on the condition of breaking up the ice with huge clubs and petards. Now the temperature was so low, any wind, even a contrary one, was welcome, for in a calm the sea froze in a single night. The _Forward_ could not winter in her present situation, exposed to winds, icebergs, and the drift from the channel; a shelter was the first thing to find; Hatteras hoped to gain the coast of New Cornwall, and to find above Albert Point a bay of refuge sufficiently sheltered. He therefore pursued his course northward with perseverance. But on the 8th an impenetrable ice-bank lay in front of him, and the temperature was at 10 degrees. Hatteras did all he could to force a passage, continually risking his ship and getting out of danger by force of skill. He could be accused of imprudence, want of reflection, folly, blindness, but he was a good sailor, and one of the best! The situation of the _Forward_ became really dangerous; the sea closed up behind her, and in a few hours the ice got so hard that the men could run along it and tow the ship in all security.

Hatteras found he could not get round the obstacle, so he resolved to attack it in front; he used his strongest blasting cylinders of eight to ten pounds of powder; they began by making a hole in the thick of the ice, and filled it with snow, taking care to place the cylinder in a horizontal position, so that a greater portion of the ice might be submitted to the explosion; lastly, they lighted the wick, which was protected by a gutta-percha tube. They worked at the blasting, as they could not saw, for the saws stuck immediately in the ice. Hatteras hoped to pass the next day. But during the night a violent wind raged, and the sea rose under her crust of ice as if shaken by some submarine commotion, and the terrified voice of the pilot was heard crying:

"Look out aft!"

Hatteras turned to the direction indicated, and what he saw by the dim twilight was frightful. A high iceberg, driven back north, was rushing on to the ship with the rapidity of an avalanche.

"All hands on deck!" cried the captain.

The rolling mountain was hardly half a mile off; the blocks of ice were driven about like so many huge grains of sand; the tempest raged with fury.

"There, Mr. Clawbonny," said Johnson to the doctor, "we are in something like danger now."

"Yes," answered the doctor tranquilly, "it looks frightful enough."
"It's an assault we shall have to repulse," replied the boatswain.

"It looks like a troop of antediluvian animals, those that were supposed to inhabit the Pole. They are trying which shall get here first!"

"Well," added Johnson, "I hope we shan't get one of their spikes into us!"

"It's a siege--let's run to the ramparts!"

And they made haste aft, where the crew, armed with poles, bars of iron, and handspikes, were getting ready to repulse the formidable enemy. The avalanche came nearer, and got bigger by the addition of the blocks of ice which it caught in its passage; Hatteras gave orders to fire the cannon in the bow to break the threatening line. But it arrived and rushed on to the brig; a great crackling noise was heard, and as it struck on the brig's starboard a part of her barricading was broken. Hatteras gave his men orders to keep steady and prepare for the ice. It came along in blocks; some of them weighing several hundredweight came over the ship's side; the smaller ones, thrown up as high as the topsails, fell in little spikes, breaking the shrouds and cutting the rigging. The ship was boarded by these innumerable enemies, which in a block would have crushed a hundred ships like the _Forward_. Some of the sailors were badly wounded whilst trying to keep off the ice, and Bolton had his left shoulder torn open. The noise was deafening. Dick barked with rage at this new kind of enemy. The obscurity of the night came to add to the horror of the situation, but did not hide the threatening blocks, their white surface reflected the last gleams of light. Hatteras's orders were heard in the midst of the crew's strange struggle with the icebergs. The ship giving way to the tremendous pressure, bent to the larboard, and the extremity of her mainyard leaned like a buttress against the iceberg and threatened to break her mast.

Hatteras saw the danger; it was a terrible moment; the brig threatened to turn completely over, and the masting might be carried away. An enormous block, as big as the steamer itself, came up alongside her hull; it rose higher and higher on the waves; it was already above the poop; it fell over the _Forward_. All was lost; it was now upright, higher than the gallant yards, and it shook on its foundation. A cry of terror escaped the crew. Everyone fled to starboard. But at this moment the steamer was lifted completely up, and for a little while she seemed to be suspended in the air, and fell again on to the ice-blocks; then she rolled over till her planks cracked again. After a minute, which appeared a century, she found herself again in her natural element, having been turned over the ice-bank that blocked her passage by the rising of the sea.

"She's cleared the ice-bank!" shouted Johnson, who had rushed to the fore of the brig.

"Thank God!" answered Hatteras.

The brig was now in the midst of a pond of ice, which hemmed her in on every side, and though her keel was in the water, she could not move; she was immovable, but the ice-field moved for her.

"We are drifting, captain!" cried Johnson.

"We must drift," answered Hatteras; "we can't help ourselves."

When daylight came, it was seen that the brig was drifting rapidly northward, along with a submarine current. The floating mass carried the _Forward_ along with it. In case of accident, when the brig might be thrown on her side, or crushed by the pressure of the ice, Hatteras had a quantity of provisions brought up on deck, along with materials for encamping, the clothes and blankets of the crew. Taking example from Captain McClure under similar circumstances, he caused the brig to be surrounded by a belt of hammocks, filled with air, so as to shield her from the thick of the damage; the ice soon accumulated under a temperature of 7 degrees, and the ship was surrounded by a wall of ice, above which her masts only were to be seen. They navigated thus for seven days; Point Albert, the western extremity of New Cornwall, was sighted on the 10th of September, but soon disappeared; from thence the ice-field drifted east. Where would it take them to? Where should they stop? Who could tell? The crew waited, and the men folded their arms. At last, on the 15th of September, about three o'clock in the afternoon, the ice-field, stopped, probably, by collision with another field, gave a violent shake to the brig, and stood still. Hatteras found himself out of sight of land in latitude 78 degrees 15 minutes and longitude 95 degrees 35 minutes in the midst of the unknown sea, where geographers have placed the Frozen Pole.

CHAPTER XXIV
PREPARATIONS FOR WINTERING

The southern hemisphere is colder in parallel latitudes than the northern hemisphere; but the temperature of the new continent is still 15 degrees below that of the other parts of the world; and in America the countries known under the name of the Frozen Pole are the most formidable. The average temperature of the year is 2 degrees below zero. Scientific men, and Dr. Clawbonny amongst them, explain the fact in the following way. According to them, the prevailing winds of the northern regions of America blow from the south-west; they come from the Pacific Ocean with an equal and bearable temperature; but in order to reach the Arctic Seas they have to cross the immense
American territory, covered with snow, they get cold by contact with it, and then cover the hyperborean regions with
their frigid violence. Hatters found himself at the Frozen Pole beyond the countries seen by his predecessors; he,
therefore, expected a terrible winter on a ship lost in the midst of the ice with a crew nearly in revolt. He resolved to
face these dangers with his accustomed energy. He began by taking, with the help of Johnson's experience, all the
measures necessary for wintering. According to his calculations he had been dragged two hundred and fifty miles
beyond New Cornwall, the last country discovered; he was clasped in an ice-field as securely as in a bed of granite,
and no power on earth could extricate him.

There no longer existed a drop of water in the vast seas over which the Arctic winter reigned. Ice-fields extended
as far as the eye could reach, bristling with icebergs, and the _Forward_ was sheltered by three of the highest on
three points of the compass; the south-east wind alone could reach her. If instead of icebergs there had been rocks,
verdure instead of snow, and the sea in its liquid state again, the brig would have been safely anchored in a pretty
bay sheltered from the worst winds. But in such a latitude it was a miserable state of things. They were obliged to
fasten the brig by means of her anchors, notwithstanding her immovability; they were obliged to prepare for the
submarine currents and the breaking up of the ice. When Johnson heard where they were, he took the greatest
precautions in getting everything ready for wintering.

"It's the captain's usual luck," said he to the doctor; "we've got nipped in the most disagreeable point of the
whole glove! Never mind; we'll get out of it!"

As to the doctor, he was delighted at the situation. He would not have changed it for any other! A winter at the
Frozen Pole seemed to him desirable. The crew were set to work at the sails, which were not taken down, and put
into the hold, as the first people who wintered in these regions had thought prudent; they were folded up in their
cases, and the ice soon made them an impervious envelope. The crow's nest, too, remained in its place, serving as a
nautical observatory; the rigging alone was taken away. It became necessary to cut away the part of the field that
surrounded the brig, which began to suffer from the pressure. It was a long and painful work. In a few days the keel
was cleared, and on examination was found to have suffered little, thanks to the solidity of its construction, only its
copper plating was almost all torn off. When the ship was once liberated she rose at least nine inches; the crew then
bevelled the ice in the shape of the keel, and the field formed again under the brig, and offered sufficient opposition
to pressure from without. The doctor helped in all this work; he used the ice-knife skilfully; he incited the sailors by
his happy disposition. He instructed himself and others, and was delighted to find the ice under the ship.

"It's a very good precaution!" said he.

"We couldn't do without it, Mr. Clawbonny," said Johnson. "Now we can raise a snow-wall as high as the
gunwale, and if we like we can make it ten feet thick, for we've plenty of materials."

"That's an excellent idea," answered the doctor. "Snow is a bad conductor of heat; it reflects it instead of
absorbing it, and the heat of the interior does not escape."

"That's true," said Johnson. "We shall raise a fortification against the cold, and against animals too, if they take it
into their heads to pay us a visit; when the work is done it will answer, I can tell you. We shall make two flights of
steps in the snow, one from the ship and the other from outside; when once we've cut out the steps we shall pour
water over them, and it will make them as hard as rock. We shall have a royal staircase."

"It's a good thing that cold makes ice and snow, and so gives us the means of protecting ourselves against it. I
don't know what we should do if it did not."

A roofing of tarred cloth was spread over the deck and descended to the sides of the brig. It was thus sheltered
from all outside impression, and made a capital promenade; it was covered with two feet and a-half of snow, which
was beaten down till it became very hard, and above that they put a layer of sand, completely macadamising it.

"With a few trees I should imagine myself in Hyde Park," said the doctor, "or in one of the hanging gardens of
Babylon."

They made a hole at a short distance from the brig; it was round, like a well; they broke the ice every morning.
This well was useful in case of fire or for the frequent baths ordered to keep the crew in health. In order to spare
their fuel, they drew the water from a greater depth by means of an apparatus invented by a Frenchman, Francois
Arago. Generally, when a ship is wintering, all the objects which encumber her are placed in magazines on the coast,
but it was impossible to do this in the midst of an ice-field. Every precaution was taken against cold and damp; men
have been known to resist the cold and succumb to damp; therefore both had to be guarded against. The _Forward_
had been built expressly for these regions, and the common room was wisely arranged. They had made war on the
corners, where damp takes refuge at first. If it had been quite circular it would have done better, but warmed by a
vast stove and well ventilated, it was very comfortable; the walls were lined with buckskins and not with woollen
materials, for wool condenses the vapours and impregnates the atmosphere with damp. The partitions were taken
down in the poop, and the officers had a large comfortable room, warmed by a stove. Both this room and that of the
crew had a sort of antechamber, which prevented all direct communication with the exterior, and prevented the heat
going out; it also made the crew pass more gradually from one temperature to another. They left their snow-covered garments in these antechambers, and scraped their feet on scrapers put there on purpose to prevent any unhealthy element getting in.

Canvas hose let in the air necessary to make the stoves draw; other hose served for escape-pipes for the steam. Two condensers were fixed in the two rooms; they gathered the vapour instead of letting it escape, and were emptied twice a week; sometimes they contained several bushels of ice. By means of the air-pipes the fires could be easily regulated, and it was found that very little fuel was necessary to keep up a temperature of 50 degrees in the rooms. But Hatteras saw with grief that he had only enough coal left for two months' firing. A drying-room was prepared for the garments that were obliged to be washed, as they could not be hung in the air or they would have been frozen and spoiled. The delicate parts of the machine were taken to pieces carefully, and the room where they were placed was closed up hermetically. The rules for life on board were drawn up by Hatteras and hung up in the common room. The men got up at six in the morning, and their hammocks were exposed to the air three times a week; the floors of the two rooms were rubbed with warm sand every morning; boiling tea was served out at every meal, and the food varied as much as possible, according to the different days of the week; it consisted of bread, flour, beef suet and raisins for puddings, sugar, cocoa, tea, rice, lemon-juice, preserved meat, salted beef and pork, pickled cabbage and other vegetables; the kitchen was outside the common rooms, and the men were thus deprived of its heat, but cooking is a constant source of evaporation and humidity.

The health of men depends a great deal on the food they eat; under these high latitudes it is of great importance to consume as much animal food as possible. The doctor presided at the drawing up of the bill of fare.

"We must take example from the Esquimaux," said he; "they have received their lessons from nature, and are our teachers here; although Arabians and Africans can live on a few dates and a handful of rice, it is very different here, where we must eat a great deal and often. The Esquimaux absorb as much as ten and fifteen pounds of oil in a day. If you do not like oil, you must have recourse to things rich in sugar and fat. In a word, you want carbon in the stove inside you as much as the stove there wants coal."

Every man was forced to take a bath in the half-frozen water condensed from the fire. The doctor set the example; he did it at first as we do all disagreeable things that we feel obliged to do, but he soon began to take extreme pleasure in it. When the men had to go out either to hunt or work they had to take great care not to get frost-bitten; and if by accident it happened, they made haste to rub the part attacked with snow to bring back the circulation of the blood. Besides being carefully clothed in wool from head to foot, the men wore hoods of buckskin and sealskin trousers, through which it is impossible for the wind to penetrate. All these preparations took about three weeks, and the 10th of October came round without anything remarkable happening.

CHAPTER XXV
AN OLD FOX

That day the thermometer went down to 3 degrees below zero. The weather was pretty calm, and the cold without breeze was bearable. Hatteras profited by the clearness of the atmosphere to reconnoitre the surrounding plains; he climbed one of the highest icebergs to the north, and could see nothing, as far as his telescope would let him, but ice-fields and icebergs. No land anywhere, but the image of chaos in its saddest aspect. He came back on board trying to calculate the probable duration of his captivity. The hunters, and amongst them the doctor, James Wall, Simpson, Johnson, and Bell, did not fail to supply the ship with fresh meat. Birds had disappeared; they were gone to less rigorous southern climates. The ptarmigans, a sort of partridge, alone stay the winter in these latitudes; they are easily killed, and their great number promised an abundant supply of game. There were plenty of hares, foxes, wolves, ermine, and bears; there were enough for any sportsman, English, French, or Norwegian; but they were difficult to get at, and difficult to distinguish on the white plains from the whiteness of their fur; when the intense cold comes their fur changes colour, and white is their winter colour. The doctor found that this change of fur is not caused by the change of temperature, for it takes place in the month of October, and is simply a precaution of Providence to guard them from the rigour of a boreal winter.

Seals were abundant in all their varieties, and were particularly sought after by the hunters for the sake, not only of their skins, but their fat, which is very warming; besides which, the liver of these animals makes excellent fuel: hundreds of them were to be seen, and two or three miles to the north of the brig the ice was literally perforated all over with the holes these enormous amphibians make; only they smelt the hunters from afar, and many were wounded that escaped by plunging under the ice. However, on the 19th, Simpson managed to catch one at about a hundred yards from the ship; he had taken the precaution to block up its hole of refuge so that it was at the mercy of the hunters. It took several bullets to kill the animal, which measured nine feet in length; its bulldog head, the sixteen teeth in its jaws, its large pectoral fins in the shape of pinions, and its little tail, furnished with another pair of
fins, made it a good specimen of the family of dog-hound fish. The doctor, wishing to preserve the head for his natural history collection, and its skin for his future use, had them prepared by a rapid and inexpensive process. He plunged the body of the animal into the hole in the ice, and thousands of little prawns soon ate off all the flesh; in half a day the work was accomplished, and the most skilful of the honourable corporation of Liverpool tanners could not have succeeded better.

As soon as the sun had passed the autumnal equinox—that is to say, on the 23rd of September—winter may be said to begin in the Arctic regions. The sun disappears entirely on the 23rd of October, lighting up with its oblique rays the summits of the frozen mountains. The doctor wished him a traveler's farewell; he was not going to see him again till February. But obscurity is not complete during this long absence of the sun; the moon comes each month to take its place as well as she can; starlight is very bright, and there is besides frequent aurora borealis, and a refraction peculiar to the snowy horizons; besides, the sun at the very moment of his greatest austral declination, the 21st of December, is still only 13 degrees from the Polar horizon, so that there is twilight for a few hours; only fogs, mists, and snowstorms often plunge these regions into complete obscurity. However, at this epoch the weather was pretty favourable; the partridges and the hares were the only animals that had a right to complain, for the sportsmen did not give them a moment's peace; they set several fox-traps, but the suspicious animals did not let themselves be caught so easily; they would often come and eat the snare by scratching out the snow from under the trap; the doctor wished them at the devil, as he could not get them himself. On the 25th of October the thermometer marked more than 4 degrees below zero. A violent tempest set in; the air was thick with snow, which prevented a ray of light reaching the _Forward_. During several hours they were very uneasy about Bell and Simpson, who had gone too far whilst hunting; they did not reach the ship till the next day, after having lain for a whole day in their buckskins, whilst the tempest swept the air about them, and buried them under five feet of snow. They were nearly frozen, and the doctor had some trouble to restore their circulation.

The tempest lasted a week without interruption. It was impossible to stir out. In a single day the temperature varied fifteen and twenty degrees. During their forced idleness each one lived to himself; some slept, others smoked, or talked in whispers, stopping when they saw the doctor or Johnson approach; there was no moral union between the men; they only met for evening prayers, and on Sunday for Divine service. Clifton had counted that once the 78th parallel cleared, his share in the bounty would amount to 375 pounds; he thought that enough, and his ambition did not go beyond. The others were of the same opinion, and only thought of enjoying the fortune acquired at such a price. Hatteras was hardly ever seen. He neither took part in the hunting nor other excursions. He felt no interest in the meteorological phenomena which excited the doctor's admiration. He lived for one idea; it was comprehended in three words—the North Pole. He was constantly looking forward to the moment when the _Forward_ once more free, would begin her adventurous voyage again.

In short, it was a melancholy life; the brig, made for movement, seemed quite out of place as a stationary dwelling; her original form could not be distinguished amidst the ice and snow that covered her, and she was anything but a lively spectacle. During these unoccupied hours the doctor put his travelling notes in order—the notes from which this history is taken; he was never idle, and the evenness of his humour remained the same, only he was very glad to see the tempest clearing off so as to allow him to set off hunting once more. On the 3rd of November, at six in the morning, with a temperature at 5 degrees below zero, he started, accompanied by Johnson and Bell; the plains of ice were level; the snow, which covered the ground thickly, solidified by the frost, made the ground good for walking; a dry and keen cold lightened the atmosphere; the moon shone in all her splendour, and threw an astonishing light on all the asperities of the field; their footsteps left marks on the snow, and the moon lighted up their edges, so that they looked like a luminous track behind the hunters whose shadows fell on the ice with astonishing outlines.

The doctor had taken his friend Dick with him; he preferred him to the Greenland dogs to run down the game for a good reason; the latter do not seem to have the scent of their brethren of more temperate climates. Dick ran on and often pointed out the track of a bear, but in spite of his skill the hunters had not even killed a hare after two hours' walking.

"Do you think the game has gone south too?" asked the doctor, halting at the foot of a hummock.

"It looks like it, Mr. Clawbonny," answered the carpenter.

"I don't think so," answered Johnson; "hares, foxes, and bears are accustomed to the climate; I believe the late tempest is the cause of their disappearance; but with the south winds they'll soon come back. Ah! if you said reindeers or musk-oxen it would be a different thing."

"But it appears those, too, are found in troops in Melville Island," replied the doctor; "that is much further south, I grant you; when Parry wintered there he always had as much game as he wanted."

"We are not so well off," said Bell; "if we could only get plenty of bear's flesh I should not complain."

"Bears are very difficult to get at," answered the doctor; "it seems to me they want civilising."
"Bell talks about the bear's flesh, but we want its fat more than its flesh or its skin," said Johnson.

"You are right, Johnson; you are always thinking about the fuel."

"How can I help thinking about it? I know if we are ever so careful of it we've only enough left for three weeks."

"Yes," replied the doctor, "that is our greatest danger, for we are only at the beginning of November, and February is the coldest month of the year in the Frozen Zone; however, if we can't get bear's grease we can rely on that of the seals."

"Not for long, Mr. Clawbonny," answered Johnson. "They'll soon desert us too; either through cold or fright, they'll soon leave off coming on to the surface of the ice."

"Then we must get at the bears," said the doctor; "they are the most useful animals in these countries: they furnish food, clothes, light, and fuel. Do you hear, Dick?" continued he, caressing his friend; "we must have a bear, so look out."

Dick, who was smelling the ice as the doctor spoke, started off all at once, quick as an arrow. He barked loudly, and, notwithstanding his distance, the sportsmen heard him distinctly. The extreme distance to which sound is carried in these low temperatures is astonishing; it is only equalled by the brilliancy of the constellations in the boreal sky.

The sportsmen, guided by Dick's barking, rushed on his traces; they had to run about a mile, and arrived quite out of breath, for the lungs are rapidly suffocated in such an atmosphere. Dick was pointing at about fifty paces from an enormous mass at the top of a mound of ice.

"We've got him," said the doctor, taking aim.

"And a fine one," added Bell, imitating the doctor.

"It's a queer bear," said Johnson, waiting to fire after his two companions.

Dick barked furiously. Bell advanced to within twenty feet and fired, but the animal did not seem to be touched.

Johnson advanced in his turn, and after taking a careful aim, pulled the trigger.

"What," cried the doctor, "not touched yet? Why, it's that cursed refraction. The bear is at least a thousand paces off."

The three sportsmen ran rapidly towards the animal, whom the firing had not disturbed; he seemed to be enormous, and without calculating the dangers of the attack, they began to rejoice in their conquest. Arrived within reasonable distance they fired again; the bear, mortally wounded, gave a great jump and fell at the foot of the mound. Dick threw himself upon it.

"That bear wasn't difficult to kill," said the doctor.

"Only three shots," added Bell in a tone of disdain, "and he's down."

"It's very singular," said Johnson.

"Unless we arrived at the very moment when it was dying of old age," said the doctor, laughing.

So speaking, the sportsmen reached the foot of the mound, and, to their great stupefaction, they found Dick with his fangs in the body of a white fox.

"Well, I never!" cried Bell.

"We kill a bear and a fox falls," added the doctor.

Johnson did not know what to say.

"Why!" said the doctor, with a roar of laughter, "it's the refraction again!"

"What do you mean, Mr. Clawbonny?" asked the carpenter.

"Why, it deceived us about the size as it did about the distance. It made us see a bear in a fox's skin."

"Well," answered Johnson, "now we've got him, we'll eat him."

Johnson was going to lift the fox on to his shoulders, when he cried like Bell--"Well, I never!"

"What is it?" asked the doctor.

"Look, Mr. Clawbonny--look what the animal's got on its neck; it's a collar, sure enough."

"A collar?" echoed the doctor, leaning over the animal. A half worn-out collar encircled the fox's neck, and the doctor thought he saw something engraved on it; he took it off and examined it.

"That bear is more than twelve years old, my friends," said the doctor, "it's one of James Ross's foxes, and the collar has been round its neck ever since 1848."

"Is it possible?" cried Bell.

"There isn't a doubt about it, and I'm sorry we've shot the poor animal. During his wintering James Ross took a lot of white foxes in his traps, and had brass collars put round their necks on which were engraved the whereabouts of his ships, the _Enterprise_ and the _Investigator_, and the store magazines. He hoped one of them might fall into the hands of some of the men belonging to Franklin's expedition. The poor animal might have saved the lives of the ship's crews, and it has fallen under our balls."

"Well, we won't eat him," said Johnson, "especially as he's twelve years old. Anyway, we'll keep his skin for
curiosity sake." So saying he lifted the animal on his shoulders, and they made their way to the ship, guided by the stars; still their expedition was not quite fruitless: they bagged several brace of ptarmigans. An hour before they reached the _Forward_, a phenomenon occurred which excited the astonishment of the doctor; it was a very rain of shooting stars; they could be counted by thousands, like rockets in a display of fireworks. They paled the light of the moon, and the admirable spectacle lasted several hours. A like meteor was observed at Greenland by the Moravian brothers in 1799. The doctor passed the whole night watching it, till it ceased, at seven in the morning, amidst the profound silence of the atmosphere.

CHAPTER XXVI
THE LAST LUMP OF COAL

It seemed certain that no bears were to be had; several seals were killed during the days of the 4th, 5th, and 6th of November; then the wind changed, and the thermometer went up several degrees; but the snow-drifts began again with great violence. It became impossible to leave the vessel, and the greatest precaution was needed to keep out the damp. At the end of the week there were several bushels of ice in the condensers. The weather changed again on the 15th of November, and the thermometer, under the influence of certain atmospherical conditions, went down to 24 degrees below zero. It was the lowest temperature observed till then. This cold would have been bearable in a quiet atmosphere, but there was a strong wind which seemed to fill the atmosphere with sharp blades. The doctor was vexed at being kept prisoner, for the ground was covered with snow, made hard by the wind, and was easy to walk upon; he wanted to attempt some long excursion.

It is very difficult to work when it is so cold, because of the shortness of breath it causes. A man can only do a quarter of his accustomed work; iron implements become impossible to touch; if one is taken up without precaution, it causes a pain as bad as a burn, and pieces of skin are left on it. The crew, confined to the ship, were obliged to walk for two hours on the covered deck, where they were allowed to smoke, which was not allowed in the common room. There, directly the fire got low, the ice invaded the walls and the joins in the flooring; every bolt, nail, or metal plate became immediately covered with a layer of ice. The doctor was amazed at the instantaneity of the phenomenon. The breath of the men condensed in the air, and passing quickly from a fluid to a solid state, fell round them in snow. At a few feet only from the stoves the cold was intense, and the men stood near the fire in a compact group. The doctor advised them to accustom their skin to the temperature, which would certainly get worse, and he himself set the example; but most of them were too idle or too benumbed to follow his advice, and preferred remaining in the unhealthy heat. However, according to the doctor, there was no danger in the abrupt changes of temperature in going from the warm room into the cold. It is only dangerous for people in perspiration; but the doctor's lessons were thrown away on the greater part of the crew.

As to Hatteras, he did not seem to feel the influence of the temperature. He walked silently about at his ordinary pace. Had the cold no empire over his strong constitution, or did he possess in a supreme degree the natural heat he wished his sailors to have? Was he so armed in his one idea as to be insensible to exterior impressions? His men were profoundly astonished at seeing him facing the 24 degrees below zero; he left the ship for hours, and came back without his face betraying the slightest mark of cold.

"He is a strange man," said the doctor to Johnson; "he even astonishes me. He is one of the most powerful natures I have ever studied in my life."

"The fact is," answered Johnson, "that he comes and goes in the open air without clothing himself more warmly than in the month of June."

"Oh! the question of clothes is not of much consequence," replied the doctor; "it is of no use clothing people who do not produce heat naturally. It is the same as if we tried to warm a piece of ice by wrapping it up in a blanket! Hatteras does not want that; he is constituted so, and I should not be surprised if being by his side were as good as being beside a stove."

Johnson had the job of clearing the water-hole the next day, and remarked that the ice was more than ten feet thick. The doctor could observe magnificent aurora borealis almost every night; from four till eight p.m. the sky became slightly coloured in the north; then this colouring took the regular form of a pale yellow border, whose extremities seemed to buttress on to the ice-field. Little by little the brilliant zone rose in the sky, following the magnetic meridian, and appeared striated with blackish bands; jets of some luminous matter, augmenting and diminishing, shot out lengthways; the meteor, arrived at its zenith, was often composed of several bows, bathed in floods of red, yellow, or green light. It was a dazzling spectacle. Soon the different curves all joined in one point, and formed boreal crowns of a heavenly richness. At last the bows joined, the splendid aurora faded, the intense rays melted into pale, vague, undetermined shades, and the marvellous phenomenon, feeble, and almost extinguished, fainted insensibly into the dark southern clouds. Nothing can equal the wonders of such a spectacle under the high
latitudes less than eight degrees from the Pole; the aurora borealis perceived in temperate regions gives no idea of them—not even a feeble one; it seems as if Providence wished to reserve its most astonishing marvels for these climates.

During the duration of the moon several images of her are seen in the sky, increasing her brilliancy; often simple lunar halos surround her, and she shines from the centre of her luminous circle with a splendid intensity.

On the 26th of November there was a high tide, and the water escaped with violence from the water-hole; the thick layer of ice was shaken by the rising of the sea, and sinister crackings announced the submarine struggle; happily the ship kept firm in her bed, and her chains only were disturbed. Hatteras had had them fastened in anticipation of the event. The following days were still colder; there was a penetrating fog, and the wind scattered the piled-up snow; it became difficult to see whether the whirlwinds began in the air or on the ice-fields; confusion reigned.

The crew were occupied in different works on board, the principal of which consisted in preparing the grease and oil produced by the seals; they had become blocks of ice, which had to be broken with axes into little bits, and ten barrels were thus preserved.

All sorts of vessels were useless, and the liquid they contained would only have broken them when the temperature changed. On the 28th the thermometer went down to 32 degrees below zero; there was only coal enough left for ten days, and everyone looked forward to its disappearance with dread. Hatteras had the poop stove put out for economy’s sake, and from that time Shandon, the doctor, and he stayed in the common room. Hatteras was thus brought into closer contact with the men, who threw ferocious and stupefied looks at him. He heard their reproaches, their recriminations, and even their threats, and he could not punish them. But he seemed to be deaf to everything. He did not claim the place nearest the fire, but stopped in a corner, his arms folded, never speaking.

In spite of the doctor’s recommendations, Pen and his friends refused to take the least exercise; they passed whole days leaning against the stove or lying under the blankets of their hammocks. Their health soon began to suffer; they could not bear up against the fatal influence of the climate, and the terrible scurvy made its appearance on board. The doctor had, however, begun, some time ago, to distribute limejuice and lime pastilles every morning; but these preservatives, generally so efficacious, had very little effect on the malady, which soon presented the most horrible symptoms. The sight of the poor fellows, whose nerves and muscles contracted with pain, was pitiable. Their legs swelled in an extraordinary fashion, and were covered with large blackish blue spots; their bloody gums and ulcerated lips only gave passage to inarticulate sounds; the vitiated blood no longer went to the extremities.

Clifton was the first attacked; then Gripper, Brunton, and Strong took to their hammocks. Those that the malady still spared could not lose sight of their sufferings; they were obliged to stay there, and it was soon transformed into a hospital, for out of eighteen sailors of the _Forward_, thirteen were attacked in a few days. Pen seemed destined to escape contagion; his vigorous nature preserved him from it. Shandon felt the first symptoms, but they did not go further, and exercise kept the two in pretty good health.

The doctor nursed the invalids with the greatest care, and it made him miserable to see the sufferings he could not alleviate. He did all he could to keep his companions in good spirits; he talked to them, read to them, and told them tales, which his astonishing memory made it easy for him to do. He was often interrupted by the complaints and groans of the invalids, and he stopped his talk to become once more the attentive and devoted doctor. His health kept up well; he did not get thinner, and he used to say that it was a good thing for him that he was dressed like a seal or a whale, who, thanks to its thick layer of fat, easily supports the Arctic atmosphere. Hatteras felt nothing, either physically or morally. Even the sufferings of his crew did not seem to touch him. Perhaps it was because he would not let his face betray his emotions; but an attentive observer would have remarked that a man’s heart beat beneath the iron envelope. The doctor analysed him, studied him, but did not succeed in classifying so strange an organisation, a temperament so supernatural. The thermometer lowered again; the walk on deck was deserted; the Esquimaux dogs alone frequented it, howling lamentably.

There was always one man on guard near the stove to keep up the fire; it was important not to let it go out. As soon as the fire got lower, the cold glided into the room; ice covered the walls, and the humidity, rapidly condensed, fell in snow on the unfortunate inhabitants of the brig. It was in the midst of these unutterable tortures that the 8th of December was reached. That morning the doctor went as usual to consult the exterior thermometer. He found the mercury completely frozen.

“Forty-four degrees below zero!” he cried with terror. And that day they threw the last lump of coal into the stove.

CHAPTER XXVII
CHRISTMAS
There was then a movement of despair. The thought of death, and death from cold, appeared in all its horror; the last piece of coal burnt away as quickly as the rest, and the temperature of the room lowered sensibly. But Johnson went to fetch some lumps of the new fuel which the marine animals had furnished him with, and he stuffed it into the stove; he added some oakum, impregnated with frozen oil, and soon obtained enough heat. The smell of the grease was abominable, but how could they get rid of it? They were obliged to get used to it. Johnson agreed that his expedient left much to wish for, and would have no success in a Liverpool house.

"However," added he, "the smell may have one good result."

"What's that?" asked the carpenter.

"It will attract the bears; they are very fond of the stink."

"And what do we want with bears?" added Bell.

"You know, Bell, we can't depend on the seals; they've disappeared for a good while to come; if the bears don't come to be turned into fuel too, I don't know what will become of us."

"There would be only one thing left; but I don't see how----"

"The captain would never consent; but perhaps we shall be obliged."

Johnson shook his head sadly, and fell into a silent reverie, which Bell did not interrupt. He knew that their stock of grease would not last more than a week with the strictest economy.

The boatswain was not mistaken. Several bears, attracted by the fetid exhalations, were signalled to the windward; the healthy men gave chase to them, but they were extraordinarily quick, and did not allow themselves to be approached, and the most skilful shots could not touch them. The ship's crew was seriously menaced with death from cold; it was impossible to resist such a temperature more than forty-eight hours, and every one feared the end of the fuel. The dreaded moment arrived at three o'clock p.m. on the 20th of December. The fire went out; the sailors looked at each other with haggard eyes. Hatteras remained immovable in his corner. The doctor as usual marched up and down in agitation; he was at his wits' end. The temperature of the room fell suddenly to 7 degrees below zero.

But if the doctor did not know what to do, some of the others did. Shandon, calm and resolute, and Pen with anger in his eyes, and two or three of their comrades, who could still walk, went up to Hatteras.

"Captain!" said Shandon.

Hatteras, absorbed in thought, did not hear him.

"Captain!" repeated Shandon, touching his hand.

Hatteras drew himself up.

"What is it?" he said.

"Our fire is out!"

"What then?" answered Hatteras.

"If you mean to kill us with cold, you had better say so," said Shandon ironically.

"I mean," said Hatteras gravely, "to require every man to do his duty to the end."

"There's something higher than duty, captain--there's the right to one's own preservation. I repeat that the fire is out, and if it is not relighted, not one of us will be alive in two days."

"I have no fuel," answered Hatteras, with a hollow voice.

"Very well," cried Pen violently, "if you have no fuel, we must take it where we can!"

Hatteras grew pale with anger.

"Where?" said he.

"On board," answered the sailor insolently.

"On board!" echoed the captain, his fists closed, his eyes sparkling.

He had seized an axe, and he now raised it over Pen's head.

"Wretch!" he cried.

The doctor rushed between the captain and Pen; the axe fell to the ground, its sharp edge sinking into the flooring. Johnson, Bell, and Simpson were grouped round Hatteras, and appeared determined to give him their support. But lamentable and plaintive voices came from the beds.

"Some fire! Give us some fire!" cried the poor fellows.

Hatteras made an effort, and said calmly:

"If we destroy the brig, how shall we get back to England?"

"We might burn some of the rigging and the gunwale, sir," said Johnson.

"Besides, we should still have the boats left," answered Shandon; "and we could build a smaller vessel with the remains of the old one!"

"Never!" answered Hatteras.

"But----" began several sailors, raising their voices.

"We have a great quantity of spirits of wine," answered Hatteras; "burn that to the last drop."
"Ah, we didn't think of that!" said Johnson, with affected cheerfulness, and by the help of large wicks steeped in spirits he succeeded in raising the temperature a few degrees.

During the days that followed this melancholy scene the wind went round to the south, and the thermometer went up. Some of the men could leave the vessel during the least damp part of the day; but ophthalmia and scurvy kept the greater number on board; besides, neither fishing nor hunting was practicable. But it was only a short respite from the dreadful cold, and on the 25th, after an unexpected change in the wind, the mercury again froze; they were then obliged to have recourse to the spirits of wine thermometer, which never freezes. The doctor found, to his horror, that it marked 66 degrees below zero; men had never been able to support such a temperature. The ice spread itself in long tarnished mirrors on the floor; a thick fog invaded the common room; the damp fell in thick snow; they could no longer see one another; the extremities became blue as the heat of the body left them; a circle of iron seemed to be clasping their heads, and made them nearly delirious. A still more fearful symptom was that their tongues could no longer articulate a word.

From the day they had threatened to burn his ship, Hatteras paced the deck for hours. He was guarding his treasures; the wood of the ship was his own flesh, and whoever cut a piece off cut one of his limbs. He was armed, and mounted guard, insensible to the cold, the snow, and the ice, which stiffened his garments and enveloped him in granite armour. His faithful Dick accompanied him, and seemed to understand why he was there.

However, on Christmas Day he went down to the common room. The doctor, taking advantage of what energy he had left, went straight to him, and said--

"Hatteras, we shall all die if we get no fuel."
"Never!" said Hatteras, knowing what was coming.
"We must," said the doctor gently.
"Never!" repeated Hatteras with more emphasis still. "I will never consent! They can disobey me if they like!"

Johnson and Bell took advantage of the half-permission, and rushed on deck. Hatteras heard the wood crack under the axe. He wept. What a Christmas Day for Englishmen was that on board the _Forward_! The thought of the great difference between their position and that of the happy English families who rejoiced in their roast beef, plum pudding, and mince pies added another pang to the miseries of the unfortunate crew. However, the fire put a little hope and confidence into the men; the boiling of coffee and tea did them good, and the next week passed less miserably, ending the dreadful year 1860; its early winter had defeated all Hatteras's plans.

On the 1st of January, 1861, the doctor made a discovery. It was not quite so cold, and he had resumed his interrupted studies; he was reading Sir Edward Belcher's account of his expedition to the Polar Seas; all at once a passage struck him; he read it again and again. It was where Sir Edward Belcher relates that after reaching the extremity of Queen's Channel he had discovered important traces of the passage and residence of men. "They were," said he, "very superior habitations to those which might be attributed to the wandering Esquimaux. The walls had foundations, the floors of the interior had been covered with a thick layer of fine gravel, and were paved. Reindeer, seal, and walrus bones were seen in great quantities. We found some coal._" At the last words the doctor was struck with an idea; he carried the book to Hatteras and showed him the passage.

"They could not have found coal on this deserted coast," said Hatteras; "it is not possible!"
"Why should we doubt what Belcher says? He would not have recorded such a fact unless he had been certain and had seen it with his own eyes."
"And what then, doctor?"
"We aren't a hundred miles from the coast where Belcher saw the coal, and what is a hundred miles' excursion? Nothing. Longer ones than that have often been made across the ice."
"We will go," said Hatteras.

Johnson was immediately told of their resolution, of which he strongly approved; he told his companions about it: some were glad, others indifferent.

"Coal on these coasts!" said Wall, stretched on his bed of pain.
"Let them go," answered Shandon mysteriously.

But before Hatteras began his preparations for the journey, he wished to be exactly certain of the _Forward_'s position. He was obliged to be mathematically accurate as to her whereabouts, because of finding her again. His task was very difficult; he went upon deck and took at different moments several lunar distances and the meridian heights of the principal stars. These observations were hard to make, for the glass and mirrors of the instrument were covered with ice from Hatteras's breath; he burnt his eyelashes more than once by touching the brass of the glasses. However, he obtained exact bases for his calculations, and came down to make them in the room. When his work was over, he raised his head in astonishment, took his map, pricked it, and looked at the doctor.

"What is it?" asked the latter.
"In what latitude were we at the beginning of our wintering?"
"We were in latitude 78 degrees 15 minutes, by longitude 95 degrees 35 minutes; exactly at the Frozen Pole."

"Well," said Hatteras, in a low tone, "our ice-field has been drifting! We are two degrees farther north and farther west, and three hundred miles at least from your store of coal!"

"And those poor fellows don't know," said the doctor.

"Hush!" said Hatteras, putting his finger on his lips.

CHAPTER XXVIII
PREPARATIONS FOR DEPARTURE

Hatteras would not inform his crew of their situation, for if they had known that they had been dragged farther north they would very likely have given themselves up to the madness of despair. The captain had hidden his own emotions at his discovery. It was his first happy moment during the long months passed in struggling with the elements. He was a hundred and fifty miles farther north, scarcely eight degrees from the Pole! But he hid his delight so profoundly that even the doctor did not suspect it; he wondered at seeing an unwonted brilliancy in the captain's eyes; but that was all, and he never once thought of the reason.

The _Forward_, by getting nearer the Pole, had got farther away from the coal repository observed by Sir Edward Belcher; instead of one hundred, it lay at two hundred and fifty miles farther south. However, after a short discussion about it between Hatteras and Clawbonny, the journey was persisted in. If Belcher had written the truth—and there was no reason for doubting his veracity—they should find things exactly in the same state as he had left them, for no new expedition had gone to these extreme continents since 1853. There were few or no Esquimaux to be met with in that latitude. They could not be disappointed on the coast of New Cornwall as they had been on Beechey Island. The low temperature preserves the objects abandoned to its influence for any length of time. All probabilities were therefore in favour of this excursion across the ice. It was calculated that the expedition would take, at the most, forty days, and Johnson's preparations were made in consequence.

The sledge was his first care; it was in the Greenland style, thirty-five inches wide and twenty-four feet long. The Esquimaux often make them more than fifty feet long. This one was made of long planks, bent up front and back, and kept bent like a bow by two thick cords; the form thus given to it gave it increased resistance to shocks; it ran easily on the ice, but when the snow was soft on the ground it was put upon a frame; to make it glide more easily it was rubbed, Esquimaux fashion, with sulphur and snow. Six dogs drew it; notwithstanding their leanness these animals did not appear to suffer from the cold; their buckskin harness was in good condition, and they could draw a weight of two thousand pounds without fatigue. The materials for encampment consisted of a tent, should the construction of a snow-house be impossible, a large piece of mackintosh to spread over the snow, to prevent it melting in contact with the human body, and lastly, several blankets and buffalo-skins. They took the halkett boat too.

The provisions consisted of five cases of pemmican, weighing about four hundred and fifty pounds; they counted one pound of pemmican for each man and each dog; there were seven dogs including Dick, and four men. They also took twelve gallons of spirits of wine—that is to say, about one hundred fifty pounds weight—a sufficient quantity of tea and biscuit, a portable kitchen with plenty of wicks, oakum, powder, ammunition, and two double-barrelled guns. They also used Captain Parry's invention of indiarubber belts, in which the warmth of the body and the movement of walking keeps coffee, tea, and water in a liquid state. Johnson was very careful about the snow-shoes; they are a sort of wooden patten, fastened on with leather straps; when the ground was quite hard and frozen they could be replaced by buckskin moccasins; each traveller had two pairs of both.

These preparations were important, for any detail omitted might occasion the loss of an expedition; they took four whole days. Each day at noon Hatteras took care to set the position of his ship; they had ceased to drift; he was obliged to be certain in order to get back. He next set about choosing the men he should take with him; some of them were not fit either to take or leave, but the captain decided to take none but sure companions, as the common safety depended upon the success of the excursion. Shandon was, therefore, excluded, which he did not seem to regret. James Wall was ill in bed. The state of the sick got no worse, however, and as the only thing to do for them was to rub them with lime-juice, and give them doses of it, the doctor was not obliged to stop, and he made one of the travellers. Johnson very much wished to accompany the captain in his perilous enterprise, but Hatteras took him aside, and said, in an affectionate tone:

"Johnson, I have confidence in you alone. You are the only officer in whose hands I can leave my ship. I must know that you are there to overlook Shandon and the others. They are kept prisoners here by the winter, but I believe them capable of anything. You will be furnished with my formal instructions, which, in case of need, will give you the command. You will take my place entirely. Our absence will last four or five weeks at the most. I shall not be anxious, knowing you are where I cannot be. You must have wood, Johnson, I know, but, as far as possible, spare
my poor ship. Do you understand me, Johnson?"

"Yes, sir," answered the old sailor, "I'll stop if you wish."

"Thank you," said Hatteras, shaking his boatswain's hand; "and if we don't come back, wait for the next breaking-up time, and try to push forward towards the Pole. But if the others won't go, don't mind us, and take the _Forward_ back to England."

"Are those your last commands, captain?"

"Yes, my express commands," answered Hatteras.

"Very well, sir, they shall be carried out," said Johnson simply.

The doctor regretted his friend, but he thought Hatteras had acted wisely in leaving him. Their other two travelling companions were Bell the carpenter and Simpson. The former was in good health, brave and devoted, and was the right man to render service during the encampments on the snow; Simpson was not so sure, but he accepted a share in the expedition, and his hunting and fishing capabilities might be of the greatest use. The expedition consisted, therefore, of four men, Hatteras, Clawbonny, Bell, and Simpson, and seven dogs. The provisions had been calculated in consequence. During the first days of January the temperature kept at an average of 33 degrees below zero. Hatteras was very anxious for the weather to change; he often consulted the barometer, but it is of little use in such high latitudes. A clear sky in these regions does not always bring cold, and the snow does not make the temperature rise; the barometer is uncertain; it goes down with the north and east winds; low, it brought fine weather; high, snow or rain. Its indications could not, therefore, be relied upon.

At last, on January 5th, the mercury rose to 18 degrees below zero, and Hatteras resolved to start the next day; he could not bear to see his ship burnt piece by piece before his eyes; all the poop had gone into the stove. On the 6th, then, in the midst of whirlwinds of snow, the order for departure was given. The doctor gave his last orders about the sick; Bell and Simpson shook hands silently with their companions. Hatteras wished to say his good-byes aloud, but he saw himself surrounded by evil looks and thought he saw Shandon smile ironically. He was silent, and perhaps hesitated for an instant about leaving the _Forward_, but it was too late to turn back; the loaded sledge, with the dogs harnessed to it, awaited him on the ice-field. Bell started the first; the others followed.

Johnson accompanied the travellers for a quarter of a mile, then Hatteras begged him to return on board, and the old sailor went back after making a long farewell gesture. At that moment Hatteras turned a last look towards the brig, and saw the extremity of her masts disappear in the dark clouds of the sky.

CHAPTER XXIX
ACROSS THE ICE

The little troop descended towards the south-east. Simpson drove the sledge. Dick helped him with zeal, and did not seem astonished at the new occupation of his companions. Hatteras and the doctor walked behind, whilst Bell went on in front, sounding the ice with his iron-tipped stick. The rising of the thermometer indicated approaching snow; it soon fell in thick flakes, and made the journey difficult for the travellers; it made them deviate from the straight line, and obliged them to walk slower; but, on an average, they made three miles an hour. The surface of the ice was unequal, and the sledge was often in danger of being overturned, but by great care it was kept upright.

Hatteras and his companions were clothed in skins more useful than elegant. Their heads and faces were covered with hoods, their mouths, eyes, and noses alone coming into contact with the air. If they had not been exposed the breath would have frozen their coverings, and they would have been obliged to take them off with the help of an axe—an awkward way of undressing. The interminable plain kept on with fatiguing monotony; icebergs of uniform aspect and hummocks whose irregularity ended by seeming always the same; blocks cast in the same mould, and icebergs between which tortuous valleys wound. The travellers spoke little, and marched on, compass in hand. It is painful to open one's mouth in such an atmosphere; sharp icicles form immediately between one's lips, and the breath is not warm enough to melt them. Bell's steps were marked in the soft ground, and they followed them attentively, certain of being able to go where he had been before.

Numerous traces of bears and foxes crossed their path, but not an animal was seen that day. It would have been dangerous and useless to hunt them, as the sledge was sufficiently freighted. Generally in this sort of excursion travellers leave provision-stores along their route; they place them in hiding-places of snow, out of reach of animals; unload during the journey, and take up the provisions on their return. But Hatteras could not venture to do this on moveable ice-fields, and the uncertainty of the route made the return the same way exceedingly problematic. At noon Hatteras caused his little troop to halt under shelter of an ice-wall. Their breakfast consisted of pemmican and boiling tea; the latter beverage comforted the cold wayfarers. They set out again after an hour's rest. The first day they walked about twenty miles, and in the evening both men and dogs were exhausted. However, notwithstanding their fatigue, they were obliged to construct a snow-house in which to pass the night. It took about an hour and a half
to build. Bell showed himself very skilful. The ice-blocks were cut out and placed above one another in the form of a dome; a large block at the top made the vault. Snow served for mortar and filled up the chinks. It soon hardened and made a single block of the entire structure. It was reached by a narrow opening, through which the doctor squeezed himself painfully, and the others followed him. The supper was rapidly prepared with spirits of wine. The interior temperature of the snow-house was bearable, as the wind which raged outside could not penetrate. When their repast, which was always the same, was over, they began to think of sleep. A mackintosh was spread over the floor and kept them from the damp. Their stockings and shoes were dried by the portable grate, and then three of the travellers wrapped themselves up in their blankets, leaving the fourth to keep watch; he watched over the common safety, and prevented the opening getting blocked up, for if it did they would be buried alive.

Dick shared the snow-house; the other dogs remained outside, and after their supper they squatted down in the snow, which made them a blanket. The men were tired out with their day's walk, and soon slept. The doctor took his turn on guard at three o'clock in the morning. There was a tempest during the night, the gusts of which thickened the walls of the snow-house. The next day, at six o'clock, they set out again on their monotonous march. The temperature lowered several degrees, and hardened the ground so that walking was easier. They often met with mounds or cairns something like the Esquimaux hiding-places. The doctor had one demolished, and found nothing but a block of ice.

"What did you expect, Clawbonny?" said Hatteras. "Are we not the first men who have set foot here?"
"It's very likely we are, but who knows?" answered the doctor.
"I do not want to lose my time in useless search," continued the captain; "I want to be quick back to my ship, even if we don't find the fuel."
"I believe we are certain of doing that," said the doctor.
"I often wish I had not left the _Forward_," said Hatteras; "a captain's place is on board."
"Johnson is there."
"Yes; but--well, we must make haste, that's all."

The procession marched along rapidly; Simpson excited the dogs by calling to them; in consequence of a phosphorescent phenomenon they seemed to be running on a ground in flames, and the sledges seemed to raise a dust of sparks. The doctor went on in front to examine the state of the snow, but all at once he disappeared. Bell, who was nearest to him, ran up.

"Well, Mr. Clawbonny," he called out in anxiety, "where are you?"
"Doctor!" called the captain.
"Here, in a hole," answered a reassuring voice; "throw me a cord, and I shall soon be on the surface of the globe again."

They threw a cord to the doctor, who was at the bottom of a hole about ten feet deep; he fastened it round his waist, and his companions hauled him up with difficulty.

"Are you hurt?" asked Hatteras.
"Not a bit," answered the doctor, shaking his kind face, all covered with snow.
"But how did you tumble down there?"
"Oh, it was the refraction's fault," he answered laughing. "I thought I was stepping across about a foot's distance, and I fell into a hole ten feet deep! I never shall get used to it. It will teach us to sound every step before we advance. Ears hear and eyes see all topsy-turvy in this enchanted spot."
"Can you go on?" asked the captain.
"Oh, yes; the little fall has done me more good than harm."

In the evening the travellers had marched twenty-five miles; they were worn out, but it did not prevent the doctor climbing up an iceberg while the snow-house was being built. The full moon shone with extraordinary brilliancy in the clearest sky; the stars were singularly bright; from the top of the iceberg the view stretched over an immense plain, bristling with icebergs; they were of all sizes and shapes, and made the field look like a vast cemetery, in which twenty generations slept the sleep of death. Notwithstanding the cold, the doctor remained a long time in contemplation of the spectacle, and his companions had much trouble to get him away; but they were obliged to think of rest; the snow-hut was ready; the four companions burrowed into it like moles, and soon slept the sleep of the just.

The next day and the following ones passed without any particular incident; the journey was easy or difficult according to the weather; when it was cold and clear they wore their moccasins and advanced rapidly, when damp and penetrating, their snow-shoes, and made little way. They reached thus the 15th of January; the moon was in her last quarter, and was only visible for a short time; the sun, though still hidden below the horizon, gave six hours of a sort of twilight, not sufficient to see the way by; they were obliged to stake it out according to the direction given by the compass. Bell led the way; Hatteras marched in a straight line behind him; then Simpson and the doctor, taking it
in turns, so as only to see Hatteras, and keep in a straight line. But notwithstanding all their precautions, they
deviated sometimes thirty or forty degrees; they were then obliged to stake it out again. On Sunday, the 15th of
January, Hatteras considered he had made a hundred miles to the south; the morning was consecrated to the mending
of different articles of clothing and encampment; divine service was not forgotten. They set out again at noon; the
temperature was cold, the thermometer marked only 32 degrees below zero in a very clear atmosphere.

All at once, without warning of any kind, a vapour rose from the ground in a complete state of congelation,
reaching a height of about ninety feet, and remaining stationary; they could not see a foot before them; it clung to
their clothing, and bristled it with ice. Our travellers, surprized by the frost-rime, had all the same idea--that of
getting near one another. They called out, "Bell!" "Simpson!" "This way, doctor!" "Where are you, captain?" But no
answers were heard; the vapour did not conduct sound. They all fired as a sign of rallying. But if the sound of the
voice appeared too weak, the detonation of the firearms was too strong, for it was echoed in all directions, and
produced a confused rumble without appreciable direction. Each acted then according to his instincts. Hatteras
stopped, folded his arms, and waited. Simpson contented himself with stopping his sledge. Bell retraced his steps,
feeling the traces with his hands. The doctor ran hither and thither, bumping against the icebergs, falling down,
getting up, and losing himself more and more. At the end of five minutes he said:

"I can't go on like this! What a queer climate! It changes too suddenly, and the icicles are cutting my face.
Captain! I say, captain!"

But he obtained no answer; he discharged his gun, and notwithstanding his thick gloves, burnt his hand with the
trigger. During this operation he thought he saw a confused mass moving at a few steps from him.

"At last!" said he. "Hatteras! Bell! Simpson! Is it you? Answer, do!"

A hollow growl was the only answer.

"Whatever is that?" thought the doctor. The mass approached, and its outline was more distinctly seen. "Why, it's
a bear!" thought the terrified doctor. It was a bear, lost too in the frost-rime, passing within a few steps of the men of
whose existence it was ignorant. The doctor saw its enormous paws beating the air, and did not like the situation. He
jumped back and the mass disappeared like a phantom. The doctor felt the ground rising under his feet; climbing on
all-fours he got to the top of a block, then another, feeling the end with his stick. "It's an iceberg!" he said to himself:
"if I get to the top I shall be saved." So saying he climbed to a height of about eighty feet; his head was higher than
the frozen fog, of which he could clearly see the top. As he looked round he saw the heads of his three companions
emerging from the dense fluid.

"Hatteras!"
"Doctor!"
"Bell!"
"Simpson!"

The four names were all shouted at the same time; the sky, lightened by a magnificent halo, threw pale rays
which coloured the frost-rime like clouds, and the summits of the icebergs seemed to emerge from liquid silver. The
travellers found themselves circumscribed by a circle less than a hundred feet in diameter. Thanks to the purity of
the upper layers of air, they could hear each other distinctly, and could talk from the top of their icebergs. After the
first shots they had all thought the best thing they could do was to climb.

"The sledge!" cried the captain.
"It's eighty feet below us," answered Simpson.
"In what condition?"
"In good condition."
"What about the bear?" asked the doctor.
"What bear?" asked Bell.
"The bear that nearly broke my head," answered the doctor.
"If there is a bear we must go down," said Hatteras.
"If we do we shall get lost again," said the doctor.
"And our dogs?" said Hatteras.

At this moment Dick's bark was heard through the fog.

"That's Dick," said Hatteras; "there's something up; I shall go down."

Growls and barks were heard in a fearful chorus. In the fog it sounded like an immense humming in a wadded
room. Some struggle was evidently going on.

"Dick! Dick!" cried the captain, re-entering the frost-rime.

"Wait a minute, Hatteras; I believe the fog is clearing off," called out the doctor. So it was, but lowering like the
waters of a pond that is being emptied; it seemed to enter the ground from whence it sprang; the shining summits of
the icebergs grew above it; others, submerged till then, came out like new islands; by an optical illusion the
travellers seemed to be mounting with their icebergs above the fog. Soon the top of the sledge appeared, then the dogs, then about thirty other animals, then enormous moving masses, and Dick jumping about in and out of the fog.

"Foxes!" cried Bell.

"Bears!" shouted the doctor. "Five!"

"Our dogs! Our provisions!" cried Simpson. A band of foxes and bears had attacked the sledge, and were making havoc with the provisions. The instinct of pillage made them agree; the dogs barked furiously, but the herd took no notice, and the scene of destruction was lamentable.

"Fire!" cried the captain, discharging his gun. His companions imitated him. Upon hearing the quadruple detonation the bears raised their heads, and with a comical growl gave the signal for departure; they went faster than a horse could gallop, and, followed by the herd of foxes, soon disappeared amongst the northern icebergs.

CHAPTER XXX
THE CAIRN
The frost-rime had lasted about three-quarters of an hour; quite long enough for the bears and foxes to make away with a considerable quantity of provisions which they attacked all the more greedily, arriving, as they did, when the animals were perishing with hunger from the long winter. They had torn open the covering of the sledge with their enormous paws; the cases of pemmican were open, and half-empty; the biscuit-bags pillaged, the provisions of tea spilt over the snow, a barrel of spirits of wine broken up, and its precious contents run out; the camping materials lying all about. The wild animals had done their work.

"The devils have done for us!" said Bell.

"What shall we do now?" said Simpson.

"Let us first see how much we've lost," said the doctor; "we can talk after."

Hatteras said nothing, but began picking up the scattered objects. They picked up all the pemmican and biscuit that was still eatable. The loss of so much spirits of wine was deplorable, as without it it was impossible to get any hot drinks—no tea nor coffee.

The doctor made an inventory of the provisions that were left, and found that the animals had eaten two hundred pounds of pemmican and a hundred and fifty pounds of biscuit; if the travellers continued their journey they would be obliged to put themselves on half-rations. They deliberated about what was to be done under the circumstances. Should they return to the brig and begin their expedition again? But how could they resolve to lose the hundred and fifty miles already cleared? and coming back without the fuel, how would they be received by the crew? and which of them would begin the excursion again? It was evident that the best thing to do was to go on, even at the price of the worst privations. The doctor, Hatteras, and Bell were for going on, but Simpson wanted to go back; his health had severely suffered from the fatigues of the journey, and he grew visibly weaker; but at last, seeing he was alone in his opinion, he took his place at the head of the sledge, and the little caravan continued its route. During the three following days, from the 15th to the 17th of January, the monotonous incidents of the journey took place again. They went on more slowly; the travellers were soon tired; their legs ached with fatigue, and the dogs drew with difficulty. Their insufficient food told upon them. The weather changed with its usual quickness, going suddenly from intense cold to damp and penetrating fogs.

On the 18th of January the aspect of the ice-field changed all at once. A great number of peaks, like pyramids, ending in a sharp point at a great elevation, showed themselves on the horizon. The soil in certain places was seen through the layer of snow; it seemed to consist of schist and quartz, with some appearance of calcareous rock. At last the travellers had reached _terra firma_, and, according to their estimation, the continent must be New Cornwall. The doctor was delighted to tread on solid ground once more; the travellers had only a hundred more miles to go before reaching Belcher Cape; but the trouble of walking increased on this rocky soil, full of inequalities, crevices, and precipices; they were obliged to plunge into the interior of the land and climb the high cliffs on the coast, across narrow gorges, in which the snow was piled up to a height of thirty or forty feet. The travellers soon had cause to regret the levels they had left, on which the sledge rolled so easily. Now they were obliged to drag it with all their strength. The dogs were worn out, and had to be helped; the men harnessed themselves along with them, and wore themselves out too. They were often obliged to unload the provisions in order to get over a steep hill, whose frozen surface gave no hold. Some passages ten feet long took hours to clear. During the first day they only made about five miles on that land, so well named Cornwall. The next day the sledge attained the upper part of the cliffs; the travellers were too exhausted to construct their snow-house, and were obliged to pass the night under the tent, enveloped in their buffalo-skins, and drying their stockings by placing them on their chests. The consequences of such a state of things may be readily imagined; during the night the thermometer went down to 44 degrees below zero, and the mercury froze.
The health of Simpson became alarming; an obstinate cold, violent rheumatism, and intolerable pain forced him to lie down on the sledge, which he could no longer guide. Bell took his place; he was not well, but was obliged not to give in. The doctor also felt the influence of his terrible winter excursion, but he did not utter a complaint; he marched on in front, leaning on his stick; he lighted the way; he helped in everything. Hatteras, impassive, impenetrable, insensible, in as good health as the first day, with his iron constitution, followed the sledge in silence. On the 20th of January the weather was so bad that the least effort caused immediate prostration; but the difficulties of the ground became so great that Hatteras and Bell harnessed themselves along with the dogs; the front of the sledge was broken by an unexpected shock, and they were forced to stop and mend it. Such delays occurred several times a day. The travellers were journeying along a deep ravine up to their waists in snow, and perspiring, notwithstanding the violent cold. No one spoke. All at once Bell looked at the doctor in alarm, picked up a handful of snow, and began to rub his companion's face with all his might.

"What the deuce, Bell?" said the doctor, struggling.
But Bell went on rubbing.

"Are you mad? You've filled my eyes, nose, and mouth with snow. What is it?"
"Why," answered Bell, "if you've got a nose left, you owe it to me."

"A nose?" said the doctor, putting his hand to his face.

"Yes, Mr. Clawbonny, you were quite frostbitten; your nose was quite white when I looked at you, and without my bit of rubbing you would be minus nose."

"Thanks, Bell," said the doctor; "I'll do the same for you in case of need."

"I hope you will, Mr. Clawbonny, and I only wish we had nothing worse to look forward to!"

"You mean Simpson! Poor fellow, he is suffering dreadfully!"

"Do you fear for him?" asked Hatteras quickly.

"Yes, captain," answered the doctor.

"What do you fear?"

"A violent attack of scurvy. His legs swell already, and his gums are attacked; the poor fellow is lying under his blankets on the sledge, and every shock increases his pain. I pity him, but I can't do anything for him!"

"Poor Simpson!" said Bell.

"Perhaps we had better stop a day or two," said the doctor.

"Stop!" cried Hatteras, "when the lives of eighteen men depend upon our return! You know we have only enough provisions left for twenty days."

Neither the doctor nor Bell could answer that, and the sledge went on its way. In the evening they stopped at the foot of an ice-hill, out of which Bell soon cut a cavern; the travellers took refuge in it, and the doctor passed the night in nursing Simpson; he was a prey to the scurvy, and constant groans issued from his terrified lips.

"Ah, Mr. Clawbonny, I shall never get over it. I wish I was dead already."

"Take courage, my poor fellow!" answered the doctor, with pity in his tone, and he answered Simpson's complaints by incessant attention. Though half-dead with fatigue, he employed a part of the night in making the sick man a soothing draught, and rubbed him with lime-juice. Unfortunately it had little effect, and did not prevent the terrible malady spreading. The next day they were obliged to lift the poor fellow on to the sledge, although he begged and prayed them to leave him to die in peace, and begin their painful march again.

The freezing mists wet the three men to the skin; the snow and sleet beat in their faces; they did the work of beasts of burden, and had not even sufficient food. Dick ran hither and thither, discovering by instinct the best route to follow. During the morning of the 23rd of January, when it was nearly dark, for the new moon had not yet made her appearance, Dick ran on first; he was lost to sight for several hours. Hatteras became anxious, as there were many bear-marks on the ground; he was considering what had better be done, when a loud barking was heard in front. The little procession moved on quicker, and soon came upon the faithful animal in the depth of a ravine. Dick was set as if he had been petrified in front of a sort of cairn, made of limestone, and covered with a cement of ice.

"This time," said the doctor, disengaging himself from the traces, "it's really a cairn; we can't be mistaken."

"What does it matter to us?" said Hatteras.

"Why, if it is a cairn, it may inclose something that would be useful to us--some provisions perhaps."

"As if Europeans had ever been here!" said Hatteras, shrugging his shoulders.

"But if not Europeans, it may be that the Esquimaux have hidden some product of their hunting here. They are accustomed to doing it, I think."

"Well, look if you like, Clawbonny, but I don't think it is worth your while."

Clawbonny and Bell, armed with their pickaxes made for the cairn. Dick kept on barking furiously. The cairn was soon demolished, and the doctor took out a damp paper. Hatteras took the document and read:

"Altam... _Porpoise_, Dec... 13th, 1860, 12.. degrees long... 8.. degrees 35 minutes lat..."
"The _Porpoise_!" said the doctor.

"I don't know any ship of that name frequenting these seas," said Hatteras.

"It is evident," continued the doctor, "that some sailors, or perhaps some shipwrecked fellows, have passed here within the last two months."

"That's certain," said Bell.

"What shall we do?" asked the doctor.

"Continue our route," said Hatteras coldly. "I don't know anything about the _Porpoise_, but I do know that the _Forward_ is waiting for our return."

CHAPTER XXXI
THE DEATH OF SIMPSON

The travellers went on their weary way, each thinking of the discovery they had just made. Hatteras frowned with uneasiness.

"What can the _Porpoise_ be?" he asked himself. "Is it a ship? and if so, what was it doing so near the Pole?"

At this thought he shivered, but not from the cold. The doctor and Bell only thought of the result their discovery might have for others or for themselves. But the difficulties and obstacles in their way soon made them oblivious to everything but their own preservation.

Simpson's condition grew worse; the doctor saw that death was near. He could do nothing, and was suffering cruelly on his own account from a painful ophthalmia which might bring on blindness if neglected. The twilight gave them enough light to hurt the eyes when reflected by the snow; it was difficult to guard against the reflection, for the spectacle-glasses got covered with a layer of opaque ice which obstructed the view, and when so much care was necessary for the dangers of the route, it was important to see clearly; however, the doctor and Bell took it in turns to cover their eyes or to guide the sledge. The soil was volcanic, and by its inequalities made it very difficult to draw the sledge, the frame of which was getting worn out. Another difficulty was the effect of the uniform brilliancy of the snow; the ground seemed to fall beneath the feet of the travellers, and they experienced the same sensation as that of the rolling of a ship; they could not get accustomed to it, and it made them sleepy, and they often walked on half in a dream. Then some unexpected shock, fall, or obstacle would wake them up from their inertia, which afterwards took possession of them again.

On the 25th of January they began to descend, and their dangers increased. The least slip might send them down a precipice, and there they would have been infallibly lost. Towards evening an extremely violent tempest swept the snow-clad summits; they were obliged to lie down on the ground, and the temperature was so low that they were in danger of being frozen to death. Bell, with the help of Hatteras, built a snow-house, in which the poor fellows took shelter; there they partook of a little pemmican and warm tea; there were only a few gallons of spirits of wine left, and they were obliged to use them to quench their thirst, as they could not take snow in its natural state; it must be melted. In temperate countries, where the temperature scarcely falls below freezing point, it is not injurious; but above the Polar circle it gets so cold that it cannot be touched more than a red-hot iron; there is such a difference of temperature that its absorption produces suffocation. The Esquimaux would rather suffer the greatest torments than slake their thirst with snow.

The doctor took his turn to watch at three o'clock in the morning, when the tempest was at its height; he was leaning in a corner of the snow-house, when a lamentable groan from Simpson drew his attention; he rose to go to him, and struck his head against the roof; without thinking of the accident he began to rub Simpson's swollen limbs; after about a quarter of an hour he got up again, and bumped his head again, although he was kneeling then.

"That's very queer," he said to himself.

He lifted his hand above his head, and felt that the roof was lowering.

"Good God!" he cried; "Hatteras! Bell!"

His cries awoke his companions, who got up quickly, and bumped themselves too; the darkness was thick.

"The roof is falling in!" cried the doctor.

They all rushed out, dragging Simpson with them; they had no sooner left their dangerous retreat, than it fell in with a great noise. The poor fellows were obliged to take refuge under the tent covering, which was soon covered with a thick layer of snow, which, as a bad conductor, prevented the travellers being frozen alive. The tempest continued all through the night. When Bell harnessed the dogs the next morning he found that some of them had begun to eat their leather harness, and that two of them were very ill, and could not go much further. However, the caravan set out again; there only remained sixty miles to go. On the 26th, Bell, who went on in front, called out suddenly to his companions. They ran up to him, and he pointed to a gun leaning against an iceberg.

"A gun!" cried the doctor.
Hatteras took it; it was loaded and in good condition.

"The men from the _Porpoise_ can't be far off," said the doctor.

Hatteras remarked that the gun was of American manufacture, and his hands crisped the frozen barrel. He gave orders to continue the march, and they kept on down the mountain slope. Simpson seemed deprived of all feeling; he had no longer the strength to complain. The tempest kept on, and the sledge proceeded more and more slowly; they scarcely made a few miles in twenty-four hours, and in spite of the strictest economy, the provisions rapidly diminished; but as long as they had enough for the return journey, Hatteras kept on.

On the 27th they found a sextant half-buried in the snow, then a leather bottle; the latter contained brandy, or rather a lump of ice, with a ball of snow in the middle, which represented the spirit; it could not be used. It was evident that they were following in the steps of some poor shipwrecked fellows who, like them, had taken the only practicable route. The doctor looked carefully round for other cairns, but in vain. Sad thoughts came into his mind; he could not help thinking that it would be a good thing not to meet with their predecessors; what could he and his companions do for them? They wanted help themselves; their clothes were in rags, and they had not enough to eat. If their predecessors were numerous they would all die of hunger. Hatteras seemed to wish to avoid them, and could he be blamed? But these men might be their fellow-countrymen, and, however slight might be the chance of saving them, ought they not to try it? He asked Bell what he thought about it, but the poor fellow's heart was hardened by his own suffering, and he did not answer. Clawbonny dared not question Hatteras, so he left it to Providence.

In the evening of the 27th, Simpson appeared to be at the last extremity; his limbs were already stiff and frozen; his difficult breathing formed a sort of mist round his head, and convulsive movements announced that his last hour was come. The expression of his face was terrible, desperate, and he threw looks of powerless anger towards the captain. He accused him silently, and Hatteras avoided him and became more taciturn and wrapped up in himself than ever. The following night was frightful; the tempest redoubled in violence; the tent was thrown down three times, and the snowdrifts buried the poor fellows, blinded them, froze them, and wounded them with the sharp icicles struck off the surrounding icebergs. The dogs howled lamentably. Simpson lay exposed to the cruel atmosphere. Bell succeeded in getting up the tent again, which, though it did not protect them from the cold, kept out the snow. But a more violent gust blew it down a fourth time, and dragged it along in its fury.

"Oh, we can't bear it any longer!" cried Bell.

"Courage, man, courage!" answered the doctor, clinging to him in order to prevent themselves rolling down a ravine. Simpson's death-rattle was heard. All at once, with a last effort, he raised himself up and shook his fist at Hatteras, who was looking at him fixedly, then gave a fearful cry, and fell back dead in the midst of his unfinished threat.

"He is dead!" cried the doctor.

"Dead!" repeated Bell.

Hatteras advanced towards the corpse, but was driven back by a gust of wind.

Poor Simpson was the first victim to the murderous climate, the first to pay with his life the unreasonable obstinacy of the captain. The dead man had called Hatteras an assassin, but he did not bend beneath the accusation. A single tear escaped from his eyes and froze on his pale cheek. The doctor and Bell looked at him with a sort of terror. Leaning on his stick, he looked like the genius of the North, upright in the midst of the whirlwind, and frightful in his immobility.

He remained standing thus till the first dawn of twilight, bold, tenacious, indomitable, and seemed to defy the tempest that roared round him.

CHAPTER XXXII
THE RETURN

The wind went down about six in the morning, and turning suddenly north cleared the clouds from the sky; the thermometer marked 33 degrees below zero. The first rays of the sun reached the horizon which they would gild a few days later. Hatteras came up to his two dejected companions, and said to them, in a low, sad voice:

"We are still more than sixty miles from the spot indicated by Sir Edward Belcher. We have just enough provisions to allow us to get back to the brig. If we go on any further we shall meet with certain death, and that will do good to no one. We had better retrace our steps."

"That is a sensible resolution, Hatteras," answered the doctor; "I would have followed you as far as you led us, but our health gets daily weaker; we can scarcely put one foot before the other; we ought to go back."

"Is that your opinion too, Bell?" asked Hatteras.

"Yes, captain," answered the carpenter.

"Very well," said Hatteras; "we will take two days' rest. We want it. The sledge wants mending. I think we had
better build ourselves a snow-house, and try to regain a little strength."

After this was settled, our three men set to work with vigour. Bell took the necessary precautions to assure the solidity of the construction, and they soon had a good shelter at the bottom of the ravine where the last halt had taken place. It had cost Hatteras a great effort to interrupt his journey. All their trouble and pain lost! A useless excursion, which one man had paid for with his life. What would become of the crew now that all hope of coal was over? What would Shandon think? Notwithstanding all these painful thoughts, he felt it impossible to go on any further. They began their preparations for the return journey at once. The sledge was mended; it had now only two hundred pounds weight to carry. They mended their clothes, worn-out, torn, soaked with snow, and hardened by the frost; new moccasins and snow-shoes replaced those that were worn out. This work took the whole day of the 29th and the morning of the 30th; the three travellers rested and comforted themselves as well as they could.

During the thirty-six hours passed in the snow-house and on the icebergs of the ravine, the doctor had noticed that Dick's conduct was very strange; he crept smelling about a sort of rising in the ground made by several layers of ice; he kept wagging his tail with impatience, and trying to draw the attention of his master to the spot. The doctor thought that the dog's uneasiness might be caused by the presence of Simpson's body, which he and his companions had not yet had time to bury. He resolved to put it off no longer, especially as they intended starting early the next morning. Bell and the doctor took their pickaxes and directed their steps towards the lowest part of the ravine; the mound indicated by Dick seemed to be a good spot to place the corpse in; they were obliged to bury it deep to keep it from the bears. They began by removing the layer of soft snow, and then attacked the ice. At the third blow of his pickaxe the doctor broke some hard obstacle; he took out the pieces and saw that it was a glass bottle; Bell discovered a small biscuit-sack with a few crumbs at the bottom.

"Whatever does this mean?" said the doctor.
"I can't think," answered Bell, suspending his work.
They called Hatteras, who came immediately. Dick barked loudly, and began scratching at the ice.
"Perhaps we have found a provision-store," said the doctor.
"It is possible," said Bell.
"Go on," said Hatteras.

Some remains of food were drawn out, and a case a quarter full of pemmican.
"If it is a hiding-place," said Hatteras, "the bears have been before us. See, the provisions are not intact."
"I am afraid so," answered the doctor; "for--"
He was interrupted by a cry from Bell, who had come upon a man's leg, stiffened and frozen.
"A corpse," cried the doctor.
"It is a tomb," answered Hatteras.

When the corpse was disinterred it turned out to be that of a sailor, about thirty years old, perfectly preserved. He wore the clothes of an Arctic navigator. The doctor could not tell how long he had been dead. But after this corpse, Bell discovered a second, that of a man of fifty, bearing the mark of the suffering that had killed him on his face.
"These are not buried bodies," cried the doctor, "the poor fellows were surprised by death just as we find them."
"You are right, Mr. Clawbonny," answered Bell.
"Go on! go on!" said Hatteras.

Bell obeyed tremblingly; for who knew how many human bodies the mound contained?
"These men have been the victims of the same accident that almost happened to us," said the doctor. "Their snow-house tumbled in. Let us see if any one of them is still alive."

The place was soon cleared, and Bell dug out a third body, that of a man of forty, who had not the cadaverous look of the others. The doctor examined him and thought he recognised some symptoms of existence.
"He is alive!" he cried.

Bell and he carried the body into the snow-house whilst Hatteras, unmoved, contemplated their late habitation. The doctor stripped the resuscitated man and found no trace of a wound on him. He and Bell rubbed him vigorously with oakum steeped in spirits of wine, and they saw signs of returning consciousness; but the unfortunate man was in a state of complete prostration, and could not speak a word. His tongue stuck to his palate as if frozen. The doctor searched his pockets, but they were empty. He left Bell to continue the friction, and rejoined Hatteras. The captain had been down into the depths of the snow-house, and had searched about carefully. He came up holding a half-burnt fragment of a letter. These words were on it:

... tamont... orpoise... w York.
"Altamont!" cried the doctor, of the ship _Porpoise_, of New York.
"An American," said Hatteras.
"I'll save him," said the doctor, "and then we shall know all about it."

He went back to Altamont whilst Hatteras remained pensive. Thanks to his attentions, the doctor succeeded in
recalling the unfortunate man to life, but not to feeling; he neither saw, heard, nor spoke, but he lived. The next day Hatteras said to the doctor:

"We must start at once."
"Yes. The sledge is not loaded; we'll put the poor fellow on it and take him to the brig."
"Very well; but we must bury these bodies first."

The two unknown sailors were placed under the ruins of the snow-house again, and Simpson's corpse took Altamont's place. The three travellers buried their companion, and at seven o'clock in the morning they set out again. Two of the Greenland dogs were dead, and Dick offered himself in their place. He pulled with energy.

During the next twenty days the travellers experienced the same incidents as before. But as it was in the month of February they did not meet with the same difficulty from the ice. It was horribly cold, but there was not much wind. The sun reappeared for the first time on the 31st of January, and every day he stopped longer above the horizon. Bell and the doctor were almost blinded and half-lame; the carpenter was obliged to walk upon crutches. Altamont still lived, but he was in a state of complete insensibility. The doctor took great care of him, although he wanted attention himself; he was getting ill with fatigue. Hatteras thought of nothing but his ship. What state should he find it in?

On the 24th of February he stopped all of a sudden. A red light appeared about 300 paces in front, and a column of black smoke went up to the sky.

"Look at that smoke! my ship is burning," said he with a beating heart.
"We are three miles off yet," said Bell; "it can't be the _Forward_."
"Yes it is," said the doctor; "the mirage makes it seem nearer."

The three men, leaving the sledge to the care of Dick, ran on, and in an hour's time were in sight of the ship. She was burning in the midst of the ice, which melted around her. A hundred steps farther a man met them, wringing his hands before the _Forward_ in flames. It was Johnson. Hatteras ran to him.

"My ship! My ship!" cried he.
"Is that you, captain? Oh, don't come any nearer," said Johnson.
"What is it?" said Hatteras.
"The wretches left forty-eight hours ago, after setting fire to the ship."
"Curse them!" cried Hatteras.

A loud explosion was then heard; the ground trembled; the icebergs fell upon the ice-field; a column of smoke went up into the clouds, and the _Forward_ blew up. The doctor and Bell reached Hatteras, who out of the depths of despair cried:

"The cowards have fled! The strong will succeed! Johnson and Bell, you are courageous. Doctor, you have science. I have faith. To the North Pole! To the North Pole!"

His companions heard these energetic words, and they did them good; but it was a terrible situation for these four men, alone, under the 80th degree of latitude, in the midst of the Polar Regions!

END OF PART I OF THE ADVENTURES OF CAPTAIN HATTERAS

THE FIELD OF ICE
BY JULES VERNE

CHAPTER I.
THE DOCTOR'S INVENTORY.

It was a bold project of Hatteras to push his way to the North Pole, and gain for his country the honour and glory of its discovery. But he had done all that lay in human power now, and, after having struggled for nine months against currents and tempests, shattering icebergs and breaking through almost insurmountable barriers, amid the cold of an unprecedented winter, after having outdistanced all his predecessors and accomplished half his task, he suddenly saw all his hopes blasted. The treachery, or rather the despondency, of his worn-out crew, and the criminal folly of one or two leading spirits among them had left him and his little band of men in a terrible situation—helpless in an icy desert, two thousand five hundred miles away from their native land, and without even a ship to shelter them.

However, the courage of Hatteras was still undaunted. The three men which were left him were the best on board his brig, and while they remained he might venture to hope.

After the cheerful, manly words of the captain, the Doctor felt the best thing to be done was to look their prospects fairly in the face, and know the exact state of things. Accordingly, leaving his companions, he stole away
alone down to the scene of the explosion.

Of the Forward, the brig that had been so carefully built and had become so dear, not a vestige remained. Shapeless blackened fragments, twisted bars of iron,

[Illustration: ]
cable ends still smouldering, and here and there in the distance spiral wreaths of smoke, met his eye on all sides. His cabin and all his precious treasures were gone, his books, and instruments, and collections reduced to ashes. As he stood thinking mournfully of his irreparable loss, he was joined by Johnson, who grasped his offered hand in speechless sorrow.

"What’s to become of us?" asked the Doctor.
"Who can tell!" was the old sailor’s reply.
"Anyhow," said Clawbonny, "do not let us despair! Let us be men!"
"Yes, Mr. Clawbonny, you are right. Now is the time to show our mettle. We are in a bad plight, and how to get out of it, that is the question."
"Poor old brig!" exclaimed the Doctor. "I had grown so attached to her. I loved her as one loves a house where he has spent a life-time."
"Ay! it’s strange what a hold those planks and beams get on a fellow’s heart."
"And the long-boat—is that burnt?" asked the Doctor.
"No, Mr. Clawbonny. Shandon and his gang have carried it off."
"And the pirogue?"
"Shivered into a thousand pieces? Stop. Do you see those bits of sheet-iron? That is all that remains of it."
"Then we have nothing but the Halkett-boat?"
"Yes, we have that still, thanks to your idea of taking it with you."
"That isn’t much," said the Doctor.
"Oh, those base traitors!" exclaimed Johnson. "Heaven punish them as they deserve!"
"Johnson," returned the Doctor, gently, "we must not forget how sorely they have been tried. Only the best remain good in the evil day; few can stand trouble. Let us pity our fellow-sufferers, and not curse them."

For the next few minutes both were silent, and then Johnson asked what had become of the sledge.

"We left it about a mile off," was the reply.
"In charge of Simpson?"
"No, Simpson is dead, poor fellow!"
"Simpson dead!"
"Yes, his strength gave way entirely, and he first sank."
"Poor Simpson! And yet who knows if he isn’t rather to be envied?"
"But, for the dead man we have left behind, we have brought back a dying one."
"A dying man?"
"Yes, Captain Altamont."
And in a few words he informed Johnson of their discovery.
"An American!" said Johnson, as the recital was ended.
"Yes, everything goes to prove that. But I wonder what the Porpoise was, and what brought her in these seas?"
"She rushed on to her ruin like the rest of foolhardy adventurers; but, tell me, did you find the coal?"
The Doctor shook his head sadly.
"No coal! not a vestige! No, we did not even get as far as the place mentioned by Sir Edward Belcher."
"Then we have no fuel whatever?" said the old sailor.
"No."
"And no provisions?"
"No."
"And no ship to make our way back to England?"

It required courage indeed to face these gloomy realities, but, after a moment’s silence, Johnson said again—

"Well, at any rate we know exactly how we stand. The first thing to be done now is to make a hut, for we can’t stay long exposed to this temperature."
"Yes, we’ll soon manage that with Bell’s help," replied the Doctor. "Then we must go and find the sledge, and bring back the American, and have a consultation with Hatteras."
"Poor captain," said Johnson, always forgetting his own troubles, "how he must feel it!"

Clawbonny and Bell found Hatteras standing motionless, his arms folded in his usual fashion. He seemed gazing into space, but his face had recovered its calm, self-possessed expression. His faithful dog stood beside him, like his master, apparently insensible to the biting cold, though the temperature was 32 degrees below zero.
Bell lay on the ice in an almost inanimate condition. Johnson had to take vigorous measures to rouse him, but at last, by dint of shaking and rubbing him with snow, he succeeded.

"Come, Bell," he cried, "don't give way like this. Exert yourself, my man; we must have a talk about our situation, and we need a place to put our heads in. Come and help me, Bell. You haven't forgotten how to make a snow hut, have you? There is an iceberg all ready to hand; we've only got to hollow it out. Let's set to work; we shall find that is the best remedy for us."

Bell tried to shake off his torpor and help his comrade, while Mr. Clawbonny undertook to go and fetch the sledge and the dogs.

"Will you go with him, captain?" asked Johnson.

"No, my friend," said Hatteras, in a gentle tone, "if the Doctor will kindly undertake the task. Before the day ends I must come to some resolution, and I need to be alone to think. Go. Do meantime whatever you think best. I will deal with the future."

Johnson went back to the Doctor, and said—

"It's very strange, but the captain seems quite to have got over his anger. I never heard him speak so gently before."

"So much the better," said Clawbonny. "Believe me, Johnson, that man can save us yet."

And drawing his hood as closely round his head as possible, the Doctor seized his iron-tipped staff, and set out without further delay.

Johnson and Bell commenced operations immediately. They had simply to dig a hole in the heart of a great block of ice; but it was not easy work, owing to the extreme hardness of the material. However, this very hardness guaranteed the solidity of the dwelling, and the further their labours advanced the more they became sheltered.

Hatteras alternately paced up and down, and stood motionless, evidently shrinking from any approach to the scene of explosion.

In about an hour the Doctor returned, bringing with him Altamont lying on the sledge, wrapped up in the folds of the tent. The poor dogs were so exhausted from starvation that they could scarcely draw it along, and they had begun to gnaw their harness. It was, indeed, high time for feasts and men to take food and rest.

While the hut was being still further dug out, the Doctor went foraging about, and had the good fortune to find a little stove, almost undamaged by the explosion. He soon restored it to working trim, and, by the time the hut was completed, had filled it with wood and got it lighted. Before long it was roaring, and diffusing a genial warmth on all sides. The American was brought in and laid on blankets, and the four Englishmen seated themselves round the fire to enjoy their scanty meal of biscuit and hot tea, the last remains of the provisions on the sledge. Not a word was spoken by Hatteras, and the others respected his silence.

When the meal was over, the Doctor rose and went out, making a sign to Johnson to follow.

"Come, Johnson," he said, "we will take an inventory of all we have left. We must know exactly how we are off, and our treasures are scattered in all directions; so we had better begin, and pick them up as fast as possible, for the snow may fall at any moment, and then it would be quite useless to look for anything."

"Don't let us lose a minute, then," replied Johnson. "Fire and food—those are our chief wants."

"Very well, you take one side and I'll take the other, and we'll search from the centre to the circumference."

This task occupied two hours, and all they discovered was a little salt meat, about 50 lbs. of pemmican, three sacks of biscuits, a small stock of chocolate, five or six pints of brandy, and about 2 lbs. of coffee, picked up bean by bean off the ice.

Neither blankets, nor hammocks, nor clothing—all had been consumed in the devouring flame.

This slender store of provisions would hardly last three weeks, and they had wood enough to supply the stove for about the same time.

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Now that the inventory was made, the next business was to fetch the sledge. The tired-out dogs were harnessed sorely against their will, and before long returned bringing the few but precious treasures found among the débris of the brig.—P.9]

Now that the inventory was made, the next business was to fetch the sledge. The tired-out dogs were harnessed sorely against their will, and before long returned bringing the few but precious treasures found among the débris of the brig. These were safely deposited in the hut, and then Johnson and Clawbonny, half-frozen with their work, resumed their places beside their companions in misfortune.

CHAPTER II.
FIRST WORDS OF ALTAMONT.
About eight o'clock in the evening, the grey snow clouds cleared away for a little, and the stars shone out brilliantly in the sky.

Hatteras seized the opportunity and went out silently to take the altitude of some of the principal constellations.
He wished to ascertain if the ice-field was still drifting.

In half an hour he returned and sat down in a corner of the hut, where he remained without stirring all night, motionless as if asleep, but in reality buried in deepest thought.

The next day the snow fell heavily, and the Doctor congratulated himself on his wise forethought, when he saw the white sheet lying three feet thick over the scene of the explosion, completely obliterating all traces of the Forward.

It was impossible to venture outside in such weather, but the stove drew capitally, and made the hut quite comfortable, or at any rate it seemed so to the weary, worn out adventurers.

The American was in less pain, and was evidently gradually coming back to life. He opened his eyes, but could not yet speak, for his lips were so affected by the scurvy that articulation was impossible, but he could hear and understand all that was said to him. On learning what had passed, and the circumstances of his discovery, he expressed his thanks by gestures, and the Doctor was too wise to let him know how brief his respite from death would prove. In three weeks at most every vestige of food would be gone.

About noon Hatteras roused himself, and going up to his friends, said—

"We must make up our minds what to do, but I must request Johnson to tell me first all the particulars of the mutiny on the brig, and how this final act of baseness came about."

"What good will that do?" said the Doctor. "The fact is certain, and it is no use thinking over it."

"I differ from your opinion," rejoined Hatteras. "Let me hear the whole affair from Johnson, and then I will banish it from my thoughts."

"Well," said the boatswain, "this was how it happened. I did all in my power to prevent, but——"

"I am sure of that, Johnson; and what’s more, I have no doubt the ringleaders had been hatching their plans for some time."

"That’s my belief too," said the Doctor.

Illustration: Johnson's Story. —P.11

"And so it is mine," resumed Johnson; "for almost immediately after your departure Shandon, supported by the others, took the command of the ship.

I could not resist him, and from that moment everybody did pretty much as they pleased. Shandon made no attempt to restrain them: it was his policy to make them believe that their privations and toils were at an end. Economy was entirely disregarded. A blazing fire was kept up in the stove, and the men were allowed to eat and drink at discretion; not only tea and coffee was at their disposal, but all the spirits on board, and on men who had been so long deprived of ardent liquors, you may guess the result. They went on in this manner from the 7th to the 15th of January."

"And this was Shandon’s doing?" asked Hatteras.

"Yes, captain."

"Never mention his name to me again! Go on, Johnson."

"It was about the 24th or 25th of January, that they resolved to abandon the ship. Their plan was to reach the west coast of Baffin’s Bay, and from thence to embark in the boat and follow the track of the whalers, or to get to some of the Greenland settlements on the eastern side. Provisions were abundant, and the sick men were so excited by the hope of return that they were almost well. They began their preparations for departure by making a sledge which they were to draw themselves, as they had no dogs. This was not ready till the 15th of February, and I was always hoping for your arrival, though I half dreaded it too, for you could have done nothing with the men, and they would have massacred you rather than remain on board. I tried my influence on each one separately, remonstrating and reasoning with them, and pointing out the dangers they would encounter, and also the cowardice of leaving you, but it was a mere waste of words; not even the best among them would listen to me. Shandon was impatient to be off, and fixed the 22nd of February for starting. The sledge and the boat were packed as closely as possible with provisions and spirits, and heaps of wood, to obtain which they had hewed the brig down to her water-line. The last day the men ran riot. They completely sacked the ship, and in a drunken paroxysm Pen and two or three others set it on fire. I fought and struggled against them, but they threw me down and assailed me with blows, and then the wretches, headed by Shandon, went off towards the east and were soon out of sight. I found myself alone on the burning ship, and what could I do? The fire-hole was completely blocked up with ice. I had not a single drop of water! For two days the Forward struggled with the flames, and you know the rest."

A long silence followed the gloomy recital, broken at length by Hatteras, who said—

"Johnson, I thank you; you did all you could to save my ship, but single-handed you could not resist. Again I thank you, and now let the subject be dropped. Let us unite efforts for our common salvation. There are four of us, four companions, four friends, and all our lives are equally precious. Let each give his opinion on the best course for us to pursue."
"You ask us then, Hatteras," said the Doctor, "we are all devoted to you, and our words come from our hearts. But will you not state your own views first?"

"That would be little use," said Hatteras, sadly; "my opinion might appear interested; let me hear all yours first."

"Captain," said Johnson, "before pronouncing on such an important matter, I wish to ask you a question."

"Ask it, then, Johnson."

"You went out yesterday to ascertain our exact position; well, is the field drifting or stationary?"

"Perfectly stationary. It had not moved since the last reckoning was made. I find we are just where we were before we left, in 80° 15' lat. and 97° 35' long."

"And what distance are we from the nearest sea to the west?"

"About six hundred miles."

"And that sea is——?"

"Smith's Sound," was the reply.

"The same that we could not get through last April?"

"The same."

"Well, captain, now we know our actual situation, we are in a better position to determine our course of action."

"Speak your minds, then," said Hatteras, again burying his head in his hands.

"What do you say, Bell?" asked the Doctor.

"It strikes me the case doesn't need long thinking over," said the carpenter. "We must get back at once without losing a single day or even a single hour, either to the south or west, and make our way to the nearest coast, even if we are two months doing it!"

"We have only food for three weeks," replied Hatteras, without raising his head.

"Very well," said Johnson, "we must make the journey in three weeks, since it is our last chance. Even if we can only crawl on our knees before we get to our destination, we must be there in twenty-five days."

"This part of the Arctic Continent is unexplored. We may have to encounter difficulties. Mountains and glaciers may bar our progress," objected Hatteras.

"I don't see that's any sufficient reason for not attempting it. We shall have to endure sufferings, no doubt, and perhaps many. We shall have to limit ourselves to the barest quantities of food, unless our guns should procure us anything."

"There is only about half a pound of powder left," said Hatteras.

"Come now, Hatteras, I know the full weight of your objections, and I am not deluding myself with vain hopes. But I think I can read your motive. Have you any practical suggestion to offer?"

"No," said Hatteras, after a little hesitation.

"You don't doubt our courage," continued the Doctor. "We would follow you to the last—you know that. But must we not, meantime, give up all hope of reaching the Pole? Your plans have been defeated by treachery. Natural difficulties you might have overcome, but you have been outmatched by perfidy and human weakness. You have done all that man could do, and you would have succeeded I am certain; but situated as we are now, are you not obliged to relinquish your projects for the present, and is not a return to England even positively necessary before you could continue them?"

"Well, captain?" asked Johnson after waiting a considerable time for Hatteras to reply.

"Think yourselves quite certain then of reaching the Sound, exhausted though you are, and almost without food?"

"No," replied the Doctor, "but there is one thing certain, the Sound won't come to us, we must go to it. We may chance to find some Esquimaux tribes further south."

"Besides, isn't there the chance of falling in with some ship that is wintering here?" asked Johnson.

"Even supposing the Sound is blocked up, couldn't we get across to some Greenland or Danish settlement? At any rate, Hatteras, we can get nothing by remaining here. The route to England is towards the south, not the north."

"Yes," said Bell, "Mr. Clawbonny is right. We must start, and start at once. We have been forgetting our country too long already."

"Is this your advice, Johnson?" asked Hatteras again.

"Yes, captain."

"And yours, Doctor?"

"Yes, Hatteras."

Hatteras remained silent, but his face, in spite of himself, betrayed his inward agitation. The issue of his whole life hung on the decision he had to make, for he felt that to return to England was to lose all! He could not venture on a fourth expedition.
The Doctor finding he did not reply, added—

"I ought also to have said, that there is not a moment to lose. The sledge must be loaded with the provisions at once, and as much wood as possible. I must confess six hundred miles is a long journey, but we can, or rather we must make twenty miles a day, which will bring us to the coast about the 26th of March."

"But cannot we wait a few days yet?" said Hatteras.

"What are you hoping for?" asked Johnson.

"I don't know. Who can tell the future? It is necessary, too, that you should get your strength a little recruited. You might sink down on the road with fatigue, without even a snow hut to shelter you."

"But think of the terrible death that awaits us here," replied the carpenter.

"My friends," said Hatteras, in almost supplicating tones; "you are despairing too soon. I should propose that we should seek our deliverance towards the north, but you would refuse to follow me, and yet why should there not be Esquimaux tribes round about the Pole as well as towards the south? The open sea, of the existence of which we are certified, must wash the shores of continents. Nature is logical in all her doings. Consequently vegetation must be found there when the earth is no longer ice-bound. Is there not a promised land awaiting us in the north from which you would flee?"

Hatteras became animated as he spoke, and Doctor Clawbonny's excitable nature was so wrought upon that his decision began to waver. He was on the point of yielding, when Johnson, with his wiser head and calmer temperament, recalled him to reason and duty by calling out—

"Come, Bell, let us be off to the sledge."

"All right," said Bell, and the two had risen to leave the hut, when Hatteras exclaimed—

"Oh, Johnson! You! You! Well, go! I shall stay, I shall stay!"

"Captain!" said Johnson, stopping in spite of himself.

"I shall stay, I tell you. Go! Leave me like the rest! Come, Duk, you and I will stay together."

The faithful dog barked as if he understood, and settled himself down beside his master. Johnson looked at the Doctor, who seemed at a loss to know what to do, but finally decided that the best way, meantime, was to calm Hatteras, even at the sacrifice of a day. He was just about to try the force of his eloquence in this direction, when he felt a light touch on his arm, and turning round saw Altamont who had crawled out of bed and managed to get on his knees. He was trying to speak, but his swollen lips could scarcely make a sound. Hatteras went towards him, and watched his efforts to articulate so attentively that in a few minutes he made out a word that sounded like Porpoise, and stooping over him he asked—

"Is it the Porpoise?"

Altamont made a sign in the affirmative, and Hatteras went on with his queries, now that he had found a clue.

"In these seas?"

The affirmative gesture was repeated.

"Is she in the north?"

"Yes."

"Do you know her position?"

"Yes."

"Exactly?"

"Yes."

For a minute or so, nothing more was said, and the onlookers waited with palpitating hearts.

Then Hatteras spoke again and said—

"Listen to me. We must know the exact position of your vessel. I will count the degrees aloud, and you; will stop me when I come to the right one."

The American assented by a motion of the head, and Hatteras began—

"We'll take the longitude first. 105°, No? 106°, 107°? It is to the west, I suppose?"

"Yes," replied Altamont.

"Let us go on, then: 109°, 110°, 112°, 114°, 116°, 118°, 120°."

"Yes," interrupted the sick man.

[Illustration: ]

"120° of longitude, and how many minutes? I will count."

Hatteras began at number one, and when he got to fifteen, Altamont made a sign to stop.

"Very good," said Hatteras; "now for the latitude. Are you listening? 80°, 81°, 82°, 83°."

Again the sign to stop was made.

"Now for the minutes: 5', 10', 15', 20', 25', 30', 35'."

Altamont stopped him once more, and smiled feebly.
"You say, then, that the Porpoise is in longitude 120° 15', and latitude 83° 35'?"

"Yes," sighed the American, and fell back motionless in the Doctor's arms, completely overpowered by the effort he had made.

"Friends!" exclaimed Hatteras; "you see I was right. Our salvation lies indeed in the north, always in the north. We shall be saved!"

But the joyous, exulting words had hardly escaped his lips before a sudden thought made his countenance change. The serpent of jealousy had stung him, for this stranger was an American, and he had reached three degrees nearer the Pole than the ill-fated Forward.

CHAPTER III.

A SEVENTEEN DAYS' MARCH.

These first words of Altamont had completely changed the whole aspect of affairs, but his communication was still incomplete, and, after giving him a little time to rest, the Doctor undertook the task of conversing again with him, putting his questions in such a form that a movement of the head or eyes would be a sufficient answer.

He soon ascertained that the Porpoise was a three-mast American ship, from New York, wrecked on the ice, with provisions and combustibles in abundance still on board, and that, though she had been thrown on her side, she had not gone to pieces, and there was every chance of saving her cargo.

Altamont and his crew had left her two months previously, taking the long boat with them on a sledge. They intended to get to Smith's Sound, and reach some whaler that would take them back to America; but one after another succumbed to fatigue and illness, till at last Altamont and two men were all that remained out of thirty; and truly he had survived by a providential miracle, while his two companions already lay beside him in the sleep of death.

Hatteras wished to know why the Porpoise had come so far north, and learned in reply that she had been irresistibly driven there by the ice. But his anxious fears were not satisfied with this explanation, and he asked further what was the purpose of his voyage. Altamont said he wanted to make the north-west passage, and this appeared to content the jealous Englishman, for he made no more reference to the subject. "Well," said the Doctor, "it strikes me that, instead of trying to get to Baffin's Bay, our best plan would be to go in search of the Porpoise, for here lies a ship a full third of the distance nearer, and, more than that, stocked with everything necessary for winter quarters."

"I see no other course open to us," replied Bell.

"And the sooner we go the better," added Johnson, "for the time we allow ourselves must depend on our provisions."

"You are right, Johnson," returned the Doctor. "If we start to-morrow, we must reach the Porpoise by the 15th of March, unless we mean to die of starvation. What do you say, Hatteras?"

"Let us make preparations immediately, but perhaps the route may be longer than we suppose."

"How can that be, captain? The man seems quite sure of the position of his ship," said the Doctor.

"But suppose the ice-field should have drifted like ours?"

Here Altamont, who was listening attentively, made a sign that he wished to speak, and, after much difficulty, he succeeded in telling the Doctor that the Porpoise had struck on rocks near the coast, and that it was impossible for her to move.

This was reassuring information, though it cut off all hope of returning to Europe, unless Bell could construct a smaller ship out of the wreck.

[Illustration: ]

No time was lost in getting ready to start. The sledge was the principal thing, as it needed thorough repair. There was plenty of wood, and, profiting by the experience they had recently had of this mode of transit, several improvements were made by Bell.

Inside, a sort of couch was laid for the American, and covered over with the tent. The small stock of provisions did not add much to the weight, but, to make up the deficiency, as much wood was piled up on it as it could hold.

The Doctor did the packing, and made an exact calculation of how long their stores would last. He found that, by allowing three-quarter rations to each man and full rations to the dogs, they might hold out for three weeks.

Towards seven in the evening, they felt so worn out that they were obliged to give up work for the night; but, before lying down to sleep, they heaped up the wood in the stove, and made a roaring fire, determined to allow themselves this parting luxury. As they gathered round it, basking in the unaccustomed heat, and enjoying their hot coffee and biscuits and pemmican, they became quite cheerful, and forgot all their sufferings.

About seven in the morning they set to work again and by three in the afternoon everything was ready.

It was almost dark, for, though the sun had reappeared above the horizon since the 31st of January, his light was
feeble and of short duration. Happily the moon would rise about half-past six, and her soft beams would give
sufficient light to show the road.

The parting moment came. Altamont was overjoyed at the idea of starting, though the jolting would necessarily
increase his sufferings, for the Doctor would find on board the medicines he required for his cure.

They lifted him on to the sledge, and laid him as comfortably as possible, and then harnessed the dogs, including
Duk. One final look towards the icy bed where the Forward had been, and the little party set out for the Porpoise.
Bell was scout, as before; the Doctor and Johnson took each a side of the sledge, and lent a helping hand when
necessary; while Hatteras walked behind to keep all in the right track.

They got on pretty quickly, for the weather was good, and the ice smooth and hard, allowing the sledge to glide
easily along, yet the temperature was so low that men and dogs were soon panting, and had often to stop and take
breath. About seven the moon shone out, and irradiated the whole horizon. Far as the eye could see, there was
nothing visible but a wide-stretching level plain of ice, without a solitary hummock or patch to relieve the
uniformity.

Illustration: ]

As the Doctor remarked to his companion, it looked like some vast, monotonous desert.
"Ay! Mr. Clawbonny, it is a desert, but we shan’t die of thirst in it at any rate."
"That’s a comfort, certainly, but I’ll tell you one thing: it proves, Johnson, we must be a great distance from any
coast. The nearer the coast, the more numerous the icebergs in general, and you see there is not one in sight."
"The horizon is rather misty, though."
"So it is, but ever since we started, we have been on this same interminable ice-field."
"Do you know, Mr. Clawbonny, that smooth as this ice is, we are going over most dangerous ground?
Fathomless abysses lie beneath our feet."
"That’s true enough, but they won’t engulp us. This white sheet over them is pretty tough, I can tell you. It is
always getting thicker too; for in these latitudes, it snows nine days out of ten even in April and May; ay, and in June
as well. The ice here, in some parts, cannot be less than between thirty and forty feet thick."
"That sounds reassuring, at all events." said Johnson.
"Yes, we’re not like the skaters on the Serpentine—always in danger of falling through. This ice is strong
enough to bear the weight of the Custom House in Liverpool, or the Houses of Parliament in Westminster."
"Can they reckon pretty nearly what ice will bear, Mr. Clawbonny?" asked the old sailor, always eager for
information.
"What can’t be reckoned now-a-days? Yes, ice two inches thick will bear a man; three and a half inches, a man
on horse-back; five inches, an eight pounder; eight inches, field artillery; and ten inches, a whole army."
"It is difficult to conceive of such a power of resistance, but you were speaking of the incessant snow just now,
and I cannot help wondering where it comes from, for the water all round is frozen, and what makes the clouds?"
"That’s a natural enough question, but my notion is that nearly all the snow or rain that we get here comes from
the temperate zones. I fancy each of those snowflakes was originally a drop of water in some river, caught up by
evaporation into the air, and wafted over here in the shape of clouds; so that it is not impossible that when we
quench our thirst with the melted snow, we are actually drinking from the very rivers of our own native land."

Just at this moment the conversation was interrupted by Hatteras, who called out that they were getting out of the
straight line. The increasing mist made it difficult to keep together, and at last, about eight o’clock, they determined
to come to a halt, as they had gone fifteen miles. The tent was put up and the stove lighted, and after their usual
supper they lay down and slept comfortably till morning.

The calm atmosphere was highly favourable, for though the cold became intense, and the mercury was always
frozen in the thermometer, they found no difficulty in continuing their route, confirming the truth of Parry’s
assertion that any man suitably clad may walk abroad with impunity in the lowest temperature, provided there is no
wind; while, on the other hand, the least breeze would make the skin smart acutely, and bring on violent headache,
which would soon end in death.

On the 5th of March a peculiar phenomenon occurred. The sky was perfectly clear and glittering with stars,
when suddenly snow began to fall thick and fast, though there was not a cloud in the heavens and through the white
flakes the constellations could be seen shining. This curious display lasted two hours, and ceased before the Doctor
could arrive at any satisfactory conclusion as to its cause.

The moon had ended her last quarter, and complete darkness prevailed now for seventeen hours out of the
twenty-four. The travellers had to fasten themselves together with a long rope to avoid getting separated, and it was
all but impossible to pursue the right course. Moreover, the brave fellows, in spite of their iron will, began to show
signs of fatigue. Halts became more frequent, and yet every hour was precious, for the provisions were rapidly
coming to an end.
Hatteras hardly knew what to think as day after day went on without apparent result, and he asked himself sometimes whether the Porpoise had any actual existence except in Altamont’s fevered brain, and more than once the idea even came into his head that perhaps national hatred might have induced the American to drag them along with himself to certain death.

He told the Doctor his suppositions, who rejected them absolutely, and laid them down to the score of the unhappy rivalry that had arisen already between the two captains.

On the 14th of March, after sixteen days’ march the little party found themselves only yet in the 82º latitude. Their strength was exhausted, and they had a hundred miles more to go. To increase their sufferings, rations had to be still further reduced. Each man must be content with a fourth part to allow the dogs their full quantity.

Unfortunately they could not rely at all on their guns, for only seven charges of powder were left, and six balls. They had fired at several hares and foxes on the road already, but unsuccessfully.

However, on the 15th, the Doctor was fortunate enough to surprise a seal basking on the ice, and, after several shots, the animal was captured and killed.

Johnson soon had it skinned and cut in pieces, but it was so lean that it was worthless as food, unless its captors would drink the oil like the Esquimaux.

The Doctor was bold enough to make the attempt, but failed in spite of himself.

Next day several icebergs and hummocks were noticed on the horizon. Was this a sign that land was near, or was it some ice-field that had broken up? It was difficult to know what to surmise.

On arriving at the first of these hummocks, the travellers set to work to make a cave in it where they could rest more comfortably than in the tent, and after three hours’ persevering toil, were able to light their stove and lie down beside it to stretch their weary limbs.

CHAPTER IV.

THE LAST CHARGE OF POWDER

Johnson was obliged to take the dogs inside the hut, for they would have been soon frozen outside in such dry weather. Had it been snowing they would have been safe enough, for the snow served as a covering, and kept in the natural heat of the animals.

The old sailor, who made a first-rate dog-driver, tried his beasts with the oily flesh of the seal; and found, to his joyful surprise, that they ate it greedily. The Doctor said he was not astonished at this, as in North America the horses were chiefly fed on fish; and he thought that what would satisfy an herbivorous horse might surely content an omnivorous dog.

The whole party were soon buried in deep sleep, for they were fairly overcome with fatigue. Johnson awoke his companions early next morning, and the march was resumed in haste. Their lives depended now on their speed, for provisions would only hold out three days longer.

The sky was magnificent; the atmosphere extremely clear, and the temperature very low. The sun rose in the form of a long ellipse, owing to refraction, which made his horizontal diameter appear twice the length of his vertical.

The Doctor, gun in hand, wandered away from the others, braving the solitude and the cold in the hope of discovering game. He had only sufficient powder left to load three times, and he had just three balls. That was little enough should he encounter a bear, for it often takes ten or twelve shots to have any effect on these enormous animals.

But the brave Doctor would have been satisfied with humbler game. A few hares or foxes would be a welcome addition to their scanty food; but all that day, if even he chanced to see one, either he was too far away, or he was deceived by refraction, and took a wrong aim. He came back to his companions at night with crestfallen looks, having wasted one ball and one charge of powder.

Next day the route appeared more difficult, and the weary men could hardly drag themselves along. The dogs had devoured even the entrails of the seal, and began to gnaw their traces.

A few foxes passed in the distance, and the Doctor lost another ball in attempting to shoot them.

They were forced to come to a halt early in the evening, though the road was illumined by a splendid Aurora Borealis; for they could not put one foot before the other.

Their last meal, on the Sunday evening, was a very sad one—if no providential help came, their doom was sealed.

Johnson set a few traps before going to sleep, though he had no baits to put inside them. He was very disappointed to find them all empty in the morning, and was returning gloomily to the hut, when he perceived a bear of huge dimensions. The old sailor took it into his head that Heaven had sent this beast specially for him to kill; and
without waking his comrades, he seized the Doctor’s gun, and was soon in pursuit of his prey. On reaching the right
distance, he took aim; but, just as his finger touched the trigger, he felt his arm tremble. His thick gloves hampered
him, and, flinging them hastily off, he took up the gun with a firmer grasp. But what a cry of agony escaped him!
The skin of his fingers stuck to the gun as if it had been red-hot, and he was forced to let it drop. The sudden fall made it go off, and the last ball was discharged in the air.

The Doctor ran out at the noise of the report, and understood all at a glance. He saw the animal walking quietly
off, and poor Johnson forgetting his sufferings in his despair.

[illustration: ]

"I am a regular milksop!" he exclaimed, “a cry-baby, that can’t stand the least pain! And at my age, too!"
"Come, Johnson; go in at once, or you will be frost-bitten. Look at your hands—they are white already! Come, come this minute."
"I am not worth troubling about, Mr. Clawbonny," said the old boatswain. “Never mind me!"
"But you must come in, you obstinate fellow. Come, now, I tell you; it will be too late presently."
At last he succeeded in dragging the poor fellow into the tent, where he made him plunge his hands into a
bowl of water, which the heat of the stove kept in a liquid state, though still cold. Johnson’s hands had hardly
touched it before it froze immediately.
"You see it was high time you came in; I should have been forced to amputate soon," said the Doctor.
Thanks to his endeavours, all danger was over in about an hour, but he was advised to keep his hands at a good
distance from the stove for some time still.

That morning they had no breakfast. Pemmican and salt beef were both done. Not a crumb of biscuit remained.
They were obliged to content themselves with half a cup of hot coffee, and start off again.
They scarcely went three miles before they were compelled to give up for the day. They had no supper but
coffee, and the dogs were so ravenous that they were almost devouring each other.
Johnson fancied he could see the bear following them in the distance, but he made no remark to his companions.
Sleep forsook the unfortunate men, and their eyes grew wild and haggard.

Tuesday morning came, and it was thirty-four hours since they had tasted a morsel of food. Yet these brave,
stout-hearted men continued their march, sustained by their superhuman energy of purpose. They pushed the sledge
themselves, for the dogs could no longer draw it.
At the end of two hours, they sank exhausted. Hatteras urged them to make a fresh attempt, but his entreaties and
supplications were powerless; they could not do impossibilities.
[illustration: ]

"Well, at any rate," he said, "I won’t die of cold if I must of hunger." He set to work to hew out
a hut in an iceberg, aided by Johnson, and really they looked like men digging their own tomb.
It was hard labour, but at length the task was accomplished. The little house was ready, and the miserable men
took up their abode in it.

In the evening, while the others lay motionless, a sort of hallucination came over Johnson, and he began raving
about bears.
The Doctor roused himself from his torpor, and asked the old man what he meant, and what bear he was talking
about.

"The bear that is following us," replied Johnson.
"A bear following us?"
"Yes, for the last two days!"
"For the last two days! You have seen him?"
"Yes, about a mile to leeward."
"And you never told me, Johnson!"
"What was the good!"
"True enough," said the Doctor; "we have not a single bail to send after him!"
"No, not even a bit of iron!"

The Doctor was silent for a minute, as if thinking. Then he said—
"Are you quite certain the animal is following us?"
"Yes, Mr. Clawbonny, he is reckoning on a good feed of human flesh!"
"Johnson!" exclaimed the Doctor, grieved at the despairing mood of his companion.
"He is sure enough of his meal!" continued the
"You have no ball!"
"I’ll make one."
"You have no lead!"

"No, but I have mercury."

So saying, he took the thermometer, which stood at 50° above zero, and went outside and laid it on a block of ice. Then he came in again, and said, "Tomorrow! Go to sleep, and wait till the sun rises."

With the first streak of dawn next day, the Doctor and Johnson rushed out to look at the thermometer. All the mercury had frozen into a compact cylindrical mass. The Doctor broke the tube and took it out. Here was a hard piece of metal ready for use.

"It is wonderful, Mr. Clawbonny; you ought to be a proud man."

"Not at all, my friend, I am only gifted with a good memory, and I have read a great deal."

"How did that help you?"

"Why, I just happened to recollect a fact related by Captain Ross in his voyages. He states that they pierced a plank, an inch thick, with a bullet made of mercury. Oil would even have suited my purpose, for, he adds, that a ball of frozen almond oil splits through a post without breaking in pieces."

"It is quite incredible!"

"But it is a fact, Johnson. Well, come now, this bit of metal may save our lives. We'll leave it exposed to the air a little while, and go and have a look for the bear."

Just then Hatteras made his appearance, and the Doctor told him his project, and showed him the mercury.

The captain grasped his hand silently, and the three hunters went off in quest of their game.

The weather was very clear, and Hatteras, who was a little ahead of the others, speedily discovered the bear about three hundred yards distant, sitting on his hind quarters sniffing the air, evidently scenting the intruders on his domains.

"There he is!" he exclaimed.

"Hush!" cried the Doctor.

But the enormous quadruped, even when he perceived his antagonists, never stirred, and displayed neither fear nor anger. It would not be easy to get near him, however, and Hatteras said—

"Friends, this is no idle sport, our very existence is at stake; we must act prudently."

"Yes," replied the Doctor, "for we have but the one shot to depend upon. We must not miss, for if Away they went, while the old boatswain slipped behind a hummock, which completely hid him from the bear, who continued still in the same place and in the same position.

CHAPTER V.

THE SEAL AND THE BEAR.

"You know, Doctor," said Hatteras, as they returned to the hut, "the polar bears subsist almost entirely on seals. They'll lie in wait for them beside the crevasses for whole days, ready to strangle them the moment their heads appear above the surface. It is not likely, then, that a bear will be frightened of a seal."

"I think I see what you are after, but it is dangerous."

"Yes, but there is more chance of success than in trying any other plan, so I mean to risk it. I am going to dress myself in the seal's skin, and creep along the ice. Come, don't let us lose time. Load the gun and give it me."

The Doctor soon joined the old boatswain behind the hummock, and told him what they had been doing. The bear was still there, but moving restlessly about, as if he felt the approach of danger.

In a quarter of an hour or so the seal made his appearance on the ice. He had gone a good way round, so as to come on the bear by surprise, and every movement was so perfect an imitation of a seal, that even the Doctor would have been deceived if he had not known it was Hatteras.

"It is capital!" said Johnson, in a low voice. The bear had instantly caught sight of the supposed seal, for he gathered himself up, preparing to make a spring as the animal came nearer, apparently seeking to return to his native element, and unaware of the enemy's proximity. Bruin went to work with extreme prudence, though his eyes glared with greedy desire to clutch the coveted prey, for he had probably been fasting a month, if not two. He allowed his victim to get within ten paces of him, and then sprang forward with a tremendous bound, but stopped short,
stupefied and frightened, within three steps of Hatteras, who started up that moment, and, throwing off his disguise, knelt on one knee, and aimed straight at the bear’s heart. He fired, and the huge monster rolled back on the ice.

"Forward! Forward!" shouted the Doctor, hurrying towards Hatteras, for the bear had reared on his hind legs, and was striking the air with one paw and tearing up the snow to stanch his wound with the other.

Hatteras never moved, but waited, knife in hand. He had aimed well, and fired with a sure and steady aim. Before either of his companions came up he had plunged the knife in the animal’s throat, and made an end of him, for he fell down at once to rise no more.

"Hurrah! Bravo!" shouted Johnson and the Doctor, but Hatteras was as cool and unexcited as possible, and stood with folded arms gazing at his prostrate foe.

"It is my turn now," said Johnson. "It is a good thing the bear is killed, but if we leave him out here much longer, he will get as hard as a stone, and we shall be able to do nothing with him."

He began forthwith to strip the skin off, and a fine business it was, for the enormous quadruped was almost as large as an ox. It measured nearly nine feet long, and four round, and the great tusks in his jaws were three inches long.

On cutting the carcase open, Johnson found nothing but water in the stomach. The beast had evidently had no food for a long time, yet it was very fat, and weighed fifteen hundred pounds. The hunters were so famished that they had hardly patience to carry home the flesh to be cooked, and it needed all the Doctor’s persuasion to prevent them eating it raw.

On entering the hut, each man with a load on his back, Clawbonny was struck with the coldness that pervaded the atmosphere. On going up to the stove he found the fire black out. The exciting business of the morning had made Johnson neglect his accustomed duty of replenishing the stove.

The Doctor tried to blow the embers into a flame, but finding he could not even get a red spark, he went out to the sledge to fetch tinder, and get the steel from Johnson.

The old sailor put his hand into his pocket, but was surprised to find the steel missing. He felt in the other pockets, but it was not there. Then he went into the hut again, and shook the blanket he had slept in all night, but his search was still unsuccessful.

He went back to his companions and said—
"Are you sure, Doctor, you haven’t the steel?"
"Quite, Johnson."
"And you haven’t it either, captain?"
"Not I!" replied Hatteras.
"It has always been in your keeping," said the Doctor.
"Well, I have not got it now!" exclaimed Johnson, turning pale.
"Not got the steel!" repeated the Doctor, shuddering involuntarily at the bare idea of its loss, for it was all the means they had of procuring a fire.

"Look again, Johnson," he said.

The boatswain hurried to the only remaining place he could think of, the hummock where he had stood to watch the bear. But the missing treasure was nowhere to be found, and the old sailor returned in despair.

Hatteras looked at him, but no word of reproach escaped his lips. He only said—
"This is a serious business, Doctor."
"It is, indeed!" said Clawbonny.
"We have not even an instrument, some glass that we might take the lens out of, and use like a burning glass."
"No, and it is a great pity, for the sun’s rays are quite strong enough just now to light our tinder."
"Well," said Hatteras, "we must just appease our hunger with the raw meat, and set off again as soon as we can, to try to discover the ship."
"Yes!" replied Clawbonny, speaking to himself, absorbed in his own reflections. "Yes, that might do at a pinch! Why not? We might try."

"What are you dreaming about?" asked Hatteras.
"An idea has just occurred to me."
"An idea come into your head, Doctor," exclaimed Johnson; "then we are saved!"
"Will it succeed? that’s the question."
"What’s your project?" said Hatteras.
"We want a lens; well, let us make one."
"How?" asked Johnson.
"With a piece of ice."
"What? Do you think that would do?"
"Why not? All that is needed is to collect the sun's rays into one common focus, and ice will serve that purpose
as well as the finest crystal."
"Is it possible?" said Johnson.
"Yes, only I should like fresh water ice, it is harder and more transparent than the other."
"There it is to your hand, if I am not much mistaken," said Johnson, pointing to a hummock close by.
[Illustration: ]
"I fancy that is fresh water, from the dark look of it, and the green tinge."
"You are right. Bring your hatchet, Johnson."

A good-sized piece was soon cut off, about a foot in diameter, and the Doctor set to work. He began by chopping
it into rough shape with the hatchet; then he operated upon it more carefully with his knife, making as smooth a
surface as possible, and finished the polishing process with his fingers, rubbing away until he had obtained as
transparent a lens as if it had been made of magnificent crystal.

The sun was shining brilliantly enough for the Doctor's experiment. The tinder was fetched, and held beneath
the lens so as to catch the rays in full power. In a few seconds it took fire, to Johnson's rapturous delight.

He danced about like an idiot, almost beside himself with joy, and shouted, "Hurrah! hurrah!" while Clawbonny
hurried back into the hut and rekindled the fire. The stove was soon roaring, and it was not many minutes before the
savoury odour of broiled bear-steaks roused Bell from his torpor.

What a feast this meal was to the poor starving men may be imagined. The Doctor, however, counselled
moderation in eating, and set the example himself.

"This is a glad day for us," he said, "and we have no fear of wanting food all the rest of our journey. Still we
must not forget we have further to go yet, and I think the sooner we start the better."

"We cannot be far off now," said Altamont, who could almost articulate perfectly again; "we must be within
forty-eight hours' march of the Porpoise."

"I hope we'll find something there to make a fire with," said the Doctor, smiling. "My lens does well enough at
present; but it needs the sun, and there are plenty of days when he does not make his appearance here, within less
than four degrees of the pole."

"Less than four degrees!" repeated Altamont, with a sigh; "yes, my ship went further than any other has ever
ventured."

"It is time we started," said Hatteras, abruptly.

"Yes," replied the Doctor, glancing uneasily at the two captains.

The dogs were speedily harnessed to the sledge, and the march resumed. [Illustration: ]

But the American made only evasive replies, and Clawbonny whispered in old Johnson's ear—

"Two men we've got that need looking after."

"You are right," said Johnson.

"Hatteras never says a word to this American, and I must say the man has not shown himself very grateful. I am
here, fortunately."

"Mr. Clawbonny," said Johnson, "now this Yankee has come back to life again, I must confess I don't much like
the expression of his face."

"I am much mistaken if he does not suspect the projects of Hatteras."

"Do you think his own were similar?"

"Who knows? These Americans, Johnson, are bold, daring fellows. It is likely enough an American would try to
do as much as an Englishman."

"Then you think that Altamont—"

"I think nothing about it, but his ship is certainly on the road to the North Pole."

"But didn't Altamont say that he had been caught among the ice, and dragged there irresistibly?"

"He said so, but I fancied there was a peculiar smile on his lips while he spoke."

"Hang it! It would be a bad job, Mr. Clawbonny, if any feeling of rivalry came between two men of their stamp."

"Heaven forfend! for it might involve the most serious consequences, Johnson."

"I hope Altamont will remember he owes his life to us?"

"But do we not owe ours to him now? I grant, without us, he would not be alive at this moment, but without him
and his ship, what would become of us?"

"Well, Mr. Clawbonny, you are here to keep things straight anyhow, and that is a blessing."

"I hope I may manage it, Johnson."

The journey proceeded without any fresh incident, but on the Saturday morning the travellers found themselves
in a region of quite an altered character. Instead of the wide smooth plain of ice that had hitherto stretched before
them, overturned icebergs and broken hummocks covered the horizon; while the frequent blocks of fresh-water ice
showed that some coast was near.

Next day, after a hearty breakfast off the bear’s paws, the little party continued their route; but the road became
tolosome and fatiguing. Altamont lay watching the horizon with feverish anxiety—an anxiety shared by all his
companions, for, according to the last reckoning made by Hatteras, they were now exactly in latitude 83° 35" and
longitude 120° 15", and the question of life or death would be decided before the day was over.

At last, about two o’clock in the afternoon, Altamont started up with a shout that arrested the whole party, and
pointing to a white mass that no eye but his could have distinguished from the surrounding icebergs, exclaimed in a
loud, ringing voice, "The Porpoise."

CHAPTER VI.

THE PORPOISE

It was the 24th of March, and Palm Sunday, a bright, joyous day in many a town and village of the Old World,
but in this desolate region what mournful silence prevailed! No willow branches here with their silvery blossom —
not even a single withered leaf to be seen — not a blade of grass!

Yet this was a glad day to the travellers, for it promised them speedy deliverance from the death that had seemed
so inevitable.

They hastened onward, the dogs put forth renewed energy, and Duk barked his loudest, till, before long, they
arrived at the ship. The Porpoise was completely buried under the snow. All her masts and rigging had been
destroyed in the shipwreck, and she was lying on a bed of rocks so entirely on her side that her hull was uppermost.

They had to knock away fifteen feet of ice before they could even catch a glimpse of her, and it was not without
great difficulty that they managed to get on board, and made the welcome discovery that the provision stores had not
been visited by any four-footed marauders. It was quite evident, however, that the ship was not habitable.

"Never mind!" said Hatteras, "we must build a snow-house, and make ourselves comfortable on land."

"Yes, but we need not hurry over it," said the Doctor; "let us do it well while we’re about it, and for a time we
can make shift on board; for we must build a substantial house, that will protect us from the bears as well as the
cold. I’ll undertake to be the architect, and you shall see what a first-rate job I’ll make of it."

"I don’t doubt your talents, Mr. Clawbonny," replied Johnson; "but, meantime, let us see about taking up our
abode here, and making an inventory of the stores we find. There does not seem a boat visible of any description,
and I fear these timbers are in too bad a condition to build a new ship out of them."

"I don’t know that," returned Clawbonny, "time and thought do wonders; but our first business is to build a
house, and not a ship; one thing at a time, I propose."

"And quite right too," said Hatteras; "so we’ll go ashore again."

They returned to the sledge, to communicate the result of their investigation to Bell and Altamont; and about
four in the afternoon the five men installed themselves as well as they could on the wreck. Bell had managed to
make a tolerably level floor with planks and spars; the stiffened cushions and hammocks were placed round the
stove to thaw, and were soon fit for use. Altamont, with the Doctor’s assistance, got on board without much trouble,
and a sigh of satisfaction escaped him as if he felt himself once more at home—a sigh which to Johnson’s ear boded
no good.

The rest of the day was given to repose, and they wound up with a good supper off the remains of the bear,
backed by a plentiful supply of biscuit and hot tea.

[Illustration: The poor fellows felt like colonists safely arrived at their destination—P.57]

It was late next morning before Hatteras and his companions woke, for their minds were not burdened now with
any solicitudes about the morrow, and they might sleep as long as they pleased. The poor fellows felt like colonists
safely arrived at their destination, who had forgotten all the sufferings of the voyage, and thought only of the new
life that lay before them.

"Well, it is something at all events," said the Doctor, rousing himself and stretching his arms, "for a fellow not to
need to ask where he is going to find his next bed and breakfast."

"Let us see what there is on board before we say much," said Johnson.

The Porpoise has been thoroughly equipped and provisioned for a long voyage, and, on making an inventory of
what stores remained, they found 6150 lbs. of flour, fat, and raisins; 2000 lbs. of salt beef and pork, 1500 lbs. of
pemmican; 700 lbs. of sugar, and the same of chocolate; a chest and a half of tea, weighing 96 lbs.; 500 lbs. of rice;
several barrels of preserved fruits and vegetables; a quantity of lime-juice, with all sorts of medicines, and 300
gallons of rum and brandy. There was also a large supply of gunpowder, ball, and shot, and coal and wood in
abundance.

Altogether, there was enough to last those five men for more than two years, and all fear of death from starvation
or cold was at an end.

"Well, Hatteras, we’re sure of enough to live on now," said the Doctor, "and there is nothing to hinder us reaching the Pole."

"The Pole!" echoed Hatteras.

"Yes, why not? Can’t we push our way overland in the summer months?"

"We might overland; but how could we cross water?"

"Perhaps we may be able to build a boat out of some of the ship’s planks."

"Out of an American ship!" exclaimed the captain, contemptuously.

Clawbonny was prudent enough to make no reply, and presently changed the conversation by saying—

"Well, now we have seen what we have to depend upon, we must begin our house and store-rooms. We have materials enough at hand; and, Bell, I hope you are going to distinguish yourself," he added.

"I am ready, Mr. Clawbonny," replied Bell; "and, as for material, there is enough for a town here with houses and streets."

"We don’t require that; we’ll content ourselves with imitating the Hudson's Bay Company. They entrench themselves in fortresses against the Indians and wild beasts. That’s all we need—a house one side and stores the other, with a wall and two bastions. I must try to make a plan."

"Ah! Doctor, if you undertake it," said Johnson, "I am sure you’ll make a good thing of it."

"Well, the first part of the business is to go and choose the ground. Will you come with us Hatteras?"

"I’ll trust all that to you, Doctor," replied the captain. "I’m going to look along the coast."

Altamont was too feeble yet to take part in any work, so he remained on the ship, while the others commenced to explore the unknown continent.

On examining the coast, they found that the Porpoise was in a sort of bay bristling with dangerous rocks, and that to the west, far as the eye could reach, the sea extended, entirely frozen now, though if Belcher and Penny were to be believed, open during the summer months. Towards the north, a promontory stretched out into the sea, and about three miles away was an island of moderate size. The roadstead thus formed would have afforded safe anchorage to ships, but for the difficulty of entering it. A considerable distance inland there was a solitary mountain, about 3000 feet high, by the Doctor’s reckoning; and half-way up the steep rocky cliffs that rose from the shore, they noticed a circular plateau, open on three sides to the bay and sheltered on the fourth by a precipitous wall, 120 feet high.

This seemed to the Doctor the very place for this house, from its naturally fortified situation. By cutting steps in the ice, they managed to climb up and examine it more closely.

[Illustration: ]

They were soon convinced they could not have a better foundation, and resolved to commence operations forthwith, by removing the hard snow more than ten feet deep, which covered the ground, as both dwelling and storehouses must have a solid foundation.

This preparatory work occupied the whole of Monday, Tuesday, and Wednesday. At last they came to hard granite close in grain, and containing garnets and felspar crystals, which flew out with every stroke of the pickaxe.

[Illustration: ]

The dimensions and plan of the snow-house were then settled by the Doctor. It was to be divided into three rooms, as all they needed was a bed-room, sitting-room and kitchen. The sitting-room was to be in the middle, the kitchen to the left, and the bed-room to the right.

For five days they toiled unremittingly. There was plenty of material, and the walls required to be thick enough to resist summer thaws. Already the house began to present an imposing appearance. There were four windows in front, made of splendid sheets of ice, in Esquimaux fashion, through which the light came softly in as if through frosted glass.

Outside there was a long covered passage between the two windows of the sitting-room. This was the entrance hall, and it was shut in by a strong door taken from the cabin of the Porpoise. The Doctor was highly delighted with his performance when all was finished, for though it would have been difficult to say to what style of architecture it belonged, it was strong, and that was the chief thing.

The next business was to move in all the furniture of the Porpoise. The beds were brought first and laid down round the large stove in the sleeping room; then came chairs, tables, arm-chairs, cupboards, and benches for the sitting-room, and finally the ship furnaces and cooking utensils for the kitchen. Sails spread on the ground did duty for carpets, and also served for inner doors.

[Illustration: ]

The walls of the house were over five feet thick, and the windows resembled port-holes for cannon. Every part was as solid as possible, and what more was wanted? Yet if the Doctor could have had his way, he would have made
all manner of ornamental additions, in humble imitation of the Ice Palace built in St. Petersburgh in January, 1740,
of which he had read an account. He amused his companions after work in the evening by describing its grandeur,
the cannons in front, and statues of exquisite beauty, and the wonderful elephant that spouted water out of his trunk
by day and flaming naphtha by night—all cut out of ice. He also depicted the interior, with tables, and toilette tables,
mIRRORS, CANDELABRA, TAPPERS, BEDS, MATTRESSES, PILLOWS, CURTAINS, TIME-PIECES, CHAIRS, PLAYING-CARDS, WARDROBES,
completely fitted up—in fact, everything in the way of furniture that could be mentioned, and the whole entirely
composed of ice.

It was on Easter Sunday, the 31st of March, when the travellers installed themselves in their new abode and after
holding divine service in the sitting-room, they devoted the remainder of the day to rest.

Next morning they set about building the storehouses and powder magazine. This took a whole week longer,
including the time spent in unloading the vessel, which was a task of considerable difficulty, as the temperature was
so low, that they could not work for many hours at a time. At length on the 8th of April, provisions, fuel, and
ammunition were all safe on terra firma, and deposited in their respective places. A sort of kennel was constructed a
little distance from the house for the Greenland dogs, which the Doctor dignified by the name of "Dog Palace." Duk
shared his master's quarters.

All that now remained to be done was to put a parapet right round the plateau by way of fortification.

By the 15th this was also completed, and the snow-house might bid defiance to a whole tribe of Esquimaux, or
any other hostile invaders, if indeed any human beings whatever were to be found on this unknown continent, for
Hatteras, who had minutely examined the bay and the surrounding coast, had not been able to discover the least
vestiges of the huts that are generally met with on shores frequented by Greenland tribes. The shipwrecked sailors of
the Porpoise and Forward seemed to be the first whose feet had ever trod this lone region.

CHAPTER VII.
AN IMPORTANT DISCUSSION.

While all these preparations for winter were going on Altamont was fast regaining strength. His vigorous
constitution triumphed, and he was even able to lend a helping hand in the unlading of the ship. He was a true type
of the American, a shrewd, intelligent man, full of energy and resolution, enterprising, bold, and ready for anything.
He was a native of New York, he informed his companions, and had been a sailor from his boyhood.

The Porpoise had been equipped and sent out by a company of wealthy merchants belonging to the States, at the
head of which was the famous Grinnell.

There were many points of resemblance between Altamont and Hatteras, but no affinities. Indeed, any similarity
that there was between them, tended rather to create discord than to make the men friends. With a greater show of
frankness, he was in reality far more deep and crafty than Hatteras. He was more free and easy, but not so true-
hearted, and somehow his apparent openness did not inspire such confidence as the Englishman's gloomy reserve.

The Doctor was in constant dread of a collision between the rival captains, and yet one must command
inevitably, and which should it be! Hatteras had the men, but Altamont had the ship, and it was hard to say whose
was the better right.

It required all the Doctor's tact to keep things smooth, for the simplest conversation threatened to lead to strife.

At last, in spite of all his endeavours, an outbreak occurred on the occasion of a grand banquet by way of "house-
warming," when the new habitation was completed.

This banquet was Dr Clawbonny's idea. He was head-cook, and distinguished himself by the concoction of a
wonderful pudding, which would positively have done no dishonour to the cuisine of the Lord Chancellor of
England.

Bell most opportunely chanced to shoot a white hare and several ptarmigans, which made an agreeable variety
from the pemmican and salt meat.

Clawbonny was master of the ceremonies, and brought in his pudding, adorning himself with the insignia of his
office—a big apron, and a knife dangling at his belt.

As Altamont did not conform to the teetotal régime of his English companions, gin and brandy were set on the
table after dinner, and the others, by the Doctor's orders, joined him in a glass for once, that the festive occasion
might be duly honoured. When the different toasts were being drunk, one was given to the United States, to which
Hatteras made no response.

This important business over, the Doctor introduced an interesting subject of conversation by saying—

"My friends, it is not enough to have come thus far in spite of so many difficulties; we have something more yet
to do. I propose we should bestow a name on this continent, where we have found friendly shelter and rest, and not
only on the continent, but on the several bays, peaks, and promontories that we meet with. This has been invariably
done by navigators and is a most necessary proceeding."

"Quite right," said Johnson, "when once a place is named, it takes away the feeling of being castaways on an
unknown shore."

"Yes," added Bell, "and we might be going on some expedition and obliged to separate, or go out hunting, and it
would make it much easier to find one another if each locality had a definite name."

[ Illustration: ]

"Very well; then," said the Doctor, "since we are all agreed, let us go steadily to work."

Hatteras had taken no part in the conversation as yet, but seeing all eyes fixed on him, he rose at last, and said—
"If no one objects, I think the most suitable name we can give our house is that of its skilful architect, the best
man among us. Let us call it ‘Doctor’s House.’"

"Just the thing!" said Bell.

"First rate!" exclaimed Johnson, "‘Doctor’s House!’"

"We cannot do better," chimed in Altamont. "Hurrah for Doctor Clawbonny."

Three hearty cheers were given, in which Duk joined lustily, barking his loudest.

"It is agreed then," said Hatteras, "that this house is to be called ‘Doctor’s House.’"

The Doctor, almost overcome by his feelings, modestly protested against the honour; but he was obliged to yield
to the wishes of his friends, and the new habitation was formally named "Doctor’s House."

"Now, then," said the Doctor, "let us go onto name the most important of our discoveries."

"There is that immense sea which surrounds us, unfurrowed as yet by a single ship."

"A single ship!" repeated Altamont. "I think you have forgotten the Porpoise, and yet she certainly did not get
here overland."

"Well, it would not be difficult to believe she had," replied Hatteras, "to see on what she lies at present."

"True, enough, Hatteras," said Altamont, in a piqued tone; "but, after all, is not that better than being blown to
atoms like the Forward?"

Hatteras was about to make some sharp retort, but Clawbonny interposed.

"It is not a question of ships, my friends," he said, "but of a fresh sea."

"It is no new sea," returned Altamont; "it is in every Polar chart, and has a name already. It is called the Arctic
Ocean, and I think it would be very inconvenient to alter its designation. Should we find out by and by, that, instead
of being an ocean it is only a strait or gulf, it will be time enough to alter it then."

"So be it," said Hatteras.

"Very well, that is an understood thing, then," said the Doctor, almost regretting that he had started a discussion
so pregnant with national rivalries.

"Let us proceed with the continent where we find ourselves at present," resumed Hatteras. "I am not aware that
any name whatever has been affixed to it, even in the most recent charts."

He looked at Altamont as he spoke, who met his gaze steadily, and said—

"Possibly you may be mistaken again, Hatteras."

"Mistaken! What! This unknown continent, this virgin soil——"

"Has already a name," replied Altamont, coolly.

Hatteras was silent, but his lip quivered.

"And what name has it, then?" asked the Doctor, rather astonished at Altamont’s affirmation.

"My dear Clawbonny," replied the American, "it is the custom, not to say the right, of every navigator to christen
the soil on which he is the first to set foot. It appears to me, therefore, that it is my privilege and duty on this
occasion to exercise my prerogative, and——"

"But, sir," interrupted Johnson, rather nettled at his sang froid.

"It would be a difficult matter to prove that the Porpoise did not come here, even supposing she reached this
coast by land," continued Altamont, without noticing Johnson’s protest. "The fact is indisputable," he added looking
at Hatteras.

[ Illustration: "I dispute the claim," said the Englishman, restraining himself by a powerful effort.—P.72]

"I dispute the claim," said the Englishman, restraining himself by a powerful effort. "To name a country, you
must first discover it, I suppose, and that you certainly did not do. Besides, but for us, where would you have been,
sir, at this moment, pray? Lying twenty feet deep under the snow."

"And without me, sir," retorted Altamont, hotly, "without me and my ship, where would you all be at this
moment? Dead, from cold and hunger."

"Come, come, friends," said the Doctor, "don’t get to words, all that can be easily settled. Listen to me."

"Mr. Hatteras," said Altamont, "is welcome to name whatever territories he may discover, should he succeed in
discovering any; but this continent belongs to me. I should not even consent to its having two names like Grinnell’s
Land, which is also called Prince Albert’s Land, because it was discovered almost simultaneously by an Englishman and an American. This is quite another matter; my right of priority is incontestable. No ship before mine ever touched this shore, no foot before mine ever trod this soil. I have given it a name, and that name it shall keep."

"And what is that name?" inquired the Doctor.

"New America," replied Altamont.

Hatteras trembled with suppressed passion, but by a violent effort restrained himself.

"Can you prove to me," said Altamont, "that an Englishman has set foot here before an American?"

Johnson and Bell said nothing, though quite as much offended as the captain by Altamont’s imperious tone. They felt that reply was impossible.

For a few minutes there was an awkward silence, which the Doctor broke by saying—

"My friends, the highest human law is justice. It includes all others. Let us be just, then, and don’t let any bad feeling get in among us. The priority of Altamont seems to me indisputable. We will take our revenge by and by, and England will get her full share in our future discoveries. Let the name New America stand for the continent itself, but I suppose Altamont has not yet disposed of all the bays, and capes, and headlands it contains, and I imagine there will be nothing to prevent us calling this bay Victoria Bay?"

"Nothing whatever, provided that yonder cape is called Cape Washington," replied Altamont.

"You might choose a name, sir," exclaimed Hatteras, almost beside himself with passion, "that is less offensive to an Englishman."

"But not one which sounds so sweet to an American," retorted Altamont, proudly.

"Come, come," said the Doctor, "no discussion on that subject. An American has a perfect right to be proud of his great countryman! Let us honour genius wherever it is met with; and since Altamont has made his choice, let us take our turn next; let the captain——"

"Doctor!" interrupted Hatteras, "I have no wish that my name should figure anywhere on this continent, seeing that it belongs to America."

"Is this your unalterable determination?" asked Clawbonny.

"It is."

The Doctor did not insist further.

"Very well, we’ll have it to ourselves then," he continued, turning to Johnson and Bell. "We’ll leave our traces behind us. I propose that the island we see out there, about three miles away from the shore, should be called Isle Johnson, in honour of our boatswain,"

"Oh, Mr. Clawbonny," began Johnson, in no little confusion.

"And that mountain that we discovered in the west we will call Bell Mount, if our carpenter is willing."

"It is doing me too much honour," replied Bell.

"It is simple justice," returned the Doctor.

"Nothing could be better," said Altamont.

"Now then, all we have to do is to christen our fort," said the Doctor, "about that there will be no discussion, I hope, for it is neither to our gracious sovereign Queen Victoria, nor to Washington, that we owe our safety and shelter here, but to God, who brought about our meeting, and by so doing saved us all. Let our little fort be called Fort Providence."

"Your remarks are just," said Altamont; "no name could be more suitable."

"Fort Providence," added Johnson, "sounds well too. In our future excursions, then, we shall go by Cape Washington to Victoria Bay, and from thence to Fort Providence, where we shall find food and rest at Doctor’s House!"

"The business is settled then so far," resumed the Doctor. "As our discoveries multiply we shall have other names to give; but I trust, friends, we shall have no disputes about them, for placed as we are, we need all the help and love we can give each other. Let us be strong by being united. Who knows what dangers yet we may have to brave, and what sufferings to endure before we see our native land once more. Let us be one in heart though five in number, and let us lay aside all feelings of rivalry. Such feelings are bad enough at all times, but among us they would be doubly wrong. You understand me, Altamont, and you, Hatteras?"

Neither of the captains replied, but the Doctor took no notice of their silence, and went on to speak of other things. Sundry expeditions were planned to forage for fresh food. It would soon be spring, and hares and partridges, foxes and bears would re-appear. So it was determined that part of every day should be spent in hunting and exploring this unknown continent of New America.

[Illustration: Clambering up the steep, rocky wall, against which the Doctor’s House leaned, he succeeded, though with considerable difficulty, in reaching the top.—P.77]

CHAPTER VIII.
AN EXCURSION TO THE NORTH OF VICTORIA BAY

Next morning Clawbonny was out by dawn of day. Clambering up the steep, rocky wall, against which the Doctor’s House leaned, he succeeded, though with considerable difficulty, in reaching the top, which he found terminated abruptly in a sort of truncated cone. From this elevation there was an extensive view over a vast tract of country, which was all disordered and convulsed as if it had undergone some volcanic commotion. Sea and land, as far as it was possible to distinguish one from the other, were covered with a sheet of ice.

A new project struck the Doctor’s mind, which was soon matured and ripe for execution. He lost no time in going back to the snow house, and consulting over it with his companions.

"I have got an idea," he said; "I think of constructing a lighthouse on the top of that cone above our heads."

"A lighthouse!" they all exclaimed.

"Yes, a lighthouse. It would be a double advantage. It would be a beacon to guide us in distant excursions, and also serve to illumine our plateau in the long dreary winter months."

"There is no doubt," replied Altamont, "of its utility; but how would you contrive to make it?"

"With one of the lanterns out of the Porpoise."

"All right; but how will you feed your lamp? With seal oil?"

"No, seal oil would not give nearly sufficient light. It would scarcely be visible through the fog."

"Are you going to try to make gas out of our coal then?"

"No, not that either, for gas would not be strong enough; and, worse still, it would waste our combustibles."

"Well," replied Altamont; "I’m at a loss to see how you—"

"Oh, I’m prepared for everything after the mercury bullet, and the ice lens, and Fort Providence. I believe Mr. Clawbonny can do anything," exclaimed Johnson.

"Come, Clawbonny, tell us what your light is to be, then," said Altamont.

"That’s soon told," replied Clawbonny. "I mean to have an electric light."

"An electric light?"

"Yes, why not? Haven’t you a galvanic battery on board your ship?"

"Yes."

"Well, there will be no difficulty then in producing an electric light, and that will cost nothing, and be far brighter."

"First-rate?" said Johnson; "let us set to work at once."

"By all means. There is plenty of material. In an hour we can raise a pillar of ice ten feet high, and that is quite enough.

Away went the Doctor, followed by his companions, and the column was soon erected and crowned with a ship lantern. The conducting wires were properly adjusted within it, and the pile with which they communicated fixed up in the sitting-room, where the warmth of the stove would protect it from the action of the frost.

As soon as it grew dark the experiment was made, and proved a complete success. An intense brilliant light streamed from the lantern and illumined the entire plateau and the plains beneath.

Johnson could not help clapping his hands, half beside himself with delight.

"Well, I declare, Mr. Clawbonny," he exclaimed, "you’re our sun now."

"One must be a little of everything, you know," was Clawbonny’s modest reply.

It was too cold, however, even to stand admiring more than a minute, and the whole party were glad enough to get indoors again, and tuck themselves up in their warm blankets.

A regular course of life commenced now, though uncertain weather and frequent changes of temperature made it sometimes impracticable to venture outside the hut at all, and it was not till the Saturday after the installation, that a day came that was favourable enough for a hunting excursion; when Bell, and Altamont, and the Doctor determined to take advantage of it, and try to replenish their stock of provisions.

They started very early in the morning, each armed with a double-barrelled gun and plenty of powder and shot, a hatchet, and a snow knife.

[ Illustration: ]

The weather was cloudy, but Clawbonny put the galvanic battery in action before he left, and the bright rays of the electric light did duty for the glorious orb of day, and in truth was no bad substitute, for the light was equal to three thousand candles, or three hundred gas burners.

It was intensely cold, but dry, and there was little or no wind. The hunters set off in the direction of Cape Washington, and the hard snow so favoured their march, that in three hours they had gone fifteen miles, Duk jumping and barking beside them all the way. They kept as close to the coast as possible, but found no trace of human habitation and indeed scarcely a sign of animal life. A few snow birds, however, darting to and fro announced the approach of spring and the return of the animal creation. The sea was still entirely frozen over, but it
was evident from the open breathing holes in the ice, that the seals had been quite recently on the surface. In one part the holes were so numerous, that the Doctor said to his companions that he had no doubt that when summer came, they would be seen there in hundreds, and would be easily captured, for on unfrequented shores they were not so difficult of approach. But once frighten them and they all vanish as if by enchantment, and never return to the spot again. "Inexperienced hunters," he said, "have often lost a whole shoal by attacking them, en masse, with noisy shouts instead of singly and silently."

"Is it for the oil or skin that they are mostly hunted?"

"Europeans hunt them for the skin, but the Esquimaux eat them. They live on seals, and nothing is so delicious to them as a piece of the flesh, dipped in the blood and oil. After all, cooking has a good deal to do with it, and I'll bet you something I could dress you cutlets you would not turn up your nose at, unless for their black appearance."

"We'll set you to work on it," said Bell, "and I'll eat as much as you like to please you."

"My good Bell, you mean to say to please yourself, but your voracity would never equal the Green-landers', for they devour from ten to fifteen pounds of meat a day."

"Fifteen pounds!" said Bell. "What stomachs!"

"Arctic stomachs," replied the Doctor, "are prodigious; they can expand at will, and, I may add, contract at will; so that they can endure starvation quite as well as abundance. When an Esquimaux sits down to dinner he is quite thin, and by the time he has finished, he is so corpulent you would hardly recognize him. But then we must remember that one meal sometimes has to last a whole day."

"This voracity must be peculiar to the inhabitants of cold countries," said Altamont.

"I think it is," replied the Doctor. "In the Arctic regions people must eat enormously: it is not only one of the conditions of strength, but of existence. The Hudson's Bay Company always reckoned on this account 8 lbs. of meat to each man a day, or 12 lbs. of fish, or 2 lbs. of pemmican."

"Invigorating regimen, certainly!" said Bell.

"Not so much as you imagine, my friend. An Indian who guzzles like that can't do a whit better day's work than an Englishman, who has his pound of beef and pint of beer."

"Things are best as they are, then, Mr. Clawbonny."

"No doubt of it; and yet an Esquimaux meal may well astonish us. In Sir John Ross's narrative, he states his surprise at the appetites of his guides. He tells us that two of them—just two mind—devoured a quarter of a buffalo in one morning. They cut the meat in long narrow strips, and the mode of eating was either for the one to bite off as much as his mouth could hold, and then pass it on to the other, or to leave the long ribbons of meat dangling from the mouth and devour them gradually like boa-constrictors, lying at full length on the ground."

[ Illustration: ]

"Faugh!" exclaimed Bell, "what disgusting brutes!"

"Every man has his own fashion of dining," remarked the philosophical American.

"Happily," said the Doctor.

"Well, if eating is such an imperative necessity in these latitudes, it quite accounts for all the journals of Arctic travellers being so full of eating and drinking."

"You are right," returned the Doctor. "I have been struck by the same fact; but I think it arises not only from the necessity of full diet, but from the extreme difficulty sometimes in procuring it. The thought of food is always uppermost in the mind, and naturally finds mention in the narrative."

"And yet," said Altamont, "if my memory serves me right, in the coldest parts of Norway the peasants do not seem to need such substantial fare. Milk diet is their staple food, with eggs, and bread made of the bark of the birch-tree; a little salmon occasionally, but never meat; and still they are fine hardy fellows."

"It is an affair of organization out of my power to explain," replied Clawbonny; "but I have no doubt that if these same Norwegians were transplanted to Greenland, they would learn to eat like the Esquimaux by the second or third generation. Even if we ourselves were to remain in this blessed country long, we should be as bad as the Esquimaux, even if we escaped becoming regular gluttons."

"I declare, Mr. Clawbonny, you make me feel hungry talking so much about eating," exclaimed Bell.

"Not I!" said Altamont. "It rather sickens me, and makes me loathe the sight of a seal. But, stop, I do believe we are going to have the chance of a dinner off one, for I am much mistaken if that's not something alive lying on those lumps of ice yonder!"

"It is a walrus!" exclaimed the Doctor. "Be quiet, and let us get up to him."

Clawbonny was right, it was a walrus of huge dimensions, disporting himself not more than two hundred yards away. The hunters separated, going in different directions, so as to surround the animal and cut off all retreat. They crept along cautiously behind the hummocks, and managed to get within a few paces of him unperceived, when they fired simultaneously.
The walrus rolled over, but speedily got up again, and tried to make his escape, but Altamont fell upon him with his hatchet, and cut off his dorsal fins. He made a desperate resistance, but was overpowered by his enemies, and soon lay dead, reddening the ice-field with his blood.

It was a fine animal, measuring more than fifteen feet in length, and would have been worth a good deal for the oil; but the hunters contented themselves with cutting off the most savoury parts, and left the rest to the ravens, which had just begun to make their appearance.

Night was drawing on, and it was time to think of returning to Fort Providence. The moon had not yet risen, but the sky was serene and cloudless, and already glittering with stars—magnificent stars.

"Come," said the Doctor, "let us be off, for it is getting late. Our hunting has not been very successful; but still, if a man has found something for his supper, he need not grumble. Let us go the shortest road, however, and get quickly home without losing our way. The stars will guide us."

They resolved to try a more direct route back by going further inland, and avoiding the windings of the coast; but, after some hours’ walking, they found themselves no nearer Doctor’s House, and it was evident that they must have lost their way. The question was raised whether to construct a hut and rest till morning, or proceed; but Clawbonny insisted on going on, as Hatteras and Johnson would be so uneasy.

"Duk will guide us," he said; "he won’t go wrong. His instinct can dispense with star and compass. Just let us keep close behind him."

They did well to trust to Duk, for very speedily a faint light appeared in the horizon almost like a star glimmering through the mist, which hung low above the ground.

"There’s our lighthouse!" exclaimed the Doctor.

"Do you think it is, Mr. Clawbonny?" said Bell.

"I’m certain of it! Come on faster." The light became stronger the nearer they approached, and soon they were walking in a bright luminous track, leaving their long shadows behind them on the spotless snow. —P.87

Quickening their steps, they hastened forward, and in another half hour they were climbing the ascent to Fort Providence.

CHAPTER IX.
COLD AND HEAT.

Hatteras and Johnson had been getting somewhat uneasy at the prolonged absence of their companions, and were delighted to see them back safe and sound. The hunters were no less glad to find themselves once more in a warm shelter, for the temperature had fallen considerably as night drew on, and the thermometer outside was 73° below zero.

The poor hunters were half frozen, and so worn out that they could hardly drag their limbs along; but the stoves were roaring and crackling cheerily, and the big kitchen fire waiting to cook such game as might be brought in. Clawbonny donned his official apron again, and soon had his seal cutlets dressed and smoking on the table. By nine o’clock the whole party were enjoying a good supper, and Bell couldn’t help exclaiming—

"Well, even at the risk of being taken for an Esquimaux, I must confess eating is the most important business if one has to winter in these regions. A good meal isn’t to be sneezed at."

They all had their mouths crammed too full to speak, but the Doctor signified his agreement with Bell’s views by an approving nod.

The cutlets were pronounced first-rate, and it seemed as if they were, for they were all eaten, to the very last morsel.

For dessert they had coffee, which the Doctor brewed himself in a French coffee-pot over spirits-of-wine. He never allowed anybody but himself to concoct this precious beverage; for he made a point of serving it boiling hot, always declaring it was not fit to drink unless it burnt his tongue. This evening he took it so scalding that Altamont exclaimed—

"You’ll skin your throat!"

"Not a bit of it," was the Doctor’s reply.

"Then your palate must be copper-sheathed," said Johnson.

"Not at all, friends. I advise you to copy my example. Many persons, and I am one, can drink coffee at a temperature of 131°."

"131°?" said Altamont; "why, that is hotter than the hand could bear!"

"Of course it is, Altamont, for the hand could not bear more than 122°, but the palate and tongue are less
"You surprise me."

"Well, I will convince you it is fact," returned Clawbonny, and taking up a thermometer, he plunged it into the steaming coffee. He waited till the mercury rose as high as 131° and then withdrew it, and swallowed the liquid with evident gusto.

Bell tried to follow his example, but burnt his mouth severely.

"You are not used to it," said the Doctor, coolly.

"Can you tell us, Clawbonny," asked Altamont, "what is the highest temperature that the human body can bear."

"Yes, several curious experiments have been made in that respect. I remember reading of some servant girls, in the town of Rochefoucauld, in France, who could stay ten minutes in a baker's large oven when the temperature was 300°, while potatoes and meat were cooking all round them.

"What girls!" exclaimed Altamont.

"Well, there is another case, where eight of our own countrymen—Fordyce, Banks, Solander, Blagdin, Home, Nooth, Lord Seaforth, and Captain Phillips—went into one as hot as 200°, where eggs and beef were frizzling."

"And they were Englishmen!" said Bell, with a touch of national pride.

"Oh, the Americans could have done better than that," said Altamont.

"They would have roasted," returned the Doctor, laughing. "At all events they have never tried it, so I shall stand up for my countrymen. There is one more instance I recollect, and really it is so incredible, that it would be impossible to believe it, if it were not attested by unimpeachable evidence. The Duke of Ragusa and [Illustration: ] Dr. Jung, a Frenchman and an Austrian, saw a Turk plunge into a bath at 170°."

"But that is not so astonishing as those servant girls, or our own countrymen," said Johnson.

"I beg your pardon," replied Clawbonny; "there is a great difference between plunging into hot air and hot water. Hot air produces perspiration, which protects the skin, but boiling water scalds. The maximum heat of baths is 107°, so that this Turk must have been an extraordinary fellow to endure such temperature."

"What is the mean temperature, Mr. Clawbonny, of animated beings?" asked Johnson.

"That varies with the species," replied the Doctor. "Birds have the highest, especially the duck and the hen. The mammalia come next, and human beings. The temperature of Englishmen averages 101°."

"I am sure Mr. Altamont is going to claim a higher rate for his countrymen," said Johnson, smiling.

"Well, sure enough, we've some precious hot ones among us, but as I never have put a thermometer down their throats to ascertain, I can't give you statistics.

"There is no sensible difference," said the Doctor, "between men of different races when they are placed under the same conditions, whatever their food may be. I may almost say their temperature would be the same at the Equator as the Pole."

"Then the heat of our bodies is the same here as in England," replied Altamont.

"Just about it. The other species of mammalia are generally hotter than human beings. The horse, the hare, the elephant, the porpoise, and the tiger are nearly the same; but the cat, the squirrel, the rat, the panther, the sheep, the ox, the dog, the monkey, and the goat, are as high as 103°; and the pig is 104°."

"Rather humiliating to us," put in Altamont.

"Then come the amphibia and the fish," resumed the Doctor, "whose temperature varies with that of the water. The serpent has a temperature of 86°, the frog 70°, and the shark several degrees less. Insects appear to have the temperature of air and water."

[Illustration: ]

"All this is very well," interrupted Hatteras, who had hitherto taken no part in the conversation, "and we are obliged to the Doctor for his scientific information; but we are really talking as if we were going to brave the heat of the torrid zone. I think it would be far more seasonable to speak of cold, if the Doctor could tell us what is the lowest temperature on record."

"I can enlighten you on that too," replied the Doctor. "There are a great number of memorable winters, which appear to have come at intervals of about forty-one years. In 1364, the Rhone was frozen over as far as Arles; in 1408, the Danube was frozen throughout its entire extent, and the wolves crossed the Cattigut on firm ground; in 1509, the Adriatic and the Mediterranean were frozen at Venice and Marseilles, and the Baltic on the 10th of April; in 1608, all the cattle died in England from the cold; in 1789, the Thames was frozen as far as Gravesend; and the frightful winter of 1813 will long be remembered in France. The earliest and longest ever known in the present century was in 1829. So much for Europe."

"But here, within the Polar circle, what is the lowest degree?" asked Altamont.
"My word!" said the Doctor. "I think we have experienced the lowest ourselves, for one day the thermometer was 72° below zero, and, if my memory serves me right, the lowest temperature mentioned hitherto by Arctic voyagers has been 61° at Melville Island, 65° at Port Felix, and 70° at Fort Reliance."

"Yes," said Hatteras, "it was the unusual severity of the winter that barred our progress, for it came on just at the worst time possible."

"You were stopped, you say?" asked Altamont, looking fixedly at the captain.

"Yes, in our voyage west," the Doctor hastened to reply.

"Then the maximum and minimum temperatures," said Altamont, resuming the conversation, "are about 200° apart. So you see, my friends, we may make ourselves easy."

"But if the sun were suddenly extinguished," suggested Johnson, "would not the earth’s temperature be far lower?"

"There is no fear of such a catastrophe; but, even should it happen, the temperature would be scarcely any different."

[illustration: ]

"That’s curious."

"It is; but Fourrier, a learned Frenchman, has proved the fact incontestably. If it were not the case, the difference between day and night would be far greater, as also the degree of cold at the Poles. But now I think, friends, we should be the better of a few hours’ sleep. Who has charge of the stove?"

"It is my turn to-night," said Bell.

"Well, pray keep up a good fire, for it is a perishing night."

"Trust me for that," said Bell. "But do look out, the sky is all in a blaze."

"Ay! it is a magnificent aurora," replied the Doctor, going up to the window. "How beautiful! I never tire gazing at it."

No more he ever did, though his companions had become so used to such displays that they hardly noticed them now. He soon followed the example of the others, however, and lay down on his bed beside the fire, leaving Bell to mount guard.

CHAPTER X.
WINTER PLEASURES

It is a dreary affair to live at the Pole, for there is no going out for many long months, and nothing to break the weary monotony.

The day after the hunting excursion was dark and snowy, and Clawbonny could find no occupation except polishing up the ice walls of the hut as they became damp with the heat inside, and emptying out the snow which drifted into the long passage leading to the inner door. The "Snow-House" stood out well, defying storm and tempest, and the snow only seemed to increase the thickness of the walls.

The storehouses, too, did not give way the least; but though they were only a few yards off, it was found necessary to lay in enough provisions for the day, as very often the weather made it almost impossible to venture that short distance.

The unloading of the Porpoise turned out to have been a wise precaution, for she was slowly but surely being crashed to pieces by the silent, irresistible pressure around her. Still the Doctor was always hoping enough planks might be sufficiently sound to construct a small vessel to convey them back to England, but the right time to build had not come.

[illustration: ]

The five men were consequently compelled to spend the greater part of the day in complete idleness. Hatteras lolled on his bed absorbed in thought. Altamont smoked or dozed, and the Doctor took care not to disturb either of them, for he was in perpetual fear of a quarrel between them.

At meal times he always led the conversation away from irritating topics and sought, as far as possible, to instruct and interest all parties. Whenever he was not engaged with the preparation of his notes, he gave them dissertations on history, geography, or meteorology, handling his subject in an easy, though philosophical manner, drawing lessons from the most trivial incidents. His inexhaustible memory was never at a loss for fact or illustration when his good humour and geniality made him the life and soul of the little company. He was implicitly trusted by all, even by Hatteras, who cherished a deep affection for him.

Yet no man felt the compulsory confinement more painfully than Clawbonny. He longed ardently for the breaking up of the frost to resume his excursions though he dreaded the rivalry that might ensue between the two captains.

Yet things must come to a crisis soon or late, and meantime he resolved to use his best endeavors to bring both
parties to a better mind, but to reconcile an American and an Englishman was no easy task. He and Johnson had
many a talk on the subject, for the old sailor’s views quite coincided with his own as to the difficult complications
which awaited them in the future.

However, the bad weather continued, and leaving Fort Providence, even for an hour, was out of the question.
Day and night they were pent up in these glittering ice-walls, and time hung heavily on their hands, at least on all
but the Doctor’s, and he always managed to find some occupation for himself.

[Illustration: ]

"I declare," said Altamont, one evening; "life like this is not worth having. We might as well be some of those
reptiles that sleep all the winter. But I suppose there is no help for it."

"I am afraid not," said the Doctor; "unfortunately we are too few in number to get up any amusement."

"Then you think if there were more of us, we should find more to do?"

"Of course: when whole ships’ crews have wintered here, they have managed to while away the time famously."

"Well, I must say I should like to know how. It would need a vast amount of ingenuity to extract anything
amusing out of our circumstances. I suppose they did not play at charades?"

"No, but they introduced the press and the theatre."

"What? They had a newspaper?" exclaimed the American.

"They acted a comedy?" said Bell.

"That they did," said the Doctor. "When Parry wintered at Melville Island, he started both amusements among
his men, and they met with great success."

"Well, I must confess, I should like to have been there," returned Johnson; "for it must have been rather curious
work."

"Curious and amusing too, my good Johnson. Lieutenant Beechey was the theatre manager, and Captain Sabina
chief editor of the newspaper called ‘The Winter Chronicle, or the Gazette of Northern Georgia.’ "

"Good titles," said Altamont.

"The newspaper appeared daily from the 1st of November, 1819, to the 20th of March, 1820. It reported the
different excursions, and hunting parties, and accidents, and adventures, and published amusing stories. No doubt
the articles were not up to the ‘Spectator’ or the ‘Daily Telegraph,’ but the readers were neither critical nor blasé,
and found great pleasure in their perusal."

[Illustration: ]

"My word!" said Altamont. "I should like to read some of the articles."

"Would you? Well, you shall judge for yourself."

"What! can you repeat them from memory?"

"No; but you had Parry’s Voyages on board the Porpoise, and I can read you his own narrative if you like."

This proposition was so eagerly welcomed that the Doctor fetched the book forthwith, and soon found the
passage in question.

"Here is a letter," he said, "addressed to the editor."

"Your proposition to establish a journal has been received by us with the greatest satisfaction. I am convinced
that, under your direction, it will be a great source of amusement, and go a long way to lighten our hundred days of
darkness."

"The interest I take in the matter myself has led me to study the effect of your announcement on my comrades,
and I can testify, to use reporter’s language, that the thing has produced an immense sensation.

"The day after your prospectus appeared, there was an unusual and unprecedented demand for ink among us,
and our green tablecloth was deluged with snippings and parings of quill-pens, to the injury of one of our servants,
who got a piece driven right under his nail. I know for a fact that Sergeant Martin had no less than nine pen-knives
to sharpen."

"It was quite a novel sight to see all the writing-desks brought out, which had not made their appearance for a
couple of months, and judging by the reams of paper visible, more than one visit must have been made to the depths
of the hold."

"I must not forget to tell you, that I believe attempts will be made to slip into your box sundry articles which
are not altogether original, as they have been published already. I can declare that, no later than last night, I saw an
author bending over his desk, holding a volume of the "Spectator" open with one hand, and thawing the frozen ink in
his pen at the lamp with the other. I need not warn you to be on your guard against such tricks, for it would never do
for us to have articles in our "Winter Chronicle" which our great-grandfathers read over their breakfast-tables a
century ago."

"Well, well," said Altamont, "there is a good deal of clever humour in that writer. He must have been a sharp
fellow."
"You’re right. Here is an amusing catalogue of Arctic tribulations:—

‘To go out in the morning for a walk, and the moment you put your foot outside the ship, find yourself immersed in the cook’s water-hole.

‘To go out hunting, and fall in with a splendid reindeer, take aim, and find your gun has gone off with a flash in the pan, owing to damp powder.

‘To set out on a march with a good supply of soft new bread in your pocket, and discover, when you want to eat, that it has frozen so hard that you would break your teeth if you attempted to bite it through.

‘To rush from the table when it is reported that a wolf is in sight, and on coming back to find the cat has eaten your dinner.

‘To be returning quietly home from a walk, absorbed in profitable meditation, and suddenly find yourself in the embrace of a bear.’

“We might supplement this list ourselves,” said the Doctor, “to almost any amount, for there is a sort of pleasure in enumerating troubles when one has got the better of them.”

“I declare,” said Altamont, “this ‘Winter Journal’ is an amusing affair. I wish we could subscribe to it.”

“Suppose we start one,” said Johnson.

“For us five!” exclaimed Clawbonny; “we might do for editors, but there would not be readers enough.”

“No, nor spectators enough, if we tried to get up a comedy,” added Altamont.

“Tell us some more about Captain Parry’s theatre,” said Johnson; “did they play new pieces?”

“Certainly. At first two volumes on board the ‘Hecla’ were gone through, but as there was a performance once a fortnight, this repertoire was soon exhausted. Then they had to improvise fresh plays; Parry himself composed one which had immense success. It was called ‘The North-West Passage, or the End of the Voyage.’ ”

“A famous title,” said Altamont; “but I must confess, if I had chosen such a subject, I should have been at a loss for the dénouement.”

“You are right,” said Bell; “who can say what the end will be?”

“What does that matter?” replied Mr. Clawbonny. “Why should we trouble about the last act, while the first ones are going on well. Leave all that to Providence, friends; let us each play our own rôle as perfectly as we can, and since the dénouement belongs to the Great Author of all things, we will trust his skill. He will manage our affairs for us, never fear.”

“Well, we’d better go and dream about it,” said Johnson, “for it’s getting late, and it is time we went to bed,” said Johnson.

“You’re in a great hurry, old fellow,” replied the Doctor.

“Why would you sit up, Mr. Clawbonny? I am so comfortable in my bed, and then I always have such good dreams. I dream invariably of hot countries, so that I might almost say, half my life is spent in the tropics, and half at the North Pole.”

“You’re a happy man, Johnson,” said Altamont, “to be blessed with such a fortunate organization.”

“Indeed I am,” replied Johnson.

“Well, come, after that it would be positive cruelty to keep our good friend pining here,” said the Doctor, “his tropical sun awaits him, so let’s all go to bed.”

CHAPTER XI

TRACES OF BEARS

On the 26th of April during the night there was a sudden change in the weather. The thermometer fell several degrees, and the inmates of Doctor’s House could hardly keep themselves warm even in their beds. Altamont had charge of the stove, and he found it needed careful replenishing to preserve the temperature at 50° above zero.

This increase of cold betokened the cessation of the stormy weather, and the Doctor hailed it gladly as the harbinger of his favourite hunting and exploring expeditions.

He rose early next morning, and climbed up to the top of the cone. The wind had shifted north, the air was clear, and the snow firm and smooth to the tread.

Before long the five companions had left Doctor’s House, and were busily engaged in clearing the heavy masses of snow off the roof and sides, for the house was no longer distinguishable from the plateau, as the snow had drifted to a depth of full fifteen feet. It took two hours to remove the frozen snow, and restore the architectural form of the dwelling. At length the granite foundations appeared, and the storehouses and powder magazines were once more accessible.

[Illustration: ]

But as, in so uncertain a climate, a storm might cut off their supplies any day, they wisely resolved to provide for any such emergency by carrying over a good stock of provisions to the kitchen; and then Clawbonny, Altamont, and Bell started off with their guns in search of game, for the want of fresh food began to be urgently felt.
The three companions went across the east side of the cone, right down into the centre of the far-stretching, snow-covered plain beneath, but they did not need to go far, for numerous traces of animals appeared on all sides within a circle of two miles round Fort Providence.

After gazing attentively at these traces for some minutes, the hunters looked at each other silently, and then the Doctor exclaimed:

"Well, these are plain enough, I think!"
"Ay, only too plain," added Bell, "bears have been here!"
"First rate game!" said Altamont. "There’s only one fault about it."
"And what is that?" asked Bell.
"What do you mean?"
"I mean this—there are distinct traces of five bears, and five bears are rather too much for five men."
"Are you sure there are five?" said Clawbonny.
"Look and see for yourself. Here is one footprint, and there is another quite different. These claws are far wider apart than those; and see here, again, that paw belongs to a much smaller bear. I tell you, if you look carefully, you will see the marks of all five different bears distinctly."
"You’re right," said Bell, after a close inspection.
"If that’s the case, then," said the Doctor, "we must take care what we’re about, and not be foolhardy, for these animals are starving after the severe winter, and they might be extremely dangerous to encounter and, since we are sure of their number——"
"And of their intentions, too," put in Altamont.
"You think they have discovered our presence here?"
"No doubt of it, unless we have got into a bear-pass, but then, why should these footprints be in a circle round our fort? Look, these animals have come from the south-east, and stopped at this place, and commenced to reconnoitre the coast."

[Illustration: ]

"You’re right," said the Doctor, "and, what’s more, it is certain that they have been here last night."
"And other nights before that," replied Altamont.
"I don’t think so," rejoined Clawbonny. "It is more likely that they waited till the cessation of the tempest, and were on their way down to the bay, intending to catch seals, when they scented us."
"Well, we can easily find out if they come tonight," said Altamont.
"How?"
"By effacing all the marks in a given place, and if to-morrow, we find fresh ones, it will be evident that Fort Providence is the goal for which the bears are bound."

[Illustration: ]

"Very good, at any rate we shall know, then, what we have to expect."

The three hunters set to work, and scraped the snow over till all the footprints were obliterated for a considerable distance.

"It is singular, though," said Bell, "that bears could scent us all that way off; we have not been burning anything fat which might have attracted them."

"Oh!" replied the Doctor, "bears are endowed with a wonderfully keen sense of smell, and a piercing sight; and, more than that, they are extremely intelligent, almost more so than any other animal. They have smelt something unusual; and, besides, who can tell whether they have not even found their way as far as our plateau during the tempest?"

"But then, why did they stop here last night?" asked Altamont.
"Well, that’s a question I can’t answer, but there is no doubt they will continue narrowing their circles, till they reach Fort Providence."

"We shall soon see," said Altamont.
"And, meantime, we had best go on," added the Doctor, "and keep a sharp look out."

But not a sign of anything living was visible, and after a time they returned to the snow-house.

Hatteras and Johnson were informed how matters stood, and it was resolved to maintain a vigilant watch. Night came, but nothing disturbed its calm splendour—nothing was heard to indicate approaching danger.

Next morning at early dawn, Hatteras and his companions, well armed, went out to reconnoitre the state of the snow. They found the same identical footmarks, but somewhat nearer. Evidently the enemy was bent on the siege of Fort Providence.

"But where can the bears be?" said Bell.
"Behind the icebergs watching us," replied the Doctor. "Don’t let us expose ourselves imprudently."
"What about going hunting, then?" asked Altamont.

"We must put it off for a day or two, I think, and rub out the marks again, and see if they are renewed to-morrow."

The Doctor’s advice was followed, and they entrenched themselves for the present in the fort. The lighthouse was taken down, as it was not of actual use meantime, and might help to attract the bears. Each took it in turn to keep watch on the upper plateau.

The day passed without a sign of the enemy’s existence, and next morning, when they hurried eagerly out to examine the snow, judge their astonishment to find it wholly untouched!

"Capital!" exclaimed Altamont. "The bears are put off the scent; they have no perseverance, and have grown tired waiting for us. They are off, and a good riddance. Now let us start for a day’s hunting."

"Softly, softly," said the Doctor; "I’m not so sure they have gone. I think we had better wait one day more. It is evident the bears have not been here last night, at least on this side; but still—"

"Well, let us go right round the plateau, and see how things stand," said the impatient Altamont.

"All right," said Clawbonny. "Come along."

Away they went, but it was impossible to scrutinize carefully a track of two miles, and no trace of the enemy was discoverable.

"Now, then, can’t we go hunting?" said Altamont.

"Wait till to-morrow," urged the Doctor again.

His friend was very unwilling to delay, but yielded the point at last, and returned to the fort.

As on the preceding night, each man took his hour’s watch on the upper plateau. When it came to Altamont’s turn, and he had gone out to relieve Bell, Hatteras called his old companions round him. The Doctor left his desk and Johnson his cooking, and hastened to their captain’s side, supposing he wanted to talk over their perilous situation; but Hatteras never gave it a thought.

"My friends," he said, "let us take advantage of the American’s absence to speak of business. There are things which cannot concern him, and with which I do not choose him to meddle."

Johnson and Clawbonny looked at each other, wondering what the captain was driving at.

"I wish," he continued, "to talk with you about our plans for the future."

"All right! talk away while we are alone," said the Doctor.

"In a month, or six weeks at the outside, the time for making distant excursions will come again. Have you thought of what we had better undertake in summer?"

"Have you, captain?" asked Johnson.

"Have I? I may say that not an hour of my life passes without revolving in my mind my one cherished purpose. I suppose not a man among you intends to retrace his steps?"

No one replied, and Hatteras went on to say—

"For my own part, even if I must go alone, I will push on to the North Pole. Never were men so near it before, for we are not more than 360 miles distant at most, and I will not lose such an opportunity without making every attempt to reach it, even though it be an impossibility. What are your views, Doctor?"

"Your own, Hatteras."

"And yours, Johnson?"

"Like the Doctor’s."

"And yours, Bell?"

"Captain," replied the carpenter, "it is true we have neither wives nor children waiting us in England, but, after all, it is one’s country—one’s native land! Have you no thoughts of returning home?"

"We can return after we have discovered the Pole quite as well as before, and even better. Our difficulties will not increase, for as we near the Pole we get away from the point of greatest cold. We have fuel and provisions enough. There is nothing to stop us, and we should be culpable, in my opinion, if we allowed ourselves to abandon the project."

"Very well, captain, I’ll go along with you."

"That’s right; I never doubted you," said Hatteras. "We shall succeed, and England will have all the glory."

"But there is an American among us!" said Johnson.

Hatteras could not repress an impatient exclamation.

"I know it!" he said, in a stern voice.

"We cannot leave him behind," added the Doctor.

"No, we can’t," repeated Hatteras, almost mechanically.

"And he will be sure to go too."
"Yes, he will go too; but who will command?"
"You, captain."
"And if you all obey my orders, will the Yankee refuse?"
"I shouldn't think so; but suppose he should, what can be done?"
"He and I must fight it out, then."
The three Englishmen looked at Hatteras, but said nothing. Then the Doctor asked how they were to go.
"By the coast, as far as possible," was the reply.
"But what if we find open water, as is likely enough?"
"Well, we'll go across it."
"But we have no boat."
Hatteras did not answer, and looked embarrassed.
"Perhaps," suggested Bell, "we might make a ship out of some of the planks of the Porpoise."
"Never!" exclaimed Hatteras, vehemently.
"Never!" said Johnson.
The Doctor shook his head. He understood the feeling of the captain.
"Never!" reiterated Hatteras. "A boat made out of an American ship would be an American!"
"But, captain——" began Johnson.
The Doctor made a sign to the old boatswain not to press the subject further, and resolved in his own mind to
reserve the question for discussion at a more opportune moment. He managed to turn the conversation to other
matters, till it abruptly terminated by the entrance of Altamont.

This ended the day, and the night passed quietly without the least disturbance. The bears had evidently
disappeared.

CHAPTER XII
IMPRISONED IN DOCTOR’S HOUSE

The first business next day was to arrange for a hunt. It was settled that Altamont, Bell, and Hatteras should form
the party, while Clawbonny should go and explore as far as Isle Johnson, and make some hydrographic notes and
Johnson should remain behind to keep house.

The three hunters soon completed their preparations. They armed themselves each with a double barreled
revolver and a rifle, and took plenty of powder and shot. Each man also carried in his belt his indispensable snow
knife and hatchet, and a small supply of pemmican in case night should surprise them before their return.

Thus equipped, they could go far, and might count on a good supply of game.

At eight o'clock they started, accompanied by Duk, who frisked and gambolled with delight. They went up the
hill to the east, across the cone, and down into the plain below.

The Doctor next took his departure, after agreeing with Johnson on a signal of alarm in case of danger.

The old boatswain was left alone, but he had plenty to do. He began by unfastening the Greenland dogs, and
letting them out for a run after their long, wearisome confinement. Then he attended to divers housekeeping matters.
He had to replenish the stock of combustibles and provisions, to arrange the store-houses, to mend several broken
utensils, to repair the rents in coverlets, and get new shoes ready for summer excursions. There was no lack of work,
and the old sailor's nimble clever fingers could do anything.

While his hands were busy, his mind was occupied with the conversation of the preceding evening. He thought
with regret over the captain's obstinacy, and yet he felt that there was something grand and even heroic in his
determination that neither an American nor an American ship should first touch the Pole.

The hunters had been gone about an hour when Johnson suddenly heard the report of a gun.
"Capital!" he exclaimed. "They have found something, and pretty quickly too, for me to hear their guns so
distinctly. The atmosphere must be very clear."

A second and a third shot followed.
"Bravo!" again exclaimed the boatswain; "they must have fallen in luck's way!"

But when three more shots came in rapid succession, the old man turned pale, and a horrible thought crossed his
mind, which made him rush out and climb hastily to the top of the cone. He shuddered at the sight which met his
eyes. The three hunters, followed by Duk, were tearing home at full speed, followed by the five huge bears! Their
six balls had evidently taken no effect, and the terrible monsters were close on their heels. Hatteras, who brought up
the rear, could only manage to keep off his pursuers by flinging down one article after another—first his cap, then
his hatchet, and, finally, his gun. He knew that the inquisitive bears would stop and examine every object, sniffing
all round it, and this gave him a little time, otherwise he could not have escaped, for these animals outstrip the
fleetest horse, and one monster was so near that Hatteras had to brandish his knife vigorously, to ward off a
tremendous blow of his paw.

At last, though panting and out of breath, the three men reached Johnson safely, and slid down the rock with him
into the snow-house. The bears stopped short on the upper plateau, and Hatteras and his companions lost no time in
barring and barricading them out.

"Here we are at last!" exclaimed Hatteras; "we can defend ourselves better now. It is five against five."

"Four!" said Johnson in a frightened voice.

"How?"

"The Doctor!" replied Johnson, pointing to the empty sitting-room.

"Well, he is in Isle Johnson."

"A bad job for him," said Bell.

"But we can't leave him to his fate, in this fashion," said Altamont.

"No, let's be off to find him at once," replied Hatteras.

He opened the door, but soon shut it, narrowly escaping a bear's hug.

"They are there!" he exclaimed.

"All?" asked Bell.

"The whole pack."

Altamont rushed to the windows, and began to fill up the deep embrasure with blocks of ice, which he broke off
the walls of the house.

His companions followed his example silently. Not a sound was heard but the low, deep growl of Duk.

To tell the simple truth, however, it was not their own danger that occupied their thoughts, but their absent
friend, the Doctor's. It was for him they trembled, not for themselves. Poor Clawbonny, so good and devoted as he
had been to every member of the little colony! This was the first time they had been separated from him. Extreme
peril, and most likely a frightful death awaited him, for he might return unsuspectingly to Fort Providence, and find
himself in the power of these ferocious animals.

"And yet," said Johnson, "unless I am much mistaken, he must be on guard. Your repeated shots cannot but have
warned him. He must surely be aware that something unusual has happened."

"But suppose he was too far away to hear them," replied Altamont, "or has not understood the cause of them? It
is ten chances to one but he'll come quickly back, never imagining the danger. The bears are screened from sight by
the crag completely."

"We must get rid of them before he comes," said Hatteras.

"But how?" asked Bell.

Altamont resolved to try a port-hole through which he might fire on his assailants. He had soon scooped out a hole in the wall, but his gun was hardly
pushed through, when it was seized with irresistible force, and wrested from his grasp before he could even fire.

"Confound it!" he exclaimed, "we're no match for them."

And he hastened to stop up the breach as fast as possible.

This state of things had lasted upwards of an hour, and there seemed no prospect of a termination. The question
of a sortie began now to be seriously discussed. There was little chance of success, as the bears could not be attacked
separately, but Hatteras and his companions had grown so impatient, and it must be confessed were also so much
ashamed of being kept in prison by beasts, that they would even have dared the risk if the captain had not suddenly
thought of a new mode of defence.

He took Johnson's furnace-poker, and thrust it into the stove while he made an opening in the snow wall, or
rather a partial opening, for he left a thin sheet of ice on the outer side. As soon as the poker was red hot, he said to
his comrades who stood eagerly watching him, wondering what he was going to do—

"This red-hot bar will keep off the bears when they try to get hold of it, and we shall be able easily to fire across
it without letting them snatch away our guns."

"A good idea," said Bell, posting himself beside Altamont.
Hatteras withdrew the poker, and instantly plunged it in the wall. The melting snow made a loud hissing noise, and two bears ran and made a snatch at the glowing bar; but they fell back with a terrible howl, and at the same moment four shots resounded, one after the other.

"Hit!" exclaimed Altamont.
"Hit!" echoed Bell.
"Let us repeat the dose," said Hatteras, carefully stopping up the opening meantime.
The poker was again thrust into the fire, and in a few minutes was ready for Hatteras to recommence operations. Altamont and Bell reloaded their guns, and took their places; but this time the poker would not pass through.
"Confound the beasts!" exclaimed the impetuous American.
"What’s the matter?" asked Johnson.
"What’s the matter? Why, those plaguey animals are piling up block after block, intending to bury us alive!"
"Impossible!"
"Look for yourself; the poker can’t get through. I declare it is getting absurd now."
It was worse than absurd, it was alarming. Things grew worse. It was evident that the bears meant to stifle their prey, for the sagacious animals were heaping up huge masses, which would make escape impossible.
"It is too bad," said old Johnson, with a mortified look. "One might put up with men, but bears!"
Illustration: ]
Two hours elapsed without bringing any relief to the prisoners; to go out was impossible, and the thick walls excluded all sound. Altamont walked impatiently up and down full of exasperation and excitement at finding himself worsted for once. Hatteras could think of nothing but the Doctor, and of the serious peril which threatened him.
Illustration: ]
"Oh, if Mr. Clawbonny were only here!" said Johnson.
"What could he do?" asked Altamont.
"Oh, he’d manage to get us out somehow."
"How, pray?" said the American, crossly.
"If I knew that I should not need him. However, I know what his advice just now would be."
"What?"
"To take some food; that can’t hurt us. What do you say, Mr. Altamont?"
"Oh, let’s eat, by all means, if that will please you, though we’re in a ridiculous, not to say humiliating, plight."
"I’ll bet you we’ll find a way out after dinner."
No one replied, but they seated themselves round the table.
Illustration: ]
Johnson, trained in Clawbonny’s school, tried to be brave and unconcerned about the danger, but he could scarcely manage it. His jokes stuck in his throat. Moreover, the whole party began to feel uncomfortable. The atmosphere was getting dense, for every opening was hermetically sealed. The stoves would hardly draw, and it was evident would soon go out altogether for want of oxygen.
Hatteras was the first to see their fresh danger, and he made no attempt to hide it from his companions.
"If that is the case," said Altamont, "we must get out at all risks."
"Yes," replied Hatteras; "but let us wait till night. We will make a hole in the roof, and let in a provision of air, and then one of us can fire out of it on the bears."
"It is the only thing we can do, I suppose," said Altamont.
So it was agreed; but waiting was hard work, and Altamont could not refrain from giving vent to his impatience by thundering maldictions on the bears, and abusing the ill fate which had placed them in such an awkward and humiliating predicament. "It was beasts versus men," he said, "and certainly the men cut a pretty figure."

CHAPTER XIII.
THE MINE.
Night drew on, and the lamp in the sitting-room already began to burn dim for want of oxygen.
At eight o’clock the final arrangements were completed, and all that remained to do was to make an opening in the roof.
They had been working away at this for some minutes, and Bell was showing himself quite an adept in the business, when Johnson, who had been keeping watch in the sleeping room, came hurriedly in to his companions, pulling such a long face, that the captain asked immediately what was the matter?
"Nothing exactly," said the old sailor, "and yet——"
"Come, out with it!" exclaimed Altamont.
"Hush! don’t you hear a peculiar noise?"
"Where?"
"Here, on this side, on the wall of the room."
Bell stopped working, and listened attentively like the rest. Johnson was right; a noise there certainly was on the side wall, as if some one were cutting the ice.
"Don't you hear it?" repeated Johnson.
"Hear it? Yes, plain enough," replied Altamont.
"Is it the bears?" asked Bell.
"Most assuredly."
"Well; they have changed their tactics," said old Johnson, "and given up the idea of suffocating us."
"Or may be they suppose we are suffocated by now," suggested the American, getting furious at his invisible enemies.
"They are going to attack us," said Bell.
"Well, what of it?" returned Hatteras.
"We shall have a hand-to-hand struggle, that’s all."
"And so much the better," added Altamont; "that’s far more to my taste; I have had enough of invisible foes—let me see my antagonist, and then I can fight him."
"Ay," said Johnson; "but not with guns. They would be useless here."
"With knife and hatchet then," returned the American.
The noise increased, and it was evident that the point of attack was the angle of the wall formed by its junction with the cliff.
"They are hardly six feet off now," said the boatswain.
"Right, Johnson!" replied Altamont; "but we have time enough to be ready for them."
And seizing a hatchet, he placed himself in fighting attitude, planting his right foot firmly forward and throwing himself back.
Hatteras and the others followed his example, and Johnson took care to load a gun in case of necessity.
Every minute the sound came nearer, till at last only a thin coating separated them from their assailants.
Presently this gave way with a loud crack, and a huge dark mass rolled over into the room.
Altamont had already swung his hatchet to strike, when he was arrested by a well-known voice, exclaiming—
"For Heaven’s sake, stop!"
"The Doctor! the Doctor!" cried Johnson.
And the Doctor it actually was who had tumbled in among them in such undignified fashion.
"How do ye do, good friends?" he said, picking himself smartly up.
His companions stood stupefied for a moment, but joy soon loosened their tongues, and each rushed eagerly forward to welcome his old comrade with a loving embrace. Hatteras was for once fairly overcome with emotion, and positively hugged him like a child.
"And is it really you, Mr. Clawbonny?" said Johnson.
"Myself and nobody else, my old fellow. I assure you I have been far more uneasy about you than you could have been about me."
"But how did you know we had been attacked by a troop of bears?" asked Altamont. "What we were most afraid of was that you would come quickly back to Fort Providence, never dreaming of danger."
"Oh, I saw it all. Your repeated shots gave me the alarm. When you commenced firing I was beside the wreck of the Porpoise, but I climbed up a hummock, and discovered five bears close on your heels. Oh, how anxious I was for you! But when I saw you disappear down the cliff, while the bears stood hesitating on the edge, as if uncertain what to do, I felt sure that you had managed to get safely inside the house and barricade it. I crept cautiously nearer, sometimes going on all-fours, sometimes slipping between great blocks of ice, till I came at last quite close to our fort, and then I found the bears working away like beavers. They were prowling about the snow, and dragging enormous blocks of ice towards the house, piling them up like a wall, evidently intending to bury you alive. It is a lucky thing they did not take it into their heads to dash down the blocks from the summit of the cone, for you must have been crushed inevitably."
"But what danger you were in, Mr. Clawbonny," said Bell. "Any moment they might have turned round and attacked you."
"They never thought of it even. Johnson’s Greenland dogs came in sight several times, but they did not take the trouble to go after them. No, they imagined themselves sure of a more savoury supper!"
"Thanks for the compliment!" said Altamont, laughing.
"Oh, there is nothing to be proud of. When I saw what the bears were up to, I determined to get back to you by
some means or other. I waited till night, but as soon as it got dark I glided noiselessly along towards the powder-magazine. I had my reasons for choosing that point from which to work my way hither, and I speedily commenced operations with my snow-knife. A famous tool it is. For three mortal hours I have been hacking and heaving away, but here I am at last tired enough and starving, but still safe here."

"To share our fate!" said Altamont.
"No, to save you all; but, for any sake, give me a biscuit and a bit of meat, for I feel sinking for want of food."
A substantial meal was soon before him, but the vivacious little man could talk all the while he was eating, and was quite ready to answer any questions.
"Did you say to save us?" asked Bell.
"Most assuredly!" was the reply.
"Well, certainly, if you found your way in, we can find our way out by the same road."
"A likely story, and leave the field clear for the whole pack to come in and find out our stores. Pretty havoc they would make!"
"No, we must stay here," said Hatteras.
"Of course we must," replied Clawbonny, "but we'll get rid of the bears for all that."
"I told you so," said Johnson, rubbing his hands. "I knew nothing was hopeless if Mr. Clawbonny was here; he has always some expedient in his wise head."
"My poor head is very empty, I fear, but by dint of rummaging perhaps I——"
"Doctor," interrupted Altamont, "I suppose there is no fear of the bears getting in by the passage you have made?"
"No, I took care to stop up the opening thoroughly, and now we can reach the powder-magazine without letting them see us."
"All right; and now will you let us have your plan of getting rid of these comical assailants?"
[Illustration: ]
"My plan is quite simple, and part of the work is done already."
"What do you mean?"
"You shall see. But I am forgetting that I brought a companion with me."
"What do you say?" said Johnson.
"I have a companion to introduce to you," replied the Doctor, going out again into the passage, and bringing back a dead fox, newly killed.
"I shot it this morning," he continued, "and never did fox come more opportunely."
"What on earth do you mean?" asked Altamont.
"I mean to blow up the bears en masse with 100 lbs of powder."
"But where is the powder?" exclaimed his friend.
"In the magazine. This passage will lead to it. I made it purposely."
"And where is the mine to be?" inquired Altamont.
"At the furthest point from the house and stores."
"And how will you manage to entice the bears there, all to one spot?"
"I'll undertake that business; but we have talked enough, let us set to work. We have a hundred feet more to add to our passage to-night, and that is no easy matter, but as there are five of us, we can take turns at it. Bell will begin, and we will lie down and sleep meantime."
"Well, really," said Johnson, "the more I think of it, the more feasible seems the Doctor's plan."
"It is a sure one, anyway," said Clawbonny.
"So sure that I can feel the bear's fur already on my shoulder. Well, come, let's begin then."
Away he went into the gloomy passage, followed by Bell, and in a few moments they had reached the powder-magazine, and stood among the well-arranged barrels. The Doctor pointed out to his companion the exact spot where he began excavating, and then left him to his task, at which he laboured diligently for about an hour, when Altamont came to relieve him. All the snow he had dug out was taken to the kitchen and melted, to prevent its taking up room.
The captain succeeded Altamont, and was followed by Johnson. In ten hours—that is to say, about eight in the morning—the gallery was entirely open.
[Illustration: ]
With the first streak of day, the Doctor was up to reconnoitre the position of the enemy. The patient animals were still occupying their old position, prowling up and down and growling. The house had already almost disappeared beneath the piled-up blocks of ice, but even while he gazed a council of war seemed being held, which evidently resulted in the determination to alter the plan of action, for suddenly all the five bears began vigorously to
pull down these same heaped-up blocks.

"What are they about?" asked Hatteras, who was standing beside him.

"Well, they look to me to be bent on demolishing their own work, and getting right down to us as fast as possible; but wait a bit, my gentlemen, we'll demolish you first. However, we have not a minute to lose."

Hastening away to the mine, he had the chamber where the powder was to be lodged enlarged the whole breadth and height of the sloping rock against which the wall leaned, till the upper part was about a foot thick, and had to be propped up to prevent its falling in. A strong stake was fixed firmly on the granite foundation, on the top of which the dead fox was fastened. A rope was attached to the lower part of the stake, sufficiently long to reach the powder stores.

"This is the bait," he said, pointing to the dead fox, "and here is the mine," he added, rolling in a keg of powder containing about 100 lbs.

"But, Doctor," said Hatteras, "won't that blow us up too, as well as the bears?"

"No, we shall be too far from the scene of explosion. Besides, our house is solid, and we can soon repair the walls even if they should get a bit shaken."

"And how do you propose to manage?" asked Altamont.

"See! By hauling in this rope we lower the post which props up the roof, and make it give way, and bring up the dead fox to light, and I think you will agree with me that the bears are so famished with their long fasting, that they won't lose much time in rushing towards their unexpected meal. Well, just at that very moment, I shall set fire to the mine, and blow up both the guests and the meal."

"Capital! Capital!" shouted Johnson, who had been listening with intense interest.

[Illustration: ]

Hatteras said nothing, for he had such absolute confidence in his friend that he wanted no further explanation. But Altamont must know the why and wherefore of everything.

"But Doctor," he said, "can you reckon on your match so exactly that you can be quite sure it will fire the mine at the right moment?"

"I don't need to reckon at all; that's a difficulty easily got over."

"Then you have a match a hundred feet long?"

"No."

"You are simply going to lay a train of powder."

"No, that might miss fire."

"Well, there is no way then but for one of us to devote his life to the others, and go and light the powder himself."

"I'm ready," said Johnson, eagerly, "ready and willing."

"Quite useless my brave fellow," replied the Doctor, holding out his hand. "All our lives are precious, and they will be all spared, thank God!"

"Well, I give it up!" said the American. "I'll make no more guesses."

"I should like to know what is the good of learning physics," said the Doctor, smiling, "if they can't help a man at a pinch like this. Haven't we an electric battery, and long enough lines attached to it to serve our purpose? We can fire our mine whenever we please in an instant, and without the slightest danger."

"Hurrah!" exclaimed Johnson.

"Hurrah!" echoed the others, without heeding whether the enemy heard them or not.

The Doctor's idea was immediately carried out, and the connecting lines uncoiled and laid down from the house to the chamber of the mine, one end of each remaining attached to the electric pile, and the other inserted into the keg of powder.

By nine o'clock everything was ready. It was high time, for the bears were furiously engaged in the work of demolition. Johnson was stationed in the powder-magazine, in charge of the cord which held the bait.

"Now," said Clawbonny to his companions, "load your guns, in case our assailants are not killed. Stand beside Johnson, and the moment the explosion is over rush out."

[Illustration: ]

"All right," said Altamont.

"And now we have done all we can to help ourselves. So may Heaven help us!"

Hatteras, Altamont, and Bell repaired to the powder-magazine, while the Doctor remained alone beside the pile. Soon he heard Johnson's voice in the distance calling out "Ready."

"All right," was the reply.

Johnson pulled his rope vigorously, and then rushed to the loop-hole to see the effect. The thin shell of ice had given way, and the body of the fox lay among the ruins. The bears were somewhat scared at first, but the next
minute had eagerly rushed to seize the booty.

"Fire!" called out Johnson, and at once the electric spark was sent along the lines right into the keg of powder. A formidable explosion ensued; the house was shaken as if by an earthquake, and the walls cracked asunder. Hatteras, Alamont, and Bell hurried out with the guns, but they might spare their shot, for four of the bears lay dead, and the fifth, half roasted, though alive, was scampering away in terror as fast as his legs could carry him.

"Hurrah! Three cheers for Clawbonny," they shouted and overwhelmed the Doctor with plaudits and thanks.

CHAPTER XIV.
AN ARCTIC SPRING.

The prisoners were free, and their joy found vent in the noisiest demonstrations. They employed the rest of the day in repairing the house, which had suffered greatly by the explosion. They cleared away the blocks piled up by the animals, and filled up the rents in the walls, working with might and main, enlivened by the many songs of old Johnson.

Next morning there was a singular rise in the temperature, the thermometer going up to 15° above zero. This comparative heat lasted several days. In sheltered spots the glass rose as high as 31°, and symptoms of a thaw appeared.

The ice began to crack here and there, and jets of salt water were thrown up, like fountains in an English park. A few days later, the rain fell in torrents.

Thick vapour rose from the snow, giving promise of the speedy disappearance of these immense masses. The sun’s pale disc became deeper in colour, and remained longer above the horizon. The night was scarcely longer than three hours.

Other tokens of spring’s approach were manifest of equal significance, the birds were returning in flocks, and the air resounded with their deafening cries. Hares were seen on the shores of the bay, and mice in such abundance that their burrows completely honeycombed the ground.

The Doctor drew the attention of his companions to the fact, that almost all these animals were beginning to lose their white winter dress, and would soon put on summer attire, while nature was already providing mosses, and poppies, and saxifrags, and short grass for their sustenance. A new world lay beneath that melting snow.

But with these inoffensive animals came back their natural enemies. Foxes and wolves arrived in search of their prey, and dismal howls broke the silence of the short night.

Arctic wolves closely resemble dogs, and their barking would deceive the most practised ears; even the canine race themselves have been deceived by it. Indeed, it seems as if the wily animals employed this ruse to attract the dogs, and make them their prey. Several navigators have mentioned the fact, and the Doctor’s own experience confirmed it. Johnson took care not to let his Greenlanders loose; of Duk there was little fear; nothing could take him in.

For about a fortnight hunting was the principal occupation. There was an abundant supply of fresh meat to be had. They shot partridges, ptarmigans, and snow ortolans, which are delicious eating. The hunters never went far from Fort Providence, for game was so plentiful that it seemed waiting their guns, and the whole bay presented an animated appearance.

The thaw, meanwhile, was making rapid progress. The thermometer stood steadily at 32° above zero, and the water ran down the mountain sides in cataracts, and dashed in torrents through the ravines.

The Doctor lost no time in clearing about an acre of ground, in which he sowed the seeds of anti-scorbutic plants. He just had the pleasure of seeing tiny little green leaves begin to sprout, when the cold returned in full force.

In a single night, the thermometer lost nearly 40°; it went down to 8° below zero. Everything was frozen—birds, quadrupeds, amphibia disappeared as if by magic; seal-holes reclosed, and the ice once more became hard as granite.

The change was most striking; it occurred on the 18th of May, during the night. The Doctor was rather disappointed at having all his work to do again, but Hatteras bore the grievance most unphilosophically, as it interfered with all his plans of speedy departure.

"Do you think we shall have a long spell of this weather, Mr. Clawbonny?" asked Johnson.

"No, my friend, I don’t; it is a last blow from the cold. You see these are his dominions, and he won’t be driven out without making some resistance."

"He can defend himself pretty well," said Bell, rubbing his face.

"Yes; but I ought to have waited, and not have wasted my seed like an ignoramus; and all the more as I could, if necessary, have made them sprout by the kitchen stoves."
"But do you mean to say," asked Altamont, "that you might have anticipated the sudden change?"

"Of course, and without being a wizard. I ought to have put my seed under the protection of Saint Paucratius and the other two saints, whose fête days fall this month."

"Absurd! Pray tell me what they have to do with it? What influence can they possibly have on the temperature?"

"An immense one, if we are to believe horticulturists, who call them the patron saints of the frost."

"And for what reason?"

"Because generally there is a periodical frost in the month of May, and it is coldest from the 11th to the 13th. That is the fact."

"And how is it explained?"

"In two ways. Some say that a larger number of asteroids come between the earth and the sun at this time of year, and others that the mere melting of the snow necessarily absorbs a large amount of heat, and accounts for the low temperature. Both theories are plausible enough, but the fact remains whichever we accept, and I ought to have remembered it."

The Doctor was right, for the cold lasted till the end of the month, and put an end to all their hunting expeditions. The old monotonous life in-doors recommenced, and was unmarked by any incident except a serious illness which suddenly attacked Bell. This was violent quinsy, but, under the Doctor’s skilful treatment, it was soon cured. Ice was the only remedy he employed, administered in small pieces, and in twenty-four hours Bell was himself again.

During this compulsory leisure, Clawbonny determined to have a talk with the captain on an important subject—the building of a sloop out of the planks of the Porpoise.

The Doctor hardly knew how to begin, as Hatteras had declared so vehemently that he would never consent to use a morsel of American wood; yet it was high time he were brought to reason, as June was at hand, the only season for distant expeditions, and they could not start without a ship.

He thought over it a long while, and at last drew the captain aside, and said in the kindest, gentlest way—

"Hatteras, do you believe I’m your friend?"

"Most certainly I do," replied the captain, earnestly; "my best, indeed my only friend."

"And if I give you a piece of advice without your asking, will you consider my motive is perfectly disinterested?"

"Yes, for I know you have never been actuated by self-interest. But what are you driving at?"

"Wait, Hatteras, I have one thing more to ask. Do you look on me as a true-hearted Englishman like yourself, anxious for his country’s glory?"

Hatteras looked surprised, but simply said—

"I do."

"You desire to reach the North Pole," the Doctor went on; "and I understand and share your ambition, but to achieve your object you must employ the right means."

"Well, and have I not sacrificed everything for it?"

"No, Hatteras, you have not sacrificed your personal antipathies. Even at this very moment I know you are in the mood to refuse the indispensable conditions of reaching the pole."

"Ah! it is the boat you want to talk about, and that man——"

"Hatteras, let us discuss the question calmly, and examine the case on all sides. The coast on which we find ourselves at present may terminate abruptly; we have no proof that it stretches right away to the pole; indeed, if your present information prove correct, we ought to come to an open sea during the summer months. Well, supposing we reach this Arctic Ocean and find it free from ice and easy to navigate, what shall we do if we have no ship?"

Hatteras made no reply.

"Tell me, now, would you like to find yourself only a few miles from the pole and not be able to get to it?"

Hatteras made no reply. "No," continued Clawbonny; "the real truth is, it is not the sloop you care about: it is the man."

"Yes, Doctor, yes," replied the captain. "It is this American I detest; I hate him with a thorough English hatred. Fate has thrown him in my path."
"To save you!"
"To ruin me. He seems to defy me, and speaks as if he were lord and master. He thinks he has my destiny in his hands, and knows all my projects. Didn't we see the man in his true colours when we were giving names to the different coasts? Has he ever avowed his object in coming so far north? You will never get out of my head that this man is not the leader of some expedition sent out by the American government."
"Well, Hatteras, suppose it is so, does it follow that this expedition is to search for the North Pole? May it not be to find the North-West Passage? But anyway, Altamont is in complete ignorance of our object, for neither Johnson, nor Bell, nor myself, have ever breathed a word to him about it, and I am sure you have not."
"Well, let him always remain so."
"He must be told in the end, for we can't leave him here alone."
"Why not? Can't he stay here in Fort Providence?"
"He would never consent to that, Hatteras; and, moreover, to leave a man in that way, and not know whether we might find him safe when we came back, would be worse than imprudent: it would be inhuman. Altamont will come with us; he must come. But we need not disclose our projects; let us tell him nothing, but simply build a sloop for the ostensible purpose of making a survey of the coast."
Hatteras could not bring himself to consent, but said—
"And suppose the man won't allow his ship to be cut up?"
"In that case, you must take the law in your own hands, and build a vessel in spite of him."
"I wish to goodness he would refuse, then!"
"He must be asked before he can refuse. I'll undertake the asking," said Clawbonny.
He kept his word, for that very same night, at supper, he managed to turn the conversation towards the subject of making excursions during summer for hydrographical purposes.
"You will join us, I suppose, Altamont," he said.
"Of course," replied the American. "We must know how far New America extends."
Hatteras looked fixedly at his rival, but said nothing.
"And for that purpose," continued Altamont, "we had better build a little ship out of the remains of the Porpoise. It is the best possible use we can make of her."
"You hear, Bell," said the Doctor, eagerly. "We'll all set to work to-morrow morning."
[Illustration: The carpenter began his task immediately.—P.154]
CHAPTER XV.
THE NORTH-WEST PASSAGE.
Next morning, Altamont Bell and the Doctor repaired to the Porpoise. There was no lack of wood, for, shattered as the old "three-master" had been by the icebergs, she could still supply the principal parts of a new ship, and the carpenter began his task immediately.
In the end of May, the temperature again rose, and spring returned for good and all. Rain fell copiously, and before long the melting snow was running down every little slope in falls and cascades.
Hatteras could not contain his delight at these signs of a general thaw among the ice-fields, for an open sea would bring him liberty. At last he might hope to ascertain for himself whether his predecessors were correct in their assertions about a polar basin.
This was a frequent topic of thought and conversation with him, and one evening when he was going over all the old familiar arguments in support of his theory, Altamont took up the subject, and declared his opinion that the polar basin extended west as well as east. But it was impossible for the American and Englishman, to talk long about anything without coming to words, so intensely national were both. Dr. Kane was the first bone of contention on this occasion, for the jealous Englishman was unwilling to grant his rival the glory of being a discoverer, alleging his belief that though the brave adventurer had gone far north, it was by mere chance he had made a discovery.
[Illustration: ]
"Chance!" interrupted Altamont, hotly. "Do you mean to assert that it is not to Kane's energy and science that we owe his great discovery?"
"I mean to say that Dr. Kane's name is not worth mentioning in a country made illustrious by such names as Parry, and Franklin, and Ross, and Belcher, and Penny; in a country where the seas opened the North-West Passage to an Englishman—McClure!"
"McClure!" exclaimed the American. "Well, if ever chance favoured anyone it was that McClure. Do you pretend to deny it?"
"I do," said Hatteras, becoming quite excited. "It was his courage and perseverance in remaining four whole winters among the ice."
"I believe that, don't I?" said Altamont, sneeringly. "He was caught among the bergs and could not get away; but
didn’t he after all abandon his ship, the Investigator, and try to get back home? Besides, putting the man aside, what is the value of his discovery? I maintain that the North-West Passage is still undiscovered, for not a single ship to this day has ever sailed from Behring’s Straits to Baffin’s Bay!"

The fact was indisputable, but Hatteras started to his feet, and said—

"I will not permit the honour of an English captain to be attacked in my presence any longer!"

"You will not permit!" echoed Altamont, also springing erect. "But these are facts, and it is out of your power to destroy them!"

"Sir!" shouted Hatteras, pale with rage.

"My friends!" interposed the Doctor; "pray be calm. This is a scientific point we are discussing."

But Hatteras was deaf to reason now, and said angrily—

"I’ll tell you the facts, sir."

"And I’ll tell you," retorted the irate American.

"Gentlemen," said Clawbonny, in a firm tone; "allow me to speak, for I know the facts of the case as well as and perhaps better than you, and I can state them impartially."

[Illustration: ]

"Yes, yes!" cried Bell and Johnson, who had been anxiously watching the strife.

"Well, go on," said Altamont, finding himself in the minority, while Hatteras simply made a sign of acquiescence, and resumed his seat.

The Doctor brought a chart and spread it out on the table, that his auditors might follow his narration intelligibly, and be able to judge the merits of McClure for themselves.

"It was in 1848," he said, "that two vessels, the Herald and the Plover, were sent out in search of Franklin, but their efforts proving ineffectual, two others were despatched to assist them—the Investigator, in command of McClure, and the Enterprise, in command of Captain Collison. The Investigator arrived first in Behring’s Straits, and without waiting for her consort, set out with the declared purpose to find Franklin or the North-West Passage. The gallant young officer hoped to push north as far as Melville Sound, but just at the extremity of the Strait, he was stopped by an insurmountable barrier of ice, and forced to winter there. During the long, dreary months, however, he and his officers undertook a journey over the ice-field, to make sure of its communicating with Melville Sound."

"Yes, but he did not get through," said Altamont.

"Stop a bit," replied Clawbonny; "as soon as a thaw set in, McClure renewed his attempt to bring his ship into Melville Sound, and had succeeded in getting within twenty miles, when contrary winds set in, and dragged her south with irresistible violence. This decided the captain to alter his course. He determined to go in a westerly direction; but after a fearful struggle with icebergs, he stuck fast in the first of the series of straits

[Illustration: ]

which end in Baffin’s Bay, and was obliged to winter in Mercy Bay. His provisions would only hold out eighteen months longer, but he would not give up. He set out on a sledge, and reached Melville Island, hoping to fall in with some ship or other, but all he found in Winter Harbour was a cairn, which contained a document, stating that Captain Austin’s lieutenant, McClintock, had been there the preceding year. McClure replaced this document by another, which stated his intention of returning to England by the North-West Passage he had discovered, by Lancaster Sound and Baffin’s Bay, and that in the event of his not being heard of, he might be looked for north or west of Melville Island. Then he went back to Mercy Bay with undaunted courage, to pass a third winter. By the beginning of March his stock of provisions was so reduced in consequence of the utter scarcity of game through the severity of the season, that McClure resolved to send half his men to England, either by Baffin’s Bay or by McKenzie River and Hudson’s Bay. The other half would manage to work the vessel to Europe. He kept all his best sailors, and selected for departure only those to whom a fourth winter would have been fatal. Everything was arranged for their leaving, and the day fixed, when McClure, who was out walking with Lieutenant Craswell, observed a man running towards them, flinging up his arms and gesticulating frantically, and on getting nearer recognized him as Lieutenant Prim, officer on board the Herald, one of the ships he had parted with in Behring’s Straits two years before.

Captain Kellett, the Commander, had reached Winter Harbour, and finding McClure’s document in the cairn, had dispatched his lieutenant in search of him. McClure accompanied him back, and arranged with the captain to send him his batch of invalids. Lieutenant Craswell took charge of these and conveyed them safely to Winter Harbour. Leaving them there he went across the ice four hundred and seventy miles, and arrived at Isle Beechy, where, a few days afterwards, he took passage with twelve men on board the Phoenix, and reached London safely on the 7th of October, 1853, having traversed the whole extent between Behring’s Straits and Cape Farewell."

"Well, if arriving on one side and leaving at the other is not going through, I don’t know what is!" said Hatteras.

"Yes, but he went four hundred and seventy miles over ice-fields," objected Altamont.
"What of that?"
"Everything; that is the gist of the whole argument. It was not the Investigator that went through."
"No," replied Clawbonny, "for, at the close of the fourth winter, McClure was obliged to leave her among the ice."
"Well, in maritime expeditions the vessel has to get through, and not the man; and if ever the Northwest Passage is practicable, it will be for ships and not sledges. If a ship cannot go, a sloop must."
"A sloop!" exclaimed Hatteras, discovering a hidden meaning in the words.
"Altamont," said the Doctor, "your distinction is simply puerile, and in that respect we all consider that you are in the wrong."
"You may easily do that," returned the American. "It is four against one, but that will not prevent me from holding my own opinion."
"Keep it and welcome, but keep it to yourself, if you please, for the future," exclaimed Hatteras.
"And pray what right have you to speak to me like this, sir?" shouted Altamont, in a fury.
"My right as captain," returned Hatteras, equally angry.
"Am I to submit to your orders, then?"
"Most assuredly, and woe to you if——"

The Doctor did not allow him to proceed, for he really feared the two antagonists might come to blows.—P.162

The Doctor did not allow him to proceed, for he really feared the two antagonists might come to blows. Bell and Johnson seconded his endeavours to make peace, and, after a few conciliatory words, Altamont turned on his heel, and walked carelessly away, whistling "Yankee Doodle." Hatteras went outside, and paced up and down with rapid strides. In about an hour he came back, and retired to bed without saying another word.

CHAPTER XVI.
ARCTIC ARCADIA

On the 29th of May, for the first time, the sun never set. His glowing disc just touched the boundary line of the horizon, and rose again immediately. The period was now entered when the day lasts twenty-four hours.

Next morning there was a magnificent halo; the monarch of day appeared surrounded by a luminous circle, radiant with all the prismatic colours. This phenomenon never lost its charm, for the Doctor, however frequently it occurred, and he always noted carefully down all particulars respecting it.

Before long the feathered tribes began to return, filling the air with their discordant cries. Flocks of bustards and Canadian geese from Florida or Arkansas came flying north with marvellous rapidity, bringing spring beneath their wings. The Doctor shot several, and among them one or two cranes and a solitary stork.

The snow was now fast melting, and the ice-fields were covered with "slush." All round the bay large pools had formed, between which the soil appeared as if some product of spring.

The Doctor recommenced his sowing, for he had plenty of seed; but he was surprised to find sorrel growing already between the half-dried stones, and even pale sickly heaths, trying to show their delicate pink blossoms.

At last it began to be really hot weather. On the 15th of June, the thermometer stood at 57° above zero. The Doctor scarcely believed his eyes, but it was a positive fact, and it was soon confirmed by the changed appearance of the country.

The three hunters, accompanied by Duk, set out on Monday, the 17th of June, at six in the morning, each man armed with a double-barrelled gun, a hatchet and snow-knife, and provisions for several days.
It was a fine bright morning, and by ten o’clock they had gone twelve miles; but not a living thing had crossed
their path, and the hunt threatened to turn out a mere excursion.

However, they went on in hope, after a good breakfast and half-an-hour’s rest.

The ground was getting gradually lower, and presented a peculiar appearance from the snow, which lay here and
there in ridges unmelted. At a distance it looked like the sea when a strong wind is lashing up the waves, and
cresting them with a white foam.

[Illustration: ]

Before long they reached a sort of glen, at the bottom of which was a winding river. It was almost completely
thawed, and already the banks were clothed with a species of vegetation, as if the sun had done his best to fertilise
the soil.

"I tell you what," said the Doctor, "a few enterprising colonists might make a fine settlement here. With a little
industry and perseverance wonders might be done in this country. Ah! if I am not much mistaken, it has some four-
footed inhabitants already. Those frisky little fellows know the best spots to choose."

"Hares! I declare. That’s jolly!" said Altamont, loading his gun.

[Illustration: ]

"Stop!" cried the Doctor; "stop, you furious hunter. Let the poor little things alone; they are not thinking of
running away. Look, they are actually coming to us, I do believe!"

He was right, for presently three or four young hares, gambolling away among the fresh moss and tiny heaths,
came running about their legs so fearlessly and trustfully, that even Altamont was disarmed. They

[Illustration: It was a strange and touching spectacle to see the pretty creatures—they flew on Clawbonny’s
shoulders, etc.—P.169]
rubbed against the Doctor’s knees, and let him stroke them till the kind-hearted man could not help saying to
Altamont—

"Why give shot to those who come for caresses? The death of these little beasts could do us no good."

"You say what’s true, Clawbonny. Let them live!" replied Hatteras.

[Illustration: ]

"And these ptarmigans too, I suppose, and these long-legged plovers," added Altamont, as a whole covey of
birds flew down among the hunters, never suspecting their danger. Duk could not tell what to make of it, and stood
stupefied.

It was a strange and touching spectacle to see the pretty creatures; they flew on Clawbonny’s shoulders, and lay
down at his feet as if inviting friendly caresses, and doing their utmost to welcome the strangers. The whole glen
echoed with their joyous cries as they darted to and fro from all parts. The good Doctor seemed some mighty
enchanter.

The hunters had continued their course along the banks of the river, when a sudden bend in the valley revealed a
herd of deer, eight or ten in number, peacefully browsing on some lichens that lay half-buried in the snow. They
were charming creatures, so graceful and gentle, male and female, both adorned with noble antlers, wide-spreading
and deeply-notched. Their skin had already lost its winter whiteness, and began to assume the brown tint of
summer. Strange to say, they appeared not a whit more afraid than the birds or hares.

The three men were now right in the centre of the herd, but not one made the least movement to run away. This
time the worthy Doctor had far more difficulty in restraining Altamont’s impatience, for the mere sight of such
magnificent animals roused his hunting instincts, and he became quite excited; while Hatteras, on the contrary,
seemed really touched to see the splendid creatures rubbing their heads so affectionately and trustfully against
the good Clawbonny, the friend of every living thing.

"But, I say," exclaimed Altamont, "didn’t we come out expressly to hunt?"

"To hunt the musk-ox, and nothing else," replied Clawbonny. "Besides, we shouldn’t know what to do with this
game, even if we killed it; we have provisions enough. Let us for once enjoy the sight of men and animals in perfect
amity."

"It proves no human beings have been here before," said Hatteras.

"True, and that proves something more, these animals are not of American origin."

"How do you make that out?" said Altamont.

"Why, if they had been born in North America they would have known how to treat that mammiferous biped
called man, and would have fled at the first glimpse of us. No, they are from the north, most likely from the
untrodden wilds of Asia, so Altamont, you have no right to claim them as fellow-countrymen."

[Illustration: ]

"Oh! a hunter doesn’t examine his game so closely as all that. Everything is grist that comes to his mill."

"All right. Calm yourself, my brave Nimrod! For my own part, I would rather never fire another shot than make
one of these beautiful creatures afraid of me. See, even Duk fraternizes with them. Believe me, it is well to be kind
where we can. Kindness is power."

"Well, well, so be it," said Altamont, not at all understanding such scruples. "But I should like to see what you
would do if you had no weapon but kindness among a pack of bears or wolves! You wouldn’t make much of it."

"I make no pretensions to charm wild beasts. I don’t believe much in Orpheus and his enchantments. Besides,
bears and wolves would not come to us like these hares, and partridges, and deer."

"Why not? They have never seen human beings either."

"No but they are savage by nature," said Clawbonny, "and ferocity, like wickedness, engenders suspicion. This is
true of men as well as animals."

They spent the whole day in the glen, which the Doctor christened "Arctic Arcadia," and when evening came
they lay down to rest in the hollow of a rock, which seemed as if expressly prepared for their accommodation.

CHAPTER XVII.
ALTAMONT’S REVENGE.

Next morning, as the fine weather still continued, the hunters determined to have another search for the musk ox.
It was only fair to give Altamont a chance, with the distinct understanding that he should have the right of firing,
however fascinating the game they might meet. Besides, the flesh of the musk ox, though a little too highly
impregnated with the smell, is savoury food, and the hunters would gladly carry back a few pounds of it to Fort
Providence.

During the first part of the day, nothing occurred worth mentioning, but they noticed a considerable change in
the aspect of the country, and appearances seemed to indicate that they were approaching a hilly region. This New
America was evidently either a continent or an island of considerable extent.

Duk was running far ahead of his party when he stopped suddenly short, and began sniffing the ground as if he
had caught scent of game. Next minute he rushed forward again with extreme rapidity, and was speedily out of
sight. But loud distinct barking convinced the hunters that the faithful fellow had at last discovered the desired
object.

They hurried onwards, and after an hour and a half’s quick walking, found him standing in front of two
formidable looking animals, and barking furiously. The Doctor recognized them at once as belonging to the musk
ox, or Ovibos genus, as naturalists call it, by the very wide horns touching each other at their base, by the absence of
muzzle, by the narrow square chanfrin resembling that of a sheep, and by the very short tail. Their hair was long and
thickly matted, and mixed with fine brown, silky wool.

[Illustration: ]

These singular-looking quadrupeds were not the least afraid of Duk, though extremely surprised; but at the first
glimpse of the hunters they took flight, and it was no easy task to go after them, for half an hour’s swift running
brought them no nearer, and made the whole party so out of breath, that they were forced to come to a halt.

"Confound the beasts!" said Altamont.

"Yes, Altamont, I’ll make them over to you," replied Clawbonny; "they are true Americans, and they don’t
appear to have a very favourable idea of their fellow countrymen."

[Illustration: ]

"That proves our hunting prowess," rejoined Altamont.

Meantime the oxen finding themselves no longer pursued, had stopped short. Further pursuit was evidently
useless. If they were to be captured at all they must be surrounded, and the plateau which they first happened to have
reached, was very favourable for the purpose. Leaving Duk to worry them, they went down by the neighbouring
ravines; and got to the one end of the plateau, where Altamont and the Doctor hid themselves behind projecting
rocks, while Hatteras went on to the other end, intending to startle the animals by his sudden appearance, and drive
them back towards his companions.

"I suppose you have no objection this time to bestow a few bullets on these gentry?" said Altamont.

"Oh, no, it is ‘a fair field now and no favour,’" returned Clawbonny.

The oxen had begun to shake themselves impatiently at Duk, trying to kick him off, when Hatteras started up
right in front of them, shouting and chasing them back. This was the signal for Altamont and the Doctor to rush
forward and fire, but at the sight of two assailants, the terrified animals wheeled round and attacked Hatteras. He met
their onset with a firm, steady foot, and fired straight at their heads. But both his balls were powerless, and only
served still further to madden the enraged beasts. They rushed upon the unfortunate man like furies, and threw him
on the ground in an instant.

"He is a dead man!" exclaimed the Doctor, in despairing accents.

A tremendous struggle was going on in Altamont’s breast at the sight of his prostrate foe, and though his first
impulse was to hasten to his help, he stopped short, battling with himself and his prejudices. But his hesitation
scarcely lasted half a second, his better self conquered, and exclaiming,

"No, it would be cowardly!" he rushed forward with Clawbonny.

Hatteras full well understood how his rival felt, but would rather have died than have begged his intervention. However, he had hardly time to think about it, before Altamont was at his side.

He could not have held out much longer, for it was impossible to ward off the blows of horns and hoofs of two such powerful antagonists, and in a few minutes more he must have been torn to pieces. But suddenly two shots resounded, and Hatteras felt the balls graze his head.

[Ilustration: Dealt him such a tremendous blow on the head with his hatchet, that the skull was completely split open.—P.177]

"Courage!" shouted Altamont, flinging away his discharged weapon, and throwing himself right in front of the raging animals. One of them, shot to the heart, fell dead as he reached the spot, while the other dashed madly on Hatteras, and was about to gore the unfortunate captain with his horns, when Altamont plunged his snow knife far into the beast’s wide open jaws with one hand, with the other dealt him such a tremendous blow on the head with his hatchet, that the skull was completely split open.

It was done so quickly that it seemed like a flash of lightning, and all was over. The second ox lay dead, and Clawbonny shouted "Hurrah! hurrah!" Hatteras was saved.

He owed his life to the man he hated the most. What a storm of conflicting passions this must have roused in his soul! But where was the emotion he could not master?

However, his action was prompt, whatever his feeling might be. Without a moment’s hesitancy, he went up to his rival, and said in a grave voice—

"Altamont, you have saved my life!"
"You saved mine," replied the American.

There was a moment’s silence, and then Altamont added—

"We’re quits, Hatteras."

"No, Altamont," said the captain; "when the Doctor dragged you out of your icy tomb, I did not know who you were; but you saved me at the peril of your own life, knowing quite well who I was."
"Why, you are a fellow-creature at any rate, and whatever faults an American may have, he is no coward."
"No, indeed," said the Doctor. "He is a man, every inch as much as yourself, Hatteras."
"And like me, he shall have part in the glory that awaits us."
"The glory of reaching the North Pole?" asked Altamont.
"Yes," replied Hatteras, proudly.
"I guessed right, then," said Altamont.
"And you have actually dared to conceive such a project? Oh! it is grand; I tell you it is sublime even to think of it?"

"But tell me," said Hatteras in a hurried manner; "you were not bound for the Pole then yourself?"

Altamont hesitated.
"Come, speak out, man," urged the Doctor.
"Well, to tell the truth, I was not, and the truth is better than self-love. No, I had no such grand purpose in view. I was trying to clear the North-West Passage, and that was all."

"Altamont," said Hatteras, holding out his hand; "be our companion to glory, come with us and find the North Pole."

The two men clasped hands in a warm, hearty grasp, and the bond of friendship between them was sealed.

When they turned to look for the Doctor they found him in tears.

"Ah! friends," he said, wiping his eyes; "you have made me so happy, it is almost more than I can bear’ You have sacrificed this miserable nationality for the sake of the common cause. You have said, ‘What does it matter if only the Pole is discovered, whether it is by an Englishman or an American?’ Why should we brag of being American or English, when we can boast that we are men?"

The good little man was beside himself with joy He hugged the reconciled enemies to his bosom, and cemented their friendship by his own affection to both.

At last he grew calm after at least a twentieth embrace, and said—

"It is time I went to work now. Since I am no hunter, I must use my talents in another direction"

And he began to cut up the oxen so skilfully, that he seemed like a surgeon making a delicate autopsy.

His two companions looked on smiling. In a few minutes the adroit operator had cut off more than a hundred pounds of flesh. This he divided into three parts. Each man took one, and they retraced their steps to Fort Providence.

At ten o’clock they arrived at Doctor’s House, where Johnson and Bell had a good supper prepared for them.
But before sitting down to enjoy it, the Doctor exclaimed in a jubilant tone, and pointing to his two companions—

"My dear old Johnson, I took out an American and an Englishman with me, didn’t I?"

"Yes, Mr. Clawbonny."

"Well, I bring back two brothers."

This was joyous news to the sailors, and they shook hands warmly with Altamont; while the Doctor recounted all that had passed, and how the American captain had saved the English captain’s life. That night no five happier men could have been found than those that lay sleeping in the little snow house.

CHAPTER XVIII.

FINAL PREPARATIONS

Next day the weather changed, the cold returned. Snow, and rain, and tempest came in quick succession for several days.

Bell had completed the sloop, and done his work well, for the little vessel was admirably adapted for the purpose contemplated, being high at the sides and partly decked so as to be able to stand a heavy sea, and yet light enough to be drawn on the sledge without overburdening the dogs.

At last a change of the greatest importance took place. The ice began to tremble in the centre of the bay, and the highest masses became loosened at their base ready to form icebergs, and drift away before the first gale; but Hatteras would not wait for the ice-fields to break up before he started. Since the journey must be made on land, he did not care whether the sea was open or not; and the day of departure was fixed for the 25th of June—Johnson and Bell undertaking the necessary repairs of the sledge.

On the 20th, finding there was space enough between the broken ice to allow the sloop to get through, it was determined to take her a trial trip to Cape Washington.

The sea was not quite open but it would have been impossible to go across on foot.

This short sail of six hours sufficiently tested the powers of the sloop, and proved her excellent qualities. In coming back they witnessed a curious sight; it was the chase of a seal by a gigantic bear. Mr. Bruin was too busily engaged to notice the vessel, or he would have pursued; he was intently watching beside a seal hole with the patience of a true hunter, or rather angler, for he was certainly fishing just then. He watched in absolute silence, without stirring or giving the least sign of life.

But all of a sudden there was a slight disturbance on the surface of the water in the hole, which announced the coming up of the amphibious animal to breathe. Instantly the bear lay flat on his belly with his two paws stretched round the opening.

Next minute up came the seal, but his head no sooner appeared above the water than the bear’s paws closed about him like a vice, and dragged him right out. The poor seal struggled desperately, but could not free himself from the iron grasp of his enemy, who hugged him closer and closer till suffocation was complete. Then he carried him off to his den as if the weight were nothing, leaping lightly from pack to pack till he gained terra firma safely.

On the 22nd of June, Hatteras began to load the sledge. They put in 200 lbs. of salt meat, three cases of vegetables and preserved meat, besides lime-juice, and flour, and medicines. They also took 200 lbs. of powder and a stock of fire-arms. Including the sloop and the Halkett-boat, there was about 1500 lbs. weight, a heavy load for four dogs, and all the more as they would have to drag it every day, instead of only four days successively, like the dogs employed by the Esquimaux, who always keep a relay for their sledges. However, the distance to the Pole was not 150 miles at the outside, and they did not intend to go more than twelve miles a day, as they could do it comfortably in a month. Even if land failed them, they could always fall back on the sloop, and finish the journey without fatigue to men or dogs.

All the party were in excellent health, though they had lost flesh a little; but, by attending to the Doctor’s wise counsels, they had weathered the winter without being attacked by any of the maladies incident to the climate.

On Sunday, the 23rd, all was ready, and it was resolved to devote the entire day to rest.

The dwellers on Fort Providence could not see the last day dawn without some emotion. It cost them a pang to
leave the snow-hut which had served them in such good stead, and this hospitable shore where they had passed the
winter. Take it altogether, they had spent very happy hours there, and the Doctor made a touching reference to the
subject as they sat round the table at the evening meal, and did not forget to thank God for his manifest protection.

They retired early to rest, for they needed to be up betimes. So passed the last night in Fort Providence.

CHAPTER XIX.

MARCH TO THE NORTH

Next day at early dawn, Hatteras gave the signal for departure. The well-fed and well-rested dogs were
harnessed to the sledge. They had been having a good time of it all the winter, and might be expected to do good
service during the summer.

It was six in the morning when the expedition started. After following the windings of the bay and going past
Cape Washington, they struck into the direct route for the north, and by seven o’clock had lost sight of the
lighthouse and Fort Providence.

During the first two days they made twenty miles in twelve hours, devoting the remainder of the time to rest and
meals. The tent was quite sufficient protection during sleep.

The temperature began to rise. In many places the snow melted entirely away, and great patches of water
appeared; here and there complete ponds, which a little stretch of imagination might easily convert into lakes. The
travellers were often up to their knees, but they only laughed over it; and, indeed, the Doctor was rather glad of such
unexpected baths.

"But for all that," he said, "the water has no business to wet us here. It is an element which has no right to this
country, except in a solid or vaporous state. Ice or vapour is all very well, but water— never!"

Hunting was not forgotten during the march, for fresh meat was a necessity. Altamont and Bell kept their guns
loaded, and shot ptarmigans, guillemots, geese, and a few young hares; but, by degrees, birds and animals had been
changing from trustfulness to fear, and had become so shy and difficult to approach, that very often, but for Duk, the
hunters would have wasted their powder.

Hatteras advised them not to go more than a mile away, as there was not a day, nor even an hour, to lose, for
three months of fine weather was the utmost they
could count upon. Besides, the sledge was often coming to difficult places, when each man was needed to lend a
helping hand.

On the third day they came to a lake, several acres in extent, and still entirely frozen over. The sun’s rays had
little access to it, owing to its situation, and the ice was so strong that it must have dated from some remote winter. It
was strong enough to bear both the travellers and their sledge, and was covered with dry snow.

From this point the country became gradually lower, from which the Doctor concluded that it did not extend to
the Pole, but that most probably this New America was an island.

Up to this time the expedition had been attended with no fatigue. The travellers had only suffered from the
intense glare of the sun on the snow, which threatened them with snow-blindness. At another time of the year they
might have avoided this by walking during the night, but at present there was no night at all. Happily the snow was
beginning to melt, and the brilliancy would diminish as the process of dissolution advanced.

On the 28th of June the thermometer rose to 45°, and the rain fell in torrents. Hatteras and his companions,
however, marched stoically on, and even hailed the downpour with delight, knowing that it would hasten the
disappearance of the snow.

As they went along, the Doctor often picked up stones, both round ones and flat pebbles, as if worn away by the
tide. He thought from this they must be near the Polar Basin, and yet far as the eye could reach was one interminable
plain.

There was not a trace of houses, or huts, or cairns visible. It was evident that the Greenlanders had not pushed
their way so far north, and yet the famished tribes would have found their account in coming, for the country
abounded in game. Bears were frequently seen, and numerous herds of musk-oxen and deer.

On the 29th, Bell killed a fox and Altamont a musk-ox. These supplies of fresh food were very acceptable, and
even the Doctor surveyed, with considerable satisfaction, the haunches of meat they managed to procure from time
to time.

"Don’t let us stint ourselves," he used to say on these occasions; "food is no unimportant matter in expeditions
like ours."
    "Especially," said Johnson, "when a meal depends on a lucky shot."
    "You’re right, Johnson; a man does not think so much about dinner when he knows the soup-pot is simmering by
the kitchen-fire."
    On the 30th, they came to a district which seemed
    [Illustration: ]
to have been upturned by some volcanic convulsion, so covered was it with cones and sharp lofty peaks.
    A strong breeze from the south-east was blowing, which soon increased to a hurricane, sweeping over the rocks
covered with snow and the huge masses, of ice, which took the forms of icebergs and hummocks, though on dry
land.
    The tempest was followed by damp, warm weather, which caused a regular thaw.
    On all sides nothing could be heard but the noise of cracking ice and falling avalanches.
    The travellers had to be very careful in avoiding hills, and even in speaking aloud, for the slightest agitation in
the air might have caused a catastrophe. Indeed, the suddenness is the peculiar feature in Arctic
    [Illustration: ]
avalanches, distinguishing them from those of Switzerland and Norway. Often the dislodgment of a block of ice
is instantaneous, and not even a cannon-ball or thunderbolt could be more rapid in its descent. The loosening, the
fall, and the crash happen almost simultaneously.
    Happily, however, no accident befell any of the party, and three days afterwards they came to smooth, level
ground again.
    [Illustration: ]
    But here a new phenomenon met their gaze—a phenomenon which was long a subject of patient inquiry among
the learned of both hemispheres. They came to a long chain of low hills which seemed to extend for miles, and were
all covered on the eastern side with bright red snow.
    It is easy to imagine the surprise and half-terrified exclamations of the little company at the sight of this long red
curtain; but the Doctor hastened to reassure them, or rather to instruct them, as to the nature of this peculiar snow.
He told them that this same red substance had been found in Switzerland, in the heart of the Alps, and that the colour
proceeded solely from the presence of certain corpuscles, about the nature of which for a long time chemists could
not agree. They could not decide whether these corpuscles were of animal or vegetable origin, but at last it was
settled that they belonged to the family of fungi, being a sort of microscopic champignon of the species Uredo.
    Turning the snow over with his iron-tipped staff, the Doctor found that the colouring matter measured nine feet
deep. He pointed this out to his companions, that they might have some idea of the enormous number of these tiny
mushrooms in a layer extending so many miles.
    This phenomenon was none the less strange for being explained, for red is a colour seldom seen in nature over
any considerable area. The reflection of the sun’s rays upon it produced the most peculiar effect, lighting up men,
and animals, and rocks with a fiery glow, as if proceeding from some flame within. When the snow melted it looked
like blood, as the red particles do not decompose. It seemed to the travellers as if rivulets of blood were running
among their feet.
    [Illustration: ]
    The Doctor filled several bottles with this precious substance to examine at leisure, as he had only had a glimpse
of the Crimson Cliffs in Baffin’s Bay.
    [Illustration: ]
    This Field of Blood, as he called it, took three hours to get over, and then the country resumed its usual aspect.
    [Illustration: At Bell’s suggestion torches were contrived.—P.199]
CHAPTER XX.
FOOTPRINTS IN THE SNOW.
    On the fourth of July there was such an exceedingly dense fog, that it was very difficult to keep the straight
course for the north. No misadventure, however, befell the party during the darkness, except the loss of Bell’s snow-
shoes. At Bell’s suggestion, which fired the Doctor’s inventive genius, torches were contrived, made of tow steeped
in spirits-of-wine and fastened on the end of a stick, and these served somewhat to help them on, though they made
but small progress; for, on the sixth, after the fog had cleared off, the Doctor took their bearings, and found that they
had only been marching at the rate of eight miles a day.
    Determined to make up for lost time, they rose next morning very early and started off, Bell and Altamont as
usual going ahead of the rest and acting as scouts. Johnson and the others kept beside the sledge, and were soon
nearly two miles behind the guides; but the weather was so dry and clear that all their movements could be distinctly
observed.
"What now? " said Clawbonny, as he saw them make a sudden halt, and stoop down as if examining the ground.
"I was just wondering what they are about, myself," replied old Johnson.
"Perhaps they have come on the tracks of animals," suggested Hatteras.
"No," said Clawbonny, "it can’t be that."
[Illustration: ]
"Why not?"
"Because Duk would bark."
"Well, it is quite evident they are examining some sort of marks."
"Let’s get on, then," said Hatteras; and, urging forward the dogs, they rejoined their companions in about twenty
minutes, and shared their surprise at finding unmistakable fresh footprints of human beings in the snow, as plain as
if only made the preceding day.
"They are Esquimaux footprints," said Hatteras.
"Do you think so?" asked Altamont.
"There is no doubt of it."
"But what do you make of this, then?" returned Altamont, pointing to another footprint repeated in
[Illustration: ]
several places. "Do you believe for a minute that was made by an Esquimaux?"
It was incontestably the print of a European boot—nails, sole, and heel clearly stamped in the snow. There was
no room for doubt, and Hatteras exclaimed in amazement—
"Europeans here!"
"Evidently," said Johnson.
"And yet it is so improbable that we must take a second look before pronouncing an opinion," said Clawbonny.

But the longer he looked, the more apparent became the fact. Hatteras was chagrined beyond measure. A
European here, so near the Pole!
The footprints extended for about a quarter of a mile, and then diverged to the west. Should the travellers follow
them further?
"No," said Hatteras, "let us go on."
He was interrupted by an exclamation from the Doctor, who had just picked up an object that gave still more
convincing proof of European origin. It was part of a pocket spy-glass!
"Well, if we still had any doubts about the footmarks, this settles the case at once, at any rate," said Clawbonny.
"Forward!" exclaimed Hatteras so energetically, that instinctively each one obeyed, and the march was resumed
forthwith.
The day wore away, but no further sign of the presence of suspected rivals was discovered, and they prepared to
encamp for the night.
The tent was pitched in a ravine for shelter, as the sky was dark and threatening, and a violent north wind was
blowing.
"I’m afraid we’ll have a bad night," said Johnson.
"A pretty noisy one, I expect," replied the Doctor, "but not cold. We had better take every precaution, and fasten
down our tent with good big stones."
"You are right, Mr. Clawbonny. If the hurricane swept away our tent, I don’t know where we should find it
again."
[Illustration: ]
The tent held fast, but sleep was impossible, for the tempest was let loose and raged with tremendous violence.
"It seems to me," said the Doctor, during a brief lull in the deafening roar," as if I could hear the sound of
collisions between icebergs and ice-fields. If we were near the sea, I could really believe there was a general break-
up in the ice."
"I can’t explain the noises any other way," said Johnson.
"Can we have reached the coast, I wonder?" asked Hatteras.
"It is not impossible," replied Clawbonny. "Listen! Do you hear that crash? That is certainly the sound of
icebergs falling. We cannot be very far from the ocean."
"Well, if it turn out to be so, I shall push right on over the ice-fields."
"Oh, they’ll be all broken up after such a storm as this. We shall see what to-morrow, brings; but all I can say is,
if any poor fellows are wandering about in a night like this, I pity them.
The storm lasted for ten hours, and the weary travellers anxiously watched for the morning. About daybreak its
fury seemed to have spent itself, and Hatteras, accompanied by Bell and Altamont, ventured to leave the tent. They
climbed a hill about three hundred feet high, which commanded a wide view. But what a metamorphosed region met
their gaze! All the ice had completely vanished, the storm had chased away the winter, and stripped the soil everywhere of its snow covering.

But Hatteras scarcely bestowed a glance on surrounding objects; his eager gaze was bent on the northern horizon, which appeared shrouded in black mist.

"That may very likely be caused by the ocean," suggested Clawbonny.

"You are right. The sea must be there," was the reply.

"That tints is what we call the blink of open water," said Johnson.

"Come on, then, to the sledge at once, and let us get to this unknown ocean," exclaimed Hatteras.

Their few preparations were soon made, and the march resumed. Three hours afterwards they arrived at the coast, and shouted simultaneously, "The sea! the sea!"

"Ay, and open sea!" added Hatteras.

And so it was. The storm had opened wide the Polar Basin, and the loosened packs were drifting in all directions. The icebergs had weighed anchor, and were sailing out into the open sea.

This new ocean stretched far away out of sight, and not a single island or continent was visible.

On the east and west the coast formed two capes or headlands, which sloped gently down to the sea. In the centre, a projecting rock formed a small natural bay, sheltered on three sides, into which a wide river fell, bearing in its bosom the melted snows of winter.

After a careful survey of the coast, Hatteras determined to launch the sloop that very day, and to unpack the sledge, and get everything on board. The tent was soon put up, and a comfortable repast prepared. This important business despatched, work commenced; and all hands were so expeditious and willing, that by five o'clock nothing more remained to be done. The sloop lay rocking gracefully in the little bay, and all the cargo was on board except the tent, and what was required for the night’s encampment.

The sight of the sloop suggested to Clawbonny the propriety of giving Altamont’s name to the little bay. His proposition to that effect met with unanimous approval, and the port was forthwith dignified by the title of Altamont Harbour.

According to the Doctor’s calculations the travellers were now only 9° distant from the Pole. They had gone over two hundred miles from Victoria Bay to Altamont Harbour, and were in latitude 87° 5’ and longitude 118° 35’.

CHAPTER XXI.

THE OPEN SEA.

Next morning by eight o’clock all the remaining effects were on board, and the preparations for departure completed. But before starting the Doctor thought he would like to take a last look at the country and see if any further traces of the presence of strangers could be discovered, for the mysterious footmarks they had met with were never out of his thoughts. He climbed to the top of a height which commanded a view of the whole southern horizon, and took out his pocket telescope. But what was his astonishment, to find he could see nothing through it, not even neighbouring objects. He rubbed his eyes and looked again, but with no better result. Then he began to examine the telescope, the object glass was gone!

The object glass! This explained the whole mystery, foot-prints and all; and with a shout of surprise he hurried down the hill to impart his discovery to the wondering companions, who came running towards him, startled by his loud exclamation, and full of anxiety at his precipitate descent.

"Well, what is the matter now?" said Johnson.

The Doctor could hardly speak, he was so out of breath. At last he managed to gasp out—

"The tracks, footmarks, strangers."

"What?" said Hatteras, "strangers here?"

"No, no, the object glass; the object glass out of my telescope."

And he held out his spy-glass for them to look at.

"Ah! I see," said Altamont; "it is wanting."

"Yes."

"But then the footmarks?"

"They were ours, friends, just ours," exclaimed the Doctor. "We had lost ourselves in the fog, and been wandering in a circle."

"But the boot-marks," objected Hatteras.

"Bell’s. He walked about a whole day after he had lost his snow shoes."
"So I did," said Bell.

The mistake was so evident, that they all laughed heartily, except Hatteras, though no one was more glad than he at the discovery.

A quarter of an hour afterwards the little sloop sailed out of Altamont Harbour, and commenced her voyage of discovery. The wind was favourable, but there was little of it, and the weather was positively warm.

The sloop was none the worse for the sledge journey. She was in first-rate trim, and easily managed. Johnson steered, the Doctor, Bell, and the American leaned back against the cargo, and Hatteras stood at the prow, his fixed, eager gaze bent steadily on that mysterious point towards which he felt drawn with irresistible power, like the magnetic needle to the Pole. He wished to be the first to descry any shore that might come in sight, and he had every right to the honour.

The water of this Polar Sea presented some peculiar features worth mentioning. In colour it was a faint ultramarine blue, and possessed such wonderful transparency that one seemed to gaze down into fathomless depths. These depths were lighted up, no doubt, by some electrical phenomenon, and so many varieties of living creatures were visible that the vessel seemed to be sailing over a vast aquarium.

Innumerable flocks of birds were flying over the surface of this marvellous ocean, darkening the sky like thick heavy storm-clouds. Water-fowl of every description were among them, from the albatross to the penguin, and all of gigantic proportions. Their cries were absolutely deafening, and some of them had such immense, wide-spreading wings, that they covered the sloop completely as they flew over. The Doctor thought himself a good naturalist, but he found his science greatly at fault, for many a species here was wholly unknown to any ornithological society.

The good little man was equally nonplussed when he looked at the water, for he saw the most wonderful meduse, some so large that they looked like little islands floating about among Brobdignagian sea-weeds. And below the surface, what a spectacle met the eye! Myriads of fish of every species; young manati at play with each other; narwhals with their one strong weapon of defence, like the horn of a unicorn, chasing the timid seals; whales of every tribe, spouting out columns of water and mucilage, and filling the air with a peculiar whizzing noise; dolphins, seals, and walruses; sea-dogs and sea-horses, sea-bears and sea-elephants, quietly browsing on submarine pastures; and the Doctor could gaze at them all as easily and clearly as if they were in glass tanks in the Zoological Gardens.

There was a strange supernatural purity about the atmosphere. It seemed charged to overflowing with oxygen, and had a marvellous power of exhilaration, producing an almost intoxicating effect on the brain.

Towards evening, Hatteras and his companions lost sight of the coast. Night came on, though the sun remained just above the horizon; but it had the same influence on animated nature as in temperate zones. Birds, fish, and all the cetacea disappeared and perfect silence prevailed.

Since the departure from Altamont Harbour, the sloop had made one degree further north. The next day brought no signs of land; there was not even a speck on the horizon. The wind was still favourable, and the sea pretty calm. The birds and fishes returned as numerously as on the preceding day, and the Doctor leaning over the side of the vessel, could see the whales and the dolphins, and all the rest of the monsters of the deep.—P.214]  

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Indeed, but little ice was met with anywhere. The sloop was ten degrees above the point of greatest cold, and consequently in the same temperature as Baffin’s Bay and Disko. It was therefore not astonishing that the sea should be open in these summer months.

This is a fact of great practical value, for if ever the whalers can penetrate north as far as the Polar basin, they may be sure of an immediate cargo, as this part of the ocean seems the general reservoir of whales and seals, and every marine species.

The day wore on, but still nothing appeared on the horizon. Hatteras never left the prow of the ship, but stood, glass in hand, eagerly gazing into the distance with anxious, questioning eyes, and seeking to discover, in the colour of the water, the shape of the waves, and the breath of the wind, indications of approaching land.

CHAPTER XXII.
GETTING NEAR THE POLE.
Hour after hour passed away, and still Hatteras persevered in his weary watch, though his hopes appeared doomed to disappointment.

At length, about six in the evening, a dim, hazy, shapeless sort of mist seemed to rise far away between sea and
sky. It was not a cloud, for it was constantly vanishing, and then reappearing next minute.

Hatteras was the first to notice this peculiar phenomenon; but after an hour’s scrutiny through his telescope, he could make nothing of it.

All at once, however, some sure indication met his eye, and stretching out his arm to the horizon, he shouted, in a clear ringing voice——

"Land! land!"

His words produced an electrical effect on his companions, and every man rushed to his side.

"I see it, I see it," said Clawbonny.

"Yes, yes, so do I! " exclaimed Johnson.

"It is a cloud," said Altamont.

"Land! land!" repeated Hatteras, in tones of absolute conviction.

Even while he spoke the appearance vanished, and when it returned again the Doctor fancied he caught a gleam of light about the smoke for an instant.

[Illustration: "It is a volcano!" he exclaimed.—P.217]

"It is a volcano!" he exclaimed.

"A volcano?" repeated Altamont.

"Undoubtedly."

[ Illustration: ]

"In so high a latitude?"

"Why not? Is not Iceland a volcanic island—indeed, almost made of volcanoes, one might say?"

"Well, has not our famous countryman, James Ross, affirmed the existence of two active volcanoes, the Erebus and the Terror, on the Southern Continent, in longitude 170° and latitude 78°? Why, then, should not volcanoes be found near the North Pole?"

"It is possible, certainly," replied Altamont.

"Ah, now I see it distinctly," exclaimed the Doctor. "It is a volcano!"

"Let us make right for it then," said Hatteras.

[ Illustration: ]

It was impossible longer to doubt the proximity of the coast. In twenty-four hours, probably, the bold navigators might hope to set foot on its untrodden soil. But strange as it was, now that they were so near the goal of their voyage, no one showed the joy which might have been expected. Each man sat silent, absorbed in his own thoughts, wondering what sort of place this Pole must be. The birds seemed to shun it, for though it was evening, they were all flying towards the south with outspread wings. Was it, then, so inhospitable, that not so much as a sea-gull or a ptarmigan could find a shelter? The fish, too, even the large cetacea, were hastening away through the transparent waters. What could cause this feeling either of repulsion or terror?

At last sleep overcame the tired men, and one after another dropped off, leaving Hatteras to keep watch.

He took the helm, and tried his best not to close his eyes, for he grudged losing precious time; but the slow motion of the vessel rocked him into a state of such irresistible somnolence that, in spite of himself, he was soon, like his companions, locked fast in deep slumber. He began to dream, and imagination brought back all the scenes of his past life. He dreamt of his ship, the Forward, and of the traitors that had burnt it. He began to remember, and he forgot his actual situation. Then the scene changed, and he saw himself at the Pole unfurling the Union Jack!

While memory and fancy were thus busied, an enormous cloud of an olive tinge had begun to darken sea and sky. A hurricane was at hand. The first blast of the tempest roused the captain and his companions, and they were on their feet in an instant, ready to meet it. The sea had risen tremendously, and the ship was tossing violently up and down on the billows. Hatteras took the helm again, and kept a firm hold of it, while Johnson and Bell baled out the water which was constantly dashing over the ship.

It was a difficult matter to preserve the right course, for the thick fog made it impossible to see more than a few yards off.

This sudden tempest might well seem to such excited men, a stern prohibition against further approach to the Pole; but it needed but a glance at their resolute faces to know that they would neither yield to winds nor waves, but go right on to the end.

[ Illustration: ]

For a whole day the struggle lasted, death threatening them each moment; but about six in the evening, just as the fury of the waves seemed at its highest pitch, there came a sudden calm. The wind was stilled as if miraculously,
and the sea became smooth as glass.

Then came a most extraordinary inexplicable phenomenon.

The fog, without dispersing, became strangely luminous, and the sloop sailed along in a zone of electric light. Mast, sail, and rigging appeared pencilled in black against the phosphorescent sky with wondrous distinctness. The men were bathed in light, and their faces shone with a fiery glow.

"The volcano!" exclaimed Hatteras.

"Is it possible?" said Bell.

"No, no!" replied Clawbonny. "We should be suffocated with its flames so near."

"Perhaps it is the reflection," suggested Altamont.

"Not that much even, for then we must be near land, and in that case we should hear the noise of the eruption."

"What is it, then?" asked the captain.

"It is a cosmical phenomenon," replied the Doctor, "seldom met hitherto. If we go on, we shall soon get out of our luminous sphere and be back in the darkness and tempest again."

"Well, let's go on, come what may," said Hatteras.

The Doctor was right. Gradually the fog began to lose its light, and then its transparency, and the howling wind was heard not far off. A few minutes more, and the little vessel was caught in a violent squall, and swept back into the cyclone.

But the hurricane had fortunately turned a point towards the south, and left the vessel free to run before the wind straight towards the Pole. There was imminent danger of her sinking, for she sped along at frenzied speed, and any sudden collision with rock or iceberg must have inevitably dashed her to pieces.

But not a man on board counselled prudence. They were intoxicated with the danger, and no speed could be quick enough to satisfy their longing impatience to reach the unknown.

At last they began evidently to near the coast. Strange symptoms were manifest in the air; the fog suddenly rent like a curtain torn by the wind; and for an instant, like a flash of lightning, an immense column of flame was seen on the horizon.

"The volcano! the volcano!" was the simultaneous exclamation.

But the words had hardly passed their lips before the fantastic vision had vanished. The wind suddenly changed to south-east, and drove the ship back again from the land.

"Confound it!" said Hatteras; "we weren’t three miles from the coast."

However, resistance was impossible. All that could be done was to keep tacking; but every few minutes the little sloop would be thrown on her side, though she righted herself again immediately obedient to the helm.

As Hatteras stood with dishevelled hair, grasping the helm as if welded to his hand, he seemed the animating soul of the ship.

All at once, a fearful sight met his gaze.

Scarcely twenty yards in front was a great block of ice coming right towards them, mounting and falling on the stormy billows, ready to overturn at any moment and crush them in its descent.

But this was not the only danger that threatened the bold navigators. The iceberg was packed with white bears, huddling close together, and evidently beside themselves with terror.

The iceberg made frightful lurches, sometimes inclining at such a sharp angle that the animals rolled pell-mell over each other and set up a low growling, which mingled with the roar of the elements and made a terrible concert.

For a quarter of an hour, which seemed a whole century, the sloop sailed on in this formidable company, sometimes a few yards distant and sometimes near enough to touch. The Greenland dogs trembled for fear, but Duk was quite imperturbable. At last the iceberg lost ground, and got driven by the wind further and further away till it disappeared in the fog, only at intervals betraying its presence by the ominous growls of its equipage.

[Illustration: Mast and sail were torn off, and went flying away through the darkness like some large white bird. —P.224]

The storm now burst forth with redoubled fury. The little barque was lifted bodily out of the water, and whirled round and round with the most frightful rapidity. Mast and sail were torn off, and went flying away through the darkness like some large white bird. A whirlpool began to form among the waves, drawing down the ship gradually by its irresistible suction.

[Instruction: ]

Deeper and deeper she sank, whizzing round at such tremendous speed that to the poor fellows on board, the water seemed motionless. All five men stood erect, gazing at each other in speechless terror. But suddenly the ship rose perpendicularly, her prow went above the edge of the vortex, and getting out of the centre of attraction by her own velocity, she escaped at a tangent from the circumference, and was thrown far beyond, swift as a ball from a cannon’s mouth.
Altamont, the Doctor, Johnson, and Bell were pitched flat on the planks. When they got up, Hatteras had disappeared!

It was two o’clock in the morning.

CHAPTER XXIII.

THE ENGLISH FLAG

For a few seconds they seemed stupefied, and then a cry of "Hatteras!" broke from every lip.

On all sides, nothing was visible but the tempestuous ocean. Duk barked desperately, and Bell could hardly keep him from leaping into the waves.

"Take the helm, Altamont," said the Doctor, "and let us try our utmost to find our poor captain."

Johnson and Bell seized the oars, and rowed about for more than an hour; but their search was vain—Hatteras was lost!

Lost! and so near the Pole, just as he had caught sight of the goal!

The Doctor called, and shouted, and fired signals, and Duk made piteous lamentations; but there was no response. Clawbonny could bear up no longer; he buried his head in his hands, and fairly wept aloud.

At such a distance from the coast, it was impossible Hatteras could reach it alive, without an oar or even so much as a spar to help him; if ever he touched the haven of his desire, it would be as a swollen, mutilated corpse!

Longer search was useless, and nothing remained but to resume the route north. The tempest was dying out, and about five in the morning on the 11th of July, the wind fell, and the sea gradually became calm. The sky recovered its polar clearness, and less than three miles away the land appeared in all its grandeur.

The new continent was only an island, or rather a volcano, fixed like a lighthouse on the North Pole of the world.

[Illustration: Two men in a boat observing a volcano in the distance.]

The mountain was in full activity, pouring out a mass of burning stones and glowing rock. At every fresh eruption there was a convulsive heaving within, as if some mighty giant were respiring, and the masses ejected were thrown up high into the air amidst jets of bright flame, streams of lava rolling down the sides in impetuous torrents.

In one part, serpents of fire seemed writhing and wriggling amongst smoking rocks, and in another the glowing liquid fell in cascades, in the midst of purple vapour, into a river of fire below, formed of a thousand igneous streams, which emptied itself into the sea, the waters hissing and seething like a boiling cauldron.

Apparently there was only one crater to the volcano, out of which the columns of fire issued, streaked with forked lightning. Electricity seemed to have something to do with this magnificent panorama.

Above the panting flames waved an immense plume-shaped cloud of smoke, red at its base and black at its summit. It rose with incomparable majesty, and unrolled in thick volumes.

The sky was ash-colour to a great height, and it was evident that the darkness that had prevailed while the tempest lasted, which had seemed quite inexplicable to the Doctor, was owing to the columns of cinders overspreading the sun like a thick curtain. He remembered a similar phenomenon which occurred in the Barbadoes, where the whole island was plunged in profound obscurity by the mass of cinders ejected from the crater of Isle St. Vincent.

This enormous ignivomous rock in the middle of the sea was six thousand feet high, just about the altitude of Hecla.

It seemed to rise gradually out of the water as the boat got nearer. There was no trace of vegetation, indeed there was no shore; the rock ran straight down to the sea.

"Can we land?" said the Doctor.

"The wind is carrying us right to it," said Altamont. "But I don’t see an inch of land to set our foot upon."

"It seems so at this distance," said Johnson; "but we shall be sure to find some place to run in our boat at, and that is all we want."

"Let us go on, then," said Clawbonny, dejectedly.

He had no heart now for anything. The North Pole was indeed before his eyes, but not the man who had discovered it.

As they got nearer the island, which was not more than eight or ten miles in circumference, the navigators noticed a tiny fiord, just large enough to harbour their boat, and made towards it immediately. They feared their captain’s dead body would meet their eyes on the coast, and yet it seemed difficult for a corpse to lie on it, for there was no shore, and the sea broke on steep rocks, which were covered with cinders above watermark.

At last the little sloop glided gently into the narrow opening between two sandbanks just visible above the water, where she would be safe from the violence of the breakers; but before she could be moored, Duk began howling and barking again in the most piteous manner, as if calling on the cruel sea and stony rocks to yield up his lost master. The Doctor tried to calm him by caresses, but in vain. The faithful beast, as if he would represent the captain, sprang...
on shore with a tremendous bound, sending a cloud of cinders after him.

"Duk! Duk!" called Clawbonny.

But Duk had already disappeared.

[Illustration: ]

After the sloop was made fast, they all got out and went after him. Altamont was just going to climb to the top of a pile of stones, when the Doctor exclaimed, "Listen!"

Duk was barking vehemently some distance off, but his bark seemed full of grief rather than fury.

"Has he come on the track of some animal, do you think? " asked Johnson.

"No, no!" said Clawbonny, shuddering. "His bark is too sorrowful; it is the dog's tear. He has found the body of Hatteras."

They all four rushed forward, in spite of the blinding cinder-dust, and came to the far-end of a fiord, where they discovered the dog barking round a corpse wrapped in the British flag!

"Hatteras! Hatteras!" cried the Doctor, throwing himself on the body of his friend. But next minute he started up with an indescribable cry, and shouted, "Alive! alive!"

"Yes!" said a feeble voice; "yes, alive at the North Pole, on Queen's Island."

"Hurrah for England!" shouted all with one accord.

"And for America!" added Clawbonny, holding out one hand to Hatteras and the other to Altamont.

Duk was not behind with his hurrah, which was worth quite as much as the others.

For a few minutes the joy of recovery of their captain filled all their hearts, and the poor fellows could not restrain their tears.

The Doctor found, on examination, that he was not seriously hurt. The wind threw him on the coast where landing was perilous work, but, after being driven back more than once into the sea, the hardy sailor had managed to scramble on to a rock, and gradually to hoist himself above the waves.

Then he must have become insensible, for he remembered nothing more except rolling himself in his flag. He only awoke to consciousness with the loud barking and caresses of his faithful Duk.

After a little, Hatteras was able to stand up supported by the Doctor, and tried to get back to the sloop.

He kept exclaiming, "The Pole! the North Pole!"

"You are happy now?" said his friend.

"Yes, happy! And are not you? Isn't it joy to find yourself here! The ground we tread is round the Pole! The air we breathe is the air that blows round the Pole! The sea we have crossed is the sea which washes the Pole! Oh! the North Pole! the North Pole!"

He had become quite delirious with excitement, and fever burned in his veins. His eyes shone with unnatural brilliancy, and his brain seemed on fire. Perfect rest was what he most needed, for the Doctor found it impossible to quiet him.

A place of encampment must therefore be fixed upon immediately.

[Illustration: Altamont speedily discovered a grotto composed of rocks.—P.234]

Altamont speedily discovered a grotto composed of rocks, which had so fallen as to form a sort of cave. Johnson and Bell carried in provisions, and gave the dogs their liberty.

About eleven o'clock, breakfast, or rather dinner, was ready, consisting of pemmican, salt meat, and smoking-hot tea and coffee.

But Hatteras would do nothing till the exact position of the island was ascertained; so the Doctor and Altamont set to work with their instruments, and found that the exact latitude of the grotto was 89° 59' 15". The longitude was of little importance, for all the meridians blended a few hundred feet higher.

The 90° of lat. was then only about three quarters of a mile off, or just about the summit of the volcano.

When the result was communicated to Hatteras, he desired that a formal document might be drawn up to attest the fact, and two copies made, one of which should be deposited on a cairn on the island.

Clawbonny was the scribe, and indited the following document, a copy of which is now among the archives of the Royal Geographical Society of London:

"On this 11th day of July, 1861, in North latitude 89° 59' 15" was discovered Queen's Island at the North Pole, by Captain Hatteras, Commander of the brig Forward of Liverpool, who signs this, as also all his companions.

"Whoever may find this document is requested to forward it to the Admiralty.

"(Signed) JOHN HATTERAS, Commander
of the Forward
"DR. CLAWBONNY
"ALTAMONT, Commander of the Porpoise
"JOHNSON, Boatswain"
"BELL, Carpenter."

"And now, friends, come to table," said the Doctor, merrily.

Coming to table was just squatting on the ground.

"But who," said Clawbonny, "would not give all the tables and dining-rooms in the world to dine at 89° 59’ and 15° N. lat.?"

It was an exciting occasion this first meal at the Pole! What neither ancients nor moderns, neither Europeans, nor Americans, nor Asiatics had been able to accomplish was now achieved, and all past sufferings and perils were forgotten in the glow of success.

"But, after all," said Johnson, after toasts to Hatteras and the North Pole had been enthusiastically drunk, "what is there so very special about the North Pole? Will you tell me, Mr. Clawbonny?"

"Just this, my good Johnson. It is the only point of the globe that is motionless; all the other points are revolving with extreme rapidity."

"But I don’t see that we are any more motionless here than at Liverpool."

"Because in both cases you are a party concerned, both in the motion and the rest; but the fact is certain."

Clawbonny then went on to describe the diurnal and annual motions of the earth—the one round its own axis, the extremities of which are the poles, which is accomplished in twenty-four hours, and the other round the sun, which takes a whole year.

Bell and Johnson listened half incredulously, and 

[caption: Illustration: ]

couldn’t see why the earth could not have been allowed to keep still, till Altamont informed them that they would then have had neither day nor night, nor spring, summer, autumn, and winter.

"Ay, and worse still," said Clawbonny, "if the motion chanced to be interrupted, we should fall right into the sun in sixty-four and a half days."

"What! take sixty-four and a half days, to fall?" exclaimed Johnson.

"Yes, we are ninety-five millions of miles off. But when I say the Pole is motionless, it is not strictly true; it is only so in comparison with the rest of the globe, for it has a certain movement of its own, and completes a circle in about twenty-six thousand years. This comes from the precession of the equinoxes."

A long and learned talk was started on this subject between Altamont and the Doctor, simplified, however, as much as possible for the benefit of Bell and Johnson.

Hatteras took no part in it, and even when they went on to speculate about the earth’s centre, and discussed several of the theories that had been advanced respecting it, he seemed not to hear; it was evident his thoughts were far away.

Among other opinions put forth was one in our own days, which greatly excited Altamont’s surprise. It was held that there was an immense opening at the poles which led into the heart of the earth, and that it was out of the opening that the light of the Aurora Borealis streamed. This was gravely stated, and Captain Synness, a countryman of our own, actually proposed that Sir Humphrey Davy, Humboldt, and Arago should undertake an expedition through it, but they refused."

"And quite right too," said Altamont.

"So say I; but you see, my friends, what absurdities imagination has conjured up about these regions, and how, sooner or later, the simple reality comes to light."

CHAPTER XXIV.

MOUNT HATTERAS.

After this conversation they all made themselves as comfortable as they could, and lay down to sleep.

All, except Hatteras; and why could this extraordinary man not sleep like the others?

Was not the purpose of his life attained now? Had he not realized his most daring project? Why could he not rest? Indeed, might not one have supposed that, after the strain his nervous system had undergone, he would long for rest?

But no, he grew more and more excited, and it was not the thought of returning that so affected him. Was he bent on going farther still? Had his passion for travel no limits? Was the world too small for him now he had circumnavigated it.

Whatever might be the cause, he could not sleep; yet this first night at the Pole was clear and calm. The isle was absolutely uninhabited—not a bird was to be seen in this burning atmosphere, not an animal on these scoriae-covered rocks, not a fish in these seething waters. Next morning, when Altamont, and the others awoke, Hatteras was gone. Feeling uneasy at his absence, they hurried out of the grotto in search of him.

[Caption: Illustration: There he was standing on a rock, gazing fixedly at the top of the mountain.—P.242]

There he was standing on a rock, gazing fixedly at the top of the mountain. His instruments were in his hand,
and he was evidently calculating the exact longitude and latitude.

The Doctor went towards him and spoke, but it was long before he could rouse him from his absorbing contemplations. At last the captain seemed to understand, and Clawbonny said, while he examined him with a keen scrutinizing glance—

"Let us go round the island. Here we are, all ready for our last excursion."

"The last!" repeated Hatteras, as if in a dream. "Yes!, the last truly, but," he added, with more animation, "the most wonderful."

He pressed both hands on his brow as he spoke, as if to calm the inward tumult.

Just then Altamont and the others came up, and their appearance seemed to dispel the hallucinations under which he was labouring.

"My friends," he said, in a voice full of emotion, "thanks for your courage, thanks for your perseverance, thanks for your superhuman efforts, through which we are permitted to set our feet on this soil."

"Captain," said Johnson, "we have only obeyed orders to you alone belongs the honour."

"No, no!" exclaimed Hatteras, with a violent outburst of emotion, "to all of you as much as to me! To Altamont as much as any of us, as much as the Doctor himself! Oh, let my heart break in your hands, it cannot contain its joy and gratitude any longer."

He grasped the hands of his brave companions as he spoke, and paced up and down as if he had lost all self-control.

"We have only done our duty as Englishmen," said Bell.

"And as friends," added Clawbonny.

"Yes, but all did not do it," replied Hatteras "some gave way. However, we must pardon them—pardon both the traitors and those who were led away by them. Poor fellows! I forgive them. You hear me, Doctor?"

"Yes," replied Clawbonny, beginning to be seriously uneasy at his friend's excitement.

"I have no wish, therefore," continued the captain, "that they should lose the little fortune they came so far to seek. No, the original agreement is to remain unaltered, and they shall be rich—if they ever see England again."

It would have been difficult not to have been touched by the pathetic tone of voice in which Hatteras said this.

"But, captain," interrupted Johnson, trying to joke, "one would think you were making your will!"

"Perhaps I am," said Hatteras, gravely.

"And yet you have a long bright career of glory before you!"

"Who knows?" was the reply.

No one answered, and the Doctor did not dare to guess his meaning; but Hatteras soon made them understand it, for presently he said, in a hurried, agitated manner, as if he could scarcely command himself—

"Friends, listen to me. We have done much already, but much yet remains to be done."

His companions heard him with profound astonishment.

"Yes," he resumed, "we are close to the Pole, but we are not on it."

"How do you make that out," said Altamont.

"Yes," replied Hatteras, with vehemence, "I said an Englishman should plant his foot on the Pole of the world! I said it, and an Englishman shall."

"What!" cried Clawbonny.

"We are still 45° from the unknown point," resumed Hatteras, with increasing animation, "and to that point I shall go."

"But it is on the summit of the volcano," said the Doctor.

"I shall go."

"It is an inaccessible cone!"

"I shall go."

"But it is a yawning fiery crater!"

"I shall go."

The tone of absolute determination in which Hatteras pronounced these words it is impossible to describe.

His friends were stupefied, and gazed in terror at the blazing mountain.

At last the Doctor recovered himself, and began to urge and entreat Hatteras to renounce his project. He tried every means his heart dictated, from humble supplications to friendly threats; but he could gain nothing—a sort of frenzy had come over the captain, an absolute monomania about the Pole.

Nothing but violent measures would keep him back from destruction, but the Doctor was unwilling to employ these unless driven to extremity.

He trusted, moreover, that physical impossibilities, insuperable obstacles would bar his further progress, and meantime finding all protestations were useless, he simply said—
"Very well, since you are bent on it, we’ll go too."
"Yes," replied Hatteras, "half-way up the mountain, but not a step beyond. You know you have to carry back to England the duplicate of the document in the cairn——"
"Yes; but——"
"It is settled," said Hatteras, in an imperious tone; "and since the prayers of a friend will not suffice, the captain commands."

The Doctor did not insist longer, and a few minutes after the little band set out, accompanied by Duk.

It was about eight o’clock when they commenced their difficult ascent; the sky was splendid, and the thermometer stood at 52°.

Hatteras and his dog went first, closely followed by the others.

"I am afraid," said Johnson to the Doctor.
"No, no, there’s nothing to be afraid of; we are here."

This singular little island appeared to be of recent formation, and was evidently the product of successive volcanic eruptions. The rocks were all lying loose on the top of each other, and it was a marvel how they preserved their equilibrium. Strictly speaking, the mountain was only a heap of stones thrown down from a height, and the mass of rocks which composed the island had evidently come out of the bowels of the earth.

The earth, indeed, may be compared to a vast cauldron of spherical form, in which, under the influence of a central fire, immense quantities of vapours are generated, which would explode the globe but for the safety-valves outside.

These safety-valves are volcanoes, when one closes another opens; and at the Poles where the crust of the earth is thinner, owing to its being flattened, it is not surprising that a volcano should be suddenly formed by the upheaving of some part of the ocean-bed.

The Doctor, while following Hatteras, was closely following all the peculiarities of the island, and he was further confirmed in his opinion as to its recent formation by the absence of water. Had it existed for centuries, the thermal springs would have flowed from its bosom.

As they got higher, the ascent became more and more difficult, for the flanks of the mountain were almost perpendicular, and it required the utmost care to keep them from falling. Clouds of scoræ and ashes would whirl round them repeatedly, threatening them with asphyxia, or torrents of lava would bar their passage. In parts where these torrents ran horizontally, the outside had become hardened; while underneath was the boiling lava, and every step the travellers took had first to be tested with the iron-tipped staff to avoid being suddenly plunged into the scalding liquid.

At intervals large fragments of red-hot rock were thrown up from the crater, and burst in the air like bomb-shells, scattering the debris to enormous distances in all directions.

Hatteras, however, climbed up the steepest ascents with surprising agility, disdaining the help of his staff.

He arrived before long at a circular rock, a sort of plateau about ten feet wide. A river of boiling lava surrounded it, except in one part, where it forked away to a higher rock, leaving a narrow passage, through which Hatteras fearlessly passed.

Here he stopped, and his companions managed to rejoin him. He seemed to be measuring with his eye the distance he had yet to get over. Horizontally, he was not more than two hundred yards from the top of the crater, but vertically he had nearly three times that distance to traverse.

The ascent had occupied three hours already. Hatteras showed no signs of fatigue, while the others were almost spent.

The summit of the volcano appeared inaccessible, and the Doctor determined at any price to prevent Hatteras from attempting to proceed. He tried gentle means first, but the captain’s excitement was fast becoming delirium. During their ascent, symptoms of insanity had become more and more marked, and no one could be surprised who knew anything of his previous history.

"Hatteras," said the Doctor, "it is enough! we cannot go further!"
"Stop, then," he replied, in a strangely altered voice; "I am going higher."
"No, it is useless; you are at the Pole already."
"No, no! higher, higher!"
"My friend, do you know who is speaking to you? It is I, Doctor Clawbonny."
"Higher, higher!" repeated the madman.
"Very well, we shall not allow it—that is all."

He had hardly uttered the words before Hatteras, by a superhuman effort, sprang over the boiling lava, and was beyond the reach of his companions.

A cry of horror burst from every lip, for they thought the poor captain must have perished in that fiery gulf; but
there he was safe on the other side, accompanied by his faithful Duk, who would not leave him.

He speedily disappeared behind a curtain of smoke, and they heard his voice growing fainter in the distance, shouting—

"To the north! to the north! to the top of Mount Hatteras! Remember Mount Hatteras!"

All pursuit of him was out of the question; it was impossible to leap across the fiery torrent, and equally impossible to get round it. Altamont, indeed, was mad enough to make an attempt, and would certainly have lost his life if the others had not held him back by main force.

"Hatteras! Hatteras!" shouted the Doctor, but no response was heard save the faint bark of Duk.

At intervals, however, a glimpse of him could be caught through the clouds of smoke and showers of ashes. Sometimes his head, sometimes his arm appeared; then he was out of sight again, and a few minutes later was seen higher up clinging to the rocks. His size constantly decreased with the fantastic rapidity of objects rising upwards in the air. In half-an-hour he was only half his size.

The air was full of the deep rumbling noise of the volcano, and the mountain shook and trembled. From time to time a loud fail was heard behind, and the travellers would see some enormous rock rebounding from the heights to engulf itself in the polar basin below.

[Illustration: Hatteras did not even turn once to look back, but marched straight on, carrying his country’s flag attached to his staff.—P.249]

Hatteras did not even turn once to look back, but marched straight on, carrying his country’s flag attached to his staff. His terrified friends watched every movement, and saw him gradually decrease to microscopic dimensions, while Duk looked no larger than a big rat.

Then came a moment of intense anxiety, for the wind beat down on them an immense sheet of flame, and they could see nothing but the red glare. A cry of agony escaped the Doctor; but an instant afterwards Hatteras reappeared, waving his flag.

For a whole hour this fearful spectacle went on—an hour of battle with unsteady loose rocks and quagmires of ashes, where the foolhardy climber sank up to his waist. Sometimes they saw him hoist himself up by leaning knees and loins against the rocks in narrow, intricate winding paths, and sometimes he would be hanging on by both hands to some sharp crag, swinging to and fro like a withered tuft.

[Illustration: ]

At last he reached the summit of the mountain, the mouth of the crater. Here the Doctor hoped the infatuated man would stop, at any rate, and would, perhaps, recover his senses, and expose himself to no more danger than the descent involved.

Once more he shouted—

"Hatteras! Hatteras!"

There was such a pathos of entreaty in his tone that Altamont felt moved to his inmost soul.

"I’ll save him yet!" he exclaimed; and before Clawbonny could hinder him, he had cleared with a bound the torrent of fire, and was out of sight among the rocks.

Meantime, Hatteras had mounted a rock which overhung the crater, and stood waving his flag amidst showers of stones which rained down on him. Duk was by his side; but the poor beast was growing dizzy in such close proximity to the abyss.

Hatteras balanced his staff in one hand, and with the other sought to find the precise mathematical point where all the meridians of the globe meet, the point on which it was his sublime purpose to plant his foot.

All at once the rock gave way, and he disappeared. A cry of horror broke from his companions, and rang to the top of the mountain. Clawbonny thought his friend had perished, and lay buried for ever in the depths of the volcano. A second—only a second, though it seemed an age—elapsed, and there was Altamont and the dog holding the ill-fated Hatteras! Man and dog had caught him at the very moment when he disappeared in the abyss.

Hatteras was saved! Saved in spite of himself; and half-an-hour later he lay unconscious in the arms of his despairing companions.

When he came to himself, the Doctor looked at him in speechless anguish, for there was no glance of recognition in his eye. It was the eye of a blind man, who gazes without seeing.

"Good heavens!" exclaimed Johnson; "he is blind!"

"No," replied Clawbonny, "no! My poor friends, we have only saved the body of Hatteras; his soul is left behind on the top of the volcano. His reason is gone!"

"Insane!" exclaimed Johnson and Altamont, in consternation.

"Insane!" replied the Doctor, and the big tears ran down his cheeks.

CHAPTER XXV.

RETURN SOUTH.
Three hours after this sad dénouement of the adventures of Captain Hatteras, the whole party were back once more in the grotto.

Clawbonny was asked his opinion as to what was best to be done.
"Well, friends," he said, "we cannot stay longer in this island; the sea is open, and we have enough provisions. We ought to start at once, and get back without the least delay to Fort Providence, where we must winter."
"That is my opinion, too," said Altamont. "The wind is favourable, so to-morrow we will get to sea."

The day passed in profound dejection. The insanity of the captain was a bad omen and when they began to talk over the return voyage, their hearts failed them for fear. They missed the intrepid spirit of their leader.

However, like brave men, they prepared to battle anew with the elements and with themselves, if ever they felt inclined to give way.

Next morning they made all ready to sail, and brought the tent and all its belongings on board.

But before leaving these rocks, never to return, the Doctor carrying out the intentions of Hatteras, had a cairn erected on the very spot where the poor fellow had jumped ashore. It was made of great blocks placed one on the top of the other, so as to be a landmark perfectly visible while the eruptions of the volcano left it undisturbed. On one of the side stones, Bell chiselled the simple inscription—

JOHN HATTERAS.

The duplicate of the document attesting the discovery of the North Pole was enclosed in a tinned iron cylinder, and deposited in the cairn, to remain as a silent witness among those desert rocks.

This done, the four men and the captain, a poor body without a soul, set out on the return voyage, accompanied by the faithful Duk, who had become sad and downcast. A new sail was manufactured out of the tent, and about ten o’clock, the little sloop sailed out before the wind.

She made a quick passage, finding abundance of open water. It was certainly easier to get away from the Pole than to get to it.

But Hatteras knew nothing that was passing around him. He lay full length in the boat, perfectly silent, with lifeless eye and folded arms, and Duk lying at his feet. Clawbonny frequently addressed him, but could elicit no reply.

On the 15th they sighted Altamont Harbour, but as the sea was open all along the coast, they determined to go round to Victoria Bay by water, instead of crossing New America in the sledge.

The voyage was easy and rapid. In a week they accomplished what had taken a fortnight in the sledge, and on the 23rd they cast anchor in Victoria Bay.

As soon as the sloop was made fast, they all hastened to Fort Providence. But what a scene of devastation met their eyes! Doctor’s House, stores, powder-magazine, fortifications, all had melted away, and the provisions had been ransacked by devouring animals.

The navigators had almost come to the end of their supplies, and had been reckoning on replenishing their stores at Fort Providence. The impossibility of wintering there now was evident, and they decided to get to Baffin’s Bay by the shortest route.

"We have no alternative," said Clawbonny; "Baffin’s Bay is not more than six hundred miles distant. We can sail as long as there is water enough under our sloop, and get to Jones’ Sound, and then on to the Danish settlements."

"Yes," said Altamont; "let us collect what food remains, and be off at once."

After a thorough search, a few cases of pemmican were found scattered here and there, and two barrels of preserved meat, altogether enough for six weeks, and a good supply of powder. It was soon collected and brought on board, and the remainder of the day was employed in caulking the sloop and putting her in good trim.

Next morning they put out once more to sea. The voyage presented no great difficulties, the drift-ice being easily avoided; but still the Doctor thought it advisable, in case of possible delays, to limit the rations to one-half. This was no great hardship, as there was not much work for anyone to do, and all were in perfect health.

Besides, they found a little shooting, and brought down ducks, and geese, and guillemots, or sea turtledoves. Water they were able to supply themselves with in abundance, from the fresh-water icebergs they constantly fell in with as they kept near the coast, not daring to venture out to the open sea in so frail a barque.

At that time of the year, the thermometer was already constantly below freezing point. The frequent rains changed to snow, and the weather became gloomy. Each day the sun dipped lower below the horizon, and on the 30th, for a few minutes, he was out of sight altogether.

However, the little sloop sailed steadily on without stopping an instant. They knew what fatigues and obstacles a land journey involved, if they should be forced to adopt it, and no time was to be lost, for soon the open water would harden to firm ground; already the young ice had begun to form. In these high latitudes there is neither spring nor autumn; winter follows close on the heels of summer.
On the 31st the first stars glimmered overhead, and from that time forwards there was continual fog, which considerably impeded navigation.

The Doctor became very uneasy at these multiplied indications of approaching winter. He knew the difficulties Sir John Ross had to contend with after he left his ship to try and reach Baffin’s Bay, and how, after all, he was compelled to return and pass a fourth winter on board. It was bad enough with shelter and food and fuel, but if any such calamity befell the survivors of the Forward, if they were obliged to stop or return, they were lost.

The Doctor said nothing of his anxieties to his companions, but only urged them to get as far east as possible.

At last, after thirty days’ tolerably quick sailing, and after battling for forty-eight hours against the increasing drift ice, and risking the frail sloop a hundred times, the navigators saw themselves blocked in on all sides. Further progress was impossible, for the sea was frozen in every direction, and the thermometer was only 15° above zero.

Altamont made a reckoning with scrupulous precision, and found they were in 77°15’ latitude, and 85° 2’ longitude.

"This is our exact position then," said the Doctor. "We are in South Lincoln, just at Cape Eden, and are entering Jones’ Sound. With a little more good luck, we should have found open water right to Baffin’s Bay. But we must not grumble. If my poor Hatters had found as navigable a sea at first, he would have soon reached the Pole. His men would not have deserted him, and his brain would not have given way under the pressure of terrible trial."

"I suppose, then," said Altamont, "our only course is to leave the sloop, and get by sledge to the east coast of Lincoln."

"Yes; but I think we should go through Jones’ Sound, and get to South Devon instead of crossing Lincoln."

"Why?"

"Because the nearer we get to Lancaster Sound, the more chance we have of meeting whalers."

"You are right; but I question whether the ice is firm enough to make it practicable."

"We’ll try," replied Clawbonny.

The little vessel was unloaded, and the sledge put together again. All the parts were in good condition, so the next day the dogs were harnessed, and they started off along the coast to reach the ice-field; but Altamont’s opinion proved right. They could not get through Jones’ Sound, and were obliged to follow the coast to Lincoln.

At last, on the 24th, they set foot on North Devon.

"Now," said Clawbonny, "we have only to cross this, and get to Cape Warender at the entrance to Lancaster Sound."

But the weather became frightful, and very cold. The snow-storms and tempests returned with winter violence, and the travellers felt too weak to contend with them. Their stock of provisions was almost exhausted, and rations had to be reduced now to a third, that the dogs might have food enough to keep them in working condition.

The nature of the ground added greatly to the fatigue. North Devon is extremely wild and rugged, and the path across the Trauter mountains is through difficult gorges. The whole party—men, and dogs, and sledge alike—were frequently forced to stop, for they could not struggle on against the fury of the elements. More than once despair crept over the brave little band, hardy as they were, and used to Polar sufferings. Though scarcely aware of it themselves, they were completely worn out, physically and mentally.

It was not till the 30th of August that they emerged from these wild mountains into a plain, which seemed to have been upturned and convulsed by volcanic action at some distant period.

Here it was absolutely necessary to take a few days’ rest, for the travellers could not drag one foot after the other, and two of the dogs had died from exhaustion. None of the party felt equal to put up the tent, so they took shelter behind an iceberg.

Provisions were now so reduced, that, notwithstanding their scanty rations, there was only enough left for one week. Starvation stared the poor fellows in the face.

Altamont, who had displayed great unselfishness and devotion to the others, roused his sinking energies, and determined to go out and find food for his comrades.

He took his gun, called Duk, and went off almost unnoticed by the rest.

He had been absent about an hour, and only once during that time had they heard the report of his gun; and now he was coming back empty-handed, but running as if terrified.

"What is the matter?" asked the Doctor.

"Down there, under the snow!" said Altamont, speaking as if scared, and pointing in a particular direction.

"What?"

"A whole party of men!"

"Alive?"
"Dead—frozen—and even—"
He did not finish the sentence, but a look of unspeakable horror came over his face.

The Doctor and the others were so roused by this incident, that they managed to get up and drag themselves after Altamont towards the place he indicated.

They soon arrived, at a narrow part at the bottom of a ravine, and what a spectacle met their gaze! Dead bodies, already stiff, lay half-buried in a winding-sheet of snow. A leg visible here, an arm there, and yonder shrunken hands and rigid faces, stamped with the expression of rage and despair.

The Doctor stooped down to look at them more closely, but instantly started back pale and agitated, while Duk barked ominously.

"Horrible, horrible!" he said.
"What is it?" asked Johnson.
"Don't you recognize them?"
"What do you mean?"
"Look and see!"

It was evident this ravine had been but recently the scene of a fearful straggle with cold, and despair, and starvation, for by certain horrible remains it was manifest that the poor wretches had been feeding on human flesh, perhaps while still warm and palpitating; and among them the Doctor recognized Shandon, Pen, and the ill-fated crew of the Forward! Their strength had failed; provisions had come to an end; their boat had been broken, perhaps by an avalanche or engulfed in some abyss, and they could not take advantage of the open sea; or perhaps they had lost their way in wandering over these unknown continents. Moreover, men who set out under the excitement of a revolt were not likely to remain long united. The leader of a rebellion has but a doubtful power, and no doubt Shandon’s authority had been soon cast off.

Be that as it might, it was evident the crew had come through agonies of suffering and despair before this last terrible catastrophe, but the secret of their miseries is buried with them beneath the polar snows.

"Come away! come away!" said the Doctor, dragging his companions from the scene. Horror gave them momentary strength, and they resumed their march without stopping a minute longer.

CHAPTER XXVI.
CONCLUSION.

It would be useless to enumerate all the misfortunes which befell the survivors of the expedition. Even the men themselves were never able to give any detailed narrative of the events which occurred during the week subsequent to the horrible discovery related in the last chapter. However, on the 9th of September, by superhuman exertions, they arrived at last at Cape Horsburg, the extreme point of North Devon.

They were absolutely starving. For forty-eight hours they had tasted nothing, and their last meal had been off the flesh of their last Esquimaux dog. Bell could go no further, and Johnson felt himself dying.

They were on the shore of Baffin’s Bay, now half-frozen over; that is to say, on the road to Europe, and three miles off the waves were dashing noiselessly on the sharp edges of the ice-field.

Here they must wait their chance of a whaler appearing; and for how long?

But Heaven pitied the poor fellows, for the very next day Altamont distinctly perceived a sail on the horizon. Every one knows the torturing suspense that follows such an appearance, and the agonizing dread lest it should prove a false hope. The vessel seems alternately to approach and recede, and too often just at the very moment when the poor castaways think they are saved, the sail begins to disappear, and is soon out of sight.

[Illustration: Two hours later, after unheard-of exertions, the survivors of the Forward were picked up by the Hans Christian.—P.266]

The Doctor and his companions went through all these experiences. They had succeeded in reaching the western boundary of the ice-field by carrying and pushing each other along, and they watched the ship gradually fade away from view without observing them, in spite of their loud cries for help.

Just then a happy inspiration came to the Doctor. His fertile genius, which had served him many a time in such good stead, supplied him with one last idea!

A floe driven by the current struck against the icefield, and Clawbonny exclaimed, pointing to it—
"This floe!"

His companions could not understand what he meant.
"Let us embark on it! let us embark on it!"
"Oh! Mr. Clawbonny, Mr. Clawbonny," said Johnson, pressing his hand.

Bell, assisted by Altamont, hurried to the sledge, and brought back one of the poles, which he stuck fast on the ice like a mast, and fastened it with ropes. The tent was torn up to furnish a sail, and as soon as the frail raft was ready the poor fellows jumped upon it, and sailed out to the open sea.
Two hours later, after unheard-of exertions, the survivors of the Forward were picked up by the Hans Christian, a Danish whaler, on her way to Davis’ Straits. They were more like spectres than human beings, and the sight of their sufferings was enough. It told its own tale; but the captain received them with such hearty sympathy, and lavished on them such care and kindness, that he succeeded in keeping them alive.

Ten days afterwards, Clawbonny, Johnson, Bell, Altamont, and Captain Hatteras landed at Korsam, in Zealand, an island belonging to Denmark. They took the steamer to Kiel, and from there proceeded by Altona and Hamburg to London, where they arrived on the 13th of the same month, scarcely recovered after their long sufferings.

The first care of Clawbonny was to request the Royal Geographical Society to receive a communication from him. He was accordingly admitted to the next séance, and one can imagine the astonishment of the learned assembly and the enthusiastic applause produced by the reading of Hatteras’ document.

The English have a passion for geographical discovery, from the lord to the cockney, from the merchant down to the dock labourer, and the news of this grand discovery speedily flashed along the telegraph wires, throughout the length and breadth of the kingdom. Hatteras was lauded as a martyr by all the newspapers, and every Englishman felt proud of him.

The Doctor and his companions had the honour of being presented to the Queen by the Lord Chancellor, and they were feted and "lionized" in all quarters.

The Government confirmed the names of "Queen’s Island," "Mount Hatteras," and "Altamont Harbour."

Altamont would not part from his companions in misery and glory, but followed them to Liverpool, where they were joyously welcomed back, after being so long supposed dead and buried beneath the eternal snows.

But Dr. Clawbonny would never allow that any honour was due to himself. He claimed all the merit of the discovery for his unfortunate captain, and in the narrative of his voyage, published the next year under the auspices of the Royal Geographical Society, he places John Hatteras on a level with the most illustrious navigators, and makes him the compeer of all the brave, daring men who have sacrificed themselves for the progress of science.

The insanity of this poor victim of a sublime passion was of a mild type, and he lived quietly at Sten Cottage, a private asylum near Liverpool, where the Doctor himself had placed him. He never spoke, and understood nothing that was said to him; reason and speech had fled together. The only tie that connected him with the outside world was his friendship for Duk, who was allowed to remain with him.

For a considerable time the captain had been in the habit of walking in the garden for hours, accompanied by his faithful dog, who watched him with sad, wistful eyes, but his promenade was always in one direction in a particular part of the garden. When he got to the end of this path, he would stop and begin to walk backwards. If anyone stopped him he would point with his finger towards a certain part of the sky, but let anyone attempt to turn him round, and he became angry, while Duk, as if sharing his master’s sentiments, would bark furiously.

The Doctor, who often visited his afflicted friend, noticed this strange proceeding one day, and soon understood the reason of it. He saw how it was that he paced so constantly in a given direction, as if under the influence of some magnetic force.

This was the secret: John Hatteras invariably walked towards the North.

The End.

In Search of the Castaways
or
The Children of Captain Grant
By Jules Verne
South America
CHAPTER I THE SHARK

ON the 26th of July, 1864, a magnificent yacht was steaming along the North Channel at full speed, with a strong breeze blowing from the N. E. The Union Jack was flying at the mizzen-mast, and a blue standard bearing the initials E. G., embroidered in gold, and surmounted by a ducal coronet, floated from the topgallant head of the main-mast. The name of the yacht was the DUNCAN, and the owner was Lord Glenarvan, one of the sixteen Scotch peers who sit in the Upper House, and the most distinguished member of the Royal Thames Yacht Club, so famous throughout the United Kingdom.

Lord Edward Glenarvan was on board with his young wife, Lady Helena, and one of his cousins, Major McNabbs.

The DUNCAN was newly built, and had been making a trial trip a few miles outside the Firth of Clyde. She was
returning to Glasgow, and the Isle of Arran already loomed in the distance, when the sailor on watch caught sight of
an enormous fish sporting in the wake of the ship. Lord Edward, who was immediately apprised of the fact, came up
on the poop a few minutes after with his cousin, and asked John Mangles, the captain, what sort of an animal he
thought it was.

"Well, since your Lordship asks my opinion," said Mangles, "I think it is a shark, and a fine large one too."

"A shark on these shores!"

"There is nothing at all improbable in that," returned the captain. "This fish belongs to a species that is found in
all latitudes and in all seas. It is the 'balance-fish,' or hammer-headed shark, if I am not much mistaken. But if your
Lordship has no objections, and it would give the smallest pleasure to Lady Helena to see a novelty in the way of
fishing, we'll soon haul up the monster and find out what it really is."

"What do you say, McNabbs? Shall we try to catch it?" asked Lord Glenarvan.

"If you like; it's all one to me," was his cousin's cool reply.

"The more of those terrible creatures that are killed the better, at all events," said John Mangles, "so let's seize
the chance, and it will not only give us a little diversion, but be doing a good action."

"Very well, set to work, then," said Glenarvan.

Lady Helena soon joined her husband on deck, quite charmed at the prospect of such exciting sport. The sea was
splendid, and every movement of the shark was distinctly visible. In obedience to the captain's orders, the sailors
threw a strong rope over the starboard side of the yacht, with a big hook at the end of it, concealed in a thick lump of
bacon. The bait took at once, though the shark was full fifty yards distant. He began to make rapidly for the yacht,
beating the waves violently with his fins, and keeping his tail in a perfectly straight line. As he got nearer, his great
projecting eyes could be seen inflamed with greed, and his gaping jaws with their quadruple row of teeth. His head
was large, and shaped like a double hammer at the end of a handle. John Mangles was right. This was evidently a
balance-fish-- the most voracious of all the SQUALIDAE species.

The passengers and sailors on the yacht were watching all the animal's movements with the liveliest interest. He
soon came within reach of the bait, turned over on his back to make a good dart at it, and in a second bacon and
contents had disappeared. He had hooked himself now, as the tremendous jerk he gave the cable proved, and the
sailors began to haul in the monster by means of tackle attached to the mainyard. He struggled desperately, but his
captors were prepared for his violence, and had a long rope ready with a slip knot, which caught his tail and
rendered him powerless at once. In a few minutes more he was hoisted up over the side of the yacht and thrown on
the deck. A man came forward immediately, hatchet in hand, and approaching him cautiously, with one powerful
stroke cut off his tail.

This ended the business, for there was no longer any fear of the shark. But, though the sailors' vengeance was
satisfied, their curiosity was not; they knew the brute had no very delicate appetite, and the contents of his stomach
might be worth investigation. This is the common practice on all ships when a shark is captured, but Lady Glenarvan
deprecated to be present at such a disgusting exploration, and withdrew to the cabin again. The fish was still breathing;
it measured ten feet in length, and weighed more than six hundred pounds. This was nothing extraordinary, for
though the hammer-headed shark is not classed among the most gigantic of the species, it is always reckoned among
the most formidable.

The huge brute was soon ripped up in a very unceremonious fashion. The hook had fixed right in the stomach,
which was found to be absolutely empty, and the disappointed sailors were just going to throw the remains
overboard, when the boatswain's attention was attracted by some large object sticking fast in one of the viscera.

"I say! what's this?" he exclaimed.

"That!" replied one of the sailors, "why, it's a piece of rock the beast swallowed by way of ballast."

"It's just a bottle, neither more nor less, that the fellow has got in his inside, and couldn't digest," said another of
the crew.

"Hold your tongues, all of you!" said Tom Austin, the mate of the DUNCAN. "Don't you see the animal has
been such an invertebrate tippler that he has not only drunk the wine, but swallowed the bottle?"

"What!" said Lord Glenarvan. "Do you mean to say it is a bottle that the shark has got in his stomach."

"Ay, it is a bottle, most certainly," replied the boatswain, "but not just from the cellar."

"Well, Tom, be careful how you take it out," said Lord Glenarvan, "for bottles found in the sea often contain
precious documents."

"Do you think this does?" said Major McNabbs, incredulously.

"It possibly may, at any rate."

"Oh! I'm not saying it doesn't. There may perhaps be some secret in it," returned the Major.

"That's just what we're to see," said his cousin. "Well, Tom."

"Here it is," said the mate, holding up a shapeless lump he had managed to pull out, though with some difficulty.
"Get the filthy thing washed then, and bring it to the cabin."

Tom obeyed, and in a few minutes brought in the bottle and laid it on the table, at which Lord Glenarvan and the Major were sitting ready with the captain, and, of course Lady Helena, for women, they say, are always a little curious. Everything is an event at sea. For a moment they all sat silent, gazing at this frail relic, wondering if it told the tale of sad disaster, or brought some trifling message from a frolic-loving sailor, who had flung it into the sea to amuse himself when he had nothing better to do.

However, the only way to know was to examine the bottle, and Glenarvan set to work without further delay, so carefully and minutely, that he might have been taken for a coroner making an inquest.

He commenced by a close inspection of the outside. The neck was long and slender, and round the thick rim there was still an end of wire hanging, though eaten away with rust. The sides were very thick, and strong enough to bear great pressure. It was evidently of Champagne origin, and the Major said immediately, "That's one of our Clicquot's bottles."

Nobody contradicted him, as he was supposed to know; but Lady Helena exclaimed, "What does it matter about the bottle, if we don't know where it comes from?"

"We shall know that, too, presently, and we may affirm this much already-- it comes from a long way off. Look at those petrifactions all over it, these different substances almost turned to mineral, we might say, through the action of the salt water! This waif had been tossing about in the ocean a long time before the shark swallowed it."

"I quite agree with you," said McNabbs. "I dare say this frail concern has made a long voyage, protected by this strong covering."

"But I want to know where from?" said Lady Glenarvan.

"Wait a little, dear Helena, wait; we must have patience with bottles; but if I am not much mistaken, this one will answer all our questions," replied her husband, beginning to scrape away the hard substances round the neck. Soon the cork made its appearance, but much damaged by the water.

"That's vexing," said Lord Edward, "for if papers are inside, they'll be in a pretty state!"

"It's to be feared they will," said the Major.

"But it is a lucky thing the shark swallowed them, I must say," added Glenarvan, "for the bottle would have sunk to the bottom before long with such a cork as this."

"That's true enough," replied John Mangles, "and yet it would have been better to have fished them up in the open sea. Then we might have found out the road they had come by taking the exact latitude and longitude, and studying the atmospheric and submarine currents; but with such a postman as a shark, that goes against wind and tide, there's no clew whatever to the starting-point."

"We shall see," said Glenarvan, gently taking out the cork. A strong odor of salt water pervaded the whole saloon, and Lady Helena asked impatiently: "Well, what is there?"

"I was right!" exclaimed Glenarvan. "I see papers inside. But I fear it will be impossible to remove them," he added, "for they appear to have rotted with the damp, and are sticking to the sides of the bottle."

"Break it," said the Major.

"I would rather preserve the whole if I could."

"No doubt you would," said Lady Helena; "but the contents are more valuable than the bottle, and we had better sacrifice the one than the other."

"If your Lordship would simply break off the neck, I think we might easily withdraw the papers," suggested John Mangles.

"Try it, Edward, try it," said Lady Helena.

Lord Glenarvan was very unwilling, but he found there was no alternative; the precious bottle must be broken. They had to get a hammer before this could be done, for the stony material had acquired the hardness of granite. A few sharp strokes, however, soon shivered it to fragments, many of which had pieces of paper sticking to them. These were carefully removed by Lord Glenarvan, and separated and spread out on the table before the eager gaze of his wife and friends.

CHAPTER II THE THREE DOCUMENTS

All that could be discovered, however, on these pieces of paper was a few words here and there, the remainder of the lines being almost completely obliterated by the action of the water. Lord Glenarvan examined them attentively for a few minutes, turning them over on all sides, holding them up to the light, and trying to decipher the least scrap of writing, while the others looked on with anxious eyes. At last he said: "There are three distinct documents here, apparently copies of the same document in three different languages. Here is one in English, one in French, and one in German."

"But can you make any sense out of them?" asked Lady Helena.

"That's hard to say, my dear Helena, the words are quite incomplete."

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"But can you make any sense out of them?" asked Lady Helena.

"That's hard to say, my dear Helena, the words are quite incomplete."
"Perhaps the one may supplement the other," suggested Major McNabbs.

"Very likely they will," said the captain. "It is impossible that the very same words should have been effaced in each document, and by putting the scraps together we might gather some intelligible meaning out of them."

"That's what we will do," rejoined Lord Glenarvan; "but let us proceed methodically. Here is the English document first."

All that remained of it was the following:

62 _Bri gow sink stra aland skipp Gr that monit of long and ssistance lost_

"There's not much to be made out of that," said the Major, looking disappointed.

"No, but it is good English anyhow," returned the captain.

"There's no doubt of it," said Glenarvan. "The words SINK, ALAND, LOST are entire; SKIPP is evidently part of the word SKIPPER, and that's what they call ship captains often in England. There seems a Mr. Gr. mentioned, and that most likely is the captain of the shipwrecked vessel."

"Well, come, we have made out a good deal already," said Lady Helena.

"Yes, but unfortunately there are whole lines wanting," said the Major, "and we have neither the name of the ship nor the place where she was shipwrecked."

"We'll get that by and by," said Edward.

"Oh, yes; there is no doubt of it," replied the Major, who always echoed his neighbor's opinion. "But how?"

"By comparing one document with the other."

"Let us try them," said his wife.

The second piece of paper was even more destroyed than the first; only a few scattered words remained here and there.

It ran as follows:

7 Juni Glas zwei atrosen graus bringt ihnen

"This is written in German," said John Mangles the moment he looked at it.

"And you understand that language, don't you?" asked Lord Glenarvan.

"Perfectly."

"Come, then, tell us the meaning of these words."

The captain examined the document carefully, and said:

"Well, here's the date of the occurrence first: 7 Juni means June 7; and if we put that before the figures 62 we have in the other document, it gives us the exact date, 7th of June, 1862."

"Capital!" exclaimed Lady Helena. "Go on, John!"

"On the same line," resumed the young captain, "there is the syllable GLAS and if we add that to the GOW we found in the English paper, we get the whole word GLASGOW at once. The documents evidently refer to some ship that sailed out of the port of Glasgow." "That is my opinion, too," said the Major.

"The second line is completely effaced," continued the Captain; "but here are two important words on the third. There is ZWEI, which means TWO, and ATROSEN or MATROSEN, the German for SAILORS."

"Then I suppose it is about a captain and two sailors," said Lady Helena.

"It seems so," replied Lord Glenarvan.

"I must confess, your Lordship, that the next word puzzles me. I can make nothing of it. Perhaps the third document may throw some light on it. The last two words are plain enough. BRINGT IHNEN means BRING THEM; and, if you recollect, in the English paper we had SSISTANCE, so by putting the parts together, it reads thus, I think: 'BRING THEM ASSISTANCE.'"

"Yes, that must be it," replied Lord Glenarvan. "But where are the poor fellows? We have not the slightest indication of the place, meantime, nor of where the catastrophe happened."

"Perhaps the French copy will be more explicit," suggested Lady Helena.

"Here it is, then," said Lord Glenarvan, "and that is in a language we all know."

The words it contained were these:

troi ats tannia gonie austral abor contin pr cruel indi jete ongit et 37 degrees 11" LAT

"There are figures!" exclaimed Lady Helena. "Look!"

"Let us go steadily to work," said Lord Glenarvan, "and begin at the beginning. I think we can make out from the incomplete words in the first line that a three-mast vessel is in question, and there is little doubt about the name; we get that from the fragments of the other papers; it is the BRITANNIA. As to the next two words, GONIE and AUSTRAL, it is only AUSTRAL that has any meaning to us."

"But that is a valuable scrap of information," said John Mangles. "The shipwreck occurred in the southern hemisphere."

"That's a wide world," said the Major.
"Well, we'll go on," resumed Glenarvan. "Here is the word ABOR; that is clearly the root of the verb ABORDER. The poor men have landed somewhere; but where? CONTIN--does that mean continent? CRUEL!"

"CRUEL!" interrupted John Mangles. "I see now what GRAUS is part of in the second document. It is GRAUSAM, the word in German for CRUEL!"

"Let's go on," said Lord Glenarvan, becoming quite excited over his task, as the incomplete words began to fill up and develop their meaning. "INDI--is it India where they have been shipwrecked? And what can this word ONGIT be part of? Ah! I see--it is LONGITUDE; and here is the latitude, 37 degrees 11". That is the precise indication at last, then!"

"But we haven't the longitude," objected McNabbs.

"But we can't get everything, my dear Major; and it is something at all events, to have the exact latitude. The French document is decidedly the most complete of the three; but it is plain enough that each is the literal translation of the other, for they all contain exactly the same number of lines. What we have to do now is to put together all the words we have found, and translate them into one language, and try to ascertain their most probable and logical sense."

"Well, what language shall we choose?" asked the Major.

"I think we had better keep to the French, since that was the most complete document of the three."

"Your Lordship is right," said John Mangles, "and besides, we're all familiar with the language."

"Very well, then, I'll set to work."

In a few minutes he had written as follows:

7 Juin 1862 trois-mats Britannia Glasgow sombre gonie austral a terre deux matelots capitaine Gr abor contin pr cruel indi jete ce document de longitude et 37 degrees 11" de latitude Portez-leur secours perdus.

[7th of June, 1862 three-mast BRITANNIA Glasgow] foundered gonie southern on the coast two sailors Gr Captain landed contin pr cruel indi thrown this document in longitude and 37 degrees 11" latitude Bring them assistance lost

Just at that moment one of the sailors came to inform the captain that they were about entering the Firth of Clyde, and to ask what were his orders.

"What are your Lordship's intentions?" said John Mangles, addressing Lord Glenarvan.

"To get to Dunbarton as quickly as possible, John; and Lady Helena will return to Malcolm Castle, while I go on to London and lay this document before the Admiralty."

The sailor received orders accordingly, and went out to deliver them to the mate.

"Now, friends," said Lord Glenarvan, "let us go on with our investigations, for we are on the track of a great catastrophe, and the lives of several human beings depend on our sagacity. We must give our whole minds to the solution of this enigma."

"First of all, there are three very distinct things to be considered in this document--the things we know, the things we may conjecture, the things we do not know.""

"What are those we know? We know that on the 7th of June a three-mast vessel, the BRITANNIA of Glasgow, foundered; that two sailors and the captain threw this document into the sea in 37 degrees 11" latitude, and they entreat help."

"Exactly so," said the Major.

"What are those now we may conjecture?" continued Glenarvan. "That the shipwreck occurred in the southern seas; and here I would draw your attention at once to the incomplete word GONIE. Doesn't the name of the country strike you even in the mere mention of it?"

"Patagonia!" exclaimed Lady Helena.

"Undoubtedly."

"But is Patagonia crossed by the 37th parallel?" asked the Major.

"That is easily ascertained," said the captain, opening a map of South America. "Yes, it is; Patagonia just touches the 37th parallel. It cuts through Araucania, goes along over the Pampas to the north, and loses itself in the Atlantic."

"Well, let us proceed then with our conjectures. The two sailors and the captain LAND--land where? CONTIN--on a continent; on a continent, mark you, not an island. What becomes of them? There are two letters here providentially which give a clew to their fate--PR, that must mean prisoners, and CRUEL INDIAN is evidently the meaning of the next two words. These unfortunate men are captives in the hands of cruel Indians. Don't you see it? Don't the words seem to come of themselves, and fill up the blanks? Isn't the document quite clear now? Isn't the sense self-evident?"

Glenarvan spoke in a tone of absolute conviction, and his enthusiastic confidence appeared contagious, for the others all exclaimed, too, "Yes, it is evident, quite evident!"

After an instant, Lord Edward said again, "To my own mind the hypothesis is so plausible, that I have no doubt
whatever the event occurred on the coast of Patagonia, but still I will have inquiries made in Glasgow, as to the
destination of the BRITANNIA, and we shall know if it is possible she could have been wrecked on those shores."
"Oh, there's no need to send so far to find out that," said John Mangles. "I have the _Mercantile and Shipping
Gazette_ here, and we'll see the name on the list, and all about it."
"Do look at once, then," said Lord Glenarvan.

The file of papers for the year 1862 was soon brought, and John began to turn over the leaves rapidly, running
down each page with his eye in search of the name required. But his quest was not long, for in a few minutes he
called out: "I've got it! 'May 30, 1862, Peru-Callao, with cargo for Glasgow, the BRITANNIA, Captain Grant.'"
"Grant!" exclaimed Lord Glenarvan. "That is the adventurous Scotchman that attempted to found a new Scotland
on the shores of the Pacific."
"Yes," rejoined John Mangles, "it is the very man. He sailed from Glasgow in the BRITANNIA in 1861, and has
not been heard of since."
"There isn't a doubt of it, not a shadow of doubt," repeated Lord Glenarvan. "It is just that same Captain Grant.
The BRITANNIA left Callao on the 30th of May, and on the 7th of June, a week afterward, she is lost on the coast
of Patagonia. The few broken disjointed words we find in these documents tell us the whole story. You see, friends,
our conjectures hit the mark very well; we know all now except one thing, and that is the longitude."
"That is not needed now, we know the country. With the latitude alone, I would engage to go right to the place
where the wreck happened."
"Then have we really all the particulars now?" asked Lady Helena.
"All, dear Helena; I can fill up every one of these blanks the sea has made in the document as easily as if Captain
Grant were dictating to me."

And he took up the pen, and dashed off the following lines immediately: "On the 7th of June, 1862, the three-
mast vessel, BRITANNIA, of Glasgow, has sunk on the coast of Patagonia, in the southern hemisphere. Making for
the shore, two sailors and Captain Grant are about to land on the continent, where they will be taken prisoners by
cruel Indians. They have thrown this document into the sea, in longitude and latitude 37 degrees 11'. Bring them
assistance, or they are lost."
"Capital! capital! dear Edward," said Lady Helena. "If those poor creatures ever see their native land again, it is
you they will have to thank for it."
"And they will see it again," returned Lord Glenarvan; "the statement is too explicit, and clear, and certain for
England to hesitate about going to the aid of her three sons cast away on a desert coast. What she has done for
Franklin and so many others, she will do to-day for these poor shipwrecked fellows of the BRITANNIA."
"Most likely the unfortunate men have families who mourn their loss. Perhaps this ill-fated Captain Grant had a
wife and children," suggested Lady Helena.
"Very true, my dear, and I'll not forget to let them know that there is still hope. But now, friends, we had better
go up on deck, as the boat must be getting near the harbor."

A carriage and post-horses waited there, in readiness to convey Lady Helena and Major McNabbs to Malcolm
Castle, and Lord Glenarvan bade adieu to his young wife, and jumped into the express train for Glasgow.

But before starting he confided an important missive to a swifter agent than himself, and a few minutes
afterward it flashed along the electric wire to London, to appear next day in the _Times and Morning Chronicle_ in
the following words: "For information respecting the fate of the three-mast vessel BRITANNIA, of Glasgow,
Captain Grant, apply to Lord Glenarvan, Malcolm Castle, Luss, Dumbartonshire, Scotland."

CHAPTER III THE CAPTAIN'S CHILDREN

LORD GLENARVAN'S fortune was enormous, and he spent it entirely in doing good. His kindheartedness was
even greater than his generosity, for the one knew no bounds, while the other, of necessity, had its limits. As Lord of
Luss and "laird" of Malcolm, he represented his county in the House of Lords; but, with his Jacobite ideas, he did
d not care much for the favor of the House of Hanover, and he was looked upon coldly by the State party in England,
because of the tenacity with which he clung to the traditions of his forefathers, and his energetic resistance to the
political encroachments of Southerners. And yet he was not a man behind the times, and there was nothing little or
narrow-minded about him; but while always keeping open his ancestral county to progress, he was a true Scotchman
at heart, and it was for the honor of Scotland that he competed in the yacht races of the Royal Thames Yacht Club.

Edward Glenarvan was thirty-two years of age. He was tall in person, and had rather stern features; but there was
an exceeding sweetness in his look, and a stamp of Highland poetry about his whole bearing. He was known to be
brave to excess, and full of daring and chivalry— a Fer-gus of the nineteenth century; but his goodness excelled
every other quality, and he was more charitable than St. Martin himself, for he would have given the whole of his
cloak to any of the poor Highlanders.

He had scarcely been married three months, and his bride was Miss Helena Tuffnell, the daughter of William
Tuffnell, the great traveler, one of the many victims of geographical science and of the passion for discovery. Miss Helena did not belong to a noble family, but she was Scotch, and that was better than all nobility in the eyes of Lord Glenarvan; and she was, moreover, a charming, high-souled, religious young woman.

Lord Glenarvan did not forget that his wife was the daughter of a great traveler, and he thought it likely that she would inherit her father's predilections. He had the DUNCAN built expressly that he might take his bride to the most beautiful lands in the world, and complete their honeymoon by sailing up the Mediterranean, and through the clustering islands of the Archipelago.

However, Lord Glenarvan had gone now to London. The lives of the shipwrecked men were at stake, and Lady Helena was too much concerned herself about them to grudge her husband's temporary absence. A telegram next day gave hope of his speedy return, but in the evening a letter apprised her of the difficulties his proposition had met with, and the morning after brought another, in which he openly expressed his dissatisfaction with the Admiralty.

Lady Helena began to get anxious as the day wore on. In the evening, when she was sitting alone in her room, Mr. Halbert, the house steward, came in and asked if she would see a young girl and boy that wanted to speak to Lord Glenarvan.

"Some of the country people?" asked Lady Helena.

"No, madame," replied the steward, "I do not know them at all. They came by rail to Balloch, and walked the rest of the way to Luss."

"Tell them to come up, Halbert."

In a few minutes a girl and boy were shown in. They were evidently brother and sister, for the resemblance was unmistakable. The girl was about sixteen years of age; her tired pretty face, and sorrowful eyes, and resigned but courageous look, as well as her neat though poor attire, made a favorable impression. The boy she held by the hand was about twelve, but his face expressed such determination, that he appeared quite his sister's protector.

The girl seemed too shy to utter a word at first, but Lady Helena quickly relieved her embarrassment by saying, with an encouraging smile: "You wish to speak to me, I think?"

"No," replied the boy, in a decided tone; "not to you, but to Lord Glenarvan."

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"Excuse him, ma'am," said the girl, with a look at her brother.

"Lord Glenarvan is not at the castle just now," returned Lady Helena; "but I am his wife, and if I can do anything for you--"

"You are Lady Glenarvan?" interrupted the girl.

"I am."

"The wife of Lord Glenarvan, of Malcolm Castle, that put an announcement in the TIMES about the shipwreck of the BRITANNIA?"

"Yes, yes," said Lady Helena, eagerly; "and you?"

"I am Miss Grant, ma'am, and this is my brother."

"Miss Grant, Miss Grant!" exclaimed Lady Helena, drawing the young girl toward her, and taking both her hands and kissing the boy's rosy cheeks.

"What is it you know, ma'am, about the shipwreck? Tell me, is my father living? Shall we ever see him again? Oh, tell me," said the girl, earnestly.

"My dear child," replied Lady Helena. "Heaven forbid that I should answer you lightly such a question; I would not delude you with vain hopes."

"Oh, tell me all, tell me all, ma'am. I'm proof against sorrow. I can bear to hear anything."

"My poor child, there is but a faint hope; but with the help of almighty Heaven it is just possible you may one day see your father once more."

The girl burst into tears, and Robert seized Lady Glenarvan's hand and covered it with kisses.

As soon as they grew calmer they asked a complete string of questions, and Lady Helena recounted the whole story of the document, telling them that their father had been wrecked on the coast of Patagonia, and that he and two sailors, the sole survivors, appeared to have reached the shore, and had written an appeal for help in three languages and committed it to the care of the waves.

During the recital, Robert Grant was devouring the speaker with his eyes, and hanging on her lips. His childish imagination evidently retraced all the scenes of his father's shipwreck. He saw him on the deck of the BRITANNIA, and then struggling with the billows, then clinging to the rocks, and lying at length exhausted on the beach.

More than once he cried out, "Oh, papa! my poor papa!" and pressed close to his sister.

Miss Grant sat silent and motionless, with clasped hands, and all she said when the narration ended, was: "Oh, ma'am, the paper, please!"

"I have not it now, my dear child," replied Lady Helena.
"You haven't it?"

"No. Lord Glenarvan was obliged to take it to London, for the sake of your father; but I have told you all it contained, word for word, and how we managed to make out the complete sense from the fragments of words left—all except the longitude, unfortunately."

"We can do without that," said the boy.

"Yes, Mr. Robert," rejoined Lady Helena, smiling at the child's decided tone. "And so you see, Miss Grant, you know the smallest details now just as well as I do."

"Yes, ma'am, but I should like to have seen my father's writing."

"Well, to-morrow, perhaps, to-morrow, Lord Glenarvan will be back. My husband determined to lay the document before the Lords of the Admiralty, to induce them to send out a ship immediately in search of Captain Grant."

"Is it possible, ma'am," exclaimed the girl, "that you have done that for us?"

"Yes, my dear Miss Grant, and I am expecting Lord Glenarvan back every minute now."

"Oh, ma'am! Heaven bless you and Lord Glenarvan," said the young girl, fervently, overcome with grateful emotion.

"My dear girl, we deserve no thanks; anyone in our place would have done the same. I only trust the hopes we are leading you to entertain may be realized, but till my husband returns, you will remain at the Castle."

"Oh, no, ma'am. I could not abuse the sympathy you show to strangers."

"Strangers, dear child!" interrupted Lady Helena; "you and your brother are not strangers in this house, and I should like Lord Glenarvan to be able on his arrival to tell the children of Captain Grant himself, what is going to be done to rescue their father."

It was impossible to refuse an invitation given with such heart, and Miss Grant and her brother consented to stay till Lord Glenarvan returned.

CHAPTER IV LADY GLENARVAN'S PROPOSAL

LADY HELENA thought it best to say nothing to the children about the fears Lord Glenarvan had expressed in his letters respecting the decisions of the Lords of the Admiralty with regard to the document. Nor did she mention the probable captivity of Captain Grant among the Indians of South America. Why sadden the poor children, and damp their newly cherished hopes? It would not in the least alter the actual state of the case; so not a word was said, and after answering all Miss Grant's questions, Lady Helena began to interrogate in her turn, asking her about her past life and her present circumstances.

It was a touching, simple story she heard in reply, and one which increased her sympathy for the young girl.

Mary and Robert were the captain's only children. Harry Grant lost his wife when Robert was born, and during his long voyages he left his little ones in charge of his cousin, a good old lady. Captain Grant was a fearless sailor. He not only thoroughly understood navigation, but commerce also—a two-fold qualification eminently useful to skippers in the merchant service. He lived in Dundee, in Perthshire, Scotland. His father, a minister of St. Katrine's Church, had given him a thorough education, as he believed that could never hurt anybody.

Harry's voyages were prosperous from the first, and a few years after Robert was born, he found himself possessed of a considerable fortune.

It was then that he projected the grand scheme which made him popular in Scotland. Like Glenarvan, and a few noble families in the Lowlands, he had no heart for the union with England. In his eyes the interests of his country were not identified with those of the Anglo-Saxons, and to give scope for personal development, he resolved to found an immense Scotch colony on one of the ocean continents. Possibly he might have thought that some day they would achieve their independence, as the United States did—an example doubtless to be followed eventually by Australia and India. But whatever might be his secret motives, such was his dream of colonization. But, as is easily understood, the Government opposed his plans, and put difficulties enough in his way to have killed an ordinary man. But Harry would not be beaten. He appealed to the patriotism of his countrymen, placed his fortune at the service of the cause, built a ship, and manned it with a picked crew, and leaving his children to the care of his old cousin set off to explore the great islands of the Pacific. This was in 1861, and for twelve months, or up to May, 1862, letters were regularly received from him, but no tidings whatever had come since his departure from Callao, in June, and the name of the BRITANNIA never appeared in the Shipping List.

Just at this juncture the old cousin died, and Harry Grant's two children were left alone in the world.

Mary Grant was then only fourteen, but she resolved to face her situation bravely, and to devote herself entirely to her little brother, who was still a mere child. By dint of close economy, combined with tact and prudence, she managed to support and educate him, working day and night, denying herself everything, that she might give him all he needed, watching over him and caring for him like a mother.

The two children were living in this touching manner in Dundee, struggling patiently and courageously with
their poverty. Mary thought only of her brother, and indulged in dreams of a prosperous future for him. She had long given up all hope of the BRITANNIA, and was fully persuaded that her father was dead. What, then, was her emotion when she accidentally saw the notice in the TIMES!

She never hesitated for an instant as to the course she should adopt, but determined to go to Dumbartonshire immediately, to learn the best and worst. Even if she were to be told that her father's lifeless body had been found on a distant shore, or in the bottom of some abandoned ship, it would be a relief from incessant doubt and torturing suspense.

She told her brother about the advertisement, and the two children started off together that same day for Perth, where they took the train, and arrived in the evening at Malcolm Castle.

Such was Mary Grant's sorrowful story, and she recounted it in so simple and unaffected a manner, that it was evident she never thought her conduct had been that of a heroine through those long trying years. But Lady Helena thought it for her, and more than once she put her arms round both the children, and could not restrain her tears.

As for Robert, he seemed to have heard these particulars for the first time. All the while his sister was speaking, he gazed at her with wide-open eyes, only knowing now how much she had done and suffered for him; and, as she ended, he flung himself on her neck, and exclaimed, "Oh, mamma! My dear little mamma!"

It was quite dark by this time, and Lady Helena made the children go to bed, for she knew they must be tired after their journey. They were soon both sound asleep, dreaming of happy days.

After they had retired. Lady Helena sent for Major McNabbs, and told him the incidents of the evening.

"That Mary Grant must be a brave girl," said the Major.

"I only hope my husband will succeed, for the poor children's sake," said his cousin. "It would be terrible for them if he did not."

"He will be sure to succeed, or the Lords of the Admiralty must have hearts harder than Portland stone."

But, notwithstanding McNabbs's assurance, Lady Helena passed the night in great anxiety, and could not close her eyes.

Mary Grant and her brother were up very early next morning, and were walking about in the courtyard when they heard the sound of a carriage approaching. It was Lord Glenarvan; and, almost immediately, Lady Helena and the Major came out to meet him.

Lady Helena flew toward her husband the moment he alighted; but he embraced her silently, and looked gloomy and disappointed-- indeed, even furious.

"Well, Edward?" she said; "tell me."

"Well, Helena, dear; those people have no heart!"

"They have refused?"

"Yes. They have refused me a ship! They talked of the millions that had been wasted in search for Franklin, and declared the document was obscure and unintelligible. And, then, they said it was two years now since they were cast away, and there was little chance of finding them. Besides, they would have it that the Indians, who made them prisoners, would have dragged them into the interior, and it was impossible, they said, to hunt all through Patagonia for three men--three Scotchmen; that the search would be vain and perilous, and cost more lives than it saved. In short, they assigned all the reasons that people invent who have made up their minds to refuse. The truth is, they remembered Captain Grant's projects, and that is the secret of the whole affair. So the poor fellow is lost for ever."

"My father! my poor father!" cried Mary Grant, throwing herself on her knees before Lord Glenarvan, who exclaimed in amazement:

"Your father? What? Is this Miss--"

"Yes, Edward," said Lady Helena; "this is Miss Mary Grant and her brother, the two children condemned to orphanage by the cruel Admiralty!"

"Oh! Miss Grant," said Lord Glenarvan, raising the young girl, "if I had known of your presence--"

He said no more, and there was a painful silence in the courtyard, broken only by sobs. No one spoke, but the very attitude of both servants and masters spoke their indignation at the conduct of the English Government.

At last the Major said, addressing Lord Glenarvan: "Then you have no hope whatever?"

"None," was the reply.

"Very well, then," exclaimed little Robert, "I'll go and speak to those people myself, and we'll see if they--" He did not complete his sentence, for his sister stopped him; but his clenched fists showed his intentions were the reverse of pacific.

"No, Robert," said Mary Grant, "we will thank this noble lord and lady for what they have done for us, and never cease to think of them with gratitude; and then we'll both go together."

"Mary!" said Lady Helena, in a tone of surprise.

"Go where?" asked Lord Glenarvan.
"I am going to throw myself at the Queen's feet, and we shall see if she will turn a deaf ear to the prayers of two children, who implore their father's life."

Lord Glenarvan shook his head; not that he doubted the kind heart of her Majesty, but he knew Mary would never gain access to her. Supplicants but too rarely reach the steps of a throne; it seems as if royal palaces had the same inscription on their doors that the English have on their ships: _Passengers are requested not to speak to the man at the wheel_.

Lady Glenarvan understood what was passing in her husband's mind, and she felt the young girl's attempt would be useless, and only plunge the poor children in deeper despair. Suddenly, a grand, generous purpose fired her soul, and she called out: "Mary Grant! wait, my child, and listen to what I'm going to say."

Mary had just taken her brother by the hand, and turned to go away; but she stepped back at Lady Helena's bidding.

The young wife went up to her husband, and said, with tears in her eyes, though her voice was firm, and her face beamed with animation: "Edward, when Captain Grant wrote that letter and threw it into the sea, he committed it to the care of God. God has sent it to us--to us! Undoubtedly God intends us to undertake the rescue of these poor men."

"What do you mean, Helena?"

"I mean this, that we ought to think ourselves fortunate if we can begin our married life with a good action. Well, you know, Edward, that to please me you planned a pleasure trip; but what could give us such genuine pleasure, or be so useful, as to save those unfortunate fellows, cast off by their country?"

"Helena!" exclaimed Lord Glenarvan.

"Yes, Edward, you understand me. The DUNCAN is a good strong ship, she can venture in the Southern Seas, or go round the world if necessary. Let us go, Edward; let us start off and search for Captain Grant!"

Lord Glenarvan made no reply to this bold proposition, but smiled, and, holding out his arms, drew his wife into a close, fond embrace. Mary and Robert seized her hands, and covered them with kisses; and the servants who thronged the courtyard, and had been witnesses of this touching scene, shouted with one voice, "Hurrah for the Lady of Luss. Three cheers for Lord and Lady Glenarvan!"

CHAPTER V THE DEPARTURE OF THE "DUNCAN"

We have said already that Lady Helena was a brave, generous woman, and what she had just done proved it indubitably. Her husband had good reason to be proud of such a wife, one who could understand and enter into all his views. The idea of going to Captain Grant's rescue had occurred to him in London when his request was refused, and he would have anticipated Lady Helena, only he could not bear the thought of parting from her. But now that she herself proposed to go, all hesitation was at an end. The servants of the Castle had hailed the project with loud acclamations--for it was to save their brothers--Scotchmen, like themselves--and Lord Glenarvan cordially joined his cheers with theirs, for the Lady of Luss.

The departure once resolved upon, there was not an hour to be lost. A telegram was dispatched to John Mangles the very same day, conveying Lord Glenarvan's orders to take the DUNCAN immediately to Glasgow, and to make preparations for a voyage to the Southern Seas, and possibly round the world, for Lady Helena was right in her opinion that the yacht might safely attempt the circumnavigation of the globe, if necessary.

The DUNCAN was a steam yacht of the finest description. She was 210 tons burden--much larger than any of the first vessels that touched the shores of the New World, for the largest of the four ships that sailed with Columbus was only 70 tons. She had two masts and all the sails and rigging of an ordinary clipper, which would enable her to take advantage of every favorable wind, though her chief reliance was on her mechanical power. The engine, which was constructed on a new system, was a high-pressure one, of 160-horse power, and put in motion a double screw. This gave the yacht such swiftness that during her trial trip in the Firth of Clyde, she made seventeen miles an hour, a higher speed than any vessel had yet attained. No alterations were consequently needed in the DUNCAN herself; John Mangles had only to attend to her interior arrangements.

His first care was to enlarge the bunkers to carry as much coal as possible, for it is difficult to get fresh supplies _en route_. He had to do the same with the store-rooms, and managed so well that he succeeded in laying in provisions enough for two years. There was abundance of money at his command, and enough remained to buy a cannon, on a pivot carriage, which he mounted on the forecastle. There was no knowing what might happen, and it is always well to be able to send a good round bullet flying four miles off.

John Mangles understood his business. Though he was only the captain of a pleasure yacht, he was one of the best skippers in Glasgow. He was thirty years of age, and his countenance expressed both courage and goodness, if the features were somewhat coarse. He had been brought up at the castle by the Glenarvan family, and had turned out a capital sailor, having already given proof, in some of his long voyages, of his skill and energy and _sang-froid_. When Lord Glenarvan offered him the command of the DUNCAN, he accepted it with right good will, for he
loved the master of Malcolm Castle, like a brother, and had hitherto vainly sought some opportunity of showing his
devotion.

Tom Austin, the mate, was an old sailor, worthy of all confidence. The crew, consisting of twenty-five men,
including the captain and chief officer, were all from Dumbartonshire, experienced sailors, and all belonging to the
Glenarvan estate; in fact, it was a regular clan, and they did not forget to carry with them the traditional bagpipes.
Lord Glenarvan had in them a band of trusty fellows, skilled in their calling, devoted to himself, full of courage, and
as practiced in handling fire-arms as in the maneuvering of a ship; a valiant little troop, ready to follow him any
where, even in the most dangerous expeditions. When the crew heard whither they were bound, they could not
restrain their enthusiasm, and the rocks of Dumbarton rang again with their joyous outbursts of cheers.

But while John Mangles made the stowage and provisioning of the yacht his chief business, he did not forget to
fit up the rooms of Lord and Lady Glenarvan for a long voyage. He had also to get cabins ready for the children of
Captain Grant, as Lady Helena could not refuse Mary's request to accompany her.

As for young Robert, he would have smuggled himself in somewhere in the hold of the DUNCAN rather than be
left behind. He would willingly have gone as cabin-boy, like Nelson. It was impossible to resist a little fellow like
that, and, indeed, no one tried. He would not even go as a passenger, but must serve in some capacity, as cabin-boy,
apprentice or sailor, he did not care which, so he was put in charge of John Mangles, to be properly trained for his
vocation.

"And I hope he won't spare me the 'cat-o-nine-tails' if I don't do properly," said Robert.

"Rest easy on that score, my boy," said Lord Glenarvan, gravely; he did not add, that this mode of punishment
was forbidden on board the DUNCAN, and moreover, was quite unnecessary.

To complete the roll of passengers, we must name Major McNabbs. The Major was about fifty years of age, with
a calm face and regular features—a man who did whatever he was told, of an excellent, indeed, a perfect temper;
modest, silent, peaceable, and amiable, agreeing with everybody on every subject, never discussing, never disputing,
ever getting angry. He wouldn't move a step quicker, or slower, whether he walked upstairs to bed or mounted a
breach. Nothing could excite him, nothing could disturb him, not even a cannon ball, and no doubt he will die
without ever having known even a passing feeling of irritation.

This man was endowed in an eminent degree, not only with ordinary animal courage, that physical bravery of
the battle-field, which is solely due to muscular energy, but he had what is far nobler—moral courage, firmness of
soul. If he had any fault it was his being so intensely Scotch from top to toe, a Caledonian of the Caledonians, an
obstinate stickler for all the ancient customs of his country. This was the reason he would never serve in England,
and he gained his rank of Major in the 42nd regiment, the Highland Black Watch, composed entirely of Scotch
noblemen.

As a cousin of Glenarvan, he lived in Malcolm Castle, and as a major he went as a matter of course with the
DUNCAN.

Such, then, was the PERSONNEL of this yacht, so unexpectedly called to make one of the most wonderful
voyages of modern times. From the hour she reached the steamboat quay at Glasgow, she completely monopolized
the public attention. A considerable crowd visited her every day, and the DUNCAN was the one topic of interest and
conversation, to the great vexation of the different captains in the port, among others of Captain Burton, in command
of the SCOTIA, a magnificent steamer lying close beside her, and bound for Calcutta. Considering her size, the
SCOTIA might justly look upon the DUNCAN as a mere fly-boat, and yet this pleasure yacht of Lord Glenarvan
was quite the center of attraction, and the excitement about her daily increased.

The DUNCAN was to sail out with the tide at three o'clock on the morning of the 25th of August. But before
starting, a touching ceremony was witnessed by the good people of Glasgow. At eight o'clock the night before, Lord
Glenarvan and his friends, and the entire crew, from the stokers to the captain, all who were to take part in this self-
sacrificing voyage, left the yacht and repaired to St. Mungo's, the ancient cathedral of the city. This venerable
edifice, so marvelously described by Walter Scott, remains intact amid the ruins made by the Reformation; and it
was there, beneath its lofty arches, in the grand nave, in the presence of an immense crowd, and surrounded by	ombs as thickly set as in a cemetery, that they all assembled to implore the blessing of Heaven on their expedition,
and to put themselves under the protection of Providence. The Rev. Mr. Morton conducted the service, and when he
had ended and pronounced the benediction, a young girl's voice broke the solemn silence that followed. It was Mary
Grant who poured out her heart to God in prayer for her benefactors, while grateful happy tears streamed down her
cheeks, and almost choked her utterance. The vast assembly dispersed under the influence of deep emotion, and at
ten o'clock the passengers and crew returned on board the vessel.

CHAPTER VI AN UNEXPECTED PASSENGER

THE ladies passed the whole of the first day of the voyage in their berths, for there was a heavy swell in the sea,
and toward evening the wind blew pretty fresh, and the DUNCAN tossed and pitched considerably.
But the morning after, the wind changed, and the captain ordered the men to put up the foresail, and brigantine and foretopsail, which greatly lessened the rolling of the vessel. Lady Helena and Mary Grant were able to come on deck at daybreak, where they found Lord Glenarvan, Major McNabb and the captain.

"And how do you stand the sea, Miss Mary?" said Lord Glenarvan.

"Pretty well, my Lord. I am not very much inconvenienced by it. Besides I shall get used to it."

"And our young Robert!"

"Oh, as for Robert," said the captain, "whenever he is not poking about down below in the engine-room, he is perched somewhere aloft among the rigging. A youngster like that laughs at sea-sickness. Why, look at him this very moment! Do you see him?"

The captain pointed toward the foremast, and sure enough there was Robert, hanging on the yards of the topgallant mast, a hundred feet above in the air. Mary involuntarily gave a start, but the captain said:

"Oh, don't be afraid, Miss Mary; he is all right, take my word for it; I'll have a capital sailor to present to Captain Grant before long, for we'll find the worthy captain, depend upon it."

"Heaven grant it, Mr. John," replied the young girl.

"My dear child," said Lord Glenarvan, "there is something so providential in the whole affair, that we have every reason to hope. We are not going, we are led; we are not searching, we are guided. And then see all the brave men that have enlisted in the service of the good cause. We shall not only succeed in our enterprise, but there will be little difficulty in it. I promised Lady Helena a pleasure trip, and I am much mistaken if I don't keep my word."

"Edward," said his wife, "you are the best of men."

"Not at all," was the reply; "but I have the best of crews and the best of ships. You don't admire the DUNCAN, I suppose, Miss Mary?"

"On the contrary, my Lord, I do admire her, and I'm a connoisseur in ships," returned the young girl.

"Indeed!"

"Yes. I have played all my life on my father's ships. He should have made me a sailor, for I dare say, at a push, I could reef a sail or plait a gasket easily enough."

"Do you say so, miss?" exclaimed John Mangles.

"If you talk like that you and John will be great friends, for he can't think any calling is equal to that of a seaman; he can't fancy any other, even for a woman. Isn't it true, John?"

"Quite so," said the captain, "and yet, your Lordship, I must confess that Miss Grant is more in her place on the poop than reefing a topsail. But for all that, I am quite flattered by her remarks."

"And especially when she admires the DUNCAN," replied Glenarvan.

"Well, really," said Lady Glenarvan, "you are so proud of your yacht that you make me wish to look all over it; and I should like to go down and see how our brave men are lodged."

"Their quarters are first-rate," replied John, "they are as comfortable as if they were at home."

"And they really are at home, my dear Helena," said Lord Glenarvan. "This yacht is a portion of our old Caledonia, a fragment of Dumbartonshire, making a voyage by special favor, so that in a manner we are still in our own country. The DUNCAN is Malcolm Castle, and the ocean is Loch Lomond."

"Very well, dear Edward, do the honors of the Castle then."

"At your service, madam; but let me tell Olbinett first."

The steward of the yacht was an excellent _maitre d'hôtel_, and might have been French for his airs of importance, but for all that he discharged his functions with zeal and intelligence.

"Olbinett," said his master, as he appeared in answer to his summons, "we are going to have a turn before breakfast. I hope we shall find it ready when we come back."

He said this just as if it had been a walk to Tarbert or Loch Katrine they were going, and the steward bowed with perfect gravity in reply.

"Are you coming with us, Major?" asked Lady Helena.

"If you command me," replied McNabb.

"Oh!" said Lord Glenarvan; "the Major is absorbed in his cigar; "you mustn't tear him from it. He is an inveterate smoker, Miss Mary, I can tell you. He is always smoking, even while he sleeps."

The Major gave an assenting nod, and Lord Glenarvan and his party went below.

McNabb remained alone, talking to himself, as was his habit, and was soon enveloped in still thicker clouds of smoke. He stood motionless, watching the track of the yacht. After some minutes of this silent contemplation he turned round, and suddenly found himself face to face with a new comer. Certainly, if any thing could have surprised him, this RENCONTRE would, for he had never seen the stranger in his life before.

He was a tall, thin, withered-looking man, about forty years of age, and resembled a long nail with a big head. His head was large and massive, his forehead high, his chin very marked. His eyes were concealed by enormous
round spectacles, and in his look was that peculiar indecision which is common to nyctalopes, or people who have a peculiar construction of the eye, which makes the sight imperfect in the day and better at night. It was evident from his physiognomy that he was a lively, intelligent man; he had not the crabbed expression of those grave individuals who never laugh on principle, and cover their emptiness with a mask of seriousness. He looked far from that. His careless, good-humored air, and easy, unceremonious manners, showed plainly that he knew how to take men and things on their bright side. But though he had not yet opened his mouth, he gave one the impression of being a great talker, and moreover, one of those absent folks who neither see though they are looking, nor hear though they are listening. He wore a traveling cap, and strong, low, yellow boots with leather gaiters. His pantaloons and jacket were of brown velvet, and their innumerable pockets were stuffed with note-books, memorandum-books, account-books, pocket-books, and a thousand other things equally cumbersome and useless, not to mention a telescope in addition, which he carried in a shoulder-belt.

The stranger’s excitement was a strong contrast to the Major’s placidity. He walked round McNabbs, looking at him and questioning him with his eyes without eliciting one remark from the imperturbable Scotchman, or awakening his curiosity in the least, to know where he came from, and where he was going, and how he had got on board the DUNCAN.

Finding all his efforts baffled by the Major’s indifference, the mysterious passenger seized his telescope, drew it out to its fullest extent, about four feet, and began gazing at the horizon, standing motionless with his legs wide apart. His examination lasted some few minutes, and then he lowered the glass, set it up on deck, and leaned on it as if it had been a walking-stick. Of course, his weight shut up the instrument immediately by pushing the different parts one into the other, and so suddenly, that he fell full length on deck, and lay sprawling at the foot of the mainmast.

Any one else but the Major would have smiled, at least, at such a ludicrous sight; but McNabbs never moved a muscle of his face.

This was too much for the stranger, and he called out, with an unmistakably foreign accent:

"Steward!"

He waited a minute, but nobody appeared, and he called again, still louder, "Steward!"

Mr. Olbinett chanced to be passing that minute on his way from the galley, and what was his astonishment at hearing himself addressed like this by a lanky individual of whom he had no knowledge whatever.

"Where can he have come from? Who is he?" he thought to himself. "He can not possibly be one of Lord Glenarvan’s friends?"

However, he went up on the poop, and approached the unknown personage, who accosted him with the inquiry, "Are you the steward of this vessel?"

"Yes, sir," replied Olbinett; "but I have not the honor of--"

"I am the passenger in cabin Number 6."

"Number 6!" repeated the steward.

"Certainly; and your name, what is it?"

"Olbinett."

"Well, Olbinett, my friend, we must think of breakfast, and that pretty quickly. It is thirty-six hours since I have had anything to eat, or rather thirty-six hours that I have been asleep--pardonable enough in a man who came all the way, without stopping, from Paris to Glasgow. What is the breakfast hour?"

"Nine o’clock," replied Olbinett, mechanically.

The stranger tried to pull out his watch to see the time; but it was not till he had rummaged through the ninth pocket that he found it.

"Ah, well," he said, "it is only eight o’clock at present. Fetch me a glass of sherry and a biscuit while I am waiting, for I am actually falling through sheer inanition."

Olbinett heard him without understanding what he meant for the voluble stranger kept on talking incessantly, flying from one subject to another.

"The captain? Isn’t the captain up yet? And the chief officer? What is he doing? Is he asleep still? It is fine weather, fortunately, and the wind is favorable, and the ship goes all alone."

Just at that moment John Mangles appeared at the top of the stairs.

"Here is the captain!" said Olbinett.

"Ah! delighted, Captain Burton, delighted to make your acquaintance," exclaimed the unknown.

John Mangles stood stupefied, as much at seeing the stranger on board as at hearing himself called "Captain Burton."

But the new comer went on in the most affable manner.

"Allow me to shake hands with you, sir; and if I did not do so yesterday evening, it was only because I did not
wish to be troublesome when you were starting. But to-day, captain, it gives me great pleasure to begin my intercourse with you."

John Mangles opened his eyes as wide as possible, and stood staring at Olbinett and the stranger alternately.

But without waiting for a reply, the rattling fellow continued:
"Now the introduction is made, my dear captain, we are old friends. Let’s have a little talk, and tell me how you like the SCOTIA?"

"What do you mean by the SCOTIA?" put in John Mangles at last.

"By the SCOTIA? Why, the ship we’re on, of course—a good ship that has been commended to me, not only for its physical qualities, but also for the moral qualities of its commander, the brave Captain Burton. You will be some relation of the famous African traveler of that name. A daring man he was, sir. I offer you my congratulations."

"Sir," interrupted John. "I am not only no relation of Burton the great traveler, but I am not even Captain Burton."

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"Ah, is that so? It is Mr. Burdness, the chief officer, that I am talking to at present."

"Mr. Burdness!" repeated John Mangles, beginning to suspect how the matter stood. Only he asked himself whether the man was mad, or some heedless rattle pate? He was beginning to explain the case in a categorical manner, when Lord Glenarvan and his party came up on the poop. The stranger caught sight of them directly, and exclaimed:

"Ah! the passengers, the passengers! I hope you are going to introduce me to them, Mr. Burdness!"

But he could not wait for any one's intervention, and going up to them with perfect ease and grace, said, bowing to Miss Grant, "Madame;" then to Lady Helena, with another bow, "Miss;" and to Lord Glenarvan, "Sir."

Here John Mangles interrupted him, and said, "Lord Glenarvan."

"My Lord," continued the unknown, "I beg pardon for presenting myself to you, but at sea it is well to relax the strict rules of etiquette a little. I hope we shall soon become acquainted with each other, and that the company of these ladies will make our voyage in the SCOTIA appear as short as agreeable."

Lady Helena and Miss Grant were too astonished to be able to utter a single word. The presence of this intruder on the poop of the DUNCAN was perfectly inexplicable.

Lord Glenarvan was more collected, and said, "Sir, to whom have I the honor of speaking?"

"To Jacques Eliacin Francois Marie Paganel, Secretary of the Geographical Society of Paris, Corresponding Member of the Societies of Berlin, Bombay, Darmstadt, Leipsic, London, St. Petersburg, Vienna, and New York; Honorary Member of the Royal Geographical and Ethnographical Institute of the East Indies; who, after having spent twenty years of his life in geographical work in the study, wishes to see active service, and is on his way to India to gain for the science what information he can by following up the footsteps of great travelers."

CHAPTER VII JACQUES PAGANEL IS UNDECEIVED

THE Secretary of the Geographical Society was evidently an amiable personage, for all this was said in a most charming manner. Lord Glenarvan knew quite well who he was now, for he had often heard Paganel spoken of, and was aware of his merits. His geographical works, his papers on modern discoveries, inserted in the reports of the Society, and his world-wide correspondence, gave him a most distinguished place among the LITERATI of France.

Lord Glenarvan could not but welcome such a guest, and shook hands cordially.

"And now that our introductions are over," he added, "you will allow me, Monsieur Paganel, to ask you a question?"

"Twenty, my Lord," replied Paganel; "it will always be a pleasure to converse with you."

"Was it last evening that you came on board this vessel?"

"Yes, my Lord, about 8 o’clock. I jumped into a cab at the Caledonian Railway, and from the cab into the SCOTIA, where I had booked my cabin before I left Paris. It was a dark night, and I saw no one on board, so I found cabin No. 6, and went to my berth immediately, for I had heard that the best way to prevent sea-sickness is to go to bed as soon as you start, and not to stir for the first few days; and, moreover, I had been traveling for thirty hours. So I tucked myself in, and slept conscientiously, I assure you, for thirty-six hours."

Paganel's listeners understood the whole mystery, now, of his presence on the DUNCAN. The French traveler had mistaken his vessel, and gone on board while the crew were attending the service at St. Mungo's. All was explained. But what would the learned geographer say, when he heard the name and destination of the ship, in which he had taken passage?

"Then it is Calcutta, M. Paganel, that you have chosen as your point of departure on your travels?"

"Yes, my Lord, to see India has been a cherished purpose with me all my life. It will be the realization of my fondest dreams, to find myself in the country of elephants and Thugs."

"Then it would be by no means a matter of indifference to you, to visit another country instead."
"No, my Lord; indeed it would be very disagreeable, for I have letters from Lord Somerset, the Governor-General, and also a commission to execute for the Geographical Society."

"Ah, you have a commission."

"Yes, I have to attempt a curious and important journey, the plan of which has been drawn up by my learned friend and colleague, M. Vivien de Saint Martin. I am to pursue the track of the Schlaginweit Brothers; and Colonels Waugh and Webb, and Hodgson; and Huc and Gabet, the missionaries; and Moorecroft and M. Jules Remy, and so many celebrated travelers. I mean to try and succeed where Krick, the missionary so unfortunately failed in 1846; in a word, I want to follow the course of the river Yarou-Dzangbo-Tchou, which waters Thibet for a distance of 1500 kilometres, flowing along the northern base of the Himalayas, and to find out at last whether this river does not join itself to the Brahmapoutre in the northeast of As-sam. The gold medal, my Lord, is promised to the traveler who will succeed in ascertaining a fact which is one of the greatest DESIDERATA to the geography of India."

Paganel was magnificent. He spoke with superb animation, soaring away on the wings of imagination. It would have been as impossible to stop him as to stop the Rhine at the Falls of Schaffhausen.

"Monsieur Jacques Paganel," said Lord Glenarvan, after a brief pause, "that would certainly be a grand achievement, and you would confer a great boon on science, but I should not like to allow you to be laboring under a mistake any longer, and I must tell you, therefore, that for the present at least, you must give up the pleasure of a visit to India."

"Give it up. And why?"

"Because you are turning your back on the Indian peninsula."

"What! Captain Burton."

"I am not Captain Burton," said John Mangles.

"But the SCOTIA."

"This vessel is not the SCOTIA."

It would be impossible to depict the astonishment of Paganel. He stared first at one and then at another in the utmost bewilderment.

Lord Glenarvan was perfectly grave, and Lady Helena and Mary showed their sympathy for his vexation by their looks. As for John Mangles, he could not suppress a smile; but the Major appeared as unconcerned as usual. At last the poor fellow shrugged his shoulders, pushed down his spectacles over his nose and said:

"You are joking."

But just at that very moment his eye fell on the wheel of the ship, and he saw the two words on it: Duncan. Glasgow.

"The DUNCAN! the DUNCAN!" he exclaimed, with a cry of despair, and forthwith rushed down the stairs, and away to his cabin.

As soon as the unfortunate SAVANT had disappeared, every one, except the Major, broke out into such peals of laughter that the sound reached the ears of the sailors in the forecastle. To mistake a railway or to take the train to Edinburgh when you want to go to Dumbarton might happen; but to mistake a ship and be sailing for Chili when you meant to go to India--that is a blunder indeed!

"However," said Lord Glenarvan, "I am not much astonished at it in Paganel. He is quite famous for such misadventures. One day he published a celebrated map of America, and put Japan in it! But for all that, he is distinguished for his learning, and he is one of the best geographers in France."

"But what shall we do with the poor gentleman?" said Lady Helena; "we can't take him to Patagonia."

"Why not?" replied McNabbs, gravely. "We are not responsible for his heedless mistakes. Suppose he were in a railway train, would they stop it for him?"

"No, but he would get out at the first station."

"Well, that is just what he can do here, too, if he likes; he can disembark at the first place where we touch."

While they were talking, Paganel came up again on the poop, looking very woebegone and crestfallen. He had been making inquiry about his luggage, to assure himself that it was all on board, and kept repeating incessantly the unlucky words, "The DUNCAN! the DUNCAN!"

He could find no others in his vocabulary. He paced restlessly up and down; sometimes stopping to examine the sails, or gaze inquiringly over the wide ocean, at the far horizon. At length he accosted Lord Glenarvan once more, and said--

"And this DUNCAN--where is she going?"

"To America, Monsieur Paganel," was the reply.

"And to what particular part?"

"To Concepcion."

"To Chili! to Chili!" cried the unfortunate geographer. "And my mission to India. But what will M. de Quatre-
fages, the President of the Central Commission, say? And M. d' Avezac? And M. Cortanbert? And M. Vivien de Saint Martin? How shall I show my face at the SEANCES of the Society?"

"Come, Monsieur Paganel, don't despair. It can all be managed; you will only have to put up with a little delay, which is relatively of not much importance. The Yarou-Dzangbo-Tchou will wait for you still in the mountains of Thibet. We shall soon put in at Madeira, and you will get a ship there to take you back to Europe."

"Thanks, my Lord. I suppose I must resign myself to it; but people will say it is a most extraordinary adventure, and it is only to me such things happen. And then, too, there is a cabin taken for me on board the SCOTIA."

"Oh, as to the SCOTIA, you'll have to give that up meantime."

"But the DUNCAN is a pleasure yacht, is it not?" began Paganel again, after a fresh examination of the vessel.

"Yes, sir," said John Mangles, "and belongs to Lord Glenarvan."

"Who begs you will draw freely on his hospitality," said Lord Glenarvan.

"A thousand thanks, my Lord! I deeply feel your courtesy, but allow me to make one observation: India is a fine country, and can offer many a surprising marvel to travelers. These ladies, I suppose, have never seen it. Well now, the man at the helm has only to give a turn at the wheel, and the DUNCAN will sail as easily to Calcutta as to Concepcion; and since it is only a pleasure trip that you are--"

His proposal was met by such grave, disapproving shakes of the head, that he stopped short before the sentence was completed; and Lady Helena said:

"Monsieur Paganel, if we were only on a pleasure trip, I should reply, 'Let us all go to India together,' and I am sure Lord Glenarvan would not object; but the DUNCAN is going to bring back shipwrecked mariners who were cast away on the shores of Patagonia, and we could not alter such a destination."

The Frenchman was soon put in possession of all the circumstances of the case. He was no unmoved auditor, and when he heard of Lady Helena's generous proposition, he could not help saying,

"Madame, permit me to express my admiration of your conduct throughout--my unreserved admiration. Let your yacht continue her course. I should reproach myself were I to cause a single day's delay."

"Will you join us in our search, then?" asked Lady Helena.

"It is impossible, madame. I must fulfill my mission. I shall disembark at the first place you touch at, wherever it may be."

"That will be Madeira," said John Mangles.

"Madeira be it then. I shall only be 180 leagues from Lisbon, and I shall wait there for some means of transport."

"Very well, Monsieur Paganel, it shall be as you wish; and, for my own part, I am very glad to be able to offer you, meantime, a few days' hospitality. I only hope you will not find our company too dull."

"Oh, my Lord," exclaimed Paganel, "I am but too happy to have made a mistake which has turned out so agreeably. Still, it is a very ridiculous plight for a man to be in, to find himself sailing to America when he set out to go to the East Indies!"

But in spite of this melancholy reflection, the Frenchman submitted gracefully to the compulsory delay. He made himself amiable and merry, and even diverting, and enchanted the ladies with his good humor. Before the end of the day he was friends with everybody. At his request, the famous document was brought out. He studied it carefully and minutely for a long time, and finally declared his opinion that no other interpretation of it was possible. Mary Grant and her brother inspired him with the most lively interest. He gave them great hope; indeed, the young girl could not help smiling at his sanguine prediction of success, and this odd way of foreseeing future events. But for his mission he would have made one of the search party for Captain Grant, undoubtedly.

As for Lady Helena, when he heard that she was a daughter of William Tuffnell, there was a perfect explosion of admiring epithets. He had known her father, and what letters had passed between them when William Tuffnell was a corresponding member of the Society! It was he himself that had introduced him and M. Malte Brun. What a rencontre this was, and what a pleasure to travel with the daughter of Tuffnell.

He wound up by asking permission to kiss her, which Lady Helena granted, though it was, perhaps, a little improper.

CHAPTER VIII THE GEOGRAPHER'S RESOLUTION

MEANTIME the yacht, favored by the currents from the north of Africa, was making rapid progress toward the equator. On the 30th of August they sighted the Madeira group of islands, and Glenarvan, true to his promise, offered to put in there, and land his new guest.

But Paganel said:

"My dear Lord, I won't stand on ceremony with you. Tell me, did you intend to stop at Madeira before I came on board?"

"No," replied Glenarvan.

"Well, then, allow me to profit by my unlucky mistake. Madeira is an island too well known to be of much
interest now to a geographer. Every thing about this group has been said and written already. Besides, it is completely going down as far as wine growing is concerned. Just imagine no vines to speak of being in Madeira! In 1813, 22,000 pipes of wine were made there, and in 1845 the number fell to 2,669. It is a grievous spectacle! If it is all the same to you, we might go on to the Canary Isles instead."

"Certainly. It will not the least interfere with our route."

"I know it will not, my dear Lord. In the Canary Islands, you see, there are three groups to study, besides the Peak of Teneriffe, which I always wished to visit. This is an opportunity, and I should like to avail myself of it, and make the ascent of the famous mountain while I am waiting for a ship to take me back to Europe."

"As you please, my dear Paganel," said Lord Glenarvan, though he could not help smiling; and no wonder, for these islands are scarcely 250 miles from Madeira, a trifling distance for such a quick sailor as the DUNCAN.

Next day, about 2 P. M., John Mangles and Paganel were walking on the poop. The Frenchman was assailing his companion with all sorts of questions about Chili, when all at once the captain interrupted him, and pointing toward the southern horizon, said:

"Monsieur Paganel?"

"Yes, my dear Captain."

"Be so good as to look in this direction. Don't you see anything?"

"Nothing."

"You're not looking in the right place. It is not on the horizon, but above it in the clouds."

"In the clouds? I might well not see."

"There, there, by the upper end of the bowsprit."

"I see nothing."

"Then you don't want to see. Anyway, though we are forty miles off, yet I tell you the Peak of Teneriffe is quite visible yonder above the horizon."

But whether Paganel could not or would not see it then, two hours later he was forced to yield to ocular evidence or own himself blind.

"You do see it at last, then," said John Mangles.

"Yes, yes, distinctly," replied Paganel, adding in a disdainful tone, "and that's what they call the Peak of Teneriffe!"

"That's the Peak."

"It doesn't look much of a height."

"It is 11,000 feet, though, above the level of the sea."

"That is not equal to Mont Blanc."

"Likely enough, but when you come to ascend it, probably you'll think it high enough."

"Oh, ascend it! ascend it, my dear captain! What would be the good after Humboldt and Bonplan? That Humboldt was a great genius. He made the ascent of this mountain, and has given a description of it which leaves nothing unsaid. He tells us that it comprises five different zones—the zone of the vines, the zone of the laurels, the zone of the pines, the zone of the Alpine heaths, and, lastly, the zone of sterility. He set his foot on the very summit, and found that there was not even room enough to sit down. The view from the summit was very extensive, stretching over an area equal to Spain. Then he went right down into the volcano, and examined the extinct crater. What could I do, I should like you to tell me, after that great man?"

"Well, certainly, there isn't much left to glean. That is vexing, too, for you would find it dull work waiting for a vessel in the Peak of Teneriffe."

"But, I say, Mangles, my dear fellow, are there no ports in the Cape Verde Islands that we might touch at?"

"Oh, yes, nothing would be easier than putting you off at Villa Praya."

"And then I should have one advantage, which is by no means inconsiderable—I should find fellow-countrymen at Senegal, and that is not far away from those islands. I am quite aware that the group is said to be devoid of much interest, and wild, and unhealthy; but everything is curious in the eyes of a geographer. Seeing is a science. There are people who do not know how to use their eyes, and who travel about with as much intelligence as a shell-fish. But that's not in my line, I assure you."

"Please yourself, Monsieur Paganel. I have no doubt geographical science will be a gainer by your sojourn in the Cape Verde Islands. We must go in there anyhow for coal, so your disembarkation will not occasion the least delay."

The captain gave immediate orders for the yacht to continue her route, steering to the west of the Canary group, and leaving Teneriffe on her larboard. She made rapid progress, and passed the Tropic of Cancer on the second of September at 5 A. M.

The weather now began to change, and the atmosphere became damp and heavy. It was the rainy season, "_le tempo das aguas,_" as the Spanish call it, a trying season to travelers, but useful to the inhabitants of the African
Islands, who lack trees and consequently water. The rough weather prevented the passengers from going on deck, but did not make the conversation any less animated in the saloon.

On the 3d of September Paganel began to collect his luggage to go on shore. The DUNCAN was already steaming among the Islands. She passed Sal, a complete tomb of sand lying barren and desolate, and went on among the vast coral reefs and athwart the Isle of St. Jacques, with its long chain of basaltic mountains, till she entered the port of Villa Praya and anchored in eight fathoms of water before the town. The weather was frightful, and the surf excessively violent, though the bay was sheltered from the sea winds. The rain fell in such torrents that the town was scarcely visible through it. It rose on a plain in the form of a terrace, buttressed on volcanic rocks three hundred feet high. The appearance of the island through the thick veil of rain was mournful in the extreme.

Lady Helena could not go on shore as she had purposed; indeed, even coaling was a difficult business, and the passengers had to content themselves below the poop as best they might. Naturally enough, the main topic of conversation was the weather. Everybody had something to say about it except the Major, who surveyed the universal deluge with the utmost indifference. Paganel walked up and down shaking his head.

"It is clear enough, Paganel," said Lord Glenarvan, "that the elements are against you."

"I'll be even with them for all that," replied the Frenchman.

"You could not face rain like that, Monsieur Paganel," said Lady Helena.

"Oh, quite well, madam, as far as I myself am concerned. It is for my luggage and instruments that I am afraid. Everything will be ruined."

"The disembarking is the worst part of the business. Once at Villa Praya you might manage to find pretty good quarters. They wouldn't be over clean, and you might find the monkeys and pigs not always the most agreeable companions. But travelers are not too particular, and, moreover, in seven or eight months you would get a ship, I dare say, to take you back to Europe."

"Seven or eight months!" exclaimed Paganel.

"At least. The Cape Verde Islands are not much frequented by ships during the rainy season. But you can employ your time usefully. This archipelago is still but little known."

"You can go up the large rivers," suggested Lady Helena.

"There are none, madam."

"Well, then, the small ones."

"There are none, madam."

"The running brooks, then."

"There are no brooks, either."

"You can console yourself with the forests if that's the case," put in the Major.

"You can't make forests without trees, and there are no trees."

"A charming country!" said the Major.

"Comfort yourself, my dear Paganel, you'll have the mountains at any rate," said Glenarvan.

"Oh, they are neither lofty nor interesting, my Lord, and, beside, they have been described already."

"Already!" said Lord Glenarvan.

"Yes, that is always my luck. At the Canary Islands, I saw myself anticipated by Humboldt, and here by M. Charles Sainte-Claire Deville, a geologist."

"Impossible!"

"It is too true," replied Paganel, in a doleful voice. "Monsieur Deville was on board the government corvette, La Decidee, when she touched at the Cape Verde Islands, and he explored the most interesting of the group, and went to the top of the volcano in Isle Fogo. What is left for me to do after him?"

"It is really a great pity," said Helena. "What will become of you, Monsieur Paganel?"

Paganel remained silent.

"You would certainly have done much better to have landed at Madeira, even though there had been no wine," said Glenarvan.

Still the learned secretary was silent.

"I should wait," said the Major, just as if he had said, "I should not wait."

Paganel spoke again at length, and said:

"My dear Glenarvan, where do you mean to touch next?"

"At Concepcion."

"Plague it! That is a long way out of the road to India."

"Not it! From the moment you pass Cape Horn, you are getting nearer to it."

"I doubt it much."

"Beside," resumed Lord Glenarvan, with perfect gravity, "when people are going to the Indies it doesn't matter
much whether it is to the East or West."

"What! it does not matter much?"

"Without taking into account the fact that the inhabitants of the Pampas in Patagonia are as much Indians as the
natives of the Punjaub."

"Well done, my Lord. That's a reason that would never have entered my head!"

"And then, my dear Paganel, you can gain the gold medal anyway. There is as much to be done, and sought, and
investigated, and discovered in the Cordilleras as in the mountains of Thibet."

"But the course of the Yarou-Dzangbo-Tchou--what about that?"

"Go up the Rio Colorado instead. It is a river but little known, and its course on the map is marked out too much
according to the fancy of geographers."

"I know it is, my dear Lord; they have made grave mistakes. Oh, I make no question that the Geographical
Society would have sent me to Patagonia as soon as to India, if I had sent in a request to that effect. But I never
thought of it."

"Just like you."

"Come, Monsieur Paganel, will you go with us?" asked Lady Helena, in her most winning tone.

"Madam, my mission?"

"We shall pass through the Straits of Magellan, I must tell you," said Lord Glenarvan.

"My Lord, you are a tempter."

"Let me add, that we shall visit Port Famine."

"Port Famine!" exclaimed the Frenchman, besieged on all sides. "That famous port in French annals!"

"Think, too, Monsieur Paganel, that by taking part in our enterprise, you will be linking France with Scotland."

"Undoubtedly."

"A geographer would be of much use to our expedition, and what can be nobler than to bring science to the
service of humanity?"

"That's well said, madam."

"Take my advice, then, and yield to chance, or rather providence. Follow our example. It was providence that
sent us the document, and we set out in consequence. The same providence brought you on board the DUNCAN.
Don't leave her."

"Shall I say yes, my good friends? Come, now, tell me, you want me very much to stay, don't you?" said
Paganel.

"And you're dying to stay, now, aren't you, Paganel?" returned Glenarvan.

"That's about it," confessed the learned geographer; "but I was afraid it would be inconsiderate."

CHAPTER IX THROUGH THE STRAITS OF MAGELLAN

THE joy on board was universal when Paganel's resolution was made known.

Little Robert flung himself on his neck in such tumultuous delight that he nearly threw the worthy secretary
down, and made him say, "Rude _petit bonhomme_. I'll teach him geography."

Robert bade fair to be an accomplished gentleman some day, for John Mangles was to make a sailor of him, and
the Major was to teach him _sang-froid_, and Glenarvan and Lady Helena were to instil into him courage and
goodness and generosity, while Mary was to inspire him with gratitude toward such instructors.

The DUNCAN soon finished taking in coal, and turned her back on the dismal region. She fell in before long
with the current from the coast of Brazil, and on the 7th of September entered the Southern hemisphere.

So far, then, the voyage had been made without difficulty. Everybody was full of hope, for in this search for
Captain Grant, each day seemed to increase the probability of finding him. The captain was among the most
confident on board, but his confidence mainly arose from the longing desire he had to see Miss Mary happy. He was
smitten with quite a peculiar interest for this young girl, and managed to conceal his sentiments so well that
everyone on board saw it except himself and Mary Grant.

As for the learned geographer, he was probably the happiest man in all the southern hemisphere. He spent the
whole day in studying maps, which were spread out on the saloon table, to the great annoyance of M. Olbinett, who
could never get the cloth laid for meals, without disputes on the subject. But all the passengers took his part except
the Major, who was perfectly indifferent about geographical questions, especially at dinner-time. Paganel also came
across a regular cargo of old books in the chief officer's chest. They were in a very damaged condition, but among
them he raked out a few Spanish volumes, and determined forthwith to set to work to master the language of Cer-
vantes, as no one on board understood it, and it would be helpful in their search along the Chilian coast. Thanks to
his taste for languages, he did not despair of being able to speak the language fluently when they arrived at
Concepcion. He studied it furiously, and kept constantly muttering heterogeneous syllables.

He spent his leisure hours in teaching young Robert, and instructed him in the history of the country they were
so rapidly approaching.

On the 25th of September, the yacht arrived off the Straits of Magellan, and entered them without delay. This route is generally preferred by steamers on their way to the Pacific Ocean. The exact length of the straits is 372 miles. Ships of the largest tonnage find, throughout, sufficient depth of water, even close to the shore, and there is a good bottom everywhere, and abundance of fresh water, and rivers abounding in fish, and forests in game, and plenty of safe and accessible harbors; in fact a thousand things which are lacking in Strait Lemaire and Cape Horn, with its terrible rocks, incessantly visited by hurricane and tempest.

For the first three or four hours—that is to say, for about sixty to eighty miles, as far as Cape Gregory—the coast on either side was low and sandy. Jacques Paganel would not lose a single point of view, nor a single detail of the straits. It would scarcely take thirty-six hours to go through them, and the moving panorama on both sides, seen in all the clearness and glory of the light of a southern sun, was well worth the trouble of looking at and admiring. On the Terra del Fuego side, a few wretched-looking creatures were wandering about on the rocks, but on the other side not a solitary inhabitant was visible.

Paganel was so vexed at not being able to catch a glimpse of any Patagonians, that his companions were quite amused at him. He would insist that Patagonia without Patagonians was not Patagonia at all.

But Glenarvan replied:
"Patience, my worthy geographer. We shall see the Patagonians yet."
"I am not sure of it."
"But there is such a people, anyhow," said Lady Helena.
"I doubt it much, madam, since I don't see them."
"But surely the very name Patagonia, which means 'great feet' in Spanish, would not have been given to imaginary beings." "Oh, the name is nothing," said Paganel, who was arguing simply for the sake of arguing. "And besides, to speak the truth, we are not sure if that is their name."
"What an idea!" exclaimed Glenarvan. "Did you know that, Major?"
"No," replied McNabbs, "and wouldn't give a Scotch pound-note for the information."
"You shall hear it, however, Major Indifferent. Though Magellan called the natives Patagonians, the Fuegians called them Tiremenen, the Chilians Caucalhues, the colonists of Carmen Tehuelches, the Araucans Huiliches; Bougainville gives them the name of Chauha, and Falkner that of Tehuelhets. The name they give themselves is Inaken. Now, tell me then, how would you recognize them? Indeed, is it likely that a people with so many names has any actual existence?"
"That's a queer argument, certainly," said Lady Helena.
"Well, let us admit it," said her husband, "but our friend Paganel must own that even if there are doubts about the name of the race there is none about their size."
"Indeed, I will never own anything so outrageous as that," replied Paganel.
"They are tall," said Glenarvan.
"I don't know that."
"Are they little, then?" asked Lady Helena.
"No one can affirm that they are."
"About the average, then?" said McNabbs.
"I don't know that either."
"That's going a little too far," said Glenarvan. "Travelers who have seen them tell us."
"Travelers who have seen them," interrupted Paganel, "don't agree at all in their accounts. Magellan said that his head scarcely reached to their waist."
"Well, then, that proves."
"Yes, but Drake declares that the English are taller than the tallest Patagonian?"
"Oh, the English—that may be," replied the Major, disdainfully, "but we are talking of the Scotch."
"Cavendish assures us that they are tall and robust," continued Paganel. "Hawkins makes out they are giants. Lemaire and Shouten declare that they are eleven feet high."
"These are all credible witnesses," said Glenarvan.
"Yes, quite as much as Wood, Narborough, and Falkner, who say they are of medium stature. Again, Byron, Giraudais, Bougainville, Wallis, and Carteret, declared that the Patagonians are six feet six inches tall."
"But what is the truth, then, among all these contradictions?" asked Lady Helena.
"Just this, madame; the Patagonians have short legs, and a large bust; or by way of a joke we might say that these natives are six feet high when they are sitting, and only five when they are standing."
"Bravo! my dear geographer," said Glenarvan. "That is very well put."
"Unless the race has no existence, that would reconcile all statements," returned Paganel. "But here is one
consolation, at all events: the Straits of Magellan are very magnificent, even without Patagonians."

Just at this moment the DUNCAN was rounding the peninsula of Brunswick between splendid panoramas.

Seventy miles after doubling Cape Gregory, she left on her starboard the penitentiary of Punta Arena. The church steeple and the Chilian flag gleamed for an instant among the trees, and then the strait wound on between huge granitic masses which had an imposing effect. Cloud-capped mountains appeared, their heads white with eternal snows, and their feet hid in immense forests. Toward the southwest, Mount Tarn rose 6,500 feet high. Night came.

V. IV Verne on after a long lingering twilight, the light insensibly melting away into soft shades. These brilliant constellations began to bestud the sky, and the Southern Cross shone out. There were numerous bays along the shore, easy of access, but the yacht did not drop anchor in any; she continued her course fearlessly through the luminous darkness. Presently ruins came in sight, crumbling buildings, which the night invested with grandeur, the sad remains of a deserted settlement, whose name will be an eternal protest against these fertile shores and forests full of game. The DUNCAN was passing Fort Famine.

It was in that very spot that Sarmiento, a Spaniard, came in 1581, with four hundred emigrants, to establish a colony. He founded the city of St. Philip, but the extreme severity of winter decimated the inhabitants, and those who had struggled through the cold died subsequently of starvation. Cavendish the Corsair discovered the last survivor dying of hunger in the ruins.

A WEEK after they had doubled the Cape Pilares, the DUNCAN steamed into the bay of Talcahuano, a magnificent estuary, twelve miles long and nine broad. The weather was splendid. From November to March the sky is always cloudless, and a constant south wind prevails, as the coast is sheltered by the mountain range of the Andes. In obedience to Lord Glenarvan's order, John Mangles had sailed as near the archipelago of Chiloe as possible, and examined all the creeks and windings of the coast, hoping to discover some traces of the shipwreck. A broken spar, or any fragment of the vessel, would have put them in the right track; but nothing whatever was visible, and the yacht continued her route, till she dropped anchor at the port of Talcahuano, forty-two days from the time she had sailed out of the fogs of the Clyde.

Lord Glenarvan had a boat lowered immediately, and went on shore, accompanied by Paganel. The learned geographer gladly availed himself of the opportunity of making use of the language he had been studying so conscientiously, but to his great amazement, found he could not make himself understood by the people. "It is the accent I've not got," he said.

"Let us go to the Custom-house," replied Glenarvan.

They were informed on arriving there, by means of a few English words, aided by expressive gestures, that the British Consul lived at Concepcion, an hour's ride distant. Glenarvan found no difficulty in procuring two fleet horses, and he and Paganel were soon within the walls of the great city, due to the enterprising genius of Valdivia, the valiant comrade of the Pizarros.

How it was shorn of its ancient splendor! Often pillaged by the natives, burned in 1819, it lay in desolation and ruins, its walls still blackened by the flames, scarcely numbering 8,000 inhabitants, and already eclipsed by Talcahuano. The grass was growing in the streets, beneath the lazy feet of the citizens, and all trade and business, indeed any description of activity, was impossible. The notes of the mandolin resounded from every balcony, and languishing songs floated on the breeze. Concepcion, the ancient city of brave men, had become a village of women and children. Lord Glenarvan felt no great desire to inquire into the causes of this decay, though Paganel tried to draw him into a discussion on the subject. He would not delay an instant, but went straight on to the house of Mr. Bentic, her Majesty's Consul, who received them very courteously, and, on learning their errand, undertook to make inquiries all along the coast.

But to the question whether a three-mast vessel, called the BRITANNIA, had gone ashore either on the Chilian
or Araucanian coast, he gave a decided negative. No report of such an event had been made to him, or any of the
other consuls. Glenarvan, however, would not allow himself to be disheartened; he went back to Talcahuano, and
spared neither pains nor expense to make a thorough investigation of the whole seaboard. But it was all in vain. The
most minute inquiries were fruitless, and Lord Glenarvan returned to the yacht to report his ill success. Mary Grant
and her brother could not restrain their grief. Lady Helena did her best to comfort them by loving caresses, while
Jacques Paganel took up the document and began studying it again. He had been poring over it for more than an
hour when Glenarvan interrupted him and said:

"Paganel! I appeal to your sagacity. Have we made an erroneous interpretation of the document? Is there
anything illogical about the meaning?"

Paganel was silent, absorbed in reflection.

"Have we mistaken the place where the catastrophe occurred?" continued Glenarvan. "Does not the name
Patagonia seem apparent even to the least clear-sighted individual?"

Paganel was still silent.

"Besides," said Glenarvan, "does not the word INDIEN prove we are right?"

"Perfectly so," replied McNabbs.

"And is it not evident, then, that at the moment of writing the words, the shipwrecked men were expecting to be
made prisoners by the Indians?"

"I take exception to that, my Lord," said Paganel; "and even if your other conclusions are right, this, at least,
seemed to me irrational."

"What do you mean?" asked Lady Helena, while all eyes were fixed on the geographer.

"I mean this," replied Paganel, "that Captain Grant is _now a prisoner among the Indians_, and I further add that
the document states it unmistakably."

"Explain yourself, sir," said Mary Grant.

"Nothing is plainer, dear Mary. Instead of reading the document _seront prisonniers_, read _sont prisonniers_,
and the whole thing is clear."

"But that is impossible," replied Lord Glenarvan.

"Impossible! and why, my noble friend?" asked Paganel, smiling.

"Because the bottle could only have been thrown into the sea just when the vessel went to pieces on the rocks,
and consequently the latitude and longitude given refer to the actual place of the shipwreck."

"There is no proof of that," replied Paganel, "and I see nothing to preclude the supposition that the poor fellows
were dragged into the interior by the Indians, and sought to make known the place of their captivity by means of this
bottle."

"Except this fact, my dear Paganel, that there was no sea, and therefore they could not have flung the bottle into
it."

"Unless they flung it into rivers which ran into the sea," returned Paganel.

This reply was so unexpected, and yet so admissible, that it made them all completely silent for a minute, though
their beaming eyes betrayed the rekindling of hope in their hearts. Lady Helena was the first to speak.

"What an idea!" she exclaimed.

"And what a good idea," was Paganel's naive rejoinder to her exclamation.

"What would you advise, then?" said Glenarvan.

"My advice is to follow the 37th parallel from the point where it touches the American continent to where it dips
into the Atlantic, without deviating from it half a degree, and possibly in some part of its course we shall fall in with
the shipwrecked party."

"There is a poor chance of that," said the Major.

"Poor as it is," returned Paganel, "we ought not to lose it. If I am right in my conjecture, that the bottle has been
carried into the sea on the bosom of some river, we cannot fail to find the track of the prisoners. You can easily
convince yourselves of this by looking at this map of the country."

He unrolled a map of Chili and the Argentine provinces as he spoke, and spread it out on the table.

"Just follow me for a moment," he said, "across the American continent. Let us make a stride across the narrow
strip of Chili, and over the Cordilleras of the Andes, and get into the heart of the Pampas. Shall we find any lack of
rivers and streams and currents? No, for here are the Rio Negro and Rio Colorado, and their tributaries intersected
by the 37th parallel, and any of them might have carried the bottle on its waters. Then, perhaps, in the midst of a
tribe in some Indian settlement on the shores of these almost unknown rivers, those whom I may call my friends
await some providential intervention. Ought we to disappoint their hopes? Do you not all agree with me that it is our
duty to go along the line my finger is pointing out at this moment on the map, and if after all we find I have been
mistaken, still to keep straight on and follow the 37th parallel till we find those we seek, if even we go right round
the world?"

His generous enthusiasm so touched his auditors that, involuntarily, they rose to their feet and grasped his hands, while Robert exclaimed as he devoured the map with his eyes:

"Yes, my father is there!"

"And where he is," replied Glenarvan, "we'll manage to go, my boy, and find him. Nothing can be more logical than Paganel's theory, and we must follow the course he points out without the least hesitation. Captain Grant may have fallen into the hands of a numerous tribe, or his captors may be but a handful. In the latter case we shall carry him off at once, but in the event of the former, after we have reconnoitered the situation, we must go back to the DUNCAN on the eastern coast and get to Buenos Ayres, where we can soon organize a detachment of men, with Major McNabbs at their head, strong enough to tackle all the Indians in the Argentine provinces."

"That's capital, my Lord," said John Mangles, "and I may add, that there is no danger whatever crossing the continent."

"Monsieur Paganel," asked Lady Helena, "you have no fear then that if the poor fellows have fallen into the hands of the Indians their lives at least have been spared."

"What a question? Why, madam, the Indians are not anthropophagi! Far from it. One of my own countrymen, M. Guinnard, associated with me in the Geographical Society, was three years a prisoner among the Indians in the Pampas. He had to endure sufferings and ill-treatment, but came off victorious at last. A European is a useful being in these countries. The Indians know his value, and take care of him as if he were some costly animal."

"There is not the least room then for hesitation," said Lord Glenarvan. "Go we must, and as soon as possible. What route must we take?"

"One that is both easy and agreeable," replied Paganel. "Rather mountainous at first, and then sloping gently down the eastern side of the Andes into a smooth plain, turfed and graveled quite like a garden."

"Let us see the map?" said the Major.

"Here it is, my dear McNabbs. We shall go through the capital of Araucania, and cut the Cordilleras by the pass of Antuco, leaving the volcano on the south, and gliding gently down the mountain sides, past the Neuquem and the Rio Colorado on to the Pampas, till we reach the Sierra Tapalquen, from whence we shall see the frontier of the province of Buenos Ayres. These we shall pass by, and cross over the Sierra Tandil, pursuing our search to the very shores of the Atlantic, as far as Point Medano."

Paganel went through this programme of the expedition without so much as a glance at the map. He was so posted up in the travels of Frezier, Molina, Humboldt, Miers, and Orbigny, that he had the geographical nomenclature at his fingers' ends, and could trust implicitly to his never-failing memory.

"You see then, friend," he added, "that it is a straight course. In thirty days we shall have gone over it, and gained the eastern side before the DUNCAN, however little she may be delayed by the westerly winds."

"Then the DUNCAN is to cruise between Corrientes and Cape Saint Antonie," said John Mangles.

"Just so."

"And how is the expedition to be organized?" asked Glenarvan.

"As simply as possible. All there is to be done is to reconnoiter the situation of Captain Grant and not to come to gunshot with the Indians. I think that Lord Glenarvan, our natural leader; the Major, who would not yield his place to anybody; and your humble servant, Jacques Paganel."

"And me," interrupted Robert.

"Robert, Robert!" exclaimed Mary.

"And why not?" returned Paganel. "Travels form the youthful mind. Yes, Robert, we four and three of the sailors."

"And does your Lordship mean to pass me by?" said John Mangles, addressing his master.

"My dear John," replied Glenarvan, "we leave passengers on board, those dearer to us than life, and who is to watch over them but the devoted captain?"

"Then we can't accompany you?" said Lady Helena, while a shade of sadness beclouded her eyes.

"My dear Helena, the journey will so soon be accomplished that it will be but a brief separation, and--"

"Yes, dear, I understand, it is all right; and I do hope you may succeed."

"Besides, you can hardly call it a journey," added Paganel.

"What is it, then?"

"It is just making a flying passage across the continent, the way a good man goes through the world, doing all the good he can. _Transire beneficiendo_—that is our motto."

This ended the discussion, if a conversation can be so called, where all who take part in it are of the same opinion. Preparations commenced the same day, but as secretly as possible to prevent the Indians getting scent of it.

The day of departure was fixed for the 14th of October. The sailors were all so eager to join the expedition that
Glenarvan found the only way to prevent jealousy among them was to draw lots who should go. This was accordingly done, and fortune favored the chief officer, Tom Austin, Wilson, a strong, jovial young fellow, and Mulrady, so good a boxer that he might have entered the lists with Tom Sayers himself.

Glenarvan displayed the greatest activity about the preparations, for he was anxious to be ready by the appointed day. John Mangles was equally busy in coaling the vessel, that she might weigh anchor at the same time. There was quite a rivalry between Glenarvan and the young captain about getting first to the Argentine coast.

Both were ready on the 14th. The whole search party assembled in the saloon to bid farewell to those who remained behind. The DUNCAN was just about to get under way, and already the vibration of the screw began to agitate the limpid waters of Talcahuano. Glenarvan, Paganel, McNabbs, Robert Grant, Tom Austin, Wilson, and Mulrady, stood armed with carbines and Colt's revolvers. Guides and mules awaited them at the landing stairs of the harbor.

"It is time," said Lord Glenarvan at last.
"Go then, dear Edward," said Lady Helena, restraining her emotion.

Lord Glenarvan clasped her closely to his breast for an instant, and then turned away, while Robert flung his arms round Mary's neck.

"And now, friends," said Paganel, "let's have one good hearty shake of the hand all round, to last us till we get to the shores of the Atlantic."

This was not much to ask, but he certainly got strong enough grips to go some way towards satisfying his desire.

All went on deck now, and the seven explorers left the vessel. They were soon on the quay, and as the yacht turned round to pursue her course, she came so near where they stood, that Lady Helena could exchange farewells once more.

"God help you!" she called out.
"Heaven will help us, madam," shouted Paganel, in reply, "for you may be sure we'll help ourselves."
"Go on," sung out the captain to his engineer.

At the same moment Lord Glenarvan gave the signal to start, and away went the mules along the coast, while the DUNCAN steamed out at full speed toward the broad ocean.

CHAPTER XI TRAVELING IN CHILI

THE native troops organized by Lord Glenarvan consisted of three men and a boy. The captain of the muleteers was an Englishman, who had become naturalized through twenty years' residence in the country. He made a livelihood by letting out mules to travelers, and leading them over the difficult passes of the Cordilleras, after which he gave them in charge of a BAQUEANO, or Argentine guide, to whom the route through the Pampas was perfectly familiar. This Englishman had not so far forgotten his mother tongue among mules and Indians that he could not converse with his countrymen, and a lucky thing it was for them, as Lord Glenarvan found it far easier to give orders than to see them executed, Paganel was still unsuccessful in making himself understood.

The CATAPEZ, as he was called in Chilian, had two natives called PEONS, and a boy about twelve years of age under him. The PEONS took care of the baggage mules, and the boy led the MADRINA, a young mare adorned with rattle and bells, which walked in front, followed by ten mules. The travelers rode seven of these, and the CATAPEZ another. The remaining two carried provisions and a few bales of goods, intended to secure the goodwill of the Caciques of the plain. The PEONS walked, according to their usual habit.

Every arrangement had been made to insure safety and speed, for crossing the Andes is something more than an ordinary journey. It could not be accomplished without the help of the hardy mules of the far-famed Argentine breed. Those reared in the country are much superior to their progenitors. They are not particular about their food, and only drink once a day, and they can go with ease ten leagues in eight hours.

There are no inns along this road from one ocean to another. The only viands on which travelers can regale themselves are dried meat, rice seasoned with pimento, and such game as may be shot en route. The torrents provide them with water in the mountains, and the rivulets in the plains, which they improve by the addition of a few drops of rum, and each man carries a supply of this in a bullock's horn, called CHIFFLE. They have to be careful, however, not to indulge too freely in alcoholic drinks, as the climate itself has a peculiarly exhilarating effect on the nervous system. As for bedding, it is all contained in the saddle used by the natives, called RECADO. This saddle is made of sheepskins, tanned on one side and woolly on the other, fastened by gorgeous embroidered straps. Wrapped in these warm coverings a traveler may sleep soundly, and brave exposure to the damp nights.

Glenarvan, an experienced traveler, who knew how to adapt himself to the customs of other countries,adopted the Chilian costume for himself and his whole party. Paganel and Robert, both alike children, though of different growth, were wild with delight as they inserted their heads in the national PONCHO, an immense plaid with a hole in center, and their legs in high leather boots. The mules were richly caparisoned, with the Arab bit in their mouths, and long reins of plaited leather, which served as a whip; the headstall of the bridle was decorated with metal.
ornaments, and the ALFORJAS, double sacks of gay colored linen, containing the day's provisions. Paganel, DI
STRAIT as usual, was flung several times before he succeeded in bestriding his good steed, but once in the saddle, his inseparable telescope on his shoulder-belt, he held on well enough, keeping his feet fast in the stirrups, and trusting entirely to the sagacity of his beast. As for Robert, his first attempt at mounting was successful, and proved that he had the making in him of an excellent horseman.

The weather was splendid when they started, the sky a deep cloudless blue, and yet the atmosphere so tempered by the sea breezes as to prevent any feeling of oppressive heat. They marched rapidly along the winding shore of the bay of Talcahuano, in order to gain the extremity of the parallel, thirty miles south. No one spoke much the first day, for the smoke of the DUNCAN was still visible on the horizon, and the pain of parting too keenly felt. Paganel talked to himself in Spanish, asking and answering questions.

The CATAPEZ, moreover, was a taciturn man naturally, and had not been rendered loquacious by his calling. He hardly spoke to his PEONS. They understood their duties perfectly. If one of the mules stopped, they urged it on with a guttural cry, and if that proved unavailing, a good-sized pebble, thrown with unerring aim, soon cured the animal's obstinacy. If a strap got loose, or a rein fell, a PEON came forward instantly, and throwing off his poncho, flung it over his beast's head till the accident was repaired and the march resumed.

The custom of the muleteers is to start immediately after breakfast, about eight o'clock, and not to stop till they camp for the night, about 4 P. M. Glenarvan fell in with the practice, and the first halt was just as they arrived at Arauco, situated at the very extremity of the bay. To find the extremity of the 37th degree of latitude, they would have required to proceed as far as the Bay of Carnero, twenty miles further. But the agents of Glenarvan had already scoured that part of the coast, and to repeat the exploration would have been useless. It was, therefore, decided that Arauco should be the point of departure, and they should keep on from there toward the east in a straight line.

Since the weather was so favorable, and the whole party, even Robert, were in perfect health, and altogether the journey had commenced under such favorable auspices, it was deemed advisable to push forward as quickly as possible. Accordingly, the next day they marched 35 miles or more, and encamped at nightfall on the banks of Rio Biobio. The country still presented the same fertile aspect, and abounded in flowers, but animals of any sort only came in sight occasionally, and there were no birds visible, except a solitary heron or owl, and a thrush or grebe, flying from the falcon. Human beings there were none, not a native appeared; not even one of the GUASSOS, the degenerate offspring of Indians and Spaniards, dashed across the plain like a shadow, his flying steed dripping with blood from the cruel thrusts inflicted by the gigantic spurs of his master's naked feet. It was absolutely impossible to make inquiries when there was no one to address, and Lord Glenarvan came to the conclusion that Captain Grant must have been dragged right over the Andes into the Pampas, and that it would be useless to search for him elsewhere. The only thing to be done was to wait patiently and press forward with all the speed in their power.

On the 17th they set out in the usual line of march, a line which it was hard work for Robert to keep, his ardor constantly compelled him to get ahead of the MADRINA, to the great despair of his mule. Nothing but a sharp recall from Glenarvan kept the boy in proper order.

The country now became more diversified, and the rising ground indicated their approach to a mountainous district. Rivers were more numerous, and came rushing noisily down the slopes. Paganel consulted his maps, and when he found any of those streams not marked, which often happened, all the fire of a geographer burned in his veins, and he would exclaim, with a charming air of vexation:

"A river which hasn't a name is like having no civil standing. It has no existence in the eye of geographical law."

He christened them forthwith, without the least hesitation, and marked them down on the map, qualifying them with the most high-sounding adjectives he could find in the Spanish language.

"What a language!" he said. "How full and sonorous it is! It is like the metal church bells are made of--composed of seventy-eight parts of copper and twenty-two of tin."

"But, I say, do you make any progress in it?" asked Glenarvan.

"Most certainly, my dear Lord. Ah, if it wasn't the accent, that wretched accent!"

And for want of better work, Paganel whiled away the time along the road by practising the difficulties in pronunciation, repeating all the break-jaw words he could, though still making geographical observations. Any question about the country that Glenarvan might ask the CATAPEZ was sure to be answered by the learned Frenchman before he could reply, to the great astonishment of the guide, who gazed at him in bewilderment.

About two o'clock that same day they came to a cross road, and naturally enough Glenarvan inquired the name of it.

"It is the route from Yumbel to Los Angeles," said Paganel.

Glenarvan looked at the CATAPEZ, who replied:

"Quite right."

And then, turning toward the geographer, he added:
"You have traveled in these parts before, sir?"
"Oh, yes," said Paganel, quite gravely.
"On a mule?"
"No, in an easy chair."
The CATAPEZ could not make him out, but shrugged his shoulders and resumed his post at the head of the party.
At five in the evening they stopped in a gorge of no great depth, some miles above the little town of Loja, and encamped for the night at the foot of the Sierras, the first steppes of the great Cordilleras.
CHAPTER XII ELEVEN THOUSAND FEET ALOFT
NOTHING of importance had occurred hitherto in the passage through Chili; but all the obstacles and difficulties incident to a mountain journey were about to crowd on the travelers now.
One important question had first to be settled. Which pass would take them over the Andes, and yet not be out of their fixed route?
On questioning the CATAPEZ on the subject, he replied:
"There are only two practicable passes that I know of in this part of the Cordilleras."
"The pass of Arica is one undoubtedly discovered by Valdivia Mendoza," said Paganel.
"Just so."
"And that of Villarica is the other."
"Precisely."
"Well, my good fellow, both these passes have only one fault; they take us too far out of our route, either north or south."
"Have you no other to propose?" asked the Major.
"Certainly," replied Paganel. "There is the pass of Antuco, on the slope of the volcano, in latitude, 37 degrees 30', or, in other words, only half a degree out of our way."
"That would do, but are you acquainted with this pass of Antuco, CATAPEZ?" said Glenarvan.
"Yes, your Lordship, I have been through it, but I did not mention it, as no one goes that way but the Indian shepherds with the herds of cattle."
"Oh, very well; if mares and sheep and oxen can go that way, we can, so let's start at once."
The signal for departure was given immediately, and they struck into the heart of the valley of Las Lejas, between great masses of chalk crystal. From this point the pass began to be difficult, and even dangerous. The angles of the declivities widened and the ledges narrowed, and frightful precipices met their gaze. The mules went cautiously along, keeping their heads near the ground, as if scenting the track. They marched in file. Sometimes at a sudden bend of the road, the MADRINA would disappear, and the little caravan had to guide themselves by the distant tinkle of her bell. Often some capricious winding would bring the column in two parallel lines, and the CATAPEZ could speak to his PEONS across a crevasse not two fathoms wide, though two hundred deep, which made between them an inseparable gulf.
Glenarvan followed his guide step by step. He saw that his perplexity was increasing as the way became more difficult, but did not dare to interrogate him, rightly enough, perhaps, thinking that both mules and muleteers were very much governed by instinct, and it was best to trust to them.
For about an hour longer the CATAPEZ kept wandering about almost at haphazard, though always getting higher up the mountains. At last he was obliged to stop short. They were in a narrow valley, one of those gorges called by the Indians "quebrads," and on reaching the end, a wall of porphyry rose perpendicularly before them, and barred further passage. The CATAPEZ, after vain attempts at finding an opening, dismounted, crossed his arms, and waited. Glenarvan went up to him and asked if he had lost his way.
"No, your Lordship," was the reply.
"But you are not in the pass of Antuco."
"We are."
"You are sure you are not mistaken?"
"I am not mistaken. See! there are the remains of a fire left by the Indians, and there are the marks of the mares and the sheep."
"They must have gone on then."
"Yes, but no more will go; the last earthquake has made the route impassable."
"To mules," said the Major, "but not to men."
"Ah, that's your concern; I have done all I could. My mules and myself are at your service to try the other passes of the Cordilleras."
"And that would delay us?"
"Three days at least."

Glenarvan listened silently. He saw the CATAPEZ was right. His mules could not go farther. When he talked of returning, however, Glenarvan appealed to his companions and said:

"Will you go on in spite of all the difficulty?"

"We will follow your Lordship," replied Tom Austin.

"And even precede you," added Paganel. "What is it after all? We have only to cross the top of the mountain chain, and once over, nothing can be easier of descent than the slopes we shall find there. When we get below, we shall find BAQUEANOS, Argentine shepherds, who will guide us through the Pampas, and swift horses accustomed to gallop over the plains. Let's go forward then, I say, and without a moment's hesitation."

"Forward!" they all exclaimed. "You will not go with us, then?" said Glenarvan to the CATAPEZ.

"I am the muleteer," was the reply.

"As you please," said Glenarvan.

"We can do without him," said Paganel. "On the other side we shall get back into the road to Antuco, and I'm quite sure I'll lead you to the foot of the mountain as straight as the best guide in the Cordilleras."

Accordingly, Glenarvan settled accounts with the CATAPEZ, and bade farewell to him and his PEONS and mules. The arms and instruments, and a small stock of provisions were divided among the seven travelers, and it was unanimously agreed that the ascent should recommence at once, and, if necessary, should continue part of the night. There was a very steep winding path on the left, which the mules never would have attempted. It was toilsome work, but after two hours' exertion, and a great deal of roundabout climbing, the little party found themselves once more in the pass of Antuco.

They were not far now from the highest peak of the Cordilleras, but there was not the slightest trace of any beaten path. The entire region had been overturned by recent shocks of earthquake, and all they could do was to keep on climbing higher and higher. Paganel was rather disconcerted at finding no way out to the other side of the chain, and laid his account with having to undergo great fatigue before the topmost peaks of the Andes could be reached, for their mean height is between eleven and twelve thousand six hundred feet. Fortunately the weather was calm and the sky clear, in addition to the season being favorable, but in Winter, from May to October, such an ascent would have been impracticable. The intense cold quickly kills travelers, and those who even manage to hold out against it fall victims to the violence of the TEMPORALES, a sort of hurricane peculiar to those regions, which yearly fills the abysses of the Cordilleras with dead bodies.

They went on toiling steadily upward all night, hoisting themselves up to almost inaccessible plateaux, and leaping over broad, deep crevasses. They had no ropes, but arms linked in arms supplied the lack, and shoulders served for ladders. The strength of Mulrady and the dexterity of Wilson were taxed heavily now. These two brave Scots multiplied themselves, so to speak. Many a time, but for their devotion and courage the small band could not have gone on. Glenarvan never lost sight of young Robert, for his age and vivacity made him imprudent. Paganel was a true Frenchman in his impetuous ardor, and hurried furiously along. The Major, on the contrary, only went as quick as was necessary, neither more nor less, climbing without the least apparent exertion. Perhaps he hardly knew, indeed, that he was climbing at all, or perhaps he fancied he was descending.

The whole aspect of the region had now completely changed. Huge blocks of glittering ice, of a bluish tint on some of the declivities, stood up on all sides, reflecting the early light of morn. The ascent became very perilous. They were obliged to reconnoiter carefully before making a single step, on account of the crevasses. Wilson took the lead, and tried the ground with his feet. His companions followed exactly in his footprints, lowering their voices to a whisper, as the least sound would disturb the currents of air, and might cause the fall of the masses of snow suspended in the air seven or eight hundred feet above their heads.

They had come now to the region of shrubs and bushes, which, higher still, gave place to grasses and cacti. At 11,000 feet all trace of vegetation had disappeared. They had only stopped once, to rest and snatch a hurried meal to V. IV Verne recruit their strength. With superhuman courage, the ascent was then resumed amid increasing dangers and difficulties. They were forced to bstride sharp peaks and leap over chasms so deep that they did not dare to look down them. In many places wooden crosses marked the scene of some great catastrophes.

About two o'clock they came to an immense barren plain, without a sign of vegetation. The air was dry and the sky unclouded blue. At this elevation rain is unknown, and vapors only condense into snow or hail. Here and there peaks of porphyry or basalt pierced through the white winding-sheet like the bones of a skeleton; and at intervals fragments of quartz or gneiss, loosened by the action of the air, fell down with a faint, dull sound, which in a denser atmosphere would have been almost imperceptible.

However, in spite of their courage, the strength of the little band was giving way. Glenarvan regretted they had gone so far into the interior of the mountain when he saw how exhausted his men had become. Young Robert held out manfully, but he could not go much farther.
At three o'clock Glenarvan stopped and said:
"We must rest."
He knew if he did not himself propose it, no one else would.
"Rest?" rejoined Paganel; "we have no place of shelter."
"It is absolutely necessary, however, if it were only for Robert."
"No, no," said the courageous lad; "I can still walk; don't stop."
"You shall be carried, my boy; but we must get to the other side of the Cordilleras, cost what it may. There we
may perhaps find some hut to cover us. All I ask is a two hours' longer march."
"Are you all of the same opinion?" said Glenarvan.
"Yes," was the unanimous reply: and Mulrady added, "I'll carry the boy."
The march eastward was forthwith resumed. They had a frightful height to climb yet to gain the topmost peaks.
The rarefaction of the atmosphere produced that painful oppression known by the name of PUNA. Drops of blood
stood on the gums and lips, and respiration became hurried and difficult. However strong the will of these brave men
might be, the time came at last when their physical powers failed, and vertigo, that terrible malady in the mountains,
destroyed not only their bodily strength but their moral energy. Falls became frequent, and those who fell could not
rise again, but dragged themselves along on their knees.

But just as exhaustion was about to make short work of any further ascent, and Glenarvan's heart began to sink
as he thought of the snow lying far as the eye could reach, and of the intense cold, and saw the shadow of night fast
overspreading the desolate peaks, and knew they had not a roof to shelter them, suddenly the Major stopped and
said, in a calm voice, "A hut!"

CHAPTER XIII A SUDDEN DESCENT
ANYONE else but McNabbs might have passed the hut a hundred times, and gone all round it, and even over it
without suspecting its existence. It was covered with snow, and scarcely distinguishable from the surrounding rocks;
but Wilson and Mulrady succeeded in digging it out and clearing the opening after half an hour's hard work, to the
great joy of the whole party, who eagerly took possession of it.
They found it was a CASUCHA, constructed by the Indians, made of ADOBES, a species of bricks baked in the
sun. Its form was that of a cube, 12 feet on each side, and it stood on a block of basalt. A stone stair led up to the
door, the only opening; and narrow as this door was, the hurricane, and snow, and hail found their way in when the
TEMPORALES were unchained in the mountains.
Ten people could easily find room in it, and though the walls might be none too water-tight in the rainy season,
at this time of the year, at any rate, it was sufficient protection against the intense cold, which, according to the
thermometer, was ten degrees below zero. Besides, there was a sort of fireplace in it, with a chimney of bricks, badly
enough put together, certainly, but still it allowed of a fire being lighted.
"This will shelter us, at any rate," said Glenarvan, "even if it is not very comfortable. Providence has led us to it,
and we can only be thankful."
"Why, it is a perfect palace, I call it," said Paganel; "we only want flunkeys and courtiers. We shall do capital
here."
"Especially when there is a good fire blazing on the hearth, for we are quite as cold as we are hungry. For my
part, I would rather see a good faggot just now than a slice of venison."
"Well, Tom, we'll try and get some combustible or other," said Paganel.
"Combustibles on the top of the Cordilleras!" exclaimed Mulrady, in a dubious tone.
"Since there is a chimney in the CASUCHA," said the Major, "the probability is that we shall find something to
burn in it."
"Our friend McNabbs is right," said Glenarvan. "Get everything in readiness for supper, and I'll go out and turn
woodcutter."
"Wilson and I will go with you," said Paganel.
"Do you want me?" asked Robert, getting up.
"No, my brave boy, rest yourself. You'll be a man, when others are only children at your age," replied
Glenarvan.

On reaching the little mound of porphyry, Glenarvan and his two companions left the CASUCHA. In spite of the
perfect calmness of the atmosphere, the cold was stinging. Paganel consulted his barometer, and found that the
depression of the mercury corresponded to an elevation of 11,000 feet, only 910 meters lower than Mont Blanc. But
if these mountains had presented the difficulties of the giant of the Swiss Alps, not one of the travelers could have
crossed the great chain of the New World.
On reaching a little mound of porphyry, Glenarvan and Paganel stopped to gaze about them and scan the horizon
on all sides. They were now on the summit of the Nevadas of the Cordilleras, and could see over an area of forty
miles. The valley of the Colorado was already sunk in shadow, and night was fast drawing her mantle over the eastern slopes of the Andes. The western side was illumined by the rays of the setting sun, and peaks and glaciers flashed back his golden beams with dazzling radiance. On the south the view was magnificent. Across the wild valley of the Torbido, about two miles distant, rose the volcano of Antuco. The mountain roared like some enormous monster, and vomited red smoke, mingled with torrents of sooty flame. The surrounding peaks appeared on fire. Showers of red-hot stones, clouds of reddish vapor and rockets of lava, all combined, presented the appearance of glowing sparkling streams. The splendor of the spectacle increased every instant as night deepened, and the whole sky became lighted up with a dazzling reflection of the blazing crater, while the sun, gradually becoming shorn of his sunset glories, disappeared like a star lost in the distant darkness of the horizon.

Paganel and Glenarvan would have remained long enough gazing at the sublime struggle between the fires of earth and heaven, if the more practical Wilson had not reminded them of the business on hand. There was no wood to be found, however, but fortunately the rocks were covered with a poor, dry species of lichen. Of this they made an ample provision, as well as of a plant called LLARETTA, the root of which burns tolerably well. This precious combustible was carried back to the CASUCHA and heaped up on the hearth. It was a difficult matter to kindle it, though, and still more to keep it alight. The air was so rarefied that there was scarcely oxygen enough in it to support combustion. At least, this was the reason assigned by the Major.

"By way of compensation, however," he added, "water will boil at less than 100 degrees heat. It will come to the point of ebullition before 99 degrees."

McNabbs was right, as the thermometer proved, for it was plunged into the kettle when the water boiled, and the mercury only rose to 99 degrees. Coffee was soon ready, and eagerly gulped down by everybody. The dry meat certainly seemed poor fare, and Paganel couldn't help saying:

"I tell you what, some grilled llama wouldn't be bad with this, would it? They say that the llama is substitute for the ox and the sheep, and I should like to know if it is, in an alimentary respect."

"What!" replied the Major. "You're not content with your supper, most learned Paganel."

"Enchanted with it, my brave Major; still I must confess I should not say no to a dish of llama."

"You are a Sybarite."

"I plead guilty to the charge. But come, now, though you call me that, you wouldn't sulk at a beefsteak yourself, would you?"

"Probably not."

"And if you were asked to lie in wait for a llama, notwithstanding the cold and the darkness, you would do it without the least hesitation?"

"Of course; and if it will give you the slightest pleasure--"

His companions had hardly time to thank him for his obliging good nature, when distant and prolonged howls broke on their ear, plainly not proceeding from one or two solitary animals, but from a whole troop, and one, moreover, that was rapidly approaching.

Providence had sent them a supper, as well as led them to a hut. This was the geographer's conclusion; but Glenarvan damped his joy somewhat by remarking that the quadrupeds of the Cordilleras are never met with in such a high latitude.

"Then where can these animals come from?" asked Tom Austin. "Don't you hear them getting nearer!"


"Impossible," returned Paganel. "That is regular howling."

"Let us go out and see," said Glenarvan.

"Yes, and be ready for hunting," replied McNabbs, arming himself with his carbine.

They all rushed forthwith out of the CASUCHA. Night had completely set in, dark and starry. The moon, now in her last quarter, had not yet risen. The peaks on the north and east had disappeared from view, and nothing was visible save the fantastic SILHOUETTE of some towering rocks here and there. The howls, and clearly the howls of terrified animals, were redoubled. They proceeded from that part of the Cordilleras which lay in darkness. What could be going on there? Suddenly a furious avalanche came down, an avalanche of living animals mad with fear. The whole plateau seemed to tremble. There were hundreds, perhaps thousands, of these animals, and in spite of the rarefied atmosphere, their noise was deafening. Were they wild beasts from the Pampas, or herds of llamas and vicunas? Glenarvan, McNabbs, Robert, Austin, and the two sailors, had just time to throw themselves flat on the ground before they swept past like a whirlwind, only a few paces distant. Paganel, who had remained standing, to take advantage of his peculiar powers of sight, was knocked down in a twinkling. At the same moment the report of firearms was heard. The Major had fired, and it seemed to him that an animal had fallen close by, and that the whole herd, yelling louder than ever, had rushed down and disappeared among the declivities lighted up by the reflection of the volcano.
"Ah, I've got them," said a voice, the voice of Paganel.
"Got what?" asked Glenarvan.
"My spectacles," was the reply. "One might expect to lose that much in such a tumult as this."
"You are not wounded, I hope?"
"No, only knocked down; but by what?"
"By this," replied the Major, holding up the animal he had killed.
They all hastened eagerly into the hut, to examine McNabbs' prize by the light of the fire.
It was a pretty creature, like a small camel without a hump. The head was small and the body flattened, the legs were long and slender, the skin fine, and the hair the color of _cafe au lait_.
Paganel had scarcely looked at it before he exclaimed, "A guanaco!"
"What sort of an animal is that?" asked Glenarvan.
"One you can eat."
"And it is good savory meat, I assure you; a dish of Olympus! I knew we should have fresh meat for supper, and such meat! But who is going to cut up the beast?"
"I will," said Wilson.
"Well, I'll undertake to cook it," said Paganel.
"Can you cook, then, Monsieur Paganel?" asked Robert.
"I should think so, my boy. I'm a Frenchman, and in every Frenchman there is a cook."
Five minutes afterward Paganel began to grill large slices of venison on the embers made by the use of the LLARETTAS, and in about ten minutes a dish was ready, which he served up to his companions by the tempting name of guanaco cutlets. No one stood on ceremony, but fell to with a hearty good will.
To the absolute stupefaction of the geographer, however, the first mouthful was greeted with a general grimace, and such exclamations as--"Tough!" "It is horrible." "It is not eatable."
The poor SAVANT was obliged to own that his cutlets could not be relished, even by hungry men. They began to banter him about his "Olympian dish," and indulge in jokes at his expense; but all he cared about was to find out how it happened that the flesh of the guanaco, which was certainly good and eatable food, had turned out so badly in his hands. At last light broke in on him, and he called out:
"I see through it now! Yes, I see through it. I have found out the secret now."
"The meat was too long kept, was it?" asked McNabbs, quietly.
"No, but the meat had walked too much. How could I have forgotten that?"
"What do you mean?" asked Tom Austin.
"I mean this: the guanaco is only good for eating when it is killed in a state of rest. If it has been long hunted, and gone over much ground before it is captured, it is no longer eatable. I can affirm the fact by the mere taste, that this animal has come a great distance, and consequently the whole herd has."
"You are certain of this?" asked Glenarvan.
"Absolutely certain."
"But what could have frightened the creatures so, and driven them from their haunts, when they ought to have been quietly sleeping?"
"That's a question, my dear Glenarvan, I could not possibly answer. Take my advice, and let us go to sleep without troubling our heads about it. I say, Major, shall we go to sleep?"
"Yes, we'll go to sleep, Paganel."
Each one, thereupon, wrapped himself up in his poncho, and the fire was made up for the night.
Loud snores in every tune and key soon resounded from all sides of the hut, the deep bass contribution of Paganel completing the harmony.
But Glenarvan could not sleep. Secret uneasiness kept him in a continual state of wakefulness. His thoughts reverted involuntarily to those frightened animals flying in one common direction, impelled by one common terror. They could not be pursued by wild beasts, for at such an elevation there were almost none to be met with, and of hunters still fewer. What terror then could have driven them among the precipices of the Andes? Glenarvan felt a presentiment of approaching danger.
But gradually he fell into a half-drowsy state, and his apprehensions were lulled. Hope took the place of fear. He saw himself on the morrow on the plains of the Andes, where the search would actually commence, and perhaps success was close at hand. He thought of Captain Grant and his two sailors, and their deliverance from cruel bondage. As these visions passed rapidly through his mind, every now and then he was roused by the crackling of the fire, or sparks flying out, or some little jet of flame would suddenly flare up and illumine the faces of his slumbering companions.
Then his presentiments returned in greater strength than before, and he listened anxiously to the sounds outside.
the hut.

At certain intervals he fancied he could hear rumbling noises in the distance, dull and threatening like the mutterings of thunder before a storm. There surely must be a storm raging down below at the foot of the mountains. He got up and went out to see.

The moon was rising. The atmosphere was pure and calm. Not a cloud visible either above or below. Here and there was a passing reflection from the flames of Antuco, but neither storm nor lightning, and myriads of bright stars studded the zenith. Still the rumbling noises continued. They seemed to meet together and cross the chain of the Andes. Glenarvan returned to the CASUCHA more uneasy than ever, questioning within himself as to the connection between these sounds and the flight of the guanacos. He looked at his watch and found the time was about two in the morning. As he had no certainty, however, of any immediate danger, he did not wake his companions, who were sleeping soundly after their fatigue, and after a little dozed off himself, and slumbered heavily for some hours.

All of a sudden a violent crash made him start to his feet. A deafening noise fell on his ear like the roar of artillery. He felt the ground giving way beneath him, and the CASUCHA rocked to and fro, and opened.

He shouted to his companions, but they were already awake, and tumbling pell-mell over each other. They were being rapidly dragged down a steep declivity. Day dawned and revealed a terrible scene. The form of the mountains changed in an instant. Cones were cut off. Tottering peaks disappeared as if some trap had opened at their base. Owing to a peculiar phenomenon of the Cordilleras, an enormous mass, many miles in extent, had been displaced entirely, and was speeding down toward the plain.

"An earthquake!" exclaimed Paganel. He was not mistaken. It was one of those cataclysms frequent in Chili, and in this very region where Copiapo had been twice destroyed, and Santiago four times laid in ruins in fourteen years. This region of the globe is so underlaid with volcanic fires and the volcanoes of recent origin are such insufficient safety valves for the subterranean vapors, that shocks are of frequent occurrence, and are called by the people TREMBLORES.

The plateau to which the seven men were clinging, holding on by tufts of lichen, and giddy and terrified in the extreme, was rushing down the declivity with the swiftness of an express, at the rate of fifty miles an hour. Not a cry was possible, nor an attempt to get off or stop. They could not even have heard themselves speak. The internal rumblings, the crash of the avalanches, the fall of masses of granite and basalt, and the whirlwind of pulverized snow, made all communication impossible. Sometimes they went perfectly smoothly along without jolts or jerks, and sometimes on the contrary, the plateau would reel and roll like a ship in a storm, coasting past abysses in which fragments of the mountain were falling, tearing up trees by the roots, and leveling, as if with the keen edge of an immense scythe, every projection of the declivity.

How long this indescribable descent would last, no one could calculate, nor what it would end in ultimately. None of the party knew whether the rest were still alive, whether one or another were not already lying in the depths of some abyss. Almost breathless with the swift motion, frozen with the cold air, which pierced them through, and blinded with the whirling snow, they gasped for breath, and became exhausted and nearly inanimate, only retaining their hold of the rocks by a powerful instinct of self-preservation. Suddenly a tremendous shock pitched them right off, and sent them rolling to the very foot of the mountain. The plateau had stopped.

For some minutes no one stirred. At last one of the party picked himself up, and stood on his feet, stunned by the shock, but still firm on his legs. This was the Major. He shook off the blinding snow and looked around him. His companions lay in a close circle like the shots from a gun that has just been discharged, piled one on top of another.

The Major counted them. All were there except one—that one was Robert Grant.

CHAPTER XIV PROVIDENTIALLY RESCUED

THE eastern side of the Cordilleras of the Andes consists of a succession of lengthened declivities, which slope down almost insensibly to the plain. The soil is carpeted with rich herbage, and adorned with magnificent trees, among which, in great numbers, were apple-trees, planted at the time of the conquest, and golden with fruit. There were literally, perfect forests of these. This district was, in fact, just a corner of fertile Normandy.

The sudden transition from a desert to an oasis, from snowy peaks to verdant plains, from Winter to Summer, can not fail to strike the traveler's eye.

The ground, moreover, had recovered its immobility. The trembling had ceased, though there was little doubt the forces below the surface were carrying on their devastating work further on, for shocks of earthquake are always occurring in some part or other of the Andes. This time the shock had been one of extreme violence. The outline of the mountains was wholly altered, and the Pampas guides would have sought vainly for the accustomed landmarks.

A magnificent day had dawned. The sun was just rising from his ocean bed, and his bright rays streamed already over the Argentine plains, and ran across to the Atlantic. It was about eight o'clock.

Lord Glenarvan and his companions were gradually restored to animation by the Major's efforts. They had been
completely stunned, but had sustained no injury whatever. The descent of the Cordilleras was accomplished; and as Dame Nature had conveyed them at her own expense, they could only have praised her method of locomotion if one of their number, and that one the feeblest and youngest, the child of the party, had not been missing at the roll call.

The brave boy was beloved by everybody. Paganel was particularly attached to him, and so was the Major, with all his apparent coldness. As for Glenarvan, he was in absolute despair when he heard of his disappearance, and pictured to himself the child lying in some deep abyss, wildly crying for succor.

"We must go and look for him, and look till we find him," he exclaimed, almost unable to keep back his tears. "We cannot leave him to his fate. Every valley and precipice and abyss must be searched through and through. I will have a rope fastened round my waist, and go down myself. I insist upon it; you understand; I insist upon it. Heaven grant Robert may be still alive! If we lose the boy, how could we ever dare to meet the father? What right have we to save the captain at the cost of his son's life?"

Glenarvan's companions heard him in silence. He sought to read hope in their eyes, but they did not venture to meet his gaze.

At last he said, "Well, you hear what I say, but you make no response. Do you mean to tell me that you have no hope--not the slightest?"

Again there was silence, till McNabbs asked: "Which of you can recollect when Robert disappeared?"

No one could say.

"Well, then," resumed the Major, "you know this at any rate. Who was the child beside during our descent of the Cordilleras?"

"Beside me," replied Wilson.

"Very well. Up to what moment did you see him beside you? Try if you can remember."

"All that I can recollect is that Robert Grant was still by my side, holding fast by a tuft of lichen, less than two minutes before the shock which finished our descent."

"Less than two minutes? Mind what you are saying; I dare say a minute seemed a very long time to you. Are you sure you are not making a mistake?"

"I don't think I am. No; it was just about two minutes, as I tell you."

"Very well, then; and was Robert on your right or left?"

"On my left. I remember that his poncho brushed past my face."

"And with regard to us, how were you placed?"

"On the left also."

"Then Robert must have disappeared on this side," said the Major, turning toward the mountain and pointing toward the right: "and I should judge," he added, "considering the time that has elapsed, that the spot where he fell is about two miles up. Between that height and the ground is where we must search, dividing the different zones among us, and it is there we shall find him."

Not another word was spoken. The six men commenced their explorations, keeping constantly to the line they had made in their descent, examining closely every fissure, and going into the very depths of the abysses, choked up though they partly were with fragments of the plateau; and more than one came out again with garments torn to rags, and feet and hands bleeding. For many long hours these brave fellows continued their search without dreaming of taking rest. But all in vain. The child had not only met his death on the mountain, but found a grave which some enormous rock had sealed forever.

About one o'clock, Glenarvan and his companions met again in the valley. Glenarvan was completely crushed with grief. He scarcely spoke. The only words that escaped his lips amid his sighs were, "I shall not go away! I shall not go away!"

No one of the party but could enter into his feeling, and respect it.

"Let us wait," said Paganel to the Major and Tom Austin. "We will take a little rest, and recruit our strength. We need it anyway, either to prolong our search or continue our route."

"Yes; and, as Edward wishes it, we will rest. He has still hope, but what is it he hopes?"

"Who knows!" said Tom Austin.

"Poor Robert!" replied Paganel, brushing away a tear.

The valley was thickly wooded, and the Major had no difficulty in finding a suitable place of encampment. He chose a clump of tall carob trees, under which they arranged their few belongings--few indeed, for all they had were sundry wraps and fire-arms, and a little dried meat and rice. Not far off there was a RIO, which supplied them with water, though it was still somewhat muddy after the disturbance of the avalanche. Mulrady soon had a fire lighted on the grass, and a warm refreshing beverage to offer his master. But Glenarvan refused to touch it, and lay stretched on
his poncho in a state of absolute prostration.

So the day passed, and night came on, calm and peaceful as the preceding had been. While his companions were lying motionless, though wide awake, Glenarvan betook himself once more to the slopes of the Cordilleras, listening intently in hope that some cry for help would fall upon his ear. He ventured far up in spite of his being alone, straining his ear with painful eagerness to catch the faintest sound, and calling aloud in an agony of despair.

But he heard nothing save the beatings of his own heart, though he wandered all night on the mountain. Sometimes the Major followed him, and sometimes Paganel, ready to lend a helping hand among the slippery peaks and dangerous precipices among which he was dragged by his rash and useless imprudence. All his efforts were in vain, however, and to his repeated cries of "Robert, Robert!" echo was the only response.

Day dawned, and it now became a matter of necessity to go and bring back the poor Lord from the distant plateau, even against his will. His despair was terrible. Who could dare to speak of quitting this fatal valley? Yet provisions were done, and Argentine guides and horses were not far off to lead them to the Pampas. To go back would be more difficult than to go forward. Besides, the Atlantic Ocean was the appointed meeting place with the DUNCAN. These were strong reasons against any long delay; indeed it was best for all parties to continue the route as soon as possible.

McNabbs undertook the task of rousing Lord Glenarvan from his grief. For a long time his cousin seemed not to hear him. At last he shook his head, and said, almost inaudibly:
"Did you say we must start?"
"Yes, we must start."
"Wait one hour longer."
"Yes, we'll wait another," replied the Major.

The hour slipped away, and again Glenarvan begged for longer grace. To hear his imploring tones, one might have thought him a criminal begging a respite. So the day passed on till it was almost noon. McNabbs hesitated now no longer, but, acting on the advice of the rest, told his cousin that start they must, for all their lives depended on prompt action.

"Yes, yes!" replied Glenarvan. "Let us start, let us start!"

But he spoke without looking at McNabbs. His gaze was fixed intently on a certain dark speck in the heavens. Suddenly he exclaimed, extending his arm, and keeping it motionless, as if petrified:
"There! there! Look! look!"

All eyes turned immediately in the direction indicated so imperiously. The dark speck was increasing visibly. It was evidently some bird hovering above them.

"A condor," said Paganel.

"Yes, a condor," replied Glenarvan. "Who knows? He is coming down-- he is gradually getting lower! Let us wait."

Paganel was not mistaken, it was assuredly a condor. This magnificent bird is the king of the Southern Andes, and was formerly worshiped by the Incas. It attains an extraordinary development in those regions. Its strength is prodigious. It has frequently driven oxen over the edge of precipices down into the depths of abysses. It seizes sheep, and kids, and young calves, browsing on the plains, and carries them off to inaccessible heights. It hovers in the air far beyond the utmost limits of human sight, and its powers of vision are so great that it can discern the smallest objects on the earth beneath.

What had this condor discovered then? Could it be the corpse of Robert Grant? "Who knows?" repeated Glenarvan, keeping his eye immovably fixed on the bird. The enormous creature was fast approaching, sometimes hovering for awhile with outspread wings, and sometimes falling with the swiftness of inert bodies in space. Presently he began to wheel round in wide circles. They could see him distinctly. He measured more than fifteen feet, and his powerful wings bore him along with scarcely the slightest effort, for it is the prerogative of large birds to fly with calm majesty, while insects have to beat their wings a thousand times a second.

The Major and Wilson had seized their carbines, but Glenarvan stopped them by a gesture. The condor was encircling in his flight a sort of inaccessible plateau about a quarter of a mile up the side of the mountain. He wheeled round and round with dazzling rapidity, opening and shutting his formidable claws, and shaking his cartilaginous carbuncle, or comb.

"It is there, there!" exclaimed Glenarvan.

A sudden thought flashed across his mind, and with a terrible cry, he called out, "Fire! fire! Oh, suppose Robert were still alive! That bird."

But it was too late. The condor had dropped out of sight behind the crags. Only a second passed, a second that seemed an age, and the enormous bird reappeared, carrying a heavy load and flying at a slow rate.

A cry of horror rose on all sides. It was a human body the condor had in his claws, dangling in the air, and
apparently lifeless-- it was Robert Grant. The bird had seized him by his clothes, and had him hanging already at least one hundred and fifty feet in the air. He had caught sight of the travelers, and was flapping his wings violently, endeavoring to escape with his heavy prey.

"Oh! would that Robert were dashed to pieces against the rocks, rather than be a--"

He did not finish his sentence, but seizing Wilson's carbine, took aim at the condor. His arm was too trembling, however, to keep the weapon steady.

"Let me do it," said the Major. And with a calm eye, and sure hands and motionless body, he aimed at the bird, now three hundred feet above him in the air.

But before he had pulled the trigger the report of a gun resounded from the bottom of the valley. A white smoke rose from between two masses of basalt, and the condor, shot in the head, gradually turned over and began to fall, supported by his great wings spread out like a parachute. He had not let go his prey, but gently sank down with it on the ground, about ten paces from the stream.

"We've got him, we've got him," shouted Glenarvan; and without waiting to see where the shot so providentially came from, he rushed toward the condor, followed by his companions.

When they reached the spot the bird was dead, and the body of Robert was quite concealed beneath his mighty wings. Glenarvan flung himself on the corpse, and dragging it from the condor's grasp, placed it flat on the grass, and knelt down and put his ear to the heart.

But a wilder cry of joy never broke from human lips, than Glenarvan uttered the next moment, as he started to his feet and exclaimed:

"He is alive! He is still alive!"

The boy's clothes were stripped off in an instant, and his face bathed with cold water. He moved slightly, opened his eyes, looked round and murmured, "Oh, my Lord! Is it you!" he said; "my father!"

Glenarvan could not reply. He was speechless with emotion, and kneeling down by the side of the child so miraculously saved, burst into tears.

CHAPTER XV THALCAVE

ROBERT had no sooner escaped one terrible danger than he ran the risk of another scarcely less formidable. He was almost torn to pieces by his friends, for the brave fellows were so overjoyed at the sight of him, that in spite of his weak state, none of them would be satisfied without V. IV Verne giving him a hug. However, it seemed as if good rough hugging did not hurt sick people; at any rate it did not hurt Robert, but quite the contrary.

But the first joy of deliverance over, the next thought was who was the deliverer? Of course it was the Major who suggested looking for him, and he was not far off, for about fifty paces from the RIO a man of very tall stature was seen standing motionless on the lowest crags at the foot of the mountain. A long gun was lying at his feet.

He had broad shoulders, and long hair bound together with leather thongs. He was over six feet in height. His bronzed face was red between the eyes and mouth, black by the lower eyelids, and white on the forehead. He wore the costume of the Patagonians on the frontiers, consisting of a splendid cloak, ornamented with scarlet arabesques, made of the skins of the guanaco, sewed together with ostrich tendons, and with the silky wool turned up on the edge. Under this mantle was a garment of fox-skin, fastened round the waist, and coming down to a point in front. A little bag hung from his belt, containing colors for painting his face. His boots were pieces of ox hide, fastened round the ankles by straps, across.

This Patagonian had a splendid face, indicating real intelligence, notwithstanding the medley of colors by which it was disfigured. His waiting attitude was full of dignity; indeed, to see him standing grave and motionless on his pedestal of rocks, one might have taken him for a statue of _sang-froid_.

As soon as the Major perceived him, he pointed him out to Glenarvan, who ran toward him immediately. The Patagonian came two steps forward to meet him, and Glenarvan caught hold of his hand and pressed it in his own. It was impossible to mistake the meaning of the action, for the noble face of the Scotch lord so beamed with gratitude that no words were needed. The stranger bowed slightly in return, and said a few words that neither Glenarvan nor the Major could understand.

The Patagonian surveyed them attentively for a few minutes, and spoke again in another language. But this second idiom was no more intelligible than the first. Certain words, however, caught Glenarvan's ear as sounding like Spanish, a few sentences of which he could speak.

"ESPAÑOL?" he asked.

The Patagonian nodded in reply, a movement of the head which has an affirmative significance among all nations.

"That's good!" said the Major. "Our friend Paganel will be the very man for him. It is lucky for us that he took it into his head to learn Spanish."
Paganel was called forthwith. He came at once, and saluted the stranger with all the grace of a Frenchman. But his compliments were lost on the Patagonian, for he did not understand a single syllable. However, on being told how things stood, he began in Spanish, and opening his mouth as wide as he could, the better to articulate, said:

"_Vos sois um homen de bem_." (You are a brave man.)
The native listened, but made no reply.
"He doesn't understand," said the geographer.
"Perhaps you haven't the right accent," suggested the Major.
"That's just it! Confound the accent!"

Once more Paganel repeated his compliment, but with no better success.
"I'll change the phrase," he said; and in slow, deliberate tones he went on, "_Sam duvida um Patagao_." (A Patagonian, undoubtedly).
No response still.
"DIZEIME!" said Paganel (Answer me).
But no answer came.
"_Vos compriendes_?" (Do you understand?) shouted Paganel, at the very top of his voice, as if he would burst his throat.
Evidently the Indian did not understand, for he replied in Spanish,
"_No comprendo_." (I do not understand).

It was Paganel's turn now to be amazed. He pushed his spectacles right down over his nose, as if greatly irritated, and said,
"I'll be hanged if I can make out one word of his infernal patois. It is Araucanian, that's certain!"
"Not a bit of it!" said Glenarvan. "It was Spanish he spoke."
And addressing the Patagonian, he repeated the word, "ESPANOL?" (Spanish?).
"_Si, si_." (yes, yes) replied the Indian.

Paganel's surprise became absolute stupefaction. The Major and his cousin exchanged sly glances, and McNabbs said, mischievously, with a look of fun on his face, "Ah, ah, my worthy friend; is this another of your misadventures? You seem to have quite a monopoly of them."
"What!" said Paganel, pricking up his ear.
"Yes, it's clear enough the man speaks Spanish."
"He!"
"Yes, he certainly speaks Spanish. Perhaps it is some other language you have been studying all this time instead of--"

But Paganel would not allow him to proceed. He shrugged his shoulders, and said stiffly,
"You go a little too far, Major."
"Well, how is it that you don't understand him then?"
"Why, of course, because the man speaks badly," replied the learned geographer, getting impatient.
"He speaks badly; that is to say, because you can't understand him," returned the Major coolly.
"Come, come, McNabbs," put in Glenarvan, "your supposition is quite inadmissible. However DISTRAIT our friend Paganel is, it is hardly likely he would study one language for another."
"Well, Edward--or rather you, my good Paganel--explain it then."
"I explain nothing. I give proof. Here is the book I use daily, to practice myself in the difficulties of the Spanish language. Examine it for yourself, Major,” he said, handing him a volume in a very ragged condition, which he had brought up, after a long rummage, from the depths of one of his numerous pockets. "Now you can see whether I am imposing on you," he continued, indignantly.
"And what's the name of this book?" asked the Major, as he took it from his hand.
"The LUSIADES, an admirable epic, which--"
"The LUSIADES!" exclaimed Glenarvan.
"Yes, my friend, the LUSIADES of the great Camoens, neither more nor less."
"Camoens!" repeated Glenarvan; "but Paganel, my unfortunate fellow, Camoens was a Portuguese! It is Portuguese you have been learning for the last six weeks!"
"Camoens! LUISADES! Portuguese!" Paganel could not say more. He looked vexed, while his companions, who had all gathered round, broke out in a furious burst of laughter.

The Indian never moved a muscle of his face. He quietly awaited the explanation of this incomprehensible mirth.
"Fool, idiot, that I am!" at last uttered Paganel. "Is it really a fact? You are not joking with me? It is what I have actually been doing? Why, it is a second confusion of tongues, like Babel. Ah me! alack-a-day! my friends, what is
to become of me? To start for India and arrive at Chili! To learn Spanish and talk Portuguese! Why, if I go on like this, some day I shall be throwing myself out of the window instead of my cigar!"

To hear Paganel bemoan his misadventures and see his comical discomfiture, would have upset anyone's gravity. Besides, he set the example himself, and said:

"Laugh away, my friends, laugh as loud as you like; you can't laugh at me half as much as I laugh at myself!"

"But, I say," said the Major, after a minute, "this doesn't alter the fact that we have no interpreter."

"Oh, don't distress yourself about that," replied Paganel, "Portuguese and Spanish are so much alike that I made a mistake; but this very resemblance will be a great help toward rectifying it. In a very short time I shall be able to thank the Patagonian in the language he speaks so well."

Paganel was right. He soon managed to exchange a few words with the stranger, and found out even that his name was Thalcave, a word that signified in Araucanian, "The Thunderer." This surname had, no doubt, come from his skill in handling fire-arms.

But what rejoiced Glenarvan most was to learn that he was a guide by occupation, and, moreover, a guide across the Pampas. To his mind, the meeting with him was so providential, that he could not doubt now of the success of their enterprise. The deliverance of Captain Grant seemed an accomplished fact.

When the party went back to Robert, the boy held out his arms to the Patagonian, who silently laid his hand on his head, and proceeded to examine him with the greatest care, gently feeling each of his aching limbs. Then he went down to the RIO, and gathered a few handfuls of wild celery, which grew on the banks, with which he rubbed the child's body all over. He handled him with the most exquisite delicacy, and his treatment so revived the lad's strength, that it was soon evident that a few hours' rest would set him all right.

It was accordingly decided that they should encamp for the rest of the day and the ensuing night. Two grave questions, moreover, had to be settled: where to get food, and means of transport. Provisions and mules were both lacking. Happily, they had Thalcave, however, a practised guide, and one of the most intelligent of his class. He undertook to find all that was needed, and offered to take him to a TOLDERIA of Indians, not further than four miles off at most, where he could get supplies of all he wanted. This proposition was partly made by gestures, and partly by a few Spanish words which Paganel managed to make out. His offer was accepted, and Glenarvan and his learned friend started off with him at once.

They walked at a good pace for an hour and a half, and had to make great strides to keep up with the giant Thalcave. The road lay through a beautiful fertile region, abounding in rich pasturages; where a hundred thousand cattle might have fed comfortably. Large ponds, connected by an inextricable labyrinth of RIROS, amply watered these plains and produced their greenness. Swans with black heads were disporting in the water, disputing possession with the numerous intruders which gamboled over the LLANOS. The feathered tribes were of most brilliant plumage, and of marvelous variety and deafening noise. The isacus, a graceful sort of dove with gray feathers streaked with white, and the yellow cardinals, were flitting about in the trees like moving flowers; while overhead pigeons, sparrows, chingolos, bulgueros, and mongitas, were flying swiftly along, rending the air with their piercing cries.

Paganel's admiration increased with every step, and he had nearly exhausted his vocabulary of adjectives by his loud exclamations, to the astonishment of the Patagonian, to whom the birds, and the swans, and the prairies were every day things. The learned geographer was so lost in delight, that he seemed hardly to have started before they came in sight of the Indian camp, or TOLDERIA, situated in the heart of a valley.

About thirty nomadic Indians were living there in rude cabins made of branches, pasturing immense herds of milch cows, sheep, oxen, and horses. They went from one prairie to another, always finding a well-spread table for their four-footed guests.

These nomads were a hybrid type of Araucans, Pehu-enches, and Aucas. They were Ando-Peruvians, of an olive tint, of medium stature and massive form, with a low forehead, almost circular face, thin lips, high cheekbones, effeminate features, and cold expression. As a whole, they are about the least interesting of the Indians. However, it was their herds Glenarvan wanted, not themselves. As long as he could get beef and horses, he cared for nothing else.

Thalcave did the bargaining. It did not take long. In exchange for seven ready saddled horses of the Argentine breed, 100 pounds of CHARQUI, or dried meat, several measures of rice, and leather bottles for water, the Indians agreed to take twenty ounces of gold as they could not get wine or rum, which they would have preferred, though they were perfectly acquainted with the value of gold. Glenarvan wished to purchase an eighth horse for the Patagonian, but he gave him to understand that it would be useless.

They got back to the camp in less than half an hour, and were hailed with acclamations by the whole party or rather the provisions and horses were. They were all hungry, and ate heartily of the welcome viands. Robert took a little food with the rest. He was fast recovering strength. The close of the day was spent in complete repose and
pleasant talk about the dear absent ones.

Paganel never quitted the Indian's side. It was not that he was so glad to see a real Patagonian, by whom he
looked a perfect pigmy--a Patagonian who might have almost rivaled the Emperor Maximii, and that Congo negro
seen by the learned Van der Brock, both eight feet high; but he caught up Spanish phrases from the Indian and
studied the language without a book this time, gesticulating at a great rate all the grand sonorous words that fell on
his ear.

"If I don't catch the accent," he said to the Major, "it won't be my fault; but who would have said to me that it
was a Patagonian who would teach me Spanish one day?"

CHAPTER XVI THE NEWS OF THE LOST CAPTAIN

NEXT day, the 22d of October, at eight o'clock in the morning, Thalcave gave the signal for departure. Between
the 22d and 42d degrees the Argentine soil slopes eastward, and all the travelers had to do was to follow the slope
right down to the sea.

Glenarvan had supposed Thalcave's refusal of a horse was that he preferred walking, as some guides do, but he
was mistaken, for just as they were ready, the Patagonian gave a peculiar whistle, and immediately a magnificent
steed of the pure Argentine breed came bounding out of a grove close by, at his master's call. Both in form and color
the animal was of perfect beauty. The Major, who was a thorough judge of all the good points of a horse, was loud
in admiration of this sample of the Pampas breed, and considered that, in many respects, he greatly resembled an
English hunter. This splendid creature was called "Thaouka," a word in Patagonia which means bird, and he well
deserved the name.

Thalcave was a consummate horseman, and to see him on his prancing steed was a sight worth looking at. The
saddle was adapted to the two hunting weapons in common use on the Argentine plains—the BOLAS and the LAZO.
The BOLAS consists of three balls fastened together by a strap of leather, attached to the front of the RECADO. The
Indians fling them often at the distance of a hundred feet from the animal or enemy of which they are in pursuit, and
with such precision that they catch round their legs and throw them down in an instant. It is a formidable weapon in
their hands, and one they handle with surprising skill. The LAZO is always retained in the hand. It is simply a rope,
thirty feet long, made of tightly twisted leather, with a slip knot at the end, which passes through an iron ring. This
noose was thrown by the right hand, while the left keeps fast hold of the rope, the other end of which is fastened to
the saddle. A long carbine, in the shoulder belt completed the accouterments of the Patagonian.

He took his place at the head of the party, quite unconscious of the admiration he was exciting, and they set off,
going alternately at a gallop and walking pace, for the "trot" seemed altogether unknown to them. Robert proved to
be a bold rider, and completely reassured Glenarvan as to his ability to keep his seat.

The Pampas commenced at the very foot of the Cordilleras. They may be divided into three parts. The first
extends from the chain of the Andes, and stretches over an extent of 250 miles covered with stunted trees and
bushes; the second 450 miles is clothed with magnificent herbage, and stops about 180 miles from Buenos Ayres;
from this point to the sea, the foot of the traveler treads over immense prairies of lucerne and thistles, which
constitute the third division of the Pampas.

On issuing from the gorges of the Cordilleras, Glenarvan and his band came first to plains of sand, called
MEDANOS, lying in ridges like waves of the sea, and so extremely fine that the least breath of wind agitated the
light particles, and sent them flying in clouds, which rose and fell like water-spouts. It was a spectacle which caused
both pleasure and pain, for nothing could be more curious than to see the said water-spouts wandering over the
plain, coming in contact and mingling with each other, and falling and rising in wild confusion; but, on the other
hand, nothing could be more disagreeable than the dust which was thrown off by these innumerable MEDANOS,
which was so impalpable that close one's eyes as they might, it found its way through the lids.

This phenomenon lasted the greater part of the day. The travelers made good progress, however, and about four
o'clock the Cordilleras lay full forty miles behind them, the dark outlines being already almost lost in the evening
mists. They were all somewhat fatigued with the journey, and glad enough to halt for the night on the banks of the
Neuquem, called Ramid, or Comoe by certain geographers, a troubled, turbulent rapid flowing between high red
banks.

No incident of any importance occurred that night or the following day. They rode well and fast, finding the
ground firm, and the temperature bearable. Toward noon, however, the sun's rays were extremely scorching, and
when evening came, a bar of clouds streaked the southwest horizon—a sure sign of a change in the weather. The
Patagonian pointed it out to the geographer, who replied:

"Yes, I know;" and turning to his companions, added, "see, a change of weather is coming! We are going to have
a taste of PAMPERO."

And he went on to explain that this PAMPERO is very common in the Argentine plains. It is an extremely dry
wind which blows from the southwest. Thalcave was not mistaken, for the PAMPERO blew violently all night, and
was sufficiently trying to poor fellows only sheltered by their ponchos. The horses lay down on the ground, and the men stretched themselves beside them in a close group. Glenarvan was afraid they would be delayed by the continuance of the hurricane, but Paganel was able to reassure him on that score, after consulting his barometer.

"The PAMPERO generally brings a tempest which lasts three days, and may be always foretold by the depression of the mercury," he said. "But when the barometer rises, on the contrary, which is the case now, all we need expect is a few violent blasts. So you can make your mind easy, my good friend; by sunrise the sky will be quite clear again."


"And I am one; and what's more, you are welcome to turn over my leaves whenever you like."

The book was right. At one o'clock the wind suddenly lulled, and the weary men fell asleep and woke at daybreak, refreshed and invigorated.

It was the 20th of October, and the tenth day since they had left Talcahuano. They were still ninety miles from the point where the Rio Colorado crosses the thirty-seventh parallel, that is to say, about two days' journey. Glenarvan kept a sharp lookout for the appearance of any Indians, intending to question them, through Thalcave, about Captain Grant, as Paganel could not speak to him well enough for this. But the track they were following was one little frequented by the natives, for the ordinary routes across the Pampas lie further north. If by chance some nomadic horseman came in sight far away, he was off again like a dart, not caring to enter into conversation with strangers. To a solitary individual, a little troop of eight men, all mounted and well armed, wore a suspicious aspect, so that any intercourse either with honest men or even banditti, was almost impossible.

Glenarvan was regretting this exceedingly, when he unexpectedly met with a singular justification of his rendering of the eventful document.

In pursuing the course the travelers had laid down for themselves, they had several times crossed the routes over the plains in common use, but had struck into none of them. Hitherto Thalcave had made no remark about this. He understood quite well, however, that they were not bound for any particular town, or village, or settlement. Every morning they set out in a straight line toward the rising sun, and went on without the least deviation. Moreover, it must have struck Thalcave that instead of being the guide he was guided; yet, with true Indian reserve, he maintained absolute silence. But on reaching a particular point, he checked his horse suddenly, and said to Paganel:

"The Carmen route."

"Yes, my good Patagonian," replied Paganel in his best Spanish; "the route from Carmen to Mendoza."

"We are not going to take it?"

"No," replied Paganel.

"Where are we going then?"

"Always to the east."

"That's going nowhere."

"Who knows?"

Thalcave was silent, and gazed at the geographer with an air of profound surprise. He had no suspicion that Paganel was joking, for an Indian is always grave.

"You are not going to Carmen, then?" he added, after a moment's pause.

"No."

"Nor to Mendoza?"

"No, nor to Mendoza."

Just then Glenarvan came up to ask the reason of the stoppage, and what he and Thalcave were discussing.

"He wanted to know whether we were going to Carmen or Mendoza, and was very much surprised at my negative reply to both questions."

"Well, certainly, it must seem strange to him."

"I think so. He says we are going nowhere."

"Well, Paganel, I wonder if it is possible to make him understand the object of our expedition, and what our motive is for always going east."

"That would be a difficult matter, for an Indian knows nothing about degrees, and the finding of the document would appear to him a mere fantastic story."

"Is it the story he would not understand, or the storyteller?" said McNabbs, quietly

"Ah, McNabbs, I see you have small faith in my Spanish yet."

"Well, try it, my good friend."

"So I will."

And turning round to the Patagonian he began his narrative, breaking down frequently for the want of a word, and the difficulty of making certain details intelligible to a half-civilized Indian. It was quite a sight to see the
learned geographer. He gesticulated and articulated, and so worked himself up over it, that the big drops of sweat fell in a cascade down his forehead on to his chest. When his tongue failed, his arms were called to aid. Paganel got down on the ground and traced a geographical map on the sand, showing where the lines of latitude and longitude cross and where the two oceans were, along which the Carmen route led. Thalcave looked on composedly, without giving any indication of comprehending or not comprehending.

The lesson had lasted half an hour, when the geographer left off, wiped his streaming face, and waited for the Patagonian to speak.

"Does he understand?" said Glenarvan.

"That remains to be seen; but if he doesn't, I give it up," replied Paganel.

Thalcave neither stirred nor spoke. His eyes remained fixed on the lines drawn on the sand, now becoming fast effaced by the wind.

"Well?" said Paganel to him at length.

The Patagonian seemed not to hear. Paganel fancied he could detect an ironical smile already on the lips of the Major, and determined to carry the day, was about to recommence his geographical illustrations, when the Indian stopped him by a gesture, and said:

"You are in search of a prisoner?"

"Yes," replied Paganel.

"And just on this line between the setting and rising sun?" added Thalcave, speaking in Indian fashion of the route from west to east.

"Yes, yes, that's it."

"And it's your God," continued the guide, "that has sent you the secret of this prisoner on the waves."

"God himself."

"His will be accomplished then," replied the native almost solemnly. "We will march east, and if it needs be, to the sun."

Paganel, triumphing in his pupil, immediately translated his replies to his companions, and exclaimed:

"What an intelligent race! All my explanations would have been lost on nineteen in every twenty of the peasants in my own country."

Glenarvan requested him to ask the Patagonian if he had heard of any foreigners who had fallen into the hands of the Indians of the Pampas.

Paganel did so, and waited an answer.

"Perhaps I have."

The reply was no sooner translated than the Patagonian found himself surrounded by the seven men questioning him with eager glances. Paganel was so excited, he could hardly find words, and he gazed at the grave Indian as if he could read the reply on his lips.

Each word spoken by Thalcave was instantly translated, so that the whole party seemed to hear him speak in their mother tongue.

"And what about the prisoner?" asked Paganel.

"He was a foreigner."

"You have seen him?"

"No; but I have heard the Indian speak of him. He is brave; he has the heart of a bull."

"The heart of a bull!" said Paganel. "Ah, this magnificent Patagonian language. You understand him, my friends, he means a courageous man."

"My father!" exclaimed Robert Grant, and, turning to Paganel, he asked what the Spanish was for, "Is it my father."

"_Es mio padre_," replied the geographer.

Immediately taking Thalcave's hands in his own, the boy said, in a soft tone:

"_Es mio padre_."

"_Suo padre_," replied the Patagonian, his face lighting up.

He took the child in his arms, lifted him up on his horse, and gazed at him with peculiar sympathy. His intelligent face was full of quiet feeling.

But Paganel had not completed his interrogations. "This prisoner, who was he? What was he doing? When had Thalcave heard of him?" All these questions poured upon him at once.

He had not long to wait for an answer, and learned that the European was a slave in one of the tribes that roamed the country between the Colorado and the Rio Negro.

"But where was the last place he was in?"

"With the Cacique Calfoucoura."
"In the line we have been following?"
"Yes."
"And who is this Cacique?"
"The chief of the Poyuches Indians, a man with two tongues and two hearts."
"That's to say false in speech and false in action," said Paganel, after he had translated this beautiful figure of the Patagonian language.
"And can we deliver our friend?" he added.
"You may if he is still in the hands of the Indians."
"And when did you last hear of him?"
"A long while ago; the sun has brought two summers since then to the Pampas."

The joy of Glenarvan can not be described. This reply agreed perfectly with the date of the document. But one question still remained for him to put to Thalcave.
"You spoke of a prisoner," he said; "but were there not three?"
"I don't know," said Thalcave.
"And you know nothing of his present situation?"
"Nothing."

This ended the conversation. It was quite possible that the three men had become separated long ago; but still this much was certain, that the Indians had spoken of a European that was in their power; and the date of the captivity, and even the descriptive phrase about the captive, evidently pointed to Harry Grant.

CHAPTER XVII A SERIOUS NECESSITY

THE Argentine Pampas extend from the thirty-fourth to the fortieth degree of southern latitude. The word PAMPA, of Araucanian origin, signifies _grass plain_, and justly applies to the whole region. The mimosas growing on the western part, and the substantial herbage on the eastern, give those plains a peculiar appearance. The soil is composed of sand and red or yellow clay, and this is covered by a layer of earth, in which the vegetation takes root. The geologist would find rich treasures in the tertiary strata here, for it is full of antediluvian remains--enormous bones, which the Indians attribute to some gigantic race that lived in a past age.

The horses went on at a good pace through the thick PAJA-BRAVA, the grass of the Pampas, _par excellence_, so high and thick that the Indians find shelter in it from storms. At certain distances, but increasingly seldom, there were wet, marshy spots, almost entirely under water, where the willows grew, and a plant called the _Gygnerium argenteum_. Here the horses drank their fill greedily, as if bent on quenching their thirst for past, present and future.

Thalcave went first to beat the bushes and frighten away the cholinas, a most dangerous species of viper, the bite of which kills an ox in less than an hour.

For two days they plodded steadily across this arid and deserted plain. The dry heat became severe. There were not only no RIOS, but even the ponds dug out by the Indians were dried up. As the drought seemed to increase with every mile, Paganel asked Thalcave when he expected to come to water.
"At Lake Salinas," replied the Indian.
"And when shall we get there?"
"To-morrow evening."

When the Argentines travel in the Pampas they generally dig wells, and find water a few feet below the surface. But the travelers could not fall back on this resource, not having the necessary implements. They were therefore obliged to husband the small provision of water they had still left, and deal it out in rations, so that if no one had enough to satisfy his thirst no one felt it too painful.

They halted at evening after a course of thirty miles and eagerly looked forward to a good night's rest to compensate for the fatigue of day. But their slumbers were invaded by a swarm of mosquitoes, which allowed them no peace. Their presence indicated a change of wind which shifted to the north. A south or southwest wind generally puts to flight these little pests.

Even these petty ills of life could not ruffle the Major's equanimity; but Paganel, on the contrary, was perfectly exasperated by such trifling annoyances. He abused the poor mosquitoes desperately, and deplored the lack of some acid lotion which would have eased the pain of their stings. The Major did his best to console him by reminding him of the fact that they had only to do with one species of insect, among the 300,000 naturalists reckon. He would listen to nothing, and got up in a very bad temper.

He was quite willing to start at daybreak, however, for they had to get to Lake Salinas before sundown. The horses were tired out and dying for water, and though their riders had stinted themselves for their sakes, still their ration was very insufficient. The drought was constantly increasing, and the heat none the less for the wind being north, this wind being the simoom of the Pampas.

There was a brief interruption this day to the monotony of the journey. Mulrady, who was in front of the others,
rode hastily back to report the approach of a troop of Indians. The news was received with very different feelings by Glenarvan and Thalcave. The Scotchman was glad of the chance of gleaning some information about his shipwrecked countryman, while the Patagonian hardly cared to encounter the nomadic Indians of the prairie, knowing their bandit propensities. He rather sought to avoid them, and gave orders to his party to have their arms in readiness for any trouble.

Presently the nomads came in sight, and the Patagonian was reassured at finding they were only ten in number. They came within a hundred yards of them, and stopped. This was near enough to observe them distinctly. They were fine specimens of the native races, which had been almost entirely swept away in 1833 by General Rosas, tall in stature, with arched forehead and olive complexion. They were dressed in guanaco skins, and carried lances twenty feet long, knives, slings, bolas, and lassos, and, by their dexterity in the management of their horses, showed themselves to be accomplished riders.

They appeared to have stopped for the purpose of holding a council with each other, for they shouted and gesticulated at a great rate. Glenarvan determined to go up to them; but he had no sooner moved forward than the whole band wheeled round, and disappeared with incredible speed. It would have been useless for the travelers to attempt to overtake them with such wornout horses.

"The cowards!" exclaimed Paganel.
"They scampered off too quick for honest folks," said McNabbs.
"Who are these Indians, Thalcave?" asked Paganel.
"Gauchos."
"The Gauchos!" cried Paganel; and, turning to his companions, he added, "we need not have been so much on our guard; there was nothing to fear."
"How is that?" asked McNabbs.
"Because the Gauchos are inoffensive peasants."
"You believe that, Paganel?"
"Certainly I do. They took us for robbers, and fled in terror."
"I rather think they did not dare to attack us," replied Glenarvan, much vexed at not being able to enter into some sort of communication with those Indians, whatever they were.
"That's my opinion too," said the Major, "for if I am not mistaken, instead of being harmless, the Gauchos are formidable out-and-out bandits."
"The idea!" exclaimed Paganel.

And forthwith commenced a lively discussion of this ethnological thesis—so lively that the Major became excited, and, quite contrary to his usual suavity, said bluntly:
"I believe you are wrong, Paganel."
"Wrong?" replied Paganel.
"Yes. Thalcave took them for robbers, and he knows what he is talking about."
"Well, Thalcave was mistaken this time," retorted Paganel, somewhat sharply. "The Gauchos are agriculturists and shepherds, and nothing else, as I have stated in a pamphlet on the natives of the Pampas, written by me, which has attracted some notice."

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[illustration omitted] [page intentionally blank]
"Well, well, you have committed an error, that's all, Monsieur Paganel."
"What, Monsieur McNabbs! you tell me I have committed an error?"
"An inadvertence, if you like, which you can put among the ERRATA in the next edition."
Paganel, highly incensed at his geographical knowledge being brought in question, and even jested about, allowed his ill-humor to get the better of him, and said:
"Know, sir, that my books have no need of such ERRATA."
"Indeed! Well, on this occasion they have, at any rate," retorted McNabbs, quite as obstinate as his opponent.
"Sir, I think you are very annoying to-day."
"And I think you are very crabbed."

Glenarvan thought it was high time to interfere, for the discussion was getting too hot, so he said:
"Come, now, there is no doubt one of you is very teasing and the other is very crabbed, and I must say I am surprised at both of you."

The Patagonian, without understanding the cause, could see that the two friends were quarreling. He began to smile, and said quietly:
"It's the north wind."
"The north wind," exclaimed Paganel; "what's the north wind to do with it?"
"Ah, it is just that," said Glenarvan. "It's the north wind that has put you in a bad temper. I have heard that, in South America, the wind greatly irritates the nervous system."

"By St. Patrick, Edward you are right," said the Major, laughing heartily.

But Paganel, in a towering rage, would not give up the contest, and turned upon Glenarvan, whose intervention in this jesting manner he resented.

"And so, my Lord, my nervous system is irritated?" he said.

"Yes, Paganel, it is the north wind--a wind which causes many a crime in the Pampas, as the TRAMONTANE does in the Campagna of Rome."

" Crimes!" returned the geographer. "Do I look like a man that would commit crimes?"

"That's not exactly what I said."

"Tell me at once that I want to assassinate you?"

"Well, I am really afraid," replied Glenarvan, bursting into an uncontrollable fit of laughter, in which all others joined.

Paganel said no more, but went off in front alone, and came back in a few minutes quite himself, as if he had completely forgotten his grievance.

At eight o'clock in the evening, Thalcave, who was considerably in advance of the rest, descried in the distance the much-desired lake, and in less than a quarter of an hour they reached its banks; but a grievous disappointment awaited them--the lake was dried up.

CHAPTER XVIII IN SEARCH OF WATER

LAKE SALINAS ends the string of lagoons connected with the Sierras Ventana and Guamini. Numerous expeditions were formerly made there from Buenos Ayres, to collect the salt deposited on its banks, as the waters contain great quantities of chloride of sodium.

But when Thalcave spoke of the lake as supplying drinkable water he was thinking of the RIOS of fresh water which run into it. Those streams, however, were all dried up also; the burning sun had drunk up everything liquid, and the consternation of the travelers may be imagined at the discovery.

Some action must be taken immediately, however; for what little water still remained was almost bad, and could not quench thirst. Hunger and fatigue were forgotten in the face of this imperious necessity. A sort of leather tent, called a ROUKAH, which had been left by the natives, afforded the party a temporary resting-place, and the weary horses stretched themselves along the muddy banks, and tried to browse on the marine plants and dry reeds they found there--nauseous to the taste as they must have been.

As soon as the whole party were ensconced in the ROUKAH, Paganel asked Thalcave what he thought was best to be done. A rapid conversation followed, a few words of which were intelligible to Glenarvan. Thalcave spoke calmly, but the lively Frenchman gesticulated enough for both. After a little, Thalcave sat silent and folded his arms.

"What does he say?" asked Glenarvan. "I fancied he was advising us to separate."

"Yes, into two parties. Those of us whose horses are so done out with fatigue and thirst that they can scarcely drag one leg after the other, are to continue the route as they best can, while the others, whose steeds are fresher, are to push on in advance toward the river Guamini, which throws itself into Lake San Lucas about thirty-one miles off. If there should be water enough in the river, they are to wait on the banks till their companions reach them; but should it be dried up, they will hasten back and spare them a useless journey."

"And what will we do then?" asked Austin.

"Then we shall have to make up our minds to go seventy-two miles south, as far as the commencement of the Sierra Ventana, where rivers abound."

"It is wise counsel, and we will act upon it without loss of time. My horse is in tolerable good trim, and I volunteer to accompany Thalcave."

"Oh, my Lord, take me," said Robert, as if it were a question of some pleasure party.

"But would you be able for it, my boy?"

"Oh, I have a fine beast, which just wants to have a gallop. Please, my Lord, to take me."

"Come, then, my boy," said Glenarvan, delighted not to leave Robert behind. "If we three don't manage to find out fresh water somewhere," he added, "we must be very stupid."

"Well, well, and what about me?" said Paganel.

"Oh, my dear Paganel, you must stay with the reserve corps," replied the Major. "You are too well acquainted with the 37th parallel and the river Guamini and the whole Pampas for us to let you go. Neither Mulrady, nor Wilson, nor myself would be able to rejoin Thalcave at the given rendezvous, but we will put ourselves under the banner of the brave Jacques Paganel with perfect confidence."

"I resign myself," said the geographer, much flattered at having supreme command.

"But mind, Paganel, no distractions," added the Major. "Don't you take us to the wrong place--to the borders of
the Pacific, for instance."

"Oh, you insufferable Major; it would serve you right," replied Paganel, laughing. "But how will you manage to understand what Thalcave says, Glenarvan?" he continued.

"I suppose," replied Glenarvan, "the Patagonian and I won't have much to talk about; besides, I know a few Spanish words, and, at a pinch, I should not fear either making him understand me, or my understanding him."

"Go, then, my worthy friend," said Paganel.

"We'll have supper first," rejoined Glenarvan, "and then sleep, if we can, till it is starting time."

The supper was not very reviving without drink of any kind, and they tried to make up for the lack of it by a good sleep. But Paganel dreamed of water all night, of torrents and cascades, and rivers and ponds, and streams and brooks—in fact, he had a complete nightmare.

Next morning, at six o'clock, the horses of Thalcave, Glenarvan and Robert were got ready. Their last ration of water was given them, and drunk with more avidity than satisfaction, for it was filthy, disgusting stuff. The three travelers then jumped into their saddles, and set off, shouting "_Au revoir!_" to their companions.

"Don't come back whatever you do," called Paganel after them.

The _Desertio de las Salinas_, which they had to traverse, is a dry plain, covered with stunted trees not above ten feet high, and small mimosas, which the Indians call _curra-mammel_; and _JUMES_, a bushy shrub, rich in soda. Here and there large spaces were covered with salt, which sparkled in the sunlight with astonishing brilliancy. These might easily have been taken for sheets of ice, had not the intense heat forbidden the illusion; and the contrast these dazzling white sheets presented to the dry, burned-up ground gave the desert a most peculiar character. Eighty miles south, on the contrary, the Sierra Ventana, toward which the travelers might possibly have to betake themselves should the Guamini disappoint their hopes, the landscape was totally different. There the fertility is splendid; the pasturage is incomparable. Unfortunately, to reach them would necessitate a march of one hundred and thirty miles south; and this was why Thalcave thought it best to go first to Guamini, as it was not only much nearer, but also on the direct line of route.

The three horses went forward might and main, as if instinctively knowing whither they were bound. Thaouka especially displayed a courage that neither fatigue nor hunger could damp. He bounded like a bird over the dried-up CANADAS and the bushes of CURRA-MAMMEL, his loud, joyous neighing seeming to bode success to the search. The horses of Glenarvan and Robert, though not so light-footed, felt the spur of his example, and followed him bravely. Thalcave inspired his companions as much as Thaouka did his four-footed brethren. He sat motionless in the saddle, but often turned his head to look at Robert, and ever and anon gave him a shout of encouragement and approval, as he saw how well he rode. Certainly the boy deserved praise, for he was fast becoming an excellent cavalier.

"Bravo! Robert," said Glenarvan. "Thalcave is evidently congratulating you, my boy, and paying you compliments."

"What for, my Lord?"

"For your good horsemanship."

"I can hold firm on, that's all," replied Robert blushing with pleasure at such an encomium.

"That is the principal thing, Robert; but you are too modest. I tell you that some day you will turn out an accomplished horseman."

"What would papa say to that?" said Robert, laughing. "He wants me to be a sailor."

"The one won't hinder the other. If all cavaliers wouldn't make good sailors, there is no reason why all sailors should not make good horsemen. To keep one's footing on the yards must teach a man to hold on firm; and as to managing the reins, and making a horse go through all sorts of movements, that's easily acquired. Indeed, it comes naturally."

"Poor father," said Robert; "how he will thank you for saving his life."

"You love him very much, Robert?"

"Yes, my Lord, dearly. He was so good to me and my sister. We were his only thought: and whenever he came home from his voyages, we were sure of some SOUVENIR from all the places he had been to; and, better still, of loving words and caresses. Ah! if you knew him you would love him, too. Mary is most like him. He has a soft voice, like hers. That's strange for a sailor, isn't it?"

"Yes, Robert, very strange."

"I see him still," the boy went on, as if speaking to himself. "Good, brave papa. He put me to sleep on his knee, crooning an old Scotch ballad about the lochs of our country. The time sometimes comes back to me, but very confused like. So it does to Mary, too. Ah, my Lord, how we loved him. Well, I do think one needs to be little to love one's father like that."

"Yes, and to be grown up, my child, to venerate him," replied Glenarvan, deeply touched by the boy's genuine
affection.

During this conversation the horses had been slackening speed, and were only walking now.

"You will find him?" said Robert again, after a few minutes' silence.

"Yes, we'll find him," was Glenarvan's reply, "Thalcave has set us on the track, and I have great confidence in him."

"Thalcave is a brave Indian, isn't he?" said the boy.

"That indeed he is."

"Do you know something, my Lord?"

"What is it, and then I will tell you?"

"That all the people you have with you are brave. Lady Helena, whom I love so, and the Major, with his calm manner, and Captain Mangles, and Monsieur Paganel, and all the sailors on the DUNCAN. How courageous and devoted they are."

"Yes, my boy, I know that," replied Glenarvan.

"And do you know that you are the best of all."

"No, most certainly I don't know that."

"Well, it is time you did, my Lord," said the boy, seizing his lordship's hand, and covering it with kisses.

Glenarvan shook his head, but said no more, as a gesture from Thalcave made them spur on their horses and hurry forward.

But it was soon evident that, with the exception of Thaouka, the wearied animals could not go quicker than a walking pace. At noon they were obliged to let them rest for an hour. They could not go on at all, and refused to eat the ALFAFARES, a poor, burnt-up sort of lucerne that grew there.

Glenarvan began to be uneasy. Tokens of sterility were not the least on the decrease, and the want of water might involve serious calamities. Thalcave said nothing, thinking probably, that it would be time enough to despair if the Guamini should be dried up—if, indeed, the heart of an Indian can ever despair.

Spur and whip had both to be employed to induce the poor animals to resume the route, and then they only crept along, for their strength was gone.

Thaouka, indeed, could have galloped swiftly enough, and reached the RIO in a few hours, but Thalcave would not leave his companions behind, alone in the midst of a desert.

It was hard work, however, to get the animal to consent to walk quietly. He kicked, and reared, and neighed violently, and was subdued at last more by his master's voice than hand. Thalcave positively talked to the beast, and Thaouka understood perfectly, though unable to reply, for, after a great deal of arguing, the noble creature yielded, though he still champed the bit.

Thalcave did not understand Thaouka, it turned out, though Thaouka understood him. The intelligent animal felt humidity in the atmosphere and drank it in with frenzy, moving and making a noise with his tongue, as if taking deep draughts of some cool refreshing liquid. The Patagonian could not mistake him now—water was not far off.

The two other horses seemed to catch their comrade's meaning, and, inspired by his example, made a last effort, and galloped forward after the Indian.

About three o'clock a white line appeared in a dip of the road, and seemed to tremble in the sunlight.

"Water!" exclaimed Glenarvan.

"Yes, yes! it is water!" shouted Robert.

They were right; and the horses knew it too, for there was no need now to urge them on; they tore over the ground as if mad, and in a few minutes had reached the river, and plunged in up to their chests.

Their masters had to go on too, whether they would or not but they were so rejoiced at being able to quench their thirst, that this compulsory bath was no grievance.

"Oh, how delicious this is!" exclaimed Robert, taking a deep draught.

"Drink moderately, my boy," said Glenarvan; but he did not set the example.

Thalcave drank very quietly, without hurrying himself, taking small gulps, but "as long as a lazo," as the Patagonians say. He seemed as if he were never going to leave off, and really there was some danger of his swallowing up the whole river.

At last Glenarvan said:

"Well, our friends won't be disappointed this time; they will be sure of finding clear, cool water when they get here-- that is to say, if Thalcave leaves any for them."

"But couldn't we go to meet them? It would spare them several hours' suffering and anxiety."

"You're right my boy; but how could we carry them this water? The leather bottles were left with Wilson. No; it is better for us to wait for them as we agreed. They can't be here till about the middle of the night, so the best thing we can do is to get a good bed and a good supper ready for them."
Thalcave had not waited for Glenarvan's proposition to prepare an encampment. He had been fortunate enough to discover on the banks of the _rio a ramada_, a sort of enclosure, which had served as a fold for flocks, and was shut in on three sides. A more suitable place could not be found for their night's lodging, provided they had no fear of sleeping in the open air beneath the star-lit heavens; and none of Thalcave's companions had much solicitude on that score. Accordingly they took possession at once, and stretched themselves at full length on the ground in the bright sunshine, to dry their dripping garments.

"Well, now we've secured a lodging, we must think of supper," said Glenarvan. "Our friends must not have reason to complain of the couriers they sent to precede them; and if I am not much mistaken, they will be very satisfied. It strikes me that an hour's shooting won't be lost time. Are you ready, Robert?"

"Yes, my Lord," replied the boy, standing up, gun in hand.

Why Glenarvan proposed this was, that the banks of the Guamini seemed to be the general rendezvous of all the game in the surrounding plains. A sort of partridge peculiar to the Pampas, called TINAMOUS; black wood-hens; a species of plover, called TERU-TERU; yellow rays, and waterfowl with magnificent green plumage, rose in coveys. No quadrupeds, however, were visible, but Thalcave pointed to the long grass and thick brushwood, and gave his friends to understand they were lying there in concealment.

Disdaining the feathered tribes when more substantial game was at hand, the hunters' first shots were fired into the underwood. Instantly there rose by the hundred roebucks and guanacos, like those that had swept over them that terrible night on the Cordilleras, but the timid creatures were so frightened that they were all out of gunshot in a twinkling. The hunters were obliged to content themselves with humbler game, though in an alimentary point of view nothing better could be wished. A dozen of red partridges and rays were speedily brought down, and Glenarvan also managed very cleverly to kill a TAY-TETRE, or peccary, a pachydermatous animal, the flesh of which is excellent eating.

In less than half an hour the hunters had all the game they required. Robert had killed a curious animal belonging to the order EDENTATA, an armadillo, a sort of tatou, covered with a hard bony shell, in movable pieces, and measuring a foot and a half long. It was very fat and would make an excellent dish, the Patagonian said. Robert was very proud of his success.

Thalcave did his part by capturing a NANDOU, a species of ostrich, remarkable for its extreme swiftness.

There could be no entrapping such an animal, and the Indian did not attempt it. He urged Thaouka to a gallop, and made a direct attack, knowing that if the first aim missed the NANDOU would soon tire out horse and rider by involving them in an inextricable labyrinth of windings. The moment, therefore, that Thalcave got to a right distance, he flung his BOLAS with such a powerful hand, and so skillfully, that he caught the bird round the legs and paralyzed his efforts at once. In a few seconds it lay flat on the ground.

The Indian had not made his capture for the mere pleasure and glory of such a novel chase. The flesh of the NANDOU is highly esteemed, and Thalcave felt bound to contribute his share of the common repast.

They returned to the RAMADA, bringing back the string of partridges, the ostrich, the peccary, and the armadillo. The ostrich and the peccary were prepared for cooking by divesting them of their tough skins, and cutting them up into thin slices. As to the armadillo, he carries his cooking apparatus with him, and all that had to be done was to place him in his own shell over the glowing embers.

The substantial dishes were reserved for the night-comers, and the three hunters contented themselves with devouring the partridges, and washed down their meal with clear, fresh water, which was pronounced superior to all the porter in the world, even to the famous Highland USQUEBAUGH, or whisky.

The horses had not been overlooked. A large quantity of dry fodder was discovered lying heaped up in the RAMADA, and this supplied them amply with both food and bedding.

When all was ready the three companions wrapped themselves in the ponchos, and stretched themselves on an eiderdown of ALFAFARES, the usual bed of hunters on the Pampas.

CHAPTER XIX THE RED WOLVES

NIGHT came, but the orb of night was invisible to the inhabitants of the earth, for she was just in her first quarter. The dim light of the stars was all that illumined the plain. The waters of the Guamini ran silently, like a sheet of oil over a surface of marble. Birds, quadrupeds, and reptiles were resting motionless after the fatigues of the day, and the silence of the desert brooded over the far-spreading Pampas.

Glenarvan, Robert, and Thalcave, had followed the common example, and lay in profound slumber on their soft couch of lucerne. The worn-out horses had stretched themselves full length on the ground, except Thaouka, who slept standing, true to his high blood, proud in repose as in action, and ready to start at his master's call. Absolute silence reigned within the inclosure, over which the dying embers of the fire shed a fitful light.

However, the Indian's sleep did not last long; for about ten o'clock he woke, sat up, and turned his ear toward the plain, listening intently, with half-closed eyes. An uneasy look began to depict itself on his usually impassive face.
Had he caught scent of some party of Indian marauders, or of jaguars, water tigers, and other terrible animals that haunt the neighborhood of rivers? Apparently it was the latter, for he threw a rapid glance on the combustible materials heaped up in the inclosure, and the expression of anxiety on his countenance seemed to deepen. This was not surprising, as the whole pile of ALFAFARES would soon burn out and could only ward off the attacks of wild beasts for a brief interval.

There was nothing to be done in the circumstances but wait; and wait he did, in a half-recumbent posture, his head leaning on his hands, and his elbows on his knees, like a man roused suddenly from his night's sleep.

A whole hour passed, and anyone except Thalcave would have lain down again on his couch, reassured by the silence round him. But where a stranger would have suspected nothing, the sharpened senses of the Indian detected the approach of danger.

As he was thus watching and listening, Thaouka gave a low neigh, and stretched his nostrils toward the entrance of the RAMADA.

This startled the Patagonian, and made him rise to his feet at once.

"Thaouka scents an enemy," he said to himself, going toward the opening, to make careful survey of the plains.

Silence still prevailed, but not tranquillity; for Thalcave caught a glimpse of shadows moving noiselessly over the tufts of CURRA-MAMMEL. Here and there luminous spots appeared, dying out and rekindling constantly, in all directions, like fantastic lights dancing over the surface of an immense lagoon. An inexperienced eye might have mistaken them for fireflies, which shine at night in many parts of the Pampas; but Thalcave was not deceived; he knew the enemies he had to deal with, and lost no time in loading his carbine and taking up his post in front of the fence.

He did not wait long, for a strange cry—a confused sound of barking and howling—broke over the Pampas, followed next instant by the report of the carbine, which made the uproar a hundred times worse.

Glenarvan and Robert woke in alarm, and started to their feet instantly.

"What is it?" exclaimed Robert.

"Is it the Indians?" asked Glenarvan.

"No," replied Thalcave, "the AGUARAS."

"AGUARAS?" said Robert, looking inquiringly at Glenarvan.

"Yes," replied Glenarvan, "the red wolves of the Pampas."

They seized their weapons at once, and stationed themselves beside the Patagonian, who pointed toward the plain from whence the yelling resounded.

Robert drew back involuntarily.

"You are not afraid of wolves, my boy?" said Glenarvan.

"No, my Lord," said the lad in a firm tone, "and moreover, beside you I am afraid of nothing."

"So much the better. These AGUARAS are not very formidable either; and if it were not for their number I should not give them a thought."

"Never mind; we are all well armed; let them come."

"We'll certainly give them a warm reception," rejoined Glenarvan.

His Lordship only spoke thus to reassure the child, for a secret terror filled him at the sight of this legion of bloodthirsty animals let loose on them at midnight.

There might possibly be some hundreds, and what could three men do, even armed to the teeth, against such a multitude?

As soon as Thalcave said the word AGUARA, Glenarvan knew that he meant the red wolf, for this is the name given to it by the Pampas Indians. This voracious animal, called by naturalists the _Canis jubatus_, is in shape like a large dog, and has the head of a fox. Its fur is a reddish-cinnamon color, and there is a black mane all down the back. It is a strong, nimble animal, generally inhabiting marshy places, and pursuing aquatic animals by swimming, prowling about by night and sleeping during the day. Its attacks are particularly dreaded at the ESTANCIAS, or sheep stations, as it often commits considerable ravages, carrying off the finest of the flock. Singly, the AGUARA is not much to be feared; but they generally go in immense packs, and one had better have to deal with a jaguar or cougar than with them.

Both from the noise of the howling and the multitude of shadows leaping about, Glenarvan had a pretty good idea of the number of the wolves, and he knew they had scented a good meal of human flesh or horse flesh, and none of them would go back to their dens without a share. It was certainly a very alarming situation to be in.

The assailants were gradually drawing closer. The horses displayed signs of the liveliest terror, with the exception of Thaouka, who stamped his foot, and tried to break loose and get out. His master could only calm him by keeping up a low, continuous whistle.

Glenarvan and Robert had posted themselves so as to defend the opening of the RAMADA. They were just
going to fire into the nearest ranks of the wolves when Thalcave lowered their weapons.
"What does Thalcave mean?" asked Robert.
"He forbids our firing."
"And why?"
"Perhaps he thinks it is not the right time."
But this was not the Indian's reason, and so Glenarvan saw when he lifted the powder-flask, showed him it was nearly empty.
"What's wrong?" asked Robert.
"We must husband our ammunition," was the reply. "To-day's shooting has cost us dear, and we are short of powder and shot. We can't fire more than twenty times."
The boy made no reply, and Glenarvan asked him if he was frightened.
"No, my Lord," he said.
"That's right," returned Glenarvan.
A fresh report resounded that instant. Thalcave had made short work of one assailant more audacious than the rest, and the infuriated pack had retreated to within a hundred steps of the inclosure.
On a sign from the Indian Glenarvan took his place, while Thalcave went back into the inclosure and gathered up all the dried grass and ALFAFARES, and, indeed, all the combustibles he could rake together, and made a pile of them at the entrance. Into this he flung one of the still-glowing embers, and soon the bright flames shot up into the dark night. Glenarvan could now get a good glimpse of his antagonists, and saw that it was impossible to exaggerate their numbers or their fury. The barrier of fire just raised by Thalcave had redoubled their anger, though it had cut off their approach. Several of them, however, urged on by the hindmost ranks, pushed forward into the very flames, and burned their paws for their pains.
From time to time another shot had to be fired, notwithstanding the fire, to keep off the howling pack, and in the course of an hour fifteen dead animals lay stretched on the prairie.
The situation of the besieged was, relatively speaking, less dangerous now. As long as the powder lasted and the barrier of fire burned on, there was no fear of being overmastered. But what was to be done afterward, when both means of defense failed at once?
Glenarvan's heart swelled as he looked at Robert. He forgot himself in thinking of this poor child, as he saw him showing a courage so far above his years. Robert was pale, but he kept his gun steady, and stood with firm foot ready to meet the attacks of the infuriated wolves.
However, after Glenarvan had calmly surveyed the actual state of affairs, he determined to bring things to a crisis.
"In an hour's time," he said, "we shall neither have powder nor fire. It will never do to wait till then before we settle what to do."
Accordingly, he went up to Thalcave, and tried to talk to him by the help of the few Spanish words his memory could muster, though their conversation was often interrupted by one or the other having to fire a shot.
It was no easy task for the two men to understand each other, but, most fortunately, Glenarvan knew a great deal of the peculiarities of the red wolf; otherwise he could never have interpreted the Indian's words and gestures.
As it was, fully a quarter of an hour elapsed before he could get any answer from Thalcave to tell Robert in reply to his inquiry.
"What does he say?"
"He says that at any price we must hold out till daybreak. The AGUARA only prowls about at night, and goes back to his lair with the first streak of dawn. It is a cowardly beast, that loves the darkness and dreads the light—an owl on four feet."
"Very well, let us defend ourselves, then, till morning."
"Yes, my boy, and with knife-thrusts, when gun and shots fail."
Already Thalcave had set the example, for whenever a wolf came too near the burning pile, the long arm of the Patagonian dashed through the flames and came out again reddened with blood.
But very soon this means of defense would be at an end. About two o'clock, Thalcave flung his last armful of combustibles into the fire, and barely enough powder remained to load a gun five times.
Glenarvan threw a sorrowful glance round him. He thought of the lad standing there, and of his companions and those left behind, whom he loved so dearly.
Robert was silent. Perhaps the danger seemed less imminent to his imagination. But Glenarvan thought for him, and pictured to himself the horrible fate that seemed to await him inevitably. Quite overcome by his emotion, he took the child in his arms, and straining him convulsively to his heart, pressed his lips on his forehead, while tears he could not restrain streamed down his cheeks.
Robert looked up into his face with a smile, and said, "I am not frightened."
"No, my child, no! and you are right. In two hours daybreak will come, and we shall be saved. Bravo, Thalcave! my brave Patagonian! Bravo!" he added as the Indian that moment leveled two enormous beasts who endeavored to leap across the barrier of flames.

But the fire was fast dying out, and the DENOUEMENT of the terrible drama was approaching. The flames got lower and lower. Once more the shadows of night fell on the prairie, and the glaring eyes of the wolves glowed like phosphorescent balls in the darkness. A few minutes longer, and the whole pack would be in the inclosure.

Thalcave loaded his carbine for the last time, killed one more enormous monster, and then folded his arms. His head sank on his chest, and he appeared buried in deep thought. Was he planning some daring, impossible, mad attempt to repulse the infuriated horde? Glenarvan did not venture to ask.

At this very moment the wolves began to change their tactics. The deafening howls suddenly ceased: they seemed to be going away. Gloomy silence spread over the prairie, and made Robert exclaim:
"They're gone!"

But Thalcave, guessing his meaning, shook his head. He knew they would never relinquish their sure prey till daybreak made them hasten back to their dens.

Still, their plan of attack had evidently been altered. They no longer attempted to force the entrance, but their new maneuvers only heightened the danger.

They had gone round the RAMADA, as by common consent, and were trying to get in on the opposite side.
The next minute they heard their claws attacking the moldering wood, and already formidable paws and hungry, savage jaws had found their way through the palings. The terrified horses broke loose from their halters and ran about the inclosure, mad with fear.

Glenarvan put his arms round the young lad, and resolved to defend him as long as his life held out. Possibly he might have made a useless attempt at flight when his eye fell on Thalcave.

The Indian had been stalking about the RAMADA like a stag, when he suddenly stopped short, and going up to his horse, who was trembling with impatience, began to saddle him with the most scrupulous care, without forgetting a single strap or buckle. He seemed no longer to disturb himself in the least about the wolves outside, though their yells had redoubled in intensity. A dark suspicion crossed Glenarvan's mind as he watched him.
"He is going to desert us," he exclaimed at last, as he saw him seize the reins, as if preparing to mount.
"He! never!" replied Robert. Instead of deserting them, the truth was that the Indian was going to try and save his friends by sacrificing himself.

Thaouka was ready, and stood champing his bit. He reared up, and his splendid eyes flashed fire; he understood his master.

But just as the Patagonian caught hold of the horse's mane, Glenarvan seized his arm with a convulsive grip, and said, pointing to the open prairie.
"You are going away?"
V. IV Verne
"Yes," replied the Indian, understanding his gesture. Then he said a few words in Spanish, which meant: "Thaouka; good horse; quick; will draw all the wolves away after him."
"Oh, Thalcave," exclaimed Glenarvan.
"Quick, quick!" replied the Indian, while Glenarvan said, in a broken, agitated voice to Robert:
"Robert, my child, do you hear him? He wants to sacrifice himself for us. He wants to rush away over the Pampas, and turn off the wolves from us by attracting them to himself."
"Friend Thalcave," returned Robert, throwing himself at the feet of the Patagonian, "friend Thalcave, don't leave us!"

"No," said Glenarvan, "he shall not leave us."
And turning toward the Indian, he said, pointing to the frightened horses, "Let us go together."
"No," replied Thalcave, catching his meaning. "Bad beasts; frightened; Thaouka, good horse."
"Be it so then!" returned Glenarvan. "Thalcave will not leave you, Robert. He teaches me what I must do. It is for me to go, and for him to stay by you."
Then seizing Thaouka's bridle, he said, "I am going, Thalcave, not you."
"No," replied the Patagonian quietly.
"I am," exclaimed Glenarvan, snatching the bridle out of his hands. "I, myself! Save this boy, Thalcave! I commit him to you."

Glenarvan was so excited that he mixed up English words with his Spanish. But what mattered the language at such a terrible moment. A gesture was enough. The two men understood each other.

However, Thalcave would not give in, and though every instant's delay but increased the danger, the discussion
Neither Glenarvan nor Thalcave appeared inclined to yield. The Indian had dragged his companion towards the entrance of the RAMADA, and showed him the prairie, making him understand that now was the time when it was clear from the wolves; but that not a moment was to be lost, for should this maneuver not succeed, it would only render the situation of those left behind more desperate. and that he knew his horse well enough to be able to trust his wonderful lightness and swiftness to save them all. But Glenarvan was blind and obstinate, and determined to sacrifice himself at all hazards, when suddenly he felt himself violently pushed back. Thaouka pranced up, and reared himself bolt upright on his hind legs, and made a bound over the barrier of fire, while a clear, young voice called out:

"God save you, my lord."

But before either Thalcave or Glenarvan could get more than a glimpse of the boy, holding on fast by Thaouka's mane, he was out of sight.


But even Thalcave did not catch the words, for his voice was drowned in the frightful uproar made by the wolves, who had dashed off at a tremendous speed on the track of the horse.

Thalcave and Glenarvan rushed out of the RAMADA. Already the plain had recovered its tranquillity, and all that could be seen of the red wolves was a moving line far away in the distant darkness.

Glenarvan sank prostrate on the ground, and clasped his hands despairingly. He looked at Thalcave, who smiled with his accustomed calmness, and said:

"Thaouka, good horse. Brave boy. He will save himself!"

"And suppose he falls?" said Glenarvan.

"He'll not fall."

But notwithstanding Thalcave's assurances, poor Glenarvan spent the rest of the night in torturing anxiety. He seemed quite insensible now to the danger they had escaped through the departure of the wolves, and would have hastened immediately after Robert if the Indian had not kept him back by making him understand the impossibility of their horses overtaking Thaouka; and also that boy and horse had outdistanced the wolves long since, and that it would be useless going to look for them till daylight.

At four o'clock morning began to dawn. A pale glimmer appeared in the horizon, and pearly drops of dew lay thick on the plain and on the tall grass, already stirred by the breath of day.

The time for starting had arrived.

"Now!" cried Thalcave, "come."

Glenarvan made no reply, but took Robert's horse and sprung into the saddle. Next minute both men were galloping at full speed toward the west, in the line in which their companions ought to be advancing. They dashed along at a prodigious rate for a full hour, dreading every minute to come across the mangled corpse of Robert. Glenarvan had torn the flanks of his horse with his spurs in his mad haste, when at last gun-shots were heard in the distance at regular intervals, as if fired as a signal.

"There they are!" exclaimed Glenarvan; and both he and the Indian urged on their steeds to a still quicker pace, till in a few minutes more they came up to the little detachment conducted by Paganel. A cry broke from Glenarvan's lips, for Robert was there, alive and well, still mounted on the superb Thaouka, who neighed loudly with delight at the sight of his master.

"Oh, my child, my child!" cried Glenarvan, with indescribable tenderness in his tone.

Both he and Robert leaped to the ground, and flung themselves into each other's arms. Then the Indian hugged the brave boy in his arms.

"He is alive, he is alive," repeated Glenarvan again and again.

"Yes," replied Robert; "and thanks to Thaouka."

This great recognition of his favorite's services was wholly unexpected by the Indian, who was talking to him that minute, caressing and speaking to him, as if human blood flowed in the veins of the proud creature. Then turning to Paganel, he pointed to Robert, and said, "A brave!" and employing the Indian metaphor, he added, "his spurs did not tremble!"

But Glenarvan put his arms round the boy and said, "Why wouldn't you let me or Thalcave run the risk of this last chance of deliverance, my son?"

"My lord," replied the boy in tones of gratitude, "wasn't it my place to do it? Thalcave has saved my life already, and you-- you are going to save my father."

CHAPTER XX STRANGE SIGNS

AFTER the first joy of the meeting was over, Paganel and his party, except perhaps the Major, were only conscious of one feeling-- they were dying of thirst. Most fortunately for them, the Guamini ran not far off, and
about seven in the morning the little troop reached the inclosure on its banks. The precincts were strewed with the
dead wolves, and judging from their numbers, it was evident how violent the attack must have been, and how
desperate the resistance.

As soon as the travelers had drunk their fill, they began to demolish the breakfast prepared in the RAMADA,
and did ample justice to the extraordinary viands. The NANDOU fillets were pronounced first-rate, and the
armadillo was delicious.

"To eat moderately," said Paganel, "would be positive ingratitude to Providence. We must eat immoderately."
And so they did, but were none the worse for it. The water of the Guamini greatly aided digestion apparently.

Glenarvan, however, was not going to imitate Hannibal at Capua, and at ten o'clock next morning gave the signal
for starting. The leathern bottles were filled with water, and the day's march commenced. The horses were so well
rested that they were quite fresh again, and kept up a canter almost constantly. The country was not so parched up
now, and consequently less sterile, but still a desert. No incident occurred of any importance during the 2d and 3d of
November, and in the evening they reached the boundary of the Pampas, and camped for the night on the frontiers of
the province of Buenos Ayres. Two-thirds of their journey was now accomplished. It was twenty-two days since
they left the Bay of Talcahuano, and they had gone 450 miles.

Next morning they crossed the conventional line which separates the Argentine plains from the region of the
Pampas. It was here that Thalcave hoped to meet the Caciques, in whose hands, he had no doubt, Harry Grant and
his men were prisoners.

From the time of leaving the Guamini, there was marked change in the temperature, to the great relief of the
travelers. It was much cooler, thanks to the violent and cold winds from Patagonia, which constantly agitate the
atmospheric waves. Horses and men were glad enough of this, after what they had suffered from the heat and
drought, and they felt animated with fresh ardor and confidence. But contrary to what Thalcave had said, the whole
district appeared uninhabited, or rather abandoned.

Their route often led past or went right through small lagoons, sometimes of fresh water, sometimes of brackish.
On the banks and bushes about these, king-wrens were hopping about and larks singing joyously in concert with the
tangaras, the rivals in color of the brilliant humming birds. On the thorny bushes the nests of the ANNUBIS swung
to and fro in the breeze like an Indian hammock; and on the shore magnificent flamingos stalked in regular order
like soldiers marching, and spread out their flaming red wings. Their nests were seen in groups of thousands,
forming a complete town, about a foot high, and resembling a truncated cone in shape. The flamingos did not disturb
themselves in the least at the approach of the travelers, but this did not suit Paganel.

"I have been very desirous a long time," he said to the Major, "to see a flamingo flying."
"All right," replied McNabbs.
"Now while I have the opportunity, I should like to make the most of it," continued Paganel.
"Very well; do it, Paganel."
"Come with me, then, Major, and you too Robert. I want witnesses."
And all three went off towards the flamingos, leaving the others to go on in advance.

As soon as they were near enough, Paganel fired, only loading his gun, however, with powder, for he would not
shed even the blood of a bird uselessly. The shot made the whole assemblage fly away _en masse_, while Paganel
watched them attentively through his spectacles.

"Well, did you see them fly?" he asked the Major.
"Certainly I did," was the reply. "I could not help seeing them, unless I had been blind."
"Well and did you think they resembled feathered arrows when they were flying?"
"Not in the least."
"Not a bit," added Robert.
"I was sure of it," said the geographer, with a satisfied air; "and yet the very proudest of modest men, my
illustrious countryman, Chateaubriand, made the inaccurate comparison. Oh, Robert, comparison is the most
dangerous figure in rhetoric that I know. Mind you avoid it all your life, and only employ it in a last extremity."
"Are you satisfied with your experiment?" asked McNabbs.
"Delighted."
"And so am I. But we had better push on now, for your illustrious Chateaubriand has put us more than a mile
behind."

On rejoining their companions, they found Glenarvan busily engaged in conversation with the Indian, though
apparently unable to make him understand. Thalcave's gaze was fixed intently on the horizon, and his face wore a
puzzled expression.
The moment Paganel came in sight, Glenarvan called out:
"Come along, friend Paganel. Thalcave and I can't understand each other at all."
After a few minutes' talk with the Patagonian, the interpreter turned to Glenarvan and said:

"Thalcave is quite astonished at the fact, and certainly it is very strange that there are no Indians, nor even traces of any to be seen in these plains, for they are generally thick with companies of them, either driving along cattle stolen from the ESTANCIAS, or going to the Andes to sell their zorillo cloths and plaited leather whips."

"And what does Thalcave think is the reason?"

"He does not know; he is amazed and that's all."

"But what description of Indians did he reckon on meeting in this part of the Pampas?"

"Just the very ones who had the foreign prisoners in their hands, the natives under the rule of the Caciques Calfoucoura, Catriel, or Yanchetruz."

"Who are these Caciques?"

"Chiefs that were all powerful thirty years ago, before they were driven beyond the sierras. Since then they have been reduced to subjection as much as Indians can be, and they scour the plains of the Pampas and the province of Buenos Ayres. I quite share Thalcave's surprise at not discovering any traces of them in regions which they usually infest as SALTEADORES, or bandits."

"And what must we do then?"

"I'll go and ask him," replied Paganel.

After a brief colloquy he returned and said:

"This is his advice, and very sensible it is, I think. He says we had better continue our route to the east as far as Fort Independence, and if we don't get news of Captain Grant there we shall hear, at any rate, what has become of the Indians of the Argentine plains."

"Is Fort Independence far away?" asked Glenarvan.

"No, it is in the Sierra Tandil, a distance of about sixty miles."

"And when shall we arrive?"

"The day after to-morrow, in the evening."

Glenarvan was considerably disconcerted by this circumstance. Not to find an Indian where in general there were only too many, was so unusual that there must be some grave cause for it; but worse still if Harry Grant were a prisoner in the hands of any of those tribes, had been dragged away with them to the north or south? Glenarvan felt that, cost what it might, they must not lose his track, and therefore decided to follow the advice of Thalcave, and go to the village of Tandil. They would find some one there to speak to, at all events.

About four o'clock in the evening a hill, which seemed a mountain in so flat a country, was sighted in the distance. This was Sierra Tapalquem, at the foot of which the travelers camped that night.

The passage in the morning over this sierra, was accomplished without the slightest difficulty; after having crossed the Cordillera of the Andes, it was easy work to ascend the gentle heights of such a sierra as this. The horses scarcely slackened their speed. At noon they passed the deserted fort of Tapalquem, the first of the chain of forts which defend the southern frontiers from Indian marauders. But to the increasing surprise of Thalcave, they did not come across even the shadow of an Indian. About the middle of the day, however, three flying horsemen, well mounted and well armed came in sight, gazed at them for an instant, and then sped away with inconceivable rapidity. Glenarvan was furious.

"Gauchos," said the Patagonian, designating them by the name which had caused such a fiery discussion between the Major and Paganel.

"Ah! the Gauchos," replied McNabbs. "Well, Paganel, the north wind is not blowing to-day. What do you think of those fellows yonder?"

"I think they look like regular bandits."

"And how far is it from looking to being, my good geographer?"

"Only just a step, my dear Major."

Paganel's admission was received with a general laugh, which did not in the least disconcert him. He went on talking about the Indians however, and made this curious observation:

"I have read somewhere," he said, "that about the Arabs there is a peculiar expression of ferocity in the mouth, while the eyes have a kindly look. Now, in these American savages it is quite the reverse, for the eye has a particularly villainous aspect."

No physiognomist by profession could have better characterized the Indian race.

But desolate as the country appeared, Thalcave was on his guard against surprises, and gave orders to his party to form themselves in a close platoon. It was a useless precaution, however; for that same evening, they camped for the night in an immense TOLDERIA, which they not only found perfectly empty, but which the Patagonian declared, after he had examined it all round, must have been uninhabited for a long time.

Next day, the first ESTANCIAS of the Sierra Tandil came in sight. The ESTANCIAS are large cattle stations for
breeding cattle; but Thalcave resolved not to stop at any of them, but to go straight on to Fort Independence. They passed several farms fortified by battlements and surrounded by a deep moat, the principal building being encircled by a terrace, from which the inhabitants could fire down on the marauders in the plain. Glenarvan might, perhaps, have got some information at these houses, but it was the surest plan to go straight on to the village of Tandil. Accordingly they went on without stopping, fording the Río of Los Huasos and also the Chapaleofu, a few miles further on. Soon they were treading the grassy slopes of the first ridges of the Sierra Tandil, and an hour afterward the village appeared in the depths of a narrow gorge, and above it towered the lofty battlements of Fort Independence.

CHAPTER XXI A FALSE TRAIL

THE Sierra Tandil rises a thousand feet above the level of the sea. It is a primordial chain--that is to say, anterior to all organic and metamorphic creation. It is formed of a semi-circular ridge of gneiss hills, covered with fine short grass. The district of Tandil, to which it has given its name, includes all the south of the Province of Buenos Ayres, and terminates in a river which conveys north all the Ríos that take their rise on its slopes.

After making a short ascent up the sierra, they reached the postern gate, so carelessly guarded by an Argentine sentinel, that they passed through without difficulty, a circumstance which betokened extreme negligence or extreme security.

A few minutes afterward the Commandant appeared in person. He was a vigorous man about fifty years of age, of military aspect, with grayish hair, and an imperious eye, as far as one could see through the clouds of tobacco smoke which escaped from his short pipe. His walk reminded Paganel instantly of the old subalterns in his own country.

Thalcave was spokesman, and addressing the officer, presented Lord Glenarvan and his companions. While he was speaking, the Commandant kept staring fixedly at Paganel in rather an embarrassing manner. The geographer could not understand what he meant by it, and was just about to interrogate him, when the Commandant came forward, and seizing both his hands in the most free-and-easy fashion, said in a joyous voice, in the mother tongue of the geographer:

"A Frenchman!"

"Yes, a Frenchman," replied Paganel.

"Ah! delightful! Welcome, welcome. I am a Frenchman too," he added, shaking Paganel's hand with such vigor as to be almost alarming.

"Is he a friend of yours, Paganel?" asked the Major.

"Yes," said Paganel, somewhat proudly. "One has friends in every division of the globe."

After he had succeeded in disengaging his hand, though not without difficulty, from the living vise in which it was held, a lively conversation ensued. Glenarvan would fain have put in a word about the business on hand, but the Commandant related his entire history, and was not in a mood to stop till he had done. It was evident that the worthy man must have left his native country many years back, for his mother tongue had grown unfamiliar, and if he had not forgotten the words he certainly did not remember how to put them together. He spoke more like a negro belonging to a French colony.

The fact was that the Governor of Fort Independence was a French sergeant, an old comrade of Parachapee. He had never left the fort since it had been built in 1828; and, strange to say, he commanded it with the consent of the Argentine Government. He was a man about fifty years of age, a Basque by birth, and his name was Manuel Ipharaguerre, so that he was almost a Spaniard. A year after his arrival in the country he was naturalized, took service in the Argentine army, and married an Indian girl, who was then nursing twin babies six months old--two boys, be it understood, for the good wife of the Commandant would have never thought of presenting her husband with girls. Manuel could not conceive of any state but a military one, and he hoped in due time, with the help of God, to offer the republic a whole company of young soldiers.

"You saw them. Charming! good soldiers are Jose, Juan, and Miquele! Pepe, seven year old; Pepe can handle a gun."

Pepe, hearing himself complimented, brought his two little feet together, and presented arms with perfect grace.

"He'll get on!" added the sergeant. "He'll be colonel-major or brigadier-general some day."

Sergeant Manuel seemed so enchanted that it would have been useless to express a contrary opinion, either to the profession of arms or the probable future of his children. He was happy, and as Goethe says, "Nothing that makes us happy is an illusion."

All this talk took up a quarter of an hour, to the great astonishment of Thalcave. The Indian could not understand how so many words could come out of one throat. No one interrupted the Sergeant, but all things come to an end, and at last he was silent, but not till he had made his guests enter his dwelling, and be presented to Madame Ipharaguerre. Then, and not till then, did he ask his guests what had procured him the honor of their visit. Now or
never was the moment to explain, and Paganel, seizing the chance at once, began an account of their journey across
the Pampas, and ended by inquiring the reason of the Indians having deserted the country.
"Ah! there was no one!" replied the Sergeant, shrugging his shoulders--"really no one, and us, too, our arms
crossed! Nothing to do!"
"But why?"
"War."
"War?"
"Yes, civil war between the Paraguayans and Buenos Ayriens," replied the Sergeant.
"Well?"
"Well, Indians all in the north, in the rear of General Flores. Indian pillagers find pillage there."
"But where are the Caciques?"
"Caciques are with them."
"What! Catriel?"
"There is no Catriel."
"And Calfoucoura?"
"There is no Calfoucoura."
"And is there no Yanchetruz?"
"No; no Yanchetruz."

The reply was interpreted by Thalcave, who shook his head and gave an approving look. The Patagonian was
either unaware of, or had forgotten that civil war was decimating the two parts of the republic--a war which
ultimately required the intervention of Brazil. The Indians have everything to gain by these intestine strifes, and can
not lose such fine opportunities of plunder. There was no doubt the Sergeant was right in assigning war then as the
cause of the forsaken appearance of the plains.

But this circumstance upset all Glenarvan's projects, for if Harry Grant was a prisoner in the hands of the
Caciques, he must have been dragged north with them. How and where should they ever find him if that were the
case? Should they attempt a perilous and almost useless journey to the northern border of the Pampas? It was a
serious question which would need to be well talked over.

However, there was one inquiry more to make to the Sergeant; and it was the Major who thought of it, for all the
others looked at each other in silence.
"Had the Sergeant heard whether any Europeans were prisoners in the hands of the Caciques?"
Manuel looked thoughtful for a few minutes, like a man trying to ransack his memory. At last he said:
"Yes."
"Ah!" said Glenarvan, catching at the fresh hope.
They all eagerly crowded round the Sergeant, exclaiming,
"Tell us, tell us."
"It was some years ago," replied Manuel. "Yes; all I heard was that some Europeans were prisoners, but I never
saw them."
"You are making a mistake," said Glenarvan. "It can't be some years ago; the date of the shipwreck is explicitly
given. The BRITANNIA was wrecked in June, 1862. It is scarcely two years ago."
"Oh, more than that, my Lord."
"Impossible!" said Paganel.
"Oh, but it must be. It was when Pepe was born. There were two prisoners."
"No, three!" said Glenarvan.
"Two!" replied the Sergeant, in a positive tone.
"Two?" echoed Glenarvan, much surprised. "Two Englishmen?"
"No, no. Who is talking of Englishmen? No; a Frenchman and an Italian."
"An Italian who was massacred by the Poyuches?" exclaimed Paganel.
"Yes; and I heard afterward that the Frenchman was saved."
"Saved!" exclaimed young Robert, his very life hanging on the lips of the Sergeant.
Yes; delivered out of the hands of the Indians."
Paganel struck his forehead with an air of desperation, and said at last,
"Ah! I understand. It is all clear now; everything is explained."
"But what is it?" asked Glenarvan, with as much impatience.
"My friends," replied Paganel, taking both Robert's hands in his own, "we must resign ourselves to a sad
disaster. We have been on a wrong track. The prisoner mentioned is not the captain at all, but one of my own
countrymen; and his companion, who was assassinated by the Poyuches, was Marco Vazello. The Frenchman was
dragged along by the cruel Indians several times as far as the shores of the Colorado, but managed at length to make his escape, and return to Colorado. Instead of following the track of Harry Grant, we have fallen on that of young Guinnard."

This announcement was heard with profound silence. The mistake was palpable. The details given by the Sergeant, the nationality of the prisoner, the murder of his companions, his escape from the hands of the Indians, all evidenced the fact. Glenarvan looked at Thalcave with a crestfallen face, and the Indian, turning to the Sergeant, asked whether he had never heard of three English captives.

"Never," replied Manuel. "They would have known of them at Tandil, I am sure. No, it cannot be."

After this, there was nothing further to do at Fort Independence but to shake hands with the Commandant, and thank him and take leave.

Glenarvan was in despair at this complete overthrow of his hopes, and Robert walked silently beside him, with his eyes full of tears. Glenarvan could not find a word of comfort to say to him. Paganel gesticulated and talked away to himself. The Major never opened his mouth, nor Thalcave, whose _amour propre_, as an Indian, seemed quite wounded by having allowed himself to go on a wrong scent. No one, however, would have thought of reproaching him for an error so pardonable.

They went back to the FONDA, and had supper; but it was a gloomy party that surrounded the table. It was not that any one of them regretted the fatigue they had so heedlessly endured or the dangers they had run, but they felt their hope of success was gone, for there was no chance of coming across Captain Grant between the Sierra Tandil and the sea, as Sergeant Manuel must have heard if any prisoners had fallen into the hands of the Indians on the coast of the Atlantic. Any event of this nature would have attracted the notice of the Indian traders who traffic between Tandil and Carmen, at the mouth of the Rio Negro. The best thing to do now was to get to the DUNCAN as quick as possible at the appointed rendezvous.

Paganel asked Glenarvan, however, to let him have the document again, on the faith of which they had set out on so bootless a search. He read it over and over, as if trying to extract some new meaning out of it.

"Yet nothing can be clearer," said Glenarvan; "it gives the date of the shipwreck, and the manner, and the place of the captivity in the most categorical manner."

"That it does not--no, it does not!" exclaimed Paganel, striking the table with his fist. "Since Harry Grant is not in the Pampas, he is not in America; but where he is the document must say, and it shall say, my friends, or my name is not Jacques Paganel any longer."

CHAPTER XXII THE FLOOD

A DISTANCE of 150 miles separates Fort Independence from the shores of the Atlantic. Unless unexpected and certainly improbable delays should occur, in four days Glenarvan would rejoin the DUNCAN. But to return on board without Captain Grant, and after having so completely failed in his search, was what he could not bring himself to do. Consequently, when next day came, he gave no orders for departure; the Major took it upon himself to have the horses saddled, and make all preparations. Thanks to his activity, next morning at eight o'clock the little troop was descending the grassy slopes of the Sierra.

Glenarvan, with Robert at his side, galloped along without saying a word. His bold, determined nature made it impossible to take failure quietly. His heart throbbed as if it would burst, and his head was burning. Paganel, excited by the difficulty, was turning over and over the words of the document, and trying to discover some new meaning. Thalcave was perfectly silent, and left Thaouka to lead the way. The Major, always confident, remained firm at his post, like a man on whom discouragement takes no hold. Tom Austin and his two sailors shared the dejection of their master. A timid rabbit happened to run across their path, and the superstitious men looked at each other in dismay.

"Yes, in the Highlands," repeated Mulrady.
"What's bad in the Highlands is not better here," returned Wilson sententiously.

Toward noon they had crossed the Sierra, and descended into the undulating plains which extend to the sea. Limpid RIOS intersected these plains, and lost themselves among the tall grasses. The ground had once more become a dead level, the last mountains of the Pampas were passed, and a long carpet of verdure unrolled itself over the monotonous prairie beneath the horses' tread.

Hitherto the weather had been fine, but to-day the sky presented anything but a reassuring appearance. The heavy vapors, generated by the high temperature of the preceding days, hung in thick clouds, which ere long would empty themselves in torrents of rain. Moreover, the vicinity of the Atlantic, and the prevailing west wind, made the climate of this district particularly damp. This was evident by the fertility and abundance of the pasture and its dark color. However, the clouds remained unbroken for the present, and in the evening, after a brisk gallop of forty miles, the horses stopped on the brink of deep CANADAS, immense natural trenches filled with water. No shelter was
near, and ponchos had to serve both for tents and coverlets as each man lay down and fell asleep beneath the threatening sky.

Next day the presence of water became still more sensibly felt; it seemed to exude from every pore of the ground. Soon large ponds, some just beginning to form, and some already deep, lay across the route to the east. As long as they had only to deal with lagoons, circumscribed pieces of water unencumbered with aquatic plants, the horses could get through well enough, but when they encountered moving sloughs called PENTANOS, it was harder work. Tall grass blocked them up, and they were involved in the peril before they were aware.

These bogs had already proved fatal to more than one living thing, for Robert, who had got a good bit ahead of the party, came rushing back at full gallop, calling out:

"Monsieur Paganel, Monsieur Paganel, a forest of horns."

"What!" exclaimed the geographer; "you have found a forest of horns?"

"Yes, yes, or at any rate a coppice."

"A coppice!" replied Paganel, shrugging his shoulders. "My boy, you are dreaming."

"I am not dreaming, and you will see for yourself. Well, this is a strange country. They sow horns, and they sprout up like wheat. I wish I could get some of the seed."

"The boy is really speaking seriously," said the Major.

"Yes, Mr. Major, and you will soon see I am right."

The boy had not been mistaken, for presently they found themselves in front of an immense field of horns, regularly planted and stretching far out of sight. It was a complete copse, low and close packed, but a strange sort.

"Well," said Robert.

"This is peculiar certainly," said Paganel, and he turned round to question Thalcave on the subject.

"The horns come out of the ground," replied the Indian, "but the oxen are down below."

"What!" exclaimed Paganel; "do you mean to say that a whole herd was caught in that mud and buried alive?"

"Yes," said the Patagonian.

And so it was. An immense herd had been suffocated side by side in this enormous bog, and this was not the first occurrence of the kind which had taken place in the Argentine plains.

An hour afterward and the field of horns lay two miles behind.

Thalcave was somewhat anxiously observing a state of things which appeared to him unusual. He frequently stopped and raised himself on his stirrups and looked

V. IV Verne around. His great height gave him a commanding view of the whole horizon; but after a keen rapid survey, he quickly resumed his seat and went on. About a mile further he stopped again, and leaving the straight route, made a circuit of some miles north and south, and then returned and fell back in his place at the head of the troop, without saying a syllable as to what he hoped or feared. This strange behavior, several times repeated, made Glenarvan very uneasy, and quite puzzled Paganel. At last, at Glenarvan's request, he asked the Indian about it.

Thalcave replied that he was astonished to see the plains so saturated with water. Never, to his knowledge, since he had followed the calling of guide, had he found the ground in this soaking condition. Even in the rainy season, the Argentine plains had always been passable.

"But what is the cause of this increasing humidity?" said Paganel.

"I do not know, and what if I did?"

"Could it be owing to the RIOS of the Sierra being swollen to overflowing by the heavy rains?"

"Sometimes they are."

"And is it the case now?"

"Perhaps."

Paganel was obliged to be content with this unsatisfactory reply, and went back to Glenarvan to report the result of his conversation.

"And what does Thalcave advise us to do?" said Glenarvan.

Paganel went back to the guide and asked him.

"Go on fast," was the reply.

This was easier said than done. The horses soon tired of treading over ground that gave way at every step. It sank each moment more and more, till it seemed half under water.

They quickened their pace, but could not go fast enough to escape the water, which rolled in great sheets at their feet. Before two hours the cataracts of the sky opened and deluged the plain in true tropical torrents of rain. Never was there a finer occasion for displaying philosophic equanimity. There was no shelter, and nothing for it but to bear it stolidly. The ponchos were streaming like the overflowing gutter-spouts on the roof of a house, and the unfortunate horsemen had to submit to a double bath, for their horses dashed up the water to their waists at every step.
In this drenching, shivering state, and worn out with fatigue, they came toward evening to a miserable RANCHO, which could only have been called a shelter by people not very fastidious, and certainly only travelers in extremity would even have entered it; but Glenarvan and his companions had no choice, and were glad enough to burrow in this wretched hovel, though it would have been despised by even a poor Indian of the Pampas. A miserable fire of grass was kindled, which gave out more smoke than heat, and was very difficult to keep alight, as the torrents of rain which dashed against the ruined cabin outside found their way within and fell down in large drops from the roof. Twenty times over the fire would have been extinguished if Mulrady and Wilson had not kept off the water.

The supper was a dull meal, and neither appetizing nor reviving. Only the Major seemed to eat with any relish. The impassive McNabbs was superior to all circumstances. Paganel, Frenchman as he was, tried to joke, but the attempt was a failure.

"My jests are damp," he said, "they miss fire."

The only consolation in such circumstances was to sleep, and accordingly each one lay down and endeavored to find in slumber a temporary forgetfulness of his discomforts and his fatigues. The night was stormy, and the planks of the rancho cracked before the blast as if every instant they would give way. The poor horses outside, exposed to all the inclemency of the weather, were making piteous moans, and their masters were suffering quite as much inside the ruined RANCHO. However, sleep overpowered them at length. Robert was the first to close his eyes and lean his head against Glenarvan's shoulder, and soon all the rest were soundly sleeping too under the guardian eye of Heaven.

The night passed safely, and no one stirred till Thaouka woke them by tapping vigorously against the RANCHO with his hoof. He knew it was time to start, and at a push could give the signal as well as his master. They owed the faithful creature too much to disobey him, and set off immediately.

The rain had abated, but floods of water still covered the ground. Paganel, on consulting his map, came to the conclusion that the RIOS Grande and Vivarota, into which the water from the plains generally runs, must have been united in one large bed several miles in extent.

Extreme haste was imperative, for all their lives depended on it. Should the inundation increase, where could they find refuge? Not a single elevated point was visible on the whole circle of the horizon, and on such level plains water would sweep along with fearful rapidity.

The horses were spurred on to the utmost, and Thaouka led the way, bounding over the water as if it had been his natural element. Certainly he might justly have been called a sea-horse--better than many of the amphibious animals who bear that name.

All of a sudden, about ten in the morning, Thaouka betrayed symptoms of violent agitation. He kept turning round toward the south, neighing continually, and snorting with wide open nostrils. He reared violently, and Thalcave had some difficulty in keeping his seat. The foam from his mouth was tinged with blood from the action of the bit, pulled tightly by his master's strong hand, and yet the fiery animal would not be still. Had he been free, his master knew he would have fled away to the north as fast as his legs would have carried him.

"What is the matter with Thaouka?" asked Paganel. "Is he bitten by the leeches? They are very voracious in the Argentine streams."

"No," replied the Indian.

"Is he frightened at something, then?"

"Yes, he scents danger."

"What danger?"

"I don't know."

But, though no danger was apparent to the eye, the ear could catch the sound of a murmuring noise beyond the limits of the horizon, like the coming in of the tide. Soon a confused sound was heard of bellowing and neighing and bleating, and about a mile to the south immense flocks appeared, rushing and tumbling over each other in the greatest disorder, as they hurried pell-mell along with inconceivable rapidity. They raised such a whirlwind of water in their course that it was impossible to distinguish them clearly. A hundred whales of the largest size could hardly have dashed up the ocean waves more violently.

"_Anda, anda!_" (quick, quick), shouted Thalcave, in a voice like thunder.

"What is it, then?" asked Paganel.

"The rising," replied Thalcave.

"He means an inundation," exclaimed Paganel, flying with the others after Thalcave, who had spurred on his horse toward the north.

It was high time, for about five miles south an immense towering wave was seen advancing over the plain, and changing the whole country into an ocean. The tall grass disappeared before it as if cut down by a scythe, and
clumps of mimosas were torn up and drifted about like floating islands.

The wave was speeding on with the rapidity of a racehorse, and the travelers fled before it like a cloud before a storm-wind. They looked in vain for some harbor of refuge, and the terrified horses galloped so wildly along that the riders could hardly keep their saddles.

"Anda, anda!" shouted Thalcave, and again they spurred on the poor animals till the blood ran from their lacerated sides. They stumbled every now and then over great cracks in the ground, or got entangled in the hidden grass below the water. They fell, and were pulled up only to fall again and again, and be pulled up again and again. The level of the waters was sensibly rising, and less than two miles off the gigantic wave reared its crested head.

For a quarter of an hour this supreme struggle with the most terrible of elements lasted. The fugitives could not tell how far they had gone, but, judging by the speed, the distance must have been considerable. The poor horses, however, were breast-high in water now, and could only advance with extreme difficulty. Glenarvan and Paganel, and, indeed, the whole party, gave themselves up for lost, as the horses were fast getting out of their depth, and six feet of water would be enough to drown them.

It would be impossible to tell the anguish of mind these eight men endured; they felt their own impotence in the presence of these cataclysms of nature so far beyond all human power. Their salvation did not lie in their own hands.

Five minutes afterward, and the horses were swimming; the current alone carried them along with tremendous force, and with a swiftness equal to their fastest gallop; they must have gone fully twenty miles an hour.

All hope of delivery seemed impossible, when the Major suddenly called out:

"A tree!"

"A tree?" exclaimed Glenarvan.

"Yes, there, there!" replied Thalcave, pointing with his finger to a species of gigantic walnut-tree, which raised its solitary head above the waters.

His companions needed no urging forward now; this tree, so opportunely discovered, they must reach at all hazards. The horses very likely might not be able to get to it, but, at all events, the men would, the current bearing them right down to it.

Just at that moment Tom Austin's horse gave a smothered neigh and disappeared. His master, freeing his feet from the stirrups, began to swim vigorously.

"Hang on to my saddle," called Glenarvan.

"Thanks, your honor, but I have good stout arms."

"Robert, how is your horse going?" asked his Lordship, turning to young Grant.

"Famously, my Lord, he swims like a fish."

"Lookout!" shouted the Major, in a stentorian voice.

The warning was scarcely spoken before the enormous billow, a monstrous wave forty feet high, broke over the fugitives with a fearful noise. Men and animals all disappeared in a whirl of foam; a liquid mass, weighing several millions of tons, engulfed them in its seething waters.

When it had rolled on, the men reappeared on the surface, and counted each other rapidly; but all the horses, except Thaouka, who still bore his master, had gone down forever.

"Courage, courage," repeated Glenarvan, supporting Paganel with one arm, and swimming with the other.

"I can manage, I can manage," said the worthy savant. "I am even not sorry--"

But no one ever knew what he was not sorry about, for the poor man was obliged to swallow down the rest of his sentence with half a pint of muddy water. The Major advanced quietly, making regular strokes, worthy of a master swimmer. The sailors took to the water like porpoises, while Robert clung to Thaouka's mane, and was carried along with him. The noble animal swam superbly, instinctively making for the tree in a straight line.

The tree was only twenty fathoms off, and in a few minutes was safely reached by the whole party; but for this refuge they must all have perished in the flood.

The water had risen to the top of the trunk, just to where the parent branches fork out. It was consequently, quite easy to clamber up to it. Thalcave climbed up first, and got off his horse to hoist up Robert and help the others. His powerful arms had soon placed all the exhausted swimmers in a place of security.

But, meantime, Thaouka was being rapidly carried away by the current. He turned his intelligent face toward his master, and, shaking his long mane, neighed as if to summon him to his rescue.

"Are you going to forsake him, Thalcave?" asked Paganel.

"I!" replied the Indian, and forthwith he plunged down into the tumultuous waters, and came up again ten fathoms off. A few instants afterward his arms were round Thaouka's neck, and master and steed were drifting together toward the misty horizon of the north.

CHAPTER XXIII A SINGULAR ABODE

THE tree on which Glenarvan and his companions had just found refuge, resembled a walnut-tree, having the
same glossy foliage and rounded form. In reality, however, it was the OMBU, which grows solitarily on the Argentine plains. The enormous and twisted trunk of this tree is planted firmly in the soil, not only by its great roots, but still more by its vigorous shoots, which fasten it down in the most tenacious manner. This was how it stood proof against the shock of the mighty billow.

This OMBU measured in height a hundred feet, and covered with its shadow a circumference of one hundred and twenty yards. All this scaffolding rested on three great boughs which sprang from the trunk. Two of these rose almost perpendicularly, and supported the immense parasol of foliage, the branches of which were so crossed and intertwined and entangled, as if by the hand of a basket-maker, that they formed an impenetrable shade. The third arm, on the contrary, stretched right out in a horizontal position above the roaring waters, into which the lower leaves dipped. There was no want of room in the interior of this gigantic tree, for there were great gaps in the foliage, perfect glades, with air in abundance, and freshness everywhere. To see the innumerable branches rising to the clouds, and the creepers running from bough to bough, and attaching them together while the sunlight glinted here and there among the leaves, one might have called it a complete forest instead of a solitary tree sheltering them all.

On the arrival of the fugitives a myriad of the feathered tribes fled away into the topmost branches, protesting by their outcries against this flagrant usurpation of their domicile. These birds, who themselves had taken refuge in the solitary OMBU, were in hundreds, comprising blackbirds, starlings, isacas, HILGUEROS, and especially the pica-flor, humming-birds of most resplendent colors. When they flew away it seemed as though a gust of wind had blown all the flowers off the tree.

Such was the asylum offered to the little band of Glenarvan. Young Grant and the agile Wilson were scarcely perched on the tree before they had climbed to the upper branches and put their heads through the leafy dome to get a view of the vast horizon. The ocean made by the inundation surrounded them on all sides, and, far as the eye could reach, seemed to have no limits. Not a single tree was visible on the liquid plain; the OMBU stood alone amid the rolling waters, and trembled before them. In the distance, drifting from south to north, carried along by the impetuous torrent, they saw trees torn up by the roots, twisted branches, roofs torn off, destroyed RANCHOS, planks of sheds stolen by the deluge from ESTANCIAS, carcasses of drowned animals, blood-stained skins, and on a shaky tree a complete family of jaguars, howling and clutching hold of their frail raft. Still farther away, a black spot almost invisible, already caught Wilson's eye. It was Thalcave and his faithful Thaouka.

"Thalcave, Thalcave!" shouted Robert, stretching out his hands toward the courageous Patagonian.

"He will save himself, Mr. Robert," replied Wilson; "we must go down to his Lordship."

Next minute they had descended the three stages of boughs, and landed safely on the top of the trunk, where they found Glenarvan, Paganel, the Major, Austin, and Mulrady, sitting either astride or in some position they found more comfortable. Wilson gave an account of their investigations aloft, and all shared his opinion with respect to Thalcave. The only question was whether it was Thalcave who would save Thaouka, or Thaouka save Thalcave.

Their own situation meantime was much more alarming than his. No doubt the tree would be able to resist the current, but the waters might rise higher and higher, till the topmost branches were covered, for the depression of the soil made this part of the plain a deep reservoir. Glenarvan's first care, consequently, was to make notches by which to ascertain the progress of the inundation. For the present it was stationary, having apparently reached its height. This was reassuring.

"And now what are we going to do?" said Glenarvan.

"Make our nest, of course!" replied Paganel

"Make our nest!" exclaimed Robert.

"Certainly, my boy, and live the life of birds, since we can't that of fishes."

"All very well, but who will fill our bills for us?" said Glenarvan.

"I will," said the Major.

All eyes turned toward him immediately, and there he sat in a natural arm-chair, formed of two elastic boughs, holding out his ALFORJAS damp, but still intact.

"Oh, McNabbs, that's just like you," exclaimed Glenarvan, "you think of everything even under circumstances which would drive all out of your head."

"Since it was settled we were not going to be drowned, I had no intention of starvimg of hunger."

"I should have thought of it, too," said Paganel, "but I am so DISTRAIT."

"And what is in the ALFORJAS?" asked Tom Austin.

"Food enough to last seven men for two days," replied McNabbs.

"And I hope the inundation will have gone down in twenty-four hours," said Glenarvan.

"Or that we shall have found some way of regaining _terra firma_," added Paganel.

"Our first business, then, now is to breakfast," said Glenarvan.
"I suppose you mean after we have made ourselves dry," observed the Major.

"And where's the fire?" asked Wilson.

"We must make it," returned Paganel.

"Where?"

"On the top of the trunk, of course."

"And what with?"

"With the dead wood we cut off the tree."

"But how will you kindle it?" asked Glenarvan. "Our tinder is just like wet sponge."

"We can dispense with it," replied Paganel. "We only want a little dry moss and a ray of sunshine, and the lens of my telescope, and you'll see what a fire I'll get to dry myself by. Who will go and cut wood in the forest?"

"I will," said Robert.

And off he scampered like a young cat into the depths of the foliage, followed by his friend Wilson. Paganel set to work to find dry moss, and had soon gathered sufficient. This he laid on a bed of damp leaves, just where the large branches began to fork out, forming a natural hearth, where there was little fear of conflagration.

Robert and Wilson speedily reappeared, each with an armful of dry wood, which they threw on the moss. By the help of the lens it was easily kindled, for the sun was blazing overhead. In order to ensure a proper draught, Paganel stood over the hearth with his long legs straddled out in the Arab manner. Then stooping down and raising himself with a rapid motion, he made a violent current of air with his poncho, which made the wood take fire, and soon a bright flame roared in the improvised brasier. After drying themselves, each in his own fashion, and hanging their ponchos on the tree, where they were swung to and fro in the breeze, they breakfasted, carefully however rationing out the provisions, for the morrow had to be thought of; the immense basin might not empty so soon as Glenarvan expected, and, anyway, the supply was very limited. The OMBU produced no fruit, though fortunately, it would likely abound in fresh eggs, thanks to the numerous nests stowed away among the leaves, not to speak of their feathered proprietors. These resources were by no means to be despised.

The next business was to install themselves as comfortably as they could, in prospect of a long stay.

"As the kitchen and dining-room are on the ground floor," said Paganel, "we must sleep on the first floor. The house is large, and as the rent is not dear, we must not cramp ourselves for room. I can see up yonder natural cradles, in which once safely tucked up we shall sleep as if we were in the best beds in the world. We have nothing to fear. Besides, we will watch, and we are numerous enough to repulse a fleet of Indians and other wild animals."

"We only want fire-arms."

"I have my revolvers," said Glenarvan.

"And I have mine," replied Robert.

"But what's the good of them?" said Tom Austin, "unless Monsieur Paganel can find out some way of making powder."

"We don't need it," replied McNabbs, exhibiting a powder flask in a perfect state of preservation.

"Where did you get it from, Major," asked Paganel.

"From Thalcave. He thought it might be useful to us, and gave it to me before he plunged into the water to save Thaouka."

"Generous, brave Indian!" exclaimed Glenarvan.

"Yes," replied Tom Austin, "if all the Patagonians are cut after the same pattern, I must compliment Patagonia."

"I protest against leaving out the horse," said Paganel. "He is part and parcel of the Patagonian, and I'm much mistaken if we don't see them again, the one on the other's back."

"What distance are we from the Atlantic?" asked the Major.

"About forty miles at the outside," replied Paganel; "and now, friends, since this is Liberty Hall, I beg to take leave of you. I am going to choose an observatory for myself up there, and by the help of my telescope, let you know how things are going on in the world."

Forthwith the geographer set off, hoisting himself up very cleverly from bough to bough, till he disappeared beyond the thick foliage. His companions began to arrange the night quarters, and prepare their beds. But this was neither a long nor difficult task, and very soon they resumed their seats round the fire to have a talk.

As usual their theme was Captain Grant. In three days, should the water subside, they would be on board the DUNCAN once more. But Harry Grant and his two sailors, those poor shipwrecked fellows, would not be with them. Indeed, it even seemed after this ill success and this useless journey across America, that all chance of finding them was gone forever. Where could they commence a fresh quest? What grief Lady Helena and Mary Grant would feel on hearing there was no further hope.

"Poor sister!" said Robert. "It is all up with us."

For the first time Glenarvan could not find any comfort to give him. What could he say to the lad?
Had they not searched exactly where the document stated?

"And yet," he said, "this thirty-seventh degree of latitude is not a mere figure, and that it applies to the shipwreck or captivity of Harry Grant, is no mere guess or supposition. We read it with our own eyes."

"All very true, your Honor," replied Tom Austin, "and yet our search has been unsuccessful."

"It is both a provoking and hopeless business," replied Glenarvan.

"Provoking enough, certainly," said the Major, "but not hopeless. It is precisely because we have an uncon-testable figure, provided for us, that we should follow it up to the end."

"What do you mean?" asked Glenarvan. "What more can we do?"

"A very logical and simple thing, my dear Edward. When we go on board the DUNCAN, turn her beak head to the east, and go right along the thirty-seventh parallel till we come back to our starting point if necessary."

"Do you suppose that I have not thought of that, Mr. McNabbs?" replied Glenarvan. "Yes, a hundred times. But what chance is there of success? To leave the American continent, wouldn't it be to go away from the very spot indicated by Harry Grant, from this very Patagonia so distinctly named in the document?"

"And would you recommence your search in the Pampas, when you have the certainty that the shipwreck of the BRITANNIA neither occurred on the coasts of the Pacific nor the Atlantic?"

Glenarvan was silent.

"And however small the chance of finding Harry Grant by following up the given parallel, ought we not to try?"

"I don't say no," replied Glenarvan.

"And are you not of my opinion, good friends," added the Major, addressing the sailors.

"Entirely," said Tom Austin, while Mulrady and Wilson gave an assenting nod.

"Listen to me, friends," said Glenarvan after a few minutes' reflection; "and remember, Robert, this is a grave discussion. I will do my utmost to find Captain Grant; I am pledged to it, and will devote my whole life to the task if needs be. All Scotland would unite with me to save so devoted a son as he has been to her. I too quite think with you that we must follow the thirty-seventh parallel round the globe if necessary, however slight our chance of finding him. But that is not the question we have to settle. There is one much more important than that is--should we from this time, and all together, give up our search on the American continent?"

No one made any reply. Each one seemed afraid to pronounce the word.

"Well?" resumed Glenarvan, addressing himself especially to the Major.

"My dear Edward," replied McNabbs, "it would be incurring too great a responsibility for me to reply _hic et nunc_. It is a question which requires reflection. I must know first, through which countries the thirty-seventh parallel of southern latitude passes?"

"That's Paganel's business; he will tell you that," said Glenarvan.

"Let's ask him, then," replied the Major.

But the learned geographer was nowhere to be seen. He was hidden among the thick leafage of the OMBU, and they must call out if they wanted him.

"Paganel, Paganel!" shouted Glenarvan.

"Here," replied a voice that seemed to come from the clouds.

"Where are you?"

"In my tower."

"What are you doing there?"

"Examining the wide horizon."

"Could you come down for a minute?"

"Do you want me?"

"Yes."

"What for?"

"To know what countries the thirty-seventh parallel passes through."

"That's easily said. I need not disturb myself to come down for that."

"Very well, tell us now."

"Listen, then. After leaving America the thirty-seventh parallel crosses the Atlantic Ocean."

"And then?"

"It encounters Isle Tristan d'Acunha."

"Yes."

"It goes on two degrees below the Cape of Good Hope."

"And afterwards?"

"Runs across the Indian Ocean, and just touches Isle St. Pierre, in the Amsterdam group."

"Go on."
"It cuts Australia by the province of Victoria."
"And then."
"After leaving Australia in--"
This last sentence was not completed. Was the geographer hesitating, or didn't he know what to say?
No; but a terrible cry resounded from the top of the tree. Glenarvan and his friends turned pale and looked at
each other. What fresh catastrophe had happened now? Had the unfortunate Paganel slipped his footing?
Already Wilson and Mulrady had rushed to his rescue when his long body appeared tumbling down from branch
to branch.
But was he living or dead, for his hands made no attempt to seize anything to stop himself. A few minutes more,
and he would have fallen into the roaring waters had not the Major's strong arm barred his passage.
"Much obliged, McNabbs," said Paganel.
"How's this? What is the matter with you? What came over you? Another of your absent fits."
"Yes, yes," replied Paganel, in a voice almost inarticulate with emotion. "Yes, but this was something
extraordinary."
"What was it?"
"I said we had made a mistake. We are making it still, and have been all along."
"Explain yourself."
"Glenarvan, Major, Robert, my friends," exclaimed Paganel, "all you that hear me, we are looking for Captain
Grant where he is not to be found."
"What do you say?" exclaimed Glenarvan.
"Not only where he is not now, but where he has never been."
CHAPTER XXIV PAGANEL'S DISCLOSURE
PROFOUND astonishment greeted these unexpected words of the learned geographer. What could he mean?
Had he lost his sense? He spoke with such conviction, however, that all eyes turned toward Glenarvan, for Paganel's
affirmation was a direct answer to his question, but Glenarvan shook his head, and said nothing, though evidently he
was not inclined to favor his friend's views.
"Yes," began Paganel again, as soon as he had recovered himself a little; "yes, we have gone a wrong track, and
read on the document what was never there."
"Explain yourself, Paganel," said the Major, "and more calmly if you can."
"The thing is very simple, Major. Like you, I was in error; like you, I had rushed at a false interpretation, until
about an instant ago, on the top of the tree, when I was answering your questions, just as I pronounced the word
'Australia,' a sudden flash came across my mind, and the document became clear as day."
"What!" exclaimed Glenarvan, "you mean to say that Harry Grant--"
"I mean to say," replied Paganel, "that the word AUSTRAL that occurs in the document is not a complete word,
as we have supposed up till now, but just the root of the word AUSTRALIE."
"Well, that would be strange," said the Major.
"Strange!" repeated Glenarvan, shrugging his shoulders; "it is simply impossible."
"Impossible!" returned Paganel. "That is a word we don't allow in France."
"What!" continued Glenarvan, in a tone of the most profound incredulity, "you dare to contend, with the
document in your hand, that the shipwreck of the BRITANNIA happened on the shores of Australia."
"I am sure of it," replied Paganel.
"My conscience," exclaimed Glenarvan, "I must say I am surprised at such a declaration from the Secretary of a
Geographical Society!"
"And why so?" said Paganel, touched in his weak point.
"Because, if you allow the word AUSTRALIE! you must also allow the word INDIENS, and Indians are never
seen there."
Paganel was not the least surprised at this rejoinder. Doubtless he expected it, for he began to smile, and said:
"My dear Glenarvan, don't triumph over me too fast. I am going to floor you completely, and never was an
Englishman more thoroughly defeated than you will be. It will be the revenge for Cressy and Agincourt."
"I wish nothing better. Take your revenge, Paganel."
"Listen, then. In the text of the document, there is neither mention of the Indians nor of Patagonia! The
incomplete word INDI does not mean INDIENS, but of course, INDIGENES, aborigines! Now, do you admit that
there are aborigines in Australia?"
"Bravo, Paganel!" said the Major.
"Well, do you agree to my interpretation, my dear Lord?" asked the geographer again.
"Yes," replied Glenarvan, "if you will prove to me that the fragment of a word GONIE, does not refer to the
country of the Patagonians."

"Certainly it does not. It has nothing to do with Patagonia," said Paganel. "Read it any way you please except that."

"How?"

"Cosmogonie, theogonie, agonie_."

"AGONIE," said the Major.

"I don't care which," returned Paganel. "The word is quite unimportant; I will not even try to find out its meaning. The main point is that AUSTRAL means AUSTRALIE, and we must have gone blindly on a wrong track not to have discovered the explanation at the very beginning, it was so evident. If I had found the document myself, and my judgment had not been misled by your interpretation, I should never have read it differently."

A burst of hurrahs, and congratulations, and compliments followed Paganel's words. Austin and the sailors, and the Major and Robert, most all overjoyed at this fresh hope, applauded him heartily; while even Glenarvan, whose eyes were gradually getting open, was almost prepared to give in.

"I only want to know one thing more, my dear Paganel," he said, "and then I must bow to your perspicacity."

"What is it?"

"How will you group the words together according to your new interpretation? How will the document read?"

"Easily enough answered. Here is the document," replied Paganel, taking out the precious paper he had been studying so conscientiously for the last few days.

For a few minutes there was complete silence, while the worthy SAVANT took time to collect his thoughts before complying with his lordship's request. Then putting his finger on the words, and emphasizing some of them, he began as follows:

"Le 7 juin 1862 le trois-mats Britannia de Glasgow a sombre apres _, put, if you please, ', deux jours, trois jours_, or ', une longue agonie_, it doesn't signify, it is quite a matter of indifference,--' sur les cotes de l'Australie. Se dirigeant a terre, deux matelots et le Capitaine Grant vont essayer d'aborder _, or ', ont aborde le continent ou ils seront_, or ', sont prisonniers de cruels indigenes. Ils ont jete ce documents_, etc. Is that clear?"

"Clear enough," replied Glenarvan, "if the word continent can be applied to Australia, which is only an island."

"Make yourself easy about that, my dear Glenarvan; the best geographers have agreed to call the island the Australian Continent."

"Then all I have now to say is, my friends," said Glenarvan, "away to Australia, and may Heaven help us!"

"To Australia!" echoed his companions, with one voice.

"I tell you what, Paganel," added Glenarvan, "your being on board the DUNCAN is a perfect providence."

"All right. Look on me as a messenger of providence, and let us drop the subject."

So the conversation ended—a conversation which great results were to follow; it completely changed the moral condition of the travelers; it gave the clew of the labyrinth in which they had thought themselves hopelessly entangled, and, amid their ruined projects, inspired them with fresh hope. They could now quit the American Continent without the least hesitation, and already their thoughts had flown to the Australias. In going on board the DUNCAN again they would not bring despair with them, and Lady Helena and Mary Grant would not have to mourn the irrevocable loss of Captain Grant. This thought so filled them with joy that they forgot all the dangers of their actual situation, and only regretted that they could not start immediately.

It was about four o'clock in the afternoon, and they determined to have supper at six. Paganel wished to get up a splendid spread in honor of the occasion, but as the materials were very scanty, he proposed to Robert to go and hunt in the neighboring forest. Robert clapped his hands at the idea, so they took Thalcave's powder flask, cleaned the revolvers and loaded them with small shot, and set off.

"Don't go too far," said the Major, gravely, to the two hunters.

After their departure, Glenarvan and McNabbs went down to examine the state of the water by looking at the notches they had made on the tree, and Wilson and Mulrady replenished the fire.

No sign of decrease appeared on the surface of the immense lake, yet the flood seemed to have reached its maximum height; but the violence with which it rushed from the south to north proved that the equilibrium of the Argentine rivers was not restored. Before getting lower the liquid mass must remain stationary, as in the case with the ocean before the ebb tide commences.

While Glenarvan and his cousin were making these observations, the report of firearms resounded frequently above their heads, and the jubilant outcries of the two sportsmen—for Paganel was every whit as much a child as Robert. They were having a fine time of it among the thick leaves, judging by the peals of laughter which rang out in the boy's clear treble voice and Paganel's deep bass. The chase was evidently successful, and wonders in culinary art might be expected. Wilson had a good idea to begin with, which he had skilfully carried out; for when Glenarvan
came back to the brasier, he found that the brave fellow had actually managed to catch, with only a pin and a piece of string, several dozen small fish, as delicate as smelts, called MOJARRAS, which were all jumping about in a fold of his poncho, ready to be converted into an exquisite dish.

At the same moment the hunters reappeared. Paganel was carefully carrying some black swallows’ eggs, and a string of sparrows, which he meant to serve up later under the name of field larks. Robert had been clever enough to bring down several brace of HILGUEROS, small green and yellow birds, which are excellent eating, and greatly in demand in the Montevideo market. Paganel, who knew fifty ways of dressing eggs, was obliged for this once to be content with simply hardening them on the hot embers. But notwithstanding this, the viands at the meal were both dainty and varied. The dried beef, hard eggs, grilled MOJARRAS, sparrows, and roast HILGUEROS, made one of those gala feasts the memory of which is imperishable.

The conversation was very animated. Many compliments were paid Paganel on his twofold talents as hunter and cook, which the SAVANT accepted with the modesty which characterizes true merit. Then he turned the conversation on the peculiarities of the OMBU, under whose canopy they had found shelter, and whose depths he declared were immense.

"Robert and I," he added, jestingly, "thought ourselves hunting in the open forest. I was afraid, for the minute, we should lose ourselves, for I could not find the road. The sun was sinking below the horizon; I sought vainly for footmarks; I began to feel the sharp pangs of hunger, and the gloomy depths of the forest resounded already with the roar of wild beasts. No, not that; there are no wild beasts here, I am sorry to say."

"What!" exclaimed Glenarvan, "you are sorry there are no wild beasts?"

"Certainly I am."

"And yet we should have every reason to dread their ferocity."

"Their ferocity is non-existent, scientifically speaking," replied the learned geographer.

"Now come, Paganel," said the Major, "you'll never make me admit the utility of wild beasts. What good are they?"

"Why, Major," exclaimed Paganel, "for purposes of classification into orders, and families, and species, and subspecies."

"A mighty advantage, certainly!" replied McNabbs, "I could dispense with all that. If I had been one of Noah’s companions at the time of the deluge, I should most assuredly have hindered the imprudent patriarch from putting in pairs of lions, and tigers, and panthers, and bears, and such animals, for they are as malevolent as they are useless."

"You would have done that?" asked Paganel.

"Yes, I would."

"Well, you would have done wrong in a zoological point of view," returned Paganel.

"But not in a humanitarian one," rejoined the Major.

"It is shocking!" replied Paganel. "Why, for my part, on the contrary, I should have taken special care to preserve megatheriums and pterodactyles, and all the antediluvian species of which we are unfortunately deprived by his neglect."

"And I say," returned McNabbs, "that Noah did a very good thing when he abandoned them to their fate--that is, if they lived in his day."

"And I say he did a very bad thing," retorted Paganel, "and he has justly merited the malediction of SAVANTS to the end of time!"

The rest of the party could not help laughing at hearing the two friends disputing over old Noah. Contrary to all his principles, the Major, who all his life had never disputed with anyone, was always sparring with Paganel. The geographer seemed to have a peculiarly exciting effect on him.

Glenarvan, as usual, always the peacemaker, interfered in the debate, and said:

"Whether the loss of ferocious animals is to be regretted or not, in a scientific point of view, there is no help for it now; we must be content to do without them. Paganel can hardly expect to meet with wild beasts in this aerial forest."

"Why not?" asked the geographer.

"Wild beasts on a tree!" exclaimed Tom Austin.

"Yes, undoubtedly. The American tiger, the jaguar, takes refuge in the trees, when the chase gets too hot for him. It is quite possible that one of these animals, surprised by the inundation, might have climbed up into this OMBU, and be hiding now among its thick foliage."

"You haven’t met any of them, at any rate, I suppose?" said the Major.

"No," replied Paganel, "though we hunted all through the wood. It is vexing, for it would have been a splendid chase. A jaguar is a bloodthirsty, ferocious creature. He can twist the neck of a horse with a single stroke of his paw. When he has once tasted human flesh he scents it greedily. He likes to eat an Indian best, and next to him a negro,
then a mulatto, and last of all a white man,"

"I am delighted to hear we come number four," said McNabbs.

"That only proves you are insipid," retorted Paganel, with an air of disdain.

"I am delighted to be insipid," was the Major's reply.

"Well, it is humiliating enough," said the intractable Paganel. "The white man proclaimed himself chief of the human race; but Mr. Jaguar is of a different opinion it seems."

"Be that as it may, my brave Paganel, seeing there are neither Indians, nor negroes, nor mulattoes among us, I am quite rejoiced at the absence of your beloved jaguars. Our situation is not so particularly agreeable."

"What! not agreeable!" exclaimed Paganel, jumping at the word as likely to give a new turn to the conversation.

"You are complaining of your lot, Glenarvan."

"I should think so, indeed," replied Glenarvan. "Do you find these uncomfortable hard branches very luxurious?"

"I have never been more comfortable, even in my study. We live like the birds, we sing and fly about. I begin to believe men were intended to live on trees."

"But they want wings," suggested the Major.

"They'll make them some day."

"And till then," put in Glenarvan, "with your leave, I prefer the gravel of a park, or the floor of a house, or the deck of a ship, to this aerial dwelling."

"We must take things as they come, Glenarvan," returned Paganel. "If good, so much the better; if bad, never mind. Ah, I see you are wishing you had all the comforts of Malcolm Castle."

"No, but--"

"I am quite certain Robert is perfectly happy," interrupted Paganel, eager to insure one partisan at least.

"Yes, that I am!" exclaimed Robert, in a joyous tone.

"At his age it is quite natural," replied Glenarvan.

"And at mine, too," returned the geographer. "The fewer one's comforts, the fewer one's needs; and the fewer one's needs, the greater one's happiness."

"Now, now," said the Major, "here is Paganel running a tilt against riches and gilt ceilings."

"No, McNabbs," replied the SAVANT, "I'm not; but if you like, I'll tell you a little Arabian story that comes into my mind, very APROPOS this minute."

"Oh, do, do," said Robert.

"And what is your story to prove, Paganel?" inquired the Major.

"Much what all stories prove, my brave comrade."

"Not much then," rejoined McNabbs. "But go on, Scheherazade, and tell us the story."

"There was once," said Paganel, "a son of the great Haroun-al-Raschid, who was unhappy, and went to consult an old Dervish. The old sage told him that happiness was a difficult thing to find in this world. 'However,' he added, 'I know an infallible means of procuring your happiness.' 'What is it?' asked the young Prince. 'It is to put the shirt of a happy man on your shoulders.' Whereupon the Prince embraced the old man, and set out at once to search for his talisman. He visited all the capital cities in the world. He tried on the shirts of kings, and emperors, and princes and nobles; but all in vain: he could not find a man among them that was happy. Then he put on the shirts of artists, and warriors, and merchants; but these were no better. By this time he had traveled a long way, without finding what he sought. At last he began to despair of success, and began sorrowfully to retrace his steps back to his father's palace, when one day he heard an honest peasant singing so merrily as he drove the plow, that he thought, 'Surely this man is happy, if there is such a thing as happiness on earth.' Forthwith he accosted him, and said, 'Are you happy?' 'Yes,' was the reply. 'There is nothing you desire?' 'Nothing.' 'You would not change your lot for that of a king?' 'Never!' 'Well, then, sell me your shirt.' 'My shirt! I haven't one!'''

CHAPTER XXV BETWEEN FIRE AND WATER

BEFORE turning into 'their nest,' as Paganel had called it, he, and Robert, and Glenarvan climbed up into the observatory to have one more inspection of the liquid plain. It was about nine o'clock; the sun had just sunk behind the glowing mists of the western horizon.

The eastern horizon was gradually assuming a most stormy aspect. A thick dark bar of cloud was rising higher and higher, and by degrees extinguishing the stars. Before long half the sky was overspread. Evidently motive power lay in the cloud itself, for there was not a breath of wind. Absolute calm reigned in the atmosphere; not a leaf stirred on the tree, not a ripple disturbed the surface of the water. There seemed to be scarcely any air even, as though some vast pneumatic machine had rarefied it. The entire atmosphere was charged to the utmost with electricity, the presence of which sent a thrill through the whole nervous system of all animated beings.

"We are going to have a storm," said Paganel.

"You're not afraid of thunder, are you, Robert?" asked Glenarvan.
"No, my Lord!" exclaimed Robert. "Well, my boy, so much the better, for a storm is not far off."
"And a violent one, too," added Paganel, "if I may judge by the look of things."
"It is not the storm I care about," said Glenarvan, "so much as the torrents of rain that will accompany it. We shall be soaked to the skin. Whatever you may say, Paganel, a nest won't do for a man, and you will learn that soon, to your cost."
"With the help of philosophy, it will," replied Paganel.
"Philosophy! that won't keep you from getting drenched."
"No, but it will warm you."
"Well," said Glenarvan, "we had better go down to our friends, and advise them to wrap themselves up in their philosophy and their ponchos as tightly as possible, and above all, to lay in a stock of patience, for we shall need it before very long."

Glenarvan gave a last glance at the angry sky. The clouds now covered it entirely; only a dim streak of light shone faintly in the west. A dark shadow lay on the water, and it could hardly be distinguished from the thick vapors above it. There was no sensation of light or sound. All was darkness and silence around.

"Let us go down," said Glenarvan; "the thunder will soon burst over us."

On returning to the bottom of the tree, they found themselves, to their great surprise, in a sort of dim twilight, produced by myriads of luminous specks which appeared buzzing confusedly over the surface of the water.

"It is phosphorescence, I suppose," said Glenarvan.

"No, but phosphorescent insects, positive glow-worms, living diamonds, which the ladies of Buenos Ayres convert into magnificent ornaments."

"What!" exclaimed Robert, "those sparks flying about are insects!"

"Yes, my boy."

Robert caught one in his hand, and found Paganel was right. It was a kind of large drone, an inch long, and the Indians call it "tucu-tucu." This curious specimen of the COLEOPTERA sheds its radiance from two spots in the front of its breast-plate, and the light is sufficient to read by. Holding his watch close to the insect, Paganel saw distinctly that the time was 10 P. M.

On rejoining the Major and his three sailors, Glenarvan warned them of the approaching storm, and advised them to secure themselves in their beds of branches as firmly as possible, for there was no doubt that after the first clap of thunder the wind would become unchained, and the OMBU would be violently shaken. Though they could not defend themselves from the waters above, they might at least keep out of the rushing current beneath.

They wished one another "good-night," though hardly daring to hope for it, and then each one rolled himself in his poncho and lay down to sleep.

But the approach of the great phenomena of nature excites vague uneasiness in the heart of every sentient being, even in the most strong-minded. The whole party in the OMBU felt agitated and oppressed, and not one of them could close his eyes. The first peal of thunder found them wide awake. It occurred about 11 P. M., and sounded like a distant rolling. Glenarvan ventured to creep out of the sheltering foliage, and made his way to the extremity of the horizontal branch to take a look round.

The deep blackness of the night was already scarified with sharp bright lines, which were reflected back by the water with unerring exactness. The clouds had rent in many parts, but noislessly, like some soft cotton material. After attentively observing both the zenith and horizon, Glenarvan went back to the center of the trunk.

"Well, Glenarvan, what's your report?" asked Paganel.

"I say it is beginning in good earnest, and if it goes on so we shall have a terrible storm."

"So much the better," replied the enthusiastic Paganel; "I should like a grand exhibition, since we can't run away."

"That's another of your theories," said the Major.

"And one of my best, McNabbs. I am of Glenarvan's opinion, that the storm will be superb. Just a minute ago, when I was trying to sleep, several facts occurred to my memory, that make me hope it will, for we are in the region of great electrical tempests. For instance, I have read somewhere, that in 1793, in this very province of Buenos Ayres, lightning struck thirty-seven times during one single storm. My colleague, M. Martin de Mouussy, counted fifty-five minutes of uninterrupted rolling."

"Watch in hand?" asked the Major.

"Watch in hand. Only one thing makes me uneasy," added Paganel, "if it is any use to be uneasy, and that is, that the culminating point of this plain, is just this very OMBU where we are. A lightning conductor would be very serviceable to us at present. For it is this tree especially, among all that grow in the Pampas, that the thunder has a particular affection for. Besides, I need not tell you, friend, that learned men tell us never to take refuge under trees during a storm."
"Most seasonable advice, certainly, in our circumstances," said the Major.
"I must confess, Paganel," replied Glenarvan, "that you might have chosen a better time for this reassuring information."
"Bah!" replied Paganel, "all times are good for getting information. Ha! now it's beginning."
Louder peals of thunder interrupted this inopportune conversation, the violence increasing with the noise till the whole atmosphere seemed to vibrate with rapid oscillations.
The incessant flashes of lightning took various forms. Some darted down perpendicularly from the sky five or six times in the same place in succession. Others would have excited the interest of a SAVANT to the highest degree, for though Arago, in his curious statistics, only cites two examples of forked lightning, it was visible here hundreds of times. Some of the flashes branched out in a thousand different directions, making coralliform zigzags, and threw out wonderful jets of arborescent light.

Soon the whole sky from east to north seemed supported by a phosphoric band of intense brilliancy. This kept increasing by degrees till it overspread the entire horizon, kindling the clouds which were faithfully mirrored in the waters as if they were masses of combustible material, beneath, and presented the appearance of an immense globe of fire, the center of which was the OMBU.

Glenarvan and his companions gazed silently at this terrifying spectacle. They could not make their voices heard, but the sheets of white light which enwrapped them every now and then, revealed the face of one and another, sometimes the calm features of the Major, sometimes the eager, curious glance of Paganel, or the energetic face of Glenarvan, and at others, the scared eyes of the terrified Robert, and the careless looks of the sailors, investing them with a weird, spectral aspect.

However, as yet, no rain had fallen, and the wind had not risen in the least. But this state of things was of short duration; before long the cataracts of the sky burst forth, and came down in vertical streams. As the large drops fell splashing into the lake, fiery sparks seemed to fly out from the illuminated surface.

Was the rain the FINALE of the storm? If so, Glenarvan and his companions would escape scot free, except for a few vigorous douche baths. No. At the very height of this struggle of the electric forces of the atmosphere, a large ball of fire appeared suddenly at the extremity of the horizontal parent branch, as thick as a man's wrist, and surrounded with black smoke. This ball, after turning round and round for a few seconds, burst like a bombshell, and with so much noise that the explosion was distinctly audible above the general FRACAS. A sulphurous smoke filled the air, and complete silence reigned till the voice of Tom Austin was heard shouting:

"The tree is on fire."

Tom was right. In a moment, as if some fireworks were being ignited, the flame ran along the west side of the OMBU; the dead wood and nests of dried grass, and the whole sap, which was of a spongy texture, supplied food for its devouring activity.

The wind had risen now and fanned the flame. It was time to flee, and Glenarvan and his party hurried away to the eastern side of their refuge, which was meantime untouched by the fire. They were all silent, troubled, and terrified, as they watched branch after branch shrivel, and crack, and writhe in the flame like living serpents, and then drop into the swollen torrent, still red and gleaming, as it was borne swiftly along on the rapid current. The flames sometimes rose to a prodigious height, and seemed almost lost in the atmosphere, and sometimes, beaten down by the hurricane, closely enveloped the OMBU like a robe of Nessus. Terror seized the entire group. They were almost suffocated with smoke, and scorched with the unbearable heat, for the conflagration had already reached the lower branches on their side of the OMBU. To extinguish it or check its progress was impossible; and they saw themselves irrevocably condemned to a torturing death, like the victims of Hindoo divinities.

At last, their situation was absolutely intolerable. Of the two deaths staring them in the face, they had better choose the less cruel.

"To the water!" exclaimed Glenarvan.

Wilson, who was nearest the flames, had already plunged into the lake, but next minute he screamed out in the most violent terror:

"Help! Help!"

Austin rushed toward him, and with the assistance of the Major, dragged him up again on the tree.

"What's the matter?" they asked.

"Alligators! alligators!" replied Wilson.

The whole foot of the tree appeared to be surrounded by these formidable animals of the Saurian order. By the glare of the flames, they were immediately recognized by Paganel, as the ferocious species peculiar to America, called CAIMANS in the Spanish territories. About ten of them were there, lashing the water with their powerful tails, and attacking the OMBU with the long teeth of their lower jaw.

At this sight the unfortunate men gave themselves up to be lost. A frightful death was in store for them, since
they must either be devoured by the fire or by the caimans. Even the Major said, in a calm voice:

"This is the beginning of the end, now."

There are circumstances in which men are powerless, when the unchained elements can only be combated by other elements. Glenarvan gazed with haggard looks at the fire and water leagued against him, hardly knowing what deliverance to implore from Heaven.

The violence of the storm had abated, but it had developed in the atmosphere a considerable quantity of vapors, to which electricity was about to communicate immense force. An enormous water-spout was gradually forming in the south-- a cone of thick mists, but with the point at the bottom, and base at the top, linking together the turbulent water and the angry clouds. This meteor soon began to move forward, turning over and over on itself with dizzy rapidity, and sweeping up into its center a column of water from the lake, while its gyratory motions made all the surrounding currents of air rush toward it.

A few seconds more, and the gigantic water-spout threw itself on the OMBU, and caught it up in its whirl. The tree shook to its roots. Glenarvan could fancy the caimans' teeth were tearing it up from the soil; for as he and his companions held on, each clinging firmly to the other, they felt the towering OMBU give way, and the next minute it fell right over with a terrible hissing noise, as the flaming branches touched the foaming water.

It was the work of an instant. Already the water-spout had passed, to carry on its destructive work elsewhere. It seemed to empty the lake in its passage, by continually drawing up the water into itself.

The OMBU now began to drift rapidly along, impelled by wind and current. All the caimans had taken their departure, except one that was crawling over the upturned roots, and coming toward the poor refugees with wide open jaws. But Mulrady, seizing hold of a branch that was half-burned off, struck the monster such a tremendous blow, that it fell back into the torrent and disappeared, lashing the water with its formidable tail.

Glenarvan and his companions being thus delivered from the voracious SAURIANS, stationed themselves on the branches windward of the conflagration, while the OMBU sailed along like a blazing fire-ship through the dark night, the flames spreading themselves round like sails before the breath of the hurricane.

CHAPTER XXVI THE RETURN ON BOARD

FOR two hours the OMBU navigated the immense lake without reaching _terra firma_. The flames which were devouring it had gradually died out. The chief danger of their frightful passage was thus removed, and the Major went the length of saying, that he should not be surprised if they were saved after all.

The direction of the current remained unchanged, always running from southwest to northeast. Profound darkness had again set in, only illumined here and there by a parting flash of lightning. The storm was nearly over. The rain had given place to light mists, which a breath of wind dispersed, and the heavy masses of cloud had separated, and now streaked the sky in long bands.

The OMBU was borne onward so rapidly by the impetuous torrent, that anyone might have supposed some powerful locomotive engine was hidden in its trunk. It seemed likely enough they might continue drifting in this way for days. About three o'clock in the morning, however, the Major noticed that the roots were beginning to graze the ground occasionally, and by sounding the depth of the water with a long branch, Tom Austin found that they were getting on rising ground. Twenty minutes afterward, the OMBU stopped short with a violent jolt.

"Land! land!" shouted Paganel, in a ringing tone.

The extremity of the calcined bough had struck some hillock, and never were sailors more glad; the rock to them was the port.

Already Robert and Wilson had leaped on to the solid plateau with a loud, joyful hurrah! when a well-known whistle was heard. The gallop of a horse resounded over the plain, and the tall form of Thalcave emerged from the dark night, the flames spreading themselves round like sails before the breath of the hurricane.

"Thalcave! Thalcave!" they all cried with one voice.

"Amigos!" replied the Patagonian, who had been waiting for the travelers here in the same place where the current had landed himself.

As he spoke he lifted up Robert in his arms, and hugged him to his breast, never imagining that Paganel was hanging on to him. A general and hearty hand-shaking followed, and everyone rejoiced at seeing their faithful guide again. Then the Patagonian led the way into the HANGAR of a deserted ESTANCIA, where there was a good, blazing fire to warm them, and a substantial meal of fine, juicy slices of venison soon broiling, of which they did not leave a crumb. When their minds had calmed down a little, and they were able to reflect on the dangers they had come through from flood, and fire, and alligators, they could scarcely believe they had escaped.

Thalcave, in a few words, gave Paganel an account of himself since they parted, entirely ascribing his deliverance to his intrepid horse. Then Paganel tried to make him understand their new interpretation of the document, and the consequent hopes they were indulging. Whether the Indian actually understood his ingenious hypothesis was a question; but he saw that they were glad and confident, and that was enough for him.
As can easily be imagined, after their compulsory rest on the OMBU, the travelers were up betimes and ready to start. At eight o'clock they set off. No means of transport being procurable so far south, they were compelled to walk. However, it was not more than forty miles now that they had to go, and Thaouka would not refuse to give a lift occasionally to a tired pedestrian, or even to a couple at a pinch. In thirty-six hours they might reach the shores of the Atlantic.

The low-lying tract of marshy ground, still under water, soon lay behind them, as Thalcave led them upward to the higher plains. Here the Argentine territory resumed its monotonous aspect. A few clumps of trees, planted by European hands, might chance to be visible among the pasturage, but quite as rarely as in Tandil and Tapalquem Sierras. The native trees are only found on the edge of long prairies and about Cape Corrientes.

Next day, though still fifteen miles distant, the proximity of the ocean was sensibly felt. The VIRAZON, a peculiar wind, which blows regularly half of the day and night, bent down the heads of the tall grasses. Thinly planted woods rose to view, and small tree-like mimosa-s, bushes of acacia, and tufts of CURRA-MANTEL. Here and there, shining like pieces of broken glass, were salinous lagoons, which increased the difficulty of the journey as the travelers had to wind round them to get past. They pushed on as quickly as possible, hoping to reach Lake Salado, on the shores of the ocean, the same day; and at 8 P. M., when they found themselves in front of the sand hills two hundred feet high, which skirt the coast, they were all tolerably tired. But when the long murmur of the distant ocean fell on their ears, the exhausted men forgot their fatigue, and ran up the sandhills with surprising agility. But it was getting quite dark already, and their eager gaze could discover no traces of the DUNCAN on the gloomy expanse of water that met their sight.

"But she is there, for all that," exclaimed Glenarvan, "waiting for us, and running alongside."

"We shall see her to-morrow," replied McNabbs.

Tom Austin hailed the invisible yacht, but there was no response. The wind was very high and the sea rough. The clouds were scudding along from the west, and the spray of the waves dashed up even to the sand-hills. It was little wonder, then, if the man on the look-out could neither hear nor make himself heard, supposing the DUNCAN were there. There was no shelter on the coast for her, neither bay nor cove, nor port; not so much as a creek. The shore was composed of sand-banks which ran out into the sea, and were more dangerous to approach than rocky shoals. The sand-banks irritate the waves, and make the sea so particularly rough, that in heavy weather vessels that run aground there are invariably dashed to pieces.

Though, then, the DUNCAN would keep far away from such a coast, John Mangles is a prudent captain to get near. Tom Austin, however, was of the opinion that she would be able to keep five miles out.

The Major advised his impatient relative to restrain himself to circumstances. Since there was no means of dissipating the darkness, what was the use of straining his eyes by vainly endeavoring to pierce through it.

He set to work immediately to prepare the night's encampment beneath the shelter of the sand-hills; the last provisions supplied the last meal, and afterward, each, following the Major's example, scooped out a hole in the sand, which made a comfortable enough bed, and then covered himself with the soft material up to his chin, and fell into a heavy sleep.

But Glenarvan kept watch. There was still a stiff breeze of wind, and the ocean had not recovered its equilibrium after the recent storm. The waves, at all times tumultuous, now broke over the sand-banks with a noise like thunder. Glenarvan could not rest, knowing the DUNCAN was so near him. As to supposing she had not arrived at the appointed rendezvous, that was out of the question. Glenarvan had left the Bay of Talcahuano on the 14th of October, and arrived on the shores of the Atlantic on the 12th of November. He had taken thirty days to cross Chili, the Cordilleras, the Pampas, and the Argentine plains, giving the DUNCAN ample time to double Cape Horn, and arrive on the opposite side. For such a fast runner there were no impediments. Certainly the storm had been very violent, and its fury must have been terrible on such a vast battlefield as the Atlantic, but the yacht was a good ship, and the captain was a good sailor. He was bound to be there, and he would be there.

These reflections, however, did not calm Glenarvan. When the heart and the reason are struggling, it is generally the heart that wins the mastery. The laird of Malcolm Castle felt the presence of loved ones about him in the darkness as he wandered up and down the lonely strand. He gazed, and listened, and even fancied he caught occasional glimpses of a faint light.

"I am not mistaken," he said to himself; "I saw a ship's light, one of the lights on the DUNCAN! Oh! why can't I see in the dark?"

All at once the thought rushed across him that Paganel said he was a nyctalope, and could see at night. He must go and wake him.

The learned geographer was sleeping as sound as a mole. A strong arm pulled him up out of the sand and made him call out:

"Who goes there?"
"It is I, Paganel."
"Who?"
"Glenarvan. Come, I need your eyes."
"My eyes," replied Paganel, rubbing them vigorously.
"Yes, I need your eyes to make out the DUNCAN in this darkness, so come."
"Confound the nyctalopia!" said Paganel, inwardly, though delighted to be of any service to his friend.

He got up and shook his stiffened limbs, and stretching and yawning as most people do when roused from sleep, followed Glenarvan to the beach.

Glenarvan begged him to examine the distant horizon across the sea, which he did most conscientiously for some minutes.
"Well, do you see nothing?" asked Glenarvan.
"Not a thing. Even a cat couldn't see two steps before her."

V. IV Verne
"Look for a red light or a green one--her larboard or starboard light."
"I see neither a red nor a green light, all is pitch dark," replied Paganel, his eyes involuntarily beginning to close.

For half an hour he followed his impatient friend, mechanically letting his head frequently drop on his chest, and raising it again with a start. At last he neither answered nor spoke, and he reeled about like a drunken man. Glenarvan looked at him, and found he was sound asleep!

Without attempting to wake him, he took his arm, led him back to his hole, and buried him again comfortably.

At dawn next morning, all the slumberers started to their feet and rushed to the shore, shouting "Hurrah, hurrah!" as Lord Glenarvan's loud cry, "The DUNCAN, the DUNCAN!" broke upon his ear.

There she was, five miles out, her courses carefully reefed, and her steam half up. Her smoke was lost in the morning mist. The sea was so violent that a vessel of her tonnage could not have ventured safely nearer the sand-banks.

Glenarvan, by the aid of Paganel's telescope, closely observed the movements of the yacht. It was evident that John Mangles had not perceived his passengers, for he continued his course as before.

But at this very moment Thalcave fired his carbine in the direction of the yacht. They listened and looked, but no signal of recognition was returned. A second and a third time the Indian fired, awakening the echoes among the sand-hills.

At last a white smoke was seen issuing from the side of the yacht.
"They see us!" exclaimed Glenarvan. "That's the cannon of the DUNCAN."

A few seconds, and the heavy boom of the cannon came across the water and died away on the shore. The sails were instantly altered, and the steam got up, so as to get as near the coast as possible.

Presently, through the glass, they saw a boat lowered.
"Lady Helena will not be able to come," said Tom Austin. "It is too rough."

"Nor John Mangles," added McNabbs; "he cannot leave the ship."

"My sister, my sister!" cried Robert, stretching out his arms toward the yacht, which was now rolling violently.
"Oh, how I wish I could get on board!" said Glenarvan.
"Patience, Edward! you will be there in a couple of hours," replied the Major.

Two hours! But it was impossible for a boat--a six-oared one--to come and go in a shorter space of time.

Glenarvan went back to Thalcave, who stood beside Thaouka, with his arms crossed, looking quietly at the troubled waves.

Glenarvan took his hand, and pointing to the yacht, said: "Come!"
The Indian gently shook his head.
"Come, friend," repeated Glenarvan.

"No," said Thalcave, gently. "Here is Thaouka, and there-- the Pampas," he added, embracing with a passionate gesture the wide-stretching prairies.

Glenarvan understood his refusal. He knew that the Indian would never forsake the prairie, where the bones of his fathers were whitening, and he knew the religious attachment of these sons of the desert for their native land. He did not urge Thalcave longer, therefore, but simply pressed his hand. Nor could he find it in his heart to insist, when the Indian, smiling as usual, would not accept the price of his services, pushing back the money, and saying:
"For the sake of friendship."

Glenarvan could not reply; but he wished at least, to leave the brave fellow some souvenir of his European friends. What was there to give, however? Arms, horses, everything had been destroyed in the unfortunate inundation, and his friends were no richer than himself.

He was quite at a loss how to show his recognition of the disinterestedness of this noble guide, when a happy
thought struck him. He had an exquisite portrait of Lady Helena in his pocket, a CHEF-D'OEUVRE of Lawrence. This he drew out, and offered to Thalcave, simply saying:

"My wife."
The Indian gazed at it with a softened eye, and said:

"Good and beautiful."

Then Robert, and Paganel, and the Major, and the rest, exchanged touching farewells with the faithful Patagonian. Thalcave embraced them each, and pressed them to his broad chest. Paganel made him accept a map of South America and the two oceans, which he had often seen the Indian looking at with interest. It was the most precious thing the geographer possessed. As for Robert, he had only caresses to bestow, and these he lavished on his friend, not forgetting to give a share to Thaouka.

The boat from the DUNCAN was now fast approaching, and in another minute had glided into a narrow channel between the sand-banks, and run ashore.

"My wife?" were Glenarvan's first words.

"My sister?" said Robert.

"Lady Helena and Miss Grant are waiting for you on board," replied the coxswain; "but lose no time your honor, we have not a minute, for the tide is beginning to ebb already."

The last kindly adieux were spoken, and Thalcave accompanied his friends to the boat, which had been pushed back into the water. Just as Robert was going to step in, the Indian took him in his arms, and gazed tenderly into his face. Then he said:

"Now go. You are a man."

"Good-by, good-by, friend!" said Glenarvan, once more.

"Shall we never see each other again?" Paganel called out.

"_Quien sabe? _" (Who knows?) replied Thalcave, lifting his arms toward heaven.

These were the Indian's last words, dying away on the breeze, as the boat receded gradually from the shore. For a long time, his dark, motionless SILHOUETTE stood out against the sky, through the white, dashing spray of the waves. Then by degrees his tall form began to diminish in size, till at last his friends of a day lost sight of him altogether.

An hour afterward Robert was the first to leap on board the DUNCAN. He flung his arms round Mary's neck, amid the loud, joyous hurrahs of the crew on the yacht.

Thus the journey across South America was accomplished, the given line of march being scrupulously adhered to throughout.

Neither mountains nor rivers had made the travelers change their course; and though they had not had to encounter any ill-will from men, their generous intrepidity had been often enough roughly put to the proof by the fury of the unchained elements.

END OF BOOK ONE
principal incidents of the expedition, and especially of the new interpretation of the document, due to the sagacity of Jacques Paganel. His Lordship also spoke in the most eulogistic terms of Robert, of whom Mary might well be proud. His courage and devotion, and the dangers he had run, were all shown up in strong relief by his patron, till the modest boy did not know which way to look, and was obliged to hide his burning cheeks in his sister's arms.

"No need to blush, Robert," said John Mangles. "Your conduct has been worthy of your name." And he leaned over the boy and pressed his lips on his cheek, still wet with Mary's tears.

The Major and Paganel, it need hardly be said, came in for their due share of welcome, and Lady Helena only regretted she could not shake hands with the brave and generous Thalcave. McNabbs soon slipped away to his cabin, and began to shave himself as coolly and composedly as possible; while Paganel flew here and there, like a bee sipping the sweets of compliments and smiles. He wanted to embrace everyone on board the yacht, and beginning with Lady Helena and Mary Grant, wound up with M. Olbinett, the steward, who could only acknowledge so polite an attention by announcing that breakfast was ready.

"Breakfast!" exclaimed Paganel.

"Yes, Monsieur Paganel."

"A real breakfast, on a real table, with a cloth and napkins?"

"Certainly, Monsieur Paganel."

"And we shall neither have CHARQUI, nor hard eggs, nor fillets of ostrich?"

"Oh, Monsieur," said Olbinett in an aggrieved tone.

"I don't want to hurt your feelings, my friend," said the geographer smiling. "But for a month that has been our usual bill of fare, and when we dined we stretched ourselves full length on the ground, unless we sat astride on the trees. Consequently, the meal you have just announced seemed to me like a dream, or fiction, or chimera."

"Well, Monsieur Paganel, come along and let us prove its reality," said Lady Helena, who could not help laughing.

"Take my arm," replied the gallant geographer.

"Has his Lordship any orders to give me about the DUNCAN?" asked John Mangles.

"After breakfast, John," replied Glenarvan, "we'll discuss the program of our new expedition _en famille_."

M. Olbinett's breakfast seemed quite a FETE to the hungry guests. It was pronounced excellent, and even superior to the festivities of the Pampas. Paganel was helped twice to each dish, through "absence of mind," he said. This unlucky word reminded Lady Helena of the amiable Frenchman's propensity, and made her ask if he had ever fallen into his old habits while they were away. The Major and Glenarvan exchanged smiling glances, and Paganel burst out laughing, and protested on his honor that he would never be caught tripping again once more during the whole voyage. After this prelude, he gave an amusing recital of his disastrous mistake in learning Spanish, and his profound study of Camoens. "After all," he added, "it's an ill wind that blows nobody good, and I don't regret the mistake."

"Why not, my worthy friend?" asked the Major.

"Because I not only know Spanish, but Portuguese. I can speak two languages instead of one."

"Upon my word, I never thought of that," said McNabbs. "My compliments, Paganel—my sincere compliments."

But Paganel was too busily engaged with his knife and fork to lose a single mouthful, though he did his best to eat and talk at the same time. He was so much taken up with his plate, however, that one little fact quite escaped his observation, though Glenarvan noticed it at once. This was, that John Mangles had grown particularly attentive to Mary Grant. A significant glance from Lady Helena told him, moreover, how affairs stood, and inspired him with affectionate sympathy for the young lovers; but nothing of this was apparent in his manner to John, for his next question was what sort of a voyage he had made.

"We could not have had a better; but I must apprise your Lordship that I did not go through the Straits of Magellan again."

"What! you doubled Cape Horn, and I was not there!" exclaimed Paganel.

"Hang yourself!" said the Major.

"Selfish fellow! you advise me to do that because you want my rope," retorted the geographer.

"Well, you see, my dear Paganel, unless you have the gift of ubiquity you can't be in two places at once. While you were scouring the pampas you could not be doubling Cape Horn."

"That doesn't prevent my regretting it," replied Paganel.

Here the subject dropped, and John continued his account of his voyage. On arriving at Cape Pilares he had found the winds dead against him, and therefore made for the south, coasting along the Desolation Isle, and after going as far as the sixty-seventh degree southern latitude, had doubled Cape Horn, passed by Terra del Fuego and the Straits of Lemaire, keeping close to the Patagonian shore. At Cape Corrientes they encountered the terrible storm which had handled the travelers across the pampas so roughly, but the yacht had borne it bravely, and for the last
three days had stood right out to sea, till the welcome signal-gun of the expedition was heard announcing the arrival of the anxiously-looked-for party. "It was only justice," the captain added, "that he should mention the intrepid bearing of Lady Helena and Mary Grant throughout the whole hurricane. They had not shown the least fear, unless for their friends, who might possibly be exposed to the fury of the tempest."

After John Mangles had finished his narrative, Glenarvan turned to Mary and said; "My dear Miss Mary, the captain has been doing homage to your noble qualities, and I am glad to think you are not unhappy on board his ship."

"How could I be?" replied Mary naively, looking at Lady Helena, and at the young captain too, likely enough. "Oh, my sister is very fond of you, Mr. John, and so am I," exclaimed Robert.

"And so am I of you, my dear boy," returned the captain, a little abashed by Robert's innocent avowal, which had kindled a faint blush on Mary's cheek. Then he managed to turn the conversation to safer topics by saying: "And now that your Lordship has heard all about the doings of the DUNCAN, perhaps you will give us some details of your own journey, and tell us more about the exploits of our young hero."

Nothing could be more agreeable than such a recital to Lady Helena and Mary Grant; and accordingly Lord Glenarvan hastened to satisfy their curiosity--going over incident by incident, the entire march from one ocean to another, the pass of the Andes, the earthquake, the disappearance of Robert, his capture by the condor, Thalcave's providential shot, the episode of the red wolves, the devotion of the young lad, Sergeant Manuel, the inundations, the caimans, the waterspout, the night on the Atlantic shore-- all these details, amusing or terrible, excited by turns laughter and horror in the listeners. Often and often Robert came in for caresses from his sister and Lady Helena. Never was a boy so much embraced, or by such enthusiastic friends.

"And now, friends," added Lord Glenarvan, when he had finished his narrative, "we must think of the present. The past is gone, but the future is ours. Let us come back to Captain Harry Grant."

As soon as breakfast was over they all went into Lord Glenarvan's private cabin and seated themselves round a table covered with charts and plans, to talk over the matter fully.

"My dear Helena," said Lord Glenarvan, "I told you, when we came on board a little while ago, that though we had not brought back Captain Grant, our hope of finding him was stronger than ever. The result of our journey across America is this: We have reached the conviction, or rather absolute certainty, that the shipwreck never occurred on the shores of the Atlantic nor Pacific. The natural inference is that, as far as regards Patagonia, our interpretation of the document was erroneous. Most fortunately, our friend Paganel, in a happy moment of inspiration, discovered the mistake. He has proved clearly that we have been on the wrong track, and so explained the document that all doubt whatever is removed from our minds. However, as the document is in French, I will ask Paganel to go over it for your benefit."

The learned geographer, thus called upon, executed his task in the most convincing manner, descanting on the syllables GONIE and INDI, and extracting AUSTRALIA out of AUSTRAL. He pointed out that Captain Grant, on leaving the coast of Peru to return to Europe, might have been carried away with his disabled ship by the southern currents of the Pacific right to the shores of Australia, and his hypotheses were so ingenious and his deductions so subtle that even the matter-of-fact John Mangles, a difficult judge, and most unlikely to be led away by any flights of imagination, was completely satisfied.

At the conclusion of Paganel's dissertation, Glenarvan announced that the DUNCAN would sail immediately for Australia.

But before the decisive orders were given, McNabbs asked for a few minutes' hearing.

"Say away, McNabbs," replied Glenarvan.

"I have no intention of weakening the arguments of my friend Paganel, and still less of refuting them. I consider them wise and weighty, and deserving our attention, and think them justly entitled to form the basis of our future researches. But still I should like them to be submitted to a final examination, in order to make their worth incontestable and uncontested."

"Go on, Major," said Paganel; "I am ready to answer all your questions."

"They are simple enough, as you will see. Five months ago, when we left the Clyde, we had studied these same documents, and their interpretation then appeared quite plain. No other coast but the western coast of Patagonia could possibly, we thought, have been the scene of the shipwreck. We had not even the shadow of a doubt on the subject."

"That's true," replied Glenarvan.

"A little later," continued the Major, "when a providential fit of absence of mind came over Paganel, and brought him on board the yacht, the documents were submitted to him and he approved our plan of search most unreservedly."

"I do not deny it," said Paganel.
"And yet we were mistaken," resumed the Major.

"Yes, we were mistaken," returned Paganel; "but it is only human to make a mistake, while to persist in it, a man must be a fool."

"Stop, Paganel, don't excite yourself; I don't mean to say that we should prolong our search in America."

"What is it, then, that you want?" asked Glenarvan.

"A confession, nothing more. A confession that Australia now as evidently appears to be the theater of the shipwreck of the BRITANNIA as America did before."

"We confess it willingly," replied Paganel.

"Very well, then, since that is the case, my advice is not to let your imagination rely on successive and contradictory evidence. Who knows whether after Australia some other country may not appear with equal certainty to be the place, and we may have to recommence our search?"

Glenarvan and Paganel looked at each other silently, struck by the justice of these remarks.

"I should like you, therefore," continued the Major, "before we actually start for Australia, to make one more examination of the documents. Here they are, and here are the charts. Let us take up each point in succession through which the 37th parallel passes, and see if we come across any other country which would agree with the precise indications of the document."

"Nothing can be more easily and quickly done," replied Paganel; "for countries are not very numerous in this latitude, happily."

"Well, look," said the Major, displaying an English planisphere on the plan of Mercator's Chart, and presenting the appearance of a terrestrial globe.

He placed it before Lady Helena, and then they all stood round, so as to be able to follow the argument of Paganel.

"As I have said already," resumed the learned geographer, "after having crossed South America, the 37th degree of latitude cuts the islands of Tristan d'Acunha. Now I maintain that none of the words of the document could relate to these islands."

The documents were examined with the most minute care, and the conclusion unanimously reached was that these islands were entirely out of the question.

"Let us go on then," resumed Paganel. "After leaving the Atlantic, we pass two degrees below the Cape of Good Hope, and into the Indian Ocean. Only one group of islands is found on this route, the Amsterdam Isles. Now, then, we must examine these as we did the Tristan d'Acunha group."

After a close survey, the Amsterdam Isles were rejected in their turn. Not a single word, or part of a word, French, English or German, could apply to this group in the Indian Ocean.

"Now we come to Australia," continued Paganel.

"The 37th parallel touches this continent at Cape Bernouilli, and leaves it at Twofold Bay. You will agree with me that, without straining the text, the English word STRA and the French one AUSTRAL may relate to Australia. The thing is too plain to need proof."

The conclusion of Paganel met with unanimous approval; every probability was in his favor.

"And where is the next point?" asked McNabbs.

"That is easily answered. After leaving Twofold Bay, we cross an arm of the sea which extends to New Zealand. Here I must call your attention to the fact that the French word CONTIN means a continent, irrefragably. Captain Grant could not, then, have found refuge in New Zealand, which is only an island. However that may be though, examine and compare, and go over and over each word, and see if, by any possibility, they can be made to fit this new country."

"In no way whatever," replied John Mangles, after a minute investigation of the documents and the planisphere.

"No," chimed in all the rest, and even the Major himself, "it cannot apply to New Zealand."

"Now," went on Paganel, "in all this immense space between this large island and the American coast, there is only one solitary barren little island crossed by the 37th parallel."

"And what is its name," asked the Major.

"Here it is, marked in the map. It is Maria Theresa--a name of which there is not a single trace in either of the three documents."

"Not the slightest," said Glenarvan.

"I leave you, then, my friends, to decide whether all these probabilities, not to say certainties, are not in favor of the Australian continent."

"Evidently," replied the captain and all the others.

"Well, then, John," said Glenarvan, "the next question is, have you provisions and coal enough?"

"Yes, your honor, I took in an ample store at Talcahuano, and, besides, we can easily replenish our stock of coal
at Cape Town."
"Well, then, give orders."
"Let me make one more observation," interrupted McNabbs.
"Go on then."
"Whatever likelihood of success Australia may offer us, wouldn't it be advisable to stop a day or two at the
Tristan d'Acunha Isles and the Amsterdam? They lie in our route, and would not take us the least out of the way.
Then we should be able to ascertain if the BRITANNIA had left any traces of her shipwreck there?"
"Incredulous Major!" exclaimed Paganel, "he still sticks to his idea."
"I stick to this any way, that I don't want to have to retrace our steps, supposing that Australia should disappoint
our sanguine hopes."
"It seems to me a good precaution," replied Glenarvan.
"And I'm not the one to dissuade you from it," returned Paganel; "quite the contrary."
"Steer straight for Tristan d'Acunha."
"Immediately, your Honor," replied the captain, going on deck, while Robert and Mary Grant overwhelmed Lord
Glenarvan with their grateful thanks.
Shortly after, the DUNCAN had left the American coast, and was running eastward, her sharp keel rapidly
cutting her way through the waves of the Atlantic Ocean.

CHAPTER II TRISTAN D'ACUNHA AND THE ISLE OF AMSTERDAM

IF the yacht had followed the line of the equator, the 196 degrees which separate Australia from America, or,
more correctly, Cape Bernouilli from Cape Corrientes, would have been equal to 11,760 geographical miles; but
along the 37th parallel these same degrees, owing to the form of the earth, only represent 9,480 miles. From the
American coast to Tristan d'Acunha is reckoned 2,100 miles-- a distance which John Mangles hoped to clear in ten
days, if east winds did not retard the motion of the yacht. But he was not long uneasy on that score, for toward
evening the breeze sensibly lulled and then changed altogether, giving the DUNCAN a fair field on a calm sea for
displaying her incomparable qualities as a sailor.

The passengers had fallen back into their ordinary ship life, and it hardly seemed as if they really could have
been absent a whole month. Instead of the Pacific, the Atlantic stretched itself out before them, and there was
scarcely a shade of difference in the waves of the two oceans. The elements, after having handled them so roughly,
seemed now disposed to favor them to the utmost. The sea was tranquil, and the wind kept in the right quarter, so
that the yacht could spread all her canvas, and lend its aid, if needed to the indefatigable steam stored up in the
boiler.
Under such conditions, the voyage was safely and rapidly accomplished. Their confidence increased as they
found themselves nearer the Australian coast. They began to talk of Captain Grant as if the yacht were going to take
him on board at a given port. His cabin was got ready, and berths for the men. This cabin was next to the famous
_number six_, which Paganel had taken possession of instead of the one he had booked on the SCOTIA. It had been
till now occupied by M. Olbinett, who vacated it for the expected guest. Mary took great delight in arranging it with
her own hands, and adorning it for the reception of the loved inmate.
The learned geographer kept himself closely shut up. He was working away from morning till night at a work
entitled "Sublime Impressions of a Geographer in the Argentine Pampas," and they could hear him repeating elegant
periods aloud before committing them to the white pages of his day-book; and more than once, unfaithful to Clio,
the muse of history, he invoked in his transports the divine Calliope, the muse of epic poetry.

Paganel made no secret of it either. The chaste daughters of Apollo willingly left the slopes of Helicon and
Parnassus at his call. Lady Helena paid him sincere compliments on his mythological visitants, and so did the Major,
though he could not forbear adding:
"But mind no fits of absence of mind, my dear Paganel; and if you take a fancy to learn Australian, don't go and
study it in a Chinese grammar."

Things went on perfectly smoothly on board. Lady Helena and Lord Glenarvan found leisure to watch John
Mangles' growing attachment to Mary Grant. There was nothing to be said against it, and, indeed, since John
remained silent, it was best to take no notice of it.

V. IV Verne
"What will Captain Grant think?" Lord Glenarvan asked his wife one day.
"He'll think John is worthy of Mary, my dear Edward, and he'll think right."
Meanwhile, the yacht was making rapid progress. Five days after losing sight of Cape Corrientes, on the 16th of
November, they fell in with fine westerly breezes, and the DUNCAN might almost have dispensed with her screw
altogether, for she flew over the water like a bird, spreading all her sails to catch the breeze, as if she were running a
race with the Royal Thames Club yachts.
Next day, the ocean appeared covered with immense seaweeds, looking like a great pond choked up with the DEBRIS of trees and plants torn off the neighboring continents. Commander Murray had specially pointed them out to the attention of navigators. The DUNCAN appeared to glide over a long prairie, which Paganel justly compared to the Pampas, and her speed slackened a little.

Twenty-four hours after, at break of day, the man on the look-out was heard calling out, "Land ahead!"

"In what direction?" asked Tom Austin, who was on watch.

"Leeeward!" was the reply.

This exciting cry brought everyone speedily on deck. Soon a telescope made its appearance, followed by Jacques Paganel. The learned geographer pointed the instrument in the direction indicated, but could see nothing that resembled land.

"Look in the clouds," said John Mangles.

"Ah, now I do see a sort of peak, but very indistinctly."

"It is Tristan d'Acunha," replied John Mangles.

"Then, if my memory serves me right, we must be eighty miles from it, for the peak of Tristan, seven thousand feet high, is visible at that distance."

"That's it, precisely."

Some hours later, the sharp, lofty crags of the group of islands stood out clearly on the horizon. The conical peak of Tristan looked black against the bright sky, which seemed all ablaze with the splendor of the rising sun. Soon the principal island stood out from the rocky mass, at the summit of a triangle inclining toward the northeast.

Tristan d'Acunha is situated in 37 degrees 8' of southern latitude, and 10 degrees 44' of longitude west of the meridian at Greenwich. Inaccessible Island is eighteen miles to the southwest and Nightingale Island is ten miles to the southeast, and this completes the little solitary group of islets in the Atlantic Ocean. Toward noon, the two principal landmarks, by which the group is recognized were sighted, and at 3 P. M. the DUNCAN entered Falmouth Bay in Tristan d'Acunha.

Several whaling vessels were lying quietly at anchor there, for the coast abounds in seals and other marine animals.

John Mangle's first care was to find good anchorage, and then all the passengers, both ladies and gentlemen, got into the long boat and were rowed ashore. They stepped out on a beach covered with fine black sand, the impalpable DEBRIS of the calcined rocks of the island.

Tristan d'Acunha is the capital of the group, and consists of a little village, lying in the heart of the bay, and watered by a noisy, rapid stream. It contained about fifty houses, tolerably clean, and disposed with geometrical regularity. Behind this miniature town there lay 1,500 hectares of meadow land, bounded by an embankment of lava. Above this embankment, the conical peak rose 7,000 feet high.

Lord Glenarvan was received by a governor supplied from the English colony at the Cape. He inquired at once respecting Harry Grant and the BRITANNIA, and found the names entirely unknown. The Tristan d'Acunha Isles are out of the route of ships, and consequently little frequented. Since the wreck of the _Blendon Hall_ in 1821, on the rocks of Inaccessible Island, two vessels have stranded on the chief island—the PRIMANGUET in 1845, and the three-mast American, PHILADELPHIA, in 1857. These three events comprise the whole catalogue of maritime disasters in the annals of the Acunhas.

Lord Glenarvan did not expect to glean any information, and only asked by the way of duty. He even sent the boats to make the circuit of the island, the entire extent of which was not more than seventeen miles at most.

In the interim the passengers walked about the village. The population does not exceed 150 inhabitants, and consists of English and Americans, married to negroes and Cape Hottentots, who might bear away the palm for ugliness. The children of these heterogeneous households are very disagreeable compounds of Saxon stiffness and African blackness.

It was nearly nightfall before the party returned to the yacht, chattering and admiring the natural riches displayed on all sides, for even close to the streets of the capital, fields of wheat and maize were waving, and crops of vegetables, imported forty years before; and in the environs of the village, herds of cattle and sheep were feeding.

The boats returned to the DUNCAN about the same time as Lord Glenarvan. They had made the circuit of the entire island in a few hours, but without coming across the least trace of the BRITANNIA. The only result of this voyage of circumnavigation was to strike out the name of Isle Tristan from the program of search.

CHAPTER III CAPE TOWN AND M. VIOT

As John Mangles intended to put in at the Cape of Good Hope for coals, he was obliged to deviate a little from the 37th parallel, and go two degrees north. In less than six days he cleared the thirteen hundred miles which separate the point of Africa from Tristan d'Acunha, and on the 24th of November, at 3 P. M. the Table Mountain was sighted. At eight o'clock they entered the bay, and cast anchor in the port of Cape Town. They sailed away next
morning at daybreak.

Between the Cape and Amsterdam Island there is a distance of 2,900 miles, but with a good sea and favoring breeze, this was only a ten day's voyage. The elements were now no longer at war with the travelers, as on their journey across the Pampas--air and water seemed in league to help them forward.

"Ah! the sea! the sea!" exclaimed Paganel, "it is the field _par excellence_ for the exercise of human energies, and the ship is the true vehicle of civilization. Think, my friends, if the globe had been only an immense continent, the thousandth part of it would still be unknown to us, even in this nineteenth century. See how it is in the interior of great countries. In the steppes of Siberia, in the plains of Central Asia, in the deserts of Africa, in the prairies of America, in the immense wilds of Australia, in the icy solitudes of the Poles, man scarcely dares to venture; the most daring shrinks back, the most courageous succumbs. They cannot penetrate them; the means of transport are insufficient, and the heat and disease, and savage disposition of the natives, are impassable obstacles. Twenty miles of desert separate men more than five hundred miles of ocean."

Paganel spoke with such warmth that even the Major had nothing to say against this panegyric of the ocean. Indeed, if the finding of Harry Grant had involved following a parallel across continents instead of oceans, the enterprise could not have been attempted; but the sea was there ready to carry the travelers from one country to another, and on the 6th of December, at the first streak of day, they saw a fresh mountain apparently emerging from the bosom of the waves.

This was Amsterdam Island, situated in 37 degrees 47 minutes latitude and 77 degrees 24 minutes longitude, the high cone of which in clear weather is visible fifty miles off. At eight o'clock, its form, indistinct though it still was, seemed almost a reproduction of Teneriffe.

"And consequently it must resemble Tristan d'Acunha," observed Glenarvan.

"A very wise conclusion," said Paganel, "according to the geometrographic axiom that two islands resembling a third must have a common likeness. I will only add that, like Tristan d'Acunha, Amsterdam Island is equally rich in seals and Robinsons."

"There are Robinsons everywhere, then?" said Lady Helena.

"Indeed, Madam," replied Paganel, "I know few islands without some tale of the kind appertaining to them, and the romance of your immortal countryman, Daniel Defoe, has been often enough realized before his day."

"Monsieur Paganel," said Mary, "may I ask you a question?"

"Two if you like, my dear young lady, and I promise to answer them."

"Well, then, I want to know if you would be very much frightened at the idea of being cast away alone on a desert island."

"I?" exclaimed Paganel.

"Come now, my good fellow," said the Major, "don't go and tell us that it is your most cherished desire."

"I don't pretend it is that, but still, after all, such an adventure would not be very unpleasant to me. I should begin a new life; I should hunt and fish; I should choose a grotto for my domicile in Winter and a tree in Summer. I should make storehouses for my harvests: in one word, I should colonize my island."

"All by yourself?"

"All by myself if I was obliged. Besides, are we ever obliged? Cannot one find friends among the animals, and choose some tame kid or eloquent parrot or amiable monkey? And if a lucky chance should send one a companion like the faithful Friday, what more is needed? Two friends on a rock, there is happiness. Suppose now, the Major and I--"

"Thank you," replied the Major, interrupting him; "I have no inclination in that line, and should make a very poor Robinson Crusoe."

"My dear Monsieur Paganel," said Lady Helena, "you are letting your imagination run away with you, as usual. But the dream is very different from the reality. You are thinking of an imaginary Robinson's life, thrown on a picked island and treated like a spoiled child by nature. You only see the sunny side."

"What, madam! You don't believe a man could be happy on a desert island?"

"I do not. Man is made for society and not for solitude, and solitude can only engender despair. It is a question of time. At the outset it is quite possible that material wants and the very necessities of existence may engross the poor shipwrecked fellow, just snatched from the waves; but afterward, when he feels himself alone, far from his fellow men, without any hope of seeing country and friends again, what must he think, what must he suffer? His little island is all his world. The whole human race is shut up in himself, and when death comes, which utter loneliness will make terrible, he will be like the last man on the last day of the world. Believe me, Monsieur Paganel, such a man is not to be envied."

Paganel gave in, though regretfully, to the arguments of Lady Helena, and still kept up a discussion on the advantages and disadvantages of Isolation, till the very moment the DUNCAN dropped anchor about a mile off
Amsterdam Island.

This lonely group in the Indian Ocean consists of two distinct islands, thirty-three miles apart, and situated exactly on the meridian of the Indian peninsula. To the north is Amsterdam Island, and to the south St. Paul; but they have been often confounded by geographers and navigators.

At the time of the DUNCAN's visit to the island, the population consisted of three people, a Frenchman and two mulattoes, all three employed by the merchant proprietor. Paganel was delighted to shake hands with a countryman in the person of good old Monsieur Viot. He was far advanced in years, but did the honors of the place with much politeness. It was a happy day for him when these kindly strangers touched at his island, for St. Peter's was only frequented by seal-fishers, and now and then a whaler, the crews of which are usually rough, coarse men.

M. Viot presented his subjects, the two mulattoes. They composed the whole living population of the island, except a few wild boars in the interior and myriads of penguins. The little house where the three solitary men lived was in the heart of a natural bay on the southeast, formed by the crumbling away of a portion of the mountain.

Twice over in the early part of the century, Amsterdam Island became the country of deserted sailors, providentially saved from misery and death; but since these events no vessel had been lost on its coast. Had any shipwreck occurred, some fragments must have been thrown on the sandy shore, and any poor sufferers from it would have found their way to M. Viot's fishing-huts. The old man had been long on the island, and had never been called upon to exercise such hospitality. Of the BRITANNIA and Captain Grant he knew nothing, but he was certain that the disaster had not happened on Amsterdam Island, nor on the islet called St. Paul, for whalers and fishing-vessels went there constantly, and must have heard of it.

Glenarvan was neither surprised nor vexed at the reply; indeed, his object in asking was rather to establish the fact that Captain Grant had not been there than that he had. This done, they were ready to proceed on their voyage next day.

They rambled about the island till evening, as its appearance was very inviting. Its FAUNA and FLORA, however, were poor in the extreme. The only specimens of quadrupeds, birds, fish and cetacea were a few wild boars, stormy petrels, albatrosses, perch and seals. Here and there thermal springs and chalybeate waters escaped from the black lava, and thin dark vapors rose above the volcanic soil. Some of these springs were very hot. John Mangles held his thermometer in one of them, and found the temperature was 176 degrees Fahrenheit. Fish caught in the sea a few yards off, cooked in five minutes in these all but boiling waters, a fact which made Paganel resolve not to attempt to bathe in them.

Toward evening, after a long promenade, Glenarvan and his party bade adieu to the good old M. Viot, and returned to the yacht, wishing him all the happiness possible on his desert island, and receiving in return the old man's blessing on their expedition.

CHAPTER IV A WAGER AND HOW DECIDED

On the 7th of December, at three A. M., the DUNCAN lay puffing out her smoke in the little harbor ready to start, and a few minutes afterward the anchor was lifted, and the screw set in motion. By eight o'clock, when the passengers came on deck, the Amsterdam Island had almost disappeared from view behind the mists of the horizon. This was the last halting-place on the route, and nothing now was between them and the Australian coast but three thousand miles' distance. Should the west wind continue but a dozen days longer, and the sea remain favorable, the yacht would have reached the end of her voyage.

Mary Grant and her brother could not gaze without emotion at the waves through which the DUNCAN was speeding her course, when they thought that these very same waves must have dashed against the prow of the BRITANNIA but a few days before her shipwreck. Here, perhaps, Captain Grant, with a disabled ship and diminished crew, had struggled against the tremendous hurricanes of the Indian Ocean, and felt himself driven toward the coast with irresistible force. The Captain pointed out to Mary the different currents on the ship's chart, and explained to her their constant direction. Among others there was one running straight to the Australian continent, and its action is equally felt in the Atlantic and Pacific. It was doubtless against this that the BRITANNIA, dismasted and rudderless, had been unable to contend, and consequently been dashed against the coast, and broken in pieces.

A difficulty about this, however, presented itself. The last intelligence of Captain Grant was from Callao on the 30th of May, 1862, as appeared in the _Mercantile and Shipping Gazette_. "How then was it possible that on the 7th of June, only eight days after leaving the shores of Peru, that the BRITANNIA could have found herself in the Indian Ocean? But to this, Paganel, who was consulted on the subject, found a very plausible solution.

It was one evening, about six days after their leaving Amsterdam Island, when they were all chatting together on the poop, that the above-named difficulty was stated by Glenarvan. Paganel made no reply, but went and fetched the document. After perusing it, he still remained silent, simply shrugging his shoulders, as if ashamed of troubling himself about such a trifle.
"Come, my good friend," said Glenarvan, "at least give us an answer."
"No," replied Paganel, "I'll merely ask a question for Captain John to answer."
"And what is it, Monsieur Paganel?" said John Mangles.
"Could a quick ship make the distance in a month over that part of the Pacific Ocean which lies between America and Australia?"
"Yes, by making two hundred miles in twenty-four hours."
"Would that be an extraordinary rate of speed?"
"Not at all; sailing clippers often go faster."
"Well, then, instead of '7 June' on this document, suppose that one figure has been destroyed by the sea-water, and read '17 June' or '27 June,' and all is explained."
"That's to say," replied Lady Helena, "that between the 31st of May and the 27th of June--"
"Captain Grant could have crossed the Pacific and found himself in the Indian Ocean.
Paganel's theory met with universal acceptance.
"That's one more point cleared up," said Glenarvan. "Thanks to our friend, all that remains to be done now is to get to Australia, and look out for traces of the wreck on the western coast."
"Or the eastern?" said John Mangles.
"Indeed, John, you may be right, for there is nothing in the document to indicate which shore was the scene of the catastrophe, and both points of the continent crossed by the 37th parallel, must, therefore, be explored."
"Then, my Lord, it is doubtful, after all," said Mary.
"Oh no, Miss Mary," John Mangles hastened to reply, seeing the young girl's apprehension. "His Lordship will please to consider that if Captain Grant had gained the shore on the east of Australia, he would almost immediately have found refuge and assistance. The whole of that coast is English, we might say, peopled with colonists. The crew of the BRITANNIA could not have gone ten miles without meeting a fellow-countryman."
"I am quite of your opinion, Captain John," said Paganel. "On the eastern coast Harry Grant would not only have found an English colony easily, but he would certainly have met with some means of transport back to Europe."
"And he would not have found the same resources on the side we are making for?" asked Lady Helena.
"No, madam," replied Paganel; "it is a desert coast, with no communication between it and Melbourne or Adelaide. If the BRITANNIA was wrecked on those rocky shores, she was as much cut off from all chance of help as if she had been lost on the inhospitable shores of Africa."
"But what has become of my father there, then, all these two years?" asked Mary Grant.
"My dear Mary," replied Paganel, "you have not the least doubt, have you, that Captain Grant reached the Australian continent after his shipwreck?"
"No, Monsieur Paganel."
"Well, granting that, what became of him? The suppositions we might make are not numerous. They are confined to three. Either Harry Grant and his companions have found their way to the English colonies, or they have fallen into the hands of the natives, or they are lost in the immense wilds of Australia."
"Go on, Paganel," said Lord Glenarvan, as the learned Frenchman made a pause.
"The first hypothesis I reject, then, to begin with, for Harry Grant could not have reached the English colonies, or long ago he would have been back with his children in the good town of Dundee."
"Poor father," murmured Mary, "away from us for two whole years."
"Hush, Mary," said Robert, "Monsieur Paganel will tell us."
"Alas! my boy, I cannot. All that I affirm is, that Captain Grant is in the hands of the natives."
"But these natives," said Lady Helena, hastily, "are they--"
"Reassure yourself, madam," said Paganel, divining her thoughts. "The aborigines of Australia are low enough in the scale of human intelligence, and most degraded and uncivilized, but they are mild and gentle in disposition, and not sanguinary like their New Zealand neighbors. Though they may be prisoners, their lives have never been threatened, you may be sure. All travelers are unanimous in declaring that the Australian natives abhor shedding blood, and many a time they have found in them faithful allies in repelling the attacks of evil-disposed convicts far more cruelly inclined."
"You hear what Monsieur Paganel tells us, Mary," said Lady Helena turning to the young girl. "If your father is in the hands of the natives, which seems probable from the document, we shall find him."
"And what if he is lost in that immense country?" asked Mary.
"Well, we'll find him still," exclaimed Paganel, in a confident tone. "Won't we, friends?"
"Most certainly," replied Glenarvan; and anxious to give a less gloomy turn to the conversation, he added--
"But I won't admit the supposition of his being lost, not for an instant."
"Neither will I," said Paganel.
"Is Australia a big place?" inquired Robert.

"Australia, my boy, is about as large as four-fifths of Europe. It has somewhere about 775,000 HECTARES."

"So much as that?" said the Major.

"Yes, McNabbs, almost to a yard's breadth. Don't you think now it has a right to be called a continent?"

"I do, certainly."

"I may add," continued the SAVANT, "that there are but few accounts of travelers being lost in this immense country. Indeed, I believe Leichardt is the only one of whose fate we are ignorant, and some time before my departure I learned from the Geographical Society that McDintyre had strong hopes of having discovered traces of him."

"The whole of Australia, then, is not yet explored?" asked Lady Helena.

"No, madam, but very little of it. This continent is not much better known than the interior of Africa, and yet it is from no lack of enterprising travelers. From 1606 to 1862, more than fifty have been engaged in exploring along the coast and in the interior."

"Oh, fifty!" exclaimed McNabbs incredulously.

"No, no," objected the Major; "that is going too far."

"And I might go farther, McNabbs," replied the geographer, impatient of contradiction.

"Yes, McNabbs, quite that number."

"Farther still, Paganel."

"If you doubt me, I can give you the names."

"Oh, oh," said the Major, coolly. "That's just like you SAVANTS. You stick at nothing."

"Major, will you bet your Purdy-Moore rifle against my telescope?"

"Why not, Paganel, if it would give you any pleasure."

"Done, Major!" exclaimed Paganel. "You may say good-by to your rifle, for it will never shoot another chamois or fox unless I lend it to you, which I shall always be happy to do, by the by."

"And whenever you require the use of your telescope, Paganel, I shall be equally obliging," replied the Major, gravely.

"Let us begin, then; and ladies and gentlemen, you shall be our jury. Robert, you must keep count."

This was agreed upon, and Paganel forthwith commenced.

"Mnemosyne! Goddess of Memory, chaste mother of the Muses!" he exclaimed, "inspire thy faithful servant and fervent worshiper! Two hundred and fifty-eight years ago, my friends, Australia was unknown. Strong suspicions were entertained of the existence of a great southern continent. In the library of your British Museum, Glenarvan, there are two charts, the date of which is 1550, which mention a country south of Asia, called by the Portuguese Great Java. But these charts are not sufficiently authentic. In the seventeenth century, in 1606, Quiros, a Spanish navigator, discovered a country which he named Australia de Espiritu Santo. Some authors imagine that this was the New Hebrides group, and not Australia. I am not going to discuss the question, however. Count Quiros, Robert, and let us pass on to another."

"ONE," said Robert.

"In that same year, Louis Vas de Torres, the second in command of the fleet of Quiros, pushed further south. But it is to Theodore Hertogt, a Dutchman, that the honor of the great discovery belongs. He touched the western coast of Australia in 25 degrees latitude, and called it Eendracht, after his vessel. From this time navigators increased. In 1618, Zeachen discovered the northern parts of the coast, and called them Amheim and Diemen. In 1618, Jan Edels went along the western coast, and christened it by his own name. In 1622, Leuwin went down as far as the cape which became his namesake. And so Paganel continued with name after name until his hearers cried for mercy.

"Stop, Paganel," said Glenarvan, laughing heartily, "don't quite crush poor McNabbs. Be generous; he owns he is vanquished."

"And what about the rifle?" asked the geographer, triumphantly.

"It is yours, Paganel," replied the Major, "and I am very sorry for it; but your memory might gain an armory by such feats."

"It is certainly impossible to be better acquainted with Australia; not the least name, not even the most trifling fact—"

"As to the most trifling fact, I don't know about that," said the Major, shaking his head.

"What do you mean, McNabbs?" exclaimed Paganel.

"Simply that perhaps all the incidents connected with the discovery of Australia may not be known to you."

"Just fancy," retorted Paganel, throwing back his head proudly.

"Come now. If I name one fact you don't know, will you give me back my rifle?" said McNabbs.

"On the spot, Major."
"Very well, it's a bargain, then."
"Yes, a bargain; that's settled."
"All right. Well now, Paganel, do you know how it is that Australia does not belong to France?"
"But it seems to me--"
"Or, at any rate, do you know what's the reason the English give?" asked the Major.
"No," replied Paganel, with an air of vexation.
"Just because Captain Baudin, who was by no means a timid man, was so afraid in 1802, of the croaking of the Australian frogs, that he raised his anchor with all possible speed, and quit the coast, never to return."
"What!" exclaimed Paganel. "Do they actually give that version of it in England? But it is just a bad joke."
"Bad enough, certainly, but still it is history in the United Kingdom."
"It's an insult!" exclaimed the patriotic geographer; "and they relate that gravely?"
"I must own it is the case," replied Glenarvan, amidst a general outburst of laughter. "Do you mean to say you have never heard of it before?"
"Never! But I protest against it. Besides, the English call us 'frog-eaters.' Now, in general, people are not afraid of what they eat."
"It is said, though, for all that," replied McNabbs. So the Major kept his famous rifle after all.

CHAPTER V THE STORM ON THE INDIAN OCEAN
Two days after this conversation, John Mangles announced that the DUNCAN was in longitude 113 degrees 37 minutes, and the passengers found on consulting the chart that consequently Cape Bernouilli could not be more than five degrees off. They must be sailing then in that part of the Indian Ocean which washed the Australian continent, and in four days might hope to see Cape Bernouilli appear on the horizon.

Hitherto the yacht had been favored by a strong westerly breeze, but now there were evident signs that a calm was impending, and on the 13th of December the wind fell entirely; as the sailors say, there was not enough to fill a cap.

There was no saying how long this state of the atmosphere might last. But for the powerful propeller the yacht would have been obliged to lie motionless as a log. The young captain was very much annoyed, however, at the prospect of emptying his coal-bunkers, for he had covered his ship with canvas, intending to take advantage of the slightest breeze.

"After all, though," said Glenarvan, with whom he was talking over the subject, "it is better to have no wind than a contrary one."

"Your Lordship is right," replied John Mangles; "but the fact is these sudden calms bring change of weather, and this is why I dread them. We are close on the trade winds, and if we get them ever so little in our teeth, it will delay us greatly."

"Well, John, what if it does? It will only make our voyage a little longer."
"Yes, if it does not bring a storm with it."
"Do you mean to say you think we are going to have bad weather?" replied Glenarvan, examining the sky, which from horizon to zenith seemed absolutely cloudless.

"I do," returned the captain. "I may say so to your Lordship, but I should not like to alarm Lady Glenarvan or Miss Grant."

"You are acting wisely; but what makes you uneasy?"

"Sure indications of a storm. Don't trust, my Lord, to the appearance of the sky. Nothing is more deceitful. For the last two days the barometer has been falling in a most ominous manner, and is now at 27 degrees. This is a warning I dare not neglect, for there is nothing I dread more than storms in the Southern Seas; I have had a taste of them already. The vapors which become condensed in the immense glaciers at the South Pole produce a current of air of extreme violence. This causes a struggle between the polar and equatorial winds, which results in cyclones, tornadoes, and all those multiplied varieties of tempest against which a ship is no match."

"Well, John," said Glenarvan, "the DUNCAN is a good ship, and her captain is a brave sailor. Let the storm come, we'll meet it!"

John Mangles remained on deck the whole night, for though as yet the sky was still unclouded, he had such faith in his weather-glass, that he took every precaution that prudence could suggest. About 11 P. M. the sky began to darken in the south, and the crew were called up, and all the sails hauled in, except the foresail, brigantine, top-sail, and jib-boom. At midnight the wind freshened, and before long the cracking of the masts, and the rattling of the cordage, and groaning of the timbers, awakened the passengers, who speedily made their appearance on deck-- at least Paganel, Glenarvan, the Major and Robert.

"Is it the hurricane?" asked Glenarvan quietly.
"Not yet," replied the captain; "but it is close at hand."
And he went on giving his orders to the men, and doing his best to make ready for the storm, standing, like an officer commanding a breach, with his face to the wind, and his gaze fixed on the troubled sky. The glass had fallen to 26 degrees, and the hand pointed to tempest.

It was one o'clock in the morning when Lady Helena and Miss Grant ventured upstairs on deck. But they no sooner made their appearance than the captain hurried toward them, and begged them to go below again immediately. The waves were already beginning to dash over the side of the ship, and the sea might any moment sweep right over her from stem to stern. The noise of the warring elements was so great that his words were scarcely audible, but Lady Helena took advantage of a sudden lull to ask if there was any danger.

"None whatever," replied John Mangles; "but you cannot remain on deck, madam, no more can Miss Mary."

The ladies could not disobey an order that seemed almost an entreaty, and they returned to their cabin. At the same moment the wind redoubled its fury, making the masts bend beneath the weight of the sails, and completely lifting up the yacht.

"Haul up the foresail!" shouted the captain. "Lower the topsail and jib-boom!"

Glenarvan and his companions stood silently gazing at the struggle between their good ship and the waves, lost in wondering and half-terrified admiration at the spectacle.

Just then, a dull hissing was heard above the noise of the elements. The steam was escaping violently, not by the funnel, but from the safety-valves of the boiler; the alarm whistle sounded unnaturally loud, and the yacht made a frightful pitch, overturning Wilson, who was at the wheel, by an unexpected blow from the tiller. The DUNCAN no longer obeyed the helm.

"What is the matter?" cried the captain, rushing on the bridge.

"The ship is heeling over on her side," replied Wilson.

"The engine! the engine!" shouted the engineer.

Away rushed John to the engine-room. A cloud of steam filled the room. The pistons were motionless in their cylinders, and they were apparently powerless, and the engine-driver, fearing for his boilers, was letting off the steam.

"What's wrong?" asked the captain.

"The propeller is bent or entangled," was the reply. "It's not acting at all."

"Can't you extricate it?"

"It is impossible."

An accident like this could not be remedied, and John's only resource was to fall back on his sails, and seek to make an auxiliary of his most powerful enemy, the wind. He went up again on deck, and after explaining in a few words to Lord Glenarvan how things stood, begged him to retire to his cabin, with the rest of the passengers. But Glenarvan wished to remain above.

"But we might be a help."

"Go in, my Lord, go in. I must indeed insist on it. There are times when I must be master on board, and retire you must."

Their situation must indeed be desperate for John Mangles to speak in such authoritative language. Glenarvan was wise enough to understand this, and felt he must set an example in obedience. He therefore quitted the deck immediately with his three companions, and rejoined the ladies, who were anxiously watching the DENOUEMENT of this war with the elements.

"He's an energetic fellow, this brave John of mine!" said Lord Glenarvan, as he entered the saloon.

"That he is," replied Paganel. "He reminds me of your great Shakespeare's boatswain in the 'Tempest,' who says to the king on board: 'Hence! What care these roarers for the name of king? To cabin! Silence! Trouble us not.'"

However, John Mangles did not lose a second in extricating his ship from the peril in which she was placed by the condition of her screw propeller. He resolved to rely on the mainsail for keeping in the right route as far as possible, and to brace the yards obliquely, so as not to present a direct front to the storm. The yacht turned about like a swift horse that feels the spur, and presented a broadside to the billows. The only question was, how long would she hold out with so little sail, and what sail could resist such violence for any length of time. The great advantage of keeping up the mainsail was that it presented to the waves only the most solid portions of the yacht, and kept her in the right course. Still it involved some peril, for the vessel might get engulfed between the waves, and not be able to raise herself. But Mangles felt there was no alternative, and all he could do was to keep the crew ready to alter the sail at any moment, and stay in the shrouds himself watching the tempest.

The remainder of the night was spent in this manner, and it was hoped that morning would bring a calm. But this
was a delusive hope. At 8 A.M., the wind had increased to a hurricane.

John said nothing, but he trembled for his ship, and those on board. The DUNCAN made a frightful plunge forward, and for an instant the men thought she would never rise again. Already they had seized their hatchets to cut away the shrouds from the mainmast, but the next minute the sails were torn away by the tempest, and had flown off like gigantic albatrosses.

The yacht had risen once more, but she found herself at the mercy of the waves entirely now, with nothing to steady or direct her, and was so fearfully pitched and tossed about that every moment the captain expected the masts would break short off. John had no resource but to put up a forestaysail, and run before the gale. But this was no easy task. Twenty times over he had all his work to begin again, and it was 3 P.M. before his attempt succeeded. A mere shred of canvas though it was, it was enough to drive the DUNCAN forward with inconceivable rapidity to the northeast, of course in the same direction as the hurricane. Swiftness was their only chance of safety. Sometimes she would get in advance of the waves which carried her along, and cutting through them with her sharp prow, bury herself in their depths. At others, she would keep pace with them, and make such enormous leaps that there was imminent danger of her being pitched over on her side, and then again, every now and then the storm-driven sea would out-distance the yacht, and the angry billows would sweep over the deck from stem to stern with tremendous violence.

In this alarming situation and amid dreadful alternations of hope and despair, the 12th of December passed away, and the ensuing night, John Mangles never left his post, not even to take food. Though his impassive face betrayed no symptoms of fear, he was tortured with anxiety, and his steady gaze was fixed on the north, as if trying to pierce through the thick mists that enshrouded it.

There was, indeed, great cause for fear. The DUNCAN was out of her course, and rushing toward the Australian coast with a speed which nothing could lessen. To John Mangles it seemed as if a thunderbolt were driving them along. Every instant he expected the yacht would dash against some rock, for he reckoned the coast could not be more than twelve miles off, and better far be in mid ocean exposed to all its fury than too near land.

John Mangles went to find Glenarvan, and had a private talk with him about their situation, telling him frankly the true state of affairs, stating the case with all the coolness of a sailor prepared for anything and everything and he wound up by saying he might, perhaps, be obliged to cast the yacht on shore.

"To save the lives of those on board, my Lord," he added.

"Do it then, John," replied Lord Glenarvan.

"And Lady Helena, Miss Grant?"

"I will tell them at the last moment when all hope of keeping out at sea is over. You will let me know?"

"I will, my Lord."

Glenarvan rejoined his companions, who felt they were in imminent danger, though no word was spoken on the subject. Both ladies displayed great courage, fully equal to any of the party. Paganel descanted in the most inopportune manner about the direction of atmospheric currents, making interesting comparisons, between tornadoes, cyclones, and rectilinear tempests. The Major calmly awaited the end with the fatalism of a Mussulman.

About eleven o'clock, the hurricane appeared to decrease slightly. The damp mist began to clear away, and a sudden gleam of light revealed a low-lying shore about six miles distant. They were driving right down on it. Enormous breakers fifty feet high were dashing over it, and the fact of their height showed John there must be solid ground before they could make such a rebound.

"Those are sand-banks," he said to Austin.

"I think they are," replied the mate.

"We are in God's hands," said John. "If we cannot find any opening for the yacht, and if she doesn't find the way in herself, we are lost."

"The tide is high at present, it is just possible we may ride over those sand-banks."

"But just see those breakers. What ship could stand them. Let us invoke divine aid, Austin!"

Meanwhile the DUNCAN was speeding on at a frightful rate. Soon she was within two miles of the sand-banks, which were still veiled from time to time in thick mist. But John fancied he could see beyond the breakers a quiet basin, where the DUNCAN would be in comparative safety. But how could she reach it?

All the passengers were summoned on deck, for now that the hour of shipwreck was at hand, the captain did not wish anyone to be shut up in his cabin.

"John!" said Glenarvan in a low voice to the captain, "I will try to save my wife or perish with her. I put Miss Grant in your charge."

"Yes, my Lord," replied John Mangles, raising Glenarvan's hand to his moistened eyes.

The yacht was only a few cables' lengths from the sandbanks. The tide was high, and no doubt there was abundance of water to float the ship over the dangerous bar; but these terrific breakers alternately lifting her up and
then leaving her almost dry, would infallibly make her graze the sand-banks.

Was there no means of calming this angry sea? A last expedient struck the captain. "The oil, my lads!" he exclaimed. "Bring the oil here!"

The crew caught at the idea immediately; this was a plan that had been successfully tried already. The fury of the waves had been allayed before this time by covering them with a sheet of oil. Its effect is immediate, but very temporary. The moment after a ship has passed over the smooth surface, the sea redoubles its violence, and woe to the bark that follows. The casks of seal-oil were forthwith hauled up, for danger seemed to have given the men double strength. A few hatchet blows soon knocked in the heads, and they were then hung over the larboard and starboard.

"Be ready!" shouted John, looking out for a favorable moment.

In twenty seconds the yacht reached the bar. Now was the time. "Pour out!" cried the captain, "and God prosper it!"

The barrels were turned upside down, and instantly a sheet of oil covered the whole surface of the water. The billows fell as if by magic, the whole foaming sea seemed leveled, and the DUNCAN flew over its tranquil bosom into a quiet basin beyond the formidable bar; but almost the same minute the ocean burst forth again with all its fury, and the towering breakers dashed over the bar with increased violence.

CHAPTER VI A HOSPITABLE COLONIST

The captain's first care was to anchor his vessel securely. He found excellent moorage in five fathoms' depth of water, with a solid bottom of hard granite, which afforded a firm hold. There was no danger now of either being driven away or stranded at low water. After so many hours of danger, the DUNCAN found herself in a sort of creek, sheltered by a high circular point from the winds outside in the open sea.

Lord Glenarvan grasped John Mangles' hand, and simply said: "Thank you, John."

This was all, but John felt it ample recompense. Glenarvan kept to himself the secret of his anxiety, and neither Lady Helena, nor Mary, nor Robert suspected the grave perils they had just escaped.

One important fact had to be ascertained. On what part of the coast had the tempest thrown them? How far must they go to regain the parallel. At what distance S. W. was Cape Bernouilli? This was soon determined by taking the position of the ship, and it was found that she had scarcely deviated two degrees from the route. They were in longitude 36 degrees 12 minutes, and latitude 32 degrees 67 minutes, at Cape Catastrophe, three hundred miles from Cape Bernouilli. The nearest port was Adelaide, the Capital of Southern Australia.

Could the DUNCAN be repaired there? This was the question. The extent of the injuries must first be ascertained, and in order to do this he ordered some of the men to dive below the stern. Their report was that one of the branches of the screw was bent, and had got jammed against the stern post, which of course prevented all possibility of rotation. This was a serious damage, so serious as to require more skilful workmen than could be found in Adelaide.

After mature reflection, Lord Glenarvan and John Mangles came to the determination to sail round the Australian coast, stopping at Cape Bernouilli, and continuing their route south as far as Melbourne, where the DUNCAN could speedily be put right. This effected, they would proceed to cruise along the eastern coast to complete their search for the BRITANNIA.

This decision was unanimously approved, and it was agreed that they should start with the first fair wind. They had not to wait long for the same night the hurricane had ceased entirely, and there was only a manageable breeze from the S. W. Preparations for sailing were instantly commenced, and at four o'clock in the morning the crew lifted the anchors, and got under way with fresh canvas outspread, and a wind blowing right for the Australian shores.

Two hours afterward Cape Catastrophe was out of sight. In the evening they doubled Cape Borda, and came alongside Kangaroo Island. This is the largest of the Australian islands, and a great hiding place for runaway convicts. Its appearance was enchanting. The stratified rocks on the shore were richly carpeted with verdure, and innumerable kangaroos were jumping over the woods and plains, just as at the time of its discovery in 1802. Next day, boats were sent ashore to examine the coast minutely, as they were now on the 36th parallel, and between that and the 38th Glenarvan wished to leave no part unexplored.

The boats had hard, rough work of it now, but the men never complained. Glenarvan and his inseparable companion, Paganel, and young Robert generally accompanied them. But all this painstaking exploration came to nothing. Not a trace of the shipwreck could be seen anywhere. The Australian shores revealed no more than the Patagonian. However, it was not time yet to lose hope altogether, for they had not reached the exact point indicated by the document.

On the 20th of December, they arrived off Cape Bernouilli, which terminates Lacepede Bay, and yet not a vestige of the BRITANNIA had been discovered. Still this was not surprising, as it was two years since the occurrence of the catastrophe, and the sea might, and indeed must, have scattered and destroyed whatever fragments
of the brig had remained. Besides, the natives who scent a wreck as the vultures do a dead body, would have pounced upon it and carried off the smaller DEBRIS. There was no doubt whatever Harry Grant and his companions had been made prisoners the moment the waves threw them on the shore, and been dragged away into the interior of the continent.

But if so, what becomes of Paganel's ingenious hypothesis about the document? viz., that it had been thrown into a river and carried by a current into the sea. That was a plausible enough theory in Patagonia, but not in the part of Australia intersected by the 37th parallel. Besides the Patagonian rivers, the Río Colorado and the Río Negro, flow into the sea along deserted solitudes, uninhabited and uninhabitable; while, on the contrary, the principal rivers of Australia--the Murray, the Yarrow, the Torrens, the Darling--all connected with each other, throw themselves into the ocean by well-frequented routes, and their mouths are ports of great activity. What likelihood, consequently, would there be that a fragile bottle would ever find its way along such busy thoroughfares right out into the Indian Ocean?

Paganel himself saw the impossibility of it, and confessed to the Major, who raised a discussion on the subject, that his hypothesis would be altogether illogical in Australia. It was evident that the degrees given related to the place where the BRITANNIA was actually shipwrecked and not the place of captivity, and that the bottle therefore had been thrown into the sea on the western coast of the continent.

However, as Glenarvan justly remarked, this did not alter the fact of Captain Grant's captivity in the least degree, though there was no reason now for prosecuting the search for him along the 37th parallel, more than any other. It followed, consequently, that if no traces of the BRITANNIA were discovered at Cape Bernouilli, the only thing to be done was to return to Europe. Lord Glenarvan would have been unsuccessful, but he would have done his duty courageously and conscientiously.

But the young Grants did not feel disheartened. They had long since said to themselves that the question of their father's deliverance was about to be finally settled. Irrevocably, indeed, they might consider it, for as Paganel had judiciously demonstrated, if the wreck had occurred on the eastern side, the survivors would have found their way back to their own country long since.

"Hope on! Hope on, Mary!" said Lady Helena to the young girl, as they neared the shore; "God's hand will still lead us."

"Yes, Miss Mary," said Captain John. "Man's extremity is God's opportunity. When one way is hedged up another is sure to open."

"God grant it," replied Mary.

Land was quite close now. The cape ran out two miles into the sea, and terminated in a gentle slope, and the boat glided easily into a sort of natural creek between coral banks in a state of formation, which in course of time would be a belt of coral reefs round the southern point of the Australian coast. Even now they were quite sufficiently formidable to destroy the keel of a ship, and the BRITANNIA might likely enough have been dashed to pieces on them.

The passengers landed without the least difficulty on an absolutely desert shore. Cliffs composed of beds of strata made a coast line sixty to eighty feet high, which it would have been difficult to scale without ladders or cramp-irons. John Mangles happened to discover a natural breach about half a mile south. Part of the cliff had been partially beaten down, no doubt, by the sea in some equinoctial gale. Through this opening the whole party passed and reached the top of the cliff by a pretty steep path. Robert climbed like a young cat, and was the first on the summit, to the despair of Paganel, who was quite ashamed to see his long legs, forty years old, out-distanced by a young urchin of twelve. However, he was far ahead of the Major, who gave himself no concern on the subject.

They were all soon assembled on the lofty crags, and from this elevation could command a view of the whole plain below. It appeared entirely uncultivated, and covered with shrubs and bushes. Glenarvan thought it resembled some glens in the lowlands of Scotland, and Paganel fancied it like some barren parts of Brittany. But along the coast the country appeared to be inhabited, and significant signs of industry revealed the presence of civilized men, not savages.

"A mill!" exclaimed Robert.

And, sure enough, in the distance the long sails of a mill appeared, apparently about three miles off.

"It certainly is a windmill," said Paganel, after examining the object in question through his telescope.

"Let us go to it, then," said Glenarvan.

Away they started, and, after walking about half an hour, the country began to assume a new aspect, suddenly changing its sterility for cultivation. Instead of bushes, quick-set hedges met the eye, inclosing recent clearings. Several bullocks and about half a dozen horses were feeding in meadows, surrounded by acacias supplied from the vast plantations of Kangaroo Island. Gradually fields covered with cereals came in sight, whole acres covered with bristling ears of corn, hay-ricks in the shape of large bee-hives, blooming orchards, a fine garden worthy of Horace,
in which the useful and agreeable were blended; then came sheds; commons wisely distributed, and last of all, a plain comfortable dwelling-house, crowned by a joyous-sounding mill, and fanned and shaded by its long sails as they kept constantly moving round.

Just at that moment a pleasant-faced man, about fifty years of age, came out of the house, warned, by the loud barking of four dogs, of the arrival of strangers. He was followed by five handsome strapping lads, his sons, and their mother, a fine tall woman. There was no mistaking the little group. This was a perfect type of the Irish colonist—a man who, weary of the miseries of his country, had come, with his family, to seek fortune and happiness beyond the seas.

Before Glenarvan and his party had time to reach the house and present themselves in due form, they heard the cordial words: "Strangers! welcome to the house of Paddy O'Moore!"

"You are Irish," said Glenarvan, "if I am not mistaken," warmly grasping the outstretched hand of the colonist.

"I was," replied Paddy O'Moore, "but now I am Australian. Come in, gentlemen, whoever you may be, this house is yours."

It was impossible not to accept an invitation given with such grace. Lady Helena and Mary Grant were led in by Mrs. O'Moore, while the gentlemen were assisted by his sturdy sons to disencumber themselves of their fire-arms.

An immense hall, light and airy, occupied the ground floor of the house, which was built of strong planks laid horizontally. A few wooden benches fastened against the gaily-colored walls, about ten stools, two oak chests on tin mugs, a large long table where twenty guests could sit comfortably, composed the furniture, which looked in perfect keeping with the solid house and robust inmates.

The noonday meal was spread; the soup tureen was smoking between roast beef and a leg of mutton, surrounded by large plates of olives, grapes, and oranges. The necessary was there and there was no lack of the superfluous. The host and hostess were so pleasant, and the big table, with its abundant fare, looked so inviting, that it would have been ungracious not to have seated themselves. The farm servants, on equal footing with their master, were already in their places to take their share of the meal. Paddy O'Moore pointed to the seats reserved for the strangers, and said to Glenarvan:

"I was waiting for you."

"Waiting for us!" replied Glenarvan in a tone of surprise.

"I am always waiting for those who come," said the Irishman; and then, in a solemn voice, while the family and domestics reverently stood, he repeated the BENEDICITE.

Dinner followed immediately, during which an animated conversation was kept up on all sides. From Scotch to Irish is but a handbreadth. The Tweed, several fathoms wide, digs a deeper trench between Scotland and England than the twenty leagues of Irish Channel, which separates Old Caledonia from the Emerald Isle. Paddy O'Moore related his history. It was that of all emigrants driven by misfortune from their own country. Many come to seek fortunes who only find trouble and sorrow, and then they throw the blame on chance, and forget the true cause is their own idleness and vice and want of commonsense. Whoever is sober and industrious, honest and economical, gets on.

Such a one had been and was Paddy O'Moore. He left Dundalk, where he was starving, and came with his family to Australia, landed at Adelaide, where, refusing employment as a miner, he got engaged on a farm, and two months afterward commenced clearing ground on his own account.

The whole territory of South Australia is divided into lots, each containing eighty acres, and these are granted to colonists by the government. Any industrious man, by proper cultivation, can not only get a living out of his lot, but lay by pounds 80 a year.

Paddy O'Moore knew this. He profited by his own former experience, and laid by every penny he could till he had saved enough to purchase new lots. His family prospered, and his farm also. The Irish peasant became a landed proprietor, and though his little estate had only been under cultivation for two years, he had five hundred acres cleared by his own hands, and five hundred head of cattle. He was his own master, after having been a serf in Europe, and as independent as one can be in the freest country in the world.

His guests congratulated him heartily as he ended his narration; and Paddy O'Moore no doubt expected confidence for confidence, but he waited in vain. However, he was one of those discreet people who can say, "I tell you who I am, but I don't ask who you are." Glenarvan's great object was to get information about the BRITANNIA, and like a man who goes right to the point, he began at once to interrogate O'Moore as to whether he had heard of the shipwreck.

The reply of the Irishman was not favorable; he had never heard the vessel mentioned. For two years, at least, no ship had been wrecked on that coast, neither above nor below the Cape. Now, the date of the catastrophe was within two years. He could, therefore, declare positively that the survivors of the wreck had not been thrown on that part of the western shore. Now, my Lord," he added, "may I ask what interest you have in making the inquiry?"
This pointed question elicited in reply the whole history of the expedition. Glenarvan related the discovery of the document, and the various attempts that had been made to follow up the precise indications given of the whereabouts of the unfortunate captives; and he concluded his account by expressing his doubt whether they should ever find the Captain after all.

His dispirited tone made a painful impression on the minds of his auditors. Robert and Mary could not keep back their tears, and Paganel had not a word of hope or comfort to give them. John Mangles was grieved to the heart, though he, too, was beginning to yield to the feeling of hopelessness which had crept over the rest, when suddenly the whole party were electrified by hearing a voice exclaim: "My Lord, praise and thank God! if Captain Grant is alive, he is on this Australian continent."

CHAPTER VII THE QUARTERMASTER OF THE "BRITANNIA"

The surprise caused by these words cannot be described. Glenarvan sprang to his feet, and pushing back his seat, exclaimed: "Who spoke?"

"I did," said one of the servants, at the far end of the table.

"You, Ayrton!" replied his master, not less bewildered than Glenarvan.

"Yes, it was I," rejoined Ayrton in a firm tone, though somewhat agitated voice. "A Scotchman like yourself, my Lord, and one of the shipwrecked crew of the BRITANNIA."

The effect of such a declaration may be imagined. Mary Grant fell back, half-fainting, in Lady Helena's arms, overcome by joyful emotion, and Robert, and Mangles, and Paganel started up and toward the man that Paddy O'Moore had addressed as AYRTON. He was a coarse-looking fellow, about forty-five years of age, with very bright eyes, though half-hidden beneath thick, overhanging brows. In spite of extreme leanness there was an air of unusual strength about him. He seemed all bone and nerves, or, to use a Scotch expression, as if he had not wasted time in making fat. He was broad-shouldered and of middle height, and though his features were coarse, his face was so full of intelligence and energy and decision, that he gave one a favorable impression. The interest he excited was still further heightened by the marks of recent suffering imprinted on his countenance. It was evident that he had endured long and severe hardships, and that he had borne them bravely and come off victor.

"You are one of the shipwrecked sailors of the BRITANNIA?" was Glenarvan's first question.

"Yes, my Lord; Captain Grant's quartermaster."

"And saved with him after the shipwreck?"

"No, my Lord, no. I was separated from him at that terrible moment, for I was swept off the deck as the ship struck."

"Then you are not one of the two sailors mentioned in the document?"

"No; I was not aware of the existence of the document. The captain must have thrown it into the sea when I was no longer on board."

"But the captain? What about the captain?"

"I believed he had perished; gone down with all his crew. I imagined myself the sole survivor."

"But you said just now, Captain Grant was living."

"No, I said, 'if the captain is living.'"

"And you added, 'he is on the Australian continent.'"

"And, indeed, he cannot be anywhere else."

"Then you don't know where he is?"

"No, my Lord. I say again, I supposed he was buried beneath the waves, or dashed to pieces against the rocks. It was from you I learned that he was still alive."

"What then do you know?"

"Simply this--if Captain Grant is alive, he is in Australia."

"Where did the shipwreck occur?" asked Major McNabbs.

This should have been the first question, but in the excitement caused by the unexpected incident, Glenarvan cared more to know where the captain was, than where the BRITANNIA had been lost. After the Major's inquiry, however, Glenarvan's examination proceeded more logically, and before long all the details of the event stood out clearly before the minds of the company.

To the question put by the Major, Ayrton replied:

"When I was swept off the forecastle, when I was hauling in the jib-boom, the BRITANNIA was running right on the Australian coast. She was not more than two cables' length from it and consequently she must have struck just there."

"In latitude 37 degrees?" asked John Mangles.

"Yes, in latitude 37 degrees."

"On the west coast?"
"No, on the east coast," was the prompt reply.
"And at what date?"
"It was on the night of the 27th of June, 1862."
"Exactly, just exactly," exclaimed Glenarvan.
"You see, then, my Lord," continued Ayrton, "I might justly say, _If Captain Grant_ is alive, he is on the
Australian continent, and it is useless looking for him anywhere else."
"And we will look for him there, and find him too, and save him," exclaimed Paganel. "Ah, precious document," he added, with perfect NAIVETE, "you must own you have fallen into the hands of uncommonly shrewd people."

But, doubtless, nobody heard his flattering words, for Glenarvan and Lady Helena, and Mary Grant, and Robert,
were too much engrossed with Ayrton to listen to anyone else. They pressed round him and grasped his hands. It
seemed as if this man's presence was the sure pledge of Harry Grant's deliverance. If this sailor had escaped the
perils of the shipwreck, why should not the captain? Ayrton was quite sanguine as to his existence; but on what part
of the continent he was to be found, that he could not say. The replies the man gave to the thousand questions that
assailed him on all sides were remarkably intelligent and exact. All the while he spake, Mary held one of his hands
in hers. This sailor was a companion of her father's, one of the crew of the BRITANNIA. He had lived with Harry
Grant, crossed the seas with him and shared his dangers. Mary could not keep her eyes off his face, rough and
homely though it was, and she wept for joy.

Up to this time no one had ever thought of doubting either the veracity or identity of the quartermaster; but the
Major, and perhaps John Mangles, now began to ask themselves if this Ayrton's word was to be absolutely believed.
There was something suspicious about this unexpected meeting. Certainly the man had mentioned facts and dates
which corresponded, and the minuteness of his details was most striking. Still exactness of details was no positive
proof. Indeed, it has been noticed that a falsehood has sometimes gained ground by being exceedingly particular in
minutiae. McNabbs, therefore, prudently refrained from committing himself by expressing any opinion.

John Mangles, however, was soon convinced when he heard Ayrton speak to the young girl about her father. He
knew Mary and Robert quite well. He had seen them in Glasgow when the ship sailed. He remembered them at the
farewell breakfast given on board the BRITANNIA to the captain's friends, at which Sheriff McIntyre was present.
Robert, then a boy of ten years old, had been given into his charge, and he ran away and tried to climb the rigging.
"Yes, that I did, it is quite right," said Robert.

He went on to mention several other trifling incidents, without attaching the importance to them that John
Mangles did, and when he stopped Mary Grant said, in her soft voice: "Oh, go on, Mr. Ayrton, tell us more about
our father."

The quartermaster did his best to satisfy the poor girl, and Glenarvan did not interrupt him, though a score of
questions far more important crowded into his mind. Lady Helena made him look at Mary's beaming face, and the
words he was about to utter remained unspoken.

Ayrton gave an account of the BRITANNIA'S voyage across the Pacific. Mary knew most of it before, as news
of the ship had come regularly up to the month of May, 1862. In the course of the year Harry Grant had touched at
all the principal ports. He had been to the Hebrides, to New Guinea, New Zealand, and New Caledonia, and had
succeeded in finding an important point on the western coast of Papua, where the establishment of a Scotch colony
seemed to him easy, and its prosperity certain. A good port on the Molucca and Philippine route must attract ships,
especially when the opening of the Suez Canal would have supplanted the Cape route. Harry Grant was one of those
who appreciated the great work of M. De Lesseps, and would not allow political rivalries to interfere with
international interests.

After reconnoitering Papua, the BRITANNIA went to provision herself at Callao, and left that port on the 30th
of May, 1862, to return to Europe by the Indian Ocean and the Cape. Three weeks afterward, his vessel was disabled
by a fearful storm in which they were caught, and obliged to cut away the masts. A leak sprang in the hold, and
could not be stopped. The crew were too exhausted to work the pumps, and for eight days the BRITANNIA was
tossed about in the hurricane like a shuttlecock. She had six feet of water in her hold, and was gradually sinking. The
boats had been all carried away by the tempest; death stared them in the face, when, on the night of the 22d of June,
as Paganel had rightly supposed, they came in sight of the eastern coast of Australia.

The ship soon neared the shore, and presently dashed violently against it. Ayrton was swept off by a wave, and
thrown among the breakers, where he lost consciousness. When he recovered, he found himself in the hands of
natives, who dragged him away into the interior of the country. Since that time he had never heard the
BRITANNIA's name mentioned, and reasonably enough came to the conclusion that she had gone down with all
hands off the dangerous reefs of Twofold Bay.

This ended Ayrton's recital, and more than once sorrowful exclamations were evoked by the story. The Major
could not, in common justice, doubt its authenticity. The sailor was then asked to narrate his own personal history,
which was short and simple enough. He had been carried by a tribe of natives four hundred miles north of the 37th parallel. He spent a miserable existence there— not that he was ill-treated, but the natives themselves lived miserably. He passed two long years of painful slavery among them, but always cherished in his heart the hope of one day regaining his freedom, and watching for the slightest opportunity that might turn up, though he knew that his flight would be attended with innumerable dangers.

At length one night in October, 1864, he managed to escape the vigilance of the natives, and took refuge in the depths of immense forests. For a whole month he subsisted on roots, edible ferns and mimosa gums, wandering through vast solitudes, guiding himself by the sun during the day and by the stars at night. He went on, though often almost despairingly, through bogs and rivers, and across mountains, till he had traversed the whole of the uninhabited part of the continent, where only a few bold travelers have ventured; and at last, in an exhausted and all but dying condition, he reached the hospitable dwelling of Paddy O'Moore, where he said he had found a happy home in exchange for his labor.

"And if Ayrton speaks well of me," said the Irish settler, when the narrative ended, "I have nothing but good to say of him. He is an honest, intelligent fellow and a good

V. IV Verne worker; and as long as he pleases, Paddy O'Moore's house shall be his."

Ayrton thanked him by a gesture, and waited silently for any fresh question that might be put to him, though he thought to himself that he surely must have satisfied all legitimate curiosity. What could remain to be said that he had not said a hundred times already. Glenarvan was just about to open a discussion about their future plan of action, profiting by this rencontre with Ayrton, and by the information he had given them, when Major McNabbs, addressing the sailor said, "You were quartermaster, you say, on the BRITANNIA?"

"Yes," replied Ayrton, without the least hesitation.

But as if conscious that a certain feeling of mistrust, however slight, had prompted the inquiry, he added, "I have my shipping papers with me; I saved them from the wreck."

He left the room immediately to fetch his official document, and, though hardly absent a minute, Paddy O'Moore managed to say, "My Lord, you may trust Ayrton; I vouch for his being an honest man. He has been two months now in my service, and I have never had once to find fault with him. I knew all this story of his shipwreck and his captivity. He is a true man, worthy of your entire confidence."

Glenarvan was on the point of replying that he had never doubted his good faith, when the man came in and brought his engagement written out in due form. It was a paper signed by the shipowners and Captain Grant. Mary recognized her father's writing at once. It was to certify that "Tom Ayrton, able-bodied seaman, was engaged as quartermaster on board the three-mast vessel, the BRITANNIA, Glasgow."

There could not possibly be the least doubt now of Ayrton's identity, for it would have been difficult to account for his possession of the document if he were not the man named in it.

"Now then," said Glenarvan, "I wish to ask everyone's opinion as to what is best to be done. Your advice, Ayrton, will be particularly valuable, and I shall be much obliged if you would let us have it."

"Madam," replied Ayrton, readily enough, "I should re-embark in the DUNCAN, and go right to the scene of the catastrophe. There I should be guided by circumstances, and by any chance indications we might discover."

"Very good," returned Glenarvan; "but we must wait till the DUNCAN is repaired."
"Ah, she has been injured then?" said Ayrton.
"Yes," replied Mangles.
"To any serious extent?"
"No; but such injuries as require more skilful workmanship than we have on board. One of the branches of the screw is twisted, and we cannot get it repaired nearer than Melbourne."
"Well, let the ship go to Melbourne then," said Paganel, "and we will go without her to Twofold Bay."
"And how?" asked Mangles.
"By crossing Australia as we crossed America, keeping along the 37th parallel."
"But the DUNCAN?" repeated Ayrton, as if particularly anxious on that score.
"The DUNCAN can join us, or we can join her, as the case may be. Should we discover Captain Grant in the course of our journey, we can all return together to Melbourne. If we have to go on to the coast, on the contrary, then the DUNCAN can come to us there. Who has any objection to make? Have you, Major?"
"No, not if there is a practicable route across Australia."
"So practicable, that I propose Lady Helena and Miss Grant should accompany us."
"Are you speaking seriously?" asked Glenarvan.
"Perfectly so, my Lord. It is a journey of 350 miles, not more. If we go twelve miles a day it will barely take us a month, just long enough to put the vessel in trim. If we had to cross the continent in a lower latitude, at its wildest part, and traverse immense deserts, where there is no water and where the heat is tropical, and go where the most adventurous travelers have never yet ventured, that would be a different matter. But the 37th parallel cuts only through the province of Victoria, quite an English country, with roads and railways, and well populated almost everywhere. It is a journey you might make, almost, in a chaise, though a wagon would be better. It is a mere trip from London to Edinburgh, nothing more."
"What about wild beasts, though?" asked Glenarvan, anxious to go into all the difficulties of the proposal.
"There are no wild beasts in Australia."
"And how about the savages?"
"There are no savages in this latitude, and if there were, they are not cruel, like the New Zealanders."
"And the convicts?"
"There are no convicts in the southern provinces, only in the eastern colonies. The province of Victoria not only refused to admit them, but passed a law to prevent any ticket-of-leave men from other provinces from entering her territories. This very year the Government threatened to withdraw its subsidy from the Peninsular Company if their vessels continued to take in coal in those western parts of Australia where convicts are admitted. What! Don't you know that, and you an Englishman?"
"In the first place, I beg leave to say I am not an Englishman," replied Glenarvan.
"What M. Paganel says is perfectly correct," said Paddy O'Moore. "Not only the province of Victoria, but also Southern Australia, Queensland, and even Tasmania, have agreed to expel convicts from their territories. Ever since I have been on this farm, I have never heard of one in this Province."
"And I can speak for myself. I have never come across one."
"You see then, friends," went on Jacques Paganel, "there are few if any savages, no ferocious animals, no convicts, and there are not many countries of Europe for which you can say as much. Well, will you go?"
"What do you think, Helena?" asked Glenarvan.
"What we all think, dear Edward," replied Lady Helena, turning toward her companions; "let us be off at once."

CHAPTER VIII PREPARATION FOR THE JOURNEY

GLENARVAN never lost much time between adopting an idea and carrying it out. As soon as he consented to Paganel's proposition, he gave immediate orders to make arrangements for the journey with as little delay as possible. The time of starting was fixed for the 22d of December, the next day but one.

What results might not come out of this journey. The presence of Harry Grant had become an indisputable fact, and the chances of finding him had increased. Not that anyone expected to discover the captain exactly on the 37th parallel, which they intended strictly to follow, but they might come upon his track, and at all events, they were going to the actual spot where the wreck had occurred. That was the principal point.

Besides, if Ayrton consented to join them and act as their guide through the forests of the province of Victoria and right to the eastern coast, they would have a fresh chance of success. Glenarvan was sensible of this, and asked his host whether he would have any great objection to his asking Ayrton to accompany them, for he felt particularly desirous of securing the assistance of Harry Grant's old companion.

Paddy O'Moore consented, though he would regret the loss of his excellent servant.
"Well, then, Ayrton, will you come with us in our search expedition?"
Ayrton did not reply immediately. He even showed signs of hesitation; but at last, after due reflection, said,
"Yes, my Lord, I will go with you, and if I can not take you to Captain Grant, I can at least take you to the very place where his ship struck."
"Thanks, Ayrton."
"One question, my Lord."
"Well?"
"Where will you meet the DUNCAN again?"
"At Melbourne, unless we traverse the whole continent from coast to coast."
"But the captain?"
"The captain will await my instructions in the port of Melbourne."
"You may depend on me then, my Lord."
"I will, Ayrton."

The quartermaster was warmly thanked by the passengers of the DUNCAN, and the children loaded him with caresses. Everyone rejoiced in his decision except the Irishman, who lost in him an intelligent and faithful helper. But Paddy understood the importance Glenarvan attached to the presence of the man, and submitted. The whole party then returned to the ship, after arranging a rendezvous with Ayrton, and ordering him to procure the necessary means of conveyance across the country.

When John Mangles supported the proposition of Paganel, he took for granted that he should accompany the expedition. He began to speak to Glenarvan at once about it, and adduced all sorts of arguments to advance his cause—his devotion to Lady Helena and his Lordship, how useful he could be in organizing the party, and how useless on board the DUNCAN; everything, in fact, but the main reason, and that he had no need to bring forward.

"I'll only ask you one question, John," said Glenarvan. "Have you entire confidence in your chief officer?"
"Absolutely," replied Mangles, "Tom Austin is a good sailor. He will take the ship to her destination, see that the repairs are skillfully executed, and bring her back on the appointed day. Tom is a slave to duty and discipline. Never would he take it upon himself to alter or retard the execution of an order. Your Lordship may rely on him as on myself."

"Very well then, John," replied Glenarvan. "You shall go with us, for it would be advisable," he added, smiling, "that you should be there when we find Mary Grant's father."

"Oh! your Lordship," murmured John, turning pale. He could say no more, but grasped Lord Glenarvan's hand.

Next day, John Mangles and the ship's carpenter, accompanied by sailors carrying provisions, went back to Paddy O'Moore's house to consult the Irishman about the best method of transport. All the family met him, ready to give their best help. Ayrton was there, and gave the benefit of his experience.

On one point both he and Paddy agreed, that the journey should be made in a bullock-wagon by the ladies, and that the gentlemen should ride on horseback. Paddy could furnish both bullocks and vehicle. The vehicle was a cart twenty feet long, covered over by a tilt, and resting on four large wheels without spokes or felloes, or iron tires— in a word, plain wooden discs. The front and hinder part were connected by means of a rude mechanical contrivance, which did not allow of the vehicle turning quickly. There was a pole in front thirty-five feet long, to which the bullocks were to be yoked in couples. These animals were able to draw both with head and neck, as their yoke was fastened on the nape of the neck, and to this a collar was attached by an iron peg. It required great skill to drive such a long, narrow, shaky concern, and to guide such a team by a goad; but Ayrton had served his apprenticeship to it on the Irishman's farm, and Paddy could answer for his com-petency. The role of conductor was therefore assigned to him.

There were no springs to the wagon, and, consequently, it was not likely to be very comfortable; but, such as it was, they had to take it. But if the rough construction could not be altered, John Mangles resolved that the interior should be made as easy as possible. His first care was to divide it into two compartments by a wooden partition. The back one was intended for the provisions and luggage, and M. Olbinett's portable kitchen. The front was set apart especially for the ladies, and, under the carpenter's hands, was to be speedily converted into a comfortable room, covered with a thick carpet, and fitted up with a toilet table and two couches. Thick leather curtains shut in this apartment, and protected the occupants from the chilliness of the nights. In case of necessity, the gentlemen might shelter themselves here, when the violent rains came on, but a tent was to be their usual resting-place when the caravan camped for the night. John Mangles exercised all his ingenuity in furnishing the small space with everything that the two ladies could possibly require, and he succeeded so well, that neither Lady Helena nor Mary had much reason to regret leaving their cozy cabins on board the DUNCAN.

For the rest of the party, the preparations were soon made, for they needed much less. Strong horses were provided for Lord Glenarvan, Paganel, Robert Grant, McNabbs, and John Mangles; also for the two sailors, Wilson and Mulrady, who were to accompany their captain. Ayrton's place was, of course, to be in front of the wagon, and M. Olbinett, who did not much care for equitation, was to make room for himself among the baggage. Horses and
bullocks were grazing in the Irishman's meadows, ready to fetch at a moment's notice.

After all arrangements were made, and the carpenter set to work, John Mangles escorted the Irishman and his family back to the vessel, for Paddy wished to return the visit of Lord Glenarvan. Ayrton thought proper to go too, and about four o'clock the party came over the side of the DUNCAN.

They were received with open arms. Glenarvan would not be outstripped in politeness, and invited his visitors to stop and dine. His hospitality was willingly accepted. Paddy was quite amazed at the splendor of the saloon, and was loud in admiration of the fitting up of the cabins, and the carpets and hangings, as well as of the polished maple-wood of the upper deck. Ayrton's approbation was much less hearty, for he considered it mere costly superfluity.

But when he examined the yacht with a sailor's eye, the quartermaster of the BRITANNIA was as enthusiastic about it as Paddy. He went down into the hold, inspected the screw department and the engine-room, examining the engine thoroughly, and inquired about its power and consumption. He explored the coal-bunkers, the store-room, the powder-store, and armory, in which last he seemed to be particularly attracted by a cannon mounted on the forecastle. Glenarvan saw he had to do with a man who understood such matters, as was evident from his questions. Ayrton concluded his investigations by a survey of the masts and rigging.

"You have a fine vessel, my Lord," he said after his curiosity was satisfied.
"A good one, and that is best," replied Glenarvan.
"And what is her tonnage?"
"Two hundred and ten tons."
"I don't think I am far out," continued Ayrton, "in judging her speed at fifteen knots. I should say she could do that easily."
"Say seventeen," put in John Mangles, "and you've hit the mark."
"Seventeen!" exclaimed the quartermaster. "Why, not a man-of-war--not the best among them, I mean--could chase her!"
"Not one," replied Mangles. "The DUNCAN is a regular racing yacht, and would never let herself be beaten."
"Even at sailing?" asked Ayrton.
"Even at sailing."
"Well, my Lord, and you too, captain," returned Ayrton, "allow a sailor who knows what a ship is worth, to compliment you on yours."
"Stay on board of her, then, Ayrton," said Glenarvan; "it rests with yourself to call it yours."
"I will think of it, my Lord," was all Ayrton's reply.
Just then M. Olbinett came to announce dinner, and his Lordship repaired with his guests to the saloon.
"That Ayrton is an intelligent man," said Paganel to the Major.
"Too intelligent!" muttered McNabbs, who, without any apparent reason, had taken a great dislike to the face and manners of the quartermaster.

During the dinner, Ayrton gave some interesting details about the Australian continent, which he knew perfectly. He asked how many sailors were going to accompany the expedition, and seemed astonished to hear that only two were going. He advised Glenarvan to take all his best men, and even urged him to do it, which advice, by the way, ought to have removed the Major's suspicion.
"But," said Glenarvan, "our journey is not dangerous, is it?"
"Not at all," replied Ayrton, quickly.
"Well then, we'll have all the men we can on board. Hands will be wanted to work the ship, and to help in the repairs. Besides, it is of the utmost importance that she should meet us to the very day, at whatever place may be ultimately selected. Consequently, we must not lessen her crew."
Ayrton said nothing more, as if convinced his Lordship was right.

When evening came, Scotch and Irish separated. Ayrton and Paddy O'Moore and family returned home. Horses and wagons were to be ready the next day, and eight o'clock in the morning was fixed for starting.

Lady Helena and Mary Grant soon made their preparations. They had less to do than Jacques Paganel, for he spent half the night in arranging, and wiping, and rubbing up the lenses of his telescope. Of course, next morning he slept on till the Major's stentorian voice roused him.

The luggage was already conveyed to the farm, thanks to John Mangles, and a boat was waiting to take the passengers. They were soon seated, and the young captain gave his final orders to Tom Austin, his chief officer. He impressed upon him that he was to wait at Melbourne for Lord Glenarvan's commands, and to obey them scrupulously, whatever they might be.

The old sailor told John he might rely on him, and, in the name of the men, begged to offer his Lordship their best wishes for the success of this new expedition.

A storm of hurrahs burst forth from the yacht as the boat rowed off. In ten minutes the shore was reached, and a
quarter of an hour afterward the Irishman's farm. All was ready. Lady Helena was enchanted with her installation. The huge chariot, with its primitive wheels and massive planks, pleased her particularly. The six bullocks, yoked in pairs, had a patriarchal air about them which took her fancy. Ayrtin, goad in hand, stood waiting the orders of this new master.

"My word," said Paganel, "this is a famous vehicle; it beats all the mail-coaches in the world. I don't know a better fashion of traveling than in a mountebank's caravan— a movable house, which goes or stops wherever you please. What can one wish better? The Samaritians understood that, and never traveled in any other way."

"Monsieur Paganel," said Lady Helena, "I hope I shall have the pleasure of seeing you in my SALONS."

"Assuredly, madam, I should count it an honor. Have you fixed the day?"

"I shall be at home every day to my friends," replied Lady Helena; "and you are--"

"The most devoted among them all," interrupted Paganel, gaily.

These mutual compliments were interrupted by the arrival of the seven horses, saddled and ready. They were brought by Paddy's sons, and Lord Glenarvan paid the sum stipulated for his various purchases, adding his cordial thanks, which the worthy Irishman valued at least as much as his golden guineas.

The signal was given to start, and Lady Helena and Mary took their places in the reserved compartment. Ayrtin seated himself in front, and Olbinett scrambled in among the luggage. The rest of the party, well armed with carbines and revolvers, mounted their horses. Ayrtin gave a peculiar cry, and his team set off. The wagon shook and the planks creaked, and the axles grated in the naves of the wheels; and before long the hospitable farm of the Irishman was out of sight.

CHAPTER IX A COUNTRY OF PARADOXES

IT was the 23d of December, 1864, a dull, damp, dreary month in the northern hemisphere; but on the Australian continent it might be called June. The hottest season of the year had already commenced, and the sun's rays were almost tropical, when Lord Glenarvan started on his new expedition.

Most fortunately the 37th parallel did not cross the immense deserts, inaccessible regions, which have cost many martyrs to science already. Glenarvan could never have encountered them. He had only to do with the southern part of Australia—viz., with a narrow portion of the province of Adelaide, with the whole of Victoria, and with the top of the reversed triangle which forms New South Wales.

It is scarcely sixty-two miles from Cape Bernouilli to the frontiers of Victoria. It was not above a two days' march, and Ayrtin reckoned on their sleeping next night at Apsley, the most westerly town of Victoria.

The commencement of a journey is always marked by ardor, both in the horses and the horsemen. This is well enough in the horsemen, but if the horses are to go far, their speed must be moderated and their strength husbanded. It was, therefore, fixed that the average journey every day should not be more than from twenty-five to thirty miles.

Besides, the pace of the horses must be regulated by the slower pace of the bullocks, truly mechanical engines which lose in time what they gain in power. The wagon, with its passengers and provisions, was the very center of the caravan, the moving fortress. The horsemen might act as scouts, but must never be far away from it.

As no special marching order had been agreed upon, everybody was at liberty to follow his inclinations within certain limits. The hunters could scour the plain, amiable folks could talk to the fair occupants of the wagon, and philosophers could philosophize. Paganel, who was all three combined, had to be and was everywhere at once.

The march across Adelaide presented nothing of any particular interest. A succession of low hills rich in dust, a long stretch of what they call in Australia "bush," several prairies covered with a small prickly bush, considered a great dainty by the ovine tribe, embraced many miles. Here and there they noticed a species of sheep peculiar to New Holland— sheep with pig's heads, feeding between the posts of the telegraph line recently made between Adelaide and the coast.

Up to this time there had been a singular resemblance in the country to the monotonous plains of the Argentine Pampas. There was the same grassy flat soil, the same sharply-defined horizon against the sky. McNabb's declared they had never changed countries; but Paganel told him to wait, and he would soon see a difference. And on the faith of this assurance marvelous things were expected by the whole party.

In this fashion, after a march of sixty miles in two days, the caravan reached the parish of Apsley, the first town in the Province of Victoria in the Wimerra district.

The wagon was put up at the Crown Inn. Supper was soon smoking on the table. It consisted solely of mutton served up in various ways.

They all ate heartily, but talked more than they ate, eagerly asking Paganel questions about the wonders of the country they were just beginning to traverse. The amiable geographer needed no pressing, and told them first that this part of it was called Australia Felix.

"Wrongly named!" he continued. "It had better have been called rich, for it is true of countries, as individuals, that riches do not make happiness. Thanks to her gold mines, Australia has been abandoned to wild devastating
adventurers. You will come across them when we reach the gold fields."

"Is not the colony of Victoria of but a recent origin?" asked Lady Glenarvan.

"Yes, madam, it only numbers thirty years of existence. It was on the 6th of June, 1835, on a Tuesday--"

"At a quarter past seven in the evening," put in the Major, who delighted in teasing the Frenchman about his precise dates.

"No, at ten minutes past seven," replied the geographer, gravely, "that Batman and Falckner first began a settlement at Port Phillip, the bay on which the large city of Melbourne now stands. For fifteen years the colony was part of New South Wales, and recognized Sydney as the capital; but in 1851, she was declared independent, and took the name of Victoria."

"And has greatly increased in prosperity since then, I believe," said Glenarvan.

"Judge for yourself, my noble friend," replied Paganel. "Here are the numbers given by the last statistics; and let McNabbs say as he likes, I know nothing more eloquent than statistics."

"Go on," said the Major.

"Well, then, in 1836, the colony of Port Phillip had 224 inhabitants. To-day the province of Victoria numbers 550,000. Seven millions of vines produce annually 121,- 000 gallons of wine. There are 103,000 horses spreading over the plains, and 675,272 horned cattle graze in her wide-stretching pastures."

"Is there not also a certain number of pigs?" inquired McNabbs.

"Yes, Major, 79,625."

"And how many sheep?"

"7,115,943, McNabbs."

"Including the one we are eating at this moment."

"No, without counting that, since it is three parts devoured."

"Bravo, Monsieur Paganel," exclaimed Lady Helena, laughing heartily. "It must be owned you are posted up in geographical questions, and my cousin McNabbs need not try and find you tripping."

"It is my calling, Madam, to know this sort of thing, and to give you the benefit of my information when you please. You may therefore believe me when I tell you that wonderful things are in store for you in this strange country."

"It does not look like it at present," said McNabbs, on purpose to tease Paganel.

"Just wait, impatient Major," was his rejoinder. "You have hardly put your foot on the frontier, when you turn round and abuse it. Well, I say and say again, and will always maintain that this is the most curious country on the earth. Its formation, and nature, and products, and climate, and even its future disappearance have amazed, and are now amazing, and will amaze, all the SAVANTS in the world. Think, my friends, of a continent, the margin of which, instead of the center, rose out of the waves originally like a gigantic ring, which encloses, perhaps, in its center, a sea partly evaporated, the waves of which are drying up daily; where humidity does not exist either in the air or in the soil; where the trees lose their bark every year, instead of their leaves; where the leaves present their sides to the sun and not their face, and consequently give no shade; where the wood is often incombustible, where good-sized stones are dissolved by the rain; where the forests are low and the grasses gigantic; where the animals are strange; where quadrupeds have beaks, like the echidna, or ornithorhynchus, and naturalists have been obliged to create a special order for them, called monotremes; where the kangaroos leap on unequal legs, and sheep have pigs' heads; where foxes fly about from tree to tree; where the swans are black; where rats make nests; where the bowerbird opens her reception-rooms to receive visits from her feathered friends; where the birds astonish the imagination by the variety of their notes and their aptness; where one bird serves for a clock, and another makes a sound like a postillion cracking of a whip, and a third imitates a knife-grinder, and a fourth the motion of a pendulum; where one laughs when the sun rises, and another cries when the sun sets! Oh, strange, illogical country, land of paradoxes and anomalies, if ever there was one on earth--the learned botanist Grimard was right when he said, 'There is that Australia, a sort of parody, or rather a defiance of universal laws in the face of the rest of the world.'"

Paganel's tirade was poured forth in the most impetuous manner, and seemed as if it were never coming to an end. The eloquent secretary of the Geographical Society was no longer master of himself. He went on and on, gesticulating furiously, and brandishing his fork to the imminent danger of his neighbors. But at last his voice was drowned in a thunder of applause, and he managed to stop.

Certainly after such an enumeration of Australian peculiarities, he might have been left in peace but the Major said in the coolest tone possible: "And is that all, Paganel?"

"No, indeed not," rejoined the Frenchman, with renewed vehemence.

"What!" exclaimed Lady Helena; "there are more wonders still in Australia?"

"Yes, Madam, its climate. It is even stranger than its productions."

"Is it possible?" they all said.
"I am not speaking of the hygienic qualities of the climate," continued Paganel, "rich as it is in oxygen and poor in azote. There are no damp winds, because the trade winds blow regularly on the coasts, and most diseases are unknown, from typhus to measles, and chronic affections."

"Still, that is no small advantage," said Glenarvan.

"No doubt; but I am not referring to that, but to one quality it has which is incomparable."

"And what is that?"

"You will never believe me."

"Yes, we will," exclaimed his auditors, their curiosity aroused by this preamble.

"Well, it is--"

"It is what?"

"It is a moral regeneration."

"A moral regeneration?"

"Yes," replied the SAVANT, in a tone of conviction. "Here metals do not get rust on them by exposure to the air, nor men. Here the pure, dry atmosphere whitens everything rapidly, both linen and souls. The virtue of the climate must have been well known in England when they determined to send their criminals here to be reformed."

"What! do you mean to say the climate has really any such influence?" said Lady Helena.

"Yes, Madam, both on animals and men."

"You are not joking, Monsieur Paganel?"

"I am not, Madam. The horses and the cattle here are of incomparable docility. You see it?"

"It is impossible!"

"But it is a fact. And the convicts transported into this reviving, salubrious air, become regenerated in a few years. Philanthropists know this. In Australia all natures grow better."

"But what is to become of you then, Monsieur Paganel, in this privileged country--you who are so good already?" said Lady Helena. "What will you turn out?"

"Excellent, Madam, just excellent, and that's all."

CHAPTER X AN ACCIDENT

THE next day, the 24th of December, they started at daybreak. The heat was already considerable, but not unbearable, and the road was smooth and good, and allowed the cavalcade to make speedy progress. In the evening they camped on the banks of the White Lake, the waters of which are brackish and undrinkable.

Jacques Paganel was obliged to own that the name of this lake was a complete misnomer, for the waters were no more white than the Black Sea is black, or the Red Sea red, or the Yellow River yellow, or the Blue Mountains blue. However, he argued and disputed the point with all the _amour propre_ of a geographer, but his reasoning made no impression.

M. Olbinett prepared the evening meal with his accustomed punctuality, and after this was dispatched, the travelers disposed themselves for the night in the wagon and in the tent, and were soon sleeping soundly, notwithstanding the melancholy howling of the "dingoes," the jackals of Australia.

A magnificent plain, thickly covered with chrysanthemums, stretched out beyond the lake, and Glenarvan and his friends would gladly have explored its beauties when they awoke next morning, but they had to start. As far as the eye could reach, nothing was visible but one stretch of prairie, enameled with flower, in all the freshness and abundance of spring. The blue flowers of the slender-leaved flax, combined with the bright hues of the scarlet acanthus, a flower peculiar to the country.

A few cassowaries were bounding over the plain, but it was impossible to get near them. The Major was fortunate enough, however, to hit one very rare animal with a ball in the leg. This was the jabiru, a species which is fast disappearing, the gigantic crane of the English colonies. This winged creature was five feet high, and his wide, conical, extremely pointed beak, measured eighteen inches in length. The violet and purple tints of his head contrasted vividly with the glossy green of his neck, and the dazzling whiteness of his throat, and the bright red of his long legs. Nature seems to have exhausted in its favor all the primitive colors on her palette.

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Great admiration was bestowed on this bird, and the Major's spoil would have borne the honors of the day, had not Robert come across an animal a few miles further on, and bravely killed it. It was a shapeless creature, half porcupine, half ant-eater, a sort of unfinished animal belonging to the first stage of creation. A long glutinous extensible tongue hung out of his jaws in search of the ants, which formed its principal food.

"It is an echidna," said Paganel. "Have you ever seen such a creature?"

"It is horrible," replied Glenarvan.

"Horrible enough, but curious, and, what's more, peculiar to Australia. One might search for it in vain in any other part of the world."
Naturally enough, the geographer wished to preserve this interesting specimen of monotremata, and wanted to stow it away in the luggage; but M. Olbinett resented the idea so indignantly, that the SAVANT was obliged to abandon his project.

About four o'clock in the afternoon, John Mangles descried an enormous column of smoke about three miles off, gradually overspreading the whole horizon. What could be the cause of this phenomenon? Paganel was inclined to think it was some description of meteor, and his lively imagination was already in search of an explanation, when Ayrton cut short all his conjectures summarily, by announcing that the cloud of dust was caused by a drove of cattle on the road.

The quartermaster proved right, for as the cloud came nearer, quite a chorus of bleatings and neighings, and bellowings escaped from it, mingled with the loud tones of a human voice, in the shape of cries, and whistles, and vociferations.

Presently a man came out of the cloud. This was the leader-in-chief of the four-footed army. Glenarvan advanced toward him, and friendly relations were speedily established between them. The leader, or to give him his proper designation, the stock-keeper, was part owner of the drove. His name was Sam Machell, and he was on his way from the eastern provinces to Portland Bay.

The drove numbered 12,075 head in all, or 1,000 bullocks, 11,000 sheep, and 75 horses. All these had been bought in the Blue Mountains in a poor, lean condition, and were going to be fatted up on the rich pasture lands of Southern Australia, and sold again at a great profit. Sam Machell expected to get pounds 2 on each bullock, and 10s. on every sheep, which would bring him in pounds 3,750. This was doing good business; but what patience and energy were required to conduct such a restive, stubborn lot to their destination, and what fatigues must have to be endured. Truly the gain was hardly earned.

Sam Machell told his history in a few words, while the drove continued their march among the groves of mimosas. Lady Helena and Mary and the rest of the party seated themselves under the shade of a wide-spreading gum-tree, and listened to his recital.

It was seven months since Sam Machell had started. He had gone at the rate of ten miles a day, and his interminable journey would last three months longer. His assistants in the laborious task comprised twenty dogs and thirty men, five of whom were blacks, and very serviceable in tracking up any strayed beasts. Six wagons made the rear-guard. All the men were armed with stockwhips, the handles of which are eighteen inches long, and the lash nine feet, and they move about among the racks, bringing refractory animals back into order, while the dogs, the light cavalry of the regiment, preserved discipline in the wings.

The travelers were struck with the admirable arrangement of the drove. The different stock were kept apart, for wild sheep and bullocks would not have got on together at all. The bullocks would never have grazed where the sheep had passed along, and consequently they had to go first, divided into two battalions. Five regiments of sheep followed, in charge of twenty men, and last of all came the horses.

Sam Machell drew the attention of his auditors to the fact that the real guides of the drove were neither the men nor the dogs, but the oxen themselves, beasts of superior intelligence, recognized as leaders by their congenitors. They advanced in front with perfect gravity, choosing the best route by instinct, and fully alive to their claim to respect. Indeed, they were obliged to be studied and humored in everything, for the whole drove obeyed them implicitly. If they took it into their heads to stop, it was a matter of necessity to yield to their good pleasure, for not a single animal would move a step till these leaders gave the signal to set off.

Sundry details, added by the stock-keeper, completed the history of this expedition, worthy of being written, if not commended by Xenophon himself. As long as the troop marched over the plains it was well enough, there was little difficulty or fatigue. The animals fed as they went along, and slaked their thirst at the numerous creeks that watered the plains, sleeping at night and making good progress in the day, always obedient and tractable to the dogs. But when they had to go through great forests and groves of eucalyptus and mimosas, the difficulties increased. Platoons, battalions and regiments got all mixed together or scattered, and it was a work of time to collect them again. Should a "leader" unfortunately go astray, he had to be found, cost what it might, on pain of a general disbandment, and the blacks were often long days in quest of him, before their search was successful. During the heavy rains the lazy beasts refused to stir, and when violent storms chanced to occur, the creatures became almost mad with terror, and were seized with a wild, disorderly panic.

However, by dint of energy and ambition, the stock-keeper triumphed over these difficulties, incessantly renewed though they were. He kept steadily on; mile after mile of plains and woods, and mountains, lay behind. But in addition to all his other qualities, there was one higher than all that he specially needed when they came to rivers. This was patience—patience that could stand any trial, and not only could hold out for hours and days, but for weeks. The stock-keeper would be himself forced to wait on the banks of a stream that might have been crossed at once. There was nothing to hinder but the obstinacy of the herd. The bullocks would taste the water and turn back. The
sheep fled in all directions, afraid to brave the liquid element. The stock-keeper hoped when night came he might manage them better, but they still refused to go forward. The rams were dragged in by force, but the sheep would not follow. They tried what thirst would do, by keeping them without drink for several days, but when they were brought to the river again, they simply quenched their thirst, and declined a more intimate acquaintance with the water. The next expedient employed was to carry all the lambs over, hoping the mothers would be drawn after them, moved by their cries. But the lambs might bleat as pitifully as they liked, the mothers never stirred. Sometimes this state of affairs would last a whole month, and the stock-keeper would be driven to his wits' end by his bleating, bellowing, neighing army. Then all of a sudden, one fine day, without rhyme or reason, a detachment would take it into their heads to make a start across, and the only difficulty now was to keep the whole herd from rushing helter-skelter after them. The wildest confusion set in among the ranks, and numbers of the animals were drowned in the passage.

Such was the narrative of Sam Machell. During its recital, a considerable part of the troop had filed past in good order. It was time for him to return to his place at their head, that he might be able to choose the best pasturage. Taking leave of Lord Glenarvan, he sprang on a capital horse of the native breed, that one of his men held waiting for him, and after shaking hands cordially with everybody all round, took his departure. A few minutes later, nothing was visible of the stock-keeper and his troop but a cloud of dust.

The wagon resumed its course in the opposite direction, and did not stop again till they halted for the night at the foot of Mount Talbot.

Paganel made the judicious observation that it was the 25th of December, the Christmas Day so dear to English hearts. But the steward had not forgotten it, and an appetizing meal was soon ready under the tent, for which he deserved and received warm compliments from the guests. Indeed, M. Olbinett had quite excelled himself on this occasion. He produced from his stores such an array of European dishes as is seldom seen in the Australian desert. Reindeer hams, slices of salt beef, smoked salmon, oat cakes, and barley meal scones; tea _ad libitum_, and whisky in abundance, and several bottles of port, composed this astonishing meal. The little party might have thought themselves in the grand dining-hall of Malcolm Castle, in the heart of the Highlands of Scotland.

The next day, at 11 A. M., the wagon reached the banks of the Wimerra on the 143d meridian.

The river, half a mile in width, wound its limpid course between tall rows of gum-trees and acacias. Magnificent specimens of the MYRTACEA, among others, the _metroside-ros speciosa_, fifteen feet high, with long drooping branches, adorned with red flowers. Thousands of birds, the lories, and greenfinches, and gold-winged pigeons, not to speak of the noisy paroquets, flew about in the green branches. Below, on the bosom of the water, were a couple of shy and unapproachable black swans. This _rara avis_ of the Australian rivers soon disappeared among the windings of the Wimerra, which water the charming landscape in the most capricious manner.

The wagon stopped on a grassy bank, the long fringes of which dipped in the rapid current. There was neither raft nor bridge, but cross over they must. Ayrton looked about for a practicable ford. About a quarter of a mile up the water seemed shallower, and it was here they determined to try to pass over. The soundings in different parts showed a depth of three feet only, so that the wagon might safely enough venture.

"I suppose there is no other way of fording the river?" said Glenarvan to the quartermaster.

"No, my Lord; but the passage does not seem dangerous. We shall manage it."

"Shall Lady Glenarvan and Miss Grant get out of the wagon?"

"Not at all. My bullocks are sure-footed, and you may rely on me for keeping them straight."

"Very well, Ayrton; I can trust you."

The horsemen surrounded the ponderous vehicle, and all stepped boldly into the current. Generally, when wagons have to ford rivers, they have empty casks slung all round them, to keep them floating on the water; but they had no such swimming belt with them on this occasion, and they could only depend on the sagacity of the animals and the prudence of Ayrton, who directed the team. The Major and the two sailors were some feet in advance. Glenarvan and John Mangles went at the sides of the wagon, ready to lend any assistance the fair travelers might require, and Paganel and Robert brought up the rear.

All went well till they reached the middle of the Wimerra, but then the hollow deepened, and the water rose to the middle of the wheels. The bullocks were in danger of losing their footing, and dragging with them the oscillating vehicle. Ayrton devoted himself to his task courageously. He jumped into the water, and hanging on by the bullocks' horns, dragged them back into the right course.

Suddenly the wagon made a jolt that it was impossible to prevent; a crack was heard, and the vehicle began to lean over in a most precarious manner. The water now rose to the ladies' feet; the whole concern began to float, though John Mangles and Lord Glenarvan hung on to the side. It was an anxious moment.

Fortunately a vigorous effort drove the wagon toward the opposite shore, and the bank began to slope upward, so that the horses and bullocks were able to regain their footing, and soon the whole party found themselves on the
other side, glad enough, though wet enough too.

The fore part of the wagon, however, was broken by the jolt, and Glenarvan's horse had lost a shoe.

This was an accident that needed to be promptly repaired. They looked at each other hardly knowing what to do, till Ayrton proposed he should go to Black Point Station, twenty miles further north, and bring back a blacksmith with him.

"Yes, go, my good fellow," said Glenarvan. "How long will it take you to get there and back?"

"About fifteen hours," replied Ayrton, "but not longer."

"Start at once, then, and we will camp here, on the banks of the Wimerra, till you return."

CHAPTER XI CRIME OR CALAMITY

IT was not without apprehension that the Major saw Ayrton quit the Wimerra camp to go and look for a blacksmith at the Black Point Station. But he did not breathe a word of his private misgivings, and contented himself with watching the neighborhood of the river; nothing disturbed the repose of those tranquil glades, and after a short night the sun reappeared on the horizon.

As to Glenarvan, his only fear was lest Ayrton should return alone. If they fail to find a workman, the wagon could not resume the journey. This might end in a delay of many days, and Glenarvan, impatient to succeed, could brook no delay, in his eagerness to attain his object.

Ayrton luckily had lost neither his time nor his trouble. He appeared next morning at daybreak, accompanied by a man who gave himself out as the blacksmith from BlackPoint Station. He was a powerful fellow, and tall, but his features were of a low, brutal type, which did not prepossess anyone in his favor. But that was nothing, provided he knew his business. He scarcely spoke, and certainly he did not waste his breath in useless words.

"Is he a good workman?" said John Mangles to the quartermaster.

"I know no more about him than you do, captain," said Ayrton. "But we shall see."

The blacksmith set to work. Evidently that was his trade, as they could plainly see from the way he set about repairing the forepart of the wagon. He worked skilfully and with uncommon energy. The Major observed that the flesh of his wrists was deeply furrowed, showing a ring of extravasated blood. It was the mark of a recent injury, which the sleeve of an old woolen shirt could not conceal. McNabbs questioned the blacksmith about those sores which looked so painful. The man continued his work without answering. Two hours more and the damage the carriage had sustained was made good. As to Glenarvan's horse, it was soon disposed of. The blacksmith had had the forethought to bring the shoes with him. These shoes had a peculiarity which did not escape the Major; it was a trefoil clumsily cut on the back part. McNabbs pointed it out to Ayrton.

"It is the Black-Point brand," said the quartermaster. "That enables them to track any horses that may stray from the station, and prevents their being mixed with other herds."

The horse was soon shod. The blacksmith claimed his wage, and went off without uttering four words.

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Half an hour later, the travelers were on the road. Beyond the grove of mimosas was a stretch of sparsely timbered country, which quite deserved its name of "open plain." Some fragments of quartz and ferruginous rock lay among the scrub and the tall grass, where numerous flocks were feeding. Some miles farther the wheels of the wagon plowed deep into the alluvial soil, where irregular creeks murmured in their beds, half hidden among giant reeds. By-and-by they skirted vast salt lakes, rapidly evaporating. The journey was accomplished without trouble, and, indeed, without fatigue.

Lady Helena invited the horsemen of the party to pay her a visit in turns, as her reception-room was but small, and in pleasant converse with this amiable woman they forgot the fatigue of their day's ride.

Lady Helena, seconded by Miss Mary, did the honors of their ambulatory house with perfect grace. John Mangles was not forgotten in these daily invitations, and his somewhat serious conversation was not unpleasing.

The party crossed, in a diagonal direction, the mail-coach road from Crowland to Horsham, which was a very dusty one, and little used by pedestrians.

The spurs of some low hills were skirted at the boundary of Talbot County, and in the evening the travelers reached a point about three miles from Maryborough. The fine rain was falling, which, in any other country, would have soaked the ground; but here the air absorbed the moisture so wonderfully that the camp did not suffer in the least.

Next day, the 29th of December, the march was delayed somewhat by a succession of little hills, resembling a miniature Switzerland. It was a constant repetition of up and down hill, and many a jolt besides, all of which were scarcely pleasant. The travelers walked part of the way, and thought it no hardship.

At eleven o'clock they arrived at Carisbrook, rather an important municipality. Ayrton was for passing outside the town without going through it, in order, he said, to save time. Glenarvan concurred with him, but Paganel, always eager for novelties, was for visiting Carisbrook. They gave him his way, and the wagon went on slowly.

Paganel, as was his custom, took Robert with him. His visit to the town was very short, but it sufficed to give
him an exact idea of Australian towns. There was a bank, a court-house, a market, a church, and a hundred or so of brick houses, all exactly alike. The whole town was laid out in squares, crossed with parallel streets in the English fashion. Nothing could be more simple, nothing less attractive. As the town grows, they lengthen the streets as we lengthen the trousers of a growing child, and thus the original symmetry is undisturbed.

Carisbrook was full of activity, a remarkable feature in these towns of yesterday. It seems in Australia as if towns shot up like trees, owing to the heat of the sun. Men of business were hurrying along the streets; gold buyers were hastening to meet the in-coming escort; the precious metal, guarded by the local police, was coming from the mines at Bendigo and Mount Alexander. All the little world was so absorbed in its own interests, that the strangers passed unobserved amid the laborious inhabitants.

After an hour devoted to visiting Carisbrook, the two visitors rejoined their companions, and crossed a highly cultivated district. Long stretches of prairie, known as the "Low Level Plains," next met their gaze, dotted with countless sheep, and shepherds' huts. And then came a sandy tract, without any transition, but with the abruptness of change so characteristic of Australian scenery. Mount Simpson and Mount Terrengower marked the southern point where the boundary of the Loddon district cuts the 144th meridian.

As yet they had not met with any of the aboriginal tribes living in the savage state. Glenarvan wondered if the Australians were wanting in Australia, as the Indians had been wanting in the Pampas of the Argentine district; but Paganel told him that, in that latitude, the natives frequented chiefly the Murray Plains, about one hundred miles to the eastward.

"We are now approaching the gold district," said he, "in a day or two we shall cross the rich region of Mount Alexander. It was here that the swarm of diggers alighted in 1852; the natives had to fly to the interior. We are in civilized districts without seeing any sign of it; but our road will, before the day is over, cross the railway which connects the Murray with the sea. Well, I must confess, a railway in Australia does seem to me an astonishing thing!"

"And pray, why, Paganel?" said Glenarvan.

"Why? because it jars on one's ideas. Oh! I know you English are so used to colonizing distant possessions. You, who have electric telegraphs and universal exhibitions in New Zealand, you think it is all quite natural. But it dumbfounders the mind of a Frenchman like myself, and confuses all one's notions of Australia!"

"Because you look at the past, and not at the present," said John Mangles.

A loud whistle interrupted the discussion. The party were within a mile of the railway. Quite a number of persons were hastening toward the railway bridge. The people from the neighboring stations left their houses, and the shepherds their flocks, and crowded the approaches to the railway. Every now and then there was a shout, "The railway! the railway!"

Something serious must have occurred to produce such an agitation. Perhaps some terrible accident.

Glenarvan, followed by the rest, urged on his horse. In a few minutes he arrived at Camden Bridge and then he became aware of the cause of such an excitement.

A fearful accident had occurred; not a collision, but a train had gone off the line, and then there had been a fall. The affair recalled the worst disasters of American railways. The river crossed by the railway was full of broken carriages and the engine. Whether the weight of the train had been too much for the bridge, or whether the train had gone off the rails, the fact remained that five carriages out of six fell into the bed of the Loddon, dragged down by the locomotive. The sixth carriage, miraculously preserved by the breaking of the coupling chain, remained on the rails, six feet from the abyss. Below nothing was discernible but a melancholy heap of twisted and blackened axles, shattered wagons, bent rails, charred sleepers; the boiler, burst by the shock, had scattered its plates to enormous distances. From this shapeless mass of ruins flames and black smoke still rose. After the fearful fall came fire, more fearful still! Great tracks of blood, scattered limbs, charred trunks of bodies, showed here and there; none could guess how many victims lay dead and mangled under those ruins.

Glenarvan, Paganel, the Major, Mangles, mixing with the crowd, heard the current talk. Everyone tried to account for the accident, while doing his utmost to save what could be saved.

"The bridge must have broken," said one.

"Not a bit of it. The bridge is whole enough; they must have forgotten to close it to let the train pass. That is all."

It was, in fact, a swing bridge, which opened for the convenience of the boats. Had the guard, by an unpardonable oversight, omitted to close it for the passage of the train, so that the train, coming on at full speed, was precipitated into the Loddon? This hypothesis seemed very admissible; for although one-half of the bridge lay beneath the ruins of the train, the other half, drawn up to the opposite shore, hung, still unharmed, by its chains. No one could doubt that an oversight on the part of the guard had caused the catastrophe.

The accident had occurred in the night, to the express train which left Melbourne at 11:45 in the evening. About a quarter past three in the morning, twenty-five minutes after leaving Castlemaine, it arrived at Camden Bridge,
where the terrible disaster befell. The passengers and guards of the last and only remaining carriage at once tried to obtain help. But the telegraph, whose posts were lying on the ground, could not be worked. It was three hours before the authorities from Castlemaine reached the scene of the accident, and it was six o'clock in the morning when the salvage party was organized, under the direction of Mr. Mitchell, the surveyor-general of the colony, and a detachment of police, commanded by an inspector. The squatters and their "hands" lent their aid, and directed their efforts first to extinguishing the fire which raged in the ruined heap with unconquerable violence. A few unrecognizable bodies lay on the slope of the embankment, but from that blazing mass no living thing could be saved. The fire had done its work too speedily. Of the passengers ten only survived—those in the last carriage. The railway authorities sent a locomotive to bring them back to Castlemaine.

Lord Glenarvan, having introduced himself to the surveyor-general, entered into conversation with him and the inspector of police. The latter was a tall, thin man, im-perturbably cool, and, whatever he may have felt, allowed no trace of it to appear on his features. He contemplated this calamity as a mathematician does a problem; he was seeking to solve it, and to find the unknown; and when Glenarvan observed, "This is a great misfortune," he quietly replied, "Better than that, my Lord."

"Better than that?" cried Glenarvan. "I do not understand you."

"It is better than a misfortune, it is a crime!" he replied, in the same quiet tone.

Glenarvan looked inquiringly at Mr. Mitchell for a solution. "Yes, my Lord," replied the surveyor-general, "our inquiries have resulted in the conclusion that the catastrophe is the result of a crime. The last luggage-van has been robbed. The surviving passengers were attacked by a gang of five or six villains. The bridge was intentionally opened, and not left open by the negligence of the guard; and connecting with this fact the guard's disappearance, we may conclude that the wretched fellow was an accomplice of these ruffians."

The police-officer shook his head at this inference.

"You do not agree with me?" said Mr. Mitchell.

"No, not as to the complicity of the guard."

"Well, but granting that complicity, we may attribute the crime to the natives who haunt the Murray. Without him the blacks could never have opened a swing-bridge; they know nothing of its mechanism."

"Exactly so," said the police-inspector.

"Well," added Mr. Mitchell, "we have the evidence of a boatman whose boat passed Camden Bridge at 10:40 P. M., that the bridge was properly shut after he passed."

"True."

"Well, after that I cannot see any doubt as to the complicity of the guard."

The police-officer shook his head gently, but continuously.

"Then you don't attribute the crime to the natives?"

"Not at all."

"To whom then?"

Just at this moment a noise was heard from about half a mile up the river. A crowd had gathered, and quickly increased. They soon reached the station, and in their midst were two men carrying a corpse. It was the body of the guard, quite cold, stabbed to the heart. The murderers had no doubt hoped, by dragging their victim to a distance, that the police would be put on a wrong scent in their first inquiries. This discovery, at any rate, justified the doubts of the police-inspector. The poor blacks had had no hand in the matter.

"Those who dealt that blow," said he, "were already well used to this little instrument"; and so saying he produced a pair of "darbies," a kind of handcuff made of a double ring of iron secured by a lock. "I shall soon have the pleasure of presenting them with these bracelets as a New Year's gift."

"Then you suspect—"

"Some folks who came out free in Her Majesty's ships."

"What! convicts?" cried Paganel, who recognized the formula employed in the Australian colonies.

"I thought," said Glenarvan, "convicts had no right in the province of Victoria."

"Bah!" said the inspector, "if they have no right, they take it! They escape sometimes, and, if I am not greatly mistaken, this lot have come straight from Perth, and, take my word for it, they will soon be there again."

Mr. Mitchell nodded acquiescence in the words of the police-inspector. At this moment the wagon arrived at the level crossing of the railway. Glenarvan wished to spare the ladies the horrible spectacle at Camden Bridge. He took courteous leave of the surveyor-general, and made a sign to the rest to follow him. "There is no reason," said he, "for delaying our journey."

When they reached the wagon, Glenarvan merely mentioned to Lady Helena that there had been a railway accident, without a hint of the crime that had played so great a part in it; neither did he make mention of the presence of a band of convicts in the neighborhood, reserving that piece of information solely for Ayrton's ear. The little
procession now crossed the railway some two hundred yards below the bridge, and then resumed their eastward course.

CHAPTER XII TOLINE OF THE LACHLAN

ABOUT two miles from the railway, the plain terminated in a range of low hills, and it was not long before the wagon entered a succession of narrow gorges and capricious windings, out of which it emerged into a most charming region, where grand trees, not closely planted, but in scattered groups, were growing with absolutely tropical luxuriance. As the party drove on they stumbled upon a little native boy lying fast asleep beneath the shade of a magnificent banksia. He was dressed in European garb, and seemed about eight years of age. There was no mistaking the characteristic features of his race; the crisped hair, the nearly black skin, the flattened nose, the thick lips, the unusual length of the arms, immediately classed him among the aborigines of the interior. But a degree of intelligence appeared in his face that showed some educational influences must have been at work on his savage, untamed nature.

Lady Helena, whose interest was greatly excited by this spectacle, got out of the wagon, followed by Mary, and presently the whole company surrounded the peaceful little sleeper. "Poor child!" said Mary Grant. "Is he lost, I wonder, in this desert?"

"I suppose," said Lady Helena, "he has come a long way to visit this part. No doubt some he loves are here."

"But he can't be left here," added Robert. "We must--"

His compassionate sentence remained unfinished, for, just at that moment the child turned over in his sleep, and, to the extreme surprise of everybody, there was a large label on his shoulders, on which the following was written:

TOLINE. To be conducted to Echuca. Care of Jeffries Smith, Railway Porter. Prepaid.

"That's the English all over!" exclaimed Paganel. "They send off a child just as they would luggage, and book him like a parcel. I heard it was done, certainly; but I could not believe it before."

"Poor child!" said Lady Helena. "Could he have been in the train that got off the line at Camden Bridge? Perhaps his parents are killed, and he is left alone in the world!"

"I don't think so, madam," replied John Mangles. "That card rather goes to prove he was traveling alone."

"He is waking up!" said Mary.

And so he was. His eyes slowly opened and then closed again, pained by the glare of light. But Lady Helena took his hand, and he jumped up at once and looked about him in bewilderment at the sight of so many strangers. He seemed half frightened at first, but the presence of Lady Helena reassured him. "Do you understand English, my little man?" asked the young lady.

"I understand it and speak it," replied the child in fluent enough English, but with a marked accent. His pronunciation was like a Frenchman's.

"What is your name?" asked Lady Helena.

"Toline," replied the little native.

"Toline!" exclaimed Paganel. "Ah! I think that means 'bark of a tree' in Australian."

Toline nodded, and looked again at the travelers.

"Where do you come from?" inquired Lady Helena.

"From Melbourne, by the railway from Sandhurst."

"Were you in the accident at Camden Bridge?" said Glenarvan.

"Yes, sir," was Toline's reply; "but the God of the Bible protected me."

"Are you traveling alone?"

"Yes, alone; the Reverend Paxton put me in charge of Jeffries Smith; but unfortunately the poor man was killed."

"And you did not know any one else on the train?"

"No one, madam; but God watches over children and never forsakes them."

Toline said this in soft, quiet tones, which went to the heart. When he mentioned the name of God his voice was grave and his eyes beamed with all the fervor that animated his young soul.

This religious enthusiasm at so tender an age was easily explained. The child was one of the aborigines baptized by the English missionaries, and trained by them in all the rigid principles of the Methodist Church. His calm replies, proper behavior, and even his somber garb made him look like a little reverend already.

But where was he going all alone in these solitudes and why had he left Camden Bridge? Lady Helena asked him about this.

"I was returning to my tribe in the Lachlan," he replied. "I wished to see my family again."

"Are they Australians?" inquired John Mangles.

"Yes, Australians of the Lachlan," replied Toline.

"Have you a father and mother?" said Robert Grant.

"Yes, my brother," replied Toline, holding out his hand to little Grant. Robert was so touched by the word
brother that he kissed the black child, and they were friends forthwith.

The whole party were so interested in these replies of the little Australian savage that they all sat round him in a listening group. But the sun had meantime sunk behind the tall trees, and as a few miles would not greatly retard their progress, and the spot they were in would be suitable for a halt, Glenarvan gave orders to prepare their camp for the night at once. Ayrton unfastened the bullocks and turned them out to feed at will. The tent was pitched, and Olbinett got the supper ready. Toline consented, after some difficulty, to share it, though he was hungry enough. He took his seat beside Robert, who chose out all the titbits for his new friend. Toline accepted them with a shy grace that was very charming.

The conversation with him, however, was still kept up, for everyone felt an interest in the child, and wanted to talk to him and hear his history. It was simple enough. He was one of the poor native children confided to the care of charitable societies by the neighboring tribes. The Australian aborigines are gentle and inoffensive, never exhibiting the fierce hatred toward their conquerors which characterizes the New Zealanders, and possibly a few of the races of Northern Australia. They often go to the large towns, such as Adelaide, Sydney and Melbourne, and walk about in very primitive costume. They go to barter their few articles of industry, hunting and fishing implements, weapons, etc., and some of the chiefs, from pecuniary motives, no doubt, willingly leave their children to profit by the advantages of a gratuitous education in English.

V. IV Verne

This was how Toline's parents had acted. They were true Australian savages living in the Lachlan, a vast region lying beyond the Murray. The child had been in Melbourne five years, and during that time had never once seen any of his own people. And yet the imperishable feeling of kindred was still so strong in his heart that he had dared to brave this journey over the wilds to visit his tribe once more, scattered though perchance it might be, and his family, even should he find it decimated.

"And after you have kissed your parents, are you coming back to Melbourne?" asked Lady Glenarvan.

"Yes, Madam," replied Toline, looking at the lady with a loving expression.

"And what are you going to be some day?" she continued.

"I am going to snatch my brothers from misery and ignorance. I am going to teach them, to bring them to know and love God. I am going to be a missionary."

Words like those, spoken with such animation from a child of only eight years, might have provoked a smile in light, scoffing auditors, but they were understood and appreciated by the grave Scotch, who admired the courage of this young disciple, already armed for the battle. Even Paganel was stirred to the depths of his heart, and felt his warmer sympathy awakened for the poor child.

To speak the truth, up to that moment he did not care much for a savage in European attire. He had not come to Australia to see Australians in coats and trousers. He preferred them simply tattooed, and this conventional dress jarred on his preconceived notions. But the child's genuine religious fervor won him over completely. Indeed, the wind-up of the conversation converted the worthy geographer into his best friend.

It was in reply to a question Lady Helena had asked, that Toline said he was studying at the Normal School in Melbourne, and that the principal was the Reverend Mr. Paxton.

"And what do they teach you?" she went on to say.

"They teach me the Bible, and mathematics, and geography."

Paganel pricked up his ears at this, and said, "Indeed, geography!"

"Yes, sir," said Toline; "and I had the first prize for geography before the Christmas holidays."

"You had the first prize for geography, my boy?"

"Yes, sir. Here it is," returned Toline, pulling a book out of his pocket.

It was a bible, 32mo size, and well bound. On the first page was written the words: "Normal School, Melbourne. First Prize for Geography. Toline of the Lachlan."

Paganel was beside himself. An Australian well versed in geography. This was marvelous, and he could not help kissing Toline on both cheeks, just as if he had been the Reverend Mr. Paxton himself, on the day of the distribution of prizes. Paganel need not have been so amazed at this circumstance, however, for it is frequent enough in Australian schools. The little savages are very quick in learning geography. They learn it eagerly, and on the other hand, are perfectly averse to the science of arithmetic.

Toline could not understand this outburst of affection on the part of the Frenchman, and looked so puzzled that Lady Helena thought she had better inform him that Paganel was a celebrated geographer and a distinguished professor on occasion.

"A professor of geography!" cried Toline. "Oh, sir, do question me!"

"Question you? Well, I'd like nothing better. Indeed, I was going to do it without your leave. I should very much like to see how they teach geography in the Normal School of Melbourne."
"And suppose Toline trips you up, Paganel!" said McNabbs.
"What a likely idea!" exclaimed the geographer. "Trip up the Secretary of the Geographical Society of France."
Their examination then commenced, after Paganel had settled his spectacles firmly on his nose, drawn himself up to his full height, and put on a solemn voice becoming to a professor.
"Pupil Toline, stand up."
As Toline was already standing, he could not get any higher, but he waited modestly for the geographer's questions.
"Pupil Toline, what are the five divisions of the globe?"
"Oceanica, Asia, Africa, America, and Europe."
"Perfectly so. Now we'll take Oceanica first; where are we at this moment? What are the principal divisions?"
"Australia, belonging to the English; New Zealand, belonging to the English; Tasmania, belonging to the English. The islands of Chatham, Auckland, Macquarie, Kermadec, Makin, Maraki, are also belonging to the English."
"Very good, and New Caledonia, the Sandwich Islands, the Mendana, the Pomotou?"
"They are islands under the Protectorate of Great Britain."
"What!" cried Paganel, "under the Protectorate of Great Britain. I rather think on the contrary, that France--"
"France," said the child, with an astonished look.
"Well, well," said Paganel; "is that what they teach you in the Melbourne Normal School?"
"Yes, sir. Isn't it right?"
"Oh, yes, yes, perfectly right. All Oceanica belongs to the English. That's an understood thing. Go on."
Paganel's face betrayed both surprise and annoyance, to the great delight of the Major.
"Let us go on to Asia."
"Asia," replied Toline, "is an immense country. Capital--Calcutta. Chief Towns--Bombay, Madras, Calicut, Aden, Malacca, Singapore, Pegu, Colombo. The Laccadive Islands, the Maldives, the Chagos, etc., belonging to the English."
"Very good, and New Caledonia, the Sandwich Islands, the Mendana, the Pomotou?"
"They are islands under the Protectorate of Great Britain."
"Capital!" said Paganel, beginning to enter into this perfectly taught but Anglo-colored fanciful geography. "As to Algeria, Morocco, Egypt--they are all struck out of the Britannic cities."
"Let us pass on, pray, to America."
"It is divided," said Toline, promptly, "into North and South America. The former belongs to the English in Canada, New Brunswick, New Scotland, and the United States, under the government of President Johnson."
"President Johnson," cried Paganel, "the successor of the great and good Lincoln, assassinated by a mad fanatic of the slave party. Capital; nothing could be better. And as to South America, with its Guiana, its archipelago of South Shetland, its Georgia, Jamaica, Trinidad, etc., that belongs to the English, too! Well, I'll not be the one to dispute that point! But, Toline, I should like to know your opinion of Europe, or rather your professor's."
"Europe?" said Toline not at all understanding Paganel's excitement.
"Yes, Europe! Who does Europe belong to?"
"Why, to the English," replied Toline, as if the fact was quite settled.
"I much doubt it," returned Paganel. "But how's that, Toline, for I want to know that?"
"England, Ireland, Scotland, Malta, Jersey and Guern-sey, the Ionian Islands, the Hebrides, the Shetlands, and the Orkneys."
"Yes, yes, my lad; but there are other states you forgot to mention."
"What are they?" replied the child, not the least disconcerted.
"Spain, Russia, Austria, Prussia, France," answered Paganel.
"They are provinces, not states," said Toline.
"Well, that beats all!" exclaimed Paganel, tearing off his spectacles.
"Yes," continued the child. "Spain--capital, Gibraltar."
"Admirable! perfect! sublime! And France, for I am French, and I should like to know to whom I belong."
"France," said Toline, quietly, "is an English province; chief city, Calais."
"Calais!" cried Paganel. "So you think Calais still belongs to the English?"
"Certainly."
"And that it is the capital of France?"
"Yes, sir; and it is there that the Governor, Lord Napo-leon, lives."
This was too much for Paganel's risible faculties. He burst out laughing. Toline did not know what to make of
him. He had done his best to answer every question put to him. But the singularity of the answers were not his
blame; indeed, he never imagined anything singular about them. However, he took it all quietly, and waited for the
professor to recover himself. These peals of laughter were quite incomprehensible to him.

"You see," said Major McNabbs, laughing, "I was right. The pupil could enlighten you after all."

"Most assuredly, friend Major," replied the geographer. "So that's the way they teach geography in Melbourne!
They do it well, these professors in the Normal School! Europe, Asia, Africa, America, Oceanica, the whole world
belongs to the English. My conscience! with such an ingenious education it is no wonder the natives submit. Ah,
well, Toline, my boy, does the moon belong to England, too?"

"She will, some day," replied the young savage, gravely.

This was the climax. Paganel could not stand any more. He was obliged to go away and take his laugh out, for he
was actually exploding with mirth, and he went fully a quarter of a mile from the encampment before his
equilibrium was restored.

Meanwhile, Glenarvan looked up a geography they had brought among their books. It was "Richardson's
Compendium," a work in great repute in England, and more in agreement with modern science than the manual in
use in the Normal School in Melbourne.

"Here, my child," he said to Toline, "take this book and keep it. You have a few wrong ideas about geography,
which it would be well for you to rectify. I will give you this as a keepsake from me."

Toline took the book silently; but, after examining it attentively, he shook his head with an air of incredulity, and
could not even make up his mind to put it in his pocket.

By this time night had closed in; it was 10 P. M. and time to think of rest, if they were to start betimes next day.
Robert offered his friend Toline half his bed, and the little fellow accepted it. Lady Helena and Mary Grant
withdrew to the wagon, and the others lay down in the tent, Paganel's merry peals still mingling with the low, sweet
song of the wild magpie.

But in the morning at six o'clock, when the sunshine wakened the sleepers, they looked in vain for the little
Australian. Toline had disappeared. Was he in haste to get to the Lachlan district? or was he hurt by Paganel's
laughter? No one could say.

But when Lady Helena opened her eyes she discovered a fresh branch of mimosa leaves lying across her, and
Paganel found a book in his vest pocket, which turned out to be "Richardson's Geography."

CHAPTER XIII A WARNING

ON the 2d of January, at sunrise, the travelers forded the Colban and the Caupespe rivers. The half of their
journey was now accomplished. In fifteen days more, should their journey continue to be prosperous, the little party
would reach Twofold Bay.

They were all in good health. All that Paganel said of the hygienic qualities of the climate was realized. There
was little or no humidity, and the heat was quite bearable. Neither horses nor bullocks could complain of it any more
than human beings. The order of the march had been changed in one respect since the affair of Camden Bridge. That
criminal catastrophe on the railway made Ayrton take sundry precautions, which had hitherto been unnecessary. The
hunters never lost sight of the wagon, and whenever they camped, one was always placed on watch. Morning and
evening the firearms were primed afresh. It was certain that a gang of ruffians was prowling about the country, and
though there was no cause for actual fear, it was well to be ready for whatever might happen.

It need hardly be said these precautions were adopted without the knowledge of Lady Helena and Mary Grant, as
Lord Glenarvan did not wish to alarm them.

They were by no means unnecessary, however, for any imprudence or carelessness might have cost the travelers
dear. Others beside Glenarvan were on their guard. In lonely settlements and on stations, the inhabitants and the
squatters prepared carefully against any attack or surprise. Houses are closed at nightfall; the dogs let loose inside
the fences, barked at the slightest sound. Not a single shepherd on horseback gathered his numerous flocks together
at close of day, without having a carbine slung from his saddle.

The outrage at Camden Bridge was the reason for all this, and many a colonist fastened himself in with bolts and
bars now at dusk, who used to sleep with open doors and windows.

The Government itself displayed zeal and prudence, especially in the Post-office department. On this very day,
just as Glenarvan and his party were on their way from Kilmore to Heathcote, the mail dashed by at full speed; but
though the horses were at a gallop, Glenarvan caught sight of the glittering weapons of the mounted police that rode
by its side, as they swept past in a cloud of dust. The travelers might have fancied themselves back in those lawless
times when the discovery of the first gold-fields deluged the Australian continent with the scum of Europe.

A mile beyond the road to Kilmore, the wagon, for the first time since leaving Cape Bernouilli, struck into one
of those forests of gigantic trees which extend over a super-fices of several degrees. A cry of admiration escaped the
travelers at the sight of the eucalyptus trees, two hundred feet high, with tough bark five inches thick. The trunks,
measuring twenty feet round, and furrowed with foamy streaks of an odorous resin, rose one hundred and fifty feet above the soil. Not a branch, not a twig, not a stray shoot, nor even a knot, spoilt the regularity of their outline. They could not have come out smoother from the hands of a turner. They stood like pillars all molded exactly alike, and could be counted by hundreds. At an enormous height they spread out in chaplets of branches, rounded and adorned at their extremity with alternate leaves. At the axe of these leaves solitary flowers drooped down, the calyx of which resembles an inverted urn.

Under this leafy dome, which never lost its greenness, the air circulated freely, and dried up the dampness of the ground. Horses, cattle, and wagon could easily pass between the trees, for they were standing in wide rows, and parceled out like a wood that was being felled. This was neither like the densely-packed woods choked up with brambles, nor the virgin forest barricaded with the trunks of fallen trees, and overgrown with inextricable tangles of creepers, where only iron and fire could open up a track. A grassy carpet at the foot of the trees, and a canopy of verdure above, long perspectives of bold colors, little shade, little freshness at all, a peculiar light, as if the rays came through a thin veil, dappled lights and shades sharply reflected on the ground, made up a whole, and constituted a peculiar spectacle rich in novel effects. The forests of the Oceanic continent do not in the least resemble the forests of the New World; and the Eucalyptus, the “Tara” of the aborigines, belonging to the family of MYRTACEA, the different varieties of which can hardly be enumerated, is the tree _par excellence_ of the Australian flora.

The reason of the shade not being deep, nor the darkness profound, under these domes of verdure, was that these trees presented a curious anomaly in the disposition of the leaves. Instead of presenting their broad surface to the sunlight, only the side is turned. Only the profile of the leaves is seen in this singular foliage. Consequently the sun's rays slant down them to the earth, as if through the open slants of a Venetian blind.

Glenarvan expressed his surprise at this circumstance, and wondered what could be the cause of it. Paganel, who was never at a loss for an answer, immediately replied:

"What astonishes me is not the caprice of nature. She knows what she is about, but botanists don't always know what they are saying. Nature made no mistake in giving this peculiar foliage to the tree, but men have erred in calling them EUCALYPTUS."

"What does the word mean?" asked Mary Grant.

"It comes from a Greek word, meaning I _cover well_. They took care to commit the mistake in Greek, that it might not be so self-evident, for anyone can see that the eucalyptus covers badly."

"I agree with you there," said Glenarvan; "but now tell us, Paganel, how is it that the leaves grow in this fashion?"

"From a purely physical cause, friends," said Paganel, "and one that you will easily understand. In this country where the air is dry and rain seldom falls, and the ground is parched, the trees have no need of wind or sun. Moisture lacking, sap is lacking also. Hence these narrow leaves, which seek to defend themselves against the light, and prevent too great evaporation. This is why they present the profile and not the face to the sun's rays. There is nothing more intelligent than a leaf."

"And nothing more selfish," added the Major. "These only thought of themselves, and not at all of travelers."

Everyone inclined to the opinion of McNabbs except Paganel, who congratulated himself on walking under shadeless trees, though all the time he was wiping the perspiration from his forehead. However, this disposition of foliage was certainly to be regretted, for the journey through the forest was often long and painful, as the traveler had no protection whatever against the sun's fierce rays.

The whole of this day the wagon continued to roll along through interminable rows of eucalyptus, without meeting either quadruped or native. A few cockatoos lived in the tops of the trees, but at such a height they could scarcely be distinguished, and their noisy chatter was changed into an imperceptible murmur. Occasionally a swarm of par-roquets flew along a distant path, and lighted it up for an instant with gay colors; but otherwise, solemn silence reigned in this vast green temple, and the tramp of the horses, a few words exchanged with each other by the riders, the grinding noise of the wheels, and from time to time a cry from Ayrton to stir up his lazy team, were the only sounds which disturbed this immense solitude.

When night came they camped at the foot of some eucalyptus, which bore marks of a comparatively recent fire. They looked like tall factory chimneys, for the flame had completely hollowed them out their whole length. With the thick bark still covering them, they looked none the worse. However, this bad habit of squatters or natives will end in the destruction of these magnificent trees, and they will disappear like the cedars of Lebanon, those world monuments burnt by unlucky camp fires.

Olbinett, acting on Paganel's advice, lighted his fire to prepare supper in one of these tubular trunks. He found it drew capitally, and the smoke was lost in the dark foliage above. The requisite precautions were taken for the night, and Ayrton, Mulrady, Wilson and John Mangles undertook in turn to keep watch until sunrise.

On the 3d of January, all day long, they came to nothing but the same symmetrical avenues of trees; it seemed as
if they never were going to end. However, toward evening the ranks of trees began to thin, and on a little plain a few miles off an assemblage of regular houses.

"Seymour!" cried Paganel; "that is the last town we come to in the province of Victoria."

"Is it an important one?" asked Lady Helena.

"It is a mere village, madam, but on the way to become a municipality."

"Shall we find a respectable hotel there?" asked Glenarvan.

"I hope so," replied Paganel.

"Very well; let us get on to the town, for our fair travelers, with all their courage, will not be sorry, I fancy, to have a good night's rest."

"My dear Edward, Mary and I will accept it gladly, but only on the condition that it will cause no delay, or take us the least out of the road."

"It will do neither," replied Lord Glenarvan. "Besides, our bullocks are fatigued, and we will start to-morrow at daybreak."

It was now nine o'clock; the moon was just beginning to rise, but her rays were only slanting yet, and lost in the mist. It was gradually getting dark when the little party entered the wide streets of Seymour, under Paganel's guidance, who seemed always to know what he had never seen; but his instinct led him right, and he walked straight to Campbell's North British Hotel.

The Major without even leaving the hotel, was soon aware that fear absorbed the inhabitants of the little town. Ten minutes' conversation with Dickson, the loquacious landlord, made him completely acquainted with the actual state of affairs; but he never breathed a word to any one.

When supper was over, though, and Lady Glenarvan, and Mary, and Robert had retired, the Major detained his companions a little, and said, "They have found out the perpetrators of the crime on the Sandhurst railroad."

"And are they arrested?" asked Ayrton, eagerly.

"No," replied McNabbs, without apparently noticing the EMPRESSMENT of the quartermaster--an EMPRESSMENT which, moreover, was reasonable enough under the circumstances.

"So much the worse," replied Ayrton.

"Well," said Glenarvan, "who are the authors of the crime?"

"Read," replied the Major, offering Glenarvan a copy of the _Australian and New Zealand Gazette_, "and you will see that the inspector of the police was not mistaken."

Glenarvan read aloud the following message:

SYDNEY, Jan. 2, 1866.

It will be remembered that on the night of the 29th or 30th of last December there was an accident at Camden Bridge, five miles beyond the station at Castlemaine, on the railway from Melbourne to Sandhurst. The night express, 11.45, dashing along at full speed, was precipitated into the Loddon River.

Camden Bridge had been left open. The numerous robberies committed after the accident, the body of the guard picked up about half a mile from Camden Bridge, proved that this catastrophe was the result of a crime.

Indeed, the coroner's inquest decided that the crime must be attributed to the band of convicts which escaped six months ago from the Penitentiary at Perth, Western Australia, just as they were about to be transferred to Norfolk Island.

The gang numbers twenty-nine men; they are under the command of a certain Ben Joyce, a criminal of the most dangerous class, who arrived in Australia a few months ago, by what ship is not known, and who has hitherto succeeded in evading the hands of justice.

The inhabitants of towns, colonists and squatters at stations, are hereby cautioned to be on their guard, and to communicate to the Surveyor-General any information that may aid his search. J. P. MITCHELL, S. G.

When Glenarvan had finished reading this article, McNabbs turned to the geographer and said, "You see, Paganel, there can be convicts in Australia."

"Escaped convicts, that is evident," replied Paganel, "but not regularly transported criminals. Those fellows have no business here."

"Well, they are here, at any rate," said Glenarvan; "but I don't suppose the fact need materially alter our arrangements. What do you think, John?"

John Mangles did not reply immediately; he hesitated between the sorrow it would cause the two children to give up the search, and the fear of compromising the expedition.

"If Lady Glenarvan, and Miss Grant were not with us," he said, "I should not give myself much concern about these wretches."

Glenarvan understood him and added, "Of course I need not say that it is not a question of giving up our task; but would it perhaps be prudent, for the sake of our companions, to rejoin the DUNCAN at Melbourne, and proceed
with our search for traces of Harry Grant on the eastern side. What do you think of it, McNabbs?"

"Before I give my opinion," replied the Major, "I should like to hear Ayrton's."

At this direct appeal, the quartermaster looked at Glenarvan, and said, "I think we are two hundred miles from Melbourne, and that the danger, if it exists, is as great on the route to the south as on the route to the east. Both are little frequented, and both will serve us. Besides, I do not think that thirty scoundrels can frighten eight well-armed, determined men. My advice, then, is to go forward."

"And good advice too, Ayrton," replied Paganel. "By going on we may come across the traces of Captain Grant. In returning south, on the contrary, we turn our backs to them. I think with you, then, and I don't care a snap for these escaped fellows. A brave man wouldn't care a bit for them!"

Upon this they agreed with the one voice to follow their original programme.

"Just one thing, my Lord," said Ayrton, when they were about to separate.

"Say on, Ayrton."

"Wouldn't it be advisable to send orders to the DUNCAN to be at the coast?"

"What good would that be," replied John Mangles. "When we reach Twofold Bay it will be time enough for that. If any unexpected event should oblige us to go to Melbourne, we might be sorry not to find the DUNCAN there. Besides, her injuries can not be repaired yet. For these reasons, then, I think it would be better to wait."

"All right," said Ayrton, and forbore to press the matter further.

CHAPTER XIV WEALTH IN THE WILDERNESS

ON January 6, at 7 A. M., after a tranquil night passed in longitude 146 degrees 15', the travelers continued their journey across the vast district. They directed their course steadily toward the rising sun, and made a straight line across the plain. Twice over they came upon the traces of squatters going toward the north, and their different footprints became confused, and Glenarvan's horse no longer left on the dust the Blackpoint mark, recognizable by its double shamrock.

The plain was furrowed in some places by fantastic winding creeks surrounded by box, and whose waters were rather temporary than permanent. They originated in the slopes of the Buffalo Ranges, a chain of mountains of moderate height, the undulating line of which was visible on the horizon. It was resolved to camp there the same night. Ayrton goaded on his team, and after a journey of thirty-five miles, the bullocks arrived, somewhat fatigued. The tent was pitched beneath the great trees, and as night had drawn on supper was served as quickly as possible, for all the party cared more for sleeping than eating, after such a day's march.

Paganel who had the first watch did not lie down, but shouldered his rifle and walked up and down before the camp, to keep himself from going to sleep. In spite of the absence of the moon, the night was almost luminous with the light of the southern constellations. The SAVANT amused himself with reading the great book of the firmament, a book which is always open, and full of interest to those who can read it. The profound silence of sleeping nature was only interrupted by the clanking of the hobbles on the horses' feet.

Paganel was engrossed in his astronomical meditations, and thinking more about the celestial than the terrestrial world, when a distant sound aroused him from his reverie. He listened attentively, and to his great amaze, fancied he heard the sounds of a piano. He could not be mistaken, for he distinctly heard chords struck.

"A piano in the wilds!" said Paganel to himself. "I can never believe it is that."

It certainly was very surprising, but Paganel found it easier to believe it was some Australian bird imitating the sounds of a Pleyel or Erard, as others do the sounds of a clock or mill. But at this very moment, the notes of a clear ringing voice rose on the air. The PIANIST was accompanied by singing. Still Paganel was unwilling to be convinced. However, next minute he was forced to admit the fact, for there fell on his ear the sublime strains of Mozart's "Il mio tesoro tanto" from Don Juan.

"Well, now," said the geographer to himself, "let the Australian birds be as queer as they may, and even granting the paroquets are the most musical in the world, they can't sing Mozart!"

He listened to the sublime inspiration of the great master to the end. The effect of this soft melody on the still clear night was indescribable. Paganel remained as if spellbound for a time; the voice ceased and all was silence. When Wilson came to relieve the watch, he found the geographer plunged into a deep reverie. Paganel made no remark, however, to the sailor, but reserved his information for Glenarvan in the morning, and went into the tent to bed.

Next day, they were all aroused from sleep by the sudden loud barking of dogs, Glenarvan got up forthwith. Two magnificent pointers, admirable specimens of English hunting dogs, were bounding in front of the little wood, into which they had retreated at the approach of the travelers, redoubling their clamor.

"There is some station in this desert, then," said Glenarvan, "and hunters too, for these are regular setters."

Paganel was just about to recount his nocturnal experiences, when two young men appeared, mounted on horses of the most perfect breed, true "hunters."
The two gentlemen dressed in elegant hunting costume, stopped at the sight of the little group camping in gipsy fashion. They looked as if they wondered what could bring an armed party there, but when they saw the ladies get out of the wagon, they dismounted instantly, and went toward them hat in hand. Lord Glenarvan came to meet them, and, as a stranger, announced his name and rank.

The gentlemen bowed, and the elder of them said, "My Lord, will not these ladies and yourself and friends honor us by resting a little beneath our roof?"

"Mr.--," began Glenarvan.

"Michael and Sandy Patterson are our names, proprietors of Hottam Station. Our house is scarcely a quarter of a mile distant."

"Gentlemen," replied Glenarvan, "I should not like to abuse such kindly-offered hospitality."

"My Lord," returned Michael Patterson, "by accepting it you will confer a favor on poor exiles, who will be only too happy to do the honors of the wilds."

Glenarvan bowed in token of acquiescence.

"Sir," said Paganel, addressing Michael Patterson, "if it is not an impudent question, may I ask whether it was you that sung an air from the divine Mozart last night?"

"It was, sir," replied the stranger, "and my cousin Sandy accompanied me."

"Well, sir," replied Paganel, holding out his hand to the young man, "receive the sincere compliments of a Frenchman, who is a passionate admirer of this music."

Michael grasped his hand cordially, and then pointing out the road to take, set off, accompanied by the ladies and Lord Glenarvan and his friends, for the station. The horses and the camp were left to the care of Ayrton and the sailors.

Hottam Station was truly a magnificent establishment, kept as scrupulously in order as an English park. Immense meadows, enclosed in gray fences, stretched away out of sight. In these, thousands of bullocks and millions of sheep were grazing, tended by numerous shepherds, and still more numerous dogs. The crack of the stock-whip mingled continually with the barking of the "collies" and the bellowing and bleating of the cattle and sheep.

Toward the east there was a boundary of myalls and gum-trees, beyond which rose Mount Hottam, its imposing peak towering 7,500 feet high. Long avenues of green trees were visible on all sides. Here and there was a thick clump of "grass trees," tall bushes ten feet high, like the dwarf palm, quite lost in their crown of long narrow leaves. The air was balmy and odorous with the perfume of scented laurels, whose white blossoms, now in full bloom, distilled on the breeze the finest aromatic perfume.

To these charming groups of native trees were added transplantations from European climates. The peach, pear, and apple trees were there, the fig, the orange, and even the oak, to the rapturous delight of the travelers, who greeted them with loud hurrahs! But astonished as the travelers were to find themselves walking beneath the shadow of the trees of their own native land, they were still more so at the sight of the birds that flew about in the branches—the "satin bird," with its silky plumage, and the "king-honeysuckers," with their plumage of gold and black velvet.

For the first time, too, they saw here the "Lyre" bird, the tail of which resembles in form the graceful instrument of Orpheus. It flew about among the tree ferns, and when its tail struck the branches, they were almost surprised not to hear the harmonious strains that inspired Amphion to rebuild the walls of Thebes. Paganel had a great desire to play on it.

However, Lord Glenarvan was not satisfied with admiring the fairy-like wonders of this oasis, improvised in the Australian desert. He was listening to the history of the young gentlemen. In England, in the midst of civilized countries, the new comer acquaints his host whence he comes and whither he is going; but here, by a refinement of delicacy, Michael and Sandy Patterson thought it a duty to make themselves known to the strangers who were about to receive their hospitality.

Michael and Sandy Patterson were the sons of London bankers. When they were twenty years of age, the head of their family said, "Here are some thousands, young men. Go to a distant colony; and start some useful settlement there. Learn to know life by labor. If you succeed, so much the better. If you fail, it won't matter much. We shall not regret the money which makes you men."

The two young men obeyed. They chose the colony of Victoria in Australia, as the field for sowing the paternal bank-notes, and had no reason to repent the selection. At the end of three years the establishment was flourishing. In Victoria, New South Wales, and Southern Australia, there are more than three thousand stations, some belonging to squatters who rear cattle, and others to settlers who farm the ground. Till the arrival of the two Pattersons, the largest establishment of this sort was that of Mr. Jamieson, which covered an area of seventy-five miles, with a frontage of about eight miles along the Peron, one of the affluents of the Darling.

Now Hottam Station bore the palm for business and extent. The young men were both squatters and settlers.
They managed their immense property with rare ability and uncommon energy.

The station was far removed from the chief towns in the midst of the unfrequented districts of the Murray. It occupied a long wide space of five leagues in extent, lying between the Buffalo Ranges and Mount Hottam. At the two angles north of this vast quadrilateral, Mount Aberdeen rose on the left, and the peaks of High Barven on the right. Winding, beautiful streams were not wanting, thanks to the creeks and affluents of the Oven's River, which throws itself at the north into the bed of the Murray. Consequently they were equally successful in cattle breeding and farming. Ten thousand acres of ground, admirably cultivated, produced harvests of native productions and exotics, and several millions of animals fattened in the fertile pastures. The products of Hottam Station fetched the very highest price in the markets of Castlemaine and Melbourne.

Michael and Sandy Patterson had just concluded these details of their busy life, when their dwelling came in sight, at the extremity of the avenue of the oaks.

It was a charming house, built of wood and brick, hidden in groves of emerophilis. Nothing at all, however, belonging to a station was visible--neither sheds, nor stables, nor cart-houses. All these out-buildings, a perfect village, comprising more than twenty huts and houses, were about a quarter of a mile off in the heart of a little valley. Electric communication was established between this village and the master's house, which, far removed from all noise, seemed buried in a forest of exotic trees.

At Sandy Patterson's bidding, a sumptuous breakfast was served in less than a quarter of an hour. The wines and viands were of the finest quality; but what pleased the guests most of all in the midst of these refinements of opulence, was the joy of the young squatters in offering them this splendid hospitality.

It was not long before they were told the history of the expedition, and had their liveliest interest awakened for its success. They spoke hopefully to the young Grants, and Michael said: "Harry Grant has evidently fallen into the hands of natives, since he has not turned up at any of the settlements on the coast. He knows his position exactly, as the document proves, and the reason he did not reach some English colony is that he must have been taken prisoner by the savages the moment he landed!"

"That is precisely what befell his quartermaster, Ayrton," said John Mangles.

"But you, gentlemen, then, have never heard the catastrophe of the BRITANNIA, mentioned?" inquired Lady Helena.

"Never, Madam," replied Michael.

"And what treatment, in your opinion, has Captain Grant met with among the natives?"

"The Australians are not cruel, Madam," replied the young squatter, "and Miss Grant may be easy on that score. There have been many instances of the gentleness of their nature, and some Europeans have lived a long time among them without having the least cause to complain of their brutality."

"King, among others, the sole survivor of the Burke expedition," put in Paganel.

"And not only that bold explorer," returned Sandy, "but also an English soldier named Buckley, who deserted at Port Philip in 1803, and who was welcomed by the natives, and lived thirty-three years among them."

"And more recently," added Michael, "one of the last numbers of the AUSTRALASIA informs us that a certain Morrilli has just been restored to his countrymen after sixteen years of slavery. His story is exactly similar to the captain's, for it was at the very time of his shipwreck in the PRUVIENNE, in 1846, that he was made prisoner by the natives, and dragged away into the interior of the continent. I therefore think you have reason to hope still."

The young squatter's words caused great joy to his auditors. They completely corroborated the opinions of Paganel and Ayrton.

Glenarvan could not refuse the request of his amiable hosts, to spend the whole day at the station. It was twelve hours' delay, but also twelve hours' rest, and both horses and bullocks would be the better for the comfortable quarters they would find there. This was accordingly agreed upon, and the young squatters sketched out a programme of the day's amusements, which was adopted eagerly.

At noon, seven vigorous hunters were before the door. An elegant brake was intended for the ladies, in which the coachman could exhibit his skill in driving four-in-hand. The cavalcade set off preceded by huntsmen, and armed with first-rate rifles, followed by a pack of pointers barking joyously as they bounded through the bushes. For four hours the hunting party wandered through the paths and avenues of the park, which was as large as a small German state. The Reuiss-Schleitz, or Saxe-Coburg Gotha, would have gone inside it comfortably. Few people were to be
met in it certainly, but sheep in abundance. As for game, there was a complete preserve awaiting the hunters. The noisy reports of guns were soon heard on all sides. Little Robert did wonders in company with Major McNabbs. The daring boy, in spite of his sister's injunctions, was always in front, and the first to fire. But John Mangles promised to watch over him, and Mary felt less uneasy.

During this BATTUE they killed certain animals peculiar to the country, the very names of which were unknown to Paganel; among others the "wombat" and the "bandicoot." The wombat is an herbivorous animal, which burrows in the ground like a badger. It is as large as a sheep, and the flesh is excellent.

The bandicoot is a species of marsupial animal which could outwit the European fox, and give him lessons in pillaging poultry yards. It was a repulsive-looking animal, a foot and a half long, but, as Paganel chanced to kill it, of course he thought it charming.

"An adorable creature," he called it.

But the most interesting event of the day, by far, was the kangaroo hunt. About four o'clock, the dogs roused a troop of these curious marsupials. The little ones retreated precipitately into the maternal pouch, and all the troop decamped in file. Nothing could be more astonishing than the enormous bounds of the kangaroo. The hind legs of the animal are twice as long as the front ones, and unbend like a spring. At the head of the flying troop was a male five feet high, a magnificent specimen of the _macropus giganteus_, an "old man," as the bushmen say.

For four or five miles the chase was vigorously pursued. The kangaroos showed no signs of weariness, and the dogs, who had reason enough to fear their strong paws and sharp nails, did not care to approach them. But at last, worn out with the race, the troop stopped, and the "old man" leaned against the trunk of a tree, ready to defend himself. One of the pointers, carried away by excitement, went up to him. Next minute the unfortunate beast leaped into the air, and fell down again completely ripped up.

The whole pack, indeed, would have had little chance with these powerful marsupia. They had to dispatch the fellow with rifles. Nothing but balls could bring down the gigantic animal.

Just at this moment, Robert was well nigh the victim of his own imprudence. To make sure of his aim, he had approached too near the kangaroo, and the animal leaped upon him immediately. Robert gave a loud cry and fell. Mary Grant saw it all from the brake, and in an agony of terror, speechless and almost unable even to see, stretched out her arms toward her little brother. No one dared to fire, for fear of wounding the child.

But John Mangles opened his hunting knife, and at the risk of being ripped up himself, sprang at the animal, and plunged it into his heart. The beast dropped forward, and Robert rose unhurt. Next minute he was in his sister's arms.

"Thank you, Mr. John, thank you!" she said, holding out her hand to the young captain.

"I had pledged myself for his safety," was all John said, taking her trembling fingers into his own.

This occurrence ended the sport. The band of marsupia had disappeared after the death of their leader. The hunting party returned home, bringing their game with them. It was then six o'clock. A magnificent dinner was ready. Among other things, there was one dish that was a great success. It was kangaroo-tail soup, prepared in the native manner.

Next morning very early, they took leave of the young squatters, with hearty thanks and a positive promise from them of a visit to Malcolm Castle when they should return to Europe.

Then the wagon began to move away, round the foot of Mount Hottam, and soon the hospitable dwelling disappeared from the sight of the travelers like some brief vision which had come and gone.

For five miles further, the horses were still treading the station lands. It was not till nine o'clock that they had passed the last fence, and entered the almost unknown districts of the province of Victoria.

CHAPTER XV SUSPICIOUS OCCURRENCES

AN immense barrier lay across the route to the southeast. It was the Australian Alps, a vast fortification, the fantastic curtain of which extended 1,500 miles, and pierced the clouds at the height of 4,000 feet.

The cloudy sky only allowed the heat to reach the ground through a close veil of mist. The temperature was just bearable, but the road was toilsome from its uneven character. The extumescences on the plain became more and more marked. Several mounds planted with green young gum trees appeared here and there. Further on these protuberances rising sharply, formed the first steps of the great Alps. From this time their course was a continual ascent, as was soon evident in the strain it made on the bullocks to drag along the cumbrous wagon. Their yoke creaked, they breathed heavily, and the muscles of their houghs were stretched as if they would burst. The planks of the vehicle groaned at the unexpected jolts, which Ayrtan with all his skill could not prevent. The ladies bore their share of discomfort bravely.

John Mangles and his two sailors acted as scouts, and went about a hundred steps in advance. They found out practical paths, or passes, indeed they might be called, for these projections of the ground were like so many rocks, between which the wagon had to steer carefully. It required absolute navigation to find a safe way over the billowy region.
It was a difficult and often perilous task. Many a time Wilson's hatchet was obliged to open a passage through thick tangles of shrubs. The damp argillaceous soil gave way under their feet. The route was indefinitely prolonged owing to the insurmountable obstacles, huge blocks of granite, deep ravines, suspected lagoons, which obliged them to make a thousand detours. When night came they found they had only gone over half a degree. They camped at the foot of the Alps, on the banks of the creek of Cobongra, on the edge of a little plain, covered with little shrubs four feet high, with bright red leaves which gladdened the eye.

"We shall have hard work to get over," said Glenarvan, looking at the chain of mountains, the outlines of which were fast fading away in the deepening darkness. "The very name Alps gives plenty of room for reflection."

"It is not quite so big as it sounds, my dear Glenarvan. Don't suppose you have a whole Switzerland to traverse. In Australia there are the Grampians, the Pyrenees, the Alps, the Blue Mountains, as in Europe and America, but in miniature. This simply implies either that the imagination of geographers is not infinite, or that their vocabulary of proper names is very poor."

"Then these Australian Alps," said Lord Glenarvan, "are--"

"Mere pocket mountains," put in Paganel; "we shall get over them without knowing it."

"Speak for yourself," said the Major. "It would certainly take a very absent man who could cross over a chain of mountains and not know it."

"Absent! But I am not an absent man now. I appeal to the ladies. Since ever I set foot on the Australian continent, have I been once at fault? Can you reproach me with a single blunder?"

"Not one. Monsieur Paganel," said Mary Grant. "You are now the most perfect of men."

"Too perfect," added Lady Helena, laughing; "your blunders suited you admirably."

"Didn't they, Madam? If I have no faults now, I shall soon get like everybody else. I hope then I shall make some outrageous mistake before long, which will give you a good laugh. You see, unless I make mistakes, it seems to me I fail in my vocation."

Next day, the 9th of January, notwithstanding the assurances of the confident geographer, it was not without great difficulty that the little troop made its way through the Alpine pass. They were obliged to go at a venture, and enter the depths of narrow gorges without any certainty of an outlet. Ayrton would doubtless have found himself very much embarrassed if a little inn, a miserable public house, had not suddenly presented itself.

"My goodness!" cried Paganel, "the landlord of this inn won't make his fortune in a place like this. What is the use of it here?"

"To give us the information we want about the route," replied Glenarvan. "Let us go in."

Glenarvan, followed by Ayrton, entered the inn forthwith. The landlord of the "Bush Inn," as it was called, was a coarse man with an ill-tempered face, who must have considered himself his principal customer for the gin, brandy and whisky he had to sell. He seldom saw any one but the squatters and rovers. He answered all the questions put to him in a surly tone. But his replies sufficed to make the route clear to Ayrton, and that was all that was wanted. Glenarvan rewarded him with a handful of silver for his trouble, and was about to leave the tavern, when a placard against the wall arrested his attention.

It was a police notice, and announcing the escape of the convicts from Perth, and offering a reward for the capture of Ben Joyce of pounds 100 sterling.

"He's a fellow that's worth hanging, and no mistake," said Glenarvan to the quartermaster.

"And worth capturing still more. But what a sum to offer! He is not worth it!"

"I don't feel very sure of the innkeeper though, in spite of the notice," said Glenarvan.

"No more do I," replied Ayrton.

They went back to the wagon, toward the point where the route to Lucknow stopped. A narrow path wound away from this which led across the chain in a slanting direction. They had commenced the ascent.

It was hard work. More than once both the ladies and gentlemen had to get down and walk. They were obliged to help to push round the wheels of the heavy vehicle, and to support it frequently in dangerous declivities, to unharness the bullocks when the team could not go well round sharp turnings, prop up the wagon when it threatened to roll back, and more than once Ayrton had to reinforce his bullocks by harnessing the horses, although they were tired out already with dragging themselves along.

Whether it was this prolonged fatigue, or from some other cause altogether, was not known, but one of the horses sank suddenly, without the slightest symptom of illness. It was Mulrady's horse that fell, and on attempting to pull it up, the animal was found to be dead. Ayrton examined it immediately, but was quite at a loss to account for the disaster.

"The beast must have broken some blood vessels," said Glenarvan.

"Evidently," replied Ayrton.

"Take my horse, Mulrady," added Glenarvan. "I will join Lady Helena in the wagon."
Mulrady obeyed, and the little party continued their fatiguing ascent, leaving the carcass of the dead animal to the ravens.

The Australian Alps are of no great thickness, and the base is not more than eight miles wide. Consequently if the pass chosen by Ayrton came out on the eastern side, they might hope to get over the high barrier within forty-eight hours more. The difficulty of the route would then be surmounted, and they would only have to get to the sea.

During the 18th the travelers reached the top-most point of the pass, about 2,000 feet high. They found themselves on an open plateau, with nothing to intercept the view. Toward the north the quiet waters of Lake Omco, all alive with aquatic birds, and beyond this lay the vast plains of the Murray. To the south were the wide spreading plains of Gippsland, with its abundant gold-fields and tall forests. There nature was still mistress of the products and water, and great trees where the woodman's ax was as yet unknown, and the squatters, then five in number, could not struggle against her. It seemed as if this chain of the Alps separated two different countries, one of which had retained its primitive wildness. The sun went down, and a few solitary rays piercing the rosy clouds, lighted up the Murray district, leaving Gippsland in deep shadow, as if night had suddenly fallen on the whole region. The contrast was presented very vividly to the spectators placed between these two countries so divided, and some emotion filled the minds of the travelers, as they contemplated the almost unknown district they were about to traverse right to the frontiers of Victoria.

They camped on the plateau that night, and next day the descent commenced. It was tolerably rapid. A hailstorm of extreme violence assailed the travelers, and obliged them to seek a shelter among the rocks. It was not hail-stones, but regular lumps of ice, as large as one's hand, which fell from the stormy clouds. A waterspout could not have come down with more violence, and sundry big bruises warned Paganel and Robert to retreat. The wagon was riddled in several places, and few coverings would have held out against those sharp icicles, some of which had fastened themselves into the trunks of the trees. It was impossible to go on till this tremendous shower was over, unless the travelers wished to be stoned. It lasted about an hour, and then the march commenced anew over slanting rocks still slippery after the hail.

Toward evening the wagon, very much shaken and disjointed in several parts, but still standing firm on its wooden disks, came down the last slopes of the Alps, among great isolated pines. The passage ended in the plains of Gippsland. The chain of the Alps was safely passed, and the usual arrangements were made for the nightly encampment.

On the 21st, at daybreak, the journey was resumed with an ardor which never relaxed. Everyone was eager to reach the goal--that is to say the Pacific Ocean--at that part where the wreck of the BRITANNIA had occurred. Nothing could be done in the lonely wilds of Gippsland, and Ayrton urged Lord Glenarvan to send orders at once for the DUNCAN to repair to the coast, in order to have at hand all means of research. He thought it would certainly be advisable to take advantage of the Lucknow route to Melbourne. If they waited it would be difficult to find any way of direct communication with the capital.

This advice seemed good, and Paganel recommended that they should act upon it. He also thought that the presence of the yacht would be very useful, and he added, that if the Lucknow road was once passed, it would be impossible to communicate with Melbourne.

Glenarvan was undecided what to do, and perhaps he would have yielded to Ayrton's arguments, if the Major had not combated this decision vigorously. He maintained that the presence of Ayrton was necessary to the expedition, that he would know the country about the coast, and that if any chance should put them on the track of Harry Grant, the quartermaster would be better able to follow it up than any one else, and, finally, that he alone could point out the exact spot where the shipwreck occurred.

McNabbs voted therefore for the continuation of the voyage, without making the least change in their programme. John Mangles was of the same opinion. The young captain said even that orders would reach the DUNCAN more easily from Twofold Bay, than if a message was sent two hundred miles over a wild country.

His counsel prevailed. It was decided that they should wait till they came to Twofold Bay. The Major watched Ayrton narrowly, and noticed his disappointed look. But he said nothing, keeping his observations, as usual, to himself.

The plains which lay at the foot of the Australian Alps were level, but slightly inclined toward the east. Great clumps of mimosas and eucalyptus, and various odorous gum-trees, broke the uniform monotony here and there. The _gastrolobium grandiflorum_ covered the ground, with its bushes covered with gay flowers. Several unimportant creeks, mere streams full of little rushes, and half covered up with orchids, often interrupted the route. They had to ford these. Flocks of bustards and emus fled at the approach of the travelers. Below the shrubs, kangaroos were leaping and springing like dancing jacks. But the hunters of the party were not thinking much of the sport, and the horses little needed any additional fatigue.

Moreover, a sultry heat oppressed the plain. The atmosphere was completely saturated with electricity, and its
influence was felt by men and beasts. They just dragged themselves along, and cared for nothing else. The silence was only interrupted by the cries of Ayrton urging on his burdened team.

From noon to two o'clock they went through a curious forest of ferns, which would have excited the admiration of less weary travelers. These plants in full flower measured thirty feet in height. Horses and riders passed easily beneath their drooping leaves, and sometimes the spurs would clash against the woody stems. Beneath these immovable parasols there was a refreshing coolness which every one appreciated. Jacques Paganel, always demonstrative, gave such deep sighs of satisfaction that the parrots and cockatoos flew out in alarm, making a deafening chorus of noisy chatter.

The geographer was going on with his sighs and jubilations with the utmost coolness, when his companions suddenly saw him reel forward, and he and his horse fell down in a lump. Was it giddiness, or worse still, suffocation, caused by the high temperature? They ran to him, exclaiming: "Paganel! Paganel! what is the matter?"

"Just this. I have no horse, now!" he replied, disengaging his feet from the stirrups.

"What! your horse?"

"Dead like Mulrady's, as if a thunderbolt had struck him."

Glenarvan, John Mangles, and Wilson examined the animal; and found Paganel was right. His horse had been suddenly struck dead.

"That is strange," said John.

"Very strange, truly," muttered the Major.

Glenarvan was greatly disturbed by this fresh accident. He could not get a fresh horse in the desert, and if an epidemic was going to seize their steeds, they would be seriously embarrassed how to proceed.

Before the close of the day, it seemed as if the word epidemic was really going to be justified. A third horse, Wilson's, fell dead, and what was, perhaps equally disastrous, one of the bullocks also. The means of traction and transport were now reduced to three bullocks and four horses.

The situation became grave. The unmounted horsemen might walk, of course, as many squatters had done already; but if they abandoned the wagon, what would the ladies do? Could they go over the one hundred and twenty miles which lay between them and Twofold Bay? John Mangles and Lord Glenarvan examined the surviving horses with great uneasiness, but there was not the slightest symptom of illness or feebleness in them. The animals were in perfect health, and bravely bearing the fatigues of the voyage. This somewhat reassured Glenarvan, and made him hope the malady would strike no more victims. Ayrton agreed with him, but was unable to find the least solution of the mystery.

They went on again, the wagon serving, from time to time, as a house of rest for the pedestrians. In the evening, after a march of only ten miles, the signal to halt was given, and the tent pitched. The night passed without inconvenience beneath a vast mass of bushy ferns, under which enormous bats, properly called flying foxes, were flapping about.

The next day's journey was good; there were no new calamities. The health of the expedition remained satisfactory; horses and cattle did their task cheerily. Lady Helena's drawing-room was very lively, thanks to the number of visitors. M. Olbinett busied himself in passing round refreshments which were very acceptable in such hot weather. Half a barrel of Scotch ale was sent in bodily. Barclay and Co. was declared to be the greatest man in Great Britain, even above Wellington, who could never have manufactured such good beer. This was a Scotch estimate. Jacques Paganel drank largely, and discoursed still more _de omni re scibili_.

A day so well commenced seemed as if it could not but end well; they had gone fifteen good miles, and managed to get over a pretty hilly district where the soil was reddish. There was every reason to hope they might camp that same night on the banks of the Snowy River, an important river which throws itself into the Pacific, south of Victoria.

Already the wheels of the wagon were making deep ruts on the wide plains, covered with blackish alluvium, as it passed on between tufts of luxuriant grass and fresh fields of gastrolobium. As evening came on, a white mist on the horizon marked the course of the Snowy River. Several additional miles were got over, and a forest of tall trees came in sight at a bend of the road, behind a gentle eminence. Ayrton turned his team a little toward the great trunks, lost in shadow, and he had got to the skirts of the wood, about half-a-mile from the river, when the wagon suddenly sank up to the middle of the wheels.

"Stop!" he called out to the horsemen following him.

"What is wrong?" inquired Glenarvan.

"We have stuck in the mud," replied Ayrton.

He tried to stimulate the bullocks to a fresh effort by voice and goad, but the animals were buried half-way up their legs, and could not stir.

"Let us camp here," suggested John Mangles.
"It would certainly be the best place," said Ayrton. "We shall see by daylight to-morrow how to get ourselves out."

Glenarvan acted on their advice, and came to a halt. Night came on rapidly after a brief twilight, but the heat did not withdraw with the light. Stifling vapors filled the air, and occasionally bright flashes of lightning, the reflections of a distant storm, lighted up the sky with a fiery glare. Arrangements were made for the night immediately. They did the best they could with the sunk wagon, and the tent was pitched beneath the shelter of the great trees; and if the rain did not come, they had not much to complain about.

Ayrton succeeded, though with some difficulty, in extricating the three bullocks. These courageous beasts were engulfed up to their flanks. The quartermaster turned them out with the four horses, and allowed no one but himself to see after their pasturage. He always executed his task wisely, and this evening Glenarvan noticed he redoubled his care, for which he took occasion to thank him, the preservation of the team being of supreme importance.

Meantime, the travelers were dispatching a hasty supper. Fatigue and heat destroy appetite, and sleep was needed more than food. Lady Helena and Miss Grant speedily bade the company good-night, and retired. Their companions soon stretched themselves under the tent or outside under the trees, which is no great hardship in this salubrious climate.

Gradually they all fell into a heavy sleep. The darkness deepened owing to a thick current of clouds which overspread the sky. There was not a breath of wind. The silence of night was only interrupted by the cries of the "morepork" in the minor key, like the mournful cuckoos of Europe.

Towards eleven o'clock, after a wretched, heavy, unre-freshing sleep, the Major woke. His half-closed eyes were struck with a faint light running among the great trees. It looked like a white sheet, and glittered like a lake, and McNabbs thought at first it was the commencement of a fire.

He started up, and went toward the wood; but what was his surprise to perceive a purely natural phenomenon! Before him lay an immense bed of mushrooms, which emitted a phosphorescent light. The luminous spores of the cryptograms shone in the darkness with intensity.

The Major, who had no selfishness about him, was going to waken Paganel, that he might see this phenomenon with his own eyes, when something occurred which arrested him. This phosphorescent light illumined the distance half a mile, and McNabbs fancied he saw a shadow pass across the edge of it. Were his eyes deceiving him? Was it some hallucination?

McNabbs lay down on the ground, and, after a close scrutiny, he could distinctly see several men stooping down and lifting themselves up alternately, as if they were looking on the ground for recent marks.

The Major resolved to find out what these fellows were about, and without the least hesitation or so much as arousing his companions, crept along, lying flat on the ground, like a savage on the prairies, completely hidden among the long grass.

CHAPTER XVI A STARTLING DISCOVERY

It was a frightful night. At two A. M. the rain began to fall in torrents from the stormy clouds, and continued till daybreak. The tent became an insufficient shelter. Glenarvan and his companions took refuge in the wagon; they did not sleep, but talked of one thing and another. The Major alone, whose brief absence had not been noticed, contented himself with being a silent listener. There was reason to fear that if the storm lasted longer the Snowy River would overflow its banks, which would be a very unlucky thing for the wagon, stuck fast as it was already in the soft ground. Mulrady, Ayrton and Mangles went several times to ascertain the height of the water, and came back dripping from head to foot.

At last day appeared; the rain ceased, but sunlight could not break through the thick clouds. Large patches of yellowish water—muddy, dirty ponds indeed they were—covered the ground. A hot steam rose from the soaking earth, and saturated the atmosphere with unhealthy humidity.

Glenarvan's first concern was the wagon; this was the main thing in his eyes. They examined the ponderous vehicle, and found it sunk in the mud in a deep hollow in the stiff clay. The forepart had disappeared completely, and the hind part up to the axle. It would be a hard job to get the heavy conveyance out, and would need the united strength of men, bullocks, and horses.

"At any rate, we must make haste," said John Mangles. "If the clay dries, it will make our task still more difficult."

"Let us be quick, then," replied Ayrton.

Glenarvan, his two sailors, John Mangles, and Ayrton went off at once into the wood, where the animals had passed the night. It was a gloomy-looking forest of tall gum-trees; nothing but dead trees, with wide spaces between, which had been barked for ages, or rather skinned like the cork-oak at harvest time. A miserable network of bare branches was seen above two hundred feet high in the air. Not a bird built its nest in these aerial skeletons; not a leaf trembled on the dry branches, which rattled together like bones. To what cataclysm is this phenomenon to be
attributed, so frequent in Australia, entire forests struck dead by some epidemic; no one knows; neither the oldest natives, nor their ancestors who have lain long buried in the groves of the dead, have ever seen them green.

Glenarvan as he went along kept his eye fixed on the gray sky, on which the smallest branch of the gum-trees was sharply defined. Ayrton was astonished not to discover the horses and bullocks where he had left them the preceding night. They could not have wandered far with the hobbles on their legs.

They looked over the wood, but saw no signs of them, and Ayrton returned to the banks of the river, where magnificent mimosas were growing. He gave a cry well known to his team, but there was no reply. The quartermaster seemed uneasy, and his companions looked at him with disappointed faces. An hour had passed in vain endeavors, and Glenarvan was about to go back to the wagon, when a neigh struck on his ear, and immediately after a bellow.

"They are there!" cried John Mangles, slipping between the tall branches of gastrolobium, which grew high enough to hide a whole flock. Glenarvan, Mulrady, and Ayrton darted after him, and speedily shared his stupefaction at the spectacle which met their gaze.

Two bullocks and three horses lay stretched on the ground, struck down like the rest. Their bodies were already cold, and a flock of half-starved looking ravens croaking among the mimosas were watching the unexpected prey. Glenarvan and his party gazed at each other and Wilson could not keep back the oath that rose to his lips.

"What do you mean, Wilson?" said Glenarvan, with difficulty controlling himself. "Ayrton, bring away the bullock and the horse we have left; they will have to serve us now."

"If the wagon were not sunk in the mud," said John Mangles, "these two animals, by making short journeys, would be able to take us to the coast; so we must get the vehicle out, cost what it may."

"We will try, John," replied Glenarvan. "Let us go back now, or they will be uneasy at our long absence."

Ayrton removed the hobbles from the bullock and Mulrady from the horse, and they began to return to the encampment, following the winding margin of the river. In half an hour they rejoined Paganel, and McNabbs, and the ladies, and told them of this fresh disaster.

"Upon my honor, Ayrton," the Major could not help saying, "it is a pity that you hadn't had the shoeing of all our beasts when we forded the Wimerra."

"Why, sir?" asked Ayrton.

"Because out of all our horses only the one your blacksmith had in his hands has escaped the common fate."

"That's true," said John Mangles. "It's strange it happens so."

"A mere chance, and nothing more," replied the quartermaster, looking firmly at the Major.

Major McNabbs bit his lips as if to keep back something.

V. IV Verne he was about to say. Glenarvan and the rest waited for him to speak out his thoughts, but the Major was silent, and went up to the wagon, which Ayrton was examining.

"What was he going to say. Mangles?" asked Glenarvan.

"I don't know," replied the young captain; "but the Major is not at all a man to speak without reason."

"No, John," said Lady Helena. "McNabbs must have suspicions about Ayrton."

"Suspicious!" exclaimed Paganel, shrugged his shoulders.

"And what can they be?" asked Glenarvan. "Does he suppose him capable of having killed our horses and bullocks? And for what purpose? Is not Ayrton's interest identical with our own?"

"You are right, dear Edward," said Lady Helena! "and what is more, the quartermaster has given us incontestable proofs of his devotion ever since the commencement of the journey."

"Certainly he has," replied Mangles; "but still, what could the Major mean? I wish he would speak his mind plainly out."

"Does he suppose him acting in concert with the convicts?" asked Paganel, imprudently.

"What convicts?" said Miss Grant.

"Monsieur Paganel is making a mistake," replied John Mangles, instantly. "He knows very well there are no convicts in the province of Victoria."

"Ah, that is true," returned Paganel, trying to get out of his unlucky speech. "Whatever had I got in my head? Convicts! who ever heard of convicts being in Australia? Besides, they would scarcely have disembarked before they would turn into good, honest men. The climate, you know, Miss Mary, the regenerative climate---"

Here the poor SAVANT stuck fast, unable to get further, like the wagon in the mud. Lady Helena looked at him in surprise, which quite deprived him of his remaining _sang-froid_; but seeing his embarrassment, she took Mary away to the side of the tent, where M. Olbinett was laying out an elaborate breakfast.

"I deserve to be transported myself," said Paganel, woefully.

"I think so," said Glenarvan.

And after this grave reply, which completely overwhelmed the worthy geographer, Glenarvan and John Mangles
They found Ayrton and the two sailors doing their best to get it out of the deep ruts, and the bullock and horse, yoked together, were straining every muscle. Wilson and Mulrady were pushing the wheels, and the quartermaster urging on the team with voice and goad; but the heavy vehicle did not stir, the clay, already dry, held it as firmly as if sealed by some hydraulic cement.

John Mangles had the clay watered to loosen it, but it was of no use. After renewed vigorous efforts, men and animals stopped. Unless the vehicle was taken to pieces, it would be impossible to extricate it from the mud; but they had no tools for the purpose, and could not attempt such a task.

However, Ayrton, who was for conquering this obstacle at all costs, was about to commence afresh, when Glenarvan stopped him by saying: "Enough, Ayrton, enough. We must husband the strength of our remaining horse and bullock. If we are obliged to continue our journey on foot, the one animal can carry the ladies and the other the provisions. They may thus still be of great service to us."

"Very well, my Lord," replied the quartermaster, un-yoking the exhausted beasts.

"Now, friends," added Glenarvan, "let us return to the encampment and deliberately examine our situation, and determine on our course of action."

After a tolerably good breakfast to make up for their bad night, the discussion was opened, and every one of the party was asked to give his opinion. The first point was to ascertain their exact position, and this was referred to Paganel, who informed them, with his customary rigorous accuracy, that the expedition had been stopped on the 37th parallel, in longitude 147 degrees 53 minutes, on the banks of the Snowy River.

"What is the exact longitude of Twofold Bay?" asked Glenarvan.

"One hundred and fifty degrees," replied Paganel; "two degrees seven minutes distant from this, and that is equal to seventy-five miles."

"And Melbourne is?"

"Two hundred miles off at least."

"Very good. Our position being then settled, what is best to do?"

The response was unanimous to get to the coast without delay. Lady Helena and Mary Grant undertook to go five miles a day. The courageous ladies did not shrink, if necessary, from walking the whole distance between the Snowy River and Twofold Bay.

"You are a brave traveling companion, dear Helena," said Lord Glenarvan. "But are we sure of finding at the bay all we want when we get there?"

"Without the least doubt," replied Paganel. "Eden is a municipality which already numbers many years in existence; its port must have frequent communication with Melbourne. I suppose even at Delegete, on the Victoria frontier, thirty-five miles from here, we might revictual our expedition, and find fresh means of transport."

"And the DUNCAN?" asked Ayrton. "Don't you think it advisable to send for her to come to the bay?"

"What do you think, John?" said Glenarvan.

"I don't think your Lordship should be in any hurry about it," replied the young captain, after brief reflection.

"There will be time enough to give orders to Tom Austin, and summon him to the coast."

"That's quite certain," added Paganel.

"You see," said John, "in four or five days we shall reach Eden."

"Four or five days!" repeated Ayrton, shaking his head; "say fifteen or twenty, Captain, if you don't want to repent your mistake when it is too late."

"Fifteen or twenty days to go seventy-five miles?" cried Glenarvan.

"At the least, my Lord. You are going to traverse the most difficult portion of Victoria, a desert, where everything is wanting, the squatters say; plains covered with scrub, where is no beaten track and no stations. You will have to walk hatchet or torch in hand, and, believe me, that's not quick work."

Ayrton had spoken in a firm tone, and Paganel, at whom all the others looked inquiringly, nodded his head in token of his agreement in opinion with the quartermaster.

But John Mangles said, "Well, admitting these difficulties, in fifteen days at most your Lordship can send orders to the DUNCAN."

"I have to add," said Ayrton, "that the principal difficulties are not the obstacles in the road, but the Snowy River has to be crossed, and most probably we must wait till the water goes down."

"Wait!" cried John. "Is there no ford?"

"I think not," replied Ayrton. "This morning I was looking for some practical crossing, but could not find any. It is unusual to meet with such a tumultuous river at this time of the year, and it is a fatality against which I am powerless."

"Is this Snowy River wide?" asked Lady Helena.
"Wide and deep, Madam," replied Ayrton; "a mile wide, with an impetuous current. A good swimmer could not go over without danger."

"Let us build a boat then," said Robert, who never stuck at anything. "We have only to cut down a tree and hollow it out, and get in and be off."

"He's going ahead, this boy of Captain Grant's!" said Paganel.

"And he's right," returned John Mangles. "We shall be forced to come to that, and I think it is useless to waste our time in idle discussion."

"What do you think of it, Ayrton?" asked Glenarvan seriously.

"I think, my Lord, that a month hence, unless some help arrives, we shall find ourselves still on the banks of the Snowy."

"Well, then, have you any better plan to propose?" said John Mangles, somewhat impatiently.

"Yes, that the DUNCAN should leave Melbourne, and go to the east coast."

"Oh, always the same story! And how could her presence at the bay facilitate our means of getting there?"

Ayrton waited an instant before answering, and then said, rather evasively: "I have no wish to obtrude my opinions. What I do is for our common good, and I am ready to start the moment his honor gives the signal." And he crossed his arms and was silent.

"That is no reply, Ayrton," said Glenarvan. "Tell us your plan, and we will discuss it. What is it you propose?"

Ayrton replied in a calm tone of assurance: "I propose that we should not venture beyond the Snowy in our present condition. It is here we must wait till help comes, and this help can only come from the DUNCAN. Let us camp here, where we have provisions, and let one of us take your orders to Tom Austin to go on to Twofold Bay."

This unexpected proposition was greeted with astonishment, and by John Mangles with openly expressed opposition.

"Meantime," continued Ayrton, "either the river will get lower, and allow us to ford it, or we shall have time to make a canoe. This is the plan I submit for your Lordship's approval."

"Well, Ayrton," replied Glenarvan, "your plan is worthy of serious consideration. The worst thing about it is the delay it would cause; but it would save us great fatigue, and perhaps danger. What do you think of it, friends?"

"Speak your mind, McNabbs," said Lady Helena. "Since the beginning of the discussion you have been only a listener, and very sparing of your words."

"Since you ask my advice," said the Major, "I will give it you frankly. I think Ayrton has spoken wisely and well, and I side with him."

Such a reply was hardly looked for, as hitherto the Major had been strongly opposed to Ayrton's project. Ayrton himself was surprised, and gave a hasty glance at the Major. However, Paganel, Lady Helena, and the sailors were all of the same way of thinking; and since McNabbs had come over to his opinion, Glenarvan decided that the quartermaster's plan should be adopted in principle.

"And now, John," he added, "don't you think yourself it would be prudent to encamp here, on the banks of the river Snowy, till we can get some means of conveyance."

"Yes," replied John Mangles, "if our messenger can get across the Snowy when we cannot."

All eyes were turned on the quartermaster, who said, with the air of a man who knew what he was about: "The messenger will not cross the river."

"Indeed!" said John Mangles.

"He will simply go back to the Lucknow Road which leads straight to Melbourne."

"Go two hundred and fifty miles on foot!" cried the young Captain.

"On horseback," replied Ayrton. "There is one horse sound enough at present. It will only be an affair of four days. Allow the DUNCAN two days more to get to the bay and twenty hours to get back to the camp, and in a week the messenger can be back with the entire crew of the vessel."

The Major nodded approvingly as Ayrton spoke, to the profound astonishment of John Mangles; but as every one was in favor of the plan all there was to do was to carry it out as quickly as possible.

"Now, then, friends," said Glenarvan, "we must settle who is to be our messenger. It will be a fatiguing, perilous mission. I would not conceal the fact from you. Who is disposed, then, to sacrifice himself for his companions and carry our instructions to Melbourne?"

Wilson and Mulrady, and also Paganel, John Mangles and Robert instantly offered their services. John particularly insisted that he should be intrusted with the business; but Ayrton, who had been silent till that moment, now said: "With your Honor's permission I will go myself. I am accustomed to all the country round. Many a time I have been across worse parts. I can go through where another would stick. I ask then, for the good of all, that I may be sent to Melbourne. A word from you will accredit me with your chief officer, and in six days I guarantee the DUNCAN shall be in Twofold Bay."
"That's well spoken," replied Glenarvan. "You are a clever, daring fellow, and you will succeed."

It was quite evident the quartermaster was the fittest man for the mission. All the rest withdrew from the competition. John Mangles made this one last objection, that the presence of Ayrton was necessary to discover traces of the BRITANNIA or Harry Grant. But the Major justly observed that the expedition would remain on the banks of the Snowy till the return of Ayrton, that they had no idea of resuming their search without him, and that consequently his absence would not in the least prejudice the Captain's interests.

"Well, go, Ayrton," said Glenarvan. "Be as quick as you can, and come back by Eden to our camp."

A gleam of satisfaction shot across the quartermaster's face. He turned away his head, but not before John Mangles caught the look and instinctively felt his old distrust of Ayrton revive.

The quartermaster made immediate preparations for departure, assisted by the two sailors, one of whom saw to the horse and the other to the provisions. Glenarvan, meantime, wrote his letter for Tom Austin. He ordered his chief officer to repair without delay to Twofold Bay. He introduced the quartermaster to him as a man worthy of all confidence. On arriving at the coast, Tom was to dispatch a detachment of sailors from the yacht under his orders.

Glenarvan was just at this part of his letter, when McNabbs, who was following him with his eyes, asked him in a singular tone, how he wrote Ayrton's name.

"Why, as it is pronounced, of course," replied Glenarvan.

"It is a mistake," replied the Major quietly. "He pronounces it AYRTON, but he writes it _Ben Joyce!_"

CHAPTER XVII THE PLOT UNVEILED

The revelation of Tom Ayrton's name was like a clap of thunder. Ayrton had started up quickly and grasped his revolver. A report was heard, and Glenarvan fell wounded by a ball. Gunshots resounded at the same time outside.

John Mangles and the sailors, after their first surprise, would have seized Ben Joyce; but the bold convict had already disappeared and rejoined his gang scattered among the gum-trees.

The tent was no shelter against the balls. It was necessary to beat a retreat. Glenarvan was slightly wounded, but could stand up.

"To the wagon--to the wagon!" cried John Mangles, dragging Lady Helena and Mary Grant along, who were soon in safety behind the thick curtains.

John and the Major, and Paganel and the sailors seized their carbines in readiness to repulse the convicts. Glenarvan and Robert went in beside the ladies, while Olbinett rushed to the common defense.

These events occurred with the rapidity of lightning. John Mangles watched the skirts of the wood attentively. The reports had ceased suddenly on the arrival of Ben Joyce; profound silence had succeeded the noisy fusillade. A few wreaths of white smoke were still curling over the tops of the gum trees. The tall tufts of gastrolobium were motionless. All signs of attack had disappeared.

The Major and John Mangles examined the wood closely as far as the great trees; the place was abandoned. Numerous footmarks were there and several half-burned caps were lying smoking on the ground. The Major, like a prudent man, extinguished these carefully, for a spark would be enough to kindle a tremendous conflagration in this forest of dry trees.

"The convicts have disappeared!" said John Mangles.

"Yes," replied the Major; "and the disappearance of them makes me uneasy. I prefer seeing them face to face. Better to meet a tiger on the plain than a serpent in the grass. Let us beat the bushes all round the wagon."

The Major and John hunted all round the country, but there was not a convict to be seen from the edge of the wood right down to the river. Ben Joyce and his gang seemed to have flown away like a flock of marauding birds. It was too sudden a disappearance to let the travelers feel perfectly safe; consequently they resolved to keep a sharp lookout. The wagon, a regular fortress buried in mud, was made the center of the camp, and two men mounted guard round it, who were relieved hour by hour.

The first care of Lady Helena and Mary was to dress Glenarvan's wound. Lady Helena rushed toward him in terror, as he fell down struck by Ben Joyce's ball. Controlling her agony, the courageous woman helped her husband into the wagon. Then his shoulder was bared, and the Major found, on examination, that the ball had only gone into the flesh, and there was no internal lesion. Neither bone nor muscle appeared to be injured. The wound bled profusely, but Glenarvan could use his fingers and forearm; and consequently there was no occasion for any uneasiness about the issue. As soon as his shoulder was dressed, he would not allow any more fuss to be made about himself, but at once entered on the business in hand.

All the party, except Mulrady and Wilson, who were on guard, were brought into the wagon, and the Major was asked to explain how this DENOUEMENT had come about.

Beforecommencing his recital, he told Lady Helena about the escape of the convicts at Perth, and their appearance in Victoria; as also their complicity in the railway catastrophe. He handed her the _Australian and New Zealand Gazette_ they had bought in Seymour, and added that a reward had been offered by the police for the
apprehension of Ben Joyce, a redoubtable bandit, who had become a noted character during the last eighteen months, for doing deeds of villainy and crime.

But how had McNabbs found out that Ayrton and Ben Joyce were one and the same individual? This was the mystery to be unraveled, and the Major soon explained it.

Ever since their first meeting, McNabbs had felt an instinctive distrust of the quartermaster. Two or three insignificant facts, a hasty glance exchanged between him and the blacksmith at the Wimerra River, his unwillingness to cross towns and villages, his persistence about getting the DUNCAN summoned to the coast, the strange death of the animals entrusted to his care, and, lastly, a want of frankness in all his behavior—all these details combined had awakened the Major’s suspicions.

However, he could not have brought any direct accusation against him till the events of the preceding evening had occurred. He then told of his experience.

McNabbs, slipping between the tall shrubs, got within reach of the suspicious shadows he had noticed about half a mile away from the encampment. The phosphorescent furze emitted a faint light, by which he could discern three men examining marks on the ground, and one of the three was the blacksmith of Black Point.

"It is them!" said one of the men. 'Yes,' replied another, 'there is the trefoil on the mark of the horseshoe. It has been like that since the Wimerra. 'All the horses are dead.' 'The poison is not far off.' 'There is enough to kill a regiment of cavalry.' 'A useful plant this gastrolobium.'

"I heard them say this to each other, and then they were quite silent; but I did not know enough yet, so I followed them. Soon the conversation began again. 'He is a clever fellow, this Ben Joyce,' said the blacksmith. 'A capital quartermaster, with his invention of shipwreck.' 'If his project succeeds, it will be a stroke of fortune.' 'He is a very devil, is this Ayrton.' 'Call him Ben Joyce, for he has well earned his name.' And then the scoundrels left the forest.

"I had all the information I wanted now, and came back to the camp quite convinced, begging Paganel's pardon, that Australia does not reform criminals."

This was all the Major's story, and his companions sat silently thinking over it.

"Then Ayrton has dragged us here," said Glenarvan, pale with anger, "on purpose to rob and assassinate us." "For nothing else," replied the Major; "and ever since we left the Wimerra, his gang has been on our track and spying on us, waiting for a favorable opportunity."

"Yes."

"Then the wretch was never one of the sailors on the BRITANNIA; he had stolen the name of Ayrton and the shipping papers."

They were all looking at McNabbs for an answer, for he must have put the question to himself already.

"There is no great certainty about the matter," he replied, in his usual calm voice; "but in my opinion the man's name is really Ayrton. Ben Joyce is his _nom de guerre_. It is an incontestible fact that he knew Harry Grant, and also that he was quartermaster on the BRITANNIA. These facts were proved by the minute details given us by Ayrton, and are corroborated by the conversation between the convicts, which I repeated to you. We need not lose ourselves in vain conjectures, but consider it as certain that Ben Joyce is Ayrton, and that Ayrton is Ben Joyce; that is to say, one of the crew of the BRITANNIA has turned leader of the convict gang."

The explanations of McNabbs were accepted without discussion.

"Now, then," said Glenarvan, "will you tell us how and why Harry Grant's quartermaster comes to be in Australia?"

"How, I don't know," replied McNabbs; "and the police declare they are as ignorant on the subject as myself. Why, it is impossible to say; that is a mystery which the future may explain."

"The police are not even aware of Ayrton's identity with Ben Joyce," said John Mangles.

"You are right, John," replied the Major, "and this circumstance would throw light on their search."

"Then, I suppose," said Lady Helena, "the wicked wretch had got work on Paddy O'Moore's farm with a criminal intent?"

"There is not the least doubt of it. He was planning some evil design against the Irishman, when a better chance presented itself. Chance led us into his presence. He heard Paganel's story and all about the shipwreck, and the audacious fellow determined to act his part immediately. The expedition was decided on. At the Wimerra he found means of communicating with one of his gang, the blacksmith of Black Point, and left traces of our journey which might be easily recognized. The gang followed us. A poisonous plant enabled them gradually to kill our bullocks and horses. At the right moment he sunk us in the marshes of the Snowy, and gave us into the hands of his gang."

Such was the history of Ben Joyce. The Major had shown him up in his character—a bold and formidable criminal. His manifestly evil designs called for the utmost vigilance on the part of Glenarvan. Happily the unmasked bandit was less to be feared than the traitor.

But one serious consequence must come out of this revelation; no one had thought of it yet except Mary Grant.
"Miss Mary! Miss Mary!" he cried; "you are crying!"
"Crying, my child!" said Lady Helena.
"My father, madam, my father!" replied the poor girl.

She could say no more, but the truth flashed on every mind. They all knew the cause of her grief, and why tears fell from her eyes and her father's name came to her lips.

The discovery of Ayrton's treachery had destroyed all hope; the convict had invented a shipwreck to entrap Glenarvan. In the conversation overheard by McNabbs, the convicts had plainly said that the BRITANNIA had never been wrecked on the rocks in Twofold Bay. Harry Grant had never set foot on the Australian continent!

A second time they had been sent on the wrong track by an erroneous interpretation of the document. Gloomy silence fell on the whole party at the sight of the children's sorrow, and no one could find a cheering word to say. Robert was crying in his sister's arms. Paganel muttered in a tone of vexation: "That unlucky document! It may boast of having half-crazed a dozen peoples' wits!" The worthy geographer was in such a rage with himself, that he struck his forehead as if he would smash it in.

Glenarvan went out to Mulrady and Wilson, who were keeping watch. Profound silence reigned over the plain between the wood and the river. Ben Joyce and his band must be at considerable distance, for the atmosphere was in such a state of complete torpor that the slightest sound would have been heard. It was evident, from the flocks of birds on the lower branches of the trees, and the kangaroos feeding quietly on the young shoots, and a couple of emus whose confiding heads passed between the great clumps of bushes, that those peaceful solitudes were untroubled by the presence of human beings.

"You have neither seen nor heard anything for the last hour?" said Glenarvan to the two sailors.
"Nothing whatever, your honor," replied Wilson. "The convicts must be miles away from here."
"They were not in numbers enough to attack us, I suppose," added Mulrady. "Ben Joyce will have gone to recruit his party, with some bandits like himself, among the bush-rangers who may be lurking about the foot of the Alps."
"That is probably the case, Mulrady," replied Glenarvan. "The rascals are cowards; they know we are armed, and well armed too. Perhaps they are waiting for nightfall to commence the attack. We must redouble our watchfulness. Oh, if we could only get out of this bog, and down the coast; but this swollen river bars our passage. I would pay its weight in gold for a raft which would carry us over to the other side."
"Why does not your honor give orders for a raft to be constructed? We have plenty of wood."
"No, Wilson," replied Glenarvan; "this Snowy is not a river, it is an impassable torrent."

John Mangles, the Major, and Paganel just then came out of the wagon on purpose to examine the state of the river. They found it still so swollen by the heavy rain that the water was a foot above the level. It formed an impetuous current, like the American rapids. To venture over that foaming current and that rushing flood, broken into a thousand eddies and hollows and gulls, was impossible.

John Mangles declared the passage impracticable. "But we must not stay here," he added, "without attempting anything. What we were going to do before Ayrton's treachery is still more necessary now."
"What do you mean, John?" asked Glenarvan.
"I mean that our need is urgent, and that since we cannot go to Twofold Bay, we must go to Melbourne. We have still one horse. Give it to me, my Lord, and I will go to Melbourne."
"But that will be a dangerous venture, John," said Glenarvan. "Not to speak of the perils of a journey of two hundred miles over an unknown country, the road and the by-ways will be guarded by the accomplices of Ben Joyce."
"I know it, my Lord, but I know also that things can't stay long as they are; Ayrton only asked a week's absence to fetch the crew of the DUNCAN, and I will be back to the Snowy River in six days. Well, my Lord, what are your commands?"

"Before Glenarvan decides," said Paganel, "I must make an observation. That some one must go to Melbourne is evident, but that John Mangles should be the one to expose himself to the risk, cannot be. He is the captain of the DUNCAN, and must be careful of his life. I will go instead."
"That is all very well, Paganel," said the Major; "but why should you be the one to go?"
"Are we not here?" said Mulrady and Wilson.
"And do you think," replied McNabbs, "that a journey of two hundred miles on horseback frightens me."
"Friends," said Glenarvan, "one of us must go, so let it be decided by drawing lots. Write all our names, Paganel."
"Not yours, my Lord," said John Mangles.
"And why not?"
"What! separate you from Lady Helena, and before your wound is healed, too!"
"Glenarvan," said Paganel, "you cannot leave the expedition."
"No," added the Major. "Your place is here, Edward, you ought not to go."
"Danger is involved in it," said Glenarvan, "and I will take my share along with the rest. Write the names, Paganel, and put mine among them, and I hope the lot may fall on me."

His will was obeyed. The names were written, and the lots drawn. Fate fixed on Mulrady. The brave sailor shouted hurrah! and said: "My Lord, I am ready to start." Glenarvan pressed his hand, and then went back to the wagon, leaving John Mangles and the Major on watch.

Lady Helena was informed of the determination to send a message to Melbourne, and that they had drawn lots who should go, and Mulrady had been chosen. Lady Helena said a few kind words to the brave sailor, which went straight to his heart. Fate could hardly have chosen a better man, for he was not only brave and intelligent, but robust and superior to all fatigue.

Mulrady's departure was fixed for eight o'clock, immediately after the short twilight. Wilson undertook to get the horse ready. He had a project in his head of changing the horse's left shoe, for one off the horses that had died in the night. This would prevent the convicts from tracking Mulrady, or following him, as they were not mounted.

While Wilson was arranging this, Glenarvan got his letter ready for Tom Austin, but his wounded arm troubled him, and he asked Paganel to write it for him. The SAVANT was so absorbed in one fixed idea that he seemed hardly to know what he was about. In all this succession of vexations, it must be said the document was always uppermost in Paganel's mind. He was always worrying himself about each word, trying to discover some new meaning, and losing the wrong interpretation of it, and going over and over himself in perplexities.

He did not hear Glenarvan when he first spoke, but on the request being made a second time, he said: "Ah, very well. I'm ready."

While he spoke he was mechanically getting paper from his note-book. He tore a blank page off, and sat down pencil in hand to write.

Glenarvan began to dictate as follows: "Order to Tom Austin, Chief Officer, to get to sea without delay, and bring the DUNCAN to--"

Paganel was just finishing the last word, when his eye chanced to fall on the _Australian and New Zealand Gazette_ lying on the ground. The paper was so folded that only the last two syllables of the title were visible. Paganel's pencil stopped, and he seemed to become oblivious of Glenarvan and the letter entirely, till his friends called out: "Come, Paganel!"

"Ah!" said the geographer, with a loud exclamation.
"What is the matter?" asked the Major.
"Nothing, nothing," replied Paganel. Then he muttered to himself, ".Aland! aland! aland! ."

He had got up and seized the newspaper. He shook it in his efforts to keep back the words that involuntarily rose to his lips.

Lady Helena, Mary, Robert, and Glenarvan gazed at him in astonishment, at a loss to understand this unaccountable agitation. Paganel looked as if a sudden fit of insanity had come over him. But his excitement did not last. He became by degrees calmer. The gleam of joy that shone in his eyes died away. He sat down again, and said quietly:

"When you please, my Lord, I am ready." Glenarvan resumed his dictation at once, and the letter was soon completed. It read as follows: "Order to Tom Austin to go to sea without delay; and take the DUNCAN to Melbourne by the 37th degree of latitude to the eastern coast of Australia."

"Of Australia?" said Paganel. "Ah yes! of Australia."

Then he finished the letter, and gave it to Glenarvan to sign, who went through the necessary formality as well as he could, and closed and sealed the letter. Paganel, whose hand still trembled with emotion, directed it thus: "Tom Austin, Chief Officer on board the Yacht DUNCAN, Melbourne."

Then he got up and went out of the wagon, gesticulating and repeating the incomprehensible words:
"Aland aland! aland!"

CHAPTER XVIII FOUR DAYS OF ANGUISH

THE rest of the day passed on without any further incident. All the preparations for Mulrady's journey were completed, and the brave sailor rejoiced in being able to give his Lordship this proof of devotion.

Paganel had recovered his usual _sang-froid_ and manners. His look, indeed, betrayed his preoccupation, but he seemed resolved to keep it secret. No doubt he had strong reasons for this course of action, for the Major heard him repeating, like a man struggling with himself: "No, no, they would not believe it; and, besides, what good would it be? It is too late!"

Having taken this resolution, he busied himself with giving Mulrady the necessary directions for getting to
Melbourne, and showed him his way on the map. All the TRACKS, that is to say, paths through the prairie, came out on the road to Lucknow. This road, after running right down to the coast took a sudden bend in the direction of Melbourne. This was the route that must be followed steadily, for it would not do to attempt a short cut across an almost unknown country. Nothing, consequently, could be more simple. Mulrady could not lose his way.

As to dangers, there were none after he had gone a few miles beyond the encampment, out of the reach of Ben Joyce and his gang. Once past their hiding place, Mulrady was certain of soon being able to outdistance the convicts, and execute his important mission successfully.

At six o'clock they all dined together. The rain was falling in torrents. The tent was not protection enough, and the whole party had to take refuge in the wagon. This was a sure refuge. The clay kept it firmly imbedded in the soil, like a fortress resting on sure foundations. The arsenal was composed of seven carbines and seven revolvers, and could stand a pretty long siege, for they had plenty of ammunition and provisions. But before six days were over, the DUNCAN would anchor in Twofold Bay, and twenty-four hours after her crew would reach the other shore of the Snowy River; and should the passage still remain impracticable, the convicts at any rate would be forced to retire before the increased strength. But all depended on Mulrady's success in his perilous enterprise.

At eight o'clock it got very dark; now was the time to start. The horse prepared for Mulrady was brought out. His feet, by way of extra precaution, were wrapped round with cloths, so that they could not make the least noise on the ground. The animal seemed tired, and yet the safety of all depended on his strength and surefootedness. The Major advised Mulrady to let him go gently as soon as he got past the convicts. Better delay half-a-day than not arrive safely.

John Mangles gave his sailor a revolver, which he had loaded with the utmost care. This is a formidable weapon in the hand of a man who does not tremble, for six shots fired in a few seconds would easily clear a road infested with criminals. Mulrady seated himself in the saddle ready to start.

"Here is the letter you are to give to Tom Austin," said Glenarvan. "Don't let him lose an hour. He is to sail for Twofold Bay at once; and if he does not find us there, if we have not managed to cross the Snowy, let him come on to us without delay. Now go, my brave sailor, and God be with you."

He shook hands with him, and bade him good-by; and so did Lady Helena and Mary Grant. A more timorous man than the sailor would have shrunk back a little from setting out on such a dark, raining night on an errand so full of danger, across vast unknown wilds. But his farewells were calmly spoken, and he speedily disappeared down a path which skirted the wood.

At the same moment the gusts of wind redoubled their violence. The high branches of the eucalyptus clattered together noisily, and bough after bough fell on the wet ground. More than one great tree, with no living sap, but still standing hitherto, fell with a crash during this storm. The wind howled amid the cracking wood, and mingled its moans with the ominous roaring of the rain. The heavy clouds, driving along toward the east, hung on the ground like rays of vapor, and deep, cheerless gloom intensified the horrors of the night.

The travelers went back into the wagon immediately Mulrady had gone. Lady Helena, Mary Grant, Glenarvan and Paganel occupied the first compartment, which had been hermetically closed. The second was occupied by Olbinett, Wilson and Robert. The Major and John Mangles were on duty outside. This precaution was necessary, for an attack on the part of the convicts would be easy enough, and therefore probable enough.

The two faithful guardians kept close watch, bearing philosophically the rain and wind that beat on their faces. They tried to pierce through the darkness so favorable to ambushes, for nothing could be heard but the noise of the tempest, the howling branches, falling trees, and roaring of the unchained waters.

At times the wind would cease for a few moments, as if to take breath. Nothing was audible but the moan of the Snowy River, as it flowed between the motionless reeds and the dark curtain of gum trees. The silence seemed deeper in these momentary lulls, and the Major and John Mangles listened attentively.

During one of these calms a sharp whistle reached them. John Mangles went hurriedly up to the Major. "You heard that?" he asked.

"Yes," said McNabbs. "Is it man or beast?"


And then both listened. The mysterious whistle was repeated, and answered by a kind of report, but almost indistinguishable, for the storm was raging with renewed violence. McNabbs and John Mangles could not hear themselves speak. They went for comfort under the shelter of the wagon.

At this moment the leather curtains were raised and Glenarvan rejoined his two companions. He too had heard this ill-boding whistle, and the报告 which echoed under the tilt. "Which way was it?" he asked.

"There," said John, pointing to the dark track in the direction taken by Mulrady.

"How far?"

"The wind brought it; I should think, three or four miles, at least."
"Come," said Glenarvan, putting his gun on his shoulder.

"No," said the Major. "It is a decoy to get us away from the wagon."

"But if Mulrady has even now fallen beneath the blows of these rascals?" exclaimed Glenarvan, seizing McNabbs by the hand.

"We shall know by to-morrow," said the Major, coolly, determined to prevent Glenarvan from taking a step which was equally rash and futile.

"You cannot leave the camp, my Lord," said John. "I will go alone."

"You will do nothing of the kind!" cried McNabbs, energetically. "Do you want to have us killed one by one to diminish our force, and put us at the mercy of these wretches? If Mulrady has fallen a victim to them, it is a misfortune that must not be repeated. Mulrady was sent, chosen by chance. If the lot had fallen to me, I should have gone as he did; but I should neither have asked nor expected assistance."

In restraining Glenarvan and John Mangles, the Major was right in every aspect of the case. To attempt to follow the sailor, to run in the darkness of night among the convicts in their leafy ambush was madness, and more than that-it was useless. Glenarvan's party was not so numerous that it could afford to sacrifice another member of it.

Still Glenarvan seemed as if he could not yield; his hand was always on his carbine. He wandered about the wagon, and bent a listening ear to the faintest sound. The thought that one of his men was perhaps mortally wounded, abandoned to his fate, calling in vain on those for whose sake he had gone forth, was a torture to him. McNabbs was not sure that he should be able to restrain him, or if Glenarvan, carried away by his feelings, would not run into the arms of Ben Joyce.

"Edward," said he, "be calm. Listen to me as a friend. Think of Lady Helena, of Mary Grant, of all who are left. And, besides, where would you go? Where would you find Mulrady? He must have been attacked two miles off. In what direction? Which track would you follow?"

At that very moment, as if to answer the Major, a cry of distress was heard.

"Listen!" said Glenarvan.

This cry came from the same quarter as the report, but less than a quarter of a mile off.

Glenarvan, repulsing McNabbs, was already on the track, when at three hundred paces from the wagon they heard the exclamation: "Help! help!"

The voice was plaintive and despairing. John Mangles and the Major sprang toward the spot. A few seconds after they perceived among the scrub a human form dragging itself along the ground and uttering mournful groans. It was Mulrady, wounded, apparently dying; and when his companions raised him they felt their hands bathed in blood.

The rain came down with redoubled violence, and the wind raged among the branches of the dead trees. In the pelting storm, Glenarvan, the Major and John Mangles transported the body of Mulrady.

On their arrival everyone got up. Paganel, Robert, Wilson and Olbinett left the wagon, and Lady Helena gave up her compartment to poor Mulrady. The Major removed the poor fellow's flannel shirt, which was dripping with blood and rain. He soon found the wound; it was a stab in the right side.

McNabbs dressed it with great skill. He could not tell whether the weapon had touched any vital part. An intermittent jet of scarlet blood flowed from it; the patient's paleness and weakness showed that he was seriously injured. The Major washed the wound first with fresh water and then closed the orifice; after this he put on a thick pad of lint, and then folds of scraped linen held firmly in place with a bandage. He succeeded in stopping the hemorrhage. Mulrady was laid on his side, with his head and chest well raised, and Lady Helena succeeded in making him swallow a few drops of water.

After about a quarter of an hour, the wounded man, who till then had lain motionless, made a slight movement. His eyes unclosed, his lips muttered incoherent words, and the Major, bending toward him, heard him repeating: "My Lord--the letter--Ben Joyce."

The Major repeated these words, and looked at his companions. What did Mulrady mean? Ben Joyce had been the attacking party, of course; but why? Surely for the express purpose of intercepting him, and preventing his arrival at the DUNCAN. This letter--

Glenarvan searched Mulrady's pockets. The letter addressed to Tom Austin was gone!

The night wore away amid anxiety and distress; every moment, they feared, would be poor Mulrady's last. He suffered from acute fever. The Sisters of Charity, Lady Helena and Mary Grant, never left him. Never was patient so well tended, nor by such sympathetic hands.

Day came, and the rain had ceased. Great clouds filled the sky still; the ground was strewn with broken branches; the marly soil, soaked by the torrents of rain, had yielded still more; the approaches to the wagon became difficult, but it could not sink any deeper.

John Mangles, Paganel, and Glenarvan went, as soon as it was light enough, to reconnoiter in the neighborhood
of the encampment. They revisited the track, which was still stained with blood. They saw no vestige of Ben Joyce, nor of his band. They penetrated as far as the scene of the attack. Here two corpses lay on the ground, struck down by Mulrady's bullets. One was the blacksmith of Blackpoint. His face, already changed by death, was a dreadful spectacle. Glenarvan searched no further. Prudence forbade him to wander from the camp. He returned to the wagon, deeply absorbed by the critical position of affairs.

"We must not think of sending another messenger to Melbourne," said he.
"But we must," said John Mangles; "and I must try to pass where my sailor could not succeed."
"No, John! it is out of the question. You have not even a horse for the journey, which is full two hundred miles!"

This was true, for Mulrady's horse, the only one that remained, had not returned. Had he fallen during the attack on his rider, or was he straying in the bush, or had the convicts carried him off?

"Come what will," replied Glenarvan, "we will not separate again. Let us wait a week, or a fortnight, till the Snowy falls to its normal level. We can then reach Twofold Bay by short stages, and from there we can send on to the DUNCAN, by a safer channel, the order to meet us."

"That seems the only plan," said Paganel.
"Therefore, my friends," rejoined Glenarvan, "no more parting. It is too great a risk for one man to venture alone into a robber-haunted waste. And now, may God save our poor sailor, and protect the rest of us!"

Glenarvan was right in both points; first in prohibiting all isolated attempts, and second, in deciding to wait till the passage of the Snowy River was practicable. He was scarcely thirty miles from Delegete, the first frontier village of New South Wales, where he would easily find the means of transport to Twofold Bay, and from there he could telegraph to Melbourne his orders about the DUNCAN.

These measures were wise, but how late! If Glenarvan had not sent Mulrady to Lucknow what misfortunes would have been averted, not to speak of the assassination of the sailor!

When he reached the camp he found his companions in better spirits. They seemed more hopeful than before.

"He is better! he is better!" cried Robert, running out to meet Lord Glenarvan.
"Mulrady?--"
"Yes, Edward," answered Lady Helena. "A reaction has set in. The Major is more confident. Our sailor will live."
"Where is McNabbs?" asked Glenarvan.
"With him. Mulrady wanted to speak to him, and they must not be disturbed."

He then learned that about an hour since, the wounded man had awakened from his lethargy, and the fever had abated. The first thing he did on recovering his memory and speech was to ask for Lord Glenarvan, or, failing him, the Major. McNabbs seeing him so weak, would have forbidden any conversation; but Mulrady insisted with such energy that the Major had to give in. The interview had already lasted some minutes when Glenarvan returned. There was nothing for it but to await the return of McNabbs.

Presently the leather curtains of the wagon moved, and the Major appeared. He rejoined his friends at the foot of a gum-tree, where the tent was placed. His face, usually so stolid, showed that something disturbed him. When his eyes fell on Lady Helena and the young girl, his glance was full of sorrow.

Glenarvan questioned him, and extracted the following information: When he left the camp Mulrady followed one of the paths indicated by Paganel. He made as good speed as the darkness of the night would allow. He reckoned that he had gone about two miles when several men—five, he thought—sprang to his horse's head. The animal reared; Mulrady seized his revolver and fired. He thought he saw two of his assailants fall. By the flash he recognized Ben Joyce. But that was all. He had not time to fire all the barrels. He felt a violent blow on his side and was thrown to the ground.

Still he did not lose consciousness. The murderers thought he was dead. He felt them search his pockets, and then heard one of them say: "I have the letter."
"Give it to me," returned Ben Joyce, "and now the DUNCAN is ours."
At this point of the story, Glenarvan could not help uttering a cry.

McNabbs continued: "'Now you fellows,' added Ben Joyce, 'catch the horse. In two days I shall be on board the DUNCAN, and in six I shall reach Twofold Bay. This is to be the rendezvous. My Lord and his party will be still stuck in the marshes of the Snowy River. Cross the river at the bridge of Kempe Pier, proceed to the coast, and wait for me. I will easily manage to get you on board. Once at sea in a craft like the DUNCAN, we shall be masters of the Indian Ocean.' "Hurrah for Ben Joyce!" cried the convicts. Mulrady's horse was brought, and Ben Joyce disappeared, galloping on the Lucknow Road, while the band took the road southeast of the Snowy River. Mulrady, though severely wounded, had the strength to drag himself to within three hundred paces from the camp, whence we found him almost dead. There," said McNabbs, "is the history of Mulrady; and now you can understand why the brave fellow was so determined to speak."
This revelation terrified Glenarvan and the rest of the party.
"Pirates! pirates!" cried Glenarvan. "My crew massacred! my DUNCAN in the hands of these bandits!"
"Yes, for Ben Joyce will surprise the ship," said the Major, "and then--"
"Well, we must get to the coast first," said Paganel.
"But how are we to cross the Snowy River?" said Wilson.
"As they will," replied Glenarvan. "They are to cross at Kemple Pier Bridge, and so will we."
"But about Mulrady?" asked Lady Helena.
"We will carry him; we will have relays. Can I leave my crew to the mercy of Ben Joyce and his gang?"

To cross the Snowy River at Kemple Pier was practicable, but dangerous. The convicts might entrench themselves at that point, and defend it. They were at least thirty against seven! But there are moments when people do not deliberate, or when they have no choice but to go on.

"My Lord," said John Mangles, "before we throw away our chance, before venturing to this bridge, we ought to reconnoiter, and I will undertake it."

"I will go with you, John," said Paganel.

This proposal was agreed to, and John Mangles and Paganel prepared to start immediately. They were to follow the course of the Snowy River, follow its banks till they reached the place indicated by Ben Joyce, and especially they were to keep out of sight of the convicts, who were probably scouring the bush.

So the two brave comrades started, well provisioned and well armed, and were soon out of sight as they threaded their way among the tall reeds by the river. The rest anxiously awaited their return all day. Evening came, and still the scouts did not return. They began to be seriously alarmed. At last, toward eleven o'clock, Wilson announced their arrival. Paganel and John Mangles were worn out with the fatigues of a ten-mile walk.

"Well, what about the bridge? Did you find it?" asked Glenarvan, with impetuous eagerness.

"Yes, a bridge of supple-jacks," said John Mangles. "The convicts passed over, but--"

"But what?" said Glenarvan, who foreboded some new misfortune.

"They burned it after they passed!" said Paganel.

CHAPTER XIX HELPLESS AND HOPELESS

It was not a time for despair, but action. The bridge at Kemple Pier was destroyed, but the Snowy River must be crossed, come what might, and they must reach Twofold Bay before Ben Joyce and his gang, so, instead of wasting time in empty words, the next day (the 16th of January) John Mangles and Glenarvan went down to examine the river, and arrange for the passage over.

The swollen and tumultuous waters had not gone down the least. They rushed on with indescribable fury. It would be risking life to battle with them. Glenarvan stood gazing with folded arms and downcast face.

"Would you like me to try and swim across?" asked John Mangles.

"No, John, no!" said Lord Glenarvan, holding back the bold, daring young fellow, "let us wait."

And they both returned to the camp. The day passed in the most intense anxiety. Ten times Lord Glenarvan went to look at the river, trying to invent some bold way of getting over; but in vain. Had a torrent of lava rushed between the shores, it could not have been more impassable.

During these long wasted hours, Lady Helena, under the Major's advice, was nursing Mulrady with the utmost skill. The sailor felt a throbb of returning life. McNabbs ventured to affirm that no vital part was injured. Loss of blood accounted for the patient's extreme exhaustion. The wound once closed and the hemorrhage stopped, time and rest would be all that was needed to complete his cure. Lady Helena had insisted on giving up the first compartment of the wagon to him, which greatly tried his modesty. The poor fellow's greatest trouble was the delay his condition might cause Glenarvan, and he made him promise that they should leave him in the camp under Wilson's care, should the passage of the river become practicable.

But, unfortunately, no passage was practicable, either that day or the next (January 17); Glenarvan was in despair. Lady Helena and the Major vainly tried to calm him, and preached patience.

Patience, indeed, when perhaps at this very moment Ben Joyce was boarding the yacht; when the DUNCAN, loosing from her moorings, was getting up steam to reach the fatal coast, and each hour was bringing her nearer.

John Mangles felt in his own breast all that Glenarvan was suffering. He determined to conquer the difficulty at any price, and constructed a canoe in the Australian manner, with large sheets of bark of the gum-trees. These sheets were kept together by bars of wood, and formed a very fragile boat. The captain and the sailor made a trial trip in it during the day. All that skill, and strength, and tact, and courage could do they did; but they were scarcely in the current before they were upside down, and nearly paid with their lives for the dangerous experiment. The boat disappeared, dragged down by the eddy. John Mangles and Wilson had not gone ten fathoms, and the river was a mile broad, and swollen by the heavy rains and melted snows.

Thus passed the 19th and 20th of January. The Major and Glenarvan went five miles up the river in search of a
favorable passage, but everywhere they found the same roaring, rushing, impetuous torrent. The whole southern slope of the Australian Alps poured its liquid masses into this single bed.

All hope of saving the DUNCAN was now at an end. Five days had elapsed since the departure of Ben Joyce. The yacht must be at this moment at the coast, and in the hands of the convicts.

However, it was impossible that this state of things could last. The temporary influx would soon be exhausted, and the violence also. Indeed, on the morning of the 21st, Paganel announced that the water was already lower. "What does it matter now?" said Glenarvan. "It is too late!"

"That is no reason for our staying longer here," said the Major.

"Certainly not," replied John Mangles. "Perhaps tomorrow the river may be practicable."

"And will that save my unhappy men?" cried Glenarvan.

"Will your Lordship listen to me?" returned John Mangles. "I know Tom Austin. He would execute your orders, and set out as soon as departure was possible. But who knows whether the DUNCAN was ready and her injury repaired on the arrival of Ben Joyce. And suppose the

V. IV Verne yacht could not go to sea; suppose there was a delay of a day, or two days."

"You are right, John," replied Glenarvan. "We must get to Twofold Bay; we are only thirty-five miles from Delegete."

"Yes," added Paganel, "and that's a town where we shall find rapid means of conveyance. Who knows whether we shan't arrive in time to prevent a catastrophe."

"Let us start," cried Glenarvan.

John Mangles and Wilson instantly set to work to construct a canoe of larger dimensions. Experience had proved that the bark was powerless against the violence of the torrent, and John accordingly felled some of the gum-trees, and made a rude but solid raft with the trunks. It was a long task, and the day had gone before the work was ended. It was completed next morning.

By this time the waters had visibly diminished; the torrent had once more become a river, though a very rapid one, it is true. However, by pursuing a zigzag course, and overcoming it to a certain extent, John hoped to reach the opposite shore. At half-past twelve, they embarked provisions enough for a couple of days. The remainder was left with the wagon and the tent. Mulrady was doing well enough to be carried over; his convalescence was rapid.

At one o'clock, they all seated themselves on the raft, still moored to the shore. John Mangles had installed himself at the starboard, and entrusted to Wilson a sort of oar to steady the raft against the current, and lessen the leeway. He took his own stand at the back, to steer by means of a large scull; but, notwithstanding their efforts, Wilson and John Mangles soon found themselves in an inverse position, which made the action of the oars impossible.

There was no help for it; they could do nothing to arrest the gyratory movement of the raft; it turned round with dizzying rapidity, and drifted out of its course. John Mangles stood with pale face and set teeth, gazing at the whirling current.

However, the raft had reached the middle of the river, about half a mile from the starting point. Here the current was extremely strong, and this broke the whirling eddy, and gave the raft some stability. John and Wilson seized their oars again, and managed to push it in an oblique direction. This brought them nearer to the left shore. They were not more than fifty fathoms from it, when Wilson's oar snapped short off, and the raft, no longer supported, was dragged away. John tried to resist at the risk of breaking his own oar, too, and Wilson, with bleeding hands, seconded his efforts with all his might.

At last they succeeded, and the raft, after a passage of more than half an hour, struck against the steep bank of the opposite shore. The shock was so violent that the logs became disunited, the cords broke, and the water bubbled up between. The travelers had barely time to catch hold of the steep bank. They dragged out Mulrady and the two dripping ladies. Everyone was safe; but the provisions and firearms, except the carbine of the Major, went drifting down with the DEBRIS of the raft.

The river was crossed. The little company found themselves almost without provisions, thirty-five miles from Delegete, in the midst of the unknown deserts of the Victoria frontier. Neither settlers nor squatters were to be met with; it was entirely uninhabited, unless by ferocious bushrangers and bandits.

They resolved to set off without delay. Mulrady saw clearly that he would be a great drag on them, and he begged to be allowed to remain, and even to remain alone, till assistance could be sent from Delegete.

Glenarvan refused. It would be three days before he could reach Delegete, and five the shore—that is to say, the 26th of January. Now, as the DUNCAN had left Melbourne on the 16th, what difference would a few days' delay make?

"No, my friend," he said, "I will not leave anyone behind. We will make a litter and carry you in turn."

The litter was made of boughs of eucalyptus covered with branches; and, whether he would or not, Mulrady was
obliged to take his place on it. Glenarvan would be the first to carry his sailor. He took hold of one end and Wilson of the other, and all set off.

What a sad spectacle, and how lamentably was this expedition to end which had commenced so well. They were no longer in search of Harry Grant. This continent, where he was not, and never had been, threatened to prove fatal to those who sought him. And when these intrepid countrymen of his should reach the shore, they would find the DUNCAN waiting to take them home again. The first day passed silently and painfully. Every ten minutes the litter changed bearers. All the sailor’s comrades took their share in this task without murmuring, though the fatigue was augmented by the great heat.

In the evening, after a journey of only five miles, they camped under the gum-trees. The small store of provisions saved from the raft composed the evening meal. But all they had to depend upon now was the Major’s carbine.

It was a dark, rainy night, and morning seemed as if it would never dawn. They set off again, but the Major could not find a chance of firing a shot. This fatal region was only a desert, unfrequented even by animals. Fortunately, Robert discovered a bustard’s nest with a dozen of large eggs in it, which Olbinett cooked on hot cinders. These, with a few roots of purslain which were growing at the bottom of a ravine, were all the breakfast of the 22d.

The route now became extremely difficult. The sandy plains were bristling with SPINIFEX, a prickly plant, which is called in Melbourne the porcupine. It tears the clothing to rags, and makes the legs bleed. The courageous ladies never complained, but footed it bravely, setting an example, and encouraging one and another by word or look.

They stopped in the evening at Mount Bulla Bulla, on the edge of the Jungalla Creek. The supper would have been very scant, if McNabbs had not killed a large rat, the _mus conditor_, which is highly spoken of as an article of diet. Olbinett roasted it, and it would have been pronounced even superior to its reputation had it equaled the sheep in size. They were obliged to be content with it, however, and it was devoured to the bones.

On the 23d the weary but still energetic travelers started off again. After having gone round the foot of the mountain, they crossed the long prairies where the grass seemed made of whalebone. It was a tangle of darts, a medley of sharp little sticks, and a path had to be cut through either with the hatchet or fire.

That morning there was not even a question of breakfast. Nothing could be more barren than this region strewn with pieces of quartz. Not only hunger, but thirst began to assail the travelers. A burning atmosphere heightened their discomfort. Glenarvan and his friends could only go half a mile an hour. Should this lack of food and water continue till evening, they would all sink on the road, never to rise again.

But when everything fails a man, and he finds himself without resources, at the very moment when he feels he must give up, then Providence steps in. Water presented itself in the CEPHALOTES, a species of cup-shaped flower, filled with refreshing liquid, which hung from the branches of coralliform-shaped bushes. They all quenched their thirst with these, and felt new life returning.

The only food they could find was the same as the natives were forced to subsist upon, when they could find neither game, nor serpents, nor insects. Paganel discovered in the dry bed of a creek, a plant whose excellent properties had been frequently described by one of his colleagues in the Geographical Society.

It was the NARDOU, a cryptogamous plant of the family Marsilaceae, and the same which kept Burke and King alive in the deserts of the interior. Under its leaves, which resembled those of the trefoil, there were dried sporules as large as a lentil, and these sporules, when crushed between two stones, made a sort of flour. This was converted into coarse bread, which stilled the pangs of hunger at least. There was a great abundance of this plant growing in the district, and Olbinett gathered a large supply, so that they were sure of food for several days.

The next day, the 24th, Mulrady was able to walk part of the way. His wound was entirely cicatrized. The town of Delegete was not more than ten miles off, and that evening they camped in longitude 140 degrees, on the very frontier of New South Wales.

For some hours, a fine but penetrating rain had been falling. There would have been no shelter from this, if by chance John Mangles had not discovered a sawyer’s hut, deserted and dilapidated to a degree. But with this miserable cabin they were obliged to be content. Wilson wanted to kindle a fire to prepare the NARDOU bread, and he went out to pick up the dead wood scattered all over the ground. But he found it would not light, the great quantity of albuminous matter which it contained prevented all combustion. This is the incombustible wood put down by Paganel in his list of Australian products.

They had to dispense with fire, and consequently with food too, and sleep in their wet clothes, while the laughing jackasses, concealed in the high branches, seemed to ridicule the poor unfortunates. However, Glenarvan was nearly at the end of his sufferings. It was time. The two young ladies were making heroic efforts, but their strength was hourly decreasing. They dragged themselves along, almost unable to walk.
Next morning they started at daybreak. At 11 A.M. Delegete came in sight in the county of Wellesley, and fifty miles from Twofold Bay.

Means of conveyance were quickly procured here. Hope returned to Glenarvan as they approached the coast. Perhaps there might have been some slight delay, and after all they might get there before the arrival of the DUNCAN. In twenty-four hours they would reach the bay.

At noon, after a comfortable meal, all the travelers installed in a mail-coach, drawn by five strong horses, left Delegete at a gallop. The postilions, stimulated by a promise of a princely DOUCEUR, drove rapidly along over a well-kept road. They did not lose a minute in changing horses, which took place every ten miles. It seemed as if they were infected with Glenarvan's zeal. All that day, and night, too, they traveled on at the rate of six miles an hour.

In the morning at sunrise, a dull murmur fell on their ears, and announced their approach to the Indian Ocean. They required to go round the bay to gain the coast at the 37th parallel, the exact point where Tom Austin was to wait their arrival.

When the sea appeared, all eyes anxiously gazed at the offing. Was the DUNCAN, by a miracle of Providence, there running close to the shore, as a month ago, when they crossed Cape Corrientes, they had found her on the Argentine coast? They saw nothing. Sky and earth mingled in the same horizon. Not a sail enlivened the vast stretch of ocean.

One hope still remained. Perhaps Tom Austin had thought it his duty to cast anchor in Twofold Bay, for the sea was heavy, and a ship would not dare to venture near the shore. "To Eden!" cried Glenarvan. Immediately the mail-coach resumed the route round the bay, toward the little town of Eden, five miles distant. The postilions stopped not far from the lighthouse, which marks the entrance of the port. Several vessels were moored in the roadstead, but none of them bore the flag of Malcolm.

Glenarvan, John Mangles, and Paganel got out of the coach, and rushed to the custom-house, to inquire about the arrival of vessels within the last few days.

"No ship had touched the bay for a week," Glenarvan said, a sudden revulsion of feeling lifting him from despair. "Perhaps we have arrived first."

John Mangles shook his head. He knew Tom Austin. His first mate would not delay the execution of an order for ten days.

"I must know at all events how they stand," said Glenarvan. "Better certainty than doubt."

A quarter of an hour afterward a telegram was sent to the syndicate of shipbrokers in Melbourne. The whole party then repaired to the Victoria Hotel.

At 2 P.M. the following telegraphic reply was received: "LORD GLENARVAN, Eden.

"Twofold Bay.

"The DUNCAN left on the 16th current. Destination unknown. J. ANDREWS, S. B."

The telegram dropped from Glenarvan's hands.

There was no doubt now. The good, honest Scotch yacht was now a pirate ship in the hands of Ben Joyce!

So ended this journey across Australia, which had commenced under circumstances so favorable. All trace of Captain Grant and his shipwrecked men seemed to be irrevocably lost. This ill success had cost the loss of a ship's crew. Lord Glenarvan had been vanquished in the strife; and the courageous searchers, whom the unfriendly elements of the Pampas had been unable to check, had been conquered on the Australian shore by the perversity of man.

END OF BOOK TWO
Mary Grant at this crisis nerved herself to the resolution never to utter the name of her father. She suppressed her own anguish, when she thought of the unfortunate crew who had perished. The daughter was merged in the friend, and she now took upon her to console Lady Glenarvan, who till now had been her faithful comforter. She was the first to speak of returning to Scotland. John Mangles was filled with admiration at seeing her so courageous and so resigned. He wanted to say a word further in the Captain's interest, but Mary stopped him with a glance, and afterward said to him: "No, Mr. John, we must think of those who ventured their lives. Lord Glenarvan must return to Europe!"

"You are right, Miss Mary," answered John Mangles; "he must. Beside, the English authorities must be informed of the fate of the DUNCAN. But do not despair. Rather than abandon our search I will resume it alone! I will either find Captain Grant or perish in the attempt!"

It was a serious undertaking to which John Mangles bound himself; Mary accepted, and gave her hand to the young captain, as if to ratify the treaty. On John Mangles' side it was a life's devotion; on Mary's undying gratitude.

During that day, their departure was finally arranged; they resolved to reach Melbourne without delay. Next day John went to inquire about the ships ready to sail. He expected to find frequent communication between Eden and Victoria.

He was disappointed; ships were scarce. Three or four vessels, anchored in Twofold Bay, constituted the mercantile fleet of the place; none of them were bound for Melbourne, nor Sydney, nor Point de Galle, at any of which ports Glenarvan would have found ships loading for England. In fact, the Peninsular and Oriental Company has a regular line of packets between these points and England.

Under these circumstances, what was to be done? Waiting for a ship might be a tedious affair, for Twofold Bay is not much frequented. Numbers of ships pass by without touching. After due reflection and discussion, Glenarvan had nearly decided to follow the coast road to Sydney, when Paganel made an unexpected proposition.

The geographer had visited Twofold Bay on his own account, and was aware that there were no means of transport for Sydney or Melbourne. But of the three vessels anchored in the roadstead one was loading for Auckland, the capital of the northern island of New Zealand. Paganel's proposal was to take the ship in question, and get to Auckland, whence it would be easy to return to Europe by the boats of the Peninsular and Oriental Company.

This proposition was taken into serious consideration. Paganel on this occasion dispensed with the volley of arguments he generally indulged in. He confined himself to the bare proposition, adding that the voyage to New Zealand was only five or six days--the distance, in fact, being only about a thousand miles.

By a singular coincidence Auckland is situated on the self-same parallel--the thirty-seventh--which the explorers had perseveringly followed since they left the coast of Araucania. Paganel might fairly have used this as an argument in favor of his scheme; in fact, it was a natural opportunity of visiting the shores of New Zealand.

But Paganel did not lay stress on this argument. After two mistakes, he probably hesitated to attempt a third interpretation of the document. Besides, what could he make of it? It said positively that a "continent" had served as a refuge for Captain Grant, not an island. Now, New Zealand was nothing but an island. This seemed decisive. Whether, for this reason, or for some other, Paganel did not connect any idea of further search with this proposition of reaching Auckland. He merely observed that regular communication existed between that point and Great Britain, and that it was easy to take advantage of it.

John Mangles supported Paganel's proposal. He advised its adoption, as it was hopeless to await the problematical arrival of a vessel in Twofold Bay. But before coming to any decision, he thought it best to visit the ship mentioned by the geographer. Glenarvan, the Major, Paganel, Robert, and Mangles himself, took a boat, and a few strokes brought them alongside the ship anchored two cables' length from the quay.

It was a brig of 150 tons, named the MACQUARIE. It was engaged in the coasting trade between the various ports of Australia and New Zealand. The captain, or rather the "master," received his visitors gruffly enough. They perceived that they had to do with a man of no education, and whose manners were in no degree superior to those of the five sailors of his crew. With a coarse, red face, thick hands, and a broken nose, blind of an eye, and his lips stained with the pipe, Will Halley was a sadly brutal looking person. But they had no choice, and for so short a voyage it was not necessary to be very particular.

"What do you want?" asked Will Halley, when the strangers stepped on the poop of his ship.

"The captain," answered John Mangles.
"I am the captain," said Halley. "What else do you want?"
"The MACQUARIE is loading for Auckland, I believe?"
"Yes. What else?"
"What does she carry?"
"Everything salable and purchasable. What else?"
"When does she sail?"
"To-morrow at the mid-day tide. What else?"
"Does she take passengers?"
"That depends on who the passengers are, and whether they are satisfied with the ship's mess."
"They would bring their own provisions."
"What else?"
"What else?"
"Yes. How many are there?"
"Nine; two of them are ladies."
"I have no cabins."
"We will manage with such space as may be left at their disposal."
"What else?"
"Do you agree?" said John Mangles, who was not in the least put out by the captain's peculiarities.
"We'll see," said the master of the MACQUARIE.
Will Halley took two or three turns on the poop, making it resound with iron-heeled boots, and then he turned abruptly to John Mangles.
"What would you pay?" said he.
"What do you ask?" replied John.
"Fifty pounds."
Glenarvan looked consent.
"Very good! Fifty pounds," replied John Mangles.
"But passage only," added Halley.
"Yes, passage only."
"Food extra."
"Extra."
"Agreed. And now," said Will, putting out his hand, "what about the deposit money?"
"Here is half of the passage-money, twenty-five pounds," said Mangles, counting out the sum to the master.
"All aboard to-morrow," said he, "before noon. Whether or no, I weigh anchor."
"We will be punctual."
This said, Glenarvan, the Major, Robert, Paganel, and John Mangles left the ship, Halley not so much as touching the oilskin that adorned his red locks.
"What a brute," exclaimed John.
"He will do," answered Paganel. "He is a regular sea-wolf."
"A downright bear!" added the Major.
"I fancy," said John Mangles, "that the said bear has dealt in human flesh in his time."
"What matter?" answered Glenarvan, "as long as he commands the MACQUARIE, and the MACQUARIE goes to New Zealand. From Twofold Bay to Auckland we shall not see much of him; after Auckland we shall see him no more."

Lady Helena and Mary Grant were delighted to hear that their departure was arranged for to-morrow. Glenarvan warned them that the MACQUARIE was inferior in comfort to the DUNCAN. But after what they had gone through, they were indifferent to trifling annoyances. Wilson was told off to arrange the accommodation on board the MACQUARIE. Under his busy brush and broom things soon changed their aspect.
Will Halley shrugged his shoulders, and let the sailor have his way. Glenarvan and his party gave him no concern. He neither knew, nor cared to know, their names. His new freight represented fifty pounds, and he rated it far below the two hundred tons of cured hides which were stowed away in his hold. Skins first, men after. He was a merchant. As to his sailor qualification, he was said to be skillful enough in navigating these seas, whose reefs make them very dangerous.
As the day drew to a close, Glenarvan had a desire to go again to the point on the coast cut by the 37th parallel. Two motives prompted him. He wanted to examine once more the presumed scene of the wreck. Ayrton had certainly been quartermaster on the BRITANNIA, and the BRITANNIA might have been lost on this part of the Australian coast; on the east coast if not on the west. It would not do to leave without thorough investigation, a locality which they were never to revisit.
And then, failing the BRITANNIA, the DUNCAN certainly had fallen into the hands of the convicts. Perhaps there had been a fight? There might yet be found on the coast traces of a struggle, a last resistance. If the crew had perished among the waves, the waves probably had thrown some bodies on the shore.
Glenarvan, accompanied by his faithful John, went to carry out the final search. The landlord of the Victoria Hotel lent them two horses, and they set out on the northern road that skirts Twofold Bay.
It was a melancholy journey. Glenarvan and Captain John trotted along without speaking, but they understood each other. The same thoughts, the same anguish harrowed both their hearts. They looked at the sea-worn rocks; they needed no words of question or answer. John's well-tried zeal and intelligence were a guarantee that every point was scrupulously examined, the least likely places, as well as the sloping beaches and sandy plains where even the slight tides of the Pacific might have thrown some fragments of wreck. But no indication was seen that could suggest further search in that quarter—all trace of the wreck escaped them still.

As to the DUNCAN, no trace either. All that part of Australia, bordering the ocean, was desert.

Still John Mangles discovered on the skirts of the shore evident traces of camping, remains of fires recently kindled under solitary Myall-trees. Had a tribe of wandering blacks passed that way lately? No, for Glenarvan saw a token which furnished incontestable proof that the convicts had frequented that part of the coast.

This token was a grey and yellow garment worn and patched, an ill-omened rag thrown down at the foot of a tree. It bore the convict's original number at the Perth Penitentiary. The felon was not there, but his filthy garments betrayed his passage. This livery of crime, after having clothed some miscreant, was now decaying on this desert shore.

"You see, John," said Glenarvan, "the convicts got as far as here! and our poor comrades of the DUNCAN—"

"Yes," said John, in a low voice, "they never landed, they perished!"

"Those wretches!" cried Glenarvan. "If ever they fall into my hands I will avenge my crew—"

Grief had hardened Glenarvan's features. For some minutes he gazed at the expanse before him, as if taking a last look at some ship disappearing in the distance. Then his eyes became dim; he recovered himself in a moment, and without a word or look, set off at a gallop toward Eden.

The wanderers passed their last evening sadly enough. Their thoughts recalled all the misfortunes they had encountered in this country. They remembered how full of well-warranted hope they had been at Cape Bernouilli, and how cruelly disappointed at Twofold Bay!

Paganel was full of feverish agitation. John Mangles, who had watched him since the affair at Snowy River, felt that the geographer was hesitating whether to speak or not to speak. A thousand times he had pressed him with questions, and failed in obtaining an answer.

But that evening, John, in lighting him to his room, asked him why he was so nervous.

"Friend John," said Paganel, evasively, "I am not more nervous to-night than I always am."

"Mr. Paganel," answered John, "you have a secret that chokes you."

"Well!" cried the geographer, gesticulating, "what can I do? It is stronger than I!"

"What is stronger?"

"My joy on the one hand, my despair on the other."

"You rejoice and despair at the same time!"

"Yes; at the idea of visiting New Zealand."

"Why! have you any trace?" asked John, eagerly. "Have you recovered the lost tracks?"

"No, friend John. No one returns from New Zealand; but still—you know human nature. All we want to nourish hope is breath. My device is '_Spiro spero_' and it is the best motto in the world!"

CHAPTER II NAVIGATORS AND THEIR DISCOVERIES

NEXT day, the 27th of January, the passengers of the MACQUARIE were installed on board the brig. Will Halley had not offered his cabin to his lady passengers. This omission was the less to be deplored, for the den was worthy of the bear.

At half past twelve the anchor was weighed, having been loosed from its holding-ground with some difficulty. A moderate breeze was blowing from the southwest. The sails were gradually unfurled; the five hands made slow work. Wilson offered to assist the crew; but Halley begged him to be quiet and not to interfere with what did not concern him. He was accustomed to manage his own affairs, and required neither assistance nor advice.

This was aimed at John Mangles, who had smiled at the clumsiness of some maneuver. John took the hint, but mentally resolved that he would nevertheless hold himself in readiness in case the incapacity of the crew should endanger the safety of the vessel.

However, in time, the sails were adjusted by the five sailors, aided by the stimulus of the captain's oaths. The MACQUARIE stood out to sea on the larboard tack, under all her lower sails, topsails, topgallants, cross-jack, and jib. By and by, the other sails were hoisted. But in spite of this additional canvas the brig made very little way. Her rounded bow, the width of her hold, and her heavy stern, made her a bad sailor, the perfect type of a wooden shoe.

They had to make the best of it. Happily, five days, or, at most, six, would take them to Auckland, no matter how bad a sailor the MACQUARIE was.

At seven o'clock in the evening the Australian coast and the lighthouse of the port of Eden had faded out of sight. The ship labored on the lumpy sea, and rolled heavily in the trough of the waves. The passengers below
suffered a good deal from this motion. But it was impossible to stay on deck, as it rained violently. Thus they were condemned to close imprisonment.

Each one of them was lost in his own reflections. Words were few. Now and then Lady Helena and Miss Grant exchanged a few syllables. Glenarvan was restless; he went in and out, while the Major was impassive. John Mangles, followed by Robert, went on the poop from time to time, to look at the weather. Paganel sat in his corner, muttering vague and incoherent words.

What was the worthy geographer thinking of? Of New Zealand, the country to which destiny was leading him. He went mentally over all his history; he called to mind the scenes of the past in that ill-omened country.

But in all that history was there a fact, was there a solitary incident that could justify the discoverers of these islands in considering them as "a continent." Could a modern geographer or a sailor concede to them such a designation. Paganel was always revolving the meaning of the document. He was possessed with the idea; it became his ruling thought. After Patagonia, after Australia, his imagination, allured by a name, flew to New Zealand. But in that direction, one point, and only one, stood in his way.

"_Contin--contin_," he repeated, "that must mean continent!"

And then he resumed his mental retrospect of the navigators who made known to us these two great islands of the Southern Sea.

It was on the 13th of December, 1642, that the Dutch navigator Tasman, after discovering Van Diemen's Land, sighted the unknown shores of New Zealand. He coasted along for several days, and on the 17th of December his ships penetrated into a large bay, which, terminating in a narrow strait, separated the two islands.

The northern island was called by the natives Ikana-Mani, a word which signifies the fish of Mani. The southern island was called Tavai-Pouna-Mou, "the whale that yields the green-stones."

Abel Tasman sent his boats on shore, and they returned accompanied by two canoes and a noisy company of natives. These savages were middle height, of brown or yellow complexion, angular bones, harsh voices, and black hair, which was dressed in the Japanese manner, and surmounted by a tall white feather.

This first interview between Europeans and aborigines seemed to promise amicable and lasting intercourse. But the next day, when one of Tasman's boats was looking for an anchorage nearer to the land, seven canoes, manned by a great number of natives, attacked them fiercely. The boat capsized and filled. The quartermaster in command was instantly struck with a badly-sharpened spear, and fell into the sea. Of his six companions four were killed; the other two and the quartermaster were able to swim to the ships, and were picked up and recovered.

After this sad occurrence Tasman set sail, confining his revenge to giving the natives a few musket-shots, which probably did not reach them. He left this bay—which still bears the name of Massacre Bay—followed the western coast, and on the 5th of January, anchored near the northern-most point. Here the violence of the surf, as well as the unfriendly attitude of the natives, prevented his obtaining water, and he finally quitting these shores, giving them the name Staten-land or the Land of the States, in honor of the States-General.

The Dutch navigator concluded that these islands were adjacent to the islands of the same name on the east of Terra del Fuego, at the southern point of the American continent. He thought he had found "the Great Southern Continent."

"But," said Paganel to himself, "what a seventeenth century sailor might call a 'continent' would never stand for one with a nineteenth century man. No such mistake can be supposed! No! there is something here that baffles me."

CHAPTER III THE MARTYR-ROLL OF NAVIGATORS

ON the 31st of January, four days after starting, the MACQUARIE had not done two-thirds of the distance between Australia and New Zealand. Will Halley took very little heed to the working of the ship; he let things take their chance. He seldom showed himself, for which no one was sorry. No one would have complained if he had passed all his time in his cabin, but for the fact that the brutal captain was every day under the influence of gin or brandy. His sailors willingly followed his example, and no ship ever sailed more entirely depending on Providence than the MACQUARIE did from Twofold Bay.

This unpardonable carelessness obliged John Mangles to keep a watchful eye ever open. Mulrady and Wilson more than once brought round the helm when some careless steering threatened to throw the ship on her beam-ends. Often Will Halley would interfere and abuse the two sailors with a volley of oaths. The latter, in their impatience, would have liked nothing better than to bind this drunken captain, and lower him into the hold, for the rest of the voyage. But John Mangles succeeded, after some persuasion, in calming their well-grounded indignation.

Still, the position of things filled him with anxiety; but, for fear of alarming Glenarvan, he spoke only to Paganel or the Major. McNabbs recommended the same course as Mulrady and Wilson.

"If you think it would be for the general good, John," said McNabbs, "you should not hesitate to take the command of the vessel. When we get to Auckland the drunken imbecile can resume his command, and then he is at liberty to wreck himself, if that is his fancy."
"All that is very true, Mr. McNabbs, and if it is absolutely necessary I will do it. As long as we are on open sea, a
careful lookout is enough; my sailors and I are watching on the poop; but when we get near the coast, I confess I
shall be uneasy if Halley does not come to his senses."

"Could not you direct the course?" asked Paganel.

"That would be difficult," replied John. "Would you believe it that there is not a chart on board?"

"Is that so?"

"It is indeed. The MACQUARIE only does a coasting trade between Eden and Auckland, and Halley is so at
home in these waters that he takes no observations."

"I suppose he thinks the ship knows the way, and steers herself." "Ha! ha!" laughed John Mangles; "I do not
believe in ships that steer themselves; and if Halley is drunk when we get among soundings, he will get us all into
trouble."

"Let us hope," said Paganel, "that the neighborhood of land will bring him to his senses."

"Well, then," said McNabbs, "if needs were, you could not sail the MACQUARIE into Auckland?"

"Without a chart of the coast, certainly not. The coast is very dangerous. It is a series of shallow fiords as
irregular and capricious as the fiords of Norway. There are many reefs, and it requires great experience to avoid
them. The strongest ship would be lost if her keel struck one of those rocks that are submerged but a few feet below
the water."

"In that case those on board would have to take refuge on the coast."

"If there was time."

"A terrible extremity," said Paganel, "for they are not hospitable shores, and the dangers of the land are not less
appalling than the dangers of the sea."

"You refer to the Maories, Monsieur Paganel?" asked John Mangles.

"Yes, my friend. They have a bad name in these waters. It is not a matter of timid or brutish Australians, but of
an intelligent and sanguinary race, cannibals greedy of human flesh, man-eaters to whom we should look in vain for
pity."

"Well, then," exclaimed the Major, "if Captain Grant had been wrecked on the coast of New Zealand, you would
dissuade us from looking for him."

"Oh, you might search on the coasts," replied the geographer, "because you might find traces of the
BRITANNIA, but not in the interior, for it would be perfectly useless. Every European who ventures into these fatal
districts falls into the hands of the Maories, and a prisoner in the hands of the Maories is a lost man. I have urged my
friends to cross the Pampas, to toil over the plains of Australia, but I will never lure them into the mazes of the New
Zealand forest. May heaven be our guide, and keep us from ever being thrown within the power of those fierce
natives!"

CHAPTER IV THE WRECK OF THE "MACQUARIE"

STILL this wearisome voyage dragged on. On the 2d of February, six days from starting, the MACQUARIE had
not yet made a nearer acquaintance with the shores of Auckland. The wind was fair, nevertheless, and blew steadily
from the southwest; but the currents were against the ship's course, and she scarcely made any way. The heavy,
lumpy sea strained her cordage, her timbers creaked, and she labored painfully in the trough of the sea. Her standing
rigging was so out of order that it allowed play to the masts, which were violently shaken at every roll of the sea.

Fortunately, Will Halley was not a man in a hurry, and did not use a press of canvas, or his masts would
inevitably have come down. John Mangles therefore hoped that the wretched hull would reach port without accident;
but it grieved him that his companions should have to suffer so much discomfort from the defective arrangements of
the brig.

But neither Lady Helena nor Mary Grant uttered a word of complaint, though the continuous rain obliged them
to stay below, where the want of air and the violence of the motion were painfully felt. They often braved the
weather, and went on the poop till driven down again by the force of a sudden squall. Then they returned to the
narrow space, fitter for stowing cargo than accommodating passengers, especially ladies.

Their friends did their best to amuse them. Paganel tried to beguile the time with his stories, but it was a hopeless
case. Their minds were so distracted at this change of route as to be quite unhinged. Much as they had been
interested in his dissertation on the Pampas, or Australia, his lectures on New Zealand fell on cold and indifferent
ears. Besides, they were going to this new and ill-reputed country without enthusiasm, without conviction, not even
of their own free will, but solely at the bidding of destiny.

Of all the passengers on board the MACQUARIE, the most to be pitied was Lord Glenarvan. He was rarely to be
seen below. He could not stay in one place. His nervous organization, highly excited, could not submit to
confinement between four narrow bulkheads. All day long, even all night, regardless of the torrents of rain and the
dashing waves, he stayed on the poop, sometimes leaning on the rail, sometimes walking to and fro in feverish
agitation. His eyes wandered ceaselessly over the blank horizon. He scanned it eagerly during every short interval of clear weather. It seemed as if he sought to question the voiceless waters; he longed to tear away the veil of fog and vapor that obscured his view. He could not be resigned, and his features expressed the bitterness of his grief. He was a man of energy, till now happy and powerful, and deprived in a moment of power and happiness. John Mangles bore him company, and endured with him the inclemency of the weather. On this day Glenarvan looked more anxiously than ever at each point where a break in the mist enabled him to do so. John came up to him and said, "Your Lordship is looking out for land?"

Glenarvan shook his head in dissent.

"And yet," said the young captain, "you must be longing to quit this vessel. We ought to have seen the lights of Auckland thirty-six hours ago."

Glenarvan made no reply. He still looked, and for a moment his glass was pointed toward the horizon to windward.

"The land is not on that side, my Lord," said John Mangles. "Look more to starboard."

"Why, John?" replied Glenarvan. "I am not looking for the land."

"What then, my Lord?"

"My yacht! the DUNCAN," said Glenarvan, hotly. "It must be here on these coasts, skimming these very waves, playing the vile part of a pirate! It is here, John; I am certain of it, on the track of vessels between Australia and New Zealand; and I have a presentiment that we shall fall in with her."

"God keep us from such a meeting!"

"Why, John?"

"Your Lordship forgets our position. What could we do in this ship if the DUNCAN gave chase. We could not even fly!"

"Fly, John?"

"Yes, my Lord; we should try in vain! We should be taken, delivered up to the mercy of those wretches, and Ben Joyce has shown us that he does not stop at a crime! Our lives would be worth little. We would fight to the death, of course, but after that! Think of Lady Glenarvan; think of Mary Grant!"

"Poor girls!" murmured Glenarvan. "John, my heart is broken; and sometimes despair nearly masters me. I feel as if fresh misfortunes awaited us, and that Heaven itself is against us. It terrifies me!"

"You, my Lord?"

"Not for myself, John, but for those I love--whom you love, also."

"Keep up your heart, my Lord," said the young captain. "We must not look out for troubles. The MACQUARIE sails badly, but she makes some way nevertheless. Will Halley is a brute, but I am keeping my eyes open, and if the coast looks dangerous, I will put the ship's head to sea again. So that, on that score, there is little or no danger. But as to getting alongside the DUNCAN! God forbid! And if your Lordship is bent on looking out for her, let it be in order to give her a wide berth."

John Mangles was right. An encounter with the DUNCAN would have been fatal to the MACQUARIE. There was every reason to fear such an engagement in these narrow seas, in which pirates could ply their trade without risk. However, for that day at least, the yacht did not appear, and the sixth night from their departure from Twofold Bay came, without the fears of John Mangles being realized.

But that night was to be a night of terrors. Darkness came on almost suddenly at seven o'clock in the evening; the sky was very threatening. The sailor instinct rose above the stupefaction of the drunkard and roused Will Halley. He left his cabin, rubbed his eyes, and shook his great red head. Then he drew a great deep breath of air, as other people swallow a draught of water to revive themselves. He examined the masts. The wind freshened, and veering a point more to the westward, blew right for the New Zealand coast.

Will Halley, with many an oath, called his men, tightened his topmast cordage, and made all snug for the night. John Mangles approved in silence. He had ceased to hold any conversation with the coarse seaman; but neither Glenarvan nor he left the poop. Two hours after a stiff breeze came on. Will Halley took in the lower reef of his topsails. The maneuver would have been a difficult job for five men if the MACQUARIE had not carried a double yard, on the American plan. In fact, they had only to lower the upper yard to bring the sail to its smallest size.

Two hours passed; the sea was rising. The MACQUARIE was struck so violently that it seemed as if her keel had touched the rocks. There was no real danger, but the heavy vessel did not rise easily to the waves. By and by the returning waves would break over the deck in great masses. The boat was washed out of the davits by the force of the water.

John Mangles never released his watch. Any other ship would have made no account of a sea like this; but with
this heavy craft there was a danger of sinking by the bow, for the deck was filled at every lurch, and the sheet of water not being able to escape quickly by the scuppers, might submerge the ship. It would have been the wisest plan to prepare for emergency by knocking out the bulwarks with an ax to facilitate their escape, but Halley refused to take this precaution.

But a greater danger was at hand, and one that it was too late to prevent. About half-past eleven, John Mangles and Wilson, who stayed on deck throughout the gale, were suddenly struck by an unusual noise. Their nautical instincts awoke. John seized the sailor's hand. "The reef!" said he.

"Yes," said Wilson; "the waves breaking on the bank."
"Not more than two cables' length off?"
"At farthest? The land is there!"
John leaned over the side, gazed into the dark water, and called out, "Wilson, the lead!"

The master, posted forward, seemed to have no idea of his position. Wilson seized the lead-line, sprang to the fore-chains, and threw the lead; the rope ran out between his fingers, at the third knot the lead stopped.

"Captain," said John, running to Will Halley, "we are on the breakers."

Whether or not he saw Halley shrug his shoulders is of very little importance. But he hurried to the helm, put it hard down, while Wilson, leaving the line, hauled at the main-topsail brace to bring the ship to the wind. The man who was steering received a smart blow, and could not comprehend the sudden attack.

"Let her go! Let her go!" said the young captain, working her to get away from the reefs.

For half a minute the starboard side of the vessel was turned toward them, and, in spite of the darkness, John could discern a line of foam which moaned and gleamed four fathoms away.

At this moment, Will Halley, comprehending the danger, lost his head. His sailors, hardly sobered, could not understand his orders. His incoherent words, his contradictory orders showed that this stupid sot had quite lost his self-control. He was taken by surprise at the proximity of the land, which was eight miles off, when he thought it was thirty or forty miles off. The currents had thrown him out of his habitual track, and this miserable slave of routine was left quite helpless.

Still the prompt maneuver of John Mangles succeeded in keeping the MACQUARIE off the breakers. But John did not know the position. For anything he could tell he was girdled in by reefs. The wind blew them strongly toward the east, and at every lurch they might strike.

In fact, the sound of the reef soon redoubled on the starboard side of the bow. They must luff again. John put the helm down again and brought her up. The breakers increased under the bow of the vessel, and it was necessary to put her about to regain the open sea. Whether she would be able to go about under shortened sail, and badly trimmed as she was, remained to be seen, but there was nothing else to be done.

"Helm hard down!" cried Mangles to Wilson.

The MACQUARIE began to near the new line of reefs: in another moment the waves were seen dashing on submerged rocks. It was a moment of inexpressible anxiety. The spray was luminous, just as if lit up by sudden phosphorescence. The roaring of the sea was like the voice of those ancient Tritons whom poetic mythology endowed with life. Wilson and Mulrady hung to the wheel with all their weight. Some cordage gave way, which endangered the foremast. It seemed doubtful whether she would go about without further damage.

Suddenly the wind fell and the vessel fell back, and turning her became hopeless. A high wave caught her below, carried her up on the reefs, where she struck with great violence. The foremast came down with all the fore-rigging. The brig rose twice, and then lay motionless, heeled over on her port side at an angle of 30 degrees.

The glass of the skylight had been smashed to powder. The passengers rushed out. But the waves were sweeping the deck from one side to the other, and they dared not stay there. John Mangles, knowing the ship to be safely lodged in the sand, begged them to return to their own quarters.

"Tell me the truth, John," said Glenarvan, calmly.

"The truth, my Lord, is that we are at a standstill. Whether the sea will devour us is another question; but we have time to consider."

"It is midnight?"
"Yes, my Lord, and we must wait for the day."
"Can we not lower the boat?"
"In such a sea, and in the dark, it is impossible. And, besides, where could we land?"
"Well, then, John, let us wait for the daylight."

Will Halley, however, ran up and down the deck like a maniac. His crew had recovered their senses, and now broached a cask of brandy, and began to drink. John foresaw that if they became drunk, terrible scenes would ensue.

The captain could not be relied on to restrain them; the wretched man tore his hair and wrung his hands. His
whole thought was his uninsured cargo. "I am ruined! I am lost!" he would cry, as he ran from side to side.

John Mangles did not waste time on him. He armed his two companions, and they all held themselves in readiness to resist the sailors who were filling themselves with brandy, seasoned with fearful blasphemies.

"The first of these wretches that comes near the ladies, I will shoot like a dog," said the Major, quietly.

The sailors doubtless saw that the passengers were determined to hold their own, for after some attempts at pillage, they disappeared to their own quarters. John Mangles thought no more of these drunken rascals, and waited impatiently for the dawn. The ship was now quite motionless. The sea became gradually calmer. The wind fell. The hull would be safe for some hours yet. At daybreak John examined the landing-place; the yawl, which was now their only boat, would carry the crew and the passengers. It would have to make three trips at least, as it could only hold four.

As he was leaning on the skylight, thinking over the situation of affairs, John Mangles could hear the roaring of the surf. He tried to pierce the darkness. He wondered how far it was to the land they longed for no less than dreaded. A reef sometimes extends for miles along the coast. Could their fragile boat hold out on a long trip?

While John was thus ruminating and longing for a little light from the murky sky, the ladies, relying on him, slept in their little berths. The stationary attitude of the brig insured them some hours of repose. Glenarvan, John, and their companions, no longer disturbed by the noise of the crew who were now wrapped in a drunken sleep, also refreshed themselves by a short nap, and a profound silence reigned on board the ship, herself slumbering peacefully on her bed of sand.

Toward four o'clock the first peep of dawn appeared in the east. The clouds were dimly defined by the pale light of the dawn. John returned to the deck. The horizon was veiled with a curtain of fog. Some faint outlines were shadowed in the mist, but at a considerable height. A slight swell still agitated the sea, but the more distant waves were undistinguishable in a motionless bank of clouds.

John waited. The light gradually increased, and the horizon acquired a rosy hue. The curtain slowly rose over the vast watery stage. Black reefs rose out of the waters. Then a line became defined on the belt of foam, and there gleamed a luminous beacon-light point behind a low hill which concealed the scarcely risen sun. There was the land, less than nine miles off.

"Land ho!" cried John Mangles.

His companions, aroused by his voice, rushed to the poop, and gazed in silence at the coast whose outline lay on the horizon. Whether they were received as friends or enemies, that coast must be their refuge.

"Where is Halley?" asked Glenarvan.

"I do not know, my Lord," replied John Mangles.

"Where are the sailors?"

"Invisible, like himself."

"Probably dead drunk, like himself," added McNabbs.

"Let them be called," said Glenarvan, "we cannot leave them on the ship."

Mulrady and Wilson went down to the forecastle, and two minutes after they returned. The place was empty! They then searched between decks, and then the hold. But found no trace of Will Halley nor his sailors.

"What! no one?" exclaimed Glenarvan.

"Could they have fallen into the sea?" asked Paganel.

"Everything is possible," replied John Mangles, who was getting uneasy. Then turning toward the stern: "To the boat!" said he.

Wilson and Mulrady followed to launch the yawl. The yawl was gone.

CHAPTER V CANNIBALS

WILL HALLEY and his crew, taking advantage of the darkness of night and the sleep of the passengers, had fled with the only boat. There could be no doubt about it. The captain, whose duty would have kept him on board to the last, had been the first to quit the ship.

"The cowards are off!" said John Mangles. "Well, my Lord, so much the better. They have spared us some trying scenes."

"No doubt," said Glenarvan; "besides we have a captain of our own, and courageous, if unskillful sailors, your companions, John. Say the word, and we are ready to obey."

The Major, Paganel, Robert, Wilson, Mulrady, Olbinett himself, applauded Glenarvan's speech, and ranged themselves on the deck, ready to execute their captain's orders.

"What is to be done?" asked Glenarvan.

It was evident that raising the MACQUARIE was out of the question, and no less evident that she must be abandoned. Waiting on board for succor that might never come, would have been imprudence and folly. Before the arrival of a chance vessel on the scene, the MACQUARIE would have broken up. The next storm, or even a high
tide raised by the winds from seaward, would roll it on the sands, break it up into splinters, and scatter them on the
shore. John was anxious to reach the land before this inevitable consummation.

He proposed to construct a raft strong enough to carry the passengers, and a sufficient quantity of provisions, to
the coast of New Zealand.

There was no time for discussion, the work was to be set about at once, and they had made considerable progress
when night came and interrupted them.

Toward eight o'clock in the evening, after supper, while Lady Helena and Mary Grant slept in their berths, Paganel
and his friends conversed on serious matters as they walked up and down the deck. Robert had chosen to
stay with them. The brave boy listened with all his ears, ready to be of use, and willing to enlist in any perilous
adventure.

Paganel asked John Mangles whether the raft could not follow the coast as far as Auckland, instead of landing its
freight on the coast.

John replied that the voyage was impossible with such an unmanageable craft.

"And what we cannot do on a raft could have been done in the ship's boat?"

"Yes, if necessary," answered John; "but we should have had to sail by day and anchor at night."

"Then those wretches who abandoned us--"

"Oh, as for them," said John, "they were drunk, and in the darkness I have no doubt they paid for their cowardice
with their lives."

"So much the worse for them and for us," replied Paganel; "for the boat would have been very useful to us."

"What would you have, Paganel? The raft will bring us to the shore," said Glenarvan.

"The very thing I would fain avoid," exclaimed the geographer.

"What! do you think another twenty miles after crossing the Pampas and Australia, can have any terrors for us,
hardened as we are to fatigue?"

"My friend," replied Paganel, "I do not call in question our courage nor the bravery of our friends. Twenty miles
would be nothing in any other country than New Zealand. You cannot suspect me of faint-heartedness. I was the
first to persuade you to cross America and Australia. But here the case is different. I repeat, anything is better than
to venture into this treacherous country."

"Anything is better, in my judgment," said John Mangles, "than braving certain destruction on a stranded
vessel."

"What is there so formidable in New Zealand?" asked Glenarvan.

"The savages," said Paganel.

"The savages!" repeated Glenarvan. "Can we not avoid them by keeping to the shore? But in any case what have
we to fear? Surely, two resolute and well-armed Europeans need not give a thought to an attack by a handful of
miserable beings."

Paganel shook his head. "In this case there are no miserable beings to contend with. The New Zealanders are a
powerful race, who are rebelling against English rule, who fight the invaders, and often beat them, and who always
eat them!"

"Cannibals!" exclaimed Robert, "cannibals?! Then they heard him whisper, "My sister! Lady Helena."

"Don't frighten yourself, my boy," said Glenarvan; "our friend Paganel exaggerates."

"Far from it," rejoined Paganel. "Robert has shown himself a man, and I treat him as such, in not concealing the
truth from him."

Paganel was right. Cannibalism has become a fixed fact in New Zealand, as it is in the Fijis and in Torres Strait.
Superstition is no doubt partly to blame, but cannibalism is certainly owing to the fact that there are moments when
game is scarce and hunger great. The savages began by eating human flesh to appease the demands of an appetite
rarely satiated; subsequently the priests regulated and satisfied the monstrous custom. What was a meal, was raised
to the dignity of a ceremony, that is all.

Besides, in the eyes of the Maories, nothing is more natural than to eat one another. The missionaries often
questioned them about cannibalism. They asked them why they devoured their brothers; to which the chiefs made
answer that fish eat fish, dogs eat men, men eat dogs, and dogs eat one another. Even the Maori mythology has a
legend of a god who ate another god; and with such a precedent, who could resist eating his neighbor?

Another strange notion is, that in eating a dead enemy they consume his spiritual being, and so inherit his soul,
his strength and his bravery, which they hold are specially lodged in the brain. This accounts for the fact that the
brain figures in their feasts as the choicest delicacy, and is offered to the most honored guest.

But while he acknowledged all this, Paganel maintained, not without a show of reason, that sensuality, and
especially hunger, was the first cause of cannibalism among the New Zealanders, and not only among the
Polynesian races, but also among the savages of Europe.
"For," said he, "cannibalism was long prevalent among the ancestors of the most civilized people, and especially (if the Major will not think me personal) among the Scotch."

"Really," said McNabbs.

"Yes, Major," replied Paganel. "If you read certain passages of Saint Jerome, on the Atticoli of Scotland, you will see what he thought of your forefathers. And without going so far back as historic times, under the reign of Elizabeth, when Shakespeare was dreaming out his Shy-lock, a Scotch bandit, Sawney Bean, was executed for the crime of cannibalism. Was it religion that prompted him to cannibalism? No! it was hunger."

"Hunger?" said John Mangles.

"Hunger!" repeated Paganel; "but, above all, the necessity of the carnivorous appetite of replacing the bodily waste, by the azote contained in animal tissues. The lungs are satisfied with a provision of vegetable and farinaceous food. But to be strong and active the body must be supplied with those plastic elements that renew the muscles. Until the Maories become members of the Vegetarian Association they will eat meat, and human flesh as meat."

"Why not animal flesh?" asked Glenarvan.

"Because they have no animals," replied Paganel; "and that ought to be taken into account, not to extenuate, but to explain, their cannibal habits. Quadrupeds, and even birds, are rare on these inhospitable shores, so that the Maories have always eaten human flesh. There are even 'man-eating seasons,' as there are in civilized countries hunting seasons. Then begin the great wars, and whole tribes are served up on the tables of the conquerors."

"Well, then," said Glenarvan, "according to your mode of reasoning, Paganel, cannibalism will not cease in New Zealand until her pastures teem with sheep and oxen."

"Evidently, my dear Lord; and even then it will take years to wean them from Maori flesh, which they prefer to all others; for the children will still have a relish for what their fathers so highly appreciated. According to them it tastes like pork, with even more flavor. As to white men's flesh, they do not like it so well, because the whites eat salt with their food, which gives a peculiar flavor, not to the taste of connoisseurs."

"They are dainty," said the Major. "But, black or white, do they eat it raw, or cook it?"

"Why, what is that to you, Mr. McNabbs?" cried Robert.

"What is that to me!" exclaimed the Major, earnestly. "If I am to make a meal for a cannibal, I should prefer being cooked."

"Why?"

"Because then I should be sure of not being eaten alive!"

"Very good. Major," said Paganel; "but suppose they cooked you alive?"

"The fact is," answered the Major, "I would not give half-a-crown for the choice!"

"Well, McNabbs, if it will comfort you--you may as well be told--the New Zealanders do not eat flesh without cooking or smoking it. They are very clever and experienced in cookery. For my part, I very much dislike the idea of being eaten! The idea of ending one's life in the maw of a savage! bah!"

"The conclusion of all," said John Mangles, "is that we must not fall into their hands. Let us hope that one day Christianity will abolish all these monstrous customs."

"Yes, we must hope so," replied Paganel; "but, believe me, a savage who has tasted human flesh, is not easily persuaded to forego it. I will relate two facts which prove it."

"By all means let us have the facts, Paganel," said Glenarvan.

"The first is narrated in the chronicles of the Jesuit Society in Brazil. A Portuguese missionary was one day visiting an old Brazilian woman who was very ill. She had only a few days to live. The Jesuit inculcated the truths of religion, which the dying woman accepted, without objection. Then having attended to her spiritual wants, he bethought himself of her bodily needs, and offered her some European delicacies. 'Alas,' said she, 'my digestion is too weak to bear any kind of food. There is only one thing I could fancy, and nobody here could get it for me.' 'What is it?' asked the Jesuit. 'Ah! my son,' said she, 'it is the hand of a little boy! I feel as if I should enjoy munching the little bones!'"

"Horrid! but I wonder is it so very nice?" said Robert.

"My second tale will answer you, my boy," said Paganel: "One day a missionary was reproving a cannibal for the horrible custom, so abhorrent to God's laws, of eating human flesh! And beside,' said he, 'it must be so nasty! 'Oh, father,' said the savage, looking greedily at the missionary, 'say that God forbids it! That is a reason for what you tell us. But don't say it is nasty! If you had only tasted it!"

CHAPTER VI A DREADED COUNTRY

Paganel's facts were indisputable. The cruelty of the New Zealanders was beyond a doubt, therefore it was dangerous to land. But had the danger been a hundredfold greater, it had to be faced. John Mangles felt the necessity of leaving without delay a vessel doomed to certain and speedy destruction. There were two dangers, one certain and the other probable, but no one could hesitate between them.
As to their chance of being picked up by a passing vessel, they could not reasonably hope for it. The MACQUARIE was not in the track of ships bound to New Zealand. They keep further north for Auckland, further south for New Plymouth, and the ship had struck just between these two points, on the desert region of the shores of Ika-na-Mani, a dangerous, difficult coast, and infested by desperate characters.

"When shall we get away?" asked Glenarvan.

"To-morrow morning at ten o'clock," replied John Mangles. "The tide will then turn and carry us to land."

Next day, February 5, at eight o'clock, the raft was finished. John had given all his attention to the building of this structure. The foreyard, which did very well for mooring the anchors, was quite inadequate to the transport of passengers and provisions. What was needed was a strong, manageable raft, that would resist the force of the waves during a passage of nine miles. Nothing but the masts could supply suitable materials.

Wilson and Mulrady set to work; the rigging was cut clear, and the mainmast, chopped away at the base, fell over the starboard rail, which crashed under its weight. The MACQUARIE was thus razed like a pontoon.

When the lower mast, the topmasts, and the royals were sawn and split, the principal pieces of the raft were ready. They were then joined to the fragments of the foremast and the whole was fastened securely together. John took the precaution to place in the interstices half a dozen empty barrels, which would raise the structure above the level of the water. On this strong foundation, Wilson laid a kind of floor in open work, made of the gratings off the hatches. The spray could then dash on the raft without staying there, and the passengers would be kept dry. In addition to this, the hose-pipes firmly lashed together formed a kind of circular barrier which protected the deck from the waves.

That morning, John seeing that the wind was in their favor, rigged up the royal-yard in the middle of the raft as a mast. It was stayed with shrouds, and carried a makeshift sail. A large broad-bladed oar was fixed behind to act as a rudder in case the wind was sufficient to require it. The greatest pains had been expended on strengthening the raft to resist the force of the waves, but the question remained whether, in the event of a change of wind, they could steer, or indeed, whether they could hope ever to reach the land.

At nine o'clock they began to load. First came the provisions, in quantity sufficient to last till they should reach Auckland, for they could not count on the productions of this barren region.

Olbinett's stores furnished some preserved meat which remained of the purchase made for their voyage in the MACQUARIE. This was but a scanty resource. They had to fall back on the coarse viands of the ship; sea biscuits of inferior quality, and two casks of salt fish. The steward was quite crestfallen.

These provisions were put in hermetically sealed cases, staunch and safe from sea water, and then lowered on to the raft and strongly lashed to the foot of the mast. The arms and ammunition were piled in a dry corner. Fortunately the travelers were well armed with carbines and revolvers.

A holding anchor was also put on board in case John should be unable to make the land in one tide, and would have to seek moorings.

At ten o'clock the tide turned. The breeze blew gently from the northwest, and a slight swell rocked the frail craft.

"Are we ready?" asked John.

"All ready, captain," answered Wilson.

"All aboard!" cried John.

Lady Helena and Mary Grant descended by a rope ladder, and took their station at the foot of the mast on the cases of provisions, their companions near them. Wilson took the helm. John stood by the tackle, and Mulrady cut the line which held the raft to the ship's side.

The sail was spread, and the frail structure commenced its progress toward the land, aided by wind and tide. The coast was about nine miles off, a distance that a boat with good oars would have accomplished in three hours. But with a raft allowance must be made. If the wind held, they might reach the land in one tide. But if the breeze died away, the ebb would carry them away from the shore, and they would be compelled to anchor and wait for the next tide, a serious consideration, and one that filled John Mangles with anxiety.

Still he hoped to succeed. The wind freshened. The tide had turned at ten o'clock, and by three they must either make the land or anchor to save themselves from being carried out to sea. They made a good start. Little by little the black line of the reefs and the yellow banks of sand disappeared under the swelling tide. Extreme watchfulness and perfect skill were necessary to avoid these submerged rocks, and steer a bark that did not readily answer to the helm, and that constantly broke off.

At noon they were still five miles from shore. A tolerably clear sky allowed them to make out the principal features of the land. In the northeast rose a mountain about 2,300 feet high, whose sharply defined outline was exactly like the grinning face of a monkey turned toward the sky. It was Pirongia, which the map gave as exactly on the 38th parallel.
At half-past twelve, Paganel remarked that all the rocks had disappeared under the rising tide.

"All but one," answered Lady Helena.

"Which, Madam?" asked Paganel.

"There," replied she, pointing to a black speck a mile off.

"Yes, indeed," said Paganel. "Let us try to ascertain its position, so as not to get too near it, for the sea will soon conceal it."

"It is exactly in a line with the northern slope of the mountain," said John Mangles. "Wilson, mind you give it a wide berth."

"Yes, captain," answered the sailor, throwing his whole weight on the great oar that steered the raft.

In half an hour they had made half a mile. But, strange to say, the black point still rose above the waves.

John looked attentively, and in order to make it out, borrowed Paganel's telescope.

"That is no reef," said he, after a moment; "it is something floating, which rises and falls with the swell."

"Is it part of the mast of the MACQUARIE?" asked Lady Helena.

"No," said Glenarvan, "none of her timbers could have come so far."

"Stay!" said John Mangles; "I know it! It is the boat."

"The ship's boat?" exclaimed Glenarvan.

"Yes, my lord. The ship's boat, keel up."

"The unfortunate creatures," cried Lady Helena, "they have perished!"

"Yes, Madam," replied John Mangles, "they must have perished, for in the midst of these breakers in a heavy swell on that pitchy night, they ran to certain death."

For a few minutes the passengers were silent. They gazed at the frail craft as they drew near it. It must evidently have capsized about four miles from the shore, and not one of the crew could have escaped.

"But this boat may be of use to us," said Glenarvan.

"That is true," answered John Mangles. "Keep her up, Wilson."

The direction was slightly changed, but the breeze fell gradually, and it was two hours before they reached the boat.

Mulrady, stationed forward, fended off the blow, and the yawl was drawn alongside.

"Empty?" asked John Mangles.

"Yes, captain," answered the sailor, "the boat is empty. and all its seams are open. It is of no use to us."

"No use at all?" said McNabbs.

"None at all," said John Mangles.

"It is good for nothing but to burn."

"I regret it," said Paganel, "for the yawl might have taken us to Auckland."

"We must bear our fate, Monsieur Paganel," replied John Mangles. "But, for my part, in such a stormy sea I prefer our raft to that crazy boat. A very slight shock would be enough to break her up. Therefore, my lord, we have nothing to detain us further."

"As you think best, John."

"On then, Wilson," said John, "and bear straight for the land."

There was still an hour before the turn of the tide. In that time they might make two miles. But the wind soon fell almost entirely, and the raft became nearly motionless, and soon began to drift to seaward under the influence of the ebb-tide.

John did not hesitate a moment.

"Let go the anchor," said he.

Mulrady, who stood to execute this order, let go the anchor in five fathoms water. The raft backed about two fathoms on the line, which was then at full stretch. The sail was taken in, and everything made snug for a tedious period of inaction.

The returning tide would not occur till nine o'clock in the evening; and as John Mangles did not care to go on in the dark, the anchorage was for the night, or at least till five o'clock in the morning, land being in sight at a distance of less than three miles.

A considerable swell raised the waves, and seemed to set in continuously toward the coast, and perceiving this, Glenarvan asked John why he did not take advantage of this swell to get nearer to the land.

"Your Lordship is deceived by an optical illusion," said the young captain. "Although the swell seems to carry the waves landward, it does not really move at all. It is mere undulating molecular motion, nothing more. Throw a piece of wood overboard and you will see that it will remain quite stationary except as the tide affects it. There is nothing for it but patience."

"And dinner," said the Major.
Olbinett unpacked some dried meat and a dozen biscuits. The steward blushed as he proffered the meager bill of fare. But it was received with a good grace, even by the ladies, who, however, had not much appetite, owing to the violent motion.

This motion, produced by the jerking of the raft on the cable, while she lay head on to the sea, was very severe and fatiguing. The blows of the short, tumbling seas were as severe as if she had been striking on a submerged rock. Sometimes it was hard to believe that she was not aground. The cable strained violently, and every half hour John had to take in a fathom to ease it. Without this precaution it would certainly have given way, and the raft must have drifted to destruction.

John's anxiety may easily be understood. His cable might break, or his anchor lose its hold, and in either case the danger was imminent.

Night drew on; the sun's disc, enlarged by refraction, was dipping blood-red below the horizon. The distant waves glittered in the west, and sparkled like sheets of liquid silver. Nothing was to be seen in that direction but sky and water, except one sharply-defined object, the hull of the MACQUARIE motionless on her rocky bed.

The short twilight postponed the darkness only by a few minutes, and soon the coast outline, which bounded the view on the east and north, was lost in darkness.

The shipwrecked party were in an agonizing situation on their narrow raft, and overtaken by the shades of night. Some of the party fell into a troubled sleep, a prey to evil dreams; others could not close an eye. When the day dawned, the whole party were worn out with fatigue.

With the rising tide the wind blew again toward the land. It was six o'clock in the morning, and there was no time to lose. John arranged everything for resuming their voyage, and then he ordered the anchor to be weighed. But the anchor flukes had been so imbedded in the sand by the repeated jerks of the cable, that without a windlass it was impossible to detach it, even with the tackle which Wilson had improvised.

Half an hour was lost in vain efforts. John, impatient of delay, cut the rope, thus sacrificing his anchor, and also the possibility of anchoring again if this tide failed to carry them to land. But he decided that further delay was not to be thought of, and an ax-blow committed the raft to the mercy of the wind, assisted by a current of two knots an hour.

The sail was spread. They drifted slowly toward the land, which rose in gray, hazy masses, on a background of sky illuminated by the rising sun. The reef was dexterously avoided and doubled, but with the fitful breeze the raft could not get near the shore. What toil and pain to reach a coast so full of danger when attained.

At nine o'clock, the land was less than a mile off. It was a steeply-shelving shore, fringed with breakers; a practicable landing-place had to be discovered.

Gradually the breeze grew fainter, and then ceased entirely. The sail flapped idly against the mast, and John had it furled. The tide alone carried the raft to the shore, but steering had become impossible, and its passage was impeded by immense bands of FUCUS.

At ten o'clock John found himself almost at a stand-still, not three cables' lengths from the shore. Having lost their anchor, they were at the mercy of the ebb-tide.

John clenched his hands; he was racked with anxiety, and cast frenzied glances toward this inaccessible shore.

In the midst of his perplexities, a shock was felt. The raft stood still. It had landed on a sand-bank, twenty-five fathoms from the coast.

Glenarvan, Robert, Wilson, and Mulrady, jumped into the water. The raft was firmly moored to the nearest rocks. The ladies were carried to land without wetting a fold of their dresses, and soon the whole party, with their arms and provisions, were finally landed on these much dreaded New Zealand shores.

CHAPTER VII THE MAORI WAR

GLENARVAN would have liked to start without an hour's delay, and follow the coast to Auckland. But since the morning heavy clouds had been gathering, and toward eleven o'clock, after the landing was effected, the vapors condensed into violent rain, so that instead of starting they had to look for shelter.

Wilson was fortunate enough to discover what just suited their wants: a grotto hollowed out by the sea in the basaltic rocks. Here the travelers took shelter with their arms and provisions. In the cave they found a ready-garnered store of dried sea-weed, which formed a convenient couch; for fire, they lighted some wood near the mouth of the cavern, and dried themselves as well as they could.

John hoped that the duration of this deluge of rain would be in an inverse ratio to its violence, but he was doomed to disappointment. Hours passed without any abatement of its fury. Toward noon the wind freshened, and increased the force of the storm. The most patient of men would have rebelled at such an untoward incident; but what could be done; without any vehicle, they could not brave such a tempest; and, after all, unless the natives appeared on the scene, a delay of twelve hours was not so much consequence, as the journey to Auckland was only a matter of a few days. During this involuntary halt, the conversation turned on the incidents of the New Zealand war.
But to understand and appreciate the critical position into which these MACQUARIE passengers were thrown, something ought to be known of the history of the struggle which had deluged the island of Ika-na-Mani with blood.

Since the arrival of Abel Tasman in Cook's Strait, on the 16th of December, 1642, though the New Zealanders had often been visited by European vessels, they had maintained their liberty in their several islands. No European power had thought of taking possession of this archipelago, which commands the whole Pacific Ocean. The missionaries stationed at various points were the sole channels of Christian civilization. Some of them, especially the Anglicans, prepared the minds of the New Zealand chiefs for submitting to the English yoke. It was cleverly managed, and these chiefs were influenced to sign a letter addressed to Queen Victoria to ask her protection. But the most clear-sighted of them saw the folly of this step; and one of them, after having affixed his tattoo-mark to the letter by way of signature, uttered these prophetic words: "We have lost our country! henceforth it is not ours; soon the stranger will come and take it, and we shall be his slaves."

And so it was; on January 29, 1840, the English corvette HERALD arrived to claim possession.

From the year 1840, till the day the DUNCAN left the Clyde, nothing had happened here that Paganel did not know and he was ready to impart his information to his companions.

"Madam," said he, in answer to Lady Helena's questions, "I must repeat what I had occasion to remark before, that the New Zealanders are a courageous people, who yielded for a moment, but afterward fought foot to foot against the English invaders. The Maori tribes are organized like the old clans of Scotland. They are so many great families owning a chief, who is very jealous of his prerogative. The men of this race are proud and brave, one tribe tall, with straight hair, like the Maltese, or the Jews of Bagdad; the other smaller, thickset like mulattoes, but robust, haughty, and warlike. They had a famous chief, named Hihi, a real Vercingetorix, so that you need not be astonished that the war with the English has become chronic in the Northern Island, for in it is the famous tribe of the Waikatos, who defend their lands under the leadership of William Thompson."

"But," said John Mangles, "are not the English in possession of the principal points in New Zealand?"

"Certainly, dear John," replied Paganel. "After Captain Hobson took formal possession, and became governor, nine colonies were founded at various times between 1840 and 1862, in the most favorable situations. These formed the nucleus of nine provinces, four in the North Island and five in the southern island, with a total population of 184,346 inhabitants on the 30th of June, 1864."

"But what about this interminable war?" asked John Mangles.

"Well," said Paganel, "six long months have gone by since we left Europe, and I cannot say what may have happened during that time, with the exception of a few facts which I gathered from the newspapers of Maryborough and Seymour during our Australian journey. At that time the fighting was very lively in the Northern Island."

"And when did the war commence?" asked Mary Grant.

"Recommence, you mean, my dear young lady," replied Paganel; "for there was an insurrection so far back as 1845. The present war began toward the close of 1863; but long before that date the Maories were occupied in making preparations to shake off the English yoke. The national party among the natives carried on an active propaganda for the election of a Maori ruler. The object was to make old Potatau king, and to fix as the capital of the new kingdom his village, which lay between the Waikato and Waipa Rivers. Potatau was an old man, remarkable rather for cunning than bravery; but he had a Prime Minister who was both intelligent and energetic, a descendant of the Ngatihahuas, who occupied the isthmus before the arrival of the strangers. This minister, William Thompson, became the soul of the War of Independence, and organized the Maori troops, with great skill. Under this guidance a Taranaki chief gathered the scattered tribes around the same flag; a Waikato chief formed a 'Land League,' intended to prevent the natives from selling their land to the English Government, and warlike feasts were held just as in civilized countries on the verge of revolution. The English newspapers began to notice these alarming symptoms, and the government became seriously disturbed at these 'Land League' proceedings. In short, the train was laid, and the mine was ready to explode. Nothing was wanted but the spark, or rather the shock of rival interests to produce the spark.

"This shock took place in 1860, in the Taranaki province on the southwest coast of Ika-na-Mani. A native had six hundred acres of land in the neighborhood of New Plymouth. He sold them to the English Government; but when the surveyor came to measure the purchased land, the chief Kingi protested, and by the month of March he had made the six hundred acres in question into a fortified camp, surrounded with high palisades. Some days after Colonel Gold carried this fortress at the head of his troops, and that day heard the first shot fired of the native war."

"Have the rebels been successful up to this time?"

"Yes, Madam, and the English themselves have often been compelled to admire the courage and bravery of the New Zealanders. Their mode of warfare is of the guerilla type; they form skirmishing parties, come down in small detachments, and pillage the colonists' homes. General Cameron had no easy time in the campaigns, during which every bush had to be searched. In 1863, after a long and sanguinary struggle, the Maories were entrenched in strong
and fortified position on the Upper Waikato, at the end of a chain of steep hills, and covered by three miles of forts. The native prophets called on all the Maori population to defend the soil, and promised the extermination of the pakekas, or white men. General Cameron had three thousand volunteers at his disposal, and they gave no quarter to the Maories after the barbarous murder of Captain Sprent. Several bloody engagements took place; in some instances the fighting lasted twelve hours before the Maories yielded to the English cannonade. The heart of the army was the fierce Waikato tribe under William Thompson. This native general commanded at the outset 2,500 warriors, afterward increased to 8,000. The men of Shongi and Heki, two powerful chiefs, came to his assistance. The women took their part in the most trying labors of this patriotic war. But right has not always might. After severe struggles General Cameron succeeded in subduing the Waikato district, but empty and depopulated, for the Maories escaped in all directions. Some wonderful exploits were related. Four hundred Maories who were shut up in the fortress of Orakau, besieged by 1,000 English, under Brigadier-General Carey, without water or provisions, refused to surrender, but one day at noon cut their way through the then decimated 40th Regiment, and escaped to the marshes."

"But," asked John Mangles, "did the submission of the Waikato district put an end to this sanguinary war?"

"No, my friend," replied Paganel. "The English resolved to march on Taranaki province and besiege Mataitawa, William Thompson's fortress. But they did not carry it without great loss. Just as I was leaving Paris, I heard that the Governor and the General had accepted the submission of the Tauranga tribes, and left them in possession of three-fourths of their lands. It was also rumored that the principal chief of the rebellion, William Thompson, was inclined to surrender, but the Australian papers have not confirmed this, but rather the contrary, and I should not be surprised to find that at this moment the war is going on with renewed vigor."

"Then, according to you, Paganel," said Glenarvan, "this struggle is still going on in the provinces of Auckland and Taranaki?"

"I think so."

"This very province where the MACQUARIE'S wreck has deposited us."

"Exactly. We have landed a few miles above Kawhia harbor, where the Maori flag is probably still floating."

"Then our most prudent course would be to keep toward the north," remarked Glenarvan.

"By far the most prudent," said Paganel. "The New Zealanders are incensed against Europeans, and especially against the English. Therefore let us avoid falling into their hands."

"We might have the good fortune to fall in with a detachment of European troops," said Lady Helena.

"We may, Madam," replied the geographer; "but I do not expect it. Detached parties do not like to go far into the country, where the smallest tussock, the thinnest brushwood, may conceal an accomplished marksman. I don't fancy we shall pick up an escort of the 40th Regiment. But there are mission-stations on this west coast, and we shall be able to make them our halting-places till we get to Auckland."

CHAPTER VIII ON THE ROAD TO AUCKLAND

On the 7th of February, at six o'clock in the morning, the signal for departure was given by Glenarvan. During the night the rain had ceased. The sky was veiled with light gray clouds, which moderated the heat of the sun, and allowed the travelers to venture on a journey by day.

Paganel had measured on the map a distance of eighty miles between Point Kawhia and Auckland; it was an eight days' journey if they made ten miles a day. But instead of following the windings of the coast, he thought it better to make for a point thirty miles off, at the confluence of the Waikato and the Waipa, at the village of Ngarnavahia. The "overland track" passes that point, and is rather a path than a road, practicable for the vehicles which go almost across the island, from Napier, in Hawke's Bay, to Auckland. From this village it would be easy to reach Drury, and there they could rest in an excellent hotel, highly recommended by Dr. Hochstetter.
potent preservation from wild beasts, but New Zealand has neither tiger, nor lion, nor bear, nor any wild animal, but the Maori adequately fills their place, and a fire would only have served to attract this two-footed jaguar.

The night passed pleasantly with the exception of the attack of the sand-flies, called by the natives, "ngamu," and the visit of the audacious family of rats, who exercised their teeth on the provisions.

Next day, on the 8th of February, Paganel rose more sanguine, and almost reconciled to the country. The Maories, whom he particularly dreaded, had not yet appeared, and these ferocious cannibals had not molested him even in his dreams. "I begin to think that our little journey will end favorably. This evening we shall reach the confluence of the Waipa and Waikato, and after that there is not much chance of meeting natives on the way to Auckland."

"How far is it now," said Glenarvan, "to the confluence of the Waipa and Waikato?"
"Fifteen miles; just about what we did yesterday."
"But we shall be terribly delayed if this interminable scrub continues to obstruct our path."
"No," said Paganel, "we shall follow the banks of the Waipa, and then we shall have no obstacle, but on the contrary, a very easy road."
"Well, then," said Glenarvan, seeing the ladies ready, "let us make a start."

During the early part of the day, the thick brushwood seriously impeded their progress. Neither wagon nor horses could have passed where travelers passed, so that their Australian vehicle was but slightly regretted. Until practicable wagon roads are cut through these forests of scrub, New Zealand will only be accessible to foot passengers. The ferns, whose name is legion, concur with the Maories in keeping strangers off the lands.

The little party overcame many obstacles in crossing the plains in which the Hakariruoa Ranges rise. But before noon they reached the banks of the Waipa, and followed the northward course of the river.

The Major and Robert, without leaving their companions, shot some snipe and partridge under the low shrubs of the plain. Olbinett, to save time, plucked the birds as he went along.

Paganel was less absorbed by the culinary importance of the game than by the desire of obtaining some bird peculiar to New Zealand. His curiosity as a naturalist overcame his hunger as a traveler. He called to mind the peculiarities of the "tui" of the natives, sometimes called the mocking-bird from its incessant chuckle, and sometimes "the parson," in allusion to the white cravat it wears over its black, cassock-like plumage.

"The tui," said Paganel to the Major, "grows so fat during the Winter that it makes him ill, and prevents him from flying. Then he tears his breast with his beak, to relieve himself of his fat, and so becomes lighter. Does not that seem to you singular, McNabbs?"

"So singular that I don't believe a word of it," replied the Major.

Paganel, to his great regret, could not find a single specimen, or he might have shown the incredulous Major the bloody scars on the breast. But he was more fortunate with a strange animal which, hunted by men, cats and dogs, has fled toward the unoccupied country, and is fast disappearing from the fauna of New Zealand. Robert, searching like a ferret, came upon a nest made of interwoven roots, and in it a pair of birds destitute of wings and tail, with four toes, a long snipe-like beak, and a covering of white feathers over the whole body, singular creatures, which seemed to connect the oviparous tribes with the mam-mifers.

It was the New Zealand "kiwi," the _Apteryx australis_ of naturalists, which lives with equal satisfaction on larvæ, insects, worms or seeds. This bird is peculiar to the country. It has been introduced into very few of the zoological collections of Europe. Its graceless shape and comical motions have always attracted the notice of travelers, and during the great exploration of the Astrolabe and the Zelee, Dumont d'Urville was principally charged by the Academy of Sciences to bring back a specimen of these singular birds. But in spite of rewards offered to the natives, he could not obtain a single specimen.

Paganel, who was elated at such a piece of luck, tied the two birds together, and carried them along with the intention of presenting them to the Jardin des Plantes, in Paris. "Presented by M. Jacques Paganel." He mentally saw the flattering inscription on the handsomest cage in the gardens. Sanguine geographer!

The party pursued their way without fatigue along the banks of the Waipa. The country was quite deserted; not a trace of natives, nor any track that could betray the existence of man. The stream was fringed with tall bushes, or glided along sloping banks, so that nothing obstructed the view of the low range of hills which closed the eastern end of the valley. With their grotesque shapes, and their outlines lost in a deceptive haze, they brought to mind giant animals, worthy of antediluvian times. They might have been a herd of enormous whales, suddenly turned to stone. These disrupted masses proclaimed their essentially volcanic character. New Zealand is, in fact, a formation of recent plutonic origin. Its emergence from the sea is constantly increasing. Some points are known to have risen six feet in twenty years. Fire still runs across its center, shakes it, convulses it, and finds an outlet in many places by the mouths of geysers and the craters of volcanoes.

At four in the afternoon, nine miles had been easily accomplished. According to the map which Paganel
constantly referred to, the confluence of the Waipa and Waikato ought to be reached about five miles further on, and there the night halt could be made. Two or three days would then suffice for the fifty miles which lay between them and the capital; and if Glenarvan happened to fall in with the mail coach that plies between Hawkes' Bay and Auckland twice a month, eight hours would be sufficient.

"Therefore," said Glenarvan, "we shall be obliged to camp during the night once more."

"Yes," said Paganel, "but I hope for the last time."

"I am very glad to think so, for it is very trying for Lady Helena and Mary Grant."

"And they never utter a murmur," added John Mangles. "But I think I heard you mention a village at the confluence of these rivers."

"Yes," said the geographer, "here it is, marked on Johnston's map. It is Ngarnavahia, two miles below the junction."

"Well, could we not stay there for the night? Lady Helena and Miss Grant would not grudge two miles more to find a hotel even of a humble character."

"A hotel!" cried Paganel, "a hotel in a Maori village! you would not find an inn, not a tavern! This village will be a mere cluster of huts, and so far from seeking rest there, my advice is that you give it a wide berth."

"Your old fears, Paganel!" retorted Glenarvan.

"My dear Lord, where Moaies are concerned, distrust is safer than confidence. I do not know on what terms they are with the English, whether the insurrection is suppressed or successful, or whether indeed the war may not be going on with full vigor. Modesty apart, people like us would be a prize, and I must say, I would rather forego a taste of Maori hospitality. I think it certainly more prudent to avoid this village of Ngarnavahia, to skirt it at a distance, so as to avoid all encounters with the natives. When we reach Drury it will be another thing, and there our brave ladies will be able to recruit their strength at their leisure."

This advice prevailed. Lady Helena preferred to pass another night in the open air, and not to expose her companions to danger. Neither Mary Grant or she wished to halt, and they continued their march along the river.

Two hours later, the first shades of evening began to fall. The sun, before disappearing below the western horizon, darted some bright rays through an opening in the clouds. The distant eastern summits were empurpled with the parting glories of the day. It was like a flying salute addressed to the way-worn travelers.

Glenarvan and his friends hastened their steps, they knew how short the twilight is in this high latitude, and how quickly the night follows it. They were very anxious to reach the confluence of the two rivers before the darkness overtook them. But a thick fog rose from the ground, and made it very difficult to see the way.

Fortunately hearing stood them in the stead of sight; shortly a nearer sound of water indicated that the confluence was at hand. At eight o'clock the little troop arrived at the point where the Waipa loses itself in the Waikato, with a moaning sound of meeting waves.

"There is the Waikato!" cried Paganel, "and the road to Auckland is along its right bank."

"We shall see that to-morrow," said the Major, "let us camp here. It seems to me that that dark shadow is that of a little clump of trees grown expressly to shelter us. Let us have supper and then get some sleep."

"Supper by all means," said Paganel, "but no fire; nothing but biscuit and dried meat. We have reached this spot incognito, let us try and get away in the same manner. By good luck, the fog is in our favor."

The clump of trees was reached and all concurred in the wish of the geographer. The cold supper was eaten without a sound, and presently a profound sleep overcame the travelers, who were tolerably fatigued with their fifteen miles' march.

CHAPTER IX INTRODUCTION TO THE CANNIBALS

THE next morning at daybreak a thick fog was clinging to the surface of the river. A portion of the vapors that saturated the air were condensed by the cold, and lay as a dense cloud on the water. But the rays of the sun soon broke through the watery mass and melted it away.

A tongue of land, sharply pointed and bristling with bushes, projected into the uniting streams. The swifter waters of the Waipa rushed against the current of the Waikato for a quarter of a mile before they mingled with it; but the calm and majestic river soon quieted the noisy stream and carried it off quietly in its course to the Pacific Ocean.

When the vapor disappeared, a boat was seen ascending the current of the Waikato. It was a canoe seventy feet long, five broad, and three deep; the prow raised like that of a Venetian gondola, and the whole hollowed out of a trunk of a kahikatea. A bed of dry fern was laid at the bottom. It was swiftly rowed by eight oars, and steered with a paddle by a man seated in the stern.

This man was a tall Maori, about forty-five years of age, broad-chested, muscular, with powerfully developed hands and feet. His prominent and deeply-furrowed brow, his fierce look, and sinister expression, gave him a formidable aspect.

Tattooing, or "moko," as the New Zealanders call it, is a mark of great distinction. None is worthy of these
Koumou, he said in a perfectly unconcerned voice: them. He therefore made up his mind to question the chief on the fate that awaited them. Addressing himself to Kai-word, but from the few sentences they did utter, Glenarvan felt certain that the English language was familiar to procedure, he and his companions would spare themselves needless humiliation.

Savages in general, and particularly the Maories, have a notion of dignity from which they never Glenarvan's advice, they resolved to affect utter indifference before the natives. It was the only way to impress these it would scarcely have been supposed that they were hurrying to the final catastrophe. With one accord, and by the boat against the not very rapid current of the Waikato, with extraordinary velocity.

The eight rowers in the prow seemed to be servants or slaves of the chief. They rowed vigorously, and propelled the to make a final appeal to the tribes of the Waikato district, so that he might go to the aid of the indomitable William The Maori chief, whose principal warriors had been picked off by the soldiers of the 42nd Regiment, was returning to the middle of the night they were surprised in their sleep, were made prisoners, and carried on board the canoe. They had not been ill-treated, so far, but all attempts at resistance had been vain. Their arms and ammunition were in the hands of the savages, and they would soon have been targets for their own balls.

They were soon aware, from a few English words used by the natives, that they were a retreating party of the tribe who had been beaten and decimated by the English troops, and were on their way back to the Upper Waikato. The Maori chief, whose principal warriors had been picked off by the soldiers of the 42nd Regiment, was returning to make a final appeal to the tribes of the Waikato district, so that he might go to the aid of the indomitable William Thompson, who was still holding his own against the conquerors. The chief's name was "Kai-Koumou," a name of evil boding in the native language, meaning "He who eats the limbs of his enemy." He was bold and brave, but his cruelty was equally remarkable. No pity was to be expected at his hands. His name was well known to the English soldiers, and a price had been set on his head by the governor of New Zealand.

This terrible blow befell Glenarvan at the very moment when he was about to reach the long-desired haven of Auckland, and so regain his own country; but no one who looked at his cool, calm features, could have guessed the anguish he endured. Glenarvan always rose to his misfortunes. He felt that his part was to be the strength and the head and chief; ready to die for the rest if circumstances required it. He was of a deeply religious turn of mind, and never lost his trust in Providence nor his belief in the sacred character of his enterprise. In the midst of this crowning peril he did not give way to any feeling of regret at having been induced to venture into this country of savages.

His companions were worthy of him; they entered into his lofty views; and judging by their haughty demeanor, it would scarcely have been supposed that they were hurrying to the final catastrophe. With one accord, and by Glenarvan's advice, they resolved to affect utter indifference before the natives. It was the only way to impress these ferocious natures. Savages in general, and particularly the Maories, have a notion of dignity from which they never derogate. They respect, above all things, coolness and courage. Glenarvan was aware that by this mode of procedure, he and his companions would spare themselves needless humiliation.

From the moment of embarking, the natives, who were very taciturn, like all savages, had scarcely exchanged a word, but from the few sentences they did utter, Glenarvan felt certain that the English language was familiar to them. He therefore made up his mind to question the chief on the fate that awaited them. Addressing himself to Kai-Koumou, he said in a perfectly unconcerned voice:

"Where are we going, chief?"
Kai-Koumou looked coolly at him and made no answer. "What are you going to do with us?" pursued Glenarvan. A sudden gleam flashed into the eyes of Kai-Koumou, and he said in a deep voice: "Exchange you, if your own people care to have you; eat you if they don't."

Glenarvan asked no further questions; but hope revived in his heart. He concluded that some Maori chiefs had fallen into the hands of the English, and that the natives would try to get them exchanged. So they had a chance of salvation, and the case was not quite so desperate.

The canoe was speeding rapidly up the river. Paganel, whose excitable temperament always rebounded from one extreme to the other, had quite regained his spirits. He consoled himself that the natives were saving them the trouble of the journey to the English outposts, and that was so much gain. So he took it quite quietly and followed on the map the course of the Waikato across the plains and valleys of the province. Lady Helena and Mary Grant, concealing their alarm, conversed in a low voice with Glenarvan, and the keenest physiognomists would have failed to see any anxiety in their faces.

The Waikato is the national river in New Zealand. It is to the Maories what the Rhine is to the Germans, and the Danube to the Slavs. In its course of 200 miles it waters the finest lands of the North Island, from the province of Wellington to the province of Auckland. It gave its name to all those indomitable tribes of the river district, which rose _en masse_ against the invaders.

The waters of this river are still almost strangers to any craft but the native canoe. The most audacious tourist will scarcely venture to invade these sacred shores; in fact, the Upper Waikato is sealed against profane Europeans.

Paganel was aware of the feelings of veneration with which the natives regard this great arterial stream. He knew that the English and German naturalists had never penetrated further than its junction with the Waipa. He wondered how far the good pleasure of Kai-Koumou would carry his captives? He could not have guessed, but for hearing the word "Taupo" repeatedly uttered between the chief and his warriors. He consulted his map and saw that "Taupo" was the name of a lake celebrated in geographical annals, and lying in the most mountainous part of the island, at the southern extremity of Auckland province. The Waikato passes through this lake and then flows on for 120 miles.

**CHAPTER X A MOMENTOUS INTERVIEW**

An unfathomable gulf twenty-five miles long, and twenty miles broad was produced, but long before historic times, by the falling in of caverns among the trachytic lavas of the center of the island. And these waters falling from the surrounding heights have taken possession of this vast basin. The gulf has become a lake, but it is also an abyss, and no lead-line has yet sounded its depths.

Such is the wondrous lake of Taupo, lying 1,250 feet above the level of the sea, and in view of an amphitheater of mountains 2,400 feet high. On the west are rocky peaks of great size; on the north lofty summits clothed with low trees; on the east a broad beach with a road track, and covered with pumice stones, which shimmer through the leafy screen of the bushes; on the southern side rise volcanic cones behind a forest flat. Such is the majestic frame that incloses this vast sheet of water whose roaring tempests rival the cyclones of Ocean.

The whole region boils like an immense cauldron hung over subterranean fires. The ground vibrates from the agitation of the central furnace. Hot springs filter out everywhere. The crust of the earth cracks in great rifts like a cake, too quickly baked.

About a quarter of a mile off, on a craggy spur of the mountain stood a "pah," or Maori fortress. The prisoners, whose feet and hands were liberated, were landed one by one, and conducted into it by the warriors. The path which led up to the intrenchment, lay across fields of "phormium" and a grove of beautiful trees, the "kai-kateas" with persistent leaves and red berries; "dracaenas australis," the "ti-trees" of the natives, whose crown is a graceful counterpart of the cabbage-palm, and "huious," which are used to give a black dye to cloth. Large doves with metallic sheen on their plumage, and a world of starlings with reddish carmeles, flew away at the approach of the natives.

After a rather circuitous walk, Glenarvan and his party arrived at the "pah."

The fortress was defended by an outer inclosure of strong palisades, fifteen feet high; a second line of stakes; then a fence composed of osiers, with loop-holes, inclosed

V. IV. Verne the inner space, that is the plateau of the "pah," on which were erected the Maori buildings, and about forty huts arranged symmetrically.

When the captives approached they were horror-struck at the sight of the heads which adorned the posts of the inner circle. Lady Helena and Mary Grant turned away their eyes more with disgust than with terror. These heads were those of hostile chiefs who had fallen in battle, and whose bodies had served to feed the conquerors. The geographer recognized that it was so, from their eye sockets being hollow and deprived of eye-balls.

Glenarvan and his companions had taken in all this scene at a glance. They stood near an empty house, waiting the pleasure of the chief, and exposed to the abuse of a crowd of old crones. This troop of harpies surrounded them,
shaking their fists, howling and vociferating. Some English words that escaped their coarse mouths left no doubt that they were clamoring for immediate vengeance.

In the midst of all these cries and threats, Lady Helena, tranquil to all outward seeming, affected an indifference she was far from feeling. This courageous woman made heroic efforts to restrain herself, lest she should disturb Glenarvan's coolness. Poor Mary Grant felt her heart sink within her, and John Mangles stood by ready to die in her behalf. His companions bore the deluge of invectives each according to his disposition; the Major with utter indifference, Paganel with exasperation that increased every moment.

Glenarvan, to spare Lady Helena the attacks of these witches, walked straight up to Kai-Koumou, and pointing to the hideous group:

"Send them away," said he.

The Maori chief stared fixedly at his prisoner without speaking; and then, with a nod, he silenced the noisy horde. Glenarvan bowed, as a sign of thanks, and went slowly back to his place.

At this moment a hundred Maories were assembled in the "pah," old men, full grown men, youths; the former were calm, but gloomy, awaiting the orders of Kai-Koumou; the others gave themselves up to the most violent sorrow, bewailing their parents and friends who had fallen in the late engagements.

Kai-Koumou was the only one of all the chiefs that obeyed the call of William Thompson, who had returned to the lake district, and he was the first to announce to his tribe the defeat of the national insurrection, beaten on the plains of the lower Waikato. Of the two hundred warriors who, under his orders, fastened to the defence of the soil, one hundred and fifty were missing on his return. Allowing for a number being made prisoners by the invaders, how many must be lying on the field of battle, never to return to the country of their ancestors!

This was the secret of the outburst of grief with which the tribe saluted the arrival of Kai-Koumou. Up to that moment nothing had been known of the last defeat, and the fatal news fell on them like a thunder clap.

Among the savages, sorrow is always manifested by physical signs; the parents and friends of deceased warriors, the women especially, lacerated their faces and shoulders with sharpened shells. The blood spurted out and blended with their tears. Deep wounds denoted great despair. The unhappy Maories, bleeding and excited, were hideous to look upon.

There was another serious element in their grief. Not only had they lost the relative or friend they mourned, but his bones would be missing in the family mausoleum. In the Maori religion the possession of these relics is regarded as indispensable to the destinies of the future life; not the perishable flesh, but the bones, which are collected with the greatest care, cleaned, scraped, polished, even varnished, and then deposited in the "oudoupa," that is the "house of glory." These tombs are adorned with wooden statues, representing with perfect exactness the tattoo of the deceased. But now their tombs would be left empty, the religious rites would be unsolemized, and the bones that escaped the teeth of the wild dog would whiten without burial on the field of battle.

Then the sorrowful chorus redoubled. The menaces of the women were intensified by the imprecations of the men against the Europeans. Abusive epithets were lavished, the accompanying gestures became more violent. The howl was about to end in brutal action.

Kai-Koumou, fearing that he might be overpowered by the fanatics of his tribe, conducted his prisoners to a sacred place, on an abruptly raised plateau at the other end of the "pah." This hut rested against a mound elevated a hundred feet above it, which formed the steep outer buttress of the entrenchment. In this "Ware-Atoua," sacred house, the priests or arikis taught the Maories about a Triune God, father, son, and bird, or spirit. The large, well constructed hut, contained the sacred and choice food which Maoui-Ranga-Rangui eats by the mouths of his priests.

In this place, and safe for the moment from the frenzied natives, the captives lay down on the flax mats. Lady Helena was quite exhausted, her moral energies prostrate, and she fell helpless into her husband's arms.

Glenarvan pressed her to his bosom and said:

"Courage, my dear Helena; Heaven will not forsake us!"

Robert was scarcely in when he jumped on Wilson's shoulders, and squeezed his head through a crevice left between the roof and the walls, from which chaplets of amulets were hung. From that elevation he could see the whole extent of the "pah," and as far as Kai-Koumou's house.

"They are all crowding round the chief," said he softly. "They are throwing their arms about. . . . They are howling. . . . Kai-Koumou is trying to speak."

Then he was silent for a few minutes.

"Kai-Koumou is speaking. . . . The savages are quieter. . . . They are listening. . . . ."

"Evidently," said the Major, "this chief has a personal interest in protecting us. He wants to exchange his prisoners for some chiefs of his tribe! But will his warriors consent?"

"Yes! . . . They are listening. . . . They have dispersed, some are gone into their huts. . . . The others have left the intrenchment."
"Are you sure?" said the Major.
"Yes, Mr. McNabbs," replied Robert, "Kai-Koumou is left alone with the warriors of his canoe. . . . Oh! one of them is coming up here. . . ."
"Come down, Robert," said Glenarvan.
At this moment, Lady Helena who had risen, seized her husband's arm.
"Edward," she said in a resolute tone, "neither Mary Grant nor I must fall into the hands of these savages alive!"
And so saying, she handed Glenarvan a loaded revolver.
"Fire-arm!" exclaimed Glenarvan, with flashing eyes.
"Yes! the Maories do not search their prisoners. But, Edward, this is for us, not for them."
Glenarvan slipped the revolver under his coat; at the same moment the mat at the entrance was raised, and a native entered.

He motioned to the prisoners to follow him. Glenarvan and the rest walked across the "pah" and stopped before Kai-Koumou. He was surrounded by the principal warriors of his tribe, and among them the Maori whose canoe joined that of the Kai-Koumou at the confluence of Pohain-henna, on the Waikato. He was a man about forty years of age, powerfully built and of fierce and cruel aspect. His name was Kara-Tete, meaning "the irascible" in the native tongue. Kai-Koumou treated him with a certain tone of respect, and by the fineness of his tattoo, it was easy to perceive that Kara-Tete held a lofty position in the tribe, but a keen observer would have guessed the feeling of rivalry that existed between these two chiefs. The Major observed that the influence of Kara-Tete gave umbrage to Kai-Koumou. They both ruled the Waikato tribes, and were equal in authority. During this interview Kai-Koumou smiled, but his eyes betrayed a deep-seated enmity.
Kai-Koumou interrogated Glenarvan.
"You are English?" said he.
"Yes," replied Glenarvan, unhesitatingly, as his nationality would facilitate the exchange.
"And your companions?" said Kai-Koumou.
"My companions are English like myself. We are shipwrecked travelers, but it may be important to state that we have taken no part in the war."
"That matters little!" was the brutal answer of Kara-Tete. "Every Englishman is an enemy. Your people invaded our island! They robbed our fields! they burned our villages!"
"They were wrong!" said Glenarvan, quietly. "I say so, because I think it, not because I am in your power."
"Listen," said Kai-Koumou, "the Tohonga, the chief priest of Noui-Atoua has fallen into the hands of your brethren; he is a prisoner among the Pakekas. Our deity has commanded us to ransom him. For my own part, I would rather have torn out your heart, I would have stuck your head, and those of your companions, on the posts of that palisade. But Noui-Atoua has spoken."
As he uttered these words, Kai-Koumou, who till now had been quite unmoved, trembled with rage, and his features expressed intense ferocity.

Then after a few minutes' interval he proceeded more calmly.
"Do you think the English will exchange you for our Tohonga?"
Glenarvan hesitated, all the while watching the Maori chief.
"I do not know," said he, after a moment of silence.
"Speak," returned Kai-Koumou, "is your life worth that of our Tohonga?"
"No," replied Glenarvan. "I am neither a chief nor a priest among my own people."
Paganel, petrified at this reply, looked at Glenarvan in amazement. Kai-Koumou appeared equally astonished.
"You doubt it then?" said he.
"I do not know," replied Glenarvan.
"Your people will not accept you as an exchange for Tohonga?"
"Our Maori custom," replied Kai-Koumou, "is head for head."
"Offer first these ladies in exchange for your priest," said Glenarvan, pointing to Lady Helena and Mary Grant. Lady Helena was about to interrupt him. But the Major held her back.
"Those two ladies," continued Glenarvan, bowing respectfully toward Lady Helena and Mary Grant, "are personages of rank in their own country."
The warrior gazed coldly at his prisoner. An evil smile relaxed his lips for a moment; then he controlled himself, and in a voice of ill-concealed anger:
"Do you hope to deceive Kai-Koumou with lying words, accursed Pakeka? Can not the eyes of Kai-Koumou read hearts?"
And pointing to Lady Helena: "That is your wife?" he said.
"No! mine!" exclaimed Kara-Tete.

And then pushing his prisoners aside, he laid his hand on the shoulder of Lady Helena, who turned pale at his touch.

"Edward!" cried the unfortunate woman in terror.

Glenarvan, without a word, raised his arm, a shot! and Kara-Tete fell at his feet.

The sound brought a crowd of natives to the spot. A hundred arms were ready, and Glenarvan's revolver was snatched from him.

Kai-Koumou glanced at Glenarvan with a curious expression: then with one hand protecting Glenarvan, with the other he waved off the crowd who were rushing on the party.

At last his voice was heard above the tumult.

"Taboo! Taboo!" he shouted.

At that word the crowd stood still before Glenarvan and his companions, who for the time were preserved by a supernatural influence.

A few minutes after they were re-conducted to Ware-Atoua, which was their prison. But Robert Grant and Paganel were not with them.

CHAPTER XI THE CHIEF'S FUNERAL

KAI-KOUMOU, as frequently happens among the Maories, joined the title of ariki to that of tribal chief. He was invested with the dignity of priest, and, as such, he had the power to throw over persons or things the superstitious protection of the "taboo."

The "taboo," which is common to all the Polynesian races, has the primary effect of isolating the "tabooed" person and preventing the use of "tabooed" things. According to the Maori doctrine, anyone who laid sacrilegious hands on what had been declared "taboo," would be punished with death by the insulted deity, and even if the god delayed the vindication of his power, the priests took care to accelerate his vengeance.

By the chiefs, the "taboo" is made a political engine, except in some cases, for domestic reasons. For instance, a native is tabooed for several days when his hair is cut; when he is tattooed; when he is building a canoe, or a house; when he is seriously ill, and when he is dead. If excessive consumption threatens to exterminate the fish of a river, or ruin the early crop of sweet potatoes, these things are put under the protection of the taboo. If a chief wishes to clear his house of hangers-on, he taboos it; if an English trader displeases him he is tabooed. His interdict has the effect of the old royal "veto."

If an object is tabooed, no one can touch it with impunity. When a native is under the interdict, certain ailments are denied him for a prescribed period. If he is relieved, as regards the severe diet, his slaves feed him with the viands he is forbidden to touch with his hands; if he is poor and has no slaves, he has to take up the food with his mouth, like an animal.

In short, the most trifling acts of the Maories are directed and modified by this singular custom, the deity is brought into constant contact with their daily life. The taboo has the same weight as a law; or rather, the code of the Maories, indisputable and undisputed, is comprised in the frequent applications of the taboo.

As to the prisoners confined in the Ware-Atoua, it was an arbitrary taboo which had saved them from the fury of the tribe. Some of the natives, friends and partisans of Kai-Koumou, desisted at once on hearing their chief's voice, and protected the captives from the rest.

Glenarvan cherished no illusive hopes as to his own fate; nothing but his death could atone for the murder of a chief, and among these people death was only the concluding act of a martyrdom of torture. Glenarvan, therefore, was fully prepared to pay the penalty of the righteous indignation that nerved his arm, but he hoped that the wrath of Kai-Koumou would not extend beyond himself.

What a night he and his companions passed! Who could picture their agonies or measure their sufferings? Robert and Paganel had not been restored to them, but their fate was no doubtful matter. They were too surely the first victims of the frenzied natives. Even McNabbs, who was always sanguine, had abandoned hope. John Mangles was nearly frantic at the sight of Mary Grant's despair at being separated from her brother. Glenarvan pondered over the terrible request of Lady Helena, who preferred dying by his hand to submitting to torture and slavery. How was he to summon the terrible courage!

"And Mary? who has a right to strike her dead?" thought John, whose heart was broken.

Escape was clearly impossible. Ten warriors, armed to the teeth, kept watch at the door of Ware-Atoua.

The morning of February 13th arrived. No communication had taken place between the natives and the "tabooed" prisoners. A limited supply of provisions was in the house, which the unhappy inmates scarcely touched. Misery deadened the pangs of hunger. The day passed without change, and without hope; the funeral ceremonies of the dead chief would doubtless be the signal for their execution.

Although Glenarvan did not conceal from himself the probability that Kai-Koumou had given up all idea of
exchange, the Major still cherished a spark of hope.

"Who knows," said he, as he reminded Glenarvan of the effect produced on the chief by the death of Kara-Tete--
"who knows but that Kai-Koumou, in his heart, is very much obliged to you?"

But even McNabbs' remarks failed to awaken hope in Glenarvan's mind. The next day passed without any appearance of preparation for their punishment; and this was the reason of the delay.

The Maories believe that for three days after death the soul inhabits the body, and therefore, for three times twenty-four hours, the corpse remains unburied. This custom was rigorously observed. Till February 15th the "pah" was deserted.

John Mangles, hoisted on Wilson's shoulders, frequently reconnoitered the outer defences. Not a single native was visible; only the watchful sentinels relieving guard at the door of the Ware-Atoua.

But on the third day the huts opened; all the savages, men, women, and children, in all several hundred Maories, assembled in the "pah," silent and calm.

Kai-Koumou came out of his house, and surrounded by the principal chiefs of his tribe, he took his stand on a mound some feet above the level, in the center of the enclosure. The crowd of natives formed in a half circle some distance off, in dead silence.

At a sign from Kai-Koumou, a warrior bent his steps toward Ware-Atoua.

"Remember," said Lady Helena to her husband. Glenarvan pressed her to his heart, and Mary Grant went closer to John Mangles, and said hurriedly:

"Lord and Lady Glenarvan cannot but think if a wife may claim death at her husband's hands, to escape a shameful life, a betrothed wife may claim death at the hands of her betrothed husband, to escape the same fate. John! at this last moment I ask you, have we not long been betrothed to each other in our secret hearts? May I rely on you, as Lady Helena relies on Lord Glenarvan?"

"Mary!" cried the young captain in his despair. "Ah! dear Mary--"

The mat was lifted, and the captives led to Kai-Koumou; the two women were resigned to their fate; the men dissembled their sufferings with superhuman effort.

They arrived in the presence of the Maori chief.

"You killed Kara-Tete," said he to Glenarvan.

"I did," answered Glenarvan.

"You die to-morrow at sunrise."

"Alone?" asked Glenarvan, with a beating heart.

"Oh! if our Tohonga's life was not more precious than yours!" exclaimed Kai-Koumou, with a ferocious expression of regret.

At this moment there was a commotion among the natives. Glenarvan looked quickly around; the crowd made way, and a warrior appeared heated by running, and sinking with fatigue.

Kai-Koumou, as soon as he saw him, said in English, evidently for the benefit of the captives:

"You come from the camp of the Pakekas?"

"Yes," answered the Maori.

"You have seen the prisoner, our Tohonga?"

"I have seen him."

"Alive?"

"Dead! English have shot him."

It was all over with Glenarvan and his companions.

"All!" cried Kai-Koumou; "you all die to-morrow at daybreak."

Punishment fell on all indiscriminately. Lady Helena and Mary Grant were grateful to Heaven for the boon.

The captives were not taken back to Ware-Atoua. They were destined to attend the obsequies of the chief and the bloody rites that accompanied them. A guard of natives conducted them to the foot of an immense kauri, and then stood on guard without taking their eyes off the prisoners.

The three prescribed days had elapsed since the death of Kara-Tete, and the soul of the dead warrior had finally departed; so the ceremonies commenced.

The body was laid on a small mound in the central enclosure. It was clothed in a rich dress, and wrapped in a magnificent flax mat. His head, adorned with feathers, was encircled with a crown of green leaves. His face, arms, and chest had been rubbed with oil, and did not show any sign of decay.

The parents and friends arrived at the foot of the mound, and at a certain moment, as if the leader of an orchestra were leading a funeral chant, there arose a great wail of tears, sighs, and sobs. They lamented the deceased with a plaintive rhythm and doleful cadence. The kinsmen beat their heads; the kinswomen tore their faces with their nails and lavished more blood than tears. But these demonstrations were not sufficient to propitiate the soul of the
deceased, whose wrath might strike the survivors of his tribe; and his warriors, as they could not recall him to life, were anxious that he should have nothing to wish for in the other world. The wife of Kara-Tete was not to be parted from him; indeed, she would have refused to survive him. It was a custom, as well as a duty, and Maori history has no lack of such sacrifices.

This woman came on the scene; she was still young. Her disheveled hair flowed over her shoulders. Her sobs and cries filled the air. Incoherent words, regrets, sobs, broken phrases in which she extolled the virtues of the dead, alternated with her moans, and in a crowning paroxysm of sorrow, she threw herself at the foot of the mound and beat her head on the earth.

The Kai-Koumou drew near; suddenly the wretched victim rose; but a violent blow from a "MERE," a kind of club brandished by the chief, struck her to the ground; she fell senseless.

Horrible yells followed; a hundred arms threatened the terror-stricken captives. But no one moved, for the funeral ceremonies were not yet over.

The wife of Kara-Tete had joined her husband. The two bodies lay stretched side by side. But in the future life, even the presence of his faithful companion was not enough. Who would attend on them in the realm of Noui-Atoua, if their slaves did not follow them into the other world.

Six unfortunate fellows were brought to the mound. They were attendants whom the pitiless usages of war had reduced to slavery. During the chief's lifetime they had borne the severest privations, and been subjected to all kinds of ill-usage; they had been scantily fed, and incessantly occupied like beasts of burden, and now, according to Maori ideas, they were to resume to all eternity this life of bondage.

These poor creatures appeared quite resigned to their destiny. They were not taken by surprise. Their unbound hands showed that they met their fate without resistance.

Their death was speedy and not aggravated by tedious suffering; torture was reserved for the authors of the murder, who, only twenty paces off, averted their eyes from the horrible scene which was to grow yet more horrible.

Six blows of the MERE, delivered by the hands of six powerful warriors, felled the victims in the midst of a sea of blood.

This was the signal for a fearful scene of cannibalism. The bodies of slaves are not protected by taboo like those of their masters. They belong to the tribe; they were a sort of small change thrown among the mourners, and the moment the sacrifice was over, the whole crowd, chiefs, warriors, old men, women, children, without distinction of age, or sex, fell upon the senseless remains with brutal appetite. Faster than a rapid pen could describe it, the bodies, still reeking, were dismembered, divided, cut up, not into morsels, but into crumbs. Of the two hundred Maories present everyone obtained a share. They fought, they struggled, they quarreled over the smallest fragment. The drops of hot blood splashed over these festive monsters, and the whole of this detestable crew groveled under a rain of blood. It was like the delirious fury of tigers fighting over their prey, or like a circus where the wild beasts devour the deer. This scene ended, a score of fires were lit at various points of the "pah"; the smell of charred flesh polluted the air; and but for the fearful tumult of the festival, but for the cries that emanated from these flesh-sated throats, the captives might have heard the bones crunching under the teeth of the cannibals.

Glenarvan and his companions, breathless with horror, tried to conceal this fearful scene from the eyes of the two poor ladies. They understood then what fate awaited them next day at dawn, and also with what cruel torture this death would be preceded. They were dumb with horror.

The funeral dances commenced. Strong liquors distilled from the "piper excelsum" animated the intoxication of the natives. They had nothing human left. It seemed possible that the "taboo" might be forgotten, and they might rush upon the prisoners, who were already terrified at their delirious gestures.

But Kai-Koumou had kept his own senses amidst the general delirium. He allowed an hour for this orgy of blood to attain its maximum and then cease, and the final scene of the obsequies was performed with the accustomed ceremonial.

The corpses of Kara-Tete and his wife were raised, the limbs were bent, and laid against the stomach according to the Maori usage; then came the funeral, not the final interment, but a burial until the moment when the earth had destroyed the flesh and nothing remained but the skeleton.

The place of "oudoupa," or the tomb, had been chosen outside the fortress, about two miles off at the top of a low hill called Maunganamau, situated on the right bank of the lake, and to this spot the body was to be taken. Two palanquins of a very primitive kind, hand-barrows, in fact, were brought to the foot of the mound, and the corpses doubled up so that they were sitting rather than lying, and their garments kept in place by a band of hanes, were placed on them. Four warriors took up the litters on their shoulders, and the whole tribe, repeating their funeral chant, followed in procession to the place of sepulture.

The captives, still strictly guarded, saw the funeral cortege leave the inner inclosure of the "pah"; then the chants and cries grew fainter. For about half an hour the funeral procession remained out of sight, in the hollow valley, and
then came in sight again winding up the mountain side; the distance gave a fantastic effect to the undulating movement of this long serpentine column.

The tribe stopped at an elevation of about 800 feet, on the summit of Maunganamu, where the burial place of Kara-Tete had been prepared. An ordinary Maori would have had nothing but a hole and a heap of earth. But a powerful and formidable chief destined to speedy deification, was honored with a tomb worthy of his exploits.

The "oudoupa" had been fenced round, and posts, surmounted with faces painted in red ochre, stood near the grave where the bodies were to lie. The relatives had not forgotten that the "Waidoua," the spirit of the dead, lives on mortal food, as the body did in this life. Therefore, food was deposited in the inclosure as well as the arms and clothing of the deceased. Nothing was omitted for comfort. The husband and wife were laid side by side, then covered with earth and grass, after another series of laments.

Then the procession wound slowly down the mountain, and henceforth none dare ascend the slope of Maunganamu on pain of death, for it was "tabooed," like Tongariro, where lie the ashes of a chief killed by an earthquake in 1846.

CHAPTER XII STRANGELY LIBERATED

JUST as the sun was sinking beyond Lake Taupo, behind the peaks of Tuhahua and Pupepapu, the captives were conducted back to their prison. They were not to leave it again till the tops of the Wahiti Ranges were lit with the first fires of day.

They had one night in which to prepare for death. Overcome as they were with horror and fatigue, they took their last meal together.

"We shall need all our strength," Glenarvan had said, "to look death in the face. We must show these savages how Europeans can die."

The meal ended. Lady Helena repeated the evening prayer aloud, her companions, bare-headed, repeated it after her. Who does not turn his thoughts toward God in the hour of death? This done, the prisoners embraced each other. Mary Grant and Helena, in a corner of the hut, lay down on a mat. Sleep, which keeps all sorrow in abeyance, soon weighed down their eyelids; they slept in each other's arms, overcome by exhaustion and prolonged watching.

Then Glenarvan, taking his friends aside, said: "My dear friends, our lives and the lives of these poor women are in God's hands. If it is decreed that we die to-morrow, let us die bravely, like Christian men, ready to appear without terror before the Supreme Judge. God, who reads our hearts, knows that we had a noble end in view. If death awaits us instead of success, it is by His will. Stern as the decree may seem, I will not repine. But death here, means not death only, it means torture, insult, perhaps, and here are two ladies--"

Glenarvan's voice, firm till now, faltered. He was silent a moment, and having overcome his emotion, he said, addressing the young captain:

"John, you have promised Mary what I promised Lady Helena. What is your plan?"

"I believe," said John, "that in the sight of God I have a right to fulfill that promise."

"Yes, John; but we are unarmed."

"No!" replied John, showing him a dagger. "I snatched it from Kara-Tete when he fell at your feet. My Lord, whichever of us survives the other will fulfill the wish of Lady Helena and Mary Grant."

After these words were said, a profound silence ensued. At last the Major said: "My friends, keep that to the last moment. I am not an advocate of irremediable measures."

"I did not speak for ourselves," said Glenarvan. "Be it as it may, we can face death! Had we been alone, I should ere now have cried, 'My friends, let us make an effort. Let us attack these wretches! But with these poor girls--"

At this moment John raised the mat, and counted twenty-five natives keeping guard on the Ware-Atoua. A great fire had been lighted, and its lurid glow threw into strong relief the irregular outlines of the "pah." Some of the savages were sitting round the brazier; the others standing motionless, their black outlines relieved against the clear background of flame. But they all kept watchful guard on the hut confided to their care.

It has been said that between a vigilant jailer and a prisoner who wishes to escape, the chances are in favor of the prisoner; the fact is, the interest of the one is keener than that of the other. The jailer may forget that he is on guard; the prisoner never forgets that he is guarded. The captive thinks oftener of escaping than the jailer of preventing his flight, and hence we hear of frequent and wonderful escapes.

But in the present instance hatred and revenge were the jailers--not an indifferent warden; the prisoners were not bound, but it was because bonds were useless when five-and-twenty men were watching the only egress from the Ware-Atoua.

This house, with its back to the rock which closed the fortress, was only accessible by a long, narrow promontory which joined it in front to the plateau on which the "pah" was erected. On its two other sides rose pointed rocks, which jutted out over an abyss a hundred feet deep. On that side descent was impossible, and had it been possible, the bottom was shut in by the enormous rock. The only outlet was the regular door of the Ware-
Atoua, and the Maories guarded the promontory which united it to the "pah" like a drawbridge. All escape was thus hopeless, and Glenarvan having tried the walls for the twentieth time, was compelled to acknowledge that it was so.

The hours of this night, wretched as they were, slipped away. Thick darkness had settled on the mountain. Neither moon nor stars pierced the gloom. Some gusts of wind whistled by the sides of the "pah," and the posts of the house creaked: the fire outside revived with the puffs of wind, and the flames sent fitful gleams into the interior of Ware-Atoua. The group of prisoners was lit up for a moment; they were absorbed in their last thoughts, and a deathlike silence reigned in the hut.

It might have been about four o'clock in the morning when the Major's attention was called to a slight noise which seemed to come from the foundation of the posts in the wall of the hut which abutted on the rock. McNabbs was at first indifferent, but finding the noise continue, he listened; then his curiosity was aroused, and he put his ear to the ground; it sounded as if someone was scraping or hollowing out the ground outside.

As soon as he was sure of it, he crept over to Glenarvan and John Mangles, and startling them from their melancholy thoughts, led them to the end of the hut.

"Listen," said he, motioning them to stoop.

The scratching became more and more audible; they could hear the little stones grate on a hard body and roll away.

"Some animal in his burrow," said John Mangles.

Glenarvan struck his forehead.

"Who knows?" said he, "it might be a man."

"Animal or man," answered the Major, "I will soon find out!"

Wilson and Olbinett joined their companions, and all united to dig through the wall--John with his dagger, the others with stones taken from the ground, or with their nails, while Mulrady, stretched along the ground, watched the native guard through a crevice of the matting.

These savages sitting motionless around the fire, suspected nothing of what was going on twenty feet off. The soil was light and friable, and below lay a bed of silicious tufa; therefore, even without tools, the aperture deepened quickly. It soon became evident that a man, or men, clinging to the sides of the "pah," were cutting a passage into its exterior wall. What could be the object? Did they know of the existence of the prisoners, or was it some private enterprise that led to the undertaking?

The prisoners redoubled their efforts. Their fingers bled, but still they worked on; after half an hour they had gone three feet deep; they perceived by the increased sharpness of the sounds that only a thin layer of earth prevented immediate communication.

Some minutes more passed, and the Major withdrew his hand from the stroke of a sharp blade. He suppressed a cry.

John Mangles, inserting the blade of his poniard, avoided the knife which now protruded above the soil, but seized the hand that wielded it.

It was the hand of a woman or child, a European! On V. IV Verne neither side had a word been uttered. It was evidently the cue of both sides to be silent.

"Is it Robert?" whispered Glenarvan.

But softly as the name was breathed, Mary Grant, already awakened by the sounds in the hut, slipped over toward Glenarvan, and seizing the hand, all stained with earth, she covered it with kisses.

"My darling Robert," said she, never doubting, "it is you! it is you!"

"Yes, little sister," said he, "it is I am here to save you all; but be very silent."

"Brave lad!" repeated Glenarvan.

"Watch the savages outside," said Robert.

Mulrady, whose attention was distracted for a moment by the appearance of the boy, resumed his post.

"It is all right," said he. "There are only four awake; the rest are asleep."

A minute after, the hole was enlarged, and Robert passed from the arms of his sister to those of Lady Helena. Round his body was rolled a long coil of flax rope.

"My child, my child," murmured Lady Helena, "the savages did not kill you!"

"No, madam," said he; "I do not know how it happened, but in the scuffle I got away; I jumped the barrier; for two days I hid in the bushes, to try and see you; while the tribe were busy with the chief's funeral, I came and reconnoitered this side of the path, and I saw that I could get to you. I stole this knife and rope out of the desert hut. The tufts of bush and the branches made me a ladder, and I found a kind of grotto already hollowed out in the rock under this hut; I had only to bore some feet in soft earth, and here I am."

Twenty noiseless kisses were his reward.

"Let us be off!" said he, in a decided tone.
"Is Paganel below?" asked Glenarvan.
"Monsieur Paganel?" replied the boy, amazed.
"Yes; is he waiting for us?"
"No, my Lord; but is he not here?" inquired Robert.
"No, Robert!" answered Mary Grant.
"Why! have you not seen him?" asked Glenarvan. "Did you lose each other in the confusion? Did you not get away together?"
"No, my Lord!" said Robert, taken aback by the disappearance of his friend Paganel.
"Well, lose no more time," said the Major. "Wherever Paganel is, he cannot be in worse plight than ourselves. Let us go."

Truly, the moments were precious. They had to fly. The escape was not very difficult, except the twenty feet of perpendicular fall outside the grotto.

After that the slope was practicable to the foot of the mountain. From this point the prisoners could soon gain the lower valleys; while the Maories, if they perceived the flight of the prisoners, would have to make a long round to catch them, being unaware of the gallery between the Ware-Atoua and the outer rock.

The escape was commenced, and every precaution was taken. The captives passed one by one through the narrow passage into the grotto. John Mangles, before leaving the hut, disposed of all the evidences of their work, and in his turn slipped through the opening and let down over it the mats of the house, so that the entrance to the gallery was quite concealed.

The next thing was to descend the vertical wall to the slope below, and this would have been impracticable, but that Robert had brought the flax rope, which was now unrolled and fixed to a projecting point of rock, the end hanging over.

John Mangles, before his friends trusted themselves to this flax rope, tried it; he did not think it very strong; and it was of importance not to risk themselves imprudently, as a fall would be fatal.

"This rope," said he, "will only bear the weight of two persons; therefore let us go in rotation. Lord and Lady Glenarvan first; when they arrive at the bottom, three pulls at the rope will be a signal to us to follow."

"I will go first," said Robert. "I discovered a deep hollow at the foot of the slope where those who come down can conceal themselves and wait for the rest."

"Go, my boy," said Glenarvan, pressing Robert's hand.
Robert disappeared through the opening out of the grotto. A minute after, the three pulls at the cord informed them the boy had alighted safely.

Glenarvan and Lady Helena immediately ventured out of the grotto. The darkness was still very great, though some grayish streaks were already visible on the eastern summits.

The biting cold of the morning revived the poor young lady. She felt stronger and commenced her perilous descent.

Glenarvan first, then Lady Helena, let themselves down along the rope, till they came to the spot where the perpendicular wall met the top of the slope. Then Glenarvan going first and supporting his wife, began to descend backward.

He felt for the tufts and grass and shrubs able to afford a foothold; tried them and then placed Lady Helena's foot on them. Some birds, suddenly awakened, flew away, uttering feeble cries, and the fugitives trembled when a stone loosened from its bed rolled to the foot of the mountain.

They had reached half-way down the slope, when a voice was heard from the opening of the grotto.
"Stop!" whispered John Mangles.
Glenarvan, holding with one hand to a tuft of tetragonia, with the other holding his wife, waited with breathless anxiety.

Wilson had had an alarm. Having heard some unusual noise outside the Ware-Atoua, he went back into the hut and watched the Maories from behind the mat. At a sign from him, John stopped Glenarvan.

One of the warriors on guard, startled by an unusual sound, rose and drew nearer to the Ware-Atoua. He stood still about two paces from the hut and listened with his head bent forward. He remained in that attitude for a minute that seemed an hour, his ear intent, his eye peering into the darkness. Then shaking his head like one who sees he is mistaken, he went back to his companions, took an armful of dead wood, and threw it into the smouldering fire, which immediately revived. His face was lighted up by the flame, and was free from any look of doubt, and after having glanced to where the first light of dawn whitened the eastern sky, stretched himself near the fire to warm his stiffened limbs.

"All's well!" whispered Wilson.
John signaled to Glenarvan to resume his descent.
Glenarvan let himself gently down the slope; soon Lady Helena and he landed on the narrow track where Robert waited for them.

The rope was shaken three times, and in his turn John Mangles, preceding Mary Grant, followed in the dangerous route.

He arrived safely; he rejoined Lord and Lady Glenarvan in the hollow mentioned by Robert.

Five minutes after, all the fugitives had safely escaped from the Ware-Atoua, left their retreat, and keeping away from the inhabited shores of the lakes, they plunged by narrow paths into the recesses of the mountains.

They walked quickly, trying to avoid the points where they might be seen from the pah. They were quite silent, and glided among the bushes like shadows. Whither? Where chance led them, but at any rate they were free.

Toward five o'clock, the day began to dawn, bluish clouds marbled the upper stratum of clouds. The misty summits began to pierce the morning mists. The orb of day was soon to appear, and instead of giving the signal for their execution, would, on the contrary, announce their flight.

It was of vital importance that before the decisive moment arrived they should put themselves beyond the reach of the savages, so as to put them off their track. But their progress was slow, for the paths were steep. Lady Glenarvan climbed the slopes, supported, not to say carried, by Glenarvan, and Mary Grant leaned on the arm of John Mangles; Robert, radiant with joy, triumphant at his success, led the march, and the two sailors brought up the rear.

Another half an hour and the glorious sun would rise out of the mists of the horizon. For half an hour the fugitives walked on as chance led them. Paganel was not there to take the lead. He was now the object of their anxiety, and whose absence was a black shadow between them and their happiness. But they bore steadily eastward, as much as possible, and faced the gorgeous morning light. Soon they had reached a height of 500 feet above Lake Taupo, and the cold of the morning, increased by the altitude, was very keen. Dim outlines of hills and mountains rose behind one another; but Glenarvan only thought how best to get lost among them. Time enough by and by to see about escaping from the labyrinth.

At last the sun appeared and sent his first rays on their path.

Suddenly a terrific yell from a hundred throats rent the air. It came from the pah, whose direction Glenarvan did not know. Besides, a thick veil of fog, which, spread at his feet, prevented any distinct view of the valleys below.

But the fugitives could not doubt that their escape had been discovered; and now the question was, would they be able to elude pursuit? Had they been seen? Would not their track betray them?

At this moment the fog in the valley lifted, and enveloped them for a moment in a damp mist, and at three hundred feet below they perceived the swarming mass of frantic natives.

While they looked they were seen. Renewed howls broke forth, mingled with the barking of dogs, and the whole tribe, after vainly trying to scale the rock of Ware-Atoua, rushed out of the pah, and hastened by the shortest paths in pursuit of the prisoners who were flying from their vengeance.

CHAPTER XIII THE SACRED MOUNTAIN

The summit of the mountain was still a hundred feet above them. The fugitives were anxious to reach it that they might continue their flight on the eastern slope out of the view of their pursuers. They hoped then to find some practicable ridge that would allow of a passage to the neighboring peaks that were thrown together in an orographic maze, to which poor Paganel's genius would doubtless have found the clew.

They hastened up the slope, spurred on by the loud cries that drew nearer and nearer. The avenging crowd had already reached the foot of the mountain.

"Courage! my friends," cried Glenarvan, urging his companions by voice and look.

In less than five minutes they were at the top of the mountain, and then they turned to judge of their position, and decide on a route that would baffle their pursuers.

From their elevated position they could see over Lake Taupo, which stretched toward the west in its setting of picturesque mountains. On the north the peaks of Pirongia; on the south the burning crater of Tongariro. But eastward nothing but the rocky barrier of peaks and ridges that formed the Wahiti ranges, the great chain whose unbroken links stretch from the East Cape to Cook's Straits. They had no alternative but to descend the opposite slope and enter the narrow gorges, uncertain whether any outlet existed.

Glenarvan could not prolong the halt for a moment. Wearied as they might be, they must fly or be discovered.

"Let us go down!" cried he, "before our passage is cut off."

But just as the ladies had risen with a despairing effort, McNabbs stopped them and said:

"Glenarvan, it is useless. Look!"

And then they all perceived the inexplicable change that had taken place in the movements of the Maories.

Their pursuit had suddenly stopped. The ascent of the mountain had ceased by an imperious command. The natives had paused in their career, and surged like the sea waves against an opposing rock. All the crowd, thursting
for blood, stood at the foot of the mountain yelling and gesticulating, brandishing guns and hatchets, but not advancing a foot. Their dogs, rooted to the spot like themselves, barked with rage.

What stayed them? What occult power controlled these savages? The fugitives looked without understanding, fearing lest the charm that enchained Kai-Koumou's tribe should be broken.

Suddenly John Mangles uttered an exclamation which attracted the attention of his companions. He pointed to a little inclosure on the summit of the cone.

"The tomb of Kara-Tete!" said Robert.

"Are you sure, Robert?" said Glenarvan.

"Yes, my Lord, it is the tomb; I recognize it."

Robert was right. Fifty feet above, at the extreme peak of the mountain, freshly painted posts formed a small palisaded inclosure, and Glenarvan too was convinced that it was the chief's burial place. The chances of their flight had led them to the crest of Maunganamu.

Glenarvan, followed by the rest, climbed to the foot of the tomb. A large opening, covered with mats, led into it. Glenarvan was about to invade the sanctity of the "oudoupa," when he reeled backward.

"A savage!" said he.

"In the tomb?" inquired the Major.

"Yes, McNabbs."

"No matter; go in."

Glenarvan, the Major, Robert and John Mangles entered. There sat a Maori, wrapped in a large flax mat; the darkness of the "oudoupa" preventing them from distinguishing his features. He was very quiet, and was eating his breakfast quite coolly.

Glenarvan was about to speak to him when the native forestalled him by saying gayly and in good English:

"Sit down, my Lord; breakfast is ready."

It was Paganel. At the sound of his voice they all rushed into the "oudoupa," and he was cordially embraced all round. Paganel was found again. He was their salvation. They wanted to question him; to know how and why he was here on the summit of Maunganamu; but Glenarvan stopped this misplaced curiosity.

"The savages?" said he.

"The savages," said Paganel, shrugging his shoulders. "I have a contempt for those people! Come and look at them."

They all followed Paganel out of the "oudoupa." The Maories were still in the same position round the base of the mountain, uttering fearful cries.

"Shout! yell! till your lungs are gone, stupid wretches!" said Paganel. "I dare you to come here!"

"But why?" said Glenarvan.

"Because the chief is buried here, and the tomb protects us, because the mountain is tabooed."

"Tabooed?"

"Yes, my friends! and that is why I took refuge here, as the malefactors used to flee to the sanctuaries in the middle ages."

"God be praised!" said Lady Helena, lifting her hands to heaven.

The fugitives were not yet out of danger, but they had a moment's respite, which was very welcome in their exhausted state.

Glenarvan was too much overcome to speak, and the Major nodded his head with an air of perfect content.

"And now, my friends," said Paganel, "if these brutes think to exercise their patience on us, they are mistaken. In two days we shall be out of their reach."

"By flight!" said Glenarvan. "But how?"

"That I do not know," answered Paganel, "but we shall manage it."

And now everybody wanted to know about their friend's adventures. They were puzzled by the reserve of a man generally so talkative; on this occasion they had to drag the words out of his mouth; usually he was a ready storyteller, now he gave only evasive answers to the questions of the rest.

"Paganel is another man!" thought McNabbs.

His face was really altered. He wrapped himself closely in his great flax mat and seemed to deprecate observation. Everyone noticed his embarrassment, when he was the subject of conversation, though nobody appeared to remark it; when other topics were under discussion, Paganel resumed his usual gayety.

Of his adventures all that could be extracted from him at this time was as follows:

After the murder of Kara-Tete, Paganel took advantage, like Robert, of the commotion among the natives, and got out of the inclosure. But less fortunate than young Grant, he walked straight into a Maori camp, where he met a tall, intelligent-looking chief, evidently of higher rank than all the warriors of his tribe. The chief spoke excellent
English, and he saluted the new-comer by rubbing the end of his nose against the end of the geographer's nose.

Paganel wondered whether he was to consider himself a prisoner or not. But perceiving that he could not stir without the polite escort of the chief, he soon made up his mind on that point.

This chief, Hihi, or Sunbeam, was not a bad fellow. Paganel's spectacles and telescope seemed to give him a great idea of Paganel's importance, and he manifested great attachment to him, not only by kindness, but by a strong flax rope, especially at night.

This lasted for three days; to the inquiry whether he was well treated, he said "Yes and no!" without further answer; he was a prisoner, and except that he expected immediate execution, his state seemed to him no better than that in which he had left his unfortunate friends.

One night, however, he managed to break his rope and escape. He had seen from afar the burial of the chief, and knew that he was buried on the top of Maunganamu, and he was well acquainted with the fact that the mountain would be therefore tabooed. He resolved to take refuge there, being unwilling to leave the region where his companions were in durance. He succeeded in his dangerous attempt, and had arrived the previous night at the tomb of Kara-Tete, and there proposed to recruit his strength while he waited in the hope that his friends might, by Divine mercy, find the means of escape.

Such was Paganel's story. Did he designedly conceal some incident of his captivity? More than once his embarrassment led them to that conclusion. But however that might be, he was heartily congratulated on all sides. And then the present emergency came on for serious discussion. The natives dare not climb Maunganamu, but they, of course, calculated that hunger and thirst would restore them their prey. It was only a question of time, and patience is one of the virtues of all savages. Glenarvan was fully alive to the difficulty, but made up his mind to watch for an opportunity, or make one. First of all he made a thorough survey of Maunganamu, their present fortress; not for the purpose of defence, but of escape. The Major, John, Robert, Paganel, and himself, made an exact map of the mountain. They noted the direction, outlet and inclination of the paths. The ridge, a mile in length, which united Maunganamu to the Wahiti chain had a downward inclination. Its slope, narrow and jagged though it was, appeared the only practicable route, if they made good their escape at all. If they could do this without observation, under cover of night, they might possibly reach the deep valleys of the Range and put the Maories off the scent.

But there were dangers in this route; the last part of it was within pistol shot of natives posted on the lower slopes. Already when they ventured on the exposed part of the crest, they were saluted with a hail of shot which did not reach them. Some gun wads, carried by the wind, fell beside them; they were made of printed paper, which Paganel picked up out of curiosity, and with some trouble deciphered.

"That is a good idea! My friends, do you know what those creatures use for wads?"

"No, Paganel!" said Glenarvan.

"Pages of the Bible! If that is the use they make of the Holy Book, I pity the missionaries! It will be rather difficult to establish a Maori library."

"And what text of scripture did they aim at us?"

"A message from God Himself!" exclaimed John Mangles, who was in the act of reading the scorched fragment of paper. "It bids us hope in Him," added the young captain, firm in the faith of his Scotch convictions.

"Read it, John!" said Glenarvan.

And John read what the powder had left visible: "I will deliver him, for he hath trusted in me."

"My friends," said Glenarvan, "we must carry these words of hope to our dear, brave ladies. The sound will bring comfort to their hearts."

Glenarvan and his companions hastened up the steep path to the cone, and went toward the tomb. As they climbed they were astonished to perceive every few moments a kind of vibration in the soil. It was not a movement like earthquake, but that peculiar tremor that affects the metal of a boiler under high pressure. It was clear the mountain was the outer covering of a body of vapor, the product of subterranean fires.

This phenomenon of course excited no surprise in those that had just traveled among the hot springs of the Waikato. They knew that the central region of the Ika-na-Mani is essentially volcanic. It is a sieve, whose interstices furnish a passage for the earth's vapors in the shape of boiling geysers and solfataras.

Paganel, who had already noticed this, called the attention of his friends to the volcanic nature of the mountain.

The peak of Maunganamu was only one of the many cones which bristle on this part of the island. It was a volcano of the future. A slight mechanical change would produce a crater of eruption in these slopes, which consisted merely of whitish silicious tufa.

"That may be," said Glenarvan, "but we are in no more danger here than standing by the boiler of the DUNCAN; this solid crust is like sheet iron."

"I agree with you," added the Major, "but however good a boiler may be, it bursts at last after too long service."

"McNabbs," said Paganel, "I have no fancy for staying on the cone. When Providence points out a way, I will go
"I wish," remarked John, "that Maunganamu could carry us himself, with all the motive power that he has inside. It is too bad that millions of horse-power should lie under our feet unavailable for our needs. Our DUNCAN would carry us to the end of the world with the thousandth part of it."

The recollections of the DUNCAN evoked by John Mangles turned Glenarvan's thoughts into their saddest channel; for desperate as his own case was he often forgot it, in vain regret at the fate of his crew.

His mind still dwelt on it when he reached the summit of Maunganamu and met his companions in misfortune.

Lady Helena, when she saw Glenarvan, came forward to meet him.

"Dear Edward," said she, "you have made up your mind? Are we to hope or fear?"

"Hope, my dear Helena," replied Glenarvan. "The natives will never set foot on the mountain, and we shall have time to devise a plan of escape."

"More than that, madam, God himself has encouraged us to hope."

And so saying, John Mangles handed to Lady Helena the fragment of paper on which was legible the sacred words; and these young women, whose trusting hearts were always open to observe Providential interpositions, read in these words an indisputable sign of salvation.

"And now let us go to the 'oudoupa!'" cried Paganel, in his gayest mood. "It is our castle, our dining-room, our study! None can meddle with us there! Ladies! allow me to do the honors of this charming abode."

They followed Paganel, and when the savages saw them profaning anew the tabooed burial place, they renewed their fire and their fearful yells, the one as loud as the other. But fortunately the balls fell short of our friends, though the cries reached them.

Lady Helena, Mary Grant, and their companions were quite relieved to find that the Maories were more dominated by superstition than by anger, and they entered the monument.

It was a palisade made of red-painted posts. Symbolic figures, tattooed on the wood, set forth the rank and achievements of the deceased. Strings of amulets, made of shells or cut stones, hung from one part to another. In the interior, the ground was carpeted with green leaves, and in the middle, a slight mound betokened the place of the newly made grave. There lay the chief's weapons, his guns loaded and capped, his spear, his splendid ax of green jade, with a supply of powder and ball for the happy hunting grounds.

"Quite an arsenal!" said Paganel, "of which we shall make a better use. What ideas they have! Fancy carrying arms in the other world!"

"Well!" said the Major, "but these are English firearms."

"No doubt," replied Glenarvan, "and it is a very unwise practice to give firearms to savages! They turn them against the invaders, naturally enough. But at any rate, they will be very valuable to us."

"Yes," said Paganel, "but what is more useful still is the food and water provided for Kara-Tete."

Things had been handsomely done for the deceased chief; the amount of provisions denoted their esteem for the departed. There was food enough to sustain ten persons for fifteen days, or the dead man forever.

The vegetable aliments consisted of edible ferns, sweet potatoes, the "convolvulus batatas," which was indigenous, and the potato which had been imported long before by the Europeans. Large jars contained pure water, and a dozen baskets artistically plaited contained tablets of an unknown green gum.

The fugitives were therefore provided for some days against hunger and thirst, and they needed no persuasion to begin their attack on the deceased chief's stores. Glenarvan brought out the necessary quantity and put them into Olbinet's hands. The steward, who never could forget his routine ideas, even in the most exceptional circumstances, thought the meal a slender one. He did not know how to prepare the roots, and, besides, had no fire.

But Paganel soon solved the difficulty by recommending him to bury his fern roots and sweet potatoes in the soil. The temperature of the surface stratum was very high, and a thermometer plunged into the soil would have marked from 160 to 170 degrees; in fact, Olbinett narrowly missed being scalded, for just as he had scooped a hole for the roots, a jet of vapor sprang up and with a whistling sound rose six feet above the ground.

The steward fell back in terror.

"Shut off steam!" cried the Major, running to close the hole with the loose drift, while Paganel pondering on the singular phenomenon muttered to himself:

"Let me see! ha! ha! Why not?"

"Are you hurt?" inquired McNabbs of Olbinett.

"No, Major," said the steward, "but I did not expect--"

"That Providence would send you fire," interrupted Paganel in a jovial tone. "First the larder of Kara-Tete and then fire out of the ground! Upon my word, this mountain is a paradise! I propose that we found a colony, and cultivate the soil and settle here for life! We shall be the Robinsons of Maunganamu. We should want for nothing."

"If it is solid ground," said John Mangles.
"Well! it is not a thing of yesterday," said Paganel. "It has stood against the internal fire for many a day, and will do so till we leave it, at any rate."

"Breakfast is ready," announced Olbinett with as much dignity as if he was in Malcolm Castle.

Without delay, the fugitives sat down near the palisade, and began one of the many meals with which Providence had supplied them in critical circumstances. Nobody was inclined to be fastidious, but opinions were divided as regarded the edible fern. Some thought the flavor sweet and agreeable, others pronounced it leathery, insipid, and resembling the taste of gum. The sweet potatoes, cooked in the burning soil, were excellent. The geographer remarked that Kara-Tete was not badly off after all.

And now that their hunger was appeased, it was time to decide on their plan of escape.

"So soon!" exclaimed Paganel in a piteous tone. "Would you quit the home of delight so soon?"

"But, Monsieur Paganel," interposed Lady Helena, "if this be Capua, you dare not intend to imitate Hannibal!"

"Madam, I dare not contradict you, and if discussion is the order of the day, let it proceed."

"First," said Glenarvan, "I think we ought to start before we are driven to it by hunger. We are revived now, and ought to take advantage of it. To-night we will try to reach the eastern valleys by crossing the cordon of natives under cover of the darkness."

"Excellent," answered Paganel, "if the Maories allow us to pass."

"And if not?" asked John Mangles.

"Then we will use our great resources," said Paganel.

"But have we great resources?" inquired the Major.

"More than we can use!" replied Paganel, without any further explanation.

And then they waited for the night.

The natives had not stirred. Their numbers seemed even greater, perhaps owing to the influx of the stragglers of the tribe. Fires lighted at intervals formed a girdle of flame round the base of the mountain, so that when darkness fell, Maunganamu appeared to rise out of a great brasier, and to hide its head in the thick darkness. Five hundred feet below they could hear the hum and the cries of the enemy's camp.

At nine o'clock the darkness being very intense, Glenarvan and John Mangles went out to reconnoiter before embarking the whole party on this critical journey. They made the descent noiselessly, and after about ten minutes, arrived on the narrow ridge that crossed the native lines, fifty feet above the camp.

All went well so far. The Maories, stretched beside the fires, did not appear to observe the two fugitives. But in an instant a double fusillade burst forth from both sides of the ridge.

"Back," exclaimed Glenarvan; "those wretches have the eyes of cats and the guns of riflemen!"

And they turned, and once more climbed the steep slope of the mountain, and then hastened to their friends who had been alarmed at the firing. Glenarvan's hat was pierced by two balls, and they concluded that it was out of the question to venture again on the ridge between two lines of marksmen.

"Wait till to-morrow," said Paganel, "and as we cannot elude their vigilance, let me try my hand on them."

The night was cold; but happily Kara-Tete had been furnished with his best night gear, and the party wrapped themselves each in a warm flax mantle, and protected by native superstition, slept quietly inside the inclosure, on the warm ground, still violating with the violence of the internal ebullition.

CHAPTER XIV A BOLD STRATAGEM

NEXT day, February 17th, the sun's first rays awoke the sleepers of the Maunganamu. The Maories had long since been astir, coming and going at the foot of the mountain, without leaving their line of observation. Furious clamor broke out when they saw the Europeans leave the sacred place they had profaned.

Each of the party glanced first at the neighboring mountains, and at the deep valleys still drowned in mist, and over Lake Taupo, which the morning breeze ruffled slightly. And then all clustered round Paganel eager to hear his project.

Paganel soon satisfied their curiosity. "My friends," said he, "my plan has one great recommendation; if it does not accomplish all that I anticipate, we shall be no worse off than we are at present. But it must, it will succeed."

"And what is it?" asked McNabbs.

"It is this," replied Paganel, "the superstition of the natives has made this mountain a refuge for us, and we must take advantage of their superstition to escape. If I can persuade Kai-Koumou that we have expiated our profanation, that the wrath of the Deity has fallen on us: in a word, that we have died a terrible death, do you think he will leave the plateau of Maunganamu to return to his village?"

"Not a doubt of it," said Glenarvan.

"And what is the horrible death you refer to?" asked Lady Helena.

"The death of the sacrilegious, my friends," replied Paganel. "The avenging flames are under our feet. Let us open a way for them!"
"What! make a volcano!" cried John Mangles.

"Yes, an impromptu volcano, whose fury we can regulate. There are plenty of vapors ready to hand, and subterranean fires ready to issue forth. We can have an eruption ready to order."

"An excellent idea, Paganel; well conceived," said the Major.

"You understand," replied the geographer, "we are to pretend to fall victims to the flames of the Maori Pluto, and to disappear spiritually into the tomb of Kara-Tete. And stay there three, four, even five days if necessary—that is to say, till the savages are convinced that we have perished, and abandon their watch."

"But," said Miss Grant, "suppose they wish to be sure of our punishment, and climb up here to see?"

"No, my dear Mary," returned Paganel. "They will not do that. The mountain is tabooed, and if it devoured its sacrilegious intruders, it would only be more inviolably tabooed."

"It is really a very clever plan," said Glenarvan. "There is only one chance against it; that is, if the savages prolong their watch at the foot of Maunganamu, we may run short of provisions. But if we play our game well there is not much fear of that."

"And when shall we try this last chance?" asked Lady Helena.

"To-night," rejoined Paganel, "when the darkness is the deepest."

"Agreed," said McNabbs; "Paganel, you are a genius! and I, who seldom get up an enthusiasm, I answer for the success of your plan. Oh! those villains! They shall have a little miracle that will put off their conversion for V. IV Verne another century. I hope the missionaries will forgive us."

The project of Paganel was therefore adopted, and certainly with the superstitious ideas of the Maories there seemed good ground for hope. But brilliant as the idea might be, the difficulty was in the _modus operandi_. The volcano might devour the bold schemers, who offered it a crater. Could they control and direct the eruption when they had succeeded in letting loose its vapor and flames, and lava streams? The entire cone might be engulfed. It was meddling with phenomena of which nature herself has the absolute monopoly.

Paganel had thought of all this; but he intended to act prudently and without pushing things to extremes. An appearance would be enough to dupe the Maories, and there was no need for the terrible realities of an eruption.

How long that day seemed. Each one of the party inwardly counted the hours. All was made ready for flight. The oudoupa provisions were divided and formed very portable packets. Some mats and firearms completed their light equipment, all of which they took from the tomb of the chief. It is needless to say that their preparations were made within the inclosure, and that they were unseen by the savages.

At six o'clock the steward served up a refreshing meal. Where or when they would eat in the valleys of the Ranges no one could foretell. So that they had to take in supplies for the future. The principal dish was composed of half a dozen rats, caught by Wilson and stewed. Lady Helena and Mary Grant obstinately refused to taste this game, which is highly esteemed by the natives; but the men enjoyed it like the real Maories. The meat was excellent and savory, and the six devourers were devoured down to the bones.

The evening twilight came on. The sun went down in a stormy-looking bank of clouds. A few flashes of lightning glanced across the horizon and distant thunder pealed through the darkened sky.

Paganel welcomed the storm, which was a valuable aid to his plans, and completed his program. The savages are superstitiously affected by the great phenomena of nature. The New Zealanders think that thunder is the angry voice of Noui-Atoua, and lightning the fierce gleam of his eyes. Thus their deity was coming personally to chastise the violators of the taboo.

At eight o'clock, the summit of the Maunganamu was lost in portentous darkness. The sky would supply a black background for the blaze which Paganel was about to throw on it. The Maories could no longer see their prisoners; and this was the moment for action. Speed was necessary. Glenarvan, Paganel, McNabbs, Robert, the steward, and the two sailors, all lent a hand.

The spot for the crater was chosen thirty paces from Kara-Tete's tomb. It was important to keep the oudoupa intact, for if it disappeared, the taboo of the mountain would be nullified. At the spot mentioned Paganel had noticed an enormous block of stone, round which the vapors played with a certain degree of intensity. This block covered a small natural crater hollowed in the cone, and by its own weight prevented the egress of the subterranean fire. If they could move it from its socket, the vapors and the lava would issue by the disencumbered opening.

The workers used as levers some posts taken from the interior of the oudoupa, and they plied their tools vigorously against the rocky mass. Under their united efforts the stone soon moved. They made a little trench so that it might roll down the inclined plane. As they gradually raised it, the vibrations under foot became more distinct. Dull roarings of flame and the whistling sound of a furnace ran along under the thin crust. The intrepid laborers, veritable Cyclops handling Earth's fires, worked in silence; soon some fissures and jets of steam warned them that their place was growing dangerous. But a crowning effort moved the mass which rolled down and disappeared. Immediately the thin crust gave way. A column of fire rushed to the sky with loud detonations, while streams of
boiling water and lava flowed toward the native camp and the lower valleys.

All the cone trembled as if it was about to plunge into a fathomless gulf.

Glenarvan and his companions had barely time to get out of the way; they fled to the enclosure of the oudoupa, not without having been sprinkled with water at 220 degrees. This water at first spread a smell like soup, which soon changed into a strong odor of sulphur.

Then the mud, the lava, the volcanic stones, all spouted forth in a torrent. Streams of fire furrowed the sides of Maunganamu. The neighboring mountains were lit up by the glare; the dark valleys were also filled with dazzling light.

All the savages had risen, howling under the pain inflicted by the burning lava, which was bubbling and foaming in the midst of their camp.

Those whom the liquid fire had not touched fled to the surrounding hills; then turned, and gazed in terror at this fearful phenomenon, this volcano in which the anger of their deity would swallow up the profane intruders on the sacred mountain. Now and then, when the roar of the eruption became less violent, their cry was heard:

"Taboo! taboo! taboo!"

An enormous quantity of vapors, heated stones and lava was escaping by this crater of Maunganamu. It was not a mere geyser like those that girdle round Mount Hecla, in Iceland, it was itself a Hecla. All this volcanic commotion was confined till then in the envelope of the cone, because the safety valve of Tangariro was enough for its expansion; but when this new issue was afforded, it rushed forth fiercely, and by the laws of equilibrium, the other eruptions in the island must on that night have lost their usual intensity.

An hour after this volcano burst upon the world, broad streams of lava were running down its sides. Legions of rats came out of their holes, and fled from the scene.

All night long, and fanned by the tempest in the upper sky, the crater never ceased to pour forth its torrents with a violence that alarmed Glenarvan. The eruption was breaking away the edges of the opening. The prisoners, hidden behind the inclosure of stakes, watched the fearful progress of the phenomenon.

Morning came. The fury of the volcano had not slackened. Thick yellowish fumes were mixed with the flames; the lava torrents wound their serpentine course in every direction.

Glenarvan watched with a beating heart, looking from all the interstices of the palisaded enclosure, and observed the movements in the native camp.

The Maories had fled to the neighboring ledges, out of the reach of the volcano. Some corpses which lay at the foot of the cone, were charred by the fire. Further off toward the "pah," the lava had reached a group of twenty huts, which were still smoking. The Maories, forming here and there groups, contemplated the canopied summit of Maunganamu with religious awe.

Kai-Koumou approached in the midst of his warriors, and Glenarvan recognized him. The chief advanced to the foot of the hill, on the side untouched by the lava, but he did not ascend the first ledge.

Standing there, with his arms stretched out like an exerciser, he made some grimaces, whose meaning was obvious to the prisoners. As Paganel had foreseen, Kai-Koumou launched on the avenging mountain a more rigorous taboo.

Soon after the natives left their positions and followed the winding paths that led toward the pah.

"They are going!" exclaimed Glenarvan. "They have left their posts! God be praised! Our stratagem has succeeded! My dear Lady Helena, my brave friends, we are all dead and buried! But this evening when night comes, we shall rise and leave our tomb, and fly these barbarous tribes!"

It would be difficult to conceive of the joy that pervaded the oudoupa. Hope had regained the mastery in all hearts. The intrepid travelers forgot the past, forgot the future, to enjoy the present delight! And yet the task before them was not an easy one—to gain some European outpost in the midst of this unknown country. But Kai-Koumou once off their track, they thought themselves safe from all the savages in New Zealand.

A whole day had to elapse before they could make a start, and they employed it in arranging a plan of flight. Paganel had treasured up his map of New Zealand, and on it could trace out the best roads.

After discussion, the fugitives resolved to make for the Bay of Plenty, towards the east. The region was unknown, but apparently desert. The travelers, who from their past experience, had learned to make light of physical difficulties, feared nothing but meeting Maories. At any cost they wanted to avoid them and gain the east coast, where the missionaries had several stations. That part of the country had hitherto escaped the horrors of war, and the natives were not in the habit of scouring the country.

As to the distance that separated Lake Taupo from the Bay of Plenty, they calculated it about a hundred miles. Ten days' march at ten miles a day, could be done, not without fatigue, but none of the party gave that a thought. If they could only reach the mission stations they could rest there while waiting for a favorable opportunity to get to Auckland, for that was the point they desired to reach.
This question settled, they resumed their watch of the native proceedings, and continued so doing till evening fell. Not a solitary native remained at the foot of the mountain, and when darkness set in over the Taupo valleys, not a fire indicated the presence of the Maories at the base. The road was free.

At nine o’clock, the night being unusually dark, Glenarvan gave the order to start. His companions and he, armed and equipped at the expense of Kara-Tete, began cautiously to descend the slopes of Maunganamu, John Mangles and Wilson leading the way, eyes and ears on the alert. They stopped at the slightest sound, they started at every passing cloud. They slid rather than walked down the spur, that their figures might be lost in the dark mass of the mountain. At two hundred feet below the summit, John Mangles and his sailors reached the dangerous ridge that had been so obstinately defended by the natives. If by ill luck the Maories, more cunning than the fugitives, had only pretended to retreat; if they were not really duped by the volcanic phenomenon, this was the spot where their presence would be betrayed. Glenarvan could not but shudder, in spite of his confidence, and in spite of the jokes of Paganel. The fate of the whole party would hang in the balance for the ten minutes required to pass along that ridge. He felt the beating of Lady Helena’s heart, as she clung to his arm.

He had no thought of turning back. Neither had John. The young captain, followed closely by the whole party, and protected by the intense darkness, crept along the ridge, stopping when some loose stone rolled to the bottom. If the savages were still in the ambush below, these unusual sounds might provoke from both sides a dangerous fusillade.

But speed was impossible in their serpent-like progress down this sloping crest. When John Mangles had reached the lowest point, he was scarcely twenty-five feet from the plateau, where the natives were encamped the night before, and then the ridge rose again pretty steeply toward a wood for about a quarter of a mile.

All this lower part was crossed without molestation, and they commenced the ascent in silence. The clump of bush was invisible, though they knew it was there, and but for the possibility of an ambush, Glenarvan counted on being safe when the party arrived at that point. But he observed that after this point, they were no longer protected by the taboo. The ascending ridge belonged not to Maunganamu, but to the mountain system of the eastern side of Lake Taupo, so that they had not only pistol shots, but hand-to-hand fighting to fear. For ten minutes, the little band ascended by insensible degrees toward the higher table-land. John could not discern the dark wood, but he knew it ought to be within two hundred feet. Suddenly he stopped; almost retreated. He fancied he heard something in the darkness; his stoppage interrupted the march of those behind.

He remained motionless long enough to alarm his companions. They waited with unspeakable anxiety, wondering if they were doomed to retrace their steps, and return to the summit of Maunganamu.

But John, finding that the noise was not repeated, resumed the ascent of the narrow path of the ridge. Soon they perceived the shadowy outline of the wood showing faintly through the darkness. A few steps more and they were hid from sight in the thick foliage of the trees.

CHAPTER XV FROM PERIL TO SAFETY

The night favored their escape, and prudence urged them to lose no time in getting away from the fatal neighborhood of Lake Taupo. Paganel took the post of leader, and his wonderful instinct shone out anew in this difficult mountain journey. His nyctalopia was a great advantage, his cat-like sight enabling him to distinguish the smallest object in the deepest gloom.

For three hours they walked on without halting along the far-reaching slope of the eastern side. Paganel kept a little to the southeast, in order to make use of a narrow passage between the Kaimanawa and the Wahiti Ranges, through which the road from Hawkes’ Bay to Auckland passes. Once through that gorge, his plan was to keep off the road, and, under the shelter of the high ranges, march to the coast across the inhabited regions of the province.

At nine o’clock in the morning, they had made twelve miles in twelve hours. The courageous women could not be pressed further, and, besides, the locality was suitable for camping. The fugitives had reached the pass that separates the two chains. Paganel, map in hand, made a loop toward the northeast, and at ten o’clock the little party reached a sort of redan, formed by a projecting rock.

The provisions were brought out, and justice was done to their meal. Mary Grant and the Major, who had not thought highly of the edible fern till then, now ate of it heartily.

The halt lasted till two o’clock in the afternoon, then they resumed their journey; and in the evening they stopped eight miles from the mountains, and required no persuasion to sleep in the open air.

Next day was one of serious difficulties. Their route lay across this wondrous region of volcanic lakes, geysers, and solfataras, which extended to the east of the Wahiti Ranges. It is a country more pleasant for the eye to ramble over, than for the limbs. Every quarter of a mile they had to turn aside or go around for some obstacle, and thus incurred great fatigue; but what a strange sight met their eyes! What infinite variety nature lavishes on her great panoramas!

On this vast extent of twenty miles square, the subterranean forces had a field for the display of all their varied
effects. Salt springs, of singular transparency, peopled by myriads of insects, sprang up from thickets of tea-tree scrub. They diffused a powerful odor of burnt powder, and scattered on the ground a white sediment like dazzling snow. The limpid waters were nearly at boiling point, while some neighboring springs spread out like sheets of glass. Gigantic tree-ferns grew beside them, in conditions analogous to those of the Silurian vegetation.

On every side jets of water rose like park fountains, out of a sea of vapor; some of them continuous, others intermittent, as if a capricious Pluto controlled their movements. They rose like an amphitheater on natural terraces; their waters gradually flowed together under folds of white smoke, and corroding the edges of the semi-transparent steps of this gigantic staircase. They fed whole lakes with their boiling torrents.

Farther still, beyond the hot springs and tumultuous geysers, came the solfataras. The ground looked as if covered with large pustules. These were slumbering craters full of cracks and fissures from which rose various gases. The air was saturated with the acrid and unpleasant odor of sulphurous acid. The ground was encrusted with sulphur and crystalline concretions. All this incalculable wealth had been accumulating for centuries, and if the sulphur beds of Sicily should ever be exhausted, it is here, in this little known district of New Zealand, that supplies must be sought.

The fatigue in traveling in such a country as this will be best understood. Camping was very difficult, and the sportsmen of the party shot nothing worthy of Olbinett's skill; so that they had generally to content themselves with fern and sweet potato--a poor diet which was scarcely sufficient to recruit the exhausted strength of the little party, who were all anxious to escape from this barren region.

But four days at least must elapse before they could hope to leave it. On February 23, at a distance of fifty miles from Maunganamu, Glenarvan called a halt, and camped at the foot of a nameless mountain, marked on Paganel's map. The wooded plains stretched away from sight, and great forests appeared on the horizon.

That day McNabbs and Robert killed three kiwis, which filled the chief place on their table, not for long, however, for in a few moments they were all consumed from the beaks to the claws.

At dessert, between the potatoes and sweet potatoes, Paganel moved a resolution which was carried with enthusiasm. He proposed to give the name of Glenarvan to this unnamed mountain, which rose 3,000 feet high, and then was lost in the clouds, and he printed carefully on his map the name of the Scottish nobleman.

It would be idle to narrate all the monotonous and uninteresting details of the rest of the journey. Only two or three occurrences of any importance took place on the way from the lakes to the Pacific Ocean. The march was all day long across forests and plains. John took observations of the sun and stars. Neither heat nor rain increased the discomfort of the journey, but the travelers were so reduced by the trials they had undergone, that they made very slow progress; and they longed to arrive at the mission station.

They still chatted, but the conversation had ceased to be general. The little party broke up into groups, attracted to each other, not by narrow sympathies, but by a more personal communion of ideas.

Glenarvan generally walked alone; his mind seemed to recur to his unfortunate crew, as he drew nearer to the sea. He apparently lost sight of the dangers which lay before them on their way to Auckland, in the thought of his massacred men; the horrible picture haunted him.

Harry Grant was never spoken of; they were no longer in a position to make any effort on his behalf. If his name was uttered at all, it was between his daughter and John Mangles.

John had never reminded Mary of what she had said to him on that last night at Ware-Atoua. He was too wise to take advantage of a word spoken in a moment of despair. When he mentioned Captain Grant, John always spoke of further search. He assured Mary that Lord Glenarvan would re-embark in the enterprise. He persistently returned to the fact that the authenticity of the document was indisputable, and that therefore Harry Grant was somewhere to be found, and that they would find him, if they had to try all over the world. Mary drank in his words, and she and John, united by the same thought, cherished the same hope. Often Lady Helena joined in the conversation; but she did not participate in their illusions, though she refrained from chilling their enthusiasm.

McNabbs, Robert, Wilson, and Mulrady kept up their hunting parties, without going far from the rest, and each one furnished his QUOTA of game.

Paganel, arrayed in his flax mat, kept himself aloof, in a silent and pensive mood.

And yet, it is only justice to say, in spite of the general rule that, in the midst of trials, dangers, fatigues, and privations, the most amiable dispositions become ruffled and embittered, all our travelers were united, devoted, ready to die for one another.

On the 25th of February, their progress was stopped by a river which answered to the Wakari on Paganel's map, and was easily forded. For two days plains of low scrub succeeded each other without interruption. Half the distance from Lake Taupo to the coast had been traversed without accident, though not without fatigue.

Then the scene changed to immense and interminable forests, which reminded them of Australia, but here the kauri took the place of the eucalyptus. Although their enthusiasm had been incessantly called forth during their four
months’ journey, Glenarvan and his companions were compelled to admire and wonder at those gigantic pines, worthy rivals of the Cedars of Lebanon, and the "Mammoth trees" of California. The kauris measured a hundred feet high, before the ramification of the branches. They grew in isolated clumps, and the forest was not composed of trees, but of innumerable groups of trees, which spread their green canopies in the air two hundred feet from the ground.

Some of these pines, still young, about a hundred years old, resembled the red pine of Europe. They had a dark crown surmounted by a dark conical shoot. Their older brethren, five or six hundred years of age, formed great green pavilions supported on the inextricable network of their branches. These patriarchs of the New Zealand forest measured fifty yards in circumference, and the united arms of all the travelers could not embrace the giant trunk.

For three days the little party made their way under these vast arches, over a clayey soil which the foot of man had never trod. They knew this by the quantity of resinous gum that lay in heaps at the foot of the trees, and which would have lasted for native exportation many years.

The sportsmen found whole coveys of the kiwi, which are scarce in districts frequented by the Maories; the native dogs drive them away to the shelter of these inaccessible forests. They were an abundant source of nourishing food to our travelers.

Paganel also had the good fortune to espy, in a thicket, a pair of gigantic birds; his instinct as a naturalist was awakened. He called his companions, and in spite of their fatigue, the Major, Robert, and he set off on the track of these animals.

His curiosity was excusable, for he had recognized, or thought he had recognized, these birds as "moas" belonging to the species of "dinornis," which many naturalists class with the extinct birds. This, if Paganel was right, would confirm the opinion of Dr. Hochstetter and other travelers on the present existence of the wingless giants of New Zealand.

These moas which Paganel was chasing, the contemporaries of the Megatherium and the Pterodactyles, must have been eighteen feet high. They were huge ostriches, timid too, for they fled with extreme rapidity. But no shot could stay their course. After a few minutes of chase, these fleet-footed moas disappeared among the tall trees, and the sportsmen lost their powder and their pains.

That evening, March 1, Glenarvan and his companions, emerging at last from the immense kauri-forest, camped at the foot of Mount Ikirangi, whose summit rose five thousand five hundred feet into the air. At this point they had traveled a hundred miles from Maunganamu, and the shore was still thirty miles away. John Mangles had calculated on accomplishing the whole journey in ten days, but he did not foresee the physical difficulties of the country.

On the whole, owing to the circuits, the obstacles, and the imperfect observations, the journey had been extended by fully one-fifth, and now that they had reached Mount Ikirangi, they were quite worn out.

Two long days of walking were still to be accomplished, during which time all their activity and vigilance would be required, for their way was through a district often frequented by the natives. The little party conquered their weariness, and set out next morning at daybreak.

Between Mount Ikirangi which was left to the right, and Mount Hardy whose summit rose on the left to a height of 3,700 feet, the journey was very trying; for about ten miles the bush was a tangle of "supple-jack," a kind of flexible rope, appropriately called "stifling-creeper," that caught the feet at every step. For two days, they had to cut their way with an ax through this thousand-headed hydra. Hunting became impossible, and the sportsmen failed in their accustomed tribute. The provisions were almost exhausted, and there was no means of renewing them; their thirst was increasing by fatigue, and there was no water wherewith to quench it.

The sufferings of Glenarvan and his party became terrible, and for the first time their moral energy threatened to give way. They no longer walked, they dragged themselves along, soulless bodies, animated only by the instinct of self-preservation which survives every other feeling, and in this melancholy plight they reached Point Lottin on the shores of the Pacific.

Here they saw several deserted huts, the ruins of a village lately destroyed by the war, abandoned fields, and everywhere signs of pillage and incendiary fires.

They were toiling painfully along the shore, when they saw, at a distance of about a mile, a band of natives, who rushed toward them brandishing their weapons. Glenarvan, hemmed in by the sea, could not fly, and summoning all his remaining strength he was about to meet the attack, when John Mangles cried:

"A boat! a boat!"

And there, twenty paces off, a canoe with six oars lay on the beach. To launch it, jump in and fly from the dangerous shore, was only a minute’s work. John Mangles, McNabbs, Wilson and Mulrady took the oars; Glenarvan the helm; the two women, Robert and Olbinett stretched themselves beside him. In ten minutes the canoe was a quarter of a mile from the shore. The sea was calm. The fugitives were silent. But John, who did not want to get too far from land, was about to give the order to go up the coast, when he suddenly stopped rowing.
He saw three canoes coming out from behind Point Lottin and evidently about to give chase.
"Out to sea! Out to sea!" he exclaimed. "Better to drown if we must!"

The canoe went fast under her four rowers. For half an hour she kept her distance; but the poor exhausted fellows grew weaker, and the three pursuing boats began to gain sensibly on them. At this moment, scarcely two miles lay between them. It was impossible to avoid the attack of the natives, who were already preparing to fire their long guns.

What was Glenarvan about?--standing up in the stern he was looking toward the horizon for some chimerical help. What did he hope for? What did he wish? Had he a presentiment?

In a moment his eyes gleamed, his hand pointed out into the distance.
"A ship! a ship!" he cried. "My friends, row! row hard!"

Not one of the rowers turned his head—not an oar-stroke must be lost. Paganel alone rose, and turned his telescope to the point indicated.
"Yes," said he, "a ship! a steamer! they are under full steam! they are coming to us! Found now, brave comrades!"

The fugitives summoned new energy, and for another half hour, keeping their distance, they rowed with hasty strokes. The steamer came nearer and nearer. They made out her two masts, bare of sails, and the great volumes of black smoke. Glenarvan, handing the tiller to Robert, seized Paganel's glass, and watched the movements of the steamer.

John Mangles and his companions were lost in wonder when they saw Glenarvan's features contract and grow pale, and the glass drop from his hands. One word explained it.
"The DUNCAN!" exclaimed Glenarvan. "The DUNCAN, and the convicts!"
"The DUNCAN!" cried John, letting go his oar and rising.
"Yes, death on all sides!" murmured Glenarvan, crushed by despair.

It was indeed the yacht, they could not mistake her—the yacht and her bandit crew!

The major could scarcely restrain himself from cursing their destiny.

The canoe was meantime standing still. Where should they go? Whither fly? What choice was there between the convicts and the savages?

A shot was fired from the nearest of the native boats, and the ball struck Wilson's oar.

A few strokes then carried the canoe nearer to the DUNCAN.
The yacht was coming down at full speed, and was not more than half a mile off.

John Mangles, between two enemies, did not know what to advise, whither to fly! The two poor ladies on their knees, prayed in their agony.

The savages kept up a running fire, and shots were raining round the canoe, when suddenly a loud report was heard, and a ball from the yacht's cannon passed over their heads, and now the boat remained motionless between the DUNCAN and the native canoes.

John Mangles, frenzied with despair, seized his ax. He was about to scuttle the boat and sink it with his unfortunate companions, when a cry from Robert arrested his arm.
"Tom Austin! Tom Austin!" the lad shouted. "He is on board! I see him! He knows us! He is waving his hat."
The ax hung useless in John's hand.

A second ball whistled over his head, and cut in two the nearest of the three native boats, while a loud hurrah burst forth on board the DUNCAN.
The savages took flight, fled and regained the shore.
"Come on, Tom, come on!" cried John Mangles in a joyous voice.

And a few minutes after, the ten fugitives, how, they knew not, were all safe on board the DUNCAN.

CHAPTER XVI WHY THE "DUNCAN" WENT TO NEW ZEALAND

It would be vain to attempt to depict the feelings of Glenarvan and his friends when the songs of old Scotia fell on their ears. The moment they set foot on the deck of the DUNCAN, the piper blew his bagpipes, and commenced the national pibroch of the Malcolm clan, while loud hurrahs rent the air.

Glenarvan and his whole party, even the Major himself, were crying and embracing each other. They were delirious with joy. The geographer was absolutely mad. He frisked about, telescope in hand, pointing it at the last canoe approaching the shore.

But at the sight of Glenarvan and his companions, with their clothing in rags, and thin, haggard faces, bearing marks of horrible sufferings, the crew ceased their noisy demonstrations. These were specters who had returned—not the bright, adventurous travelers who had left the yacht three months before, so full of hope! Chance, and chance only, had brought them back to the deck of the yacht they never thought to see again. And in what a state of exhaustion and feebleness. But before thinking of fatigue, or attending to the imperious demands of hunger and
thirst, Glenarvan questioned Tom Austin about his being on this coast.

Why had the DUNCAN come to the eastern coast of New Zealand? How was it not in the hands of Ben Joyce? By what providential fatality had God brought them in the track of the fugitives?

Why? how? and for what purpose? Tom was stormed with questions on all sides. The old sailor did not know which to listen to first, and at last resolved to hear nobody but Glenarvan, and to answer nobody but him.

"But the convicts?" inquired Glenarvan. "What did you do with them?"

"The convicts?" replied Tom, with the air of a man who does not in the least understand what he is being asked.

"Yes, the wretches who attacked the yacht."

"What yacht? Your Honor's?"

"Why, of course, Tom. The DUNCAN, and Ben Joyce, who came on board."

"I don't know this Ben Joyce, and have never seen him."

"Never seen him!" exclaimed Paganel, stupefied at the old sailor's replies. "Then pray tell me, Tom, how it is that the DUNCAN is cruising at this moment on the coast of New Zealand?"

But if Glenarvan and his friends were totally at a loss to understand the bewilderment of the old sailor, what was their amazement when he replied in a calm voice:

"The DUNCAN is cruising here by your Honor's orders."

"By my orders?" cried Glenarvan.

"Yes, my Lord. I only acted in obedience to the instructions sent in your letter of January fourteenth."

"My letter! my letter!" exclaimed Glenarvan.

The ten travelers pressed closer round Tom Austin, devouring him with their eyes. The letter dated from Snowy River had reached the DUNCAN, then.

"Let us come to explanations, pray, for it seems to me I am dreaming. You received a letter, Tom?"

"Yes, a letter from your Honor."

"At Melbourne?"

"At Melbourne, just as our repairs were completed."

"And this letter?"

"It was not written by you, but bore your signature, my Lord."

"Just so; my letter was brought by a convict called Ben Joyce."

"No, by a sailor called Ayrton, a quartermaster on the BRITANNIA."

"Yes, Ayrton or Ben Joyce, one and the same individual. Well, and what were the contents of this letter?"

"It contained orders to leave Melbourne without delay, and go and cruise on the eastern coast of--".

"Australia!" said Glenarvan with such vehemence that the old sailor was somewhat disconcerted.

"Of Australia?" repeated Tom, opening his eyes. "No, but New Zealand."

"Australia, Tom! Australia!" they all cried with one voice.

Austin's head began to feel in a whirl. Glenarvan spoke with such assurance that he thought after all he must have made a mistake in reading the letter. Could a faithful, exact old servant like himself have been guilty of such a thing? He turned red and looked quite disturbed.

"Never mind, Tom," said Lady Helena. "God so willed it."

"But, no, madam, pardon me," replied old Tom. "No, it is impossible, I was not mistaken. Ayrton read the letter as I did, and it was he, on the contrary, who wished to bring me to the Australian coast."

"Ayrton!" cried Glenarvan.

"Yes, Ayrton himself. He insisted it was a mistake: that you meant to order me to Twofold Bay."

"Have you the letter still, Tom?" asked the Major, extremely interested in this mystery.

"Yes, Mr. McNabbs," replied Austin. "I'll go and fetch it."

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He ran at once to his cabin in the forecastle. During his momentary absence they gazed at each other in silence, all but the Major, who crossed his arms and said:

"Well, now, Paganel, you must own this would be going a little too far."

"What?" growled Paganel, looking like a gigantic note of interrogation, with his spectacles on his forehead and his stooping back.

Austin returned directly with the letter written by Paganel and signed by Glenarvan.

"Will your Honor read it?" he said, handing it to him.

Glenarvan took the letter and read as follows:

"Order to Tom Austin to put out to sea without delay, and to take the Duncan, by latitude 37 degrees to the eastern coast of New Zealand!"

"New Zealand!" cried Paganel, leaping up.
And he seized the letter from Glenarvan, rubbed his eyes, pushed down his spectacles on his nose, and read it for himself.

"New Zealand!" he repeated in an indescribable tone, letting the order slip between his fingers.
That same moment he felt a hand laid on his shoulder, and turning round found himself face to face with the Major, who said in a grave tone:

"Well, my good Paganel, after all, it is a lucky thing you did not send the DUNCAN to Cochin China!"

This pleasantry finished the poor geographer. The crew burst out into loud Homeric laughter. Paganel ran about like a madman, seized his head with both hands and tore his hair. He neither knew what he was doing nor what he wanted to do. He rushed down the poop stairs mechanically and paced the deck, nodding to himself and going straight before without aim or object till he reached the forecastle. There his feet got entangled in a coil of rope. He stumbled and fell, accidentally catching hold of a rope with both hands in his fall.

Suddenly a tremendous explosion was heard. The forecastle gun had gone off, riddling the quiet calm of the waves with a volley of small shot. The unfortunate Paganel had caught hold of the cord of the loaded gun. The geographer was thrown down the forecastle ladder and disappeared below.

A cry of terror succeeded the surprise produced by the explosion. Everybody thought something terrible must have happened. The sailors rushed between decks and lifted up Paganel, almost bent double. The geographer uttered no sound.

They carried his long body onto the poop. His companions were in despair. The Major, who was always the surgeon on great occasions, began to strip the unfortunate that he might dress his wounds; but he had scarcely put his hands on the dying man when he started up as if touched by an electrical machine.

"Never! never!" he exclaimed, and pulling his ragged coat tightly round him, he began buttoning it up in a strangely excited manner.

"But, Paganel," began the Major.
"No, I tell you!"
"I must examine--"
"You shall not examine."
"You may perhaps have broken--" continued McNabbs.
"Yes," continued Paganel, getting up on his long legs, "but what I have broken the carpenter can mend."
"What is it, then?"
"There."

Bursts of laughter from the crew greeted this speech. Paganel's friends were quite reassured about him now. They were satisfied that he had come off safe and sound from his adventure with the forecastle gun.

At any rate," thought the Major, "the geographer is wonderfully bashful."
But now Paganel was recovered a little, he had to reply to a question he could not escape.

"Now, Paganel," said Glenarvan, "tell us frankly all about it. I own that your blunder was providential. It is sure and certain that but for you the DUNCAN would have fallen into the hands of the convicts; but for you we should have been recaptured by the Maories. But for my sake tell me by what supernatural aberration of mind you were induced to write New Zealand instead of Australia?"

"Well, upon my oath," said Paganel, "it is--"

But the same instant his eyes fell on Mary and Robert Grant, and he stopped short and then went on:

"What would you have me say, my dear Glenarvan? I am mad, I am an idiot, an incorrigible fellow, and I shall live and die the most terrible absent man. I can't change my skin."

"Unless you get flayed alive."

"Get flayed alive!" cried the geographer, with a furious look. "Is that a personal allusion?"

"An allusion to what?" asked McNabbs, quietly. This was all that passed. The mystery of the DUNCAN's presence on the coast was explained, and all that the travelers thought about now was to get back to their comfortable cabins, and to have breakfast.

However, Glenarvan and John Mangles stayed behind with Tom Austin after the others had retired. They wished to put some further questions to him.

"Now, then, old Austin," said Glenarvan, "tell me, didn't it strike you as strange to be ordered to go and cruise on the coast of New Zealand?"

"Yes, your Honor," replied Tom. "I was very much surprised, but it is not my custom to discuss any orders I receive, and I obeyed. Could I do otherwise? If some catastrophe had occurred through not carrying out your injunctions to the letter, should not I have been to blame? Would you have acted differently, captain?"

"No, Tom," replied John Mangles.
"But what did you think?" asked Glenarvan.
"I thought, your Honor, that in the interest of Harry Grant, it was necessary to go where I was told to go. I thought that in consequence of fresh arrangements, you were to sail over to New Zealand, and that I was to wait for you on the east coast of the island. Moreover, on leaving Melbourne, I kept our destination a secret, and the crew only knew it when we were right out at sea, and the Australian continent was finally out of sight. But one circumstance occurred which greatly perplexed me."

"What was it, Tom?" asked Glenarvan.

"Just this, that when the quartermaster of the BRITANNIA heard our destination--"

"Ayrton!" cried Glenarvan. "Then he is on board?"

"Yes, your Honor."

"Ayrton here?" repeated Glenarvan, looking at John Mangles.

"God has so willed!" said the young captain.

In an instant, like lightning, Ayrton's conduct, his long-planned treachery, Glenarvan's wound, Mulrady's assassination, the sufferings of the expedition in the marshes of the Snowy River, the whole past life of the miscreant, flashed before the eyes of the two men. And now, by the strangest concourse of events, the convict was in their power.

"Where is he?" asked Glenarvan eagerly.

"In a cabin in the forecastle, and under guard."

"Why was he imprisoned?"

"Because when Ayrton heard the vessel was going to New Zealand, he was in a fury; because he tried to force me to alter the course of the ship; because he threatened me; and, last of all, because he incited my men to mutiny. I saw clearly he was a dangerous individual, and I must take precautions against him."

"And since then?"

"Since then he has remained in his cabin without attempting to go out."

"That's well, Tom."

Just at this moment Glenarvan and John Mangles were summoned to the saloon where breakfast, which they so sorely needed, was awaiting them. They seated themselves at the table and spoke no more of Ayrton.

But after the meal was over, and the guests were refreshed and invigorated, and they all went upon deck, Glenarvan acquainted them with the fact of the quartermaster's presence on board, and at the same time announced his intention of having him brought before them.

"May I beg to be excused from being present at his examination?" said Lady Helena. "I confess, dear Edward, it would be extremely painful for me to see the wretched man."

"He must be confronted with us, Helena," replied Lord Glenarvan; "I beg you will stay. Ben Joyce must see all his victims face to face."

Lady Helena yielded to his wish. Mary Grant sat beside her, near Glenarvan. All the others formed a group round them, the whole party that had been compromised so seriously by the treachery of the convict. The crew of the yacht, without understanding the gravity of the situation, kept profound silence.

"Bring Ayrton here," said Glenarvan.

CHAPTER XVII AYRTON'S OBSTINACY

AYRTON came. He crossed the deck with a confident tread, and mounted the steps to the poop. His eyes were gloomy, his teeth set, his fists clenched convulsively. His appearance betrayed neither effrontery nor timidity. When he found himself in the presence of Lord Glenarvan he folded his arms and awaited the questions calmly and silently.

"Ayrton," said Glenarvan, "here we are then, you and us, on this very DUNCAN that you wished to deliver into the hands of the convicts of Ben Joyce."

The lips of the quartermaster trembled slightly and a quick flush suffused his impassive features. Not the flush of remorse, but of shame at failure. On this yacht which he thought he was to command as master, he was a prisoner, and his fate was about to be decided in a few seconds.

However, he made no reply. Glenarvan waited patiently. But Ayrton persisted in keeping absolute silence.

"Speak, Ayrton, what have you to say?" resumed Glenarvan.

Ayrton hesitated, the wrinkles in his forehead deepened, and at length he said in calm voice:

"I have nothing to say, my Lord. I have been fool enough to allow myself to be caught. Act as you please."

Then he turned his eyes away toward the coast which lay on the west, and affected profound indifference to what was passing around him. One would have thought him a stranger to the whole affair. But Glenarvan was determined to be patient. Powerful motives urged him to find out certain details concerning the mysterious life of Ayrton, especially those which related to Harry Grant and the BRITANNIA. He therefore resumed his interrogations, speaking with extreme gentleness and firmly restraining his violent irritation against him.
"I think, Ayrton," he went on, "that you will not refuse to reply to certain questions that I wish to put to you; and, first of all, ought I to call you Ayrton or Ben Joyce? Are you, or are you not, the quartermaster of the BRITANNIA?"

Ayrton remained impassive, gazing at the coast, deaf to every question.

Glenarvan's eyes kindled, as he said again:

"Will you tell me how you left the BRITANNIA, and why you are in Australia?"

The same silence, the same impassibility.

"Listen to me, Ayrton," continued Glenarvan; "it is to your interest to speak. Frankness is the only resource left to you, and it may stand you in good stead. For the last time, I ask you, will you reply to my questions?"

Ayrton turned his head toward Glenarvan, and looked into his eyes.

"My Lord," he said, "it is not for me to answer. Justice may witness against me, but I am not going to witness against myself."

"Proof will be easy," said Glenarvan.

"Easy, my Lord," repeated Ayrton, in a mocking tone. "Your honor makes rather a bold assertion there, it seems to me. For my own part, I venture to affirm that the best judge in the Temple would be puzzled what to make of me. Who will say why I came to Australia, when Captain Grant is not here to tell? Who will prove that I am the Ben Joyce placarded by the police, when the police have never had me in their hands, and my companions are at liberty? Who can damage me except yourself, by bringing forward a single crime against me, or even a blameable action? Who will affirm that I intended to take possession of this ship and deliver it into the hands of the convicts? No one, I tell you, no one. You have your suspicions, but you need certainties to condemn a man, and certainties you have none. Until there is a proof to the contrary, I am Ayrton, quartermaster of the BRITANNIA."

Ayrton had become animated while he was speaking, but soon relapsed into his former indifference.

He, no doubt, expected that his reply would close the examination, but Glenarvan commenced again, and said:

"Ayrton, I am not a Crown prosecutor charged with your indictment. That is no business of mine. It is important that our respective situations should be clearly defined. I am not asking you anything that could compromise you. That is for justice to do. But you know what I am searching for, and a single word may put me on the track I have lost. Will you speak?"

Ayrton shook his head like a man determined to be silent.

"Will you tell me where Captain Grant is?" asked Glenarvan.

"No, my Lord," replied Ayrton.

"Will you tell me where the BRITANNIA was wrecked?"

"No, neither the one nor the other."

"Ayrton," said Glenarvan, in almost beseeching tones, "if you know where Harry Grant is, will you, at least, tell his poor children, who are waiting for you to speak the word?"

Ayrton hesitated. His features contracted, and he muttered in a low voice, "I cannot, my Lord."

Then he added with vehemence, as if reproaching himself for a momentary weakness:

"No, I will not speak. Have me hanged, if you choose."

"Hanged!" exclaimed Glenarvan, overcome by a sudden feeling of anger.

But immediately mastering himself, he added in a grave voice:

"Ayrton, there is neither judge nor executioner here. At the first port we touch at, you will be given up into the hands of the English authorities."

"That is what I demand," was the quartermaster's reply.

Then he turned away and quietly walked back to his cabin, which served as his prison. Two sailors kept guard at the door, with orders to watch his slightest movement. The witnesses of this examination retired from the scene indignant and despairing.

As Glenarvan could make no way against Ayrton's obstinacy, what was to be done now? Plainly no course remained but to carry out the plan formed at Eden, of returning to Europe and giving up for the time this unsuccessful enterprise, for the traces of the BRITANNIA seemed irrevocably lost, and the document did not appear to allow any fresh interpretation. On the 37th parallel there was not even another country, and the DUNCAN had only to turn and go back.

After Glenarvan had consulted his friends, he talked over the question of returning, more particularly with the captain. John examined the coal bunkers, and found there was only enough to last fifteen days longer at the outside. It was necessary, therefore, to put in at the nearest port for a fresh supply.

John proposed that he should steer for the Bay of Talcahuano, where the DUNCAN had once before been revictualled before she commenced her voyage of circumnavigation. It was a direct route across, and lay exactly along the 37th parallel. From thence the yacht, being amply provisioned, might go south, double Cape Horn, and get
back to Scotland by the Atlantic route.

This plan was adopted, and orders were given to the engineer to get up the steam. Half an hour afterward the beak-head of the yacht was turned toward Talcahuano, over a sea worthy of being called the Pacific, and at six P. M. the last mountains of New Zealand had disappeared in warm, hazy mist on the horizon.

The return voyage was fairly commenced. A sad voyage, for the courageous searching party to come back to the port without bringing home Harry Grant with them! The crew, so joyous at departure and so hopeful, were coming back to Europe defeated and discouraged. There was not one among the brave fellows whose heart did not swell at the thought of seeing his own country once more; and yet there was not one among them either who would not have been willing to brave the perils of the sea for a long time still if they could but find Captain Grant.

Consequently, the hurrahs which greeted the return of Lord Glenarvan to the yacht soon gave place to dejection. Instead of the close intercourse which had formerly existed among the passengers, and the lively conversations which had cheered the voyage, each one kept apart from the others in the solitude of his own cabin, and it was seldom that anyone appeared on the deck of the DUNCAN.

Paganel, who generally shared in an exaggerated form the feelings of those about him, whether painful or joyous— a man who could have invented hope if necessary—even Paganel was gloomy and taciturn. He was seldom visible; his natural loquacity and French vivacity gave place to silence and dejection. He seemed even more downhearted than his companions. If Glenarvan spoke at all of renewing the search, he shook his head like a man who has given up all hope, and whose convictions concerning the fate of the shipwrecked men appeared settled. It was quite evident he believed them irrevocably lost.

And yet there was a man on board who could have spoken the decisive word, and refused to break his silence. This was Ayrton. There was no doubt the fellow knew, if not the present whereabouts of the captain, at least the place of shipwreck. But it was evident that were Grant found, he would be a witness against him. Hence his persistent silence, which gave rise to great indignation on board, especially among the crew, who would have liked to deal summarily with him.

Glenarvan repeatedly renewed his attempts with the quartermaster, but promises and threats were alike useless. Ayrton's obstinacy was so great, and so inexplicable, that the Major began to believe he had nothing to reveal. His opinion was shared, moreover, by the geographer, as it corroborated his own notion about Harry Grant.

But if Ayrton knew nothing, why did he not confess his ignorance? It could not be turned against him. His silence increased the difficulty of forming any new plan. Was the presence of the quartermaster on the Australian continent a proof of Harry Grant's being there? It was settled that they must get this information out of Ayrton.

Lady Helena, seeing her husband's ill-success, asked his permission to try her powers against the obstinacy of the convict. When a man had failed, a woman perhaps, with her gentler influence, might succeed. Is there not a constant repetition going on of the story of the fable where the storm, blow as it will, cannot tear the cloak from the shoulders of the traveler, while the first warm rays of sunshine make him throw it off immediately?

Glenarvan, knowing his young wife's good sense, allowed her to act as she pleased.

The same day (the 5th of March), Ayrton was conducted to Lady Helena's saloon. Mary Grant was to be present at the interview, for the influence of the young girl might be considerable, and Lady Helena would not lose any chance of success.

For a whole hour the two ladies were closeted with the quartermaster, but nothing transpired about their interview. What had been said, what arguments they used to win the secret from the convict, or what questions were asked, remained unknown; but when they left Ayrton, they did not seem to have succeeded, as the expression on their faces denoted discouragement.

In consequence of this, when the quartermaster was being taken back to his cabin, the sailors met him with violent menaces. He took no notice except by shrugging his shoulders, which so increased their rage, that John Mangles and Glenarvan had to interfere, and could only repress it with difficulty.

But Lady Helena would not own herself vanquished. She resolved to struggle to the last with this pitiless man, and went next day herself to his cabin to avoid exposing him again to the vindictiveness of the crew.

The good and gentle Scotchwoman stayed alone with the convict leader for two long hours. Glenarvan in a state of extreme nervous anxiety, remained outside the cabin, alternately resolved to exhaust completely this last chance of success, alternately resolved to rush in and snatch his wife from so painful a situation.

But this time when Lady Helena reappeared, her look was full of hope. Had she succeeded in extracting the secret, and awakening in that adamantine heart a last faint touch of pity?

McNabbs, who first saw her, could not restrain a gesture of incredulity.

However the report soon spread among the sailors that the quartermaster had yielded to the persuasions of Lady Helena. The effect was electrical. The entire crew assembled on deck far quicker than Tom Austin's whistle could have brought them together.
Glenarvan had hastened up to his wife and eagerly asked:
"Has he spoken?"
"No," replied Lady Helena, "but he has yielded to my entreaties, and wishes to see you."
"Ah, dear Helena, you have succeeded!"
"I hope so, Edward."
"Have you made him any promise that I must ratify?"
"Only one; that you will do all in your power to mitigate his punishment."
"Very well, dear Helena. Let Ayrton come immediately."
Lady Helena retired to her cabin with Mary Grant, and the quartermaster was brought into the saloon where Lord Glenarvan was expecting him.

CHAPTER XVIII A DISCOURAGING CONFESSION

As soon as the quartermaster was brought into the presence of Lord Glenarvan, his keepers withdrew.
"You wanted to speak to me, Ayrton?" said Glenarvan.
"Yes, my Lord," replied the quartermaster.
"Did you wish for a private interview?"
"Yes, but I think if Major McNabbs and Mr. Paganel were present it would be better."
"For whom?"
"For myself."

Ayrton spoke quite calmly and firmly. Glenarvan looked at him for an instant, and then sent to summon McNabbs and Paganel, who came at once.
"We are all ready to listen to you," said Glenarvan, when his two friends had taken their place at the saloon table. Ayrton collected himself, for an instant, and then said:
"My Lord, it is usual for witnesses to be present at every contract or transaction between two parties. That is why I desire the presence of Messrs. Paganel and McNabbs, for it is, properly speaking, a bargain which I propose to make."

Glenarvan, accustomed to Ayrton's ways, exhibited no surprise, though any bargaining between this man and himself seemed strange.
"What is the bargain?" he said.
"This," replied Ayrton. "You wish to obtain from me certain facts which may be useful to you. I wish to obtain from you certain advantages which would be valuable to me. It is giving for giving, my Lord. Do you agree to this or not?"
"What are the facts?" asked Paganel eagerly.
"No," said Glenarvan. "What are the advantages?"
Ayrton bowed in token that he understood Glenarvan's distinction.
"These," he said, "are the advantages I ask. It is still your intention, I suppose, to deliver me up to the English authorities?"
"Yes, Ayrton, it is only justice."
"I don't say it is not," replied the quartermaster quietly. "Then of course you would never consent to set me at liberty."

Glenarvan hesitated before replying to a question so plainly put. On the answer he gave, perhaps the fate of Harry Grant might depend!
However, a feeling of duty toward human justice compelled him to say:
"No, Ayrton, I cannot set you at liberty."
"I do not ask it," said the quartermaster proudly.
"Then, what is it you want?"
"A middle place, my Lord, between the gibbet that awaits me and the liberty which you cannot grant me."
"And that is--"
"To allow me to be left on one of the uninhabited islands of the Pacific, with such things as are absolute necessaries. I will manage as best I can, and will repent if I have time."

Glenarvan, quite unprepared for such a proposal, looked at his two friends in silence. But after a brief reflection, he replied:
"Ayrton, if I agree to your request, you will tell me all I have an interest in knowing."
"Yes, my Lord, that is to say, all I know about Captain Grant and the BRITANNIA."
"The whole truth?"
"The whole."
"But what guarantee have I?"
"Oh, I see what you are uneasy about. You need a guarantee for me, for the truth of a criminal. That's natural. But what can you have under the circumstances. There is no help for it, you must either take my offer or leave it."

"I will trust to you, Ayrton," said Glenarvan, simply.

"And you do right, my Lord. Besides, if I deceive you, vengeance is in your own power."

"How?"

"You can come and take me again from where you left me, as I shall have no means of getting away from the island."

Ayrton had an answer for everything. He anticipated the difficulties and furnished unanswerable arguments against himself. It was evident he intended to affect perfect good faith in the business. It was impossible to show more complete confidence. And yet he was prepared to go still further in disinterestedness.

"My Lord and gentlemen," he added, "I wish to convince you of the fact that I am playing cards on the table. I have no wish to deceive you, and I am going to give you a fresh proof of my sincerity in this matter. I deal frankly with you, because I reckon on your honor."

"Speak, Ayrton," said Glenarvan.

"My Lord, I have not your promise yet to accede to my proposal, and yet I do not scruple to tell you that I know very little about Harry Grant."

"Very little," exclaimed Glenarvan.

"Yes, my Lord, the details I am in a position to give you relate to myself. They are entirely personal, and will not do much to help you to recover the lost traces of Captain Grant."

Keen disappointment was depicted on the faces of Glenarvan and the Major. They thought the quartermaster in the possession of an important secret, and he declared that his communications would be very nearly barren. Paganel's countenance remained unmoved.

Somehow or other, this avowal of Ayrton, and surrender of himself, so to speak, unconditionally, singularly touched his auditors, especially when the quartermaster added:

"So I tell you beforehand, the bargain will be more to my profit than yours."

"It does not signify," replied Glenarvan. "I accept your proposal, Ayrton. I give you my word to land you on one of the islands of the Pacific Ocean."

"All right, my Lord," replied the quartermaster.

Was this strange man glad of this decision? One might have doubted it, for his impassive countenance betokened no emotion whatever. It seemed as if he were acting for someone else rather than himself.

"I am ready to answer," he said.

"We have no questions to put to you," said Glenarvan. "Tell us all you know, Ayrton, and begin by declaring who you are."

"Gentlemen," replied Ayrton, "I am really Tom Ayrton, the quartermaster of the BRITANNIA. I left Glasgow on Harry Grant's ship on the 12th of March, 1861. For fourteen months I cruised with him in the Pacific in search of an advantageous spot for founding a Scotch colony. Harry Grant was the man to carry out grand projects, but serious disputes often arose between us. His temper and mine could not agree. I cannot bend, and with Harry Grant, when once his resolution is taken, any resistance is impossible, my Lord. He has an iron will both for himself and others."

"But in spite of that, I dared to rebel, and I tried to get the crew to join me, and to take possession of the vessel. Whether I was to blame or not is of no consequence. Be that as it may, Harry Grant had no scruples, and on the 8th of April, 1862, he left me behind on the west coast of Australia."

"Of Australia!" said the Major, interrupting Ayrton in his narrative. "Then of course you had quitted the BRITANNIA before she touched at Callao, which was her last date?"

"Yes," replied the quartermaster, "for the BRITANNIA did not touch there while I was on board. And how I came to speak of Callao at Paddy O'Moore's farm was that I learned the circumstances from your recital."

"Go on, Ayrton," said Glenarvan.

"I found myself abandoned on a nearly desert coast, but only forty miles from the penal settlement at Perth, the capital of Western Australia. As I was wandering there along the shore, I met a band of convicts who had just escaped, and I joined myself to them. You will dispense, my Lord, with any account of my life for two years and a half. This much, however, I must tell you, that I became the leader of the gang, under the name of Ben Joyce. In September, 1864, I introduced myself at the Irish farm, where I engaged myself as a servant in my real name, Ayrton. I waited there till I should get some chance of seizing a ship. This was my one idea. Two months afterward the DUNCAN arrived. During your visit to the farm you related Captain Grant's history, and I learned then facts of which I was not previously aware-- that the BRITANNIA had touched at Callao, and that her latest news was dated June, 1862, two months after my disembarkation, and also about the document and the loss of the ship somewhere along the 37th parallel; and, lastly, the strong reasons you had for supposing Harry Grant was on the Australian
continent. Without the least hesitation I determined to appropriate the DUNCAN, a matchless vessel, able to outdistance the swiftest ships in the British Navy. But serious injuries had to be repaired. I therefore let it go to Melbourne, and joined myself to you in my true character as quartermaster, offering to guide you to the scene of the shipwreck, fictitiously placed by me on the east coast of Australia. It was in this way, followed or sometimes preceded by my gang of convicts, I directed your expedition toward the province of Victoria. My men committed a bootless crime at Camden Bridge; since the DUNCAN, if brought to the coast, could not escape me, and with the yacht once mine, I was master of the ocean. I led you in this way unsuspiciously as far as the Snowy River. The horses and bullocks dropped dead one by one, poisoned by the gastrolobium. I dragged the wagon into the marshes, where it got half buried. At my instance—but you know the rest, my Lord, and you may be sure that but for the blunder of Mr. Paganel, I should now command the DUNCAN. Such is my history, gentlemen. My disclosures, unfortunately, cannot put you on the track of Harry Grant, and you perceive that you have made but a poor bargain by coming to my terms."

The quartermaster said no more, but crossed his arms in his usual fashion and waited. Glenarvan and his friends kept silence. They felt that this strange criminal had spoken the whole truth. He had only missed his coveted prize, the DUNCAN, through a cause independent of his will. His accomplices had gone to Twofold Bay, as was proved by the convict blouse found by Glenarvan. Faithful to the orders of their chief, they had kept watch on the yacht, and at length, weary of waiting, had returned to the old haunt of robbers and incendiaries in the country parts of New South Wales.

The Major put the first question, his object being to verify the dates of the BRITANNIA.
"You are sure then," he said, "that it was on the 8th of April you were left on the west coast of Australia?"
"On that very day," replied Ayrton.
"And do you know what projects Harry Grant had in view at the time?"
"In an indefinite way I do."
"Say all you can, Ayrton," said Glenarvan, "the least indication may set us in the right course."
"I only know this much, my Lord," replied the quartermaster, "that Captain Grant intended to visit New Zealand. Now, as this part of the programme was not carried out while I was on board, it is not impossible that on leaving Callao the BRITANNIA went to reconnoiter New Zealand. This would agree with the date assigned by the document to the shipwreck—the 27th of June, 1862."
"Clearly," said Paganel.
"But," objected Glenarvan, "there is nothing in the fragmentary words in the document that could apply to New Zealand."
"That I cannot answer," said the quartermaster.
"Well, Ayrton," said Glenarvan, "you have kept your word, and I will keep mine. We have to decide now on what island of the Pacific Ocean you are to be left?"
"It matters little, my Lord," replied Ayrton.
"Return to your cabin," said Glenarvan, "and wait our decision."
The quartermaster withdrew, guarded by the two sailors.
"That villain might have been a man," said the Major.
"Yes," returned Glenarvan; "he is a strong, clear-headed fellow. Why was it that he must needs turn his powers to such evil account?"
"But Harry Grant?"
"I must fear he is irrevocably lost. Poor children! Who can tell them where their father is?"
"I can!" replied Paganel. "Yes; I can!" One could not help remarking that the geographer, so loquacious and impatient usually, had scarcely spoken during Ayrton's examination. He listened without opening his mouth. But this speech of his now was worth many others, and it made Glenarvan spring to his feet, crying out: "You, Paganel! you know where Captain Grant is?"
"Yes, as far as can be known."
"How do you know?"
"From that infernal document."
"Ah!" said the Major, in a tone of the most profound incredulity.
"Hear me first, and shrug your shoulders afterward," said Paganel. "I did not speak sooner, because you would not have believed me. Besides, it was useless; and I only speak to-day because Ayrton's opinion just supports my own."

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"Then it is New Zealand?" asked Glenarvan.
"Listen and judge," replied Paganel. "It is not without reason, or, rather, I had a reason for making the blunder
which has saved our lives. When I was in the very act of writing the letter to Glenarvan's dictation, the word ZEALAND was swimming in my brain. This is why. You remember we were in the wagon. McNabbs had just apprised Lady Helena about the convicts; he had given her the number of the _Australian and New Zealand Gazette_, which contained the account of the catastrophe at Camden Bridge. Now, just as I was writing, the newspaper was lying on the ground, folded in such a manner that only two syllables of the title were visible; these two syllables were ALAND. What a sudden light flashed on my mind. ALAND was one of the words in the English document, one that hitherto we had translated _a terre_, and which must have been the termination of the proper noun, ZEALAND."

"Indeed!" said Glenarvan.

"Yes," continued Paganel, with profound conviction; "this meaning had escaped me, and do you know why? Because my wits were exercised naturally on the French document, as it was most complete, and in that this important word was wanting."

"Oh, oh!" said the Major; "your imagination goes too far, Paganel; and you forget your former deductions."

"Go on, Major; I am ready to answer you."

"Well, then, what do you make of your word AUSTRAL?"

"What it was at first. It merely means southern countries."

"Well, and this syllable, INDI, which was first the root of the INDIANS, and second the root of the word _indigenes?""

"And CONTIN?" cried McNabbs. "Does that still mean CONTINENT?"

"No; since New Zealand is only an island."

"What then?" asked Glenarvan.

"My dear lord," replied Paganel, "I am going to translate the document according to my third interpretation, and you shall judge. I only make two observations beforehand. First, forget as much as possible preceding interpretations, and divest your mind of all preconceived notions. Second, certain parts may appear to you strained, and it is possible that I translate them badly; but they are of no importance; among others, the word AGONIE, which chokes me; but I cannot find any other explanation. Besides, my interpretation was founded on the French document; and don't forget it was written by an Englishman, who could not be familiar with the idioms of the French language. Now then, having said this much, I will begin."

And slowly articulating each syllable, he repeated the following sentences:

"LE 27th JUIN, 1862, _le trois-mats Britannia_, de _Glasgow, a submergé apres une longue AGONIE dans les mers AUSTRALES sur les cotes de la Nouvelle ZELANDE--in English _Zealand. Deux matelots et le _Capitaine Grant_ ont pu y ABORDER. La CONTINUEllement en PRoie a une CRUELle INDIgence, ils ont _jete ce document_ par--_de longitude ET 37 degrees 11' de LATItude. _Venex a leur_ secours, ou ils sont PERDUS!" (On the 27th of June, 1865, the three-mast vessel BRITANNIA, of Glasgow, has foundered after a long AGOnie in the Southern Seas, on the coast of New Zealand. Two sailors and Captain Grant have succeeded in landing. Continually a prey to cruel indigence, they have thrown this document into the sea in-- longitude and 37 degrees 11' latitude. Come to their help, or they are lost.)

Paganel stopped. His interpretation was admissible. But precisely because it appeared as likely as the preceding, it might be as false. Glenarvan and the Major did not then try and discuss it. However, since no traces of the BRITANNIA had yet been met with, either on the Patagonian or Australian coasts, at the points where these countries are crossed by the 37th parallel, the chances were in favor of New Zealand.

"Now, Paganel," said Glenarvan, "will you tell me why you have kept this interpretation secret for nearly two months?"

"Because I did not wish to buoy you up again with vain hopes. Besides, we were going to Auckland, to the very spot indicated by the latitude of the document."

"But since then, when we were dragged out of the route, why did you not speak?"

"Because, however just the interpretation, it could do nothing for the deliverance of the captain."

"Why not, Paganel?"

"Because, admitting that the captain was wrecked on the New Zealand coast, now that two years have passed and he has not reappeared, he must have perished by shipwreck or by the New Zealanders."

"Then you are of the opinion," said Glenarvan, "that--"

"That vestiges of the wreck might be found; but that the survivors of the BRITANNIA have, beyond doubt, perished."

"Keep all this silent, friends," said Glenarvan, "and let me choose a fitting moment to communicate these sad tidings to Captain Grant's children."
CHAPTER XIX A CRY IN THE NIGHT

THE crew soon heard that no light had been thrown on the situation of Captain Grant by the revelations of Ayrton, and it caused profound disappointment among them, for they had counted on the quartermaster, and the quartermaster knew nothing which could put the DUNCAN on the right track.

The yacht therefore continued her course. They had yet to select the island for Ayrton's banishment.

Paganel and John Mangles consulted the charts on board, and exactly on the 37th parallel found a little isle marked by the name of Maria Theresa, a sunken rock in the middle of the Pacific Ocean, 3,500 miles from the American coast, and 1,500 miles from New Zealand. The nearest land on the north was the Archipelago of Pomotou, under the protectorate of France; on the south there was nothing but the eternal ice-belt of the Polar Sea. No ship would come to reconnoiter this solitary isle. No echoes from the world would ever reach it. The storm birds only would rest awhile on it during their long flight, and in many charts the rock was not even marked.

If ever complete isolation was to be found on earth, it was on this little out-of-the-way island. Ayrton was informed of its situation, and expressed his willingness to live there apart from his fellows. The head of the vessel was in consequence turned toward it immediately.

Two days later, at two o'clock, the man on watch signaled land on the horizon. This was Maria Theresa, a low, elongated island, scarcely raised above the waves, and looking like an enormous whale. It was still thirty miles distant from the yacht, whose stem was rapidly cutting her way over the water at the rate of sixteen knots an hour.

Gradually the form of the island grew more distinct on the horizon. The orb of day sinking in the west, threw up its peculiar outlines in sharp relief. A few peaks of no great elevation stood out here and there, tipped with sunlight.

At five o'clock John Mangles could discern a light smoke rising from it.

"Is it a volcano?" he asked of Paganel, who was gazing at this new land through his telescope.

"I don't know what to think," replied the geographer; "Maria Theresa is a spot little known; nevertheless, it would not be surprising if its origin were due to some submarine upheaval, and consequently it may be volcanic."

"But in that case," said Glenarvan, "is there not reason to fear that if an eruption produced it, an eruption may carry it away?"

"That is not possible," replied Paganel. "We know of its existence for several centuries, which is our security. When the Isle Julia emerged from the Mediterranean, it did not remain long above the waves, and disappeared a few months after its birth."

"Very good," said Glenarvan. "Do you think, John, we can get there to-night?"

"No, your honor, I must not risk the DUNCAN in the dark, for I am unacquainted with the coast. I will keep under steam, but go very slowly, and to-morrow, at daybreak, we can send off a boat."

At eight o'clock in the evening, Maria Theresa, though five miles to leeward, appeared only an elongated shadow, scarcely visible. The DUNCAN was always getting nearer.

At nine o'clock, a bright glare became visible, and flames shot up through the darkness. The light was steady and continued.

"That confirms the supposition of a volcano," said Paganel, observing it attentively.

"Yet," replied John Mangles, "at this distance we ought to hear the noise which always accompanies an eruption, and the east wind brings no sound whatever to our ear."

"That's true," said Paganel. "It is a volcano that blazes, but does not speak. The gleam seems intermittent too, sometimes, like that of a lighthouse."

"You are right," said John Mangles, "and yet we are not on a lighted coast."

"Ah!" he exclaimed, "another fire? On the shore this time! Look! It moves! It has changed its place!"

John was not mistaken. A fresh fire had appeared, which seemed to die out now and then, and suddenly flare up again.

"Is the island inhabited then?" said Glenarvan.

"By savages, evidently," replied Paganel.

"But in that case, we cannot leave the quartermaster there."

"No," replied the Major, "he would be too bad a gift even to bestow on savages."

"We must find some other uninhabited island," said Glenarvan, who could not help smiling at the delicacy of McNabbs. "I promised Ayrton his life, and I mean to keep my promise."

"At all events, don't let us trust them," added Paganel. "The New Zealanders have the barbarous custom of deceiving ships by moving lights, like the wreckers on the Cornish coast in former times. Now the natives of Maria Theresa may have heard of this proceeding."

"Keep her off a point," called out John to the man at the helm. "To-morrow at sunrise we shall know what we're about."

At eleven o'clock, the passengers and John Mangles retired to their cabins. In the forepart of the yacht the man
on watch was pacing the deck, while aft, there was no one but the man at the wheel.

At this moment Mary Grant and Robert came on the poop.

The two children of the captain, leaning over the rail, gazed sadly at the phosphorescent waves and the luminous wake of the DUNCAN. Mary was thinking of her brother's future, and Robert of his sister's. Their father was uppermost in the minds of both. Was this idolized parent still in existence? Must they give him up? But no, for what would life be without him? What would become of them without him? What would have become of them already, but for Lord Glenarvan and Lady Helena?

The young boy, old above his years through trouble, divined the thoughts that troubled his sister, and taking her hand in his own, said, "Mary, we must never despair. Remember the lessons our father gave us. Keep your courage up and no matter what befalls you, let us show this obstinate courage which can rise above everything. Up to this time, sister, you have been working for me, it is my turn now, and I will work for you."

"Dear Robert!" replied the young girl.

"I must tell you something," resumed Robert. "You mustn't be vexed, Mary!"

"Why should I be vexed, my child?"

"And you will let me do it?"

"What do you mean?" said Mary, getting uneasy.

"Sister, I am going to be a sailor!"

"You are going to leave me!" cried the young girl, pressing her brother's hand.

"Yes, sister; I want to be a sailor, like my father and Captain John. Mary, dear Mary, Captain John has not lost all hope, he says. You have confidence in his devotion to us, and so have I. He is going to make a grand sailor out of me some day, he has promised me he will; and then we are going to look for our father together. Tell me you are willing, sister mine. What our father would have done for us it is our duty, mine, at least, to do for him. My life has one purpose to which it should be entirely consecrated-- that is to search, and never cease searching for my father, who would never have given us up. Ah, Mary, how good our father was!"

"And so noble, so generous!" added Mary. "Do you know, Robert, he was already a glory to our country, and that he would have been numbered among our great men if fate had not arrested his course."

"Yes, I know it," said Robert.

Mary put her arm around the boy, and hugged him fondly as he felt her tears fall on his forehead.

"Mary, Mary!" he cried, "it doesn't matter what our friends say, I still hope, and will always hope. A man like my father doesn't die till he has finished his work."

Mary Grant could not reply. Sobs choked her voice. A thousand feelings struggled in her breast at the news that fresh attempts were about to be made to recover Harry Grant, and that the devotion of the captain was so unbounded.

"And does Mr. John still hope?" she asked.

"Yes," replied Robert. "He is a brother that will never forsake us, never! I will be a sailor, you'll say yes, won't you, sister? And let me join him in looking for my father. I am sure you are willing."

"Yes, I am willing," said Mary. "But the separation!" she murmured.

"You will not be alone, Mary, I know that. My friend John told me so. Lady Helena will not let you leave her. You are a woman; you can and should accept her kindness. To refuse would be ungrateful, but a man, my father has said a hundred times, must make his own way."

"But what will become of our own dear home in Dundee, so full of memories?"

"We will keep it, little sister! All that is settled, and settled so well, by our friend John, and also by Lord Glenarvan. He is to keep you at Malcolm Castle as if you were his daughter. My Lord told my friend John so, and he told me. You will be at home there, and have someone to speak to about our father, while you are waiting till John and I bring him back to you some day. Ah! what a grand day that will be!" exclaimed Robert, his face glowing with enthusiasm.

"My boy, my brother," replied Mary, "how happy my father would be if he could hear you. How much you are like him, dear Robert, like our dear, dear father. When you grow up you'll be just himself."

"I hope I may," said Robert, blushing with filial and sacred pride.

"But how shall we requite Lord and Lady Glenarvan?" said Mary Grant.

"Oh, that will not be difficult," replied Robert, with boyish confidence. "We will love and revere them, and we will tell them so; and we will give them plenty of kisses, and some day, when we can get the chance, we will die for them."

"We'll live for them, on the contrary," replied the young girl, covering her brother's forehead with kisses. "They will like that better, and so shall I."

The two children then relapsed into silence, gazing out into the dark night, and giving way to long reveries,
interrupted occasionally by a question or remark from one to the other. A long swell undulated the surface of the calm sea, and the screw turned up a luminous furrow in the darkness.

A strange and altogether supernatural incident now occurred. The brother and sister, by some of those magnetic communications which link souls mysteriously together, were the subjects at the same time and the same instant of the same hallucination.

Out of the midst of these waves, with their alternations of light and shadow, a deep plaintive voice sent up a cry, the tones of which thrilled through every fiber of their being.
"Come! come!" were the words which fell on their ears.
They both started up and leaned over the railing, and peered into the gloom with questioning eyes.
"Mary, you heard that? You heard that?" cried Robert.
But they saw nothing but the long shadow that stretched before them.
"Robert," said Mary, pale with emotion, "I thought--yes, I thought as you did, that--We must both be ill with fever, Robert."

A second time the cry reached them, and this time the illusion was so great, that they both exclaimed simultaneously, "My father! My father!"

It was too much for Mary. Overcome with emotion, she fell fainting into Robert's arms.
"Help!" shouted Robert. "My sister! my father! Help! Help!"
The man at the wheel darted forward to lift up the girl. The sailors on watch ran to assist, and John Mangles, Lady Helena, and Glenarvan were hastily roused from sleep.
"My sister is dying, and my father is there!" exclaimed Robert, pointing to the waves.
They were wholly at a loss to understand him.
"Yes!" he repeated, "my father is there! I heard my father's voice; Mary heard it too!"

Just at this moment, Mary Grant recovering consciousness, but wandering and excited, called out, "My father! my father is there!"

And the poor girl started up, and leaning over the side of the yacht, wanted to throw herself into the sea.
"My Lord--Lady Helena!" she exclaimed, clasping her hands, "I tell you my father is there! I can declare that I heard his voice come out of the waves like a wail, as if it were a last adieu."
The young girl went off again into convulsions and spasms, which became so violent that she had to be carried to her cabin, where Lady Helena lavished every care on her. Robert kept on repeating, "My father! my father is there! I am sure of it, my Lord!"

The spectators of this painful scene saw that the captain's children were laboring under an hallucination. But how were they to be undeceived?

Glenarvan made an attempt, however. He took Robert's hand, and said, "You say you heard your father's voice, my dear boy?"
"Yes, my Lord; there, in the middle of the waves. He cried out, 'Come! come!'"
"And did you recognize his voice?"
"Yes, I recognized it immediately. Yes, yes; I can swear to it! My sister heard it, and recognized it as well. How could we both be deceived? My Lord, do let us go to my father's help. A boat! a boat!"

Glenarvan saw it was impossible to undeceive the poor boy, but he tried once more by saying to the man at the wheel:
"Hawkins, you were at the wheel, were you not, when Miss Mary was so strangely attacked?"
"Yes, your Honor," replied Hawkins.
"And you heard nothing, and saw nothing?"
"Nothing."
"Now Robert, see?"
"If it had been Hawkins's father," returned the boy, with indomitable energy, "Hawkins would not say he had heard nothing. It was my father, my lord! my father."

Sobs choked his voice; he became pale and silent, and presently fell down insensible, like his sister.
Glenarvan had him carried to his bed, where he lay in a deep swoon.
"Poor orphans," said John Mangles. "It is a terrible trial they have to bear!"
"Yes," said Glenarvan; "excessive grief has produced the same hallucination in both of them, and at the same time."

"In both of them!" muttered Paganel; "that's strange, and pure science would say inadmissible."
He leaned over the side of the vessel, and listened attentively, making a sign to the rest to keep still.
But profound silence reigned around. Paganel shouted his loudest. No response came.
"It is strange," repeated the geographer, going back to his cabin. "Close sympathy in thought and grief does not
suffice to explain this phenomenon.

Next day, March 4, at 5 A.M., at dawn, the passengers, including Mary and Robert, who would not stay behind, were all assembled on the poop, each one eager to examine the land they had only caught a glimpse of the night before.

The yacht was coasting along the island at the distance of about a mile, and its smallest details could be seen by the eye.

Suddenly Robert gave a loud cry, and exclaimed he could see two men running about and gesticulating, and a third was waving a flag.

"The Union Jack," said John Mangles, who had caught up a spy-glass.

"True enough," said Paganel, turning sharply round toward Robert.

"My Lord," said Robert, trembling with emotion, "if you don't want me to swim to the shore, let a boat be lowered. Oh, my Lord, I implore you to let me be the first to land.

No one dared to speak. What! on this little isle, crossed by the 37th parallel, there were three men, shipwrecked Englishmen! Instantaneously everyone thought of the voice heard by Robert and Mary the preceding night. The children were right, perhaps, in the affirmation. The sound of a voice might have reached them, but this voice-- was it their father's? No, alas, most assuredly no. And as they thought of the dreadful disappointment that awaited them, they trembled lest this new trial should crush them completely. But who could stop them from going on shore? Lord Glenarvan had not the heart to do it.

"Lower a boat," he called out.

Another minute and the boat was ready. The two children of Captain Grant, Glenarvan, John Mangles, and Paganel, rushed into it, and six sailors, who rowed so vigorously that they were presently almost close to the shore.

At ten fathoms' distance a piercing cry broke from Mary's lips.

"My father!" she exclaimed.

A man was standing on the beach, between two others. His tall, powerful form, and his physiognomy, with its mingled expression of boldness and gentleness, bore a resemblance both to Mary and Robert. This was indeed the man the children had so often described. Their hearts had not deceived them. This was their father, Captain Grant!

The captain had heard Mary's cry, for he held out his arms, and fell flat on the sand, as if struck by a thunderbolt.

CHAPTER XX CAPTAIN GRANT'S STORY

JOY does not kill, for both father and children recovered before they had reached the yacht. The scene which followed, who can describe? Language fails. The whole crew wept aloud at the sight of these three clasped together in a close, silent embrace.

The moment Harry Grant came on deck, he knelt down reverently. The pious Scotchman's first act on touching the yacht, which to him was the soil of his native land, was to return thanks to the God of his deliverance. Then, turning to Lady Helena and Lord Glenarvan, and his companions, he thanked them in broken words, for his heart was too full to speak. During the short passage from the isle to the yacht, his children had given him a brief sketch of the DUNCAN'S history.

What an immense debt he owed to this noble lady and her friends! From Lord Glenarvan, down to the lowest sailor on board, how all had struggled and suffered for him! Harry Grant expressed his gratitude with such simplicity and nobleness, his manly face suffused with pure and sweet emotion, that the whole crew felt amply recompensed for the trials they had undergone. Even the impassable Major himself felt a tear steal down his cheek in spite of all his self-command; while the good, simple Paganel cried like a child who does not care who sees his tears.

Harry Grant could not take his eyes off his daughter. He thought her beautiful, charming; and he not only said so to himself, but repeated it aloud, and appealed to Lady Helena for confirmation of his opinion, as if to convince himself that he was not blinded by his paternal affection. His boy, too, came in for admiration. "How he has grown! he is a man!" was his delighted exclamation. And he covered the two children so dear to him with the kisses he had been heaping up for them during his two years of absence.

Robert then presented all his friends successively, and found means always to vary the formula of introduction, though he had to say the same thing about each. The fact was, each and all had been perfect in the children's eyes.

John Mangles blushed like a child when his turn came, and his voice trembled as he spoke to Mary's father.

Lady Helena gave Captain Grant a narrative of the voyage, and made him proud of his son and daughter. She told him of the young hero's exploits, and how the lad had already paid back part of the paternal debt to Lord Glenarvan. John Mangles sang Mary's praises in such terms, that Harry Grant, acting on a hint from Lady Helena, put his daughter's hand into that of the brave young captain, and turning to Lord and Lady Glenarvan, said: "My Lord, and you, Madam, also give your blessing to our children."

When everything had been said and re-said over and over again, Glenarvan informed Harry Grant about Ayrton. Grant confirmed the quartermaster's confession as far as his disembarkation on the coast of Australia was concerned.
"He is an intelligent, intrepid man," he added, "whose passions have led him astray. May reflection and repentance bring him to a better mind!"

But before Ayrton was transferred, Harry Grant wished to do the honors of his rock to his friends. He invited them to visit his wooden house, and dine with him in Robinson Crusoe fashion.

Glenarvan and his friends accepted the invitation most willingly. Robert and Mary were eagerly longing to see the solitary house where their father had so often wept at the thought of them. A boat was manned, and the Captain and his two children, Lord and Lady Glenarvan, the Major, John Mangles, and Paganel, landed on the shores of the island.

A few hours sufficed to explore the whole domain of Harry Grant. It was in fact the summit of a submarine mountain, a plateau composed of basaltic rocks and volcanic debris. During the geological epochs of the earth, this mountain had gradually emerged from the depths of the Pacific, through the action of the subterranean fires, but for ages back the volcano had been a peaceful mountain, and the filled-up crater, an island rising out of the liquid plain. Then soil formed. The vegetable kingdom took possession of this new land. Several whalers landed domestic animals there in passing; goats and pigs, which multiplied and ran wild, and the three kingdoms of nature were now displayed on this island, sunk in mid ocean.

When the survivors of the shipwrecked Britannia took refuge there, the hand of man began to organize the efforts of nature. In two years and a half, Harry Grant and his two sailors had metamorphosed the island. Several acres of well-cultivated land were stocked with vegetables of excellent quality.

The house was shaded by luxuriant gum-trees. The magnificent ocean stretched before the windows, sparkling in the sunlight. Harry Grant had the table placed beneath the grand trees, and all the guests seated themselves. A hind quarter of a goat, nardou bread, several bowls of milk, two or three roots of wild endive, and pure fresh water, composed the simple repast, worthy of the shepherds of Arcadia.

Paganel was enchanted. His old fancies about Robinson Crusoe revived in full force. "He is not at all to be pitied, that scoundrel, Ayrton!" he exclaimed, enthusiastically. "This little isle is just a paradise!"

"Yes," replied Harry Grant, "a paradise to these poor, shipwrecked fellows that Heaven had pity on, but I am sorry that Maria Theresa was not an extensive and fertile island, with a river instead of a stream, and a port instead of a tiny bay exposed to the open sea."

"And why, captain?" asked Glenarvan.

"Because I should have made it the foundation of the colony with which I mean to dower Scotland."

"Ah, Captain Grant, you have not given up the project, then, which made you so popular in our old country?"

"No, my Lord, and God has only saved me through your efforts that I might accomplish my task. My poor brothers in old Caledonia, all who are needy must have a refuge provided for them in another land against their misery, and my dear country must have a colony of her own, for herself alone, somewhere in these seas, where she may find that independence and comfort she so lacks in Europe."

"Ah, that is very true, Captain Grant," said Lady Helena. "This is a grand project of yours, and worthy of a noble heart. But this little isle--"

"No, madam, it is a rock only fit at most to support a few settlers; while what we need is a vast country, whose virgin soil abounds in untouched stores of wealth," replied the captain.

"Well, captain," exclaimed Glenarvan, "the future is ours, and this country we will seek for together."

And the two brave Scotchmen joined hands in a hearty grip and so sealed the compact.

A general wish was expressed to hear, while they were on the island, the account of the shipwreck of the Britannia, and of the two years spent by the survivors in this very place. Harry Grant was delighted to gratify their curiosity, and commenced his narration forthwith.

"My story," he said, "is that of all the Robinson Crusoes cast upon an island, with only God and themselves to rely on, and feeling it a duty to struggle for life with the elements."

"It was during the night of the 26th or 27th of June, 1862, that the Britannia, disabled by a six days' storm, struck against the rocks of Maria Theresa. The sea was mountains high, and lifeboats were useless. My unfortunate crew all perished, except Bob Learce and Joe Bell, who with myself managed to reach shore after twenty unsuccessful attempts.

"The land which received us was only an uninhabited island, two miles broad and five long, with about thirty trees in the interior, a few meadows, and a brook of fresh water, which fortunately never dried up. Alone with my sailors, in this corner of the globe, I did not despair. I put my trust in God, and accustomed myself to struggle resolutely for existence. Bob and Joe, my brave companions in misfortune, my friends, seconded me energetically.

"We began like the fictitious Robinson Crusoe of Defoe, our model, by collecting the planks of the ship, the tools, a little powder, and firearms, and a bag of precious seeds. The first few days were painful enough, but hunting and fishing soon afforded us a sure supply of food, for wild goats were in abundance in the interior of the island, and
marine animals abounded on the coast. By degrees we fell into regular ways and habits of life.

"I had saved my instruments from the wreck, and knew exactly the position of the island. I found we were out of the route of vessels, and could not be rescued unless by some providential chance. I accepted our trying lot composedly, always thinking, however, of my dear ones, remembering them every day in my prayers, though never hoping to see them again.

"However, we toiled on resolutely, and before long several acres of land were sown with the seed off the BRITANNIA; potatoes, endive, sorrel, and other vegetables besides, gave wholesome variety to our daily fare. We caught some young kids, which soon grew quite tame. We had milk and butter. The nardou, which grew abundantly in dried up creeks, supplied us with tolerably substantial bread, and we had no longer any fears for our material life.

"We had built a log hut with the DEBRIS of the BRITANNIA, and this was covered over with sail cloth, carefully tarred over, and beneath this secure shelter the rainy season passed comfortably. Many a plan was discussed here, and many a dream indulged in, the brightest of which is this day realized.

"I had at first the idea of trying to brave the perils of the ocean in a canoe made out of the spars of the ship, but 1,500 miles lay between us and the nearest coast, that is to say the islands of the Archipelago of Pomotou. No boat could have stood so long a voyage. I therefore relinquished my scheme, and looked for no deliverance except from a divine hand.

"Ah, my poor children! how often we have stood on the top of the rocks and watched the few vessels passing in the distance far out at sea. During the whole period of our exile only two or three vessels appeared on the horizon, and those only to disappear again immediately. Two years and a half were spent in this manner. We gave up hoping, but yet did not despair. At last, early yesterday morning, when I was standing on the highest peak of the island, I noticed a light smoke rising in the west. It increased, and soon a ship appeared in sight. It seemed to be coming toward us. But would it not rather steer clear of an island where there was no harbor.

"Ah, what a day of agony that was! My heart was almost bursting. My comrades kindled a fire on one of the peaks. Night came on, but no signal came from the yacht. Deliverance was there, however. Were we to see it vanish from our eyes?

"I hesitated no longer. The darkness was growing deeper. The ship might double the island during the night. I jumped into the sea, and attempted to make my way toward it. Hope trebled my strength, I cleft the waves with superhuman vigor, and had got so near the yacht that I was scarcely thirty fathoms off, when it tacked about.

"This provoked me to the despairing cry, which only my two children heard. It was no illusion.

"Then I came back to the shore, exhausted and overcome with emotion and fatigue. My two sailors received me half dead. It was a horrible night this last we spent on the island, and we believed ourselves abandoned forever, when day dawned, and there was the yacht sailing nearly alongside, under easy steam. Your boat was lowered--we were saved--and, oh, wonder of Divine goodness, my children, my beloved children, were there holding out their arms to me!"

Robert and Mary almost smothered their father with kisses and caresses as he ended his narrative.

It was now for the first time that the captain heard that he owed his deliverance to the somewhat hieroglyphical V. IV Verne document which he had placed in a bottle and confined to the mercy of the ocean.

But what were Jacques Paganel's thoughts during Captain Grant's recital? The worthy geographer was turning over in his brain for the thousandth time the words of the document. He pondered his three successive interpretations, all of which had proved false. How had this island, called Maria Theresa, been indicated in the papers originally?

At last Paganel could contain himself no longer, and seizing Harry Grant's hand, he exclaimed:

"Captain! will you tell me at last what really was in your indecipherable document?"

A general curiosity was excited by this question of the geographer, for the enigma which had been for nine months a mystery was about to be explained.

"Well, captain," repeated Paganel, "do you remember the precise words of the document?"

"Exactly," replied Harry Grant; "and not a day has passed without my recalling to memory words with which our last hopes were linked."

"And what are they, captain?" asked Glenarvan. "Speak, for our _amour propre_ is wounded to the quick!"

"I am ready to satisfy you," replied Harry Grant; "but, you know, to multiply the chances of safety, I had inclosed three documents in the bottle, in three different languages. Which is it you wish to hear?"

"They are not identical, then?" cried Paganel.

"Yes, they are, almost to a word."

"Well, then, let us have the French document," replied Glenarvan. "That is the one that is most respected by the waves, and the one on which our interpretations have been mostly founded."

"My Lord, I will give it you word for word," replied Harry Grant.
LE 27 JUIN, 1862, le trois-mats Britannia, de Glasgow, s'est perdu a quinze cents lieues de la Patagonie, dans l'hémisphère austral. Partes a terre, deux matelots et le Capitaine Grant ont atteint l'île Tabor._

"Oh!" exclaimed Paganel.

"LA," continued Harry Grant, "continuellement en proie a une cruelle indigence, ils ont jete ce document par 153 degrees de longitude et 37 degrees 11' de latitude. Venes a leur secours, ou ils sont perdus._

At the name of Tabor, Paganel had started up hastily, and now being unable to restrain himself longer, he called out:

"How can it be Isle Tabor? Why, this is Maria Theresa!"

"Undoubtedly, Monsieur Paganel," replied Harry Grant. "It is Maria Theresa on the English and German charts, but is named Tabor on the French ones!"

At this moment a vigorous thump on Paganel's shoulder almost bent him double. Truth obliges us to say it was the Major that dealt the blow, though strangely contrary to his usual strict politeness.

"Geographer!" said McNabbs, in a tone of the most supreme contempt.

But Paganel had not even felt the Major's hand. What was that compared to the geographical blow which had stunned him?

He had been gradually getting nearer the truth, however, as he learned from Captain Grant. He had almost entirely deciphered the indecipherable document. The names Patagonia, Australia, New Zealand, had appeared to him in turn with absolute certainty. CONTIN, at first CONTIENT, had gradually reached its true meaning, _continuelle. Indi_ had successively signified _indiens, indigenes_, and at last the right word was found--_INDIGENCE. But one mutilated word, ABOR, had baffled the geographer's sagacity. Paganel had persisted in making it the root of the verb ABORDER, and it turned out to be a proper name, the French name of the Isle Tabor, the isle which had been a refuge for the shipwrecked sailors of the BRITANNIA. It was difficult to avoid falling into the error, however, for on the English planispheres on the DUNCAN, the little isle was marked Maria Theresa.

"No matter?" cried Paganel, tearing his hair; "I ought not to have forgotten its double appellation. It is an unpardonable mistake, one unworthy of a secretary of the Geographical Society. I am disgraced!"

"Come, come, Monsieur Paganel," said Lady Helena; "moderate your grief."

"No, madam, no; I am a mere ass!"

"And not even a learned one!" added the Major, by way of consolation.

When the meal was over, Harry Grant put everything in order in his house. He took nothing away, wishing the guilty to inherit the riches of the innocent. Then they returned to the vessel, and, as Glenarvan had determined to start the same day, he gave immediate orders for the disembarkation of the quartermaster. Ayrton was brought up on the poop, and found himself face to face with Harry Grant.

"It is I, Ayrton!" said Grant.

"Yes, it is you, captain," replied Ayrton, without the least sign of surprise at Harry Grant's recovery. "Well, I am not sorry to see you again in good health."

"It seems, Ayrton, that I made a mistake in landing you on an inhabited coast."

"It seems so, captain."

"You are going to take my place on this uninhabited island. May Heaven give you repentance!"

"Amen," said Ayrton, calmly.

Glenarvan then addressed the quartermaster.

"It is still your wish, then, Ayrton, to be left behind?"

"Yes, my Lord!"

"And Isle Tabor meets your wishes?"

"Perfectly."

"Now then, listen to my last words, Ayrton. You will be cut off here from all the world, and no communication with your fellows is possible. Miracles are rare, and you will not be able to quit this isle. You will be alone, with no eye upon you but that of God, who reads the deepest secrets of the heart; but you will be neither lost nor forsaken, as Captain Grant was. Unworthy as you are of anyone's remembrance, you will not be dropped out of recollection. I know where you are, Ayrton; I know where to find you-- I shall never forget."

"God keep your Honor," was all Ayrton's reply.

These were the final words exchanged between Glenarvan and the quartermaster. The boat was ready and Ayrton got into it.

John Mangles had previously conveyed to the island several cases of preserved food, besides clothing, and tools and firearms, and a supply of powder and shot. The quartermaster could commence a new life of honest labor. Nothing was lacking, not even books; among others, the Bible, so dear to English hearts.

The parting hour had come. The crew and all the passengers were assembled on deck. More than one felt his
heart swell with emotion. Mary Grant and Lady Helena could not restrain their feelings.

"Must it be done?" said the young wife to her husband. "Must the poor man be left there?"

"He must, Helena," replied Lord Glenarvan. "It is in expiation of his crimes."

At that moment the boat, in charge of John Mangles, turned away. Ayrton, who remained standing, and still unmoved, took off his cap and bowed gravely.

Glenarvan uncovered, and all the crew followed his example, as if in presence of a man who was about to die, and the boat went off in profound silence.

On reaching land, Ayrton jumped on the sandy shore, and the boat returned to the yacht. It was then four o'clock in the afternoon, and from the poop the passengers could see the quartermaster gazing at the ship, standing with folded arms on a rock, motionless as a statue.

"Shall we set sail, my Lord?" asked John Mangles.

"Yes, John," replied Glenarvan, hastily, more moved than he cared to show.

"Go on!" shouted John to the engineer.

The steam hissed and puffed out, the screw began to stir the waves, and by eight o'clock the last peaks of Isle Tabor disappeared in the shadows of the night.

CHAPTER XXI PAGANEL'S LAST ENTANGLEMENT

ON the 19th of March, eleven days after leaving the island, the DUNCAN sighted the American coast, and next day dropped anchor in the bay of Talcahuano. They had come back again after a voyage of five months, during which, and keeping strictly along the 37th parallel, they had gone round the world. The passengers in this memorable expedition, unprecedented in the annals of the Travelers' Club, had visited Chili, the Pampas, the Argentine Republic, the Atlantic, the island of Tristan d'Acunha, the Indian Ocean, Amsterdam Island, Australia, New Zealand, Isle Tabor, and the Pacific. Their search had not been fruitless, for they were bringing back the survivors of the shipwrecked BRITANNIA.

Not one of the brave Scots who set out at the summons of their chief, but could answer to their names; all were returning to their old Scotia.

As soon as the DUNCAN had re-provisioned, she sailed along the coast of Patagonia, doubled Cape Horn, and made a swift run up the Atlantic Ocean. No voyage could be more devoid of incident. The yacht was simply carrying home a cargo of happiness. There was no secret now on board, not even John Mangles's attachment to Mary Grant.

Yes, there was one mystery still, which greatly excited McNabbs's curiosity. Why was it that Paganel remained always hermetically fastened up in his clothes, with a big comforter round his throat and up to his very ears? The Major was burning with desire to know the reason of this singular fashion. But in spite of interrogations, allusions, and suspicions on the part of McNabbs, Paganel would not unbutton.

Not even when the DUNCAN crossed the line, and the heat was so great that the seams of the deck were melting, "He is so DISTRAINT that he thinks he is at St. Petersburg," said the Major, when he saw the geographer wrapped in an immense great-coat, as if the mercury had been frozen in the thermometer.

At last on the 9th of May, fifty-three days from the time of leaving Talcahuano, John Mangles sighted the lights of Cape Clear. The yacht entered St. George's Channel, crossed the Irish Sea, and on the 10th of May reached the Firth of Clyde. At 11 o'clock she dropped anchor off Dunbarton, and at 2 P.M. the passengers arrived at Malcolm Castle amidst the enthusiastic cheering of the Highlanders.

As fate would have it then, Harry Grant and his two companions were saved. John Mangles wedded Mary Grant in the old cathedral of St. Mungo, and Mr. Paxton, the same clergyman who had prayed nine months before for the deliverance of the father, now blessed the marriage of his daughter and his deliverer. Robert was to become a sailor like Harry Grant and John Mangles, and take part with them in the captain's grand projects, under the auspices of Lord Glenarvan.

But fate also decreed that Paganel was not to die a bachelor? Probably so.

The fact was, the learned geographer after his heroic exploits, could not escape celebrity. His blunders made quite a FURORE among the fashionables of Scotland, and he was overwhelmed with courtesies.

It was then that an amiable lady, about thirty years of age, in fact, a cousin of McNabbs, a little eccentric herself, but good and still charming, fell in love with the geographer's oddities, and offered him her hand. Forty thousand pounds went with it, but that was not mentioned.

Paganel was far from being insensible to the sentiments of Miss Arabella, but yet he did not dare to speak. It was the Major who was the medium of communication between these two souls, evidently made for each other. He even told Paganel that his marriage was the last freak he would be able to allow himself. Paganel was in a great state of embarrassment, but strangely enough could not make up his mind to speak the fatal word.

"Does not Miss Arabella please you then?" asked McNabbs.
"Oh, Major, she is charming," exclaimed Paganel, "a thousand times too charming, and if I must tell you all, she
would please me better if she were less so. I wish she had a defect!"

"Be easy on that score," replied the Major, "she has, and more than one. The most perfect woman in the world
has always her quota. So, Paganel, it is settled then, I suppose?"

"I dare not."

"Come, now, my learned friend, what makes you hesitate?"

"I am unworthy of Miss Arabella," was the invariable reply of the geographer. And to this he would stick.

At last, one day being fairly driven in a corner by the intractable Major, he ended by confiding to him, under the
seal of secrecy, a certain peculiarity which would facilitate his apprehension should the police ever be on his track.

"Bah!" said the Major.

"It is really as I tell you," replied Paganel.

"What does it matter, my worthy friend?"

"Do you think so, Major?"

"On the contrary, it only makes you more uncommon. It adds to your personal merits. It is the very thing to
make you the nonpareil husband that Arabella dreams about."

And the Major with imperturbable gravity left Paganel in a state of the utmost disquietude.

A short conversation ensued between McNabbs and Miss Arabella. A fortnight afterwards, the marriage was
celebrated in grand style in the chapel of Malcolm Castle. Paganel looked magnificent, but closely buttoned up, and
Miss Arabella was arrayed in splendor.

And this secret of the geographer would have been forever buried in oblivion, if the Major had not mentioned it
to Glenarvan, and he could not hide it from Lady Helena, who gave a hint to Mrs. Mangles. To make a long story
short, it got in the end to M. Olbinett's ears, and soon became noised abroad.

Jacques Paganel, during his three days' captivity among the Maories, had been tattooed from the feet to the
shoulders, and he bore on his chest a heraldic kiwi with outspread wings, which was biting at his heart.

This was the only adventure of his grand voyage that Paganel could never get over, and he always bore a grudge
to New Zealand on account of it. It was for this reason too, that, notwithstanding solicitation and regrets, he never
would return to France. He dreaded lest he should expose the whole Geographical Society in his person to the jests
of caricaturists and low newspapers, by their secretary coming back tattooed.

The return of the captain to Scotland was a national event, and Harry Grant was soon the most popular man in
old Caledonia. His son Robert became a sailor like himself and Captain Mangles, and under the patronage of Lord
Glenarvan they resumed the project of founding a Scotch colony in the Southern Seas.

MICHAEL STROGOFF
OR, THE COURIER OF THE CZAR
by Jules Verne

BOOK I

CHAPTER I A FETE AT THE NEW PALACE
"SIRE, a fresh dispatch."

"Whence?"

"From Tomsk?"

"Is the wire cut beyond that city?"

"Yes, sire, since yesterday."

"Telegraph hourly to Tomsk, General, and keep me informed of all that occurs."

"Sire, it shall be done," answered General Kissoff.

These words were exchanged about two hours after midnight, at the moment when the fete given at the New
Palace was at the height of its splendor.

During the whole evening the bands of the Preobra-jensky and Paulowsky regiments had played without
cessation polkas, mazurkas, schottisches, and waltzes from among the choicest of their repertoires. Innumerable
couples of dancers whirled through the magnificent saloons of the palace, which stood at a few paces only from the
"old house of stones"—in former days the scene of so many terrible dramas, the echoes of whose walls were this
night awakened by the gay strains of the musicians.

The grand-chamberlain of the court, was, besides, well seconded in his arduous and delicate duties. The grand-
dukes and their aides-de-camp, the chamberlains-in-waiting and other officers of the palace, presided personally in
the arrangement of the dances. The grand duchesses, covered with diamonds, the ladies-in-waiting in their most
exquisite costumes, set the example to the wives of the military and civil dignitaries of the ancient "city of white
stone." When, therefore, the signal for the "polonaise" resounded through the saloons, and the guests of all ranks
took part in that measured promenade, which on occasions of this kind has all the importance of a national dance,
the mingled costumes, the sweeping robes adorned with lace, and uniforms covered with orders, presented a scene
dazzling splendor, lighted by hundreds of lusters multiplied tenfold by the numerous mirrors adorning the walls.

The grand saloon, the finest of all those contained in the New Palace, formed to this procession of exalted
personages and splendidly dressed women a frame worthy of the magnificence they displayed. The rich ceiling, with
its gilding already softened by the touch of time, appeared as if glittering with stars. The embroidered drapery of the
curtains and doors, falling in gorgeous folds, assumed rich and varied hues, broken by the shadows of the heavy
masses of damask.

Through the panes of the vast semicircular bay-windows the light, with which the saloons were filled, shone
forth with the brilliancy of a conflagration, vividly illuminating the gloom in which for some hours the palace had
been shrouded. The attention of those of the guests not taking part in the dancing was attracted by the contrast.
Resting in the recesses of the windows, they could discern, standing out dimly in the darkness, the vague outlines
of the countless towers, domes, and spires which adorn the ancient city. Below the sculptured balconies were visible
numerous sentries, pacing silently up and down, their rifles carried horizontally on the shoulder, and the spikes of
their helmets glittering like flames in the glare of light issuing from the palace. The steps also of the patrols could be
heard beating time on the stones beneath with even more regularity than the feet of the dancers on the floor of the
saloon. From time to time the watchword was repeated from post to post, and occasionally the notes of a trumpet,
ingling with the strains of the orchestra, penetrated into their midst. Still farther down, in front of the facade, dark
masses obscured the rays of light which proceeded from the windows of the New Palace. These were boats
descending the course of a river, whose waters, faintly illuminated by a few lamps, washed the lower portion of the
terraces.

The principal personage who has been mentioned, the giver of the fete, and to whom General Kissoff had been
speaking in that tone of respect with which sovereigns alone are usually addressed, wore the simple uniform of an
officer of chasseurs of the guard. This was not affectation on his part, but the custom of a man who cared little for
dress, his contrasting strongly with the gorgeous costumes amid which he moved, encircled by his escort of
Georgians, Cossacks, and Circassians—a brilliant band, splendidly clad in the glittering uniforms of the Caucasus.

This personage, of lofty stature, affable demeanor, and physiognomy calm, though bearing traces of anxiety,
moved from group to group, seldom speaking, and appearing to pay but little attention either to the merriment of the
younger guests or the graver remarks of the exalted dignitaries or members of the diplomatic corps who represented
at the Russian court the principal governments of Europe. Two or three of these astute politicians—physiognomists
by virtue of their profession—failed not to detect on the countenance of their host symptoms of disquietude, the
source of which eluded their penetration; but none ventured to interrogate him on the subject.

It was evidently the intention of the officer of chasseurs that his own anxieties should in no way cast a shade
over the festivities; and, as he was a personage whom almost the population of a world in itself was wont to obey,
the gayety of the ball was not for a moment checked.

Nevertheless, General Kissoff waited until the officer to whom he had just communicated the dispatch
forwarded from Tomsk should give him permission to withdraw; but the latter still remained silent. He had taken the
telegram, he had read it carefully, and his visage became even more clouded than before. Involuntarily he sought the
hilt of his sword, and then passed his hand for an instant before his eyes, as though, dazzled by the brilliancy of the
light, he wished to shade them, the better to see into the recesses of his own mind.

"We are, then," he continued, after having drawn General Kissoff aside towards a window, "since yesterday
without intelligence from the Grand Duke?"

"Without any, sire; and it is to be feared that in a short time dispatches will no longer cross the Siberian frontier."

"But have not the troops of the provinces of Amoor and Irkutsk, as those also of the Trans-Balkan territory,
received orders to march immediately upon Irkutsk?"

"The orders were transmitted by the last telegram we were able to send beyond Lake Baikal."

"And the governments of Yeniseisk, Omsk, Semipolatinsk, and Tobolsk—are we still in direct communication
with them as before the insurrection?"

"Yes, sire; our dispatches have reached them, and we are assured at the present moment that the Tartars have not
advanced beyond the Irdish and the Obi."

"And the traitor Ivan Ogareff, are there no tidings of him?"

"None," replied General Kissoff. "The head of the police cannot state whether or not he has crossed the frontier."
"Let a description of him be immediately dispatched to Nijni-Novgorod, Perm, Ekaterenburg, Kasirnov, Tioumen, Ishim, Omsk, Tomsk, and to all the telegraphic stations with which communication is yet open."

"Your majesty's orders shall be instantly carried out."

"You will observe the strictest silence as to this."

The General, having made a sign of respectful assent, bowing low, mingled with the crowd, and finally left the apartments without his departure being remarked.

The officer remained absorbed in thought for a few moments, when, recovering himself, he went among the various groups in the saloon, his countenance reassuming that calm aspect which had for an instant been disturbed.

Nevertheless, the important occurrence which had occasioned these rapidly exchanged words was not so unknown as the officer of the chasseurs of the guard and General Kissoff had possibly supposed. It was not spoken of officially, it is true, nor even officiously, since tongues were not free; but a few exalted personages had been informed, more or less exactly, of the events which had taken place beyond the frontier. At any rate, that which was only slightly known, that which was not matter of conversation even between members of the corps diplomatique, two guests, distinguished by no uniform, no decoration, at this reception in the New Palace, discussed in a low voice, and with apparently very correct information.

By what means, by the exercise of what acuteness had these two ordinary mortals ascertained that which so many persons of the highest rank and importance scarcely even suspected? It is impossible to say. Had they the gifts of foreknowledge and foresight? Did they possess a supplementary sense, which enabled them to see beyond that limited horizon which bounds all human gaze? Had they obtained a peculiar power of divining the most secret events? Was it owing to the habit, now become a second nature, of living on information, that their mental constitution had thus become really transformed? It was difficult to escape from this conclusion.

Of these two men, the one was English, the other French; both were tall and thin, but the latter was sallow as are the southern Provencals, while the former was ruddy like a Lancashire gentleman. The Anglo-Norman, formal, cold, grave, parsimonious of gestures and words, appeared only to speak or gesticulate under the influence of a spring operating at regular intervals. The Gaul, on the contrary, lively and petulant, expressed himself with lips, eyes, hands, all at once, having twenty different ways of explaining his thoughts, whereas his interlocutor seemed to have only one, immutably stereotyped on his brain.

The strong contrast they presented would at once have struck the most superficial observer; but a physiognomist, regarding them closely, would have defined their particular characteristics by saying, that if the Frenchman was "all eyes," the Englishman was "all ears."

In fact, the visual apparatus of the one had been singularly perfected by practice. The sensibility of its retina must have been as instantaneous as that of those conjurors who recognize a card merely by a rapid movement in cutting the pack or by the arrangement only of marks invisible to others. The Frenchman indeed possessed in the highest degree what may be called "the memory of the eye."

The Englishman, on the contrary, appeared especially organized to listen and to hear. When his aural apparatus had been once struck by the sound of a voice he could not forget it, and after ten or even twenty years he would have recognized it among a thousand. His ears, to be sure, had not the power of moving as freely as those of animals who are provided with large auditory flaps; but, since scientific men know that human ears possess, in fact, a very limited power of movement, we should not be far wrong in affirming that those of the said Englishman became erect, and turned in all directions while endeavoring to gather in the sounds, in a manner apparent only to the naturalist. It must be observed that this perfection of sight and hearing was of wonderful assistance to these two men in their vocation, for the Englishman acted as correspondent of the Daily Telegraph, and the Frenchman, as correspondent of what newspaper, or of what newspapers, he did not say; and when asked, he replied in a jocular manner that he corresponded with "his cousin Madeleine." This Frenchman, however, neath his careless surface, was wonderfully shrewd and sagacious. Even while speaking at random, perhaps the better to hide his desire to learn, he never forgot himself. His loquacity even helped him to conceal his thoughts, and he was perhaps even more discreet than his confrere of the Daily Telegraph. Both were present at this fete given at the New Palace on the night of the 15th of July in their character of reporters.

It is needless to say that these two men were devoted to their mission in the world--that they delighted to throw themselves in the track of the most unexpected intelligence--that nothing terrified or discouraged them from succeeding--that they possessed the imperturbable sang froid and the genuine intrepidity of men of their calling. Enthusiastic jockeys in this steeplechase, this hunt after information, they leaped hedges, crossed rivers, sprang over fences, with the ardor of pure-blooded racers, who will run "a good first" or die!

Their journals did not restrict them with regard to money--the surest, the most rapid, the most perfect element of information known to this day. It must also be added, to their honor, that neither the one nor the other ever looked over or listened at the walls of private life, and that they only exercised their vocation when political or social
interests were at stake. In a word, they made what has been for some years called "the great political and military reports."

It will be seen, in following them, that they had generally an independent mode of viewing events, and, above all, their consequences, each having his own way of observing and appreciating.

The French correspondent was named Alcide Jolivet. Harry Blount was the name of the Englishman. They had just met for the first time at this fete in the New Palace, of which they had been ordered to give an account in their papers. The dissimilarity of their characters, added to a certain amount of jealousy, which generally exists between rivals in the same calling, might have rendered them but little sympathetic. However, they did not avoid each other, but endeavored rather to exchange with each other the chat of the day. They were sportsmen, after all, hunting on the same ground. That which one missed might be advantageously secured by the other, and it was to their interest to meet and converse.

This evening they were both on the look out; they felt, in fact, that there was something in the air.

"Even should it be only a wildgoose chase," said Alcide Jolivet to himself, "it may be worth powder and shot."

The two correspondents therefore began by cautiously sounding each other.

"Really, my dear sir, this little fete is charming!" said Alcide Jolivet pleasantly, thinking himself obliged to begin the conversation with this eminently French phrase.

"I have telegraphed already, 'splendid!'" replied Harry Blount calmly, employing the word specially devoted to expressing admiration by all subjects of the United Kingdom.

"Nevertheless," added Alcide Jolivet, "I felt compelled to remark to my cousin--"

"Your cousin?" repeated Harry Blount in a tone of surprise, interrupting his brother of the pen.

"Yes," returned Alcide Jolivet, "my cousin Madeleine. It is with her that I correspond, and she likes to be quickly and well informed, does my cousin. I therefore remarked to her that, during this fete, a sort of cloud had appeared to overshadow the sovereign's brow."

"To me, it seemed radiant," replied Harry Blount, who perhaps, wished to conceal his real opinion on this topic.

"And, naturally, you made it 'radiant,' in the columns of the Daily Telegraph."

"Exactly."

"Do you remember, Mr. Blount, what occurred at Zakret in 1812?"

"I remember it as well as if I had been there, sir," replied the English correspondent.

"Then," continued Alcide Jolivet, "you know that, in the middle of a fete given in his honor, it was announced to the Emperor Alexander that Napoleon had just crossed the Niemen with the vanguard of the French army. Nevertheless the Emperor did not leave the fete, and notwithstanding the extreme gravity of intelligence which might cost him his empire, he did not allow himself to show more uneasiness."

"Than our host exhibited when General Kissoff informed him that the telegraphic wires had just been cut between the frontier and the government of Irkutsck."

"Ah! you are aware of that?"

"I am!"

"As regards myself, it would be difficult to avoid knowing it, since my last telegram reached Udinsk," observed Alcide Jolivet, with some satisfaction.

"And mine only as far as Krasnoiarsk," answered Harry Blount, in a no less satisfied tone.

"Then you know also that orders have been sent to the troops of Nikolaevsk?"

"I do, sir; and at the same time a telegram was sent to the Cossacks of the government of Tobolsk to concentrate their forces."

"Nothing can be more true, Mr. Blount; I was equally well acquainted with these measures, and you may be sure that my dear cousin shall know of them to-morrow."

"Exactly as the readers of the Daily Telegraph shall know it also, M. Jolivet."

"Well, when one sees all that is going on...."

"And when one hears all that is said...."

"An interesting campaign to follow, Mr. Blount."

"I shall follow it, M. Jolivet!"

"Then it is possible that we shall find ourselves on ground less safe, perhaps, than the floor of this ball-room."

"Less safe, certainly, but--"

"But much less slippery," added Alcide Jolivet, holding up his companion, just as the latter, drawing back, was about to lose his equilibrium.

Thereupon the two correspondents separated, pleased that the one had not stolen a march on the other.

At that moment the doors of the rooms adjoining the great reception saloon were thrown open, disclosing to view several immense tables beautifully laid out, and groaning under a profusion of valuable china and gold plate.
On the central table, reserved for the princes, princesses, and members of the corps diplomatique, glittered an epergne of inestimable price, brought from London, and around this chef-d’œuvre of chased gold reflected under the light of the lusters a thousand pieces of most beautiful service from the manufactories of Sevres.

The guests of the New Palace immediately began to stream towards the supper-rooms.

At that moment. General Kissoff, who had just re-entered, quickly approached the officer of chasseurs.

"Well?" asked the latter abruptly, as he had done the former time.

"Telegram pass Tomsk no longer, sire."

"A courier this moment!"

The officer left the hall and entered a large ante-chamber adjoining. It was a cabinet with plain oak furniture, situated in an angle of the New Palace. Several pictures, amongst others some by Horace Vernet, hung on the wall.

The officer hastily opened a window, as if he felt the want of air, and stepped out on a balcony to breathe the pure atmosphere of a lovely July night. Beneath his eyes, bathed in moonlight, lay a fortified inclosure, from which rose two cathedrals, three palaces, and an arsenal. Around this inclosure could be seen three distinct towns: Kitai-Gorod, Beloi-Gorod, Zemlianai-Gorod--European, Tartar, and Chinese quarters of great extent, commanded by towers, belfries, minarets, and the cupolas of three hundred churches, with green domes, surmounted by the silver cross. A little winding river, here and there reflected the rays of the moon.

This river was the Moskowa; the town Moscow; the fortified inclosure the Kremlin; and the officer of chasseurs of the guard, who, with folded arms and thoughtful brow, was listening dreamily to the sounds floating from the New Palace over the old Muscovite city, was the Czar.

CHAPTER II RUSSIANS AND TARTARS

The Czar had not so suddenly left the ball-room of the New Palace, when the fete he was giving to the civil and military authorities and principal people of Moscow was at the height of its brilliancy, without ample cause; for he had just received information that serious events were taking place beyond the frontiers of the Ural. It had become evident that a formidable rebellion threatened to wrest the Siberian provinces from the Russian crown.

Asiatic Russia, or Siberia, covers a superficial area of 1,790,208 square miles, and contains nearly two millions of inhabitants. Extending from the Ural Mountains, which separate it from Russia in Europe, to the shores of the Pacific Ocean, it is bounded on the south by Turkestan and the Chinese Empire; on the north by the Arctic Ocean, from the Sea of Kara to Behring's Straits. It is divided into several governments or provinces, those of Tobolsk, Yeniseisk, Irkutsk, Omsk, and Yakutsk; contains two districts, Okhotsk and Kamtschatka; and possesses two countries, now under the Muscovite dominion--that of the Kirghiz and that of the Tshouktshes. This immense extent of steppes, which includes more than one hundred and ten degrees from west to east, is a land to which criminals and political offenders are banished.

Two governor-generals represent the supreme authority of the Czar over this vast country. The higher one resides at Irkutsk, the far capital of Eastern Siberia. The River Tchouna separates the two Siberias.

No rail yet furrows these wide plains, some of which are in reality extremely fertile. No iron ways lead from those precious mines which make the Siberian soil far richer below than above its surface. The traveler journeys in summer in a kibick or telga; in winter, in a sledge.

An electric telegraph, with a single wire more than eight thousand versts in length, alone affords communication between the western and eastern frontiers of Siberia. On issuing from the Ural, it passes through Ekaterenburg, Kasirnov, Tioumen, Ishim, Omsk, Kolyvan, Tomsk, Krasnoiarsk, Nijni-Udinsk, Irkutsk, Verkne-Nertschink, Strelink, Albazine, Blagowstenks, Radde, Orlomskaya, Alexandrowskoe, and Nikolaevsk; and six roubles and nineteen copecks are paid for every word sent from one end to the other. From Irkutsk there is a branch to Kiatka, on the Mongolian frontier; and from thence, for thirty copecks a word, the post conveys the dispatches to Pekin in a fortnight.

It was this wire, extending from Ekaterenburg to Nikolaevsk, which had been cut, first beyond Tomsk, and then between Tomsk and Kolyvan.

This was why the Czar, to the communication made to him for the second time by General Kissoff, had answered by the words, "A courier this moment!"

The Czar remained motionless at the window for a few moments, when the door was again opened. The chief of police appeared on the threshold.

"Enter, General," said the Czar briefly, "and tell me all you know of Ivan Ogareff."

"He is an extremely dangerous man, sire," replied the chief of police.

"He ranked as colonel, did he not?"

"Yes, sire."
"Was he an intelligent officer?"

"Very intelligent, but a man whose spirit it was impossible to subdue; and possessing an ambition which stopped at nothing, he became involved in secret intrigues, and was degraded from his rank by his Highness the Grand Duke, and exiled to Siberia."

"How long ago was that?"

"Two years since. Pardoned after six months of exile by your majesty's favor, he returned to Russia."

"And since that time, has he not revisited Siberia?"

"Yes, sire; but he voluntarily returned there," replied the chief of police, adding, and slightly lowering his voice, "there was a time, sire, when NONE returned from Siberia."

"Well, whilst I live, Siberia is and shall be a country whence men CAN return."

The Czar had the right to utter these words with some pride, for often, by his clemency, he had shown that Russian justice knew how to pardon.

The head of the police did not reply to this observation, but it was evident that he did not approve of such half-measures. According to his idea, a man who had once passed the Ural Mountains in charge of policemen, ought never again to cross them. Now, it was not thus under the new reign, and the chief of police sincerely deplored it. What! no banishment for life for other crimes than those against social order! What! political exiles returning from Tobolsk, from Yakutsk, from Irkutsk! In truth, the chief of police, accustomed to the despotic sentences of the ukase which formerly never pardoned, could not understand this mode of governing. But he was silent, waiting until the Czar should interrogate him further. The questions were not long in coming.

"Did not Ivan Ogareff," asked the Czar, "return to Russia a second time, after that journey through the Siberian provinces, the object of which remains unknown?"

"He did."

"And have the police lost trace of him since?"

"No, sire; for an offender only becomes really dangerous from the day he has received his pardon."

The Czar frowned. Perhaps the chief of police feared that he had gone rather too far, though the stubbornness of his ideas was at least equal to the boundless devotion he felt for his master. But the Czar, disdaining to reply to these indirect reproaches cast on his policy, continued his questions. "Where was Ogareff last heard of?"

"In the province of Perm."

"In what town?"

"At Perm itself."

"What was he doing?"

"He appeared unoccupied, and there was nothing suspicious in his conduct."

"Then he was not under the surveillance of the secret police?"

"No, sire."

"When did he leave Perm?"

"About the month of March?"

"To go...?"

"Where, is unknown."

"And it is not known what has become of him?"

"No, sire; it is not known."

"Well, then, I myself know," answered the Czar. "I have received anonymous communications which did not pass through the police department; and, in the face of events now taking place beyond the frontier, I have every reason to believe that they are correct."

"Do you mean, sire," cried the chief of police, "that Ivan Ogareff has a hand in this Tartar rebellion?"

"Indeed I do; and I will now tell you something which you are ignorant of. After leaving Perm, Ivan Ogareff crossed the Ural mountains, entered Siberia, and penetrated the Kirghiz steppes, and there endeavored, not without success, to foment rebellion amongst their nomadic population. He then went so far south as free Turkestan; there, in the provinces of Bokhara, Khokhand, and Koondooz, he found chiefs willing to pour their Tartar hordes into Siberia, and excite a general rising in Asiatic Russia. The storm has been silently gathering, but it has at last burst like a thunderclap, and now all means of communication between Eastern and Western Siberia have been stopped. Moreover, Ivan Ogareff, thirsting for vengeance, aims at the life of my brother!"

The Czar had become excited whilst speaking, and now paced up and down with hurried steps. The chief of police said nothing, but he thought to himself that, during the time when the emperors of Russia never pardoned an exile, schemes such as those of Ivan Ogareff could never have been realized. Approaching the Czar, who had thrown himself into an armchair, he asked, "Your majesty has of course given orders so that this rebellion may be suppressed as soon as possible?"
"Yes," answered the Czar. "The last telegram which reached Nijni-Udinsk would set in motion the troops in the governments of Yenisei, Irkutsk, Yakutsk, as well as those in the provinces of the Amoor and Lake Baikal. At the same time, the regiments from Perm and Nijni-Novgorod, and the Cossacks from the frontier, are advancing by forced marches towards the Ural Mountains; but some weeks must pass before they can attack the Tartars."

"And your majesty's brother, his Highness the Grand Duke, is now isolated in the government of Irkutsk, and is no longer in direct communication with Moscow?"

"That is so."

"But by the last dispatches, he must know what measures have been taken by your majesty, and what help he may expect from the governments nearest Irkutsk?"

"He knows that," answered the Czar; "but what he does not know is, that Ivan Ogareff, as well as being a rebel, is also playing the part of a traitor, and that in him he has a personal and bitter enemy. It is to the Grand Duke that Ogareff owes his first disgrace; and what is more serious is, that this man is not known to him. Ogareff's plan, therefore, is to go to Irkutsk, and, under an assumed name, offer his services to the Grand Duke. Then, after gaining his confidence, when the Tartars have invested Irkutsk, he will betray the town, and with it my brother, whose life he seeks. This is what I have learned from my secret intelligence; this is what the Grand Duke does not know; and this is what he must know!"

"Well, sire, an intelligent, courageous courier..."

"I momentarily expect one."

"And it is to be hoped he will be expeditious," added the chief of police; "for, allow me to add, sire, that Siberia is a favorable land for rebellions."

"Do you mean to say, General, that the exiles would make common cause with the rebels?" exclaimed the Czar.

"Excuse me, your majesty," stammered the chief of police, for that was really the idea suggested to him by his uneasy and suspicious mind.

"I believe in their patriotism," returned the Czar.

"There are other offenders besides political exiles in Siberia," said the chief of police.

"The criminals? Oh, General, I give those up to you! They are the vilest, I grant, of the human race. They belong to no country. But the insurrection, or rather, the rebellion, is not to oppose the emperor; it is raised against Russia, against the country which the exiles have not lost all hope of again seeing—and which they will see again. No, a Russian would never unite with a Tartar, to weaken, were it only for an hour, the Muscovite power!"

The Czar was right in trusting to the patriotism of those whom his policy kept, for a time, at a distance. Clemency, which was the foundation of his justice, when he could himself direct its effects, the modifications he had adopted with regard to applications for the formerly terrible ukases, warranted the belief that he was not mistaken. But even without this powerful element of success in regard to the Tartar rebellion, circumstances were not the less very serious; for it was to be feared that a large part of the Kirghiz population would join the rebels.

The Kirghiz are divided into three hordes, the greater, the lesser, and the middle, and number nearly four hundred thousand "tents," or two million souls. Of the different tribes some are independent and others recognize either the sovereignty of Russia or that of the Khans of Khiva, Khokhand, and Bokhara, the most formidable chiefs of Turkestan. The middle horde, the richest, is also the largest, and its encampments occupy all the space between the rivers Sara Sou, Irtish, and the Upper Ishim, Lake Saisang and Lake Aksakal. The greater horde, occupying the countries situated to the east of the middle one, extends as far as the governments of Omsk and Tobolsk. Therefore, if the Kirghiz population should rise, it would be the rebellion of Asiatic Russia, and the first thing would be the separation of Siberia, to the east of the Yenisei.

It is true that these Kirghiz, mere novices in the art of war, are rather nocturnal thieves and plunderers of caravans than regular soldiers. As M. Levchine says, "a firm front or a square of good infantry could repel ten times the number of Kirghiz; and a single cannon might destroy a frightful number."

That may be; but to do this it is necessary for the square of good infantry to reach the rebellious country, and the cannon to leave the arsenals of the Russian provinces, perhaps two or three thousand versts distant. Now, except by the direct route from Ekaterenburg to Irkutsk, the often marshy steppes are not easily practicable, and some weeks must certainly pass before the Russian troops could reach the Tartar hordes.

Omsk is the center of that military organization of Western Siberia which is intended to overawe the Kirghiz population. Here are the bounds, more than once infringed by the half-subdued nomads, and there was every reason to believe that Omsk was already in danger. The line of military stations, that is to say, those Cossack posts which are ranged in echelon from Omsk to Semipolatinsk, must have been broken in several places. Now, it was to be feared that the "Grand Sultans," who govern the Kirghiz districts would either voluntarily accept, or involuntarily submit to, the dominion of Tartars, Mussulmen like themselves, and that to the hate caused by slavery was not united the hate due to the antagonism of the Greek and Mussulman religions. For some time, indeed, the Tartars of
Turkestan had endeavored, both by force and persuasion, to subdue the Kirghiz hordes.

A few words only with respect to these Tartars. The Tartars belong more especially to two distinct races, the Caucasian and the Mongolian. The Caucasian race, which, as Abel de Remusat says, "is regarded in Europe as the type of beauty in our species, because all the nations in this part of the world have sprung from it," includes also the Turks and the Persians. The purely Mongolian race comprises the Mongols, Manchoux, and Thibetans.

The Tartars who now threatened the Russian Empire, belonged to the Caucasian race, and occupied Turkestan. This immense country is divided into different states, governed by Khans, and hence termed Khanats. The principal khanats are those of Bokhara, Khokhand, Koondooz, etc. At this period, the most important and the most formidable khanat was that of Bokhara. Russia had already been several times at war with its chiefs, who, for their own interests, had supported the independence of the Kirghiz against the Muscovite dominion. The present chief, Feofar-Khan, followed in the steps of his predecessors.

The khanat of Bokhara has a population of two million five hundred thousand inhabitants, an army of sixty thousand men, trebled in time of war, and thirty thousand horsemen. It is a rich country, with varied animal, vegetable, and mineral products, and has been increased by the accession of the territories of Balkh, Aukoi, and Meimanah. It possesses nineteen large towns. Bokhara, surrounded by a wall measuring more than eight English miles, and flanked with towers, a glorious city, made illustrious by Avicenna and other learned men of the tenth century, is regarded as the center of Mussulman science, and ranks among the most celebrated cities of Central Asia. Samarcan, which contains the tomb of Tamerlane and the famous palace where the blue stone is kept on which each new khan must seat himself on his accession, is defended by a very strong citadel. Karschi, with its triple cordon, situated in an oasis, surrounded by a marsh peopled with tortoises and lizards, is almost impregnable. Ischardjoui is defended by a population of twenty thousand souls. Protected by its mountains, and isolated by its steppes, the khanat of Bokhara is a most formidable state; and Russia would need a large force to subdue it.

The fierce and ambitious Feofar now governed this corner of Tartary. Relying on the other khans--principally those of Khokhand and Koondooz, cruel and rapacious warriors, all ready to join an enterprise so dear to Tartar instincts--aided by the chiefs who ruled all the hordes of Central Asia, he had placed himself at the head of the rebellion of which Ivan Ogareff was the instigator. This traitor, impelled by insane ambition as much as by hate, had ordered the movement so as to attack Siberia. Mad indeed he was, if he hoped to rupture the Muscovite Empire. Acting under his suggestion, the Emir--which is the title taken by the khans of Bokhara--had poured his hordes over the Russian frontier. He invaded the government of Semipolatinsk, and the Cossacks, who were only in small force there, had been obliged to retire before him. He had advanced farther than Lake Balkhash, gaining over the Kirghiz population on his way. Pillaging, ravaging, enrolling those who submitted, taking prisoners those who resisted, he marched from one town to another, followed by those impedimenta of Oriental sovereignty which may be called his household, his wives and his slaves--all with the cool audacity of a modern Ghengis-Khan. It was impossible to ascertain where he now was; how far his soldiers had marched before the news of the rebellion reached Moscow; or to what part of Siberia the Russian troops had been forced to retire. All communication was interrupted. Had the wire between Kolyvan and Tomsk been cut by Tartar scouts, or had the Emir himself arrived at the Yeniseisk provinces? Was all the lower part of Western Siberia in a ferment? Had the rebellion already spread to the eastern regions? No one could say. The only agent which fears neither cold nor heat, which can neither be stopped by the rigors of winter nor the heat of summer, and which flies with the rapidity of lightning--the electric current--was prevented from traversing the steppes, and it was no longer possible to warn the Grand Duke, shut up in Irkutsk, of the danger threatening him from the treason of Ivan Ogareff.

A courier only could supply the place of the interrupted current. It would take this man some time to traverse the five thousand two versts between Moscow and Irkutsk. To pass the ranks of the rebels and invaders he must display almost superhuman courage and intelligence. But with a clear head and a firm heart much can be done.

"Shall I be able to find this head and heart?" thought the Czar.

CHAPTER III MICHAEL STROGOFF MEETS THE CZAR

THE door of the imperial cabinet was again opened and General Kissoff was announced.

"The courier?" inquired the Czar eagerly.

"He is here, sire," replied General Kissoff.

"Have you found a fitting man?"

"I will answer for him to your majesty."

"Has he been in the service of the Palace?"

"Yes, sire."

"You know him?"
"Personally, and at various times he has fulfilled difficult missions with success."

"Abroad?"

"In Siberia itself."

"Where does he come from?"

"From Omsk. He is a Siberian."

"Has he coolness, intelligence, courage?"

"Yes, sire; he has all the qualities necessary to succeed, even where others might possibly fail."

"What is his age?"

"Thirty."

"Is he strong and vigorous?"

"Sire, he can bear cold, hunger, thirst, fatigue, to the very last extremities."

"He must have a frame of iron."

"Sire, he has."

"And a heart?"

"A heart of gold."

"His name?"

"Michael Strogoff."

"Is he ready to set out?"

"He awaits your majesty's orders in the guard-room."

"Let him come in," said the Czar.

In a few moments Michael Strogoff, the courier, entered the imperial library. He was a tall, vigorous, broad-shouldered, deep-chested man. His powerful head possessed the fine features of the Caucasian race. His well-knit frame seemed built for the performance of feats of strength. It would have been a difficult task to move such a man against his will, for when his feet were once planted on the ground, it was as if they had taken root. As he doffed his Muscovite cap, locks of thick curly hair fell over his broad, massive forehead. When his ordinarily pale face became at all flushed, it arose solely from a more rapid action of the heart. His eyes, of a deep blue, looked with clear, frank, firm gaze. The slightly-contracted eyebrows indicated lofty heroism—"the hero's cool courage," according to the definition of the physiologist. He possessed a fine nose, with large nostrils; and a well-shaped mouth, with the slightly-projecting lips which denote a generous and noble heart.

Michael Strogoff had the temperament of the man of action, who does not bite his nails or scratch his head in doubt and indecision. Sparing of gestures as of words, he always stood motionless like a soldier before his superior; but when he moved, his step showed a firmness, a freedom of movement, which proved the confidence and vivacity of his mind.

Michael Strogoff wore a handsome military uniform something resembling that of a light-cavalry officer in the field—boots, spurs, half tightly-fitting trousers, brown pelisse, trimmed with fur and ornamented with yellow braid. On his breast glittered a cross and several medals.

Michael Strogoff belonged to the special corps of the Czar's couriers, ranking as an officer among those picked men. His most discernible characteristic—particularly in his walk, his face, in the whole man, and which the Czar perceived at a glance—was, that he was "a fulfiller of orders." He therefore possessed one of the most serviceable qualities in Russia—one which, as the celebrated novelist Tourgueneff says, "will lead to the highest positions in the Muscovite empire."

In short, if anyone could accomplish this journey from Moscow to Irkutsk, across a rebellious country, surmount obstacles, and brave perils of all sorts, Michael Strogoff was the man.

A circumstance especially favorable to the success of his plan was, that he was thoroughly acquainted with the country which he was about to traverse, and understood its different dialects—not only from having traveled there before, but because he was of Siberian origin.

His father—old Peter Strogoff, dead ten years since—inhabited the town of Omsk, situated in the government of the same name; and his mother, Marfa Strogoff, lived there still. There, amid the wild steppes of the provinces of Omsk and Tobolsk, had the famous huntsman brought up his son Michael to endure hardship. Peter Strogoff was a huntsman by profession. Summer and winter—in the burning heat, as well as when the cold was sometimes fifty degrees below zero—he scoured the frozen plains, the thickets of birch and larch, the pine forests; setting traps; watching for small game with his gun, and for large game with the spear or knife. The large game was nothing less than the Siberian bear, a formidable and ferocious animal, in size equaling its fellow of the frozen seas. Peter Strogoff had killed more than thirty-nine bears—that is to say, the fortieth had fallen under his blows; and, according to Russian legends, most huntsmen who have been lucky enough up to the thirty-ninth bear, have succumbed to the fortieth.
Peter Strogoff had, however, passed the fatal number without even a scratch. From that time, his son Michael, aged eleven years, never failed to accompany him to the hunt, carrying the ragatina or spear to aid his father, who was armed only with the knife. When he was fourteen, Michael Strogoff had killed his first bear, quite alone—that was nothing; but after stripping it he dragged the gigantic animal's skin to his father's house, many versts distant, exhibiting remarkable strength in a boy so young.

This style of life was of great benefit to him, and when he arrived at manhood he could bear any amount of cold, heat, hunger, thirst, or fatigue. Like the Yakout of the northern countries, he was made of iron. He could go four- and-twenty hours without eating, ten nights without sleeping, and could make himself a shelter in the open steppe where others would have been frozen to death. Gifted with marvelous acuteness, guided by the instinct of the Delaware of North America, over the white plain, when every object is hidden in mist, or even in higher latitudes, where the polar night is prolonged for many days, he could find his way when others would have had no idea whither to turn. All his father's secrets were known to him. He had learnt to read almost imperceptible signs—the forms of icicles, the appearance of the small branches of trees, mists rising far away in the horizon, vague sounds in the air, distant reports, the flight of birds through the foggy atmosphere, a thousand circumstances which are so many words to those who can decipher them. Moreover, tempered by snow like a Damascus blade in the waters of Syria, he had a frame of iron, as General Kissoff had said, and, what was no less true, a heart of gold.

The only sentiment of love felt by Michael Strogoff was that which he entertained for his mother, the aged Marfa, who could never be induced to leave the house of the Strogoffs, at Omsk, on the banks of the Irtish, where the old huntsman and she had lived so long together. When her son left her, he went away with a full heart, but promising to come and see her whenever he could possibly do so; and this promise he had always religiously kept.

When Michael was twenty, it was decided that he should enter the personal service of the Emperor of Russia, in the corps of the couriers of the Czar. The hardy, intelligent, zealous, well-conducted young Siberian first distinguished himself especially, in a journey to the Caucasus, through the midst of a difficult country, ravaged by some restless successors of Schamyl; then later, in an important mission to Petropolowski, in Kamtschatka, the extreme limit of Asiatic Russia. During these long journeys he displayed such marvelous coolness, prudence, and courage, as to gain him the approbation and protection of his chiefs, who rapidly advanced him in his profession.

The furloughs which were his due after these distant missions, he never failed to devote to his old mother. Having been much employed in the south of the empire, he had not seen old Marfa for three years—three ages!—the first time in his life he had been so long absent from her. Now, however, in a few days he would obtain his furlough, and he had accordingly already made preparations for departure for Omsk, when the events which have been related occurred. Michael Strogoff was therefore introduced into the Czar's presence in complete ignorance of what the emperor expected from him.

The Czar fixed a penetrating look upon him without uttering a word, whilst Michael stood perfectly motionless.

The Czar, apparently satisfied with his scrutiny, motioned to the chief of police to seat himself, and dictated in a low voice a letter of not more than a few lines.

The letter penned, the Czar re-read it attentively, then signed it, preceding his name with the words "Byt po semou," which, signifying "So be it," constitutes the decisive formula of the Russian emperors.

The letter was then placed in an envelope, which was sealed with the imperial arms.

The Czar, rising, told Michael Strogoff to draw near.

Michael advanced a few steps, and then stood motionless, ready to answer.

The Czar again looked him full in the face and their eyes met. Then in an abrupt tone, "Thy name?" he asked.

"Michael Strogoff, sire."

"Thy rank?"

"Captain in the corps of couriers of the Czar."

"Thou dost know Siberia?"

"I am a Siberian."

"A native of?"

"Omsk, sire."

"Hast thou relations there?"

"Yes sire."

"What relations?"

"My old mother."

The Czar suspended his questions for a moment. Then, pointing to the letter which he held in his hand, "Here is a letter which I charge thee, Michael Strogoff, to deliver into the hands of the Grand Duke, and to no other but him."

"I will deliver it, sire."

"The Grand Duke is at Irkutsk."
"I will go to Irkutsk."
"Thou wilt have to traverse a rebellious country, invaded by Tartars, whose interest it will be to intercept this letter."
"I will traverse it."
"Above all, beware of the traitor, Ivan Ogareff, who will perhaps meet thee on the way."
"I will beware of him."
"Wilt thou pass through Omsk?"
"Sire, that is my route."
"If thou dost see thy mother, there will be the risk of being recognized. Thou must not see her!"
Michael Strogoff hesitated a moment.
"I will not see her," said he.
"Swear to me that nothing will make thee acknowledge who thou art, nor whither thou art going."
"I swear it."
"Michael Strogoff," continued the Czar, giving the letter to the young courier, "take this letter; on it depends the safety of all Siberia, and perhaps the life of my brother the Grand Duke."
"This letter shall be delivered to his Highness the Grand Duke."
"Then thou wilt pass whatever happens?"
"I shall pass, or they shall kill me."
"I want thee to live."
"I shall live, and I shall pass," answered Michael Strogoff.
The Czar appeared satisfied with Strogoff's calm and simple answer.
"Go then, Michael Strogoff," said he, "go for God, for Russia, for my brother, and for myself!"
The courier, having saluted his sovereign, immediately left the imperial cabinet, and, in a few minutes, the New Palace.
"You made a good choice there, General," said the Czar.
"I think so, sire," replied General Kissoff; "and your majesty may be sure that Michael Strogoff will do all that a man can do."
"He is indeed a man," said the Czar.

CHAPTER IV FROM MOSCOW TO NIJNI-NOVGOROD

The distance between Moscow and Irkutsk, about to be traversed by Michael Strogoff, was three thousand four hundred miles. Before the telegraph wire extended from the Ural Mountains to the eastern frontier of Siberia, the dispatch service was performed by couriers, those who traveled the most rapidly taking eighteen days to get from Moscow to Irkutsk. But this was the exception, and the journey through Asiatic Russia usually occupied from four to five weeks, even though every available means of transport was placed at the disposal of the Czar's messengers.

Michael Strogoff was a man who feared neither frost nor snow. He would have preferred traveling during the severe winter season, in order that he might perform the whole distance by sleighs. At that period of the year the difficulties which all other means of locomotion present are greatly diminished, the wide steppes being leveled by snow, while there are no rivers to cross, but simply sheets of glass, over which the sleigh glides rapidly and easily.

Perhaps certain natural phenomena are most to be feared at that time, such as long-continuing and dense fogs, excessive cold, fearfully heavy snow-storms, which sometimes envelop whole caravans and cause their destruction. Hungry wolves also roam over the plain in thousands. But it would have been better for Michael Strogoff to face these risks; for during the winter the Tartar invaders would have been stationed in the towns, any movement of their troops would have been impracticable, and he could consequently have more easily performed his journey. But it was not in his power to choose either weather or time. Whatever the circumstances, he must accept them and set out.

Such were the difficulties which Michael Strogoff boldly confronted and prepared to encounter.

In the first place, he must not travel as a courier of the Czar usually would. No one must even suspect what he really was. Spies swarm in a rebellious country; let him be recognized, and his mission would be in danger. Also, while supplying him with a large sum of money, which was sufficient for his journey, and would facilitate it in some measure, General Kissoff had not given him any document notifying that he was on the Emperor's service, which is the Sesame par excellence. He contented himself with furnishing him with a "podorojna."

This podorojna was made out in the name of Nicholas Korpanoff, merchant, living at Irkutsk. It authorized Nicholas Korpanoff to be accompanied by one or more persons, and, moreover, it was, by special notification, made available in the event of the Muscovite government forbidding natives of any other countries to leave Russia.

The podorojna is simply a permission to take post-horses; but Michael Strogoff was not to use it unless he was
sure that by so doing he would not excite suspicion as to his mission, that is to say, whilst he was on European territory. The consequence was that in Siberia, whilst traversing the insurgent provinces, he would have no power over the relays, either in the choice of horses in preference to others, or in demanding conveyances for his personal use; neither was Michael Strogoff to forget that he was no longer a courier, but a plain merchant, Nicholas Korpanoff, traveling from Moscow to Irkutsk, and, as such exposed to all the impediments of an ordinary journey.

To pass unknown, more or less rapidly, but to pass somehow, such were the directions he had received.

Thirty years previously, the escort of a traveler of rank consisted of not less than two hundred mounted Cossacks, two hundred foot-soldiers, twenty-five Baskir horsemen, three hundred camels, four hundred horses, twenty-five wagons, two portable boats, and two pieces of cannon. All this was requisite for a journey in Siberia.

Michael Strogoff, however, had neither cannon, nor horsemen, nor foot-soldiers, nor beasts of burden. He would travel in a carriage or on horseback, when he could; on foot, when he could not.

There would be no difficulty in getting over the first thousand miles, the distance between Moscow and the Russian frontier. Railroads, post-carriages, steamboats, relays of horses, were at everyone's disposal, and consequently at the disposal of the courier of the Czar.

Accordingly, on the morning of the 16th of July, having doffed his uniform, with a knapsack on his back, dressed in the simple Russian costume--tightly-fitting tunic, the traditional belt of the Moujik, wide trousers, gartered at the knees, and high boots--Michael Strogoff arrived at the station in time for the first train. He carried no arms, openly at least, but under his belt was hidden a revolver and in his pocket, one of those large knives, resembling both a cutlass and a yataghan, with which a Siberian hunter can so neatly disembowel a bear, without injuring its precious fur.

A crowd of travelers had collected at the Moscow station. The stations on the Russian railroads are much used as places for meeting, not only by those who are about to proceed by the train, but by friends who come to see them off. The station resembles, from the variety of characters assembled, a small news exchange.

The train in which Michael took his place was to set him down at Nijni-Novgorod. There terminated at that time, the iron road which, uniting Moscow and St. Petersburg, has since been continued to the Russian frontier. It was a journey of under three hundred miles, and the train would accomplish it in ten hours. Once arrived at Nijni-Novgorod, Strogoff would either take the land route or the steamer on the Volga, so as to reach the Ural Mountains as soon as possible.

Michael Strogoff ensconced himself in his corner, like a worthy citizen whose affairs go well with him, and who endeavors to kill time by sleep. Nevertheless, as he was not alone in his compartment, he slept with one eye open, and listened with both his ears.

In fact, rumor of the rising of the Kirghiz hordes, and of the Tartar invasion had transpired in some degree. The occupants of the carriage, whom chance had made his traveling companions, discussed the subject, though with that caution which has become habitual among Russians, who know that spies are ever on the watch for any treasonable expressions which may be uttered.

These travelers, as well as the large number of persons in the train, were merchants on their way to the celebrated fair of Nijni-Novgorod;--a very mixed assembly, composed of Jews, Turks, Cossacks, Russians, Georgians, Kalmucks, and others, but nearly all speaking the national tongue.

They discussed the pros and cons of the serious events which were taking place beyond the Ural, and those merchants seemed to fear lest the government should be led to take certain restrictive measures, especially in the provinces bordering on the frontier--measures from which trade would certainly suffer. They apparently thought only of the struggle from the single point of view of their threatened interests. The presence of a private soldier, clad in his uniform--and the importance of a uniform in Russia is great--would have certainly been enough to restrain the merchants' tongues. But in the compartment occupied by Michael Strogoff, there was no one who seemed a military man, and the Czar's courier was not the person to betray himself. He listened, then.

"They say that caravan teas are up," remarked a Persian, known by his cap of Astrakhan fur, and his ample brown robe, worn threadbare by use.

"Oh, there's no fear of teas falling," answered an old Jew of sullen aspect. "Those in the market at Nijni-Novgorod will be easily cleared off by the West; but, unfortunately, it won't be the same with Bokhara carpets."

"What! are you expecting goods from Bokhara?" asked the Persian.

"No, but from Samarcand, and that is even more exposed. The idea of reckoning on the exports of a country in which the khans are in a state of revolt from Khiva to the Chinese frontier!"

"Well," replied the Persian, "if the carpets do not arrive, the drafts will not arrive either, I suppose."

"And the profits, Father Abraham!" exclaimed the little Jew, "do you reckon them as nothing?"

"You are right," said another; "goods from Central Asia run a great risk in the market, and it will be the same with the tallow and shawls from the East."
"Why, look out, little father," said a Russian traveler, in a bantering tone; "you'll grease your shawls terribly if you mix them up with your tallow."

"That amuses you," sharply answered the merchant, who had little relish for that sort of joke.

"Well, if you tear your hair, or if you throw ashes on your head," replied the traveler, "will that change the course of events? No; no more than the course of the Exchange."

"One can easily see that you are not a merchant," observed the little Jew.

"Faith, no, worthy son of Abraham! I sell neither hops, nor eider-down, nor honey, nor wax, nor hemp-seed, nor salt meat, nor caviare, nor wood, nor wool, nor ribbons, nor, hemp, nor flax, nor morocco, nor furs."

"But do you buy them?" asked the Persian, interrupting the traveler's list.

"As little as I can, and only for my own private use," answered the other, with a wink.

"He's a wag," said the Jew to the Persian.

"Or a spy," replied the other, lowering his voice. "We had better take care, and not speak more than necessary. The police are not over-particular in these times, and you never can know with whom you are traveling."

In another corner of the compartment they were speaking less of mercantile affairs, and more of the Tartar invasion and its annoying consequences.

"All the horses in Siberia will be requisitioned," said a traveler, "and communication between the different provinces of Central Asia will become very difficult."

"Is it true," asked his neighbor, "that the Kirghiz of the middle horde have joined the Tartars?"

"So it is said," answered the traveler, lowering his voice; "but who can flatter themselves that they know anything really of what is going on in this country?"

"I have heard of a concentration of troops on the frontier. The Don Cossacks have already gathered along the course of the Volga, and they are to be opposed to the rebel Kirghiz."

"If the Kirghiz descend the Irtish, the route to Irkutsk will not be safe," observed his neighbor. "Besides, yesterday I wanted to send a telegram to Krasnoiarsk, and it could not be forwarded. It's to be feared that before long the Tartar columns will have isolated Eastern Siberia."

"In short, little father," continued the first speaker, "these merchants have good reason for being uneasy about their trade and transactions. After requisitioning the horses, they will take the boats, carriages, every means of transport, until presently no one will be allowed to take even one step in all the empire."

"I'm much afraid that the Nijni-Novgorod fair won't end as brilliantly as it has begun," responded the other, shaking his head. "But the safety and integrity of the Russian territory before everything. Business is business."

This was especially remarked by a traveler in a carriage at the front part of the train. This person—evidently a stranger—made good use of his eyes, and asked numberless questions, to which he received only evasive answers. Every minute leaning out of the window, which he would keep down, to the great disgust of his fellow-travelers, he lost nothing of the views to the right. He inquired the names of the most insignificant places, their position, what were their commerce, their manufactures, the number of their inhabitants, the average mortality, etc., and all this he wrote down in a note-book, already full.

This was the correspondent Alcide Jolivet, and the reason of his putting so many insignificant questions was, that amongst the many answers he received, he hoped to find some interesting fact "for his cousin." But, naturally enough, he was taken for a spy, and not a word treating of the events of the day was uttered in his hearing.

Finding, therefore, that he could learn nothing of the Tartar invasion, he wrote in his book, "Travelers of great discretion. Very close as to political matters."

Whilst Alcide Jolivet noted down his impressions thus minutely, his confrere, in the same train, traveling for the same object, was devoting himself to the same work of observation in another compartment. Neither of them had seen each other that day at the Moscow station, and they were each ignorant that the other had set out to visit the scene of the war. Harry Blount, speaking little, but listening much, had not inspired his companions with the suspicions which Alcide Jolivet had aroused. He was not taken for a spy, and therefore his neighbors, without constraint, gossiped in his presence, allowing themselves even to go farther than their natural caution would in most cases have allowed them. The correspondent of the Daily Telegraph had thus an opportunity of observing how much recent events preoccupied the merchants of Nijni-Novgorod, and to what a degree the commerce with Central Asia was threatened in its transit.

He therefore noted in his book this perfectly correct observation, "My fellow-travelers extremely anxious. Nothing is talked of but war, and they speak of it, with a freedom which is astonishing, as having broken out
The readers of the Daily Telegraph would not fail to be as well informed as Alcide Jolivet's "cousin." But as Harry Blount, seated at the left of the train, only saw one part of the country, which was hilly, without giving himself the trouble of looking at the right side, which was composed of wide plains, he added, with British assurance, "Country mountainous between Moscow and Wladimir."

It was evident that the Russian government purposed taking severe measures to guard against any serious eventualities even in the interior of the empire. The rebel lion had not crossed the Siberian frontier, but evil influences might be feared in the Volga provinces, so near to the country of the Kirghiz.

The police had as yet found no traces of Ivan Ogareff. It was not known whether the traitor, calling in the foreigner to avenge his personal rancor, had rejoined Feofar-Khan, or whether he was endeavoring to foment a revolt in the government of Niijni-Novgorod, which at this time of year contained a population of such diverse elements. Perhaps among the Persians, Armenians, or Kalmucks, who flocked to the great market, he had agents, instructed to provoke a rising in the interior. All this was possible, especially in such a country as Russia. In fact, this vast empire, 4,000,000 square miles in extent, does not possess the homogeneousness of the states of Western Europe. The Russian territory in Europe and Asia contains more than seventy millions of inhabitants. In it thirty different languages are spoken. The Sclavonian race predominates, no doubt, but there are besides Russians, Poles, Lithuanians, Courlanders. Add to these, Finns, Laplanders, Estonians, several other northern tribes with unpronounceable names, the Permiaks, the Germans, the Greeks, the Tartars, the Caucasian tribes, the Mongol, Kalmuck, Samoid, Kamtschatkan, and Aleutian hordes, and one may understand that the unity of so vast a state must be difficult to maintain, and that it could only be the work of time, aided by the wisdom of many successive rulers.

Be that as it may, Ivan Ogareff had hitherto managed to escape all search, and very probably he might have rejoined the Tartar army. But at every station where the train stopped, inspectors came forward who scrutinized the travelers and subjected them all to a minute examination, as by order of the superintendent of police, these officials were seeking Ivan Ogareff. The government, in fact, believed it to be certain that the traitor had not yet been able to quit European Russia. If there appeared cause to suspect any traveler, he was carried off to explain himself at the police station, and in the meantime the train went on its way, no person troubling himself about the unfortunate one left behind.

With the Russian police, which is very arbitrary, it is absolutely useless to argue. Military rank is conferred on its employees, and they act in military fashion. How can anyone, moreover, help obeying, unhesitatingly, orders which emanate from a monarch who has the right to employ this formula at the head of his ukase: "We, by the grace of God, Emperor and Autocrat of all the Russians of Moscow, Kiev, Wladimir, and Novgorod, Czar of Kasan and Astrakhan, Czar of Poland, Czar of Siberia, Czar of the Tauric Chersonese, Seignior of Pskov, Prince of Smolensk, Lithuania, Volynia, Podolia, and Finland, Prince of Esthonia, Livonia, Courland, and of Semigallia, of Bialystok, Karelia, Sougria, Perm, Viatka, Bulgaria, and many other countries; Lord and Sovereign Prince of the territory of Niijni-Novgorod, Tchemigoff, Riazan, Polotsk, Rostov, Jaroslavl, Bielozersk, Oudoria, Obdoria, Kondinia, Vitep, and of Mtsisla, Governor of the Hyperborean Regions, Lord of the countries of Iveria, Kartalinia, Grou-zinia, Kabardinia, and Armenia, Hereditary Lord and Suzerain of the Scherkess princes, of those of the mountains, and of others; heir of Norway, Duke of Schleswig-Holstein, Stormarn, Dittmarsen, and Oldenburg." A powerful lord, in truth, is he whose arms are an eagle with two heads, holding a scepter and a globe, surrounded by the escutcheons of Novgorod, Wladimir, Kiev, Kasan, Astrakhan, and of Siberia, and environed by the collar of the order of St. Andrew, surmounted by a royal crown!

As to Michael Strogoff, his papers were in order, and he was, consequently, free from all police supervision.

At the station of Wladimir the train stopped for several minutes, which appeared sufficient to enable the correspondent of the Daily Telegraph to take a twofold view, physical and moral, and to form a complete estimate of this ancient capital of Russia.

At the Wladimir station fresh travelers joined the train. Among others, a young girl entered the compartment occupied by Michael Strogoff. A vacant place was found opposite the courier. The young girl took it, after placing by her side a modest traveling-bag of red leather, which seemed to constitute all her luggage. Then seating herself with downcast eyes, not even glancing at the fellow-travelers whom chance had given her, she prepared for a journey which was still to last several hours.

Michael Strogoff could not help looking attentively at his newly-arrived fellow-traveler. As she was so placed as to travel with her back to the engine, he even offered her his seat, which he might prefer to her own, but she thanked him with a slight bend of her graceful neck.

The young girl appeared to be about sixteen or seventeen years of age. Her head, truly charming, was of the purest Sclavonic type—slightly severe, and likely in a few summers to unfold into beauty rather than mere prettiness.
From beneath a sort of kerchief which she wore on her head escaped in profusion light golden hair. Her eyes were brown, soft, and expressive of much sweetness of temper. The nose was straight, and attached to her pale and somewhat thin cheeks by delicately mobile nostrils. The lips were finely cut, but it seemed as if they had long since forgotten how to smile.

The young traveler was tall and upright, as far as could be judged of her figure from the very simple and ample pelisse that covered her. Although she was still a very young girl in the literal sense of the term, the development of her high forehead and clearly-cut features gave the idea that she was the possessor of great moral energy—a point which did not escape Michael Strogoff. Evidently this young girl had already suffered in the past, and the future doubtless did not present itself to her in glowing colors; but she had surely known how to struggle still with the trials of life. Her energy was evidently both prompt and persistent, and her calmness unalterable, even under circumstances in which a man would be likely to give way or lose his self-command.

Such was the impression which she produced at first sight. Michael Strogoff, being himself of an energetic temperament, was naturally struck by the character of her physiognomy, and, while taking care not to cause her annoyance by a too persistent gaze, he observed his neighbor with no small interest. The costume of the young traveler was both extremely simple and appropriate. She was not rich—that could be easily seen; but not the slightest mark of negligence was to be discerned in her dress. All her luggage was contained in the leather bag which, for want of room, she held on her lap.

She wore a long, dark pelisse, gracefully adjusted at the neck by a blue tie. Under this pelisse, a short skirt, also dark, fell over a robe which reached the ankles. Half-boots of leather, thickly soled, as if chosen in anticipation of a long journey, covered her small feet.

Michael Strogoff fancied that he recognized, by certain details, the fashion of the costume of Livonia, and thought his neighbor a native of the Baltic provinces.

But whither was this young girl going, alone, at an age when the fostering care of a father, or the protection of a brother, is considered a matter of necessity? Had she now come, after an already long journey, from the provinces of Western Russia? Was she merely going to Nijni-Novgorod, or was the end of her travels beyond the eastern frontiers of the empire? Would some relation, some friend, await her arrival by the train? Or was it not more probable, on the contrary, that she would find herself as much isolated in the town as she was in this compartment? It was probable.

In fact, the effect of habits contracted in solitude was clearly manifested in the bearing of the young girl. The manner in which she entered the carriage and prepared herself for the journey, the slight disturbance she caused among those around her, the care she took not to incommode or give trouble to anyone, all showed that she was accustomed to be alone, and to depend on herself only.

Michael Strogoff observed her with interest, but, himself reserved, he sought no opportunity of accosting her. Once only, when her neighbor—the merchant who had jumbled together so imprudently in his remarks tallow and shawls—being asleep, and threatening her with his great head, which was swaying from one shoulder to the other, Michael Strogoff awoke him somewhat roughly, and made him understand that he must hold himself upright.

The merchant, rude enough by nature, grumbled some words against "people who interfere with what does not concern them," but Michael Strogoff cast on him a glance so stern that the sleeper leant on the opposite side, and relieved the young traveler from his unpleasant vicinity.

The latter looked at the young man for an instant, and mute and modest thanks were in that look.

But a circumstance occurred which gave Strogoff a just idea of the character of the maiden. Twelve verst before arriving at Nijni-Novgorod, at a sharp curve of the iron way, the train experienced a very violent shock. Then, for a minute, it ran onto the slope of an embankment.

Travelers more or less shaken about, cries, confusion, general disorder in the carriages—such was the effect at first produced. It was to be feared that some serious accident had happened. Consequently, even before the train had stopped, the doors were opened, and the panic-stricken passengers thought only of getting out of the carriages.

Michael Strogoff thought instantly of the young girl; but, while the passengers in her compartment were precipitating themselves outside, screaming and struggling, she had remained quietly in her place, her face scarcely changed by a slight pallor.

She waited—Michael Strogoff waited also.

"A determined nature!" thought Michael Strogoff.

However, all danger had quickly disappeared. A breakage of the coupling of the luggage-van had first caused the shock to, and then the stoppage of, the train, which in another instant would have been thrown from the top of the embankment into a bog. There was an hour's delay. At last, the road being cleared, the train proceeded, and at half-past eight in the evening arrived at the station of Nijni-Novgorod.
Before anyone could get out of the carriages, the inspectors of police presented themselves at the doors and examined the passengers.

Michael Strogoff showed his podorojna, made out in the name of Nicholas Korpanoff. He had consequently no difficulty. As to the other travelers in the compartment, all bound for Nijni-Novgorod, their appearance, happily for them, was in nowise suspicious.

The young girl in her turn, exhibited, not a passport, since passports are no longer required in Russia, but a permit indorsed with a private seal, and which seemed to be of a special character. The inspector read the permit with attention. Then, having attentively examined the person whose description it contained:

"You are from Riga?" he said.
"Yes," replied the young girl.
"You are going to Irkutsk?"
"Yes."
"By what route?"
"By Perm."
"Good!" replied the inspector. "Take care to have your permit vised, at the police station of Nijni-Novgorod."

The young girl bent her head in token of assent.

Hearing these questions and replies, Michael Strogoff experienced a mingled sentiment both of surprise and pity. What! this young girl, alone, journeying to that far-off Siberia, and at a time when, to its ordinary dangers, were added all the perils of an invaded country and one in a state of insurrection! How would she reach it? What would become of her?

The inspection ended, the doors of the carriages were then opened, but, before Michael Strogoff could move towards her, the young Livonian, who had been the first to descend, had disappeared in the crowd which thronged the platforms of the railway station.

CHAPTER V THE TWO ANNOUNCEMENTS

NIJNI-NOVGOROD, Lower Novgorod, situate at the junction of the Volga and the Oka, is the chief town in the district of the same name. It was here that Michael Strogoff was obliged to leave the railway, which at the time did not go beyond that town. Thus, as he advanced, his traveling would become first less speedy and then less safe.

Nijni-Novgorod, the fixed population of which is only from thirty to thirty-five thousand inhabitants, contained at that time more than three hundred thousand; that is to say, the population was increased tenfold. This addition was in consequence of the celebrated fair, which was held within the walls for three weeks. Formerly Makariew had the benefit of this concourse of traders, but since 1817 the fair had been removed to Nijni-Novgorod.

Even at the late hour at which Michael Strogoff left the platform, there was still a large number of people in the two towns, separated by the stream of the Volga, which compose Nijni-Novgorod. The highest of these is built on a steep rock, and defended by a fort called in Russia "kreml."

Michael Strogoff expected some trouble in finding a hotel, or even an inn, to suit him. As he had not to start immediately, for he was going to take a steamer, he was compelled to look out for some lodging; but, before doing so, he wished to know exactly the hour at which the steamboat would start. He went to the office of the company whose boats plied between Nijni-Novgorod and Perm. There, to his great annoyance, he found that no boat started for Perm till the following day at twelve o'clock. Seventeen hours to wait! It was very vexatious to a man so pressed for time. However, he never senselessly murmured. Besides, the fact was that no other conveyance could take him so quickly either to Perm or Kasan. It would be better, then, to wait for the steamer, which would enable him to regain lost time.

Here, then, was Michael Strogoff, strolling through the town and quietly looking out for some inn in which to pass the night. However, he troubled himself little on this score, and, but that hunger pressed him, he would probably have wandered on till morning in the streets of Nijni-Novgorod. He was looking for supper rather than a bed. But he found both at the sign of the City of Constantinople. There, the landlord offered him a fairly comfortable room, with little furniture, it is true, but not without an image of the Virgin, and a few saints framed in yellow gauze.

A goose filled with sour stuffing swimming in thick cream, barley bread, some curds, powdered sugar mixed with cinnamon, and a jug of kwass, the ordinary Russian beer, were placed before him, and sufficed to satisfy his hunger. He did justice to the meal, which was more than could be said of his neighbor at table, who, having, in his character of "old believer" of the sect of Raskalniks, made the vow of abstinence, rejected the potatoes in front of him, and carefully refrained from putting sugar in his tea.

His supper finished, Michael Strogoff, instead of going up to his bedroom, again strolled out into the town. But, although the long twilight yet lingered, the crowd was already dispersing, the streets were gradually becoming empty, and at length everyone retired to his dwelling.
Why did not Michael Strogoff go quietly to bed, as would have seemed more reasonable after a long railway journey? Was he thinking of the young Livonian girl who had been his traveling companion? Having nothing better to do, he was thinking of her. Did he fear that, lost in this busy city, she might be exposed to insult? He feared so, and with good reason. Did he hope to meet her, and, if need were, to afford her protection? No. To meet would be difficult. As to protection—what right had he—

"Alone," he said to himself, "alone, in the midst of these wandering tribes! And yet the present dangers are nothing compared to those she must undergo. Siberia! Irkutsk! I am about to dare all risks for Russia, for the Czar, while she is about to do so—For whom? For what? She is authorized to cross the frontier! The country beyond is in revolt! The steppes are full of Tartar bands!"

Michael Strogoff stopped for an instant, and reflected.

"Without doubt," thought he, "she must have determined on undertaking her journey before the invasion. Perhaps she is even now ignorant of what is happening. But no, that cannot be; the merchants discussed before her the disturbances in Siberia—and she did not seem surprised. She did not even ask an explanation. She must have known it then, and knowing it, is still resolute. Poor girl! Her motive for the journey must be urgent indeed! But though she may be brave—and she certainly is so—her strength must fail her, and, to say nothing of dangers and obstacles, she will be unable to endure the fatigue of such a journey. Never can she reach Irkutsk!"

Indulging in such reflections, Michael Strogoff wandered on as chance led him; being well acquainted with the town, he knew that he could easily retrace his steps.

Having strolled on for about an hour, he seated himself on a bench against the wall of a large wooden cottage, which stood, with many others, on a vast open space. He had scarcely been there five minutes when a hand was laid heavily on his shoulder.

"What are you doing here?" roughly demanded a tall and powerful man, who had approached unperceived.

"I am resting," replied Michael Strogoff.

"Do you mean to stay all night on the bench?"

"Yes, if I feel inclined to do so," answered Michael Strogoff, in a tone somewhat too sharp for the simple merchant he wished to personate.

"Come forward, then, so I can see you," said the man.

Michael Strogoff, remembering that, above all, prudence was requisite, instinctively drew back. "It is not necessary," he replied, and calmly stepped back ten paces.

The man seemed, as Michael observed him well, to have the look of a Bohemian, such as are met at fairs, and with whom contact, either physical or moral, is unpleasant. Then, as he looked more attentively through the dusk, he perceived, near the cottage, a large caravan, the usual traveling dwelling of the Zingaris or gypsies, who swarm in Russia wherever a few copecks can be obtained.

As the gypsy took two or three steps forward, and was about to interrogate Michael Strogoff more closely, the door of the cottage opened. He could just see a woman, who spoke quickly in a language which Michael Strogoff knew to be a mixture of Mongol and Siberian.

"Another spy! Let him alone, and come to supper. The papluka is waiting for you."

Michael Strogoff could not help smiling at the epithet bestowed on him, dreading spies as he did above all else. In the same dialect, although his accent was very different, the Bohemian replied in words which signify, "You are right, Sangarre! Besides, we start to-morrow."

"To-morrow?" repeated the woman in surprise.

"Yes, Sangarre," replied the Bohemian; "to-morrow, and the Father himself sends us--where we are going!"

Thereupon the man and woman entered the cottage, and carefully closed the door.

"Good!" said Michael Strogoff, to himself; "if these gipsies do not wish to be understood when they speak before me, they had better use some other language."

From his Siberian origin, and because he had passed his childhood in the Steppes, Michael Strogoff, it has been said, understood almost all the languages in usage from Tartary to the Sea of Ice. As to the exact signification of the words he had heard, he did not trouble his head. For why should it interest him?

It was already late when he thought of returning to his inn to take some repose. He followed, as he did so, the course of the Volga, whose waters were almost hidden under the countless number of boats floating on its bosom.

An hour after, Michael Strogoff was sleeping soundly on one of those Russian beds which always seem so hard to strangers, and on the morrow, the 17th of July, he awoke at break of day.

He had still five hours to pass in Nijni-Novgorod; it seemed to him an age. How was he to spend the morning unless in wandering, as he had done the evening before, through the streets? By the time he had finished his breakfast, strapped up his bag, had his podorojna inspected at the police office, he would have nothing to do but start. But he was not a man to lie in bed after the sun had risen; so he rose, dressed himself, placed the letter with the
imperial arms on it carefully at the bottom of its usual pocket within the lining of his coat, over which he fastened his belt; he then closed his bag and threw it over his shoulder. This done, he had no wish to return to the City of Constantinople, and intending to breakfast on the bank of the Volga near the wharf, he settled his bill and left the inn. By way of precaution, Michael Strogoff went first to the office of the steam-packet company, and there made sure that the Caucasus would start at the appointed hour. As he did so, the thought for the first time struck him that, since the young Livonian girl was going to Perm, it was very possible that her intention was also to embark in the Caucasus, in which case he should accompany her.

The town above with its kremlin, whose circumference measures two versts, and which resembles that of Moscow, was altogether abandoned. Even the governor did not reside there. But if the town above was like a city of the dead, the town below, at all events, was alive.

Michael Strogoff, having crossed the Volga on a bridge of boats, guarded by mounted Cossacks, reached the square where the evening before he had fallen in with the gipsy camp. This was somewhat outside the town, where the fair of Nijni-Novgorod was held. In a vast plain rose the temporary palace of the governor-general, where by imperial orders that great functionary resided during the whole of the fair, which, thanks to the people who composed it, required an ever-watchful surveillance.

This plain was now covered with booths symmetrically arranged in such a manner as to leave avenues broad enough to allow the crowd to pass without a crush.

Each group of these booths, of all sizes and shapes, formed a separate quarter particularly dedicated to some special branch of commerce. There was the iron quarter, the furriers’ quarter, the woolen quarter, the quarter of the wood merchants, the weavers’ quarter, the dried fish quarter, etc. Some booths were even built of fancy materials, some of bricks of tea, others of masses of salt meat--that is to say, of samples of the goods which the owners thus announced were there to the purchasers--a singular, and somewhat American, mode of advertisement.

In the avenues and long alleys there was already a large assemblage of people--the sun, which had risen at four o’clock, being well above the horizon--an extraordinary mixture of Europeans and Asiatics, talking, wrangling, haranguing, and bargaining. Everything which can be bought or sold seemed to be heaped up in this square. Furs, precious stones, silks, Cashmere shawls, Turkey carpets, weapons from the Caucasus, gauzes from Smyrna and Ispahan. Tiflis armor, caravan teas. European bronzes, Swiss clocks, velvets and silks from Lyons, English cottons, harness, fruits, vegetables, minerals from the Ural, malachite, lapis-lazuli, spices, perfumes, medicinal herbs, wood, tar, rope, horn, pumpkins, water-melons, etc--all the products of India, China, Persia, from the shores of the Caspian and the Black Sea, from America and Europe, were united at this corner of the globe.

It is scarcely possible truly to portray the moving mass of human beings surging here and there, the excitement, the confusion, the hubbub; demonstrative as were the natives and the inferior classes, they were completely outdone by their visitors. There were merchants from Central Asia, who had occupied a year in escorting their merchandise across its vast plains, and who would not again see their shops and counting-houses for another year to come. In short, of such importance is this fair of Nijni-Novgorod, that the sum total of its transactions amounts yearly to nearly a hundred million dollars.

On one of the open spaces between the quarters of this temporary city were numbers of mountebanks of every description; gypsies from the mountains, telling fortunes to the credulous fools who are ever to be found in such assemblies; Zingaris or Tsiganes--a name which the Russians give to the gypsies who are the descendants of the ancient Copts--singing their wildest melodies and dancing their most original dances; comedians of foreign theaters, acting Shakespeare, adapted to the taste of spectators who crowded to witness them. In the long avenues the bear showmen accompanied their four-footed dancers, menageries resounded with the hoarse cries of animals under the influence of the stinging whip or red-hot irons of the tamer; and, besides all these numberless performers, in the middle of the central square, surrounded by a circle four deep of enthusiastic amateurs, was a band of "mariners of the Volga," sitting on the ground, as on the deck of their vessel, imitating the action of rowing, guided by the stick of the master of the orchestra, the veritable helmsman of this imaginary vessel! A whimsical and pleasing custom!

Suddenly, according to a time-honored observance in the fair of Nijni-Novgorod, above the heads of the vast concourse a flock of birds was allowed to escape from the cages in which they had been brought to the spot. In return for a few copecks charitably offered by some good people, the bird-fanciers opened the prison doors of their captives, who flew out in hundreds, uttering their joyous notes.

It should be mentioned that England and France, at all events, were this year represented at the great fair of Nijni-Novgorod by two of the most distinguished products of modern civilization, Messrs. Harry Blount and Alcide Jolivet. Jolivet, an optimist by nature, found everything agreeable, and as by chance both lodging and food were to his taste, he jotted down in his book some memoranda particularly favorable to the town of Nijni-Novgorod. Blount, on the contrary, having in vain hunted for a supper, had been obliged to find a resting-place in the open air. He therefore looked at it all from another point of view, and was preparing an article of the most withering character
against a town in which the landlords of the inns refused to receive travelers who only begged leave to be flayed, "morally and physically."

Michael Strogoff, one hand in his pocket, the other holding his cherry-stemmed pipe, appeared the most indifferent and least impatient of men; yet, from a certain contraction of his eyebrows every now and then, a careful observer would have seen that he was burning to be off.

For two hours he kept walking about the streets, only to find himself invariably at the fair again. As he passed among the groups of buyers and sellers he discovered that those who came from countries on the confines of Asia manifested great uneasiness. Their trade was visibly suffering. Another symptom also was marked. In Russia military uniforms appear on every occasion. Soldiers are wont to mix freely with the crowd, the police agents being almost invariably aided by a number of Cossacks, who, lance on shoulder, keep order in the crowd of three hundred thousand strangers. But on this occasion the soldiers, Cossacks and the rest, did not put in an appearance at the great market. Doubtless, a sudden order to move having been foreseen, they were restricted to their barracks.

Moreover, while no soldiers were to be seen, it was not so with their officers. Since the evening before, aides-de-camp, leaving the governor's palace, galloped in every direction. An unusual movement was going forward which a serious state of affairs could alone account for. There were innumerable couriers on the roads both to Wladimir and to the Ural Mountains. The exchange of telegraphic dispatches with Moscow was incessant.

Michael Strogoff found himself in the central square when the report spread that the head of police had been summoned by a courier to the palace of the governor-general. An important dispatch from Moscow, it was said, was the cause of it.

"The fair is to be closed," said one.
"The regiment of Nijni-Novgorod has received the route," declared another.
"They say that the Tartars menace Tomsk!"
"Here is the head of police!" was shouted on every side. A loud clapping of hands was suddenly raised, which subsided by degrees, and finally was succeeded by absolute silence. The head of police arrived in the middle of the central square, and it was seen by all that he held in his hand a dispatch.

Then, in a loud voice, he read the following announcements: "By order of the Governor of Nijni-Novgorod.
"1st. All Russian subjects are forbidden to quit the province upon any pretext whatsoever.
"2nd. All strangers of Asiatic origin are commanded to leave the province within twenty-four hours."

CHAPTER VI BROTHER AND SISTER

HOWEVER disastrous these measures might be to private interests, they were, under the circumstances, perfectly justifiable.

"All Russian subjects are forbidden to leave the province;" if Ivan Ogareff was still in the province, this would at any rate prevent him, unless with the greatest difficulty, from rejoining Feofar-Khan, and becoming a very formidable lieutenant to the Tartar chief.

"All foreigners of Asiatic origin are ordered to leave the province in four-and-twenty hours;" this would send off in a body all the traders from Central Asia, as well as the bands of Bohemians, gipsies, etc., having more or less sympathy with the Tartars. So many heads, so many spies--undoubtedly affairs required their expulsion.

It is easy to understand the effect produced by these two thunder-claps bursting over a town like Nijni-Novgorod, so densely crowded with visitors, and with a commerce so greatly surpassing that of all other places in Russia. The natives whom business called beyond the Siberian frontier could not leave the province for a time at least. The tenor of the first article of the order was express; it admitted of no exception. All private interests must yield to the public weal. As to the second article of the proclamation, the order of expulsion which it contained admitted of no evasion either. It only concerned foreigners of Asiatic origin, but these could do nothing but pack up their merchandise and go back the way they came. As to the mountebanks, of which there were a considerable number, they had nearly a thousand versts to go before they could reach the nearest frontier. For them it was simply misery.

At first there rose against this unusual measure a murmur of protestation, a cry of despair, but this was quickly suppressed by the presence of the Cossacks and agents of police. Immediately, what might be called the exodus from the immense plain began. The awnings in front of the stalls were folded up; the theaters were taken to pieces; the fires were put out; the acrobats' ropes were lowered; the old broken-winded horses of the traveling vans came back from their sheds. Agents and soldiers with whip or stick stimulated the tardy ones, and made nothing of pulling down the tents even before the poor Bohemians had left them.

Under these energetic measures the square of Nijni-Novgorod would, it was evident, be entirely evacuated before the evening, and to the tumult of the great fair would succeed the silence of the desert.
It must again be repeated—for it was a necessary aggravation of these severe measures—that to all those nomads chiefly concerned in the order of expulsion even the steppes of Siberia were forbidden, and they would be obliged to hasten to the south of the Caspian Sea, either to Persia, Turkey, or the plains of Turkestan. The post of the Ural, and the mountains which form, as it were, a prolongation of the river along the Russian frontier, they were not allowed to pass. They were therefore under the necessity of traveling six hundred miles before they could tread a free soil.

Just as the reading of the proclamation by the head of the police came to an end, an idea darted instinctively into the mind of Michael Strogoff. "What a singular coincidence," thought he, "between this proclamation expelling all foreigners of Asiatic origin, and the words exchanged last evening between those two gipsies of the Zingari race. 'The Father himself sends us where we wish to go,' that old man said. But 'the Father' is the emperor! He is never called anything else among the people. How could those gipsies have foreseen the measure taken against them? how could they have known it beforehand, and where do they wish to go? Those are suspicious people, and it seems to me that to them the government proclamation must be more useful than injurious."

But these reflections were completely dispelled by another which drove every other thought out of Michael's mind. He forgot the Zingaris, their suspicious words, the strange coincidence which resulted from the proclamation. The remembrance of the young Livonian girl suddenly rushed into his mind. "Poor child!" he thought to himself. "She cannot now cross the frontier."

In truth the young girl was from Riga; she was Livonian, consequently Russian, and now could not leave Russian territory! The permit which had been given her before the new measures had been promulgated was no longer available. All the routes to Siberia had just been pitilessly closed to her, and, whatever the motive taking her to Irkutsk, she was now forbidden to go there.

This thought greatly occupied Michael Strogoff. He said to himself, vaguely at first, that, without neglecting anything of what was due to his important mission, it would perhaps be possible for him to be of some use to this brave girl; and this idea pleased him. Knowing how serious were the dangers which he, an energetic and vigorous man, would have personally to encounter, he could not conceal from himself how infinitely greater they would prove to a young unprotected girl. As she was going to Irkutsk, she would be obliged to follow the same road as himself, she would have to pass through the bands of invaders, as he was about to attempt doing himself. If, moreover, she had at her disposal only the money necessary for a journey taken under ordinary circumstances, how could she manage to accomplish it under conditions which made it not only perilous but expensive?

"Well," said he, "if she takes the route to Perm, it is nearly impossible but that I shall fall in with her. Then, I will watch over her without her suspecting it; and as she appears to me as anxious as myself to reach Irkutsk, she will cause me no delay."

But one thought leads to another. Michael Strogoff had till now thought only of doing a kind action; but now another idea flashed into his brain; the question presented itself under quite a new aspect.

"The fact is," said he to himself, "that I have much more need of her than she can have of me. Her presence will be useful in drawing off suspicion from me. A man traveling alone across the steppe, may be easily guessed to be a courier of the Czar. If, on the contrary, this young girl accompanies me, I shall appear, in the eyes of all, the Nicholas Korpanoff of my podorojna. Therefore, she must accompany me. Therefore, I must find her again at any cost. It is not probable that since yesterday evening she has been able to get a carriage and leave Nijni-Novgorod. I must look for her. And may God guide me!"

Michael left the great square of Nijni-Novgorod, where the tumult produced by the carrying out of the prescribed measures had now reached its height. Recriminations from the banished strangers, shouts from the agents and Cossacks who were using them so brutally, together made an indescribable uproar. The girl for whom he searched could not be there. It was now nine o'clock in the morning. The steamboat did not start till twelve. Michael Strogoff had therefore nearly two hours to employ in searching for her whom he wished to make his traveling companion.

He crossed the Volga again and hunted through the quarters on the other side, where the crowd was much less considerable. He entered the churches, the natural refuge for all who weep, for all who suffer. Nowhere did he meet the young Livonian.

"And yet," he repeated, "she could not have left Nijni-Novgorod yet. We'll have another look." He wandered about thus for two hours. He went on without stopping, feeling no fatigue, obeying a potent instinct which allowed no room for thought. All was in vain.

It then occurred to him that perhaps the girl had not heard of the order—though this was improbable enough, for such a thunder-clap could not have burst without being heard by all. Evidently interested in knowing the smallest news from Siberia, how could she be ignorant of the measures taken by the governor, measures which concerned her so directly?

But, if she was ignorant of it, she would come in an hour to the quay, and there some merciless agent would refuse her a passage! At any cost, he must see her beforehand, and enable her to avoid such a repulse.
But all his endeavors were in vain, and he at length almost despaired of finding her again. It was eleven o'clock, and Michael thought of presenting his podorojna at the office of the head of police. The proclamation evidently did not concern him, since the emergency had been foreseen for him, but he wished to make sure that nothing would hinder his departure from the town.

Michael then returned to the other side of the Volga, to the quarter in which was the office of the head of police. An immense crowd was collected there; for though all foreigners were ordered to quit the province, they had notwithstanding to go through certain forms before they could depart.

Without this precaution, some Russian more or less implicated in the Tartar movement would have been able, in a disguise, to pass the frontier—just those whom the order wished to prevent going. The strangers were sent away, but still had to gain permission to go.

Mountebanks, gypsies, Tsiganes, Zingaris, mingled with merchants from Persia, Turkey, India, Turkestan, China, filled the court and offices of the police station.

Everyone was in a hurry, for the means of transport would be much sought after among this crowd of banished people, and those who did not set about it soon ran a great risk of not being able to leave the town in the prescribed time, which would expose them to some brutal treatment from the governor's agents.

Owing to the strength of his elbows Michael was able to cross the court. But to get into the office and up to the clerk's little window was a much more difficult business. However, a word into an inspector's ear and a few judiciously given roubles were powerful enough to gain him a passage. The man, after taking him into the waiting-room, went to call an upper clerk. Michael Strogoff would not be long in making everything right with the police and being free in his movements.

Whilst waiting, he looked about him, and what did he see? There, fallen, rather than seated, on a bench, was a girl, prey to a silent despair, although her face could scarcely be seen, the profile alone being visible against the wall. Michael Strogoff could not be mistaken. He instantly recognized the young Livonian.

Not knowing the governor's orders, she had come to the police office to get her pass signed. They had refused to sign it. No doubt she was authorized to go to Irkutsk, but the order was peremptory—it annulled all previous authorizations, and the routes to Siberia were closed to her. Michael, delighted at having found her again, approached the girl.

She looked up for a moment and her face brightened on recognizing her traveling companion. She instinctively rose and, like a drowning man who clutches at a spar, she was about to ask his help.

At that moment the agent touched Michael on the shoulder, "The head of police will see you," he said.

"Good," returned Michael. And without saying a word to her for whom he had been searching all day, without reassuring her by even a gesture, which might compromise either her or himself, he followed the man.

The young Livonian, seeing the only being to whom she could look for help disappear, fell back again on her bench.

Three minutes had not passed before Michael Strogoff reappeared, accompanied by the agent. In his hand he held his podorojna, which threw open the roads to Siberia for him. He again approached the young Livonian, and holding out his hand: "Sister," said he.

She understood. She rose as if some sudden inspiration prevented her from hesitating a moment.

"Sister," repeated Michael Strogoff, "we are authorized to continue our journey to Irkutsk. Will you come with me?"

"I will follow you, brother," replied the girl, putting her hand into that of Michael Strogoff. And together they left the police station.

CHAPTER VII GOING DOWN THE VOLGA

A LITTLE before midday, the steamboat's bell drew to the wharf on the Volga an unusually large concourse of people, for not only were those about to embark who had intended to go, but the many who were compelled to go contrary to their wishes. The boilers of the Caucasus were under full pressure; a slight smoke issued from its funnel, whilst the end of the escape-pipe and the lids of the valves were crowned with white vapor. It is needless to say that the police kept a close watch over the departure of the Caucasus, and showed themselves pitiless to those travelers who did not satisfactorily answer their questions.

Numerous Cossacks came and went on the quay, ready to assist the agents, but they had not to interfere, as no one ventured to offer the slightest resistance to their orders. Exactly at the hour the last clang of the bell sounded, the powerful wheels of the steamboat began to beat the water, and the Caucasus passed rapidly between the two towns of which Nijni-Novgorod is composed.

Michael Strogoff and the young Livonian had taken a passage on board the Caucasus. Their embarkation was
made without any difficulty. As is known, the podorojna, drawn up in the name of Nicholas Korpanoff, authorized this merchant to be accompanied on his journey to Siberia. They appeared, therefore, to be a brother and sister traveling under the protection of the imperial police. Both, seated together at the stern, gazed at the receding town, so disturbed by the governor's order. Michael had as yet said nothing to the girl, he had not even questioned her. He waited until she should speak to him, when that was necessary. She had been anxious to leave that town, in which, but for the providential intervention of this unexpected protector, she would have remained imprisoned. She said nothing, but her looks spoke her thanks.

The Volga, the Rha of the ancients, the largest river in all Europe, is almost three thousand miles in length. Its waters, rather unwholesome in its upper part, are improved at Nijni-Novgorod by those of the Oka, a rapid affluent, issuing from the central provinces of Russia. The system of Russian canals and rivers has been justly compared to a gigantic tree whose branches spread over every part of the empire. The Volga forms the trunk of this tree, and it has for roots seventy mouths opening into the Caspian Sea. It is navigable as far as Rjef, a town in the government of Tver, that is, along the greater part of its course.

The steamboats plying between Perm and Nijni-Novgorod rapidly perform the two hundred and fifty miles which separate this town from the town of Kasan. It is true that these boats have only to descend the Volga, which adds nearly two miles of current per hour to their own speed; but on arriving at the confluence of the Kama, a little below Kasan, they are obliged to quit the Volga for the smaller river, up which they ascend to Perm. Powerful as were her machines, the Caucasus could not thus, after entering the Kama, make against the current more than ten miles an hour. Including an hour's stoppage at Kasan, the voyage from Nijni-Novgorod to Perm would take from between sixty to sixty-two hours.

The steamer was very well arranged, and the passengers, according to their condition or resources, occupied three distinct classes on board. Michael Strogoff had taken care to engage two first-class cabins, so that his young companion might retire into hers whenever she liked.

The Caucasus was loaded with passengers of every description. A number of Asiatic traders had thought it best to leave Nijni-Novgorod immediately. In that part of the steamer reserved for the first-class might be seen Armenians in long robes and a sort of miter on their heads; Jews, known by their conical caps; rich Chinese in their traditional costume, a very wide blue, violet, or black robe; Turks, wearing the national turban; Hindoos, with square caps, and a simple string for a girdle, some of whom, hold in their hands all the traffic of Central Asia; and, lastly, Tartars, wearing boots, ornamented with many-colored braid, and the breast a mass of embroidery. All these merchants had been obliged to pile up their numerous bales and chests in the hold and on the deck; and the transport of their baggage would cost them dear, for, according to the regulations, each person had only a right to twenty pounds' weight.

In the bows of the Caucasus were more numerous groups of passengers, not only foreigners, but also Russians, who were not forbidden by the order to go back to their towns in the province. There were mujiks with caps on their heads, and wearing checked shirts under their wide pelisses; peasants of the Volga, with blue trousers stuffed into their boots, rose-colored cotton shirts, drawn in by a cord, felt caps; a few women, habited in flowery-patterned cotton dresses, gay-colored aprons, and bright handkerchiefs on their heads. These were principally third-class passengers, who were, happily, not troubled by the prospect of a long return voyage. The Caucasus passed numerous boats being towed up the stream, carrying all sorts of merchandise to Nijni-Novgorod. Then passed rafts of wood interminably long, and barges loaded to the gunwale, and nearly sinking under water. A bootless voyage they were making, since the fair had been abruptly broken up at its outset.

The waves caused by the steamer splashed on the banks, covered with flocks of wild duck, who flew away uttering deafening cries. A little farther, on the dry fields, bordered with willows, and aspens, were scattered a few cows, sheep, and herds of pigs. Fields, sown with thin buckwheat and rye, stretched away to a background of half-cultivated hills, offering no remarkable prospect. The pencil of an artist in quest of the picturesque would have found nothing to reproduce in this monotonous landscape.

The Caucasus had been steaming on for almost two hours, when the young Livonian, addressing herself to Michael, said, "Are you going to Irukutsk, brother?"

"Yes, sister," answered the young man. "We are going the same way. Consequently, where I go, you shall go."

"To-morrow, brother, you shall know why I left the shores of the Baltic to go beyond the Ural Mountains."

"I ask you nothing, sister."

"You shall know all," replied the girl, with a faint smile. "A sister should hide nothing from her brother. But I cannot to-day. Fatigue and sorrow have broken me."

"Will you go and rest in your cabin?" asked Michael Strogoff.

"Yes--yes; and to-morrow--"

"Come then--"
He hesitated to finish his sentence, as if he had wished to end it by the name of his companion, of which he was
still ignorant.

"Nadia," said she, holding out her hand.

"Come, Nadia," answered Michael, "and make what use you like of your brother Nicholas Korpanoff." And he
led the girl to the cabin engaged for her off the saloon.

Michael Strogoff returned on deck, and eager for any news which might bear on his journey, he mingled in the
groups of passengers, though without taking any part in the conversation. Should he by any chance be questioned,
and obliged to reply, he would announce himself as the merchant Nicholas Korpanoff, going back to the frontier, for
he did not wish it to be suspected that a special permission authorized him to travel to Siberia.

The foreigners in the steamer could evidently speak of nothing but the occurrences of the day, of the order and
its consequences. These poor people, scarcely recovered from the fatigue of a journey across Central Asia, found
themselves obliged to return, and if they did not give loud vent to their anger and despair, it was because they dared
not. Fear, mingled with respect, restrained them. It was possible that inspectors of police, charged with watching the
passengers, had secretly embarked on board the Caucasus, and it was just as well to keep silence; expulsion, after
all, was a good deal preferable to imprisonment in a fortress. Therefore the men were either silent, or spoke with so
much caution that it was scarcely possible to get any useful information.

Michael Strogoff thus could learn nothing here; but if mouths were often shut at his approach—for they did not
know him—his ears were soon struck by the sound of one voice, which cared little whether it was heard or not.

The man with the hearty voice spoke Russian, but with a French accent; and another speaker answered him more
reservedly. "What," said the first, "are you on board this boat, too, my dear fellow; you whom I met at the imperial
fete in Moscow, and just caught a glimpse of at Nijni-Novgorod?"

"Yes, it's I," answered the second drily.

"Really, I didn't expect to be so closely followed."

"I am not following you sir, I am preceding you."

"Precede!precede! Let us march abreast, keeping step, like two soldiers on parade, and for the time, at least, let
us agree, if you will, that one shall not pass the other."

"On the contrary, I shall pass you."

"We shall see that, when we are at the seat of war; but till then, why, let us be traveling companions. Later, we
shall have both time and occasion to be rivals."

"Enemies."

"Enemies, if you like. There is a precision in your words, my dear fellow, particularly agreeable to me. One may
always know what one has to look for, with you."

"What is the harm?"

"No harm at all. So, in my turn, I will ask your permission to state our respective situations."

"State away."

"You are going to Perm—like me?"

"Like you."

"And probably you will go from Perm to Ekaterenburg, since that is the best and safest route by which to cross
the Ural Mountains?"

"Probably."

"Once past the frontier, we shall be in Siberia, that is to say in the midst of the invasion."

"We shall be there."

"Well! then, and only then, will be the time to say, Each for himself, and God for—"

"For me."

"For you, all by yourself! Very well! But since we have a week of neutral days before us, and since it is very
certain that news will not shower down upon us on the way, let us be friends until we become rivals again."

"Enemies."

"Yes; that's right, enemies. But till then, let us act together, and not try and ruin each other. All the same, I
promise you to keep to myself all that I can see—"

"And I, all that I can hear."

"Is that agreed?"

"It is agreed."

"Your hand?"

"Here it is." And the hand of the first speaker, that is to say, five wide-open fingers, vigorously shook the two
fingers coolly extended by the other.

"By the bye," said the first, "I was able this morning to telegraph the very words of the order to my cousin at
seventeen minutes past ten."
"And I sent it to the Daily Telegraph at thirteen minutes past ten."
"Bravo, Mr. Blount!"
"Very good, M. Jolivet."
"I will try and match that!"
"It will be difficult."
"I can try, however."

So saying, the French correspondent familiarly saluted the Englishman, who bowed stiffly. The governor's proclamation did not concern these two news-hunters, as they were neither Russians nor foreigners of Asiatic origin. However, being urged by the same instinct, they had left Nijni-Novgorod together. It was natural that they should take the same means of transport, and that they should follow the same route to the Siberian steppes. Traveling companions, whether enemies or friends, they had a week to pass together before "the hunt would be open." And then success to the most expert! Alcide Jolivet had made the first advances, and Harry Blount had accepted them though he had done so coldly.

That very day at dinner the Frenchman open as ever and even too loquacious, the Englishman still silent and grave, were seen hobnobbing at the same table, drinking genuine Cliquot, at six roubles the bottle, made from the fresh sap of the birch-trees of the country. On hearing them chatting away together, Michael Strogoff said to himself: "Those are inquisitive and indiscreet fellows whom I shall probably meet again on the way. It will be prudent for me to keep them at a distance."

The young Livonian did not come to dinner. She was asleep in her cabin, and Michael did not like to awaken her. It was evening before she reappeared on the deck of the Caucasus. The long twilight imparted a coolness to the atmosphere eagerly enjoyed by the passengers after the stifling heat of the day. As the evening advanced, the greater number never even thought of going into the saloon. Stretched on the benches, they inhaled with delight the slight breeze caused by the speed of the steamer. At this time of year, and under this latitude, the sky scarcely darkened between sunset and dawn, and left the steersman light enough to guide his steamer among the numerous vessels going up or down the Volga.

Between eleven and two, however, the moon being new, it was almost dark. Nearly all the passengers were then asleep on the deck, and the silence was disturbed only by the noise of the paddles striking the water at regular intervals. Anxiety kept Michael Strogoff awake. He walked up and down, but always in the stern of the steamer. Once, however, he happened to pass the engine-room. He then found himself in the part reserved for second and third-class passengers.

There, everyone was lying asleep, not only on the benches, but also on the bales, packages, and even the deck itself. Some care was necessary not to tread on the sleepers, who were lying about everywhere. They were chiefly mujiks, accustomed to hard couches, and quite satisfied with the planks of the deck. But no doubt they would, all the same, have soundly abused the clumsy fellow who roused them with an accidental kick.

Michael Strogoff took care, therefore, not to disturb anyone. By going thus to the end of the boat, he had no other idea but that of striving against sleep by a rather longer walk. He reached the forward deck, and was already climbing the forecastle ladder, when he heard someone speaking near him. He stopped. The voices appeared to come from a group of passengers enveloped in cloaks and wraps. It was impossible to recognize them in the dark, though it sometimes happened that, when the steamer's chimney sent forth a plume of ruddy flames, the sparks seemed to fall amidst the group as though thousands of spangles had been suddenly illuminated.

Michael was about to step up the ladder, when a few words reached his ear, uttered in that strange tongue which he had heard during the night at the fair. Instinctively he stopped to listen. Protected by the shadow of the forecastle, he could not be perceived himself. As to seeing the passengers who were talking, that was impossible. He must confine himself to listening.

The first words exchanged were of no importance--to him at least--but they allowed him to recognize the voices of the man and woman whom he had heard at Nijni-Novgorod. This, of course, made him redouble his attention. It was, indeed, not at all impossible that these same Tsiganes, now banished, should be on board the Caucasus.

And it was well for him that he listened, for he distinctly heard this question and answer made in the Tartar idiom: "It is said that a courier has set out from Moscow for Irkutsk."

"It is so said, Sangarre; but either this courier will arrive too late, or he will not arrive at all."

Michael Strogoff started involuntarily at this reply, which concerned him so directly. He tried to see if the man and woman who had just spoken were really those whom he suspected, but he could not succeed.

In a few moments Michael Strogoff had regained the stern of the vessel without having been perceived, and, taking a seat by himself, he buried his face in his hands. It might have been supposed that he was asleep.

He was not asleep, however, and did not even think of sleeping. He was reflecting, not without a lively
apprehension: "Who is it knows of my departure, and who can have any interest in knowing it?"

CHAPTER VIII GOING UP THE KAMA

THE next day, the 18th of July, at twenty minutes to seven in the morning, the Caucasus reached the Kasan quay, seven versts from the town.

Kasan is situated at the confluence of the Volga and Kasanka. It is an important chief town of the government, and a Greek archbishopric, as well as the seat of a university. The varied population preserves an Asiatic character. Although the town was so far from the landing-place, a large crowd was collected on the quay. They had come for news. The governor of the province had published an order identical with that of Nijni-Novgorod. Police officers and a few Cossacks kept order among the crowd, and cleared the way both for the passengers who were disembarking and also for those who were embarking on board the Caucasus, minutely examining both classes of travelers. The one were the Asiatiks who were being expelled; the other, mujiks stopping at Kasan.

Michael Strogoff unconcernedly watched the bustle which occurs at all quays on the arrival of a steam vessel. The Caucasus would stay for an hour to renew her fuel. Michael did not even think of landing. He was unwilling to leave the young Livonian girl alone on board, as she had not yet reappeared on deck.

The two journalists had risen at dawn, as all good huntsmen should do. They went on shore and mingled with the crowd, each keeping to his own peculiar mode of proceeding; Harry Blount, sketching different types, or noting some observation; Alcide Jolivet contenting himself with asking questions, confiding in his memory, which never failed him.

There was a report along all the frontier that the insurrection and invasion had reached considerable proportions. Communication between Siberia and the empire was already extremely difficult. All this Michael Strogoff heard from the new arrivals. This information could not but cause him great uneasiness, and increase his wish of being beyond the Ural Mountains, so as to judge for himself of the truth of these rumors, and enable him to guard against any possible contingency. He was thinking of seeking more direct intelligence from some native of Kasan, when his attention was suddenly diverted.

Among the passengers who were leaving the Caucasus, Michael recognized the troop of Tsiganes who, the day before, had appeared in the Nijni-Novgorod fair. There, on the deck of the steamboat were the old Bohemian and the woman. With them, and no doubt under their direction, landed about twenty dancers and singers, from fifteen to twenty years of age, wrapped in old cloaks, which covered their spangled dresses. These dresses, just then glancing in the first rays of the sun, reminded Michael of the curious appearance which he had observed during the night. It must have been the glitter of those spangles in the bright flames issuing from the steamboat's funnel which had attracted his attention.

"Evidently," said Michael to himself, "this troop of Tsiganes, after remaining below all day, crouched under the forecastle during the night. Were these gipsies trying to show themselves as little as possible? Such is not according to the usual custom of their race."

Michael Strogoff no longer doubted that the expressions he had heard, had proceeded from this tawny group, and had been exchanged between the old gypsy and the woman to whom he gave the Mongolian name of Sangarre. Michael involuntarily moved towards the gangway, as the Bohemian troop was leaving the steamboat.

The old Bohemian was there, in a humble attitude, little conformable with the effrontery natural to his race. One would have said that he was endeavoring rather to avoid attention than to attract it. His battered hat, browned by the suns of every clime, was pulled forward over his wrinkled face. His arched back was bent under an old cloak, wrapped closely round him, notwithstanding the heat. It would have been difficult, in this miserable dress, to judge of either his size or face. Near him was the Tsigane, Sangarre, a woman about thirty years old. She was tall and well made, with olive complexion, magnificent eyes, and golden hair.

Many of the young dancers were remarkably pretty, all possessing the clear-cut features of their race. These Tsiganes are generally very attractive, and more than one of the great Russian nobles, who try to vie with the English in eccentricity, has not hesitated to choose his wife from among these gypsy girls. One of them was humming a song of strange rhythm, which might be thus rendered:

"Glitters brightly the gold In my raven locks streaming Rich coral around My graceful neck gleaming; Like a bird of the air, Through the wide world I roam."

The laughing girl continued her song, but Michael Strogoff ceased to listen. It struck him just then that the Tsigane, Sangarre, was regarding him with a peculiar gaze, as if to fix his features indelibly in her memory.

It was but for a few moments, when Sangarre herself followed the old man and his troop, who had already left the vessel. "That's a bold gypsy," said Michael to himself. "Could she have recognized me as the man whom she saw at Nijni-Novgorod? These confounded Tsiganes have the eyes of a cat! They can see in the dark; and that woman
Michael Strogoff was on the point of following Sangarre and the gypsy band, but he stopped. "No," thought he, "no unguarded proceedings. If I were to stop that old fortune teller and his companions my incognito would run a risk of being discovered. Besides, now they have landed, before they can pass the frontier I shall be far beyond it. They may take the route from Kasan to Ishim, but that affords no resources to travelers. Besides a tarantass, drawn by good Siberian horses, will always go faster than a gypsy cart! Come, friend Korpanoff, be easy."

By this time the man and Sangarre had disappeared.

Kasan is justly called the "Gate of Asia" and considered as the center of Siberian and Bokharian commerce; for two roads begin here and lead across the Ural Mountains. Michael Strogoff had very judiciously chosen the one by Perm and Ekaterenburg. It is the great stage road, well supplied with relays kept at the expense of the government, and is prolonged from Ishim to Irkutsk.

It is true that a second route--the one of which Michael had just spoken--avoiding the slight detour by Perm, also connects Kasan with Ishim. It is perhaps shorter than the other, but this advantage is much diminished by the absence of post-houses, the bad roads, and lack of villages. Michael Strogoff was right in the choice he had made, and if, as appeared probable, the gipsies should follow the second route from Kasan to Ishim, he had every chance of arriving before them.

An hour afterwards the bell rang on board the Caucasus, calling the new passengers, and recalling the former ones. It was now seven o'clock in the morning. The requisite fuel had been received on board. The whole vessel began to vibrate from the effects of the steam. She was ready to start. Passengers going from Kasan to Perm were crowding on the deck.

Michael noticed that of the two reporters Blount alone had rejoined the steamer. Was Alcide Jolivet about to miss his passage?

But just as the ropes were being cast off, Jolivet appeared, tearing along. The steamer was already sheering off, the gangway had been drawn onto the quay, but Alcide Jolivet would not stick at such a little thing as that, so, with a bound like a harlequin, he alighted on the deck of the Caucasus almost in his rival's arms.

"I thought the Caucasus was going without you," said the latter.

"Bah!" answered Jolivet, "I should soon have caught you up again, by chartering a boat at my cousin's expense, or by traveling post at twenty copecks a verst, and on horseback. What could I do? It was so long a way from the quay to the telegraph office."

"Have you been to the telegraph office?" asked Harry Blount, biting his lips.

"That's exactly where I have been!" answered Jolivet, with his most amiable smile.

"And is it still working to Kolyvan?"

"That I don't know, but I can assure you, for instance, that it is working from Kasan to Paris."

"You sent a dispatch to your cousin?"

"With enthusiasm."

"You had learnt then--?"

"Look here, little father, as the Russians say," replied Alcide Jolivet, "I'm a good fellow, and I don't wish to keep anything from you. The Tartars, and Feofar-Khan at their head, have passed Semipolatinsk, and are descending the Irtish. Do what you like with that!"

What! such important news, and Harry Blount had not known it; and his rival, who had probably learned it from some inhabitant of Kasan, had already transmitted it to Paris. The English paper was distanced! Harry Blount, crossing his hands behind him, walked off and seated himself in the stern without uttering a word.

About ten o'clock in the morning, the young Livonian, leaving her cabin, appeared on deck. Michael Strogoff went forward and took her hand. "Look, sister!" said he, leading her to the bows of the Caucasus.

The view was indeed well worth seeing. The Caucasus had reached the confluence of the Volga and the Kama. There she would leave the former river, after having descended it for nearly three hundred miles, to ascend the latter for a full three hundred.

The Kama was here very wide, and its wooded banks lovely. A few white sails enlivened the sparkling water. The horizon was closed by a line of hills covered with aspens, alders, and sometimes large oaks.

But these beauties of nature could not distract the thoughts of the young Livonian even for an instant. She had left her hand in that of her companion, and turning to him, "At what distance are we from Moscow?" she asked.

"Nine hundred versts," answered Michael.

"Nine hundred, out of seven thousand!" murmured the girl.

The bell now announced the breakfast hour. Nadia followed Michael Strogoff to the restaurant. She ate little, and as a poor girl whose means are small would do. Michael thought it best to content himself with the fare which satisfied his companion; and in less than twenty minutes he and Nadia returned on deck. There they seated
themselves in the stern, and without preamble, Nadia, lowering her voice to be heard by him alone, began:

"Brother, I am the daughter of an exile. My name is Nadia Fedor. My mother died at Riga scarcely a month ago, and I am going to Irkutsk to rejoin my father and share his exile."

"I, too, am going to Irkutsk," answered Michael, "and I shall thank Heaven if it enables me to give Nadia Fedor safe and sound into her father's hands."

"Thank you, brother," replied Nadia.

Michael Strogoff then added that he had obtained a special podorojna for Siberia, and that the Russian authorities could in no way hinder his progress.

Nadia asked nothing more. She saw in this fortunate meeting with Michael a means only of accelerating her journey to her father.

"I had," said she, "a permit which authorized me to go to Irkutsk, but the new order annulled that; and but for you, brother, I should have been unable to leave the town, in which, without doubt, I should have perished."

"And dared you, alone, Nadia," said Michael, "attempt to cross the steppes of Siberia?"

"The Tartar invasion was not known when I left Riga. It was only at Moscow that I learnt the news."

"And despite it, you continued your journey?"

"It was my duty."

The words showed the character of the brave girl.

She then spoke of her father, Wassili Fedor. He was a much-esteemed physician at Riga. But his connection with some secret society having been asserted, he received orders to start for Irkutsk. The police who brought the order conducted him without delay beyond the frontier.

Wassili Fedor had but time to embrace his sick wife and his daughter, so soon to be left alone, when, shedding bitter tears, he was led away. A year and a half after her husband's departure, Madame Fedor died in the arms of her daughter, who was thus left alone and almost penniless. Nadia Fedor then asked, and easily obtained from the Russian government, an authorization to join her father at Irkutsk. She wrote and told him she was starting. She had barely enough money for this long journey, and yet she did not hesitate to undertake it. She would do what she could. God would do the rest.

CHAPTER IX DAY AND NIGHT IN A TARANTASS

The next day, the 19th of July, the Caucasus reached Perm, the last place at which she touched on the Kama.

The government of which Perm is the capital is one of the largest in the Russian Empire, and, extending over the Ural Mountains, encroaches on Siberian territory. Marble quarries, mines of salt, platina, gold, and coal are worked here on a large scale. Although Perm, by its situation, has become an important town, it is by no means attractive, being extremely dirty, and without resources. This want of comfort is of no consequence to those going to Siberia, for they come from the more civilized districts, and are supplied with all necessaries.

At Perm travelers from Siberia resell their vehicles, more or less damaged by the long journey across the plains. There, too, those passing from Europe to Asia purchase carriages, or sleighs in the winter season.

Michael Strogoff had already sketched out his programme. A vehicle carrying the mail usually runs across the Ural Mountains, but this, of course, was discontinued. Even if it had not been so, he would not have taken it, as he wished to travel as fast as possible, without depending on anyone. He wisely preferred to buy a carriage, and journey by stages, stimulating the zeal of the postillions by well-applied "na vodkou," or tips.

Unfortunately, in consequence of the measures taken against foreigners of Asiatic origin, a large number of travelers had already left Perm, and therefore conveyances were extremely rare. Michael was obliged to content himself with what had been rejected by others. As to horses, as long as the Czar's courier was not in Siberia, he could exhibit his podorojna, and the postmasters would give him the preference. But, once out of Europe, he had to depend alone on the power of his roubles.

But to what sort of a vehicle should he harness his horses? To a telga or to a tarantass? The telga is nothing but an open four-wheeled cart, made entirely of wood, the pieces fastened together by means of strong rope. Nothing could be more primitive, nothing could be less comfortable; but, on the other hand, should any accident happen on the way, nothing could be more easily repaired. There is no want of firs on the Russian frontier, and axle-trees grow naturally in forests. The post extraordinary, known by the name of "perck-ladnoi," is carried by the telga, as any road is good enough for it. It must be confessed that sometimes the ropes which fasten the concern together break, and whilst the hinder part remains stuck in some bog, the fore-part arrives at the post-house on two wheels; but this result is considered quite satisfactory.

Michael Strogoff would have been obliged to employ a telga, if he had not been lucky enough to discover a tarantass. It is to be hoped that the invention of Russian coach-builders will devise some improvement in this last-
named vehicle. Springs are wanting in it as well as in the telga; in the absence of iron, wood is not spared; but its four wheels, with eight or nine feet between them, assure a certain equilibrium over the jolting rough roads. A splash-board protects the travelers from the mud, and a strong leathern hood, which may be pulled quite over the occupiers, shelters them from the great heat and violent storms of the summer. The tarantass is as solid and as easy to repair as the telga, and is, moreover, less addicted to leaving its hinder part in the middle of the road.

It was not without careful search that Michael managed to discover this tarantass, and there was probably not a second to be found in all Perm. He haggled long about the price, for form's sake, to act up to his part as Nicholas Korpanoff, a plain merchant of Irkutsk.

Nadia had followed her companion in his search after a suitable vehicle. Although the object of each was different, both were equally anxious to arrive at their goal. One would have said the same will animated them both.

"Sister," said Michael, "I wish I could have found a more comfortable conveyance for you."

"Do you say that to me, brother, when I would have gone on foot, if need were, to rejoin my father?"

"I do not doubt your courage, Nadia, but there are physical fatigue's a woman may be unable to endure."

"I shall endure them, whatever they be," replied the girl. "If you ever hear a complaint from me you may leave me in the road, and continue your journey alone."

Half an hour later, the podorojna being presented by Michael, three post-horses were harnessed to the tarantass. These animals, covered with long hair, were very like long-legged bears. They were small but spirited, being of Siberian breed. The way in which the iemschik harnessed them was thus: one, the largest, was secured between two long shafts, on whose farther end was a hoop carrying tassels and bells; the two others were simply fastened by ropes to the steps of the tarantass. This was the complete harness, with mere strings for reins.

Neither Michael Strogoff nor the young Livonian girl had any baggage. The rapidity with which one wished to make the journey, and the more than modest resources of the other, prevented them from embarrassing themselves with packages. It was a fortunate thing, under the circumstances, for the tarantass could not have carried both baggage and travelers. It was only made for two persons, without counting the iemschik, who kept his equilibrium with packages. It was a fortunate thing, under the circumstances, for the tarantass could not have carried both baggage and travelers. It was only made for two persons, without counting the iemschik, who kept his equilibrium on his narrow seat in a marvellous manner.

The iemschik is changed at every relay. The man who drove the tarantass during the first stage was, like his horses, a Siberian, and no less shaggy than they; long hair, cut square on the forehead, hat with a turned-up brim, red belt, coat with crossed facings and buttons stamped with the imperial cipher. The iemschik, on coming up with his team, threw an inquisitive glance at the passengers of the tarantass. No luggage!--and had there been, where in the world could he have stowed it? Rather shabby in appearance too. He looked contemptuous.

"Crows," said he, without caring whether he was overheard or not; "crows, at six copecks a verst!"

"No, eagles!" said Michael, who understood the iemschik's slang perfectly; "eagles, do you hear, at nine copecks a verst, and a tip besides."

He was answered by a merry crack of the whip.

In the language of the Russian postillions the "crow" is the stingy or poor traveler, who at the post-houses only pays two or three copecks a verst for the horses. The "eagle" is the traveler who does not mind expense, to say nothing of liberal tips. Therefore the crow could not claim to fly as rapidly as the imperial bird.

Nadia and Michael immediately took their places in the tarantass. A small store of provisions was put in the box, in case at any time they were delayed in reaching the post-houses, which are very comfortably provided under direction of the State. The hood was pulled up, as it was insupport-ably hot, and at twelve o'clock the tarantass left Perm in a cloud of dust.

The way in which the iemschik kept up the pace of his team would have certainly astonished travelers who, being neither Russians nor Siberians, were not accustomed to this sort of thing. The leader, rather larger than the others, kept to a steady long trot, perfectly regular, whether up or down hill. The two other horses seemed to know no other pace than the gallop, though they performed many an eccentric curvette as they went along. The iemschik, however, never touched them, only urging them on by startling cracks of his whip. But what epithets he lavished on them, including the names of all the saints in the calendar, when they behaved like docile and conscientious animals! The string which served as reins would have had no influence on the spirited beasts, but the words "na pravo," to the right, "na levo," to the left, pronounced in a guttural tone, were more effectual than either bridle or snaffle.

And what amiable expressions! "Go on, my doves!" the iemschik would say. "Go on, pretty swallows! Fly, my little pigeons! Hold up, my cousin on the left! Gee up, my little father on the right!"

But when the pace slackened, what insulting expressions, instantly understood by the sensitive animals! "Go on, you wretched snail! Confound you, you slug! I'll roast you alive, you torture, you!"

Whether or not it was from this way of driving, which requires the iemschiks to possess strong throats more than muscular arms, the tarantass flew along at a rate of from twelve to fourteen miles an hour. Michael Strogoff was accustomed both to the sort of vehicle and the mode of traveling. Neither jerks nor jolts incommoded him. He knew
that a Russian driver never even tries to avoid either stones, ruts, bogs, fallen trees, or trenches, which may happen to be in the road. He was used to all that. His companion ran a risk of being hurt by the violent jolts of the tarantass, but she would not complain.

For a little while Nadia did not speak. Then possessed with the one thought, that of reaching her journey's end, "I have calculated that there are three hundred versts between Perm and Ekaterenburg, brother," said she. "Am I right?"

"You are quite right, Nadia," answered Michael; "and when we have reached Ekaterenburg, we shall be at the foot of the Ural Mountains on the opposite side."

"How long will it take to get across the mountains?"

"Forty-eight hours, for we shall travel day and night. I say day and night, Nadia," added he, "for I cannot stop even for a moment; I go on without rest to Irkutsk."

"I shall not delay you, brother; no, not even for an hour, and we will travel day and night."

"Well then, Nadia, if the Tartar invasion has only left the road open, we shall arrive in twenty days."

"You have made this journey before?" asked Nadia.

"Many times."

"During winter we should have gone more rapidly and surely, should we not?"

"Yes, especially with more rapidity, but you would have suffered much from the frost and snow."

"What matter! Winter is the friend of Russia."

"Yes, Nadia, but what a constitution anyone must have to endure such friendship! I have often seen the temperature in the Siberian steppes fall to more than forty degrees below freezing point! I have felt, notwithstanding my reindeer coat, my heart growing chill, my limbs stiffening, my feet freezing in triple woolen socks; I have seen my sleigh horses covered with a coating of ice, their breath congealed at their nostrils. I have seen the brandy in my flask change into hard stone, on which not even my knife could make an impression. But my sleigh flew like the wind. Not an obstacle on the plain, white and level farther than the eye could reach! No rivers to stop one! Hard ice everywhere, the route open, the road sure! But at the price of what suffering, Nadia, those alone could say, who have never returned, but whose bodies have been covered up by the snow storm."

"However, you have returned, brother," said Nadia.

"Yes, but I am a Siberian, and, when quite a child, I used to follow my father to the chase, and so became inured to these hardships. But when you said to me, Nadia, that winter would not have stopped you, that you would have gone alone, ready to struggle against the frightful Siberian climate, I seemed to see you lost in the snow and falling, never to rise again."

"How many times have you crossed the steppe in winter?" asked the young Livonian.

"Three times, Nadia, when I was going to Omsk."

"And what were you going to do at Omsk?"

"See my mother, who was expecting me."

"And I am going to Irkutsk, where my father expects me. I am taking him my mother's last words. That is as much as to tell you, brother, that nothing would have prevented me from setting out."

"You are a brave girl, Nadia," replied Michael. "God Himself would have led you."

All day the tarantass was driven rapidly by the iemschiks, who succeeded each other at every stage. The eagles of the mountain would not have found their name dishonored by these "eagles" of the highway. The high price paid for each horse, and the tips dealt out so freely, recommended the travelers in a special way. Perhaps the postmasters thought it singular that, after the publication of the order, a young man and his sister, evidently both Russians, could travel freely across Siberia, which was closed to everyone else, but their papers were all en regle and they had the right to pass.

However, Michael Strogoff and Nadia were not the only travelers on their way from Perm to Ekaterenburg. At the first stages, the courier of the Czar had learnt that a carriage preceded them, but, as there was no want of horses, he did not trouble himself about that.

During the day, halts were made for food alone. At the post-houses could be found lodging and provision. Besides, if there was not an inn, the house of the Russian peasant would have been no less hospitable. In the villages, which are almost all alike, with their white-walled, green-roofed chapels, the traveler might knock at any door, and it would be opened to him. The moujik would come out, smiling and extending his hand to his guest. He would offer him bread and salt, the burning charcoal would be put into the "samovar," and he would be made quite at home. The family would turn out themselves rather than that he should not have room. The stranger is the relation of all. He is "one sent by God."

On arriving that evening Michael instinctively asked the postmaster how many hours ago the carriage which preceded them had passed that stage.

"Two hours ago, little father," replied the postmaster.
"Is it a berlin?"
"No, a telga."
"How many travelers?"
"Two."
"And they are going fast?"
"Eagles!"
"Let them put the horses to as soon as possible."

Michael and Nadia, resolved not to stop even for an hour, traveled all night. The weather continued fine, though the atmosphere was heavy and becoming charged with electricity. It was to be hoped that a storm would not burst whilst they were among the mountains, for there it would be terrible. Being accustomed to read atmospheric signs, Michael Strogoff knew that a struggle of the elements was approaching.

The night passed without incident. Notwithstanding the jolting of the tarantass, Nadia was able to sleep for some hours. The hood was partly raised so as to give as much air as there was in the stifling atmosphere.

Michael kept awake all night, mistrusting the iemschiks, who are apt to sleep at their posts. Not an hour was lost at the relays, not an hour on the road.

The next day, the 20th of July, at about eight o'clock in the morning, they caught the first glimpse of the Ural Mountains in the east. This important chain which separates Russia from Siberia was still at a great distance, and they could not hope to reach it until the end of the day. The passage of the mountains must necessarily be performed during the next night. The sky was cloudy all day, and the temperature was therefore more bearable, but the weather was very threatening.

It would perhaps have been more prudent not to have ascended the mountains during the night, and Michael would not have done so, had he been permitted to wait; but when, at the last stage, the iemschik drew his attention to a peal of thunder reverberating among the rocks, he merely said:
"Is a telga still before us?"
"Yes."
"How long is it in advance?"
"Nearly an hour."
"Forward, and a triple tip if we are at Ekaterenburg to-morrow morning."

CHAPTER X A STORM IN THE URAL MOUNTAINS

THE Ural Mountains extend in a length of over two thousand miles between Europe and Asia. Whether they are called the Urals, which is the Tartar, or the Poyas, which is the Russian name, they are correctly so termed; for these names signify "belt" in both languages. Rising on the shores of the Arctic Sea, they reach the borders of the Caspian. This was the barrier to be crossed by Michael Strogoff before he could enter Siberian Russia. The mountains could be crossed in one night, if no accident happened. Unfortunately, thunder muttering in the distance announced that a storm was at hand. The electric tension was such that it could not be dispersed without a tremendous explosion, which in the peculiar state of the atmosphere would be very terrible.

Michael took care that his young companion should be as well protected as possible. The hood, which might have been easily blown away, was fastened more securely with ropes, crossed above and at the back. The traces were doubled, and, as an additional precaution, the nave-boxes were stuffed with straw, as much to increase the strength of the wheels as to lessen the jolting, unavoidable on a dark night. Lastly, the fore and hinder parts, connected simply by the axles to the body of the tarantass, were joined one to the other by a crossbar, fixed by means of pins and screws.

Nadia resumed her place in the cart, and Michael took his seat beside her. Before the lowered hood hung two leathern curtains, which would in some degree protect the travelers against the wind and rain. Two great lanterns, suspended from the iemschik's seat, threw a pale glimmer scarcely sufficient to light the way, but serving as warning lights to prevent any other carriage from running into them.

It was well that all these precautions were taken, in expectation of a rough night. The road led them up towards dense masses of clouds, and should the clouds not soon resolve into rain, the fog would be such that the tarantass would be unable to advance without danger of falling over some precipice.

The Ural chain does not attain any very great height, the highest summit not being more than five thousand feet. Eternal snow is there unknown, and what is piled up by the Siberian winter is soon melted by the summer sun. Shrubs and trees grow to a considerable height. The iron and copper mines, as well as those of precious stones, draw a considerable number of workmen to that region. Also, those villages termed "gavody" are there met with pretty frequently, and the road through the great passes is easily practicable for post-carriages.
But what is easy enough in fine weather and broad daylight, offers difficulties and perils when the elements are engaged in fierce warfare, and the traveler is in the midst of it. Michael Strogoff knew from former experience what a storm in the mountains was, and perhaps this would be as terrible as the snowstorms which burst forth with such vehemence in the winter.

Rain was not yet falling, so Michael raised the leathern curtains which protected the interior of the tarantass and looked out, watching the sides of the road, peopled with fantastic shadows, caused by the wavering light of the lanterns. Nadia, motionless, her arms folded, gazed forth also, though without leaning forward, whilst her companion, his body half out of the carriage, examined both sky and earth.

The calmness of the atmosphere was very threatening, the air being perfectly still. It was just as if Nature were half stifled, and could no longer breathe; her lungs, that is to say those gloomy, dense clouds, not being able to perform their functions. The silence would have been complete but for the grindings of the wheels of the tarantass over the road, the creaking of the axles, the snorting of the horses, and the clattering of their iron hoofs among the pebbles, sparks flying out on every side.

The road was perfectly deserted. The tarantass encountered neither pedestrians nor horsemen, nor a vehicle of any description, in the narrow defiles of the Ural, on this threatening night. Not even the fire of a charcoal-burner was visible in the woods, not an encampment of miners near the mines, not a hut among the brushwood.

Under these peculiar circumstances it might have been allowable to postpone the journey till the morning. Michael Strogoff, however, had not hesitated, he had no right to stop, but then--and it began to cause him some anxiety--what possible reason could those travelers in the telga ahead have for being so imprudent?

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"At what time shall we reach the top of the ridge?" asked Michael of the iemschik.
"At one o'clock in the morning if we ever get there at all," replied he, with a shake of his head.
"Why, my friend, this will not be your first storm in the mountains, will it?"
"No, and pray God it may not be my last!"
"Are you afraid?"
"No, I'm not afraid, but I repeat that I think you were wrong in starting."
"I should have been still more wrong had I stayed."
"Hold up, my pigeons!" cried the iemschik; it was his business to obey, not to question.

Just then a distant noise was heard, shrill whistling through the atmosphere, so calm a minute before. By the light of a dazzling flash, almost immediately followed by a tremendous clap of thunder, Michael could see huge pines on a high peak, bending before the blast. The wind was unchained, but as yet it was the upper air alone which was disturbed. Successive crashes showed that many of the trees had been unable to resist the burst of the hurricane. An avalanche of shattered trunks swept across the road and dashed over the precipice on the left, two hundred feet in front of the tarantass.

The horses stopped short.
"Get up, my pretty doves!" cried the iemschik, adding the cracking of his whip to the rumbling of the thunder. Michael took Nadia's hand. "Are you asleep, sister?"
"No, brother."
"Be ready for anything; here comes the storm!"
"I am ready."

Michael Strogoff had only just time to draw the leathern curtains, when the storm was upon them.

The iemschik leapt from his seat and seized the horses' heads, for terrible danger threatened the whole party. The tarantass was at a standstill at a turning of the road, down which swept the hurricane; it was absolutely necessary to hold the animals' heads to the wind, for if the carriage was taken broadside it must infallibly capsize and be dashed over the precipice. The frightened horses reared, and their driver could not manage to quiet them. His friendly expressions had been succeeded by the most insulting epithets. Nothing was of any use. The unfortunate animals, blinded by the lightning, terrified by the incessant peals of thunder, threatened every instant to break their traces and flee. The iemschik had no longer any control over his team.
At that moment Michael Strogoff threw himself from the tarantass and rushed to his assistance. Endowed with more than common strength, he managed, though not without difficulty, to master the horses.

The storm now raged with redoubled fury. A perfect avalanche of stones and trunks of trees began to roll down the slope above them.

"We cannot stop here," said Michael.

"We cannot stop anywhere," returned the iemschik, all his energies apparently overcome by terror. "The storm will soon send us to the bottom of the mountain, and that by the shortest way."

"Take you that horse, coward," returned Michael, "I'll look after this one."

A fresh burst of the storm interrupted him. The driver and he were obliged to crouch upon the ground to avoid being blown down. The carriage, notwithstanding their efforts and those of the horses, was gradually blown back, and had it not been stopped by the trunk of a tree, it would have gone over the edge of the precipice.

"Do not be afraid, Nadia!" cried Michael Strogoff.

"I'm not afraid," replied the young Livonian, her voice not betraying the slightest emotion.

The storm had not been securely fastened, it would have been blown away long before. Michael Strogoff and the iemschik took more than two hours in getting up this bit of road, only half a verst in length, so directly exposed was it to the lashing of the storm. The danger was not only from the wind which battered against the travelers, but from the avalanche of stones and broken trunks which were hurtling through the air.

Suddenly, during a flash of lightning, one of these masses was seen crashing and rolling down the mountain towards the tarantass. The iemschik uttered a cry.

Michael Strogoff in vain brought his whip down on the team, they refused to move.

A few feet farther on, and the mass would pass behind them! Michael saw the tarantass struck, his companion crushed; he saw there was no time to drag her from the vehicle.

Then, possessed in this hour of peril with superhuman strength, he threw himself behind it, and planting his feet on the ground, by main force placed it out of danger.

The enormous mass as it passed grazed his chest, taking away his breath as though it had been a cannon-ball, then crushing to powder the flints on the road, it bounded into the abyss below.

"Oh, brother!" cried Nadia, who had seen it all by the light of the flashes.

"Nadia!" replied Michael, "fear nothing!"

"It is not on my own account that I fear!"

"God is with us, sister!"

"With me truly, brother, since He has sent thee in my way!" murmured the young girl.

The impetus the tarantass had received was not to be lost, and the tired horses once more moved forward. Dragged, so to speak, by Michael and the iemschik, they toiled on towards a narrow pass, lying north and south, where they would be protected from the direct sweep of the tempest. At one end a huge rock jutted out, round the summit of which whirled an eddy. Behind the shelter of the rock there was a comparative calm; yet once within the circumference of the cyclone, neither man nor beast could resist its power.

Indeed, some firs which towered above this protection were in a trice shorn of their tops, as though a gigantic scythe had swept across them. The storm was now at its height. The lightning filled the defile, and the thunderclaps had become one continued peal. The ground, struck by the concussion, trembled as though the whole Ural chain was shaken to its foundations.

Happily, the tarantass could be so placed that the storm might strike it obliquely. But the counter-currents, directed towards it by the slope, could not be so well avoided, and so violent were they that every instant it seemed...
as though it would be dashed to pieces.

Nadia was obliged to leave her seat, and Michael, by the light of one of the lanterns, discovered an excavation bearing the marks of a miner's pick, where the young girl could rest in safety until they could once more start.

Just then—it was one o'clock in the morning—the rain began to fall in torrents, and this in addition to the wind and lightning, made the storm truly frightful. To continue the journey at present was utterly impossible. Besides, having reached this pass, they had only to descend the slopes of the Ural Mountains, and to descend now, with the road torn up by a thousand mountain torrents, in these eddies of wind and rain, was utter madness.

"To wait is indeed serious," said Michael, "but it must certainly be done, to avoid still longer detentions. The very violence of the storm makes me hope that it will not last long. About three o'clock the day will begin to break, and the descent, which we cannot risk in the dark, we shall be able, if not with ease, at least without such danger, to attempt after sunrise."

"Let us wait, brother," replied Nadia; "but if you delay, let it not be to spare me fatigue or danger."

"Nadia, I know that you are ready to brave everything, but, in exposing both of us, I risk more than my life, more than yours, I am not fulfilling my task, that duty which before everything else I must accomplish."

"A duty!" murmured Nadia.

Just then a bright flash lit up the sky; a loud clap followed. The air was filled with sulphurous suffocating vapor, and a clump of huge pines, struck by the electric fluid, scarcely twenty feet from the tarantass, flared up like a gigantic torch.

The iemschik was struck to the ground by a counter-shock, but, regaining his feet, found himself happily unhurt.

Just as the last growlings of the thunder were lost in the recesses of the mountain, Michael felt Nadia's hand pressing his, and he heard her whisper these words in his ear: "Cries, brother! Listen!"

CHAPTER XI TRAVELERS IN DISTRESS

DURING the momentary lull which followed, shouts could be distinctly heard from farther on, at no great distance from the tarantass. It was an earnest appeal, evidently from some traveler in distress.

Michael listened attentively. The iemschik also listened, but shook his head, as though it was impossible to help.

"They are travelers calling for aid," cried Nadia.

"They can expect nothing," replied the iemschik.

"Why not?" cried Michael. "Ought not we do for them what they would for us under similar circumstances?"

"Surely you will not risk the carriage and horses!"

"I will go on foot," replied Michael, interrupting the iemschik.

"I will go, too, brother," said the young girl.

"No, remain here, Nadia. The iemschik will stay with you. I do not wish to leave him alone."

"I will stay," replied Nadia.

"Whatever happens, do not leave this spot."

"You will find me where I now am."

Michael pressed her hand, and, turning the corner of the slope, disappeared in the darkness.

"Your brother is wrong," said Strogoff simply.

Meanwhile Strogoff strode rapidly on. If he was in a great hurry to aid the travelers, he was also very anxious to know who it was that had not been hindered from starting by the storm; for he had no doubt that the cries came from the telga, which had so long preceded him.

The rain had stopped, but the storm was raging with redoubled fury. The shouts, borne on the air, became more distinct. Nothing was to be seen of the pass in which Nadia remained. The road wound along, and the squalls, checked by the corners, formed eddies highly dangerous, to pass which, without being taken off his legs, Michael had to use his utmost strength.

He soon perceived that the travelers whose shouts he had heard were at no great distance. Even then, on account of the darkness, Michael could not see them, yet he heard distinctly their words.

This is what he heard, and what caused him some surprise: "Are you coming back, blockhead?"

"You shall have a taste of the knout at the next stage."

"Do you hear, you devil's postillion! Hullo! Below!"

"This is how a carriage takes you in this country!"

"Yes, this is what you call a telga!"

"Oh, that abominable driver! He goes on and does not appear to have discovered that he has left us behind!"

"To deceive me, too! Me, an honorable Englishman! I will make a complaint at the chancellor's office and have
the fellow hanged."

This was said in a very angry tone, but was suddenly interrupted by a burst of laughter from his companion, who exclaimed, "Well! this is a good joke, I must say."

"You venture to laugh!" said the Briton angrily.

"Certainly, my dear confrere, and that most heartily. 'Pon my word I never saw anything to come up to it."

Just then a crashing clap of thunder re-echoed through the defile, and then died away among the distant peaks. When the sound of the last growl had ceased, the merry voice went on: "Yes, it undoubtedly is a good joke. This machine certainly never came from France."

"Nor from England," replied the other.

On the road, by the light of the flashes, Michael saw, twenty yards from him, two travelers, seated side by side in a most peculiar vehicle, the wheels of which were deeply imbedded in the ruts formed in the road.

He approached them, the one grinning from ear to ear, and the other gloomily contemplating his situation, and recognized them as the two reporters who had been his companions on board the Caucasus.

"Good-morning to you, sir," cried the Frenchman. "Delighted to see you here. Let me introduce you to my intimate enemy, Mr. Blount."

The English reporter bowed, and was about to introduce in his turn his companion, Alcide Jolivet, in accordance with the rules of society, when Michael interrupted him.

"Perfectly unnecessary, sir; we already know each other, for we traveled together on the Volga."

"Ah, yes! exactly so! Mr.--" "Nicholas Korpanoff, merchant, of Irkutsk. But may I know what has happened which, though a misfortune to your companion, amuses you so much?"

"Certainly, Mr. Korpanoff," replied Alcide. "Fancy! our driver has gone off with the front part of this confounded carriage, and left us quietly seated in the back part! So here we are in the worse half of a telga; no driver, no horses. Is it not a joke?"

"No joke at all," said the Englishman.

"Indeed it is, my dear fellow. You do not know how to look at the bright side of things."

"How, pray, are we to go on?" asked Blount.

"That is the easiest thing in the world," replied Alcide. "Go and harness yourself to what remains of our cart; I will take the reins, and call you my little pigeon, like a true iemschik, and you will trot off like a real post-horse."

"Mr. Jolivet," replied the Englishman, "this joking is going too far, it passes all limits and--"

"Now do be quiet, my dear sir. When you are done up, I will take your place; and call me a broken-winded snail and faint-hearted tortoise if I don't take you over the ground at a rattling pace."

Alcide said all this with such perfect good-humor that Michael could not help smiling. "Gentlemen," said he, "here is a better plan. We have now reached the highest ridge of the Ural chain, and thus have merely to descend the slopes of the mountain. My carriage is close by, only two hundred yards behind. I will lend you one of my horses, harness it to the remains of the telga, and to-mor-how, if no accident befalls us, we will arrive together at Ekaterenburg."

"That, Mr. Korpanoff," said Alcide, "is indeed a generous proposal."

"Indeed, sir," replied Michael, "I would willingly offer you places in my tarantass, but it will only hold two, and my sister and I already fill it."

"Really, sir," answered Alcide, "with your horse and our demi-telga we will go to the world's end."

"Sir," said Harry Blount, "we most willingly accept your kind offer. And, as to that iemschik--"

"Oh! I assure you that you are not the first travelers who have met with a similar misfortune," replied Michael.

"But why should not our driver come back? He knows perfectly well that he has left us behind, wretch that he is!"

"He! He never suspected such a thing."

"What! the fellow not know that he was leaving the better half of his telga behind?"

"Not a bit, and in all good faith is driving the fore part into Ekaterenburg."

"Did I not tell you that it was a good joke, confrere?" cried Alcide.

"Then, gentlemen, if you will follow me," said Michael, "we will return to my carriage, and--"

"But the telga," observed the Englishman.

"There is not the slightest fear that it will fly away, my dear Blount!" exclaimed Alcide; "it has taken such good root in the ground, that if it were left here until next spring it would begin to bud."

"Come then, gentlemen," said Michael Strogoff, "and we will bring up the tarantass."

The Frenchman and the Englishman, descending from their seats, no longer the hinder one, since the front had taken its departure, followed Michael.
Walking along, Alcide Jolivet chattered away as usual, with his invariable good-humor. "Faith, Mr. Korpanoff," said he, "you have indeed got us out of a bad scrape."

"I have only done, sir," replied Michael, "what anyone would have done in my place."

"Well, sir, you have done us a good turn, and if you are going farther we may possibly meet again, and--"

Alcide Jolivet did not put any direct question to Michael as to where he was going, but the latter, not wishing it to be suspected that he had anything to conceal, at once replied, "I am bound for Omsk, gentlemen."

"Mr. Blount and I," replied Alcide, "go where danger is certainly to be found, and without doubt news also."

"To the invaded provinces?" asked Michael with some earnestness.

"Exactly so, Mr. Korpanoff; and we may possibly meet there."

"Indeed, sir," replied Michael, "I have little love for cannon-balls or lance points, and am by nature too great a lover of peace to venture where fighting is going on."

"I am sorry, sir, extremely sorry; we must only regret that we shall separate so soon! But on leaving Ekaterenburg it may be our fortunate fate to travel together, if only for a few days?"

"Do you go on to Omsk?" asked Michael, after a moment's reflection.

"We know nothing as yet," replied Alcide, "but we shall certainly go as far as Ishim, and once there, our movements must depend on circumstances."

"Well then, gentlemen," said Michael, "we will be fellow-travelers as far as Ishim."

Michael would certainly have preferred to travel alone, but he could not, without appearing at least singular, seek to separate himself from the two reporters, who were taking the same road that he was. Besides, since Alcide and his companion intended to make some stay at Ishim, he thought it rather convenient than otherwise to make that part of the journey in their company.

Then in an indifferent tone he asked, "Do you know, with any certainty, where this Tartar invasion is?"

"Indeed, sir," replied Alcide, "we only know what they said at Perm. Feofar-Khan's Tartars have invaded the whole province of Semipolatinsk, and for some days, by forced marches, have been descending the Irtish. You must hurry if you wish to get to Omsk before them."

"Indeed I must," replied Michael.

"It is reported also that Colonel Ogareff has succeeded in passing the frontier in disguise, and that he will not be slow in joining the Tartar chief in the revolted country."

"But how do they know it?" asked Michael, whom this news, more or less true, so directly concerned.

"Oh! as these things are always known," replied Alcide; "it is in the air."

"Then have you really reason to think that Colonel Ogareff is in Siberia?"

"I myself have heard it said that he was to take the road from Kasan to Ekaterenburg."

"Ah! you know that, Mr. Jolivet?" said Harry Blount, roused from his silence.

"I knew it," replied Alcide.

"And do you know that he went disguised as a gypsy!" asked Blount.

"As a gypsy!" exclaimed Michael, almost involuntarily, and he suddenly remembered the look of the old Bohemian at Nijni-Novgorod, his voyage on board the Caucasus, and his disembarking at Kasan.

"Just well enough to make a few remarks on the subject in a letter to my cousin," replied Alcide, smiling.

"You lost no time at Kasan," dryly observed the Englishman.

"No, my dear fellow! and while the Caucasus was laying in her supply of fuel, I was employed in obtaining a store of information."

Michael no longer listened to the repartee which Harry Blount and Alcide exchanged. He was thinking of the gypsy troupe, of the old Tsigane, whose face he had not been able to see, and of the strange woman who accompanied him, and then of the peculiar glance which she had cast at him. Suddenly, close by he heard a pistol-shot.

"Ah! forward, sirs!" cried he.

"Hullo!" said Alcide to himself, "this quiet merchant who always avoids bullets is in a great hurry to go where they are flying about just now!"

Quickly followed by Harry Blount, who was not a man to be behind in danger, he dashed after Michael. In another instant the three were opposite the projecting rock which protected the tarantass at the turning of the road.

The clump of pines struck by the lightning was still burning. There was no one to be seen. However, Michael was not mistaken. Suddenly a dreadful growling was heard, and then another report.

"A bear;" cried Michael, who could not mistake the growling. "Nadia; Nadia!" And drawing his cutlass from his belt, Michael bounded round the buttress behind which the young girl had promised to wait.

The pines, completely enveloped in flames, threw a wild glare on the scene. As Michael reached the tarantass, a huge animal retreated towards him.
It was a monstrous bear. The tempest had driven it from the woods, and it had come to seek refuge in this cave, doubtless its habitual retreat, which Nadia then occupied.

Two of the horses, terrified at the presence of the enormous creature, breaking their traces, had escaped, and the iemschik, thinking only of his beasts, leaving Nadia face to face with the bear, had gone in pursuit of them.

But the brave girl had not lost her presence of mind. The animal, which had not at first seen her, was attacking the remaining horse. Nadia, leaving the shelter in which she had been crouching, had run to the carriage, taken one of Michael's revolvers, and, advancing resolutely towards the bear, had fired close to it.

The animal, slightly wounded in the shoulder, turned on the girl, who rushed for protection behind the tarantass, but then, seeing that the horse was attempting to break its traces, and knowing that if it did so, and the others were not recovered, their journey could not be continued, with the most perfect coolness she again approached the bear, and, as it raised its paws to strike her down, gave it the contents of the second barrel.

This was the report which Michael had just heard. In an instant he was on the spot. Another bound and he was between the bear and the girl. His arm made one movement upwards, and the enormous beast, ripped up by that terrible knife, fell to the ground a lifeless mass. He had executed in splendid style the famous blow of the Siberian hunters, who endeavor not to damage the precious fur of the bear, which fetches a high price.

"You are not wounded, sister?" said Michael, springing to the side of the young girl.

"No, brother," replied Nadia.

At that moment the two journalists came up. Alcide seized the horse's head, and, in an instant, his strong wrist mastered it. His companion and he had seen Michael's rapid stroke. "Bravo!" cried Alcide; "for a simple merchant, Mr. Korpanoff, you handle the hunter's knife in a most masterly fashion."

"Most masterly, indeed," added Blount.

"In Siberia," replied Michael, "we are obliged to do a little of everything."

Alcide regarded him attentively. Seen in the bright glare, his knife dripping with blood, his tall figure, his foot firm on the huge carcass, he was indeed worth looking at.

"A formidable fellow," said Alcide to himself. Then advancing respectfully, he saluted the young girl.

Nadia bowed slightly.

Alcide turned towards his companion. "The sister worthy of the brother!" said he. "Now, were I a bear, I should not meddle with two so brave and so charming."

Harry Blount, perfectly upright, stood, hat in hand, at some distance. His companion's easy manners only increased his usual stiffness.

At that moment the iemschik, who had succeeded in recapturing his two horses, reappeared. He cast a regretful glance at the magnificent animal lying on the ground, loth to leave it to the birds of prey, and then proceeded once more to harness his team.

Michael acquainted him with the travelers' situation, and his intention of loaning one of the horses.

"As you please," replied the iemschik. "Only, you know, two carriages instead of one."

"All right, my friend," said Alcide, who understood the insinuation, "we will pay double."

"Then gee up, my turtle-doves!" cried the iemschik.

Nadia again took her place in the tarantass. Michael and his companions followed on foot. It was three o'clock. The storm still swept with terrific violence across the defile. When the first streaks of daybreak appeared the tarantass had reached the telga, which was still conscientiously imbedded as far as the center of the wheel. Such being the case, it can be easily understood how a sudden jerk would separate the front from the hinder part. One of the horses was now harnessed by means of cords to the remains of the telga, the reporters took their place on the singular equipage, and the two carriages started off. They had now only to descend the Ural slopes, in doing which there was not the slightest difficulty.

Six hours afterwards the two vehicles, the tarantass preceding the telga, arrived at Ekaterenburg, nothing worthy of note having happened in the descent.

The first person the reporters perceived at the door of the post-house was their iemschik, who appeared to be waiting for them. This worthy Russian had a fine open countenance, and he smilingly approached the travelers, and, holding out his hand, in a quiet tone he demanded the usual "pour-boire."

This very cool request roused Blount's ire to its highest pitch, and had not the iemschik prudently retreated, a straight-out blow of the fist, in true British boxing style, would have paid his claim of "na vodkou."

Alcide Jolivet, at this burst of anger, laughed as he had never laughed before.

"But the poor devil is quite right!" he cried. "He is perfectly right, my dear fellow. It is not his fault if we did not know how to follow him!"

Then drawing several copecks from his pocket, "Here my friend," said he, handing them to the iemschik; "take them. If you have not earned them, that is not your fault."
This redoubled Mr. Blount's irritation. He even began to speak of a lawsuit against the owner of the telga.

"A lawsuit in Russia, my dear fellow!" cried Alcide. "Things must indeed change should it ever be brought to a conclusion! Did you never hear the story of the wet-nurse who claimed payment of twelve months' nursing of some poor little infant?"

"I never heard it," replied Harry Blount.

"Then you do not know what that suckling had become by the time judgment was given in favor of the nurse?"

"What was he, pray?"

"Colonel of the Imperial Guard!"

At this reply all burst into a laugh.

Alcide, enchanted with his own joke, drew out his notebook, and in it wrote the following memorandum, destined to figure in a forthcoming French and Russian dictionary: "Telga, a Russian carriage with four wheels, that is when it starts; with two wheels, when it arrives at its destination."

CHAPTER XII PROVOCATION

EKATERENBURG, geographically, is an Asiatic city; for it is situated beyond the Ural Mountains, on the farthest eastern slopes of the chain. Nevertheless, it belongs to the government of Perm; and, consequently, is included in one of the great divisions of European Russia. It is as though a morsel of Siberia lay in Russian jaws.

Neither Michael nor his companions were likely to experience the slightest difficulty in obtaining means of continuing their journey in so large a town as Ekaterenburg. It was founded in 1723, and has since become a place of considerable size, for in it is the chief mint of the empire. There also are the headquarters of the officials employed in the management of the mines. Thus the town is the center of an important district, abounding in manufactories principally for the working and refining of gold and platina.

Just now the population of Ekaterenburg had greatly increased; many Russians and Siberians, menaced by the Tartar invasion, having collected there. Thus, though it had been so troublesome a matter to find horses and vehicles when going to Ekaterenburg, there was no difficulty in leaving it; for under present circumstances few travelers cared to venture on the Siberian roads.

So it happened that Blount and Alcide had not the slightest trouble in replacing, by a sound telga, the famous demi-carriage which had managed to take them to Ekaterenburg. As to Michael, he retained his tarantass, which was not much the worse for its journey across the Urals; and he had only to harness three good horses to it to take him swiftly over the road to Irkutsk.

As far as Tioumen, and even up to Novo-Zaimskoe, this road has slight inclines, which gentle undulations are the first signs of the slopes of the Ural Mountains. But after Novo-Zaimskoe begins the immense steppe.

At Ichim, as we have said, the reporters intended to stop, that is at about four hundred and twenty miles from Ekaterenburg. There they intended to be guided by circumstances as to their route across the invaded country, either together or separately, according as their news-hunting instinct set them on one track or another.

This road from Ekaterenburg to Ichim—which passes through Irkutsk—was the only one which Michael could take. But, as he did not run after news, and wished, on the contrary, to avoid the country devastated by the invaders, he determined to stop nowhere.

"I am very happy to make part of my journey in your company," said he to his new companions, "but I must tell you that I am most anxious to reach Omsk; for my sister and I are going to rejoin our mother. Who can say whether we shall arrive before the Tartars reach the town! I must therefore stop at the post-houses only long enough to change horses, and must travel day and night."

"That is exactly what we intend doing," replied Blount.

"Good," replied Michael; "but do not lose an instant. Buy or hire a carriage whose—"

"Whose hind wheels," added Alcide, "are warranted to arrive at the same time as its front wheels."

Half an hour afterwards the energetic Frenchman had found a tarantass in which he and his companion at once seated themselves. Michael and Nadia once more entered their own carriage, and at twelve o'clock the two vehicles left the town of Ekaterenburg together.

Nadia was at last in Siberia, on that long road which led to Irkutsk. What must then have been the thoughts of the young girl? Three strong swift horses were taking her across that land of exile where her parent was condemned to live, for how long she knew not, and so far from his native land. But she scarcely noticed those long steppes over which the tarantass was rolling, and which at one time she had despaired of ever seeing, for her eyes were gaz ing at the horizon, beyond which she knew her banished father was. She saw nothing of the country across which she was traveling at the rate of fifteen versts an hour; nothing of these regions of Western Siberia, so different from those of the east. Here, indeed, were few cultivated fields; the soil was poor, at least at the surface, but in its bowels lay hid
quantities of iron, copper, platina, and gold. How can hands be found to cultivate the land, when it pays better to burrow beneath the earth? The pickaxe is everywhere at work; the spade nowhere.

However, Nadia's thoughts sometimes left the provinces of Lake Baikal, and returned to her present situation. Her father's image faded away, and was replaced by that of her generous companion as he first appeared on the Vladimir railroad. She recalled his attentions during that journey, his arrival at the police-station, the hearty simplicity with which he had called her sister, his kindness to her in the descent of the Volga, and then all that he did for her on that terrible night of the storm in the Urals, when he saved her life at the peril of his own.

Thus Nadia thought of Michael. She thanked God for having given her such a gallant protector, a friend so generous and wise. She knew that she was safe with him, under his protection. No brother could have done more than he. All obstacles seemed cleared away; the performance of her journey was but a matter of time.

Michael remained buried in thought. He also thanked God for having brought about this meeting with Nadia, which at the same time enabled him to do a good action, and afforded him additional means for concealing his true character. He delighted in the young girl's calm intrepidity. Was she not indeed his sister? His feeling towards his beautiful and brave companion was rather respect than affection. He felt that hers was one of those pure and rare hearts which are held by all in high esteem.

However, Michael's dangers were now beginning, since he had reached Siberian ground. If the reporters were not mistaken, if Ivan Ogareff had really passed the frontier, all his actions must be made with extreme caution. Things were now altered; Tartar spies swarmed in the Siberian provinces. His incognito once discovered, his character as courier of the Czar known, there was an end of his journey, and probably of his life. Michael felt now more than ever the weight of his responsibility.

While such were the thoughts of those occupying the first carriage, what was happening in the second? Nothing out of the way. Alcide spoke in sentences; Blount replied by monosyllables. Each looked at everything in his own light, and made notes of such incidents as occurred on the journey--few and but slightly varied--while they crossed the provinces of Western Siberia.

At each relay the reporters descended from their carriage and found themselves with Michael. Except when meals were to be taken at the post-houses, Nadia did not leave the tarantass. When obliged to breakfast or dine, she sat at table, but was always very reserved, and seldom joined in conversation.

Alcide, without going beyond the limits of strict propriety, showed that he was greatly struck by the young girl. He admired the silent energy which she showed in bearing all the fatigues of so difficult a journey.

The forced stoppages were anything but agreeable to Michael; so he hastened the departure at each relay, roused the innkeepers, urged on the iemschiks, and expedited the harnessing of the tarantass. Then the hurried meal over--always much too hurried to agree with Blount, who was a methodical eater--they started, and were driven as eagles, for they paid like princes.

It need scarcely be said that Blount did not trouble himself about the girl at table. That gentleman was not in the habit of doing two things at once. She was also one of the few subjects of conversation which he did not care to discuss with his companion.

Alcide having asked him, on one occasion, how old he thought the girl, "What girl?" he replied, quite seriously. "Why, Nicholas Korpanoff's sister."

"Is she his sister?"

"No; his grandmother!" replied Alcide, angry at his indifference. "What age should you consider her?"

"Had I been present at her birth I might have known."

Very few of the Siberian peasants were to be seen in the fields. These peasants are remarkable for their pale, grave faces, which a celebrated traveler has compared to those of the Castilians, without the haughtiness of the latter. Here and there some villages already deserted indicated the approach of the Tartar hordes. The inhabitants, having driven off their flocks of sheep, their camels, and their horses, were taking refuge in the plains of the north. Some tribes of the wandering Kirghiz, who remained faithful, had transported their tents beyond the Irtych, to escape the depredations of the invaders.

Happily, post traveling was as yet uninterrupted; and telegraphic communication could still be effected between places connected with the wire. At each relay horses were to be had on the usual conditions. At each telegraphic station the clerks transmitted messages delivered to them, delaying for State dispatches alone.

Thus far, then, Michael's journey had been accomplished satisfactorily. The courier of the Czar had in no way been impeded; and, if he could only get on to Krasnoiarsk, which seemed the farthest point attained by Feofar-Khan's Tartars, he knew that he could arrive at Irkustsk, before them. The day after the two carriages had left Ekaterenburg they reached the small town of Toulouguisk at seven o'clock in the morning, having covered two hundred and twenty versts, no event worthy of mention having occurred. The same evening, the 22d of July, they arrived at Tioumen.
Tioumen, whose population is usually ten thousand inhabitants, then contained double that number. This, the first industrial town established by the Russians in Siberia, in which may be seen a fine metal-refining factory and a bell foundry, had never before presented such an animated appearance. The correspondents immediately went off after news. That brought by Siberian fugitives from the seat of war was far from reassuring. They said, amongst other things, that Feofar-Khan's army was rapidly approaching the valley of the Ichim, and they confirmed the report that the Tartar chief was soon to be joined by Colonel Ogareff, if he had not been so already. Hence the conclusion was that operations would be pushed in Eastern Siberia with the greatest activity. However, the loyal Cossacks of the government of Tobolsk were advancing by forced marches towards Tomsk, in the hope of cutting off the Tartar columns.

At midnight the town of Novo-Saimsk was reached; and the travelers now left behind them the country broken by tree-covered hills, the last remains of the Urals.

Here began the regular Siberian steppe which extends to the neighborhood of Krasnoiarsk. It is a boundless plain, a vast grassy desert; earth and sky here form a circle as distinct as that traced by a sweep of the compasses. The steppe presents nothing to attract notice but the long line of the telegraph posts, their wires vibrating in the breeze like the strings of a harp. The road could be distinguished from the rest of the plain only by the clouds of fine dust which rose under the wheels of the tarantass. Had it not been for this white ribbon, which stretched away as far as the eye could reach, the travelers might have thought themselves in a desert.

Michael and his companions again pressed rapidly forward. The horses, urged on by the iemschik, seemed to fly over the ground, for there was not the slightest obstacle to impede them. The tarantass was going straight for Ichim, where the two correspondents intended to stop, if nothing happened to make them alter their plans.

A hundred and twenty miles separated Novo-Saimsk from the town of Ichim, and before eight o'clock the next evening the distance could and should be accomplished if no time was lost. In the opinion of the iemschiks, should the travelers not be great lords or high functionaries, they were worthy of being so, if it was only for their generosity in the matter of "na vodkou."

On the afternoon of the next day, the 23rd of July, the two carriages were not more than thirty versts from Ichim. Suddenly Michael caught sight of a carriage—scarcely visible among the clouds of dust—preceeding them along the road. As his horses were evidently less fatigued than those of the other traveler, he would not be long in overtaking it. This was neither a tarantass nor a telga, but a post-berlin, which looked as if it had made a long journey. The postillion was thrashing his horses with all his might, and only kept them at a gallop by dint of abuse and blows. The berlin had certainly not passed through Novo-Saimsk, and could only have struck the Irkutsk road by some less frequented route across the steppe.

Our travelers' first thought, on seeing this berlin, was to get in front of it, and arrive first at the relay, so as to make sure of fresh horses. They said a word to their iemschiks, who soon brought them up with the berlin.

Michael Strogoff came up first. As he passed, a head was thrust out of the window of the berlin.

He had not time to see what it was like, but as he dashed by he distinctly heard this word, uttered in an imperious tone: "Stop!"

But they did not stop; on the contrary, the berlin was soon distanced by the two tarantasses.

It now became a regular race; for the horses of the berlin—no doubt excited by the sight and pace of the others—recovered their strength and kept up for some minutes. The three carriages were hidden in a cloud of dust. From this cloud issued the cracking of whips mingled with excited shouts and exclamations of anger.

Nevertheless, the advantage remained with Michael and his companions, which might be very important to them if the relay was poorly provided with horses. Two carriages were perhaps more than the postmaster could provide for, at least in a short space of time.

Half an hour after the berlin was left far behind, looking only a speck on the horizon of the steppe.

It was eight o'clock in the evening when the two carriages reached Ichim. The news was worse and worse with regard to the invasion. The town itself was menaced by the Tartar vanguard; and two days before the authorities had been obliged to retreat to Tobolsk. There was not an officer nor a soldier left in Ichim.

On arriving at the relay, Michael Strogoff immediately asked for horses. He had been fortunate in distancing the berlin. Only three horses were fit to be harnessed. The others had just come in worn out from a long stage.

As the two correspondents intended to stop at Ichim, they had not to trouble themselves to find transport, and had their carriage put away. In ten minutes Michael was told that his tarantass was ready to start.

"Good," said he.

Then turning to the two reporters: "Well, gentlemen, the time is come for us to separate."

"What, Mr. Korpanoff," said Alcide Jolivet, "shall you not stop even for an hour at Ichim?"

"No, sir; and I also wish to leave the post-house before the arrival of the berlin which we distanced."

"Are you afraid that the traveler will dispute the horses with you?"
"I particularly wish to avoid any difficulty."
"Then, Mr. Korpanoff," said Jolivet, "it only remains for us to thank you once more for the service you rendered us, and the pleasure we have had in traveling with you."
"It is possible that we shall meet you again in a few days at Omsk," added Blount.
"It is possible," answered Michael, "since I am going straight there."
"Well, I wish you a safe journey, Mr. Korpanoff," said Alcide, "and Heaven preserve you from telgas."

The two reporters held out their hands to Michael with the intention of cordially shaking his, when the sound of a carriage was heard outside. Almost immediately the door was flung open and a man appeared.

It was the traveler of the Berlin, a military-looking man, apparently about forty years of age, tall, robust in figure, broad-shouldered, with a strongly-set head, and thick mustaches meeting red whiskers. He wore a plain uniform. A cavalry saber hung at his side, and in his hand he held a short-handled whip.

"Horses," he demanded, with the air of a man accustomed to command.
"I have no more disposable horses," answered the postmaster, bowing.
"I must have some this moment."
"It is impossible."
"What are those horses which have just been harnessed to the tarantass I saw at the door?"
"They belong to this traveler," answered the postmaster, pointing to Michael Strogoff.
"Take them out!" said the traveler in a tone which admitted of no reply.
Michael then advanced.
"These horses are engaged by me," he said.
"What does that matter? I must have them. Come, be quick; I have no time to lose."
"I have no time to lose either," replied Michael, restraining himself with difficulty.
Nadia was near him, calm also, but secretly uneasy at a scene which it would have been better to avoid.
"Enough!" said the traveler. Then, going up to the postmaster, "Let the horses be put into my berlin," he exclaimed with a threatening gesture.

The postmaster, much embarrassed, did not know whom to obey, and looked at Michael, who evidently had the right to resist the unjust demands of the traveler.

Michael hesitated an instant. He did not wish to make use of his podorojna, which would have drawn attention to him, and he was most unwilling also, by giving up his horses, to delay his journey, and yet he must not engage in a struggle which might compromise his mission.

The two reporters looked at him ready to support him should he appeal to them.
"My horses will remain in my carriage," said Michael, but without raising his tone more than would be suitable for a plain Irkutsk merchant.

The traveler advanced towards Michael and laid his hand heavily on his shoulder. "Is it so?" he said roughly.
"You will not give up your horses to me?"
"No," answered Michael.
"Very well, they shall belong to whichever of us is able to start. Defend yourself; I shall not spare you!"
So saying, the traveler drew his saber from its sheath, and Nadia threw herself before Michael.
Blount and Alcide Jolivet advanced towards him.
"I shall not fight," said Michael quietly, folding his arms across his chest.
"You will not fight?"
"No."
"Not even after this?" exclaimed the traveler. And before anyone could prevent him, he struck Michael's shoulder with the handle of the whip. At this insult Michael turned deadly pale. His hands moved convulsively as if he would have knocked the brute down. But by a tremendous effort he mastered himself. A duel! it was more than a delay; it was perhaps the failure of his mission. It would be better to lose some hours. Yes; but to swallow this affront!
"Will you fight now, coward?" repeated the traveler, adding coarseness to brutality.
"No," answered Michael, without moving, but looking the other straight in the face.
"The horses this moment," said the man, and left the room.
The postmaster followed him, after shrugging his shoulders and bestowing on Michael a glance of anything but approbation.

The effect produced on the reporters by this incident was not to Michael's advantage. Their discomfiture was visible. How could this strong young man allow himself to be struck like that and not demand satisfaction for such an insult? They contented themselves with bowing to him and retired, Jolivet remarking to Harry Blount

"I could not have believed that of a man who is so skillful in finishing up Ural Mountain bears. Is it the case that
a man can be courageous at one time and a coward at another? It is quite incomprehensible."

A moment afterwards the noise of wheels and whip showed that the berlin, drawn by the tarantass' horses, was driving rapidly away from the post-house.

Nadia, unmoved, and Michael, still quivering, remained alone in the room. The courier of the Czar, his arms crossed over his chest was seated motionless as a statue. A color, which could not have been the blush of shame, had replaced the paleness on his countenance.

Nadia did not doubt that powerful reasons alone could have allowed him to suffer so great a humiliation from such a man. Going up to him as he had come to her in the police-station at Nijni-Novgorod:

"Your hand, brother," said she.

And at the same time her hand, with an almost maternal gesture, wiped away a tear which sprang to her companion's eye.

CHAPTER XIII DUTY BEFORE EVERYTHING

NADIA, with the clear perception of a right-minded woman, guessed that some secret motive directed all Michael Strogoff's actions; that he, for a reason unknown to her, did not belong to himself; and that in this instance especially he had heroically sacrificed to duty even his resentment at the gross injury he had received.

Nadia, therefore, asked no explanation from Michael. Had not the hand which she had extended to him already replied to all that he might have been able to tell her?

Michael remained silent all the evening. The postmaster not being able to supply them with fresh horses until the next morning, a whole night must be passed at the house. Nadia could profit by it to take some rest, and a room was therefore prepared for her.

The young girl would no doubt have preferred not to leave her companion, but she felt that he would rather be alone, and she made ready to go to her room.

Just as she was about to retire she could not refrain from going up to Michael to say good-night.

"Brother," she whispered. But he checked her with a gesture. The girl sighed and left the room.

Michael Strogoff at last asked for the postmaster. The latter, a Siberian of the old type, came directly, and looking rather contemptuously at the young man, waited to be questioned.

"You belong to the country?" asked Michael.

"Yes."

"Do you know that man who took my horses?"

"No."

"Had you never seen him before?"

"Never."

"Who do you think he was?"

"A man who knows how to make himself obeyed."

Michael fixed his piercing gaze upon the Siberian, but the other did not quail before it.

"Do you dare to judge me?" exclaimed Michael.

"Yes," answered the Siberian, "there are some things even a plain merchant cannot receive without returning."

"Blows?"

"Blows, young man. I am of an age and strength to tell you so."

Michael went up to the postmaster and laid his two powerful hands on his shoulders.

Then in a peculiarly calm tone, "Be off, my friend," said he: "be off! I could kill you."

The postmaster understood. "I like him better for that," he muttered and retired without another word.

At eight o'clock the next morning, the 24th of July, three strong horses were harnessed to the tarantass. Michael Strogoff and Nadia took their places, and Ichim, with its disagreeable remembrances, was soon left far behind.

At the different relays at which they stopped during the day Strogoff ascertained that the berlin still preceded them on the road to Irkutsk, and that the traveler, as hurried as they were, never lost a minute in pursuing his way across the steppe.

At four o'clock in the evening they reached Abatskaia, fifty miles farther on, where the Ichim, one of the
principal affluents of the Irtych, had to be crossed. This passage was rather more difficult than that of the Tobol. Indeed the current of the Ichim was very rapid just at that place. During the Siberian winter, the rivers being all frozen to a thickness of several feet, they are easily practicable, and the traveler even crosses them without being aware of the fact, for their beds have disappeared under the snowy sheet spread uniformly over the steppe; but in summer the difficulties of crossing are sometimes great.

In fact, two hours were taken up in making the passage of the Ichim, which much exasperated Michael, especially as the boatmen gave them alarming news of the Tartar invasion. Some of Feofar-Khan's scouts had already appeared on both banks of the lower Ichim, in the southern parts of the government of Tobolsk. Omsk was threatened. They spoke of an engagement which had taken place between the Siberian and Tartar troops on the frontier of the great Kirghese horde—an engagement not to the advantage of the Russians, who were weak in numbers. The troops had retreated thence, and in consequence there had been a general emigration of all the peasants of the province. The boatmen spoke of horrible atrocities committed by the invaders—pillage, theft, incendiariism, murder. Such was the system of Tartar warfare.

The people all fled before Feofar-Khan. Michael Strogoff's great fear was lest, in the depopulation of the towns, he should be unable to obtain the means of transport. He was therefore extremely anxious to reach Omsk. Perhaps there they would get the start of the Tartar scouts, who were coming down the valley of the Irtych, and would find the road open to Irkutsk.

Just at the place where the tarantass crossed the river ended what is called, in military language, the "Ichim chain"—a chain of towers, or little wooden forts, extending from the southern frontier of Siberia for a distance of nearly four hundred versts. Formerly these forts were occupied by detachments of Cossacks, and they protected the country against the Kirghese, as well as against the Tartars. But since the Muscovite Government had believed these hordes reduced to absolute submission, they had been abandoned, and now could not be used; just at the time when they were needed. Many of these forts had been reduced to ashes; and the boatmen even pointed out the smoke to Michael, rising in the southern horizon, and showing the approach of the Tartar advance-guard.

As soon as the ferryboat landed the tarantass on the right bank of the Ichim, the journey across the steppe was resumed with all speed. Michael Strogoff remained very silent. He was, however, always attentive to Nadia, helping her to bear the fatigue of this long journey without break or rest; but the girl never complained. She longed to give wings to the horses. Something told her that her companion was even more anxious than herself to reach Irkutsk; and how many versts were still between!

It also occurred to her that if Omsk was entered by the Tartars, Michael's mother, who lived there, would be in danger, and that this was sufficient to explain her son's impatience to get to her.

Nadia at last spoke to him of old Marfa, and of how unprotected she would be in the midst of all these events. "Have you received any news of your mother since the beginning of the invasion?" she asked.

"None, Nadia. The last letter my mother wrote to me contained good news. Marfa is a brave and energetic Siberian woman. Notwithstanding her age, she has preserved all her moral strength. She knows how to suffer."

"I shall see her, brother," said Nadia quickly. "Since you give me the name of sister, I am Marfa's daughter."

And as Michael did not answer she added: "Perhaps your mother has been able to leave Omsk?"

"It is possible, Nadia," replied Michael; "and I hope she may have reached Tobolsk. Marfa hates the Tartars. She knows the steppe, and would have no fear in just taking her staff and going down the banks of the Irtych. There is not a spot in all the province unknown to her. Many times has she traveled all over the country with my father; and many times I myself, when a mere child, have accompanied them across the Siberian desert. Yes, Nadia, I trust that my mother has left Omsk."

"And when shall you see her?"

"I shall see her--on my return."

"If, however, your mother is still at Omsk, you will be able to spare an hour to go to her?"

"I shall not go and see her."

"You will not see her?"

"No, Nadia," said Michael, his chest heaving as he felt he could not go on replying to the girl's questions. "You say no! Why, brother, if your mother is still at Omsk, for what reason could you refuse to see her?"

"For what reason, Nadia? You ask me for what reason," exclaimed Michael, in so changed a voice that the young girl started. "For the same reason as that which made me patient even to cowardice with the villain who--" He could not finish his sentence.

"Calm yourself, brother," said Nadia in a gentle voice. "I only know one thing, or rather I do not know it, I feel it. It is that all your conduct is now directed by the sentiment of a duty more sacred—if there can be one--than that which unites the son to the mother."
Nadia was silent, and from that moment avoided every subject which in any way touched on Michael's peculiar situation. He had a secret motive which she must respect. She respected it.

The next day, July 25th, at three o'clock in the morning, the tarantass arrived at Tioukalmsk, having accomplished a distance of eighty miles since it had crossed the Ichim. They rapidly changed horses. Here, however, for the first time, the iemschik made difficulties about starting, declaring that detachments of Tartars were roving across the steppe, and that travelers, horses, and carriages would be a fine prize for them.

Only by dint of a large bribe could Michael get over the unwillingness of the iemschik, for in this instance, as in many others, he did not wish to show his podorojna. The last ukase, having been transmitted by telegraph, was known in the Siberian provinces; and a Russian specially exempted from obeying these words would certainly have drawn public attention to himself—a thing above all to be avoided by the Czar's courier. As to the iemschik's hesitation, either the rascal traded on the traveler's impatience or he really had good reason to fear.

However, at last the tarantass started, and made such good way that by three in the afternoon it had reached Koulatsinskoe, fifty miles farther on. An hour after this it was on the banks of the Irtych. Omsk was now only fourteen miles distant.

The Irtych is a large river, and one of the principal of those which flow towards the north of Asia. Rising in the Altai Mountains, it flows from the southeast to the northwest and empties itself into the Obi, after a course of four thousand miles.

At this time of year, when all the rivers of the Siberian basin are much swollen, the waters of the Irtych were very high. In consequence the current was changed to a regular torrent, rendering the passage difficult enough. A swimmer could not have crossed, however powerful; and even in a ferryboat there would be some danger.

But Michael and Nadia, determined to brave all perils whatever they might be, did not dream of shrinking from this one. Michael proposed to his young companion that he should cross first, embarking in the ferryboat with the tarantass and horses, as he feared that the weight of this load would render it less safe. After landing the carriage he would return and fetch Nadia.

The girl refused. It would be the delay of an hour, and she would not, for her safety alone, be the cause of it.

The embarkation was made not without difficulty, for the banks were partly flooded and the boat could not get in near enough. However, after half an hour's exertion, the boatmen got the tarantass and the three horses on board. The passengers embarked also, and they shoved off.

For a few minutes all went well. A little way up the river the current was broken by a long point projecting from the bank, and forming an eddy easily crossed by the boat. The two boatmen propelled their barge with long poles, which they handled cleverly; but as they gained the middle of the stream it grew deeper and deeper, until at last they could only just reach the bottom. The ends of the poles were only a foot above the water, which rendered their use difficult. Michael and Nadia, seated in the stern of the boat, and always in dread of a delay, watched the boatmen with some uneasiness.

"Look out!" cried one of them to his comrade.

The shout was occasioned by the new direction the boat was rapidly taking. It had got into the direct current and was being swept down the river. By diligent use of the poles, putting the ends in a series of notches cut below the gunwale, the boatmen managed to keep the craft against the stream, and slowly urged it in a slanting direction towards the right bank.

They calculated on reaching it some five or six versts below the landing place; but, after all, that would not matter so long as men and beasts could disembark without accident. The two stout boatmen, stimulated moreover by the promise of double fare, did not doubt of succeeding in this difficult passage of the Irtych.

But they reckoned without an accident which they were powerless to prevent, and neither their zeal nor their skillfulness could, under the circumstances, have done more.

The boat was in the middle of the current, at nearly equal distances from either shore, and being carried down at the rate of two versts an hour, when Michael, springing to his feet, bent his gaze up the river.

Several boats, aided by oars as well as by the current, were coming swiftly down upon them.

Michael's brow contracted, and a cry escaped him.

"What is the matter?" asked the girl.

But before Michael had time to reply one of the boatmen exclaimed in an accent of terror:

"The Tartars! the Tartars!"

There were indeed boats full of soldiers, and in a few minutes they must reach the ferryboat, it being too heavily laden to escape from them.

The terrified boatmen uttered exclamations of despair and dropped their poles.

"Courage, my friends!" cried Michael; "courage! Fifty roubles for you if we reach the right bank before the boats overtake us."
Incited by these words, the boatmen again worked manfully but it soon became evident that they could not escape the Tartars.

It was scarcely probable that they would pass without attacking them. On the contrary, there was everything to be feared from robbers such as these.

"Do not be afraid, Nadia," said Michael; "but be ready for anything."

"I am ready," replied Nadia.

"Even to leap into the water when I tell you?"

"Whenever you tell me."

"Have confidence in me, Nadia."

"I have, indeed!"

The Tartar boats were now only a hundred feet distant. They carried a detachment of Bokharian soldiers, on their way to reconnoiter around Omsk.

The ferryboat was still two lengths from the shore. The boatmen redoubled their efforts. Michael himself seized a pole and wielded it with superhuman strength. If he could land the tarantass and horses, and dash off with them, there was some chance of escaping the Tartars, who were not mounted.

But all their efforts were in vain. "Saryn na kitchou!" shouted the soldiers from the first boat.

Michael recognized the Tartar war-cry, which is usually answered by lying flat on the ground. As neither he nor the boatmen obeyed a volley was let fly, and two of the horses were mortally wounded.

At the next moment a violent blow was felt. The boats had run into the ferryboat.

"Come, Nadia!" cried Michael, ready to jump overboard.

The girl was about to follow him, when a blow from a lance struck him, and he was thrown into the water. The current swept him away, his hand raised for an instant above the waves, and then he disappeared.

Nadia uttered a cry, but before she had time to throw herself after him she was seized and dragged into one of the boats. The boatmen were killed, the ferryboat left to drift away, and the Tartars continued to descend the Irtysch.

CHAPTER XIV MOTHER AND SON

OMSK is the official capital of Western Siberia. It is not the most important city of the government of that name, for Tomsk has more inhabitants and is larger. But it is at Omsk that the Governor-General of this the first half of Asiatic Russia resides. Omsk, properly so called, is composed of two distinct towns: one which is exclusively inhabited by the authorities and officials; the other more especially devoted to the Siberian merchants, although, indeed, the trade of the town is of small importance.

This city has about 12,000 to 13,000 inhabitants. It is defended by walls, but these are merely of earth, and could afford only insufficient protection. The Tartars, who were well aware of this fact, consequently tried at this period to carry it by main force, and in this they succeeded, after an investment of a few days.

The garrison of Omsk, reduced to two thousand men, resisted valiantly. But driven back, little by little, from the mercantile portion of the place, they were compelled to take refuge in the upper town.

It was there that the Governor-General, his officers, and soldiers had entrenched themselves. They had made the upper quarter of Omsk a kind of citadel, and hitherto they held out well in this species of improvised "kreml," but without much hope of the promised succor. The Tartar troops, who were descending the Irtysch, received every day fresh reinforcements, and, what was more serious, they were led by an officer, a traitor to his country, but a man of much note, and of an audacity equal to any emergency. This man was Colonel Ivan Ogareff.

Ivan Ogareff, terrible as any of the most savage Tartar chieftains, was an educated soldier. Possessing on his mother's side some Mongolian blood, he delighted in deceptive strategy and ambuscades, stopping short of nothing when he desired to fathom some secret or to set some trap. Deceitful by nature, he willingly had recourse to the vilest trickery; lying when occasion demanded, excelling in the adoption of all disguises and in every species of deception. Further, he was cruel, and had even acted as an executioner. Feofar-Khan possessed in him a lieutenant well capable of seconding his designs in this savage war.

When Michael Strogoff arrived on the banks of the Irtysch, Ivan Ogareff was already master of Omsk, and was pressing the siege of the upper quarter of the town all the more eagerly because he must hasten to Tomsk, where the main body of the Tartar army was concentrated.

Tomsk, in fact, had been taken by Feofar-Khan some days previously, and it was thence that the invaders, masters of Central Siberia, were to march upon Irkutsk.

Irkutsk was the real object of Ivan Ogareff. The plan of the traitor was to reach the Grand Duke under a false name, to gain his confidence, and to deliver into Tartar hands the town and the Grand Duke himself. With such a town, and such a hostage, all Asiatic Siberia must necessarily fall into the hands of the invaders. Now it was known
that the Czar was acquainted with this conspiracy, and that it was for the purpose of baffling it that a courier had been intrusted with the important warning. Hence, therefore, the very stringent instructions which had been given to the young courier to pass incognito through the invaded district.

This mission he had so far faithfully performed, but now could he carry it to a successful completion?

The blow which had struck Michael Strogoff was not mortal. By swimming in a manner by which he had effectually concealed himself, he had reached the right bank, where he fell exhausted among the bushes.

When he recovered his senses, he found himself in the cabin of a mujik, who had picked him up and cared for him. For how long a time had he been the guest of this brave Siberian? He could not guess. But when he opened his eyes he saw the handsome bearded face bending over him, and regarding him with pitying eyes. "Do not speak, little father," said the mujik, "Do not speak! Thou art still too weak. I will tell thee where thou art and everything that has passed."

And the mujik related to Michael Strogoff the different incidents of the struggle which he had witnessed--the attack upon the ferry by the Tartar boats, the pillage of the tarantass, and the massacre of the boatmen.

But Michael Strogoff listened no longer, and slipping his hand under his garment he felt the imperial letter still secured in his breast. He breathed a sigh of relief.

But that was not all. "A young girl accompanied me," said he.

"They have not killed her," replied the mujik, anticipating the anxiety which he read in the eyes of his guest. "They have carried her off in their boat, and have continued the descent of Irtych. It is only one prisoner more to join the many they are taking to Tomsk!"

Michael Strogoff was unable to reply. He pressed his hand upon his heart to restrain its beating. But, notwithstanding these many trials, the sentiment of duty mastered his whole soul. "Where am I?" asked he.

"Upon the right bank of the Irtych, only five versts from Omsk," replied the mujik.

"What wound can I have received which could have thus prostrated me? It was not a gunshot wound?"

"No; a lance-thrust in the head, now healing," replied the mujik. "After a few days' rest, little father, thou wilt be able to proceed. Thou didst fall into the river; but the Tartars neither touched nor searched thee; and thy purse is still in thy pocket."

Michael Strogoff gripped the mujik's hand. Then, recovering himself with a sudden effort, "Friend," said he, "how long have I been in thy hut?"

"Three days."

"Three days lost!"

"Three days hast thou lain unconscious."

"Hast thou a horse to sell me?"

"Thou wishest to go?"

"At once."

"I have neither horse nor carriage, little father. Where the Tartar has passed there remains nothing!"

"Well, I will go on foot to Omsk to find a horse."

"A few more hours of rest, and thou wilt be in a better condition to pursue thy journey."

"Not an hour!"

"Come now," replied the mujik, recognizing the fact that it was useless to struggle against the will of his guest, "I will guide thee myself. Besides," he added, "the Russians are still in great force at Omsk, and thou couldst, perhaps, pass unperceived."

"Friend," replied Michael Strogoff, "Heaven reward thee for all thou hast done for me!"

"Only fools expect reward on earth," replied the mujik.

Michael Strogoff went out of the hut. When he tried to walk he was seized with such faintness that, without the assistance of the mujik, he would have fallen; but the fresh air quickly revived him. He then felt the wound in his head, the violence of which his fur cap had lessened. With the energy which he possessed, he was not a man to succumb under such a trifle. Before his eyes lay a single goal--far-distant Irkutsk. He must reach it! But he must pass through Omsk without stopping there.

"God protect my mother and Nadia!" he murmured. "I have no longer the right to think of them!"

Michael Strogoff and the mujik soon arrived in the mercantile quarter of the lower town. The surrounding earthwork had been destroyed in many places, and there were the breaches through which the marauders who followed the armies of Feofar-Khan had penetrated. Within Omsk, in its streets and squares, the Tartar soldiers swarmed like ants; but it was easy to see that a hand of iron imposed upon them a discipline to which they were little accustomed. They walked nowhere alone, but in armed groups, to defend themselves against surprise.

In the chief square, transformed into a camp, guarded by many sentries, 2,000 Tartars bivouacked. The horses, picketed but still saddled, were ready to start at the first order. Omsk could only be a temporary halting-place for this
Tartar cavalry, which preferred the rich plains of Eastern Siberia, where the towns were more wealthy, and, consequently, pillage more profitable.

Above the mercantile town rose the upper quarter, which Ivan Ogareff, notwithstanding several assaults vigorously made but bravely repelled, had not yet been able to reduce. Upon its embattled walls floated the national colors of Russia.

It was not without a legitimate pride that Michael Strogoff and his guide, vowing fidelity, saluted them.

Michael Strogoff was perfectly acquainted with the town of Omsk, and he took care to avoid those streets which were much frequented. This was not from any fear of being recognized. In the town his old mother only could have called him by name, but he had sworn not to see her, and he did not. Besides—and he wished it with his whole heart—she might have fled into some quiet portion of the steppe.

The mujik very fortunately knew a postmaster who, if well paid, would not refuse at his request either to let or to sell a carriage or horses. There remained the difficulty of leaving the town, but the breaches in the fortifications would, of course, facilitate his departure.

The mujik was accordingly conducting his guest straight to the posting-house, when, in a narrow street, Michael Strogoff, coming to a sudden stop sprang behind a jutting wall.

"What is the matter?" asked the astonished mujik.

"Silence!" replied Michael, with his finger on his lips. At this moment a detachment debouched from the principal square into the street which Michael Strogoff and his companion had just been following.

At the head of the detachment, composed of twenty horsemen, was an officer dressed in a very simple uniform. Although he glanced rapidly from one side to the other he could not have seen Michael Strogoff, owing to his precipitous retreat.

The detachment went at full trot into the narrow street. Neither the officer nor his escort concerned themselves about the inhabitants. Several unlucky ones had scarcely time to make way for their passage. There were a few half-stifled cries, to which thrusts of the lance gave an instant reply, and the street was immediately cleared.

When the escort had disappeared, "Who is that officer?" asked Michael Strogoff. And while putting the question his face was pale as that of a corpse.

"It is Ivan Ogareff," replied the Siberian, in a deep voice which breathed hatred.

"He!" cried Michael Strogoff, from whom the word escaped with a fury he could not conquer. He had just recognized in this officer the traveler who had struck him at the posting-house of Ichim. And, although he had only caught a glimpse of him, it burst upon his mind, at the same time, that this traveler was the old Zingari whose words he had overheard in the market place of Nijni-Novgorod.

Michael Strogoff was not mistaken. The two men were one and the same. It was under the garb of a Zingari, mingling with the band of Sangarre, that Ivan Ogareff had been able to leave the town of Nijni-Novgorod, where he had gone to seek his confidants. Sangarre and her Zingari, well paid spies, were absolutely devoted to him. It was he who, during the night, on the fair-ground had uttered that singular sentence, which Michael Strogoff could not understand; it was he who was voyaging on board the Caucasus, with the whole of the Bohemian band; it was he who, by this other route, from Kasan to Ichim, across the Urals, had reached Omsk, where now he held supreme authority.

Ivan Ogareff had been barely three days at Omsk, and had it not been for their fatal meeting at Ichim, and for the event which had detained him three days on the banks of the Irytych, Michael Strogoff would have evidently beaten him on the way to Irkutsk.

And who knows how many misfortunes would have been avoided in the future! In any case—and now more than ever—Michael Strogoff must avoid Ivan Ogareff, and contrive not to be seen. When the moment of encountering him face to face should arrive, he knew how to meet it, even should the traitor be master of the whole of Siberia.

The mujik and Michael resumed their way and arrived at the posting-house. To leave Omsk by one of the breaches would not be difficult after nightfall. As for purchasing a carriage to replace the tarantass, that was impossible. There were none to be let or sold. But what want had Michael Strogoff now for a carriage? Was he not alone, alas? A horse would suffice him; and, very fortunately, a horse could be had. It was an animal of strength and mettle, and Michael Strogoff, accomplished horseman as he was, could make good use of it.

It was four o'clock in the afternoon. Michael Strogoff, compelled to wait till nightfall, in order to pass the fortifications, but not desiring to show himself, remained in the posting-house, and there partook of food.

There was a great crowd in the public room. They were talking of the expected arrival of a corps of Muscovite troops, not at Omsk, but at Tomsk—a corps intended to recapture that town from the Tartars of Feofar-Khan.

Michael Strogoff lent an attentive ear, but took no part in the conversation. Suddenly a cry made him tremble, a cry which penetrated to the depths of his soul, and these two words rushed into his ear: "My son!"

His mother, the old woman Marfa, was before him! Trembling, she smiled upon him. She stretched forth her
arms to him. Michael Strogoff arose. He was about to throw himself--

The thought of duty, the serious danger for his mother and himself in this unfortunate meeting, suddenly stopped him, and such was his command over himself that not a muscle of his face moved. There were twenty people in the public room. Among them were, perhaps, spies, and was it not known in the town that the son of Marfa Strogoff belonged to the corps of the couriers of the Czar?

Michael Strogoff did not move.
"Michael!" cried his mother.
"Who are you, my good lady?" Michael Strogoff stammered, unable to speak in his usual firm tone.
"Who am I, thou askest! Dost thou no longer know thy mother?"
"You are mistaken," coldly replied Michael Strogoff. "A resemblance deceives you."

The old Marfa went up to him, and, looking straight into his eyes, said, "Thou art not the son of Peter and Marfa Strogoff?"

Michael Strogoff would have given his life to have locked his mother in his arms; but if he yielded it was all over with him, with her, with his mission, with his oath! Completely master of himself, he closed his eyes, in order not to see the inexpressible anguish which agitated the revered countenance of his mother. He drew back his hands, in order not to touch those trembling hands which sought him. "I do not know in truth what it is you say, my good woman," he replied, stepping back.

"Michael!" again cried his aged mother.
"My name is not Michael. I never was your son! I am Nicholas Korpanoff, a merchant at Irkutsk."

And suddenly he left the public room, whilst for the last time the words re-echoed, "My son! my son!"

Michael Strogoff, by a desperate effort, had gone. He did not see his old mother, who had fallen back almost inanimate upon a bench. But when the postmaster hastened to assist her, the aged woman raised herself. Suddenly a thought occurred to her. She denied by her son! It was not possible. As for being herself deceived, and taking another for him, equally impossible. It was certainly her son whom she had just seen; and if he had not recognized her it was because he would not, it was because he ought not, it was because he had some cogent reasons for acting thus! And then, her mother's feelings arising within her, she had only one thought--"Can I, unwittingly, have ruined him?"

"I am mad," she said to her interrogators. "My eyes have deceived me! This young man is not my child. He had not his voice. Let us think no more of it; if we do I shall end by finding him everywhere."

Less than ten minutes afterwards a Tartar officer appeared in the posting-house. "Marfa Strogoff?" he asked.
"It is I," replied the old woman, in a tone so calm, and with a face so tranquil, that those who had witnessed the meeting with her son would not have known her.

"Come," said the officer.

Marfa Strogoff, with firm step, followed the Tartar. Some moments afterwards she found herself in the chief square in the presence of Ivan Ogareff, to whom all the details of this scene had been immediately reported.

Ogareff, suspecting the truth, interrogated the old Siberian woman. "Thy name?" he asked in a rough voice.
"Marfa Strogoff."
"Thou hast a son?"
"Yes."
"He is a courier of the Czar?"
"Yes."
"Where is he?"
"At Moscow."
"Thou hast no news of him?"
"No news."
"Since how long?"
"Since two months."
"Who, then, was that young man whom thou didst call thy son a few moments ago at the posting-house?"
"A young Siberian whom I took for him," replied Marfa Strogoff. "This is the tenth man in whom I have thought I recognized my son since the town has been so full of strangers. I think I see him everywhere."

"So this young man was not Michael Strogoff?"
"It was not Michael Strogoff."
"Dost thou know, old woman, that I can torture thee until thou avowest the truth?"
"I have spoken the truth, and torture will not cause me to alter my words in any way."
"This Siberian was not Michael Strogoff?" asked a second time Ivan Ogareff.
"No, it was not he," replied a second time Marfa Strogoff. "Do you think that for anything in the world I would
deny a son whom God has given me?"

Ivan Ogareff regarded with an evil eye the old woman who braved him to the face. He did not doubt but that she had recognized her son in this young Siberian. Now if this son had first renounced his mother, and if his mother renounced him in her turn, it could occur only from the most weighty motive. Ogareff had therefore no doubt that the pretended Nicholas Korpanoff was Michael Strogoff, courier of the Czar, seeking concealment under a false name, and charged with some mission which it would have been important for him to know. He therefore at once gave orders for his pursuit. Then "Let this woman be conducted to Tomsk," he said.

While the soldiers brutally dragged her off, he added between his teeth, "When the moment arrives I shall know how to make her speak, this old sorceress!"

CHAPTER XV THE MARSHES OF THE BARABA

It was fortunate that Michael Strogoff had left the posting-house so promptly. The orders of Ivan Ogareff had been immediately transmitted to all the approaches of the city, and a full description of Michael sent to all the various commandants, in order to prevent his departure from Omsk. But he had already passed through one of the breaches in the wall; his horse was galloping over the steppe, and the chances of escape were in his favor.

It was on the 29th of July, at eight o’clock in the evening, that Michael Strogoff had left Omsk. This town is situated about halfway between Moscow and Irkutsk, where it was necessary that he should arrive within ten days if he wished to get ahead of the Tartar columns. It was evident that the unlucky chance which had brought him into the presence of his mother had betrayed his incognito. Ivan Ogareff was no longer ignorant of the fact that a courier of the Czar had just passed Omsk, taking the direction of Irkutsk. The dispatches which this courier bore must have been of immense importance. Michael Strogoff knew, therefore, that every effort would be made to capture him.

But what he did not know, and could not know, was that Marfa Strogoff was in the hands of Ivan Ogareff, and that she was about to atone, perhaps with her life, for that natural exhibition of her feelings which she had been unable to restrain when she suddenly found herself in the presence of her son. And it was fortunate that he was ignorant of it. Could he have withstood this fresh trial?

Michael Strogoff urged on his horse, imbuing him with all his own feverish impatience, requiring of him one thing only, namely, to bear him rapidly to the next posting-house, where he could be exchanged for a quicker conveyance.

At midnight he had cleared fifty miles, and halted at the station of Koulikovo. But there, as he had feared, he found neither horses nor carriages. Several Tartar detachments had passed along the highway of the steppe. Everything had been stolen or requisitioned both in the villages and in the posting-houses. It was with difficulty that Michael Strogoff was even able to obtain some refreshment for his horse and himself.

It was of great importance, therefore, to spare his horse, for he could not tell when or how he might be able to replace it. Desiring, however, to put the greatest possible distance between himself and the horsemen who had no doubt been dispatched in pursuit, he resolved to push on. After one hour’s rest he resumed his course across the steppe.

Hitherto the weather had been propitious for his journey. The temperature was endurable. The nights at this time of the year are very long, and as they are lighted by the moon, the route over the steppe is practicable. Michael Strogoff, moreover, was a man certain of his road and devoid of doubt or hesitation, and in spite of the melancholy thoughts which possessed him he had preserved his clearness of mind, and made for his destined point as though it were visible upon the horizon. When he did halt for a moment at some turn in the road it was to breathe his horse. Now he would dismount to ease his steed for a moment, and again he would place his ear to the ground to listen for the sound of galloping horses upon the steppe. Nothing arousing his suspicions, he resumed his way.

On the 30th of July, at nine o’clock in the morning, Michael Strogoff passed through the station of Touroumoff and entered the swampy district of the Baraba.

There, for a distance of three hundred versts, the natural obstacles would be extremely great. He knew this, but he also knew that he would certainly surmount them.

These vast marshes of the Baraba, form the reservoir to all the rain-water which finds no outlet either towards the Obi or towards the Irtysch. The soil of this vast depression is entirely argillaceous, and therefore impermeable, so that the waters remain there and make of it a region very difficult to cross during the hot season. There, however, lies the way to Irkutsk, and it is in the midst of ponds, pools, lakes, and swamps, from which the sun draws poisonous exhalations, that the road winds, and entails upon the traveler the greatest fatigue and danger.

Michael Strogoff spurred his horse into the midst of a grassy prairie, differing greatly from the close-cropped sod of the steppe, where feed the immense Siberian herds. The grass here was five or six feet in height, and had made room for swamp-plants, to which the dampness of the place, assisted by the heat of summer, had given giant
proportions. These were principally canes and rushes, which formed a tangled network, an impenetrable undergrowth, sprinkled everywhere with a thousand flowers remarkable for the brightness of their color.

Michael Strogoff, galloping amongst this undergrowth of cane, was no longer visible from the swamps which bordered the road. The tall grass rose above him, and his track was indicated only by the flight of innumerable aquatic birds, which rose from the side of the road and dispersed into the air in screaming flocks.

The way, however, was clearly traceable. Now it would lie straight between the dense thicket of marsh-plants; again it would follow the winding shores of vast pools, some of which, several versts in length and breadth, deserve the name of lakes. In other localities the stagnant waters through which the road lay had been avoided, not by bridges, but by tottering platforms ballasted with thick layers of clay, whose joists shook like a too weak plank thrown across an abyss. Some of these platforms extended over three hundred feet, and travelers by tarantass, when crossing them have experienced a nausea like sea-sickness.

Michael Strogoff, whether the soil beneath his feet was solid or whether it sank under him, galloped on without halt, leaping the space between the rotten joists; but however fast they traveled the horse and the horseman were unable to escape from the sting of the two-winged insects which infest this marshy country.

Travelers who are obliged to cross the Baraba during the summer take care to provide themselves with masks of horse-hair, to which is attached a coat of mail of very fine wire, which covers their shoulders. Notwithstanding these precautions, there are few who come out of these marshes without having their faces, necks, and hands covered with red spots. The atmosphere there seems to bristle with fine needles, and one would almost say that a knight's armor would not protect him against the darts of these dipterans. It is a dreary region, which man dearly disputes with tipulæ, gnats, mosquitoes, horse-flies, and millions of microscopic insects which are not visible to the naked eye; but, although they are not seen, they make themselves felt by their intolerable stinging, to which the most callous Siberian hunters have never been able to inure themselves.

Michael Strogoff's horse, stung by these venomous insects, sprang forward as if the rowels of a thousand spurs had pierced his flanks. Mad with rage, he tore along over verst after verst with the speed of an express train, lashing his sides with his tail, seeking by the rapidity of his pace an alleviation of his torture.

It required as good a horseman as Michael Strogoff not to be thrown by the plungings of his horse, and the sudden stops and bounds which he made to escape from the stings of his persecutors. Having become insensible, so to speak, to physical suffering, possessed only with the one desire to arrive at his destination at whatever cost, he saw during this mad race only one thing—that the road flew rapidly behind him.

Who would have thought that this district of the Baraba, so unhealthy during the summer, could have afforded an asylum for human beings? Yet it did so. Several Siberian hamlets appeared from time to time among the giant canes. Men, women, children, and old men, clad in the skins of beasts, their faces covered with hardened blisters of skin, pastured their poor herds of sheep. In order to preserve the animals from the attack of the insects, they drove them to the leeward of fires of green wood, which were kept burning night and day, and the pungent smoke of which floated over the vast swamp.

When Michael Strogoff perceived that his horse, tired out, was on the point of succumbing, he halted at one of these wretched hamlets, and there, forgetting his own fatigue, he himself rubbed the wounds of the poor animal with hot grease according to the Siberian custom; then he gave him a good feed; and it was only after he had well groomed and provided for him that he thought of himself, and recruited his strength by a hasty meal of bread and meat and a glass of kwass. One hour afterwards, or at the most two, he resumed with all speed the interminable road to Irkutsk.

On the 30th of July, at four o'clock in the afternoon, Michael Strogoff, insensible of every fatigue, arrived at Elamsk. There it became necessary to give a night's rest to his horse. The brave animal could no longer have continued the journey. At Elamsk, as indeed elsewhere, there existed no means of transport,—for the same reasons as at the previous villages, neither carriages nor horses were to be had.

Michael Strogoff resigned himself therefore to pass the night at Elamsk, to give his horse twelve hours' rest. He recalled the instructions which had been given to him at Moscow—to cross Siberia incognito, to arrive at Irkutsk, but not to sacrifice success to the rapidity of the journey; and consequently it was necessary that he should husband the sole means of transport which remained to him.

On the morrow, Michael Strogoff left Elamsk at the moment when the first Tartar scouts were signaled ten versts behind upon the road to the Baraba, and he plunged again into the swampy region. The road was level, which made it easy, but very tortuous, and therefore long. It was impossible, moreover, to leave it, and to strike a straight line across that impassable network of pools and bogs.

On the next day, the 1st of August, eighty miles farther, Michael Strogoff arrived at midday at the town of Spaskoe, and at two o'clock he halted at Pokrowskoe. His horse, jaded since his departure from Elamsk, could not have taken a single step more.
There Michael Strogoff was again compelled to lose, for necessary rest, the end of that day and the entire night; but starting again on the following morning, and still traversing the semi-inundated soil, on the 2nd of August, at four o'clock in the afternoon, after a stage of fifty miles he reached Kamsk.

The country had changed. This little village of Kamsk lies, like an island, habitable and healthy, in the midst of the uninhabitable district. It is situated in the very center of the Baraba. The emigration caused by the Tartar invasion had not yet depopulated this little town of Kamsk. Its inhabitants probably fancied themselves safe in the center of the Baraba, whence at least they thought they would have time to flee if they were directly menaced.

Michael Strogoff, although exceedingly anxious for news, could ascertain nothing at this place. It would have been rather to him that the Governor would have addressed himself had he known who the pretended merchant of Irkutsk really was. Kamsk, in fact, by its very situation seemed to be outside the Siberian world and the grave events which troubled it.

Besides, Michael Strogoff showed himself little, if at all. To be unperceived was not now enough for him: he would have wished to be invisible. The experience of the past made him more and more circumspect in the present and the future. Therefore he secluded himself, and not caring to traverse the streets of the village, he would not even leave the inn at which he had halted.

As for his horse, he did not even think of exchanging him for another animal. He had become accustomed to this brave creature. He knew to what extent he could rely upon him. In buying him at Omsk he had been lucky, and in taking him to the postmaster the generous mujik had rendered him a great service. Besides, if Michael Strogoff had already become attached to his horse, the horse himself seemed to become inured, by degrees, to the fatigue of such a journey, and provided that he got several hours of repose daily, his rider might hope that he would carry him beyond the invaded provinces.

So, during the evening and night of the 2nd of August, Michael Strogoff remained confined to his inn, at the entrance of the town; which was little frequented and out of the way of the importunate and curious.

Exhausted with fatigue, he went to bed after having seen that his horse lacked nothing; but his sleep was broken. What he had seen since his departure from Moscow showed him the importance of his mission. The rising was an extremely serious one, and the treachery of Ogareff made it still more formidable. And when his eyes fell upon the letter bearing upon it the authority of the imperial seal—the letter which, no doubt, contained the remedy for so many evils, the safety of all this war-ravaged country—Michael Strogoff felt within himself a fierce desire to dash on across the steppe, to accomplish the distance which separated him from Irkutsk as the crow would fly it, to be an eagle that he might overtop all obstacles, to be a hurricane that he might sweep through the air at a hundred versts an hour, and to be at last face to face with the Grand Duke, and to exclaim: "Your highness, from his Majesty the Czar!"

On the next morning at six o'clock, Michael Strogoff started off again. Thanks to his extreme prudence this part of the journey was signalized by no incident whatever. At Oubinsk he gave his horse a whole night's rest, for he wished on the next day to accomplish the hundred versts which lie between Oubinsk and Ikoulskoe without halting. He started therefore at dawn; but unfortunately the Baraba proved more detestable than ever.

In fact, between Oubinsk and Kamakore the very heavy rains of some previous weeks were retained by this shallow depression as in a water-tight bowl. There was, for a long distance, no break in the succession of swamps, pools, and lakes. One of these lakes—large enough to warrant its geographical nomenclature—Tchang, Chinese in name, had to be coasted for more than twenty versts, and this with the greatest difficulty. Hence certain delays occurred, which all the impatience of Michael Strogoff could not avoid. He had been well advised in not taking a carriage at Kamsk, for his horse passed places which would have been impracticable for a conveyance on wheels.

In the evening, at nine o'clock, Michael Strogoff arrived at Ikoulskoe, and halted there over night. In this remote village of the Baraba news of the war was utterly wanting. From its situation, this part of the province, lying in the fork formed by the two Tartar columns which had bifurcated, one upon Omsk and the other upon Tomsk, had hitherto escaped the horrors of the invasion.

But the natural obstacles were now about to disappear, for, if he experienced no delay, Michael Strogoff should on the morrow be free of the Baraba and arrive at Kolyvan. There he would be within eighty miles of Tomsk. He would then be guided by circumstances, and very probably he would decide to go around Tomsk, which, if the news were true, was occupied by Feofar-Khan.

But if the small towns of Ikoulskoe and Karguinsk, which he passed on the next day, were comparatively quiet, owing to their position in the Baraba, was it not to be dreaded that, upon the right banks of the Obi, Michael Strogoff would have much more to fear from man? It was probable. However, should it become necessary, he would not hesitate to abandon the beaten path to Irkutsk. To journey then across the steppe he would, no doubt, run the risk of finding himself without supplies. There would be, in fact, no longer a well-marked road. Still, there must be no hesitation.
Finally, towards half past three in the afternoon, Michael Strogoff left the last depressions of the Baraba, and the dry and hard soil of Siberia rang out once more beneath his horse's hoofs.

He had left Moscow on the 15th of July. Therefore on this day, the 5th of August, including more than seventy hours lost on the banks of the Irtych, twenty days had gone by since his departure.

One thousand miles still separated him from Irkutsk.

CHAPTER XVI A FINAL EFFORT

MICHAEL'S fear of meeting the Tartars in the plains beyond the Baraba was by no means ungrounded. The fields, trodden down by horses' hoofs, afforded but too clear evidence that their hordes had passed that way; the same, indeed, might be said of these barbarians as of the Turks: "Where the Turk goes, no grass grows."

Michael saw at once that in traversing this country the greatest caution was necessary. Wreaths of smoke curling upwards on the horizon showed that huts and hamlets were still burning. Had these been fired by the advance guard, or had the Emir's army already advanced beyond the boundaries of the province? Was Feofar-Khan himself in the government of Yeniseisk? Michael could settle on no line of action until these questions were answered. Was the country so deserted that he could not discover a single Siberian to enlighten him?

Michael rode on for two versts without meeting a human being. He looked carefully for some house which had not been deserted. Every one was tenantless.

One hut, however, which he could just see between the trees, was still smoking. As he approached he perceived, at some yards from the ruins of the building, an old man surrounded by weeping children. A woman still young, evidently his daughter and the mother of the poor children, kneeling on the ground, was gazing on the scene of desolation. She had at her breast a baby but a few months old; shortly she would have not even that nourishment to give it. Ruin and desolation were all around!

Michael approached the old man.
"Will you answer me a few questions?" he asked.
"Speak," replied the old man.
"Have the Tartars passed this way?"
"Yes, for my house is in flames."
"Was it an army or a detachment?"
"An army, for, as far as eye can reach, our fields are laid waste."
"Commanded by the Emir?"
"By the Emir; for the Obi's waters are red."
"Has Feofar-Khan entered Tomsk?"
"He has."
"Do you know if his men have entered Kolyvan?"
"No; for Kolyvan does not yet burn."
"Thanks, friend. Can I aid you and yours?"
"No."
"Good-by."
"Farewell."

And Michael, having presented five and twenty roubles to the unfortunate woman, who had not even strength to thank him, put spurs to his horse once more.

One thing he knew; he must not pass through Tomsk. To go to Kolyvan, which the Tartars had not yet reached, was possible. Yes, that is what he must do; there he must prepare himself for another long stage. There was nothing for it but, having crossed the Obi, to take the Irkutsk road and avoid Tomsk.

This new route decided on, Michael must not delay an instant. Nor did he, but, putting his horse into a steady gallop, he took the road towards the left bank of the Obi, which was still forty versts distant. Would there be a ferry boat there, or should he, finding that the Tartars had destroyed all the boats, be obliged to swim across?

As to his horse, it was by this time pretty well worn out, and Michael intended to make it perform this stage only, and then to exchange it for a fresh one at Kolyvan. Kolyvan would be like a fresh starting point, for on leaving that town his journey would take a new form. So long as he traversed a devastated country the difficulties must be very great; but if, having avoided Tomsk, he could resume the road to Irkutsk across the province of Yeniseisk, which was not yet laid waste, he would finish his journey in a few days.

Night came on, bringing with it refreshing coolness after the heat of the day. At midnight the steppe was profoundly dark. The sound of the horses's hoofs alone was heard on the road, except when, every now and then, its master spoke a few encouraging words. In such darkness as this great care was necessary lest he should leave the
road, bordered by pools and streams, tributaries of the Obi. Michael therefore advanced as quickly as was consistent with safety. He trusted no less to the excellence of his eyes, which penetrated the gloom, than to the well-proved sagacity of his horse.

Just as Michael dismounted to discover the exact direction of the road, he heard a confused murmuring sound from the west. It was like the noise of horses' hoofs at some distance on the parched ground. Michael listened attentively, putting his ear to the ground.

"It is a detachment of cavalry coming by the road from Omsk," he said to himself. "They are marching very quickly, for the noise is increasing. Are they Russians or Tartars?"

Michael again listened. "Yes," said he, "they are at a sharp trot. My horse cannot outstrip them. If they are Russians I will join them; if Tartars I must avoid them. But how? Where can I hide in this steppe?"

He gave a look around, and, through the darkness, discovered a confused mass at a hundred paces before him on the left of the road. "There is a copse!" he exclaimed. "To take refuge there is to run the risk of being caught, if they are in search of me; but I have no choice."

In a few moments Michael, dragging his horse by the bridle, reached a little larch wood, through which the road lay. Beyond this it was destitute of trees, and wound among bogs and pools, separated by dwarfed bushes, whins, and heather. The ground on either side was quite impracticable, and the detachment must necessarily pass through the wood. They were pursuing the high road to Irkutsk. Plunging in about forty feet, he was stopped by a stream running under the brushwood. But the shadow was so deep that Michael ran no risk of being seen, unless the wood should be carefully searched. He therefore led his horse to the stream and fastened him to a tree, returning to the edge of the road to listen and ascertain with what sort of people he had to do.

Michael had scarcely taken up his position behind a group of larches when a confused light appeared, above which glared brighter lights wavering about in the shadow.

"Torches!" said he to himself. And he drew quickly back, gliding like a savage into the thickest underwood.

As they approached the wood the horses' pace was slackened. The horsemen were probably lighting up the road with the intention of examining every turn.

Michael feared this, and instinctively drew near to the bank of the stream, ready to plunge in if necessary.

Arrived at the top of the wood, the detachment halted. The horsemen dismounted. There were about fifty. A dozen of them carried torches, lighting up the road.

By watching their preparations Michael found to his joy that the detachment were not thinking of visiting the copse, but only bivouacking near, to rest their horses and allow the men to take some refreshment. The horses were soon unsaddled, and began to graze on the thick grass which carpeted the ground. The men meantime stretched themselves by the side of the road, and partook of the provisions they produced from their knapsacks.

Michael's self-possession had never deserted him, and creeping amongst the high grass he endeavored not only to examine the new-comers, but to hear what they said. It was a detachment from Omsk, composed of Usbeck horsemen, a race of the Mongolian type. These men, well built, above the medium height, rough, and wild-featured, wore on their heads the "talpak," or black sheep-skin cap, and on their feet yellow high-heeled boots with turned-up toes, like the shoes of the Middle Ages. Their tunics were close-fitting, and confined at the waist by a leathern belt braided with red. They were armed defensively with a shield, and offensively with a curved sword, and a flintlock musket slung at the saddle-bow. From their shoulders hung gay-colored cloaks.

The horses, which were feeding at liberty at the edge of the wood, were, like their masters, of the Usbeck race. These animals are rather smaller than the Turcomanian horses, but are possessed of remarkable strength, and know no other pace than the gallop.

This detachment was commanded by a "pendja-baschi"; that is to say, a commander of fifty men, having under him a "deh-baschi," or simple commander of ten men. These two officers wore helmets and half coats-of-mail; little trumpets fastened to their saddle-bows were the distinctive signs of their rank.

The pendja-baschi had been obliged to let his men rest, fatigued with a long stage. He and the second officer, smoking "beng," the leaf which forms the base of the "has-chisch," strolled up and down the wood, so that Michael Strogoff without being seen, could catch and understand their conversation, which was spoken in the Tartar language.

Michael's attention was singularly excited by their very first words. It was of him they were speaking.

"This courier cannot be much in advance of us," said the pendja-baschi; "and, on the other hand, it is absolutely impossible that he can have followed any other route than that of the Baraba."

"Who knows if he has left Omsk?" replied the deh-baschi. "Perhaps he is still hidden in the town."

"That is to be wished, certainly. Colonel Ogareff would have no fear then that the dispatches he bears should ever reach their destination."

"They say that he is a native, a Siberian," resumed the deh-baschi. "If so, he must be well acquainted with the
country, and it is possible that he has left the Irkutsk road, depending on rejoining it later."

"But then we should be in advance of him," answered the pendja-baschi; "for we left Omsk within an hour after
his departure, and have since followed the shortest road with all the speed of our horses. He has either remained in
Omsk, or we shall arrive at Tomsk before him, so as to cut him off; in either case he will not reach Irkutsk."

"A rugged woman, that old Siberian, who is evidently his mother," said the deh-baschi.

At this remark Michael's heart beat violently.

"Yes," answered the pendja-baschi. "She stuck to it well that the pretended merchant was not her son, but it was
too late. Colonel Ogareff was not to be taken in; and, as he said, he will know how to make the old witch speak
when the time comes."

These words were so many dagger-thrusts for Michael. He was known to be a courier of the Czar! A detachment
of horsemen on his track could not fail to cut him off. And, worst of all, his mother was in the hands of the Tartars,
and the cruel Ogareff had undertaken to make her speak when he wished!

Michael well knew that the brave Siberian would sacrifice her life for him. He had fancied that he could not hate
Ivan Ogareff more, yet a fresh tide of hate now rose in his heart. The wretch who had betrayed his country now
threatened to torture his mother.

The conversation between the two officers continued, and Michael understood that an engagement was imminent
in the neighborhood of Kolyvan, between the Muscovite troops coming from the north and the Tartars. A small
Russian force of two thousand men, reported to have reached the lower course of the Obi, were advancing by forced
marches towards Tomsk. If such was the case, this force, which would soon find itself engaged with the main body
of Feofar-Khan's army, would be inevitably overwhelmed, and the Irkutsk road would be in the entire possession
of the invaders.

As to himself, Michael learnt, by some words from the pendja-baschi, that a price was set on his head, and that
orders had been given to take him, dead or alive.

It was necessary, therefore, to get the start of the Usbeck horsemen on the Irkutsk road, and put the Obi between
himself and them. But to do that, he must escape before the camp was broken up.

His determination taken, Michael prepared to execute it.

Indeed, the halt would not be prolonged, and the pendja-baschi did not intend to give his men more than an
hour's rest, although their horses could not have been changed for fresh ones since Omsk, and must be as much
fatigued as that of Michael Strogoff.

There was not a moment to lose. It was within an hour of morning. It was needful to profit by the darkness to
leave the little wood and dash along the road; but although night favored it the success of such a flight appeared to
be almost impossible.

Not wishing to do anything at random, Michael took time for reflection, carefully weighing the chances so as to
take the best. From the situation of the place the result was this—that he could not escape through the back of the
wood, the stream which bordered it being not only deep, but very wide and muddy. Beneath this thick water was a
slimy bog, on which the foot could not rest. There was only one way open, the high-road. To endeavor to reach it by
creeping round the edge of the wood, without attracting attention, and then to gallop at headlong speed, required all
the remaining strength and energy of his noble steed. Too probably it would fall dead on reaching the banks of the
Obi, when, either by boat or by swimming, he must cross this important river. This was what Michael had before
him.

His energy and courage increased in sight of danger.

His life, his mission, his country, perhaps the safety of his mother, were at stake. He could not hesitate.

There was not a moment to be lost. Already there was a slight movement among the men of the detachment. A
few horsemen were strolling up and down the road in front of the wood. The rest were still lying at the foot of the
trees, but their horses were gradually penetrating towards the center of the wood.

Michael had at first thought of seizing one of these horses, but he recollected that, of course, they would be as
fatigued as his own. It was better to trust to his own brave steed, which had already rendered him such important
service. The good animal, hidden behind a thicket, had escaped the sight of the Usbecks. They, besides, had not
penetrated so far into the wood.

Michael crawled up to his horse through the grass, and found him lying down. He patted and spoke gently to
him, and managed to raise him without noise. Fortunately, the torches were entirely consumed, and now went out,
the darkness being still profound under shelter of the larches. After replacing the bit, Michael looked to his girths
and stirrups, and began to lead his horse quietly away. The intelligent animal followed his master without even
making the least neigh.

A few Usbeck horses raised their heads, and began to wander towards the edge of the wood. Michael held his
revolver in his hand, ready to blow out the brains of the first Tartar who should approach him. But happily the alarm
was not given, and he was able to gain the angle made by the wood where it joined the road.

To avoid being seen, Michael's intention was not to mount until after turning a corner some two hundred feet from the wood. Unfortunately, just at the moment that he was issuing from the wood, an Usbeck's horse, scenting him, neighed and began to trot along the road. His master ran to catch him, and seeing a shadowy form moving in the dim light, "Look out!" he shouted.

At the cry, all the men of the bivouac jumped up, and ran to seize their horses. Michael leaped on his steed, and galloped away. The two officers of the detachment urged on their men to follow.

Michael heard a report, and felt a ball pass through his tunic. Without turning his head, without replying, he spurred on, and, clearing the brushwood with a tremendous bound, he galloped at full speed toward the Obi.

The Usbecks' horses being unsaddled gave him a small start, but in less than two minutes he heard the tramp of several horses gradually gaining on him.

Day was now beginning to break, and objects at some distance were becoming visible. Michael turned his head, and perceived a horseman rapidly approaching him. It was the deh-baschi. Being better mounted, this officer had distanced his detachment.

Without drawing rein, Michael extended his revolver, and took a moment's aim. The Usbeck officer, hit in the breast, rolled on the ground.

But the other horsemen followed him closely, and without waiting to assist the deh-baschi, exciting each other by their shouts, digging their spurs into their horses' sides, they gradually diminished the distance between themselves and Michael.

For half an hour only was the latter able to keep out of range of the Tartars, but he well knew that his horse was becoming weaker, and dreaded every instant that he would stumble never to rise again.

It was now light, although the sun had not yet risen above the horizon. Two versts distant could be seen a pale line bordered by a few trees.

This was the Obi, which flows from the southwest to the northeast, the surface almost level with the ground, its bed being but the steppe itself.

Several times shots were fired at Michael, but without hitting him, and several times too he discharged his revolver on those of the soldiers who pressed him too closely. Each time an Usbeck rolled on the ground, midst cries of rage from his companions. But this pursuit could only terminate to Michael's disadvantage. His horse was almost exhausted. He managed to reach the bank of the river. The Usbeck detachment was now not more than fifty paces behind him.

The Obi was deserted--not a boat of any description which could take him over the water!

"Courage, my brave horse!" cried Michael. "Come! A last effort!" And he plunged into the river, which here was half a verst in width.

It would have been difficult to stand against the current--indeed, Michael's horse could get no footing. He must therefore swim across the river, although it was rapid as a torrent. Even to attempt it showed Michael's marvelous courage. The soldiers reached the bank, but hesitated to plunge in.

The pendja-baschi seized his musket and took aim at Michael, whom he could see in the middle of the stream. The shot was fired, and Michael's horse, struck in the side, was borne away by the current.

His master, speedily disentangling himself from his stirrups, struck out boldly for the shore. In the midst of a hailstorm of balls he managed to reach the opposite side, and disappeared in the rushes.

CHAPTER XVII THE RIVALS

MICHAEL was in comparative safety, though his situation was still terrible. Now that the faithful animal who had so bravely borne him had met his death in the waters of the river, how was he to continue his journey?

He was on foot, without provisions, in a country devastated by the invasion, overrun by the Emir's scouts, and still at a considerable distance from the place he was striving to reach. "By Heaven, I will get there!" he exclaimed, in reply to all the reasons for faltering. "God will protect our sacred Russia."

Michael was out of reach of the Usbeck horsemen. They had not dared to pursue him through the river.

Once more on solid ground Michael stopped to consider what he should do next. He wished to avoid Tomsk, now occupied by the Tartar troops. Nevertheless, he must reach some town, or at least a post-house, where he could procure a horse. A horse once found, he would throw himself out of the beaten track, and not again take to the Irkutsk road until in the neighborhood of Krasnoiarsk. From that place, if he were quick, he hoped to find the way still open, and he intended to go through the Lake Baikal provinces in a southeasterly direction.

Michael began by going eastward. By following the course of the Obi two versts further, he reached a picturesque little town lying on a small hill. A few churches, with Byzantine cupolas colored green and gold, stood
up against the gray sky. This is Kolyvan, where the officers and people employed at Kamsk and other towns take refuge during the summer from the unhealthy climate of the Baraba. According to the latest news obtained by the Czar's courier, Kolyvan could not be yet in the hands of the invaders. The Tartar troops, divided into two columns, had marched to the left on Omsk, to the right on Tomsk, neglecting the intermediate country.

Michael Strogoff's plan was simply this—to reach Kolyvan before the arrival of the Usbeck horsemen, who would ascend the other bank of the Obi to the ferry. There he would procure clothes and a horse, and resume the road to Irkutsk across the southern steppe.

It was now three o'clock in the morning. The neighborhood of Kolyvan was very still, and appeared to have been totally abandoned. The country population had evidently fled to the northwards, to the province of Yeniseisk, dreading the invasion, which they could not resist.

Michael was walking at a rapid pace towards Kolyvan when distant firing struck his ear. He stopped, and clearly distinguished the dull roar of artillery, and above it a crisp rattle which could not be mistaken.

"It is cannon and musketry!" said he. "The little Russian body is engaged with the Tartar army! Pray Heaven that I may arrive at Kolyvan before them!"

The firing became gradually louder, and soon to the left of Kolyvan a mist collected—not smoke, but those great white clouds produced by discharges of artillery.

The Usbeck horsemen stopped on the left of the Obi, to await the result of the battle. From them Michael had nothing to fear as he hastened towards the town.

In the meanwhile the firing increased, and became sensibly nearer. It was no longer a confused roar, but distinct reports. At the same time the smoke partially cleared, and it became evident that the combatants were rapidly moving southwards. It appeared that Kolyvan was to be attacked on the north side. But were the Russians defending it or the Tartars? It being impossible to decide this, Michael became greatly perplexed.

He was not more than half a verst from Kolyvan when he observed flames shooting up among the houses of the town, and the steeple of a church fell in the midst of clouds of smoke and fire. Was the struggle, then, in Kolyvan? Michael was compelled to think so. It was evident that Russians and Tartars were fighting in the streets of the town. Was this a time to seek refuge there? Would he not run a risk of being taken prisoner? Should he succeed in escaping from Kolyvan, as he had escaped from Omsk? He hesitated and stopped a moment. Would it not be better to try, even on foot, to reach some small town, and there procure a horse at any price? This was the only thing to be done; and Michael, leaving the Obi, went forward to the right of Kolyvan.

The firing had now increased in violence. Flames soon sprang up on the left of the town. Fire was devouring one entire quarter of Kolyvan.

Michael was running across the steppe endeavoring to gain the covert of some trees when a detachment of Tartar cavalry appeared on the right. He dared not continue in that direction. The horsemen advanced rapidly, and it would have been difficult to escape them.

Suddenly, in a thick clump of trees, he saw an isolated house, which it would be possible to reach before he was perceived. Michael had no choice but to run there, hide himself and ask or take something to recruit his strength, for he was exhausted with hunger and fatigue.

He accordingly ran on towards this house, still about half a verst distant. As he approached, he could see that it was a telegraph office. Two wires left it in westerly and easterly directions, and a third went towards Kolyvan.

It was to be supposed that under the circumstances this station was abandoned; but even if it was, Michael could take refuge there, and wait till nightfall, if necessary, to again set out across the steppe covered with Tartar scouts.

He ran up to the door and pushed it open.

A single person was in the room whence the telegraphic messages were dispatched. This was a clerk, calm, phlegmatic, indifferent to all that was passing outside. Faithful to his post, he waited behind his little wicket until the public claimed his services.

Michael ran up to him, and in a voice broken by fatigue, "What do you know?" he asked.

"Nothing," answered the clerk, smiling.

"Are the Russians and Tartars engaged?"

"They say so."

"But who are the victors?"

"I don't know."

Such calmness, such indifference, in the midst of these terrible events, was scarcely credible.

"And is not the wire cut?" said Michael.

"It is cut between Kolyvan and Krasnoiarsk, but it is still working between Kolyvan and the Russian frontier."

"For the government?"

"For the government, when it thinks proper. For the public, when they pay. Ten copecks a word, whenever you
like, sir!"

Michael was about to reply to this strange clerk that he had no message to send, that he only implored a little bread and water, when the door of the house was again thrown open.

Thinking that it was invaded by Tartars, Michael made ready to leap out of the window, when two men only entered the room who had nothing of the Tartar soldier about them. One of them held a dispatch, written in pencil, in his hand, and, passing the other, he hurried up to the wicket of the imperturbable clerk.

In these two men Michael recognized with astonishment, which everyone will understand, two personages of whom he was not thinking at all, and whom he had never expected to see again. They were the two reporters, Harry Blount and Alcide Jolivet, no longer traveling companions, but rivals, enemies, now that they were working on the field of battle.

They had left Ichim only a few hours after the departure of Michael Strogoff, and they had arrived at Kolyvan before him, by following the same road, in consequence of his losing three days on the banks of the Irtych. And now, after being both present at the engagement between the Russians and Tartars before the town, they had left just as the struggle broke out in the streets, and ran to the telegraph office, so as to send off their rival dispatches to Europe, and forestall each other in their report of events.

Michael stood aside in the shadow, and without being seen himself he could see and hear all that was going on. He would now hear interesting news, and would find out whether or not he could enter Kolyvan.

Blount, having distanced his companion, took possession of the wicket, whilst Alcide Jolivet, contrary to his usual habit, stamped with impatience.

"Ten copecks a word," said the clerk.
Blount deposited a pile of roubles on the shelf, whilst his rival looked on with a sort of stupefaction.
"Good," said the clerk. And with the greatest coolness in the world he began to telegraph the following dispatch:

"Daily Telegraph, London.
"From Kolyvan, Government of Omsk, Siberia, 6th August.
"Engagement between Russian and Tartar troops."

The reading was in a distinct voice, so that Michael heard all that the English correspondent was sending to his paper.

"Russians repulsed with great loss. Tartars entered Kolyvan to-day." These words ended the dispatch.
"My turn now," cried Alcide Jolivet, anxious to send off his dispatch, addressed to his cousin.
But that was not Blount's idea, who did not intend to give up the wicket, but have it in his power to send off the news just as the events occurred. He would therefore not make way for his companion.

"But you have finished!" exclaimed Jolivet.
"I have not finished," returned Harry Blount quietly.
And he proceeded to write some sentences, which he handed in to the clerk, who read out in his calm voice:

"John Gilpin was a citizen of credit and renown; a train-band captain eke was he of famous London town."

Harry Blount was telegraphing some verses learned in his childhood, in order to employ the time, and not give up his place to his rival. It would perhaps cost his paper some thousands of roubles, but it would be the first informed. France could wait.

Jolivet's fury may be imagined, though under any other circumstances he would have thought it fair warfare. He even endeavored to force the clerk to take his dispatch in preference to that of his rival.

"It is that gentleman's right," answered the clerk coolly, pointing to Blount, and smiling in the most amiable manner. And he continued faithfully to transmit to the Daily Telegraph the well-known verses of Cowper.

Whilst he was working Blount walked to the window and, his field glass to his eyes, watched all that was going on in the neighborhood of Kolyvan, so as to complete his information. In a few minutes he resumed his place at the wicket, and added to his telegram: ":Two churches are in flames. The fire appears to gain on the right. 'John Gilpin's spouse said to her dear, Though wedded we have been these twice ten tedious years, yet we no holiday have seen.'"

Alcide Jolivet would have liked to strangle the honorable correspondent of the Daily Telegraph.

He again interrupted the clerk, who, quite unmoved, merely replied: "It is his right, sir, it is his right--at ten copecks a word."

And he telegraphed the following news, just brought him by Blount: "Russian fugitives are escaping from the town. 'Away went Gilpin--who but he? His fame soon spread around: He carries weight! he rides a race! 'Tis for a thousand pound!" And Blount turned round with a quizzical look at his rival.

Alcide Jolivet fumed.

In the meanwhile Harry Blount had returned to the window, but this time his attention was diverted by the interest of the scene before him. Therefore, when the clerk had finished telegraphing the last lines dictated by Blount, Alcide Jolivet noiselessly took his place at the wicket, and, just as his rival had done, after quietly depositing
a respectable pile of roubles on the shelf, he delivered his dispatch, which the clerk read aloud: "Madeleine Jolivet, 10, Faubourg Montmartre, Paris.

"From Kolyvan, Government of Omsk, Siberia, 6th August.
"Fugitives are escaping from the town. Russians defeated. Fiercely pursued by the Tartar cavalry."
And as Harry Blount returned he heard Jolivet completing his telegram by singing in a mocking tone:
"Il est un petit homme, Tout habillé de gris, Dans Paris!"
Imitating his rival, Alcide Jolivet had used a merry refrain of Beranger.
"Hallo!" said Harry Blount.
"Just so," answered Jolivet.

In the meantime the situation at Kolyvan was alarming in the extreme. The battle was raging nearer, and the firing was incessant.

At that moment the telegraph office shook to its foundations. A shell had made a hole in the wall, and a cloud of dust filled the office.

Alcide was just finishing writing his lines; but to stop, dart on the shell, seize it in both hands, throw it out of the window, and return to the wicket, was only the affair of a moment.

Five seconds later the shell burst outside. Continuing with the greatest possible coolness, Alcide wrote: "A six-inch shell has just blown up the wall of the telegraph office. Expecting a few more of the same size."

Michael Strogoff had no doubt that the Russians were driven out of Kolyvan. His last resource was to set out across the southern steppe.

Just then renewed firing broke out close to the telegraph house, and a perfect shower of bullets smashed all the glass in the windows. Harry Blount fell to the ground wounded in the shoulder.

Jolivet even at such a moment, was about to add this postscript to his dispatch: "Harry Blount, correspondent of the Daily Telegraph, has fallen at my side struck by--" when the imperturbable clerk said calmly: "Sir, the wire has broken." And, leaving his wicket, he quietly took his hat, brushed it round with his sleeve, and, still smiling, disappeared through a little door which Michael had not before perceived.

The house was surrounded by Tartar soldiers, and neither Michael nor the reporters could effect their retreat.

Alcide Jolivet, his useless dispatch in his hand, had run to Blount, stretched on the ground, and had bravely lifted him on his shoulders, with the intention of flying with him. He was too late!

Both were prisoners; and, at the same time, Michael, taken unawares as he was about to leap from the window, fell into the hands of the Tartars!

END OF BOOK I

BOOK II

CHAPTER I A TARTAR CAMP

At a day's march from Kolyvan, several versts beyond the town of Diachinks, stretches a wide plain, planted here and there with great trees, principally pines and cedars. This part of the steppe is usually occupied during the warm season by Siberian shepherds, and their numerous flocks. But now it might have been searched in vain for one of its nomad inhabitants. Not that the plain was deserted. It presented a most animated appearance.

There stood the Tartar tents; there Feofar-Khan, the terrible Emir of Bokhara, was encamped; and there on the following day, the 7th of August, were brought the prisoners taken at Kolyvan after the annihilation of the Russian force, which had vainly attempted to oppose the progress of the invaders. Of the two thousand men who had engaged with the two columns of the enemy, the bases of which rested on Tomsk and Omsk, only a few hundred remained. Thus events were going badly, and the imperial government appeared to have lost its power beyond the frontiers of the Ural—for a time at least, for the Russians could not fail eventually to defeat the savage hordes of the invaders. But in the meantime the invasion had reached the center of Siberia, and it was spreading through the revolted country both to the eastern, and the western provinces. If the troops of the Amoor and the province of Takutsk did not arrive in time to occupy it, Irkutsk, the capital of Asiatic Russia, being insufficiently garrisoned, would fall into the hands of the Tartars, and the Grand Duke, brother of the Emperor, would be sacrificed to the vengeance of Ivan Ogareff.

What had become of Michael Strogoff? Had he broken down under the weight of so many trials? Did he consider himself conquered by the series of disasters which, since the adventure of Ichim, had increased in magnitude? Did he think his cause lost? that his mission had failed? that his orders could no longer be obeyed?

Michael was one of those men who never give in while life exists. He was yet alive; he still had the imperial
letter safe; his disguise had been undiscovered. He was included amongst the numerous prisoners whom the Tartars were dragging with them like cattle; but by approaching Tomsk he was at the same time drawing nearer to Irkutsk. Besides, he was still in front of Ivan Ogareff.

"I will get there!" he repeated to himself.

Since the affair of Kolyvan all the powers of his mind were concentrated on one object—to become free! How should he escape from the Emir's soldiers?

Feofar's camp presented a magnificent spectacle.

Numberless tents, of skin, felt, or silk, glistened in the rays of the sun. The lofty plumes which surmounted their conical tops waved amidst banners, flags, and pennons of every color. The richest of these tents belonged to the Seides and Khodjas, who are the principal personages of the khanat. A special pavilion, ornamented with a horse's tail issuing from a sheaf of red and white sticks artistically interlaced, indicated the high rank of these Tartar chiefs. Then in the distance rose several thousand of the Turcoman tents, called "karaoy," which had been carried on the backs of camels.

The camp contained at least a hundred and fifty thousand soldiers, as many foot as horse soldiers, collected under the name of Alamanes. Amongst them, and as the principal types of Turkestan, would have been directly remarked the Tadjiks, from their regular features, white skin, tall forms, and black eyes and hair; they formed the bulk of the Tartar army, and of them the khanats of Khokhand and Koundouge had furnished a contingent nearly equal to that of Bokhara. With the Tadjiks were mingled specimens of different races who either reside in Turkestan or whose native countries border on it. There were Usbecks, red-bearded, small in stature, similar to those who had pursued Michael. Here were Kirghiz, with flat faces like the Kalmucks, dressed in coats of mail: some carried the lance, bows, and arrows of Asiatic manufacture; some the saber, a matchlock gun, and the "tschakane," a short-handled ax, the wounds from which invariably prove fatal. There were Mongols—of middle height, with black hair plaited into pigtails, which hung down their back; round faces, swarthy complexions, lively deep-set eyes, scanty beards—dressed in blue nankeen trimmed with black plush, sword-belts of leather with silver buckles, coats gayly braided, and silk caps edged with fur and three ribbons fluttering behind. Brown-skinned Afghans, too, might have been seen. Arabs, having the primitive type of the beautiful Semitic races; and Turcomans, with eyes which looked as if they had lost the pupil,—all enrolled under the Emir's flag, the flag of incendiaries and devastators.

Among these free soldiers were a certain number of slave soldiers, principally Persians, commanded by officers of the same nation, and they were certainly not the least esteemed of Feofar-Khan's army.

If to this list are added the Jews, who acted as servants, their robes confined with a cord, and wearing on their heads instead of the turban, which is forbidden them, little caps of dark cloth; if with these groups are mingled some hundreds of "kalenders," a sort of religious mendicants, clothed in rags, covered by a leopard skin, some idea may be formed of the enormous agglomerations of different tribes included under the general denomination of the Tartar army.

Nothing could be more romantic than this picture, in delineating which the most skillful artist would have exhausted all the colors of his palette.

Feofar's tent overlooked the others. Draped in large folds of a brilliant silk looped with golden cords and tassels, surmounted by tall plumes which waved in the wind like fans, it occupied the center of a wide clearing, sheltered by a grove of magnificent birch and pine trees. Before this tent, on a japanned table inlaid with precious stones, was placed the sacred book of the Koran, its pages being of thin gold-leaf delicately engraved. Above floated the Tartar flag, quartered with the Emir's arms.

In a semicircle round the clearing stood the tents of the great functionaries of Bokhara. There resided the chief of the stables, who has the right to follow the Emir on horseback even into the court of his palace; the grand falconer; the "housch-begui," bearer of the royal seal; the "toptschi-baschi," grand master of the artillery; the "khodja," chief of the council, who receives the prince's kiss, and may present himself before him with his girdle untied; the "scheikh-oul-islam," chief of the Ulemas, representing the priests; the "cazi-askev," who, in the Emir's absence settles all disputes raised among the soldiers; and lastly, the chief of the astrologers, whose great business is to consult the stars every time the Khan thinks of changing his quarters.

When the prisoners were brought into the camp, the Emir was in his tent. He did not show himself. This was fortunate, no doubt. A sign, a word from him might have been the signal for some bloody execution. But he intrenched himself in that isolation which constitutes in part the majesty of Eastern kings. He who does not show himself is admired, and, above all, feared.

As to the prisoners, they were to be penned up in some enclosure, where, ill-treated, poorly fed, and exposed to all the inclemencies of the weather, they would await Feofar's pleasure.

The most docile and patient of them all was undoubtedly Michael Strogoff. He allowed himself to be led, for they were leading him where he wished to go, and under conditions of safety which free he could not have found on
the road from Kolyvan to Tomsk. To escape before reaching that town was to risk again falling into the hands of the scouts, who were scouring the steppe. The most eastern line occupied by the Tartar columns was not situated beyond the eighty-fifth meridian, which passes through Tomsk. This meridian once passed, Michael considered that he should be beyond the hostile zones, that he could traverse Genisci without danger, and gain Krasnoiarsk before Feofar-Khan had invaded the province.

"Once at Tomsk," he repeated to himself, to repress some feelings of impatience which he could not entirely master, "in a few minutes I should be beyond the outposts; and twelve hours gained on Feofar, twelve hours on Ogareff, that surely would be enough to give me a start of them to Irkutsk."

The thing that Michael dreaded more than everything else was the presence of Ivan Ogareff in the Tartar camp. Besides the danger of being recognized, he felt, by a sort of instinct, that this was the traitor whom it was especially necessary to precede. He understood, too, that the union of Ogareff's troops with those of Feofar would complete the invading army, and that the junction once effected, the army would march en masse on the capital of Eastern Siberia. All his apprehensions came from this quarter, and he dreaded every instant to hear some flourish of trumpets, announcing the arrival of the lieutenant of the Emir.

To this was added the thought of his mother, of Nadia,--the one a prisoner at Omsk; the other dragged on board the Irtych boats, and no doubt a captive, as Marfa Strogoff was. He could do nothing for them. Should he ever see them again? At this question, to which he dared not reply, his heart sank very low.

At the same time with Michael Strogoff and so many other prisoners Harry Blount and Alcide Jolivet had also been taken to the Tartar camp. Their former traveling companion, captured like them at the telegraph office, knew that they were penned up with him in the enclosure, guarded by numerous sentinels, but he did not wish to accost them. It mattered little to him, at this time especially, what they might think of him since the affair at Ichim. Besides, he desired to be alone, that he might act alone, if necessary. He therefore held himself aloof from his former acquaintances.

From the moment that Harry Blount had fallen by his side, Jolivet had not ceased his attentions to him. During the journey from Kolyvan to the camp--that is to say, for several hours--Blount, by leaning on his companion's arm, had been enabled to follow the rest of the prisoners. He tried to make known that he was a British subject; but it had no effect on the barbarians, who only replied by prods with a lance or sword. The correspondent of the Daily Telegraph was, therefore, obliged to submit to the common lot, resolving to protest later, and obtain satisfaction for such treatment. But the journey was not the less disagreeable to him, for his wound caused him much pain, and without Alcide Jolivet's assistance he might never have reached the camp.

Jolivet, whose practical philosophy never abandoned him, had physically and morally strengthened his companion by every means in his power. His first care, when they found themselves definitely established in the enclosure, was to examine Blount's wound. Having managed carefully to draw off his coat, he found that the shoulder had been only grazed by the shot.

"This is nothing," he said. "A mere scratch! After two or three dressings you will be all to rights."

"But these dressings?" asked Blount.

"I will make them for you myself."

"Then you are something of a doctor?"

"All Frenchmen are something of doctors."

And on this affirmation Alcide, tearing his handkerchief, made lint of one piece, bandages of the other, took some water from a well dug in the middle of the enclosure, bathed the wound, and skillfully placed the wet rag on Harry Blount's shoulder.

"I treat you with water," he said. "This liquid is the most efficacious sedative known for the treatment of wounds, and is the most employed now. Doctors have taken six thousand years to discover that! Yes, six thousand years in round numbers!"

"I thank you, M. Jolivet," answered Harry, stretching himself on a bed of dry leaves, which his companion had arranged for him in the shade of a birch tree.

"Bah! it's nothing! You would do as much for me."

"I am not quite so sure," said Blount candidly.

"Nonsense, stupid! All English are generous."

"Doubtless; but the French?"

"Well, the French--they are brutes, if you like! But what redeems them is that they are French. Say nothing more about that, or rather, say nothing more at all. Rest is absolutely necessary for you."

But Harry Blount had no wish to be silent. If the wound, in prudence, required rest, the correspondent of the Daily Telegraph was not a man to indulge himself.

"M. Jolivet," he asked, "do you think that our last dispatches have been able to pass the Russian frontier?"
"Why not?" answered Alcide. "By this time you may be sure that my beloved cousin knows all about the affair at Kolyvan."

"How many copies does your cousin work off of her dispatches?" asked Blount, for the first time putting his question direct to his companion.

"Well," answered Alcide, laughing, "my cousin is a very discreet person, who does not like to be talked about, and who would be in despair if she troubled the sleep of which you are in need."

"I don't wish to sleep," replied the Englishman. "What will your cousin think of the affairs of Russia?"

"That they seem for the time in a bad way. But, bah! the Muscovite government is powerful; it cannot be really uneasy at an invasion of barbarians."

"Too much ambition has lost the greatest empires," answered Blount, who was not exempt from a certain English jealousy with regard to Russian pretensions in Central Asia.

"Oh, do not let us talk politics," cried Jolivet. "It is forbidden by the faculty. Nothing can be worse for wounds in the shoulder--unless it was to put you to sleep."

"Let us, then, talk of what we ought to do," replied Blount. "M. Jolivet, I have no intention at all of remaining a prisoner to these Tartars for an indefinite time."

"Nor I, either, by Jove!"

"We will escape on the first opportunity?"

"Yes, if there is no other way of regaining our liberty."

"Do you know of any other?" asked Blount, looking at his companion.

"Certainly. We are not belligerents; we are neutral, and we will claim our freedom."

"From that brute of a Feofar-Khan?"

"No; he would not understand," answered Jolivet; "but from his lieutenant, Ivan Ogareff."

"He is a villain."

"No doubt; but the villain is a Russian. He knows that it does not do to trifle with the rights of men, and he has no interest to retain us; on the contrary. But to ask a favor of that gentleman does not quite suit my taste."

"But that gentleman is not in the camp, or at least I have not seen him here," observed Blount.

"He will come. He will not fail to do that. He must join the Emir. Siberia is cut in two now, and very certainly Feofar's army is only waiting for him to advance on Irkutsk."

"And once free, what shall we do?"

"Once free, we will continue our campaign, and follow the Tartars, until the time comes when we can make our way into the Russian camp. We must not give up the game. No, indeed; we have only just begun. You, friend, have already had the honor of being wounded in the service of the Daily Telegraph, whilst I--I have as yet suffered nothing in my cousin's service. Well, well! Good," murmured Alcide Jolivet; "there he is asleep. A few hours' sleep and a few cold water compresses are all that are required to set an Englishman on his legs again. These fellows are made of cast iron."

And whilst Harry Blount rested, Alcide watched near him, after having drawn out his note book, which he loaded with notes, determined besides to share them with his companion, for the greater satisfaction of the readers of the Daily Telegraph. Events had united them one with the other. They were no longer jealous of each other. So, then, the thing that Michael Strogoff dreaded above everything was the most lively desire of the two correspondents. Ivan Ogareff's arrival would evidently be of use to them. Blount and Jolivet's interest was, therefore, contrary to that of Michael. The latter well understood the situation, and it was one reason, added to many others, which prevented him from approaching his former traveling companions. He therefore managed so as not to be seen by them.

Four days passed thus without the state of things being in anywise altered. The prisoners heard no talk of the breaking up of the Tartar camp. They were strictly guarded. It would have been impossible for them to pass the cordon of foot and horse soldiers, which watched them night and day. As to the food which was given them it was barely sufficient. Twice in the twenty-four hours they were thrown a piece of the intestines of goats grilled on the coals, or a few bits of that cheese called "kroute," made of sour ewe's milk, and which, soaked in mare's milk, forms the Kirghiz dish, commonly called "koumyss." And this was all. It may be added that the weather had become detestable. There were considerable atmospheric commotions, bringing squalls mingled with rain. The unfortunate prisoners, destitute of shelter, had to bear all the inclemencies of the weather, nor was there the slightest alleviation to their misery. Several wounded women and children died, and the prisoners were themselves compelled to dig graves for the bodies of those whom their jailers would not even take the trouble to bury.

During this trying period Alcide Jolivet and Michael Strogoff worked hard, each in the portions of the enclosure in which they found themselves. Healthy and vigorous, they suffered less than so many others, and could better endure the hardships to which they were exposed. By their advice, and the assistance they rendered, they were of the greatest possible use to their suffering and despairing fellow-captives.
Was this state of things to last? Would Feofar-Khan, satisfied with his first success, wait some time before marching on Irkutsk? Such, it was to be feared, would be the case. But it was not so. The event so much wished for by Jolivet and Blount, so much dreaded by Michael, occurred on the morning of the 12th of August.

On that day the trumpets sounded, the drums beat, the cannon roared. A huge cloud of dust swept along the road from Kolyvan. Ivan Ogareff, followed by several thousand men, made his entry into the Tartar camp.

CHAPTER II CORRESPONDENTS IN TROUBLE

IVAN OGAREFF was bringing up the main body of the army of the Emir. The cavalry and infantry now under him had formed part of the column which had taken Omsk. Ogareff, not having been able to reduce the high town, in which, it must be remembered, the governor and garrison had sought refuge, had decided to pass on, not wishing to delay operations which ought to lead to the conquest of Eastern Siberia. He therefore left a garrison in Omsk, and, reinforcing himself en route with the conquerors of Kolyvan, joined Feofar's army.

Ivan Ogareff's soldiers halted at the outposts of the camp. They received no orders to bivouac. Their chief's plan, doubtless, was not to halt there, but to press on and reach Tomsk in the shortest possible time, it being an important town, naturally intended to become the center of future operations.

Besides his soldiers, Ogareff was bringing a convoy of Russian and Siberian prisoners, captured either at Omsk or Kolyvan. These unhappy creatures were not led to the enclosure--already too crowded--but were forced to remain at the outposts without shelter, almost without nourishment. What fate was Feofar-Khan reserving for these unfortunates? Would he imprison them in Tomsk, or would some bloody execution, familiar to the Tartar chiefs, remove them when they were found too inconvenient? This was the secret of the capricious Emir.

This army had not come from Omsk and Kolyvan without bringing in its train the usual crowd of beggars, freebooters, pedlars, and gypsies, which compose the rear-guard of an army on the march.

All these people lived on the country traversed, and left little of anything behind them. There was, therefore, a necessity for pushing forward, if only to secure provisions for the troops. The whole region between Ichim and the Obi, now completely devastated, no longer offered any resources. The Tartars left a desert behind them.

Conspicuous among the gypsies who had hastened from the western provinces was the Tsigane troop, which had accompanied Michael Strogoff as far as Perm. Sangarre was there. This fierce spy, the tool of Ivan Ogareff, had not deserted her master. Ogareff had traveled rapidly to Ichim, whilst Sangarre and her band had proceeded to Omsk by the southern part of the province.

It may be easily understood how useful this woman was to Ogareff. With her gypsy-band she could penetrate anywhere. Ivan Ogareff was kept acquainted with all that was going on in the very heart of the invaded provinces. There were a hundred eyes, a hundred ears, open in his service. Besides, he paid liberally for this espionage, from which he derived so much advantage.

Once Sangarre, being implicated in a very serious affair, had been saved by the Russian officer. She never forgot what she owed him, and had devoted herself to his service body and soul.

When Ivan Ogareff entered on the path of treason, he saw at once how he might turn this woman to account. Whatever order he might give her, Sangarre would execute it. An inexplicable instinct, more powerful still than that of gratitude, had urged her to make herself the slave of the traitor to whom she had been attached since the very beginning of his exile in Siberia.

Confidante and accomplice, Sangarre, without country, without family, had been delighted to put her vagabond life to the service of the invaders thrown by Ogareff on Siberia. To the wonderful cunning natural to her race she added a wild energy, which knew neither forgiveness nor pity. She was a savage worthy to share the wigwam of an Apache or the hut of an Andaman.

Since her arrival at Omsk, where she had rejoined him with her Tsiganes, Sangarre had not again left Ogareff. The circumstance that Michael and Marfa Strogoff had met was known to her. She knew and shared Ogareff's fears concerning the journey of a courier of the Czar. Having Marfa Strogoff in her power, she would have been the woman to torture her with all the refinement of a Redskin in order to wrest her secret from her. But the hour had not yet come in which Ogareff wished the old Siberian to speak. Sangarre had to wait, and she waited, without losing sight of her whom she was watching, observing her slightest gestures, her slightest words, endeavoring to catch the word "son" escaping from her lips, but as yet always baffled by Marfa's taciturnity.

At the first flourish of the trumpets several officers of high rank, followed by a brilliant escort of Usbeck horsemen, moved to the front of the camp to receive Ivan Ogareff. Arrived in his presence, they paid him the greatest respect, and invited him to accompany them to Feofar-Khan's tent.

Imperturbable as usual, Ogareff replied coldly to the deference paid to him. He was plainly dressed; but, from a sort of impudent bravado, he still wore the uniform of a Russian officer.
As he was about to enter the camp, Sangarre, passing among the officers approached and remained motionless before him. "Nothing?" asked Ogareff.

"Nothing."

"Have patience."

"Is the time approaching when you will force the old woman to speak?"

"It is approaching, Sangarre."

"When will the old woman speak?"

"When we reach Tomsk."

"And we shall be there--"

"In three days."

A strange gleam shot from Sangarre's great black eyes, and she retired with a calm step. Ogareff pressed his spurs into his horse's flanks, and, followed by his staff of Tartar officers, rode towards the Emir's tent.

Feofar-Khan was expecting his lieutenant. The council, composed of the bearer of the royal seal, the khodja, and some high officers, had taken their places in the tent. Ivan Ogareff dismounted and entered.

Feofar-Khan was a man of forty, tall, rather pale, of a fierce countenance, and evil eyes. A curly black beard flowed over his chest. With his war costume, coat of mail of gold and silver, cross-belt and scabbard glistening with precious stones, boots with golden spurs, helmet ornamented with an aigrette of brilliant diamonds, Feofar presented an aspect rather strange than imposing for a Tartar Sardana-palus, an undisputed sovereign, who directs at his pleasure the life and fortune of his subjects.

When Ivan Ogareff appeared, the great dignitaries remained seated on their gold-embroidered cushions; but Feofar rose from a rich divan which occupied the back part of the tent, the ground being hidden under the thick velvet-pile of a Bokharian carpet.

The Emir approached Ogareff and gave him a kiss, the meaning of which he could not mistake. This kiss made the lieutenant chief of the council, and placed him temporarily above the khodja.

Then Feofar spoke. "I have no need to question you," said he; "speak, Ivan. You will find here ears very ready to listen to you."

"Takhir," answered Ogareff, "this is what I have to make known to you." He spoke in the Tartar language, giving to his phrases the emphatic turn which distinguishes the languages of the Orientals. "Takhir, this is not the time for unnecessary words. What I have done at the head of your troops, you know. The lines of the Ichim and the Irtych are now in our power; and the Turcoman horsemen can bathe their horses in the now Tartar waters. The Kirghiz hordes rose at the voice of Feofar-Khan. You can now push your troops towards the east, and where the sun rises, or towards the west, where he sets."

"And if I march with the sun?" asked the Emir, without his countenance betraying any of his thoughts.

"To march with the sun," answered Ogareff, "is to throw yourself towards Europe; it is to conquer rapidly the Siberian provinces of Tobolsk as far as the Ural Mountains."

"And if I go to meet this luminary of the heavens?"

"It is to subdue to the Tartar dominion, with Irkutsk, the richest countries of Central Asia."

"But the armies of the Sultan of St. Petersburg?" said Feofar-Khan, designating the Emperor of Russia by this strange title.

"You have nothing to fear from them," replied Ivan Ogareff. "The invasion has been sudden; and before the Russian army can succor them, Irkutsk or Tobolsk will have fallen into your power. The Czar's troops have been overwhelmed at Kolyvan, as they will be everywhere where yours meet them."

"And what advice does your devotion to the Tartar cause suggest?" asked the Emir, after a few moments' silence.

"My advice," answered Ivan Ogareff quickly, "is to March to meet the sun. It is to give the grass of the eastern steppes to the Turcoman horses to consume. It is to take Irkutsk, the capital of the eastern provinces, and with it a hostage, the possession of whom is worth a whole country. In the place of the Czar, the Grand Duke his brother must fall into your hands."

This was the great result aimed at by Ivan Ogareff. To listen to him, one would have taken him for one of the cruel descendants of Stephan Razine, the celebrated pirate who ravaged Southern Russia in the eighteenth century. To seize the Grand Duke, murder him pitilessly, would fully satisfy his hatred. Besides, with the capture of Irkutsk, all Eastern Siberia would pass to the Tartars.

"It shall be thus, Ivan," replied Feofar.

"What are your orders, Takhsir?"

"To-day our headquarters shall be removed to Tomsk."

Ogareff bowed, and, followed by the houch-begui, he retired to execute the Emir's orders.

As he was about to mount his horse, to return to the outposts, a tumult broke out at some distance, in the part of
the camp reserved for the prisoners. Shouts were heard, and two or three shots fired. Perhaps it was an attempt at revolt or escape, which must be summarily suppressed.

Ivan Ogareff and the housch-begui walked forward and almost immediately two men, whom the soldiers had not been able to keep back appeared before them.

The housch-begui, without more information, made a sign which was an order for death, and the heads of the two prisoners would have rolled on the ground had not Ogareff uttered a few words which arrested the sword already raised aloft. The Russian had perceived that these prisoners were strangers, and he ordered them to be brought to him.

They were Harry Blount and Alcide jolivet.

On Ogareff's arrival in the camp, they had demanded to be conducted to his presence. The soldiers had refused. In consequence, a struggle, an attempt at flight, shots fired which happily missed the two correspondents, but their execution would not have been long delayed, if it had not been for the intervention of the Emir's lieutenant.

The latter observed the prisoners for some moments, they being absolutely unknown to him. They had been present at that scene in the post-house at Ichim, in which Michael Strogoff had been struck by Ogareff; but the brutal traveler had paid no attention to the persons then collected in the common room.

Blount and Jolivet, on the contrary, recognized him at once, and the latter said in a low voice, "Hullo! It seems that Colonel Ogareff and the rude personage of Ichim are one!" Then he added in his companion's ear, "Explain our affair, Blount. You will do me a service. This Russian colonel in the midst of a Tartar camp disgusts me; and although, thanks to him, my head is still on my shoulders, my eyes would exhibit my feelings were I to attempt to look him in the face."

So saying, Alcide Jolivet assumed a look of complete and haughty indifference.

Whether or not Ivan Ogareff perceived that the prisoner's attitude was insulting towards him, he did not let it appear. "Who are you, gentlemen?" he asked in Russian, in a cold tone, but free from its usual rudeness.

"Two correspondents of English and French newspapers," replied Blount laconically.

"You have, doubtless, papers which will establish your identity?"

"Here are letters which accredit us in Russia, from the English and French chancellor's office."

Ivan Ogareff took the letters which Blount held out, and read them attentively. "You ask," said he, "authorization to follow our military operations in Siberia?"

"We ask to be free, that is all," answered the English correspondent dryly.

"You are so, gentlemen," answered Ogareff; "I am curious to read your articles in the Daily Telegraph."

"Sir," replied Blount, with the most imperturbable coolness, "it is sixpence a number, including postage." And thereupon he returned to his companion, who appeared to approve completely of his replies.

Ivan Ogareff, without frowning, mounted his horse, and going to the head of his escort, soon disappeared in a cloud of dust.

"Well, Jolivet, what do you think of Colonel Ivan Ogareff, general-in-chief of the Tartar troops?" asked Blount.

"I think, my dear friend," replied Alcide, smiling, "that the housch-begui made a very graceful gesture when he gave the order for our heads to be cut off."

Whatever was the motive which led Ogareff to act thus in regard to the two correspondents, they were free and could rove at their pleasure over the scene of war. Their intention was not to leave it. The sort of antipathy which formerly they had entertained for each other had given place to a sincere friendship. Circumstances having brought them together, they no longer thought of separating. The petty questions of rivalry were forever extinguished. Harry Blount could never forget what he owed his companion, who, on the other hand, never tried to remind him of it. This friendship too assisted the reporting operations, and was thus to the advantage of their readers.

"And now," asked Blount, "what shall we do with our liberty?"

"Take advantage of it, of course," replied Alcide, "and go quietly to Tomsk to see what is going on there."

"Until the time--very near, I hope--when we may rejoin some Russian regiment?"

"As you say, my dear Blount, it won't do to Tartarise ourselves too much. The best side is that of the most civilized army, and it is evident that the people of Central Asia will have everything to lose and absolutely nothing to gain from this invasion, while the Russians will soon repulse them. It is only a matter of time."

The arrival of Ivan Ogareff, which had given Jolivet and Blount their liberty, was to Michael Strogoff, on the contrary, a serious danger. Should chance bring the Czar's courier into Ogareff's presence, the latter could not fail to recognize in him the traveler whom he had so brutally treated at the Ichim post-house, and although Michael had not replied to the insult as he would have done under any other circumstances, attention would be drawn to him, and at once the accomplishment of his plans would be rendered more difficult.

This was the unpleasant side of the business. A favorable result of his arrival, however, was the order which was given to raise the camp that very day, and remove the headquarters to Tomsk. This was the accomplishment of
Michael's most fervent desire. His intention, as has been said, was to reach Tomsk concealed amongst the other prisoners; that is to say, without any risk of falling into the hands of the scouts who swarmed about the approaches to this important town. However, in consequence of the arrival of Ivan Ogareff, he questioned whether it would not be better to give up his first plan and attempt to escape during the journey.

Michael would, no doubt, have kept to the latter plan had he not learnt that Feofar-Khan and Ogareff had already set out for the town with some thousands of horsemen. "I will wait, then," said he to himself; "at least, unless some exceptional opportunity for escape occurs. The adverse chances are numerous on this side of Tomsk, while beyond I shall in a few hours have passed the most advanced Tartar posts to the east. Still three days of patience, and may God aid me!"

It was indeed a journey of three days which the prisoners, under the guard of a numerous detachment of Tartars, were to make across the steppe. A hundred and fifty versts lay between the camp and the town—an easy march for the Emir's soldiers, who wanted for nothing, but a wretched journey for these people, enfeebled by privations. More than one corpse would show the road they had traversed.

It was two o'clock in the afternoon, on the 12th of August, under a hot sun and cloudless sky, that the toptschi-baschi gave the order to start.

Alcide and Blount, having bought horses, had already taken the road to Tomsk, where events were to reunite the principal personnages of this story.

Amongst the prisoners brought by Ivan Ogareff to the Tartar camp was an old woman, whose taciturnity seemed to keep her apart from all those who shared her fate. Not a murmur issued from her lips. She was like a statue of grief. This woman was more strictly guarded than anyone else, and, without her appearing to notice, was constantly watched by the Tsigane Sangarre. Notwithstanding her age she was compelled to follow the convoy of prisoners on foot, without any alleviation of her suffering.

However, a kind Providence had placed near her a courageous, kind-hearted being to comfort and assist her. Amongst her companions in misfortune a young girl, remarkable for beauty and taciturnity, seemed to have given herself the task of watching over her. No words had been exchanged between the two captives, but the girl was always at the old woman's side when help was useful. At first the mute assistance of the stranger was accepted with some mistrust. Gradually, however, the young girl's clear glance, her reserve, and the mysterious sympathy which draws together those who are in misfortune, thawed Marfa Strogoff's coldness.

Nadia--for it was she--was thus able, without knowing it, to render to the mother those attentions which she had herself received from the son. Her instinctive kindness had doubly inspired her. In devoting herself to her service, Nadia secured to her youth and beauty the protection afforded by the age of the old prisoner.

On the crowd of unhappy people, embittered by sufferings, this silent pair—one seeming to be the grandmother, the other the grand-daughter—imposed a sort of respect.

If Nadia had been less energetic, she would have succumbed to this double blow. The interruption to her journey, the death of Michael, made her both desperate and excited. Divided, perhaps forever, from her father, after so many happy efforts had brought her near him, and, to crown her grief, separated from the intrepid companion whom God seemed to have placed in her way to lead her. The image of Michael Strogoff, struck before her eyes with a lance and disappearing beneath the waters of the Irtych, never left her thoughts.

Could such a man have died thus? For whom was God reserving His miracles if this good man, whom a noble object was urging onwards, had been allowed to perish so miserably? Then anger would prevail over grief. The scene of the affront so strangely borne by her companion at the Ichim relay returned to her memory. Her blood boiled at the recollection.

"Who will avenge him who can no longer avenge himself?" she said.

And in her heart, she cried, "May it be I!" If before his death Michael had confided his secret to her, woman, aye girl though she was, she might have been able to carry to a successful conclusion the interrupted task of that brother whom God had so soon taken from her.

Absorbed in these thoughts, it can be understood how Nadia could remain insensible to the miseries even of her captivity. Thus chance had united her to Marfa Strogoff without her having the least suspicion of who she was. How could she imagine that this old woman, a prisoner like herself, was the mother of him, whom she only knew as the merchant Nicholas Korpanoff? And on the other hand, how could Marfa guess that a bond of gratitude connected this young stranger with her son?

The thing that first struck Nadia in Marfa Strogoff was the similarity in the way in which each bore her hard fate. This stoicismo of the old woman under the daily hardships, this contempt of bodily suffering, could only be caused by a moral grief equal to her own. So Nadia thought; and she was not mistaken. It was an instinctive sympathy for that
part of her misery which Marfa did not show which first drew Nadia towards her. This way of bearing her sorrow went to the proud heart of the young girl. She did not offer her services; she gave them. Marfa had neither to refuse nor accept them. In the difficult parts of the journey, the girl was there to support her. When the provisions were given out, the old woman would not have moved, but Nadia shared her small portion with her; and thus this painful journey was performed. Thanks to her companion, Marfa was able to follow the soldiers who guarded the prisoners without being fastened to a saddle-bow, as were many other unfortunate wretches, and thus dragged along this road of sorrow.

"May God reward you, my daughter, for what you have done for my old age!" said Marfa Strogoff once, and for some time these were the only words exchanged between the two unfortunate beings.

During these few days, which to them appeared like centuries, it would seem that the old woman and the girl would have been led to speak of their situation. But Marfa Strogoff, from a caution which may be easily understood, never spoke about herself except with the greatest brevity. She never made the smallest allusion to her son, nor to the unfortunate meeting.

Nadia also, if not completely silent, spoke little. However, one day her heart overflowed, and she told all the events which had occurred from her departure from Wladimir to the death of Nicholas Korpanoff.

All that her young companion told intensely interested the old Siberian. "Nicholas Korpanoff!" said she. "Tell me again about this Nicholas. I know only one man, one alone, in whom such conduct would not have astonished me. Nicholas Korpanoff! Was that really his name? Are you sure of it, my daughter?"

"Why should he have deceived me in this," replied Nadia, "when he deceived me in no other way?"

Moved, however, by a kind of presentiment, Marfa Strogoff put questions upon questions to Nadia.

"You told me he was fearless, my daughter. You have proved that he has been so?" asked she.

"Yes, fearless indeed!" replied Nadia.

"It was just what my son would have done," said Marfa to herself.

Then she resumed, "Did you not say that nothing stopped him, nor astonished him; that he was so gentle in his strength that you had a sister as well as a brother in him, and he watched over you like a mother?"

"Yes, yes," said Nadia. "Brother, sister, mother--he has been all to me!"

"And defended you like a lion?"

"A lion indeed!" replied Nadia. "A lion, a hero!"

"My son, my son!" thought the old Siberian. "But you said, however, that he bore a terrible insult at that post-house in Ichim?"

"He did bear it," answered Nadia, looking down.

"He bore it!" murmured Marfa, shuddering.

"Mother, mother," cried Nadia, "do not blame him! He had a secret. A secret of which God alone is as yet the judge!"

"And," said Marfa, raising her head and looking at Nadia as though she would read the depths of her heart, "in that hour of humiliation did you not despise this Nicholas Korpanoff?"

"I admired without understanding him," replied the girl. "I never felt him more worthy of respect."

The old woman was silent for a minute.

"Was he tall?" she asked.

"Very tall."

"And very handsome? Come, speak, my daughter."

"He was very handsome," replied Nadia, blushing.

"It was my son! I tell you it was my son!" exclaimed the old woman, embracing Nadia.

"Your son!" said Nadia amazed, "your son!"

"Come," said Marfa; "let us get to the bottom of this, my child. Your companion, your friend, your protector had a mother. Did he never speak to you of his mother?"

"Of his mother?" said Nadia. "He spoke to me of his mother as I spoke to him of my father--often, always. He adored her."

"Nadia, Nadia, you have just told me about my own son," said the old woman.

And she added impetuously, "Was he not going to see this mother, whom you say he loved, in Omsk?"

"No," answered Nadia, "no, he was not."

"Not!" cried Marfa. "You dare to tell me not!"

"I say so: but it remains to me to tell you that from motives which outweighed everything else, motives which I do not know, I understand that Nicholas Korpanoff had to traverse the country completely in secret. To him it was a question of life and death, and still more, a question of duty and honor."

"Duty, indeed, imperious duty," said the old Siberian, "of those who sacrifice everything, even the joy of giving
a kiss, perhaps the last, to his old mother. All that you do not know, Nadia--all that I did not know myself--I now
know. You have made me understand everything. But the light which you have thrown on the mysteries of my heart,
I cannot return on yours. Since my son has not told you his secret, I must keep it. Forgive me, Nadia; I can never
repay what you have done for me."

"Mother, I ask you nothing," replied Nadia.

All was thus explained to the old Siberian, all, even the conduct of her son with regard to herself in the inn at
Omsk. There was no doubt that the young girl's companion was Michael Strogoff, and that a secret mission in the
invaded country obliged him to conceal his quality of the Czar's courier.

"Ah, my brave boy!" thought Marfa. "No, I will not betray you, and tortures shall not wrest from me the avowal
that it was you whom I saw at Omsk."

Marfa could with a word have paid Nadia for all her devotion to her. She could have told her that her
companion, Nicholas Korpanoff, or rather Michael Strogoff, had not perished in the waters of the Irtych, since it was
some days after that incident that she had met him, that she had spoken to him.

But she restrained herself, she was silent, and contented herself with saying, "Hope, my child! Misfortune will
not overwhelm you. You will see your father again; I feel it; and perhaps he who gave you the name of sister is not
dead. God cannot have allowed your brave companion to perish. Hope, my child, hope! Do as I do. The mourning
which I wear is not yet for my son."

CHAPTER III BLOW FOR BLOW

SUCH were now the relative situations of Marfa Strogoff and Nadia. All was understood by the old Siberian,
and though the young girl was ignorant that her much-regretted companion still lived, she at least knew his
relationship to her whom she had made her mother; and she thanked God for having given her the joy of taking the
place of the son whom the prisoner had lost.

But what neither of them could know was that Michael, having been captured at Kolyvan, was in the same
convoy and was on his way to Tomsk with them.

The prisoners brought by Ivan Ogareff had been added to those already kept by the Emir in the Tartar camp.
These unfortunate people, consisting of Russians, Siberians, soldiers and civilians, numbered some thousands, and
formed a column which extended over several versts. Some among them being considered dangerous were
handcuffed and fastened to a long chain. There were, too, women and children, many of the latter suspended to the
pommels of the saddles, while the former were dragged mercilessly along the road on foot, or driven forward as if
they were animals. The horsemen compelled them to maintain a certain order, and there were no laggards with the
exception of those who fell never to rise again.

In consequence of this arrangement, Michael Strogoff, marching in the first ranks of those who had left the
Tartar camp--that is to say, among the Kolyvan prisoners--was unable to mingle with the prisoners who had arrived
after him from Omsk. He had therefore no suspicion that his mother and Nadia were present in the convoy, nor did
they suppose that he was among those in front. This journey from the camp to Tomsk, performed under the lashes
and spear-points of the soldiers, proved fatal to many, and terrible to all. The prisoners traveled across the steppe,
over a road made still more dusty by the passage of the Emir and his vanguard. Orders had been given to march
rapidly. The short halts were rare. The hundred miles under a burning sky seemed interminable, though they were
performed as rapidly as possible.

The country, which extends from the right of the Obi to the base of the spur detached from the Sayanok
Mountains, is very sterile. Only a few stunted and burnt-up shrubs here and there break the monotony of the
immense plain. There was no cultivation, for there was no water; and it was water that the prisoners, parched by
their painful march, most needed. To find a stream they must have diverged fifty versts eastward, to the very foot of
the mountains.

There flows the Tom, a little affluent of the Obi, which passes near Tomsk before losing itself in one of the great
northern arteries. There water would have been abundant, the steppe less arid, the heat less severe. But the strictest
orders had been given to the commanders of the convoy to reach Tomsk by the shortest way, for the Emir was much
afraid of being taken in the flank and cut off by some Russian column descending from the northern provinces.

It is useless to dwell upon the sufferings of the unhappy prisoners. Many hundreds fell on the steppe, where their
bodies would lie until winter, when the wolves would devour the remnants of their bones.

As Nadia helped the old Siberian, so in the same way did Michael render to his more feeble companions in
misfortune such services as his situation allowed. He encouraged some, supported others, going to and fro, until a
prick from a soldier's lance obliged him to resume the place which had been assigned him in the ranks.

Why did he not endeavor to escape?
The reason was that he had now quite determined not to venture until the steppe was safe for him. He was resolved in his idea of going as far as Tomsk "at the Emir's expense," and indeed he was right. As he observed the numerous detachments which scoured the plain on the convoy's flanks, now to the south, now to the north, it was evident that before he could have gone two versts he must have been recaptured. The Tartar horsemen swarmed—"it actually appeared as if they sprang from the earth—like insects which a thunderstorm brings to the surface of the ground. Flight under these conditions would have been extremely difficult, if not impossible. The soldiers of the escort displayed excessive vigilance, for they would have paid for the slightest carelessness with their heads.

At nightfall of the 15th of August, the convoy reached the little village of Zabediero, thirty versts from Tomsk.

The prisoners' first movement would have been to rush into the river, but they were not allowed to leave the ranks until the halt had been organized. Although the current of the Tom was just now like a torrent, it might have favored the flight of some bold or desperate man, and the strictest measures of vigilance were taken. Boats, requisitioned at Zabediero, were brought up to the Tom and formed a line of obstacles impossible to pass. As to the encampment on the outskirts of the village, it was guarded by a cordon of sentinels.

Michael Strogoff, who now naturally thought of escape, saw, after carefully surveying the situation, that under these conditions it was perfectly impossible; so, not wishing to compromise himself, he waited.

The prisoners were to encamp for the whole night on the banks of the Tom, for the Emir had put off the entrance of his troops into Tomsk. It had been decided that a military fete should mark the inauguration of the Tartar headquarters in this important city. Feofar-Khan already occupied the fortress, but the bulk of his army bivouacked under its walls, waiting until the time came for them to make a solemn entry.

Ivan Ogareff left the Emir at Tomsk, where both had arrived the evening before, and returned to the camp at Zabediero. From here he was to start the next day with the rear-guard of the Tartar army. A house had been arranged for him in which to pass the night. At sunrise horse and foot soldiers were to proceed to Tomsk, where the Emir wished to receive them with the pomp usual to Asiatic sovereigns. As soon as the halt was organized, the prisoners, worn out with their three days' journey, and suffering from burning thirst, could drink and take a little rest. The sun had already set, when Nadia, supporting Marfa Strogoff, reached the banks of the Tom. They had not till then been able to get through those who crowded the banks, but at last they came to drink in their turn.

The old woman bent over the clear stream, and Nadia, plunging in her hand, carried it to Marfa's lips. Then she refreshed herself. They found new life in these welcome waters. Suddenly Nadia started up; an involuntary cry escaped her.

Michael Strogoff was there, a few steps from her. It was he. The dying rays of the sun fell upon him.

At Nadia's cry Michael started. But he had sufficient command over himself not to utter a word by which he might have been compromised. And yet, when he saw Nadia, he also recognized his mother.

Feeling he could not long keep master of himself at this unexpected meeting, he covered his eyes with his hands and walked quickly away.

Nadia's impulse was to run after him, but the old Siberian murmured in her ear, "Stay, my daughter!"

"It is he!" replied Nadia, choking with emotion. "He lives, mother! It is he!"

"It is my son," answered Marfa, "it is Michael Strogoff, and you see that I do not make a step towards him! Imitate me, my daughter."

Michael had just experienced the most violent emotion which a man can feel. His mother and Nadia were there!

The two prisoners who were always together in his heart, God had brought them together in this common misfortune. Did Nadia know who he was? Yes, for he had seen Marfa's gesture, holding her back as she was about to rush towards him. Marfa, then, had had the good sense, and kept her secret.

During that night, Michael was twenty times on the point of looking for and joining his mother; but he knew that he must resist the longing he felt to take her in his arms, and once more press the hand of his young companion. The least imprudence might be fatal. He had besides sworn not to see his mother. Once at Tomsk, since he could not escape this very night, he would set off without having even embraced the two beings in whom all the happiness of his life was centered, and whom he should leave exposed to so many perils.

Michael hoped that this fresh meeting at the Zabediero camp would have no disastrous consequences either to his mother or to himself. But he did not know that part of this scene, although it passed so rapidly, had been observed by Sangarre, Ogareff's spy.

The Tsigane was there, a few paces off, on the bank, as usual, watching the old Siberian woman. She had not caught sight of Michael, for he disappeared before she had time to look around; but the mother's gesture as she kept back Nadia had not escaped her, and the look in Marfa's eyes told her all.

It was now beyond doubt that Marfa Strogoff's son, the Czar's courier, was at this moment in Zabediero, among Ivan Ogareff's prisoners. Sangarre did not know him, but she knew that he was there. She did not then attempt to discover him, for it would have been impossible in the dark and the immense crowd.
As for again watching Nadia and Marfa Strogoff, that was equally useless. It was evident that the two women would keep on their guard, and it would be impossible to overhear anything of a nature to compromise the courier of the Czar. The Tsigane's first thought was to tell Ivan Ogareff. She therefore immediately left the encampment. A quarter of an hour after, she reached Zabediero, and was shown into the house occupied by the Emir's lieutenant. Ogareff received the Tsigane directly.

"What have you to tell me, Sangarre?" he asked.
"Marfa Strogoff's son is in the encampment."
"A prisoner?"
"A prisoner."
"Ah!" exclaimed Ogareff, "I shall know--"
"You will know nothing, Ivan," replied Tsigane; "for you do not even know him by sight."
"But you know him; you have seen him, Sangarre?"
"I have not seen him; but his mother betrayed herself by a gesture, which told me everything."
"Are you not mistaken?"
"I am not mistaken."

"You know the importance which I attach to the apprehension of this courier," said Ivan Ogareff. "If the letter which he has brought from Moscow reaches Irkutsk, if it is given to the Grand Duke, the Grand Duke will be on his guard, and I shall not be able to get at him. I must have that letter at any price. Now you come to tell me that the bearer of this letter is in my power. I repeat, Sangarre, are you not mistaken?"

Ogareff spoke with great animation. His emotion showed the extreme importance he attached to the possession of this letter. Sangarre was not at all put out by the urgency with which Ogareff repeated his question. "I am not mistaken, Ivan," she said.

"But, Sangarre, there are thousands of prisoners; and you say that you do not know Michael Strogoff."
"No," answered the Tsigane, with a look of savage joy, "I do not know him; but his mother knows him. Ivan, we must make his mother speak."

"To-morrow she shall speak!" cried Ogareff. So saying, he extended his hand to the Tsigane, who kissed it; for there is nothing servile in this act of respect, it being usual among the Northern races.

Sangarre returned to the camp. She found out Nadia and Marfa Strogoff, and passed the night in watching them. Although worn out with fatigue, the old woman and the girl did not sleep. Their great anxiety kept them awake. Michael was living, but a prisoner. Did Ogareff know him, or would he not soon find him out? Nadia was occupied by the one thought that he whom she had thought dead still lived. But Marfa saw further into the future: and, although she did not care what became of herself, she had every reason to fear for her son.

Sangarre, under cover of the night, had crept near the two women, and remained there several hours listening. She heard nothing. From an instinctive feeling of prudence not a word was exchanged between Nadia and Marfa Strogoff. The next day, the 16th of August, about ten in the morning, trumpet-calls resounded throughout the encampment. The Tartar soldiers were almost immediately under arms.

Ivan Ogareff arrived, surrounded by a large staff of Tartar officers. His face was more clouded than usual, and his knitted brow gave signs of latent wrath which was waiting for an occasion to break forth.

Michael Strogoff, hidden in a group of prisoners, saw this man pass. He had a presentiment that some catastrophe was imminent: for Ivan Ogareff knew now that Marfa was the mother of Michael Strogoff.

Ogareff dismounted, and his escort cleared a large circle round him. Just then Sangarre approached him, and said, "I have no news."

Ivan Ogareff's only reply was to give an order to one of his officers. Then the ranks of prisoners were brutally hurried up by the soldiers. The unfortunate people, driven on with whips, or pushed on with lances, arranged themselves round the camp. A strong guard of soldiers drawn up behind, rendered escape impossible.

Silence then ensued, and, on a sign from Ivan Ogareff, Sangarre advanced towards the group, in the midst of which stood Marfa.

The old Siberian saw her, and knew what was going to happen. A scornful smile passed over her face. Then leaning towards Nadia, she said in a low tone, "You know me no longer, my daughter. Whatever may happen, and however hard this trial may be, not a word, not a sign. It concerns him, and not me."

At that moment Sangarre, having regarded her for an instant, put her hand on her shoulder.

"What do you want with me?" said Marfa.

"Come!" replied Sangarre, and pushing the old Siberian before her, she took her to Ivan Ogareff, in the middle of the cleared ground. Michael cast down his eyes that their angry flashings might not appear.

Marfa, standing before Ivan Ogareff, drew herself up, crossed her arms on her breast, and waited.

"You are Marfa Strogoff?" asked Ogareff.
"Yes," replied the old Siberian calmly.
"Do you retract what you said to me when, three days ago, I interrogated you at Omsk?"
"No!"
"Then you do not know that your son, Michael Strogoff, courier of the Czar, has passed through Omsk?"
"I do not know it."
"And the man in whom you thought you recognized your son, was not he your son?"
"He was not my son."
"And since then you have not seen him amongst the prisoners?"
"No."
"If he were pointed out, would you recognize him?"
"No."

On this reply, which showed such determined resolution, a murmur was heard amongst the crowd.
Ogareff could not restrain a threatening gesture.
"Listen," said he to Marfa, "your son is here, and you shall immediately point him out to me."
"No."

"All these men, taken at Omsk and Kolyvan, will defile before you; and if you do not show me Michael Strogoff, you shall receive as many blows of the knout as men shall have passed before you."

Ivan Ogareff saw that, whatever might be his threats, whatever might be the tortures to which he submitted her, the indomitable Siberian would not speak. To discover the courier of the Czar, he counted, then, not on her, but on Michael himself. He did not believe it possible that, when mother and son were in each other's presence, some involuntary movement would not betray him. Of course, had he wished to seize the imperial letter, he would simply have given orders to search all the prisoners; but Michael might have destroyed the letter, having learnt its contents; and if he were not recognized, if he were to reach Irkutsk, all Ivan Ogareff's plans would be baffled. It was thus not only the letter which the traitor must have, but the bearer himself.

Nadia had heard all, and she now knew who was Michael Strogoff, and why he had wished to cross, without being recognized, the invaded provinces of Siberia.

On an order from Ivan Ogareff the prisoners defiled, one by one, past Marfa, who remained immovable as a statue, and whose face expressed only perfect indifference.

Her son was among the last. When in his turn he passed before his mother, Nadia shut her eyes that she might not see him. Michael was to all appearance unmoved, but the palm of his hand bled under his nails, which were pressed into them.

Ivan Ogareff was baffled by mother and son.
Sangarre, close to him, said one word, "The knout!"
"Yes," cried Ogareff, who could no longer restrain himself; "the knout for this wretched old woman--the knout to the death!"

A Tartar soldier bearing this terrible instrument of torture approached Marfa. The knout is composed of a certain number of leathern thongs, at the end of which are attached pieces of twisted iron wire. It is reckoned that a sentence to one hundred and twenty blows of this whip is equivalent to a sentence of death.
Marfa knew it, but she knew also that no torture would make her speak. She was sacrificing her life.

Marfa, seized by two soldiers, was forced on her knees on the ground. Her dress torn off left her back bare. A saber was placed before her breast, at a few inches' distance only. Directly she bent beneath her suffering, her breast would be pierced by the sharp steel.

The Tartar drew himself up. He waited. "Begin!" said Ogareff. The whip whistled in the air.
But before it fell a powerful hand stopped the Tartar's arm. Michael was there. He had leapt forward at this horrible scene. If at the relay at Ichim he had restrained himself when Ogareff's whip had struck him, here before his mother, who was about to be struck, he could not do so. Ivan Ogareff had succeeded.
"Michael Strogoff!" cried he. Then advancing, "Ah, the man of Ichim?"
"Himself!" said Michael. And raising the knout he struck Ogareff a sharp blow across the face. "Blow for blow!"
said he.
"Well repaid!" cried a voice concealed by the tumult.
Twenty soldiers threw themselves on Michael, and in another instant he would have been slain.
But Ogareff, who on being struck had uttered a cry of rage and pain, stopped them. "This man is reserved for the Emir's judgment," said he. "Search him!"

The letter with the imperial arms was found in Michael's bosom; he had not had time to destroy it; it was handed to Ogareff.
The voice which had pronounced the words, "Well repaid!" was that of no other than Alcide Jolivet. "Par-dieu!"
said he to Blount, "they are rough, these people. Acknowledge that we owe our traveling companion a good turn. Korpanoff or Strogoff is worthy of it. Oh, that was fine retaliation for the little affair at Ichim."

"Yes, retaliation truly," replied Blount; "but Strogoff is a dead man. I suspect that, for his own interest at all events, it would have been better had he not possessed quite so lively a recollection of the event."

"And let his mother perish under the knout?"

"Do you think that either she or his sister will be a bit better off from this outbreak of his?"

"I do not know or think anything except that I should have done much the same in his position," replied Alcide. "What a scar the Colonel has received! Bah! one must boil over sometimes. We should have had water in our veins instead of blood had it been incumbent on us to be always and everywhere unmoved to wrath."

"A neat little incident for our journals," observed Blount, "if only Ivan Ogareff would let us know the contents of that letter."

Ivan Ogareff, when he had stanched the blood which was trickling down his face, had broken the seal. He read and re-read the letter deliberately, as if he was determined to discover everything it contained.

Then having ordered that Michael, carefully bound and guarded, should be carried on to Tomsk with the other prisoners, he took command of the troops at Zabediero, and, amid the deafening noise of drums and trumpets, he marched towards the town where the Emir awaited him.

CHAPTER IV THE TRIUMPHAL ENTRY

TOMSK, founded in 1604, nearly in the heart of the Siberian provinces, is one of the most important towns in Asiatic Russia. Tobolsk, situated above the sixtieth parallel; Irkutsk, built beyond the hundredth meridian--have seen Tomsk increase at their expense.

And yet Tomsk, as has been said, is not the capital of this important province. It is at Omsk that the Governor-General of the province and the official world reside. But Tomsk is the most considerable town of that territory. The country being rich, the town is so likewise, for it is in the center of fruitful mines. In the luxury of its houses, its arrangements, and its equipages, it might rival the greatest European capitals. It is a city of millionaires, enriched by the spade and pickax, and though it has not the honor of being the residence of the Czar's representative, it can boast of including in the first rank of its notables the chief of the merchants of the town, the principal grantees of the imperial government's mines.

But the millionaires were fled now, and except for the crouching poor, the town stood empty to the hordes of Feofar-Khan. At four o'clock the Emir made his entry into the square, greeted by a flourish of trumpets, the rolling sound of the big drums, salvoes of artillery and musketry.

Feofar mounted his favorite horse, which carried on its head an aigrette of diamonds. The Emir still wore his uniform. He was accompanied by a numerous staff, and beside him walked the Khans of Khokhand and Koundouge and the grand dignitaries of the Khanats.

At the same moment appeared on the terrace the chief of Feofar's wives, the queen, if this title may be given to the sultana of the states of Bokhara. But, queen or slave, this woman of Persian origin was wonderfully beautiful. Contrary to the Mahometan custom, and no doubt by some caprice of the Emir, she had her face uncovered. Her hair, divided into four plaits, fell over her dazzling white shoulders, scarcely concealed by a veil of silk worked in gold, which fell from the back of a cap studded with gems of the highest value. Under her blue-silk petticoat, fell the "zirdjameh" of silken gauze, and above the sash lay the "pirahn." But from the head to the little feet, such was the profusion of jewels--gold beads strung on silver threads, chaplets of turquoise, "firouzehs" from the celebrated mines of Elbourz, necklaces of cornelians, agates, emeralds, opals, and sapphires--that her dress seemed to be literally made of precious stones. The thousands of diamonds which sparkled on her neck, arms, hands, at her waist, and at her feet might have been valued at almost countless millions of roubles.

The Emir and the Khans dismounted, as did the dignitaries who escorted them. All entered a magnificent tent erected on the center of the first terrace. Before the tent, as usual, the Koran was laid.

Feofar's lieutenant did not make them wait, and before five o'clock the trumpets announced his arrival. Ivan Ogareff--the Scarred Cheek, as he was already nick-named--wearing the uniform of a Tartar officer, dismounted before the Emir's tent. He was accompanied by a party of soldiers from the camp at Zabediero, who ranged up at the sides of the square, in the middle of which a place for the sports was reserved. A large scar could be distinctly seen cut obliquely across the traitor's face.

Ogareff presented his principal officers to the Emir, who, without departing from the coldness which composed the main part of his dignity, received them in a way which satisfied them that they stood well in the good graces of their chief.

At least so thought Harry Blount and Alcide Jolivet, the two inseparables, now associated together in the chase
after news. After leaving Zabediero, they had proceeded rapidly to Tomsk. The plan they had agreed upon was to leave the Tartars as soon as possible, and to join a Russian regiment, and, if they could, to go with them to Irkutsk. All that they had seen of the invasion, its burnings, its pillages, its murders, had perfectly sickened them, and they longed to be among the ranks of the Siberian army. Jolivet had told his companion that he could not leave Tomsk without making a sketch of the triumphal entry of the Tartar troops, if it was only to satisfy his cousin's curiosity; but the same evening they both intended to take the road to Irkutsk, and being well mounted hoped to distance the Emir's scouts.

Alcide and Blount mingled therefore in the crowd, so as to lose no detail of a festival which ought to supply them with a hundred good lines for an article. They admired the magnificence of Feofar-Khan, his wives, his officers, his guards, and all the Eastern pomp, of which the ceremonies of Europe can give not the least idea. But they turned away with disgust when Ivan Ogareff presented himself before the Emir, and waited with some impatience for the amusements to begin.

"You see, my dear Blount," said Alcide, "we have come too soon, like honest citizens who like to get their money's worth. All this is before the curtain rises, it would have been better to arrive only for the ballet."

"What ballet?" asked Blount.

"The compulsory ballet, to be sure. But see, the curtain is going to rise." Alcide Jolivet spoke as if he had been at the Opera, and taking his glass from its case, he prepared, with the air of a connoisseur, "to examine the first act of Feofar's company."

A painful ceremony was to precede the sports. In fact, the triumph of the vanquisher could not be complete without the public humiliation of the vanquished. This was why several hundreds of prisoners were brought under the soldiers' whips. They were destined to march past Feofar-Khan and his allies before being crammed with their companions into the prisons in the town.

In the first ranks of these prisoners figured Michael Strogoff. As Ogareff had ordered, he was specially guarded by a file of soldiers. His mother and Nadia were there also.

The old Siberian, although energetic enough when her own safety was in question, was frightfully pale. She expected some terrible scene. It was not without reason that her son had been brought before the Emir. She therefore trembled for him. Ivan Ogareff was not a man to forgive having been struck in public by the knout, and his vengeance would be merciless. Some frightful punishment familiar to the barbarians of Central Asia would, no doubt, be inflicted on Michael Ogareff had protected him against the soldiers because he well knew what would happen by reserving him for the justice of the Emir.

The mother and son had not been able to speak together since the terrible scene in the camp at Zabediero. They had been pitilessly kept apart—a bitter aggravation of their misery, for it would have been some consolation to have been together during these days of captivity. Marfa longed to ask her son's pardon for the harm she had unintentionally done him, for she reproached herself with not having commanded her maternal feelings. If she had restrained herself in that post-house at Omsk, when she found herself face to face with him, Michael would have passed unrecognized, and all these misfortunes would have been avoided.

Michael, on his side, thought that if his mother was there, if Ogareff had brought her with him, it was to make her suffer with the sight of his own punishment, or perhaps some frightful death was reserved for her also.

As to Nadia, she only asked herself how she could save them both, how come to the aid of son and mother. As yet she could only wonder, but she felt instinctively that she must avoid drawing attention upon herself, that she must conceal herself, make herself insignificant. Perhaps she might at least gnaw through the meshes which imprisoned the lion. At any rate if any opportunity was given her she would seize upon it, and sacrifice herself, if need be, for the son of Marfa Strogoff.

In the meantime the greater part of the prisoners were passing before the Emir, and as they passed each was obliged to prostrate himself, with his forehead in the dust, in token of servitude. Slavery begins by humiliation. When the unfortunate people were too slow in bending, the rough guards threw them violently to the ground.

Alcide Jolivet and his companion could not witness such a sight without feeling indignant.

"It is cowardly--let us go," said Alcide.

"No," answered Blount; "we must see it all."

"See it all!--ah!" cried Alcide, suddenly, grasping his companion's arm.

"What is the matter with you?" asked the latter.

"Look, Blount; it is she!"

"What she?"

"The sister of our traveling companion--alone, and a prisoner! We must save her."

"Calm yourself," replied Blount coolly. "Any interference on our part in behalf of the young girl would be worse than useless."
Alcide Jolivet, who had been about to rush forward, stopped, and Nadia—who had not perceived them, her features being half hidden by her hair—passed in her turn before the Emir without attracting his attention.

However, after Nadia came Marfa Strogoff; and as she did not throw herself quickly in the dust, the guards brutally pushed her. She fell.

Her son struggled so violently that the soldiers who were guarding him could scarcely hold him back. But the old woman rose, and they were about to drag her on, when Ogareff interposed, saying, "Let that woman stay!"

As to Nadia, she happily regained the crowd of prisoners. Ivan Ogareff had taken no notice of her.

Michael was then led before the Emir, and there he remained standing, without casting down his eyes.

"Your forehead to the ground!" cried Ogareff.

"No!" answered Michael.

Two soldiers endeavored to make him bend, but they were themselves laid on the ground by a buffet from the young man's fist.

Ogareff approached Michael. "You shall die!" he said.

"I can die," answered Michael fiercely; "but your traitor's face, Ivan, will not the less carry forever the infamous brand of the knout."

At this reply Ivan Ogareff became perfectly livid.

"Who is this prisoner?" asked the Emir, in a tone of voice terrible from its very calmness.

"A Russian spy," answered Ogareff. In asserting that Michael was a spy he knew that the sentence pronounced against him would be terrible.

The Emir made a sign at which all the crowd bent low their heads. Then he pointed with his hand to the Koran, which was brought him. He opened the sacred book and placed his finger on one of its pages.

It was chance, or rather, according to the ideas of these Orientals, God Himself who was about to decide the fate of Michael Strogoff. The people of Central Asia give the name of "fal" to this practice. After having interpreted the sense of the verse touched by the judge's finger, they apply the sentence whatever it may be.

The Emir had let his finger rest on the page of the Koran. The chief of the Ulemas then approached, and read in a loud voice a verse which ended with these words, "And he will no more see the things of this earth."

"Russian spy!" exclaimed Feofar-Kahn in a voice trembling with fury, "you have come to see what is going on in the Tartar camp. Then look while you may."

CHAPTER V "LOOK WHILE YOU MAY!"

Michael was held before the Emir's throne, at the foot of the terrace, his hands bound behind his back. His mother overcome at last by mental and physical torture, had sunk to the ground, daring neither to look nor listen.

"Look while you may," exclaimed Feofar-Kahn, stretching his arm towards Michael in a threatening manner. Doubtless Ivan Ogareff, being well acquainted with Tartar customs, had taken in the full meaning of these words, for his lips curled for an instant in a cruel smile; he then took his place by Feofar-Khan.

A trumpet call was heard. This was the signal for the amusements to begin. "Here comes the ballet," said Alcide to Blount; "but, contrary to our customs, these barbarians give it before the drama."

Michael had been commanded to look at everything. He looked. A troop of dancers poured into the open space before the Emir's tent. Different Tartar instruments, the "doutare," a long-handled guitar, the "kobize," a kind of violoncello, the "tschibyzga," a long reed flute; wind instruments, tom-toms, tambourines, united with the deep voices of the singers, formed a strange harmony. Added to this were the strains of an aerial orchestra, composed of a dozen kites, which, fastened by strings to their centers, resounded in the breeze like Aeolian harps.

Then the dancers began. The performers were all of Persian origin; they were no longer slaves, but exercised their profession at liberty. Formerly they figured officially in the ceremonies at the court of Teheran, but since the accession of the reigning family, banished or treated with contempt, they had been compelled to seek their fortune elsewhere. They wore the national costume, and were adorned with a profusion of jewels. Little triangles of gold, studded with jewels, glittered in their ears. Circles of silver, marked with black, surrounded their necks and legs.

These performers gracefully executed various dances, sometimes alone, sometimes in groups. Their faces were uncovered, but from time to time they threw a light veil over their heads, and a gauze cloud passed over their bright eyes as smoke over a starry sky. Some of these Persians wore leathern belts embroidered with pearls, from which hung little triangular bags. From these bags, embroidered with golden filigree, they drew long narrow bands of scarlet silk, on which were braided verses of the Koran. These bands, which they held between them, formed a belt under which the other dancers darted; and, as they passed each verse, following the precept it contained, they either prostrated themselves on the earth or lightly bounded upwards, as though to take a place among the houris of Mohammed's heaven.
But what was remarkable, and what struck Alcide, was that the Persians appeared rather indolent than fiery. Their passion had deserted them, and, by the kind of dances as well as by their execution, they recalled rather the calm and self-possessed nauch girls of India than the impassioned dancers of Egypt.

When this was over, a stern voice was heard saying:
"Look while you may!"

The man who repeated the Emir's words—a tall spare Tartar—was he who carried out the sentences of Feofar-Khan against offenders. He had taken his place behind Michael, holding in his hand a broad curved saber, one of those Damascene blades which are forged by the celebrated armorers of Karschi or Hissar.

Behind him guards were carrying a tripod supporting a chafing-dish filled with live coals. No smoke arose from this, but a light vapor surrounded it, due to the incineration of a certain aromatic and resinous substance which he had thrown on the surface.

The Persians were succeeded by another party of dancers, whom Michael recognized. The journalists also appeared to recognize them, for Blount said to his companion, "These are the Tsiganes of Nijni-Novgorod."

"No doubt of it," cried Alcide. "Their eyes, I imagine, bring more money to these spies than their legs."

In putting them down as agents in the Emir's service, Alcide Jolivet was, by all accounts, not mistaken.

In the first rank of the Tsiganes, Sangarre appeared, superb in her strange and picturesque costume, which set off still further her remarkable beauty.

Sangarre did not dance, but she stood as a statue in the midst of the performers, whose style of dancing was a combination of that of all those countries through which their race had passed—Turkey, Bohemia, Egypt, Italy, and Spain. They were enlivened by the sound of cymbals, which clashed on their arms, and by the hollow sounds of the "daires"—a sort of tambourine played with the fingers.

Sangarre, holding one of those daires, which she played between her hands, encouraged this troupe of veritable corybantes. A young Tsigane, of about fifteen years of age, then advanced. He held in his hand a "doutare," strings of which he made to vibrate by a simple movement of the nails. He sung. During the singing of each couplet, of very peculiar rhythm, a dancer took her position by him and remained there immovable, listening to him, but each time that the burden came from the lips of the young singer, she resumed her dance, dinning in his ears with her daire, and deafening him with the clashing of her cymbals. Then, after the last chorus, the remainder surrounded the Tsigane in the windings of their dance.

At that moment a shower of gold fell from the hands of the Emir and his train, and from the hands of his officers of all ranks; to the noise which the pieces made as they struck the cymbals of the dancers, being added the last murmurs of the doutares and tambourines.

"Lavish as robbers," said Alcide in the ear of his companion. And in fact it was the result of plunder which was falling; for, with the Tartar tomans and sequins, rained also Russian ducats and roubles.

Then silence followed for an instant, and the voice of the executioner, who laid his hand on Michael's shoulder, once more pronounced the words, which this repetition rendered more and more sinister:
"Look while you may"

But this time Alcide observed that the executioner no longer held the saber bare in his hand.

Meanwhile the sun had sunk behind the horizon. A semi-obscurity began to envelop the plain. The mass of cedars and pines became blacker and blacker, and the waters of the Tom, totally obscured in the distance, mingled with the approaching shadows.

But at that instant several hundreds of slaves, bearing lighted torches, entered the square. Led by Sangarre, Tsiganes and Persians reappeared before the Emir's throne, and showed off, by the contrast, their dances of styles so different. The instruments of the Tartar orchestra sounded forth in harmony still more savage, accompanied by the guttural cries of the singers. The kites, which had fallen to the ground, once more winged their way into the sky, each bearing a parti-colored lantern, and under a fresher breeze their harps vibrated with intenser sound in the midst of the aerial illumination.

Then a squadron of Tartars, in their brilliant uniforms, mingled in the dances, whose wild fury was increasing rapidly, and then began a performance which produced a very strange effect. Soldiers came on the ground, armed with bare sabers and long pistols, and, as they executed dances, they made the air re-echo with the sudden detonations of their firearms, which immediately set going the rumbling of the tambourines, and grumblings of the daires, and the gnashing of doutares.

Their arms, covered with a colored powder of some metallic ingredient, after the Chinese fashion, threw long jets—red, green, and blue—so that the groups of dancers seemed to be in the midst of fireworks. In some respects, this performance recalled the military dance of the ancients, in the midst of naked swords; but this Tartar dance was rendered yet more fantastic by the colored fire, which wound, serpent-like, above the dancers, whose dresses seemed to be embroidered with fiery hems. It was like a kaleidoscope of sparks, whose infinite combinations varied at each
movement of the dancers.

Though it may be thought that a Parisian reporter would be perfectly hardened to any scenic effect, which our modern ideas have carried so far, yet Alcide Jolivet could not restrain a slight movement of the head, which at home, between the Boulevard Montmartre and La Madeleine would have said--"Very fair, very fair."

Then, suddenly, at a signal, all the lights of the fantasia were extinguished, the dances ceased, and the performers disappeared. The ceremony was over, and the torches alone lighted up the plateau, which a few instants before had been so brilliantly illuminated.

On a sign from the Emir, Michael was led into the middle of the square.

"Blount," said Alcide to his companion, "are you going to see the end of all this?"

"No, that I am not," replied Blount.

"The readers of the Daily Telegraph are, I hope, not very eager for the details of an execution a la mode Tartare?"

"No more than your cousin!"

"Poor fellow!" added Alcide, as he watched Michael. "That valiant soldier should have fallen on the field of battle!"

"Can we do nothing to save him?" said Blount.

"Nothing!"

The reporters recalled Michael's generous conduct towards them; they knew now through what trials he must have passed, ever obedient to his duty; and in the midst of these Tartars, to whom pity is unknown, they could do nothing for him. Having little desire to be present at the torture reserved for the unfortunate man, they returned to the town. An hour later, they were on the road to Irkutsk, for it was among the Russians that they intended to follow what Alcide called, by anticipation, "the campaign of revenge."

Meantime, Michael was standing ready, his eyes returning the Emir's haughty glance, while his countenance assumed an expression of intense scorn whenever he cast his looks on Ivan Ogareff. He was prepared to die, yet not a single sign of weakness escaped him.

The spectators, waiting around the square, as well as Feofar-Khan's body-guard, to whom this execution was only one of the attractions, were eagerly expecting it. Then, their curiosity satisfied, they would rush off to enjoy the pleasures of intoxication.

The Emir made a sign. Michael was thrust forward by his guards to the foot of the terrace, and Feofar said to him, "You came to see our goings out and comings in, Russian spy. You have seen for the last time. In an instant your eyes will be forever shut to the day."

Michael's fate was to be not death, but blindness; loss of sight, more terrible perhaps than loss of life. The unhappy man was condemned to be blinded.

However, on hearing the Emir's sentence Michael's heart did not grow faint. He remained unmoved, his eyes wide open, as though he wished to concentrate his whole life into one last look. To entreat pity from these savage men would be useless, besides, it would be unworthy of him. He did not even think of it. His thoughts were condensed on his mission, which had apparently so completely failed; on his mother, on Nadia, whom he should never more see! But he let no sign appear of the emotion he felt. Then, a feeling of vengeance to be accomplished came over him. "Ivan," said he, in a stern voice, "Ivan the Traitor, the last menace of my eyes shall be for you!"

Ivan Ogareff shrugged his shoulders.

But Michael was not to be looking at Ivan when his eyes were put out. Marfa Strogoff stood before him.

"My mother!" cried he. "Yes! yes! my last glance shall be for you, and not for this wretch! Stay there, before me! Now I see once more your well-beloved face! Now shall my eyes close as they rest upon it...!"

The old woman, without uttering a word, advanced.

"Take that woman away!" said Ivan.

Two soldiers were about to seize her, but she stepped back and remained standing a few paces from Michael.

The executioner appeared. This time, he held his saber bare in his hand, and this saber he had just drawn from the chafing-dish, where he had brought it to a white heat. Michael was going to be blinded in the Tartar fashion, with a hot blade passed before his eyes!

Michael did not attempt to resist. Nothing existed before his eyes but his mother, whom his eyes seemed to devour. All his life was in that last look.

Marfa Strogoff, her eyes open wide, her arms extended towards where he stood, was gazing at him. The incandescent blade passed before Michael's eyes.

A despairing cry was heard. His aged mother fell senseless to the ground. Michael Strogoff was blind.

His orders executed, the Emir retired with his train. There remained in the square only Ivan Ogareff and the torch bearers. Did the wretch intend to insult his victim yet further, and yet to give him a parting blow?
Ivan Ogareff slowly approached Michael, who, feeling him coming, drew himself up. Ivan drew from his pocket the Imperial letter, he opened it, and with supreme irony he held it up before the sightless eyes of the Czar's courier, saying, "Read, now, Michael Strogoff, read, and go and repeat at Irkutsk what you have read. The true Courier of the Czar is Ivan Ogareff."

This said, the traitor thrust the letter into his breast. Then, without looking round he left the square, followed by the torch-bearers.

Michael was left alone, at a few paces from his mother, lying lifeless, perhaps dead. He heard in the distance cries and songs, the varied noises of a wild debauch. Tomsk, illuminated, glittered and gleamed.

Michael listened. The square was silent and deserted. He went, grooping his way, towards the place where his mother had fallen. He found her with his hand, he bent over her, he put his face close to hers, he listened for the beating of her heart. Then he murmured a few words.

Did Marfa still live, and did she hear her son's words? Whether she did so or not, she made not the slightest movement. Michael kissed her forehead and her white locks. He then raised himself, and, grooping with his foot, trying to stretch out his hand to guide himself, he walked by degrees to the edge of the square.

Suddenly Nadia appeared. She walked straight to her companion. A knife in her hand cut the cords which bound Michael's arms. The blind man knew not who had freed him, for Nadia had not spoken a word.

But this done: "Brother!" said she.

"Nadia!" murmured Michael, "Nadia!"

"Come, brother," replied Nadia, "use my eyes whilst yours sleep. I will lead you to Irkutsk."

CHAPTER VI A FRIEND ON THE HIGHWAY

HALF an hour afterwards, Michael and Nadia had left Tomsk.

Many others of the prisoners were that night able to escape from the Tartars, for officers and soldiers, all more or less intoxicated, had unconsciously relaxed the vigilant guard which they had hitherto maintained. Nadia, after having been carried off with the other prisoners, had been able to escape and return to the square, at the moment when Michael was led before the Emir. There, mingling with the crowd, she had witnessed the terrible scene. Not a cry escaped her when the scorching blade passed before her companion's eyes. She kept, by her strength of will, mute and motionless. A providential inspiration bade her restrain herself and retain her liberty that she might lead Marfa's son to that goal which he had sworn to reach. Her heart for an instant ceased to beat when the aged Siberian woman fell senseless to the ground, but one thought restored her to her former energy. "I will be the blind man's dog," said she.

On Ogareff's departure, Nadia had concealed herself in the shade. She had waited till the crowd left the square. Michael, abandoned as a wretched being from whom nothing was to be feared, was alone. She saw him draw himself towards his mother, bend over her, kiss her forehead, then rise and grope his way in flight.

A few instants later, she and he, hand in hand, had descended the steep slope, when, after having followed the high banks of the Tom to the furthest extremity of the town, they happily found a breach in the inclosure.

The road to Irkutsk was the only one which penetrated towards the east. It could not be mistaken. It was possible that on the morrow, after some hours of carousal, the scouts of the Emir, once more scattering over the steppes, might cut off all communication. It was of the greatest importance therefore to get in advance of them. How could Nadia bear the fatigues of that night, from the 16th to the 17th of August? How could she have found strength for so long a stage? How could her feet, bleeding under that forced march, have carried her thither? It is almost incomprehensible. But it is none the less true that on the next morning, twelve hours after their departure from Tomsk, Michael and she reached the town of Semilowskoe, after a journey of thirty-five miles.

Michael had not uttered a single word. It was not Nadia who held his hand, it was he who held that of his companion during the whole of that night; but, thanks to that trembling little hand which guided him, he had walked at his ordinary pace.

Semilowskoe was almost entirely abandoned. The inhabitants had fled. Not more than two or three houses were still occupied. All that the town contained, useful or precious, had been carried off in wagons. However, Nadia was obliged to make a halt of a few hours. They both required food and rest.

The young girl led her companion to the extremity of the town. There they found an empty house, the door wide open. An old rickety wooden bench stood in the middle of the room, near the high stove which is to be found in all Siberian houses. They silently seated themselves.

Nadia gazed in her companion's face as she had never before gazed. There was more than gratitude, more than pity, in that look. Could Michael have seen her, he would have read in that sweet desolate gaze a world of devotion and tenderness.
The eyelids of the blind man, made red by the heated blade, fell half over his eyes. The pupils seemed to be singularly enlarged. The rich blue of the iris was darker than formerly. The eyelashes and eyebrows were partly burnt, but in appearance, at least, the old penetrating look appeared to have undergone no change. If he could no longer see, if his blindness was complete, it was because the sensibility of the retina and optic nerve was radically destroyed by the fierce heat of the steel.

Then Michael stretched out his hands.
"Are you there, Nadia?" he asked.
"Yes," replied the young girl; "I am close to you, and I will not go away from you, Michael."

At his name, pronounced by Nadia for the first time, a thrill passed through Michael's frame. He perceived that his companion knew all, who he was.
"Nadia," replied he, "we must separate!"
"We separate? How so, Michael?"
"I must not be an obstacle to your journey! Your father is waiting for you at Irkutsk! You must rejoin your father!"
"My father would curse me, Michael, were I to abandon you now, after all you have done for me!"
"Nadia, Nadia," replied Michael, "you should think only of your father!"
"Michael," replied Nadia, "you have more need of me than my father. Do you mean to give up going to Irkutsk?"
"Never!" cried Michael, in a tone which plainly showed that none of his energy was gone.
"But you have not the letter!"
"That letter of which Ivan Ogareff robbed me! Well! I shall manage without it, Nadia! They have treated me as a spy! I will act as a spy! I will go and repeat at Irkutsk all I have seen, all I have heard; I swear it by Heaven above! The traitor shall meet me one day face to face! But I must arrive at Irkutsk before him."
"And yet you speak of our separating, Michael?"
"Nadia, they have taken everything from me!"
"I have some roubles still, and my eyes! I can see for you, Michael; and I will lead you thither, where you could not go alone!"
"And how shall we go?"
"On foot."
"And how shall we live?"
"By begging."
"Let us start, Nadia."
"Come, Michael."

The two young people no longer kept the names "brother" and "sister." In their common misfortune, they felt still closer united. They left the house after an hour's repose. Nadia had procured in the town some morsels of "tchornekhleb," a sort of barley bread, and a little mead, called "meod" in Russia. This had cost her nothing, for she had already begun her plan of begging. The bread and mead had in some degree appeased Michael's hunger and thirst. Nadia gave him the lion's share of this scanty meal. He ate the pieces of bread his companion gave him, drank from the gourd she held to his lips.
"Are you eating, Nadia?" he asked several times.
"Yes, Michael," invariably replied the young girl, who contented herself with what her companion left.

Michael and Nadia quitted Semilowskoe, and once more set out on the laborious road to Irkutsk. The girl bore up in a marvelous way against fatigue. Had Michael seen her, perhaps he would not have had the courage to go on. But Nadia never complained, and Michael, hearing no sigh, walked at a speed he was unable to repress. And why? Did he still expect to keep before the Tartars? He was on foot, without money; he was blind, and if Nadia, his only guide, were to be separated from him, he could only lie down by the side of the road and there perish miserably. But if, on the other hand, by energetic perseverance he could reach Krasnoiarsk, all was perhaps not lost, since the governor, to whom he would make himself known, would not hesitate to give him the means of reaching Irkutsk.

Michael walked on, speaking little, absorbed in his own thoughts. He held Nadia's hand. The two were in incessant communication. It seemed to them that they had no need of words to exchange their thoughts. From time to time Michael said, "Speak to me, Nadia."
"Why should I, Michael? We are thinking together!" the young girl would reply, and contrived that her voice should not betray her extreme fatigue.

But sometimes, as if her heart had ceased to beat for an instant, her limbs tottered, her steps flagged, her arms fell to her sides, she dropped behind. Michael then stopped, he fixed his eyes on the poor girl, as though he would try to pierce the gloom which surrounded him; his breast heaved; then, supporting his companion more than before, he started on afresh.
However, amidst these continual miseries, a fortunate circumstance on that day occurred which it appeared likely would considerably ease their fatigue. They had been walking from Semilowskoe for two hours when Michael stopped.

"Is there no one on the road?"
"Not a single soul," replied Nadia.
"Do you not hear some noise behind us? If they are Tartars we must hide. Keep a good look-out!"
"Wait, Michael!" replied Nadia, going back a few steps to where the road turned to the right.
Michael Strogoff waited alone for a minute, listening attentively.
Nadia returned almost immediately and said, "It is a cart. A young man is leading it."
"Is he alone?"
"Alone."
Michael hesitated an instant. Should he hide? or should he, on the contrary, try to find a place in the vehicle, if not for himself, at least for her? For himself, he would be quite content to lay one hand on the cart, to push it if necessary, for his legs showed no sign of failing him; but he felt sure that Nadia, compelled to walk ever since they crossed the Obi, that is, for eight days, must be almost exhausted. He waited.

The cart was soon at the corner of the road. It was a very dilapidated vehicle, known in the country as a kibitka, just capable of holding three persons. Usually the kibitka is drawn by three horses, but this had but one, a beast with long hair and a very long tail. It was of the Mongol breed, known for strength and courage.

A young man was leading it, with a dog beside him. Nadia saw at once that the young man was Russian; his face was phlegmatic, but pleasant, and at once inspired confidence. He did not appear to be in the slightest hurry; he was not walking fast that he might spare his horse, and, to look at him, it would not have been believed that he was following a road which might at any instant be swarming with Tartars.

Nadia, holding Michael by the hand, made way for the vehicle. The kibitka stopped, and the driver smilingly looked at the young girl.

"And where are you going to in this fashion?" he asked, opening wide his great honest eyes.
At the sound of his voice, Michael said to himself that he had heard it before. And it was satisfactory to him to recognize the man for his brow at once cleared.
"Well, where are you going?" repeated the young man, addressing himself more directly to Michael.
"We are going to Irkutsk," he replied.
"Oh! little father, you do not know that there are still versts and versts between you and Irkutsk?"
"I know it."
"And you are going on foot?"
"On foot."
"You, well! but the young lady?"
"She is my sister," said Michael, who judged it prudent to give again this name to Nadia.
"Yes, your sister, little father! But, believe me, she will never be able to get to Irkutsk!"
"Friend," returned Michael, approaching him, "the Tartars have robbed us of everything, and I have not a copeck to offer you; but if you will take my sister with you, I will follow your cart on foot; I will run when necessary, I will not delay you an hour!"
"Brother," exclaimed Nadia, "I will not! I will not! Sir, my brother is blind!"
"Blind!" repeated the young man, much moved.
"The Tartars have burnt out his eyes!" replied Nadia, extending her hands, as if imploring pity.
"Burnt out his eyes! Oh! poor little father! I am going to Krasnoiarsk. Well, why should not you and your sister mount in the kibitka? By sitting a little close, it will hold us all three. Besides, my dog will not refuse to go on foot; only I don't go fast, I spare my horse."
"Friend, what is your name?" asked Michael.
"My name is Nicholas Pigassof."
"It is a name that I will never forget," said Michael.
"Well, jump up, little blind father. Your sister will be beside you, in the bottom of the cart; I sit in front to drive. There is plenty of good birch bark and straw in the bottom; it's like a nest. Serko, make room!"

The dog jumped down without more telling. He was an animal of the Siberian race, gray hair, of medium size, with an honest big head, just made to pat, and he, moreover, appeared to be much attached to his master.

In a moment more, Michael and Nadia were seated in the kibitka. Michael held out his hands as if to feel for those of Pigassof. "You wish to shake my hands!" said Nicholas. "There they are, little father! shake them as long as it will give you any pleasure."

The kibitka moved on; the horse, which Nicholas never touched with the whip, ambled along. Though Michael
did not gain any in speed, at least some fatigue was spared to Nadia.

Such was the exhaustion of the young girl, that, rocked by the monotonous movement of the kibitka, she soon fell into a sleep, its soundness proving her complete prostration. Michael and Nicholas laid her on the straw as comfortably as possible. The compassionate young man was greatly moved, and if a tear did not escape from Michael's eyes, it was because the red-hot iron had dried up the last!

"She is very pretty," said Nicholas.
"Yes," replied Michael.
"They try to be strong, little father, they are brave, but they are weak after all, these dear little things! Have you come from far,"
"Very far."
"Poor young people! It must have hurt you very much when they burnt your eyes!"
"Very much," answered Michael, turning towards Nicholas as if he could see him.
"Did you not weep?"
"Yes,"
"I should have wept too. To think that one could never again see those one loves. But they can see you, however; that's perhaps some consolation!"
"Yes, perhaps. Tell me, my friend," continued Michael, "have you never seen me anywhere before?"
"You, little father? No, never.
"The sound of your voice is not unknown to me."
"Why!" returned Nicholas, smiling, "he knows the sound of my voice! Perhaps you ask me that to find out where I come from. I come from Kolyvan."
"From Kolyvan?" repeated Michael, "Then it was there I met you; you were in the telegraph office?"
"That may be," replied Nicholas. "I was stationed there. I was the clerk in charge of the messages."
"And you stayed at your post up to the last moment?"
"Why, it's at that moment one ought to be there!"
"It was the day when an Englishman and a Frenchman were disputing, roubles in hand, for the place at your wicket, and the Englishman telegraphed some poetry."
"That is possible, but I do not remember it."
"What! you do not remember it?"
"I never read the dispatches I send. My duty being to forget them, the shortest way is not to know them."

This reply showed Nicholas Pigassof's character. In the meanwhile the kibitka pursued its way, at a pace which Michael longed to render more rapid. But Nicholas and his horse were accustomed to a pace which neither of them would like to alter. The horse went for two hours and rested one--so on, day and night. During the halts the horse grazed, the travelers ate in company with the faithful Serko. The kibitka was provisioned for at least twenty persons, and Nicholas generously placed his supplies at the disposal of his two guests, whom he believed to be brother and sister.

After a day's rest, Nadia recovered some strength. Nicholas took the best possible care of her. The journey was being made under tolerable circumstances, slowly certainly, but surely. It sometimes happened that during the night, Nicholas, although driving, fell asleep, and snored with a clearness which showed the calmness of his conscience. Perhaps then, by looking close, Michael's hand might have been seen feeling for the reins, and giving the horse a more rapid pace, to the great astonishment of Serko, who, however, said nothing. The trot was exchanged for the amble as soon as Nicholas awoke, but the kibitka had not the less gained some versts.

Thus they passed the river Ichimsk, the villages of Ichisnokoe, Berikylokoe, Kuskoe, the river Marunsk, the village of the same name, Bogostowskoe, and, lastly, the Ichoula, a little stream which divides Western from Eastern Siberia. The road now lay sometimes across wide moors, which extended as far as the eye could reach, sometimes through thick forests of firs, of which they thought they should never get to the end. Everywhere was a desert; the villages were almost entirely abandoned. The peasants had fled beyond the Yenisei, hoping that this wide river would perhaps stop the Tartars.

On the 22d of August, the kibitka entered the town of Atchinsk, two hundred and fifty miles from Tomsk. Eighty miles still lay between them and Krasnoiarsk.

No incident had marked the journey. For the six days during which they had been together, Nicholas, Michael, and Nadia had remained the same, the one in his unchange-able calm, the other two, uneasy, and thinking of the time when their companion would leave them.

Michael saw the country through which they traveled with the eyes of Nicholas and the young girl. In turns, they each described to him the scenes they passed. He knew whether he was in a forest or on a plain, whether a hut was on the steppe, or whether any Siberian was in sight. Nicholas was never silent, he loved to talk, and, from his
peculiar way of viewing things, his friends were amused by his conversation. One day, Michael asked him what sort of weather it was.

"Fine enough, little father," he answered, "but soon we shall feel the first winter frosts. Perhaps the Tartars will go into winter quarters during the bad season."

Michael Strogoff shook his head with a doubtful air.

"You do not think so, little father?" resumed Nicholas. "You think that they will march on to Irkutsk?"

"I fear so," replied Michael.

"Yes... you are right; they have with them a bad man, who will not let them loiter on the way. You have heard speak of Ivan Ogareff?"

"Yes."

"You know that it is not right to betray one's country!"

"No... it is not right..." answered Michael, who wished to remain unmoved.

"Little father," continued Nicholas, "it seems to me that you are not half indignant enough when Ivan Ogareff is spoken of. Your Russian heart ought to leap when his name is uttered."

"Believe me, my friend, I hate him more than you can ever hate him," said Michael.

"It is not possible," replied Nicholas; "no, it is not possible! When I think of Ivan Ogareff, of the harm which he is doing to our sacred Russia, I get into such a rage that if I could get hold of him--"

"If you could get hold of him, friend?"

"I think I should kill him."

"And I, I am sure of it," returned Michael quietly.

CHAPTER VII THE PASSAGE OF THE YENISEI

At nightfall, on the 25th of August, the kibitka came in sight of Krasnoiarsk. The journey from Tomsk had taken eight days. If it had not been accomplished as rapidly as it might, it was because Nicholas had slept little. Consequently, it was impossible to increase his horse's pace, though in other hands, the journey would not have taken sixty hours.

Happily, there was no longer any fear of Tartars. Not a scout had appeared on the road over which the kibitka had just traveled. This was strange enough, and evidently some serious cause had prevented the Emir's troops from marching without delay upon Irkutsk. Something had occurred. A new Russian corps, hastily raised in the government of Yeniseisk, had marched to Tomsk to endeavor to retake the town. But, being too weak to withstand the Emir's troops, now concentrated there, they had been forced to effect a retreat. Feofar-Khan, including his own soldiers, and those of the Khanats of Khokhand and Koun-douze, had now under his command two hundred and fifty thousand men, to which the Russian government could not as yet oppose a sufficient force. The invasion could not, therefore, be immediately stopped, and the whole Tartar army might at once march upon Irkutsk. The battle of Tomsk was on the 22nd of August, though this Michael did not know, but it explained why the vanguard of the Emir's army had not appeared at Krasnoiarsk by the 25th.

However, though Michael Strogoff could not know the events which had occurred since his departure, he at least knew that he was several days in advance of the Tartars, and that he need not despair of reaching before them the town of Irkutsk, still six hundred miles distant.

Besides, at Krasnoiarsk, of which the population is about twelve thousand souls, he depended upon obtaining some means of transport. Since Nicholas Pigassof was to stop in that town, it would be necessary to replace him by a guide, and to change the kibitka for another more rapid vehicle. Michael, after having addressed himself to the governor of the town, and established his identity and quality as Courier of the Czar—which would be easy—doubted not that he would be enabled to get to Irkutsk in the shortest possible time. He would thank the good Nicholas Pigassof, and set out immediately with Nadia, for he did not wish to leave her until he had placed her in her father's arms. Though Nicholas had resolved to stop at Krasnoiarsk, it was only as he said, "on condition of finding employment there." In fact, this model clerk, after having stayed to the last minute at his post in Kolyvan, was endeavoring to place himself again at the disposal of the government. "Why should I receive a salary which I have not earned?" he would say.

In the event of his services not being required at Krasnoiarsk, which it was expected would be still in telegraphic communication with Irkutsk, he proposed to go to Oudinsk, or even to the capital of Siberia itself. In the latter case, he would continue to travel with the brother and sister; and where would they find a surer guide, or a more devoted friend?

The kibitka was now only half a verst from Krasnoiarsk. The numerous wooden crosses which are erected at the approaches to the town, could be seen to the right and left of the road. It was seven in the evening; the outline of the
churches and of the houses built on the high bank of the Yenisei were clearly defined against the evening sky, and the waters of the river reflected them in the twilight.

"Where are we, sister?" asked Michael.

"Half a verst from the first houses," replied Nadia.

"Can the town be asleep?" observed Michael. "Not a sound strikes my ear."

"And I cannot see the slightest light, nor even smoke mounting into the air," added Nadia.

"What a queer town!" said Nicholas. "They make no noise in it, and go to bed uncommonly early!"

A presentiment of impending misfortune passed across Michael's heart. He had not said to Nadia that he had placed all his hopes on Krasnoiarsk, where he expected to find the means of safely finishing his journey. He much feared that his anticipations would again be disappointed.

But Nadia had guessed his thoughts, although she could not understand why her companion should be so anxious to reach Irkutsk, now that the Imperial letter was gone. She one day said something of the sort to him. "I have sworn to go to Irkutsk," he replied.

But to accomplish his mission, it was necessary that at Krasnoiarsk he should find some more rapid mode of locomotion. "Well, friend," said he to Nicholas, "why are we not going on?"

"Because I am afraid of waking up the inhabitants of the town with the noise of my carriage!" And with a light fleck of the whip, Nicholas put his horse in motion.

Ten minutes after they entered the High Street, Krasnoiarsk was deserted; there was no longer an Athenian in this "Northern Athens," as Madame de Bourboulon has called it. Not one of their dashing equipages swept through the wide, clean streets. Not a pedestrian enlivened the footpaths raised at the bases of the magnificent wooden houses, of monumental aspect! Not a Siberian belle, dressed in the last French fashion, promenaded the beautiful park, cleared in a forest of birch trees, which stretches away to the banks of the Yenisei! The great bell of the cathedral was dumb; the chimes of the churches were silent. Here was complete desolation. There was no longer a living being in this town, lately so lively!

The last telegram sent from the Czar's cabinet, before the rupture of the wire, had ordered the governor, the garrison, the inhabitants, whoever they might be, to leave Krasnoiarsk, to carry with them any articles of value, or which might be of use to the Tartars, and to take refuge at Irkutsk. The same injunction was given to all the villages of the province. It was the intention of the Muscovite government to lay the country desert before the invaders. No one thought for an instant of disputing these orders. They were executed, and this was the reason why not a single human being remained in Krasnoiarsk.

Michael Strogoff, Nadia, and Nicholas passed silently through the streets of the town. They felt half-stupefied. They themselves made the only sound to be heard in this dead city. Michael allowed nothing of what he felt to appear, but he inwardly raged against the bad luck which pursued him, his hopes being again disappointed.

"Alack, alack!" cried Nicholas, "I shall never get any employment in this desert!"

"Friend," said Nadia, "you must go on with us."

"I must indeed!" replied Nicholas. "The wire is no doubt still working between Oudinsk and Irkutsk, and there--Shall we start, little father?"

"Let us wait till to-morrow," answered Michael.

"You are right," said Nicholas. "We have the Yenisei to cross, and need light to see our way there!"

"To see!" murmured Nadia, thinking of her blind companion.

Nicholas heard her, and turning to Michael, "Forgive me, little father," said he. "Alas! night and day, it is true, are all the same to you!"

"Do not reproach yourself, friend," replied Michael, pressing his hand over his eyes. "With you for a guide I can still act. Take a few hours' repose. Nadia must rest too. To-morrow we will recommence our journey!"

Michael and his friends had not to search long for a place of rest. The first house, the door of which they pushed open, was empty, as well as all the others. Nothing could be found within but a few heaps of leaves. For want of better fodder the horse had to content himself with this scanty nourishment. The provisions of the kibitka were not yet exhausted, so each had a share. Then, after having knelt before a small picture of the Panaghia, hung on the wall, and still lighted up by a flickering lamp, Nicholas and the young girl slept, whilst Michael, over whom sleep had no influence, watched.

Before daybreak the next morning, the 26th of August, the horse was drawing the kibitka through the forests of birch trees towards the banks of the Yenisei. Michael was in much anxiety. How was he to cross the river, if, as was probable, all boats had been destroyed to retard the Tartars' march? He knew the Yenisei, its width was considerable, its currents strong. Ordinarily by means of boats specially built for the conveyance of travelers, carriages, and horses, the passage of the Yenisei takes about three hours, and then it is with extreme difficulty that the boats reach the opposite bank. Now, in the absence of any ferry, how was the kibitka to get from one bank to the other?
Day was breaking when the kibitka reached the left bank, where one of the wide alleys of the park ended. They were about a hundred feet above the Yenisei, and could therefore survey the whole of its wide course.

"Do you see a boat?" asked Michael, casting his eyes eagerly about from one side to the other, mechanically, no doubt, as if he could really see.

"It is scarcely light yet, brother," replied Nadia. "The fog is still thick, and we cannot see the water."

"But I hear it roaring," said Michael.

Indeed, from the fog issued a dull roaring sound. The waters being high rushed down with tumultuous violence. All three waited until the misty curtain should rise. The sun would not be long in dispersing the vapors.

"Well?" asked Michael.

"The fog is beginning to roll away, brother," replied Nadia, "and it will soon be clear."

"Then you do not see the surface of the water yet?"

"Not yet."

"Have patience, little father," said Nicholas. "All this will soon disappear. Look! here comes the breeze! It is driving away the fog. The trees on the opposite hills are already appearing. It is sweeping, flying away. The kindly rays of the sun have condensed all that mass of mist. Ah! how beautiful it is, my poor fellow, and how unfortunate that you cannot see such a lovely sight!"

"Do you see a boat?" asked Michael.

"I see nothing of the sort," answered Nicholas.

"Look well, friend, on this and the opposite bank, as far as your eye can reach. A raft, even a canoe?"

Nicholas and Nadia, grasping the bushes on the edge of the cliff, bent over the water. The view they thus obtained was extensive. At this place the Yenisei is not less than a mile in width, and forms two arms, of unequal size, through which the waters flow swiftly. Between these arms lie several islands, covered with alders, willows, and poplars, looking like verdant ships, anchored in the river. Beyond rise the high hills of the Eastern shore, crowned with forests, whose tops were then empurpled with light. The Yenisei stretched on either side as far as the eye could reach. The beautiful panorama lay before them for a distance of fifty versts.

But not a boat was to be seen. All had been taken away or destroyed, according to order. Unless the Tartars should bring with them materials for building a bridge of boats, their march towards Irkutsk would certainly be stopped for some time by this barrier, the Yenisei.

"I remember," said Michael, "that higher up, on the outskirts of Krasnoiarsk, there is a little quay. There the boats touch. Friend, let us go up the river, and see if some boat has not been forgotten on the bank."

Nadia seized Michael's hand and started off at a rapid pace in the direction indicated. If only a boat or a barge large enough to hold the kibitka could be found, or even one that would carry just themselves, Michael would not hesitate to attempt the passage! Twenty minutes after, all three had reached the little quay, with houses on each side quite down to the water's edge. It was like a village standing beyond the town of Krasnoiarsk.

But not a boat was on the shore, not a barge at the little wharf, nothing even of which a raft could be made large enough to carry three people. Michael questioned Nicholas, who made the discouraging reply that the crossing appeared to him absolutely impracticable.

"We shall cross!" answered Michael.

The search was continued. They examined the houses on the shore, abandoned like all the rest of Krasnoiarsk. They had merely to push open the doors and enter. The cottages were evidently those of poor people, and quite empty. Nicholas visited one, Nadia entered another, and even Michael went here and there and felt about, hoping to light upon some article that might be useful.

Nicholas and the girl had each fruitlessly rummaged these cottages and were about to give up the search, when they heard themselves called. Both ran to the bank and saw Michael standing on the threshold of a door.

"Come!" he exclaimed. Nicholas and Nadia went towards him and followed him into the cottage.

"What are these?" asked Michael, touching several objects piled up in a corner.

"They are leathern bottles," answered Nicholas.

"Are they full?"

"Yes, full of koumyss. We have found them very opportunely to renew our provisions!"

"Koumyss" is a drink made of mare's or camel's milk, and is very sustaining, and even intoxicating; so that Nicholas and his companions could not but congratulate themselves on the discovery.

"Save one," said Michael, "but empty the others."

"Directly, little father."

"These will help us to cross the Yenisei."

"And the raft?"

"Will be the kibitka itself, which is light enough to float. Besides, we will sustain it, as well as the horse, with
these bottles."

"Well thought of, little father," exclaimed Nicholas, "and by God's help we will get safely over... though perhaps
not in a straight line, for the current is very rapid!"

"What does that matter?" replied Michael. "Let us get across first, and we shall soon find out the road to Irkutsk
on the other side of the river."

"To work, then," said Nicholas, beginning to empty the bottles.

One full of koumyss was reserved, and the rest, with the air carefully fastened in, were used to form a floating
apparatus. Two bottles were fastened to the horse's sides to support it in the water. Two others were attached to the
shafts to keep them on a level with the body of the machine, thus transformed into a raft. This work was soon
finished.

"You will not be afraid, Nadia?" asked Michael.

"No, brother," answered the girl.

"And you, friend?"

"I?" cried Nicholas. "I am now going to have one of my dreams realized--that of sailing in a cart."

At the spot where they were now standing, the bank sloped, and was suitable for the launching of the kibitka.
The horse drew it into the water, and they were soon both floating. As to Serko, he was swimming bravely.

The three passengers, seated in the vehicle, had with due precaution taken off their shoes and stockings; but,
thanks to the bottles, the water did not even come over their ankles. Michael held the reins, and, according to
Nicholas's directions, guided the animal obliquely, but cautiously, so as not to exhaust him by struggling against the
current. So long as the kibitka went with the current all was easy, and in a few minutes it had passed the quays of
Krasnoiarsk. It drifted northwards, and it was soon evident that it would only reach the opposite bank far below the
town. But that mattered little. The crossing would have been made without great difficulty, even on this imperfect
apparatus, had the current been regular; but, unfortunately, there were whirlpools in numbers, and soon the kibitka,
notwithstanding all Michael's efforts, was irresistibly drawn into one of these.

There the danger was great. The kibitka no longer drifted, but spun rapidly round, inclining towards the center of
the eddy, like a rider in a circus. The horse could scarcely keep his head above water, and ran a great risk of being
suffocated. Serko had been obliged to take refuge in the carriage.

Michael knew what was happening. He felt himself drawn round in a gradually narrowing line, from which they
could not get free. How he longed to see, to be better able to avoid this peril, but that was no longer possible. Nadia
was silent, her hands clinging to the sides of the cart, which was inclining more and more towards the center of
depression.

And Nicholas, did he not understand the gravity of the situation? Was it with him phlegm or contempt of danger,
courage or indifference? Was his life valueless in his eyes, and, according to the Eastern expression, "an hotel for
five days," which, whether one is willing or not, must be left the sixth? At any rate, the smile on his rosy face never
faded for an instant.

The kibitka was thus in the whirlpool, and the horse was nearly exhausted, when, all at once, Michael, throwing
off such of his garments as might impede him, jumped into the water; then, seizing with a strong hand the bridle of
the terrified horse, he gave him such an impulse that he managed to struggle out of the circle, and getting again into
the current, the kibitka drifted along anew.

"Hurrah!" exclaimed Nicholas.

Two hours after leaving the wharf, the kibitka had crossed the widest arm of the river, and had landed on an
island more than six versts below the starting point.

There the horse drew the cart onto the bank, and an hour's rest was given to the courageous animal; then the
island having been crossed under the shade of its magnificent birches, the kibitka found itself on the shore of the
smaller arm of the Yenisei.

This passage was much easier; no whirlpools broke the course of the river in this second bed; but the current was
so rapid that the kibitka only reached the opposite side five versts below. They had drifted eleven versts in all.

These great Siberian rivers across which no bridges have as yet been thrown, are serious obstacles to the facility
of communication. All had been more or less unfortunate to Michael Strogoff. On the Irtych, the boat which carried
him and Nadia had been attacked by Tartars. On the Obi, after his horse had been struck by a bullet, he had only by
a miracle escaped from the horsemen who were pursuing him. In fact, this passage of the Yenisei had been
performed the least disastrously.

"That would not have been so amusing," exclaimed Nicholas, rubbing his hands, as they disembarked on the
right bank of the river, "if it had not been so difficult."

"That which has only been difficult to us, friend," answered Michael Strogoff, "will, perhaps, be impossible to
the Tartars."
CHAPTER VIII A HARE CROSSES THE ROAD

MICHAEL STROGOFF might at last hope that the road to Irkutsk was clear. He had distanced the Tartars, now detained at Tomsk, and when the Emir's soldiers should arrive at Krasnoiarsk they would find only a deserted town. There being no communication between the two banks of the Yenisei, a delay of some days would be caused until a bridge of boats could be established, and to accomplish this would be a difficult undertaking. For the first time since the encounter with Ivan Ogareff at Omsk, the courier of the Czar felt less uneasy, and began to hope that no fresh obstacle would delay his progress.

The road was good, for that part of it which extends between Krasnoiarsk and Irkutsk is considered the best in the whole journey; fewer jolts for travelers, large trees to shade them from the heat of the sun, sometimes forests of pines or cedars covering an extent of a hundred versts. It was no longer the wide steppe with limitless horizon; but the rich country was empty. Everywhere they came upon deserted villages. The Siberian peasantry had vanished. It was a desert, but a desert by order of the Czar.

The weather was fine, but the air, which cooled during the night, took some time to get warm again. Indeed it was now near September, and in this high region the days were sensibly shortening. Autumn here lasts but a very little while, although this part of Siberian territory is not situated above the fifty-fifth parallel, that of Edinburgh and Copenhagen. However, winter succeeds summer almost unexpectedly. These winters of Asiatic Russia may be said to be preocious, considering that during them the thermometer falls until the mercury is frozen nearly 42 degrees below zero, and that 20 degrees below zero is considered an unsupportable temperature.

The weather favored our travelers. It was neither stormy nor rainy. The health of Nadia and Michael was good, and since leaving Tomsk they had gradually recovered from their past fatigues.

As to Nicholas Pigassof, he had never been better in his life. To him this journey was a trip, an agreeable excursion in which he employed his enforced holiday.

"Decidedly," said he, "this is pleasanter than sitting twelve hours a day, perched on a stool, working the manipulator!"

Michael had managed to get Nicholas to make his horse quicken his pace. To obtain this result, he had confided to Nicholas that Nadia and he were on their way to join their father, exiled at Irkutsk, and that they were very anxious to get there. Certainly, it would not do to overwork the horse, for very probably they would not be able to exchange him for another; but by giving him frequent rests--every ten miles, for instance--forty miles in twenty-four hours could easily be accomplished. Besides, the animal was strong, and of a race calculated to endure great fatigue. He was in no want of rich pasturage along the road, the grass being thick and abundant. Therefore, it was possible to demand an increase of work from him.

Nicholas gave in to all these reasons. He was much moved at the situation of these two young people, going to share their father's exile. Nothing had ever appeared so touching to him. With what a smile he said to Nadia: "Divine goodness! what joy will Mr. Korpanoff feel, when his eyes behold you, when his arms open to receive you! If I go to Irkutsk--and that appears very probable now--will you permit me to be present at that interview! You will, will you not?" Then, striking his forehead: "But, I forgot, what grief too when he sees that his poor son is blind! Ah! everything is mingled in this world!"

However, the result of all this was the kibitka went faster, and, according to Michael's calculations, now made almost eight miles an hour.

After crossing the little river Biriousa, the kibitka reached Biriousensk on the morning of the 4th of September. There, very fortunately, for Nicholas saw that his provisions were becoming exhausted, he found in an oven a dozen "pogatchas," a kind of cake prepared with sheep's fat and a large supply of plain boiled rice. This increase was very opportune, for something would soon have been needed to replace the koumyss with which the kibitka had been stored at Krasnoiarsk.

After a halt, the journey was continued in the afternoon. The distance to Irkutsk was not now much over three hundred miles. There was not a sign of the Tartar vanguard. Michael Strogoff had some grounds for hoping that his journey would not be again delayed, and that in eight days, or at most ten, he would be in the presence of the Grand Duke.

On leaving Biriousinsk, a hare ran across the road, in front of the kibitka. "Ah!" exclaimed Nicholas. "What is the matter, friend?" asked Michael quickly, like a blind man whom the least sound arouses.

"Did you not see?" said Nicholas, whose bright face had become suddenly clouded. Then he added, "Ah! no! you could not see, and it's lucky for you, little father!"

"But I saw nothing," said Nadia.

"So much the better! So much the better! But I--I saw!"
"What was it then?" asked Michael.
"A hare crossing our road!" answered Nicholas.

In Russia, when a hare crosses the path, the popular belief is that it is the sign of approaching evil. Nicholas, superstitious like the greater number of Russians, stopped the kibitka.

Michael understood his companion's hesitation, without sharing his credulity, and endeavored to reassure him, "There is nothing to fear, friend," said he.

"Nothing for you, nor for her, I know, little father," answered Nicholas, "but for me!"

"It is my fate," he continued. And he put his horse in motion again. However, in spite of these forebodings the day passed without any accident.

At twelve o'clock the next day, the 6th of September, the kibitka halted in the village of Alsalevok, which was as deserted as the surrounding country. There, on a doorstep, Nadia found two of those strong-bladed knives used by Siberian hunters. She gave one to Michael, who concealed it among his clothes, and kept the other herself.

Nicholas had not recovered his usual spirits. The ill-omen had affected him more than could have been believed, and he who formerly was never half an hour without speaking, now fell into long reveries from which Nadia found it difficult to arouse him. The kibitka rolled swiftly along the road. Yes, swiftly! Nicholas no longer thought of being so careful of his horse, and was as anxious to arrive at his journey's end as Michael himself. Notwithstanding his fatalism, and though resigned, he would not believe himself in safety until within the walls of Irkutsk. Many Russians would have thought as he did, and more than one would have turned his horse and gone back again, after a hare had crossed his path.

Some observations made by him, the justice of which was proved by Nadia transmitting them to Michael, made them fear that their trials were not yet over. Though the land from Krasnoiarsk had been respected in its natural productions, its forests now bore trace of fire and steel; and it was evident that some large body of men had passed that way.

Twenty miles before Nijni-Oudinsk, the indications of recent devastation could not be mistaken, and it was impossible to attribute them to others than the Tartars. It was not only that the fields were trampled by horse's feet, and that trees were cut down. The few houses scattered along the road were not only empty, some had been partly demolished, others half burnt down. The marks of bullets could be seen on their walls.

Michael's anxiety may be imagined. He could no longer doubt that a party of Tartars had recently passed that way, and yet it was impossible that they could be the Emir's soldiers, for they could not have passed without being seen. But then, who were these new invaders, and by what out-of-the-way path across the steppe had they been able to join the highroad to Irkutsk? With what new enemies was the Czar's courier now to meet?

He did not communicate his apprehensions either to Nicholas or Nadia, not wishing to make them uneasy. Besides, he had resolved to continue his way, as long as no insurmountable obstacle stopped him. Later, he would see what it was best to do. During the ensuing day, the recent passage of a large body of foot and horse became more and more apparent. Smoke was seen above the horizon. The kibitka advanced cautiously. Several houses in deserted villages still burned, and could not have been set on fire more than four and twenty hours before.

At last, during the day, on the 8th of September, the kibitka stopped suddenly. The horse refused to advance. Serko barked furiously.

"What is the matter?" asked Michael.

"A corpse!" replied Nicholas, who had leapt out of the kibitka. The body was that of a moujik, horribly mutilated, and already cold. Nicholas crossed himself. Then, aided by Michael, he carried the body to the side of the road. He would have liked to give it decent burial, that the wild beasts of the steppe might not feast on the miserable remains, but Michael could not allow him the time.

"Come, friend, come!" he exclaimed, "we must not delay, even for an hour!" And the kibitka was driven on.

Besides, if Nicholas had wished to render the last duties to all the dead bodies they were now to meet with on the Siberian highroad, he would have had enough to do! As they approached Nijni-Oudinsk, they were found by twenties, stretched on the ground.

It was, however, necessary to follow this road until it was manifestly impossible to do so longer without falling into the hands of the invaders. The road they were following could not be abandoned, and yet the signs of devastation and ruin increased at every village they passed through. The blood of the victims was not yet dry. As to gaining information about what had occurred, that was impossible. There was not a living being left to tell the tale.

About four o'clock in the afternoon of this day, Nicholas caught sight of the tall steeples of the churches of Nijni-Oudinsk. Thick vapors, which could not have been clouds, were floating around them.

Nicholas and Nadia looked, and communicated the result of their observations to Michael. They must make up their minds what to do. If the town was abandoned, they could pass through without risk, but if, by some inexplicable maneuver, the Tartars occupied it, they must at every cost avoid the place.
"Advance cautiously," said Michael Strogoff, "but advance!"

A verst was soon traversed.

"Those are not clouds, that is smoke!" exclaimed Nadia. "Brother, they are burning the town!"

It was, indeed, only too plain. Flashes of light appeared in the midst of the vapor. It became thicker and thicker as it mounted upwards. But were they Tartars who had done this? They might be Russians, obeying the orders of the Grand Duke. Had the government of the Czar determined that from Krasnoiarsk, from the Yenisei, not a town, not a village should offer a refuge to the Emir's soldiers? What was Michael to do?

He was undecided. However, having weighed the pros and cons, he thought that whatever might be the difficulties of a journey across the steppe without a beaten path, he ought not to risk capture a second time by the Tartars. He was just proposing to Nicholas to leave the road, when a shot was heard on their right. A ball whistled, and the horse of the kibitka fell dead, shot through the head.

A dozen horsemen dashed forward, and the kibitka was surrounded. Before they knew where they were, Michael, Nadia, and Nicholas were prisoners, and were being dragged rapidly towards Nijni-Oudinsk.

Michael, in this second attack, had lost none of his presence of mind. Being unable to see his enemies, he had not thought of defending himself. Even had he possessed the use of his eyes, he would not have attempted it. The consequences would have been his death and that of his companions. But, though he could not see, he could listen and understand what was said.

From their language he found that these soldiers were Tartars, and from their words, that they preceded the invading army.

In short, what Michael learnt from the talk at the present moment, as well as from the scraps of conversation he overheard later, was this. These men were not under the direct orders of the Emir, who was now detained beyond the Yenisei. They made part of a third column chiefly composed of Tartars from the khanats of Khokland and Koondooz, with which Feofar's army was to affect a junction in the neighborhood of Irkutsk.

By Ogareff's advice, in order to assure the success of the invasion in the Eastern provinces, this column had skirted the base of the Altai Mountains. Pillaging and ravaging, it had reached the upper course of the Yenisei. There, guessing what had been done at Krasnoiarsk by order of the Czar, and to facilitate the passage of the river to the Emir's troops, this column had launched a flotilla of boats, which would enable Feofar to cross and resume the road to Irkutsk. Having done this, it had descended the valley of the Yenisei and struck the road on a level with Alsalevsk. From this little town began the frightful course of ruin which forms the chief part of Tartar warfare. Nijni-Oudinsk had shared the common fate, and the Tartars, to the number of fifty thousand, had now quitted it to take up a position before Irkutsk. Before long, they would be reinforced by the Emir's troops.

Such was the state of affairs at this date, most serious for this isolated part of Eastern Siberia, and for the comparatively few defenders of its capital.

It can be imagined with what thoughts Michael's mind was now occupied! Who could have been astonished had he, in his present situation, lost all hope and all courage? Nothing of the sort, however; his lips muttered no other words than these: "I will get there!"

Half an hour after the attack of the Tartar horsemen, Michael Strogoff, Nadia, and Nicholas entered Nijni-Oudinsk. The faithful dog followed them, though at a distance. They could not stay in the town, as it was in flames, and about to be left by the last of the marauders. The prisoners were therefore thrown on horses and hurried away; Nicholas resigned as usual, Nadia, her faith in Michael unshaken, and Michael himself, apparently indifferent, but ready to seize any opportunity of escaping.

The Tartars were not long in perceiving that one of their prisoners was blind, and their natural barbarity led them to make game of their unfortunate victim. They were traveling fast. Michael's horse, having no one to guide him, often started aside, and so made confusion among the ranks. This drew on his rider such abuse and brutality as wrung Nadia's heart, and filled Nicholas with indignation. But what could they do? They could not speak the Tartar language, and their assistance was mercilessly refused. Soon it occurred to these men, in a refinement of cruelty, to exchange the horse Michael was riding for one which was blind. The motive of the change was explained by a remark which Michael overheard, "Perhaps that Russian can see, after all!"

Michael was placed on this horse, and the reins ironically put into his hand. Then, by dint of lashing, throwing stones, and shouting, the animal was urged into a gallop. The horse, not being guided by his rider, blind as himself, sometimes ran into a tree, sometimes went quite off the road—in consequence, collisions and falls, which might have been extremely dangerous.

Michael did not complain. Not a murmur escaped him. When his horse fell, he waited until it got up. It was, indeed, soon assisted up, and the cruel fun continued. At sight of this wicked treatment, Nicholas could not contain himself; he endeavored to go to his friend's aid. He was prevented, and treated brutally.

This game would have been prolonged, to the Tartars' great amusement, had not a serious accident put an end to
it. On the 10th of September the blind horse ran away, and made straight for a pit, some thirty or forty feet deep, at
the side of the road.

Nicholas tried to go after him. He was held back. The horse, having no guide, fell with his rider to the bottom.
Nicholas and Nadia uttered a piercing cry! They believed that their unfortunate companion had been killed.
However, when they went to his assistance, it was found that Michael, having been able to throw himself out of
the saddle, was unhurt, but the miserable horse had two legs broken, and was quite useless. He was left there to die
without being put out of his suffering, and Michael, fastened to a Tartar's saddle, was obliged to follow the
detachment on foot.

Even now, not a protest, not a complaint! He marched with a rapid step, scarcely drawn by the cord which tied
him. He was still "the Man of Iron," of whom General Kissoff had spoken to the Czar!

The next day, the 11th of September, the detachment passed through the village of Chibarlinskoe. Here an
incident occurred which had serious consequences. It was nightfall. The Tartar horsemen, having halted, were more
or less intoxicated. They were about to start. Nadia, who till then, by a miracle, had been respectfully treated by the
soldiers, was insulted by one of them.

Michael could not see the insult, nor the insulter, but Nicholas saw for him. Then, quietly, without thinking,
without perhaps knowing what he was doing, Nicholas walked straight up to the man, and, before the latter could
make the least movement to stop him, had seized a pistol from his holster and discharged it full at his breast.
The officer in command of the detachment hastened up on hearing the report. The soldiers would have cut the
unfortunate Nicholas to pieces, but at a sign from their officer, he was bound instead, placed across a horse, and the
detachment galloped off.
The rope which fastened Michael, gnawed through by him, broke by the sudden start of the horse, and the half-
tipsy rider galloped on without perceiving that his prisoner had escaped.
Michael and Nadia found themselves alone on the road.

CHAPTER IX IN THE STEPPE

MICHAEL STROGOFF and Nadia were once more as free as they had been in the journey from Perm to the
banks of the Irtych. But how the conditions under which they traveled were altered! Then, a comfortable tarantass,
fresh horses, well-kept post-horses assured the rapidity of their journey. Now they were on foot; it was utterly
impossible to procure any other means of locomotion, they were without resources, not knowing how to obtain even
food, and they had still nearly three hundred miles to go! Moreover, Michael could now only see with Nadia's eyes.
As to the friend whom chance had given them, they had just lost him, and fearful might be his fate. Michael had
thrown himself down under the brushwood at the side of the road. Nadia stood beside him, waiting for the word
from him to continue the march.

It was ten o'clock. The sun had more than three hours before disappeared below the horizon. There was not a
house in sight. The last of the Tartars was lost in the distance. Michael and Nadia were quite alone.
"What will they do with our friend?" exclaimed the girl. "Poor Nicholas! Our meeting will have been fatal to
him!" Michael made no response.
"Michael," continued Nadia, "do you not know that he defended you when you were the Tartars' sport; that he
risked his life for me?"
Michael was still silent. Motionless, his face buried in his hands; of what was he thinking? Perhaps, although he
did not answer, he heard Nadia speak.
"Yes! he heard her, for when the young girl added, "Where shall I lead you, Michael?"
"To Irkutsk!" he replied.
"By the highroad?"
"Yes, Nadia."
Michael was still the same man who had sworn, whatever happened, to accomplish his object. To follow the
highroad, was certainly to go the shortest way. If the vanguard of Feofar-Khan's troops appeared, it would then be
time to strike across the country.
Nadia took Michael's hand, and they started.
The next morning, the 13th of September, twenty versts further, they made a short halt in the village of
Joulounov-skoe. It was burnt and deserted. All night Nadia had tried to see if the body of Nicholas had not been left
on the road, but it was in vain that she looked among the ruins, and searched among the dead. Was he reserved for
some cruel torture at Irkutske?
Nadia, exhausted with hunger, was fortunate enough to find in one of the houses a quantity of dried meat and
"soukharis," pieces of bread, which, dried by evaporation, preserve their nutritive qualities for an indefinite time.
Michael and the girl loaded themselves with as much as they could carry. They had thus a supply of food for several days, and as to water, there would be no want of that in a district rendered fertile by the numerous little affluents of the Angara.

They continued their journey. Michael walked with a firm step, and only slackened his pace for his companion's sake. Nadia, not wishing to retard him, obliged herself to walk. Happily, he could not see to what a miserable state fatigue had reduced her.

However, Michael guessed it. "You are quite done up, poor child," he said sometimes.

"No," she would reply.

"When you can no longer walk, I will carry you."

"Yes, Michael."

During this day they came to the little river Oka, but it was fordable, and they had no difficulty in crossing. The sky was cloudy and the temperature moderate. There was some fear that the rain might come on, which would much have increased their misery. A few showers fell, but they did not last.

They went on as before, hand in hand, speaking little, Nadia looking about on every side; twice a day they halted. Six hours of the night were given to sleep. In a few huts Nadia again found a little mutton; but, contrary to Michael's hopes, there was not a single beast of burden in the country; horses, camels—all had been either killed or carried off. They must still continue to plod on across this weary steppe on foot.

The third Tartar column, on its way to Irkutsk, had left plain traces: here a dead horse, there an abandoned cart. The bodies of unfortunate Siberians lay along the road, principally at the entrances to villages. Nadia, overcoming her repugnance, looked at all these corpses!

The chief danger lay, not before, but behind. The advance guard of the Emir's army, commanded by Ivan Ogareff, might at any moment appear. The boats sent down the lower Yenisei must by this time have reached Krasnoiarsk and been made use of. The road was therefore open to the invaders. No Russian force could be opposed to them between Krasnoiarsk and Lake Baikal, Michael therefore expected before long the appearance of the Tartar scouts.

At each halt, Nadia climbed some hill and looked anxiously to the Westward, but as yet no cloud of dust had signaled the approach of a troop of horse.

Then the march was resumed; and when Michael felt that he was dragging poor Nadia forward too rapidly, he went at a slower pace. They spoke little, and only of Nicholas. The young girl recalled all that this companion of a few days had done for them.

In answering, Michael tried to give Nadia some hope of which he did not feel a spark himself, for he well knew that the unfortunate fellow would not escape death.

One day Michael said to the girl, "You never speak to me of my mother, Nadia."

His mother! Nadia had never wished to do so. Why renew his grief? Was not the old Siberian dead? Had not her son given the last kiss to her corpse stretched on the plain of Tomsk?

"Speak to me of her, Nadia," said Michael. "Speak—-you will please me."

And then Nadia did what she had not done before. She told all that had passed between Marfa and herself since their meeting at Omsk, where they had seen each other for the first time. She said how an inexplicable instinct had led her towards the old prisoner without knowing who she was, and what encouragement she had received in return.

At that time Michael Strogoff had been to her but Nicholas Korpanoff.

"Whom I ought always to have been," replied Michael, his brow darkening.

Then later he added, "I have broken my oath, Nadia. I had sworn not to see my mother!"

"But you did not try to see her, Michael," replied Nadia. "Chance alone brought you into her presence."

"I had sworn, whatever might happen, not to betray myself."

"Michael, Michael! at sight of the lash raised upon Marfa, could you refrain? No! No oath could prevent a son from succoring his mother!"

"I have broken my oath, Nadia," returned Michael. "May God and the Father pardon me!"

"Michael," resumed the girl, "I have a question to ask you. Do not answer it if you think you ought not. Nothing from you would vex me!"

"Speak, Nadia."

"Why, now that the Czar's letter has been taken from you, are you so anxious to reach Irkutsk?"

Michael tightly pressed his companion's hand, but he did not answer.

"Did you know the contents of that letter before you left Moscow?"

"No, I did not know."

"Must I think, Michael, that the wish alone to place me in my father's hands draws you toward Irkutsk?"

"No, Nadia," replied Michael, gravely. "I should deceive you if I allowed you to believe that it was so. I go
where duty orders me to go. As to taking you to Irkutsk, is it not you, Nadia, who are now taking me there? Do I not see with your eyes; and is it not your hand that guides me? Have you not repaid a hundred-fold the help which I was able to give you at first? I do not know if fate will cease to go against us; but the day on which you thank me for having placed you in your father's hands, I in my turn will thank you for having led me to Irkutsk."

"Poor Michael!" answered Nadia, with emotion. "Do not speak so. That does not answer me. Michael, why, now, are you in such haste to reach Irkutsk?"

"Because I must be there before Ivan Ogareff," exclaimed Michael.

"Even now?"

"Even now, and I will be there, too!"

In uttering these words, Michael did not speak solely through hatred to the traitor. Nadia understood that her companion had not told, or could not tell, her all.

On the 15th of September, three days later, the two reached the village of Koutounskoe. The young girl suffered dreadfully. Her aching feet could scarcely support her; but she fought, she struggled, against her weariness, and her only thought was this: "Since he cannot see me, I will go on till I drop."

There were no obstacles on this part of the journey, no danger either since the departure of the Tartars, only much fatigue. For three days it continued thus. It was plain that the third invading column was advancing rapidly in the East; that could be seen by the ruins which they left after them--the cold cinders and the already decomposing corpses.

There was nothing to be seen in the West; the Emir's advance-guard had not yet appeared. Michael began to consider the various reasons which might have caused this delay. Was a sufficient force of Russians directly menacing Tomsk or Krasnoiarsk? Did the third column, isolated from the others, run a risk of being cut off? If this was the case, it would be easy for the Grand Duke to defend Irkutsk, and any time gained against an invasion was a step towards repulsing it. Michael sometimes let his thoughts run on these hopes, but he soon saw their improbability, and felt that the preservation of the Grand Duke depended alone on him.

Nadia dragged herself along. Whatever might be her moral energy, her physical strength would soon fail her. Michael knew it only too well. If he had not been blind, Nadia would have said to him, "Go, Michael, leave me in some hut! Reach Irkutsk! Accomplish your mission! See my father! Tell him where I am! Tell him that I wait for him, and you both will know where to find me! Start! I am not afraid! I will hide myself from the Tartars! I will take care of myself for him, for you! Go, Michael! I can go no farther!"

Many times Nadia was obliged to stop. Michael then took her in his strong arms and, having no longer to think of her fatigue, walked more rapidly and with his indefatigable step.

On the 18th of September, at ten in the evening, Kimiltiskeikoe was at last entered. From the top of a hill, Nadia saw in the horizon a long light line. It was the Dinka River. A few lightning flashes were reflected in the water; summer lightning, without thunder. Nadia led her companion through the ruined village. The cinders were quite cold. The last of the Tartars had passed through at least five or six days before.

Beyond the village, Nadia sank down on a stone bench. "Shall we make a halt?" asked Michael.

"It is night, Michael," answered Nadia. "Do you not want to rest a few hours?"

"I would rather have crossed the Dinka," replied Michael, "I should like to put that between us and the Emir's advance-guard. But you can scarcely drag yourself along, my poor Nadia!"

"Come, Michael," returned Nadia, seizing her companion's hand and drawing him forward.

Two or three verst's further the Dinka flowed across the Irkutsk road. The young girl wished to attempt this last effort asked by her companion. She found her way by the light from the flashes. They were then crossing a boundless desert, in the midst of which was lost the little river. Not a tree nor a hillock broke the flatness. Not a breath disturbed the atmosphere, whose calmness would allow the slightest sound to travel an immense distance.

Suddenly, Michael and Nadia stopped, as if their feet had been fast to the ground. The barking of a dog came across the steppe. "Do you hear?" said Nadia.

Then a mournful cry succeeded it--a despairing cry, like the last appeal of a human being about to die.

"Nicholas! Nicholas!" cried the girl, with a foreboding of evil. Michael, who was listening, shook his head.

"Come, Michael, come," said Nadia. And she who just now was dragging herself with difficulty along, suddenly recovered strength, under violent excitement.

"We have left the road," said Michael, feeling that he was treading no longer on powdery soil but on short grass.

"Yes, we must!" returned Nadia. "It was there, on the right, from which the cry came!"

In a few minutes they were not more than half a verst from the river. A second bark was heard, but, although more feeble, it was certainly nearer. Nadia stopped.

"Yes!" said Michael. "It is Serko barking!... He has followed his master!"

"Nicholas!" called the girl. Her cry was unanswered.
Michael listened. Nadia gazed over the plain illumined now and again with electric light, but she saw nothing. And yet a voice was again raised, this time murmuring in a plaintive tone, "Michael!"

Then a dog, all bloody, bounded up to Nadia.

It was Serko! Nicholas could not be far off! He alone could have murmured the name of Michael! Where was he? Nadia had no strength to call again. Michael, crawling on the ground, felt about with his hands.

Suddenly Serko uttered a fresh bark and darted towards a gigantic bird which had swooped down. It was a vulture. When Serko ran towards it, it rose, but returning struck at the dog. The latter leapt up at it. A blow from the formidable beak alighted on his head, and this time Serko fell back lifeless on the ground.

At the same moment a cry of horror escaped Nadia. "There... there!" she exclaimed.

A head issued from the ground! She had stumbled against it in the darkness.

Nadia fell on her knees beside it. Nicholas buried up to his neck, according to the atrocious Tartar custom, had been left in the steppe to die of thirst, and perhaps by the teeth of wolves or the beaks of birds of prey!

Frightful torture for the victim imprisoned in the ground--the earth pressed down so that he cannot move, his arms bound to his body like those of a corpse in its coffin! The miserable wretch, living in the mold of clay from which he is powerless to break out, can only long for the death which is so slow in coming!

There the Tartars had buried their prisoner three days before! For three days, Nicholas waited for the help which now came too late! The vultures had caught sight of the head on a level with the ground, and for some hours the dog had been defending his master against these ferocious birds!

Michael dug at the ground with his knife to release his friend! The eyes of Nicholas, which till then had been closed, opened.

He recognized Michael and Nadia. "Farewell, my friends!" he murmured. "I am glad to have seen you again! Pray for me!"

Michael continued to dig, though the ground, having been tightly rammed down, was as hard as stone, and he managed at last to get out the body of the unhappy man. He listened if his heart was still beating... It was still!

He wished to bury him, that he might not be left exposed; and the hole into which Nicholas had been placed when living, was enlarged, so that he might be laid in it--dead! The faithful Serko was laid by his master.

At that moment, a noise was heard on the road, about half a verst distant. Michael Strogoff listened. It was evidently a detachment of horse advancing towards the Dinka. "Nadia, Nadia!" he said in a low voice.

Nadia, who was kneeling in prayer, arose. "Look, look!" said he.

"The Tartars!" she whispered.

"They shall not prevent me from burying him!" said Michael. And he continued his work.

Soon, the body of Nicholas, the hands crossed on the breast, was laid in the grave. Michael and Nadia, kneeling, prayed a last time for the poor fellow, inoffensive and good, who had paid for his devotion towards them with his life.

"And now," said Michael, as he threw in the earth, "the wolves of the steppe will not devour him."

Then he shook his fist at the troop of horsemen who were passing. "Forward, Nadia!" he said.

Michael could not follow the road, now occupied by the Tartars. He must cross the steppe and turn to Irkutsk. He had not now to trouble himself about crossing the Dinka. Nadia could not move, but she could see for him. He took her in his arms and went on towards the southwest of the province.

A hundred and forty miles still remained to be traversed. How was the distance to be performed? Should they not succumb to such fatigue? On what were they to live on the way? By what superhuman energy were they to pass the slopes of the Sayansk Mountains? Neither he nor Nadia could answer this!

And yet, twelve days after, on the 2d of October, at six o'clock in the evening, a wide sheet of water lay at Michael Strogoff's feet. It was Lake Baikal.

CHAPTER X BAikal AND ANGARA

LAKE BAikal is situated seventeen hundred feet above the level of the sea. Its length is about six hundred miles, its breadth seventy. Its depth is not known. Madame de Bourboulon states that, according to the boatmen, it likes to be spoken of as "Madam Sea." If it is called "Sir Lake," it immediately lashes itself into fury. However, it is reported and believed by the Siberians that a Russian is never drowned in it.

This immense basin of fresh water, fed by more than three hundred rivers, is surrounded by magnificent volcanic mountains. It has no other outlet than the Angara, which after passing Irkutsk throws itself into the Yenisei, a little above the town of Yeniseisk. As to the mountains which encase it, they form a branch of the Toungouzes, and are derived from the vast system of the Altai.
In this territory, subject to peculiar climatical conditions, the autumn appears to be absorbed in the precocious winter. It was now the beginning of October. The sun set at five o'clock in the evening, and during the long nights the temperature fell to zero. The first snows, which would last till summer, already whitened the summits of the neighboring hills. During the Siberian winter this inland sea is frozen over to a thickness of several feet, and is crossed by the sleighs of caravans.

Either because there are people who are so wanting in politeness as to call it "Sir Lake," or for some more meteorological reason, Lake Baikal is subject to violent tempests. Its waves, short like those of all inland seas, are much feared by the rafts, prahms, and steamboats, which furrow it during the summer.

It was the southwest point of the lake which Michael had now reached, carrying Nadia, whose whole life, so to speak, was concentrated in her eyes. But what could these two expect, in this wild region, if it was not to die of exhaustion and famine? And yet, what remained of the long journey of four thousand miles for the Czar's courier to reach his end? Nothing but forty miles on the shore of the lake up to the mouth of the Angara, and sixty miles from the mouth of the Angara to Irkutsk; in all, a hundred miles, or three days' journey for a strong man, even on foot.

Could Michael Strogoff still be that man?

Heaven, no doubt, did not wish to put him to this trial. The fatality which had hitherto pursued his steps seemed for a time to spare him. This end of the Baikal, this part of the steppe, which he believed to be a desert, which it usually is, was not so now. About fifty people were collected at the angle formed by the end of the lake.

Nadia immediately caught sight of this group, when Michael, carrying her in his arms, issued from the mountain pass. The girl feared for a moment that it was a Tartar detachment, sent to beat the shores of the Baikal, in which case flight would have been impossible to them both. But Nadia was soon reassured.

"Russians!" she exclaimed. And with this last effort, her eyes closed and her head fell on Michael's breast.

But they had been seen, and some of these Russians, running to them, led the blind man and the girl to a little point at which was moored a raft.

The raft was just going to start. These Russians were fugitives of different conditions, whom the same interest had united at Lake Baikal. Driven back by the Tartar scouts, they hoped to obtain a refuge at Irkutsk, but not being able to get there by land, the invaders having occupied both banks of the Angara, they hoped to reach it by descending the river which flows through the town.

Their plan made Michael's heart leap; a last chance was before him, but he had strength to conceal this, wishing to keep his incognito more strictly than ever.

The fugitives' plan was very simple. A current in the lake runs along by the upper bank to the mouth of the Angara; this current they hoped to utilize, and with its assistance to reach the outlet of Lake Baikal. From this point to Irkutsk, the rapid waters of the river would bear them along at a rate of eight miles an hour. In a day and a half they might hope to be in sight of the town.

No kind of boat was to be found; they had been obliged to make one; a raft, or rather a float of wood, similar to those which usually are drifted down Siberian rivers, was constructed. A forest of firs, growing on the bank, had supplied the necessary materials; the trunks, fastened together with osiers, made a platform on which a hundred people could have easily found room.

On board this raft Michael and Nadia were taken. The girl had returned to herself; some food was given to her as well as to her companion. Then, lying on a bed of leaves, she soon fell into a deep sleep.

To those who questioned him, Michael Strogoff said nothing of what had taken place at Tomsk. He gave himself out as an inhabitant of Krasnoiarsk, who had not been able to get to Irkutsk before the Emir's troops arrived on the left bank of the Dinka, and he added that, very probably, the bulk of the Tartar forces had taken up a position before the Siberian capital.

There was not a moment to be lost; besides, the cold was becoming more and more severe. During the night the temperature fell below zero; ice was already forming on the surface of the Baikal. Although the raft managed to pass easily over the lake, it might not be so easy between the banks of the Angara, should pieces of ice be found to block up its course.

At eight in the evening the moorings were cast off, and the raft drifted in the current along the shore. It was steered by means of long poles, under the management of several muscular moujiks. An old Baikal boatman took command of the raft. He was a man of sixty-five, browned by the sun, and lake breezes. A thick white beard flowed over his chest; a fur cap covered his head; his aspect was grave and austere. His large great-coat, fastened in at the waist, reached down to his heels. This taciturn old fellow was seated in the stern, and issued his commands by gestures. Besides, the chief work consisted in keeping the raft in the current, which ran along the shore, without drifting out into the open.

It has been already said that Russians of all conditions had found a place on the raft. Indeed, to the poor moujiks, the women, old men, and children, were joined two or three pilgrims, surprised on their journey by the invasion; a
few monks, and a priest. The pilgrims carried a staff, a gourd hung at the belt, and they chanted psalms in a plaintive voice: one came from the Ukraine, another from the Yellow sea, and a third from the Finland provinces. This last, who was an aged man, carried at his waist a little padlocked collecting-box, as if it had been hung at a church door. Of all that he collected during his long and fatiguing pilgrimage, nothing was for himself; he did not even possess the key of the box, which would only be opened on his return.

The monks came from the North of the Empire. Three months before they had left the town of Archangel. They had visited the sacred islands near the coast of Carelia, the convent of Solovetsk, the convent of Troitsa, those of Saint Antony and Saint Theodosia, at Kiev, that of Kazan, as well as the church of the Old Believers, and they were now on their way to Irkutsk, wearing the robe, the cowl, and the clothes of serge.

As to the papa, or priest, he was a plain village pastor, one of the six hundred thousand popular pastors which the Russian Empire contains. He was clothed as miserably as the moujiks, not being above them in social position; in fact, laboring like a peasant on his plot of ground; baptis-ing, marrying, burying. He had been able to protect his wife and children from the brutality of the Tartars by sending them away into the Northern provinces. He himself had stayed in his parish up to the last moment; then he was obliged to fly, and, the Irkutsk road being stopped, had come to Lake Baikal.

These priests, grouped in the forward part of the raft, prayed at regular intervals, raising their voices in the silent night, and at the end of each sentence of their prayer, the "Slava Bogu," Glory to God! issued from their lips.

No incident took place during the night. Nadia remained in a sort of stupor, and Michael watched beside her; sleep only overtook him at long intervals, and even then his brain did not rest. At break of day, the raft, delayed by a strong breeze, which counteracted the course of the current, was still forty versts from the mouth of the Angara. It seemed probable that the fugitives could not reach it before three or four o'clock in the evening. This did not trouble them; on the contrary, for they would then descend the river during the night, and the darkness would also favor their entrance into Irkutsk.

The only anxiety exhibited at times by the old boatman was concerning the formation of ice on the surface of the water. The night had been excessively cold; pieces of ice could be seen drifting towards the West. Nothing was to be dreaded from these, since they could not drift into the Angara, having already passed the mouth; but pieces from the Eastern end of the lake might be drawn by the current between the banks of the river; this would cause difficulty, possibly delay, and perhaps even an insurmountable obstacle which would stop the raft.

Michael therefore took immense interest in ascertaining what was the state of the lake, and whether any large number of ice blocks appeared. Nadia being now awake, he questioned her often, and she gave him an account of all that was going on.

Whilst the blocks were thus drifting, curious phenomena were taking place on the surface of the Baikal. Magnificent jets, from springs of boiling water, shot up from some of those artesian wells which Nature has bored in the very bed of the lake. These jets rose to a great height and spread out in vapor, which was illuminated by the solar rays, and almost immediately condensed by the cold. This curious sight would have assuredly amazed a tourist traveling in peaceful times on this Siberian sea.

At four in the evening, the mouth of the Angara was signaled by the old boatman, between the high granite rocks of the shore. On the right bank could be seen the little port of Livenitchnaia, its church, and its few houses built on the bank. But the serious thing was that the ice blocks from the East were already drifting between the banks of the Angara, and consequently were descending towards Irkutsk. However, their number was not yet great enough to obstruct the course of the raft, nor the cold great enough to increase their number.

The raft arrived at the little port and there stopped. The old boatman wished to put into harbor for an hour, in order to make some repairs. The trunks threatened to separate, and it was important to fasten them more securely together to resist the rapid current of the Angara.

The old boatman did not expect to receive any fresh fugitives at Livenitchnaia, and yet, the moment the raft touched, two passengers, issuing from a deserted house, ran as fast as they could towards the beach.

Nadia seated on the raft, was abstractedly gazing at the shore. A cry was about to escape her. She seized Michael's hand, who at that moment raised his head.

"What is the matter, Nadia?" he asked.
"Our two traveling companions, Michael."
"The Frenchman and the Englishman whom we met in the defiles of the Ural?"
"Yes."

Michael started, for the strict incognito which he wished to keep ran a risk of being betrayed. Indeed, it was no longer as Nicholas Korpanoff that Jolivet and Blount would now see him, but as the true Michael Strogoff, Courier of the Czar. The two correspondents had already met him twice since their separation at the Ichim post-house—the first time at the Zabedierio camp, when he laid open Ivan Ogareff's face with the knout; the second time at Tomsk,
when he was condemned by the Emir. They therefore knew who he was and what depended on him.

Michael Strogoff rapidly made up his mind. "Nadia," said he, "when they step on board, ask them to come to me!"

It was, in fact, Blount and Jolivet, whom the course of events had brought to the port of Livenitchnaia, as it had brought Michael Strogoff. As we know, after having been present at the entry of the Tartars into Tomsk, they had departed before the savage execution which terminated the fete. They had therefore never suspected that their former traveling companion had not been put to death, but blinded by order of the Emir.

Having procured horses they had left Tomsk the same evening, with the fixed determination of henceforward dating their letters from the Russian camp of Eastern Siberia. They proceeded by forced marches towards Irkutsk. They hoped to distance Feofar-Khan, and would certainly have done so, had it not been for the unexpected apparition of the third column, come from the South, up the valley of the Yenisei. They had been cut off, as had been Michael, before being able even to reach the Dinka, and had been obliged to go back to Lake Baikal.

They had been in the place for three days in much perplexity, when the raft arrived. The fugitives' plan was explained to them. There was certainly a chance that they might be able to pass under cover of the night, and penetrate into Irkutsk. They resolved to make the attempt.

Alcide directly communicated with the old boatman, and asked a passage for himself and his companion, offering to pay anything he demanded, whatever it might be.

"No one pays here," replied the old man gravely; "every one risks his life, that is all!"

The two correspondents came on board, and Nadia saw them take their places in the forepart of the raft. Harry Blount was still the reserved Englishman, who had scarcely addressed a word to her during the whole passage over the Ural Mountains. Alcide Jolivet seemed to be rather more grave than usual, and it may be acknowledged that his gravity was justified by the circumstances.

Jolivet had, as has been said, taken his seat on the raft, when he felt a hand laid on his arm. Turning, he recognized Nadia, the sister of the man who was no longer Nicholas Korpanoff, but Michael Strogoff, Courier of the Czar. He was about to make an exclamation of surprise when he saw the young girl lay her finger on her lips.

"Come," said Nadia. And with a careless air, Alcide rose and followed her, making a sign to Blount to accompany him.

But if the surprise of the correspondents had been great at meeting Nadia on the raft it was boundless when they perceived Michael Strogoff, whom they had believed to be no longer living.

Michael had not moved at their approach. Jolivet turned towards the girl. "He does not see you, gentlemen," said Nadia. "The Tartars have burnt out his eyes! My poor brother is blind!"

A feeling of lively compassion exhibited itself on the faces of Blount and his companion. In a moment they were seated beside Michael, pressing his hand and waiting until he spoke to them.

"Gentlemen," said Michael, in a low voice, "you ought not to know who I am, nor what I am come to do in Siberia. I ask you to keep my secret. Will you promise me to do so?"

"On my honor," answered Jolivet.

"On my word as a gentleman," added Blount.

"Good, gentlemen."

"Can we be of any use to you?" asked Harry Blount. "Could we not help you to accomplish your task?"

"I prefer to act alone," replied Michael.

"But those blackguards have destroyed your sight," said Alcide.

"I have Nadia, and her eyes are enough for me!"

In half an hour the raft left the little port of Livenitchnaia, and entered the river. It was five in the evening and getting dusk. The night promised to be dark and very cold also, for the temperature was already below zero.

Alcide and Blount, though they had promised to keep Michael's secret, did not leave him. They talked in a low voice, and the blind man, adding what they told him to what he already knew, was able to form an exact idea of the state of things. It was certain that the Tartars had actually invested Irkutsk, and that the three columns had effected a junction. There was no doubt that the Emir and Ivan Ogareff were before the capital.

But why did the Czar's courier exhibit such haste to get there, now that the Imperial letter could no longer be given by him to the Grand Duke, and when he did not even know the contents of it? Alcide Jolivet and Blount could not understand it any more than Nadia had done.

No one spoke of the past, except when Jolivet thought it his duty to say to Michael, "We owe you some apology for not shaking hands with you when we separated at Ichim."

"No, you had reason to think me a coward!"

"At any rate," added the Frenchman, "you knouted the face of that villain finely, and he will carry the mark of it for a long time!"
"No, not a long time!" replied Michael quietly.

Half an hour after leaving Livenitchnaia, Blount and his companion were acquainted with the cruel trials through which Michael and his companion had successively passed. They could not but heartily admire his energy, which was only equaled by the young girl's devotion. Their opinion of Michael was exactly what the Czar had expressed at Moscow: "Indeed, this is a Man!"

The raft swiftly threaded its way among the blocks of ice which were carried along in the current of the Angara. A moving panorama was displayed on both sides of the river, and, by an optical illusion, it appeared as if it was the raft which was motionless before a succession of picturesque scenes. Here were high granite cliffs, there wild gorges, down which rushed a torrent; sometimes appeared a clearing with a still smoking village, then thick pine forests blazing. But though the Tartars had left their traces on all sides, they themselves were not to be seen as yet, for they were more especially massed at the approaches to Irkutsk.

All this time the pilgrims were repeating their prayers aloud, and the old boatman, shoving away the blocks of ice which pressed too near them, imperturbably steered the raft in the middle of the rapid current of the Angara.

CHAPTER XI BETWEEN TWO BANKS

By eight in the evening, the country, as the state of the sky had foretold, was enveloped in complete darkness. The moon being new had not yet risen. From the middle of the river the banks were invisible. The cliffs were confounded with the heavy, low-hanging clouds. At intervals a puff of wind came from the east, but it soon died away in the narrow valley of the Angara.

The darkness could not fail to favor in a considerable degree the plans of the fugitives. Indeed, although the Tartar outposts must have been drawn up on both banks, the raft had a good chance of passing unperceived. It was not likely either that the besiegers would have barred the river above Irkutsk, since they knew that the Russians could not expect any help from the south of the province. Besides this, before long Nature would herself establish a barrier, by cementing with frost the blocks of ice accumulated between the two banks.

Perfect silence now reigned on board the raft. The voices of the pilgrims were no longer heard. They still prayed, but their prayer was but a murmur, which could not reach as far as either bank. The fugitives lay flat on the platform, so that the raft was scarcely above the level of the water. The old boatman crouched down forward among his men, solely occupied in keeping off the ice blocks, a maneuver which was performed without noise.

The drifting of the ice was a favorable circumstance so long as it did not offer an insurmountable obstacle to the passage of the raft. If that object had been alone on the water, it would have run a risk of being seen, even in the darkness, but, as it was, it was confounded with these moving masses, of all shapes and sizes, and the tumult caused by the crashing of the blocks against each other concealed likewise any suspicious noises.

There was a sharp frost. The fugitives suffered cruelly, having no other shelter than a few branches of birch. They cowered down together, endeavoring to keep each other warm, the temperature being now ten degrees below freezing point. The wind, though slight, having passed over the snow-clad mountains of the east, pierced them through and through.

Michael and Nadia, lying in the afterpart of the raft, bore this increase of suffering without complaint. Jolivet and Blount, placed near them, stood these first assaults of the Siberian winter as well as they could. No one now spoke, even in a low voice. Their situation entirely absorbed them. At any moment an incident might occur, which they could not escape unscathed.

For a man who hoped soon to accomplish his mission, Michael was singularly calm. Even in the gravest conjunctures, his energy had never abandoned him. He already saw the moment when he would be at last allowed to think of his mother, of Nadia, of himself! He now only dreaded one final unhappy chance; this was, that the raft might be completely barred by ice before reaching Irkutsk. He thought but of this, determined beforehand, if necessary, to attempt some bold stroke.

Restored by a few hours' rest, Nadia had regained the physical energy which misery had sometimes overcome, although without ever having shaken her moral energy. She thought, too, that if Michael had to make any fresh effort to attain his end, she must be there to guide him. But in proportion as she drew nearer to Irkutsk, the image of her father rose more and more clearly before her mind. She saw him in the invested town, far from those he loved, but, as she never doubted, struggling against the invaders with all the spirit of his patriotism. In a few hours, if Heaven favored them, she would be in his arms, giving him her mother's last words, and nothing should ever separate them again. If the term of Wassili Fedor's exile should never come to an end, his daughter would remain exiled with him. Then, by a natural transition, she came back to him who would have enabled her to see her father once more, to that generous companion, that "brother," who, the Tartars driven back, would retake the road to Moscow, whom she would perhaps never meet again!
As to Alcide Jolivet and Harry Blount, they had one and the same thought, which was, that the situation was extremely dramatic, and that, well worked up, it would furnish a most deeply interesting article. The Englishman thought of the readers of the Daily Telegraph, and the Frenchman of those of his Cousin Madeleine. At heart, both were not without feeling some emotion.

"Well, so much the better!" thought Alcide Jolivet, "to move others, one must be moved one's self! I believe there is some celebrated verse on the subject, but hang me if I can recollect it!" And with his well-practiced eyes he endeavored to pierce the gloom of the river.

Every now and then a burst of light dispelling the darkness for a time, exhibited the banks under some fantastic aspect--either a forest on fire, or a still burning village. The Angara was occasionally illuminated from one bank to the other. The blocks of ice formed so many mirrors, which, reflecting the flames on every point and in every color, were whirled along by the caprice of the current. The raft passed unperceived in the midst of these floating masses.

The danger was not at these points.

But a peril of another nature menaced the fugitives. One that they could not foresee, and, above all, one that they could not avoid. Chance discovered it to Alcide Jolivet in this way:--Lying at the right side of the raft, he let his hand hang over into the water. Suddenly he was surprised by the impression made on it by the current. It seemed to be of a slimy consistency, as if it had been made of mineral oil. Alcide, aiding his touch by his sense of smell, could not be mistaken. It was really a layer of liquid naphtha, floating on the surface of the river!

Was the raft really floating on this substance, which is in the highest degree combustible? Where had this naphtha come from? Was it a natural phenomenon taking place on the surface of the Angara, or was it to serve as an engine of destruction, put in motion by the Tartars? Did they intend to carry conflagration into Irkutsk?

Such were the questions which Alcide asked himself, but he thought it best to make this incident known only to Harry Blount, and they both agreed in not alarming their companions by revealing to them this new danger.

It is known that the soil of Central Asia is like a sponge impregnated with liquid hydrogen. At the port of Bakou, on the Persian frontier, on the Caspian Sea, in Asia Minor, in China, on the Yuen-Kiang, in the Burman Empire, springs of mineral oil rise in thousands to the surface of the ground. It is an "oil country," similar to the one which bears this name in North America.

During certain religious festivals, principally at the port of Bakou, the natives, who are fire-worshipers, throw liquid naphtha on the surface of the sea, which buoyed it up, its density being inferior to that of water. Then at nightfall, a layer of mineral oil is thus spread over the Caspian, they light it, and exhibit the matchless spectacle of an ocean of fire undulating and breaking into waves under the breeze.

But what is only a sign of rejoicing at Bakou, might prove a fearful disaster on the waters of the Angara. Whether it was set on fire by malevolence or imprudence, in the twinkling of an eye a conflagration might spread beyond Irkutsk. On board the raft no imprudence was to be feared; but everything was to be dreaded from the conflagrations on both banks of the Angara, for should a lighted straw or even a spark blow into the water, it would inevitably set the whole current of naphtha in a blaze.

The apprehensions of Jolivet and Blount may be better understood than described. Would it not be prudent, in face of this new danger, to land on one of the banks and wait there? "At any rate," said Alcide, "whatever the danger may be, I know some one who will not land!"

He alluded to Michael Strogoff.

In the meantime, on glided the raft among the masses of ice which were gradually getting closer and closer together. Up till then, no Tartar detachment had been seen, which showed that the raft was not abreast of the outposts. At about ten o'clock, however, Harry Blount caught sight of a number of black objects moving on the ice blocks. Springing from one to the other, they rapidly approached.

"Tartars!" he thought. And creeping up to the old boatman, he pointed out to him the suspicious objects.

The old man looked attentively. "They are only wolves!" said he. "I like them better than Tartars. But we must defend ourselves, and without noise!"

The fugitives would indeed have to defend themselves against these ferocious beasts, whom hunger and cold had sent roaming through the province. They had smelt out the raft, and would soon attack it. The fugitives must struggle without using firearms, for they could not now be far from the Tartar posts. The women and children were collected in the middle of the raft, and the men, some armed with poles, others with their knives, stood prepared to repulse their assailants. They did not make a sound, but the howls of the wolves filled the air.

Michael did not wish to remain inactive. He lay down at the side attacked by the savage pack. He drew his knife, and every time that a wolf passed within his reach, his hand found out the way to plunge his weapon into its throat. Neither were Jolivet and Blount idle, but fought bravely with the brutes. Their companions gallantly seconded them. The battle was carried on in silence, although many of the fugitives received severe bites.

The struggle did not appear as if it would soon terminate. The pack was being continually reinforced from the
right bank of the Angara. "This will never be finished!" said Alcide, brandishing his dagger, red with blood.

In fact, half an hour after the commencement of the attack, the wolves were still coming in hundreds across the ice. The exhausted fugitives were getting weaker. The fight was going against them. At that moment, a group of ten huge wolves, raging with hunger, their eyes glowing in the darkness like red coals, sprang onto the raft. Jolivet and his companion threw themselves into the midst of the fierce beasts, and Michael was finding his way towards them, when a sudden change took place.

In a few moments the wolves had deserted not only the raft, but also the ice on the river. All the black bodies dispersed, and it was soon certain that they had in all haste regained the shore. Wolves, like other beasts of prey, require darkness for their proceedings, and at that moment a bright light illuminated the entire river.

It was the blaze of an immense fire. The whole of the small town of Poshkavsk was burning. The Tartars were indeed there, finishing their work. From this point, they occupied both banks beyond Irkutsk. The fugitives had by this time reached the dangerous part of their voyage, and they were still twenty miles from the capital.

It was now half past eleven. The raft continued to glide on amongst the ice, with which it was quite mingled, but gleams of light sometimes fell upon it. The fugitives stretched on the platform did not permit themselves to make a movement by which they might be betrayed.

The conflagration was going on with frightful rapidity. The houses, built of fir-wood, blazed like torches—a hundred and fifty flaming at once. With the crackling of the fire was mingled the yells of the Tartars. The old boatman, getting a foothold on a near piece of ice, managed to shove the raft towards the right bank, by doing which a distance of from three to four hundred feet divided it from the flames of Poshkavsk.

Nevertheless, the fugitives, lighted every now and then by the glare, would have been undoubtedly perceived had not the incendiaries been too much occupied in their work of destruction.

It may be imagined what were the apprehensions of Jolivet and Blount, when they thought of the combustible liquid on which the raft floated. Sparks flew in millions from the houses, which resembled so many glowing furnaces. They rose among the volumes of smoke to a height of five or six hundred feet. On the right bank, the trees and cliffs exposed to the fire looked as if they likewise were burning. A spark falling on the surface of the Angara would be sufficient to spread the flames along the current, and to carry disaster from one bank to the other. The result of this would be in a short time the destruction of the raft and of all those which it carried.

But, happily, the breeze did not blow from that side. It came from the east, and drove the flames towards the left. It was just possible that the fugitives would escape this danger. The blazing town was at last passed. Little by little the glare grew dimmer, the crackling became fainter, and the flames at last disappeared behind the high cliffs which arose at an abrupt turn of the river.

By this time it was nearly midnight. The deep gloom again threw its protecting shadows over the raft. The Tartars were there, going to and fro near the river. They could not be seen, but they could be heard. The fires of the outposts burned brightly.

In the meantime it had become necessary to steer more carefully among the blocks of ice. The old boatman stood up, and the mouchiks resumed their poles. They had plenty of work, the management of the raft becoming more and more difficult as the river was further obstructed.

Michael had crept forward; Jolivet followed; both listened to what the old boatman and his men were saying.
"Look out on the right!"
"There are blocks drifting on to us on the left!"
"Fend! fend off with your boat-hook!"
"Before an hour is past we shall be stopped!"
"If it is God's will!" answered the old man. "Against His will there is nothing to be done."
"You hear them," said Alcide.
"Yes," replied Michael, "but God is with us!"

The situation became more and more serious. Should the raft be stopped, not only would the fugitives not reach Irkutsk, but they would be obliged to leave their floating platform, for it would be very soon smashed to pieces in the ice. The osier ropes would break, the fir trunks torn asunder would drift under the hard crust, and the unhappy people would have no refuge but the ice blocks themselves. Then, when day came, they would be seen by the Tartars, and massacred without mercy!

Michael returned to the spot where Nadia was waiting for him. He approached the girl, took her hand, and put to her the invariable question: "Nadia, are you ready?" to which she replied as usual, "I am ready!"

For a few versts more the raft continued to drift amongst the floating ice. Should the river narrow, it would soon form an impassable barrier. Already they seemed to drift slower. Every moment they encountered severe shocks or were compelled to make detours; now, to avoid running foul of a block, there to enter a channel, of which it was necessary to take advantage. At length the stoppages became still more alarming. There were only a few more hours
of night. Could the fugitives not reach Irkutsk by five o'clock in the morning, they must lose all hope of ever getting there at all.

At half-past one, notwithstanding all efforts, the raft came up against a thick barrier and stuck fast. The ice, which was drifting down behind it, pressed it still closer, and kept it motionless, as though it had been stranded.

At this spot the Angara narrowed, it being half its usual breadth. This was the cause of the accumulation of ice, which became gradually soldered together, under the double influence of the increased pressure and of the cold. Five hundred feet beyond, the river widened again, and the blocks, gradually detaching themselves from the floe, continued to drift towards Irkutsk. It was probable that had the banks not narrowed, the barrier would not have formed. But the misfortune was irreparable, and the fugitives must give up all hope of attaining their object.

Had they possessed the tools usually employed by whalers to cut channels through the ice-fields—had they been able to get through to where the river widened—they might have been saved. But they had nothing which could make the least incision in the ice, hard as granite in the excessive frost. What were they to do?

At that moment several shots on the right bank startled the unhappy fugitives. A shower of balls fell on the raft. The devoted passengers had been seen. Immediately afterwards shots were heard fired from the left bank. The fugitives, taken between two fires, became the mark of the Tartar sharpshooters. Several were wounded, although in the darkness it was only by chance that they were hit.

"Come, Nadia," whispered Michael in the girl's ear.

Without making a single remark, "ready for anything," Nadia took Michael's hand.

"We must cross the barrier," he said in a low tone. "Guide me, but let no one see us leave the raft."

Nadia obeyed. Michael and she glided rapidly over the floe in the obscurity, only broken now and again by the flashes from the muskets. Nadia crept along in front of Michael. The shot fell around them like a tempest of hail, and pattered on the ice. Their hands were soon covered with blood from the sharp and rugged ice over which they clambered, but still on they went.

In ten minutes, the other side of the barrier was reached. There the waters of the Angara again flowed freely. Several pieces of ice, detached gradually from the floe, were swept along in the current down towards the town. Nadia guessed what Michael wished to attempt. One of the blocks was only held on by a narrow strip.

"Come," said Nadia. And the two crouched on the piece of ice, which their weight detached from the floe.

It began to drift. The river widened, the way was open. Michael and Nadia heard the shots, the cries of distress, the yells of the Tartars. Then, little by little, the sounds of agony and of ferocious joy grew faint in the distance.

"Our poor companions!" murmured Nadia.

For half an hour the current hurried along the block of ice which bore Michael and Nadia. They feared every moment that it would give way beneath them. Swept along in the middle of the current, it was unnecessary to give it an oblique direction until they drew near the quays of Irkutsk. Michael, his teeth tight set, his ear on the strain, did not utter a word. Never had he been so near his object. He felt that he was about to attain it!

Towards two in the morning a double row of lights glittered on the dark horizon in which were confounded the two banks of the Angara. On the right hand were the lights of Irkutsk; on the left, the fires of the Tartar camp.

Michael Strogoff was not more than half a verst from the town. "At last!" he murmured.

But suddenly Nadia uttered a cry.

At the cry Michael stood up on the ice, which was wavering. His hand was extended up the Angara. His face, on which a bluish light cast a peculiar hue, became almost fearful to look at, and then, as if his eyes had been opened to the bright blaze spreading across the river, "Ah!" he exclaimed, "then Heaven itself is against us!"

CHAPTER XII IRKUTSK

IRKUTSK, the capital of Eastern Siberia, is a populous town, containing, in ordinary times, thirty thousand inhabitants. On the right side of the Angara rises a hill, on which are built numerous churches, a lofty cathedral, and dwellings disposed in picturesque disorder.

Seen at a distance, from the top of the mountain which rises at about twenty versts off along the Siberian highroad, this town, with its cupolas, its bell-towers, its steeples slender as minarets, its domes like pot-bellied Chinese jars, presents something of an oriental aspect. But this similarity vanishes as the traveler enters.

The town, half Byzantine, half Chinese, becomes European as soon as he sees its macadamized roads, bordered with pavements, traversed by canals, planted with gigantic birches, its houses of brick and wood, some of which have several stories, the numerous equipages which drive along, not only tarantasses but broughams and coaches; lastly, its numerous inhabitants far advanced in civilization, to whom the latest Paris fashions are not unknown.

Being the refuge for all the Siberians of the province, Irkutsk was at this time very full. Stores of every kind had been collected in abundance. Irkutsk is the emporium of the innumerable kinds of merchandise which are exchanged
between China, Central Asia, and Europe. The authorities had therefore no fear with regard to admitting the peasants of the valley of the Angara, and leaving a desert between the invaders and the town.

Irkutsk is the residence of the governor-general of Eastern Siberia. Below him acts a civil governor, in whose hands is the administration of the province; a head of police, who has much to do in a town where exiles abound; and, lastly, a mayor, chief of the merchants, and a person of some importance, from his immense fortune and the influence which he exercises over the people.

The garrison of Irkutsk was at that time composed of an infantry regiment of Cossacks, consisting of two thousand men, and a body of police wearing helmets and blue uniforms laced with silver. Besides, as has been said, in consequence of the events which had occurred, the brother of the Czar had been shut up in the town since the beginning of the invasion.

A journey of political importance had taken the Grand Duke to these distant provinces of Central Asia. After passing through the principal Siberian cities, the Grand Duke, who traveled en militaire rather than en prince, without any parade, accompanied by his officers, and escorted by a regiment of Cossacks, arrived in the Trans-Baikalkine provinces. Nikolaevsk, the last Russian town situated on the shore of the Sea of Okhotsk, had been honored by a visit from him. Arrived on the confines of the immense Muscovite Empire, the Grand Duke was returning towards Irkutsk, from which place he intended to retake the road to Moscow, when, sudden as a thunder clap, came the news of the invasion.

He hastened to the capital, but only reached it just before communication with Russia had been interrupted. There was time to receive only a few telegrams from St. Petersburg and Moscow, and with difficulty to answer them before the wire was cut. Irkutsk was isolated from the rest of the world.

The Grand Duke had now only to prepare for resistance, and this he did with that determination and coolness of which, under other circumstances, he had given incontestable proofs. The news of the taking of Ichim, Omsk, and Tomsk, successively reached Irkutsk. It was necessary at any price to save the capital of Siberia. Reinforcements could not be expected for some time. The few troops scattered about in the provinces of Siberia could not arrive in sufficiently large numbers to arrest the progress of the Tartar columns. Since therefore it was impossible for Irkutsk to escape attack, the most important thing to be done was to put the town in a state to sustain a siege of some duration.

The preparations were begun on the day Tomsk fell into the hands of the Tartars. At the same time with this last news, the Grand Duke heard that the Emir of Bokhara and the allied Khans were directing the invasion in person, but what he did not know was, that the lieutenant of these barbarous chiefs was Ivan Ogareff, a Russian officer whom he had himself reduced to the ranks, but with whose person he was not acquainted.

First of all, as we have seen, the inhabitants of the province of Irkutsk were compelled to abandon the towns and villages. Those who did not take refuge in the capital had to retire beyond Lake Baikal, a district to which the invasion would probably not extend its ravages. The harvests of corn and fodder were collected and stored up in the town, and Irkutsk, the last bulwark of the Muscovite power in the Far East, was put in a condition to resist the enemy for a lengthened period.

Irkutsk, founded in 1611, is situated at the confluence of the Irkut and the Angara, on the right bank of the latter river. Two wooden draw-bridges, built on piles, connected the town with its suburbs on the left bank. On this side, defence was easy. The suburbs were abandoned, the bridges destroyed. The Angara being here very wide, it would not be possible to pass it under the fire of the besieged.

But the river might be crossed both above and below the town, and consequently, Irkutsk ran a risk of being attacked on its east side, on which there was no wall to protect it.

The whole population were immediately set to work on the fortifications. They labored day and night. The Grand Duke observed with satisfaction the zeal exhibited by the people in the work, whom ere long he would find equally courageous in the defense. Soldiers, merchants, exiles, peasants, all devoted themselves to the common safety. A week before the Tartars appeared on the Angara, earth-works had been raised. A fosse, flooded by the waters of the Angara, was dug between the scarp and counterscarp. The town could not now be taken by a coup de main. It must be invested and besieged.

The third Tartar column--the one which came up the valley of the Yenisei on the 24th of September--appeared in sight of Irkutsk. It immediately occupied the deserted suburbs, every building in which had been destroyed so as not to impede the fire of the Grand Duke's guns, unfortunately but few in number and of small caliber. The Tartar troops as they arrived organized a camp on the bank of the Angara, whilst waiting the arrival of the two other columns, commanded by the Emir and his allies.

The junction of these different bodies was effected on the 25th of September, in the Angara camp, and the whole of the invading army, except the garrisons left in the principal conquered towns, was concentrated under the command of Feofar-Khan.
The passage of the Angara in front of Irkutsk having been regarded by Ogareff as impracticable, a strong body of troops crossed, several versts up the river, by means of bridges formed with boats. The Grand Duke did not attempt to oppose the enemy in their passage. He could only impede, not prevent it, having no field-artillery at his disposal, and he therefore remained in Irkutsk.

The Tartars now occupied the right bank of the river; then, advancing towards the town, they burnt, in passing, the summer-house of the governor-general, and at last having entirely invested Irkutsk, took up their positions for the siege.

Ivan Ogareff, who was a clever engineer, was perfectly competent to direct a regular siege; but he did not possess the materials for operating rapidly. He was disappointed too in the chief object of all his efforts—the surprise of Irkutsk. Things had not turned out as he hoped. First, the march of the Tartar army was delayed by the battle of Tomsk; and secondly, the preparations for the defense were made far more rapidly than he had supposed possible; these two things had balked his plans. He was now under the necessity of instituting a regular siege of the town.

However, by his suggestion, the Emir twice attempted the capture of the place, at the cost of a large sacrifice of men. He threw soldiers on the earth-works which presented any weak point; but these two assaults were repulsed with the greatest courage. The Grand Duke and his officers did not spare themselves on this occasion. They appeared in person; they led the civil population to the ramparts. Citizens and peasants both did their duty.

At the second attack, the Tartars managed to force one of the gates. A fight took place at the head of Bolchaia Street, two versts long, on the banks of the Angara. But the Cossacks, the police, the citizens, united in so fierce a resistance that the Tartars were driven out.

Ivan Ogareff then thought of obtaining by stratagem what he could not gain by force. We have said that his plan was to penetrate into the town, make his way to the Grand Duke, gain his confidence, and, when the time came, give up the gates to the besiegers; and, that done, wreak his vengeance on the brother of the Czar. The Tsigane Sangarre, who had accompanied him to the Angara, urged him to put this plan in execution.

Indeed, it was necessary to act without delay. The Russian troops from the government of Yakutsk were advancing towards Irkutsk. They had concentrated along the upper course of the Lena. In six days they would arrive. Therefore, before six days had passed, Irkutsk must be betrayed. Ogareff hesitated no longer.

One evening, the 2d of October, a council of war was held in the grand saloon of the palace of the governor-general. This palace, standing at the end of Bolchaia Street, overlooked the river. From its windows could be seen the camp of the Tartars, and the invaders possessed guns of wider range, they would have rendered the palace uninhabitable.

The Grand Duke, General Voranzoff, the governor of the town, and the chief of the merchants, with several officers, had collected to determine upon various proposals.

"Gentlemen," said the Grand Duke, "you know our situation exactly. I have the firm hope that we shall be able to hold out until the arrival of the Yakutsk troops. We shall then be able to drive off these barbarian hordes, and it will not be my fault if they do not pay dearly for this invasion of the Muscovite territory."

"Your Highness knows that all the population of Irkutsk may be relied on," said General Voranzoff.

"Yes, general," replied the Grand Duke, "and I do justice to their patriotism. Thanks to God, they have not yet been subjected to the horrors of epidemic and famine, and I have reason to hope that they will escape them; but I cannot admire their courage on the ramparts enough. You hear my words, Sir Merchant, and I beg you to repeat such to them."

"I thank your Highness in the name of the town," answered the merchant chief. "May I ask you what is the most distant date when we may expect the relieving army?"

"Six days at most, sir," replied the Grand Duke. "A brave and clever messenger managed this morning to get into the town, and he told me that fifty thousand Russians under General Kisselef, are advancing by forced marches. Two days ago, they were on the banks of the Lena, at Kirensk, and now, neither frost nor snow will keep them back. Fifty thousand good men, taking the Tartars on the flank, will soon set us free."

"I will add," said the chief of the merchants, "that we shall be ready to execute your orders, any day that your Highness may command a sortie."

"Good, sir," replied the Grand Duke. "Wait till the heads of the relieving columns appear on the heights, and we will speedily crush these invaders."

Then turning to General Voranzoff, "To-morrow," said he, "we will visit the works on the right bank. Ice is drifting down the Angara, which will not be long in freezing, and in that case the Tartars might perhaps cross."

"Will your Highness allow me to make an observation?" said the chief of the merchants.

"Do so, sir."

"I have more than once seen the temperature fall to thirty and forty degrees below zero, and the Angara has still carried down drifting ice without entirely freezing. This is no doubt owing to the swiftness of its current. If therefore
the Tartars have no other means of crossing the river, I can assure your Highness that they will not enter Irkutsk in that way."

The governor-general confirmed this assertion.

"It is a fortunate circumstance," responded the Grand Duke. "Nevertheless, we must hold ourselves ready for any emergency."

He then, turning towards the head of the police, asked, "Have you nothing to say to me, sir?"

"I have your Highness," answered the head of police, "a petition which is addressed to you through me."

"Addressed by whom?"

"By the Siberian exiles, whom, as your Highness knows, are in the town to the number of five hundred."

The political exiles, distributed over the province, had been collected in Irkutsk, from the beginning of the invasion. They had obeyed the order to rally in the town, and leave the villages where they exercised their different professions, some doctors, some professors, either at the Gymnasium, or at the Japanese School, or at the School of Navigation. The Grand Duke, trusting like the Czar in their patriotism, had armed them, and they had thoroughly proved their bravery.

"What do the exiles ask?" said the Grand Duke.

"They ask the consent of your Highness," answered the head of police, "to their forming a special corps and being placed in the front of the first sortie."

"Yes," replied the Grand Duke with an emotion which he did not seek to hide, "these exiles are Russians, and it is their right to fight for their country!"

"I believe I may assure your Highness," said the governor-general, "you will have no better soldiers."

"But they must have a chief," said the Grand Duke, "who will he be?"

"They wish to recommend to your Highness," said the head of police, "one of their number, who has distinguished himself on several occasions."

"Is he a Russian?"

"Yes, a Russian from the Baltic provinces."

"His name?"

"Is Wassili Fedor."

This exile was Nadia's father. Wassili Fedor, as we have already said, followed his profession of a medical man in Irkutsk. He was clever and charitable, and also possessed the greatest courage and most sincere patriotism. All the time which he did not devote to the sick he employed in organizing the defense. It was he who had united his companions in exile in the common cause. The exiles, till then mingled with the population, had behaved in such a way as to draw on themselves the attention of the Grand Duke. In several sorties, they had paid with their blood their debt to holy Russia--holy as they believe, and adored by her children! Wassili Fedor had behaved heroically; his name had been mentioned several times, but he never asked either thanks or favors, and when the exiles of Irkutsk thought of forming themselves into a special corps, he was ignorant of their intention of choosing him for their captain.

When the head of police mentioned this name, the Grand Duke answered that it was not unknown to him.

"Indeed," remarked General Voranzoff, "Wassili Fedor is a man of worth and courage. His influence over his companions has always been very great."

"How long has he been at Irkutsk?" asked the Duke.

"For two years."

"And his conduct?"

"His conduct," answered the head of police, "is that of a man obedient to the special laws which govern him."

"General," said the Grand Duke, "General, be good enough to present him to me immediately."

The orders of the Grand Duke were obeyed, and before half an hour had passed, Fedor was introduced into his presence. He was a man over forty, tall, of a stern and sad countenance. One felt that his whole life was summed up in a single word--strife--he had striven and suffered. His features bore a marked resemblance to those of his daughter, Nadia Fedor.

This Tartar invasion had severely wounded him in his tenderest affections, and ruined the hope of the father, exiled eight thousand versts from his native town. A letter had apprised him of the death of his wife, and at the same time of the departure of his daughter, who had obtained from the government an authorization to join him at Irkutsk. Nadia must have left Riga on the 10th of July. The invasion had begun on the 15th of July; if at that time Nadia had passed the frontier, what could have become of her in the midst of the invaders? The anxiety of the unhappy father may be supposed when, from that time, he had no further news of his daughter.

Wassili Fedor entered the presence of the Grand Duke, bowed, and waited to be questioned.

"Wassili Fedor," said the Grand Duke, "your companions in exile have asked to be allowed to form a select
"They are not ignorant that in this corps they must make up their minds to be killed to the last man?"
"They are not ignorant of it," replied Fedor.
"They wish to have you for their captain."
"I, your Highness?"
"Do you consent to be placed at their head?"
"Yes, if it is for the good of Russia."
"Captain Fedor," said the Grand Duke, "you are no longer an exile."
"Thanks, your Highness, but can I command those who are so still?"
"They are so no longer!" The brother of the Czar had granted a pardon to all Fedor's companions in exile, now his companions in arms!

Wassili Fedor wrung, with emotion, the hand which the Grand Duke held out to him, and retired.
The latter, turned to his officers, "The Czar will not refuse to ratify that pardon," said he, smiling; "we need heroes to defend the capital of Siberia, and I have just made some."

This pardon, so generously accorded to the exiles of Irkutsk, was indeed an act of real justice and sound policy.

It was now night. Through the windows of the palace burned the fires of the Tartar camp, flickering beyond the Angara. Down the river drifted numerous blocks of ice, some of which stuck on the piles of the old bridges; others were swept along by the current with great rapidity. It was evident, as the merchant had observed, that it would be very difficult for the Angara to freeze all over. The defenders of Irkutsk had not to dread being attacked on that side. Ten o'clock had just struck. The Grand Duke was about to dismiss his officers and retire to his apartments, when a tumult was heard outside the palace.

Almost immediately the door was thrown open, an aide-de-camp appeared, and advanced rapidly towards the Grand Duke.
"Your Highness," said he, "a courier from the Czar!"

CHAPTER XIII THE CZAR'S COURIER

ALL the members of the council simultaneously started forward. A courier from the Czar arrived in Irkutsk! Had these officers for a moment considered the improbability of this fact, they would certainly not have credited what they heard.

The Grand Duke advanced quickly to his aide-de-camp. "This courier!" he exclaimed.

A man entered. He appeared exhausted with fatigue. He wore the dress of a Siberian peasant, worn into tatters, and exhibiting several shot-holes. A Muscovite cap was on his head. His face was disfigured by a recently-healed scar. The man had evidently had a long and painful journey; his shoes being in a state which showed that he had been obliged to make part of it on foot.

"His Highness the Grand Duke?" he asked.

The Grand Duke went up to him. "You are a courier from the Czar?" he asked.
"Yes, your Highness."
"You come?"
"From Moscow."
"You left Moscow?"
"On the 15th of July."
"Your name?"
"Michael Strogoff."

It was Ivan Ogareff. He had taken the designation of the man whom he believed that he had rendered powerless. Neither the Grand Duke nor anyone knew him in Irkutsk, and he had not even to disguise his features. As he was in a position to prove his pretended identity, no one could have any reason for doubting him. He came, therefore, sustained by his iron will, to hasten by treason and assassination the great object of the invasion.

After Ogareff had replied, the Grand Duke signed to all his officers to withdraw. He and the false Michael Strogoff remained alone in the saloon.

The Grand Duke looked at Ivan Ogareff for some moments with extreme attention. Then he said, "On the 15th of July you were at Moscow?"
"Yes, your Highness; and on the night of the 14th I saw His Majesty the Czar at the New Palace."
"Have you a letter from the Czar?"
"Here it is."

And Ivan Ogareff handed to the Grand Duke the Imperial letter, crumpled to almost microscopic size.
"Was the letter given you in this state?"
"No, your Highness, but I was obliged to tear the envelope, the better to hide it from the Emir's soldiers."

"Were you taken prisoner by the Tartars?"

"Yes, your Highness, I was their prisoner for several days," answered Ogareff. "That is the reason that, having left Moscow on the 15th of July, as the date of that letter shows, I only reached Irkutsk on the 2d of October, after traveling seventy-nine days."

The Grand Duke took the letter. He unfolded it and recognized the Czar's signature, preceded by the decisive formula, written by his brother's hand. There was no possible doubt of the authenticity of this letter, nor of the identity of the courier. Though Ogareff's countenance had at first inspired the Grand Duke with some distrust, he let nothing of it appear, and it soon vanished.

The Grand Duke remained for a few minutes without speaking. He read the letter slowly, so as to take in its meaning fully. "Michael Strogoff, do you know the contents of this letter?" he asked.

"Yes, your Highness. I might have been obliged to destroy it, to prevent its falling into the hands of the Tartars, and should such have been the case, I wished to be able to bring the contents of it to your Highness."

"You know that this letter enjoins us all to die, rather than give up the town?"

"I know it."

"You know also that it informs me of the movements of the troops which have combined to stop the invasion?"

"Yes, your Highness, but the movements have failed."

"What do you mean?"

"I mean that Ichim, Omsk, Tomsk, to speak only of the more important towns of the two Siberias, have been successively occupied by the soldiers of Feofar-Khan."

"But there has been fighting? Have not our Cossacks met the Tartars?"

"Several times, your Highness."

"And they were repulsed?"

"They were not in sufficient force to oppose the enemy."

"Where did the encounters take place?"

"At Kolyvan, at Tomsk." Until now, Ogareff had only spoken the truth, but, in the hope of troubling the defenders of Irkutsk by exaggerating the defeats, he added, "And a third time before Krasnoiarsk."

"And what of this last engagement?" asked the Grand Duke, through whose compressed lips the words could scarcely pass.

"It was more than an engagement, your Highness," answered Ogareff; "it was a battle."

"A battle?"

"Twenty thousand Russians, from the frontier provinces and the government of Tobolsk, engaged with a hundred and fifty thousand Tartars, and, notwithstanding their courage, were overwhelmed."

"You lie!" exclaimed the Grand Duke, endeavoring in vain to curb his passion.

"I speak the truth, your Highness," replied Ivan Ogareff coldly. "I was present at the battle of Krasnoiarsk, and it was there I was made prisoner!"

The Grand Duke grew calmer, and by a significant gesture he gave Ogareff to understand that he did not doubt his veracity. "What day did this battle of Krasnoiarsk take place?" he asked.

"On the 2d of September."

"And now all the Tartar troops are concentrated here?"

"All."

"And you estimate them?"

"At about four hundred thousand men."

Another exaggeration of Ogareff's in the estimate of the Tartar army, with the same object as before.

"And I must not expect any help from the West provinces?" asked the Grand Duke.

"None, your Highness, at any rate before the end of the winter."

"Well, hear this, Michael Strogoff. Though I must expect no help either from the East or from the West, even were these barbarians six hundred thousand strong, I will never give up Irkutsk!"

Ogareff's evil eye slightly contracted. The traitor thought to himself that the brother of the Czar did not reckon the result of treason.

The Grand Duke, who was of a nervous temperament, had great difficulty in keeping calm whilst hearing this disastrous news. He walked to and fro in the room, under the gaze of Ogareff, who eyed him as a victim reserved for vengeance. He stopped at the windows, he looked forth at the fires in the Tartar camp, he listened to the noise of the ice-blocks drifting down the Angara.

A quarter of an hour passed without his putting any more questions. Then taking up the letter, he re-read a passage and said, "You know that in this letter I am warned of a traitor, of whom I must beware?"
"Yes, your Highness."

"He will try to enter Irkutsk in disguise; gain my confidence, and betray the town to the Tartars."

"I know all that, your Highness, and I know also that Ivan Ogareff has sworn to revenge himself personally on the Czar's brother."

"Why?"

"It is said that the officer in question was condemned by the Grand Duke to a humiliating degradation."

"Yes, I remember. But it is a proof that the villain, who could afterwards serve against his country and head an invasion of barbarians, deserved it."

"His Majesty the Czar," said Ogareff, "was particularly anxious that you should be warned of the criminal projects of Ivan Ogareff against your person."

"Yes; of that the letter informs me."

"And His Majesty himself spoke to me of it, telling me I was above all things to beware of the traitor."

"Did you meet with him?"

"Yes, your Highness, after the battle of Krasnoiarsk. If he had only guessed that I was the bearer of a letter addressed to your Highness, in which his plans were revealed, I should not have got off so easily."

"No; you would have been lost!" replied the Grand Duke. "And how did you manage to escape?"

"By throwing myself into the Irtych."

"And how did you enter Irkutsk?"

"Under cover of a sortie, which was made this evening to repulse a Tartar detachment. I mingled with the defenders of the town, made myself known, and was immediately conducted before your Highness."

"Good, Michael Strogoff," answered the Grand Duke. "You have shown courage and zeal in your difficult mission. I will not forget you. Have you any favor to ask?"

"None; unless it is to be allowed to fight at the side of your Highness," replied Ogareff.

"So be it, Strogoff. I attach you from to-day to my person, and you shall be lodged in the palace."

"And if according to his intention, Ivan Ogareff should present himself to your Highness under a false name?"

"We will unmask him, thanks to you, who know him, and I will make him die under the knout. Go!"

Ogareff gave a military salute, not forgetting that he was a captain of the couriers of the Czar, and retired.

Ogareff had so far played his unworthy part with success. The Grand Duke's entire confidence had been accorded him. He could now betray it whenever it suited him. He would inhabit the very palace. He would be in the secret of all the operations for the defense of the town. He thus held the situation in his hand, as it were. No one in Irkutsk knew him, no one could snatch off his mask. He resolved therefore to set to work without delay.

Indeed, time pressed. The town must be captured before the arrival of the Russians from the North and East, and that was only a question of a few days. The Tartars once masters of Irkutsk, it would not be easy to take it again from them. At any rate, even if they were obliged to abandon it later, they would not do so before they had utterly destroyed it, and before the head of the Grand Duke had rolled at the feet of Feofar-Khan.

Ivan Ogareff, having every facility for seeing, observing, and acting, occupied himself the next day with visiting the ramparts. He was everywhere received with cordial congratulations from officers, soldiers, and citizens. To them this courier from the Czar was a link which connected them with the empire.

Ogareff recounted, with an assurance which never failed, numerous fictitious events of his journey. Then, with the cunning for which he was noted, without dwelling too much on it at first, he spoke of the gravity of the situation, exaggerating the success of the Tartars and the numbers of the barbarian forces, as he had when speaking to the Grand Duke. According to him, the expected succors would be insufficient, if ever they arrived at all, and it was to be feared that a battle fought under the walls of Irkutsk would be as fatal as the battles of Kolyvan, Tomsk, and Krasnoiarsk.

Ogareff was not too free in these insinuations. He wished to allow them to sink gradually into the minds of the defenders of Irkutsk. He pretended only to answer with reluctance when much pressed with questions. He always added that they must fight to the last man, and blow up the town rather than yield!

These false statements would have done more harm had it been possible; but the garrison and the population of Irkutsk were too patriotic to let themselves be moved. Of all the soldiers and citizens shut up in this town, isolated at the extremity of the Asiatic world, not one dreamed of even speaking of a capitulation. The contempt of the Russians for these barbarians was boundless.

No one suspected the odious part played by Ivan Ogareff; no one guessed that the pretended courier of the Czar was a traitor. It occurred very naturally that on his arrival in Irkutsk, a frequent intercourse was established between Ogareff and one of the bravest defenders of the town, Wassili Fedor. We know what anxiety this unhappy father suffered. If his daughter, Nadia Fedor, had left Russia on the date fixed by the last letter he had received from Riga, what had become of her? Was she still trying to cross the invaded provinces, or had she long since been taken
prisoner? The only alleviation to Wassili Fedor’s anxiety was when he could obtain an opportunity of engaging in battle with the Tartars—opportunities which came too seldom for his taste. The very evening the pretended courier arrived, Wassili Fedor went to the governor-general’s palace and, acquainting Ogareff with the circumstances under which his daughter must have left European Russia, told him all his uneasiness about her. Ogareff did not know Nadia, although he had met her at Ichim on the day she was there with Michael Strogoff; but then, he had not paid more attention to her than to the two reporters, who at the same time were in the post-house; he therefore could give Wassili Fedor no news of his daughter.

"But at what time," asked Ogareff, "must your daughter have left the Russian territory?"
"About the same time that you did," replied Fedor.
"I left Moscow on the 15th of July."
"Nadia must also have quitted Moscow at that time. Her letter told me so expressly."
"She was in Moscow on the 15th of July?"
"Yes, certainly, by that date."
"Then it was impossible for her--But no, I am mistaken--I was confusing dates. Unfortunately, it is too probable that your daughter must have passed the frontier, and you can only have one hope, that she stopped on learning the news of the Tartar invasion!"

The father’s head fell! He knew Nadia, and he knew too well that nothing would have prevented her from setting out. Ivan Ogareff had just committed gratuitously an act of real cruelty. With a word he might have reassured Fedor. Although Nadia had passed the frontier under circumstances with which we are acquainted, Fedor, by comparing the date on which his daughter would have been at Nijni-Novgorod, and the date of the proclamation which forbade anyone to leave it, would no doubt have concluded thus: that Nadia had not been exposed to the dangers of the invasion, and that she was still, in spite of herself, in the European territory of the Empire.

Ogareff obedient to his nature, a man who was never touched by the sufferings of others, might have said that word. He did not say it. Fedor retired with his heart broken. In that interview his last hope was crushed.

During the two following days, the 3rd and 4th of October, the Grand Duke often spoke to the pretended Michael Strogoff, and made him repeat all that he had heard in the Imperial Cabinet of the New Palace. Ogareff, prepared for all these questions, replied without the least hesitation. He intentionally did not conceal that the Czar’s government had been utterly surprised by the invasion, that the insurrection had been prepared in the greatest possible secrecy, that the Tartars were already masters of the line of the Obi when the news reached Moscow, and lastly, that none of the necessary preparations were completed in the Russian provinces for sending into Siberia the troops requisite for repulsing the invaders.

Ivan Ogareff, being entirely free in his movements, began to study Irkutsk, the state of its fortifications, their weak points, so as to profit subsequently by his observations, in the event of being prevented from consummating his act of treason. He examined particularly the Bolchaia Gate, the one he wished to deliver up.

Twice in the evening he came upon the glacis of this gate. He walked up and down, without fear of being discovered by the besiegers, whose nearest posts were at least a mile from the ramparts. He fancied that he was recognized by no one, till he caught sight of a shadow gliding along outside the earthworks. Sangarre had come at the risk of her life for the purpose of putting herself in communication with Ivan Ogareff.

For two days the besieged had enjoyed a tranquillity to which the Tartars had not accustomed them since the commencement of the investment. This was by Ogareff’s orders. Feofar-Khan’s lieutenant wished that all attempts to take the town by force should be suspended. He hoped the watchfulness of the besieged would relax. At any rate, several thousand Tartars were kept in readiness at the outposts, to attack the gate, deserted, as Ogareff anticipated that it would be, by its defenders, whenever he should summon the besiegers to the assault.

This he could not now delay in doing. All must be over by the time that the Russian troops should come in sight of Irkutsk. Ogareff’s arrangements were made, and on this evening a note fell from the top of the earthworks into Sangarre’s hands.

On the next day, that is to say during the hours of darkness from the 5th to the 6th of October, at two o’clock in the morning, Ivan Ogareff had resolved to deliver up Irkutsk.

CHAPTER XIV THE NIGHT OF THE FIFTH OF OCTOBER

IVAN OGAREFF’s plan had been contrived with the greatest care, and except for some unforeseen accident he believed that it must succeed. It was of importance that the Bolchaia Gate should be unguarded or only feebly held when he gave it up. The attention of the besieged was therefore to be drawn to another part of the town. A diversion was agreed upon with the Emir.

This diversion was to be effected both up and down the river, on the Irkutsk bank. The attack on these two points
was to be conducted in earnest, and at the same time a feigned attempt at crossing the Angara from the left bank was to be made. The Bolchaia Gate, would be probably deserted, so much the more because on this side the Tartar outposts having drawn back, would appear to have broken up.

It was the 5th of October. In four and twenty hours, the capital of Eastern Siberia would be in the hands of the Emir, and the Grand Duke in the power of Ivan Ogareff.

During the day, an unusual stir was going on in the Angara camp. From the windows of the palace important preparations on the opposite shore could be distinctly seen. Numerous Tartar detachments were converging towards the camp, and from hour to hour reinforced the Emir's troops. These movements, intended to deceive the besieged, were conducted in the most open manner possible before their eyes.

Ogareff had warned the Grand Duke that an attack was to be feared. He knew, he said, that an assault was to be made, both above and below the town, and he counselled the Duke to reinforce the two directly threatened points. Accordingly, after a council of war had been held in the palace, orders were issued to concentrate the defense on the bank of the Angara and at the two ends of the town, where the earthworks protected the river.

This was exactly what Ogareff wished. He did not expect that the Bolchaia Gate would be left entirely without defenders, but that there would only be a small number. Besides, Ogareff meant to give such importance to the diversion, that the Grand Duke would be obliged to oppose it with all his available forces. The traitor planned also to produce so frightful a catastrophe that terror must inevitably overwhelm the hearts of the besieged.

All day the garrison and population of Irkutsk were on the alert. The measures to repel an attack on the points hitherto unassailed had been taken. The Grand Duke and General Voranzoff visited the posts, strengthened by their orders. Wassili Fedor's corps occupied the North of the town, but with orders to throw themselves where the danger was greatest. The right bank of the Angara had been protected with the few guns possessed by the defenders. With these measures, taken in time, thanks to the advice so opportunely given by Ivan Ogareff, there was good reason to hope that the expected attack would be repulsed. In that case the Tartars, momentarily discouraged, would no doubt not make another attempt against the town for several days. Now the troops expected by the Grand Duke might arrive at any hour. The safety or the loss of Irkutsk hung only by a thread.

On this day, the sun which had risen at twenty minutes to six, set at forty minutes past five, having traced its diurnal arc for eleven hours above the horizon. The twilight would struggle with the night for another two hours. Then it would be intensely dark, for the sky was cloudy, and there would be no moon. This gloom would favor the plans of Ivan Ogareff.

For a few days already a sharp frost had given warning of the approaching rigor of the Siberian winter, and this evening it was especially severe. The Russians posted by the bank of the Angara, obliged to conceal their position, lighted no fires. They suffered cruelly from the low temperature. A few feet below them, the ice in large masses drifted down the current. All day these masses had been seen passing rapidly between the two banks.

This had been considered by the Grand Duke and his officers as fortunate. Should the channel of the Angara continue to be thus obstructed, the passage must be impracticable. The Tartars could use neither rafts nor boats. As to their crossing the river on the ice, that was not possible. The newly-frozen plain could not bear the weight of an assaulting column.

This circumstance, as it appeared favorable to the defenders of Irkutsk, Ogareff might have regretted. He did not do so, however. The traitor knew well that the Tartars would not try to pass the Angara, and that, on its side at least, their attempt was only a feint.

About ten in the evening, the state of the river sensibly improved, to the great surprise of the besieged and still more to their disadvantage. The passage till then impracticable, became all at once possible. The bed of the Angara was clear. The blocks of ice, which had for some days drifted past in large numbers, disappeared down the current, and five or six only now occupied the space between the banks. The Russian officers reported this change in the river to the Grand Duke. They suggested that it was probably caused by the circumstance that in some narrower part of the Angara, the blocks had accumulated so as to form a barrier.

We know this was the case. The passage of the Angara was thus open to the besiegers. There was great reason for the Russians to be on their guard.

Up to midnight nothing had occurred. On the Eastern side, beyond the Bolchaia Gate, all was quiet. Not a glimmer was seen in the dense forest, which appeared confounded on the horizon with the masses of clouds hanging low down in the sky. Lights flitting to and fro in the Angara camp, showed that a considerable movement was taking place. From a verst above and below the point where the scarp met the river's bank, came a dull murmur, proving that the Tartars were on foot, expecting some signal. An hour passed. Nothing new.

The bell of the Irkutsk cathedral was about to strike two o'clock in the morning, and not a movement amongst the besiegers had yet shown that they were about to commence the assault. The Grand Duke and his officers began to suspect that they had been mistaken. Had it really been the Tartars' plan to surprise the town? The preceding
nights had not been nearly so quiet—musketry rattling from the outposts, shells whistling through the air; and this time, nothing. The officers waited, ready to give their orders, according to circumstances.

We have said that Ogareff occupied a room in the palace. It was a large chamber on the ground floor, its windows opening on a side terrace. By taking a few steps along this terrace, a view of the river could be obtained.

Profound darkness reigned in the room. Ogareff stood by a window, awaiting the hour to act. The signal, of course, could come from him, alone. This signal once given, when the greater part of the defenders of Irkutsk would be summoned to the points openly attacked, his plan was to leave the palace and hurry to the Bolchaia Gate. If it was unguarded, he would open it; or at least he would direct the overwhelming mass of its assailants against the few defenders.

He now crouched in the shadow, like a wild beast ready to spring on its prey. A few minutes before two o'clock, the Grand Duke desired that Michael Strogoff—which was the only name they could give to Ivan Ogareff—should be brought to him. An aide-de-camp came to the room, the door of which was closed. He called.

Ogareff, motionless near the window, and invisible in the shade did not answer. The Grand Duke was therefore informed that the Czar's courier was not at that moment in the palace.

Two o'clock struck. Now was the time to cause the diversion agreed upon with the Tartars, waiting for the assault. Ivan Ogareff opened the window and stationed himself at the North angle of the side terrace.

Below him flowed the roaring waters of the Angara. Ogareff took a match from his pocket, struck it and lighted a small bunch of tow, impregnated with priming powder, which he threw into the river.

It was by the orders of Ivan Ogareff that the torrents of mineral oil had been thrown on the surface of the Angara! There are numerous naphtha springs above Irkutsk, on the right bank, between the suburb of Poskavsk and the town. Ogareff had resolved to employ this terrible means to carry fire into Irkutsk. He therefore took possession of the immense reservoirs which contained the combustible liquid. It was only necessary to demolish a piece of wall in order to allow it to flow out in a vast stream.

This had been done that night, a few hours previously, and this was the reason that the raft which carried the true Courier of the Czar, Nadia, and the fugitives, floated on a current of mineral oil. Through the breaches in these reservoirs of enormous dimensions rushed the naphtha in torrents, and, following the inclination of the ground, it spread over the surface of the river, where its density allowed it to float. This was the way Ivan Ogareff carried on warfare! Allied with Tartars, he acted like a Tartar, and against his own countrymen!

The tow had been thrown on the waters of the Angara. In an instant, with electrical rapidity, as if the current had been of alcohol, the whole river was in a blaze above and below the town. Columns of blue flames ran between the two banks. Volumes of vapor curled up above. The few pieces of ice which still drifted were seized by the burning liquid, and melted like wax on the top of a furnace, the evaporated water escaping in shrill hisses.

At the same moment, firing broke out on the North and South of the town. The enemy's batteries discharged their guns at random. Several thousand Tartars rushed to the assault of the earth-works. The houses on the bank, built of wood, took fire in every direction. A bright light dissipated the darkness of the night.

"At last!" said Ivan Ogareff.

He had good reason for congratulating himself. The diversion which he had planned was terrible. The defenders of Irkutsk found themselves between the attack of the Tartars and the fearful effects of fire. The bells rang, and all the able-bodied of the population ran, some towards the points attacked, and others towards the houses in the grasp of the flames, which it seemed too probable would ere long envelop the whole town.

The Gate of Bolchaia was nearly free. Only a very small guard had been left there. And by the traitor's suggestion, and in order that the event might be explained apart from him, as if by political hate, this small guard had been chosen from the little band of exiles.

Ogareff re-entered his room, now brilliantly lighted by the flames from the Angara; then he made ready to go out. But scarcely had he opened the door, when a woman rushed into the room, her clothes drenched, her hair in disorder.

"Sangarre!" exclaimed Ogareff, in the first moment of surprise, and not supposing that it could be any other woman than the gypsy.

It was not Sangarre; it was Nadia!

At the moment when, floating on the ice, the girl had uttered a cry on seeing the fire spreading along the current, Michael had seized her in his arms, and plunged with her into the river itself to seek a refuge in its depths from the flames. The block which bore them was not thirty fathoms from the first quay of Irkutsk.

Swimming beneath the water, Michael managed to get a footing with Nadia on the quay. Michael Strogoff had reached his journey's end! He was in Irkutsk!

"To the governor's palace!" said he to Nadia.

In less than ten minutes, they arrived at the entrance to the palace. Long tongues of flame from the Angara licked
its walls, but were powerless to set it on fire. Beyond the houses on the bank were in a blaze.

The palace being open to all, Michael and Nadia entered without difficulty. In the confusion, no one remarked them, although their garments were dripping. A crowd of officers coming for orders, and of soldiers running to execute them, filled the great hall on the ground floor. There, in a sudden eddy of the confused multitude, Michael and the young girl were separated from each other.

Nadia ran distracted through the passages, calling her companion, and asking to be taken to the Grand Duke. A door into a room flooded with light opened before her. She entered, and found herself suddenly face to face with the man whom she had met at Ichim, whom she had seen at Tomsk; face to face with the one whose villainous hand would an instant later betray the town!

"Ivan Ogareff!" she cried.

On hearing his name pronounced, the wretch started. His real name known, all his plans would be balked. There was but one thing to be done: to kill the person who had just uttered it. Ogareff darted at Nadia; but the girl, a knife in her hand, retreated against the wall, determined to defend herself.

"Ivan Ogareff!" again cried Nadia, knowing well that so detested a name would soon bring her help.

"Ah! Be silent!" hissed out the traitor between his clenched teeth.

"Ivan Ogareff!" exclaimed a third time the brave young girl, in a voice to which hate had added ten-fold strength.

Mad with fury, Ogareff, drawing a dagger from his belt, again rushed at Nadia and compelled her to retreat into a corner of the room. Her last hope appeared gone, when the villain, suddenly lifted by an irresistible force, was dashed to the ground.

"Michael!" cried Nadia.

It was Michael Strogoff. Michael had heard Nadia's call. Guided by her voice, he had just in time reached Ivan Ogareff's room, and entered by the open door.

"Fear nothing, Nadia," said he, placing himself between her and Ogareff.

"Ah!" cried the girl, "take care, brother! The traitor is armed! He can see!"

Ogareff rose, and, thinking he had an immeasurable advantage over the blind man leaped upon him. But with one hand, the blind man grasped the arm of his enemy, seized his weapon, and hurled him again to the ground.

Pale with rage and shame, Ogareff remembered that he wore a sword. He drew it and returned a second time to the charge. A blind man! Ogareff had only to deal with a blind man! He was more than a match for him!

Nadia, terrified at the danger which threatened her companion ran to the door calling for help!

"Close the door, Nadia!" said Michael. "Call no one, and leave me alone! The Czar's courier has nothing to fear to-day from this villain! Let him come on, if he dares! I am ready for him."

In the mean time, Ogareff, gathering himself together like a tiger about to spring, uttered not a word. The noise of his footsteps, his very breathing, he endeavored to conceal from the ear of the blind man. His object was to strike before his opponent was aware of his approach, to strike him with a deadly blow.

Nadia, terrified and at the same time confident, watched this terrible scene with involuntary admiration. Michael's calm bearing seemed to have inspired her. Michael's sole weapon was his Siberian knife. He did not see his adversary armed with a sword, it is true; but Heaven's support seemed to be afforded him. How, almost without stirring, did he always face the point of the sword?

Ivan Ogareff watched his strange adversary with visible anxiety. His superhuman calm had an effect upon him. In vain, appealing to his reason, did he tell himself that in so unequal a combat all the advantages were on his side. The immobility of the blind man froze him. He had settled on the place where he would strike his victim. He had fixed upon it! What, then, hindered him from putting an end to his blind antagonist?

At last, with a spring he drove his sword full at Michael's breast. An imperceptible movement of the blind man's knife turned aside the blow. Michael had not been touched, and coolly he awaited a second attack.

Cold drops stood on Ogareff's brow. He drew back a step, then again leaped forward. But as had the first, this second attempt failed. The knife had simply parried the blow from the traitor's useless sword.

Mad with rage and terror before this living statue, he gazed into the wide-open eyes of the blind man. Those eyes which seemed to pierce to the bottom of his soul, and yet which did not, could not, see--exercised a sort of dreadful fascination over him.

All at once, Ogareff uttered a cry. A sudden light flashed across his brain. "He sees!" he exclaimed, "he sees!" And like a wild beast trying to retreat into its den, step by step, terrified, he drew back to the end of the room.

Then the statue became animated, the blind man walked straight up to Ivan Ogareff, and placing himself right before him, "Yes, I see!" said he. "I see the mark of the knout which I gave you, traitor and coward! I see the place where I am about to strike you! Defend your life! It is a duel I deign to offer you! My knife against your sword!"

"He sees!" said Nadia. "Gracious Heaven, is it possible!"
Ogareff felt that he was lost. But mustering all his courage, he sprang forward on his impassible adversary. The two blades crossed, but at a touch from Michael's knife, wielded in the hand of the Siberian hunter, the sword flew in splinters, and the wretch, stabbed to the heart, fell lifeless on the ground.

At the same moment, the door was thrown open. The Grand Duke, accompanied by some of his officers, appeared on the threshold. The Grand Duke advanced. In the body lying on the ground, he recognized the man whom he believed to be the Czar's courier.

Then, in a threatening voice, "Who killed that man?" he asked.

"I," replied Michael.

One of the officers put a pistol to his temple, ready to fire.

"Your name?" asked the Grand Duke, before giving the order for his brains to be blown out.

"Your Highness," answered Michael, "ask me rather the name of the man who lies at your feet!"

"That man, I know him! He is a servant of my brother! He is the Czar's courier!"

"That man, your Highness, is not a courier of the Czar! He is Ivan Ogareff!"

"Ivan Ogareff!" exclaimed the Grand Duke.

"Yes, Ivan the Traitor!"

"But who are you, then?"

"Michael Strogoff!"

CHAPTER XV CONCLUSION

MICHAEL STROGOFF was not, had never been, blind. A purely human phenomenon, at the same time moral and physical, had neutralized the action of the incandescent blade which Feofar's executioner had passed before his eyes.

It may be remembered, that at the moment of the execution, Marfa Strogoff was present, stretching out her hands towards her son. Michael gazed at her as a son would gaze at his mother, when it is for the last time. The tears, which his pride in vain endeavored to subdue, welling up from his heart, gathered under his eyelids, and volatilizing on the cornea, had saved his sight. The vapor formed by his tears interposing between the glowing saber and his eyeballs, had been sufficient to annihilate the action of the heat. A similar effect is produced, when a workman smelter, after dipping his hand in vapor, can with impunity hold it over a stream of melted iron.

Michael had immediately understood the danger in which he would be placed should he make known his secret to anyone. He at once saw, on the other hand, that he might make use of his supposed blindness for the accomplishment of his designs. Because it was believed that he was blind, he would be allowed to go free. He must therefore be blind, blind to all, even to Nadia, blind everywhere, and not a gesture at any moment must let the truth be suspected. His resolution was taken. He must risk his life even to afford to all he might meet the proof of his want of sight. We know how perfectly he acted the part he had determined on.

His mother alone knew the truth, and he had whispered it to her in Tomsk itself, when bending over her in the dark he covered her with kisses.

When Ogareff had in his cruel irony held the Imperial letter before the eyes which he believed were destroyed, Michael had been able to read, and had read the letter which disclosed the odious plans of the traitor. This was the reason of the wonderful resolution he exhibited during the second part of his journey. This was the reason of his unalterable longing to reach Irkutsk, so as to perform his mission by word of mouth. He knew that the town would be betrayed! He knew that the life of the Grand Duke was threatened! The safety of the Czar's brother and of Siberia was in his hands.

This story was told in a few words to the Grand Duke, and Michael repeated also--and with what emotion!--the part Nadia had taken in these events.

"Who is this girl?" asked the Grand Duke.

"The daughter of the exile, Wassili Fedor," replied Michael.

"The daughter of Captain Fedor," said the Grand Duke, "has ceased to be the daughter of an exile. There are no longer exiles in Irkutsk."

Nadia, less strong in joy than she had been in grief, fell on her knees before the Grand Duke, who raised her with one hand, while he extended the other to Michael.

An hour after, Nadia was in her father's arms. Michael Strogoff, Nadia, and Wassili Fedor were united. This was the height of happiness to them all.

The Tartars had been repulsed in their double attack on the town. Wassili Fedor, with his little band, had driven back the first assailants who presented themselves at the Bolchaia Gate, expecting to find it open and which, by an instinctive feeling, often arising from sound judgment, he had determined to remain at and defend.
At the same time as the Tartars were driven back the besieged had mastered the fire. The liquid naphtha having rapidly burnt to the surface of the water, the flames did not go beyond the houses on the shore, and left the other quarters of the town uninjured. Before daybreak the troops of Feofar-Khan had retreated into their camp, leaving a large number of dead on and below the ramparts.

Among the dead was the gypsy Sangarre, who had vainly endeavored to join Ivan Ogareff.

For two days the besiegers attempted no fresh assault. They were discouraged by the death of Ogareff. This man was the mainspring of the invasion, and he alone, by his plots long since contrived, had had sufficient influence over the khans and their hordes to bring them to the conquest of Asiatic Russia.

However, the defenders of Irkutsk kept on their guard, and the investment still continued; but on the 7th of October, at daybreak, cannon boomed out from the heights around Irkutsk. It was the succoring army under the command of General Kisselef, and it was thus that he made known his welcome arrival to the Grand Duke.

The Tartars did not wait to be attacked. Not daring to run the risk of a battle under the walls of Irkutsk, they immediately broke up the Angara camp. Irkutsk was at last relieved.

With the first Russian soldiers, two of Michael's friends entered the city. They were the inseparable Blount and Jolivet. On gaining the right bank of the Angara by means of the icy barrier, they had escaped, as had the other fugitives, before the flames had reached their raft. This had been noted by Alcide Jolivet in his book in this way: "Ran a narrow chance of being finished up like a lemon in a bowl of punch!"

Their joy was great on finding Nadia and Michael safe and sound; above all, when they learnt that their brave companion was not blind. Harry Blount inscribed this observation: "Red-hot iron is insufficient in some cases to destroy the sensibility of the optic nerve."

Then the two correspondents, settled for a time in Irkutsk, busied themselves in putting the notes and impressions of their journey in order. Thence were sent to London and Paris two interesting articles relative to the Tartar invasion, and which--a rare thing--did not contradict each other even on the least important points.

The remainder of the campaign was unfortunate to the Emir and his allies. This invasion, futile as all which attack the Russian Colossus must be, was very fatal to them. They soon found themselves cut off by the Czar's troops, who retook in succession all the conquered towns. Besides this, the winter was terrible, and, decimated by the cold, only a small part of these hordes returned to the steppes of Tartary.

The Irkutsk road, by way of the Ural Mountains, was now open. The Grand Duke was anxious to return to Moscow, but he delayed his journey to be present at a touching ceremony, which took place a few days after the entry of the Russian troops.

Michael Strogoff sought Nadia, and in her father's presence said to her, "Nadia, my sister still, when you left Riga to come to Irkutsk, did you leave it with any other regret than that for your mother?"

"No," replied Nadia, "none of any sort whatever."

"Then, nothing of your heart remains there?"

"Nothing, brother."

"Then, Nadia," said Michael, "I think that God, in allowing us to meet, and to go through so many severe trials together, must have meant us to be united forever."

"Ah!" said Nadia, falling into Michael's arms. Then turning towards Wassili Fedor, "My father," said she, blushing.

"Nadia," said Captain Fedor, "it will be my joy to call you both my children!"

The marriage ceremony took place in Irkutsk cathedral.

Jolivet and Blount very naturally assisted at this marriage, of which they wished to give an account to their readers.

"And doesn't it make you wish to imitate them?" asked Alcide of his friend.

"Pooh!" said Blount. "Now if I had a cousin like you--"

"My cousin isn't to be married!" answered Alcide, laughing.

"So much the better," returned Blount, "for they speak of difficulties arising between London and Pekin. Have you no wish to go and see what is going on there?"

"By Jove, my dear Blount!" exclaimed Alcide Jolivet, "I was just going to make the same proposal to you."

And that was how the two inseparables set off for China.

A few days after the ceremony, Michael and Nadia Strogoff, accompanied by Wassili Fedor, took the route to Europe. The road so full of suffering when going, was a road of joy in returning. They traveled swiftly, in one of those sleighs which glide like an express train across the frozen steppes of Siberia.

However, when they reached the banks of the Dinka, just before Birskoe, they stopped for a while. Michael found the place where he had buried poor Nicholas. A cross was erected there, and Nadia prayed a last time on the grave of the humble and heroic friend, whom neither of them would ever forget.
At Omsk, old Marfa awaited them in the little house of the Strogoffs. She clasped passionately in her arms the
girl whom in her heart she had already a hundred times called "daughter." The brave old Siberian, on that day, had
the right to recognize her son and say she was proud of him.

After a few days passed at Omsk, Michael and Nadia entered Europe, and, Wassili Fedor settling down in St.
Petersburg, neither his son nor his daughter had any occasion to leave him, except to go and see their old mother.

The young courier was received by the Czar, who attached him specially to his own person, and gave him the
Cross of St. George. In the course of time, Michael Strogoff reached a high station in the Empire. But it is not the
history of his success, but the history of his trials, which deserves to be related.

OFF ON A COMET OR HECTOR SERVADAC
By Jules Verne

BOOK I.
CHAPTER I. A CHALLENGE
"Nothing, sir, can induce me to surrender my claim."
"I am sorry, count, but in such a matter your views cannot modify mine."
"But allow me to point out that my seniority unquestionably gives me a prior right."
"Mere seniority, I assert, in an affair of this kind, cannot possibly entitle you to any prior claim whatever."
"Then, captain, no alternative is left but for me to compel you to yield at the sword's point."
"As you please, count; but neither sword nor pistol can force me to forego my pretensions. Here is my card."
"And mine."

This rapid altercation was thus brought to an end by the formal interchange of the names of the disputants. On
one of the cards was inscribed:
_Captain Hector Servadac, Staff Officer, Mostaganem._

On the other was the title:
_Count Wassili Timascheff, On board the Schooner "Dobryna."_

It did not take long to arrange that seconds should be appointed, who would meet in Mostaganem at two o'clock
that day; and the captain and the count were on the point of parting from each other, with a salute of punctilious
courtesy, when Timascheff, as if struck by a sudden thought, said abruptly: "Perhaps it would be better, captain, not
to allow the real cause of this to transpire?"
"Far better," replied Servadac; "it is undesirable in every way for any names to be mentioned."
"In that case, however," continued the count, "it will be necessary to assign an ostensible pretext of some kind.
Shall we allege a musical dispute? a contention in which I feel bound to defend Wagner, while you are the zealous
champion of Rossini?"

"I am quite content," answered Servadac, with a smile; and with another low bow they parted.

The scene, as here depicted, took place upon the extremity of a little cape on the Algerian coast, between
Mostaganem and Tenes, about two miles from the mouth of the Shelif. The headland rose more than sixty feet above
the sea-level, and the azure waters of the Mediterranean, as they softly kissed the strand, were tinged with the
reddish hue of the ferriferous rocks that formed its base. It was the 31st of December. The noontide sun, which
usually illuminated the various projections of the coast with a dazzling brightness, was hidden by a dense mass of
cloud, and the fog, which for some unaccountable cause, had hung for the last two months over nearly every region
in the world, causing serious interruption to traffic between continent and continent, spread its dreary veil across
land and sea.

After taking leave of the staff-officer, Count Wassili Timascheff wended his way down to a small creek, and
took his seat in the stern of a light four-oar that had been awaiting his return; this was immediately pushed off from
shore, and was soon alongside a pleasure-yacht, that was lying to, not many cable lengths away.

At a sign from Servadac, an orderly, who had been standing at a respectful distance, led forward a magnificent
Arabian horse; the captain vaulted into the saddle, and followed by his attendant, well mounted as himself, started
off towards Mostaganem. It was half-past twelve when the two riders crossed the bridge that had been recently
erected over the Shelif, and a quarter of an hour later their steeds, flecked with foam, dashed through the Mascara
Gate, which was one of five entrances opened in the embattled wall that encircled the town.

At that date, Mostaganem contained about fifteen thousand inhabitants, three thousand of whom were French.
Besides being one of the principal district towns of the province of Oran, it was also a military station. Mostaganem
rejoiced in a well-sheltered harbor, which enabled her to utilize all the rich products of the Mina and the Lower
Shelif. It was the existence of so good a harbor amidst the exposed cliffs of this coast that had induced the owner of
the _Dobryna_ to winter in these parts, and for two months the Russian standard had been seen floating from her yard, whilst on her mast-head was hoisted the pennant of the French Yacht Club, with the distinctive letters M. C. W. T., the initials of Count Timascheff.

Having entered the town, Captain Servadac made his way towards Matmore, the military quarter, and was not long in finding two friends on whom he might rely—a major of the 2nd Fusileers, and a captain of the 8th Artillery. The two officers listened gravely enough to Servadac's request that they would act as his seconds in an affair of honor, but could not resist a smile on hearing that the dispute between him and the count had originated in a musical discussion. Surely, they suggested, the matter might be easily arranged; a few slight concessions on either side, and all might be amicably adjusted. But no representations on their part were of any avail. Hector Servadac was inflexible.

"No concession is possible," he replied, resolutely. "Rossini has been deeply injured, and I cannot suffer the injury to be unavenged. Wagner is a fool. I shall keep my word. I am quite firm."

"Be it so, then," replied one of the officers; "and after all, you know, a sword-cut need not be a very serious affair."

"Certainly not," rejoined Servadac; "and especially in my case, when I have not the slightest intention of being wounded at all."

Incredulous as they naturally were as to the assigned cause of the quarrel, Servadac's friends had no alternative but to accept his explanation, and without farther parley they started for the staff office, where, at two o'clock precisely, they were to meet the seconds of Count Timascheff. Two hours later they had returned. All the preliminaries had been arranged; the count, who like many Russians abroad was an aide-de-camp of the Czar, had of course proposed swords as the most appropriate weapons, and the duel was to take place on the following morning, the first of January, at nine o'clock, upon the cliff at a spot about a mile and a half from the mouth of the Shelif. With the assurance that they would not fail to keep their appointment with military punctuality, the two officers cordially wrung their friend's hand and retired to the Zulma Cafe for a game at piquet. Captain Servadac at once retraced his steps and left the town.

For the last fortnight Servadac had not been occupying his proper lodgings in the military quarters; having been appointed to make a local levy, he had been living in a gourbi, or native hut, on the Mostaganem coast, between four and five miles from the Shelif. His orderly was his sole companion, and by any other man than the captain the enforced exile would have been esteemed little short of a severe penance.

On his way to the gourbi, his mental occupation was a very laborious effort to put together what he was pleased to call a rondo, upon a model of versification all but obsolete. This rondo, it is unnecessary to conceal, was to be an ode addressed to a young widow by whom he had been captivated, and whom he was anxious to marry, and the tenor of his muse was intended to prove that when once a man has found an object in all respects worthy of his affections, he should love her "in all simplicity." Whether the aphorism were universally true was not very material to the gallant captain, whose sole ambition at present was to construct a roundelay of which this should be the prevailing sentiment. He indulged the fancy that he might succeed in producing a composition which would have a fine effect here in Algeria, where poetry in that form was all but unknown.

"I know well enough," he said repeatedly to himself, "what I want to say. I want to tell her that I love her sincerely, and wish to marry her; but, confound it! the words won't rhyme. Plague on it! Does nothing rhyme with 'simplicity'? Ah! I have it now:

'Lovers should, whoe'er they be, Love in all simplicity.'

But what next? how am I to go on? I say, Ben Zoof," he called aloud to his orderly, who was trotting silently close in his rear, "did you ever compose any poetry?"

"No, captain," answered the man promptly; "I have never made any verses, but I have seen them made fast enough at a booth during the fete of Montmartre."

"Can you remember them?"

"Remember them! to be sure I can. This is the way they began:

'Come in! come in! you'll not repent The entrance money you have spent; The wondrous mirror in this place Reveals your future sweetheart's face.'"

"Bosh!" cried Servadac in disgust; "your verses are detestable trash."

"As good as any others, captain, squeaked through a reed pipe."

"Hold your tongue, man," said Servadac peremptorily; "I have made another couplet.

'Lovers should, whoe'er they be, Love in all simplicity; Lover, loving honestly, Offer I myself to thee.'"

Beyond this, however, the captain's poetical genius was impotent to carry him; his farther efforts were unavailing, and when at six o'clock he reached the gourbi, the four lines still remained the limit of his composition.
CHAPTER II. CAPTAIN SERVADAC AND HIS ORDERLY

At the time of which I write, there might be seen in the registers of the Minister of War the following entry:

SERVADAC (_Hector_), born at St. Trelody in the district of Lesparre, department of the Gironde, July 19th, 18--.

_Property:_ 1200 francs in rentes.
_Service:_ Fourteen years, three months, and five days.
_Service:_ Two years at school at St. Cyr; two years at L’Ecole d’Application; two years in the 8th Regiment of the Line; two years in the 3rd Light Cavalry; seven years in Algeria.
_Campaigns:_ Soudan and Japan.
_Rank:_ Captain on the staff at Mostaganem.
_Decorations:_ Chevalier of the Legion of Honor, March 13th, 18--.

Hector Servadac was thirty years of age, an orphan without lineage and almost without means. Thirsting for glory rather than for gold, slightly scatter-brained, but warm-hearted, generous, and brave, he was eminently formed to be the protege of the god of battles.

For the first year and a half of his existence he had been the foster-child of the sturdy wife of a vine-dresser of Medoc—a lineal descendant of the heroes of ancient prowess; in a word, he was one of those individuals whom nature seems to have predestined for remarkable things, and around whose cradle have hovered the fairy godmothers of adventure and good luck.

In appearance Hector Servadac was quite the type of an officer; he was rather more than five feet six inches high, slim and graceful, with dark curling hair and mustaches, well-formed hands and feet, and a clear blue eye. He seemed born to please without being conscious of the power he possessed. It must be owned, and no one was more ready to confess it than himself, that his literary attainments were by no means of a high order. "We don't spin tops" is a favorite saying amongst artillery officers, indicating that they do not shirk their duty by frivolous pursuits; but it must be confessed that Servadac, being naturally idle, was very much given to 'spinning tops.' His good abilities, however, and his ready intelligence had carried him successfully through the curriculum of his early career. He was a good draughtsman, an excellent rider—having thoroughly mastered the successor to the famous "Uncle Tom" at the riding-school of St. Cyr—and in the records of his military service his name had several times been included in the order of the day.

The following episode may suffice, in a certain degree, to illustrate his character. Once, in action, he was leading a detachment of infantry through an intrenchment. They came to a place where the side-work of the trench had been so riddled by shell that a portion of it had actually fallen in, leaving an aperture quite unsheltered from the grape-shot that was pouring in thick and fast. The men hesitated. In an instant Servadac mounted the side-work, laid himself down in the gap, and thus filling up the breach by his own body, shouted, "March on!"

And through a storm of shot, not one of which touched the prostrate officer, the troop passed in safety.

Since leaving the military college, Servadac, with the exception of his two campaigns in the Soudan and Japan, had been always stationed in Algeria. He had now a staff appointment at Mostaganem, and had lately been entrusted with some topographical work on the coast between Tenes and the Shelif. It was a matter of little consequence to him that the gourbi, in which of necessity he was quartered, was uncomfortable and ill-contrived; he loved the open air, and the independence of his life suited him well. Sometimes he would wander on foot upon the sandy shore, and sometimes he would enjoy a ride along the summit of the cliff; altogether being in no hurry at all to bring his task to an end. His occupation, moreover, was not so engrossing but that he could find leisure for taking a short railway journey once or twice a week; so that he was ever and again putting in an appearance at the general's receptions at Oran, and at the fetes given by the governor at Algiers.

It was on one of these occasions that he had first met Madame de L----, the lady to whom he was desirous of dedicating the rondo, the first four lines of which had just seen the light. She was a colonel's widow, young and handsome, very reserved, not to say haughty in her manner, and either indifferent or impervious to the admiration which she inspired. Captain Servadac had not yet ventured to declare his attachment; of rivals he was well aware he had not a few, and amongst these not the least formidable was the Russian Count Timascheff. And although the young widow was all unconscious of the share she had in the matter, it was she, and she alone, who was the cause of the challenge just given and accepted by her two ardent admirers.

During his residence in the gourbi, Hector Servadac's sole companion was his orderly, Ben Zoof. Ben Zoof was devoted, body and soul, to his superior officer. His own personal ambition was so entirely absorbed in his master's welfare, that it is certain no offer of promotion—even had it been that of aide-de-camp to the Governor-General of Algiers—would have induced him to quit that master's service. His name might seem to imply that he was a native of Algeria; but such was by no means the case. His true name was Laurent; he was a native of Montmartre in Paris, and
how or why he had obtained his patronymic was one of those anomalies which the most sagacious of etymologists would find it hard to explain.

Born on the hill of Montmartre, between the Solferino tower and the mill of La Galette, Ben Zoof had ever possessed the most unreserved admiration for his birthplace; and to his eyes the heights and district of Montmartre represented an epitome of all the wonders of the world. In all his travels, and these had been not a few, he had never beheld scenery which could compete with that of his native home. No cathedral—not even Burgos itself—could vie with the church at Montmartre. Its race-course could well hold its own against that at Pentelique; its reservoir would throw the Mediterranean into the shade; its forests had flourished long before the invasion of the Celts; and its very mill produced no ordinary flour, but provided material for cakes of world-wide renown. To crown all, Montmartre boasted a mountain—a veritable mountain; envious tongues indeed might pronounce it little more than a hill; but Ben Zoof would have allowed himself to be hewn in pieces rather than admit that it was anything less than fifteen thousand feet in height.

Ben Zoof's most ambitious desire was to induce the captain to go with him and end his days in his much-loved home, and so incessantly were Servadac's ears besieged with descriptions of the unparalleled beauties and advantages of this eighteenth arrondissement of Paris, that he could scarcely hear the name of Montmartre without a conscious thrill of aversion. Ben Zoof, however, did not despair of ultimately converting the captain, and meanwhile had resolved never to leave him. When a private in the 8th Cavalry, he had been on the point of quitting the army at twenty-eight years of age, but unexpectedly he had been appointed orderly to Captain Servadac. Side by side they fought in two campaigns. Servadac had saved Ben Zoof's life in Japan; Ben Zoof had rendered his master a like service in the Soudan. The bond of union thus effected could never be severed; and although Ben Zoof's achievements had fairly earned him the right of retirement, he firmly declined all honors or any pension that might part him from his superior officer. Two stout arms, an iron constitution, a powerful frame, and an indomitable courage were all loyally devoted to his master's service, and fairly entitled him to his _soi-disant_ designation of "The Rampart of Montmartre." Unlike his master, he made no pretension to any gift of poetic power, but his inexhaustible memory made him a living encyclopaedia; and for his stock of anecdotes and trooper's tales he was matchless.

Thoroughly appreciating his servant's good qualities, Captain Servadac endured with imperturbable good humor those idiosyncrasies, which in a less faithful follower would have been intolerable, and from time to time he would drop a word of sympathy that served to deepen his subordinate's devotion.

On one occasion, when Ben Zoof had mounted his hobby-horse, and was indulging in high-flown praises about his beloved eighteenth arrondissement, the captain had remarked gravely, "Do you know, Ben Zoof, that Montmartre only requires a matter of some thirteen thousand feet to make it as high as Mont Blanc?"

Ben Zoof's eyes glistened with delight; and from that moment Hector Servadac and Montmartre held equal places in his affection.

CHAPTER III. INTERRUPTED EFFUSIONS

Composed of mud and loose stones, and covered with a thatch of turf and straw, known to the natives by the name of "driss," the gourbi, though a grade better than the tents of the nomad Arabs, was yet far inferior to any habitation built of brick or stone. It adjoined an old stone hostelry, previously occupied by a detachment of engineers, and which now afforded shelter for Ben Zoof and the two horses. It still contained a considerable number of tools, such as mattocks, shovels, and pick-axes.

Uncomfortable as was their temporary abode, Servadac and his attendant made no complaints; neither of them was dainty in the matter either of board or lodging. After dinner, leaving his orderly to stow away the remains of the repast in what he was pleased to term the "cupboard of his stomach." Captain Servadac turned out into the open air to smoke his pipe upon the edge of the cliff. The shades of night were drawing on. An hour previously, veiled in heavy clouds, the sun had sunk below the horizon that bounded the plain beyond the Shelif.

The sky presented a most singular appearance. Towards the north, although the darkness rendered it impossible to see beyond a quarter of a mile, the upper strata of the atmosphere were suffused with a rosy glare. No well-defined fringe of light, nor arch of luminous rays, betokened a display of aurora borealis, even had such a phenomenon been possible in these latitudes; and the most experienced meteorologist would have been puzzled to explain the cause of this striking illumination on this 31st of December, the last evening of the passing year.

But Captain Servadac was no meteorologist, and it is to be doubted whether, since leaving school, he had ever opened his "Course of Cosmography." Besides, he had other thoughts to occupy his mind. The prospects of the morrow offered serious matter for consideration. The captain was actuated by no personal animosity against the count; though rivals, the two men regarded each other with sincere respect; they had simply reached a crisis in
which one of them was _de trop_; which of them, fate must decide.

At eight o'clock, Captain Servadac re-entered the gourbi, the single apartment of which contained his bed, a small writing-table, and some trunks that served instead of cupboards. The orderly performed his culinary operations in the adjoining building, which he also used as a bed-room, and where, extended on what he called his "good oak mattress," he would sleep soundly as a dormouse for twelve hours at a stretch. Ben Zoof had not yet received his orders to retire, and ensconcing himself in a corner of the gourbi, he endeavored to doze—a task which the unusual agitation of his master rendered somewhat difficult. Captain Servadac was evidently in no hurry to betake himself to rest, but seating himself at his table, with a pair of compasses and a sheet of tracing-paper, he began to draw, with red and blue crayons, a variety of colored lines, which could hardly be supposed to have much connection with a topographical survey. In truth, his character of staff-officer was now entirely absorbed in that of Gascon poet. Whether he imagined that the compasses would bestow upon his verses the measure of a mathematical accuracy, or whether he fancied that the parti-colored lines would lend variety to his rhythm, it is impossible to determine; be that as it may, he was devoting all his energies to the compilation of his rondo, and supremely difficult he found the task.

"Hang it!" he ejaculated, "whatever induced me to choose this meter? It is as hard to find rhymes as to rally fugitive in a battle. But, by all the powers! it shan't be said that a French officer cannot cope with a piece of poetry. One battalion has fought—now for the rest!"

Perseverance had its reward. Presently two lines, one red, the other blue, appeared upon the paper, and the captain murmured:

"Words, mere words, cannot avail, Telling true heart's tender tale."

"What on earth ails my master?" muttered Ben Zoof; "for the last hour he has been as fidgety as a bird returning after its winter migration."

Servadac suddenly started from his seat, and as he paced the room with all the frenzy of poetic inspiration, read out:

"Empty words cannot convey All a lover's heart would say."

"Well, to be sure, he is at his everlasting verses again!" said Ben Zoof to himself, as he roused himself in his corner. "Impossible to sleep in such a noise;" and he gave vent to a loud groan.

"How now, Ben Zoof?" said the captain sharply. "What ails you?"

"Nothing, sir, only the nightmare."

"Curse the fellow, he has quite interrupted me!" ejaculated the captain. "Ben Zoof!" he called aloud.

"Here, sir!" was the prompt reply; and in an instant the orderly was upon his feet, standing in a military attitude, one hand to his forehead, the other closely pressed to his trouser-seam.

"Stay where you are! don't move an inch!" shouted Servadac; "I have just thought of the end of my rondo." And in a voice of inspiration, accompanying his words with dramatic gestures, Servadac began to declaim:

"Listen, lady, to my vows— O, consent to be my spouse; Constant ever I will be, Constant...."

No closing lines were uttered. All at once, with unutterable violence, the captain and his orderly were dashed, face downwards, to the ground.

CHAPTER IV. A CONVULSION OF NATURE

Whence came it that at that very moment the horizon underwent so strange and sudden a modification, that the eye of the most practiced mariner could not distinguish between sea and sky?

Whence came it that the billows raged and rose to a height hitherto unregistered in the records of science?

Whence came it that the elements united in one deafening crash; that the earth groaned as though the whole framework of the globe were ruptured; that the waters roared from their innermost depths; that the air shrieked with all the fury of a cyclone?

Whence came it that a radiance, intenser than the effulgence of the Northern Lights, overspread the firmament, and momentarily dimmed the splendor of the brightest stars?

Whence came it that the Mediterranean, one instant emptied of its waters, was the next flooded with a foaming surge?

Whence came it that in the space of a few seconds the moon's disc reached a magnitude as though it were but a tenth part of its ordinary distance from the earth?

Whence came it that a new blazing spheroid, hitherto unknown to astronomy, now appeared suddenly in the firmament, though it were but to lose itself immediately behind masses of accumulated cloud?

What phenomenon was this that had produced a cataclysm so tremendous in effect upon earth, sky, and sea?

Was it possible that a single human being could have survived the convulsion? and if so, could he explain its mystery?
CHAPTER V. A MYSTERIOUS SEA

Violent as the commotion had been, that portion of the Algerian coast which is bounded on the north by the Mediterranean, and on the west by the right bank of the Shelif, appeared to have suffered little change. It is true that indentations were perceptible in the fertile plain, and the surface of the sea was ruffled with an agitation that was quite unusual; but the rugged outline of the cliff was the same as heretofore, and the aspect of the entire scene appeared unaltered. The stone hostelry, with the exception of some deep clefts in its walls, had sustained little injury; but the gourbi, like a house of cards destroyed by an infant's breath, had completely subsided, and its two inmates lay motionless, buried under the sunken thatch.

It was two hours after the catastrophe that Captain Servadac regained consciousness; he had some trouble to collect his thoughts, and the first sounds that escaped his lips were the concluding words of the rondo which had had been so ruthlessly interrupted;

"Constant ever I will be, Constant...."

His next thought was to wonder what had happened; and in order to find an answer, he pushed aside the broken thatch, so that his head appeared above the _debris_. "The gourbi leveled to the ground!" he exclaimed, "surely a waterspout has passed along the coast."

He felt all over his body to perceive what injuries he had sustained, but not a sprain nor a scratch could he discover. "Where are you, Ben Zoof?" he shouted.

"Here, sir!" and with military promptitude a second head protruded from the rubbish.

"Have you any notion what has happened, Ben Zoof?"

"I've a notion, captain, that it's all up with us."

"Nonsense, Ben Zoof; it is nothing but a waterspout!"

"Very good, sir," was the philosophical reply, immediately followed by the query, "Any bones broken, sir?"

"None whatever," said the captain.

Both men were soon on their feet, and began to make a vigorous clearance of the ruins, beneath which they found that their arms, cooking utensils, and other property, had sustained little injury.

"By-the-by, what o'clock is it?" asked the captain.

"It must be eight o'clock, at least," said Ben Zoof, looking at the sun, which was a considerable height above the horizon. "It is almost time for us to start."

"To start! what for?"

"To keep your appointment with Count Timascheff."

"By Jove! I had forgotten all about it!" exclaimed Servadac. Then looking at his watch, he cried, "What are you thinking of, Ben Zoof? It is scarcely two o'clock."

"Two in the morning, or two in the afternoon?" asked Ben Zoof, again regarding the sun.

Servadac raised his watch to his ear. "It is going," said he; "but, by all the wines of Medoc, I am puzzled. Don't you see the sun is in the west? It must be near setting."

"Setting, captain! Why, it is rising finely, like a conscript at the sound of the reveille. It is considerably higher since we have been talking."

Incredible as it might appear, the fact was undeniable that the sun was rising over the Shelif from that quarter of the horizon behind which it usually sank for the latter portion of its daily round. They were utterly bewildered. Some mysterious phenomenon must not only have altered the position of the sun in the sidereal system, but must even have brought about an important modification of the earth's rotation on her axis.

Captain Servadac consoled himself with the prospect of reading an explanation of the mystery in next week's newspapers, and turned his attention to what was to him of more immediate importance. "Come, let us be off," said he to his orderly; "though heaven and earth be topsy-turvy, I must be at my post this morning."

"To do Count Timascheff the honor of running him through the body," added Ben Zoof.

If Servadac and his orderly had been less preoccupied, they would have noticed that a variety of other physical changes besides the apparent alteration in the movement of the sun had been evolved during the atmospheric disturbances of that New Year's night. As they descended the steep footpath leading from the cliff towards the Shelif, they were unconscious that their respiration became forced and rapid, like that of a mountaineer when he has reached an altitude where the air has become less charged with oxygen. They were also unconscious that their voices were thin and feeble; either they must themselves have become rather deaf, or it was evident that the air had become less capable of transmitting sound.

The weather, which on the previous evening had been very foggy, had entirely changed. The sky had assumed a singular tint, and was soon covered with lowering clouds that completely hid the sun. There were, indeed, all the
signs of a coming storm, but the vapor, on account of the insufficient condensation, failed to fall.

The sea appeared quite deserted, a most unusual circumstance along this coast, and not a sail nor a trail of smoke broke the gray monotony of water and sky. The limits of the horizon, too, had become much circumscribed. On land, as well as on sea, the remote distance had completely disappeared, and it seemed as though the globe had assumed a more decided convexity.

At the pace at which they were walking, it was very evident that the captain and his attendant would not take long to accomplish the three miles that lay between the gourbi and the place of rendezvous. They did not exchange a word, but each was conscious of an unusual buoyancy, which appeared to lift up their bodies and give as it were, wings to their feet. If Ben Zoof had expressed his sensations in words, he would have said that he felt "up to anything," and he had even forgotten to taste so much as a crust of bread, a lapse of memory of which the worthy soldier was rarely guilty.

As these thoughts were crossing his mind, a harsh bark was heard to the left of the footpath, and a jackal was seen emerging from a large grove of lentisks. Regarding the two wayfarers with manifest uneasiness, the beast took up its position at the foot of a rock, more than thirty feet in height. It belonged to an African species distinguished by a black spotted skin, and a black line down the front of the legs. At night-time, when they scour the country in herds, the creatures are somewhat formidable, but singly they are no more dangerous than a dog. Though by no means afraid of them, Ben Zoof had a particular aversion to jackals, perhaps because they had no place among the fauna of his beloved Montmartre. He accordingly began to make threatening gestures, when, to the unmitigated astonishment of himself and the captain, the animal darted forward, and in one single bound gained the summit of the rock.

"Good Heavens!" cried Ben Zoof, "that leap must have been thirty feet at least."

"True enough," replied the captain; "I never saw such a jump."

Meantime the jackal had seated itself upon its haunches, and was staring at the two men with an air of impudent defiance. This was too much for Ben Zoof's forbearance, and stooping down he caught up a huge stone, when to his surprise, he found that it was no heavier than a piece of petrified sponge. "Confound the brute!" he exclaimed, "I might as well throw a piece of bread at him. What accounts for its being as light as this?"

Nothing daunted, however, he hurled the stone into the air. It missed its aim; but the jackal, deeming it on the whole prudent to decamp, disappeared across the trees and hedges with a series of bounds, which could only be likened to those that might be made by an india-rubber kangaroo. Ben Zoof was sure that his own powers of propelling must equal those of a howitzer, for his stone, after a lengthened flight through the air, fell to the ground full five hundred paces the other side of the rock.

The orderly was now some yards ahead of his master, and had reached a ditch full of water, and about ten feet wide. With the intention of clearing it, he made a spring, when a loud cry burst from Servadac. "Ben Zoof, you idiot! What are you about? You will break your back!"

And well might he be alarmed, for Ben Zoof had sprung to a height of forty feet into the air. Fearful of the consequences that would attend the descent of his servant to _terra firma_, Servadac bounded forwards, to be on the other side of the ditch in time to break his fall. But the muscular effort that he made carried him in his turn to an altitude of thirty feet; in his ascent he passed Ben Zoof, who had already commenced his downward course; and then, obedient to the laws of gravitation, he descended with increasing rapidity, and alighted upon the earth without experiencing a shock greater than if he had merely made a bound of four or five feet high.

Ben Zoof burst into a roar of laughter. "Bravo!" he said, "we should make a good pair of clowns."

But the captain was inclined to take a more serious view of the matter. For a few seconds he stood lost in thought, then said solemnly, "Ben Zoof, I must be dreaming. Pinch me hard; I must be either asleep or mad."

"It is very certain that something has happened to us," said Ben Zoof. "I have occasionally dreamed that I was a swallow flying over the Montmartre, but I never experienced anything of this kind before; it must be peculiar to the coast of Algeria."

Servadac was stupefied; he felt instinctively that he was not dreaming, and yet was powerless to solve the mystery. He was not, however, the man to puzzle himself for long over any insoluble problem. "Come what may," he presently exclaimed, "we will make up our minds for the future to be surprised at nothing."

"Right, captain," replied Ben Zoof; "and, first of all, let us settle our little score with Count Timascheff."

Beyond the ditch lay a small piece of meadow land, about an acre in extent. A soft and delicious herbage carpeted the soil, whilst trees formed a charming framework to the whole. No spot could have been chosen more suitable for the meeting between the two adversaries.

Servadac cast a hasty glance round. No one was in sight. "We are the first on the field," he said.

"Not so sure of that, sir," said Ben Zoof.

"What do you mean?" asked Servadac, looking at his watch, which he had set as nearly as possible by the sun before leaving the gourbi; "it is not nine o'clock yet."
"Look up there, sir. I am much mistaken if that is not the sun;" and as Ben Zoof spoke, he pointed directly overhead to where a faint white disc was dimly visible through the haze of clouds.

"Nonsense!" exclaimed Servadac. "How can the sun be in the zenith, in the month of January, in lat. 39 degrees N.?

"Can't say, sir. I only know the sun is there; and at the rate he has been traveling, I would lay my cap to a dish of couscous that in less than three hours he will set."

Hector Servadac, mute and motionless, stood with folded arms. Presently he roused himself, and began to look about again. "What means all this?" he murmured. "Laws of gravity disturbed! Points of the compass reversed! The length of day reduced one half! Surely this will indefinitely postpone my meeting with the count. Something has happened; Ben Zoof and I cannot both be mad!"

The orderly, meantime, surveyed his master with the greatest equanimity; no phenomenon, however extraordinary, would have drawn from him a single exclamation of surprise. "Do you see anyone, Ben Zoof?" asked the captain, at last.

"No one, sir; the count has evidently been and gone." "But supposing that to be the case," persisted the captain, "my seconds would have waited, and not seeing me, would have come on towards the gourbi. I can only conclude that they have been unable to get here; and as for Count Timascheff--"

Meantime, with the agility of a monkey, Ben Zoof had clambered to the top of a eucalyptus, and from his lofty perch was surveying the country to the south, as well as towards both Tenes and Mostaganem. On descending, he informed the captain that the plain was deserted.

"We will make our way to the river, and get over into Mostaganem," said the captain.

The Shelif was not more than a mile and a half from the meadow, but no time was to be lost if the two men were to reach the town before nightfall. Though still hidden by heavy clouds, the sun was evidently declining fast; and what was equally inexplicable, it was not following the oblique curve that in these latitudes and at this time of year might be expected, but was sinking perpendicularly on to the horizon.

As he went along, Captain Servadac pondered deeply. Perchance some unheard-of phenomenon had modified the rotary motion of the globe; or perhaps the Algerian coast had been transported beyond the equator into the southern hemisphere. Yet the earth, with the exception of the alteration in its convexity, in this part of Africa at least, seemed to have undergone no change of any very great importance. As far as the eye could reach, the shore was, as it had ever been, a succession of cliffs, beach, and arid rocks, tinged with a red ferruginous hue. To the south—if south, in this inverted order of things, it might still be called—the face of the country also appeared unaltered, and some leagues away, the peaks of the Merdeyah mountains still retained their accustomed outline.

Presently a rift in the clouds gave passage to an oblique ray of light that clearly proved that the sun was setting in the east.

"Well, I am curious to know what they think of all this at Mostaganem," said the captain. "I wonder, too, what the Minister of War will say when he receives a telegram informing him that his African colony has become, not morally, but physically disorganized; that the cardinal points are at variance with ordinary rules, and that the sun in the month of January is shining down vertically upon our heads."

Ben Zoof, whose ideas of discipline were extremely rigid, at once suggested that the colony should be put under the surveillance of the police, that the cardinal points should be placed under restraint, and that the sun should be shot for breach of discipline.

Meantime, they were both advancing with the utmost speed. The decompression of the atmosphere made the specific gravity of their bodies extraordinarily light, and they ran like hares and leaped like chamois. Leaving the devious windings of the footpath, they went as a crow would fly across the country. Hedges, trees, and streams were cleared at a bound, and under these conditions Ben Zoof felt that he could have overstepped Montmartre at a single stride. The earth seemed as elastic as the springboard of an acrobat; they scarcely touched it with their feet, and their only fear was lest the height to which they were propelled would consume the time which they were saving by their short cut across the fields.
It was not long before their wild career brought them to the right bank of the Shelif. Here they were compelled to stop, for not only had the bridge completely disappeared, but the river itself no longer existed. Of the left bank there was not the slightest trace, and the right bank, which on the previous evening had bounded the yellow stream, as it murmured peacefully along the fertile plain, had now become the shore of a tumultuous ocean, its azure waters extending westwards as far as the eye could reach, and annihilating the tract of country which had hitherto formed the district of Mostaganem. The shore coincided exactly with what had been the right bank of the Shelif, and in a slightly curved line ran north and south, whilst the adjacent groves and meadows all retained their previous positions. But the river-bank had become the shore of an unknown sea.

Eager to throw some light upon the mystery, Servadac hurriedly made his way through the oleander bushes that overhung the shore, took up some water in the hollow of his hand, and carried it to his lips. "Salt as brine!" he exclaimed, as soon as he had tasted it. "The sea has undoubtedly swallowed up all the western part of Algeria."

"It will not last long, sir," said Ben Zoof. "It is, probably, only a severe flood."

The captain shook his head. "Worse than that, I fear, Ben Zoof," he replied with emotion. "It is a catastrophe that may have very serious consequences. What can have become of all my friends and fellow-officers?"

Ben Zoof was silent. Rarely had he seen his master so much agitated; and though himself inclined to receive these phenomena with philosophic indifference, his notions of military duty caused his countenance to reflect the captain's expression of amazement.

But there was little time for Servadac to examine the changes which a few hours had wrought. The sun had already reached the eastern horizon, and just as though it were crossing the ecliptic under the tropics, it sank like a cannon ball into the sea. Without any warning, day gave place to night, and earth, sea, and sky were immediately wrapped in profound obscurity.

CHAPTER VI. THE CAPTAIN MAKES AN EXPLORATION

Hector Servadac was not the man to remain long unnerved by any untoward event. It was part of his character to discover the why and the wherefore of everything that came under his observation, and he would have faced a cannon ball the more unflinchingly from understanding the dynamic force by which it was propelled. Such being his temperament, it may well be imagined that he was anxious not to remain long in ignorance of the cause of the phenomena which had been so startling in their consequences.

"We must inquire into this to-morrow," he exclaimed, as darkness fell suddenly upon him. Then, after a pause, he added: "That is to say, if there is to be a to-morrow; for if I were to be put to the torture, I could not tell what has become of the sun."

"May I ask, sir, what we are to do now?" put in Ben Zoof.

"Stay where we are for the present; and when daylight appears--if it ever does appear--we will explore the coast to the west and south, and return to the gourbi. If we can find out nothing else, we must at least discover where we are."

"Meanwhile, sir, may we go to sleep?"

"Certainly, if you like, and if you can."

Nothing loath to avail himself of his master's permission, Ben Zoof crouched down in an angle of the shore, threw his arms over his eyes, and very soon slept the sleep of the ignorant, which is often sounder than the sleep of the just. Overwhelmed by the questions that crowded upon his brain, Captain Servadac could only wander up and down the shore. Again and again he asked himself what the catastrophe could portend. Had the towns of Algiers, Oran, and Mostaganem escaped the inundation? Could he bring himself to believe that all the inhabitants, his friends, and comrades had perished; or was it not more probable that the Mediterranean had merely invaded the region of the mouth of the Shelif? But this supposition did not in the least explain the other physical disturbances. Another hypothesis that presented itself to his mind was that the African coast might have been suddenly transported to the equatorial zone. But although this might get over the difficulty of the altered altitude of the sun and the absence of twilight, yet it would neither account for the sun setting in the east, nor for the length of the day being reduced to six hours.

"We must wait till to-morrow," he repeated; adding, for he had become distrustful of the future, "that is to say, if to-morrow ever comes."

Although not very learned in astronomy, Servadac was acquainted with the position of the principal constellations. It was therefore a considerable disappointment to him that, in consequence of the heavy clouds, not a star was visible in the firmament. To have ascertained that the pole-star had become displaced would have been an undeniable proof that the earth was revolving on a new axis; but not a rift appeared in the lowering clouds, which seemed to threaten torrents of rain.
It happened that the moon was new on that very day; naturally, therefore, it would have set at the same time as the sun. What, then, was the captain's bewilderment when, after he had been walking for about an hour and a half, he noticed on the western horizon a strong glare that penetrated even the masses of the clouds.

"The moon in the west!" he cried aloud; but suddenly bethinking himself, he added: "But no, that cannot be the moon; unless she had shifted very much nearer the earth, she could never give a light as intense as this."

As he spoke the screen of vapor was illuminated to such a degree that the whole country was as it were bathed in twilight. "What can this be?" soliloquized the captain. "It cannot be the sun, for the sun set in the east only an hour and a half ago. Would that those clouds would disclose what enormous luminary lies behind them! What a fool I was not to have learnt more astronomy! Perhaps, after all, I am racking my brain over something that is quite in the ordinary course of nature."

But, reason as he might, the mysteries of the heavens still remained impenetrable. For about an hour some luminous body, its disc evidently of gigantic dimensions, shed its rays upon the upper strata of the clouds; then, marvelous to relate, instead of obeying the ordinary laws of celestial mechanism, and descending upon the opposite horizon, it seemed to retreat farther off, grew dimmer, and vanished.

The darkness that returned to the face of the earth was not more profound than the gloom which fell upon the captain's soul. Everything was incomprehensible. The simplest mechanical rules seemed falsified; the planets had defied the laws of gravitation; the motions of the celestial spheres were erroneous as those of a watch with a defective mainspring, and there was reason to fear that the sun would never again shed his radiance upon the earth.

But these last fears were groundless. In three hours' time, without any intervening twilight, the morning sun made its appearance in the west, and day once more had dawned. On consulting his watch, Servadac found that night had lasted precisely six hours. Ben Zoof, who was unaccustomed to so brief a period of repose, was still slumbering soundly.

"Come, wake up!" said Servadac, shaking him by the shoulder; "it is time to start."

"Time to start?" exclaimed Ben Zoof, rubbing his eyes. "I feel as if I had only just gone to sleep."

"You have slept all night, at any rate," replied the captain; "it has only been for six hours, but you must make it enough."

"Enough it shall be, sir," was the submissive rejoinder.

"And now," continued Servadac, "we will take the shortest way back to the gourbi, and see what our horses think about it all."

"They will think that they ought to be groomed," said the orderly.

"Very good; you may groom them and saddle them as quickly as you like. I want to know what has become of the rest of Algeria: if we cannot get round by the south to Mostaganem, we must go eastwards to Tenes."

And forthwith they started. Beginning to feel hungry, they had no hesitation in gathering figs, dates, and oranges from the plantations that formed a continuous rich and luxuriant orchard along their path. The district was quite deserted, and they had no reason to fear any legal penalty.

In an hour and a half they reached the gourbi. Everything was just as they had left it, and it was evident that no one had visited the place during their absence. All was desolate as the shore they had quitted.

The preparations for the expedition were brief and simple. Ben Zoof saddled the horses and filled his pouch with biscuits and game; water, he felt certain, could be obtained in abundance from the numerous affluents of the Shelif, which, although they had now become tributaries of the Mediterranean, still meandered through the plain. Captain Servadac mounted his horse Zephyr, and Ben Zoof simultaneously got astride his mare Galette, named after the mill of Montmartre. They galloped off in the direction of the Shelif, and were not long in discovering that the diminution in the pressure of the atmosphere had precisely the same effect upon their horses as it had had upon themselves. Their muscular strength seemed five times as great as hitherto; their hoofs scarcely touched the ground, and they seemed transformed from ordinary quadrupeds into veritable hippogriffs. Happily, Servadac and his orderly were fearless riders; they made no attempt to curb their steeds, but even urged them to still greater exertions. Twenty minutes sufficed to carry them over the four or five miles that intervened between the gourbi and the mouth of the Shelif; then, slackening their speed, they proceeded at a more leisurely pace to the southeast, along what had once been the right bank of the river, but which, although it still retained its former characteristics, was now the boundary of a sea, which extending farther than the limits of the horizon, must have swallowed up at least a large portion of the province of Oran. Captain Servadac knew the country well; he had at one time been engaged upon a trigonometrical survey of the district, and consequently had an accurate knowledge of its topography. His idea now was to draw up a report of his investigations: to whom that report should be delivered was a problem he had yet to solve.

During the four hours of daylight that still remained, the travelers rode about twenty-one miles from the river mouth. To their vast surprise, they did not meet a single human being. At nightfall they again encamped in a slight
bend of the shore, at a point which on the previous evening had faced the mouth of the Mina, one of the left-hand affluents of the Shelif, but now absorbed into the newly revealed ocean. Ben Zoof made the sleeping accommodation as comfortable as the circumstances would allow; the horses were clogged and turned out to feed upon the rich pasture that clothed the shore, and the night passed without special incident.

At sunrise on the following morning, the 2nd of January, the two men silently descended the mountain and remounted their horses. Before evening they had reached the foot of the Merdeyah Mountains, which, before the cataclysm, had formed the extremity of the chain of the Little Atlas. The ridge, however, had been violently ruptured, and now rose perpendicularly from the water.

On the following morning Servadac and Ben Zoof traversed one of the mountain gorges; and next, in order to make a more thorough acquaintance with the limits and condition of the section of Algerian territory of which they seemed to be left as the sole occupants, they dismounted, and proceeded on foot to the summit of one of the highest peaks. From this elevation they ascertained that from the base of the Merdeyah to the Mediterranean, a distance of about eighteen miles, a new coast line had come into existence; no land was visible in any direction; no isthmus existed to form a connecting link with the territory of Tenes, which had entirely disappeared. The result was that Captain Servadac was driven to the irresistible conclusion that the tract of land which he had been surveying was no longer formed by the natural bank of the Shelif, but consisting of an absolutely new coast-line. No land was in sight. Nothing could be seen of Orleansville, which ought to have been about six miles to the southwest; and Ben Zoof, who had mounted the highest point of view attainable, could distinguish sea, and nothing but sea, to the farthest horizon.

Quitting their encampment and riding on, the bewildered explorers kept close to the new shore. This, since it had ceased to be formed by the original river bank, had considerably altered its aspect. Frequent landslips occurred, and in many places deep chasms rifted the ground; great gaps furrowed the fields, and trees, half uprooted, overhung the water, remarkable by the fantastic distortions of their gnarled trunks, looking as though they had been chopped by a hatchet.

The sinuosities of the coast line, alternately gully and headland, had the effect of making a devious progress for the travelers, and at sunset, although they had accomplished more than twenty miles, they had only just arrived at the foot of the Merdeyah Mountains, which, before the cataclysm, had formed the extremity of the chain of the Little Atlas. The ridge, however, had been violently ruptured, and now rose perpendicularly from the water.

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At sunrise on the following morning, the 2nd of January, or what, according to the ordinary calendar, would have been the night of the 1st, the captain and his orderly remounted their horses, and during the six-hours' day accomplished a distance of forty-two miles. The right bank of the river still continued to be the margin of the land, and only in one spot had its integrity been impaired. This was about twelve miles from the Mina, and on the site of the annex or suburb of Surkelmittoo. Here a large portion of the bank had been swept away, and the hamlet, with its eight hundred inhabitants, had no doubt been swallowed up by the encroaching waters. It seemed, therefore, more than probable that a similar fate had overtaken the larger towns beyond the Shelif.

In the evening the explorers encamped, as previously, in a nook of the shore which here abruptly terminated their new domain, not far from where they might have expected to find the important village of Memounturroy; but of this, too, there was now no trace. "I had quite reckoned upon a supper and a bed at Orleansville to-night," said Servadac, as, full of despondency, he surveyed the waste of water.

"Quite impossible," replied Ben Zoof, "except you had gone by a boat. But cheer up, sir, cheer up; we will soon devise some means for getting across to Mostaganem."

"If, as I hope," rejoined the captain, "we are on a peninsula, we are more likely to get to Tenes; there we shall hear the news."

"Far more likely to carry the news ourselves," answered Ben Zoof, as he threw himself down for his night's rest.

Six hours later, only waiting for sunrise, Captain Servadac set himself in movement again to renew his investigations. At this spot the shore, that hitherto had been running in a southeasterly direction, turned abruptly to the north, being no longer formed by the natural bank of the Shelif, but consisting of an absolutely new coast-line. No land was in sight. Nothing could be seen of Orleansville, which ought to have been about six miles to the southwest; and Ben Zoof, who had mounted the highest point of view attainable, could distinguish sea, and nothing but sea, to the farthest horizon.

On the following morning Servadac and Ben Zoof traversed one of the mountain gorges; and next, in order to make a more thorough acquaintance with the limits and condition of the section of Algerian territory of which they seemed to be left as the sole occupants, they dismounted, and proceeded on foot to the summit of one of the highest peaks. From this elevation they ascertained that from the base of the Merdeyah to the Mediterranean, a distance of about eighteen miles, a new coast line had come into existence; no land was visible in any direction; no isthmus existed to form a connecting link with the territory of Tenes, which had entirely disappeared. The result was that Captain Servadac was driven to the irresistible conclusion that the tract of land which he had been surveying was not, as he had at first imagined, a peninsula; it was actually an island.

Strictly speaking, this island was quadrilateral, but the sides were so irregular that it was much more nearly a triangle, the comparison of the sides exhibiting these proportions: The section of the right bank of the Shelif, seventy-two miles; the southern boundary from the Shelif to the chain of the Little Atlas, twenty-one miles; from the Little Atlas to the Mediterranean, eighteen miles; and sixty miles of the shore of the Mediterranean itself, making in all an entire circumference of about 171 miles.

"What does it all mean?" exclaimed the captain, every hour growing more and more bewildered.

"The will of Providence, and we must submit," replied Ben Zoof, calm and undisturbed. With this reflection, the two men silently descended the mountain and remounted their horses. Before evening they had reached the Mediterranean. On their road they failed to discern a vestige of the little town of Montenotte; like Tenes, of which not so much as a ruined cottage was visible on the horizon, it seemed to be annihilated.

On the following day, the 6th of January, the two men made a forced march along the coast of the Mediterranean, which they found less altered than the captain had at first supposed; but four villages had entirely disappeared, and the headlands, unable to resist the shock of the convulsion, had been detached from the mainland.
The circuit of the island had been now completed, and the explorers, after a period of sixty hours, found themselves once more beside the ruins of their gourbi. Five days, or what, according to the established order of things, would have been two days and a half, had been occupied in tracing the boundaries of their new domain; and they had ascertained beyond a doubt that they were the sole human inhabitants left upon the island.

"Well, sir, here you are, Governor General of Algeria!" exclaimed Ben Zoof, as they reached the gourbi.

"With not a soul to govern," gloomily rejoined the captain.

"How so? Do you not reckon me?"

"Pshaw! Ben Zoof, what are you?"

"What am I? Why, I am the population."

The captain deigned no reply, but, muttering some expressions of regret for the fruitless trouble he had taken about his rondo, betook himself to rest.

CHAPTER VII. BEN ZOOF WATCHES IN VAIN

In a few minutes the governor general and his population were asleep. The gourbi being in ruins, they were obliged to put up with the best accommodation they could find in the adjacent erection. It must be owned that the captain's slumbers were by no means sound; he was agitated by the consciousness that he had hitherto been unable to account for his strange experiences by any reasonable theory. Though far from being advanced in the knowledge of natural philosophy, he had been instructed, to a certain degree, in its elementary principles; and, by an effort of memory, he managed to recall some general laws which he had almost forgotten. He could understand that an altered inclination of the earth's axis with regard to the ecliptic would introduce a change of position in the cardinal points, and bring about a displacement of the sea; but the hypothesis entirely failed to account, either for the shortening of the days, or for the diminution in the pressure of the atmosphere. He felt that his judgment was utterly baffled; his only remaining hope was that the chain of marvels was not yet complete, and that something farther might throw some light upon the mystery.

Ben Zoof's first care on the following morning was to provide a good breakfast. To use his own phrase, he was as hungry as the whole population of three million Algerians, of whom he was the representative, and he must have enough to eat. The catastrophe which had overwhelmed the country had left a dozen eggs uninjured, and upon these, with a good dish of his famous couscous, he hoped that he and his master might have a sufficiently substantial meal. The stove was ready for use, the copper skillet was as bright as hands could make it, and the beads of condensed steam upon the surface of a large stone al-caraza gave evidence that it was supplied with water. Ben Zoof at once lighted a fire, singing all the time, according to his wont, a snatch of an old military refrain.

Ever on the lookout for fresh phenomena, Captain Servadac watched the preparations with a curious eye. It struck him that perhaps the air, in its strangely modified condition, would fail to supply sufficient oxygen, and that the stove, in consequence, might not fulfill its function. But no; the fire was lighted just as usual, and fanned into vigor by Ben Zoof applying his mouth in lieu of bellows, and a bright flame started up from the midst of the twigs and coal. The skillet was duly set upon the stove, and Ben Zoof was prepared to wait awhile for the water to boil. Taking up the eggs, he was surprised to notice that they hardly weighed more than they would if they had been mere shells; but he was still more surprised when he saw that before the water had been two minutes over the fire it was at full boil.

"By jingo!" he exclaimed, "a precious hot fire!"

Servadac reflected. "It cannot be that the fire is hotter," he said, "the peculiarity must be in the water." And taking down a centigrade thermometer, which hung upon the wall, he plunged it into the skillet. Instead of 100 degrees, the instrument registered only 66 degrees.

"Take my advice, Ben Zoof," he said; "leave your eggs in the saucepan a good quarter of an hour."

"Boil them hard! That will never do," objected the orderly.

"You will not find them hard, my good fellow. Trust me, we shall be able to dip our sippets into the yolks easily enough."

The captain was quite right in his conjecture, that this new phenomenon was caused by a diminution in the pressure of the atmosphere. Water boiling at a temperature of 66 degrees was itself an evidence that the column of air above the earth's surface had become reduced by one-third of its altitude. The identical phenomenon would have occurred at the summit of a mountain 35,000 feet high; and had Servadac been in possession of a barometer, he would have immediately discovered the fact that only now for the first time, as the result of experiment, revealed itself to him--a fact, moreover, which accounted for the compression of the blood-vessels which both he and Ben Zoof had experienced, as well as for the attenuation of their voices and their accelerated breathing. "And yet," he argued with himself, "if our encampment has been projected to so great an elevation, how is it that the sea remains at
its proper level?"

Once again Hector Servadac, though capable of tracing consequences, felt himself totally at a loss to comprehend their cause; hence his agitation and bewilderment!

After their prolonged immersion in the boiling water, the eggs were found to be only just sufficiently cooked; the couscous was very much in the same condition; and Ben Zoof came to the conclusion that in future he must be careful to commence his culinary operations an hour earlier. He was rejoiced at last to help his master, who, in spite of his perplexed preoccupation, seemed to have a very fair appetite for breakfast.

"Well, captain?" said Ben Zoof presently, such being his ordinary way of opening conversation.

"Well, Ben Zoof?" was the captain's invariable response to his servant's formula.

"What are we to do now, sir?"

"We can only for the present wait patiently where we are. We are encamped upon an island, and therefore we can only be rescued by sea."

"But do you suppose that any of our friends are still alive?" asked Ben Zoof.

"Oh, I think we must indulge the hope that this catastrophe has not extended far. We must trust that it has limited its mischief to some small portion of the Algerian coast, and that our friends are all alive and well. No doubt the governor general will be anxious to investigate the full extent of the damage, and will send a vessel from Algiers to explore. It is not likely that we shall be forgotten. What, then, you have to do, Ben Zoof, is to keep a sharp lookout, and to be ready, in case a vessel should appear, to make signals at once."

"But if no vessel should appear!" sighed the orderly.

"Then we must build a boat, and go in search of those who do not come in search of us."

"Very good. But what sort of a sailor are you?"

"Everyone can be a sailor when he must," said Servadac calmly.

Ben Zoof said no more. For several succeeding days he scanned the horizon uninterruptedly with his telescope. His watching was in vain. No ship appeared upon the desert sea. "By the name of a Kabyle!" he broke out impatiently, "his Excellency is grossly negligent!"

Although the days and nights had become reduced from twenty-four hours to twelve, Captain Servadac would not accept the new condition of things, but resolved to adhere to the computations of the old calendar. Notwithstanding, therefore, that the sun had risen and set twelve times since the commencement of the new year, he persisted in calling the following day the 6th of January. His watch enabled him to keep an accurate account of the passing hours.

In the course of his life, Ben Zoof had read a few books. After pondering one day, he said: "It seems to me, captain, that you have turned into Robinson Crusoe, and that I am your man Friday. I hope I have not become a negro."

"No," replied the captain. "Your complexion isn't the fairest in the world, but you are not black yet."

"Well, I had much sooner be a white Friday than a black one," rejoined Ben Zoof.

Still no ship appeared; and Captain Servadac, after the example of all previous Crusoes, began to consider it advisable to investigate the resources of his domain. The new territory of which he had become the monarch he named Gourbi Island. It had a superficial area of about nine hundred square miles. Bullocks, cows, goats, and sheep existed in considerable numbers; and as there seemed already to be an abundance of game, it was hardly likely that a future supply would fail them. The condition of the cereals was such as to promise a fine ingathering of wheat, maize, and rice; so that for the governor and his population, with their two horses, not only was there ample provision, but even if other human inhabitants besides themselves should yet be discovered, there was not the remotest prospect of any of them perishing by starvation.

From the 6th to the 13th of January the rain came down in torrents; and, what was quite an unusual occurrence at this season of the year, several heavy storms broke over the island. In spite, however, of the continual downfall, the heavens still remained veiled in cloud. Servadac, moreover, did not fail to observe that for the season the temperature was unusually high; and, as a matter still more surprising, that it kept steadily increasing, as though the earth were gradually and continuously approximating to the sun. In proportion to the rise of temperature, the light also assumed greater intensity; and if it had not been for the screen of vapor interposed between the sky and the island, the irradiation which would have illumined all terrestrial objects would have been vivid beyond all precedent.

But neither sun, moon, nor star ever appeared; and Servadac's irritation and annoyance at being unable to identify any one point of the firmament may be more readily imagined than described. On one occasion Ben Zoof endeavored to mitigate his master's impatience by exhorting him to assume the resignation, even if he did not feel the indifference, which he himself experienced; but his advice was received with so angry a rebuff that he retired in all haste, abashed, to résumé his watchman's duty, which he performed with exemplary perseverance. Day and night, with the shortest possible intervals of rest, despite wind, rain, and storm, he mounted guard upon the cliff--but all in
vain. Not a speck appeared upon the desolate horizon. To say the truth, no vessel could have stood against the weather. The hurricane raged with tremendous fury, and the waves rose to a height that seemed to defy calculation. Never, even in the second era of creation, when, under the influence of internal heat, the waters rose in vapor to descend in deluge back upon the world, could meteorological phenomena have been developed with more impressive intensity.

But by the night of the 13th the tempest appeared to have spent its fury; the wind dropped; the rain ceased as if by a spell; and Servadac, who for the last six days had confined himself to the shelter of his roof, hastened to join Ben Zoof at his post upon the cliff. Now, he thought, there might be a chance of solving his perplexity; perhaps now the huge disc, of which he had had an imperfect glimpse on the night of the 31st of December, might again reveal itself; at any rate, he hoped for an opportunity of observing the constellations in a clear firmament above.

The night was magnificent. Not a cloud dimmed the luster of the stars, which spangled the heavens in surpassing brilliancy, and several nebulae which hitherto no astronomer had been able to discern without the aid of a telescope were clearly visible to the naked eye.

By a natural impulse, Servadac's first thought was to observe the position of the pole-star. It was in sight, but so near to the horizon as to suggest the utter impossibility of its being any longer the central pivot of the sidereal system; it occupied a position through which it was out of the question that the axis of the earth indefinitely prolonged could ever pass. In his impression he was more thoroughly confirmed when, an hour later, he noticed that the star had approached still nearer the horizon, as though it had belonged to one of the zodiacal constellations.

The pole-star being manifestly thus displaced, it remained to be discovered whether any other of the celestial bodies had become a fixed center around which the constellations made their apparent daily revolutions. To the solution of this problem Servadac applied himself with the most thoughtful diligence. After patient observation, he satisfied himself that the required conditions were answered by a certain star that was stationary not far from the horizon. This was Vega, in the constellation Lyra, a star which, according to the precession of the equinoxes, will take the place of our pole-star 12,000 years hence. The most daring imagination could not suppose that a period of 12,000 years had been crowded into the space of a fortnight; and therefore the captain came, as to an easier conclusion, to the opinion that the earth's axis had been suddenly and immensely shifted; and from the fact that the axis, if produced, would pass through a point so little removed above the horizon, he deduced the inference that the Mediterranean must have been transported to the equator.

Lost in bewildering maze of thought, he gazed long and intently upon the heavens. His eyes wandered from where the tail of the Great Bear, now a zodiacal constellation, was scarcely visible above the waters, to where the stars of the southern hemisphere were just breaking on his view. A cry from Ben Zoof recalled him to himself.

"The moon!" shouted the orderly, as though overjoyed at once again beholding what the poet has called:

"The kind companion of terrestrial night;"

and he pointed to a disc that was rising at a spot precisely opposite the place where they would have expected to see the sun. "The moon!" again he cried.

But Captain Servadac could not altogether enter into his servant's enthusiasm. If this were actually the moon, her distance from the earth must have been increased by some millions of miles. He was rather disposed to suspect that it was not the earth's satellite at all, but some planet with its apparent magnitude greatly enlarged by its approximation to the earth. Taking up the powerful field-glass which he was accustomed to use in his surveying operations, he proceeded to investigate more carefully the luminous orb. But he failed to trace any of the lineaments, supposed to resemble a human face, that mark the lunar surface; he failed to decipher any indications of hill and plain; nor could he make out the aureole of light which emanates from what astronomers have designated Mount Tycho. "It is not the moon," he said slowly.

"Not the moon?" cried Ben Zoof. "Why not?"

"It is not the moon," again affirmed the captain.

"Why not?" repeated Ben Zoof, unwilling to renounce his first impression.

"Because there is a small satellite in attendance." And the captain drew his servant's attention to a bright speck, apparently about the size of one of Jupiter's satellites seen through a moderate telescope, that was clearly visible just within the focus of his glass.

Here, then, was a fresh mystery. The orbit of this planet was assuredly interior to the orbit of the earth, because it accompanied the sun in its apparent motion; yet it was neither Mercury nor Venus, because neither one nor the other of these has any satellite at all.

The captain stamped and stamped again with mingled vexation, agitation, and bewilderment. "Confound it!" he cried, "if this is neither Venus nor Mercury, it must be the moon; but if it is the moon, whence, in the name of all the gods, has she picked up another moon for herself?"

The captain was in dire perplexity.
CHAPTER VIII. VENUS IN PERILOUS PROXIMITY

The light of the returning sun soon extinguished the glory of the stars, and rendered it necessary for the captain to postpone his observations. He had sought in vain for further trace of the huge disc that had so excited his wonder on the 1st, and it seemed most probable that, in its irregular orbit, it had been carried beyond the range of vision.

The weather was still superb. The wind, after veering to the west, had sunk to a perfect calm. Pursuing its inverted course, the sun rose and set with undeviating regularity; and the days and nights were still divided into periods of precisely six hours each—a sure proof that the sun remained close to the new equator which manifestly passed through Gourbi Island.

Meanwhile the temperature was steadily increasing. The captain kept his thermometer close at hand where he could repeatedly consult it, and on the 15th he found that it registered 50 degrees centigrade in the shade.

No attempt had been made to rebuild the 'gourbi', but the captain and Ben Zoof managed to make up quarters sufficiently comfortable in the principal apartment of the adjoining structure, where the stone walls, that at first afforded a refuge from the torrents of rain, now formed an equally acceptable shelter from the burning sun. The heat was becoming insufferable, surpassing the heat of Senegal and other equatorial regions; not a cloud ever tempered the intensity of the solar rays; and unless some modification ensued, it seemed inevitable that all vegetation should become scorched and burnt off from the face of the island.

In spite, however, of the profuse perspirations from which he suffered, Ben Zoof, constant to his principles, expressed no surprise at the unwonted heat. No remonstrances from his master could induce him to abandon his watch from the cliff. To withstand the vertical beams of that noontide sun would seem to require a skin of brass and a brain of adamant; but yet, hour after hour, he would remain conscientiously scanning the surface of the Mediterranean, which, calm and deserted, lay outstretched before him. On one occasion, Servadac, in reference to his orderly's indomitable perseverance, happened to remark that he thought he must have been born in the heart of equatorial Africa; to which Ben Zoof replied, with the utmost dignity, that he was born at Montmartre, which was all the same. The worthy fellow was unwilling to own that, even in the matter of heat, the tropics could in any way surpass his own much-loved home.

This unprecedented temperature very soon began to take effect upon the products of the soil. The sap rose rapidly in the trees, so that in the course of a few days buds, leaves, flowers, and fruit had come to full maturity. It was the same with the cereals; wheat and maize sprouted and ripened as if by magic, and for a while a rank and luxuriant pasturage clothed the meadows. Summer and autumn seemed blended into one. If Captain Servadac had been more deeply versed in astronomy, he would perhaps have been able to bring to bear his knowledge that if the axis of the earth, as everything seemed to indicate, now formed a right angle with the plane of the ecliptic, her various seasons, like those of the planet Jupiter, would become limited to certain zones, in which they would remain invariable. But even if he had understood the _rationale_ of the change, the convulsion that had brought it about would have been as much a mystery as ever.

The precocity of vegetation caused some embarrassment. The time for the corn and fruit harvest had fallen simultaneously with that of the haymaking; and as the extreme heat precluded any prolonged exertions, it was evident "the population" of the island would find it difficult to provide the necessary amount of labor. Not that the prospect gave them much concern: the provisions of the 'gourbi' were still far from exhausted, and now that the roughness of the weather had so happily subsided, they had every encouragement to hope that a ship of some sort would soon appear. Not only was that part of the Mediterranean systematically frequented by the government steamers that watched the coast, but vessels of all nations were constantly cruising off the shore.

In spite, however, of all their sanguine speculations, no ship appeared. Ben Zoof admitted the necessity of extemporizing a kind of parasol for himself, otherwise he must literally have been roasted to death upon the exposed summit of the cliff.

Meanwhile, Servadac was doing his utmost—it must be acknowledged, with indifferent success—to recall the lessons of his school-days. He would plunge into the wildest speculations in his endeavors to unravel the difficulties of the new situation, and struggled into a kind of conviction that if there had been a change of manner in the earth's rotation on her axis, there would be a corresponding change in her revolution round the sun, which would involve the consequence of the length of the year being either diminished or increased.

Independently of the increased and increasing heat, there was another very conclusive demonstration that the earth had thus suddenly approximated towards the sun. The diameter of the solar disc was now exactly twice what it ordinarily looks to the naked eye; in fact, it was precisely such as it would appear to an observer on the surface of the planet Venus. The most obvious inference would therefore be that the earth's distance from the sun had been diminished from 91,000,000 to 66,000,000 miles. If the just equilibrium of the earth had thus been destroyed, and
should this diminution of distance still continue, would there not be reason to fear that the terrestrial world would be carried onwards to actual contact with the sun, which must result in its total annihilation?

The continuance of the splendid weather afforded Servadac every facility for observing the heavens. Night after night, constellations in their beauty lay stretched before his eyes—an alphabet which, to his mortification, not to say his rage, he was unable to decipher. In the apparent dimensions of the fixed stars, in their distance, in their relative position with regard to each other, he could observe no change. Although it is established that our sun is approaching the constellation of Hercules at the rate of more than 126,000,000 miles a year, and although Arcturus is traveling through space at the rate of fifty-four miles a second—three times faster than the earth goes round the sun,—yet such is the remoteness of those stars that no appreciable change is evident to the senses. The fixed stars taught him nothing.

Far otherwise was it with the planets. The orbits of Venus and Mercury are within the orbit of the earth, Venus rotating at an average distance of 66,130,000 miles from the sun, and Mercury at that of 35,393,000. After pondering long, and as profoundly as he could, upon these figures, Captain Servadac came to the conclusion that, as the earth was now receiving about double the amount of light and heat that it had been receiving before the catastrophe, it was receiving about the same as the planet Venus; he was driven, therefore, to the estimate of the measure in which the earth must have approximated to the sun, a deduction in which he was confirmed when the opportunity came for him to observe Venus herself in the splendid proportions that she now assumed.

That magnificent planet which—as Phosphorus or Lucifer, Hesperus or Vesper, the evening star, the morning star, or the shepherd's star—has never failed to attract the rapturous admiration of the most indifferent observers, here revealed herself with unprecedented glory, exhibiting all the phases of a lustrous moon in miniature. Various indentations in the outline of its crescent showed that the solar beams were refracted into regions of its surface where the sun had already set, and proved, beyond a doubt, that the planet had an atmosphere of her own; and certain luminous points projecting from the crescent as plainly marked the existence of mountains. As the result of Servadac's computations, he formed the opinion that Venus could hardly be at a greater distance than 6,000,000 miles from the earth.

"And a very safe distance, too," said Ben Zoof, when his master told him the conclusion at which he had arrived.

"All very well for two armies, but for a couple of planets not quite so safe, perhaps, as you may imagine. It is my impression that it is more than likely we may run foul of Venus," said the captain.

"Plenty of air and water there, sir?" inquired the orderly.

"Yes; as far as I can tell, plenty," replied Servadac.

"Then why shouldn't we go and visit Venus?"

Servadac did his best to explain that as the two planets were of about equal volume, and were traveling with great velocity in opposite directions, any collision between them must be attended with the most disastrous consequences to one or both of them. But Ben Zoof failed to see that, even at the worst, the catastrophe could be much more serious than the collision of two railway trains.

The captain became exasperated. "You idiot!" he angrily exclaimed; "cannot you understand that the planets are traveling a thousand times faster than the fastest express, and that if they meet, either one or the other must be destroyed? What would become of your darling Montmartre then?"

The captain had touched a tender chord. For a moment Ben Zoof stood with clenched teeth and contracted muscles; then, in a voice of real concern, he inquired whether anything could be done to avert the calamity.

"Nothing whatever; so you may go about your own business," was the captain's brusque rejoinder.

All discomfited and bewildered, Ben Zoof retired without a word.

During the ensuing days the distance between the two planets continued to decrease, and it became more and more obvious that the earth, on her new orbit, was about to cross the orbit of Venus. Throughout this time the earth had been making a perceptible approach towards Mercury, and that planet—which is rarely visible to the naked eye, and then only at what are termed the periods of its greatest eastern and western elongations—now appeared in all its splendor. It amply justified the epithet of "sparkling" which the ancients were accustomed to confer upon it, and then only at what are termed the periods of its greatest eastern and western elongations—now appeared in all its splendor. It amply justified the epithet of "sparkling" which the ancients were accustomed to confer upon it, and could scarcely fail to awaken a new interest. The periodic recurrence of its phases; its reflection of the sun's rays, shedding upon it a light and a heat seven times greater than that received by the earth; its glacial and its torrid zones, which, on account of the great inclination of the axis, are scarcely separable; its equatorial bands; its mountains eleven miles high;—were all subjects of observation worthy of the most studious regard.

But no danger was to be apprehended from Mercury; with Venus only did collision appear imminent. By the 18th of January the distance between that planet and the earth had become reduced to between two and three millions of miles, and the intensity of its light cast heavy shadows from all terrestrial objects. It might be observed to turn upon its own axis in twenty-three hours twenty-one minutes—an evidence, from the unaltered duration of its days, that the planet had not shared in the disturbance. On its disc the clouds formed from its atmospheric vapor
were plainly perceptible, as also were the seven spots, which, according to Bianchini, are a chain of seas. It was now visible in broad daylight. Buonaparte, when under the Directory, once had his attention called to Venus at noon, and immediately hailed it joyfully, recognizing it as his own peculiar star in the ascendant. Captain Servadac, it may well be imagined, did not experience the same gratifying emotion.

On the 20th, the distance between the two bodies had again sensibly diminished. The captain had ceased to be surprised that no vessel had been sent to rescue himself and his companion from their strange imprisonment; the governor general and the minister of war were doubtless far differently occupied, and their interests far otherwise engrossed. What sensational articles, he thought, must now be teeming to the newspapers! What crowds must be flocking to the churches! The end of the world approaching! the great climax close at hand! Two days more, and the earth, shivered into a myriad atoms, would be lost in boundless space!

These dire forebodings, however, were not destined to be realized. Gradually the distance between the two planets began to increase; the planes of their orbits did not coincide, and accordingly the dreaded catastrophe did not ensue. By the 25th, Venus was sufficiently remote to preclude any further fear of collision. Ben Zoof gave a sigh of relief when the captain communicated the glad intelligence.

Their proximity to Venus had been close enough to demonstrate that beyond a doubt that planet has no moon or satellite such as Cassini, Short, Montaigne of Limoges, Montbarron, and some other astronomers have imagined to exist. "Had there been such a satellite," said Servadac, "we might have captured it in passing. But what can be the meaning," he added seriously, "of all this displacement of the heavenly bodies?"

"What is that great building at Paris, captain, with a top like a cap?" asked Ben Zoof.

"Do you mean the Observatory?"

"Yes, the Observatory. Are there not people living in the Observatory who could explain all this?"

"Very likely; but what of that?"

"Let us be philosophers, and wait patiently until we can hear their explanation."

Servadac smiled. "Do you know what it is to be a philosopher, Ben Zoof?" he asked.

"I am a soldier, sir," was the servant's prompt rejoinder, "and I have learnt to know that 'what can't be cured must be endured.'"

The captain made no reply, but for a time, at least, he desisted from puzzling himself over matters which he felt he was utterly incompetent to explain. But an event soon afterwards occurred which awakened his keenest interest.

About nine o'clock on the morning of the 27th, Ben Zoof walked deliberately into his master's apartment, and, in reply to a question as to what he wanted, announced with the utmost composure that a ship was in sight.

"A ship!" exclaimed Servadac, keeping his eye unmoved at his telescope.

"Impossible, sir!" rejoined Ben Zoof; "there are no signs of smoke."

"The _Dobryna_!" exclaimed Servadac, keeping his eye unmoved at his telescope.

"Impossible, sir!" rejoined Ben Zoof; "there are no signs of smoke."

"The _Dobryna_!" repeated the captain, positively. "She is under sail; but she is Count Timascheff's yacht."

He was right. If the count were on board, a strange fatality was bringing him to the presence of his rival. But no longer now could Servadac regard him in the light of an adversary; circumstances had changed, and all animosity was absorbed in the eagerness with which he hailed the prospect of obtaining some information about the recent startling and inexplicable events. During the twenty-seven days that she had been absent, the _Dobryna_, he conjectured, would have explored the Mediterranean, would very probably have visited Spain, France, or Italy, and accordingly would convey to Gourbi Island some intelligence from one or other of those countries. He reckoned, therefore, not only upon ascertaining the extent of the late catastrophe, but upon learning its cause. Count Timascheff was, no doubt, magnanimously coming to the rescue of himself and his orderly.

The wind being adverse, the _Dobryna_ did not make very rapid progress; but as the weather, in spite of a few clouds, remained calm, and the sea was quite smooth, she was enabled to hold a steady course. It seemed unaccountable that she should not use her engine, as whoever was on board, would be naturally impatient to
reconnoiter the new island, which must just have come within their view. The probability that suggested itself was
that the schooner's fuel was exhausted.

Servadac took it for granted that the _Dobryna_ was endeavoring to put in. It occurred to him, however, that the
count, on discovering an island where he had expected to find the mainland of Africa, would not unlikely be at a loss
for a place of anchorage. The yacht was evidently making her way in the direction of the former mouth of the Shelif,
and the captain was struck with the idea that he would do well to investigate whether there was any suitable mooring
towards which he might signal her. Zephyr and Galette were soon saddled, and in twenty minutes had carried their
riders to the western extremity of the island, where they both dismounted and began to explore the coast.

They were not long in ascertaining that on the farther side of the point there was a small well-sheltered creek of
sufficient depth to accommodate a vessel of moderate tonnage. A narrow channel formed a passage through the
ridge of rocks that protected it from the open sea, and which, even in the roughest weather, would ensure the
calmness of its waters.

Whilst examining the rocky shore, the captain observed, to his great surprise, long and well-defined rows of
seaweed, which undoubtedly betokened that there had been a very considerable ebb and flow of the waters—a thing
unknown in the Mediterranean, where there is scarcely any perceptible tide. What, however, seemed most
remarkable, was the manifest evidence that ever since the highest flood (which was caused, in all probability, by the
proximity of the body of which the huge disc had been so conspicuous on the night of the 31st of December) the
phenomenon had been gradually lessening, and in fact was now reduced to the normal limits which had
characterized it before the convulsion.

Without doing more than note the circumstance, Servadac turned his entire attention to the _Dobryna_, which,
now little more than a mile from shore, could not fail to see and understand his signals. Slightly changing her course,
she first struck her mainsail, and, in order to facilitate the movements of her helmsman, soon carried nothing but her
two topsails, brigantine and jib. After rounding the peak, she steered direct for the channel to which Servadac by his
gestures was pointing her, and was not long in entering the creek. As soon as the anchor, imbedded in the sandy
bottom, had made good its hold, a boat was lowered. In a few minutes more Count Timascheff had landed on the
island. Captain Servadac hastened towards him.

"First of all, count," he exclaimed impetuously, "before we speak one other word, tell me what has happened."
The count, whose imperturbable composure presented a singular contrast to the French officer's enthusiastic
vivacity, made a stiff bow, and in his Russian accent replied: "First of all, permit me to express my surprise at seeing
you here. I left you on a continent, and here I have the honor of finding you on an island."

"I assure you, count, I have never left the place."

"I am quite aware of it. Captain Servadac, and I now beg to offer you my sincere apologies for failing to keep
my appointment with you."

"Never mind, now," interposed the captain; "we will talk of that by-and-by. First, tell me what has happened."

"The very question I was about to put to you, Captain Servadac."

"Do you mean to say you know nothing of the cause, and can tell me nothing of the extent, of the catastrophe
which has transformed this part of Africa into an island?"

"Nothing more than you know yourself."

"But surely, Count Timascheff, you can inform me whether upon the northern shore of the Mediterranean—"

"Are you certain that this is the Mediterranean?" asked the count significantly, and added, "I have discovered no
sign of land."

The captain stared in silent bewilderment. For some moments he seemed perfectly stupefied; then, recovering
himself, he began to overwhelm the count with a torrent of questions. Had he noticed, ever since the 1st of January,
that the sun had risen in the west? Had he noticed that the days had been only six hours long, and that the weight of
the atmosphere was so much diminished? Had he observed that the moon had quite disappeared, and that the earth
had been in imminent hazard of running foul of the planet Venus? Was he aware, in short, that the entire motions of
the terrestrial sphere had undergone a complete modification? To all these inquiries, the count responded in the
affirmative. He was acquainted with everything that had transpired; but, to Servadac's increasing astonishment, he
could throw no light upon the cause of any of the phenomena.

"On the night of the 31st of December," he said, "I was proceeding by sea to our appointed place of meeting,
when my yacht was suddenly caught on the crest of an enormous wave, and carried to a height which it is beyond
my power to estimate. Some mysterious force seemed to have brought about a convulsion of the elements. Our
engine was damaged, nay disabled, and we drifted entirely at the mercy of the terrible hurricane that raged during
the succeeding days. That the _Dobryna_ escaped at all is little less than a miracle, and I can only attribute her safety
to the fact that she occupied the center of the vast cyclone, and consequently did not experience much change of
position."
He paused, and added: "Your island is the first land we have seen."
"Then let us put out to sea at once and ascertain the extent of the disaster," cried the captain, eagerly. "You will take me on board, count, will you not?"
"My yacht is at your service, sir, even should you require to make a tour round the world."
"A tour round the Mediterranean will suffice for the present, I think," said the captain, smiling.
The count shook his head.
"I am not sure," said he, "but what the tour of the Mediterranean will prove to be the tour of the world."
Servadac made no reply, but for a time remained silent and absorbed in thought.
After the silence was broken, they consulted as to what course was best to pursue; and the plan they proposed was, in the first place, to discover how much of the African coast still remained, and to carry on the tidings of their own experiences to Algiers; or, in the event of the southern shore having actually disappeared, they would make their way northwards and put themselves in communication with the population on the river banks of Europe.
Before starting, it was indispensable that the engine of the _Dobryna_ should be repaired: to sail under canvas only would in contrary winds and rough seas be both tedious and difficult. The stock of coal on board was adequate for two months' consumption; but as it would at the expiration of that time be exhausted, it was obviously the part of prudence to employ it in reaching a port where fuel could be replenished.
The damage sustained by the engine proved to be not very serious; and in three days after her arrival the _Dobryna_ was again ready to put to sea.
Servadac employed the interval in making the count acquainted with all he knew about his small domain. They made an entire circuit of the island, and both agreed that it must be beyond the limits of that circumscribed territory that they must seek an explanation of what had so strangely transpired.
It was on the last day of January that the repairs of the schooner were completed. A slight diminution in the excessively high temperature which had prevailed for the last few weeks, was the only apparent change in the general order of things; but whether this was to be attributed to any alteration in the earth's orbit was a question which would still require several days to decide. The weather remained fine, and although a few clouds had accumulated, and might have caused a trifling fall of the barometer, they were not sufficiently threatening to delay the departure of the _Dobryna_.
Doubts now arose, and some discussion followed, whether or not it was desirable for Ben Zoof to accompany his master. There were various reasons why he should be left behind, not the least important being that the schooner had no accommodation for horses, and the orderly would have found it hard to part with Zephyr, and much more with his own favorite Galette; besides, it was advisable that there should be some one left to receive any strangers that might possibly arrive, as well as to keep an eye upon the herds of cattle which, in the dubious prospect before them, might prove to be the sole resource of the survivors of the catastrophe. Altogether, taking into consideration that the brave fellow would incur no personal risk by remaining upon the island, the captain was induced with much reluctance to forego the attendance of his servant, hoping very shortly to return and to restore him to his country, when he had ascertained the reason of the mysteries in which they were enveloped.
On the 31st, then, Ben Zoof was "invested with governor's powers," and took an affecting leave of his master, begging him, if chance should carry him near Montmartre, to ascertain whether the beloved "mountain" had been left unmoved.
Farewells over, the _Dobryna_ was carefully steered through the creek, and was soon upon the open sea.

CHAPTER X. A SEARCH FOR ALGERIA

The _Dobryna_, a strong craft of 200 tons burden, had been built in the famous shipbuilding yards in the Isle of Wight. Her sea going qualities were excellent, and would have amply sufficed for a circumnavigation of the globe. Count Timascheff was himself no sailor, but had the greatest confidence in leaving the command of his yacht in the hands of Lieutenant Procope, a man of about thirty years of age, and an excellent seaman. Born on the count's estates, the son of a serf who had been emancipated long before the famous edict of the Emperor Alexander, Procope was sincerely attached, by a tie of gratitude as well as of duty and affection, to his patron's service. After an apprenticeship on a merchant ship he had entered the imperial navy, and had already reached the rank of lieutenant when the count appointed him to the charge of his own private yacht, in which he was accustomed to spend by far the greater part of his time, throughout the winter generally cruising in the Mediterranean, whilst in the summer he visited more northern waters.
The ship could not have been in better hands. The lieutenant was well informed in many matters outside the pale of his profession, and his attainments were alike creditable to himself and to the liberal friend who had given him his education. He had an excellent crew, consisting of Tiglew the engineer, four sailors named Niegoch, Tolstoy, Etkef,
and Panofka, and Mochel the cook. These men, without exception, were all sons of the count's tenants, and so
tenaciously, even out at sea, did they cling to their old traditions, that it mattered little to them what physical
disorganization ensued, so long as they felt they were sharing the experiences of their lord and master. The late
astounding events, however, had rendered Procope manifestly uneasy, and not the less so from his consciousness
that the count secretly partook of his own anxiety.

Steam up and canvas spread, the schooner started eastwards. With a favorable wind she would certainly have
made eleven knots an hour had not the high waves somewhat impeded her progress. Although only a moderate
breeze was blowing, the sea was rough, a circumstance to be accounted for only by the diminution in the force of the
earth's attraction rendering the liquid particles so buoyant, that by the mere effect of oscillation they were carried to
a height that was quite unprecedented. M. Arago has fixed twenty-five or twenty-six feet as the maximum elevation
ever attained by the highest waves, and his astonishment would have been very great to see them rising fifty or even
sixty feet. Nor did these waves in the usual way partially unfurl themselves and rebound against the sides of the
vessel; they might rather be described as long undulations carrying the schooner (its weight diminished from the
same cause as that of the water) alternately to such heights and depths, that if Captain Servadac had been subject to
seasickness he must have found himself in sorry plight. As the pitching, however, was the result of a long uniform
swell, the yacht did not labor much harder than she would against the ordinary short strong waves of the
Mediterranean; the main inconvenience that was experienced was the diminution in her proper rate of speed.

For a few miles she followed the line hitherto presumably occupied by the coast of Algeria; but no land appeared
to the south. The changed positions of the planets rendered them of no avail for purposes of nautical observation, nor
could Lieutenant Procope calculate his latitude and longitude by the altitude of the sun, as his reckonings would be
useless when applied to charts that had been constructed for the old order of things; but nevertheless, by means of the
log, which gave him the rate of progress, and by the compass which indicated the direction in which they were
sailing, he was able to form an estimate of his position that was sufficiently free from error for his immediate need.

Happily the recent phenomena had no effect upon the compass; the magnetic needle, which in these regions had
pointed about 22 degrees from the north pole, had never deviated in the least—a proof that, although east and west
had apparently changed places, north and south continued to retain their normal position as cardinal points. The log
and the compass, therefore, were able to be called upon to do the work of the sextant, which had become utterly
useless.

On the first morning of the cruise Lieutenant Procope, who, like most Russians, spoke French fluently, was
explaining these peculiarities to Captain Servadac; the count was present, and the conversation perpetually recurred,
as naturally it would, to the phenomena which remained so inexplicable to them all.

"It is very evident," said the lieutenant, "that ever since the 1st of January the earth has been moving in a new
orbit, and from some unknown cause has drawn nearer to the sun."

"No doubt about that," said Servadac; "and I suppose that, having crossed the orbit of Venus, we have a good
chance of running into the orbit of Mercury."

"And finish up by a collision with the sun!" added the count.

"There is no fear of that, sir. The earth has undoubtedly entered upon a new orbit, but she is not incurring any
probable risk of being precipitated onto the sun."

"Can you satisfy us of that?" asked the count.

"I can, sir. I can give you a proof which I think you will own is conclusive. If, as you suppose, the earth is being
drawn on so as to be precipitated against the sun, the great center of attraction of our system, it could only be
because the centrifugal and centripetal forces that cause the planets to rotate in their several orbits had been entirely
suspended: in that case, indeed, the earth would rush onwards towards the sun, and in sixty-four days and a half the
catastrophe you dread would inevitably happen."

"And what demonstration do you offer," asked Servadac eagerly, "that it will not happen?"

"Simply this, captain: that since the earth entered her new orbit half the sixty-four days has already elapsed, and
yet it is only just recently that she has crossed the orbit of Venus, hardly one-third of the distance to be traversed to
reach the sun."

The lieutenant paused to allow time for reflection, and added: "Moreover, I have every reason to believe that we
are not so near the sun as we have been. The temperature has been gradually diminishing; the heat upon Gourbi
Island is not greater now than we might ordinarily expect to find in Algeria. At the same time, we have the problem
still unsolved that the Mediterranean has evidently been transported to the equatorial zone."

Both the count and the captain expressed themselves reassured by his representations, and observed that they
must now do all in their power to discover what had become of the vast continent of Africa, of which, they were
hitherto failing so completely to find a vestige.

Twenty-four hours after leaving the island, the _Dobryna_ had passed over the sites where Tenes, Cherchil,
Koleah, and Sidi-Feruch once had been, but of these towns not one appeared within range of the telescope. Ocean reigned supreme. Lieutenant Procope was absolutely certain that he had not mistaken his direction; the compass showed that the wind had never shifted from the west, and this, with the rate of speed as estimated by the log, combined to assure him that at this date, the 2d of February, the schooner was in lat. 36 degrees 49 min N. and long. 3 degrees 25 min E., the very spot which ought to have been occupied by the Algerian capital. But Algiers, like all the other coast-towns, had apparently been absorbed into the bowels of the earth.

Captain Servadac, with clenched teeth and knitted brow, stood sternly, almost fiercely, regarding the boundless waste of water. His pulse beat fast as he recalled the friends and comrades with whom he had spent the last few years in that vanished city. All the images of his past life floated upon his memory; his thoughts sped away to his native France, only to return again to wonder whether the depths of ocean would reveal any traces of the Algerian metropolis.

"Is it not impossible," he murmured aloud, "that any city should disappear so completely? Would not the loftiest eminences of the city at least be visible? Surely some portion of the Casbah must still rise above the waves? The imperial fort, too, was built upon an elevation of 750 feet; it is incredible that it should be so totally submerged. Unless some vestiges of these are found, I shall begin to suspect that the whole of Africa has been swallowed in some vast abyss."

Another circumstance was most remarkable. Not a material object of any kind was to be noticed floating on the surface of the water; not one branch of a tree had been seen drifting by, nor one spar belonging to one of the numerous vessels that a month previously had been moored in the magnificent bay which stretched twelve miles across from Cape Matafuz to Point Pexade. Perhaps the depths might disclose what the surface failed to reveal, and Count Timascheff, anxious that Servadac should have every facility afforded him for solving his doubts, called for the sounding-line. Forthwith, the lead was greased and lowered. To the surprise of all, and especially of Lieutenant Procope, the line indicated a bottom at a nearly uniform depth of from four to five fathoms; and although the sounding was persevered with continuously for more than two hours over a considerable area, the differences of level were insignificant, not corresponding in any degree to what would be expected over the site of a city that had been terraced like the seats of an amphitheater. Astounding as it seemed, what alternative was left but to suppose that the Algerian capital had been completely leveled by the flood?

The sea-bottom was composed of neither rock, mud, sand, nor shells; the sounding-lead brought up nothing but a kind of metallic dust, which glittered with a strange iridescence, and the nature of which it was impossible to determine, as it was totally unlike what had ever been known to be raised from the bed of the Mediterranean.

"You must see, lieutenant, I should think, that we are not so near the coast of Algeria as you imagined."

The lieutenant shook his head. After pondering awhile, he said: "If we were farther away I should expect to find a depth of two or three hundred fathoms instead of five fathoms. Five fathoms! I confess I am puzzled."

For the next thirty-six hours, until the 4th of February, the sea was examined and explored with the most unflagging perseverance. Its depth remained invariable, still four, or at most five, fathoms; and although its bottom was assiduously dredged, it was only to prove it barren of marine production of any type.

The yacht made its way to lat. 36 degrees, and by reference to the charts it was tolerably certain that she was cruising over the site of the Sahel, the ridge that had separated the rich plain of the Mitidja from the sea, and of which the highest peak, Mount Boujereah, had reached an altitude of 1,200 feet; but even this peak, which might have been expected to emerge like an islet above the surface of the sea, was nowhere to be traced. Nothing was to be done but to put about, and return in disappointment towards the north.

Thus the _Dobryna_ regained the waters of the Mediterranean without discovering a trace of the missing province of Algeria.

CHAPTER XI. AN ISLAND TOMB

No longer, then, could there be any doubt as to the annihilation of a considerable portion of the colony. Not merely had there been a submersion of the land, but the impression was more and more confirmed that the very bowels of the earth must have yawned and closed again upon a large territory. Of the rocky substratum of the province it became more evident than ever that not a trace remained, and a new soil of unknown formation had certainly taken the place of the old sandy sea-bottom. As it altogether transcended the powers of those on board to elucidate the origin of this catastrophe, it was felt to be incumbent on them at least to ascertain its extent.

After a long and somewhat wavering discussion, it was at length decided that the schooner should take advantage of the favorable wind and weather, and proceed at first towards the east, thus following the outline of what had formerly represented the coast of Africa, until that coast had been lost in boundless sea.

Not a vestige of it all remained; from Cape Matafuz to Tunis it had all gone, as though it had never been. The
maritime town of Dellis, built like Algiers, amphitheater-wise, had totally disappeared; the highest points were quite
invisible; not a trace on the horizon was left of the Jurjura chain, the topmost point of which was known to have an
altitude of more than 7,000 feet.

Unsparing of her fuel, the _Dobryna_ made her way at full steam towards Cape Blanc. Neither Cape Negro nor
Cape Serrat was to be seen. The town of Bizerta, once charming in its oriental beauty, had vanished utterly; its
marabouts, or temple-tombs, shaded by magnificent palms that fringed the gulf, which by reason of its narrow
mouth had the semblance of a lake, all had disappeared, giving place to a vast waste of sea, the transparent waves of
which, as still demonstrated by the sounding-line, had ever the same uniform and arid bottom.

In the course of the day the schooner rounded the point where, five weeks previously, Cape Blanc had been so
conspicuous an object, and she was now stemming the waters of what once had been the Bay of Tunis. But bay there
was none, and the town from which it had derived its name, with the Arsenal, the Goletta, and the two peaks of Bou-
Kournein, had all vanished from the view. Cape Bon, too, the most northern promontory of Africa and the point of
the continent nearest to the island of Sicily, had been included in the general devastation.

Before the occurrence of the recent prodigy, the bottom of the Mediterranean just at this point had formed a
sudden ridge across the Straits of Libya. The sides of the ridge had shelved to so great an extent that, while the depth
of water on the summit had been little more than eleven fathoms, that on either hand of the elevation was little short
of a hundred fathoms. A formation such as this plainly indicated that at some remote epoch Cape Bon had been
connected with Cape Furina, the extremity of Sicily, in the same manner as Ceuta has doubtless been connected with
Gibraltar.

Lieutenant Procope was too well acquainted with the Mediterranean to be unaware of this peculiarity, and would
not lose the opportunity of ascertaining whether the submarine ridge still existed, or whether the sea-bottom between
Sicily and Africa had undergone any modification.

Both Timascheff and Servadac were much interested in watching the operations. At a sign from the lieutenant, a
sailor who was stationed at the foot of the fore-shrouds dropped the sounding-lead into the water, and in reply to
Procope's inquiries, reported--"Five fathoms and a flat bottom."

The next aim was to determine the amount of depression on either side of the ridge, and for this purpose the
_Dobryna_ was shifted for a distance of half a mile both to the right and left, and the soundings taken at each
station. "Five fathoms and a flat bottom," was the unvaried announcement after each operation. Not only, therefore,
was it evident that the submerged chain between Cape Bon and Cape Furina no longer existed, but it was equally
clear that the convulsion had caused a general leveling of the sea-bottom, and that the soil, degenerated, as it has
been said, into a metallic dust of unrecognized composition, bore no trace of the sponges, sea-anemones, star-fish,
sea-nettles, hydrophytes, and shells with which the submarine rocks of the Mediterranean had hitherto been
prodigally clothed.

The _Dobryna_ now put about and resumed her explorations in a southerly direction. It remained, however, as
remarkable as ever how completely throughout the voyage the sea continued to be deserted; all expectations of
hailing a vessel bearing news from Europe were entirely falsified, so that more and more each member of the crew
began to be conscious of his isolation, and to believe that the schooner, like a second Noah's ark, carried the sole
survivors of a calamity that had overwhelmed the earth.

On the 9th of February the _Dobryna_ passed over the site of the city of Dido, the ancient Byrsa--a Carthage,
however, which was now more completely destroyed than ever Punic Carthage had been destroyed by Scipio
Africanus or Roman Carthage by Hassan the Saracen.

In the evening, as the sun was sinking below the eastern horizon, Captain Servadac was lounging moodily
against the taffrail. From the heaven above, where stars kept peeping fitfully from behind the moving clouds, his eye
wandered mechanically to the waters below, where the long waves were rising and falling with the evening breeze.

All at once, his attention was arrested by a luminous speck straight ahead on the southern horizon. At first,
imagining that he was the victim of some spectral illusion, he observed it with silent attention; but when, after some
minutes, he became convinced that what he saw was actually a distant light, he appealed to one of the sailors, by
whom his impression was fully corroborated. The intelligence was immediately imparted to Count Timascheff and the
lieutenant.

"Is it land, do you suppose?" inquired Servadac, eagerly.
"I should be more inclined to think it is a light on board some ship," replied the count.
"Whatever it is, in another hour we shall know all about it," said Servadac.
"No, captain," interposed Lieutenant Procope; "we shall know nothing until to-morrow."
"What! not bear down upon it at once?" asked the count in surprise.
"No, sir; I should much rather lay to and wait till daylight. If we are really near land, I should be afraid to
approach it in the dark."
The count expressed his approval of the lieutenant's caution, and thereupon all sail was shortened so as to keep
the _Dobryna_ from making any considerable progress all through the hours of night. Few as those hours were, they
seemed to those on board as if their end would never come. Fearful lest the faint glimmer should at any moment
cease to be visible, Hector Servadac did not quit his post upon the deck; but the light continued unchanged. It shone
with about the same degree of luster as a star of the second magnitude, and from the fact of its remaining stationary,
Procope became more and more convinced that it was on land and did not belong to a passing vessel.

At sunrise every telescope was pointed with keenest interest towards the center of attraction. The light, of
course, had ceased to be visible, but in the direction where it had been seen, and at a distance of about ten miles,
there was the distinct outline of a solitary island of very small extent; rather, as the count observed, it had the
appearance of being the projecting summit of a mountain all but submerged. Whatever it was, it was agreed that its
true character must be ascertained, not only to gratify their own curiosity, but for the benefit of all future navigators.
The schooner accordingly was steered directly towards it, and in less than an hour had cast anchor within a few
cables' lengths of the shore.

The little island proved to be nothing more than an arid rock rising abruptly about forty feet above the water. It
had no outlying reefs, a circumstance that seemed to suggest the probability that in the recent convulsion it had sunk
gradually, until it had reached its present position of equilibrium.

Without removing his eye from his telescope, Servadac exclaimed: "There is a habitation on the place; I can see
an erection of some kind quite distinctly. Who can tell whether we shall not come across a human being?"

Lieutenant Procope looked doubtful. The island had all the appearance of being deserted, nor did a cannon-shot
fired from the schooner have the effect of bringing any resident to the shore. Nevertheless, it was undeniable that
there was a stone building situated on the top of the rock, and that this building had much the character of an
Arabian mosque.

The boat was lowered and manned by the four sailors; Servadac, Timascheff and Procope were quickly rowed
ashore, and lost no time in commencing their ascent of the steep acclivity. Upon reaching the summit, they found
their progress arrested by a kind of wall, or rampart of singular construction, its materials consisting mainly of vases,
fragments of columns, carved bas-reliefs, statues, and portions of broken stelae, all piled promiscuously together
without any pretense to artistic arrangement. They made their way into the enclosure, and finding an open door, they
passed through and soon came to a second door, also open, which admitted them to the interior of the mosque,
consisting of a single chamber, the walls of which were ornamented in the Arabian style by sculptures of indifferent
execution. In the center was a tomb of the very simplest kind, and above the tomb was suspended a large silver lamp
with a capacious reservoir of oil, in which floated a long lighted wick, the flame of which was evidently the light
that had attracted Servadac's attention on the previous night.

"Must there not have been a custodian of the shrine?" they mutually asked; but if such there had ever been, he
must, they concluded, either have fled or have perished on that eventful night. Not a soul was there in charge, and
the sole living occupants were a flock of wild cormorants which, startled at the entrance of the intruders, rose on
wing, and took a rapid flight towards the south.

An old French prayer-book was lying on the corner of the tomb; the volume was open, and the page exposed to
view was that which contained the office for the celebration of the 25th of August. A sudden revelation dashed
across Servadac's mind. The solemn isolation of the island tomb, the open breviary, the ritual of the ancient
anniversary, all combined to apprise him of the sanctity of the spot upon which he stood.

"The tomb of St. Louis!" he exclaimed, and his companions involuntarily followed his example, and made a
reverential obeisance to the venerated monument.

It was, in truth, the very spot on which tradition asserts that the canonized monarch came to die, a spot to which
for six centuries and more his countrymen had paid the homage of a pious regard. The lamp that had been kindled at
the memorial shrine of a saint was now in all probability the only beacon that threw a light across the waters of the
Mediterranean, and even this ere long must itself expire.

There was nothing more to explore. The three together quitted the mosque, and descended the rock to the shore,
whence their boat re-conveyed them to the schooner, which was soon again on her southward voyage; and it was not
long before the tomb of St. Louis, the only spot that had survived the mysterious shock, was lost to view.

CHAPTER XII. AT THE MERCY OF THE WINDS

As the affrighted cormorants had winged their flight towards the south, there sprang up a sanguine hope on
board the schooner that land might be discovered in that direction. Thither, accordingly, it was determined to
proceed, and in a few hours after quitting the island of the tomb, the _Dobryna_ was traversing the shallow waters
that now covered the peninsula of Dakhul, which had separated the Bay of Tunis from the Gulf of Hammamet. For
two days she continued an undeviating course, and after a futile search for the coast of Tunis, reached the latitude of 34 degrees.

Here, on the 11th of February, there suddenly arose the cry of "Land!" and in the extreme horizon, right ahead, where land had never been before, it was true enough that a shore was distinctly to be seen. What could it be? It could not be the coast of Tripoli; for not only would that low-lying shore be quite invisible at such a distance, but it was certain, moreover, that it lay two degrees at least still further south. It was soon observed that this newly discovered land was of very irregular elevation, that it extended due east and west across the horizon, thus dividing the gulf into two separate sections and completely concealing the island of Jerba, which must lie behind. Its position was duly traced on the _Dobryna_'s chart.

"How strange," exclaimed Hector Servadac, "that after sailing all this time over sea where we expected to find land, we have at last come upon land where we thought to find sea!"

"Strange, indeed," replied Lieutenant Procope; "and what appears to me almost as remarkable is that we have never once caught sight either of one of the Maltese tartans or one of the Levantine xebecs that traffic so regularly on the Mediterranean."

"Eastwards or westwards," asked the count--"which shall be our course? All farther progress to the south is checked."

"Westwards, by all means," replied Servadac quickly. "I am longing to know whether anything of Algeria is left beyond the Shelif; besides, as we pass Gourbi Island we might take Ben Zoof on board, and then make away for Gibraltar, where we should be sure to learn something, at least, of European news."

With his usual air of stately courtesy, Count Timascheff begged the captain to consider the yacht at his own disposal, and desired him to give the lieutenant instructions accordingly.

Lieutenant Procope, however, hesitated, and after revolving matters for a few moments in his mind, pointed out that as the wind was blowing directly from the west, and seemed likely to increase, if they went to the west in the teeth of the weather, the schooner would be reduced to the use of her engine only, and would have much difficulty in making any headway; on the other hand, by taking an eastward course, not only would they have the advantage of the wind, but, under steam and canvas, might hope in a few days to be off the coast of Egypt, and from Alexandria or some other port they would have the same opportunity of getting tidings from Europe as they would at Gibraltar.

Intensely anxious as he was to revisit the province of Oran, and eager, too, to satisfy himself of the welfare of his faithful Ben Zoof, Servadac could not but own the reasonableness of the lieutenant's objections, and yielded to the proposal that the eastward course should be adopted. The wind gave signs only too threatening of the breeze rising to a gale; but, fortunately, the waves did not culminate in breakers, but rather in a long swell which ran in the same direction as the vessel.

During the last fortnight the high temperature had been gradually diminishing, until it now reached an average of 20 degrees Cent. (or 68 degrees Fahr.), and sometimes descended as low as 15 degrees. That this diminution was to be attributed to the change in the earth's orbit was a question that admitted of little doubt. After approaching so near to the sun as to cross the orbit of Venus, the earth must now have receded so far from the sun that its normal distance of ninety-one millions of miles was greatly increased, and the probability was great that it was approximating to the orbit of Mars, that planet which in its physical constitution most nearly resembles our own. Nor was this supposition suggested merely by the lowering of the temperature; it was strongly corroborated by the reduction of the apparent diameter of the sun's disc to the precise dimensions which it would assume to an observer actually stationed on the surface of Mars. The necessary inference that seemed to follow from these phenomena was that the earth had been projected into a new orbit, which had the form of a very elongated ellipse.

Very slight, however, in comparison was the regard which these astronomical wonders attracted on board the _Dobryna_. All interest there was too much absorbed in terrestrial matters, and in ascertaining what changes had taken place in the configuration of the earth itself, to permit much attention to be paid to its erratic movements through space.

The schooner kept bravely on her way, but well out to sea, at a distance of two miles from land. There was good need of this precaution, for so precipitous was the shore that a vessel driven upon it must inevitably have gone to pieces; it did not offer a single harbor of refuge, but, smooth and perpendicular as the walls of a fortress, it rose to a height of two hundred, and occasionally of three hundred feet. The waves dashed violently against its base. Upon the general substratum rested a massive conglomerate, the crystallizations of which rose like a forest of gigantic pyramids and obelisks.

But what struck the explorers more than anything was the appearance of singular newness that pervaded the whole of the region. It all seemed so recent in its formation that the atmosphere had had no opportunity of producing its wonted effect in softening the hardness of its lines, in rounding the sharpness of its angles, or in modifying the color of its surface; its outline was clearly marked against the sky, and its substance, smooth and polished as though
fresh from a founder's mold, glittered with the metallic brilliancy that is characteristic of pyrites. It seemed impossible to come to any other conclusion but that the land before them, continent or island, had been upheaved by subterranean forces above the surface of the sea, and that it was mainly composed of the same metallic element as had characterized the dust so frequently uplifted from the bottom.

The extreme nakedness of the entire tract was likewise very extraordinary. Elsewhere, in various quarters of the globe, there may be sterile rocks, but there are none so adamant as to be altogether unfurrowed by the filaments engendered in the moist residuum of the condensed vapor; elsewhere there may be barren steeps, but none so rigid as not to afford some hold to vegetation, however low and elementary may be its type; but here all was bare, and blank, and desolate—not a symptom of vitality was visible.

Such being the condition of the adjacent land, it could hardly be a matter of surprise that all the sea-birds, the albatross, the gull, the sea-mew, sought continual refuge on the schooner; day and night they perched fearlessly upon the yards, the report of a gun failing to dislodge them, and when food of any sort was thrown upon the deck, they would dart down and fight with eager voracity for the prize. Their extreme avidity was recognized as a proof that any land where they could obtain a sustenance must be far remote.

Onwards thus for several days the _Dobryna_ followed the contour of the inhospitable coast, of which the features would occasionally change, sometimes for two or three miles assuming the form of a simple arris, sharply defined as though cut by a chisel, when suddenly the prismatic lamellae soaring in rugged confusion would again recur; but all along there was the same absence of beach or tract of sand to mark its base, neither were there any of those shoals of rock that are ordinarily found in shallow water. At rare intervals there were some narrow fissures, but not a creek available for a ship to enter to replenish its supply of water; and the wide roadsteads were unprotected and exposed to well-nigh every point of the compass.

But after sailing two hundred and forty miles, the progress of the _Dobryna_ was suddenly arrested. Lieutenant Procope, who had sedulously inserted the outline of the newly revealed shore upon the maps, announced that it had ceased to run east and west, and had taken a turn due north, thus forming a barrier to their continuing their previous direction. It was, of course, impossible to conjecture how far this barrier extended; it coincided pretty nearly with the fourteenth meridian of east longitude; and if it reached, as probably it did, beyond Sicily to Italy, it was certain that the vast basin of the Mediterranean, which had washed the shores alike of Europe, Asia, and Africa, must have been reduced to about half its original area.

It was resolved to proceed upon the same plan as heretofore, following the boundary of the land at a safe distance. Accordingly, the head of the _Dobryna_ was pointed north, making straight, as it was presumed, for the south of Europe. A hundred miles, or somewhat over, in that direction, and it was to be anticipated she would come in sight of Malta, if only that ancient island, the heritage in succession of Phoenicians, Carthaginians, Sicilians, Romans, Vandals, Greeks, Arabians, and the knights of Rhodes, should still be undestroyed.

But Malta, too, was gone; and when, upon the 14th, the sounding-line was dropped upon its site, it was only with the same result so oftentimes obtained before.

"The devastation is not limited to Africa," observed the count.

"Assuredly not," assented the lieutenant; adding, "and I confess I am almost in despair whether we shall ever ascertain its limits. To what quarter of Europe, if Europe still exists, do you propose that I should now direct your course?"

"To Sicily, Italy, France!" ejaculated Servadac, eagerly,—"anywhere where we can learn the truth of what has befallen us."

"How if we are the sole survivors?" said the count, gravely.

Hector Servadac was silent; his own secret presentiment so thoroughly coincided with the doubts expressed by the count, that he refrained from saying another word.

The coast, without deviation, still tended towards the north. No alternative, therefore, remained than to take a westerly course and to attempt to reach the northern shores of the Mediterranean. On the 16th the _Dobryna_ essayed to start upon her altered way, but it seemed as if the elements had conspired to obstruct her progress. A furious tempest arose; the wind beat dead in the direction of the coast, and the danger incurred by a vessel of a tonnage so light was necessarily very great.

Lieutenant Procope was extremely uneasy. He took in all sail, struck his topmasts, and resolved to rely entirely on his engine. But the peril seemed only to increase. Enormous waves caught the schooner and carried her up to their crests, whence again she was plunged deep into the abysses that they left. The screw failed to keep its hold upon the water, but continually revolved with useless speed in the vacant air; and thus, although the steam was forced on to the extremest limit consistent with safety, the vessel held her way with the utmost difficulty, and recoiled before the hurricane.

Still, not a single resort for refuge did the inaccessible shore present. Again and again the lieutenant asked
himself what would become of him and his comrades, even if they should survive the peril of shipwreck, and gain a footing upon the cliff. What resources could they expect to find upon that scene of desolation? What hope could they entertain that any portion of the old continent still existed beyond that dreary barrier?

It was a trying time, but throughout it all the crew behaved with the greatest courage and composure; confident in the skill of their commander, and in the stability of their ship, they performed their duties with steadiness and unquestioning obedience.

But neither skill, nor courage, nor obedience could avail; all was in vain. Despite the strain put upon her engine, the schooner, bare of canvas (for not even the smallest stay-sail could have withstood the violence of the storm), was drifting with terrific speed towards the menacing precipices, which were only a few short miles to leeward. Fully alive to the hopelessness of their situation, the crew were all on deck.

"All over with us, sir!" said Procope to the count. "I have done everything that man could do; but our case is desperate. Nothing short of a miracle can save us now. Within an hour we must go to pieces upon yonder rocks."

"Let us, then, commend ourselves to the providence of Him to Whom nothing is impossible," replied the count, in a calm, clear voice that could be distinctly heard by all; and as he spoke, he reverently uncovered, an example in which he was followed by all the rest.

The destruction of the vessel seeming thus inevitable, Lieutenant Procope took the best measures he could to insure a few days' supply of food for any who might escape ashore. He ordered several cases of provisions and kegs of water to be brought on deck, and saw that they were securely lashed to some empty barrels, to make them float after the ship had gone down.

Less and less grew the distance from the shore, but no creek, no inlet, could be discerned in the towering wall of cliff, which seemed about to topple over and involve them in annihilation. Except a change of wind or, as Procope observed, a supernatural rifting of the rock, nothing could bring deliverance now. But the wind did not veer, and in a few minutes more the schooner was hardly three cables' distance from the fatal land. All were aware that their last moment had arrived. Servadac and the count grasped each other's hands for a long farewell; and, tossed by the tremendous waves, the schooner was on the very point of being hurled upon the cliff, when a ringing shout was heard. "Quick, boys, quick! Hoist the jib, and right the tiller!"

Sudden and startling as the unexpected orders were, they were executed as if by magic.

The lieutenant, who had shouted from the bow, rushed astern and took the helm, and before anyone had time to speculate upon the object of his maneuvers, he shouted again, "Look out! sharp! watch the sheets!"

An involuntary cry broke forth from all on board. But it was no cry of terror. Right ahead was a narrow opening in the solid rock; it was hardly forty feet wide. Whether it was a passage or no, it mattered little; it was at least a refuge; and, driven by wind and wave, the _Dobryna_, under the dexterous guidance of the lieutenant, dashed in between its perpendicular walls.

Had she not immured herself in a perpetual prison?

CHAPTER XIII. A ROYAL SALUTE

"Then I take your bishop, major," said Colonel Murphy, as he made a move that he had taken since the previous evening to consider.

"I was afraid you would," replied Major Oliphant, looking intently at the chess-board.

Such was the way in which a long silence was broken on the morning of the 17th of February by the old calendar.

Another day elapsed before another move was made. It was a protracted game; it had, in fact, already lasted some months--the players being so deliberate, and so fearful of taking a step without the most mature consideration, that even now they were only making the twentieth move.

Both of them, moreover, were rigid disciples of the renowned Philidor, who pronounces that to play the pawns well is "the soul of chess"; and, accordingly, not one pawn had been sacrificed without a most vigorous defense.

The men who were thus beguiling their leisure were two officers in the British army--Colonel Heneage Finch Murphy and Major Sir John Temple Oliphant. Remarkably similar in personal appearance, they were hardly less so in personal character. Both of them were about forty years of age; both of them were tall and fair, with bushy whiskers and mustaches; both of them were phlegmatic in temperament, and both much addicted to the wearing of their uniforms. They were proud of their nationality, and exhibited a manifest dislike, verging upon contempt, of everything foreign. Probably they would have felt no surprise if they had been told that Anglo-Saxons were fashioned out of some specific clay, the properties of which surpassed the investigation of chemical analysis. Without any intentional disparagement they might, in a certain way, be compared to two scarecrows which, though perfectly harmless in themselves, inspire some measure of respect, and are excellently adapted to protect the
territory intrusted to their guardianship.

English-like, the two officers had made themselves thoroughly at home in the station abroad in which it had been their lot to be quartered. The faculty of colonization seems to be indigenous to the native character; once let an Englishman plant his national standard on the surface of the moon, and it would not be long before a colony was established round it.

The officers had a servant, named Kirke, and a company of ten soldiers of the line. This party of thirteen men were apparently the sole survivors of an overwhelming catastrophe, which on the 1st of January had transformed an enormous rock, garrisoned with well-nigh two thousand troops, into an insignificant island far out to sea. But although the transformation had been so marvelous, it cannot be said that either Colonel Murphy or Major Oliphant had made much demonstration of astonishment.

"This is all very peculiar, Sir John," observed the colonel.

"Yes, colonel; very peculiar," replied the major.

"England will be sure to send for us," said one officer.

"No doubt she will," answered the other.

Accordingly, they came to the mutual resolution that they would "stick to their post."

To say the truth, it would have been a difficult matter for the gallant officers to do otherwise; they had but one small boat; therefore, it was well that they made a virtue of necessity, and resigned themselves to patient expectation of the British ship which, in due time, would bring relief.

They had no fear of starvation. Their island was mined with subterranean stores, more than ample for thirteen men--nay, for thirteen Englishmen--for the next five years at least. Preserved meat, ale, brandy--all were in abundance; consequently, as the men expressed it, they were in this respect "all right."

Of course, the physical changes that had taken place had attracted the notice both of officers and men. But the reversed position of east and west, the diminution of the force of gravity, the altered rotation of the earth, and her projection upon a new orbit, were all things that gave them little concern and no uneasiness; and when the colonel and the major had replaced the pieces on the board which had been disturbed by the convulsion, any surprise they might have felt at the chess-men losing some portion of their weight was quite forgotten in the satisfaction of seeing them retain their equilibrium.

One phenomenon, however, did not fail to make its due impression upon the men; this was the diminution in the length of day and night. Three days after the catastrophe, Corporal Pim, on behalf of himself and his comrades, solicited a formal interview with the officers. The request having been granted, Pim, with the nine soldiers, all punctiliously wearing the regimental tunic of scarlet and trousers of invisible green, presented themselves at the door of the colonel's room, where he and his brother-officer were continuing their game. Raising his hand respectfully to his cap, which he wore poised jauntily over his right ear, and scarcely held on by the strap below his under lip, the corporal waited permission to speak.

After a lingering survey of the chess-board, the colonel slowly lifted his eyes, and said with official dignity, "Well, men, what is it?"

"First of all, sir," replied the corporal, "we want to speak to you about our pay, and then we wish to have a word with the major about our rations."

"Say on, then," said Colonel Murphy. "What is it about your pay?"

"Just this, sir; as the days are only half as long as they were, we should like to know whether our pay is to be diminished in proportion."

The colonel was taken somewhat aback, and did not reply immediately, though by some significant nods towards the major, he indicated that he thought the question very reasonable. After a few moments' reflection, he replied, "It must, I think, be allowed that your pay was calculated from sunrise to sunrise; there was no specification of what the interval should be. Your pay will continue as before. England can afford it."

A buzz of approval burst involuntarily from all the men, but military discipline and the respect due to their officers kept them in check from any boisterous demonstration of their satisfaction.

"And now, corporal, what is your business with me?" asked Major Oliphant.

"We want to know whether, as the days are only six hours long, we are to have but two meals instead of four?"

The officers looked at each other, and by their glances agreed that the corporal was a man of sound common sense.

"Eccentricities of nature," said the major, "cannot interfere with military regulations. It is true that there will be but an interval of an hour and a half between them, but the rule stands good--four meals a day. England is too rich to grudge her soldiers any of her soldiers' due. Yes; four meals a day."

"Hurrah!" shouted the soldiers, unable this time to keep their delight within the bounds of military decorum; and, turning to the right-about, they marched away, leaving the officers to renew the all-absorbing game.
However confident everyone upon the island might profess to be that succor would be sent them from their native land—for Britain never abandons any of her sons—it could not be disguised that that succor was somewhat tardy in making its appearance. Many and various were the conjectures to account for the delay. Perhaps England was engrossed with domestic matters, or perhaps she was absorbed in diplomatic difficulties; or perchance, more likely than all, Northern Europe had received no tidings of the convulsion that had shattered the south. The whole party thronged remarkably well upon the liberal provisions of the commissariat department, and if the officers failed to show the same tendency to _embonpoint_ which was fast becoming characteristic of the men, it was only because they deemed it due to their rank to curtail any indulgences which might compromise the fit of their uniform.

On the whole, time passed indifferently well. An Englishman rarely suffers from _ennui_, and then only in his own country, when required to conform to what he calls "the humbug of society"; and the two officers, with their similar tastes, ideas, and dispositions, got on together admirably. It is not to be questioned that they were deeply affected by a sense of regret for their lost comrades, and astounded beyond measure at finding themselves the sole survivors of a garrison of 1,895 men, but with true British pluck and self-control, they had done nothing more than draw up a report that 1,882 names were missing from the muster-roll.

The island itself, the sole surviving fragment of an enormous pile of rock that had reared itself some 1,600 feet above the sea, was not, strictly speaking, the only land that was visible; for about twelve miles to the south there was another island, apparently the very counterpart of what was now occupied by the Englishmen. It was only natural that this should awaken some interest even in the most imperturbable minds, and there was no doubt that the two officers, during one of the rare intervals when they were not absorbed in their game, had decided that it would be desirable at least to ascertain whether the island was deserted, or whether it might not be occupied by some others, like themselves, survivors from the general catastrophe. Certain it is that one morning, when the weather was bright and calm, they had embarked alone in the little boat, and been absent for seven or eight hours. Not even to Corporal Pim did they communicate the object of their excursion, nor say one syllable as to its result, and it could only be inferred from their manner that they were quite satisfied with what they had seen; and very shortly afterwards Major Oliphant was observed to draw up a lengthy document, which was no sooner finished than it was formally signed and sealed with the seal of the 33rd Regiment. It was directed:

>To the First Lord of the Admiralty, London,

and kept in readiness for transmission by the first ship that should hail in sight. But time elapsed, and here was the 18th of February without an opportunity having been afforded for any communication with the British Government.

At breakfast that morning, the colonel observed to the major that he was under the most decided impression that the 18th of February was a royal anniversary; and he went on to say that, although he had received no definite instructions on the subject, he did not think that the peculiar circumstances under which they found themselves should prevent them from giving the day its due military honors.

The major quite concurred; and it was mutually agreed that the occasion must be honored by a bumper of port, and by a royal salute. Corporal Pim must be sent for. The corporal soon made his appearance, smacking his lips, having, by a ready intuition, found a pretext for a double morning ration of spirits.

"The 18th of February, you know, Pim," said the colonel; "we must have a salute of twenty-one guns."

"Very good," replied Pim, a man of few words.

"And take care that your fellows don't get their arms and legs blown off," added the officer.

"Very good, sir," said the corporal; and he made his salute and withdrew.

Of all the bombs, howitzers, and various species of artillery with which the fortress had been crowded, one solitary piece remained. This was a cumbersome muzzle-loader of 9-inch caliber, and, in default of the smaller ordnance generally employed for the purpose, had to be brought into requisition for the royal salute.

A sufficient number of charges having been provided, the corporal brought his men to the reduct, whence the gun's mouth projected over a sloping embrasure. The two officers, in cocked hats and full staff uniform, attended to take charge of the proceedings. The gun was maneuvered in strict accordance with the rules of "The Artillerist's Manual," and the firing commenced.

Not unmindful of the warning he had received, the corporal was most careful between each discharge to see that every vestige of fire was extinguished, so as to prevent an untimely explosion while the men were reloading; and accidents, such as so frequently mar public rejoicings, were all happily avoided.

Much to the chagrin of both Colonel Murphy and Major Oliphant, the effect of the salute fell altogether short of their anticipations. The weight of the atmosphere was so reduced that there was comparatively little resistance to the explosive force of the gases, liberated at the cannon's mouth, and there was consequently none of the reverberation, like rolling thunder, that ordinarily follows the discharge of heavy artillery.

Twenty times had the gun been fired, and it was on the point of being loaded for the last time, when the colonel...
laid his hand upon the arm of the man who had the ramrod. "Stop!" he said; "we will have a ball this time. Let us put the range of the piece to the test."

"A good idea!" replied the major. "Corporal, you hear the orders."

In quick time an artillery-wagon was on the spot, and the men lifted out a full-sized shot, weighing 200 lbs., which, under ordinary circumstances, the cannon would carry about four miles. It was proposed, by means of telescopes, to note the place where the ball first touched the water, and thus to obtain an approximation sufficiently accurate as to the true range.

Having been duly charged with powder and ball, the gun was raised to an angle of something under 45 degrees, so as to allow proper development to the curve that the projectile would make, and, at a signal from the major, the light was applied to the priming.

"Heavens!" "By all that's good!" exclaimed both officers in one breath, as, standing open-mouthed, they hardly knew whether they were to believe the evidence of their own senses. "Is it possible?"

The diminution of the force of attraction at the earth's surface was so considerable that the ball had sped beyond the horizon.

"Incredible!" ejaculated the colonel.
"Incredible!" echoed the major.
"Six miles at least!" observed the one.
"Ay, more than that!" replied the other.

Awhile, they gazed at the sea and at each other in mute amazement. But in the midst of their perplexity, what sound was that which startled them? Was it mere fancy? Was it the reverberation of the cannon still booming in their ears? Or was it not truly the report of another and a distant gun in answer to their own? Attentively and eagerly they listened. Twice, thrice did the sound repeat itself. It was quite distinct. There could be no mistake.

"I told you so," cried the colonel, triumphantly. "I knew our country would not forsake us; it is an English ship, no doubt."

In half an hour two masts were visible above the horizon. "See! Was I not right? Our country was sure to send to our relief. Here is the ship."

"Yes," replied the major; "she responded to our gun."
"It is to be hoped," muttered the corporal, "that our ball has done her no damage."

Before long the hull was full in sight. A long trail of smoke betokened her to be a steamer; and very soon, by the aid of the glass, it could be ascertained that she was a schooner-yacht, and making straight for the island. A flag at her mast-head fluttered in the breeze, and towards this the two officers, with the keenest attention, respectively adjusted their focus.

Simultaneously the two telescopes were lowered. The colonel and the major stared at each other in blank astonishment. "Russian!" they gasped.

And true it was that the flag that floated at the head of yonder mast was the blue cross of Russia.

CHAPTER XIV. SENSITIVE NATIONALITY

When the schooner had approached the island, the Englishmen were able to make out the name "Dobryna_" painted on the aft-board. A sinuous irregularity of the coast had formed a kind of cove, which, though hardly spacious enough for a few fishing-smacks, would afford the yacht a temporary anchorage, so long as the wind did not blow violently from either west or south. Into this cove the _Dobryna_ was duly signaled, and as soon as she was safely moored, she lowered her four-oar, and Count Timascheff and Captain Servadac made their way at once to land.

Colonel Heneage Finch Murphy and Major Sir John Temple Oliphant stood, grave and prim, formally awaiting the arrival of their visitors. Captain Servadac, with the uncontrolled vivacity natural to a Frenchman, was the first to speak.

"A joyful sight, gentlemen!" he exclaimed. "It will give us unbounded pleasure to shake hands again with some of our fellow-creatures. You, no doubt, have escaped the same disaster as ourselves."

But the English officers, neither by word nor gesture, made the slightest acknowledgment of this familiar greeting.

"What news can you give us of France, England, or Russia?" continued Servadac, perfectly unconscious of the stolid rigidity with which his advances were received. "We are anxious to hear anything you can tell us. Have you had communications with Europe? Have you--"

"To whom have we the honor of speaking?" at last interposed Colonel Murphy, in the coldest and most measured tone, and drawing himself up to his full height.
"Ah! how stupid! I forgot," said Servadac, with the slightest possible shrug of the shoulders; "we have not been introduced."

Then, with a wave of his hand towards his companion, who meanwhile had exhibited a reserve hardly less than that of the British officers, he said:

"Allow me to introduce you to Count Wassili Timascheff."

"Major Sir John Temple Oliphant," replied the colonel.

The Russian and the Englishman mutually exchanged the stiffest of bows.

"I have the pleasure of introducing Captain Servadac," said the count in his turn.

"And this is Colonel Heneage Finch Murphy," was the major's grave rejoinder.

More bows were interchanged and the ceremony brought to its due conclusion. It need hardly be said that the conversation had been carried on in French, a language which is generally known both by Russians and Englishmen—a circumstance that is probably in some measure to be accounted for by the refusal of Frenchmen to learn either Russian or English.

The formal preliminaries of etiquette being thus complete, there was no longer any obstacle to a freer intercourse. The colonel, signing to his guests to follow, led the way to the apartment occupied jointly by himself and the major, which, although only a kind of casemate hollowed in the rock, nevertheless wore a general air of comfort. Major Oliphant accompanied them, and all four having taken their seats, the conversation was commenced.

Irritated and disgusted at all the cold formalities, Hector Servadac resolved to leave all the talking to the count; and he, quite aware that the Englishmen would adhere to the fiction that they could be supposed to know nothing that had transpired previous to the introduction felt himself obliged to recapitulate matters from the very beginning.

"You must be aware, gentlemen," began the count, "that a most singular catastrophe occurred on the 1st of January last. Its cause, its limits we have utterly failed to discover, but from the appearance of the island on which we find you here, you have evidently experienced its devastating consequences."

The Englishmen, in silence, bowed assent.

"Captain Servadac, who accompanies me," continued the count, "has been most severely tried by the disaster. Engaged as he was in an important mission as a staff-officer in Algeria—"

"A French colony, I believe," interposed Major Oliphant, half shutting his eyes with an expression of supreme indifference.

Servadac was on the point of making some cutting retort, but Count Timascheff, without allowing the interruption to be noticed, calmly continued his narrative:

"It was near the mouth of the Shelif that a portion of Africa, on that eventful night, was transformed into an island which alone survived; the rest of the vast continent disappeared as completely as if it had never been."

The announcement seemed by no means startling to the phlegmatic colonel.

"Indeed!" was all he said.

"And where were you?" asked Major Oliphant.

"I was out at sea, cruising in my yacht; hard by; and I look upon it as a miracle, and nothing less, that I and my crew escaped with our lives."

"I congratulate you on your luck," replied the major.

The count resumed: "It was about a month after the great disruption that I was sailing—my engine having sustained some damage in the shock—along the Algerian coast, and had the pleasure of meeting with my previous acquaintance, Captain Servadac, who was resident upon the island with his orderly, Ben Zoof."

"Ben who?" inquired the major.

"Zoof! Ben Zoof!" ejaculated Servadac, who could scarcely shout loud enough to relieve his pent-up feelings.

Ignoring this ebullition of the captain's spleen, the count went on to say: "Captain Servadac was naturally most anxious to get what news he could. Accordingly, he left his servant on the island in charge of his horses, and came on board the _Dobryna_ with me. We were quite at a loss to know where we should steer, but decided to direct our course to what previously had been the east, in order that we might, if possible, discover the colony of Algeria; but of Algeria not a trace remained."

The colonel curled his lips, insinuating only too plainly that to him it was by no means surprising that a French colony should be wanting in the element of stability. Servadac observed the supercilious look, and half rose to his feet, but, smothering his resentment, took his seat again without speaking.

"The devastation, gentlemen," said the count, who persistently refused to recognize the Frenchman's irritation, "everywhere was terrible and complete. Not only was Algeria lost, but there was no trace of Tunis, except one solitary rock, which was crowned by an ancient tomb of one of the kings of France—"

"Louis the Ninth, I presume," observed the colonel.

"Saint Louis," blurted out Servadac, savagely.
Colonel Murphy slightly smiled.

Proof against all interruption, Count Timascheff, as if he had not heard it, went on without pausing. He related how the schooner had pushed her way onwards to the south, and had reached the Gulf of Cabes; and how she had ascertained for certain that the Sahara Sea had no longer an existence.

The smile of disdain again crossed the colonel's face; he could not conceal his opinion that such a destiny for the work of a Frenchman could be no matter of surprise.

"Our next discovery," continued the count, "was that a new coast had been upheaved right along in front of the coast of Tripoli, the geological formation of which was altogether strange, and which extended to the north as far as the proper place of Malta."

"And Malta," cried Servadac, unable to control himself any longer; "Malta--town, forts, soldiers, governor, and all--has vanished just like Algeria."

For a moment a cloud rested upon the colonel's brow, only to give place to an expression of decided incredulity.

"The statement seems highly incredible," he said.

"Incredible?" repeated Servadac. "Why is it that you doubt my word?"

The captain's rising wrath did not prevent the colonel from replying coolly, "Because Malta belongs to England."

"I can't help that," answered Servadac, sharply; "it has gone just as utterly as if it had belonged to China."

Colonel Murphy turned deliberately away from Servadac, and appealed to the count: "Do you not think you may have made some error, count, in reckoning the bearings of your yacht?"

"No, colonel, I am quite certain of my reckonings; and not only can I testify that Malta has disappeared, but I can affirm that a large section of the Mediterranean has been closed in by a new continent. After the most anxious investigation, we could discover only one narrow opening in all the coast, and it is by following that little channel that we have made our way hither. England, I fear, has suffered grievously by the late catastrophe. Not only has Malta been entirely lost, but of the Ionian Islands that were under England's protection, there seems to be but little left."

"Ay, you may depend upon it," said Servadac, breaking in upon the conversation petulantly, "your grand resident lord high commissioner has not much to congratulate himself about in the condition of Corfu."

The Englishmen were mystified.

"Corfu, did you say?" asked Major Oliphant.

"Yes, Corfu; I said Corfu," replied Servadac, with a sort of malicious triumph.

The officers were speechless with astonishment.

The silence of bewilderment was broken at length by Count Timascheff making inquiry whether nothing had been heard from England, either by telegraph or by any passing ship.

"No," said the colonel; "not a ship has passed; and the cable is broken."

"But do not the Italian telegraphs assist you?" continued the count.

"Italian! I do not comprehend you. You must mean the Spanish, surely."

"How?" demanded Timascheff.

"Confound it!" cried the impatient Servadac. "What matters whether it be Spanish or Italian? Tell us, have you had no communication at all from Europe?--no news of any sort from London?"

"Hitherto, none whatever," replied the colonel; adding with a stately emphasis, "but we shall be sure to have tidings from England before long."

"Whether England is still in existence or not, I suppose," said Servadac, in a tone of irony. The Englishmen started simultaneously to their feet.

"England in existence?" the colonel cried. "England! Ten times more probable that France--"

"France!" shouted Servadac in a passion. "France is not an island that can be submerged; France is an integral portion of a solid continent. France, at least, is safe."

A scene appeared inevitable, and Count Timascheff's efforts to conciliate the excited parties were of small avail.

"You are at home here," said Servadac, with as much calmness as he could command; "it will be advisable, I think, for this discussion to be carried on in the open air." And hurriedly he left the room. Followed immediately by the others, he led the way to a level piece of ground, which he considered he might fairly claim as neutral territory.

"Now, gentlemen," he began haughtily, "permit me to represent that, in spite of any loss France may have sustained in the fate of Algeria, France is ready to answer any provocation that affects her honor. Here I am the representative of my country, and here, on neutral ground--"

"Neutral ground?" objected Colonel Murphy; "I beg your pardon. This, Captain Servadac, is English territory. Do you not see the English flag?" and, as he spoke, he pointed with national pride to the British standard floating over the top of the island.

"Pshaw!" cried Servadac, with a contemptuous sneer; "that flag, you know, has been hoisted but a few short
weeks."
"That flag has floated where it is for ages," asserted the colonel.
"An imposture!" shouted Servadac, as he stamped with rage.
Recovering his composure in a degree, he continued: "Can you suppose that I am not aware that this island on which we find you is what remains of the Ionian representative republic, over which you English exercise the right of protection, but have no claim of government?"

The colonel and the major looked at each other in amazement.

Although Count Timascheff secretly sympathized with Servadac, he had carefully refrained from taking part in the dispute; but he was on the point of interfering, when the colonel, in a greatly subdued tone, begged to be allowed to speak.

"I begin to apprehend," he said, "that you must be laboring under some strange mistake. There is no room for questioning that the territory here is England's--England's by right of conquest; ceded to England by the Treaty of Utrecht. Three times, indeed--in 1727, 1779, and 1792--France and Spain have disputed our title, but always to no purpose. You are, I assure you, at the present moment, as much on English soil as if you were in London, in the middle of Trafalgar Square."

It was now the turn of the captain and the count to look surprised. "Are we not, then, in Corfu?" they asked.
"You are at Gibraltar," replied the colonel.

Gibraltar! The word fell like a thunderclap upon their ears. Gibraltar! the western extremity of the Mediterranean! Why, had they not been sailing persistently to the east? Could they be wrong in imagining that they had reached the Ionian Islands? What new mystery was this?

Count Timascheff was about to proceed with a more rigorous investigation, when the attention of all was arrested by a loud outcry. Turning round, they saw that the crew of the _Dobryna_ was in hot dispute with the English soldiers. A general altercation had arisen from a disagreement between the sailor Panofka and Corporal Pim. It had transpired that the cannon-ball fired in experiment from the island had not only damaged one of the spars of the schooner, but had broken Panofka's pipe, and, moreover, had just grazed his nose, which, for a Russian's, was unusually long. The discussion over this mishap led to mutual recriminations, till the sailors had almost come to blows with the garrison.

Servadac was just in the mood to take Panofka's part, which drew from Major Oliphant the remark that England could not be held responsible for any accidental injury done by her cannon, and if the Russian's long nose came in the way of the ball, the Russian must submit to the mischance.

This was too much for Count Timascheff, and having poured out a torrent of angry invective against the English officers, he ordered his crew to embark immediately.

"We shall meet again," said Servadac, as they pushed off from shore.
"Whenever you please," was the cool reply.

The geographical mystery haunted the minds of both the count and the captain, and they felt they could never rest till they had ascertained what had become of their respective countries. They were glad to be on board again, that they might résumé their voyage of investigation, and in two hours were out of sight of the sole remaining fragment of Gibraltar.

CHAPTER XV. AN ENIGMA FROM THE SEA

Lieutenant Procope had been left on board in charge of the _Dobryna_, and on resuming the voyage it was a task of some difficulty to make him understand the fact that had just come to light. Some hours were spent in discussion and in attempting to penetrate the mysteries of the situation.

There were certain things of which they were perfectly certain. They could be under no misapprehension as to the distance they had positively sailed from Gourbi Island towards the east before their further progress was arrested by the unknown shore; as nearly as possible that was fifteen degrees; the length of the narrow strait by which they had made their way across that land to regain the open sea was about three miles and a half; thence onward to the island, which they had been assured, on evidence that they could not disbelieve, to be upon the site of Gibraltar, was four degrees; while from Gibraltar to Gourbi Island was seven degrees or but little more. What was it altogether? Was it not less than thirty degrees? In that latitude, the degree of longitude represents eight and forty miles. What, then, did it all amount to? Indubitably, to less than 1,400 miles. So brief a voyage would bring the _Dobryna_ once again to her starting-point, or, in other words, would enable her to complete the circumnavigation of the globe. How changed the condition of things! Previously, to sail from Malta to Gibraltar by an eastward course would have involved the passage of the Suez Canal, the Red Sea, the Indian Ocean, the Pacific, the Atlantic; but what had happened now? Why, Gibraltar had been reached as if it had been just at Corfu, and some three hundred and thirty
degrees of the earth's circuit had vanished utterly.

After allowing for a certain margin of miscalculation, the main fact remained undeniable; and the necessary
inference that Lieutenant Procope drew from the round of the earth being completed in 1,400 miles, was that the
earth's diameter had been reduced by about fifteen sixteenths of its length.

"If that be so," observed the count, "it accounts for some of the strange phenomena we witness. If our world has
come to be so insignificant a spheroid, not only has its gravity diminished, but its rotary speed has been accelerated;
and this affords an adequate explanation of our days and nights being thus curtailed. But how about the new orbit in
which we are moving?"

He paused and pondered, and then looked at Procope as though awaiting from him some further elucidation of
the difficulty. The lieutenant hesitated. When, in a few moments, he began to speak, Servadac smiled intelligently,
anticipating the answer he was about to hear.

"My conjecture is," said Procope, "that a fragment of considerable magnitude has been detached from the earth;
that it has carried with it an envelope of the earth's atmosphere, and that it is now traveling through the solar system
in an orbit that does not correspond at all with the proper orbit of the earth."

The hypothesis was plausible; but what a multitude of bewildering speculations it entailed! If, in truth, a certain
mass had been broken off from the terrestrial sphere, whither would it wend its way? What would be the measure of
the eccentricity of its path? What would be its period round the sun? Might it not, like a comet, be carried away into
the vast infinity of space? or, on the other hand, might it not be attracted to the great central source of light and heat,
and be absorbed in it? Did its orbit correspond with the orbit of the ecliptic? and was there no chance of its ever
uniting again with the globe, from which it had been torn off by so sudden and violent a disruption?

A thoughtful silence fell upon them all, which Servadac was the first to break. "Lieutenant," he said, "your
explanation is ingenious, and accounts for many appearances; but it seems to me that in one point it fails."

"How so?" replied Procope. "To my mind the theory meets all objections."

"I think not," Servadac answered. "In one point, at least, it appears to me to break down completely."

"What is that?" asked the lieutenant.

"Stop a moment," said the captain. "Let us see that we understand each other right. Unless I mistake you, your
hypothesis is that a fragment of the earth, comprising the Mediterranean and its shores from Gibraltar to Malta, has
been developed into a new asteroid, which is started on an independent orbit in the solar regions. Is not that your
meaning?"

"Precisely so," the lieutenant acquiesced.

"Well, then," continued Servadac, "it seems to me to be at fault in this respect: it fails, and fails completely, to
account for the geological character of the land that we have found now encompassing this sea. Why, if the new land
is a fragment of the old--why does it not retain its old formation? What has become of the granite and the calcareous
deposits? How is it that these should all be changed into a mineral concrete with which we have no acquaintance?"

No doubt, it was a serious objection; for, however likely it might be that a mass of the earth on being detached
would be eccentric in its movements, there was no probable reason to be alleged why the material of its substance
should undergo so complete a change. There was nothing to account for the fertile shores, rich in vegetation, being
transformed into rocks arid and barren beyond precedent.

The lieutenant felt the difficulty, and owned himself unprepared to give at once an adequate solution; nevertheless,
he declined to renounce his theory. He asserted that the arguments in favor of it carried conviction to
his mind, and that he entertained no doubt but that, in the course of time, all apparently antagonistic circumstances
would be explained so as to become consistent with the view he took. He was careful, however, to make it
understood that with respect to the original cause of the disruption he had no theory to offer; and although he knew
what expansion might be the result of subterranean forces, he did not venture to say that he considered it sufficient
to produce so tremendous an effect. The origin of the catastrophe was a problem still to be solved.

"Ah! well," said Servadac, "I don't know that it matters much where our new little planet comes from, or what it
is made of, if only it carries France along with it."

"And Russia," added the count.

"And Russia, of course," said Servadac, with a polite bow.

There was, however, not much room for this sanguine expectation, for if a new asteroid had thus been brought
into existence, it must be a sphere of extremely limited dimensions, and there could be little chance that it embraced
more than the merest fraction of either France or Russia. As to England, the total cessation of all telegraphic
communication between her shores and Gibraltar was a virtual proof that England was beyond its compass.

And what was the true measurement of the new little world? At Gourbi Island the days and nights were of equal
length, and this seemed to indicate that it was situated on the equator; hence the distance by which the two poles
stood apart would be half what had been reckoned would be the distance completed by the _Dobryna_ in her circuit.
That distance had been already estimated to be something under 1,400 miles, so that the Arctic Pole of their recently fashioned world must be about 350 miles to the north, and the Antarctic about 350 miles to the south of the island. Compare these calculations with the map, and it is at once apparent that the northernmost limit barely touched the coast of Provence, while the southernmost reached to about lat. 20 degrees N., and fell in the heart of the desert. The practical test of these conclusions would be made by future investigation, but meanwhile the fact appeared very much to strengthen the presumption that, if Lieutenant Procope had not arrived at the whole truth, he had made a considerable advance towards it.

The weather, ever since the storm that had driven the _Dobryna_ into the creek, had been magnificent. The wind continued favorable, and now under both steam and canvas, she made a rapid progress towards the north, a direction in which she was free to go in consequence of the total disappearance of the Spanish coast, from Gibraltar right away to Alicante. Malaga, Almeria, Cape Gata, Cartagena. Cape Palos—all were gone. The sea was rolling over the southern extent of the peninsula, so that the yacht advanced to the latitude of Seville before it sighted any land at all, and then, not shores such as the shores of Andalusia, but a bluff and precipitous cliff, in its geological features resembling exactly the stern and barren rock that she had coasted beyond the site of Malta. Here the sea made a decided indentation on the coast; it ran up in an acute-angled triangle till its apex coincided with the very spot upon which Madrid had stood. But as hitherto the sea had encroached upon the land, the land in its turn now encroached upon the sea; for a frowning headland stood out far into the basin of the Mediterranean, and formed a promontory stretching out beyond the proper places of the Balearic Isles. Curiosity was all alive. There was the intensest interest awakened to determine whether no vestige could be traced of Majorca, Minorca, or any of the group, and it was during a deviation from the direct course for the purpose of a more thorough scrutiny, that one of the sailors raised a thrill of general excitement by shouting, "A bottle in the sea!"

Here, then, at length was a communication from the outer world. Surely now they would find a document which would throw some light upon all the mysteries that had happened? Had not the day now dawned that should set their speculations all at rest?

It was the morning of the 21st of February. The count, the captain, the lieutenant, everybody hurried to the forecastle; the schooner was dexterously put about, and all was eager impatience until the supposed bottle was hauled on deck.

It was not, however, a bottle; it proved to be a round leather telescope-case, about a foot long, and the first thing to do before investigating its contents was to make a careful examination of its exterior. The lid was fastened on by wax, and so securely that it would take a long immersion before any water could penetrate; there was no maker's name to be deciphered; but impressed very plainly with a seal on the wax were the two initials "P. R."

When the scrutiny of the outside was finished, the wax was removed and the cover opened, and the lieutenant drew out a slip of ruled paper, evidently torn from a common note-book. The paper had an inscription written in four lines, which were remarkable for the profusion of notes of admiration and interrogation with which they were interspersed:

"Gallia??? _Ab sole_, au 15 fev. 59,000,000 l.! Chemin parcouru de janv. a fev. 82,000,000 l.!! _Va bene! All right!!_ Parfait!!"

There was a general sigh of disappointment. They turned the paper over and over, and handed it from one to another. "What does it all mean?" exclaimed the count.

"Something mysterious here!" said Servadac. "But yet," he continued, after a pause, "one thing is tolerably certain: on the 15th, six days ago, someone was alive to write it."

"Yes; I presume there is no reason to doubt the accuracy of the date," assented the count.

To these general observations Captain Servadac objected that he thought it unlikely that any one on board a ship would use a telescope-case for this purpose, but would be sure to use a bottle as being more secure; and, accordingly, he should rather be inclined to believe that the message had been set afloat by some _savant_ left alone, perchance, upon some isolated coast.

"But, however interesting it might be," observed the count, "to know the author of the lines, to us it is of far greater moment to ascertain their meaning."

And taking up the paper again, he said, "Perhaps we might analyze it word by word, and from its detached parts gather some clue to its sense as a whole."

"What can be the meaning of all that cluster of interrogations after Gallia?" asked Servadac.

Lieutenant Procope, who had hitherto not spoken, now broke his silence by saying, "I beg, gentlemen, to submit
my opinion that this document goes very far to confirm my hypothesis that a fragment of the earth has been precipitated into space."

Captain Servadac hesitated, and then replied, "Even if it does, I do not see how it accounts in the least for the geological character of the new asteroid."

"But will you allow me for one minute to take my supposition for granted?" said Procope. "If a new little planet has been formed, as I imagine, by disintegration from the old, I should conjecture that Gallia is the name assigned to it by the writer of this paper. The very notes of interrogation are significant that he was in doubt what he should write."

"You would presume that he was a Frenchman?" asked the count.

"I should think so," replied the lieutenant.

"Not much doubt about that," said Servadac; "it is all in French, except a few scattered words of English, Latin, and Italian, inserted to attract attention. He could not tell into whose hands the message would fall first."

"Well, then," said Count Timascheff, "we seem to have found a name for the new world we occupy."

"But what I was going especially to observe," continued the lieutenant, "is that the distance, 59,000,000 leagues, represents precisely the distance we ourselves were from the sun on the 15th. It was on that day we crossed the orbit of Mars."

"Yes, true," assented the others.

"And the next line," said the lieutenant, after reading it aloud, "apparently registers the distance traversed by Gallia, the new little planet, in her own orbit. Her speed, of course, we know by Kepler's laws, would vary according to her distance from the sun, and if she were—as I conjecture from the temperature at that date—on the 15th of January at her perihelion, she would be traveling twice as fast as the earth, which moves at the rate of between 50,000 and 60,000 miles an hour."

"You think, then," said Servadac, with a smile, "you have determined the perihelion of our orbit; but how about the aphelion? Can you form a judgment as to what distance we are likely to be carried?"

"You are asking too much," remonstrated the count.

"I confess," said the lieutenant, "that just at present I am not able to clear away the uncertainty of the future; but I feel confident that by careful observation at various points we shall arrive at conclusions which not only will determine our path, but perhaps may clear up the mystery about our geological structure."

"Allow me to ask," said Count Timascheff, "whether such a new asteroid would not be subject to ordinary mechanical laws, and whether, once started, it would not have an orbit that must be immutable?"

"Decidedly it would, so long as it was undisturbed by the attraction of some considerable body; but we must recollect that, compared to the great planets, Gallia must be almost infinitesimally small, and so might be attracted by a force that is irresistible."

"Altogether, then," said Servadac, "we seem to have settled it to our entire satisfaction that we must be the population of a young little world called Gallia. Perhaps some day we may have the honor of being registered among the minor planets."

"No chance of that," quickly rejoined Lieutenant Procope. "Those minor planets all are known to rotate in a narrow zone between the orbits of Mars and Jupiter; in their perihelia they cannot approximate the sun as we have done; we shall not be classed with them."

"Our lack of instruments," said the count, "is much to be deplored; it baffles our investigations in every way."

"Ah, never mind! Keep up your courage, count!" said Servadac, cheerily.

And Lieutenant Procope renewed his assurances that he entertained good hopes that every perplexity would soon be solved.

"I suppose," remarked the count, "that we cannot attribute much importance to the last line: _'Va bene! All right!!_ Parfait!!!!"

The captain answered, "At least, it shows that whoever wrote it had no murmuring or complaint to make, but was quite content with the new order of things."

CHAPTER XVI. THE RESIDUUM OF A CONTINENT

Almost unconsciously, the voyagers in the _Dobryna_ fell into the habit of using Gallia as the name of the new world in which they became aware they must be making an extraordinary excursion through the realms of space. Nothing, however, was allowed to divert them from their ostensible object of making a survey of the coast of the Mediterranean, and accordingly they persevered in following that singular boundary which had revealed itself to their extreme astonishment.

Having rounded the great promontory that had barred her farther progress to the north, the schooner skirted its
upper edge. A few more leagues and they ought to be abreast of the shores of France. Yes, of France.

But who shall describe the feelings of Hector Servadac when, instead of the charming outline of his native land, he beheld nothing but a solid boundary of savage rock? Who shall paint the look of consternation with which he gazed upon the stony rampart—rising perpendicularly for a thousand feet—that had replaced the shores of the smiling south? Who shall reveal the burning anxiety with which he throbbed to see beyond that cruel wall?

But there seemed no hope. Onwards and onwards the yacht made her way, and still no sign of France. It might have been supposed that Servadac's previous experiences would have prepared him for the discovery that the catastrophe which had overwhelmed other sites had brought destruction to his own country as well. But he had failed to realize how it might extend to France; and when now he was obliged with his own eyes to witness the waves of ocean rolling over what once had been the lovely shores of Provence, he was well-nigh frantic with desperation.

"Am I to believe that Gourbi Island, that little shred of Algeria, constitutes all that is left of our glorious France? No, no; it cannot be. Not yet have we reached the pole of our new world. There is—there must be—something more behind that frowning rock. Oh, that for a moment we could scale its towering height and look beyond! By Heaven, I adjure you, let us disembark, and mount the summit and explore! France lies beyond."

Disembarkation, however, was an utter impossibility. There was no semblance of a creek in which the Dobryna could find an anchorage. There was no outlying ridge on which a footing could be gained. The precipice was perpendicular as a wall, its topmost height crowned with the same conglomerate of crystallized lamellae that had all along been so pronounced a feature.

With her steam at high pressure, the yacht made rapid progress towards the east. The weather remained perfectly fine, the temperature became gradually cooler, so that there was little prospect of vapors accumulating in the atmosphere; and nothing more than a few cirri, almost transparent, veiled here and there the clear azure of the sky. Throughout the day the pale rays of the sun, apparently lessened in its magnitude, cast only faint and somewhat uncertain shadows; but at night the stars shone with surpassing brilliancy. Of the planets, some, it was observed, seemed to be fading away in remote distance. This was the case with Mars, Venus, and that unknown orb which was moving in the orbit of the minor planets; but Jupiter, on the other hand, had assumed splendid proportions; Saturn was superb in its luster, and Uranus, which hitherto had been imperceptible without a telescope was pointed out by Lieutenant Procope, plainly visible to the naked eye. The inference was irresistible that Gallia was receding from the sun, and traveling far away across the planetary regions.

On the 24th of February, after following the sinuous course of what before the date of the convulsion had been the coast line of the department of Var, and after a fruitless search for Hyeres, the peninsula of St. Tropez, the Lerius Islands, and the gulfs of Cannes and Jouar, the Dobryna arrived upon the site of the Cape of Antibes.

Here, quite unexpectedly, the explorers made the discovery that the massive wall of cliff had been rent from the top to the bottom by a narrow rift, like the dry bed of a mountain torrent, and at the base of the opening, level with the sea, was a little strand upon which there was just space enough for their boat to be hauled up.

"Joy! joy!" shouted Servadac, half beside himself with ecstasy; "we can land at last!"

Count Timascheff and the lieutenant were scarcely less impatient than the captain, and little needed his urgent and repeated solicitations: "Come on! Quick! Come on! no time to lose!"

It was half-past seven in the morning, when they set their foot upon this untried land. The bit of strand was only a few square yards in area, quite a narrow strip. Upon it might have been recognized some fragments of that agglutination of yellow limestone which is characteristic of the coast of Provence. But the whole party was far too eager to wait and examine these remnants of the ancient shore; they hurried on to scale the heights.

The narrow ravine was not only perfectly dry, but manifestly had never been the bed of any mountain torrent. The rocks that rested at the bottom—just as those which formed its sides—were of the same lamellae formation as the entire coast, and had not hitherto been subject to the disaggregation which the lapse of time never fails to work. A skilled geologist would probably have been able to assign them their proper scientific classification, but neither Servadac, Timascheff, nor the lieutenant could pretend to any acquaintance with their specific character.

Although, however, the bottom of the chasm had never as yet been the channel of a stream, indications were not wanting that at some future time it would be the natural outlet of accumulated waters; for already, in many places, thin layers of snow were glittering upon the surface of the fractured rocks, and the higher the elevation that was gained, the more these layers were found to increase in area and in depth.

"Here is a trace of fresh water, the first that Gallia has exhibited," said the count to his companions, as they toiled up the precipitous path.

"And probably," replied the lieutenant, "as we ascend we shall find not only snow but ice. We must suppose this Gallia of ours to be a sphere, and if it is so, we must now be very close to her Arctic regions; it is true that her axis is not so much inclined as to prolong day and night as at the poles of the earth, but the rays of the sun must reach us
here only very obliquely, and the cold, in all likelihood, will be intense."

"So cold, do you think," asked Servadac, "that animal life must be extinct?"

"I do not say that, captain," answered the lieutenant; "for, however far our little world may be removed from the
sun, I do not see why its temperature should fall below what prevails in those outlying regions beyond our system
where sky and air are not." "And what temperature may that be?" inquired the captain with a shudder.

"Fourier estimates that even in those vast unfathomable tracts, the temperature never descends lower than 60
degrees," said Procope.

"Sixty! Sixty degrees below zero!" cried the count. "Why, there's not a Russian could endure it!"

"I beg your pardon, count. It is placed on record that the English _have_ survived it, or something quite
approximate, upon their Arctic expeditions. When Captain Parry was on Melville Island, he knew the thermometer
to fall to 56 degrees," said Procope.

As the explorers advanced, they seemed glad to pause from time to time, that they might recover their breath; for
the air, becoming more and more rarefied, made respiration somewhat difficult and the ascent fatiguing. Before they
had reached an altitude of 600 feet they noticed a sensible diminution of the temperature; but neither cold nor fatigue
deterred them, and they were resolved to persevere. Fortunately, the deep striae or furrows in the surface of the rocks
that made the bottom of the ravine in some degree facilitated their progress, but it was not until they had been toiling
up for two hours more that they succeeded in reaching the summit of the cliff.

Eagerly and anxiously did they look around. To the south there was nothing but the sea they had traversed; to the
north, nothing but one drear, inhospitable stretch.

Servadac could not suppress a cry of dismay. Where was his beloved France? Had he gained this arduous height
only to behold the rocks carpeted with ice and snow, and reaching interminably to the far-off horizon? His heart
sank within him.

The whole region appeared to consist of nothing but the same strange, uniform mineral conglomerate,
crystallized into regular hexagonal prisms. But whatever was its geological character, it was only too evident that it
had entirely replaced the former soil, so that not a vestige of the old continent of Europe could be discerned. The
lovely scenery of Provence, with the grace of its rich and undulating landscape; its gardens of citrons and oranges
rising tier upon tier from the deep red soil—all, all had vanished. Of the vegetable kingdom, there was not a single
representative; the most meager of Arctic plants, the most insignificant of lichens, could obtain no hold upon that
stony waste. Nor did the animal world assert the feeblest sway. The mineral kingdom reigned supreme.

Captain Servadac's deep dejection was in strange contrast to his general hilarity. Silent and tearful, he stood upon
an ice-bound rock, straining his eyes across the boundless vista of the mysterious territory. "It cannot be!" he
exclaimed. "We must somehow have mistaken our bearings. True, we have encountered this barrier; but France is
there beyond! Yes, France is _there!_ Come, count, come! By all that's pitiful, I entreat you, come and explore the
farthest verge of the ice-bound track!"

He pushed onwards along the rugged surface of the rock, but had not proceeded far before he came to a sudden
pause. His foot had come in contact with something hard beneath the snow, and, stooping down, he picked up a little
block of stony substance, which the first glance revealed to be of a geological character altogether alien to the
universal rocks around. It proved to be a fragment of dis-colored marble, on which several letters were inscribed, of
which the only part at all decipherable was the syllable "Vil."

"Vil--Villa!" he cried out, in his excitement dropping the marble, which was broken into atoms by the fall.

What else could this fragment be but the sole surviving remnant of some sumptuous mansion that once had stood
on this unrivaled site? Was it not the residue of some edifice that had crowned the luxuriant headland of Antibes,
overlooking Nice, and commanding the gorgeous panorama that embraced the Maritime Alps and reached beyond
Monaco and Mentone to the Italian height of Bordighera? And did it not give in its sad and too convincing
testimony that Antibes itself had been involved in the great destruction? Servadac gazed upon the shattered marble,
pensive and disheartened.

Count Timascheff laid his hand kindly on the captain's shoulder, and said, "My friend, do you not remember the
motto of the old Hope family?"

He shook his head mournfully.

"_Orbe fracto, spes illoesa_," continued the count—"Though the world be shattered, hope is unimpaired."

Servadac smiled faintly, and replied that he felt rather compelled to take up the despairing cry of Dante, "All
hope abandon, ye who enter here."

"Nay, not so," answered the count; "for the present at least, let our maxim be _Nil desperandum!_"

CHAPTER XVII. A SECOND ENIGMA
Upon re-embarking, the bewildered explorers began to discuss the question whether it would not now be desirable to make their way back to Gourbi Island, which was apparently the only spot in their new world from which they could hope to derive their future sustenance. Captain Servadac tried to console himself with the reflection that Gourbi Island was, after all, a fragment of a French colony, and as such almost like a bit of his dear France; and the plan of returning thither was on the point of being adopted, when Lieutenant Procope remarked that they ought to remember that they had not hitherto made an entire circuit of the new shores of the sea on which they were sailing.

"We have," he said, "neither investigated the northern shore from the site of Cape Antibes to the strait that brought us to Gibraltar, nor have we followed the southern shore that stretches from the strait to the Gulf of Cabis. It is the old coast, and not the new, that we have been tracing; as yet, we cannot say positively that there is no outlet to the south; as yet, we cannot assert that no oasis of the African desert has escaped the catastrophe. Perhaps, even here in the north, we may find that Italy and Sicily and the larger islands of the Mediterranean may still maintain their existence."

"I entirely concur with you," said Count Timascheff. "I quite think we ought to make our survey of the confines of this new basin as complete as possible before we withdraw."

Servadac, although he acknowledged the justness of these observations, could not help pleading that the explorations might be deferred until after a visit had been paid to Gourbi Island.

"Depend upon it, captain, you are mistaken," replied the lieutenant; "the right thing to do is to use the _Dobryna_ while she is available."

"Available! What do you mean?" asked the count, somewhat taken by surprise.

"I mean," said Procope, "that the farther this Gallia of ours recedes from the sun, the lower the temperature will fall. It is likely enough, I think, that before long the sea will be frozen over, and navigation will be impossible. Already you have learned something of the difficulties of traversing a field of ice, and I am sure, therefore, you will acquiesce in my wish to continue our explorations while the water is still open."

"No doubt you are right, lieutenant," said the count. "We will continue our search while we can for some remaining fragment of Europe. Who shall tell whether we may not meet with some more survivors from the catastrophe, to whom it might be in our power to afford assistance, before we go into our winter quarters?"

Generous and altogether unselfish as this sentiment really was, it was obviously to the general interest that they should become acquainted, and if possible establish friendly relations, with any human inhabitant who might be sharing their own strange destiny in being rolled away upon a new planet into the infinitude of space. All difference of race, all distinction of nationality, must be merged into the one thought that, few as they were, they were the sole surviving representatives of a world which it seemed exceedingly improbable that they would ever see again; and common sense dictated that they were bound to direct all their energies to insure that their asteroid should at least have a united and sympathizing population.

It was on the 25th of February that the yacht left the little creek in which she had taken refuge, and setting off at full steam eastwards, she continued her way along the northern shore. A brisk breeze tended to increase the keenness of the atmosphere, the thermometer being, on an average, about two degrees below zero. Salt water freezes only at a lower temperature than fresh; the course of the _Dobryna_ was therefore unimpeded by ice, but it could not be concealed that there was the greatest necessity to maintain the utmost possible speed.

The nights continued lovely; the chilled condition of the atmosphere prevented the formation of clouds; the constellations gleamed forth with unsullied luster; and, much as Lieutenant Procope, from nautical considerations, might regret the absence of the moon, he could not do otherwise than own that the magnificent nights of Gallia were such as must awaken the enthusiasm of an astronomer. And, as if to compensate for the loss of the moonlight, the heavens were illuminated by a superb shower of falling stars, far exceeding, both in number and in brilliancy, the phenomena which are commonly distinguished as the August and November meteors; in fact, Gallia was passing through that meteoric ring which is known to lie exterior to the earth's orbit, but almost concentric with it. The rocky coast, its metallic surface reflecting the glow of the dazzling luminaries, appeared literally stippled with light, whilst the sea, as though spattered with burning hailstones, shone with a phosphorescence that was perfectly splendid. So great, however, was the speed at which Gallia was receding from the sun, that this meteoric storm lasted scarcely more than four and twenty hours.

Next day the direct progress of the _Dobryna_ was arrested by a long projection of land, which obliged her to turn southwards, until she reached what formerly would have been the southern extremity of Corsica. Of this, however, there was now no trace; the Strait of Bonifacio had been replaced by a vast expanse of water, which had at first all the appearance of being utterly desert; but on the following morning the explorers unexpectedly sighted a little island, which, unless it should prove, as was only too likely, to be of recent origin they concluded, from its situation, must be a portion of the northernmost territory of Sardinia.
The _Dobryna_ approached the land as nearly as was prudent, the boat was lowered, and in a few minutes the count and Servadac had landed upon the islet, which was a mere plot of meadow land, not much more than two acres in extent, dotted here and there with a few myrtle-bushes and lentisks, interspersed with some ancient olives. Having ascertained, as they imagined, that the spot was devoid of living creature, they were on the point of returning to their boat, when their attention was arrested by a faint bleating, and immediately afterwards a solitary she-goat came bounding towards the shore. The creature had dark, almost black hair, and small curled horns, and was a specimen of that domestic breed which, with considerable justice, has gained for itself the title of "the poor man's cow." So far from being alarmed at the presence of strangers, the goat ran nimbly towards them, and then, by its movements and plaintive cries, seemed to be enticing them to follow it.

"Come," said Servadac; "let us see where it will lead us; it is more than probable it is not alone."

The count agreed; and the animal, as if comprehending what was said, trotted on gently for about a hundred paces, and stopped in front of a kind of cave or burrow that was half concealed by a grove of lentisks. Here a little girl, seven or eight years of age, with rich brown hair and lustrous dark eyes, beautiful as one of Murillo's angels, was peeping shyly through the branches. Apparently discovering nothing in the aspect of the strangers to excite her apprehensions, the child suddenly gained confidence, darted forwards with outstretched hands, and in a voice, soft and melodious as the language which she spoke, said in Italian:

"I like you; you will not hurt me, will you?"

"Hurt you, my child?" answered Servadac. "No, indeed; we will be your friends; we will take care of you."

And after a few moments' scrutiny of the pretty maiden, he added:

"Tell us your name, little one."

"Nina!" was the child's reply.

"Well, then, Nina, can you tell us where we are?"

"At Madalena, I think," said the little girl; "at least, I know I was there when that dreadful shock came and altered everything."

The count knew that Madalena was close to Caprera, to the north of Sardinia, which had entirely disappeared in the disaster. By dint of a series of questions, he gained from the child a very intelligent account of her experiences. She told him that she had no parents, and had been employed in taking care of a flock of goats belonging to one of the landowners, when one day, all of a sudden, everything around her, except this little piece of land, had been swallowed up, and that she and Marzy, her pet goat, had been left quite alone. She went on to say that at first she had been very frightened; but when she found that the earth did not shake any more, she had thanked the great God, and had soon made herself very happy living with Marzy. She had enough food, she said, and had been waiting for a boat to fetch her, and now a boat had come and she was quite ready to go away; only they must let her goat go with her: they would both like so much to get back to the old farm.

"Here, at least, is one nice little inhabitant of Gallia," said Captain Servadac, as he caressed the child and conducted her to the boat.

Half an hour later, both Nina and Marzy were safely quartered on board the yacht. It is needless to say that they received the heartiest of welcomes. The Russian sailors, ever superstitious, seemed almost to regard the coming of the child as the appearance of an angel; and, incredible as it may seem, more than one of them wondered whether she had wings, and amongst themselves they commonly referred to her as "the little Madonna."

Soon out of sight of Madalena, the _Dobryna_ for some hours held a southeasterly course along the shore, which here was fifty leagues in advance of the former coast-line of Italy, demonstrating that a new continent must have been formed, substituted as it were for the old peninsula, of which not a vestige could be identified. At a latitude corresponding with the latitude of Rome, the sea took the form of a deep gulf, extending back far beyond the site of the Eternal City; the coast making a wide sweep round to the former position of Calabria, and jutting far beyond the outline of "the boot," which Italy resembles. But the beacon of Messina was not to be discerned; no trace, indeed, survived of any portion of Sicily; the very peak of Etna, 11,000 feet as it had reared itself above the level of the sea, had vanished utterly.

Another sixty leagues to the south, and the _Dobryna_ sighted the entrance of the strait which had afforded her so providential a refuge from the tempest, and had conducted her to the fragmentary relic of Gibraltar. Hence to the Gulf of Cabes had been already explored, and as it was universally allowed that it was unnecessary to renew the search in that direction, the lieutenant started off in a transverse course, towards a point hitherto uninvestigated. That point was reached on the 3rd of March, and thence the coast was continuously followed, as it led through what had been Tunis, across the province of Constantine, away to the oasis of Ziban; where, taking a sharp turn, it first reached a latitude of 32 degrees, and then returned again, thus forming a sort of irregular gulf, enclosed by the same unvarying border of mineral concrete. This colossal boundary then stretched away for nearly 150 leagues over the Sahara desert, and, extending to the south of Gourbi Island, occupied what, if Morocco had still existed, would have
been its natural frontier.

Adapting her course to these deviations of the coastline, the _Dobryna_ was steering northwards, and had barely reached the limit of the bay, when the attention of all on board was arrested by the phenomenon of a volcano, at least 3,000 feet high, its crater crowned with smoke, which occasionally was streaked by tongues of flame.

"A burning mountain!" they exclaimed.

"Gallia, then, has some internal heat," said Servadac.

"And why not, captain?" rejoined the lieutenant. "If our asteroid has carried with it a portion of the old earth's atmosphere, why should it not likewise retain something of its central fire?"

"Ah, well!" said the captain, shrugging his shoulders, "I dare say there is caloric enough in our little world to supply the wants of its population."

Count Timasheff interrupted the silence that followed this conversation by saying, "And now, gentlemen, as our course has brought us on our way once more towards Gibraltar, what do you say to our renewing our acquaintance with the Englishmen? They will be interested in the result of our voyage."

"For my part," said Servadac, "I have no desire that way. They know where to find Gourbi Island; they can betake themselves thither just when they please. They have plenty of provisions. If the water freezes, 120 leagues is no very great distance. The reception they gave us was not so cordial that we need put ourselves out of the way to repeat our visit."

"What you say is too true," replied the count. "I hope we shall show them better manners when they condescend to visit us."

"Ay," said Servadac, "we must remember that we are all one people now; no longer Russian, French, or English. Nationality is extinct."

"I am sadly afraid, however," continued the count, "that an Englishman will be an Englishman ever." 

"Yes," said the captain, "that is always their failing."

And thus all further thought of making their way again to the little garrison of Gibraltar was abandoned.

But even if their spirit of courtesy had disposed them to renew their acquaintance with the British officers, there were two circumstances that just then would have rendered such a proposal very unadvisable. In the first place, Lieutenant Procope was convinced that it could not be much longer now before the sea would be entirely frozen; and, besides this, the consumption of their coal, through the speed they had maintained, had been so great that there was only too much reason to fear that fuel would fail them. Anyhow, the strictest economy was necessary, and it was accordingly resolved that the voyage should not be much prolonged. Beyond the volcanic peak, moreover, the waters seemed to expand into a boundless ocean, and it might be a thing full of risk to be frozen up while the yacht was so inadequately provisioned. Taking all these things into account, it was agreed that further investigations should be deferred to a more favorable season, and that, without delay, the _Dobryna_ should return to Gourbi Island.

This decision was especially welcome to Hector Servadac, who, throughout the whole of the last five weeks, had been agitated by much anxious thought on account of the faithful servant he had left behind.

The transit from the volcano to the island was not long, and was marked by only one noticeable incident. This was the finding of a second mysterious document, in character precisely similar to what they had found before. The writer of it was evidently engaged upon a calculation, probably continued from day to day, as to the motions of the planet Gallia upon its orbit, and committing the results of his reckonings to the waves as the channel of communication.

Instead of being enclosed in a telescope-case, it was this time secured in a preserved-meat tin, hermetically sealed, and stamped with the same initials on the wax that fastened it. The greatest care was used in opening it, and it was found to contain the following message:

"Gallia Ab sole, au 1 mars, dist. 78,000,000 l.! Chemin parcouru de fev. a mars: 59,000,000 1.! _Va bene! All right! Nil desperandum!_ 

"Enchante!"

"Another enigma!" exclaimed Servadac; "and still no intelligible signature, and no address. No clearing up of the mystery!"

"I have no doubt, in my own mind," said the count, "that it is one of a series. It seems to me probable that they are being sent broadcast upon the sea."

"I wonder where the hare-brained _savant_ that writes them can be living?" observed Servadac.

"Very likely he may have met with the fate of AESop's abstracted astronomer, who found himself at the bottom of a well."

"Ay; but where _is_ that well?" demanded the captain.

This was a question which the count was incapable of settling; and they could only speculate afresh as to
whether the author of the riddles was dwelling upon some solitary island, or, like themselves, was navigating the waters of the new Mediterranean. But they could detect nothing to guide them to a definite decision.

After thoughtfully regarding the document for some time, Lieutenant Procope proceeded to observe that he believed the paper might be considered as genuine, and accordingly, taking its statements as reliable, he deduced two important conclusions: first, that whereas, in the month of January, the distance traveled by the planet (hypothetically called Gallia) had been recorded as 82,000,000 leagues, the distance traveled in February was only 59,000,000 leagues—a difference of 23,000,000 leagues in one month; secondly, that the distance of the planet from the sun, which on the 15th of February had been 59,000,000 leagues, was on the 1st of March 78,000,000 leagues—an increase of 19,000,000 leagues in a fortnight. Thus, in proportion as Gallia receded from the sun, so did the rate of speed diminish by which she traveled along her orbit; facts to be observed in perfect conformity with the known laws of celestial mechanism.

"And your inference?" asked the count.

"My inference," replied the lieutenant, "is a confirmation of my surmise that we are following an orbit decidedly elliptical, although we have not yet the material to determine its eccentricity."

"As the writer adheres to the appellation of Gallia, do you not think," asked the count, "that we might call these new waters the Gallian Sea?"

"There can be no reason to the contrary, count," replied the lieutenant; "and as such I will insert it upon my new chart."

"Our friend," said Servadac, "seems to be more and more gratified with the condition of things; not only has he adopted our motto, '_Nil desperandum!_' but see how enthusiastically he has wound up with his '_Enchante!_'"

The conversation dropped.

A few hours later the man on watch announced that Gourbi Island was in sight.

CHAPTER XVIII. AN UNEXPECTED POPULATION

The _Dobryna_ was now back again at the island. Her cruise had lasted from the 31st of January to the 5th of March, a period of thirty-five days (for it was leap year), corresponding to seventy days as accomplished by the new little world.

Many a time during his absence Hector Servadac had wondered how his present vicissitudes would end, and he had felt some misgivings as to whether he should ever again set foot upon the island, and see his faithful orderly, so that it was not without emotion that he had approached the coast of the sole remaining fragment of Algerian soil. But his apprehensions were groundless; Gourbi Island was just as he had left it, with nothing unusual in its aspect, except that a very peculiar cloud was hovering over it, at an altitude of little more than a hundred feet. As the yacht approached the shore, this cloud appeared to rise and fall as if acted upon by some invisible agency, and the captain, after watching it carefully, perceived that it was not an accumulation of vapors at all, but a dense mass of birds packed as closely together as a swarm of herrings, and uttering deafening and discordant cries, amidst which from time to time the noise of the report of a gun could be plainly distinguished.

The _Dobryna_ signalized her arrival by firing her cannon, and dropped anchor in the little port of the Shelif. Almost within a minute Ben Zoof was seen running, gun in hand, towards the shore; he cleared the last ridge of rocks at a single bound, and then suddenly halted. For a few seconds he stood motionless, his eyes fixed, as if obeying the instructions of a drill sergeant, on a point some fifteen yards distant, his whole attitude indicating submission and respect; but the sight of the captain, who was landing, was too much for his equanimity, and darting forward, he seized his master's hand and covered it with kisses. Instead, however, of uttering any expressions of welcome or rejoicing at the captain's return, Ben Zoof broke out into the most vehement ejaculations.

"Thieves, captain! beastly thieves! Bedouins! pirates! devils!"

"Why, Ben Zoof, what's the matter?" said Servadac soothingly.

"They are thieves! downright, desperate thieves! those infernal birds! That's what's the matter. It is a good thing you have come. Here have I for a whole month been spending my powder and shot upon them, and the more I kill them, the worse they get; and yet, if I were to leave them alone, we should not have a grain of corn upon the island."

It was soon evident that the orderly had only too much cause for alarm. The crops had ripened rapidly during the excessive heat of January, when the orbit of Gallia was being traversed at its perihelion, and were now exposed to the depredations of many thousands of birds; and although a goodly number of stacks attested the industry of Ben Zoof during the time of the _Dobryna_'s voyage, it was only too apparent that the portion of the harvest that remained ungathered was liable to the most imminent risk of being utterly devoured. It was, perhaps, only natural that this clustered mass of birds, as representing the whole of the feathered tribe upon the surface of Gallia, should resort to Gourbi Island, of which the meadows seemed to be the only spot from which they could get sustenance at
all; but as this sustenance would be obtained at the expense, and probably to the serious detriment, of the human population, it was absolutely necessary that every possible resistance should be made to the devastation that was threatened.

Once satisfied that Servadac and his friends would cooperate with him in the raid upon "the thieves," Ben Zoof became calm and content, and began to make various inquiries. "And what has become," he said, "of all our old comrades in Africa?"

"As far as I can tell you," answered the captain, "they are all in Africa still; only Africa isn't by any means where we expected to find it."

"And France? Montmartre?" continued Ben Zoof eagerly. Here was the cry of the poor fellow's heart.

As briefly as he could, Servadac endeavored to explain the true condition of things; he tried to communicate the fact that Paris, France, Europe, nay, the whole world was more than eighty millions of leagues away from Gourbi Island; as gently and cautiously as he could he expressed his fear that they might never see Europe, France, Paris, Montmartre again.

"No, no, sir!" protested Ben Zoof emphatically; "that is all nonsense. It is altogether out of the question to suppose that we are not to see Montmartre again." And the orderly shook his head resolutely, with the air of a man determined, in spite of argument, to adhere to his own opinion.

"Very good, my brave fellow," replied Servadac, "hope on, hope while you may. The message has come to us over the sea, 'Never despair'; but one thing, nevertheless, is certain; we must forthwith commence arrangements for making this island our permanent home."

Captain Servadac now led the way to the gourbi, which, by his servant's exertions, had been entirely rebuilt; and here he did the honors of his modest establishment to his two guests, the count and the lieutenant, and gave a welcome, too, to little Nina, who had accompanied them on shore, and between whom and Ben Zoof the most friendly relations had already been established.

The adjacent building continued in good preservation, and Captain Servadac's satisfaction was very great in finding the two horses, Zephyr and Galette, comfortably housed there and in good condition.

After the enjoyment of some refreshment, the party proceeded to a general consultation as to what steps must be taken for their future welfare. The most pressing matter that came before them was the consideration of the means to be adopted to enable the inhabitants of Gallia to survive the terrible cold, which, in their ignorance of the true eccentricity of their orbit, might, for aught they knew, last for an almost indefinite period. Fuel was far from abundant; of coal there was none; trees and shrubs were few in number, and to cut them down in prospect of the cold seemed a very questionable policy; but there was no doubt some expedient must be devised to prevent disaster, and that without delay.

The victualing of the little colony offered no immediate difficulty. Water was abundant, and the cisterns could hardly fail to be replenished by the numerous streams that meandered along the plains; moreover, the Gallian Sea would ere long be frozen over, and the melted ice (water in its congealed state being divested of every particle of salt) would afford a supply of drink that could not be exhausted. The crops that were now ready for the harvest, and the flocks and herds scattered over the island, would form an ample reserve. There was little doubt that throughout the winter the soil would remain unproductive, and no fresh fodder for domestic animals could then be obtained; it would therefore be necessary, if the exact duration of Gallia's year should ever be calculated, to proportion the number of animals to be reserved to the real length of the winter.

The next thing requisite was to arrive at a true estimate of the number of the population. Without including the thirteen Englishmen at Gibraltar, about whom he was not particularly disposed to give himself much concern at present, Servadac put down the names of the eight Russians, the two Frenchman, and the little Italian girl, eleven in all, as the entire list of the inhabitants of Gourbi Island.

"Oh, pardon me," interposed Ben Zoof, "you are mistaking the state of the case altogether. You will be surprised to learn that the total of people on the island is double that. It is twenty-two."

"Twenty-two!" exclaimed the captain; "twenty-two people on this island? What do you mean?"

"The opportunity has not occurred," answered Ben Zoof, "for me to tell you before, but I have had company."

"Explain yourself, Ben Zoof," said Servadac. "What company have you had?"

"You could not suppose," replied the orderly, "that my own unassisted hands could have accomplished all that harvest work that you see has been done."

"I confess," said Lieutenant Procope, "we do not seem to have noticed that."

"Well, then," said Ben Zoof, "if you will be good enough to come with me for about a mile, I shall be able to show you my companions. But we must take our guns."

"Why take our guns?" asked Servadac. "I hope we are not going to fight."

"No, not with men," said Ben Zoof; "but it does not answer to throw a chance away for giving battle to those
thieves of birds."

Leaving little Nina and her goat in the gourbi, Servadac, Count Timascheff, and the lieutenant, greatly mystified, took up their guns and followed the orderly. All along their way they made unsparing slaughter of the birds that hovered over and around them. Nearly every species of the feathered tribe seemed to have its representative in that living cloud. There were wild ducks in thousands; snipe, larks, rooks, and swallows; a countless variety of sea-birds—widgeons, gulls, and seagulls; beside a quantity of game—quails, partridges, and woodcocks. The sportsmen did their best; every shot told; and the depredators fell by dozens on either hand.

Instead of following the northern shore of the island, Ben Zoof cut obliquely across the plain. Making their progress with the unwonted rapidity which was attributable to their specific lightness, Servadac and his companions soon found themselves near a grove of sycamores and eucalyptus massed in picturesque confusion at the base of a little hill. Here they halted.

"Ah! the vagabonds! the rascals! the thieves!" suddenly exclaimed Ben Zoof, stamping his foot with rage.

"How now? Are your friends the birds at their pranks again?" asked the captain.

"No, I don't mean the birds: I mean those lazy beggars that are shirking their work. Look here; look there!" And as Ben Zoof spoke, he pointed to some scythes, and sickles, and other implements of husbandry that had been left upon the ground.

"What is it you mean?" asked Servadac, getting somewhat impatient.

"Hush, hush! listen!" was all Ben Zoof's reply; and he raised his finger as if in warning.

Listening attentively, Servadac and his associates could distinctly recognize a human voice, accompanied by the notes of a guitar and by the measured click of castanets.

"Spaniards!" said Servadac.

"No mistake about that, sir," replied Ben Zoof; "a Spaniard would rattle his castanets at the cannon's mouth."

"But what is the meaning of it all?" asked the captain, more puzzled than before.

"Hark!" said Ben Zoof; "it is the old man's turn."

And then a voice, at once gruff and harsh, was heard vociferating, "My money! my money! when will you pay me my money? Pay me what you owe me, you miserable majos."

Meanwhile the song continued:

"_Tu sandunga y cigarro, Y una cana de Jerez, Mi jamelgo y un trabuco, Que mas gloria puede haver?_"

Servadac's knowledge of Gascon enabled him partially to comprehend the rollicking tenor of the Spanish patriotic air, but his attention was again arrested by the voice of the old man growling savagely, "Pay me you shall; yes, by the God of Abraham, you shall pay me."

"A Jew!" exclaimed Servadac.

"Ay, sir, a German Jew," said Ben Zoof.

The party was on the point of entering the thicket, when a singular spectacle made them pause. A group of Spaniards had just begun dancing their national fandango, and the extraordinary lightness which had become the physical property of every object in the new planet made the dancers bound to a height of thirty feet or more into the air, considerably above the tops of the trees. What followed was irresistibly comic. Four sturdy majos had dragged along with them an old man incapable of resistance, and compelled him, _nolens volens_, to join in the dance; and as they all kept appearing and disappearing above the bank of foliage, their grotesque attitudes, combined with the pitiable countenance of their helpless victim, could not do otherwise than recall most forcibly the story of Sancho Panza tossed in a blanket by the merry drapers of Segovia.

Servadac, the count, Procope, and Ben Zoof now proceeded to make their way through the thicket until they came to a little glade, where two men were stretched idly on the grass, one of them playing the guitar, and the other a pair of castanets; both were exploding with laughter, as they urged the performers to greater and yet greater exertions in the dance. At the sight of strangers they paused in their music, and simultaneously the dancers, with their victim, alighted gently on the sward.

Breathless and half exhausted as was the Jew, he rushed with an effort towards Servadac, and exclaimed in French, marked by a strong Teutonic accent, "Oh, my lord governor, help me, help! These rascals defraud me of my rights; they rob me; but, in the name of the God of Israel, I ask you to see justice done!"

The captain glanced inquiringly towards Ben Zoof, and the orderly, by a significant nod, made his master understand that he was to play the part that was implied by the title. He took the cue, and promptly ordered the Jew to hold his tongue at once. The man bowed his head in servile submission, and folded his hands upon his breast.

Servadac surveyed him leisurely. He was a man of about fifty, but from his appearance might well have been taken for at least ten years older. Small and skinny, with eyes bright and cunning, a hooked nose, a short yellow beard, unkempt hair, huge feet, and long bony hands, he presented all the typical characteristics of the German Jew, the heartless, wily usurer, the hardened miser and skinflint. As iron is attracted by the magnet, so was this Shylock
attracted by the sight of gold, nor would he have hesitated to draw the life-blood of his creditors, if by such means he could secure his claims.

His name was Isaac Hakkabut, and he was a native of Cologne. Nearly the whole of his time, however, he informed Captain Servadac, had been spent upon the sea, his real business being that of a merchant trading at all the ports of the Mediterranean. A tartan, a small vessel of two hundred tons burden, conveyed his entire stock of merchandise, and, to say the truth, was a sort of floating emporium, conveying nearly every possible article of commerce, from a lucifer match to the radiant fabrics of Frankfort and Epinal. Without wife or children, and having no settled home, Isaac Hakkabut lived almost entirely on board the _Hansa_, as he had named his tartan; and engaging a mate, with a crew of three men, as being adequate to work so light a craft, he cruised along the coasts of Algeria, Tunis, Egypt, Turkey, and Greece, visiting, moreover, most of the harbors of the Levant. Careful to be always well supplied with the products in most general demand—coffee, sugar, rice, tobacco, cotton stuffs, and gunpowder—and being at all times ready to barter, and prepared to deal in secondhand wares, he had contrived to amass considerable wealth.

On the eventful night of the 1st of January the _Hansa_ had been at Ceuta, the point on the coast of Morocco exactly opposite Gibraltar. The mate and three sailors had all gone on shore, and, in common with many of their fellow-creatures, had entirely disappeared; but the most projecting rock of Ceuta had been undisturbed by the general catastrophe, and half a score of Spaniards, who had happened to be upon it, had escaped with their lives. They were all Andalusian majos, agricultural laborers, and naturally as careless and apathetic as men of their class usually are, but they could not help being very considerably embarrassed when they discovered that they were left in solitude upon a detached and isolated rock. They took what mutual counsel they could, but became only more and more perplexed. One of them was named Negrete, and he, as having traveled somewhat more than the rest, was tacitly recognized as a sort of leader; but although he was by far the most enlightened of them all, he was quite incapable of forming the least conception of the nature of what had occurred. The one thing upon which they could not fail to be conscious was that they had no prospect of obtaining provisions, and consequently their first business was to devise a scheme for getting away from their present abode. The Spaniards would not have had the slightest hesitation in summarily taking possession of her, but their utter ignorance of seamanship made them reluctantly come to the conclusion that the more prudent policy was to make terms with the owner.

And now came a singular part of the story. Negrete and his companions had meanwhile received a visit from two English officers from Gibraltar. What passed between them the Jew did not know; he only knew that, immediately after the conclusion of the interview, Negrete came to him and ordered him to set sail at once for the nearest point of Morocco. The Jew, afraid to disobey, but with his eye ever upon the main chance, stipulated that at the end of their voyage the Spaniards should pay for their passage—terms to which, as they would to any other, they did not demur, knowing that they had not the slightest intention of giving him a single real.

The _Hansa_ had weighed anchor on the 3rd of February. The wind blew from the west, and consequently the working of the tartan was easy enough. The unpracticed sailors had only to hoist their sails and, though they were quite unconscious of the fact, the breeze carried them to the only spot upon the little world they occupied which could afford them a refuge.

Thus it fell out that one morning Ben Zoof, from his lookout on Gourbi Island, saw a ship, not the _Dobryna_, appear upon the horizon, and make quietly down towards what had formerly been the right bank of the Shelf.

Such was Ben Zoof's version of what had occurred, as he had gathered it from the new-comers. He wound up his recital by remarking that the cargo of the _Hansa_ would be of immense service to them; he expected, indeed, that Isaac Hakkabut would be difficult to manage, but considered there could be no harm in appropriating the goods for the common welfare, since there could be no opportunity now for selling them.

Ben Zoof added, "And as to the difficulties between the Jew and his passengers, I told him that the governor general was absent on a tour of inspection, and that he would see everything equitably settled."

Smiling at his orderly's tactics, Servadac turned to Hakkabut, and told him that he would take care that his claims should be duly investigated and all proper demands should be paid. The man appeared satisfied, and, for the time at least, desisted from his complaints and importunities.

When the Jew had retired, Count Timascheff asked, "But how in the world can you ever make those fellows pay anything?"

"They have lots of money," said Ben Zoof.

"Not likely," replied the count; "when did you ever know Spaniards like them to have lots of money?"

"But I have seen it myself," said Ben Zoof; "and it is English money."

"English money!" echoed Servadac; and his mind again reverted to the excursion made by the colonel and the major from Gibraltar, about which they had been so reticent. "We must inquire more about this," he said.
Then, addressing Count Timascheff, he added, "Altogether, I think the countries of Europe are fairly represented by the population of Gallia."

"True, captain," answered the count; "we have only a fragment of a world, but it contains natives of France, Russia, Italy, Spain, and England. Even Germany may be said to have a representative in the person of this miserable Jew."

"And even in him," said Servadac, "perhaps we shall not find so indifferent a representative as we at present imagine."

CHAPTER XIX. GALLIA'S GOVERNOR GENERAL

The Spaniards who had arrived on board the _Hansa_ consisted of nine men and a lad of twelve years of age, named Pablo. They all received Captain Servadac, whom Ben Zoof introduced as the governor general, with due respect, and returned quickly to their separate tasks. The captain and his friends, followed at some distance by the eager Jew, soon left the glade and directed their steps towards the coast where the _Hansa_ was moored.

As they went they discussed their situation. As far as they had ascertained, except Gourbi Island, the sole surviving fragments of the Old World were four small islands: the bit of Gibraltar occupied by the Englishmen; Ceuta, which had just been left by the Spaniards; Madalena, where they had picked up the little Italian girl; and the site of the tomb of Saint Louis on the coast of Tunis. Around these there was stretched out the full extent of the Gallian Sea, which apparently comprised about one-half of the Mediterranean, the whole being encompassed by a barrier like a framework of precipitous cliffs, of an origin and a substance alike unknown.

Of all these spots only two were known to be inhabited: Gibraltar, where the thirteen Englishmen were amply provisioned for some years to come, and their own Gourbi Island. Here there was a population of twenty-two, who would all have to subsist upon the natural products of the soil. It was indeed not to be forgotten that, perchance, upon some remote and undiscovered isle there might be the solitary writer of the mysterious papers which they had found, and if so, that would raise the census of their new asteroid to an aggregate of thirty-six.

Even upon the supposition that at some future date the whole population should be compelled to unite and find a residence upon Gourbi Island, there did not appear any reason to question but that eight hundred acres of rich soil, under good management, would yield them all an ample sustenance. The only critical matter was how long the cold season would last; every hope depended upon the land again becoming productive; at present, it seemed impossible to determine, even if Gallia's orbit were really elliptic, when she would reach her aHELium, and it was consequently necessary that the Gallians for the time being should reckon on nothing beyond their actual and present resources.

These resources were, first, the provisions of the _Dobryna_, consisting of preserved meat, sugar, wine, brandy, and other stores sufficient for about two months; secondly, the valuable cargo of the _Hansa_, which, sooner or later, the owner, whether he would or not, must be compelled to surrender for the common benefit; and lastly, the produce of the island, animal and vegetable, which with proper economy might be made to last for a considerable period.

In the course of the conversation, Count Timascheff took an opportunity of saying that, as Captain Servadac had already been presented to the Spaniards as governor of the island, he thought it advisable that he should really assume that position.

"Every body of men," he observed, "must have a head, and you, as a Frenchman, should, I think, take the command of this fragment of a French colony. My men, I can answer for it, are quite prepared to recognize you as their superior officer."

"Most unhesitatingly," replied Servadac, "I accept the post with all its responsibilities. We understand each other so well that I feel sure we shall try and work together for the common good; and even if it be our fate never again to behold our fellow creatures, I have no misgivings but that we shall be able to cope with whatever difficulties may be before us."

As he spoke, he held out his hand. The count took it, at the same time making a slight bow. It was the first time since their meeting that the two men had shaken hands; on the other hand, not a single word about their former rivalry had ever escaped their lips; perhaps that was all forgotten now.

The silence of a few moments was broken by Servadac saying, "Do you not think we ought to explain our situation to the Spaniards?"

"No, no, your Excellency," burst in Ben Zoof, emphatically; "the fellows are chicken-hearted enough already; only tell them what has happened, and in sheer despondency they will not do another stroke of work."

"Besides," said Lieutenant Procope, who took very much the same view as the orderly, "they are so miserably ignorant they would be sure to misunderstand you."

"Understand or misunderstand," replied Servadac, "I do not think it matters. They would not care. They are all
fatalists. Only give them a guitar and their castanets, and they will soon forget all care and anxiety. For my own part, I must adhere to my belief that it will be advisable to tell them everything. Have you any opinion to offer, count?"

"My own opinion, captain, coincides entirely with yours. I have followed the plan of explaining all I could to my men on board the _Dobrynya_, and no inconvenience has arisen."

"Well, then, so let it be," said the captain; adding, "It is not likely that these Spaniards are so ignorant as not to have noticed the change in the length of the days; neither can they be unaware of the physical changes that have transpired. They shall certainly be told that we are being carried away into unknown regions of space, and that this island is nearly all that remains of the Old World."

"Ha! ha!" laughed Ben Zoof, aloud; "it will be fine sport to watch the old Jew's face, when he is made to comprehend that he is flying away millions and millions of leagues from all his debtors."

Isaac Hakkabut was about fifty yards behind, and was consequently unable to overhear the conversation. He went shambling along, half whimpering and not unfrequently invoking the God of Israel; but every now and then a cunning light gleamed from his eyes, and his lips became compressed with a grim significance.

None of the recent phenomena had escaped his notice, and more than once he had attempted to entice Ben Zoof into conversation upon the subject; but the orderly made no secret of his antipathy to him, and generally replied to his advances either by satire or by banter. He told him that he had everything to gain under the new system of nights and days, for, instead of living the Jew's ordinary life of a century, he would reach to the age of two centuries; and he congratulated him upon the circumstance of things having become so light, because it would prevent him feeling the burden of his years. At another time he would declare that, to an old usurer like him, it could not matter in the least what had become of the moon, as he could not possibly have advanced any money upon her. And when Isaac, undaunted by his jeers, persevered in besetting him with questions, he tried to silence him by saying, "Only wait till the governor general comes; he is a shrewd fellow, and will tell you all about it."

"But will he protect my property?" poor Isaac would ask tremulously.

"To be sure he will! He would confiscate it all rather than that you should be robbed of it."

With this Job's comfort the Jew had been obliged to content himself as best he could, and to await the promised arrival of the governor.

When Servadac and his companions reached the shore, they found that the _Hansa_ had anchored in an exposed bay, protected but barely by a few projecting rocks, and in such a position that a gale rising from the west would inevitably drive her on to the land, where she must be dashed in pieces. It would be the height of folly to leave her in her present moorings; without loss of time she must be brought round to the mouth of the Shelif, in immediate proximity to the Russian yacht.

The consciousness that his tartan was the subject of discussion made the Jew give way to such vehement ejaculations of anxiety, that Servadac turned round and peremptorily ordered him to desist from his clamor. Leaving the old man under the surveillance of the count and Ben Zoof, the captain and the lieutenant stepped into a small boat and were soon alongside the floating emporium.

A very short inspection sufficed to make them aware that both the tartan and her cargo were in a perfect state of preservation. In the hold were sugar-loaves by hundreds, chests of tea, bags of coffee, hogsheads of tobacco, pipes of wine, casks of brandy, barrels of dried herrings, bales of cotton, clothing of every kind, shoes of all sizes, caps of various shape, tools, household utensils, china and earthenware, reams of paper, bottles of ink, boxes of lucifer matches, blocks of salt, bags of pepper and spices, a stock of huge Dutch cheeses, and a collection of almanacs and miscellaneous literature. At a rough guess the value could not be much under pounds 5,000 sterling. A new cargo had been taken in only a few days before the catastrophe, and it had been Isaac Hakkabut's intention to cruise from Ceuta to Tripoli, calling wherever he had reason to believe there was likely to be a market for any of his commodities.

"A fine haul, lieutenant," said the captain.

"Yes, indeed," said the lieutenant; "but what if the owner refuses to part with it?"

"No fear; no fear," replied the captain. "As soon as ever the old rascal finds that there are no more Arabs or Algerians for him to fleece, he will be ready enough to transact a little business with us. We will pay him by bills of acceptance on some of his old friends in the Old World."

"But why should he want any payment?" inquired the lieutenant. "Under the circumstances, he must know that you have a right to make a requisition of his goods."

"No, no," quickly rejoined Servadac; "we will not do that. Just because the fellow is a German we shall not be justified in treating him in German fashion. We will transact our business in a business way. Only let him once realize that he is on a new globe, with no prospect of getting back to the old one, and he will be ready enough to come to terms with us."

"Perhaps you are right," replied the lieutenant; "I hope you are. But anyhow, it will not do to leave the tartan
here; not only would she be in danger in the event of a storm, but it is very questionable whether she could resist the pressure of the ice, if the water were to freeze."

"Quite true, Procope; and accordingly I give you the commission to see that your crew bring her round to the Shelif as soon as may be."

"To-morrow morning it shall be done," answered the lieutenant, promptly.

Upon returning to the shore, it was arranged that the whole of the little colony should forthwith assemble at the gourbi. The Spaniards were summoned and Isaac, although he could only with reluctance take his wistful gaze from his tartan, obeyed the governor's orders to follow.

An hour later and the entire population of twenty-two had met in the chamber adjoining the gourbi. Young Pablo made his first acquaintance with little Nina, and the child seemed highly delighted to find a companion so nearly of her own age. Leaving the children to entertain each other, Captain Servadac began his address.

Before entering upon further explanation, he said that he counted upon the cordial co-operation of them all for the common welfare.

Negrete interrupted him by declaring that no promises or pledges could be given until he and his countrymen knew how soon they could be sent back to Spain.

"To Spain, do you say?" asked Servadac.

"To Spain!" echoed Isaac Hakkabut, with a hideous yell. "Do they expect to go back to Spain till they have paid their debts? Your Excellency, they owe me twenty reals apiece for their passage here; they owe me two hundred reals. Are they to be allowed...?"

"Silence, Mordecai, you fool!" shouted Ben Zoof, who was accustomed to call the Jew by any Hebrew name that came uppermost to his memory. "Silence!"

Servadac was disposed to appease the old man's anxiety by promising to see that justice was ultimately done; but, in a fever of frantic excitement, he went on to implore that he might have the loan of a few sailors to carry his ship to Algiers.

"I will pay you honestly; I will pay you _well_," he cried; but his ingrained propensity for making a good bargain prompted him to add, "provided you do not overcharge me."

Ben Zoof was about again to interpose some angry exclamation; but Servadac checked him, and continued in Spanish: "Listen to me, my friends. Something very strange has happened. A most wonderful event has cut us off from Spain, from France, from Italy, from every country of Europe. In fact, we have left the Old World entirely. Of the whole earth, nothing remains except this island on which you are now taking refuge. The old globe is far, far away. Our present abode is but an insignificant fragment that is left. I dare not tell you that there is any chance of your ever again seeing your country or your homes."

He paused. The Spaniards evidently had no conception of his meaning.

Negrete begged him to tell them all again. He repeated all that he had said, and by introducing some illustrations from familiar things, he succeeded to a certain extent in conveying some faint idea of the convulsion that had happened. The event was precisely what he had foretold. The communication was received by all alike with the most supreme indifference.

Hakkabut did not say a word. He had listened with manifest attention, his lips twitching now and then as if suppressing a smile. Servadac turned to him, and asked whether he was still disposed to put out to sea and make for Algiers.

The Jew gave a broad grin, which, however, he was careful to conceal from the Spaniards. "Your Excellency jests," he said in French; and turning to Count Timascheff, he added in Russian: "The governor has made up a wonderful tale."

The count turned his back in disgust, while the Jew sidled up to little Nina and muttered in Italian. "A lot of lies, pretty one; a lot of lies!"

"Confound the knave!" exclaimed Ben Zoof; "he gabbles every tongue under the sun!"

"Yes," said Servadac; "but whether he speaks French, Russian, Spanish, German, or Italian, he is neither more nor less than a Jew."

CHAPTER XX. A LIGHT ON THE HORIZON

On the following day, without giving himself any further concern about the Jew's incredulity, the captain gave orders for the _Hansa_ to be shifted round to the harbor of the Shelif. Hakkabut raised no objection, not only because he was aware that the move insured the immediate safety of his tartan, but because he was secretly entertaining the hope that he might entice away two or three of the _Dobryna's_ crew and make his escape to Algiers or some other port.
Operations now commenced for preparing proper winter quarters. Spaniards and Russians alike joined heartily in the work, the diminution of atmospheric pressure and of the force of attraction contributing such an increase to their muscular force as materially facilitated all their labors.

The first business was to accommodate the building adjacent to the gourbi to the wants of the little colony. Here for the present the Spaniards were lodged, the Russians retaining their berths upon the yacht, while the Jew was permitted to pass his nights upon the _Hansa_. This arrangement, however, could be only temporary. The time could not be far distant when ships' sides and ordinary walls would fail to give an adequate protection from the severity of the cold that must be expected; the stock of fuel was too limited to keep up a permanent supply of heat in their present quarters, and consequently they must be driven to seek some other refuge, the internal temperature of which would at least be bearable.

The plan that seemed to commend itself most to their consideration was, that they should dig out for themselves some subterraneous pits similar to "silos," such as are used as receptacles for grain. They presumed that when the surface of Gallia should be covered by a thick layer of ice, which is a bad conductor of heat, a sufficient amount of warmth for animal vitality might still be retained in excavations of this kind. After a long consultation they failed to devise any better expedient, and were forced to resign themselves to this species of troglodyte existence.

In one respect they congratulated themselves that they should be better off than many of the whalers in the polar seas, for as it is impossible to get below the surface of a frozen ocean, these adventurers have to seek refuge in huts of wood and snow erected on their ships, which at best can give but slight protection from extreme cold; but here, with a solid subsoil, the Gallians might hope to dig down a hundred feet or so and secure for themselves a shelter that would enable them to brave the hardest severity of climate.

The order, then, was at once given. The work was commenced. A stock of shovels, mattocks, and pick-axes was brought from the gourbi, and with Ben Zoof as overseer, both Spanish majos and Russian sailors set to work with a will.

It was not long, however, before a discovery, more unexpected than agreeable, suddenly arrested their labors. The spot chosen for the excavation was a little to the right of the gourbi, on a slight elevation of the soil. For the first day everything went on prosperously enough; but at a depth of eight feet below the surface, the navvies came in contact with a hard surface, upon which all their tools failed to make the slightest impression. Servadac and the count were at once apprised of the fact, and had little difficulty in recognizing the substance that had revealed itself as the very same which composed the shores as well as the subsoil of the Gallian sea. It evidently formed the universal substructure of the new asteroid. Means for hollowing it failed them utterly. Harder and more resisting than granite, it could not be blasted by ordinary powder; dynamite alone could suffice to rend it.

The disappointment was very great. Unless some means of protection were speedily devised, death seemed to be staring them in the face. Were the figures in the mysterious documents correct? If so, Gallia must now be a hundred millions of leagues from the sun, nearly three times the distance of the earth at the remotest section of her orbit. The intensity of the solar light and heat, too, was very seriously diminishing, although Gourbi Island (being on the equator of an orb which had its axes always perpendicular to the plane in which it revolved) enjoyed a position that gave it a permanent summer. But no advantage of this kind could compensate for the remoteness of the sun. The temperature fell steadily; already, to the discomfiture of the little Italian girl, nurtured in sunshine, ice was beginning to form in the crevices of the rocks, and manifestly the time was impending when the sea itself would freeze.

Some shelter must be found before the temperature should fall to 60 degrees below zero. Otherwise death seemed to be inevitable. Hitherto, for the last few days, the thermometer had been registering an average of about 6 degrees below zero, and it had become matter of experience that the stove, although replenished with all the wood that was available, was altogether inadequate to effect any sensible mitigation of the severity of the cold. Nor could any amount of fuel be enough. It was certain that ere long the very mercury and spirit in the thermometers would be congealed. Some other resort must assuredly be soon found, or they must perish. That was clear.

The idea of betaking themselves to the _Dobryna_ and _Hansa_ could not for a moment be seriously entertained; not only did the structure of the vessels make them utterly insufficient to give substantial shelter, but they were totally unfit to be trusted as to their stability when exposed to the enormous pressure of the accumulated ice.

Neither Servadac, nor the count, nor Lieutenant Procope were men to be easily disheartened, but it could not be concealed that they felt themselves in circumstances by which they were equally harassed and perplexed. The sole expedient that their united counsel could suggest was to obtain a refuge below ground, and that was denied them by the strange and impenetrable substratum of the soil; yet hour by hour the sun's disc was lessening in its dimensions, and although at midday some faint radiance and glow were to be distinguished, during the night the painfulness of the cold was becoming almost intolerable.

Mounted upon Zephyr and Galette, the captain and the count scoured the island in search of some available retreat. Scarcely a yard of ground was left unexplored, the horses clearing every obstacle as if they were, like...
Pegasus, furnished with wings. But all in vain. Soundings were made again and again, but invariably with the same result; the rock, hard as adamant, never failed to reveal itself within a few feet of the surface of the ground.

The excavation of any silo being thus manifestly hopeless, there seemed nothing to be done except to try and render the buildings alongside the gourbi impervious to frost. To contribute to the supply of fuel, orders were given to collect every scrap of wood, dry or green, that the island produced; and this involved the necessity of felling the numerous trees that were scattered over the plain. But toil as they might at the accumulation of firewood, Captain Servadac and his companions could not resist the conviction that the consumption of a very short period would exhaust the total stock. And what would happen then?

Studious if possible to conceal his real misgivings, and anxious that the rest of the party should be affected as little as might be by his own uneasiness, Servadac would wander alone about the island, racking his brain for an idea that would point the way out of the serious difficulty. But still all in vain.

One day he suddenly came upon Ben Zoof, and asked him whether he had no plan to propose. The orderly shook his head, but after a few moments' pondering, said: "Ah! master, if only we were at Montmartre, we would get shelter in the charming stone-quarries."

"Idiot!" replied the captain, angrily, "if we were at Montmartre, you don't suppose that we should need to live in stone-quarries?"

But the means of preservation which human ingenuity had failed to secure were at hand from the felicitous provision of Nature herself. It was on the 10th of March that the captain and Lieutenant Procope started off once more to investigate the northwest corner of the island; on their way their conversation naturally was engrossed by the subject of the dire necessities which only too manifestly were awaiting them. A discussion more than usually animated arose between them, for the two men were not altogether of the same mind as to the measures that ought to be adopted in order to open the fairest chance of avoiding a fatal climax to their exposure; the captain persisted that an entirely new abode must be sought, while the lieutenant was equally bent upon devising a method of some sort by which their present quarters might be rendered sufficiently warm. All at once, in the very heat of his argument, Procope paused; he passed his hand across his eyes, as if to dispel a mist, and stood, with a fixed gaze centered on a point towards the south. "What is that?" he said, with a kind of hesitation. "No, I am not mistaken," he added; "it is a light on the horizon."

"A light!" exclaimed Servadac; "show me where."

"Look there!" answered the lieutenant, and he kept pointing steadily in its direction, until Servadac also distinctly saw the bright speck in the distance.

It increased in clearness in the gathering shades of evening. "Can it be a ship?" asked the captain.

"If so, it must be in flames; otherwise we should not be able to see it so far off," replied Procope.

"It does not move," said Servadac; "and unless I am greatly deceived, I can hear a kind of reverberation in the air."

For some seconds the two men stood straining eyes and ears in rapt attention. Suddenly an idea struck Servadac's mind. "The volcano!" he cried; "may it not be the volcano that we saw, whilst we were on board the _Dobryna?_"

The lieutenant agreed that it was very probable.

"Heaven be praised!" ejaculated the captain, and he went on in the tones of a keen excitement: "Nature has provided us with our winter quarters; the stream of burning lava that is flowing there is the gift of a bounteous Providence; it will provide us all the warmth we need. No time to lose! To-morrow, my dear Procope, to-morrow we will explore it all; no doubt the life, the heat we want is reserved for us in the heart and bowels of our own Gallia!

Whilst the captain was indulging in his expressions of enthusiasm, Procope was endeavoring to collect his thoughts. Distinctly he remembered the long promontory which had barred the _Dobryna's_ progress while coasting the southern confines of the sea, and which had obliged her to ascend northwards as far as the former latitude of Oran; he remembered also that at the extremity of the promontory there was a rocky headland crowned with smoke; and now he was convinced that he was right in identifying the position, and in believing that the smoke had given place to an eruption of flame.

When Servadac gave him a chance of speaking, he said, "The more I consider it, captain, the more I am satisfied that your conjecture is correct. Beyond a doubt, what we see is the volcano, and to-morrow we will not fail to visit it."

On returning to the gourbi, they communicated their discovery to Count Timascheff only, deeming any further publication of it to be premature. The count at once placed his yacht at their disposal, and expressed his intention of accompanying them.

"The yacht, I think," said Procope, "had better remain where she is; the weather is beautifully calm, and the steam-launch will answer our purpose better; at any rate, it will convey us much closer to shore than the schooner."

The count replied that the lieutenant was by all means to use his own discretion, and they all retired for the night.
Like many other modern pleasure-yachts, the _Dobryna_, in addition to her four-oar, was fitted with a fast-going little steam-launch, its screw being propelled, on the Oriolle system, by means of a boiler, small but very effective. Early next morning, this handy little craft was sufficiently freighted with coal (of which there was still about ten tons on board the _Dobryna_), and manned by nobody except the captain, the count, and the lieutenant, left the harbor of the Shelif, much to the bewilderment of Ben Zoof, who had not yet been admitted into the secret. The orderly, however, consoled himself with the reflection that he had been temporarily invested with the full powers of governor general, an office of which he was not a little proud.

The eighteen miles between the island and the headland were made in something less than three hours. The volcanic eruption was manifestly very considerable, the entire summit of the promontory being enveloped in flames. To produce so large a combustion either the oxygen of Gallia's atmosphere had been brought into contact with the explosive gases contained beneath her soil, or perhaps, still more probable, the volcano, like those in the moon, was fed by an internal supply of oxygen of her own.

It took more than half an hour to settle on a suitable landing-place. At length, a small semi-circular creek was discovered among the rocks, which appeared advantageous, because, if circumstances should so require, it would form a safe anchorage for both the _Dobryna_ and the _Hansa_.

The launch securely moored, the passengers landed on the side of the promontory opposite to that on which a torrent of burning lava was descending to the sea. With much satisfaction they experienced, as they approached the mountain, a sensible difference in the temperature, and their spirits could not do otherwise than rise at the prospect of having their hopes confirmed, that a deliverance from the threatened calamity had so opportunely been found. On they went, up the steep acclivity, scrambling over its rugged projections, scaling the irregularities of its gigantic strata, bounding from point to point with the agility of chamois, but never alighting on anything except on the accumulation of the same hexagonal prisms with which they had now become so familiar.

Their exertions were happily rewarded. Behind a huge pyramidal rock they found a hole in the mountain-side, like the mouth of a great tunnel. Climbing up to this orifice, which was more than sixty feet above the level of the sea, they ascertained that it opened into a long dark gallery. They entered and groped their way cautiously along the sides. A continuous rumbling, that increased as they advanced, made them aware that they must be approaching the central funnel of the volcano; their only fear was lest some insuperable wall of rock should suddenly bar their further progress.

Servadac was some distance ahead.

"Come on!" he cried cheerily, his voice ringing through the darkness, "come on! Our fire is lighted! no stint of fuel! Nature provides that! Let us make haste and warm ourselves!"

Inspired by his confidence, the count and the lieutenant advanced bravely along the unseen and winding path. The temperature was now at least fifteen degrees above zero, and the walls of the gallery were beginning to feel quite warm to the touch, an indication, not to be overlooked, that the substance of which the rock was composed was metallic in its nature, and capable of conducting heat.

"Follow me!" shouted Servadac again; "we shall soon find a regular stove!"

Onwards they made their way, until at last a sharp turn brought them into a sudden flood of light. The tunnel had opened into a vast cavern, and the gloom was exchanged for an illumination that was perfectly dazzling. Although the temperature was high, it was not in any way intolerable.

One glance was sufficient to satisfy the explorers that the grateful light and heat of this huge excavation were to be attributed to a torrent of lava that was rolling downwards to the sea, completely subtending the aperture of the cave. Not inaptly might the scene be compared to the celebrated Grotto of the Winds at the rear of the central fall of Niagara, only with the exception that here, instead of a curtain of rushing water, it was a curtain of roaring flame that hung before the cavern's mouth.

"Heaven be praised!" cried Servadac, with glad emotion; "here is all that we hoped for, and more besides!"

CHAPTER XXI. WINTER QUARTERS

The habitation that had now revealed itself, well lighted and thoroughly warm, was indeed marvelous. Not only would it afford ample accommodation for Hector Servadac and "his subjects," as Ben Zoof delighted to call them, but it would provide shelter for the two horses, and for a considerable number of domestic animals.

This enormous cavern was neither more or less than the common junction of nearly twenty tunnels (similar to that which had been traversed by the explorers), forming ramifications in the solid rock, and the pores, as it were, by which the internal heat exuded from the heart of the mountain. Here, as long as the volcano retained its activity, every living creature on the new asteroid might brave the most rigorous of climates; and as Count Timascheff justly remarked, since it was the only burning mountain they had sighted, it was most probably the sole outlet for Gallia's
subterranean fires, and consequently the eruption might continue unchanged for ages to come.

But not a day, not an hour, was to be lost now. The steam-launch returned to Gourbi Island, and preparations were forthwith taken in hand for conveying man and beast, corn and fodder, across to the volcanic headland. Loud and hearty were the acclamations of the little colony, especially of the Spaniards, and great was the relief of Nina, when Servadac announced to them the discovery of their future domicile; and with requickened energies they labored hard at packing, anxious to reach their genial winter quarters without delay.

For three successive days the _Dobryna_, laden to her very gunwale, made a transit to and fro. Ben Zoof was left upon the island to superintend the stowage of the freight, whilst Servadac found abundant occupation in overlooking its disposal within the recesses of the mountain. First of all, the large store of corn and fodder, the produce of the recent harvest, was landed and deposited in one of the vaults; then, on the 15th, about fifty head of live cattle--bullocks, cows, sheep, and pigs--were conveyed to their rocky stalls. These were saved for the sake of preserving the several breeds, the bulk of the island cattle being slaughtered, as the extreme severity of the climate insured all meat remaining fresh for almost an indefinite period. The winter which they were expecting would probably be of unprecedented length; it was quite likely that it would exceed the six months' duration by which many arctic explorers have been tried; but the population of Gallia had no anxiety in the matter of provisions--their stock was far more than adequate; while as for drink, as long as they were satisfied with pure water, a frozen sea would afford them an inexhaustible reservoir.

The need for haste in forwarding their preparations became more and more manifest; the sea threatened to be unnavigable very soon, as ice was already forming which the noonday sun was unable to melt. And if haste were necessary, so also were care, ingenuity, and forethought. It was indispensable that the space at their command should be properly utilized, and yet that the several portions of the store should all be readily accessible.

On further investigation an unexpected number of galleries was discovered, so that, in fact, the interior of the mountain was like a vast bee-hive perforated with innumerable cells; and in compliment to the little Italian it was unanimously voted by the colony that their new home should be called "Nina's Hive."

The first care of Captain Servadac was to ascertain how he could make the best possible use of the heat which nature had provided for them so opportunely and with so lavish a hand. By opening fresh vents in the solid rock (which by the action of the heat was here capable of fissure) the stream of burning lava was diverted into several new channels, where it could be available for daily use; and thus Mochel, the _Dobryna'_s cook, was furnished with an admirable kitchen, provided with a permanent stove, where he was duly installed with all his culinary apparatus.

"What a saving of expense it would be," exclaimed Ben Zoof, "if every household could be furnished with its own private volcano!"

The large cavern at the general junction of the galleries was fitted up as a drawing-room, and arranged with all the best furniture both of the gourbi and of the cabin of the _Dobryna_. Hither was also brought the schooner's library, containing a good variety of French and Russian books; lamps were suspended over the different tables; and the walls of the apartment were tapestried with the sails and adorned with the flags belonging to the yacht. The curtain of fire extending over the opening of the cavern provided it, as already stated, with light and heat.

The torrent of lava fell into a small rock-bound basin that had no apparent communication with the sea, and was evidently the aperture of a deep abyss, of which the waters, heated by the descent of the eruptive matter, would no doubt retain their liquid condition long after the Gallian Sea had become a sheet of ice.

A small excavation to the left of the common hall was allotted for the special use of Servadac and the count; another on the right was appropriated to the lieutenant and Ben Zoof; whilst a third recess, immediately at the back, made a convenient little chamber for Nina. The Spaniards and the Russian sailors took up their sleeping-quarters in the adjacent galleries, and found the temperature quite comfortable.

Such were the internal arrangements of Nina's Hive, the refuge where the little colony were full of hope that they would be able to brave the rigors of the stern winter-time that lay before them—a winter-time during which Gallia might possibly be projected even to the orbit of Jupiter, where the temperature would not exceed one twenty-fifth of the normal winter temperature of the earth.

The only discontented spirit was Isaac Hakkabut. Throughout all the preparations which roused even the Spaniards to activity, the Jew, still incredulous and deaf to every representation of the true state of things, insisted upon remaining in the creek at Gourbi Island; nothing could induce him to leave his tartan, where, like a miser, he would keep guard over his precious cargo, ever grumbling and growling, but with his weather-eye open in the hope of catching sight of some passing sail. It must be owned that the whole party were far from sorry to be relieved of his presence; his uncomely figure and repulsive countenance was a perpetual bugbear. He had given out in plain terms that he did not intend to part with any of his property, except for current money, and Servadac, equally resolute, had strictly forbidden any purchases to be made, hoping to wear out the rascal's obstinacy.

Hakkabut persistently refused to credit the real situation; he could not absolutely deny that some portions of the
terrestrial globe had undergone a certain degree of modification, but nothing could bring him to believe that he was not, sooner or later, to résumé his old line of business in the Mediterranean. With his wonted distrust of all with whom he came in contact, he regarded every argument that was urged upon him only as evidence of a plot that had been devised to deprive him of his goods. Repudiating, as he did utterly, the hypothesis that a fragment had become detached from the earth, he scanned the horizon for hours together with an old telescope, the case of which had been patched up till it looked like a rusty stove-pipe, hoping to descry the passing trader with which he might effect some bartering upon advantageous terms.

At first he professed to regard the proposed removal into winter-quarters as an attempt to impose upon his credulity; but the frequent voyages made by the _Dobryna_ to the south, and the repeated consignments of corn and cattle, soon served to make him aware that Captain Servadac and his companions were really contemplating a departure from Gourbi Island.

The movement set him thinking. What, he began to ask himself--what if all that was told him was true? What if this sea was no longer the Mediterranean? What if he should never again behold his German fatherland? What if his marts for business were gone for ever? A vague idea of ruin began to take possession of his mind: he must yield to necessity; he must do the best he could. As the result of his cogitations, he occasionally left his tartan and made a visit to the shore. At length he endeavored to mingle with the busy group, who were hurrying on their preparations; but his advances were only met by jeers and scorn, and, ridiculed by all the rest, he was fain to turn his attention to Ben Zoof, to whom he offered a few pinches of tobacco.

"No, old Zebulon," said Ben Zoof, steadily refusing the gift, "it is against orders to take anything from you. Keep your cargo to yourself; eat and drink it all if you can; we are not to touch it."

Finding the subordinates incorruptible, Isaac determined to go to the fountain-head. He addressed himself to Servadac, and begged him to tell him the whole truth, piteously adding that surely it was unworthy of a French officer to deceive a poor old man like himself.

"Tell you the truth, man!" cried Servadac. "Confound it, I have told you the truth twenty times. Once for all, I tell you now, you have left yourself barely time enough to make your escape to yonder mountain."

"God and Mahomet have mercy on me!" muttered the Jew, whose creed frequently assumed a very ambiguous character.

"I will tell you what," continued the captain--"you shall have a few men to work the _Hansa_ across, if you like."

"But I want to go to Algiers," whimpered Hakkabut.

"How often am I to tell you that Algiers is no longer in existence? Only say yes or no--are you coming with us into winter-quarters?"

"God of Israel! what is to become of all my property?"

"But, mind you," continued the captain, not heeding the interruption, "if you do not choose voluntarily to come with us, I shall have the _Hansa_ by my orders, removed to a place of safety. I am not going to let your cursed obstinacy incur the risk of losing your cargo altogether."

"Merciful Heaven! I shall be ruined!" moaned Isaac, in despair.

"You are going the right way to ruin yourself, and it would serve you right to leave you to your own devices. But be off! I have no more to say."

And, turning contemptuously on his heel, Servadac left the old man vociferating bitterly, and with uplifted hands protesting vehemently against the rapacity of the Gentiles.

By the 20th all preliminary arrangements were complete, and everything ready for a final departure from the island. The thermometer stood on an average at 8 degrees below zero, and the water in the cistern was completely frozen. It was determined, therefore, for the colony to embark on the following day, and take up their residence in Nina's Hive.

A final consultation was held about the _Hansa_. Lieutenant Procope pronounced his decided conviction that it would be impossible for the tartan to resist the pressure of the ice in the harbor of the Shelif, and that there would be far more safety in the proximity of the volcano. It was agreed on all hands that the vessel must be shifted; and accordingly orders were given, four Russian sailors were sent on board, and only a few minutes elapsed after the _Dobryna_ had weighed anchor, before the great lateen sail of the tartan was unfurled, and the "shop-ship," as Ben Zoof delighted to call it, was also on her way to the southward.

Long and loud were the lamentations of the Jew. He kept exclaiming that he had given no orders, that he was being moved against his will, that he had asked for no assistance, and needed none; but it required no very keen discrimination to observe that all along there was a lurking gleam of satisfaction in his little gray eyes, and when, a few hours later, he found himself securely anchored, and his property in a place of safety, he quite chuckled with glee.

"God of Israel!" he said in an undertone, "they have made no charge; the idiots have piloted me here for
nothing."

For nothing! His whole nature exulted in the consciousness that he was enjoying a service that had been rendered gratuitously.

Destitute of human inhabitants, Gourbi Island was now left to the tenancy of such birds and beasts as had escaped the recent promiscuous slaughter. Birds, indeed, that had migrated in search of warmer shores, had returned, proving that this fragment of the French colony was the only shred of land that could yield them any sustenance; but their life must necessarily be short. It was utterly impossible that they could survive the cold that would soon ensue.

The colony took possession of their new abode with but few formalities. Everyone, however, approved of all the internal arrangements of Nina's Hive, and were profuse in their expressions of satisfaction at finding themselves located in such comfortable quarters. The only malcontent was Hakkabut; he had no share in the general enthusiasm, refused even to enter or inspect any of the galleries, and insisted on remaining on board his tartan.

"He is afraid," said Ben Zoof, "that he will have to pay for his lodgings. But wait a bit; we shall see how he stands the cold out there; the frost, no doubt, will drive the old fox out of his hole."

Towards evening the pots were set boiling, and a bountiful supper, to which all were invited, was spread in the central hall. The stores of the _Dobryna_ contained some excellent wine, some of which was broached to do honor to the occasion. The health of the governor general was drunk, as well as the toast "Success to his council," to which Ben Zoof was called upon to return thanks. The entertainment passed off merrily. The Spaniards were in the best of spirits; one of them played the guitar, another the castanets, and the rest joined in a ringing chorus. Ben Zoof contributed the famous Zouave refrain, well known throughout the French army, but rarely performed in finer style than by this _virtuoso:_

"Misti goth dar dar tire lyre! Flic! floc! flac! lirette, lira! Far la rira, Tour tala rire, Tour la Ribaud, Ricandeau, Sans repos, repit, repit, repos, ris pot, ripette! Si vous attrapez mon refrain, Fameux vous etes."

The concert was succeeded by a ball, unquestionably the first that had ever taken place in Gallia. The Russian sailors exhibited some of their national dances, which gained considerable applause, even although they followed upon the marvelous fandangos of the Spaniards. Ben Zoof, in his turn, danced a _pas seul_ (often performed in the Elysee Montmartre) with an elegance and vigor that earned many compliments from Negrete.

It was nine o'clock before the festivities came to an end, and by that time the company, heated by the high temperature of the hall, and by their own exertions, felt the want of a little fresh air. Accordingly the greater portion of the party, escorted by Ben Zoof, made their way into one of the adjacent galleries that led to the shore. Servadac, with the count and lieutenant, did not follow immediately; but shortly afterwards they proceeded to join them, when on their way they were startled by loud cries from those in advance.

Their first impression was that they were cries of distress, and they were greatly relieved to find that they were shouts of delight, which the dryness and purity of the atmosphere caused to re-echo like a volley of musketry.

Reaching the mouth of the gallery, they found the entire group pointing with eager interest to the sky.

"Well, Ben Zoof," asked the captain, "what's the matter now?"

"Oh, your Excellency," ejaculated the orderly, "look there! look there! The moon! the moon's come back!"

And, sure enough, what was apparently the moon was rising above the mists of evening.

CHAPTER XXII. A FROZEN OCEAN

The moon! She had disappeared for weeks; was she now returning? Had she been faithless to the earth? and had she now approached to be a satellite of the new-born world?

"Impossible!" said Lieutenant Procope; "the earth is millions and millions of leagues away, and it is not probable that the moon has ceased to revolve about her."

"Why not?" remonstrated Servadac. "It would not be more strange than the other phenomena which we have lately witnessed. Why should not the moon have fallen within the limits of Gallia's attraction, and become her satellite?"

"Upon that supposition," put in the count, "I should think that it would be altogether unlikely that three months would elapse without our seeing her."

"Quite incredible!" continued Procope. "And there is another thing which totally disproves the captain's hypothesis; the magnitude of Gallia is far too insignificant for her power of attraction to carry off the moon."

"But," persisted Servadac, "why should not the same convulsion that tore us away from the earth have torn away the moon as well? After wandering about as she would for a while in the solar regions, I do not see why she should not have attached herself to us."

The lieutenant repeated his conviction that it was not likely.

"But why not?" again asked Servadac impetuously.
"Because, I tell you, the mass of Gallia is so inferior to that of the moon, that Gallia would become the moon's satellite; the moon could not possibly become hers."

"Assuming, however," continued Servadac, "such to be the case--"

"I am afraid," said the lieutenant, interrupting him, "that I cannot assume anything of the sort even for a moment."

Servadac smiled good-humorously.

"I confess you seem to have the best of the argument, and if Gallia had become a satellite of the moon, it would not have taken three months to catch sight of her. I suppose you are right."

While this discussion had been going on, the satellite, or whatever it might be, had been rising steadily above the horizon, and had reached a position favorable for observation. Telescopes were brought, and it was very soon ascertained, beyond a question, that the new luminary was not the well-known Phoebe of terrestrial nights; it had no feature in common with the moon. Although it was apparently much nearer to Gallia than the moon to the earth, its superfluities was hardly one-tenth as large, and so feebly did it reflect the light of the remote sun, that it scarcely emitted radiance enough to extinguish the dim luster of stars of the eighth magnitude. Like the sun, it had risen in the west, and was now at its full. To mistake its identity with the moon was absolutely impossible; not even Servadac could discover a trace of the seas, chasms, craters, and mountains which have been so minutely delineated in lunar charts, and it could not be denied that any transient hope that had been excited as to their once again being about to enjoy the peaceful smiles of "the queen of night" must all be resigned.

Count Timascheff finally suggested, though somewhat doubtfully, the question of the probability that Gallia, in her course across the zone of the minor planets, had carried off one of them; but whether it was one of the 169 asteroids already included in the astronomical catalogues, or one previously unknown, he did not presume to determine. The idea to a certain extent was plausible, inasmuch as it has been ascertained that several of the telescopic planets are of such small dimensions that a good walker might make a circuit of them in four and twenty hours; consequently Gallia, being of superior volume, might be supposed capable of exercising a power of attraction upon any of these miniature microcosms.

The first night in Nina's Hive passed without special incident; and next morning a regular scheme of life was definitely laid down. "My lord governor," as Ben Zoot until he was peremptorily forbidden delighted to call Servadac, had a wholesome dread of idleness and its consequences, and insisted upon each member of the party undertaking some special duty to fulfill. There was plenty to do. The domestic animals required a great deal of attention; a supply of food had to be secured and preserved; fishing had to be carried on while the condition of the sea would allow it; and in several places the galleries had to be further excavated to render them more available for use. Occupation, then, need never be wanting, and the daily round of labor could go on in orderly routine.

A perfect concord ruled the little colony. The Russians and Spaniards amalgamated well, and both did their best to pick up various scraps of French, which was considered the official language of the place. Servadac himself undertook the tuition of Pablo and Nina, Ben Zoot being their companion in play-hours, when he entertained them with enchanting stories in the best Parisian French, about "a lovely city at the foot of a mountain," where he always promised one day to take them.

The end of March came, but the cold was not intense to such a degree as to confine any of the party to the interior of their resort; several excursions were made along the shore, and for a radius of three or four miles the adjacent district was carefully explored. Investigation, however, always ended in the same result; turn their course in whatever direction they would, they found that the country retained everywhere its desert character, rocky, barren, and without a trace of vegetation. Here and there a slight layer of snow, or a thin coating of ice arising from atmospheric condensation indicated the existence of superficial moisture, but it would require a period indefinitely long, exceeding human reckoning, before that moisture could collect into a stream and roll downwards over the stony strata to the sea. It seemed at present out of their power to determine whether the land upon which they were so happily settled was an island or a continent, and till the cold was abated they feared to undertake any lengthened expedition to ascertain the actual extent of the strange concrete of metallic crystallization.

By ascending one day to the summit of the volcano, Captain Servadac and the count succeeded in getting a general idea of the aspect of the country. The mountain itself was an enormous block rising symmetrically to a height of nearly 3,000 feet above the level of the sea, in the form of a truncated cone, of which the topmost section was crowned by a wreath of smoke issuing continuously from the mouth of a narrow crater.

Under the old condition of terrestrial things, the ascent of this steep acclivity would have been attended with much fatigue, but as the effect of the altered condition of the law of gravity, the travelers performed perpetual prodigies in the way of agility, and in little over an hour reached the edge of the crater, without more sense of exertion than if they had traversed a couple of miles on level ground. Gallia had its drawbacks, but it had some compensating advantages.
Telescopes in hand, the explorers from the summit scanned the surrounding view. Their anticipations had already realized what they saw. Just as they expected, on the north, east, and west lay the Gallian Sea, smooth and motionless as a sheet of glass, the cold having, as it were, congealed the atmosphere so that there was not a breath of wind. Towards the south there seemed no limit to the land, and the volcano formed the apex of a triangle, of which the base was beyond the reach of vision. Viewed even from this height, whence distance would do much to soften the general asperity, the surface nevertheless seemed to be bristling with its myriads of hexagonal lamellae, and to present difficulties which, to an ordinary pedestrian, would be insurmountable.

"Oh for some wings, or else a balloon!" cried Servadac, as he gazed around him; and then, looking down to the rock upon which they were standing, he added, "We seem to have been transplanted to a soil strange enough in its chemical character to bewilder the _savants_ at a museum."

"And do you observe, captain," asked the count, "how the convexity of our little world curtails our view? See, how circumscribed is the horizon!"

Servadac replied that he had noticed the same circumstance from the top of the cliffs of Gourbi Island.

"Yes," said the count; "it becomes more and more obvious that ours is a very tiny world, and that Gourbi Island is the sole productive spot upon its surface. We have had a short summer, and who knows whether we are not entering upon a winter that may last for years, perhaps for centuries?"

"But we must not mind, count," said Servadac, smiling. "We have agreed, you know, that, come what may, we are to be philosophers."

"Ay, true, my friend," rejoined the count; "we must be philosophers and something more; we must be grateful to the good Protector who has hitherto befriended us, and we must trust His mercy to the end."

For a few moments they both stood in silence, and contemplated land and sea; then, having given a last glance over the dreary panorama, they prepared to wend their way down the mountain. Before, however, they commenced their descent, they resolved to make a closer examination of the crater. They were particularly struck by what seemed to them almost the mysterious calmness with which the eruption was effected. There was none of the wild disorder and deafening tumult that usually accompany the discharge of volcanic matter, but the heated lava, rising with a uniform gentleness, quietly overran the limits of the crater, like the flow of water from the bosom of a peaceful lake. Instead of a boiler exposed to the action of an angry fire, the crater rather resembled a brimming basin, of which the contents were noiselessly escaping. Nor were there any igneous stones or red-hot cinders mingled with the smoke that crowned the summit; a circumstance that quite accorded with the absence of the pumice-stones, obsidians, and other minerals of volcanic origin with which the base of a burning mountain is generally strewn.

Captain Servadac was of opinion that this peculiarity augured favorably for the continuance of the eruption. Extreme violence in physical, as well as in moral nature, is never of long duration. The most terrible storms, like the most violent fits of passion, are not lasting; but here the calm flow of the liquid fire appeared to be supplied from a source that was inexhaustible, in the same way as the waters of Niagara, gliding on steadily to their final plunge, would defy all effort to arrest their course.

Before the evening of this day closed in, a most important change was effected in the condition of the Gallian Sea by the intervention of human agency. Notwithstanding the increasing cold, the sea, unruffled as it was by a breath of wind, still retained its liquid state. It is an established fact that water, under this condition of absolute stillness, will remain uncongealed at a temperature several degrees below zero, whilst experiment, at the same time, shows that a very slight shock will often be sufficient to convert it into solid ice. It had occurred to Servadac that if some communication could be opened with Gourbi Island, there would be a fine scope for hunting expeditions. Having this ultimate object in view, he assembled his little colony upon a projecting rock at the extremity of the promontory, and having called Nina and Pablo out to him in front, he said: "Now, Nina, do you think you could throw something into the sea?"

"I think I could," replied the child, "but I am sure that Pablo would throw it a great deal further than I can."

"Never mind, you shall try first."

Putting a fragment of ice into Nina's hand, he addressed himself to Pablo:

"Look out, Pablo; you shall see what a nice little fairy Nina is! Throw, Nina, throw, as hard as you can."

Nina balanced the piece of ice two or three times in her hand, and threw it forward with all her strength.

A sudden thrill seemed to vibrate across the motionless waters to the distant horizon, and the Gallian Sea had become a solid sheet of ice!

CHAPTER XXIII. A CARRIER-PIGEON

When, three hours after sunset, on the 23d of March, the Gallian moon rose upon the western horizon, it was
observed that she had entered upon her last quarter. She had taken only four days to pass from syzygy to quadrature, and it was consequently evident that she would be visible for little more than a week at a time, and that her luna
tion would be accomplished within sixteen days. The lunar months, like the solar days, had been diminished by one-half. Three days later the moon was in conjunction with the sun, and was consequently lost to view; Ben Zoof, as the first observer of the satellite, was extremely interested in its movements, and wondered whether it would ever reappear.

On the 26th, under an atmosphere perfectly clear and dry, the thermometer fell to 12 degrees F. below zero. Of the present distance of Gallia from the sun, and the number of leagues she had traversed since the receipt of the last mysterious document, there were no means of judging; the extent of diminution in the apparent disc of the sun did not afford sufficient basis even for an approximate calculation; and Captain Servadac was perpetually regretting that they could receive no further tidings from the anonymous correspondent, whom he persisted in regarding as a fellow-countryman.

The solidity of the ice was perfect; the utter stillness of the air at the time when the final congelation of the waters had taken place had resulted in the formation of a surface that for smoothness would rival a skating-rink; without a crack or flaw it extended far beyond the range of vision.

The contrast to the ordinary aspect of polar seas was very remarkable. There, the ice-fields are an agglomeration of hummocks and icebergs, massed in wild confusion, often towering higher than the masts of the largest whalers, and from the instability of their foundations liable to an instantaneous loss of equilibrium; a breath of wind, a slight modification of the temperature, not unfrequently serving to bring about a series of changes outrivaling the most elaborate transformation scenes of a pantomime. Here, on the contrary, the vast white plain was level as the desert of Sahara or the Russian steppes; the waters of the Gallian Sea were imprisoned beneath the solid sheet, which became continually stouter in the increasing cold.

Accustomed to the uneven crystallizations of their own frozen seas, the Russians could not be otherwise than delighted with the polished surface that afforded them such excellent opportunity for enjoying their favorite pastime of skating. A supply of skates, found hidden away amongst the _Dobryna's_ stores, was speedily brought into use. The Russians undertook the instruction of the Spaniards, and at the end of a few days, during which the temperature was only endurable through the absence of wind, there was not a Gallian who could not skate tolerably well, while many of them could describe figures involving the most complicated curves. Nina and Pablo earned loud applause by their rapid proficiency; Captain Servadac, an adept in athletics, almost outvied his instructor, the count; and Ben Zoof, who had upon some rare occasions skated upon the Lake of Montmartre (in his eyes, of course, a sea), performed prodigies in the art.

This exercise was not only healthful in itself, but it was acknowledged that, in case of necessity, it might become a very useful means of locomotion. As Captain Servadac remarked, it was almost a substitute for railways, and as if to illustrate this proposition, Lieutenant Procope, perhaps the greatest expert in the party, accomplished the twenty miles to Gourbi Island and back in considerably less than four hours.

The temperature, meanwhile, continued to decrease, and the average reading of the thermometer was about 16 degrees F. below zero; the light also diminished in proportion, and all objects appeared to be enveloped in a half-defined shadow, as though the sun were undergoing a perpetual eclipse. It was not surprising that the effect of this continuously overhanging gloom should be to induce a frequent depression of spirits amongst the majority of the little population, exiles as they were from their mother earth, and not unlikely, as it seemed, to be swept far away into the regions of another planetary sphere. Probably Count Timascheff, Captain Servadac, and Lieutenant Procope were the only members of the community who could bring any scientific judgment to bear upon the uncertainty that was before them, but a general sense of the strangeness of their situation could not fail at times to weigh heavily upon the minds of all. Under these circumstances it was very necessary to counteract the tendency to despond by continual diversion; and the recreation of skating thus opportunely provided, seemed just the thing to arouse the flagging spirits, and to restore a wholesome excitement.

With dogged obstinacy, Isaac Hakkabut refused to take any share either in the labors or the amusements of the colony. In spite of the cold, he had not been seen since the day of his arrival from Gourbi Island. Captain Servadac had strictly forbidden any communication with him; and the smoke that rose from the cabin chimney of the _Hansa_ was the sole indication of the proprietor being still on board. There was nothing to prevent him, if he chose, from partaking gratuitously of the volcanic light and heat which were being enjoyed by all besides; but rather than abandon his close and personal oversight of his precious cargo, he preferred to sacrifice his own slender stock of fuel.

Both the schooner and the tartan had been carefully moored in the way that seemed to promise best for withstanding the rigor of the winter. After seeing the vessels made secure in the frozen creek. Lieutenant Procope, following the example of many Arctic explorers, had the precaution to have the ice beveled away from the keels, so that there should be no risk of the ships' sides being crushed by the increasing pressure; he hoped that they would
follow any rise in the level of the ice-field, and when the thaw should come, that they would easily regain their proper water-line.

On his last visit to Gourbi Island, the lieutenant had ascertained that north, east, and west, far as the eye could reach, the Gallian Sea had become one uniform sheet of ice. One spot alone refused to freeze; this was the pool immediately below the central cavern, the receptacle for the stream of burning lava. It was entirely enclosed by rocks, and if ever a few icicles were formed there by the action of the cold, they were very soon melted by the fiery shower. Hissing and spluttering as the hot lava came in contact with it, the water was in a continual state of ebullition, and the fish that abounded in its depths defied the angler’s craft; they were, as Ben Zoof remarked, "too much boiled to bite."

At the beginning of April the weather changed. The sky became overcast, but there was no rise in the temperature. Unlike the polar winters of the earth, which ordinarily are affected by atmospheric influence, and liable to slight intermissions of their severity at various shiftings of the wind, Gallia’s winter was caused by her immense distance from the source of all light and heat, and the cold was consequently destined to go on steadily increasing until it reached the limit ascertained by Fourier to be the normal temperature of the realms of space.

With the over-clouding of the heavens there arose a violent tempest; but although the wind raged with an almost inconceivable fury, it was unaccompanied by either snow or rain. Its effect upon the burning curtain that covered the aperture of the central hall was very remarkable. So far from there being any likelihood of the fire being extinguished by the vehemence of the current of air, the hurricane seemed rather to act as a ventilator, which fanned the flame into greater activity, and the utmost care was necessary to avoid being burnt by the fragments of lava that were drifted into the interior of the grotto. More than once the curtain itself was rifted entirely asunder, but only to close up again immediately after allowing a momentary draught of cold air to penetrate the hall in a way that was refreshing and rather advantageous than otherwise.

On the 4th of April, after an absence of about four days, the new satellite, to Ben Zoof’s great satisfaction, made its reappearance in a crescent form, a circumstance that seemed to justify the anticipation that henceforward it would continue to make a periodic revolution every fortnight.

The crust of ice and snow was far too stout for the beaks of the strongest birds to penetrate, and accordingly large swarms had left the island, and, following the human population, had taken refuge on the volcanic promontory; not that there the barren shore had anything in the way of nourishment to offer them, but their instinct impelled them to haunt now the very habitations which formerly they would have shunned. Scraps of food were thrown to them from the galleries; these were speedily devoured, but were altogether inadequate in quantity to meet the demand. At length, emboldened by hunger, several hundred birds ventured through the tunnel, and took up their quarters actually in Nina’s Hive. Congregating in the large hall, the half-famished creatures did not hesitate to snatch bread, meat, or food of any description from the hands of the residents as they sat at table, and soon became such an intolerable nuisance that it formed one of the daily diversions to hunt them down; but although they were vigorously attacked by stones and sticks, and even occasionally by shot, it was with some difficulty that their number could be sensibly reduced.

By a systematic course of warfare the bulk of the birds were all expelled, with the exception of about a hundred, which began to build in the crevices of the rocks. These were left in quiet possession of their quarters, as not only was it deemed advisable to perpetuate the various breeds, but it was found that these birds acted as a kind of police, never failing either to chase away or to kill any others of their species who infringed upon what they appeared to regard as their own special privilege in intruding within the limits of their domain.

On the 15th loud cries were suddenly heard issuing from the mouth of the principal gallery.

"Help, help! I shall be killed!"

Pablo in a moment recognized the voice as Nina’s. Outrunning even Ben Zoof he hurried to the assistance of his little playmate, and discovered that she was being attacked by half a dozen great sea-gulls, and only after receiving some severe blows from their beaks could he succeed by means of a stout cudgel in driving them away.

"Tell me, Nina, what is this?" he asked as soon as the tumult had subsided.

The child pointed to a bird which she was caressing tenderly in her bosom.

"A pigeon!" exclaimed Ben Zoof, who had reached the scene of commotion, adding:

"A carrier-pigeon! And by all the saints of Montmartre, there is a little bag attached to its neck!"

He took the bird, and rushing into the hall placed it in Servadac’s hands.

"Another message, no doubt," cried the captain, "from our unknown friend. Let us hope that this time he has given us his name and address."

All crowded round, eager to hear the news. In the struggle with the gulls the bag had been partially torn open, but still contained the following dispatch:

"Gallia!"
Chemin parcouru du 1er Mars au 1er Avril: 39,000,000 l.!
Distance du soleil: 110,000,000 l.!
Capte Nerina en passant.
Vivres vont manquer et...

The rest of the document had been so damaged by the beaks of the gulls that it was illegible. Servadac was wild with vexation. He felt more and more convinced that the writer was a Frenchman, and that the last line indicated that he was in distress from scarcity of food. The very thought of a fellow-countryman in peril of starvation drove him well-nigh to distraction, and it was in vain that search was made everywhere near the scene of conflict in hopes of finding the missing scrap that might bear a signature or address.

Suddenly little Nina, who had again taken possession of the pigeon, and was hugging it to her breast, said:
"Look here, Ben Zoof!"
And as she spoke she pointed to the left wing of the bird. The wing bore the faint impress of a postage-stamp, and the one word: "FORMENTERA."

CHAPTER XXIV. A SLEDGE-RIDE

Formentera was at once recognized by Servadac and the count as the name of one of the smallest of the Balearic Islands. It was more than probable that the unknown writer had thence sent out the mysterious documents, and from the message just come to hand by the carrier-pigeon, it appeared all but certain that at the beginning of April, a fortnight back, he had still been there. In one important particular the present communication differed from those that had preceded it: it was written entirely in French, and exhibited none of the ecstatic exclamations in other languages that had been remarkable in the two former papers. The concluding line, with its intimation of failing provisions, amounted almost to an appeal for help. Captain Servadac briefly drew attention to these points, and concluded by saying, "My friends, we must, without delay, hasten to the assistance of this unfortunate man."

"For my part," said the count, "I am quite ready to accompany you; it is not unlikely that he is not alone in his distress."

Lieutenant Procope expressed much surprise. "We must have passed close to Formentera," he said, "when we explored the site of the Balearic Isles; this fragment must be very small; it must be smaller than the remaining splinter of Gibraltar or Ceuta; otherwise, surely it would never have escaped our observation."

"However small it may be," replied Servadac, "we must find it. How far off do you suppose it is?"

"It must be a hundred and twenty leagues away," said the lieutenant, thoughtfully; "and I do not quite understand how you would propose to get there."

"Why, on skates of course; no difficulty in that, I should imagine," answered Servadac, and he appealed to the count for confirmation of his opinion.

The count assented, but Procope looked doubtful.

"Your enterprise is generous," he said, "and I should be most unwilling to throw any unnecessary obstacle in the way of its execution; but, pardon me, if I submit to you a few considerations which to my mind are very important. First of all, the thermometer is already down to 22 degrees below zero, and the keen wind from the south is making the temperature absolutely unendurable; in the second place, supposing you travel at the rate of twenty leagues a day, you would be exposed for at least six consecutive days; and thirdly, your expedition will be of small avail unless you convey provisions not only for yourselves, but for those whom you hope to relieve."

"We can carry our own provisions on our backs in knapsacks," interposed Servadac, quickly, unwilling to recognize any difficulty in the way.

"Granted that you can," answered the lieutenant, quietly; "but where, on this level ice-field, will you find shelter in your periods of rest? You must perish with cold; you will not have the chance of digging out ice-huts like the Esquimaux."

"As to rest," said Servadac, "we shall take none; we shall keep on our way continuously; by traveling day and night without intermission, we shall not be more than three days in reaching Formentera."

"Believe me," persisted the lieutenant, calmly, "your enthusiasm is carrying you too far; the feat you propose is impossible; but even conceding the possibility of your success in reaching your destination, what service do you imagine that you, half-starved and half-frozen yourself, could render to those who are already perishing by want and exposure? you would only bring them away to die."

The obvious and dispassionate reasoning of the lieutenant could not fail to impress the minds of those who listened to him; the impracticability of the journey became more and more apparent; unprotected on that drear expanse, any traveler must assuredly succumb to the snow-drifts that were continually being whirled across it. But Hector Servadac, animated by the generous desire of rescuing a suffering fellow-creature, could scarcely be brought
within the bounds of common sense. Against his better judgment he was still bent upon the expedition, and Ben Zoof declared himself ready to accompany his master in the event of Count Timascheff hesitating to encounter the peril which the undertaking involved. But the count entirely repudiated all idea of shrinking from what, quite as much as the captain, he regarded as a sacred duty, and turning to Lieutenant Procope, told him that unless some better plan could be devised, he was prepared to start off at once and make the attempt to skate across to Formentera. The lieutenant, who was lost in thought, made no immediate reply.

"I wish we had a sledge," said Ben Zoof.

"I dare say that a sledge of some sort could be contrived," said the count; "but then we should have no dogs or reindeers to draw it."

"Why not rough-shoe the two horses?"

"They would never be able to endure the cold," objected the count.

"Never mind," said Servadac, "let us get our sledge and put them to the test. Something must be done!"

"I think," said Lieutenant Procope, breaking his thoughtful silence, "that I can tell you of a sledge already provided for your hand, and I can suggest a motive power surer and swifter than horses."

"What do you mean?" was the eager inquiry.

"I mean the _Dobryna_’s yawl," answered the lieutenant; "and I have no doubt that the wind would carry her rapidly along the ice."

The idea seemed admirable. Lieutenant Procope was well aware to what marvelous perfection the Americans had brought their sail-sledges, and had heard how in the vast prairies of the United States they had been known to outvie the speed of an express train, occasionally attaining a rate of more than a hundred miles an hour. The wind was still blowing hard from the south, and assuming that the yawl could be propelled with a velocity of about fifteen or at least twelve leagues an hour, he reckoned that it was quite possible to reach Formentera within twelve hours, that is to say, in a single day between the intervals of sunrise and sunrise.

The yawl was about twelve feet long, and capable of holding five or six people. The addition of a couple of iron runners would be all that was requisite to convert it into an excellent sledge, which, if a sail were hoisted, might be deemed certain to make a rapid progress over the smooth surface of the ice. For the protection of the passengers it was proposed to erect a kind of wooden roof lined with strong cloth; beneath this could be packed a supply of provisions, some warm furs, some cordials, and a portable stove to be heated by spirits of wine.

For the outward journey the wind was as favorable as could be desired; but it was to be apprehended that, unless the direction of the wind should change, the return would be a matter of some difficulty; a system of tacking might be carried out to a certain degree, but it was not likely that the yawl would answer her helm in any way corresponding to what would occur in the open sea. Captain Servadac, however, would not listen to any representation of probable difficulties; the future, he said, must provide for itself.

The engineer and several of the sailors set vigorously to work, and before the close of the day the yawl was furnished with a pair of stout iron runners, curved upwards in front, and fitted with a metal scull designed to assist in maintaining the directness of her course; the roof was put on, and beneath it were stored the provisions, the wraps, and the cooking utensils.

A strong desire was expressed by Lieutenant Procope that he should be allowed to accompany Captain Servadac instead of Count Timascheff. It was unadvisable for all three of them to go, as, in case of there being several persons to be rescued, the space at their command would be quite inadequate. The lieutenant urged that he was the most experienced seaman, and as such was best qualified to take command of the sledge and the management of the sails; and as it was not to be expected that Servadac would resign his intention of going in person to relieve his fellow-countryman, Procope submitted his own wishes to the count. The count was himself very anxious to have his share in the philanthropic enterprise, and demurred considerably to the proposal; he yielded, however, after a time, to Servadac’s representations that in the event of the expedition proving disastrous, the little colony would need his services alike as governor and protector, and overcoming his reluctance to be left out of the perilous adventure, was prevailed upon to remain behind for the general good of the community at Nina’s Hive.

At sunrise on the following morning, the 16th of April, Captain Servadac and the lieutenant took their places in the yawl. The thermometer was more than 20 degrees below zero, and it was with deep emotion that their companions beheld them thus embarking upon the vast white plain. Ben Zoof’s heart was too full for words; Count Timascheff could not forbear pressing his two brave friends to his bosom; the Spaniards and the Russian sailors crowded round for a farewell shake of the hand, and little Nina, her great eyes flooded with tears, held up her face for a parting kiss. The sad scene was not permitted to be long. The sail was quickly hoisted, and the sledge, just as if it had expanded a huge white wing, was in a little while carried far away beyond the horizon.

Light and unimpeded, the yawl scudded on with incredible speed. Two sails, a brigantine and a jib, were arranged to catch the wind to the greatest advantage, and the travelers estimated that their progress would be little
under the rate of twelve leagues an hour. The motion of their novel vehicle was singularly gentle, the oscillation being less than that of an ordinary railway-carriage, while the diminished force of gravity contributed to the swiftness. Except that the clouds of ice-dust raised by the metal runners were an evidence that they had not actually left the level surface of the ice, the captain and lieutenant might again and again have imagined that they were being conveyed through the air in a balloon.

Lieutenant Procope, with his head all muffled up for fear of frost-bite, took an occasional peep through an aperture that had been intentionally left in the roof, and by the help of a compass, maintained a proper and straight course for Formentera. Nothing could be more dejected than the aspect of that frozen sea; not a single living creature relieved the solitude; both the travelers, Procope from a scientific point of view, Servadac from an aesthetic, were alike impressed by the solemnity of the scene, and where the lengthened shadow of the sail cast upon the ice by the oblique rays of the setting sun had disappeared, and day had given place to night, the two men, drawn together as by an involuntary impulse, mutually held each other's hands in silence.

There had been a new moon on the previous evening; but, in the absence of moonlight, the constellations shone with remarkable brilliancy. The new pole-star close upon the horizon was resplendent, and even had Lieutenant Procope been destitute of a compass, he would have had no difficulty in holding his course by the guidance of that alone. However great was the distance that separated Gallia from the sun, it was after all manifestly insignificant in comparison with the remoteness of the nearest of the fixed stars.

Observing that Servadac was completely absorbed in his own thoughts, Lieutenant Procope had leisure to contemplate some of the present perplexing problems, and to ponder over the true astronomical position. The last of the three mysterious documents had represented that Gallia, in conformity with Kepler's second law, had traveled along her orbit during the month of March twenty millions of leagues less than she had done in the previous month; yet, in the same time, her distance from the sun had nevertheless been increased by thirty-two millions of leagues. She was now, therefore, in the center of the zone of telescopic planets that revolve between the orbits of Mars and Jupiter, and had captured for herself a satellite which, according to the document, was Nerina, one of the asteroids most recently identified. If thus, then, it was within the power of the unknown writer to estimate with such apparent certainty Gallia's exact position, was it not likely that his mathematical calculations would enable him to arrive at some definite conclusion as to the date at which she would begin again to approach the sun? Nay, was it not to be expected that he had already estimated, with sufficient approximation to truth, what was to be the true length of the Gallian year?

So intently had they each separately been following their own train of thought, that daylight reappeared almost before the travelers were aware of it. On consulting their instruments, they found that they must have traveled close upon a hundred leagues since they started, and they resolved to slacken their speed. The sails were accordingly taken in a little, and in spite of the intensity of the cold, the explorers ventured out of their shelter, in order that they might reconnoiter the plain, which was apparently as boundless as ever. It was completely desert; not so much as a single aperture that had been intentionally left in the roof, and by the help of a compass, maintained a proper and straight course for Formentera. Nothing could be more dejected than the aspect of that frozen sea; not a single living creature relieved the solitude; both the travelers, Procope from a scientific point of view, Servadac from an aesthetic, were alike impressed by the solemnity of the scene, and where the lengthened shadow of the sail cast upon the ice by the oblique rays of the setting sun had disappeared, and day had given place to night, the two men, drawn together as by an involuntary impulse, mutually held each other's hands in silence.

In an instant the lieutenant had seized his telescope.

"I see what you mean," said he; "it is a pylone that has been used for some geodesic survey."

"Most likely," replied Procope. "I have taken the same course as I should have done at sea, and I have kept some distance to windward of the island; we can bear straight down upon it whenever we like."

"Bear down then, now; and as quickly as you can."

The yawl was at once put with her head to the northeast and Captain Servadac, in defiance of the icy blast, remained standing at the bow, his gaze fixed on the horizon.

All at once his eye brightened.

"Look! look!" he exclaimed, pointing to a faint outline that broke the monotony of the circle that divided the plain from the sky.

In an instant the lieutenant had seized his telescope.

"I see what you mean," said he; "it is a pylone that has been used for some geodesic survey."

The next moment the sail was filled, and the yawl was bearing down upon the object with inconceivable swiftness, both Captain Servadac and the lieutenant too excited to utter a word. Mile after mile the distance rapidly grew less, and as they drew nearer the pylone they could see that it was erected on a low mass of rocks that was the sole interruption to the dull level of the field of ice. No wreath of smoke rose above the little island; it was manifestly impossible, they conceived, that any human being could there have survived the cold; the sad presentiment forced itself upon their minds that it was a mere cairn to which they had been hurrying.

Ten minutes later, and they were so near the rock that the lieutenant took in his sail, convinced that the impetus already attained would be sufficient to carry him to the land. Servadac's heart bounded as he caught sight of a fragment of blue canvas fluttering in the wind from the top of the pylone: it was all that now remained of the French national standard. At the foot of the pylone stood a miserable shed, its shutters tightly closed. No other habitation
was to be seen; the entire island was less than a quarter of a mile in circumference; and the conclusion was irresistible that it was the sole surviving remnant of Formentera, once a member of the Balearic Archipelago.

To leap on shore, to clamber over the slippery stones, and to reach the cabin was but the work of a few moments. The worm-eaten door was bolted on the inside. Servadac began to knock with all his might. No answer. Neither shouting nor knocking could draw forth a reply.

"Let us force it open, Procopel!" he said.

The two men put their shoulders to the door, which soon yielded to their vigorous efforts, and they found themselves inside the shed, and in almost total darkness. By opening a shutter they admitted what daylight they could. At first sight the wretched place seemed to be deserted; the little grate contained the ashes of a fire long since extinguished; all looked black and desolate. Another instant's investigation, however, revealed a bed in the extreme corner, and extended on the bed a human form.

"Dead!" sighed Servadac; "dead of cold and hunger!"

Lieutenant Procope bent down and anxiously contemplated the body.

"No; he is alive!" he said, and drawing a small flask from his pocket he poured a few drops of brandy between the lips of the senseless man.

There was a faint sigh, followed by a feeble voice, which uttered the one word, "Gallia?"

"Yes, yes! Gallia!" echoed Servadac, eagerly.

"My comet, my comet!" said the voice, so low as to be almost inaudible, and the unfortunate man relapsed again into unconsciousness.

"Where have I seen this man?" thought Servadac to himself; "his face is strangely familiar to me."

But it was no time for deliberation. Not a moment was to be lost in getting the unconscious astronomer away from his desolate quarters. He was soon conveyed to the yawl; his books, his scanty wardrobe, his papers, his instruments, and the blackboard which had served for his calculations, were quickly collected; the wind, by a fortuitous Providence, had shifted into a favorable quarter; they set their sail with all speed, and ere long were on their journey back from Formentera.

Thirty-six hours later, the brave travelers were greeted by the acclamations of their fellow-colonists, who had been most anxiously awaiting their reappearance, and the still senseless _savant_, who had neither opened his eyes nor spoken a word throughout the journey, was safely deposited in the warmth and security of the great hall of Nina's Hive.

END OF FIRST BOOK

BOOK II.

CHAPTER I. THE ASTRONOMER

By the return of the expedition, conveying its contribution from Formentera, the known population of Gallia was raised to a total of thirty-six.

On learning the details of his friends' discoveries, Count Timascheff did not hesitate in believing that the exhausted individual who was lying before him was the author alike of the two unsigned documents picked up at sea, and of the third statement so recently brought to hand by the carrier-pigeon. Manifestly, he had arrived at some knowledge of Gallia's movements: he had estimated her distance from the sun; he had calculated the diminution of her tangential speed; but there was nothing to show that he had arrived at the conclusions which were of the most paramount interest to them all. Had he ascertained the true character of her orbit? had he established any data from which it would be possible to reckon what time must elapse before she would again approach the earth?

The only intelligible words which the astronomer had uttered had been, "My comet!"

To what could the exclamation refer? Was it to be conjectured that a fragment of the earth had been chipped off by the collision of a comet? and if so, was it implied that the name of the comet itself was Gallia, and were they mistaken in supposing that such was the name given by the _savant_ to the little world that had been so suddenly launched into space? Again and again they discussed these questions; but no satisfactory answer could be found. The only man who was able to throw any light upon the subject was lying amongst them in an unconscious and half-dying condition.

Apart from motives of humanity, motives of self-interest made it a matter of the deepest concern to restore animation to that senseless form. Ben Zoof, after making the encouraging remark that _savants_ have as many lives as a cat, proceeded, with Negrete's assistance, to give the body such a vigorous rubbing as would have threatened serious injury to any ordinary mortal, whilst they administered cordials and restoratives from the _Dobryna's_ medical stores powerful enough, one might think, to rouse the very dead.

Meanwhile the captain was racking his brain in his exertions to recall what were the circumstances of his
previous acquaintance with the Frenchman upon whose features he was gazing; he only grew more and more convinced that he had once been familiar with them. Perhaps it was not altogether surprising that he had almost forgotten him; he had never seen him since the days of his youth, that time of life which, with a certain show of justice, has been termed the age of ingratitude; for, in point of fact, the astronomer was none other than Professor Palmyrin Rosette, Servadac's old science-master at the Lycee Charlemagne.

After completing his year of elementary studies, Hector Servadac had entered the school at Saint Cyr, and from that time he and his former tutor had never met, so that naturally they would well-nigh pass from each other's recollection. One thing, however, on the other hand, might conduce to a mutual and permanent impression on their memories; during the year at the Lycee, young Servadac, never of a very studious turn of mind, had contrived, as the ringleader of a set of like caliber as himself, to lead the poor professor a life of perpetual torment. On the discovery of each delinquency he would fume and rage in a manner that was a source of unbounded delight to his audience.

Two years after Servadac left the Lycee, Professor Rosette had thrown up all educational employment in order that he might devote himself entirely to the study of astronomy. He endeavored to obtain a post at the Observatory, but his ungenial character was so well known in scientific circles that he failed in his application; however, having some small private means, he determined on his own account to carry on his researches without any official salary. He had really considerable genius for the science that he had adopted; besides discovering three of the latest of the telescopic planets, he had worked out the elements of the three hundred and twenty-fifth comet in the catalogue; but his chief delight was to criticize the publications of other astronomers, and he was never better pleased than when he detected a flaw in their reckonings.

When Ben Zoof and Negrete had extricated their patient from the envelope of furs in which he had been wrapped by Servadac and the lieutenant, they found themselves face to face with a shrivelled little man, about five feet two inches high, with a round bald head, smooth and shiny as an ostrich's egg, no beard unless the unshorn growth of a week could be so described, and a long hooked nose that supported a huge pair of spectacles such as with many near-sighted people seems to have become a part of their individuality. His nervous system was remarkably developed, and his body might not inaptly be compared to one of the Rhumkorff's bobbins of which the thread, several hundred yards in length, is permeated throughout by electric fluid. But whatever he was, his life, if possible, must be preserved. When he had been partially divested of his clothing, his heart was found to be still beating, though very feebly. Asserting that while there was life there was hope, Ben Zoof recommenced his friction with more vigor than ever.

When the rubbing had been continued without a moment's intermission for the best part of half an hour, the astronomer heaved a faint sigh, which ere long was followed by another and another. He half opened his eyes, closed them again, then opened them completely, but without exhibiting any consciousness whatever of his situation. A few words seemed to escape his lips, but they were quite unintelligible. Presently he raised his right hand to his forehead as though instinctively feeling for something that was missing; then, all of a sudden, his features became contracted, his face flushed with apparent irritation, and he exclaimed fretfully, "My spectacles!--where are my spectacles?"

In order to facilitate his operations, Ben Zoof had removed the spectacles in spite of the tenacity with which they seemed to adhere to the temples of his patient; but he now rapidly brought them back and readjusted them as best he could to what seemed to be their natural position on the aquiline nose. The professor heaved a long sigh of relief, and once more closed his eyes.

Before long the astronomer roused himself a little more, and glanced inquiringly about him, but soon relapsed into his comatose condition. When next he opened his eyes, Captain Servadac happened to be bending down closely over him, examining his features with curious scrutiny. The old man darted an angry look at him through the spectacles, and said sharply, "Servadac, five hundred lines to-morrow!"

It was an echo of days of old. The words were few, but they were enough to recall the identity which Servadac was trying to make out.

"Is it possible?" he exclaimed. "Here is my old tutor, Mr. Rosette, in very flesh and blood."

"Can't say much for the flesh," muttered Ben Zoof.

The old man had again fallen back into a torpid slumber. Ben Zoof continued, "His sleep is getting more composed. Let him alone; he will come round yet. Haven't I heard of men more dried up than he is, being brought all the way from Egypt in cases covered with pictures?"

"You idiot!--those were mummies; they had been dead for ages."

Ben Zoof did not answer a word. He went on preparing a warm bed, into which he managed to remove his patient, who soon fell into a calm and natural sleep.

Too impatient to await the awakening of the astronomer and to hear what representations he had to make, Servadac, the count, and the lieutenant, constituting themselves what might be designated "the Academy of
Sciences" of the colony, spent the whole of the remainder of the day in starting and discussing the wildest conjectures about their situation. The hypothesis, to which they had now accustomed themselves for so long, that a new asteroid had been formed by a fracture of the earth's surface, seemed to fall to the ground when they found that Professor Palmyrin Rosette had associated the name of Gallia, not with their present home, but with what he called "my comet"; and that theory being abandoned, they were driven to make the most improbable speculations to replace it.

Alluding to Rosette, Servadac took care to inform his companions that, although the professor was always eccentric, and at times very irascible, yet he was really exceedingly good-hearted; his bark was worse than his bite; and if suffered to take their course without observation, his outbreaks of ill-temper seldom lasted long.

"We will certainly do our best to get on with him," said the count. "He is no doubt the author of the papers, and we must hope that he will be able to give us some valuable information."

"Beyond a question the documents have originated with him," assented the lieutenant. "Gallia was the word written at the top of every one of them, and Gallia was the first word uttered by him in our hearing."

The astronomer slept on. Meanwhile, the three together had no hesitation in examining his papers, and scrutinizing the figures on his extemporized blackboard. The handwriting corresponded with that of the papers already received; the blackboard was covered with algebraical symbols traced in chalk, which they were careful not to obliterate; and the papers, which consisted for the most part of detached scraps, presented a perfect wilderness of geometrical figures, conic sections of every variety being repeated in countless profusion.

Lieutenant Procope pointed out that these curves evidently had reference to the orbits of comets, which are variously parabolic, hyperbolic, or elliptic. If either of the first two, the comet, after once appearing within the range of terrestrial vision, would vanish forever in the outlying regions of space; if the last, it would be sure, sooner or later, after some periodic interval, to return.

From the _prima facie_ appearance of his papers, then, it seemed probable that the astronomer, during his sojourn at Formentera, had been devoting himself to the study of cometary orbits; and as calculations of this kind are ordinarily based upon the assumption that the orbit is a parabola, it was not unlikely that he had been endeavoring to trace the path of some particular comet.

"I wonder whether these calculations were made before or after the 1st of January; it makes all the difference," said Lieutenant Procope.

"We must bide our time and hear," replied the count.

Servadac paced restlessly up and down. "I would give a month of my life," he cried, impetuously, "for every hour that the old fellow goes sleeping on."

"You might be making a bad bargain," said Procope, smiling. "Perhaps after all the comet has had nothing to do with the convulsion that we have experienced."

"Nonsense!" exclaimed the captain; "I know better than that, and so do you. Is it not as clear as daylight that the earth and this comet have been in collision, and the result has been that our little world has been split off and sent flying far into space?"

Count Timascheff and the lieutenant looked at each other in silence. "I do not deny your theory," said Procope after a while. "If it be correct, I suppose we must conclude that the enormous disc we observed on the night of the catastrophe was the comet itself; and the velocity with which it was traveling must have been so great that it was hardly arrested at all by the attraction of the earth."

"Plausible enough," answered Count Timascheff; "and it is to this comet that our scientific friend here has given the name of Gallia."

It still remained a puzzle to them all why the astronomer should apparently be interested in the comet so much more than in the new little world in which their strange lot was cast.

"Can you explain this?" asked the count.

"There is no accounting for the freaks of philosophers, you know," said Servadac; "and have I not told you that this philosopher in particular is one of the most eccentric beings in creation?"

"Besides," added the lieutenant, "it is exceedingly likely that his observations had been going on for some considerable period before the convulsion happened."

Thus, the general conclusion arrived at by the Gallian Academy of Science was this: That on the night of the 31st of December, a comet, crossing the ecliptic, had come into collision with the earth, and that the violence of the shock had separated a huge fragment from the globe, which fragment from that date had been traversing the remote inter-planetary regions. Palmyrin Rosette would doubtless confirm their solution of the phenomenon.

CHAPTER II. A REVELATION
To the general population of the colony the arrival of the stranger was a matter of small interest. The Spaniards were naturally too indolent to be affected in any way by an incident that concerned themselves so remotely; while the Russians felt themselves simply reliant on their master, and as long as they were with him were careless as to where or how they spent their days. Everything went on with them in an accustomed routine; and they lay down night after night, and awoke to their avocations morning after morning, just as if nothing extraordinary had occurred.

All night long Ben Zoof would not leave the professor's bedside. He had constituted himself sick nurse, and considered his reputation at stake if he failed to set his patient on his feet again. He watched every movement, listened to every breath, and never failed to administer the strongest cordials upon the slightest pretext. Even in his sleep Rosette's irritable nature revealed itself. Ever and again, sometimes in a tone of uneasiness, and sometimes with the expression of positive anger, the name of Gallia escaped his lips, as though he were dreaming that his claim to the discovery of the comet was being contested or denied; but although his attendant was on the alert to gather all he could, he was able to catch nothing in the incoherent sentences that served to throw any real light upon the problem that they were all eager to solve.

When the sun reappeared on the western horizon the professor was still sound asleep; and Ben Zoof, who was especially anxious that the repose which promised to be so beneficial should not be disturbed, felt considerable annoyance at hearing a loud knocking, evidently of some blunt heavy instrument against a door that had been placed at the entrance of the gallery, more for the purpose of retaining internal warmth than for guarding against intrusion from without.

"Confound it!" said Ben Zoof. "I must put a stop to this;" and he made his way towards the door.
"Who's there?" he cried, in no very amiable tone.
"I." replied the quavering voice.
"Who are you?"
"Isaac Hakkabut. Let me in; do, please, let me in."
"Oh, it is you, old Ashtaroth, is it? What do you want? Can't you get anybody to buy your stuffs?"
"Nobody will pay me a proper price."
"Well, old Shimei, you won't find a customer here. You had better be off."
"No; but do, please--do, please, let me in," supplicated the Jew. "I want to speak to his Excellency, the governor."
"The governor is in bed, and asleep."
"I can wait until he awakes."
"Then wait where you are."

And with this inhospitable rejoinder the orderly was about to return to his place at the side of his patient, when Servadac, who had been roused by the sound of voices, called out, "What's the matter, Ben Zoof?"
"Oh, nothing, sir; only that hound of a Hakkabut says he wants to speak to you."
"Let him in, then."

Ben Zoof hesitated.
"Let him in, I say," repeated the captain, peremptorily.
However reluctantly, Ben Zoof obeyed. The door was unfastened, and Isaac Hakkabut, enveloped in an old overcoat, shuffled into the gallery. In a few moments Servadac approached, and the Jew began to overwhelm him with the most obsequious epithets. Without vouchsafing any reply, the captain beckoned to the old man to follow him, and leading the way to the central hall, stopped, and turning so as to look him steadily in the face, said, "Now is your opportunity. Tell me what you want."

"Oh, my lord, my lord," whined Isaac, "you must have some news to tell me."
"News? What do you mean?"
"From my little tartan yonder, I saw the yawl go out from the rock here on a journey, and I saw it come back, and it brought a stranger; and I thought--I thought--I thought--"
"Well, you thought--what did you think?"
"Why, that perhaps the stranger had come from the northern shores of the Mediterranean, and that I might ask him--"

He paused again, and gave a glance at the captain.
"Ask him what? Speak out, man?"
"Ask him if he brings any tidings of Europe," Hakkabut blurted out at last.

Servadac shrugged his shoulders in contempt and turned away. Here was a man who had been resident three months in Gallia, a living witness of all the abnormal phenomena that had occurred, and yet refusing to believe that his hope of making good bargains with European traders was at an end. Surely nothing, thought the captain, will convince the old rascal now; and he moved off in disgust. The orderly, however, who had listened with much
amusement, was by no means disinclined for the conversation to be continued. "Are you satisfied, old Ezekiel?" he asked.

"Isn't it so? Am I not right? Didn't a stranger arrive here last night?" inquired the Jew.

"Yes, quite true."

"Where from?"

"From the Balearic Isles."

"The Balearic Isles?" echoed Isaac.

"Yes."

"Fine quarters for trade! Hardly twenty leagues from Spain! He must have brought news from Europe!"

"Well, old Manasseh, what if he has?"

"I should like to see him."

"Can't be."

The Jew sidled close up to Ben Zoof, and laying his hand on his arm, said in a low and insinuating tone, "I am poor, you know; but I would give you a few reals if you would let me talk to this stranger."

But as if he thought he was making too liberal an offer, he added, "Only it must be at once."

"He is too tired; he is worn out; he is fast asleep," answered Ben Zoof.

"But I would pay you to wake him."

The captain had overheard the tenor of the conversation, and interposed sternly, "Hakkabut! if you make the least attempt to disturb our visitor, I shall have you turned outside that door immediately."

"No offense, my lord, I hope," stammered out the Jew. "I only meant--"

"Silence!" shouted Servadac. The old man hung his head, abashed.

"I will tell you what," said Servadac after a brief interval; "I will give you leave to hear what this stranger has to tell as soon as he is able to tell us anything; at present we have not heard a word from his lips."

The Jew looked perplexed.

"Yes," said Servadac; "when we hear his story, you shall hear it too."

"And I hope it will be to your liking, old Ezekiel!" added Ben Zoof in a voice of irony.

They had none of them long to wait, for within a few minutes Rosette's peevish voice was heard calling, "Joseph! Joseph!"

The professor did not open his eyes, and appeared to be slumbering on, but very shortly afterwards called out again, "Joseph! Confound the fellow! where is he?" It was evident that he was half dreaming about a former servant now far away on the ancient globe. "Where's my blackboard, Joseph?"

"Quite safe, sir," answered Ben Zoof, quickly.

Rosette unclosed his eyes and fixed them full upon the orderly's face. "Are you Joseph?" he asked.

"At your service, sir," replied Ben Zoof with imperturbable gravity.

"Then get me my coffee, and be quick about it."

Ben Zoof left to go into the kitchen, and Servadac approached the professor in order to assist him in rising to a sitting posture.

"Do you recognize your quondam pupil, professor?" he asked.

"Ah, yes, yes; you are Servadac," replied Rosette. "It is twelve years or more since I saw you; I hope you have improved."

"Quite a reformed character, sir, I assure you," said Servadac, smiling.

"Well, that's as it should be; that's right," said the astronomer with fussy importance. "But let me have my coffee," he added impatiently; "I cannot collect my thoughts without my coffee."

Fortunately, Ben Zoof appeared with a great cup, hot and strong. After draining it with much apparent relish, the professor got out of bed, walked into the common hall, round which he glanced with a pre-occupied air, and proceeded to seat himself in an armchair, the most comfortable which the cabin of the _Dobryna_ had supplied. Then, in a voice full of satisfaction, and that involuntarily recalled the exclamations of delight that had wound up the two first of the mysterious documents that had been received, he burst out, "Well, gentlemen, what do you think of Gallia?"

There was no time for anyone to make a reply before Isaac Hakkabut had darted forward.

"By the God--"

"Who is that?" asked the startled professor; and he frowned, and made a gesture of repugnance.

Regardless of the efforts that were made to silence him, the Jew continued, "By the God of Abraham, I beseech you, give me some tidings of Europe!"

"Europe?" shouted the professor, springing from his seat as if he were electrified; "what does the man want with Europe?"
"I want to get there!" screeched the Jew; and in spite of every exertion to get him away, he clung most tenaciously to the professor's chair, and again and again implored for news of Europe.

Rosette made no immediate reply. After a moment or two's reflection, he turned to Servadac and asked him whether it was not the middle of April.

"It is the twentieth," answered the captain.

"Then to-day," said the astronomer, speaking with the greatest deliberation--"to-day we are just three millions of leagues away from Europe."

The Jew was utterly crestfallen.

"You seem here," continued the professor, "to be very ignorant of the state of things."

"How far we are ignorant," rejoined Servadac, "I cannot tell. But I will tell you all that we do know, and all that we have surmised." And as briefly as he could, he related all that had happened since the memorable night of the thirty-first of December; how they had experienced the shock; how the _Dobryna_ had made her voyage; how they had discovered nothing except the fragments of the old continent at Tunis, Sardinia, Gibraltar, and now at Formentera; how at intervals the three anonymous documents had been received; and, finally, how the settlement at Gourbi Island had been abandoned for their present quarters at Nina's Hive.

The astronomer had hardly patience to hear him to the end. "And what do you say is your surmise as to your present position?" he asked.

"Our supposition," the captain replied, "is this. We imagine that we are on a considerable fragment of the terrestrial globe that has been detached by collision with a planet to which you appear to have given the name of Gallia."

"Better than that!" cried Rosette, starting to his feet with excitement.

"How? Why? What do you mean?" cried the voices of the listeners.

"You are correct to a certain degree," continued the professor. "It is quite true that at 47° 35.6" after two o'clock on the morning of the first of January there was a collision; my comet grazed the earth; and the bits of the earth which you have named were carried clean away."

They were all fairly bewildered.

"Where, then," cried Servadac eagerly, "where are we?"

"You are on my comet, on Gallia itself!"

And the professor gazed around him with a perfect air of triumph.

CHAPTER III. THE PROFESSOR'S EXPERIENCES

"Yes, my comet!" repeated the professor, and from time to time he knitted his brows, and looked around him with a defiant air, as though he could not get rid of the impression that someone was laying an unwarranted claim to its proprietorship, or that the individuals before him were intruders upon his own proper domain.

But for a considerable while, Servadac, the count, and the lieutenant remained silent and sunk in thought. Here then, at last, was the unriddling of the enigma they had been so long endeavoring to solve; both the hypotheses they had formed in succession had now to give way before the announcement of the real truth. The first supposition, that the rotatory axis of the earth had been subject to some accidental modification, and the conjecture that replaced it, namely, that a certain portion of the terrestrial sphere had been splintered off and carried into space, had both now to yield to the representation that the earth had been grazed by an unknown comet, which had caught up some scattered fragments from its surface, and was bearing them far away into sidereal regions. Unfolded lay the past and the present before them; but this only served to awaken a keener interest about the future. Could the professor throw any light upon that? they longed to inquire, but did not yet venture to ask him.

Meanwhile Rosette assumed a pompous professional air, and appeared to be waiting for the entire party to be ceremoniously introduced to him. Nothing unwilling to humor the vanity of the eccentric little man, Servadac proceeded to go through the expected formalities.

"Allow me to present to you my excellent friend, the Count Timascheff," he said.

"You are very welcome," said Rosette, bowing to the count with a smile of condescension.

"Although I am not precisely a voluntary resident on your comet, Mr. Professor, I beg to acknowledge your courteous reception," gravely responded Timascheff.

Servadac could not quite conceal his amusement at the count's irony, but continued, "This is Lieutenant Procope, the officer in command of the _Dobryna_."

The professor bowed again in frigid dignity.

"His yacht has conveyed us right round Gallia," added the captain.

"Round Gallia?" eagerly exclaimed the professor.
"Yes, entirely round it," answered Servadac, and without allowing time for reply, proceeded, "And this is my orderly, Ben Zoof."

"Aide-de-camp to his Excellency the Governor of Gallia," interposed Ben Zoof himself, anxious to maintain his master's honor as well as his own.

Rosette scarcely bent his head.

The rest of the population of the Hive were all presented in succession: the Russian sailors, the Spaniards, young Pablo, and little Nina, on whom the professor, evidently no lover of children, glared fiercely through his formidable spectacles. Isaac Hakkabut, after his introduction, begged to be allowed to ask one question.

"How soon may we hope to get back?" he inquired.

"Get back!" rejoined Rosette, sharply; "who talks of getting back? We have hardly started yet."

Seeing that the professor was inclined to get angry, Captain Servadac adroitly gave a new turn to the conversation by asking him whether he would gratify them by relating his own recent experiences. The astronomer seemed pleased with the proposal, and at once commenced a verbose and somewhat circumlocutory address, of which the following summary presents the main features.

The French Government, being desirous of verifying the measurement already made of the arc of the meridian of Paris, appointed a scientific commission for that purpose. From that commission the name of Palmyrin Rosette was omitted, apparently for no other reason than his personal unpopularity. Furious at the slight, the professor resolved to set to work independently on his own account, and declaring that there were inaccuracies in the previous geodesic operations, he determined to re-examine the results of the last triangulation which had united Formentera to the Spanish coast by a triangle, one of the sides of which measured over a hundred miles, the very operation which had already been so successfully accomplished by Arago and Biot.

Accordingly, leaving Paris for the Balearic Isles, he placed his observatory on the highest point of Formentera, and accompanied as he was only by his servant, Joseph, led the life of a recluse. He secured the services of a former assistant, and dispatched him to a high peak on the coast of Spain, where he had to superintend a reverberator, which, with the aid of a glass, could be seen from Formentera. A few books and instruments, and two months' victuals, was all the baggage he took with him, except an excellent astronomical telescope, which was, indeed, almost part and parcel of himself, and with which he assiduously scanned the heavens, in the sanguine anticipation of making some discovery which would immortalize his name.

The task he had undertaken demanded the utmost patience. Night after night, in order to fix the apex of his triangle, he had to linger on the watch for the assistant's signal-light, but he did not forget that his predecessors, Arago and Biot, had had to wait sixty-one days for a similar purpose. What retarded the work was the dense fog which, it has been already mentioned, at that time enveloped not only that part of Europe, but almost the entire world.

Never failing to turn to the best advantage the few intervals when the mist lifted a little, the astronomer would at the same time cast an inquiring glance at the firmament, as he was greatly interested in the revision of the chart of the heavens, in the region contiguous to the constellation Gemini.

To the naked eye this constellation consists of only six stars, but through a telescope ten inches in diameter, as many as six thousand are visible. Rosette, however, did not possess a reflector of this magnitude, and was obliged to content himself with the good but comparatively small instrument he had.

On one of these occasions, whilst carefully gauging the recesses of Gemini, he espied a bright speck which was unregistered in the chart, and which at first he took for a small star that had escaped being entered in the catalogue.

But the observation of a few separate nights soon made it manifest that the star was rapidly changing its position with regard to the adjacent stars, and the astronomer's heart began to leap at the thought that the renown of the discovery of a new planet would be associated with his name.

Redoubling his attention, he soon satisfied himself that what he saw was not a planet; the rapidity of its displacement rather forced him to the conjecture that it must be a comet, and this opinion was soon strengthened by the appearance of a coma, and subsequently confirmed, as the body approached the sun, by the development of a tail.

A comet! The discovery was fatal to all further progress in the triangulation. However conscientiously the assistant on the Spanish coast might look to the kindling of the beacon, Rosette had no glances to spare for that direction; he had no eyes except for the one object of his notice, no thoughts apart from that one quarter of the firmament.

A comet! No time must be lost in calculating its elements.

Now, in order to calculate the elements of a comet, it is always deemed the safest mode of procedure to assume the orbit to be a parabola. Ordinarily, comets are conspicuous at their perihelia, as being their shortest distances from the sun, which is the focus of their orbit, and inasmuch as a parabola is but an ellipse with its axis indefinitely
produced, for some short portion of its pathway the orbit may be indifferently considered either one or the other; but
in this particular case the professor was right in adopting the supposition of its being parabolic.

Just as in a circle, it is necessary to know three points to determine the circumference; so in ascertaining the
elements of a comet, three different positions must be observed before what astronomers call its "ephemeris" can be
established.

But Professor Rosette did not content himself with three positions; taking advantage of every rift in the fog he
made ten, twenty, thirty observations both in right ascension and in declination, and succeeded in working out with
the most minute accuracy the five elements of the comet which was evidently advancing with astounding rapidity
towards the earth.

These elements were:
1. The inclination of the plane of the cometary orbit to the plane of the ecliptic, an angle which is generally
    considerable, but in this case the planes were proved to coincide.
2. The position of the ascending node, or the point where the comet crossed the terrestrial orbit.
   These two elements being obtained, the position in space of the comet's orbit was determined.
3. The direction of the axis major of the orbit, which was found by calculating the longitude of the comet's
    perihelion.
4. The perihelion distance from the sun, which settled the precise form of the parabola.
5. The motion of the comet, as being retrograde, or, unlike the planets, from east to west.

Rosette thus found himself able to calculate the date at which the comet would reach its perihelion, and,
overjoyed at his discovery, without thinking of calling it Palmyra or Rosette, after his own name, he resolved that it
should be known as Gallia.

His next business was to draw up a formal report. Not only did he at once recognize that a collision with the
earth was possible, but he soon foresaw that it was inevitable, and that it must happen on the night of the 31st of
December; moreover, as the bodies were moving in opposite directions, the shock could hardly fail to be violent.

To say that he was elated at the prospect was far below the truth; his delight amounted almost to delirium.
Anyone else would have hurried from the solitude of Formentera in sheer fright; but, without communicating a word
of his startling discovery, he remained resolutely at his post. From occasional newspapers which he had received, he
had learnt that fogs, dense as ever, continued to envelop both hemispheres, so that he was assured that the existence
of the comet was utterly unknown elsewhere; and the ignorance of the world as to the peril that threatened it averted
the panic that would have followed the publication of the facts, and left the philosopher of Formentera in sole
possession of the great secret. He clung to his post with the greater persistency, because his calculations had led him
to the conclusion that the comet would strike the earth somewhere to the south of Algeria, and as it had a solid
nucleus, he felt sure that, as he expressed it, the effect would be "unique," and he was anxious to be in the vicinity.

The shock came, and with it the results already recorded. Palmyrin Rosette was suddenly separated from his
servant Joseph, and when, after a long period of unconsciousness, he came to himself, he found that he was the
solitary occupant of the only fragment that survived of the Balearic Archipelago.

Such was the substance of the narrative which the professor gave with sundry repetitions and digressions; while
he was giving it, he frequently paused and frowned as if irritated in a way that seemed by no means justified by the
patient and good-humored demeanor of his audience.

"But now, gentlemen," added the professor, "I must tell you something more. Important changes have resulted
from the collision; the cardinal points have been displaced; gravity has been diminished: not that I ever supposed for
a minute, as you did, that I was still upon the earth. No! the earth, attended by her moon, continued to rotate along
her proper orbit. But we, gentlemen, have nothing to complain of; our destiny might have been far worse; we might
all have been crushed to death, or the comet might have remained in adhesion to the earth; and in neither of these
cases should we have had the satisfaction of making this marvelous excursion through untraversed solar regions. No,
gentlemen, I repeat it, we have nothing to regret."

And as the professor spoke, he seemed to kindle with the emotion of such supreme contentment that no one had
the heart to gainsay his assertion. Ben Zoof alone ventured an unlucky remark to the effect that if the comet had
happened to strike against Montmartre, instead of a bit of Africa, it would have met with some resistance.

"Pshaw!" said Rosette, disdainfully. "A mole-hill like Montmartre would have been ground to powder in a
moment."

"Mole-hill!" exclaimed Ben Zoof, stung to the quick. "I can tell you it would have caught up your bit of a comet
and worn it like a feather in a cap."

The professor looked angry, and Servadac having imposed silence upon his orderly, explained the worthy
soldier's sensitiveness on all that concerned Montmartre. Always obedient to his master, Ben Zoof held his tongue;
but he felt that he could never forgive the slight that had been cast upon his beloved home.
It was now all-important to learn whether the astronomer had been able to continue his observations, and whether he had learned sufficient of Gallia's path through space to make him competent to determine, at least approximately, the period of its revolution round the sun. With as much tact and caution as he could, Lieutenant Procope endeavored to intimate the general desire for some information on this point.

"Before the shock, sir," answered the professor, "I had conclusively demonstrated the path of the comet; but, in consequence of the modifications which that shock has entailed upon my comet's orbit, I have been compelled entirely to recommence my calculations."

The lieutenant looked disappointed.

"Although the orbit of the earth was unaltered," continued the professor, "the result of the collision was the projection of the comet into a new orbit altogether."

"And may I ask," said Procope, deferentially, "whether you have got the elements of the fresh orbit?"

"Yes."

"Then perhaps you know--"

"I know this, sir, that at 47 minutes 35.6 seconds after two o'clock on the morning of the 1st of January last, Gallia, in passing its ascending node, came in contact with the earth; that on the 10th of January it crossed the orbit of Venus; that it reached its perihelion on the 15th; that it re-crossed the orbit of Venus; that on the 1st of February it passed its descending node; on the 13th crossed the orbit of Mars; entered the zone of the telescopic planets on the 10th of March, and, attracting Nerina, carried it off as a satellite."

Servadac interposed:

"We are already acquainted with well-nigh all these extraordinary facts; many of them, moreover, we have learned from documents which we have picked up, and which, although unsigned, we cannot entertain a doubt have originated with you."

Professor Rosette drew himself up proudly and said: "Of course, they originated with me. I sent them off by hundreds. From whom else could they come?"

"From no one but yourself, certainly," rejoined the count, with grave politeness.

Hitherto the conversation had thrown no light upon the future movements of Gallia, and Rosette was disposed apparently to evade, or at least to postpone, the subject. When, therefore, Lieutenant Procope was about to press his inquiries in a more categorical form, Servadac, thinking it advisable not prematurely to press the little _savant_ too far, interrupted him by asking the professor how he accounted for the earth having suffered so little from such a formidable concussion.

"I account for it in this way," answered Rosette: "the earth was traveling at the rate of 28,000 leagues an hour, and Gallia at the rate of 57,000 leagues an hour, therefore the result was the same as though a train rushing along at a speed of about 86,000 leagues an hour had suddenly encountered some obstacle. The nucleus of the comet, being excessively hard, has done exactly what a ball would do fired with that velocity close to a pane of glass. It has crossed the earth without cracking it."

"It is possible you may be right," said Servadac, thoughtfully.

"Right! of course I am right!" replied the snappish professor. Soon, however, recovering his equanimity, he continued: "It is fortunate that the earth was only touched obliquely; if the comet had impinged perpendicularly, it must have plowed its way deep below the surface, and the disasters it might have caused are beyond reckoning. Perhaps," he added, with a smile, "even Montmartre might not have survived the calamity."

"Sir!" shouted Ben Zoof, quite unable to bear the unprovoked attack.

"Quiet, Ben Zoof!" said Servadac sternly.

Fortunately for the sake of peace, Isaac Hakkabut, who at length was beginning to realize something of the true condition of things, came forward at this moment, and in a voice trembling with eagerness, implored the professor to tell him when they would all be back again upon the earth.

"Are you in a great hurry?" asked the professor coolly.

The Jew was about to speak again, when Captain Servadac interposed: "Allow me to say that, in somewhat more scientific terms, I was about to ask you the same question. Did I not understand you to say that, as the consequence of the collision, the character of the comet's orbit has been changed?"

"You did, sir."

"Did you imply that the orbit has ceased to be a parabola?"

"Just so."

"Is it then a hyperbola? and are we to be carried on far and away into remote distance, and never, never to return?"

"I did not say an hyperbola."

"And is it not?"
"It is not."
"Then it must be an ellipse?"
"Yes."
"And does its plane coincide with the plane of the earth?"
"Yes."
"Then it must be a periodic comet?"
"It is."
Servadac involuntarily raised a ringing shout of joy that echoed again along the gallery.
"Yes," continued the professor, "Gallia is a periodic comet, and allowing for the perturbations to which it is liable from the attraction of Mars and Jupiter and Saturn, it will return to the earth again in two years precisely."
"You mean that in two years after the first shock, Gallia will meet the earth at the same point as they met before?" said Lieutenant Procope.
"I am afraid so," said Rosette.
"Why afraid?"
"Because we are doing exceedingly well as we are." The professor stamped his foot upon the ground, by way of emphasis, and added, "If I had my will, Gallia should never return to the earth again!"

CHAPTER IV. A REVISED CALENDAR

All previous hypotheses, then, were now forgotten in the presence of the one great fact that Gallia was a comet and gravitating through remote solar regions. Captain Servadac became aware that the huge disc that had been looming through the clouds after the shock was the form of the retreating earth, to the proximity of which the one high tide they had experienced was also to be attributed.

As to the fulfillment of the professor's prediction of an ultimate return to the terrestrial sphere, that was a point on which it must be owned that the captain, after the first flush of his excitement was over, was not without many misgivings.

The next day or two were spent in providing for the accommodation of the new comer. Fortunately his desires were very moderate; he seemed to live among the stars, and as long as he was well provided with coffee, he cared little for luxuries, and paid little or no regard to the ingenuity with which all the internal arrangements of Nina's Hive had been devised. Anxious to show all proper respect to his former tutor, Servadac proposed to leave the most comfortable apartment of the place at his disposal; but the professor resolutely declined to occupy it, saying that what he required was a small chamber, no matter how small, provided that it was elevated and secluded, which he could use as an observatory and where he might prosecute his studies without disturbance. A general search was instituted, and before long they were lucky enough to find, about a hundred feet above the central grotto, a small recess or reduct hollowed, as it were, in the mountain side, which would exactly answer their purpose. It contained room enough for a bed, a table, an arm-chair, a chest of drawers, and, what was of still more consequence, for the indispensable telescope. One small stream of lava, an off-shoot of the great torrent, sufficed to warm the apartment enough.

In these retired quarters the astronomer took up his abode. It was on all hands acknowledged to be advisable to let him go on entirely in his own way. His meals were taken to him at stated intervals; he slept but little; carried on his calculations by day, his observations by night, and very rarely made his appearance amongst the rest of the little community.

The cold now became very intense, the thermometer registering 30 degrees F. below zero. The mercury, however, never exhibited any of those fluctuations that are ever and again to be observed in variable climates, but continued slowly and steadily to fall, and in all probability would continue to do so until it reached the normal temperature of the regions of outlying space.

This steady sinking of the mercury was accompanied by a complete stillness of the atmosphere; the very air seemed to be congealed; no particle of it stirred; from zenith to horizon there was never a cloud; neither were there any of the damp mists or dry fogs which so often extend over the polar regions of the earth; the sky was always clear; the sun shone by day and the stars by night without causing any perceptible difference in the temperature.

These peculiar conditions rendered the cold endurable even in the open air. The cause of so many of the diseases that prove fatal to Arctic explorers resides in the cutting winds, unwholesome fogs, or terrible snow drifts, which, by drying up, relaxing, or otherwise affecting the lungs, make them incapable of fulfilling their proper functions. But during periods of calm weather, when the air has been absolutely still, many polar navigators, well-clothed and properly fed, have been known to withstand a temperature when the thermometer has fallen to 60 degrees below zero. It was the experience of Parry upon Melville Island, of Kane beyond latitude 81 degrees north, and of Hall and
the crew of the _Polaris_, that, however intense the cold, in the absence of the wind they could always brave its rigor.

Notwithstanding, then, the extreme lowness of the temperature, the little population found that they were able to move about in the open air with perfect immunity. The governor general made it his special care to see that his people were all well fed and warmly clad. Food was both wholesome and abundant, and besides the furs brought from the _Dobryna's_ stores, fresh skins could very easily be procured and made up into wearing apparel. A daily course of out-door exercise was enforced upon everyone; not even Pablo and Nina were exempted from the general rule; the two children, muffled up in furs, looking like little Esquimeaux, skated along together, Pablo ever at his companion's side, ready to give her a helping hand whenever she was weary with her exertions.

After his interview with the newly arrived astronomer, Isaac Hakkabut slunk back again to his tartan. A change had come over his ideas; he could no longer resist the conviction that he was indeed millions and millions of miles away from the earth, where he had carried on so varied and remunerative a traffic. It might be imagined that this realization of his true position would have led him to a better mind, and that, in some degree at least, he would have been induced to regard the few fellow-creatures with whom his lot had been so strangely cast, otherwise than as mere instruments to be turned to his own personal and pecuniary advantage; but no--the desire of gain was too thoroughly ingrained into his hard nature ever to be eradicated, and secure in his knowledge that he was under the protection of a French officer, who, except under the most urgent necessity, would not permit him to be molested in retaining his property, he determined to wait for some emergency to arise which should enable him to use his present situation for his own profit.

On the one hand, the Jew took it into account that although the chances of returning to the earth might be remote, yet from what he had heard from the professor he could not believe that they were improbable; on the other, he knew that a considerable sum of money, in English and Russian coinage, was in the possession of various members of the little colony, and this, although valueless now, would be worth as much as ever if the proper condition of things should be restored; accordingly, he set his heart on getting all the monetary wealth of Gallia into his possession, and to do this he must sell his goods. But he would not sell them yet; there might come a time when for many articles the supply would not be equal to the demand; that would be the time for him; by waiting he reckoned he should be able to transact some lucrative business.

Such in his solitude were old Isaac's cogitations, whilst the universal population of Nina's Hive were congratulating themselves upon being rid of his odious presence.

As already stated in the message brought by the carrier pigeon, the distance traveled by Gallia in April was 39,000,000 leagues, and at the end of the month she was 110,000,000 leagues from the sun. A diagram representing the elliptical orbit of the planet, accompanied by an ephemeris made out in minute detail, had been drawn out by the professor. The curve was divided into twenty-four sections of unequal length, representing respectively the distance described in the twenty-four months of the Gallian year, the twelve former divisions, according to Kepler's law, gradually diminishing in length as they approached the point denoting the aphelion and increasing as they neared the perihelion.

It was on the 12th of May that Rosette exhibited this result of his labors to Servadac, the count, and the lieutenant, who visited his apartment and naturally examined the drawing with the keenest interest. Gallia's path, extending beyond the orbit of Jupiter, lay clearly defined before their eyes, the progress along the orbit and the solar distances being inserted for each month separately. Nothing could look plainer, and if the professor's calculations were correct (a point upon which they dared not, if they would, express the semblance of a doubt), Gallia would accomplish her revolution in precisely two years, and would meet the earth, which would in the same period of time have completed two annual revolutions, in the very same spot as before. What would be the consequences of a second collision they scarcely ventured to think.

Without lifting his eye from the diagram, which he was still carefully scrutinizing, Servadac said, "I see that during the month of May, Gallia will only travel 30,400,000 leagues, and that this will leave her about 140,000,000 leagues distant from the sun."

"Just so," replied the professor.

"Then we have already passed the zone of the telescopic planets, have we not?" asked the count.

"Can you not use your eyes?" said the professor, testily. "If you will look you will see the zone marked clearly enough upon the map."

Without noticing the interruption, Servadac continued his own remarks, "The comet then, I see, is to reach its aphelion on the 15th of January, exactly a twelvemonth after passing its perihelion."

"A twelvemonth! Not a Gallian twelvemonth?" exclaimed Rosette.

Servadac looked bewildered. Lieutenant Procope could not suppress a smile.

"What are you laughing at?" demanded the professor, turning round upon him angrily.
"Nothing, sir; only it amuses me to see how you want to revise the terrestrial calendar."
"I want to be logical, that's all."
"By all manner of means, my dear professor, let us be logical."
"Well, then, listen to me," resumed the professor, stiffly. "I presume you are taking it for granted that the Gallian year--by which I mean the time in which Gallia makes one revolution round the sun--is equal in length to two terrestrial years."
They signified their assent.
"And that year, like every other year, ought to be divided into twelve months."
"Yes, certainly, if you wish it," said the captain, acquiescing.
"If I wish it!" exclaimed Rosette. "Nothing of the sort! Of course a year must have twelve months!"
"Of course," said the captain.
"And how many days will make a month?" asked the professor.
"I suppose sixty or sixty-two, as the case may be. The days now are only half as long as they used to be," answered the captain.
"Servadac, don't be thoughtless!" cried Rosette, with all the petulant impatience of the old pedagogue. "If the days are only half as long as they were, sixty of them cannot make up a twelfth part of Gallia's year--cannot be a month."
"I suppose not," replied the confused captain.
"Do you not see, then," continued the astronomer, "that if a Gallian month is twice as long as a terrestrial month, and a Gallian day is only half as long as a terrestrial day, there must be a hundred and twenty days in every month?"
"No doubt you are right, professor," said Count Timascheff; "but do you not think that the use of a new calendar such as this would practically be very troublesome?"
"Not at all! not at all! I do not intend to use any other," was the professor's bluff reply.
After pondering for a few moments, the captain spoke again. "According, then, to this new calendar, it isn't the middle of May at all; it must now be some time in March."
"Yes," said the professor, "to-day is the 26th of March. It is the 266th day of the Gallian year. It corresponds with the 133d day of the terrestrial year. You are quite correct, it is the 26th of March."
"Strange!" muttered Servadac.
"And a month, a terrestrial month, thirty old days, sixty new days hence, it will be the 86th of March."
"Ha, ha!" roared the captain; "this is logic with a vengeance!"
The old professor had an undefined consciousness that his former pupil was laughing at him; and as it was growing late, he made an excuse that he had no more leisure. The visitors accordingly quitted the observatory.
It must be owned that the revised calendar was left to the professor's sole use, and the colony was fairly puzzled whenever he referred to such unheard-of dates as the 47th of April or the 118th of May.

According to the old calendar, June had now arrived; [illustration omitted] and by the professor's tables Gallia during the month would have advanced 27,500,000 leagues farther along its orbit, and would have attained a distance of 155,000,000 leagues from the sun. The thermometer continued to fall; the atmosphere remained clear as heretofore. The population performed their daily avocations with systematic routine; and almost the only thing that broke the monotony of existence was an occasional visit from the blustering, nervous, little professor, when some sudden fancy induced him to throw aside his astronomical studies for a time, and pay a visit to the common hall. His arrival there was generally hailed as the precursor of a little season of excitement. Somehow or other the conversation would eventually work its way round to the topic of a future collision between the comet and the earth; and in the same degree as this was a matter of sanguine anticipation to Captain Servadac and his friends, it was a matter of aversion to the astronomical enthusiast, who had no desire to quit his present quarters in a sphere which, being of his own discovery, he could hardly have cared for more if it had been of his own creation. The interview would often terminate in a scene of considerable animation.
On the 27th of June (old calendar) the professor burst like a cannon-ball into the central hall, where they were all assembled, and without a word of salutation or of preface, accosted the lieutenant in the way in which in earlier days he had been accustomed to speak to an idle school-boy, "Now, lieutenant! no evasions! no shufflings! Tell me, have you or have you not circumnavigated Gallia?"
The lieutenant drew himself up stiffly. "Evasions! shufflings! I am not accustomed, sir--" he began in a tone evidencing no little resentment; but catching a hint from the count he subdued his voice, and simply said, "We have."
"And may I ask," continued the professor, quite unaware of his previous discourtesy, "whether, when you made your voyage, you took any account of distances?"
"As approximately as I could," replied the lieutenant; "I did what I could by log and compass. I was unable to
take the altitude of sun or star."

"At what result did you arrive? What is the measurement of our equator?"

"I estimate the total circumference of the equator to be about 1,400 miles."

"Ah!" said the professor, more than half speaking to himself, "a circumference of 1,400 miles would give a
diameter of about 450 miles. That would be approximately about one-sixteenth of the diameter of the earth."

Raising his voice, he continued, "Gentlemen, in order to complete my account of my comet Gallia, I require to
know its area, its mass, its volume, its density, its specific gravity."

"Since we know the diameter," remarked the lieutenant, "there can be no difficulty in finding its surface and its
volume."

"And did I say there was any difficulty?" asked the professor, fiercely. "I have been able to reckon that ever
since I was born."

"Cock-a-doodle-doo!" cried Ben Zoof, delighted at any opportunity of paying off his old grudge.
The professor looked at him, but did not vouchsafe a word. Addressing the captain, he said, "Now, Servadac,
take your paper and a pen, and find me the surface of Gallia."

With more submission than when he was a school-boy, the captain sat down and endeavored to recall the proper
formula.

"The surface of a sphere? Multiply circumference by diameter."

"Right!" cried Rosette; "but it ought to be done by this time."

"Circumference, 1,400; diameter, 450; area of surface, 630,000," read the captain.

"True," replied Rosette, "630,000 square miles; just 292 times less than that of the earth."

"Pretty little comet! nice little comet!" muttered Ben Zoof.
The astronomer bit his lip, snorted, and cast at him a withering look, but did not take any further notice.

"Now, Captain Servadac," said the professor, "take your pen again, and find me the volume of Gallia."

The captain hesitated.

"Quick, quick!" cried the professor, impatiently; "surely you have not forgotten how to find the volume of a
sphere!"

"A moment's breathing time, please."

"Breathing time, indeed! A mathematician should not want breathing time! Come, multiply the surface by the
third of the radius. Don't you recollect?"

Captain Servadac applied himself to his task while the by-standers waited, with some difficulty suppressing their
inclination to laugh. There was a short silence, at the end of which Servadac announced that the volume of the comet
was 47,880,000 cubic miles.

"Just about 5,000 times less than the earth," observed the lieutenant.

"Nice little comet! pretty little comet!" said Ben Zoof.
The professor scowled at him, and was manifestly annoyed at having the insignificant dimensions of his comet
pointed out in so disparaging a manner. Lieutenant Procopé further remarked that from the earth he supposed it to be
about as conspicuous as a star of the seventh magnitude, and would require a good telescope to see it.

"Ha, ha!" laughed the orderly, aloud; "charming little comet! so pretty; and so modest!"

"You rascal!" roared the professor, and clenched his hand in passion, as if about to strike him. Ben Zoof laughed
the more, and was on the point of repeating his satirical comments, when a stern order from the captain made him
hold his tongue. The truth was that the professor was just as sensitive about his comet as the orderly was about
Montmartre, and if the contention between the two had been allowed to go on unchecked, it is impossible to say
what serious quarrel might not have arisen.

When Professor Rosette's equanimity had been restored, he said, "Thus, then, gentlemen, the diameter, the
surface, the volume of my comet are settled; but there is more to be done. I shall not be satisfied until, by actual
measurement, I have determined its mass, its density, and the force of gravity at its surface."

"A laborious problem," remarked Count Timascheff.

"Laborious or not, it has to be accomplished. I am resolved to find out what my comet weighs."

"Would it not be of some assistance, if we knew of what substance it is composed?" asked the lieutenant.

"That is of no moment at all," replied the professor; "the problem is independent of it."

"Then we await your orders," was the captain's reply.

"You must understand, however," said Rosette, "that there are various preliminary calculations to be made; you
will have to wait till they are finished."

"As long as you please," said the count.

"No hurry at all," observed the captain, who was not in the least impatient to continue his mathematical
exercises.
“Then, gentlemen,” said the astronomer, “with your leave we will for this purpose make an appointment a few weeks hence. What do you say to the 62d of April?”

Without noticing the general smile which the novel date provoked, the astronomer left the hall, and retired to his observatory.

CHAPTER V. WANTED: A STEELYARD

Under the still diminishing influence of the sun's attraction, but without let or hindrance, Gallia continued its interplanetary course, accompanied by Nerina, its captured satellite, which performed its fortnightly revolutions with unvarying regularity.

Meanwhile, the question beyond all others important was ever recurring to the minds of Servadac and his two companions: were the astronomer's calculations correct, and was there a sound foundation for his prediction that the comet would again touch the earth? But whatever might be their doubts or anxieties, they were fain to keep all their misgivings to themselves; the professor was of a temper far too cross-grained for them to venture to ask him to revise or re-examine the results of his observations.

The rest of the community by no means shared in their uneasiness. Negrete and his fellow-countrymen yielded to their destiny with philosophical indifference. Happier and better provided for than they had ever been in their lives, it did not give them a passing thought, far less cause any serious concern, whether they were still circling round the sun, or whether they were being carried right away within the limits of another system. Utterly careless of the future, the majos, light-hearted as ever, carolled out their favorite songs, just as if they had never quitted the shores of their native land.

Happiest of all were Pablo and Nina. Racing through the galleries of the Hive, clambering over the rocks upon the shore, one day skating far away across the frozen ocean, the next fishing in the lake that was kept liquid by the heat of the lava-torrent, the two children led a life of perpetual enjoyment. Nor was their recreation allowed to interfere with their studies. Captain Servadac, who in common with the count really liked them both, conceived that the responsibilities of a parent in some degree had devolved upon him, and took great care in superintending their daily lessons, which he succeeded in making hardly less pleasant than their sports.

Indulged and loved by all, it was little wonder that young Pablo had no longing for the scorching plains of Andalusia, or that little Nina had lost all wish to return with her pet goat to the barren rocks of Sardinia. They had now a home in which they had nothing to desire.

"Have you no father nor mother?" asked Pablo, one day.

"No," she answered.

"No more have I," said the boy, "I used to run along by the side of the diligences when I was in Spain."

"I used to look after goats at Madalena," said Nina; "but it is much nicer here--I am so happy here. I have you for a brother, and everybody is so kind. I am afraid they will spoil us, Pablo," she added, smiling.

"Oh, no, Nina; you are too good to be spoiled, and when I am with you, you make me good too," said Pablo, gravely.

July had now arrived. During the month Gallia's advance along its orbit would be reduced to 22,000,000 leagues, the distance from the sun at the end being 172,000,000 leagues, about four and a half times as great as the average distance of the earth from the sun. It was traveling now at about the same speed as the earth, which traverses the ecliptic at a rate of 21,000,000 leagues a month, or 28,800 leagues an hour.

In due time the 62d April, according to the revised Gallian calendar, dawned; and in punctual fulfillment of the professor's appointment, a note was delivered to Servadac to say that he was ready, and hoped that day to commence operations for calculating the mass and density of his comet, as well as the force of gravity at its surface.

A point of far greater interest to Captain Servadac and his friends would have been to ascertain the nature of the substance of which the comet was composed, but they felt pledged to render the professor any aid they could in the researches upon which he had set his heart. Without delay, therefore, they assembled in the central hall, where they were soon joined by Rosette, who seemed to be in fairly good temper.

"Gentlemen," he began, "I propose to-day to endeavor to complete our observations of the elements of my comet. Three matters of investigation are before us. First, the measure of gravity at its surface; this attractive force we know, by the increase of our own muscular force, must of course be considerably less than that at the surface of the earth. Secondly, its mass, that is, the quality of its matter. And thirdly, its density or quantity of matter in a unit of its volume. We will proceed, gentlemen, if you please, to weigh Gallia."

Ben Zoof, who had just entered the hall, caught the professor's last sentence, and without saying a word, went out again and was absent for some minutes. When he returned, he said, "If you want to weigh this comet of yours, I suppose you want a pair of scales; but I have been to look, and I cannot find a pair anywhere. And what's more," he
added mischievously, "you won't get them anywhere."

A frown came over the professor's countenance. Servadac saw it, and gave his orderly a sign that he should desist entirely from his bantering.

"I require, gentlemen," resumed Rosette, "first of all to know by how much the weight of a kilogramme here differs from its weight upon the earth; the attraction, as we have said, being less, the weight will proportionately be less also."

"Then an ordinary pair of scales, being under the influence of attraction, I suppose, would not answer your purpose," submitted the lieutenant.

"And the very kilogramme weight you used would have become lighter," put in the count, deferentially.

"Pray, gentlemen, do not interrupt me," said the professor, authoritatively, as if _ex cathedra_. "I need no instruction on these points."

Procope and Timascheff demurely bowed their heads.

The professor resumed. "Upon a steelyard, or spring-balance, dependent upon mere tension or flexibility, the attraction will have no influence. If I suspend a weight equivalent to the weight of a kilogramme, the index will register the proper weight on the surface of Gallia. Thus I shall arrive at the difference I want: the difference between the earth's attraction and the comet's. Will you, therefore, have the goodness to provide me at once with a steelyard and a tested kilogramme?"

The audience looked at one another, and then at Ben Zoof, who was thoroughly acquainted with all their resources. "We have neither one nor the other," said the orderly.

The professor stamped with vexation.

"I believe old Hakkabut has a steelyard on board his tartan," said Ben Zoof, presently.

"Then why didn't you say so before, you idiot?" roared the excitable little man.

Anxious to pacify him, Servadac assured him that every exertion should be made to procure the instrument, and directed Ben Zoof to go to the Jew and borrow it.

"No, stop a moment," he said, as Ben Zoof was moving away on his errand; "perhaps I had better go with you myself; the old Jew may make a difficulty about lending us any of his property."

"Why should we not all go?" asked the count; "we should see what kind of a life the misanthrope leads on board the _Hansa_."

The proposal met with general approbation. Before they started, Professor Rosette requested that one of the men might be ordered to cut him a cubic decimeter out of the solid substance of Gallia. "My engineer is the man for that," said the count; "he will do it well for you if you will give him the precise measurement."

"What! you don't mean," exclaimed the professor, again going off into a passion, "that you haven't a proper measure of length?"

Ben Zoof was sent off to ransack the stores for the article in question, but no measure was forthcoming. "Most likely we shall find one on the tartan," said the orderly.

"Then let us lose no time in trying," answered the professor, as he hustled with hasty strides into the gallery.

The rest of the party followed, and were soon in the open air upon the rocks that overhung the shore. They descended to the level of the frozen water and made their way towards the little creek where the _Dobryna_ and the _Hansa_ lay firmly imprisoned in their icy bonds.

The temperature was low beyond previous experience; but well muffled up in fur, they all endured it without much actual suffering. Their breath issued in vapor, which was at once congealed into little crystals upon their whiskers, beards, eyebrows, and eyelashes, until their faces, covered with countless snow-white prickles, were truly ludicrous. The little professor, most comical of all, resembled nothing so much as the cub of an Arctic bear.

It was eight o'clock in the morning. The sun was rapidly approaching the zenith; but its disc, from the extreme remoteness, was proportionately dwarfed; its beams being all but destitute of their proper warmth and radiance. The volcano to its very summit and the surrounding rocks were still covered with the unsullied mantle of snow that had fallen while the atmosphere was still to some extent charged with vapor; but on the north side the snow had given place to the cascade of fiery lava, which, making its way down the sloping rocks as far as the vaulted opening of the central cavern, fell thence perpendicularly into the sea. Above the cavern, 130 feet up the mountain, was a dark hole, above which the stream of lava made a bifurcation in its course. From this hole projected the case of an astronomer's telescope; it was the opening of Palmyrin Rosette's observatory.

Sea and land seemed blended into one dreary whiteness, to which the pale blue sky offered scarcely any contrast. The shore was indented with the marks of many footsteps left by the colonists either on their way to collect ice for drinking purposes, or as the result of their skating expeditions; the edges of the skates had cut out a labyrinth of curves complicated as the figures traced by aquatic insects upon the surface of a pool.

Across the quarter of a mile of level ground that lay between the mountain and the creek, a series of footprints,
frozen hard into the snow, marked the course taken by Isaac Hakkabut on his last return from Nina's Hive.

On approaching the creek, Lieutenant Procope drew his companions' attention to the elevation of the _Dobryna's_ and _Hansa's_ waterline, both vessels being now some fifteen feet above the level of the sea.

"What a strange phenomenon!" exclaimed the captain.

"It makes me very uneasy," rejoined the lieutenant; "in shallow places like this, as the crust of ice thickens, it forces everything upwards with irresistible force."

"But surely this process of congelation must have a limit!" said the count.

"But who can say what that limit will be? Remember that we have not yet reached our maximum of cold," replied Procope.

"Indeed, I hope not!" exclaimed the professor; "where would be the use of our traveling 200,000,000 leagues from the sun, if we are only to experience the same temperature as we should find at the poles of the earth?"

"Fortunately for us, however, professor," said the lieutenant, with a smile, "the temperature of the remotest space never descends beyond 70 degrees below zero."

"And as long as there is no wind," added Servadac, "we may pass comfortably through the winter, without a single attack of catarrh."

Lieutenant Procope proceeded to impart to the count his anxiety about the situation of his yacht. He pointed out that by the constant superposition of new deposits of ice, the vessel would be elevated to a great height, and consequently in the event of a thaw, it must be exposed to a calamity similar to those which in polar seas cause destruction to so many whalers.

There was no time now for concerting measures offhand to prevent the disaster, for the other members of the party had already reached the spot where the _Hansa_ lay bound in her icy trammels. A flight of steps, recently hewn by Hakkabut himself, gave access for the present to the gangway, but it was evident that some different contrivance would have to be resorted to when the tartan should be elevated perhaps to a hundred feet.

A thin curl of blue smoke issued from the copper funnel that projected above the mass of snow which had accumulated upon the deck of the _Hansa_. The owner was sparing of his fuel, and it was only the non-conducting layer of ice enveloping the tartan that rendered the internal temperature endurable.

"Hi! old Nebuchadnezzar, where are you?" shouted Ben Zoof, at the full strength of his lungs.

At the sound of his voice, the cabin door opened, and the Jew's head and shoulders protruded onto the deck.

CHAPTER VI. MONEY AT A PREMIUM

"Who's there? I have nothing here for anyone. Go away!" Such was the inhospitable greeting with which Isaac Hakkabut received his visitors.

"Hakkabut! do you take us for thieves?" asked Servadac, in tones of stern displeasure.

"Oh, your Excellency, my lord, I did not know that it was you," whined the Jew, but without emerging any farther from his cabin.

"Now, old Hakkabut, come out of your shell! Come and show the governor proper respect, when he gives you the honor of his company," cried Ben Zoof, who by this time had clambered onto the deck.

After considerable hesitation, but still keeping his hold upon the cabin-door, the Jew made up his mind to step outside. "What do you want?" he inquired, timorously.

"I want a word with you," said Servadac, "but I do not want to stand talking out here in the cold."

Followed by the rest of the party, he proceeded to mount the steps. The Jew trembled from head to foot. "But I cannot let you into my cabin. I am a poor man; I have nothing to give you," he moaned piteously.

"Here he is!" laughed Ben Zoof, contemptuously; "he is beginning his chapter of lamentations over again. But standing out here will never do. Out of the way, old Hakkabut, I say! out of the way!" and, without more ado, he thrust the astonished Jew on one side and opened the door of the cabin.

Servadac, however, declined to enter until he had taken the pains to explain to the owner of the tartan that he had no intention of laying violent hands upon his property, and that if the time should ever come that his cargo was in requisition for the common use, he should receive a proper price for his goods, the same as he would in Europe.

"Europe, indeed!" muttered the Jew maliciously between his teeth. "European prices will not do for me. I must have Gallian prices—and of my own fixing, too!"

So large a portion of the vessel had been appropriated to the cargo that the space reserved for the cabin was of most meager dimensions. In one corner of the compartment stood a small iron stove, in which smoldered a bare handful of coals; in another was a trestle-board which served as a bed; two or three stools and a rickety deal table, together with a few cooking utensils, completed a stock of furniture which was worthy of its proprietor.

On entering the cabin, Ben Zoof's first proceeding was to throw on the fire a liberal supply of coals, utterly
regardless of the groans of poor Isaac, who would almost as soon have parted with his own bones as submit to such reckless expenditure of his fuel. The perishing temperature of the cabin, however, was sufficient justification for the orderly's conduct, and by a little skilful manipulation he soon succeeded in getting up a tolerable fire.

The visitors having taken what seats they could, Hakkabut closed the door, and, like a prisoner awaiting his sentence, stood with folded hands, expecting the captain to speak.

"Listen," said Servadac; "we have come to ask a favor."

Imagining that at least half his property was to be confiscated, the Jew began to break out into his usual formula about being a poor man and having nothing to spare; but Servadac, without heeding his complainings, went on: "We are not going to ruin you, you know."

Hakkabut looked keenly into the captain's face.

"We have only come to know whether you can lend us a steelyard."

So far from showing any symptom of relief, the old miser exclaimed, with a stare of astonishment, as if he had been asked for some thousand francs: "A steelyard?"

"Yes!" echoed the professor, impatiently; "a steelyard."

"Have you not one?" asked Servadac.

"To be sure he has!" said Ben Zoof.

Old Isaac stammered and stuttered, but at last confessed that perhaps there might be one amongst the stores.

"Then, surely, you will not object to lend it to us?" said the captain.

"Only for one day," added the professor.

The Jew stammered again, and began to object. "It is a very delicate instrument, your Excellency. The cold, you know, the cold may do injury to the spring; and perhaps you are going to use it to weigh something very heavy."

"Why, old Ephraim, do you suppose we are going to weigh a mountain with it?" said Ben Zoof.

"Better than that!" cried out the professor, triumphantly; "we are going to weigh Gallia with it; my comet."

"Merciful Heaven!" shrieked Isaac, feigning consternation at the bare suggestion.

Servadac knew well enough that the Jew was holding out only for a good bargain, and assured him that the steelyard was required for no other purpose than to weigh a kilogramme, which (considering how much lighter everything had become) could not possibly put the slightest strain upon the instrument.

The Jew still spluttered, and moaned, and hesitated.

"Well, then," said Servadac, "if you do not like to lend us your steelyard, do you object to sell it to us?"

Isaac fairly shrieked aloud. "God of Israel!" he ejaculated, "sell my steelyard? Would you deprive me of one of the most indispensable of my means of livelihood? How should I weigh my merchandise without my steelyard--my solitary steelyard, so delicate and so correct?"

The orderly wondered how his master could refrain from strangling the old miser upon the spot; but Servadac, rather amused than otherwise, determined to try another form of persuasion. "Come, Hakkabut, I see that you are not disposed either to lend or to sell your steelyard. What do you say to letting us hire it?"

The Jew's eyes twinkled with a satisfaction that he was unable to conceal. "But what security would you give? The instrument is very valuable;" and he looked more cunning than ever.

"What is it worth? If it is worth twenty francs, I will leave a deposit of a hundred. Will that satisfy you?"

He shook his head doubtfully. "It is very little; indeed, it is too little, your Excellency. Consider, it is the only steelyard in all this new world of ours; it is worth more, much more. If I take your deposit it must be in gold--all gold. But how much do you agree to give me for the hire--the hire, one day?"

"You shall have twenty francs," said Servadac.

"Oh, it is dirt cheap; but never mind, for one day, you shall have it. Deposit in gold money a hundred francs, and twenty francs for the hire." The old man folded his hands in meek resignation.

"The fellow knows how to make a good bargain," said Servadac, as Isaac, after casting a distrustful look around, went out of the cabin.

"Detestable old wretch!" replied the count, full of disgust.

Hardly a minute elapsed before the Jew was back again, carrying his precious steelyard with ostentatious care. It was of an ordinary kind. A spring balance, fitted with a hook, held the article to be weighed; a pointer, revolving on a disc, indicated the weight of the article. Professor Rosette was manifestly right in asserting that such a machine would register results quite independently of any change in the force of attraction. On the earth it would have registered a kilogramme as a kilogramme; here it recorded a different value altogether, as the result of the altered force of gravity.

Gold coinage to the worth of one hundred and twenty francs was handed over to the Jew, who clutched at the money with unmistakable eagerness. The steelyard was committed to the keeping of Ben Zoof, and the visitors prepared to quit the _Hansa_.
All at once it occurred to the professor that the steelyard would be absolutely useless to him, unless he had the means for ascertaining the precise measurement of the unit of the soil of Gallia which he proposed to weigh. "Something more you must lend me," he said, addressing the Jew. "I must have a measure, and I must have a kilogramme."

"I have neither of them," answered Isaac. "I have neither. I am sorry; I am very sorry." And this time the old Jew spoke the truth. He would have been really glad to do another stroke or two of business upon terms as advantageous as the transaction he had just concluded.

Palmyrin Rosette scratched his head in perplexity, glaring round upon his companions as if they were personally responsible for his annoyance. He muttered something about finding a way out of his difficulty, and hastily mounted the cabin-ladder. The rest followed, but they had hardly reached the deck when the chink of money was heard in the room below. Hakkabut was locking away the gold in one of the drawers.

Back again, down the ladder, scrambled the little professor, and before the Jew was aware of his presence he had seized him by the tail of his slouchy overcoat. "Some of your money! I must have money!" he said.

"Money!" gasped Hakkabut; "I have no money." He was pale with fright, and hardly knew what he was saying. "Falsehood!" roared Rosette. "Do you think I cannot see?" And peering down into the drawer which the Jew was vainly trying to close, he cried, "Heaps of money! French money! Five-franc pieces! the very thing I want! I must have them!"

The captain and his friends, who had returned to the cabin looked on with mingled amusement and bewilderment.

"They are mine!" shrieked Hakkabut.
"I will have them!" shouted the professor.
"You shall kill me first!" bellowed the Jew.
"No, but I must!" persisted the professor again.

It was manifestly time for Servadac to interfere. "My dear professor," he said, smiling, "allow me to settle this little matter for you."

"Ah! your Excellency," moaned the agitated Jew, "protect me! I am but a poor man--"

"None of that, Hakkabut. Hold your tongue." And, turning to Rosette, the captain said, "If, sir, I understand right, you require some silver five-franc pieces for your operation?"

"Forty," said Rosette, surily.
"Two hundred francs!" whined Hakkabut.
"Silence!" cried the captain.
"I must have more than that," the professor continued. "I want ten two-franc pieces, and twenty half-francs."
"Let me see," said Servadac, "how much is that in all? Two hundred and thirty francs, is it not?"
"I dare say it is," answered the professor.

"Count, may I ask you," continued Servadac, "to be security to the Jew for this loan to the professor?"
"Loan!" cried the Jew, "do you mean only a loan?"

"Silence!" again shouted the captain.

Count Timascheff, expressing his regret that his purse contained only paper money, begged to place it at Captain Servadac's disposal.

"No paper, no paper!" exclaimed Isaac. "Paper has no currency in Gallia."
"About as much as silver," coolly retorted the count.
"I am a poor man," began the Jew.
"Now, Hakkabut, stop these miserable lamentations of yours, once for all. Hand us over two hundred and thirty francs in silver money, or we will proceed to help ourselves."

Isaac began to yell with all his might: "Thieves! thieves!"
In a moment Ben Zoof's hand was clasped tightly over his mouth. "Stop that howling, Belshazzar!"
"Let him alone, Ben Zoof. He will soon come to his senses," said Servadac, quietly.

When the old Jew had again recovered himself, the captain addressed him. "Now, tell us, what interest do you expect?"

Nothing could overcome the Jew's anxiety to make another good bargain. He began: "Money is scarce, very scarce, you know--"

"No more of this!" shouted Servadac. "What interest, I say, what interest do you ask?"
Faltering and undecided still, the Jew went on. "Very scarce, you know. Ten francs a day, I think, would not be unreasonable, considering--"

The count had no patience to allow him to finish what he was about to say. He flung down notes to the value of several rubles. With a greediness that could not be concealed, Hakkabut grasped them all. Paper, indeed, they were;
but the cunning Israelite knew that they would in any case be security far beyond the value of his cash. He was making some eighteen hundred per cent. interest, and accordingly chuckled within himself at his unexpected stroke of business.

The professor pocketed his French coins with a satisfaction far more demonstrative. "Gentlemen," he said, "with these franc pieces I obtain the means of determining accurately both a meter and a kilogramme."

CHAPTER VII. GALLIA WEIGHED

A quarter of an hour later, the visitors to the _Hansa_ had reassembled in the common hall of Nina's Hive.

"Now, gentlemen, we can proceed," said the professor. "May I request that this table may be cleared?"

Ben Zoof removed the various articles that were lying on the table, and the coins which had just been borrowed from the Jew were placed upon it in three piles, according to their value.

The professor commenced. "Since none of you gentlemen, at the time of the shock, took the precaution to save either a meter measure or a kilogramme weight from the earth, and since both these articles are necessary for the calculation on which we are engaged, I have been obliged to devise means of my own to replace them."

This exordium delivered, he paused and seemed to watch its effect upon his audience, who, however, were too well acquainted with the professor's temper to make any attempt to exonerate themselves from the rebuke of carelessness, and submitted silently to the implied reproach.

"I have taken pains," he continued, "to satisfy myself that these coins are in proper condition for my purpose. I find them unworn and unchipped; indeed, they are almost new. They have been hoarded instead of circulated; accordingly, they are fit to be utilized for my purpose of obtaining the precise length of a terrestrial meter."

Ben Zoof looked on in perplexity, regarding the lecturer with much the same curiosity as he would have watched the performances of a traveling mountebank at a fair in Montmartre; but Servadac and his two friends had already divined the professor's meaning. They knew that French coinage is all decimal, the franc being the standard of which the other coins, whether gold, silver, or copper, are multiples or measures; they knew, too, that the caliber or diameter of each piece of money is rigorously determined by law, and that the diameters of the silver coins representing five francs, two francs, and fifty centimes measure thirty-seven, twenty-seven, and eighteen millimeters respectively; and they accordingly guessed that Professor Rosette had conceived the plan of placing such a number of these coins in juxtaposition that the length of their united diameters should measure exactly the thousand millimeters that make up the terrestrial meter.

The measurement thus obtained was by means of a pair of compasses divided accurately into ten equal portions, or decimeters, each of course 3.93 inches long. A lath was then cut of this exact length and given to the engineer of the _Dobryna_, who was directed to cut out of the solid rock the cubic decimeter required by the professor.

The next business was to obtain the precise weight of a kilogramme. This was by no means a difficult matter. Not only the diameters, but also the weights, of the French coins are rigidly determined by law, and as the silver five-franc pieces always weigh exactly twenty-five grammes, the united weight of forty of these coins is known to amount to one kilogramme.

"Oh!" cried Ben Zoof; "to be able to do all this I see you must be rich as well as learned."

With a good-natured laugh at the orderly's remark, the meeting adjourned for a few hours. By the appointed time the engineer had finished his task, and with all due care had prepared a cubic decimeter of the material of the comet.

"Now, gentlemen," said Professor Rosette, "we are in a position to complete our calculation; we can now arrive at Gallia's attraction, density, and mass."

Everyone gave him his complete attention.

"Before I proceed," he resumed, "I must recall to your minds Newton's general law, 'that the attraction of two bodies is directly proportional to the product of their masses, and inversely proportional to the square of their distances.'"

"Yes," said Servadac; "we remember that."

"Well, then," continued the professor, "keep it in mind for a few minutes now. Look here! In this bag are forty five-franc pieces—altogether they weigh exactly a kilogramme; by which I mean that if we were on the earth, and I were to hang the bag on the hook of the steelyard, the indicator on the dial would register one kilogramme. This is clear enough, I suppose?"

As he spoke the professor designedly kept his eyes fixed upon Ben Zoof. He was avowedly following the example of Arago, who was accustomed always in lecturing to watch the countenance of the least intelligent of his audience, and when he felt that he had made his meaning clear to him, he concluded that he must have succeeded with all the rest. In this case, however, it was technical ignorance, rather than any lack of intelligence, that justified the selection of the orderly for this special attention.
Satisfied with his scrutiny of Ben Zoof's face, the professor went on. "And now, gentlemen, we have to see what these coins weigh here upon Gallia."

He suspended the money bag to the hook; the needle oscillated, and stopped. "Read it off!" he said.

The weight registered was one hundred and thirty-three grammes.

"There, gentlemen, one hundred and thirty-three grammes! Less than one-seventh of a kilogramme! You see, consequently, that the force of gravity here on Gallia is not one-seventh of what it is upon the earth!"

"Interesting!" cried Servadac, "most interesting! But let us go on and compute the mass."

"No, captain, the density first," said Rosette.

"Certainly," said the lieutenant; "for, as we already know the volume, we can determine the mass as soon as we have ascertained the density."

The professor took up the cube of rock. "You know what this is," he went on to say. "You know, gentlemen, that this block is a cube hewn from the substance of which everywhere, all throughout your voyage of circumnavigation, you found Gallia to be composed--a substance to which your geological attainments did not suffice to assign a name."

"Our curiosity will be gratified," said Servadac, "if you will enlighten our ignorance."

But Rosette did not take the slightest notice of the interruption.

"A substance it is which no doubt constitutes the sole material of the comet, extending from its surface to its innermost depths. The probability is that it would be so; your experience confirms that probability: you have found no trace of any other substance. Of this rock here is a solid decimeter; let us get at its weight, and we shall have the key which will unlock the problem of the whole weight of Gallia. We have demonstrated that the force of attraction here is only one-seventh of what it is upon the earth, and shall consequently have to multiply the apparent weight of our cube by seven, in order to ascertain its proper weight. Do you understand me, goggle-eyes?"

This was addressed to Ben Zoof, who was staring hard at him. "No!" said Ben Zoof.

"I thought not; it is of no use waiting for your puzzle-brains to make it out. I must talk to those who can understand."

The professor took the cube, and, on attaching it to the hook of the steelyard, found that its apparent weight was one kilogramme and four hundred and thirty grammes.

"Here it is, gentlemen; one kilogramme, four hundred and thirty grammes. Multiply that by seven; the product is, as nearly as possible, ten kilogrammes. What, therefore, is our conclusion? Why, that the density of Gallia is just about double the density of the earth, which we know is only five kilogrammes to a cubic decimeter. Had it not been for this greater density, the attraction of Gallia would only have been one-fifteenth instead of one-seventh of the terrestrial attraction."

The professor could not refrain from exhibiting his gratification that, however inferior in volume, at least, his comet had the advantage over the earth.

Nothing further now remained than to apply the investigations thus finished to the determining of the mass or weight. This was a matter of little labor.

"Let me see," said the captain; "what is the force of gravity upon the various planets?"

"You can't mean, Servadac, that you have forgotten that? But you always were a disappointing pupil."

The captain could not help himself: he was forced to confess that his memory had failed him.

"Well, then," said the professor, "I must remind you. Taking the attraction on the earth as 1, that on Mercury is 1.15, on Venus it is .92, on Mars .5, and on Jupiter 2.45; on the moon the attraction is .16, whilst on the surface of the sun a terrestrial kilogramme would weigh 28 kilogrammes."

"Therefore, if a man upon the surface of the sun were to fall down, he would have considerable difficulty in getting up again. A cannon ball, too, would only fly a few yards," said Lieutenant Procope.

"A jolly battle-field for cowards!" exclaimed Ben Zoof.

"Not so jolly, Ben Zoof, as you fancy," said his master; "the cowards would be too heavy to run away."

Ben Zoof ventured the remark that, as the smallness of Gallia secured to its inhabitants such an increase of strength and agility, he was almost sorry that it had not been a little smaller still.

"Though it could not anyhow have been very much smaller," he added, looking slyly at the professor.

"Idiot!" exclaimed Rosette. "Your head is too light already; a puff of wind would blow it away."

"I must take care of my head, then, and hold it on," replied the irrepressible orderly.

Unable to get the last word, the professor was about to retire, when Servadac detained him.

"Permit me to ask you one more question," he said. "Can you tell me what is the nature of the soil of Gallia?"

"Yes, I can answer that. And in this matter I do not think your impertinent orderly will venture to put Montmartre into the comparison. This soil is of a substance not unknown upon the earth."

And speaking very slowly, the professor said: "It contains 70 per cent. of tellurium, and 30 per cent. of gold."
Servadac uttered an exclamation of surprise.

"And the sum of the specific gravities of these two substances is 10, precisely the number that represents Gallia's density."

"A comet of gold!" ejaculated the captain.

"Yes; a realization of what the illustrious Maupertuis has already deemed probable," replied the astronomer.

"If Gallia, then, should ever become attached to the earth, might it not bring about an important revolution in all monetary affairs?" inquired the count.

"No doubt about it!" said Rosette, with manifest satisfaction. "It would supply the world with about 246,000 trillions of francs."

"It would make gold about as cheap as dirt, I suppose," said Servadac.

The last observation, however, was entirely lost upon the professor, who had left the hall with an air almost majestic, and was already on his way to the observatory.

"And what, I wonder, is the use of all these big figures?" said Ben Zoof to his master, when next day they were alone together.

"That's just the charm of them, my good fellow," was the captain's cool reply, "that they are of no use whatever."

CHAPTER VIII. JUPITER SOMEWHAT CLOSE

Except as to the time the comet would take to revolve round the sun, it must be confessed that all the professor's calculations had comparatively little interest for anyone but himself, and he was consequently left very much to pursue his studies in solitude.

The following day was the 1st of August, or, according to Rosette, the 63rd of April. In the course of this month Gallia would travel 16,500,000 leagues, attaining at the end a distance of 197,000,000 leagues from the sun. This would leave 81,000,000 leagues more to be traversed before reaching the aphelion of the 15th of January, after which it would begin once more to approach the sun.

But meanwhile, a marvelous world, never before so close within the range of human vision, was revealing itself. No wonder that Palmyrin Rosette cared so little to quit his observatory; for throughout those calm, clear Gallian nights, when the book of the firmament lay open before him, he could revel in a spectacle which no previous astronomer had ever been permitted to enjoy.

The glorious orb that was becoming so conspicuous an object was none other than the planet Jupiter, the largest of all the bodies existing within the influence of solar attraction. During the seven months that had elapsed since its collision with the earth, the comet had been continuously approaching the planet, until the distance between them was scarcely more than 61,000,000 leagues, and this would go on diminishing until the 15th of October.

Under these circumstances, was it perfectly certain that no danger could accrue? Was not Gallia, when its pathway led it into such close proximity to this enormous planet, running a risk of being attracted within its influence? Might not that influence be altogether disastrous? The professor, it is true, in his estimate of the duration of his comet's revolution, had represented that he had made all proper allowances for any perturbations that would be caused either by Jupiter, by Saturn, or by Mars; but what if there were any errors in his calculations? what if there should be any elements of disturbance on which he had not reckoned?

Speculations of this kind became more and more frequent, and Lieutenant Procope pointed out that the danger incurred might be of a fourfold character: first, that the comet, being irresistibly attracted, might be drawn on to the very surface of the planet, and there annihilated; secondly, that as the result of being brought under that attraction, it might be transformed into a satellite, or even a sub-satellite, of that mighty world; thirdly, that it might be diverted into a new orbit, which would never be coincident with the ecliptic; or, lastly, its course might be so retarded that it would only reach the ecliptic too late to permit any junction with the earth. The occurrence of any one of these contingencies would be fatal to their hopes of reunion with the globe, from which they had been so strangely severed.

To Rosette, who, without family ties which he had never found leisure or inclination to contract, had no shadow of desire to return to the earth, it would be only the first of these probabilities that could give him any concern. Total annihilation might not accord with his views, but he would be quite content for Gallia to miss its mark with regard to the earth, indifferent whether it revolved as a new satellite around Jupiter, or whether it wended its course through the untraversed regions of the milky way. The rest of the community, however, by no means sympathized with the professor's sentiments, and the following month was a period of considerable doubt and anxiety.

On the 1st of September the distance between Gallia and Jupiter was precisely the same as the mean distance between the earth and the sun; on the 16th, the distance was further reduced to 26,000,000 leagues. The planet began to assume enormous dimensions, and it almost seemed as if the comet had already been deflected from its elliptical
orbit, and was rushing on in a straight line towards the overwhelming luminary.

The more they contemplated the character of this gigantic planet, the more they became impressed with the likelihood of a serious perturbation in their own course. The diameter of Jupiter is 85,390 miles, nearly eleven times as great as that of the earth; his volume is 1,387 times, and his mass 300 times greater; and although the mean density is only about a quarter of that of the earth, and only a third of that of water (whence it has been supposed that the superificies of Jupiter is liquid), yet his other proportions were large enough to warrant the apprehension that important disturbances might result from his proximity.

"I forget my astronomy, lieutenant," said Servadac. "Tell me all you can about this formidable neighbor."

The lieutenant having refreshed his memory by reference to Flammarion's _Recits de l'Infini_, of which he had a Russian translation, and some other books, proceeded to recapitulate that Jupiter accomplishes his revolution round the sun in 4,332 days 14 hours and 2 minutes; that he travels at the rate of 467 miles a minute along an orbit measuring 2,976 millions of miles; and that his rotation on his axis occupies only 9 hours and 55 minutes.

"His days, then, are shorter than ours?" interrupted the captain.

"Considerably," answered the lieutenant, who went on to describe how the displacement of a point at the equator of Jupiter was twenty-seven times as rapid as on the earth, causing the polar compression to be about 2,378 miles; how the axis, being nearly perpendicular, caused the days and nights to be nearly of the same length, and the seasons to be invariable; and how the amount of light and heat received by the planet is only a twenty-fifth part of that received by the earth, the average distance from the sun being 475,693,000 miles.

"And how about these satellites? Sometimes, I suppose, Jupiter has the benefit of four moons all shining at once?" asked Servadac.

Of the satellites, Lieutenant Procope went on to say that one is rather smaller than our own moon; that another moves round its primary at an interval about equal to the moon's distance from ourselves; but that they all revolve in considerably less time: the first takes only 1 day 18 hours 27 minutes; the second takes 3 days 13 hours 14 minutes; the third, 7 days 3 hours 42 minutes; whilst the largest of all takes but 16 days 16 hours 32 minutes. The most remote revolves round the planet at a distance of 1,192,820 miles.

"They have been enlisted into the service of science," said Procope. "It is by their movements that the velocity of light has been calculated; and they have been made available for the determination of terrestrial longitudes."

"It must be a wonderful sight," said the captain.

"Yes," answered Procope. "I often think Jupiter is like a prodigious clock with four hands."

"I only hope that we are not destined to make a fifth hand," answered Servadac.

Such was the style of the conversation that was day by day reiterated during the whole month of suspense. Whatever topic might be started, it seemed soon to settle down upon the huge orb that was looming upon them with such threatening aspect.

"The more remote that these planets are from the sun," said Procope, "the more venerable and advanced in formation are they found to be. Neptune, situated 2,746,271,000 miles from the sun, issued from the solar nebulous, thousands of millions of centuries back. Uranus, revolving 1,753,851,000 miles from the center of the planetary system, is of an age amounting to many hundred millions of centuries. Jupiter, the colossal planet, gravitating at a distance of 475,693,000 miles, may be reckoned as 70,000,000 centuries old. Mars has existed for 1,000,000,000 years at a distance of 139,212,000 miles. The earth, 91,430,000 miles from the sun, quitted his burning bosom 100,000,000 years ago. Venus, revolving now 66,131,000 miles away, may be assigned the age of 50,000,000 years at least; and Mercury, nearest of all, and youngest of all, has been revolving at a distance of 35,393,000 miles for the space of 10,000,000 years--the same time as the moon has been evolved from the earth."

Servadac listened attentively. He was at a loss what to say; and the only reply he made to the recital of this novel theory was to the effect that, if it were true, he would prefer being captured by Mercury than by Jupiter, for Mercury, being so much the younger, would probably prove the less imperative and self-willed master.

It was on the 1st of September that the comet had crossed the orbit of Jupiter, and on the 1st of October the two bodies were calculated to be at their minimum separation. No direct shock, however, could be apprehended; the demonstration was sufficiently complete that the orbit of Gallia did not coincide with that of the planet, the orbit of Jupiter being inclined at an angle of 1 degrees 19 mins to the orbit of the earth, with which that of Gallia was, no doubt, coincident.

As the month of September verged towards its close, Jupiter began to wear an aspect that must have excited the admiration of the most ignorant or the most indifferent observer. Its salient points were illumined with novel and radiant tints, and the solar rays, reflected from its disc, glowed with a mingled softness and intensity upon Gallia, so that Nerina had to pale her beauty.

Who could wonder that Rosette, enthusiast as he was, should be irremovable from his observatory? Who could expect otherwise than that, with the prospect before him of viewing the giant among planets, ten times nearer than
any mortal eye had ever done, he should have begrudged every moment that distracted his attention?

Meanwhile, as Jupiter grew large, the sun grew small.

From its increased remoteness the diameter of the sun's disc was diminished to 5 degrees 46 mins.

And what an increased interest began to be associated with the satellites! They were visible to the naked eye!

Was it not a new record in the annals of science?

Although it is acknowledged that they are not ordinarily visible on earth without the aid of a somewhat powerful telescope, it has been asserted that a favored few, endued with extraordinary powers of vision, have been able to identify them with an unassisted eye; but here, at least, in Nina's Hive were many rivals, for everyone could so far distinguish them one from the other as to describe them by their colors. The first was of a dull white shade; the second was blue; the third was white and brilliant; the fourth was orange, at times approaching to a red. It was further observed that Jupiter itself was almost void of scintillation.

Rosette, in his absorbing interest for the glowing glories of the planet, seemed to be beguiled into comparative forgetfulness of the charms of his comet; but no astronomical enthusiasm of the professor could quite allay the general apprehension that some serious collision might be impending.

Time passed on. There was nothing to justify apprehension. The question was continually being asked, "What does the professor really think?"

"Our friend the professor," said Servadac, "is not likely to tell us very much; but we may feel pretty certain of one thing: he wouldn't keep us long in the dark, if he thought we were not going back to the earth again. The greatest satisfaction he could have would be to inform us that we had parted from the earth for ever."

"I trust from my very soul," said the count, "that his prognostications are correct."

"The more I see of him, and the more I listen to him," replied Servadac, "the more I become convinced that his calculations are based on a solid foundation, and will prove correct to the minutest particular."

"Ben Zoof here interrupted the conversation. "I have something on my mind," he said.

"Something on your mind? Out with it!" said the captain.

"That telescope!" said the orderly; "it strikes me that that telescope which the old professor keeps pointed up at yonder big sun is bringing it down straight upon us."

The captain laughed heartily.

"Laugh, captain, if you like; but I feel disposed to break the old telescope into atoms."

"Ben Zoof," said Servadac, his laughter exchanged for a look of stern displeasure, "touch that telescope, and you shall swing for it!"

The orderly looked astonished.

"I am governor here," said Servadac.

Ben Zoof knew what his master meant, and to him his master's wish was law.

The interval between the comet and Jupiter was, by the 1st of October, reduced to 43,000,000 miles. The belts all parallel to Jupiter's equator were very distinct in their markings. Those immediately north and south of the equator were of a dusky hue; those toward the poles were alternately dark and light; the intervening spaces of the planet's superficies, between edge and edge, being intensely bright. The belts themselves were occasionally broken by spots, which the records of astronomy describe as varying both in form and in extent.

The physiology of belts and spots alike was beyond the astronomer's power to ascertain; and even if he should be destined once again to take his place in an astronomical congress on the earth, he would be just as incapable as ever of determining whether or no they owed their existence to the external accumulation of vapor, or to some internal agency. It would not be Professor Rosette's lot to enlighten his brother _savants_ to any great degree as to the mysteries that are associated with this, which must ever rank as one of the most magnificent amongst the heavenly orbs.

As the comet approached the critical point of its career it cannot be denied that there was an unacknowledged consciousness of alarm. Mutually reserved, though ever courteous, the count and the captain were secretly drawn together by the prospect of a common danger; and as their return to the earth appeared to them to become more and more dubious, they abandoned their views of narrow isolation, and tried to embrace the wider philosophy that acknowledges the credibility of a habitable universe.

But no philosophy could be proof against the common instincts of their humanity; their hearts, their hopes, were set upon their natural home; no speculation, no science, no experience, could induce them to give up their fond and sanguine anticipation that once again they were to come in contact with the earth.

"Only let us escape Jupiter," said Lieutenant Procope, repeatedly, "and we are free from anxiety."

"But would not Saturn lie ahead?" asked Servadac and the count in one breath.

"No!" said Procope; "the orbit of Saturn is remote, and does not come athwart our path. Jupiter is our sole hindrance. Of Jupiter we must say, as William Tell said, 'Once through the ominous pass and all is well.'"
The 15th of October came, the date of the nearest approximation of the comet to the planet. They were only 31,000,000 miles apart. What would now transpire? Would Gallia be diverted from its proper way? or would it hold the course that the astronomer had predicted?

Early next morning the captain ventured to take the count and the lieutenant up to the observatory. The professor was in the worst of tempers.

That was enough. It was enough, without a word, to indicate the course which events had taken. The comet was pursuing an unaltered way.

The astronomer, correct in his prognostications, ought to have been the most proud and contented of philosophers; his pride and contentment were both overshadowed by the certainty that the career of his comet was destined to be so transient, and that it must inevitably once again come into collision with the earth.

CHAPTER IX MARKET PRICES IN GALLIA

"All right!" said Servadac, convinced by the professor's ill humor that the danger was past; "no doubt we are in for a two years' excursion, but fifteen months more will take us back to the earth!"

"And we shall see Montmartre again!" exclaimed Ben Zoof, in excited tones that betrayed his delight in the anticipation.

To use a nautical expression, they had safely "rounded the point," and they had to be congratulated on their successful navigation; for if, under the influence of Jupiter's attraction, the comet had been retarded for a single hour, in that hour the earth would have already traveled 2,300,000 miles from the point where contact would ensue, and many centuries would elapse before such a coincidence would possibly again occur.

On the 1st of November Gallia and Jupiter were 40,000,000 miles apart. It was little more than ten weeks to the 15th of January, when the comet would begin to re-approach the sun. Though light and heat were now reduced to a twenty-fifth part of their terrestrial intensity, so that a perpetual twilight seemed to have settled over Gallia, yet the population felt cheered even by the little that was left, and buoyed up by the hope that they should ultimately regain their proper position with regard to the great luminary, of which the temperature has been estimated as not less than 5,000,000 degrees.

Of the anxiety endured during the last two months Isaac Hakkabut had known nothing. Since the day he had done his lucky stroke of business he had never left the tartan; and after Ben Zoof, on the following day, had returned the steelyard and the borrowed cash, receiving back the paper roubles deposited, all communication between the Jew and Nina's Hive had ceased. In the course of the few minutes' conversation which Ben Zoof had held with him, he had mentioned that he knew that the whole soil of Gallia was made of gold; but the old man, guessing that the orderly was only laughing at him as usual, paid no attention to the remark, and only meditated upon the means he could devise to get every bit of the money in the new world into his own possession. No one grieved over the life of solitude which Hakkabut persisted in leading. Ben Zoof giggled heartily, as he repeatedly observed "it was astonishing how they reconciled themselves to his absence."

The time came, however, when various circumstances prompted him to think he must renew his intercourse with the inhabitants of the Hive. Some of his goods were beginning to spoil, and he felt the necessity of turning them into money, if he would not be a loser; he hoped, moreover, that the scarcity of his commodities would secure very high prices.

It happened, just about this same time, that Ben Zoof had been calling his master's attention to the fact that some of their most necessary provisions would soon be running short, and that their stock of coffee, sugar, and tobacco would want replenishing. Servadac's mind, of course, turned to the cargo on board the _Hansa_, and he resolved, according to his promise, to apply to the Jew and become a purchaser. Mutual interest and necessity thus conspired to draw Hakkabut and the captain together.

Often and often had Isaac gloated in his solitude over the prospect of first selling a portion of his merchandise for all the gold and silver in the colony. His recent usurious transaction had whetted his appetite. He would next part with some more of his cargo for all the paper money they could give him; but still he should have goods left, and they would want these. Yes, they should have these, too, for promissory notes. Notes would hold good when they got back again to the earth; bills from his Excellency the governor would be good bills; anyhow there would be the sheriff. By the God of Israel! he would get good prices, and he would get fine interest!

Although he did not know it, he was proposing to follow the practice of the Gauls of old, who advanced money on bills for payment in a future life. Hakkabut's "future life," however, was not many months in advance of the present.

Still Hakkabut hesitated to make the first advance, and it was accordingly with much satisfaction that he hailed Captain Servadac's appearance on board the _Hansa_. 
"Hakkabut," said the captain, plunging without further preface into business, "we want some coffee, some tobacco, and other things. I have come to-day to order them, to settle the price, and to-morrow Ben Zoof shall fetch the goods away."

"Merciful, heavens!" the Jew began to whine; but Servadac cut him short.

"None of that miserable howling! Business! I am come to buy your goods. I shall pay for them."

"Ah yes, your Excellency," whispered the Jew, his voice trembling like a street beggar. "Don't impose on me. I am poor; I am nearly ruined already."

"Cease your wretched whining!" cried Servadac. "I have told you once, I shall pay for all I buy."

"Ready money?" asked Hakkabut.

"Yes, ready money. What makes you ask?" said the captain, curious to hear what the Jew would say.

"Well, you see--you see, your Excellency," stammered out the Jew, "to give credit to one wouldn't do, unless I gave credit to another. You are solvent--I mean honorable, and his lordship the count is honorable; but maybe--maybe--"

"Well?" said Servadac, waiting, but inclined to kick the old rascal out of his sight.

"Ready money?" reiterated Hakkabut.

"Don't! I must have gold. Nothing so safe as gold."

"Very good," Servadac replied. "Then you shall have ready money."

"Very good," repeated Servadac, repeating that he should come again the next day, was about to quit the vessel.

"One moment, your Excellency," said Hakkabut, sidling up with a hypocritical smile; "I suppose I am to fix my own prices."

"You will, of course, charge ordinary prices--proper market prices; European prices, I mean."

"Nothing," Servadac said sternly. "You rob me of my rights; you defraud me of my privilege. The monopoly of the market belongs to me. It is the custom; it is my right; it is my privilege to fix my own prices."

"Merciful heavens!" howled the Jew, "it is sheer ruin. The time of monopoly is the time for profit; it is the time for speculation."

"The very thing, Hakkabut, that I am anxious to prevent. Just stop now, and think a minute. You seem to forget my rights; you are forgetting that, if I please, I can confiscate all your cargo for the common use. You ought to be contented with European prices; you will get no more. I am not going to waste my breath on you. I will come again to-morrow;" and, without allowing Hakkabut time to renew his lamentations, Servadac went away.

Hakkabut hereupon descended into the hold of the tartan, and soon returned, carrying ten packets of tobacco, each weighing one kilogramme, and securely fastened by strips of paper, labeled with the French government stamp.
"Ten kilogrammes of tobacco at twelve francs a kilogramme: a hundred and twenty francs," said the Jew.

Ben Zoof was on the point of laying down the money, when Servadac stopped him.

"Let us just see whether the weight is correct."

Hakkabut pointed out that the weight was duly registered on every packet, and that the packets had never been unfastened. The captain, however, had his own special object in view, and would not be diverted. The Jew fetched his steelyard, and a packet of the tobacco was suspended to it.

"Merciful heavens!" screamed Isaac.

The index registered only 133 grammes!

"You see, Hakkabut, I was right. I was perfectly justified in having your goods put to the test," said Servadac, quite seriously.

"But--but, your Excellency--" stammered out the bewildered man.

"You will, of course, make up the deficiency," the captain continued, not noticing the interruption.

"Oh, my lord, let me say--" began Isaac again.

"Come, come, old Caiaphas, do you hear? You are to make up the deficiency," exclaimed Ben Zoof.

"Ah, yes, yes; but--"

The unfortunate Israelite tried hard to speak, but his agitation prevented him. He understood well enough the cause of the phenomenon, but he was overwhelmed by the conviction that the "cursed Gentiles" wanted to cheat him. He deeply regretted that he had not a pair of common scales on board.

"Come, I say, old Jedediah, you are a long while making up what's short," said Ben Zoof, while the Jew was still stammering on.

As soon as he recovered his power of articulation, Isaac began to pour out a medley of lamentations and petitions for mercy. The captain was inexorable. "Very sorry, you know, Hakkabut. It is not my fault that the packet is short weight; but I cannot pay for a kilogramme except I have a kilogramme."

Hakkabut pleaded for some consideration.

"A bargain is a bargain," said Servadac. "You must complete your contract."

And, moaning and groaning, the miserable man was driven to make up the full weight as registered by his own steelyard. He had to repeat the process with the sugar and coffee: for every kilogramme he had to weigh seven. Ben Zoof and the Russians jeered him most unmercifully.

"I say, old Mordecai, wouldn't you rather give your goods away, than sell them at this rate? I would."

"I say, old Pilate, a monopoly isn't always a good thing, is it?"

"I say, old Sepharvaim, what a flourishing trade you're driving!"

Meanwhile seventy kilogrammes of each of the articles required were weighed, and the Jew for each seventy had to take the price of ten.

All along Captain Servadac had been acting only in jest. Aware that old Isaac was an utter hypocrite, he had no compunction in turning a business transaction with him into an occasion for a bit of fun. But the joke at an end, he took care that the Jew was properly paid all his legitimate due.

CHAPTER X. FAR INTO SPACE

A month passed away. Gallia continued its course, bearing its little population onwards, so far removed from the ordinary influence of human passions that it might almost be said that its sole ostensible vice was represented by the greed and avarice of the miserable Jew.

After all, they were but making a voyage—a strange, yet a transient, excursion through solar regions hitherto untraversed; but if the professor's calculations were correct—and why should they be doubted?—their little vessel was destined, after a two years' absence, once more to return "to port." The landing, indeed, might be a matter of difficulty; but with the good prospect before them of once again standing on terrestrial shores, they had nothing to do at present except to make themselves as comfortable as they could in their present quarters.

Thus confident in their anticipations, neither the captain, the count, nor the lieutenant felt under any serious obligation to make any extensive provisions for the future; they saw no necessity for expending the strength of the people, during the short summer that would intervene upon the long severity of winter, in the cultivation or the preservation of their agricultural resources. Nevertheless, they often found themselves talking over the measures they would have been driven to adopt, if they had found themselves permanently attached to their present home.

Even after the turning-point in their career, they knew that at least nine months would have to elapse before the sea would be open to navigation; but at the very first arrival of summer they would be bound to arrange for the _Dobryna_ and the _Hansa_ to retransport themselves and all their animals to the shores of Gourbi Island, where they would have to commence their agricultural labors to secure the crops that must form their winter store. During
four months or thereabouts, they would lead the lives of farmers and of sportsmen; but no sooner would their haymaking and their corn harvest have been accomplished, than they would be compelled again, like a swarm of bees, to retire to their semi-troglodyte existence in the cells of Nina's Hive.

Now and then the captain and his friends found themselves speculating whether, in the event of their having to spend another winter upon Gallia, some means could not be devised by which the dreariness of a second residence in the recesses of the volcano might be escaped. Would not another exploring expedition possibly result in the discovery of a vein of coal or other combustible matter, which could be turned to account in warming some erection which they might hope to put up? A prolonged existence in their underground quarters was felt to be monotonous and depressing, and although it might be all very well for a man like Professor Rosette, absorbed in astronomical studies, it was ill suited to the temperaments of any of themselves for any longer period than was absolutely indispensable.

One contingency there was, almost too terrible to be taken into account. Was it not to be expected that the time might come when the internal fires of Gallia would lose their activity, and the stream of lava would consequently cease to flow? Why should Gallia be exempt from the destiny that seemed to await every other heavenly body? Why should it not roll onwards, like the moon, a dark cold mass in space?

In the event of such a cessation of the volcanic eruption, whilst the comet was still at so great a distance from the sun, they would indeed be at a loss to find a substitute for what alone had served to render life endurable at a temperature of 60 degrees below zero. Happily, however, there was at present no symptom of the subsidence of the lava's stream; the volcano continued its regular and unchanging discharge, and Servadac, ever sanguine, declared that it was useless to give themselves any anxiety upon the matter.

On the 15th of December, Gallia was 276,000,000 leagues from the sun, and, as it was approximately to the extremity of its axis major, would travel only some 11,000,000 or 12,000,000 leagues during the month. Another world was now becoming a conspicuous object in the heavens, and Palmyrin Rosette, after rejoicing in an approach nearer to Jupiter than any other mortal man had ever attained, was now to be privileged to enjoy a similar opportunity of contemplating the planet Saturn. Not that the circumstances were altogether so favorable. Scurcly 31,000,000 miles had separated Gallia from Jupiter; the minimum distance of Saturn would not be less than 415,000,000 miles; but even this distance, although too great to affect the comet's progress more than had been duly reckoned on, was considerably shorter than what had ever separated Saturn from the earth.

To get any information about the planet from Rosette appeared quite impossible. Although equally by night and by day he never seemed to quit his telescope, he did not evince the slightest inclination to impart the result of his observations. It was only from the few astronomical works that happened to be included in the _Dobryna's_ library that any details could be gathered, but these were sufficient to give a large amount of interesting information.

Ben Zoof, when he was made aware that the earth would be invisible to the naked eye from the surface of Saturn, declared that he then, for his part, did not care to learn any more about such a planet; to him it was indispensable that the earth should remain in sight, and it was his great consolation that hitherto his native sphere had never vanished from his gaze.

At this date Saturn was revolving at a distance of 420,000,000 miles from Gallia, and consequently 874,440,000 miles from the sun, receiving only a hundredth part of the light and heat which that luminary bestows upon the earth. On consulting their books of reference, the colonists found that Saturn completes his revolution round the sun in a period of 29 years and 167 days, traveling at the rate of more than 21,000 miles an hour along an orbit measuring 5,490 millions of miles in length. His circumference is about 220,000 miles; his superficies, 144,000 millions of square miles; his volume, 143,846 millions of cubic miles. Saturn is 735 times larger than the earth, consequently he period of 29 years and 167 days, traveling at the rate of more than 21,000 miles an hour along an orbit measuring 5,490 millions of miles in length. His circumference is about 220,000 miles; his superficies, 144,000 millions of square miles; his volume, 143,846 millions of cubic miles. Saturn is 735 times larger than the earth, consequently he
17,605 miles broad; and the outer, of a dusky hue, being 8,660 miles broad.

Such, they read, is the general outline of this strange appendage, which revolves in its own plane in 10 hours 32 minutes. Of what matter it is composed, and how it resists disintegration, is still an unsettled question; but it might almost seem that the Designer of the universe, in permitting its existence, had been willing to impart to His intelligent creatures the manner in which celestial bodies are evolved, and that this remarkable ring-system is a remnant of the nebula from which Saturn was himself developed, and which, from some unknown cause, has become solidified. If at any time it should disperse, it would either fall into fragments upon the surface of Saturn, or the fragments, mutually coalescing, would form additional satellites to circle round the planet in its path.

To any observer stationed on the planet, between the extremes of lat. 45 degrees on either side of the equator, these wonderful rings would present various strange phenomena. Sometimes they would appear as an illuminated arch, with the shadow of Saturn passing over it like the hour-hand over a dial; at other times they would be like a semi-aureole of light. Very often, too, for periods of several years, daily eclipses of the sun must occur through the interposition of this triple ring.

Truly, with the constant rising and setting of the satellites, some with bright discs at their full, others like silver crescents, in quadrature, as well as by the encircling rings, the aspect of the heavens from the surface of Saturn must be as impressive as it is gorgeous.

Unable, indeed, the Gallians were to realize all the marvels of this strange world. After all, they were practically a thousand times further off than the great astronomers have been able to approach by means of their giant telescopes. But they did not complain; their little comet, they knew, was far safer where it was; far better out of the reach of an attraction which, by affecting their path, might have annihilated their best hopes.

The distances of several of the brightest of the fixed stars have been estimated. Amongst others, Vega in the constellation Lyra is 100 millions of millions of miles away; Sirius in Canis Major, 123 millions of millions; the Pole-star, 282 millions of millions; and Capella, 340 millions of millions of miles, a figure represented by no less than fifteen digits.

The hard numerical statement of these enormous figures, however, fails altogether in any adequate way to convey a due impression of the magnitude of these distances. Astronomers, in their ingenuity, have endeavored to use some other basis, and have found "the velocity of light" to be convenient for their purpose. They have made their representations something in this way:

"Suppose," they say, "an observer endowed with an infinite length of vision: suppose him stationed on the surface of Capella; looking thence towards the earth, he would be a spectator of events that had happened seventy years previously; transport him to a star ten times distant, and he will be reviewing the terrestrial sphere of 720 years back; carry him away further still, to a star so remote that it requires something less than nineteen centuries for light to reach it, and he would be a witness of the birth and death of Christ; convey him further again, and he shall be looking upon the dread desolation of the Deluge; take him away further yet (for space is infinite), and he shall be a spectator of the Creation of the spheres. History is thus stereotyped in space; nothing once accomplished can ever be effaced."

Who can altogether be astonished that Palmyrin Rosette, with his burning thirst for astronomical research, should have been conscious of a longing for yet wider travel through the sidereal universe? With his comet now under the influence of one star, now of another, what various systems might he not have explored! what undreamed-of marvels might not have revealed themselves before his gaze! The stars, fixed and immovable in name, are all of them in motion, and Gallia might have followed them in their un-tracked way.

But Gallia had a narrow destiny. She was not to be allowed to wander away into the range of attraction of another center; nor to mingle with the star clusters, some of which have been entirely, others partially resolved; nor was she to lose herself amongst the 5,000 nebulae which have resisted hitherto the grasp of the most powerful reflectors. No; Gallia was neither to pass beyond the limits of the solar system, nor to travel out of sight of the terrestrial sphere. Her orbit was circumscribed to little over 1,500 millions of miles; and, in comparison with the infinite space beyond, this was a mere nothing.

CHAPTER XI. A FETE DAY

The temperature continued to decrease; the mercurial thermometer, which freezes at 42 degrees below zero, was no longer of service, and the spirit thermometer of the _Dobryna_ had been brought into use. This now registered 53 degrees below freezing-point.

In the creek, where the two vessels had been moored for the winter, the elevation of the ice, in anticipation of which Lieutenant Procopé had taken the precautionary measure of beveling, was going on slowly but irresistibly, and the tartan was upheaved fifty feet above the level of the Gallian Sea, while the schooner, as being lighter, had
been raised to a still greater altitude.

So irresistible was this gradual process of elevation, so utterly defying all human power to arrest, that the lieutenant began to feel very anxious as to the safety of his yacht. With the exception of the engine and the masts, everything had been cleared out and conveyed to shore, but in the event of a thaw it appeared that nothing short of a miracle could prevent the hull from being dashed to pieces, and then all means of leaving the promontory would be gone. The _Hansa_, of course, would share a similar fate; in fact, it had already heeled over to such an extent as to render it quite dangerous for its obstinate owner, who, at the peril of his life, resolved that he would stay where he could watch over his all-precious cargo, though continually invoking curses on the ill-fate of which he deemed himself the victim.

There was, however, a stronger will than Isaac Hakkabut's. Although no one of all the community cared at all for the safety of the Jew, they cared very much for the security of his cargo, and when Servadac found that nothing would induce the old man to abandon his present quarters voluntarily, he very soon adopted measures of coercion that were far more effectual than any representations of personal danger.

"Stop where you like, Hakkabut," said the captain to him; "but understand that I consider it my duty to make sure that your cargo is taken care of. I am going to have it carried across to land, at once."

Neither groans, nor tears, nor protestations on the part of the Jew, were of the slightest avail. Forthwith, on the 20th of December, the removal of the goods commenced.

Both Spaniards and Russians were all occupied for several days in the work of unloading the tartan. Well muffled up as they were in furs, they were able to endure the cold with impunity, making it their special care to avoid actual contact with any article made of metal, which, in the low state of the temperature, would inevitably have taken all the skin off their hands, as much as if it had been red-hot. The task, however, was brought to an end without accident of any kind; and when the stores of the _Hansa_ were safely deposited in the galleries of the Hive, Lieutenant Procope avowed that he really felt that his mind had been unburdened from a great anxiety.

Captain Servadac gave old Isaac full permission to take up his residence amongst the rest of the community, promised him the entire control over his own property, and altogether showed him so much consideration that, but for his unbounded respect for his master, Ben Zoof would have liked to reprimand him for his courtesy to a man whom he so cordially despised.

Although Hakkabut clamored most vehemently about his goods being carried off "against his will," in his heart he was more than satisfied to see his property transferred to a place of safety, and delighted, moreover, to know that the transport had been effected without a farthing of expense to himself. As soon, then, as he found the tartan empty, he was only too glad to accept the offer that had been made him, and very soon made his way over to the quarters in the gallery where his merchandise had been stored. Here he lived day and night. He supplied himself with what little food he required from his own stock of provisions, a small spirit-lamp sufficing to perform all the operations of his meager cookery. Consequently all intercourse between himself and the rest of the inhabitants was entirely confined to business transactions, when occasion required that some purchase should be made from his stock of commodities. Meanwhile, all the silver and gold of the colony was gradually finding its way to a double-locked drawer, of which the Jew most carefully guarded the key.

The 1st of January was drawing near, the anniversary of the shock which had resulted in the severance of thirty-six human beings from the society of their fellow-men. Hitherto, not one of them was missing. The unvarying calmness of the climate, notwithstanding the cold, had tended to maintain them in good health, and there seemed no reason to doubt that, when Gallia returned to the earth, the total of its little population would still be complete.

The 1st of January, it is true, was not properly "New Year's Day" in Gallia, but Captain Servadac, nevertheless, was very anxious to have it observed as a holiday.

"I do not think," he said to Count Timascheff and Lieutenant Procope, "that we ought to allow our people to lose their interest in the world to which we are all hoping to return; and how can we cement the bond that ought to unite us, better than by celebrating, in common with our fellow-creatures upon earth, a day that awakens afresh the kindliest sentiments of all? Besides," he added, smiling, "I expect that Gallia, although invisible just at present to the naked eye, is being closely watched by the telescopes of our terrestrial friends, and I have no doubt that the newspapers and scientific journals of both hemispheres are full of accounts detailing the movements of the new comet."

"True," asserted the count. "I can quite imagine that we are occasioning no small excitement in all the chief observatories."

"Ay, more than that," said the lieutenant; "our Gallia is certain to be far more than a mere object of scientific interest or curiosity. Why should we doubt that the elements of a comet which has once come into collision with the earth have by this time been accurately calculated? What our friend the professor has done here, has been done likewise on the earth, where, beyond a question, all manner of expedients are being discussed as to the best way of
mitigating the violence of a concussion that must occur."

The lieutenant's conjectures were so reasonable that they commanded assent. Gallia could scarcely be otherwise than an object of terror to the inhabitants of the earth, who could by no means be certain that a second collision would be comparatively so harmless as the first. Even to the Gallians themselves, much as they looked forward to the event, the prospect was not unmixed with alarm, and they would rejoice in the invention of any device by which it was likely the impetus of the shock might be deadened.

Christmas arrived, and was marked by appropriate religious observance by everyone in the community, with the exception of the Jew, who made a point of excluding himself more obstinately than ever in the gloomy recesses of his retreat.

To Ben Zoof the last week of the year was full of bustle. The arrangements for the New Year _fete_ were entrusted to him, and he was anxious, in spite of the resources of Gallia being so limited, to make the program for the great day as attractive as possible.

It was a matter of debate that night whether the professor should be invited to join the party; it was scarcely likely that he would care to come, but, on the whole, it was felt to be advisable to ask him. At first Captain Servadac thought of going in person with the invitation; but, remembering Rosette's dislike to visitors, he altered his mind, and sent young Pablo up to the observatory with a formal note, requesting the pleasure of Professor Rosette's company at the New Year's _fete_.

Pablo was soon back, bringing no answer except that the professor had told him that "to-day was the 125th of June, and that to-morrow would be the 1st of July."

Consequently, Servadac and the count took it for granted that Palmyrin Rosette declined their invitation.

An hour after sunrise on New Year's Day, Frenchmen, Russians, Spaniards, and little Nina, as the representative of Italy, sat down to a feast such as never before had been seen in Gallia. Ben Zoof and the Russian cook had quite surpassed themselves. The wines, part of the _Dobryna's_ stores, were of excellent quality. Those of the vintages of France and Spain were drunk in toasting their respective countries, and even Russia was honored in a similar way by means of a few bottles of kummel. The company was more than contented--it was as jovial as Ben Zoof could desire; and the ringing cheers that followed the great toast of the day--"A happy return to our Mother Earth," must fairly have startled the professor in the silence of his observatory.

The _dejeuner_ over, there still remained three hours of daylight. The sun was approaching the zenith, but so dim and enfeebled were his rays that they were very unlike what had produced the wines of Bordeaux and Burgundy which they had just been enjoying, and it was necessary for all, before starting upon an excursion that would last over nightfall, to envelop themselves in the thickest of clothing.

Full of spirits, the party left the Hive, and chattering and singing as they went, made their way down to the frozen shore, where they fastened on their skates. Once upon the ice, everyone followed his own fancy, and some singly, some in groups, scattered themselves in all directions. Captain Servadac, the count, and the lieutenant were generally seen together. Negrete and the Spaniards, now masters of their novel exercise, wandered fleetly and gracefully hither and thither, occasionally being out of sight completely. The Russian sailors, following a northern custom, skated in file, maintaining their rank by means of a long pole passed under their right arms, and in this way they described a trackway of singular regularity. The two children, blithe as birds, flitted about, now singly, now arm-in-arm, now joining the captain's party, now making a short peregrination by themselves, but always full of life and spirit. As for Ben Zoof, he was here, there, and everywhere, his imperturbable good temper ensuring him a smile of welcome whenever he appeared.

Thus coursing rapidly over the icy plain, the whole party had soon exceeded the line that made the horizon from the shore. First, the rocks of the coast were lost to view; then the white crests of the cliffs were no longer to be seen; and at last, the summit of the volcano, with its corona of vapor, was entirely out of sight. Occasionally the skaters were obliged to stop to recover their breath, but, fearful of frost-bite, they almost instantly resumed their exercise, and proceeded nearly as far as Gourbi Island before they thought about retracing their course.

But night was coming on, and the sun was already sinking in the east with the rapidity to which the residents on Gallia were by this time well accustomed. The sunset upon this contracted horizon was very remarkable. There was not a cloud nor a vapor to catch the tints of the declining beams; the surface of the ice did not, as a liquid sea would, reflect the last green ray of light; but the radiant orb, enlarged by the effect of refraction, its circumference sharply defined against the sky, sank abruptly, as though a trap had been opened in the ice for its reception.

Before the daylight ended. Captain Servadac had cautioned the party to collect themselves betimes into one group. "Unless you are sure of your whereabouts before dark," he said, "you will not find it after. We have come out like a party of skirmishers; let us go back in full force."

The night would be dark; their moon was in conjunction, and would not be seen; the stars would only give something of that "pale radiance" which the poet Corneille has described.
Immediately after sunset the torches were lighted, and the long series of flames, fanned by the rapid motion of
their bearers, had much the appearance of an enormous fiery banner. An hour later, and the volcano appeared like a
dim shadow on the horizon, the light from the crater shedding a lurid glare upon the surrounding gloom. In time the
glow of the burning lava, reflected in the icy mirror, fell upon the troop of skaters, and cast their lengthened shadows
grotesquely on the surface of the frozen sea.

Later still, half an hour or more afterwards, the torches were all but dying out. The shore was close at hand. All
at once, Ben Zoof uttered a startled cry, and pointed with bewildered excitement towards the mountain.
Involuntarily, one and all, they plowed their heels into the ice and came to a halt. Exclamations of surprise and
horror burst from every lip. The volcano was extinguished! The stream of burning lava had suddenly ceased to flow!
Speechless with amazement, they stood still for some moments. There was not one of them that did not realize,
more or less, how critical was their position. The sole source of the heat that had enabled them to brave the rigor of
the cold had failed them! Death, in the cruelest of all shapes, seemed staring them in the face—death from cold!
Meanwhile, the last torch had flickered out.

It was quite dark.
"Forward!" cried Servadac, firmly.

At the word of command they advanced to the shore; clambered with no little difficulty up the slippery rocks;
gained the mouth of the gallery; groped their way into the common hall.
How dreary! how chill it seemed!
The fiery cataract no longer spread its glowing covering over the mouth of the grotto. Lieutenant Procope leaned
through the aperture. The pool, hitherto kept fluid by its proximity to the lava, was already encrusted with a layer of
ice.

Such was the end of the New Year's Day so happily begun.

CHAPTER XII. THE BOWELS OF THE COMET

The whole night was spent in speculating, with gloomy forebodings, upon the chances of the future. The
temperature of the hall, now entirely exposed to the outer air, was rapidly falling, and would quickly become
unendurable. Far too intense was the cold to allow anyone to remain at the opening, and the moisture on the walls
soon resolved itself into icicles. But the mountain was like the body of a dying man, that retains awhile a certain
amount of heat at the heart after the extremities have become cold and dead. In the more interior galleries there was
still a certain degree of warmth, and hither Servadac and his companions were glad enough to retreat.

Here they found the professor, who, startled by the sudden cold, had been fain to make a precipitate retreat from
his observatory. Now would have been the opportunity to demand of the enthusiast whether he would like to prolong
his residence indefinitely upon his little comet. It is very likely that he would have declared himself ready to put up
with any amount of discomfort to be able to gratify his love of investigation; but all were far too disheartened and
distressed to care to banter him upon the subject on which he was so sensitive.

Next morning, Servadac thus addressed his people. "My friends, except from cold, we have nothing to fear. Our
provisions are ample—more than enough for the remaining period of our sojourn in this lonesome world of ours; our
preserved meat is already cooked; we shall be able to dispense with all fuel for cooking purposes. All that we require
is warmth—warmth for ourselves; let us secure that, and all may be well. Now, I do not entertain a doubt but that the
warmth we require is resident in the bowels of this mountain on which we are living; to the depth of those bowels
we must penetrate; there we shall obtain the warmth which is indispensable to our very existence."

His tone, quite as much as his words, restored confidence to many of his people, who were already yielding to a
feeling of despair. The count and the lieutenant fervently, but silently, grasped his hand.
"Nina," said the captain, "you will not be afraid to go down to the lower depths of the mountain, will you?"
"Not if Pablo goes," replied the child.
"Oh yes, of course, Pablo will go. You are not afraid to go, are you, Pablo?" he said, addressing the boy.
"Anywhere with you, your Excellency," was the boy's prompt reply.

And certain it was that no time must be lost in penetrating below the heart of the volcano; already the most
protected of the many ramifications of Nina's Hive were being pervaded by a cold that was insufferable. It was an
acknowledged impossibility to get access to the crater by the exterior declivities of the mountain-side; they were far
too steep and too slippery to afford a foothold. It must of necessity be entered from the interior.

Lieutenant Procope accordingly undertook the task of exploring all the galleries, and was soon able to report that
he had discovered one which he had every reason to believe abutted upon the central funnel. His reason for coming
to this conclusion was that the caloric emitted by the rising vapors of the hot lava seemed to be oozing, as it were,
out of the tellurium, which had been demonstrated already to be a conductor of heat. Only succeed in piercing
through this rock for seven or eight yards, and the lieutenant did not doubt that his way would be opened into the old lava-course, by following which he hoped descent would be easy.

Under the lieutenant's direction the Russian sailors were immediately set to work. Their former experience had convinced them that spades and pick-axes were of no avail, and their sole resource was to proceed by blasting with gunpowder. However skillfully the operation might be carried on, it must necessarily occupy several days, and during that time the sufferings from cold must be very severe.

"If we fail in our object, and cannot get to the depths of the mountain, our little colony is doomed," said Count Timaschef.

"That speech is not like yourself," answered Servadac, smiling. "What has become of the faith which has hitherto carried you so bravely through all our difficulties?"

The count shook his head, as if in despair, and said, sadly, "The Hand that has hitherto been outstretched to help seems now to be withdrawn."

"But only to test our powers of endurance," rejoined the captain, earnestly. "Courage, my friend, courage! Something tells me that this cessation of the eruption is only partial; the internal fire is not all extinct. All is not over yet. It is too soon to give up; never despair!"

Lieutenant Procope quite concurred with the captain. Many causes, he knew, besides the interruption of the influence of the oxygen upon the mineral substances in Gallia's interior, might account for the stoppage of the lava-flow in this one particular spot, and he considered it more than probable that a fresh outlet had been opened in some other part of the surface, and that the eruptive matter had been diverted into the new channel. But at present his business was to prosecute his labors so that a retreat might be immediately effected from their now untenable position.

Restless and agitated, Professor Rosette, if he took any interest in these discussions, certainly took no share in them. He had brought his telescope down from the observatory into the common hall, and there at frequent intervals, by night and by day, he would endeavor to continue his observations; but the intense cold perpetually compelled him to desist, or he would literally have been frozen to death. No sooner, however, did he find himself obliged to retreat from his study of the heavens, than he would begin overwhelming everybody about him with bitter complaints, pouring out his regrets that he had ever quitted his quarters at Formentera.

On the 4th of January, by persevering industry, the process of boring was completed, and the lieutenant could hear that fragments of the blasted rock, as the sailors cleared them away with their spades, were rolling into the funnel of the crater. He noticed, too, that they did not fall perpendicularly, but seemed to slide along, from which he inferred that the sides of the crater were sloping; he had therefore reason to hope that a descent might be found practicable.

Larger and larger grew the orifice; at length it would admit a man's body, and Ben Zoof, carrying a torch, pushed himself through it, followed by the lieutenant and Servadac. Procope's conjecture proved correct. On entering the crater, they found that the sides slanted at the angle of about 4 degrees; moreover, the eruption had evidently been of recent origin, dating probably only from the shock which had invested Gallia with a proportion of the atmosphere of the earth, and beneath the coating of ashes with which they were covered, there were various irregularities in the rock, not yet worn away by the action of the lava, and these afforded a tolerably safe footing.

"Rather a bad staircase!" said Ben Zoof, as they began to make their way down.

In about half an hour, proceeding in a southerly direction, they had descended nearly five hundred feet. From time to time they came upon large excavations that at first sight had all the appearance of galleries, but by waving his torch, Ben Zoof could always see their extreme limits, and it was evident that the lower strata of the mountain did not present the same system of ramification that rendered the Hive above so commodious a residence.

It was not a time to be fastidious; they must be satisfied with such accommodation as they could get, provided it was warm. Captain Servadac was only too glad to find that his hopes about the temperature were to a certain extent realized. The lower they went, the greater was the diminution in the cold, a diminution that was far more rapid than that which is experienced in making the descent of terrestrial mines. In this case it was a volcano, not a colliery, that was the object of exploration, and thankful enough they were to find that it had not become extinct. Although the lava, from some unknown cause, had ceased to rise in the crater, yet plainly it existed somewhere in an incandescent state, and was still transmitting considerable heat to inferior strata.

Lieutenant Procope had brought in his hand a mercurial thermometer, and Servadac carried an aneroid barometer, by means of which he could estimate the depth of their descent below the level of the Gallian Sea. When they were six hundred feet below the orifice the mercury registered a temperature of 6 degrees below zero.

"Six degrees!" said Servadac; "that will not suit us. At this low temperature we could not survive the winter. We must try deeper down. I only hope the ventilation will hold out."

There was, however, nothing to fear on the score of ventilation. The great current of air that rushed into the
aperture penetrated everywhere, and made respiration perfectly easy.

The descent was continued for about another three hundred feet, which brought the explorers to a total depth of nine hundred feet from their old quarters. Here the thermometer registered 12 degrees above zero—a temperature which, if only it were permanent, was all they wanted. There was no advantage in proceeding any further along the lava-course; they could already hear the dull rumblings that indicated that they were at no great distance from the central focus.

"Quite near enough for me!" exclaimed Ben Zoof. "Those who are chilly are welcome to go as much lower as they like. For my part, I shall be quite warm enough here."

After throwing the gleams of torch-light in all directions, the explorers seated themselves on a jutting rock, and began to debate whether it was practicable for the colony to make an abode in these lower depths of the mountain. The prospect, it must be owned, was not inviting. The crater, it is true, widened out into a cavern sufficiently large, but here its accommodation ended. Above and below were a few ledges in the rock that would serve as receptacles for provisions; but, with the exception of a small recess that must be reserved for Nina, it was clear that henceforth they must all renounce the idea of having separate apartments. The single cave must be their dining-room, drawing-room, and dormitory, all in one. From living the life of rabbits in a warren, they were reduced to the existence of moles, with the difference that they could not, like them, forget their troubles in a long winter's sleep.

The cavern, however, was quite capable of being lighted by means of lamps and lanterns. Among the stores were several barrels of oil and a considerable quantity of spirits of wine, which might be burned when required for cooking purposes. Moreover, it would be unnecessary for them to confine themselves entirely to the seclusion of their gloomy residence; well wrapped up, there would be nothing to prevent them making occasional excursions both to the Hive and to the sea-shore. A supply of fresh water would be constantly required; ice for this purpose must be perpetually carried in from the coast, and it would be necessary to arrange that everyone in turn should perform this office, as it would be no sinecure to clamber up the sides of the crater for 900 feet, and descend the same distance with a heavy burden.

But the emergency was great, and it was accordingly soon decided that the little colony should forthwith take up its quarters in the cave. After all, they said, they should hardly be much worse off than thousands who annually winter in Arctic regions. On board the whaling-vessels, and in the establishments of the Hudson's Bay Company, such luxuries as separate cabins or sleeping-chambers are never thought of; one large apartment, well heated and ventilated, with as few corners as possible, is considered far more healthy; and on board ship the entire hold, and in forts a single floor, is appropriated to this purpose. The recollection of this fact served to reconcile them, in a great degree, to the change to which they felt it requisite to submit.

Having remounted the ascent, they made the result of their exploration known to the mass of the community, who received the tidings with a sense of relief, and cordially accepted the scheme of the migration.

The first step was to clear the cavern of its accumulation of ashes, and then the labor of removal commenced in earnest. Never was a task undertaken with greater zest. The fear of being to a certainty frozen to death if they remained where they were, was a stimulus that made everyone put forth all his energies. Beds, furniture, cooking utensils—first the stores of the Dobryna—then the cargo of the tartan—all were carried down with the greatest alacrity, and the diminished weight combined with the downhill route to make the labor proceed with incredible briskness.

Although Professor Rosette yielded to the pressure of circumstances, and allowed himself to be conducted to the lower regions, nothing would induce him to allow his telescope to be carried underground; and as it was undeniable that it would certainly be of no service deep down in the bowels of the mountain, it was allowed to remain undisturbed upon its tripod in the great hall of Nina's Hive.

As for Isaac Hakkabut, his outcry was beyond description lamentable. Never, in the whole universe, had a merchant met with such reverses; never had such a pitiable series of losses befallen an unfortunate man. Regardless of the ridicule which his abject wretchedness excited, he howled on still, and kept up an unending wail; but meanwhile he kept a keen eye upon every article of his property, and amidst universal laughter insisted on having every item registered in an inventory as it was transferred to its appointed place of safety. Servadac considerably allowed the whole of the cargo to be deposited in a hollow apart by itself, over which the Jew was permitted to keep a watch as vigilant as he pleased.

By the 10th the removal was accomplished. Rescued, at all events, from the exposure to a perilous temperature of 60 degrees below zero, the community was installed in its new home. The large cave was lighted by the Dobryna's lamps, while several lanterns, suspended at intervals along the acclivity that led to their deserted quarters above, gave a weird picturesqueness to the scene, that might vie with any of the graphic descriptions of the "Arabian Nights' Entertainments."

"How do you like this, Nina?" said Ben Zoof.
"_Va bene!_" replied the child. "We are only living in the cellars instead of upon the ground floor."

"We will try and make ourselves comfortable," said the orderly.

"Oh yes, we will be happy here," rejoined the child; "it is nice and warm."

Although they were as careful as they could to conceal their misgivings from the rest, Servadac and his two friends could not regard their present situation without distrust. When alone, they would frequently ask each other what would become of them all, if the volcanic heat should really be subsiding, or if some unexpected perturbation should retard the course of the comet, and compel them to an indefinitely prolonged residence in their grim abode. It was scarcely likely that the comet could supply the fuel of which ere long they would be in urgent need. Who could expect to find coal in the bowels of Gallia,—coal, which is the residuum of ancient forests mineralized by the lapse of ages? Would not the lava-cinders exhumed from the extinct volcano be their last poor resource?

"Keep up your spirits, my friends," said Servadac; "we have plenty of time before us at present. Let us hope that as fresh difficulties arise, fresh ways of escape will open. Never despair!"

"True," said the count; "it is an old saying that 'Necessity is the mother of invention.' Besides, I should think it very unlikely that the internal heat will fail us now before the summer."

The lieutenant declared that he entertained the same hope. As the reason of his opinion he alleged that the combustion of the eruptive matter was most probably of quite recent origin, because the comet before its collision with the earth had possessed no atmosphere, and that consequently no oxygen could have penetrated to its interior.

"Most likely you are right," replied the count; "and so far from dreading a failure of the internal heat, I am not quite sure that we may not be exposed to a more terrible calamity still?"

"What?" asked Servadac.

"The calamity of the eruption breaking out suddenly again, and taking us by surprise."

"Heavens!" cried the captain, "we will not think of that."

"The outbreak may happen again," said the lieutenant, calmly; "but it will be our fault, our own lack of vigilance, if we are taken by surprise." And so the conversation dropped.

The 15th of January dawned; and the comet was 220,000,000 leagues from the sun.

Gallia had reached its aphelion.

CHAPTER XIII. DREARY MONTHS

Henceforth, then, with a velocity ever increasing, Gallia would re-approach the sun.

Except the thirteen Englishmen who had been left at Gibraltar, every living creature had taken refuge in the dark abyss of the volcano's crater.

And with those Englishmen, how had it fared?

"Far better than with ourselves," was the sentiment that would have been universally accepted in Nina's Hive. And there was every reason to conjecture that so it was. The party at Gibraltar, they all agreed, would not, like themselves, have been compelled to have recourse to a stream of lava for their supply of heat; they, no doubt, had had abundance of fuel as well as food; and in their solid casemate, with its substantial walls, they would find ample shelter from the rigor of the cold. The time would have been passed at least in comfort, and perhaps in contentment; and Colonel Murphy and Major Oliphant would have had leisure more than sufficient for solving the most abstruse problems of the chess-board. All of them, too, would be happy in the confidence that when the time should come, England would have full meed of praise to award to the gallant soldiers who had adhered so well and so manfully to their post.

It did, indeed, more than once occur to the minds both of Servadac and his friends that, if their condition should become one of extreme emergency, they might, as a last resource, betake themselves to Gibraltar, and there seek a refuge; but their former reception had not been of the kindest, and they were little disposed to renew an acquaintance that was marked by so little cordiality. Not in the least that they would expect to meet with any inhospitable rebuff. Far from that; they knew well enough that Englishmen, whatever their faults, would be the last to abandon their fellow-creatures in the hour of distress. Nevertheless, except the necessity became far more urgent than it had hitherto proved, they resolved to endeavor to remain in their present quarters. Up till this time no casualties had diminished their original number, but to undertake so long a journey across that unsheltered expanse of ice could scarcely fail to result in the loss of some of their party.

However great was the desire to find a retreat for every living thing in the deep hollow of the crater, it was found necessary to slaughter almost all the domestic animals before the removal of the community from Nina's Hive. To have stabled them all in the cavern below would have been quite impossible, whilst to have left them in the upper galleries would only have been to abandon them to a cruel death; and since meat could be preserved for an indefinite time in the original store-places, now colder than ever, the expedient of killing the animals seemed to recommend
itself as equally prudent and humane.

Naturally the captain and Ben Zoof were most anxious that their favorite horses should be saved, and accordingly, by dint of the greatest care, all difficulties in the way were overcome, and Zephyr and Galette were conducted down the crater, where they were installed in a large hole and provided with forage, which was still abundant.

Birds, subsisting only on scraps thrown out to them did not cease to follow the population in its migration, and so numerous did they become that multitudes of them had repeatedly to be destroyed.

The general re-arrangement of the new residence was no easy business, and occupied so much time that the end of January arrived before they could be said to be fairly settled. And then began a life of dreary monotony. Then seemed to creep over everyone a kind of moral torpor as well as physical lassitude, which Servadac, the count, and the lieutenant did their best not only to combat in themselves, but to counteract in the general community. They provided a variety of intellectual pursuits; they instituted debates in which everybody was encouraged to take part; they read aloud, and explained extracts from the elementary manuals of science, or from the books of adventuous travel which their library supplied; and Russians and Spaniards, day after day, might be seen gathered round the large table, giving their best attention to instruction which should send them back to Mother Earth less ignorant than they had left her.

Selfish and morose, Hakkabut could never be induced to be present at these social gatherings. He was far too much occupied in his own appropriated corner, either in conning his accounts, or in counting his money. Altogether, with what he had before, he now possessed the round sum of 150,000 francs, half of which was in sterling gold; but nothing could give him any satisfaction while he knew that the days were passing, and that he was denied the opportunity of putting out his capital in advantageous investments, or securing a proper interest.

Neither did Palmyrin Rosette find leisure to take any share in the mutual intercourse. His occupation was far too absorbing for him to suffer it to be interrupted, and to him, living as he did perpetually in a world of figures, the winter days seemed neither long nor wearisome. Having ascertained every possible particular about his comet, he was now devoting himself with equal ardor to the analysis of all the properties of the satellite Nerina, to which he appeared to assert the same claim of proprietorship.

In order to investigate Nerina it was indispensable that he should make several actual observations at various points of the orbit; and for this purpose he repeatedly made his way up to the grotto above, where, in spite of the extreme severity of the cold, he would persevere in the use of his telescope till he was all but paralyzed. But what he felt more than anything was the want of some retired apartment, where he could pursue his studies without hindrance or intrusion.

It was about the beginning of February, when the professor brought his complaint to Captain Servadac, and begged him to assign him a chamber, no matter how small, in which he should be free to carry on his task in silence and without molestation. So readily did Servadac promise to do everything in his power to provide him with the accommodation for which he asked, that the professor was put into such a manifest good temper that the captain ventured to speak upon the matter that was ever uppermost in his mind.

"I do not mean," he began timidly, "to cast the least imputation of inaccuracy upon any of your calculations, but would you allow me, my dear professor, to suggest that you should revise your estimate of the duration of Gallia's period of revolution. It is so important, you know, so all important; the difference of one half minute, you know, would so certainly mar the expectation of reunion with the earth--"

And seeing a cloud gathering on Rosette's face, he added:

"I am sure Lieutenant Procope would be only too happy to render you any assistance in the revision."

"Sir," said the professor, bridling up, "I want no assistant; my calculations want no revision. I never make an error. I have made my reckoning as far as Gallia is concerned. I am now making a like estimate of the elements of Nerina."

Conscious how impolitic it would be to press this matter further, the captain casually remarked that he should have supposed that all the elements of Nerina had been calculated long since by astronomers on the earth. It was about as unlucky a speech as he could possibly have made. The professor glared at him fiercely.

"Astounding, sir!" he exclaimed. "Yes! Nerina was a planet then; everything that appertained to the planet was determined; but Nerina is a moon now. And do you not think, sir, that we have a right to know as much about our moon as those _terrestrials_--"--and he curled his lip as he spoke with a contemptuous emphasis--"know of theirs?"

"I beg pardon," said the corrected captain.

"Well then, never mind," replied the professor, quickly appeased; "only will you have the goodness to get me a proper place for study?"

"I will, as I promised, do all I can," answered Servadac.

"Very good," said the professor. "No immediate hurry; an hour hence will do."
But in spite of this condescension on the part of the man of science, some hours had to elapse before any place of retreat could be discovered likely to suit his requirements; but at length a little nook was found in the side of the cavern just large enough to hold an armchair and a table, and in this the astronomer was soon ensconced to his entire satisfaction.

Buried thus, nearly 900 feet below ground, the Gallians ought to have had unbounded mental energy to furnish an adequate reaction to the depressing monotony of their existence; but many days would often elapse without any one of them ascending to the surface of the soil, and had it not been for the necessity of obtaining fresh water, it seemed almost probable that there would never have been an effort made to leave the cavern at all.

A few excursions, it is true, were made in the downward direction. The three leaders, with Ben Zoof, made their way to the lower depths of the crater, not with the design of making any further examination as to the nature of the rock—for although it might be true enough that it contained thirty per cent. of gold, it was as valueless to them as granite—but with the intention of ascertaining whether the subterranean fire still retained its activity. Satisfied upon this point, they came to the conclusion that the eruption which had so suddenly ceased in one spot had certainly broken out in another.

February, March, April, May, passed wearily by; but day succeeded to day with such gloomy sameness that it was little wonder that no notice was taken of the lapse of time. The people seemed rather to vegetate than to live, and their want of vigor became at times almost alarming. The readings around the long table ceased to be attractive, and the debates, sustained by few, became utterly wanting in animation. The Spaniards could hardly be roused to quit their beds, and seemed to have scarcely energy enough to eat. The Russians, constitutionally of more enduring temperament, did not give way to the same extent, but the long and drear confinement was beginning to tell upon them all. Servadac, the count, and the lieutenant all knew well enough that it was the want of air and exercise that was the cause of much of this mental depression; but what could they do? The most serious remonstrances on their part were entirely in vain. In fact, they themselves occasionally fell a prey to the same lassitude both of body and mind. Long fits of drowsiness, combined with an utter aversion to food, would come over them. It almost seemed as if their entire nature had become degenerate, and that, like tortoises, they could sleep and fast till the return of summer.

Strange to say, little Nina bore her hardships more bravely than any of them. Flitting about, coaxing one to eat, another to drink, rousing Pablo as often as he seemed yielding to the common languor, the child became the life of the party. Her merry prattle enlivened the gloom of the grim cavern like the sweet notes of a bird; her gay Italian songs broke the monotony of the depressing silence; and almost unconscious as the half-dormant population of Gallia were of her influence, they still would have missed her bright presence sorely. The months still glided on; how, it seemed impossible for the inhabitants of the living tomb to say. There was a dead level of dullness.

At the beginning of June the general torpor appeared slightly to relax its hold upon its victims. This partial revival was probably due to the somewhat increased influence of the sun, still far, far away. During the first half of the Gallian year, Lieutenant Procope had taken careful note of Rosette's monthly announcements of the comet's progress, and he was able now, without reference to the professor, to calculate the rate of advance on its way back towards the sun. He found that Gallia had re-crossed the orbit of Jupiter, but was still at the enormous distance of 197,000,000 leagues from the sun, and he reckoned that in about four months it would have entered the zone of the telescopic planets.

Gradually, but uninterruptedly, life and spirits continued to revive, and by the end of the month Servadac and his little colony had regained most of their ordinary physical and mental energies. Ben Zoof, in particular, roused himself with redoubled vigor, like a giant refreshed from his slumbers. The visits, consequently, to the long-neglected galleries of Nina's Hive became more and more frequent.

One day an excursion was made to the shore. It was still bitterly cold, but the atmosphere had lost nothing of its former stillness, and not a cloud was visible from horizon to zenith. The old footmarks were all as distinct as on the day in which they had been imprinted, and the only portion of the shore where any change was apparent was in the little creek. Here the elevation of the ice had gone on increasing, until the schooner and the tartan had been uplifted to a height of 150 feet, not only rendering them quite inaccessible, but exposing them to all but certain destruction in the event of a thaw.

But in spite of this condescension on the part of the man of science, some hours had to elapse before any place of retreat could be discovered likely to suit his requirements; but at length a little nook was found in the side of the cavern just large enough to hold an armchair and a table, and in this the astronomer was soon ensconced to his entire satisfaction.

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Isaac Hakkabut, immovable from the personal oversight of his property in the cavern, had not accompanied the party, and consequently was in blissful ignorance of the fate that threatened his vessel. "A good thing the old fellow wasn't there to see," observed Ben Zoof; "he would have screamed like a peacock. What a misfortune it is," he added, speaking to himself, "to have a peacock's voice, without its plumage!"

During the months of July and August, Gallia advanced 164,000,000 leagues along her orbit. At night the cold was still intense, but in the daytime the sun, here full upon the equator, caused an appreciable difference of 20 degrees in the temperature. Like birds, the population spent whole days exposed to its grateful warmth, rarely
returning till nightfall to the shade of their gloomy home.

This spring-time, if such it may be called, had a most enlivening influence upon all. Hope and courage revived as day by day the sun's disc expanded in the heavens, and every evening the earth assumed a greater magnitude amongst the fixed stars. It was distant yet, but the goal was cheeringly in view.

"I can't believe that yonder little speck of light contains my mountain of Montmartre," said Ben Zoof, one night, after he had been gazing long and steadily at the far-off world.

"You will, I hope, some day find out that it does," answered his master.

"I hope so," said the orderly, without moving his eye from the distant sphere. After meditating a while, he spoke again. "I suppose Professor Rosette couldn't make his comet go straight back, could he?"

"Hush!" cried Servadac.

Ben Zoof understood the correction.

"No," continued the captain; "it is not for man to disturb the order of the universe. That belongs to a Higher Power than ours!"

CHAPTER XIV. THE PROFESSOR PERPLEXED

Another month passed away, and it was now September, but it was still impossible to leave the warmth of the subterranean retreat for the more airy and commodious quarters of the Hive, where "the bees" would certainly have been frozen to death in their cells. It was altogether quite as much a matter of congratulation as of regret that the volcano showed no symptoms of resuming its activity; for although a return of the eruption might have rendered their former resort again habitable, any sudden outbreak would have been disastrous to them where they were, the crater being the sole outlet by which the burning lava could escape.

"A wretched time we have had for the last seven months," said the orderly one day to his master; "but what a comfort little Nina has been to us all!"

"Yes, indeed," replied Servadac; "she is a charming little creature. I hardly know how we should have got on without her."

"What is to become of her when we arrive back at the earth?"

"Not much fear, Ben Zoof, but that she will be well taken care of. Perhaps you and I had better adopt her."

"Ay, yes," assented the orderly. "You can be her father, and I can be her mother."

Servadac laughed. "Then you and I shall be man and wife."

"We have been as good as that for a long time," observed Ben Zoof, gravely.

By the beginning of October, the temperature had so far moderated that it could scarcely be said to be intolerable. The comet's distance was scarcely three times as great from the sun as the earth from the sun, so that the thermometer rarely sunk beyond 35 degrees below zero. The whole party began to make almost daily visits to the Hive, and frequently proceeded to the shore, where they resumed their skating exercise, rejoicing in their recovered freedom like prisoners liberated from a dungeon. Whilst the rest were enjoying their recreation, Servadac and the count would hold long conversations with Lieutenant Procope about their present position and future prospects, discussing all manner of speculations as to the results of the anticipated collision with the earth, and wondering whether any measures could be devised for mitigating the violence of a shock which might be terrible in its consequences, even if it did not entail a total annihilation of themselves.

There was no visitor to the Hive more regular than Rosette. He had already directed his telescope to be moved back to his former observatory, where, as much as the cold would permit him, he persisted in making his all-absorbing studies of the heavens.

The result of these studies no one ventured to inquire; but it became generally noticed that something was very seriously disturbing the professor's equanimity. Not only would he be seen toiling more frequently up the arduous way that lay between his nook below and his telescope above, but he would be heard muttering in an angry tone that indicated considerable agitation.

One day, as he was hurrying down to his study, he met Ben Zoof, who, secretly entertaining a feeling of delight at the professor's manifest discomfiture, made some casual remark about things not being very straight. The way in which his advance was received the good orderly never divulged, but henceforward he maintained the firm conviction that there was something very much amiss up in the sky.

To Servadac and his friends this continual disquietude and ill-humor on the part of the professor occasioned no little anxiety. From what, they asked, could his dissatisfaction arise? They could only conjecture that he had discovered some flaw in his reckonings; and if this were so, might there not be reason to apprehend that their anticipations of coming into contact with the earth, at the settled time, might all be falsified?

Day followed day, and still there was no cessation of the professor's discomposure. He was the most miserable
of mortals. If really his calculations and his observations were at variance, this, in a man of his irritable temperament, would account for his perpetual perturbation. But he entered into no explanation; he only climbed up to his telescope, looking haggard and distressed, and when compelled by the frost to retire, he would make his way back to his study more furious than ever. At times he was heard giving vent to his vexation. "Confound it! what does it mean? what is she doing? All behind! Is Newton a fool? Is the law of universal gravitation the law of universal nonsense?" And the little man would seize his head in both his hands, and tear away at the scanty locks which he could ill afford to lose.

Enough was overheard to confirm the suspicion that there was some irreconcilable discrepancy between the results of his computation and what he had actually observed; and yet, if he had been called upon to say, he would have sooner insisted that there was derangement in the laws of celestial mechanism, than have owned there was the least probability of error in any of his own calculations. Assuredly, if the poor professor had had any flesh to lose he would have withered away to a shadow.

But this state of things was before long to come to an end. On the 12th, Ben Zoof, who was hanging about outside the great hall of the cavern, heard the professor inside utter a loud cry. Hurrying in to ascertain the cause, he found Rosette in a state of perfect frenzy, in which ecstasy and rage seemed to be struggling for the predominance.

"Eureka! Eureka!" yelled the excited astronomer.

"What, in the name of peace, do you mean?" bawled Ben Zoof, in open-mouthed amazement.

"Eureka!" again shrieked the little man.


"Eureka! I say," repeated Rosette; "and if you don't understand me, you may go to the devil!"

Without availing himself of this polite invitation, Ben Zoof betook himself to his master. "Something has happened to the professor," he said; "he is rushing about like a madman, screeching and yelling 'Eureka!'"

"Eureka?" exclaimed Servadac. "That means he has made a discovery;" and, full of anxiety, he hurried off to meet the professor.

But, however great was his desire to ascertain what this discovery implied, his curiosity was not yet destined to be gratified. The professor kept muttering in incoherent phrases: "Rascal! he shall pay for it yet. I will be even with him! Cheat! Thrown me out!" But he did not vouchsafe any reply to Servadac's inquiries, and withdrew to his study.

From that day Rosette, for some reason at present incomprehensible, quite altered his behavior to Isaac Hakabut, a man for whom he had always hitherto evinced the greatest repugnance and contempt. All at once he began to show a remarkable interest in the Jew and his affairs, paying several visits to the dark little storehouse, making inquiries as to the state of business and expressing some solicitude about the state of the exchequer.

The wily Jew was taken somewhat by surprise, but came to an immediate conclusion that the professor was contemplating borrowing some money; he was consequently very cautious in all his replies.

It was not Hakabut's habit ever to advance a loan except at an extravagant rate of interest, or without demanding far more than an adequate security. Count Timascheff, a Russian nobleman, was evidently rich; to him perhaps, for a proper consideration, a loan might be made: Captain Servadac was a Gascon, and Gascons are proverbially poor; it would never do to lend any money to him; but here was a professor, a mere man of science, with circumscribed means; did he expect to borrow? Certainly Isaac would as soon think of flying, as of lending money to him. Such were the thoughts that made him receive all Rosette's approaches with a careful reservation.

It was not long, however, before Hakabut was to be called upon to apply his money to a purpose for which he had not reckoned. In his eagerness to effect sales, he had parted with all the alimentary articles in his cargo without having the precautionary prudence to reserve enough for his own consumption. Amongst other things that failed him was his stock of coffee, and as coffee was a beverage without which he deemed it impossible to exist, he found himself in considerable perplexity.

He pondered the matter over for a long time, and ultimately persuaded himself that, after all, the stores were the common property of all, and that he had as much right to a share as anyone else. Accordingly, he made his way to Ben Zoof, and, in the most amiable tone he could assume, begged as a favor that he would let him have a pound of coffee.

The orderly shook his head dubiously.

"A pound of coffee, old Nathan? I can't say."

"Why not? You have some?" said Isaac.

"Oh yes! plenty--a hundred kilogrammes."

"Then let me have one pound. I shall be grateful."

"Hang your gratitude!"

"Only one pound! You would not refuse anybody else."

"That's just the very point, old Samuel; if you were anybody else, I should know very well what to do. I must
refer the matter to his Excellency."

"Oh, his Excellency will do me justice."

"Perhaps you will find his justice rather too much for you." And with this consoling remark, the orderly went to
seek his master.

Rosette meanwhile had been listening to the conversation, and secretly rejoicing that an opportunity for which he
had been watching had arrived. "What's the matter, Master Isaac? Have you parted with all your coffee?" he asked,
in a sympathizing voice, when Ben Zoof was gone.

"Ah! yes, indeed," groaned Hakkabut, "and now I require some for my own use. In my little black hole I cannot
live without my coffee."

"Of course you cannot," agreed the professor.

"And don't you think the governor ought to let me have it?"

"No doubt."

"Oh, I must have coffee," said the Jew again.

"Certainly," the professor assented. "Coffee is nutritious; it warms the blood. How much do you want?"

"A pound. A pound will last me for a long time."

"And who will weigh it for you?" asked Rosette, scarcely able to conceal the eagerness that prompted the
question.

"Why, they will weigh it with my steelyard, of course. There is no other balance here." And as the Jew spoke,
the professor fancied he could detect the faintest of sighs.

"Good, Master Isaac; all the better for you! You will get your seven pounds instead of one!"

"Yes; well, seven, or thereabouts—thereabouts," stammered the Jew with considerable hesitation.

Rosette scanned his countenance narrowly, and was about to probe him with further questions, when Ben Zoof
returned. "And what does his Excellency say?" inquired Hakkabut.

"Why, Nehemiah, he says he shan't give you any."

"Merciful heavens!" began the Jew.

"He says he doesn't mind selling you a little."

"But, by the holy city, why does he make me pay for what anybody else could have for nothing?"

"As I told you before, you are not anybody else; so, come along. You can afford to buy what you want. We
should like to see the color of your money."

"Merciful heavens!" the old man whined once more.

"Now, none of that! Yes or no? If you are going to buy, say so at once; if not, I shall shut up shop."

Hakkabut knew well enough that the orderly was not a man to be trifled with, and said, in a tremulous voice,

"Yes, I will buy."

The professor, who had been looking on with much interest, betrayed manifest symptoms of satisfaction.

"How much do you want? What will you charge for it?" asked Isaac, mournfully, putting his hand into his
pocket and chinking his money.

"Oh, we will deal gently with you. We will not make any profit. You shall have it for the same price that we paid
for it. Ten francs a pound, you know."

The Jew hesitated.

"Come now, what is the use of your hesitating? Your gold will have no value when you go back to the world."

"What do you mean?" asked Hakkabut, startled.

"You will find out some day," answered Ben Zoof, significantly.

Hakkabut drew out a small piece of gold from his pocket, took it close under the lamp, rolled it over in his hand,
and pressed it to his lips. "Shall you weigh me the coffee with my steelyard?" he asked, in a quavering voice that
confirmed the professor's suspicions.

"There is nothing else to weigh it with; you know that well enough, old Shechem," said Ben Zoof. The steelyard
was then produced; a tray was suspended to the hook, and upon this coffee was thrown until the needle registered
the weight of one pound. Of course, it took seven pounds of coffee to do this.

"There you are! There's your coffee, man!" Ben Zoof said.

"Are you sure?" inquired Hakkabut, peering down close to the dial. "Are you quite sure that the needle touches
the point?"

"Yes; look and see."

"Give it a little push, please."

"Why?"

"Because—because—"

"Well, because of what?" cried the orderly, impatiently.
"Because I think, perhaps--I am not quite sure--perhaps the steelyard is not quite correct."

The words were not uttered before the professor, fierce as a tiger, had rushed at the Jew, had seized him by the throat, and was shaking him till he was black in the face.

"Help! help!" screamed Hakkabut. "I shall be strangled."

"Rascal! consummate rascal! thief! villain!" the professor reiterated, and continued to shake the Jew furiously.

Ben Zoof looked on and laughed, making no attempt to interfere; he had no sympathy with either of the two.

The sound of the scuffling, however, drew the attention of Servadac, who, followed by his companions, hastened to the scene. The combatants were soon parted. "What is the meaning of all this?" demanded the captain.

As soon as the professor had recovered his breath, exhausted by his exertions, he said, "The old reprobate, the rascal has cheated us! His steelyard is wrong! He is a thief!"

Captain Servadac looked sternly at Hakkabut.

"How is this, Hakkabut? Is this a fact?"

"No, no--yes--no, your Excellency, only--"

"He is a cheat, a thief!" roared the excited astronomer. "His weights deceive!"

"Stop, stop!" interposed Servadac; "let us hear. Tell me, Hakkabut--"

"The steelyard lies! It cheats! it lies!" roared the irrepressible Rosette.

"Tell me, Hakkabut, I say," repeated Servadac.

The Jew only kept on stammering, "Yes--no--I don't know."

But heedless of any interruption, the professor continued, "False weights! That confounded steelyard! It gave a false result! The mass was wrong! The observations contradicted the calculations; they were wrong! She was out of place! Yes, out of place entirely."

"What!" cried Servadac and Procope in a breath, "out of place?"

"Yes, completely," said the professor.

"Gallia out of place?" repeated Servadac, agitated with alarm.

"I did not say Gallia," replied Rosette, stamping his foot impetuously; "I said Nerina."


"Gallia, of course, is on her way to the earth. I told you so. But that Jew is a rascal!"

CHAPTER XV. A JOURNEY AND A DISAPPOINTMENT

It was as the professor had said. From the day that Isaac Hakkabut had entered upon his mercantile career, his dealings had all been carried on by a system of false weight. That deceitful steelyard had been the mainspring of his fortune. But when it had become his lot to be the purchaser instead of the vendor, his spirit had groaned within him at being compelled to reap the fruits of his own dishonesty. No one who had studied his character could be much surprised at the confession that was extorted from him, that for every supposed kilogramme that he had ever sold the true weight was only 750 grammes, or just five and twenty per cent. less than it ought to have been.

The professor, however, had ascertained all that he wanted to know. By estimating his comet at a third as much again as its proper weight, he had found that his calculations were always at variance with the observed situation of the satellite, which was immediately influenced by the mass of its primary.

But now, besides enjoying the satisfaction of having punished old Hakkabut, Rosette was able to recommence his calculations with reference to the elements of Nerina upon a correct basis, a task to which he devoted himself with redoubled energy.

It will be easily imagined that Isaac Hakkabut, thus caught in his own trap, was jeered most unmercifully by those whom he had attempted to make his dupes. Ben Zoof, in particular, was never wearied of telling him how on his return to the world he would be prosecuted for using false weights, and would certainly become acquainted with the inside of a prison. Thus badgered, he secluded himself more than ever in his dismal hole, never venturing, except when absolutely obliged, to face the other members of the community.

On the 7th of October the comet re-entered the zone of the telescopic planets, one of which had been captured as a satellite, and the origin of the whole of which is most probably correctly attributed to the disintegration of some large planet that formerly revolved between the orbits of Mars and Jupiter. By the beginning of the following month half of this zone had been traversed, and only two months remained before the collision with the earth was to be expected. The temperature was now rarely below 12 degrees below zero, but that was far too cold to permit the slightest symptoms of a thaw. The surface of the sea remained as frozen as ever, and the two vessels, high up on their icy pedestals, remained unaltered in their critical position.

It was about this time that the question began to be mooted whether it would not be right to reopen some communication with the Englishmen at Gibraltar. Not that any doubt was entertained as to their having been able
successfully to cope with the rigors of the winter; but Captain Servadac, in a way that did honor to his generosity, represented that, however uncourteous might have been their former behavior, it was at least due to them that they should be informed of the true condition of things, which they had had no opportunity of learning; and, moreover, that they should be invited to co-operate with the population of Nina's Hive, in the event of any measures being suggested by which the shock of the approaching collision could be mitigated.

The count and the lieutenant both heartily concurred in Servadac's sentiments of humanity and prudence, and all agreed that if the intercourse were to be opened at all, no time could be so suitable as the present, while the surface of the sea presented a smooth and solid footing. After a thaw should set in, neither the yacht nor the tartan could be reckoned on for service, and it would be inexpedient to make use of the steam launch, for which only a few tons of coal had been reserved, just sufficient to convey them to Gourbi Island when the occasion should arise; whilst as to the yawl, which, transformed into a sledge, had performed so successful a trip to Formentera, the absence of wind would make that quite unavailable. It was true that with the return of summer temperature, there would be certain to be a derangement in the atmosphere of Gallia, which would result in wind, but for the present the air was altogether too still for the yawl to have any prospects of making its way to Gibraltar.

The only question remaining was as to the possibility of going on foot. The distance was somewhere about 240 miles. Captain Servadac declared himself quite equal to the undertaking. To skate sixty or seventy miles a day would be nothing, he said, to a practical skater like himself. The whole journey there and back might be performed in eight days. Provided with a compass, a sufficient supply of cold meat, and a spirit lamp, by which he might boil his coffee, he was perfectly sure he should, without the least difficulty, accomplish an enterprise that chimed in so exactly with his adventurous spirit.

Equally urgent were both the count and the lieutenant to be allowed to accompany him; nay, they even offered to go instead; but Servadac, expressing himself as most grateful for their consideration, declined their offer, and avowed his resolution of taking no other companion than his own orderly.

Highly delighted at his master's decision, Ben Zoof expressed his satisfaction at the prospect of "stretching his legs a bit," declaring that nothing could induce him to permit the captain to go alone. There was no delay. The departure was fixed for the following morning, the 2nd of November.

Although it is not to be questioned that a genuine desire of doing an act of kindness to his fellow-creatures was a leading motive of Servadac's proposed visit to Gibraltar, it must be owned that another idea, confided to nobody, least of all to Count Timascheff, had been conceived in the brain of the worthy Gascon. Ben Zoof had an inkling that his master was "up to some other little game," when, just before starting, he asked him privately whether there was a French tricolor among the stores. "I believe so," said the orderly.

"Then don't say a word to anyone, but fasten it up tight in your knapsack."

Ben Zoof found the flag, and folded it up as he was directed. Before proceeding to explain this somewhat enigmatical conduct of Servadac, it is necessary to refer to a certain physiological fact, coincident but unconnected with celestial phenomena, originating entirely in the frailty of human nature. The nearer that Gallia approached the earth, the more a sort of reserve began to spring up between the captain and Count Timascheff. Though they could not be said to be conscious of it, the remembrance of their former rivalry, so completely buried in oblivion for the last year and ten months, was insensibly recovering its hold upon their minds, and the question was all but coming to the surface as to what would happen if, on their return to earth, the handsome Madame de L---- should still be free. From companions in peril, would they not again be avowed rivals? Conceal it as they would, a coolness was undeniably stealing over an intimacy which, though it could never be called affectionate, had been uniformly friendly and courteous.

Under these circumstances, it was not surprising that Hector Servadac should not have confided to the count a project which, wild as it was, could scarcely have failed to widen the unacknowledged breach that was opening in their friendship.

The project was the annexation of Ceuta to the French dominion. The Englishmen, rightly enough, had continued to occupy the fragment of Gibraltar, and their claim was indisputable. But the island of Ceuta, which before the shock had commanded the opposite side of the strait, and had been occupied by Spaniards, had since been abandoned, and was therefore free to the first occupant who should lay claim to it. To plant the tricolor upon it, in the name of France, was now the cherished wish of Servadac's heart.

"Who knows," he said to himself, "whether Ceuta, on its return to earth, may not occupy a grand and commanding situation? What a proud thing it would be to have secured its possession to France!"

Next morning, as soon as they had taken their brief farewell of their friends, and were fairly out of sight of the shore, Servadac imparted his design to Ben Zoof, who entered into the project with the greatest zest, and expressed himself delighted, not only at the prospect of adding to the dominions of his beloved country, but of stealing a march upon England.
Both travelers were warmly clad, the orderly’s knapsack containing all the necessary provisions. The journey was accomplished without special incident; halts were made at regular intervals, for the purpose of taking food and rest. The temperature by night as well as by day was quite endurable, and on the fourth afternoon after starting, thanks to the straight course which their compass enabled them to maintain, the adventurers found themselves within a few miles of Ceuta.

As soon as Ben Zoof caught sight of the rock on the western horizon, he was all excitement. Just as if he were in a regiment going into action, he talked wildly about “columns” and “squares” and “charges.” The captain, although less demonstrative, was hardly less eager to reach the rock. They both pushed forward with all possible speed till they were within a mile and a half of the shore, when Ben Zoof, who had a very keen vision, stopped suddenly, and said that he was sure he could see something moving on the top of the island.

“Never mind, let us hasten on,” said Servadac. A few minutes carried them over another mile, when Ben Zoof stopped again.

“What is it, Ben Zoof?” asked the captain.

“It looks to me like a man on a rock, waving his arms in the air,” said the orderly.

“Plague on it!” muttered Servadac; “I hope we are not too late.” Again they went on; but soon Ben Zoof stopped for the third time.

“It is a semaphore, sir; I see it quite distinctly.” And he was not mistaken; it had been a telegraph in motion that had caught his eye.

“Plague on it!” repeated the captain.

“Too late, sir, do you think?” said Ben Zoof.

“Yes, Ben Zoof; if that’s a telegraph—and there is no doubt of it—somebody has been before us and erected it; and, moreover, if it is moving, there must be somebody working it now.”

He was keenly disappointed. Looking towards the north, he could distinguish Gibraltar faintly visible in the extreme distance, and upon the summit of the rock both Ben Zoof and himself fancied they could make out another semaphore, giving signals, no doubt, in response to the one here.

“Yes, it is only too clear; they have already occupied it, and established their communications,” said Servadac.

“And what are we to do, then?” asked Ben Zoof.

“We must pocket our chagrin, and put as good a face on the matter as we can,” replied the captain.

“But perhaps there are only four or five Englishmen to protect the place,” said Ben Zoof, as if meditating an assault.

“No, no, Ben Zoof,” answered Servadac; “we must do nothing rash. We have had our warning, and, unless our representations can induce them to yield their position, we must resign our hope.”

Thus discomfited, they had reached the foot of the rock, when all at once, like a “Jack-in-the-box,” a sentinel started up before them with the challenge:

“Who goes there?”

“Friends. Vive la France!” cried the captain.

“Hurrah for England!” replied the soldier.

By this time four other men had made their appearance from the upper part of the rock.

“What do you want?” asked one of them, whom Servadac remembered to have seen before at Gibraltar.

“Can I speak to your commanding officer?” Servadac inquired.

“Which?” said the man. “The officer in command of Ceuta?”

“Yes, if there is one.”

“I will acquaint him with your arrival,” answered the Englishman, and disappeared.

In a few minutes the commanding officer, attired in full uniform, was seen descending to the shore. It was Major Oliphant himself.

Servadac could no longer entertain a doubt that the Englishmen had forestalled him in the occupation of Ceuta. Provisions and fuel had evidently been conveyed thither in the boat from Gibraltar before the sea had frozen, and a solid casemate, hollowed in the rock, had afforded Major Oliphant and his contingent ample protection from the rigor of the winter. The ascending smoke that rose above the rock was sufficient evidence that good fires were still kept up; the soldiers appeared to have thriven well on what, no doubt, had been a generous diet, and the major himself, although he would scarcely have been willing to allow it, was slightly stouter than before.

Being only about twelve miles distant from Gibraltar, the little garrison at Ceuta had felt itself by no means isolated in its position; but by frequent excursions across the frozen strait, and by the constant use of the telegraph, had kept up their communication with their fellow-countrymen on the other island. Colonel Murphy and the major had not even been forced to forego the pleasures of the chessboard. The game that had been interrupted by Captain Servadac’s former visit was not yet concluded; but, like the two American clubs that played their celebrated game in...
1846 between Washington and Baltimore, the two gallant officers made use of the semaphore to communicate their well-digested moves.

The major stood waiting for his visitor to speak.
"Major Oliphant, I believe?" said Servadac, with a courteous bow.
"Yes, sir, Major Oliphant, officer in command of the garrison at Ceuta," was the Englishman's reply. "And to whom," he added, "may I have the honor of speaking?"
"To Captain Servadac, the governor general of Gallia."
"Indeed!" said the major, with a supercilious look.
"Allow me to express my surprise," resumed the captain, "at seeing you installed as commanding officer upon what I have always understood to be Spanish soil. May I demand your claim to your position?"
"My claim is that of first occupant."
"But do you not think that the party of Spaniards now resident with me may at some future time assert a prior right to the proprietorship?"
"I think not, Captain Servadac."
"But why not?" persisted the captain.
"Because these very Spaniards have, by formal contract, made over Ceuta, in its integrity, to the British government."
Servadac uttered an exclamation of surprise.
"And as the price of that important cession," continued Major Oliphant, "they have received a fair equivalent in British gold."
"Ah!" cried Ben Zoof, "that accounts for that fellow Negrete and his people having such a lot of money."
Servadac was silent. It had become clear to his mind what had been the object of that secret visit to Ceuta which he had heard of as being made by the two English officers. The arguments that he had intended to use had completely fallen through; all that he had now to do was carefully to prevent any suspicion of his disappointed project.

"May I be allowed to ask, Captain Servadac, to what I am indebted for the honor of this visit?" asked Major Oliphant presently.
"I have come, Major Oliphant, in the hope of doing you and your companions a service," replied Servadac, rousing himself from his reverie.
"Ah, indeed!" replied the major, as though he felt himself quite independent of all services from exterior sources.
"I thought, major, that it was not unlikely you were in ignorance of the fact that both Ceuta and Gibraltar have been traversing the solar regions on the surface of a comet."
The major smiled incredulously; but Servadac, nothing daunted, went on to detail the results of the collision between the comet and the earth, adding that, as there was the almost immediate prospect of another concussion, it had occurred to him that it might be advisable for the whole population of Gallia to unite in taking precautionary measures for the common welfare.

"In fact, Major Oliphant," he said in conclusion, "I am here to inquire whether you and your friends would be disposed to join us in our present quarters."
"I am obliged to you, Captain Servadac," answered the major stiffly; "but we have not the slightest intention of abandoning our post. We have received no government orders to that effect; indeed, we have received no orders at all. Our own dispatch to the First Lord of the Admiralty still awaits the mail."
"But allow me to repeat," insisted Servadac, "that we are no longer on the earth, although we expect to come in contact with it again in about eight weeks."
"I have no doubt," the major answered, "that England will make every effort to reclaim us."
Servadac felt perplexed. It was quite evident that Major Oliphant had not been convinced of the truth of one syllable of what he had been saying.
"Then I am to understand that you are determined to retain your two garrisons here and at Gibraltar?" asked Servadac, with one last effort at persuasion.
"Certainly; these two posts command the entrance of the Mediterranean."
"But supposing there is no longer any Mediterranean?" retorted the captain, growing impatient.
"Oh, England will always take care of that," was Major Oliphant's cool reply. "But excuse me," he added presently; "I see that Colonel Murphy has just telegraphed his next move. Allow me to wish you good-afternoon."
And without further parley, followed by his soldiers, he retired into the casemate, leaving Captain Servadac gnawing his mustache with mingled rage and mortification.
"A fine piece of business we have made of this!" said Ben Zoof, when he found himself alone with his master.
"We will make our way back at once," replied Captain Servadac.
"Yes, the sooner the better, with our tails between our legs," rejoined the orderly, who this time felt no inclination to start off to the march of the Algerian zephyrs. And so the French tricolor returned as it had set out—in Ben Zoof's knapsack.

On the eighth evening after starting, the travelers again set foot on the volcanic promontory just in time to witness a great commotion.

Palmyrin Rosette was in a furious rage. He had completed all his calculations about Nerina, but that perfidious satellite had totally disappeared. The astronomer was frantic at the loss of his moon. Captured probably by some larger body, it was revolving in its proper zone of the minor planets.

CHAPTER XVI. A BOLD PROPOSITION

On his return Servadac communicated to the count the result of his expedition, and, though perfectly silent on the subject of his personal project, did not conceal the fact that the Spaniards, without the smallest right, had sold Ceuta to the English.

Having refused to quit their post, the Englishmen had virtually excluded themselves from any further consideration; they had had their warning, and must now take the consequences of their own incredulity.

Although it had proved that not a single creature either at Gourbi Island, Gibraltar, Ceuta, Madalena, or Formentera had received any injury whatever at the time of the first concussion, there was nothing in the least to make it certain that a like immunity from harm would attend the second. The previous escape was doubtless owing to some slight, though unaccountable, modification in the rate of motion; but whether the inhabitants of the earth had fared so fortunately, was a question that had still to be determined.

The day following Servadac's return, he and the count and Lieutenant Procope met by agreement in the cave, formally to discuss what would be the most advisable method of proceeding under their present prospects. Ben Zoof was, as a matter of course, allowed to be present, and Professor Rosette had been asked to attend; but he declined on the plea of taking no interest in the matter. Indeed, the disappearance of his moon had utterly disconcerted him, and the probability that he should soon lose his comet also, plunged him into an excess of grief which he preferred to bear in solitude.

Although the barrier of cool reserve was secretly increasing between the captain and the count, they scrupulously concealed any outward token of their inner feelings, and without any personal bias applied their best energies to the discussion of the question which was of such mutual, nay, of such universal interest.

Servadac was the first to speak. "In fifty-one days, if Professor Rosette has made no error in his calculations, there is to be a recurrence of collision between this comet and the earth. The inquiry that we have now to make is whether we are prepared for the coming shock. I ask myself, and I ask you, whether it is in our power, by any means, to avert the evil consequences that are only too likely to follow?"

Count Timaschef, in a voice that seemed to thrill with solemnity, said: "In such events we are at the disposal of an over-ruling Providence; human precautions cannot sway the Divine will."

"But with the most profound reverence for the will of Providence," replied the captain, "I beg to submit that it is our duty to devise whatever means we can to escape the threatening mischief. Heaven helps them that help themselves."

"And what means have you to suggest, may I ask?" said the count, with a faint accent of satire.

Servadac was forced to acknowledge that nothing tangible had hitherto presented itself to his mind.

"I don't want to intrude," observed Ben Zoof, "but I don't understand why such learned gentlemen as you cannot make the comet go where you want it to go."

"You are mistaken, Ben Zoof, about our learning," said the captain; "even Professor Rosette, with all his learning, has not a shadow of power to prevent the comet and the earth from knocking against each other."

"Then I cannot see what is the use of all this learning," the orderly replied.

"One great use of learning," said Count Timaschef with a smile, "is to make us know our own ignorance."

While this conversation had been going on, Lieutenant Procope had been sitting in thoughtful silence. Looking up, he now said, "Incident to this expected shock, there may be a variety of dangers. If, gentlemen, you will allow me, I will enumerate them; and we shall, perhaps, by taking them _seriatim_, be in a better position to judge whether we can successfully grapple with them, or in any way mitigate their consequences."

There was a general attitude of attention. It was surprising how calmly they proceeded to discuss the circumstances that looked so threatening and ominous.

"First of all," resumed the lieutenant, "we will specify the different ways in which the shock may happen."

"And the prime fact to be remembered," interposed Servadac, "is that the combined velocity of the two bodies will be about 21,000 miles an hour."
"Express speed, and no mistake!" muttered Ben Zoof.

"Just so," assented Procope. "Now, the two bodies may impinge either directly or obliquely. If the impact is sufficiently oblique, Gallia may do precisely what she did before: she may graze the earth; she may, or she may not, carry off a portion of the earth's atmosphere and substance, and so she may float away again into space; but her orbit would undoubtedly be deranged, and if we survive the shock, we shall have small chance of ever returning to the world of our fellow-creatures."

"Professor Rosette, I suppose," Ben Zoof remarked, "would pretty soon find out all about that."

"But we will leave this hypothesis," said the lieutenant; "our own experience has sufficiently shown us its advantages and its disadvantages. We will proceed to consider the infinitely more serious alternative of direct impact; of a shock that would hurl the comet straight on to the earth, to which it would become attached."

"A great wart upon her face!" said Ben Zoof, laughing.

The captain held up his finger to his orderly, making him understand that he should hold his tongue.

"It is, I presume, to be taken for granted," continued Lieutenant Procope, "that the mass of the earth is comparatively so large that, in the event of a direct collision, her own motion would not be sensibly retarded, and that she would carry the comet along with her, as part of herself."

"Very little question of that, I should think," said Servadac.

"Well, then," the lieutenant went on, "what part of this comet of ours will be the part to come into collision with the earth? It may be the equator, where we are; it may be at the exactly opposite point, at our antipodes; or it may be at either pole. In any case, it seems hard to foresee whence there is to come the faintest chance of deliverance."

"Is the case so desperate?" asked Servadac.

"I will tell you why it seems so. If the side of the comet on which we are resident impinges on the earth, it stands to reason that we must be crushed to atoms by the violence of the concussion."

"Regular mincemeat!" said Ben Zoof, whom no admonitions could quite reduce to silence.

"And if," said the lieutenant, after a moment's pause, and the slightest possible frown at the interruption--"and if the collision should occur at our antipodes, the sudden check to the velocity of the comet would be quite equivalent to a shock _in situ_; and, another thing, we should run the risk of being suffocated, for all our comet's atmosphere would be assimilated with the terrestrial atmosphere, and we, supposing we were not dashed to atoms, should be left as it were upon the summit of an enormous mountain (for such to all intents and purposes Gallia would be), 450 miles above the level of the surface of the globe, without a particle of air to breathe."

"But would not our chances of escape be considerably better," asked Count Timascheff, "in the event of either of the comet's poles being the point of contact?"

"Taking the combined velocity into account," answered the lieutenant, "I confess that I fear the violence of the shock will be too great to permit our destruction to be averted."

A general silence ensued, which was broken by the lieutenant himself. "Even if none of these contingencies occur in the way we have contemplated, I am driven to the suspicion that we shall be burnt alive."

"Burnt alive!" they all exclaimed in a chorus of horror.

"Yes. If the deductions of modern science be true, the speed of the comet, when suddenly checked, will be transmuted into heat, and that heat will be so intense that the temperature of the comet will be raised to some millions of degrees."

No one having anything definite to allege in reply to Lieutenant Procope's forebodings, they all relapsed into silence. Presently Ben Zoof asked whether it was not possible for the comet to fall into the middle of the Atlantic.

Procope shook his head. "Even so, we should only be adding the fate of drowning to the list of our other perils."

"Then, as I understand," said Captain Servadac, "in whatever way or in whatever place the concussion occurs, we must be either crushed, suffocated, roasted, or drowned. Is that your conclusion, lieutenant?"

"I confess I see no other alternative," answered Procope, calmly.

"But isn't there another thing to be done?" said Ben Zoof.

"What do you mean?" his master asked.

"Why, to get off the comet before the shock comes."

"How could you get off Gallia?"

"That I can't say," replied the orderly.

"I am not sure that that could not be accomplished," said the lieutenant.

All eyes in a moment were riveted upon him, as, with his head resting on his hands, he was manifestly cogitating a new idea. "Yes, I think it could be accomplished," he repeated. "The project may appear extravagant, but I do not know why it should be impossible. Ben Zoof has hit the right nail on the head; we must try and leave Gallia before the shock."

"Leave Gallia! How?" said Count Timascheff.
A thaw had now fairly set in. The breaking up of the frozen ocean was a magnificent spectacle, and "the great voice of the sea," as the whalers graphically describe it, was heard in all its solemnity. Light vapors gathered on the horizon, and clouds were formed and carried rapidly along by breezes to which the Gallian atmosphere had long been unaccustomed. All these were of the snow continued, into torrents or cascades. Light vapors gathered on the horizon, and clouds were formed and to trickle down the declivities of the mountain and along the shelving shore, only to be transformed, as the melting voice of the sea," as the whalers graphically describe it, was heard in all its solemnity. Little streams of water began month, at the close of which it was not more than 78,000,000 leagues from the sun.

"I have thought of that. We must cut it out of the sails of the _Dobryna_; they are both light and strong," rejoined the lieutenant. Count Timascheff complimented the lieutenant upon his ingenuity, and Ben Zoof could not resist bringing the meeting to a conclusion by a ringing cheer.

"Ah, a fire-balloon! A montgolfier!" cried Servadac. "But what are you going to do for a casing?"

"Only, remember," continued Procope, "there are many chances to one against our success. One instant's obstruction and stoppage in our passage, and our balloon is burnt to ashes. Still, reluctant as I am to acknowledge it, I confess that I feel our sole hope of safety rests in our getting free from this comet."

"Listen to me," replied Procope. "Perhaps I can convince you that my idea is not so chimerical as you imagine." And, knitting his brow, he proceeded to establish the feasibility of his plan. "If we can ascertain the precise moment when the shock is to happen, and can succeed in launching ourselves a sufficient time beforehand into Gallia's atmosphere, I believe it will transpire that this atmosphere will amalgamate with that of the earth, and that a balloon whirled along by the combined velocity would glide into the mingled atmosphere and remain suspended in mid-air until the shock of the collision is overpast."

Count Timascheff reflected for a minute, and said, "I think, lieutenant, I understand your project. The scheme seems tenable; and I shall be ready to co-operate with you, to the best of my power, in putting it into execution."

"But have we hydrogen enough to inflate a balloon?" asked the count.

"Hot air will be all that we shall require," the lieutenant answered; "we are only contemplating about an hour's journey."

"Ah, a fire-balloon! A montgolfier!" cried Servadac. "But what are you going to do for a casing?"

"I have thought of that. We must cut it out of the sails of the _Dobryna_; they are both light and strong," rejoined the lieutenant. Count Timascheff complimented the lieutenant upon his ingenuity, and Ben Zoof could not resist bringing the meeting to a conclusion by a ringing cheer.

Truly daring was the plan of which Lieutenant Procope had thus become the originator; but the very existence of them all was at stake, and the design must be executed resolutely. For the success of the enterprise it was absolutely necessary to know, almost to a minute, the precise time at which the collision would occur, and Captain Servadac undertook the task, by gentle means or by stern, of extracting the secret from the professor.

To Lieutenant Procope himself was entrusted the superintendence of the construction of the montgolfier, and the work was begun at once. It was to be large enough to carry the whole of the twenty-three residents in the volcano, and, in order to provide the means of floating aloft long enough to give time for selecting a proper place for descent, the lieutenant was anxious to make it carry enough hay or straw to maintain combustion for a while, and keep up the necessary supply of heated air.

The sails of the _Dobryna_, which had all been carefully stowed away in the Hive, were of a texture unusually close, and quite capable of being made airtight by means of a varnish, the ingredients of which were rummaged out of the promiscuous stores of the tartan. The lieutenant himself traced out the pattern and cut out the strips, and all hands were employed in seaming them together. It was hardly the work for little fingers, but Nina persisted in accomplishing her own share of it. The Russians were quite at home at occupation of this sort, and having initiated the Spaniards into its mysteries, the task of joining together the casing was soon complete. Isaac Hakkabut and the professor were the only two members of the community who took no part in this somewhat tedious proceeding.

A month passed away, but Servadac found no opportunity of getting at the information he had pledged himself to gain. On the sole occasion when he had ventured to broach the subject with the astronomer, he had received for answer that as there was no hurry to get back to the earth, there need be no concern about any dangers of transit.

Indeed, as time passed on, the professor seemed to become more and more inaccessible. A pleasant temperature enabled him to live entirely in his observatory, from which intruders were rigidly shut out. But Servadac bided his time. He grew more and more impressed with the importance of finding out the exact moment at which the impact would take place, but was content to wait for a promising opportunity to put any fresh questions on the subject to the too reticent astronomer.

Meanwhile, the earth's disc was daily increasing in magnitude; the comet traveled 50,000,000 leagues during the month, at the close of which it was not more than 78,000,000 leagues from the sun.

A thaw had now fairly set in. The breaking up of the frozen ocean was a magnificent spectacle, and "the great voice of the sea," as the whalers graphically describe it, was heard in all its solemnity. Little streams of water began to trickle down the declivities of the mountain and along the shelving shore, only to be transformed, as the melting of the snow continued, into torrents or cascades. Light vapors gathered on the horizon, and clouds were formed and carried rapidly along by breezes to which the Gallian atmosphere had long been unaccustomed. All these were doubtless but the prelude to atmospheric disturbances of a more startling character; but as indications of returning
spring, they were greeted with a welcome which no apprehensions for the future could prevent being glad and hearty.

A double disaster was the inevitable consequence of the thaw. Both the schooner and the tartan were entirely destroyed. The basement of the icy pedestal on which the ships had been upheaved was gradually undermined, like the icebergs of the Arctic Ocean, by warm currents of water, and on the night of the 12th the huge block collapsed _en masse_, so that on the following morning nothing remained of the _Dobryna_ and the _Hansa_ except the fragments scattered on the shore.

Although certainly expected, the catastrophe could not fail to cause a sense of general depression. Well-nigh one of their last ties to Mother Earth had been broken; the ships were gone, and they had only a balloon to replace them!

To describe Isaac Hakkabut's rage at the destruction of the tartan would be impossible. His oaths were simply dreadful; his imprecations on the accursed race were full of wrath. He swore that Servadac and his people were responsible for his loss; he vowed that they should be sued and made to pay him damages; he asserted that he had been brought from Gourbi Island only to be plundered; in fact, he became so intolerably abusive, that Servadac threatened to put him into irons unless he conducted himself properly; whereupon the Jew, finding that the captain was in earnest, and would not hesitate to carry the threat into effect, was fain to hold his tongue, and slunk back into his dim hole.

By the 14th the balloon was finished, and, carefully sewn and well varnished as it had been, it was really a very substantial structure. It was covered with a network that had been made from the light rigging of the yacht, and the car, composed of wicker-work that had formed partitions in the hold of the _Hansa_, was quite commodious enough to hold the twenty-three passengers it was intended to convey. No thought had been bestowed upon comfort or convenience, as the ascent was to last for so short a time, merely long enough for making the transit from atmosphere to atmosphere.

The necessity was becoming more and more urgent to get at the true hour of the approaching contact, but the professor seemed to grow more obstinate than ever in his resolution to keep his secret.

On the 15th the comet crossed the orbit of Mars, at the safe distance of 56,000,000 leagues; but during that night the community thought that their last hour had taken them unawares. The volcano rocked and trembled with the convulsions of internal disturbance, and Servadac and his companions, convinced that the mountain was doomed to some sudden disruption, rushed into the open air.

The first object that caught their attention as they emerged upon the open rocks was the unfortunate professor, who was scrambling down the mountain-side, piteously displaying a fragment of his shattered telescope.

It was no time for condolence.

A new marvel arrested every eye. A fresh satellite, in the gloom of night, was shining conspicuously before them. That satellite was a part of Gallia itself!

By the expansive action of the inner heat, Gallia, like Gambart's comet, had been severed in twain; an enormous fragment had been detached and launched into space! The fragment included Ceuta and Gibraltar, with the two English garrisons!

CHAPTER XVII. THE VENTURE MADE

What would be the consequences of this sudden and complete disruption, Servadac and his people hardly dared to think.

The first change that came under their observation was the rapidity of the sun's appearances and disappearances, forcing them to the conviction that although the comet still rotated on its axis from east to west, yet the period of its rotation had been diminished by about one-half. Only six hours instead of twelve elapsed between sunrise and sunset; three hours after rising in the west the sun was sinking again in the east.

"We are coming to something!" exclaimed Servadac. "We have got a year of something like 2,880 days."

"I shouldn't think it would be an easy matter to find saints enough for such a calendar as that!" said Ben Zoof.

Servadac laughed, and remarked that they should have the professor talking about the 238th of June, and the 325th of December.

It soon became evident that the detached portion was not revolving round the comet, but was gradually retreating into space. Whether it had carried with it any portion of atmosphere, whether it possessed any other condition for supporting life, and whether it was likely ever again to approach to the earth, were all questions that there were no means of determining. For themselves the all-important problem was---what effect would the rending asunder of the comet have upon its rate of progress? and as they were already conscious of a further increase of muscular power, and a fresh diminution of specific gravity, Servadac and his associates could not but wonder whether the alteration
in the mass of the comet would not result in its missing the expected coincidence with the earth altogether.

Although he professed himself incompetent to pronounce a decided opinion, Lieutenant Procope manifestly inclined to the belief that no alteration would ensue in the rate of Gallia's velocity; but Rosette, no doubt, could answer the question directly, and the time had now arrived in which he must be compelled to divulge the precise moment of collision.

But the professor was in the worst of tempers. Generally taciturn and morose, he was more than usually uncivil whenever any one ventured to speak to him. The loss of his telescope had doubtless a great deal to do with his ill-humor; but the captain drew the most favorable conclusions from Rosette's continued irritation. Had the comet been in any way projected from its course, so as to be likely to fail in coming into contact with the earth, the professor would have been quite unable to conceal his satisfaction. But they required to know more than the general truth, and felt that they had no time to lose in getting at the exact details.

The opportunity that was wanted soon came.

On the 18th, Rosette was overheard in furious altercation with Ben Zoof. The orderly had been taunting the astronomer with the mutilation of his little comet. A fine thing, he said, to split in two like a child's toy. It had cracked like a dry nut; and mightn't one as well live upon an exploding bomb?--with much more to the same effect. The professor, by way of retaliation, had commenced sneering at the "prodigious" mountain of Montmartre, and the dispute was beginning to look serious when Servadac entered.

Thinking he could turn the wrangling to some good account, so as to arrive at the information he was so anxiously seeking, the captain pretended to espouse the views of his orderly; he consequently brought upon himself the full force of the professor's wrath.

Rosette's language became more and more violent, till Servadac, feigning to be provoked beyond endurance, cried:

"You forget, sir, that you are addressing the Governor-General of Gallia."
"Governor-General! humbug!" roared Rosette. "Gallia is my comet!"
"I deny it," said Servadac. "Gallia has lost its chance of getting back to the earth. Gallia has nothing to do with you. Gallia is mine; and you must submit to the government which I please to ordain."
"And who told you that Gallia is not going back to the earth?" asked the professor, with a look of withering scorn.
"Why, isn't her mass diminished? Isn't she split in half? Isn't her velocity all altered?" demanded the captain.
"And pray who told you this?" again said the professor, with a sneer.
"Everybody. Everybody knows it, of course," replied Servadac.
"Everybody is very clever. And you always were a very clever scholar too. We remember that of old, don't we?"
"Sire!"
"You nearly mastered the first elements of science, didn't you?"
"Sire!"
"A credit to your class!"
"Hold your tongue, sire!" bellowed the captain again, as if his anger was uncontrollable.
"Not I," said the professor.
"Hold your tongue!" repeated Servadac.
"Just because the mass is altered you think the velocity is altered?"
"Hold your tongue!" cried the captain, louder than ever.
"What has mass to do with the orbit? Of how many comets do you know the mass, and yet you know their movements? Ignorance!" shouted Rosette.
"Insolence!" retorted Servadac.

Ben Zoof, really thinking that his master was angry, made a threatening movement towards the professor.
"Touch me if you dare!" screamed Rosette, drawing himself up to the fullest height his diminutive figure would allow. "You shall answer for your conduct before a court of justice!"
"Where? On Gallia?" asked the captain.
"No; on the earth."
"The earth! Pshaw! You know we shall never get there; our velocity is changed."
"On the earth," repeated the professor, with decision.
"Trash!" cried Ben Zoof. "The earth will be too far off!"
"Not too far off for us to come across her orbit at 42 minutes and 35.6 seconds past two o'clock on the morning of this coming 1st of January."
"Thanks, my dear professor--many thanks. You have given me all the information I required;" and, with a low bow and a gracious smile, the captain withdrew. The orderly made an equally polite bow, and followed his master.
The professor, completely nonplussed, was left alone.

Thirteen days, then—twenty-six of the original Gallian days, fifty-two of the present—was all the time for preparation that now remained. Every preliminary arrangement was hurried on with the greatest earnestness.

There was a general eagerness to be quit of Gallia. Indifferent to the dangers that must necessarily attend a balloon ascent under such unparalleled circumstances, and heedless of Lieutenant Procope's warning that the slightest check in their progress would result in instantaneous combustion, they all seemed to conclude that it must be the simplest thing possible to glide from one atmosphere to another, so that they were quite sanguine as to the successful issue of their enterprise. Captain Servadac made a point of showing himself quite enthusiastic in his anticipations, and to Ben Zoof the going up in a balloon was the supreme height of his ambition. The count and the lieutenant, of colder and less demonstrative temperament, alike seemed to realize the possible perils of the undertaking, but even they were determined to put a bold face upon every difficulty.

The sea had now become navigable, and three voyages were made to Gourbi Island in the steam launch, consuming the last of their little reserve of coal.

The first voyage had been made by Servadac with several of the sailors. They found the gourbi and the adjacent building quite uninjured by the severity of the winter; numbers of little rivulets intersected the pasture-land; new plants were springing up under the influence of the equatorial sun, and the luxuriant foliage was tenanted by the birds which had flown back from the volcano. Summer had almost abruptly succeeded to winter, and the days, though only three hours long, were intensely hot.

Another of the voyages to the island had been to collect the dry grass and straw which was necessary for inflating the balloon. Had the balloon been less cumbersome it would have been conveyed to the island, whence the start would have been effected; but as it was, it was more convenient to bring the combustible material to the balloon.

The last of the coal having been consumed, the fragments of the shipwrecked vessels had to be used day by day for fuel. Hakkabut began making a great hubbub when he found that they were burning some of the spars of the _Hansa_; but he was effectually silenced by Ben Zoof, who told him that if he made any more fuss, he should be compelled to pay 50,000 francs for a balloon-ticket, or else he should be left behind.

By Christmas Day everything was in readiness for immediate departure. The festival was observed with a solemnity still more marked than the anniversary of the preceding year. Every one looked forward to spending New Year's Day in another sphere altogether, and Ben Zoof had already promised Pablo and Nina all sorts of New Year's gifts.

It may seem strange, but the nearer the critical moment approached, the less Hector Servadac and Count Timascheff had to say to each other on the subject. Their mutual reserve became more apparent; the experiences of the last two years were fading from their minds like a dream; and the fair image that had been the cause of their original rivalry was ever rising, as a vision, between them.

The captain's thoughts began to turn to his unfinished rondo; in his leisure moments, rhymes suitable and unsuitable, possible and impossible, were perpetually jingling in his imagination. He labored under the conviction that he had a work of genius to complete. A poet he had left the earth, and a poet he must return.

Count Timascheff's desire to return to the world was quite equaled by Lieutenant Procope's. The Russian sailors' only thought was to follow their master, wherever he went. The Spaniards, though they would have been unconcerned to know that they were to remain upon Gallia, were nevertheless looking forward with some degree of pleasure to revisiting the plains of Andalusia; and Nina and Pablo were only too delighted at the prospect of accompanying their kind protectors on any fresh excursion whatever.

The only malcontent was Palmyrin Rosette. Day and night he persevered in his astronomical pursuits, declared his intention of never abandoning his comet, and swore positively that nothing should induce him to set foot in the car of the balloon.

The misfortune that had befallen his telescope was a never-ending theme of complaint; and just now, when Gallia was entering the narrow zone of shooting-stars, and new discoveries might have been within his reach, his loss made him more insensible than ever. In sheer desperation, he endeavored to increase the intensity of his vision by applying to his eyes some belladonna which he found in the _Dobryna's_ medicine chest; with heroic fortitude he endured the tortures of the experiment, and gazed up into the sky until he was nearly blind. But all in vain; not a single fresh discovery rewarded his sufferings.

No one was quite exempt from the feverish excitement which prevailed during the last days of December. Lieutenant Procope superintended his final arrangements. The two low masts of the schooner had been erected firmly on the shore, and formed supports for the montgolfier, which had been duly covered with the netting, and was ready at any moment to be inflated. The car was close at hand. Some inflated skins had been attached to its sides, so that the balloon might float for a time, in the event of its descending in the sea at a short distance from the shore. If
unfortunately, it should come down in mid-ocean, nothing but the happy chance of some passing vessel could save them all from the certain fate of being drowned.

The 31st came. Twenty-four hours hence and the balloon, with its large living freight, would be high in the air. The atmosphere was less buoyant than that of the earth, but no difficulty in ascending was to be apprehended.

Gallia was now within 96,000,000 miles of the sun, consequently not much more than 4,000,000 miles from the earth; and this interval was being diminished at the rate of nearly 208,000 miles an hour, the speed of the earth being about 70,000 miles, that of the comet being little less than 138,000 miles an hour.

It was determined to make the start at two o'clock, three-quarters of an hour, or, to speak correctly 42 minutes 35.6 seconds, before the time predicted by the professor as the instant of collision. The modified rotation of the comet caused it to be daylight at the time.

An hour previously the balloon was inflated with perfect success, and the car was securely attached to the network. It only awaited the stowage of the passengers.

Isaac Hakkabut was the first to take his place in the car. But scarcely had he done so, when Servadac noticed that his waist was encompassed by an enormous girdle that bulged out to a very extraordinary extent. "What's all this, Hakkabut?" he asked.

"It's only my little bit of money, your Excellency; my modest little fortune--a mere bagatelle," said the Jew.

"And what may your little fortune weigh?" inquired the captain.

"Only about sixty-six pounds!" said Isaac.

"Sixty-six pounds!" cried Servadac. "We haven't reckoned for this."

"Merciful heavens!" began the Jew.

"Sixty-six pounds!" repeated Servadac. "We can hardly carry ourselves; we can't have any dead weight here. Pitch it out, man, pitch it out!"

"God of Israel!" whined Hakkabut.

"Out with it, I say!" cried Servadac.

"What, all my money, which I have saved so long, and toiled for so hard?"

"It can't be helped," said the captain, unmoved.

"Oh, your Excellency!" cried the Jew.

"Now, old Nicodemus, listen to me," interposed Ben Zoof; "you just get rid of that pouch of yours, or we will get rid of you. Take your choice. Quick, or out you go!"

The avaricious old man was found to value his life above his money; he made a lamentable outcry about it, but he unfastened his girdle at last, and put it out of the car.

Very different was the case with Palmyrin Rosette. He avowed over and over again his intention of never quitting the nucleus of his comet. Why should he trust himself to a balloon, that would blaze up like a piece of paper? Why should he leave the comet? Why should he not go once again upon its surface into the far-off realms of space?

His volubility was brought to a sudden check by Servadac's bidding two of the sailors, without more ado, to take him in their arms and put him quietly down at the bottom of the car.

To the great regret of their owners, the two horses and Nina's pet goat were obliged to be left behind. The only creature for which there was found a place was the carrier-pigeon that had brought the professor's message to the Hive. Servadac thought it might probably be of service in carrying some communication to the earth.

When every one, except the captain and his orderly, had taken their places, Servadac said, "Get in, Ben Zoof."

"After you, sir," said Ben Zoof, respectfully.

"No, no!" insisted Servadac; "the captain must be the last to leave the ship!"

A moment's hesitation and the orderly clambered over the side of the car. Servadac followed. The cords were cut. The balloon rose with stately calmness into the air.

CHAPTER XVIII. SUSPENSE

When the balloon had reached an elevation of about 2,500 yards, Lieutenant Procope determined to maintain it at that level. A wire-work stove, suspended below the casing, and filled with lighted hay, served to keep the air in the interior at a proper temperature.

Beneath their feet was extended the basin of the Gallian Sea. An inconsiderable speck to the north marked the site of Gourbi Island. Ceuta and Gibraltar, which might have been expected in the west, had utterly disappeared. On the south rose the volcano, the extremity of the promontory that jutted out from the continent that formed the framework of the sea; whilst in every direction the strange soil, with its commixture of tellurium and gold, gleamed under the sun's rays with a perpetual iridescence.
Applying rising with them in their ascent, the horizon was well-defined. The sky above them was perfectly clear; but away in the northwest, in opposition to the sun, floated a new sphere, so small that it could not be an asteroid, but like a dim meteor. It was the fragment that the internal convulsion had rent from the surface of the comet, and which was now many thousands of leagues away, pursuing the new orbit into which it had been projected. During the hours of daylight it was far from distinct, but after nightfall it would assume a definite luster.

The object, however, of supreme interest was the great expanse of the terrestrial disc, which was rapidly drawing down obliquely towards them. It totally eclipsed an enormous portion of the firmament above, and approaching with an ever-increasing velocity, was now within half its average distance from the moon. So close was it, that the two poles could not be embraced in one focus. Irregular patches of greater or less brilliancy alternated on its surface, the brighter betokening the continents, the more somber indicating the oceans that absorbed the solar rays. Above, there were broad white bands, darkened on the side averted from the sun, exhibiting a slow but unintermittent movement; these were the vapors that pervaded the terrestrial atmosphere.

But as the aeronauts were being hurried on at a speed of 70 miles a second, this vague aspect of the earth soon developed itself into definite outlines. Mountains and plains were no longer confused, the distinction between sea and shore was more plainly identified, and instead of being, as it were, depicted on a map, the surface of the earth appeared as though modelled in relief.

Twenty-seven minutes past two, and Gallia is only 72,000 miles from the terrestrial sphere; quicker and quicker is the velocity; ten minutes later, and they are only 36,000 miles apart!

The whole configuration of the earth is clear.

"Europe! Russia! France!" shouted Procope, the count, and Servadac, almost in a breath.

And they are not mistaken. The eastern hemisphere lies before them in the full blaze of light, and there is no possibility of error in distinguishing continent from continent.

The surprise only kindled their emotion to yet keener intensity, and it would be hard to describe the excitement with which they gazed at the panorama that was before them. The crisis of peril was close at hand, but imagination overleaped all consideration of danger; and everything was absorbed in the one idea that they were again within reach of that circle of humanity from which they had supposed themselves severed forever.

And, truly, if they could have paused to study it, that panorama of the states of Europe which was outstretched before their eyes, was conspicuous for the fantastic resemblances with which Nature on the one hand, and international relations on the other, have associated them. There was England, marching like some stately dame towards the east, trailing her ample skirts and coroneted with the cluster of her little islets; Sweden and Norway, with their bristling spine of mountains, seemed like a splendid lion eager to spring down from the bosom of the ice-bound north; Russia, a gigantic polar bear, stood with its head towards Asia, its left paw resting upon Turkey, its right upon Mount Caucasus; Austria resembled a huge cat curled up and sleeping a watchful sleep; Spain, with Portugal as a pennant, like an unfurled banner, floated from the extremity of the continent; Turkey, like an insolent cock, appeared to clutch the shores of Asia with the one claw, and the land of Greece with the other; Italy, as it were a foot and leg encased in a tight-fitting boot, was juggling deftly with the islands of Sicily, Sardinia, and Corsica; Prussia, a formidable hatchet imbedded in the heart of Germany, its edge just grazing the frontiers of France; whilst France itself suggested a vigorous torso with Paris at its breast.

All at once Ben Zoof breaks the silence: "Montmartre! I see Montmartre!" And, smile at the absurdity as others might, nothing could induce the worthy orderly to surrender his belief that he could actually make out the features of his beloved home.

The only individual whose soul seemed unstirred by the approaching earth was Palmyrin Rosette. Leaning over the side of the car, he kept his eyes fixed upon the abandoned comet, now floating about a mile and a half below him, bright in the general irradiation which was flooding the surrounding space.

Chronometer in hand, Lieutenant Procope stood marking the minutes and seconds as they fled; and the stillness which had once again fallen upon them all was only broken by his order to replenish the stove, that the montgolfier might retain its necessary level. Servadac and the count continued to gaze upon the earth with an eagerness that almost amounted to awe. The balloon was slightly in the rear of Gallia, a circumstance that augured somewhat favorably, because it might be presumed that if the comet preceded the balloon in its contact with the earth, there would be a break in the suddenness of transfer from one atmosphere to the other.

The next question of anxiety was, where would the balloon alight? If upon _terra firma_, would it be in a place where adequate resources for safety would be at hand? If upon the ocean, would any passing vessel be within hail to rescue them from their critical position? Truly, as the count observed to his comrades, none but a Divine Pilot could steer them now.

"Forty-two minutes past!" said the lieutenant, and his voice seemed to thrill through the silence of expectation.

There were not 20,000 miles between the comet and the earth!
The calculated time of impact was 2 hours 47 minutes 35.6 seconds. Five minutes more and collision must ensue!

But was it so? Just at this moment, Lieutenant Procope observed that the comet deviated sensibly in an oblique course. Was it possible that after all collision would not occur?

The deviation, however, was not great; it did not justify any anticipation that Gallia would merely graze the earth, as it had done before; it left it certain that the two bodies would inevitably impinge.

"No doubt," said Ben Zoof, "this time we shall stick together."

Another thought occurred. Was it not only too likely that, in the fusion of the two atmospheres, the balloon itself, in which they were being conveyed, would be rent into ribbons, and every one of its passengers hurled into destruction, so that not a Gallian should survive to tell the tale of their strange peregrinations?

Moments were precious; but Hector Servadac resolved that he would adopt a device to secure that at least some record of their excursion in solar distances should survive themselves.

Tearing a leaf from his note-book, he wrote down the name of the comet, the list of the fragments of the earth it had carried off, the names of his companions, and the date of the comet's aphelion; and having subscribed it with his signature, turned to Nina and told her he must have the carrier-pigeon which was nestling in her bosom.

The child's eyes filled with tears; she did not say a word, but imprinting a kiss upon its soft plumage, she surrendered it at once, and the message was hurriedly fastened to its neck. The bird wheeled round and round in a few circles that widened in their diameter, and quickly sunk to an altitude in the comet's atmosphere much inferior to the balloon.

Some minutes more were thus consumed and the interval of distance was reduced to less than 8,000 miles.

The velocity became inconceivably great, but the increased rate of motion was in no way perceptible; there was nothing to disturb the equilibrium of the car in which they were making their aerial adventure.

"Forty-six minutes!" announced the lieutenant.

The glowing expanse of the earth's disc seemed like a vast funnel, yawning to receive the comet and its atmosphere, balloon and all, into its open mouth.

"Forty-seven!" cried Procope.

There was half a minute yet. A thrill ran through every vein. A vibration quivered through the atmosphere. The montgolfier, elongated to its utmost stretch, was manifestly being sucked into a vortex. Every passenger in the quivering car involuntarily clung spasmodically to its sides, and as the two atmospheres amalgamated, clouds accumulated in heavy masses, involving all around in dense obscurity, while flashes of lurid flame threw a weird glimmer on the scene.

In a mystery every one found himself upon the earth again. They could not explain it, but here they were once more upon terrestrial soil; in a swoon they had left the earth, and in a similar swoon they had come back!

Of the balloon not a vestige remained, and contrary to previous computation, the comet had merely grazed the earth, and was traversing the regions of space, again far away!

CHAPTER XIX. BACK AGAIN

"In Algeria, captain?"

"Yes, Ben Zoof, in Algeria; and not far from Mostaganem." Such were the first words which, after their return to consciousness, were exchanged between Servadac and his orderly.

They had resided so long in the province that they could not for a moment be mistaken as to their whereabouts, and although they were incapable of clearing up the mysteries that shrouded the miracle, yet they were convinced at the first glance that they had been returned to the earth at the very identical spot where they had quitted it.

In fact, they were scarcely more than a mile from Mostaganem, and in the course of an hour, when they had all recovered from the bewilderment occasioned by the shock, they started off in a body and made their way to the town. It was a matter of extreme surprise to find no symptom of the least excitement anywhere as they went along. The population was perfectly calm; every one was pursuing his ordinary avocation; the cattle were browsing quietly upon the pastures that were moist with the dew of an ordinary January morning. It was about eight o'clock; the sun was rising in the east; nothing could be noticed to indicate that any abnormal incident had either transpired or been expected by the inhabitants. As to a collision with a comet, there was not the faintest trace of any such phenomenon crossing men's minds, and awakening, as it surely would, a panic little short of the certified approach of the millennium.

"Nobody expects us," said Servadac; "that is very certain."

"No, indeed," answered Ben Zoof, with a sigh; he was manifestly disappointed that his return to Mostaganem was not welcomed with a triumphal reception.
They reached the Mascara gate. The first persons that Servadac recognized were the two friends that he had invited to be his seconds in the duel two years ago, the colonel of the 2nd Fusiliers and the captain of the 8th Artillery. In return to his somewhat hesitating salutation, the colonel greeted him heartily, "Ah! Servadac, old fellow! is it you?"

"I, myself," said the captain.

"Where on earth have you been to all this time? In the name of peace, what have you been doing with yourself?"

"You would never believe me, colonel," answered Servadac, "if I were to tell you; so on that point I had better hold my tongue."

"Hang your mysteries!" said the colonel; "tell me, where have you been?"

"No, my friend, excuse me," replied Servadac; "but shake hands with me in earnest, that I may be sure I am not dreaming." Hector Servadac had made up his mind, and no amount of persuasion could induce him to divulge his incredible experiences.

Anxious to turn the subject, Servadac took the earliest opportunity of asking, "And what about Madame de L----?"

"Madame de L----!" exclaimed the colonel, taking the words out of his mouth; "the lady is married long ago; you did not suppose that she was going to wait for you. 'Out of sight, out of mind,' you know."

"True," replied Servadac; and turning to the count he said, "Do you hear that? We shall not have to fight our duel after all."

"Most happy to be excused," rejoined the count. The rivals took each other by the hand, and were united henceforth in the bonds of a sincere and confiding friendship.

"An immense relief," said Servadac to himself, "that I have no occasion to finish that confounded rondo!"

It was agreed between the captain and the count that it would be desirable in every way to maintain the most rigid silence upon the subject of the inexplicable phenomena which had come within their experience. It was to them both a subject of the greatest perplexity to find that the shores of the Mediterranean had undergone no change, but they coincided in the opinion that it was prudent to keep their bewilderment entirely to themselves. Nothing induced them to break their reserve.

The very next day the small community was broken up.

The _Dobryna's_ crew, with the count and the lieutenant, started for Russia, and the Spaniards, provided, by the count's liberality, with a competency that ensured them from want, were despatched to their native shores. The leave taking was accompanied by genuine tokens of regard and goodwill.

For Isaac Hakkabut alone there was no feeling of regret. Doubly ruined by the loss of his tartan, and by the abandonment of his fortune, he disappeared entirely from the scene. It is needless to say that no one troubled himself to institute a search after him, and, as Ben Zoof sententiously remarked, "Perhaps old Jehoram is making money in America by exhibiting himself as the latest arrival from a comet!"

But however great was the reserve which Captain Servadac might make on his part, nothing could induce Professor Rosette to conceal his experiences. In spite of the denial which astronomer after astronomer gave to the appearance of such a comet as Gallia at all, and of its being refused admission to the catalogue, he published a voluminous treatise, not only detailing his own adventures, but setting forth, with the most elaborate precision, all the elements which settled its period and its orbit. Discussions arose in scientific circles; an overwhelming majority decided against the representations of the professor; an unimportant minority declared themselves in his favor, and a pamphlet obtained some degree of notice, ridiculing the whole debate under the title of "The History of an Hypothesis." In reply to this impertinent criticism of his labors, Rosette issued a rejoinder full with the most vehement expressions of indignation, and reiterating his asseveration that a fragment of Gibraltar was still traversing the regions of space, carrying thirteen Englishmen upon its surface, and concluding by saying that it was the great disappointment of his life that he had not been taken with them.

Pablo and little Nina were adopted, the one by Servadac, the other by the count, and under the supervision of their guardians, were well educated and cared for. Some years later, Colonel, no longer Captain, Servadac, his hair slightly streaked with grey, had the pleasure of seeing the handsome young Spaniard united in marriage to the Italian, now grown into a charming girl, upon whom the count bestowed an ample dowry; the young people's happiness in no way marred by the fact that they had not been destined, as once seemed likely, to be the Adam and Eve of a new world.

The career of the comet was ever a mystery which neither Servadac nor his orderly could eliminate from the regions of doubt. Anyhow, they were firmer and more confiding friends than ever.

One day, in the environs of Montmartre, where they were secure from eavesdroppers, Ben Zoof incidentally referred to the experiences in the depths of Nina's Hive; but stopped short and said, "However, those things never happened, sir, did they?"
Chapter I
MYSTERIOUS SOUNDS
BANG! Bang!

The pistol shots were almost simultaneous. A cow peacefully grazing fifty yards away received one of the bullets in her back. She had nothing to do with the quarrel all the same.

Neither of the adversaries was hit.

Who were these two gentlemen? We do not know, although this would be an excellent opportunity to hand down their names to posterity. All we can say is that the elder was an Englishman and the younger an American, and both of them were old enough to know better.

So far as recording in what locality the inoffensive ruminant had just tasted her last tuft of herbage, nothing can be easier. It was on the left bank of Niagara, not far from the suspension bridge which joins the American to the Canadian bank three miles from the falls.

The Englishman stepped up to the American.
"I contend, nevertheless, that it was 'Rule Britannia!'"

"And I say it was 'Yankee Doodle!'" replied the young American.

The dispute was about to begin again when one of the seconds--doubtless in the interests of the milk trade--interposed.

"Suppose we say it was 'Rule Doodle' and 'Yankee Britannia' and adjourn to breakfast?"

This compromise between the national airs of Great Britain and the United States was adopted to the general satisfaction. The Americans and Englishmen walked up the left bank of the Niagara on their way to Goat Island, the neutral ground between the falls. Let us leave them in the presence of the boiled eggs and traditional ham, and floods enough of tea to make the cataract jealous, and trouble ourselves no more about them. It is extremely unlikely that we shall again meet with them in this story.

Which was right; the Englishman or the American? It is not easy to say. Anyhow the duel shows how great was the excitement, not only in the new but also in the old world, with regard to an inexplicable phenomenon which for a month or more had driven everybody to distraction.

Never had the sky been so much looked at since the appearance of man on the terrestrial globe. The night before an aerial trumpet had blared its brazen notes through space immediately over that part of Canada between Lake Ontario and Lake Erie. Some people had heard those notes as "Yankee Doodle," others had heard them as "Rule Britannia," and hence the quarrel between the Anglo-Saxons, which ended with the breakfast on Goat Island. Perhaps it was neither one nor the other of these patriotic tunes, but what was undoubted by all was that these extraordinary sounds had seemed to descend from the sky to the earth.

What could it be? Was it some exuberant aeronaut rejoicing on that sonorous instrument of which the Renommée makes such obstreperous use?

No! There was no balloon and there were no aeronauts. Some strange phenomenon had occurred in the higher zones of the atmosphere, a phenomenon of which neither the nature nor the cause could be explained. Today it appeared over America; forty-eight hours afterwards it was over Europe; a week later it was in Asia over the Celestial Empire.

Hence in every country of the world--empire, kingdom, or republic--there was anxiety which it was important to allay. If you hear in your house strange and inexplicable noises, do you not at once endeavor to discover the cause? And if your search is in vain, do you not leave your house and take up your quarters in another? But in this case the house was the terrestrial globe! There are no means of leaving that house for the moon or Mars, or Venus, or Jupiter, or any other planet of the solar system. And so of necessity we have to find out what it is that takes place, not in the infinite void, but within the atmospheric zones. In fact, if there is no air there is no noise, and as there was a noise--that famous trumpet, to wit--the phenomenon must occur in the air, the density of which invariably diminishes, and which does not extend for more than six miles round our spheroid.

Naturally the newspapers took up the question in their thousands, and treated it in every form, throwing on it both light and darkness, recording many things about it true or false, alarming and tranquillizing their readers--as the sale required--and almost driving ordinary people mad. At one blow party politics dropped unheeded--and the affairs
of the world went on none the worse for it.

But what could this thing be? There was not an observatory that was not applied to. If an observatory could not give a satisfactory answer what was the use of observatories? If astronomers, who doubled and tripled the stars a hundred thousand million miles away, could not explain a phenomenon occurring only a few miles off, what was the use of astronomers?

The observatory at Paris was very guarded in what it said. In the mathematical section they had not thought the statement worth noticing; in the meridional section they knew nothing about it; in the physical observatory they had not come across it; in the geodetic section they had had no observation; in the meteorological section there had been no record; in the calculating room they had had nothing to deal with. At any rate this confession was a frank one, and the same frankness characterized the replies from the observatory of Montsouris and the magnetic station in the park of St. Maur. The same respect for the truth distinguished the Bureau des Longitudes.

The provinces were slightly more affirmative. Perhaps in the night of the fifth and the morning of the sixth of May there had appeared a flash of light of electrical origin which lasted about twenty seconds. At the Pic du Midi this light appeared between nine and ten in the evening. At the Meteorological Observatory on the Puy de Dome the light had been observed between one and two o'clock in the morning; at Mont Ventoux in Provence it had been seen between two and three o'clock; at Nice it had been noticed between three and four o'clock; while at the Semnoz Alps between Annecy, Le Bourget, and Le Léman, it had been detected just as the zenith was paling with the dawn.

Now it evidently would not do to disregard these observations altogether. There could be no doubt that a light had been observed at different places, in succession, at intervals, during some hours. Hence, whether it had been produced from many centers in the terrestrial atmosphere, or from one center, it was plain that the light must have traveled at a speed of over one hundred and twenty miles an hour.

In the United Kingdom there was much perplexity. The observatories were not in agreement. Greenwich would not consent to the proposition of Oxford. They were agreed on one point, however, and that was: "It was nothing at all!"

But, said one, "It was an optical illusion!" While the other contended that, "It was an acoustical illusion!" And so they disputed. Somewhere, however, was, it will be seen, common to both "It was an illusion."

Between the observatory of Berlin and the observatory of Vienna the discussion threatened to end in international complications; but Russia, in the person of the director of the observatory at Pulkowa, showed that both were right. It all depended on the point of view from which they attacked the phenomenon, which, though impossible in theory, was possible in practice.

In Switzerland, at the observatory of Sautis in the canton of Appenzell, at the Righi, at the Gäriss, in the passes of the St. Gothard, at the St. Bernard, at the Julier, at the Simplon, at Zurich, at Somblick in the Tyrolean Alps, there was a very strong disinclination to say anything about what nobody could prove—and that was nothing but reasonable.

But in Italy, at the meteorological stations on Vesuvius, on Etna in the old Casa Inglesi, at Monte Cavo, the observers made no hesitation in admitting the materiality of the phenomenon, particularly as they had seen it by day in the form of a small cloud of vapor, and by night in that of a shooting star. But of what it was they knew nothing.

Scientists began at last to tire of the mystery, while they continued to disagree about it, and even to frighten the lowly and the ignorant, who, thanks to one of the wisest laws of nature, have formed, form, and will form the immense majority of the world's inhabitants. Astronomers and meteorologists would soon have dropped the subject altogether had not, on the night of the 26th and 27th, the observatory of Kautokeino at Finmark, in Norway, and during the night of the 28th and 29th that of Isfjord at Spitzbergen—Norwegian one and Swedish the other—found themselves agreed in recording that in the center of an aurora borealis there had appeared a sort of huge bird, an aerial monster, whose structure they were unable to determine, but who, there was no doubt, was showering off from his body certain corpuscles which exploded like bombs.

In Europe not a doubt was thrown on this observation of the stations in Finmark and Spitzbergen. But what appeared the most phenomenal about it was that the Swedes and Norwegians could find themselves in agreement on any subject whatever.

There was a laugh at the asserted discovery in all the observatories of South America, in Brazil, Peru, and La Plata, and in those of Australia at Sydney, Adelaide, and Melbourne; and Australian laughter is very catching.

To sum up, only one chief of a meteorological station ventured on a decided answer to this question, notwithstanding the sarcasms that his solution provoked. This was a Chinaman, the director of the observatory at Zi-Ka-Wey which rises in the center of a vast plateau less than thirty miles from the sea, having an immense horizon and wonderfully pure atmosphere. "It is possible," said he, "that the object was an aviform apparatus—a flying machine!"

What nonsense!
But if the controversy was keen in the old world, we can imagine what it was like in that portion of the new of which the United States occupy so vast an area.

A Yankee, we know, does not waste time on the road. He takes the street that leads him straight to his end. And the observatories of the American Federation did not hesitate to do their best. If they did not hurl their objectives at each other's heads, it was because they would have had to put them back just when they most wanted to use them. In this much-disputed question the observatories of Washington in the District of Columbia, and Cambridge in Massachusetts, found themselves opposed by those of Dartmouth College in New Hampshire, and Ann Arbor in Michigan. The subject of their dispute was not the nature of the body observed, but the precise moment of its observation. All of them claimed to have seen it the same night, the same hour, the same minute, the same second, although the trajectory of the mysterious voyager took it but a moderate height above the horizon. Now from Massachusetts to Michigan, from New Hampshire to Columbia, the distance is too great for this double observation, made at the same moment, to be considered possible.

Dudley at Albany, in the state of New York, and West Point, the military academy, showed that their colleagues were wrong by an elaborate calculation of the right ascension and declination of the aforesaid body.

But later on it was discovered that the observers had been deceived in the body, and that what they had seen was an aerolite. This aerolite could not be the object in question, for how could an aerolite blow a trumpet? It was in vain that they tried to get rid of this trumpet as an optical illusion. The ears were no more deceived than the eyes. Something had assuredly been seen, and something had assuredly been heard. In the night of the 12th and 13th of May--a very dark night--the observers at Yale College, in the Sheffield Science School, had been able to take down a few bars of a musical phrase in D major, common time, which gave note for note, rhythm for rhythm, the chorus of the Chant du Départ.

"Good," said the Yankee wags. "There is a French band well up in the air."

"But to joke is not to answer." Thus said the observatory at Boston, founded by the Atlantic Iron Works Society, whose opinions in matters of astronomy and meteorology began to have much weight in the world of science.

Then there intervened the observatory at Cincinnati, founded in 1870, on Mount Lookout, thanks to the generosity of Mr. Kilgour, and known for its micrometrical measurements of double stars. Its director declared with the utmost good faith that there had certainly been something, that a traveling body had shown itself at very short periods at different points in the atmosphere, but what were the nature of this body, its dimensions, its speed, and its trajectory, it was impossible to say.

It was then a journal whose publicity is immense--the "New York Herald"--received the anonymous contribution hereunder.

"There will be in the recollection of most people the rivalry which existed a few years ago between the two heirs of the Begum of Ragginahra, the French doctor Sarrasin, the city of Frankville, and the German engineer Schultze, in the city of Steeltown, both in the south of Oregon in the United States.

"It will not have been forgotten that, with the object of destroying Frankville, Herr Schultze launched a formidable engine, intended to beat down the town and annihilate it at a single blow.

"Still less will it be forgotten that this engine, whose initial velocity as it left the mouth of the monster cannon had been erroneously calculated, had flown off at a speed exceeding by sixteen times that of ordinary projectiles--or about four hundred and fifty miles an hour--that it did not fall to the ground, and that it passed into an aerolitic stage, so as to circle for ever round our globe.

"Why should not this be the body in question?"

Very ingenious, Mr. Correspondent on the "New York Herald!" but how about the trumpet? There was no trumpet in Herr Schulze's projectile!

So all the explanations explained nothing, and all the observers had observed in vain. There remained only the suggestion offered by the director of Zi-Ka-Wey. But the opinion of a Chinaman!

The discussion continued, and there was no sign of agreement. Then came a short period of rest. Some days elapsed without any object, aerolite or otherwise, being described, and without any trumpet notes being heard in the atmosphere. The body then had fallen on some part of the globe where it had been difficult to trace it; in the sea, perhaps. Had it sunk in the depths of the Atlantic, the Pacific, or the Indian Ocean? What was to be said in this matter?

But then, between the 2nd and 9th of June, there came a new series of facts which could not possibly be explained by the unaided existence of a cosmic phenomenon.

In a week the Hamburgers at the top of St. Michael's Tower, the Turks on the highest minaret of St. Sophia, the Rouennais at the end of the metal spire of their cathedral, the Strasburgers at the summit of their minister, the Americans on the head of the Liberty statue at the entrance of the Hudson and on the Bunker Hill monument at Boston, the Chinese at the spike of the temple of the Four Hundred Genii at Canton, the Hindus on the sixteenth
terrace of the pyramid of the temple at Tanjore, the San Pietrini at the cross of St. Peter's at Rome, the English at the cross of St. Paul's in London, the Egyptians at the apex of the Great Pyramid of Ghizeh, the Parisians at the lighting conductor of the iron tower of the Exposition of 1889, a thousand feet high, all of them beheld a flag floating from some one of these inaccessible points.

And the flag was black, dotted with stars, and it bore a golden sun in its center.

Chapter II
AGREEMENT IMPOSSIBLE
"And the first who says the contrary--"
"Indeed! But we will say the contrary so long as there is a place to say it in!"
"And in spite of your threats--"
"Mind what you are saying, Bat Fynn!"
"Mind what you are saying, Uncle Prudent!"
"I maintain that the screw ought to be behind!"
"And so do we! And so do we!" replied half a hundred voices confounded in one.
"No! It ought to be in front!" shouted Phil Evans.
"In front!" roared fifty other voices, with a vigor in no whit less remarkable.
"We shall never agree!"
"Never! Never!"
"Then what is the use of a dispute?"
"It is not a dispute! It is a discussion!"

One would not have thought so to listen to the taunts, objurgations, and vociferations which filled the lecture room for a good quarter of an hour.

The room was one of the largest in the Weldon Institute, the well-known club in Walnut Street, Philadelphia, Pennsylvania, U.S.A. The evening before there had been an election of a lamplighter, occasioning many public manifestations, noisy meetings, and even interchanges of blows, resulting in an effervescence which had not yet subsided, and which would account for some of the excitement just exhibited by the members of the Weldon Institute. For this was merely a meeting of balloonists, discussing the burning question of the direction of balloons.

In this great saloon there were struggling, pushing, gesticulating, shouting, arguing, disputing, a hundred balloonists, all with their hats on, under the authority of a president, assisted by a secretary and treasurer. They were not engineers by profession, but simply amateurs of all that appertained to aerostatics, and they were amateurs in a fury, and especially foes of those who would oppose to aerostats "apparatuses heavier than the air," flying machines, aerial ships, or what not. That these people might one day discover the method of guiding balloons is possible. There could be no doubt that their president had considerable difficulty in guiding them.

This president, well known in Philadelphia, was the famous Uncle Prudent, Prudent being his family name. There is nothing surprising in America in the qualificative uncle, for you can there be uncle without having either nephew or niece. There they speak of uncle as in other places they speak of father, though the father may have had no children.

Uncle Prudent was a personage of consideration, and in spite of his name was well known for his audacity. He was very rich, and that is no drawback even in the United States; and how could it be otherwise when he owned the greater part of the shares in Niagara Falls? A society of engineers had just been founded at Buffalo for working the cataract. It seemed to be an excellent speculation. The seven thousand five hundred cubic meters that pass over Niagara in a second would produce seven millions of horsepower. This enormous power, distributed amongst all the workshops within a radius of three hundred miles, would return an annual income of three hundred million dollars, of which the greater part would find its way into the pocket of Uncle Prudent. He was a bachelor, he lived quietly, and for his only servant had his valet Frycollin, who was hardly worthy of being the servant to so audacious a master.

Uncle Prudent was rich, and therefore he had friends, as was natural; but he also had enemies, although he was president of the club--among others all those who envied his position. Amongst his bitterest foes we may mention the secretary of the Weldon Institute.

This was Phil Evans, who was also very rich, being the manager of the Wheelton Watch Company, an important manufactory, which makes every day five hundred movements equal in every respect to the best Swiss workmanship. Phil Evans would have passed for one of the happiest men in the world, and even in the United States, if it had not been for Uncle Prudent. Like him he was in his forty-sixth year; like him of invariable health; like him of undoubted boldness. They were two men made to understand each other thoroughly, but they did not, for both
were of extreme violence of character. Uncle Prudent was furiously hot; Phil Evans was abnormally cool.

And why had not Phil Evans been elected president of the club? The votes were exactly divided between Uncle Prudent and him. Twenty times there had been a scrutiny, and twenty times the majority had not declared for either one or the other. The position was embarrassing, and it might have lasted for the lifetime of the candidates.

One of the members of the club then proposed a way out of the difficulty. This was Jem Chip, the treasurer of the Weldon Institute. Chip was a confirmed vegetarian, a proclaimer of all animal nourishment, of all fermented liquors, half a Mussulman, half a Brahman. On this occasion Jem Chip was supported by another member of the club, William T. Forbes, the manager of a large factory where they made glucose by treating rags with sulphuric acid. A man of good standing was this William T. Forbes, the father of two charming girls--Miss Dorothy, called Doll, and Miss Martha, called Mat, who gave the tone to the best society in Philadelphia.

It followed, then, on the proposition of Jem Chip, supported by William T. Forbes and others, that it was decided to elect the president "on the center point."

This mode of election can be applied in all cases when it is desired to elect the most worthy; and a number of Americans of high intelligence are already thinking of employing it in the nomination of the President of the Republic of the United States.

On two boards of perfect whiteness a black line is traced. The length of each of these lines is mathematically the same, for they have been determined with as much accuracy as the base of the first triangle in a trigonometrical survey. That done, the two boards were erected on the same day in the center of the conference room, and the two candidates, each armed with a fine needle, marched towards the board that had fallen to his lot. The man who planted his needle nearest the center of the line would be proclaimed President of the Weldon Institute.

The operation must be done at once--no guide marks or trial shots allowed; nothing but sureness of eye. The man must have a compass in his eye, as the saying goes; that was all.

Uncle Prudent stuck in his needle at the same moment as Phil Evans did his. Then there began the measurement to discover which of the two competitors had most nearly approached the center.

Wonderful! Such had been the precision of the shots that the measures gave no appreciable difference. If they were not exactly in the mathematical center of the line, the distance between the needles was so small as to be invisible to the naked eye.

The meeting was much embarrassed.

Fortunately one of the members, Truck Milnor, insisted that the measurements should be remade by means of a rule graduated by the micrometrical machine of M. Perreaux, which can divide a millimeter into fifteen-hundredths of a millimeter with a diamond splinter, was brought to bear on the lines; and on reading the divisions through a microscope the following were the results: Uncle Prudent had approached the center within less than six fifteen-hundredths of a millimeter. Phil Evans was within nine fifteen-hundredths.

And that is why Phil Evans was only secretary of the Weldon Institute, whereas Uncle Prudent was president. A difference of three fifteen-hundredths of a millimeter! And on account of it Phil Evans vowed against Uncle Prudent one of those hatreds which are none the less fierce for being latent.

Chapter III
A VISITOR IS ANNOUNCED

The many experiments made during this last quarter of the nineteenth century have given considerable impetus to the question of guidable balloons. The cars furnished with propellers attached in 1852 to the aerostats of the elongated form introduced by Henry Giffard, the machines of Dupuy de Lome in 1872, of the Tissandier brothers in 1883, and of Captain Krebs and Renard in 1884, yielded many important results. But if these machines, moving in a medium heavier than themselves, maneuvering under the propulsion of a screw, working at an angle to the direction of the wind, and even against the wind, to return to their point of departure, had been really "guidable," they had only succeeded under very favorable conditions. In large, covered halls their success was perfect. In a calm atmosphere they did very well. In a light wind of five or six yards a second they still moved. But nothing practical had been obtained. Against a miller's wind--nine yards a second--the machines had remained almost stationary. Against a fresh breeze--eleven yards a second--they would have advanced backwards. In a storm--twenty-seven to thirty-three yards a second--they would have been blown about like a feather. In a hurricane--sixty yards a second--they would have run the risk of being dashed to pieces. And in one of those cyclones which exceed a hundred yards a second not a fragment of them would have been left. It remained, then, even after the striking experiments of Captains Krebs and Renard, that though guidable aerostats had gained a little speed, they could not be kept going in a moderate breeze. Hence the impossibility of making practical use of this mode of aerial locomotion.

With regards to the means employed to give the aerostat its motion a great deal of progress had been made.
the steam engines of Henry Giffard, and the muscular force of Dupuy de Lome, electric motors had gradually been substituted. The batteries of bichromate of potassium of the Tissandier brothers had given a speed of four yards a second. The dynamo-electric machines of Captain Krebs and Renard had developed a force of twelve horsepower and yielded a speed of six and a half yards per second.

With regard to this motor, engineers and electricians had been approaching more and more to that desideratum which is known as a steam horse in a watch case. Gradually the results of the pile of which Captains Krebs and Renard had kept the secret had been surpassed, and aeronauts had become able to avail themselves of motors whose lightness increased at the same time as their power.

In this there was much to encourage those who believed in the utilization of guidable balloons. But yet how many good people there are who refuse to admit the possibility of such a thing! If the aerostat finds support in the air it belongs to the medium in which it moves; under such conditions, how can its mass, which offers so much resistance to the currents of the atmosphere, make its way against the wind?

In this struggle of the inventors after a light and powerful motor, the Americans had most nearly attained what they sought. A dynamo-electric apparatus, in which a new pile was employed the composition of which was still a mystery, had been bought from its inventor, a Boston chemist up to then unknown. Calculations made with the greatest care, diagrams drawn with the utmost exactitude, showed that by means of this apparatus driving a screw of given dimensions a displacement could be obtained of from twenty to twenty-two yards a second.

Now this was magnificent!

"And it is not dear," said Uncle Prudent, as he handed to the inventor in return for his formal receipt the last installment of the hundred thousand paper dollars he had paid for his invention.

Immediately the Weldon Institute set to work. When there comes along a project of practical utility the money leaps nimbly enough from American pockets. The funds flowed in even without it being necessary to form a syndicate. Three hundred thousand dollars came into the club's account at the first appeal. The work began under the superintendence of the most celebrated aeronaut of the United States, Harry W. Tinder, immortalized by three of his ascents out of a thousand, one in which he rose to a height of twelve thousand yards, higher than Gay Lussac, Coxwell, Sivet, Crocé-Spinelli, Tissandier, Glaisher; another in which he had crossed America from New York to San Francisco, exceeding by many hundred leagues the journeys of Nadar, Godard, and others, to say nothing of that of John Wise, who accomplished eleven hundred and fifty miles from St. Louis to Jefferson county; the third, which ended in a frightful fall from fifteen hundred feet at the cost of a slight sprain in the right thumb, while the less fortunate Pilâtre de Rozier fell only seven hundred feet, and yet killed himself on the spot!

At the time this story begins the Weldon Institute had got their work well in hand. In the Turner yard at Philadelphia there reposed an enormous aerostat, whose strength had been tried by highly compressed air. It well merited the name of the monster balloon.

How large was Nadar's Géant? Six thousand cubic meters. How large was John Wise's balloon? Twenty thousand cubic meters. How large was the Giffard balloon at the 1878 Exhibition? Twenty-five thousand cubic meters. Compare these three aerostats with the aerial machine of the Weldon Institute, whose volume amounted to forty thousand cubic meters, and you will understand why Uncle Prudent and his colleagues were so justifiably proud of it.

This balloon not being destined for the exploration of the higher strata of the atmosphere, was not called the Excelsior, a name which is rather too much held in honor among the citizens of America. No! It was called, simply, the "Go-Ahead," and all it had to do was to justify its name by going ahead obediently to the wishes of its commander.

The dynamo-electric machine, according to the patent purchased by the Weldon Institute, was nearly ready. In less than six weeks the "Go-Ahead" would start for its first cruise through space.

But, as we have seen, all the mechanical difficulties had not been overcome. Many evenings had been devoted to discussing, not the form of its screw nor its dimensions, but whether it ought to be put behind, as the Tissandier brothers had done, or before as Captains Krebs and Renard had done. It is unnecessary to add that the partisans of the two systems had almost come to blows. The group of "Beforists" were equaled in number by the group of "Behindists." Uncle Prudent, who ought to have given the casting vote--Uncle Prudent, brought up doubtless in the school of Professor Buridan--could not bring himself to decide.

Hence the impossibility of getting the screw into place. The dispute might last for some time, unless the government interfered. But in the United States the government meddles with private affairs as little as it possibly can. And it is right.

Things were in this state at this meeting on the 13th of June, which threatened to end in a riot--insults exchanged, fisticuffs succeeding the insults, cane thrashings succeeding the fisticuffs, revolver shots succeeding the cane thrashings--when at thirty-seven minutes past eight there occurred a diversion.
The porter of the Weldon Institute coolly and calmly, like a policeman amid the storm of the meeting, approached the presidential desk. On it he placed a card. He awaited the orders that Uncle Prudent found it convenient to give.

Uncle Prudent turned on the steam whistle, which did duty for the presidential bell, for even the Kremlin clock would have struck in vain! But the tumult slackened not.

Then the president removed his hat. Thanks to this extreme measure a semi-silence was obtained.

"A communication!" said Uncle Prudent, after taking a huge pinch from the snuff-box which never left him.

"Speak up!" answered eighty-nine voices, accidentally in agreement on this one point.

"A stranger, my dear colleagues, asks to be admitted to the meeting."

"Never!" replied every voice.

"He desires to prove to us, it would appear," continued Uncle Prudent, "that to believe in guiding balloons is to believe in the absurdest of Utopias!"

"Let him in! Let him in!"

"What is the name of this singular personage?" asked secretary Phil Evans.

"Robur," replied Uncle Prudent.

"Robur! Robur! Robur!" yelled the assembly. And the welcome accorded so quickly to the curious name was chiefly due to the Weldon Institute hoping to vent its exasperation on the head of him who bore it!

Chapter IV
IN WHICH A NEW CHARACTER APPEARS

"Citizens of the United States! My name is Robur. I am worthy of the name! I am forty years old, although I look but thirty, and I have a constitution of iron, a healthy vigor that nothing can shake, a muscular strength that few can equal, and a digestion that would be thought first class even in an ostrich!"

They were listening! Yes! The riot was quelled at once by the totally unexpected fashion of the speech. Was this fellow a madman or a hoaxer? Whoever he was, he kept his audience in hand. There was not a whisper in the meeting in which but a few minutes ago the storm was in full fury.

And Robur looked the man he said he was. Of middle height and geometric breadth, his figure was a regular trapezium with the greatest of its parallel sides formed by the line of his shoulders. On this line attached by a robust neck there rose an enormous spheroidal head. The head of what animal did it resemble from the point of view of passional analogy? The head of a bull; but a bull with an intelligent face. Eyes which at the least opposition would glow like coals of fire; and above them a permanent contraction of the superciliary muscle, an invariable sign of extreme energy. Short hair, slightly woolly, with metallic reflections; large chest rising and falling like a smith's bellows; arms, hands, legs, feet, all worthy of the trunk. No mustaches, no whiskers, but a large American goatee, revealing the attachments of the jaw whose masseter muscles were evidently of formidable strength. It has been calculated--what has not been calculated?--that the pressure of the jaw of an ordinary crocodile can reach four hundred atmospheres, while that of a hound can only amount to one hundred. From this the following curious formula has been deduced: If a kilogram of dog produces eight kilograms of masseteric force, a kilogram of crocodile could produce twelve. Now, a kilogram of, the aforesaid Robur would not produce less than ten, so that he came between the dog and the crocodile.

From what country did this remarkable specimen come? It was difficult to say. One thing was noticeable, and that was that he expressed himself fluently in English without a trace of the drawling twang that distinguishes the Yankees of New England.

He continued: "And now, honorable citizens, for my mental faculties. You see before you an engineer whose nerves are in no way inferior to his muscles. I have no fear of anything or anybody. I have a strength of will that has never had to yield. When I have decided on a thing, all America, all the world, may strive in vain to keep me from it. When I have an idea, I allow no one to share it, and I do not permit any contradiction. I insist on these details, honorable citizens, because it is necessary you should quite understand me. Perhaps you think I am talking too much about myself? It does not matter if you do! And now consider a little before you interrupt me, as I have come to tell you something that you may not be particularly pleased to hear."

A sound as of the surf on the beach began to rise along the first row of seats--a sign that the sea would not be long in getting stormy again.

"Speak, stranger!" said Uncle Prudent, who had some difficulty in restraining himself.

And Robur spoke as follows, without troubling himself any more about his audience.

"Yes! I know it well! After a century of experiments that have led to nothing, and trials giving no results, there still exist ill-balanced minds who believe in guiding balloons. They imagine that a motor of some sort, electric or
otherwise, might be applied to their pretentious skin bags which are at the mercy of every current in the atmosphere. They persuade themselves that they can be masters of an aerostat as they can be masters of a ship on the surface of the sea. Because a few inventors in calm or nearly calm weather have succeeded in working an angle with the wind, or even beating to windward in a gentle breeze, they think that the steering of aerial apparatus lighter than the air is a practical matter. Well, now, look here; You hundred, who believe in the realization of your dreams, are throwing your thousands of dollars not into water but into space! You are fighting the impossible!"

Strange as it was that at this affirmation the members of the Weldon Institute did not move. Had they become as deaf as they were patient? Or were they reserving themselves to see how far this audacious contradictor would dare to go?

Robur continued: "What? A balloon! When to obtain the raising of a couple of pounds you require a cubic yard of gas. A balloon pretending to resist the wind by aid of its mechanism, when the pressure of a light breeze on a vessel's sails is not less than that of four hundred horsepower; when in the accident at the Tay Bridge you saw the storm produce a pressure of eight and a half hundredweight on a square yard. A balloon, when on such a system nature has never constructed anything flying, whether furnished with wings like birds, or membranes like certain fish, or certain mammalia--"

"Mammalia?" exclaimed one of the members.

"Yes! Mammalia! The bat, which flies, if I am not mistaken! Is the gentleman unaware that this flyer is a mammal? Did he ever see an omelette made of bat's eggs?"

The interrupter reserved himself for future interruption, and Robur resumed: "But does that mean that man is to give up the conquest of the air, and the transformation of the domestic and political manners of the old world, by the use of this admirable means of locomotion? By no means. As he has become master of the seas with the ship, by the oar, the sail, the wheel and the screw, so shall he become master of atmospheric space by apparatus heavier than the air--for it must be heavier to be stronger than the air!"

And then the assembly exploded. What a broadside of yells escaped from all these mouths, aimed at Robur like the muzzles of so many guns! Was not this hurling a declaration of war into the very camp of the balloonists? Was not this a stirring up of strife between 'the lighter' and 'the heavier' than air?

Robur did not even frown. With folded arms he waited bravely till silence was obtained.

By a gesture Uncle Prudent ordered the firing to cease.

"Yes," continued Robur, "the future is for the flying machine. The air affords a solid fulcrum. If you will give a column of air an ascensional movement of forty-five meters a second, a man can support himself on the top of it if the soles of his boots have a superficies of only the eighth of a square meter. And if the speed be increased to ninety meters, he can walk on it with naked feet. Or if, by means of a screw, you drive a mass of air at this speed, you get the same result."

What Robur said had been said before by all the partisans of aviation, whose work slowly but surely is leading on to the solution of the problem. To Ponton d'Amécourt, La Landelle, Nadar, De Luzy, De Louvrie, Liais, Beleguir, Moreau, the brothers Richard, Babinet, Jobert, Du Temple, Salives, Penaud, De Villeneuve, Gauchot and Tatin, Michael Loup, Edison, Planavergne, and so many others, belongs the honor of having brought forward ideas of such simplicity. Abandoned and resumed times without number, they are sure, some day to triumph. To the enemies of aviation, who urge that the bird only sustains himself by warming the air he strikes, their answer is ready. Have they not proved that an eagle weighing five kilograms would have to fill fifty cubic meters with his warm fluid merely to sustain himself in space?

This is what Robur demonstrated with undeniable logic amid the uproar that arose on all sides. And in conclusion these are the words he hurled in the faces of the balloonists: "With your aerostats you can do nothing--you will arrive at nothing--you dare do nothing! The boldest of your aeronauts, John Wise, although he has made an aerial voyage of twelve hundred miles above the American continent, has had to give up his project of crossing the Atlantic! And you have not advanced one step--not one step--towards your end."

"Sir," said the president, who in vain endeavored to keep himself cool, "you forget what was said by our immortal Franklin at the first appearance of the fire balloon, 'It is but a child, but it will grow!' It was but a child, and it has grown."

"No, Mr. President, it has not grown! It has got fatter--and this is not the same thing!"

This was a direct attack on the Weldon Institute, which had decreed, helped, and paid for the making of a monster balloon. And so propositions of the following kind began to fly about the room: "Turn him out!" "Throw him off the platform!" "Prove that he is heavier than the air!"

But these were only words, not means to an end.

Robur remained impassible, and continued: "There is no progress for your aerostats, my citizen balloonists; progress is for flying machines. The bird flies, and he is not a balloon, he is a piece of mechanism!"
"Yes, he flies!" exclaimed the fiery Bat T. Fynn; "but he flies against all the laws of mechanics."

"Indeed!" said Robur, shrugging his shoulders, and resuming, "Since we have begun the study of the flight of large and small birds one simple idea has prevailed—to imitate nature, which never makes mistakes. Between the albatross, which gives hardly ten beats of the wing per minute, between the pelican, which gives seventy—"

"Seventy-one," said the voice of a scoffer.

"And the bee, which gives one hundred and ninety-two per second—"

"One hundred and ninety-three!" said the facetious individual.

"And, the common house fly, which gives three hundred and thirty—"

"And a half!"

"And the mosquito, which gives millions—"

"No, milliards!"

But Robur, the interrupted, interrupted not his demonstration. "Between these different rates—" he continued.

"There is a difference," said a voice.

"There is a possibility of finding a practical solution. When De Lucy showed that the stag beetle, an insect weighing only two grammes, could lift a weight of four hundred grammes, or two hundred times its own weight, the problem of aviation was solved. Besides, it has been shown that the wing surface decreases in proportion to the increase of the size and weight of the animal. Hence we can look forward to such contrivances—"

"Which would never fly!" said secretary Phil Evans.

"Which have flown, and which will fly," said Robur, without being in the least disconcerted, "and which we can call streophores, helicopters, orthopters—or, in imitation of the word 'nef,' which comes from 'navis,' call them from 'avis,' 'efs,'—by means of which man will become the master of space. The helix—"

"Ah, the helix!" replied Phil Evans. "But the bird has no helix; that we know!"

"So," said Robur; "but Penaud has shown that in reality the bird makes a helix, and its flight is helicopteral. And the motor of the future is the screw—"

"From such a maladee Saint Helix keep us free!" sung out one of the members, who had accidentally hit upon the air from Herold's "Zampa."

And they all took up the chorus: "From such a maladee Saint Helix keep us free!" with such intonations and variations as would have made the French composer groan in his grave.

As the last notes died away in a frightful discord Uncle Prudent took advantage of the momentary calm to say, "Stranger, up to now, we let you speak without interruption." It seemed that for the president of the Weldon Institute shouts, yells, and catcalls were not interruptions, but only an exchange of arguments.

"But I may remind you, all the same, that the theory of aviation is condemned beforehand, and rejected by the majority of American and foreign engineers. It is a system which was the cause of the death of the Flying Saracen at Constantinople, of the monk Volador at Lisbon, of De Leturn in 1852, of De Groof in 1864, besides the victims I forget since the mythological Icarus—"

"A system," replied Robur, "no more to be condemned than that whose martyrology contains the names of Pilâtre de Rozier at Calais, of Blanchard at Paris, of Donaldson and Grimwood in Lake Michigan, of Sivel and of Crocê-Spinelli, and others whom it takes good care, to forget."

This was a counter-thrust with a vengeance.

"Besides," continued Robur, "With your balloons as good as you can make them you will never obtain any speed worth mentioning. It would take you ten years to go round the world—and a flying machine could do it in a week!"

Here arose a new tempest of protests and denials which lasted for three long minutes. And then Phil Evans look up the word.

"Mr. Aviator," he said "you who talk so much of the benefits of aviation, have you ever aviated?"

"I have."

"And made the conquest of the air?"

"Not unlikely."

"Hooray for Robur the Conqueror!" shouted an ironical voice.

"Well, yes! Robur the Conqueror! I accept the name and I will bear it, for I have a right to it!"

"We beg to doubt it!" said Jem Chip.

"Gentlemen," said Robur, and his brows knit, "when I have just seriously stated a serious thing I do not permit anyone to reply to me by a flat denial, and I shall be glad to know the name of the interrupter."

"My name is Chip, and I am a vegetarian."

"Citizen Chip," said Robur, "I knew that vegetarians had longer alimentary canals than other men—a good foot longer at the least. That is quite long enough; and so do not compel me to make you any longer by beginning at your ears and—"
"Throw him out."
"Into the street with him!"
"Lynch him!"
"Helix him!"

The rage of the balloonists burst forth at last. They rushed at the platform. Robur disappeared amid a sheaf of hands that were thrown about as if caught in a storm. In vain the steam whistle screamed its fanfares on to the assembly. Philadelphia might well think that a fire was devouring one of its quarters and that all the waters of the Schuylkill could not put it out.

Suddenly there was a recoil in the tumult. Robur had put his hands into his pockets and now held them out at the front ranks of the infuriated mob.

In each hand was one of those American institutions known as revolvers which the mere pressure of the fingers is enough to fire--pocket mitrailleuses in fact.

And taking advantage not only of the recoil of his assailants but also of the silence which accompanied it.

"Decidedly," said he, "it was not Amerigo that discovered the New World, it was Cabot! You are not Americans, citizen balloonists! You are only Cabo--"

Four or five shots cracked out, fired into space. They hurt nobody. Amid the smoke, the engineer vanished; and when it had thinned away there was no trace of him. Robur the Conqueror had flown, as if some apparatus of aviation had borne him into the air.

Chapter V
ANOTHER DISAPPEARANCE

This was not the first occasion on which, at the end of their stormy discussions, the members of the Weldon Institute had filled Walnut Street and its neighborhood with their tumult. Several times had the inhabitants complained of the noisy way in which the proceedings ended, and more than once had the policemen had to interfere to clear the thoroughfare for the passersby, who for the most part were supremely indifferent on the question of aerial navigation. But never before had the tumult attained such proportions, never had the complaints been better founded, never had the intervention of the police been more necessary.

But there was some excuse for the members of the Weldon Institute. They had been attacked in their own house. To these enthusiasts for "lighter than air" a no less enthusiast for "heavier than air" had said things absolutely abhorrent. And at the moment they were about to treat him as he deserved, he had disappeared.

So they cried aloud for vengeance. To leave such insults unpunished was impossible to all with American blood in their veins. Had not the sons of Amerigo been called the sons of Cabot? Was not that an insult as unpardonable as it happened to be just--historically?

The members of the club in several groups rushed down Walnut Street, then into the adjoining streets, and then all over the neighborhood. They woke up the householders; they compelled them to search their houses, prepared to indemnify them later on for the outrage on their privacy. Vain were all their trouble and searching. Robur was nowhere to be found; there was no trace of him. He might have gone off in the "Go-Ahead," the balloon of the Institute, for all they could tell. After an hour's hunt the members had to give in and separate, not before they had agreed to extend their search over the whole territory of the twin Americas that form the new continent.

By eleven o'clock quiet had been restored in the neighborhood of Walnut Street. Philadelphia was able to sink again into that sound sleep which is the privilege of non-manufacturing towns. The different members of the club parted to seek their respective houses. To mention the most distinguished amongst them, William T. Forbes sought his large sugar establishment, where Miss Doll and Miss Mat had prepared for him his evening tea, sweetened with his own glucose. Truck Milnor took the road to his factory in the distant suburb, where the engines worked day and night. Treasurer Jim Chip, publicly accused of possessing an alimentary canal twelve inches longer than that of other men, returned to the vegetable soup that was waiting for him.

Two of the most important balloonists--two only--did not seem to think of returning so soon to their domicile. They availed themselves of the opportunity to discuss the question with more than usual acrimony. These were the irreconcilables, Uncle Prudent and Phil Evans, the president and secretary of the Weldon Institute.

At the door of the club the valet Frycollin waited for Uncle Prudent, his master, and at last he went after him, though he cared but little for the subject which had set the two colleagues at loggerheads.

It is only an euphemism that the verb "discuss" can be used to express the way in which the duet between the president and secretary was being performed. As a matter of fact they were in full wrangle with an energy born of their old rivalry.

"No, Sir, no," said Phil Evans. "If I had had the honor of being president of the Weldon Institute, there never, no,
never, would have been such a scandal."

"And what would you have done, if you had had the honor?" demanded Uncle Prudent.

"I would have stopped the insulter before he had opened his mouth."

"It seems to me it would have been impossible to stop him until he had opened his mouth," replied Uncle Prudent.

"Not in America, Sir; not in America."

And exchanging such observations, increasing in bitterness as they went, they walked on through the streets farther and farther from their homes, until they reached a part of the city whence they had to go a long way round to get back.

Frycollin followed, by no means at ease to see his master plunging into such deserted spots. He did not like deserted spots, particularly after midnight. In fact the darkness was profound, and the moon was only a thin crescent just beginning its monthly life. Frycollin kept a lookout to the left and right of him to see if he was followed. And he fancied he could see five or six hulking follows dogging his footsteps. Instinctively he drew nearer to his master, but not for the world would he have dared to break in on the conversation of which the fragments reached him.

In short it so chanced that the president and secretary of the Weldon Institute found themselves on the road to Fairmount Park. In the full heat of their dispute they crossed the Schuylkill river by the famous iron bridge. They met only a few belated wayfarers, and pressed on across a wide open tract where the immense prairie was broken every now and then by the patches of thick woodland--which make the park different to any other in the world.

There Frycollin's terror became acute, particularly as he saw the five or six shadows gliding after him across the Schuylkill bridge. The pupils of his eyes broadened out to the circumference of his iris, and his limbs seemed to diminish as if endowed with the contractility peculiar to the mollusca and certain of the articulate; for Frycollin, the valet, was an egregious coward.

He was a pure South Carolina Negro, with the head of a fool and the carcass of an imbecile. Being only one and twenty, he had never been a slave, not even by birth, but that made no difference to him. Grinning and greedy and idle, and a magnificent poltroon, he had been the servant of Uncle Prudent for about three years. Over and over again had his master threatened to kick him out, but had kept him on for fear of doing worse. With a master ever ready to venture on the most audacious enterprises, Frycollin's cowardice had brought him many arduous trials. But he had some compensation. Very little had been said about his gluttony, and still less about his laziness.

Ah, Valet Frycollin, if you could only have read the future! Why, oh why, Frycollin, did you not remain at Boston with the Sneffels, and not have given them up when they talked of going to Switzerland? Was not that a much more suitable place for you than this of Uncle Prudent's, where danger was daily welcomed?

But here he was, and his master had become used to his faults. He had one advantage, and that was a consideration. Although he was a Negro by birth he did not speak like a Negro, and nothing is so irritating as that hateful jargon in which all the pronouns are possessive and all the verbs infinitive. Let it be understood, then, that Frycollin was a thorough coward.

And now it was midnight, and the pale crescent of the moon began to sink in the west behind the trees in the park. The rays streaming fitfully through the branches made the shadows darker than ever. Frycollin looked around him anxiously. "Brrr!" he said, "There are those fellows there all the time. Positively they are getting nearer! Master Uncle!" he shouted.

It was thus he called the president of the Weldon Institute, and thus did the president desire to be called.

At the moment the dispute of the rivals had reached its maximum, and as they hurled their epithets at each other they walked faster and faster, and drew farther and farther away from the Schuylkill bridge. They had reached the center of a wide clump of trees, whose summits were just tipped by the parting rays of the moon. Beyond the trees was a very large clearing--an oval field, a complete amphitheater. Not a hillock was there to hinder the gallop of the horses, not a bush to stop the view of the spectators.

And if Uncle Prudent and Phil Evans had not been so deep in their dispute, and had used their eyes as they were accustomed to, they would have found the clearing was not in its usual state. Was it a flour mill that had anchored on it during the night? It looked like it, with its wings and sails--motionless and mysterious in the gathering gloom.

But neither the president nor the secretary of the Weldon Institute noticed the strange modification in the landscape of Fairmount Park; and neither did Frycollin. It seemed to him that the thieves were approaching, and preparing for their attack; and he was seized with convulsive fear, paralyzed in his limbs, with every hair he could boast of on the bristle. His terror was extreme. His knees bent under him, but he had just strength enough to exclaim for the last time, "Master Uncle! Master Uncle!"

"What is the matter with you?" asked Uncle Prudent.

Perhaps the disputants would not have been sorry to have relieved their fury at the expense of the unfortunate valet. But they had no time; and neither even had he time to answer.
A whistle was heard. A flash of electric light shot across the clearing.

A signal, doubtless? The moment had come for the deed of violence. In less time that it takes to tell, six men came leaping across from under the trees, two onto Uncle Prudent, two onto Phil Evans, two onto Frycollin—there was no need for the last two, for the Negro was incapable of defending himself. The president and secretary of the Weldon Institute, although taken by surprise, would have resisted.

They had neither time nor strength to do so. In a second they were rendered speechless by a gag, blind by a bandage, thrown down, pinioned and carried bodily off across the clearing. What could they think except that they had fallen into the hands of people who intended to rob them? The people did nothing of the sort, however. They did not even touch Uncle Prudent's pockets, although, according to his custom, they were full of paper dollars.

Within a minute of the attack, without a word being passed, Uncle Prudent, Phil Evans, and Frycollin felt themselves laid gently down, not on the grass, but on a sort of plank that creaked beneath them. They were laid down side by side.

A door was shut; and the grating of a bolt in a staple told them that they were prisoners.

Then there came a continuous buzzing, a quivering, a frrrr, with the rrr unending.

And that was the only sound that broke the quiet of the night.

Great was the excitement next morning in Philadelphia. Very early was it known what had passed at the meeting of the Institute. Everyone knew of the appearance of the mysterious engineer named Robur—Robur the Conqueror—and the tumult among the balloonists, and his inexplicable disappearance. But it was quite another thing when all the town heard that the president and secretary of the club had also disappeared during the night.

Long and keen was the search in the city and neighborhood! Useless! The newspapers of Philadelphia, the newspapers of Pennsylvania, the newspapers of the United States reported the facts and explained them in a hundred ways, not one of which was the right one. Heavy rewards were offered, and placards were pasted up, but all to no purpose. The earth seemed to have opened and bodily swallowed the president and secretary of the Weldon Institute.

Chapter VI
THE PRESIDENT AND SECRETARY SUSPEND HOSTILITIES

A bandage over the eyes, a gag in the mouth, a cord round the wrists, a cord round the ankles, unable to see, to speak, or to move, Uncle Prudent, Phil Evans, and Frycollin were anything but pleased with their position. Knowing not who had seized them, nor in what they had been thrown like parcels in a goods wagon, nor where they were, nor what was reserved for them—it was enough to exasperate even the most patient of the ovine race, and we know that the members of the Weldon Institute were not precisely sheep as far as patience went. With his violence of character we can easily imagine how Uncle Prudent felt. One thing was evident, that Phil Evans and he would find it difficult to attend the club next evening.

As to Frycollin, with his eyes shut and his mouth closed, it was impossible for him to think of anything. He was more dead than alive.

For an hour the position of the prisoners remained unchanged. No one came to visit them, or to give them that liberty of movement and speech of which they lay in such need. They were reduced to stifled sighs, to grunts emitted over and under their gags, to everything that betrayed anger kept dumb and fury imprisoned, or rather bound down. Then after many fruitless efforts they remained for some time as though lifeless. Then as the sense of sight was denied them they tried by their sense of hearing to obtain some indication of the nature of this disquieting state of things. But in vain did they seek for any other sound than an interminable and inexplicable f-r-r-r which seemed to envelop them in a quivering atmosphere.

At last something happened. Phil Evans, regaining his coolness, managed to slacken the cord which bound his wrists. Little by little the knot slipped, his fingers slipped over each other, and his hands regained their usual freedom.

A vigorous rubbing restored the circulation. A moment after he had slipped off the bandage which bound his eyes, taken the gag out of his mouth, and cut the cords round his ankles with his knife. An American who has not a bowie-knife in his pocket is no longer an American.

But if Phil Evans had regained the power of moving and speaking, that was all. His eyes were useless to him—at present at any rate. The prison was quite dark, though about six feet above him a feeble gleam of light came in through a kind of loophole.

As may be imagined, Phil Evans did not hesitate to at once set free his rival. A few cuts with the bowie settled the knots which bound him foot and hand.

Immediately Uncle Prudent rose to his knees and snatched away his bandage and gag.

"Thanks," said he, in stifled voice.
"Phil Evans?"
"Uncle Prudent?"
"Here we are no longer the president and secretary of the Weldon Institute. We are adversaries no more."
"You are right," answered Evans. "We are now only two men agreed to avenge ourselves on a third whose attempt deserves severe reprisals. And this third is--"
"Robur!"
"It is Robur!"
On this point both were absolutely in accord. On this subject there was no fear of dispute.
"And your servant?" said Phil Evans, pointing to Frycollin, who was puffing like a grampus. "We must set him free."
"Not yet," said Uncle Prudent. "He would overwhelm us with his jeremiads, and we have something else to do than abuse each other."
"What is that, Uncle Prudent?"
"To save ourselves if possible."
"You are right, even if it is impossible."
"And even if it is impossible."
There could be no doubt that this kidnapping was due to Robur, for an ordinary thief would have relieved them of their watches, jewelry, and purses, and thrown their bodies into the Schuylkill with a good gash in their throats instead of throwing them to the bottom of--Of what? That was a serious question, which would have to be answered before attempting an escape with any chance of success.
"Phil Evans," began Uncle Prudent, "if, when we came away from our meeting, instead of indulging in amenities to which we need not recur, we had kept our eyes more open, this would not have happened. Had we remained in the streets of Philadelphia there would have been none of this. Evidently Robur foresaw what would happen at the club, and had placed some of his bandits on guard at the door. When we left Walnut Street these fellows must have watched us and followed us, and when we imprudently ventured into Fairmount Park they went in for their little game."
"Agreed," said Evans. "We were wrong not to go straight home."
"It is always wrong not to be right," said Prudent. 
Here a long-drawn sigh escaped from the darkest corner of the prison. "What is that?" asked Evans.
"Nothing! Frycollin is dreaming."
"Between the moment we were seized a few steps out into the clearing and the moment we were thrown in here only two minutes elapsed. It is thus evident that those people did not take us out of Fairmount Park."
"And if they had done so we should have felt we were being moved."
"Undoubtedly; and consequently we must be in some vehicle, perhaps some of those long prairie wagons, or some show-caravan--"
"Evidently! For if we were in a boat moored on the Schuylkill we should have noticed the movement due to the current--"
"That is so; and as we are still in the clearing, I think that now is the time to get away, and we can return later to settle with this Robur--"
"And make him pay for this attempt on the liberty of two citizens of the United States."
"And he shall pay pretty dearly!"
"But who is this man? Where does he come from? Is he English, or German, or French--"
"He is a scoundrel, that is enough!" said Uncle Prudent. "Now to work." And then the two men, with their hands stretched out and their fingers wide apart, began to feel round the walls to find a joint or crack.
Nothing. Nothing; not even at the door. It was closely shut and it was impossible to shoot back the lock. All that could be done was to make a hole, and escape through the hole. It remained to be seen if the knives could cut into the walls.
"But whence comes this never-ending rustling?" asked Evans, who was much impressed at the continuous f-r-r-r.
"The wind, doubtless," said Uncle Prudent.
"The wind! But I thought the night was quite calm."
"So it was. But if it isn't the wind, what can it be?"
Phil Evans got out the best blade of his knife and set to work on the wall near the door. Perhaps he might make a hole which would enable him to open it from the outside should it be only bolted or should the key have been left in the lock. He worked away for some minutes. The only result was to nip up his knife, to snip off its point, and transform what was left of the blade into a saw.
"Doesn't it cut?" asked Uncle Prudent.
"No."
"Is the wall made of sheet iron?"
"No; it gives no metallic sound when you hit it."
"Is it of ironwood?"
"No; it isn't iron and it isn't wood."
"What is it then?"
"Impossible to say. But, anyhow, steel doesn't touch it." Uncle Prudent, in a sudden outburst of fury, began to rave and stamp on the sonorous planks, while his hands sought to strangle an imaginary Robur.

"Be calm, Prudent, be calm! You have a try."

Uncle Prudent had a try, but the bowie-knife could do nothing against a wall which its best blades could not even scratch. The wall seemed to be made of crystal.

So it became evident that all flight was impracticable except through the door, and for a time they must resign themselves to their fate—not a very pleasant thing for the Yankee temperament, and very much to the disgust of these eminently practical men. But this conclusion was not arrived at without many objurgations and loud-sounding phrases hurled at this Robur—who, from what had been seen of him at the Weldon Institute, was not the sort of man to trouble himself much about them.

Suddenly Frycollin began to give unequivocal signs of being unwell. He began to writhe in a most lamentable fashion, either with cramp in his stomach or in his limbs; and Uncle Prudent, thinking it his duty to put an end to these gymnastics, cut the cords that bound him.

He had cause to be sorry for it. Immediately there was poured forth an interminable litany, in which the terrors of fear were mingled with the tortures of hunger. Frycollin was no worse in his brain than in his stomach, and it would have been difficult to decide to which organ the chief cause of the trouble should be assigned.

"Frycollin!" said Uncle Prudent.
"Master Uncle! Master Uncle!" answered the Negro between two of his lugubrious howls.
"It is possible that we are doomed to die of hunger in this prison, but we have made up our minds not to succumb until we have availed ourselves of every means of alimentation to prolong our lives."
"To eat me?" exclaimed Frycollin.
"As is always done with a Negro under such circumstances! So you had better not make yourself too obvious—"
"Or you'll have your bones picked!" said Evans.

And as Frycollin saw he might be used to prolong two existences more precious than his own, he contented himself thenceforth with groaning in quiet.

The time went on and all attempts to force the door or get through the wall proved fruitless. What the wall was made of was impossible to say. It was not metal; it was not wood; it was not stone, and all the cell seemed to be made of the same stuff. When they stamped on the floor it gave a peculiar sound that Uncle Prudent found it difficult to describe; the floor seemed to sound hollow, as if it was not resting directly on the ground of the clearing. And the inexplicable f-r-r-r-r seemed to sweep along below it. All of which was rather alarming.

"Uncle Prudent," said Phil Evans.
"Well?"
"Do you think our prison has been moved at all?"
"Not that I know of."
"Because when we were first caught I distinctly remember the fresh fragrance of the grass and the resinous odor of the park trees. While now, when I take in a good sniff of the air, it seems as though all that had gone."
"So it has."
"Why?"
"We cannot say why unless we admit that the prison has moved; and I say again that if the prison had moved, either as a vehicle on the road or a boat on the stream, we should have felt it."

Here Frycollin gave vent to a long groan, which might have been taken for his last had he not followed it up with several more.
"I expect Robur will soon have us brought before him," said Phil Evans.
"I hope so," said Uncle Prudent. "And I shall tell him—"
"What?"
"That he began by being rude and ended in being unbearable."

Here Phil Evans noticed that day was beginning to break. A gleam, still faint, filtered through the narrow window opposite the door. It ought thus to be about four o'clock in the morning for it is at that hour in the month of June in this latitude that the horizon of Philadelphia is tinged by the first rays of the dawn.

But when Uncle Prudent sounded his repeater—which was a masterpiece from his colleague's factory—the tiny
gong only gave a quarter to three, and the watch had not stopped.

"That is strange!" said Phil Evans. "At a quarter to three it ought still to be night."

"Perhaps my watch has got slow," answered Uncle Prudent.

"A watch of the Wheelton Watch Company!" exclaimed Phil Evans.

Whatever might be the reason, there was no doubt that the day was breaking. Gradually the window became white in the deep darkness of the cell. However, if the dawn appeared sooner than the fortieth parallel permitted, it did not advance with the rapidity peculiar to lower latitudes. This was another observation—of Uncle Prudent's—a new inexplicable phenomenon.

"Couldn't we get up to the window and see where we are?"

"We might," said Uncle Prudent. "Frycollin, get up!"

The Negro arose.

"Put your back against the wall," continued Prudent, "and you, Evans, get on his shoulders while I buttress him up."

"Right!" said Evans.

An instant afterwards his knees were on Frycollin's shoulders, and his eyes were level with the window. The window was not of lenticular glass like those on shipboard, but was a simple flat pane. It was small, and Phil Evans found his range of view was much limited.

"Break the glass," said Prudent, "and perhaps you will be able to see better."

Phil Evans gave it a sharp knock with the handle of his bowie-knife. It gave back a silvery sound, but it did not break.

Another and more violent blow. The same result.

"It is unbreakable glass!" said Evans.

It appeared as though the pane was made of glass toughened on the Siemens system—as after several blows it remained intact.

The light had now increased, and Phil Evans could see for some distance within the radius allowed by the frame.

"What do you see?" asked Uncle Prudent.

"Nothing."

"What? Not any trees?"

"No."

"Not even the top branches?"

"No."

"Then we are not in the clearing?"

"Neither in the clearing nor in the park."

"Don't you see any roofs of houses or monuments?" said Prudent, whose disappointment and anger were increasing rapidly.

"No."

"What! Not a flagstaff, nor a church tower, nor a chimney?"

"Nothing but space."

As he uttered the words the door opened. A man appeared on the threshold. It was Robur.

"Honorable balloonists" he said, in a serious voice, "you are now free to go and come as you like."

"Free!" exclaimed Uncle Prudent.

"Yes—within the limits of the "Albatross!"

Uncle Prudent and Phil Evans rushed out of their prison. And what did they see?

Four thousand feet below them the face of a country they sought in vain to recognize.

Chapter VII

ON BOARD THE ALBATROSS

"When will man cease to crawl in the depths to live in the azure and quiet of the sky?"

To this question of Camille Flammarion's the answer is easy. It will be when the progress of mechanics has enabled us to solve the problem of aviation. And in a few years—as we can foresee—a more practical utilization of electricity will do much towards that solution.

In 1783, before the Montgolfier brothers had built their fire-balloon, and Charles, the physician, had devised his first aerostat, a few adventurous spirits had dreamt of the conquest of space by mechanical means. The first inventors did not think of apparatus lighter than air, for that the science of their time did not allow them to imagine. It was to contrivances heavier than air, to flying machines in imitation of the birds, that they trusted to realize aerial
This was exactly what had been done by that madman Icarus, the son of Daedalus, whose wings, fixed together with wax, had melted as they approached the sun.

But without going back to mythological times, without dwelling on Archytas of Tarentum, we find, in the works of Dante of Perugia, of Leonardo da Vinci and Guidotti, the idea of machines made to move through the air. Two centuries and a half afterwards inventors began to multiply. In 1742 the Marquis de Bacqueville designed a system of wings, tried it over the Seine, and fell and broke his arm. In 1768 Pauciton conceived the idea of an apparatus with two screws, suspensive and propulsive. In 1781 Meerwein, the architect of the Prince of Baden, built an orthopteric machine, and protested against the tendency of the aerostats which had just been invented. In 1784 Launoy and Bienvenu had maneuvered a helicopter worked by springs. In 1808 there were the attempts at flight by the Austrian Jacques Degen. In 1810 came the pamphlet by Denian of Nantes, in which the principles of "heavier than air" are laid down. From 1811 to 1840 came the inventions and researches of Derblinger, Vigual, Sarti, Dubochet, and Cagniard de Latour. In 1842 we have the Englishman Henson, with his system of inclined planes and screws worked by steam. In 1845 came Cossus and his ascensional screws. In 1847 came Camille Vert and his helicopter made of birds' wings. In 1852 came Letur with his system of guidable parachutes, whose trial cost him his life; and in the same year came Michel Loup with his plan of gliding through the air on four revolving wings. In 1853 came Béléguiq and his aeroplane with the traction screws, Vaussin-Chardannes with his guidable kite, and George Cauley with his flying machines driven by gas. From 1854 to 1863 appeared Joseph Pline with several patents for aerial systems. Bréant, Carlingford, Le Bris, Du Temple, Bright, whose ascensional screws were left-handed; Smythies, Panafieu, Crosnier, &c. At length, in 1863, thanks to the efforts of Nadar, a society of "heavier than air" was founded in Paris. There the inventors could experiment with the machines, of which many were patented. Ponton d'Amécourt and his steam helicopter, La Landelle and his system of combining screws with inclined planes and parachutes, Louvrié and his aeroscape, Esterno and his mechanical bird, Groof and his apparatus with wings worked by levers. The impetus was given, inventors invented, calculators calculated all that could render aerial locomotion practicable. Bourcart, Le Bris, Kaufmann, Smyth, Stringfellow, Prigent, Danjard, Pomés and De la Pauze, Moy, Pénaud, Jobert, Haureau de Villeneuve, Achenbach, Garapon, Duchesne, Danardan, Pariesel, Dieuaida, Melkiseff, Forlanini, Bearey, Tatin, Dandrieux, Edison, some with wings or screws, others with inclined planes, imagined, created, constructed, perfected, their flying machines, ready to do their work, once there came to be applied to thereby some inventor a motor of adequate power and excessive lightness.

This list may be a little long, but that will be forgiven, for it is necessary to give the various steps in the ladder of aerial locomotion, on the top of which appeared Robur the Conqueror. Without these attempts, these experiments of his predecessors, how could the inquirer have conceived so perfect an apparatus? And though he had but contempt for those who obstinately worked away in the direction of balloons, he held in high esteem all those partisans of "heavier than air," English, American, Italian, Austrian, French--and particularly French--whose work had been perfected by him, and led him to design and then to build this flying engine known as the "Albatross," which he was guiding through the currents of the atmosphere.

"The pigeon flies!" had exclaimed one of the most persistent adepts at aviation.

"They will crowd the air as they crowd the earth!" said one of his most excited partisans.

"From the locomotive to the aeromotive!" shouted the noisiest of all, who had turned on the trumpet of publicity to awaken the Old and New Worlds.

Nothing, in fact, is better established, by experiment and calculation, than that the air is highly resistant. A circumference of only a yard in diameter in the shape of a parachute can not only impede descent in air, but can render it isochronous. That is a fact.

It is equally well known that as the weight of a flying animal increases, the less is the proportional increase in the surface of the wings, and therefore becomes almost insignificant.

It is also known that as the weight of a flying animal increases, the less is the proportional increase in the surface beaten by the wings in order to sustain it, although the motion of the wings becomes slower.

A flying machine must therefore be constructed to take advantage of these natural laws, to imitate the bird, "that admirable type of aerial locomotion," according to Dr. Marcy, of the Institute of France.

In short the contrivances likely to solve the problem are of three kinds:--

1. Helicopters or spiralifers, which are merely screws with vertical axes.
2. Ornithopters, machines which endeavour to reproduce the natural flight of birds.
3. Aeroplanes, which are merely inclined planes like kites, but towed or driven by screws.

Each of these systems has had and still has its partisans obstinately resolved to give way in not the slightest particular. However, Robur, for many reasons, had rejected the two first.

The ornithopter, or mechanical bird, offers certain advantages, no doubt. That the work and experiments of M.
Renard in 1884 have sufficiently proved. But, as has been said, it is not necessary to copy Nature servilely. Locomotives are not copied from the hare, nor are ships copied from the fish. To the first we have put wheels which are not legs; to the second we have put screws which are not fins. And they do not do so badly. Besides, what is this mechanical movement in the flight of birds, whose action is so complex? Has not Doctor Marcy suspected that the feathers open during the return of the wings so as to let the air through them? And is not that rather a difficult operation for an artificial machine?

On the other hand, aeroplanes have given many good results. Screws opposing a slanting plane to the bed of air will produce an ascensional movement, and the models experimented on have shown that the disposable weight, that is to say the weight it is possible to deal with as distinct from that of the apparatus, increases with the square of the speed. Herein the aeroplane has the advantage over the aerostat even when the aerostat is furnished with the means of locomotion.

Nevertheless Robur had thought that the simpler his contrivance the better. And the screws--the Saint Helices that had been thrown in his teeth at the Weldon Institute--had sufficed for all the needs of his flying machine. One series could hold it suspended in the air, the other could drive it along under conditions that were marvelously adapted for speed and safety.

If the ornithopter--striking like the wings of a bird--raised itself by beating the air, the helicopter raised itself by striking the air obliquely, with the fins of the screw as it mounted on an inclined plane. These fins, or arms, are in reality wings, but wings disposed as a helix instead of as a paddle wheel. The helix advances in the direction of its axis. Is the axis vertical? Then it moves vertically. Is the axis horizontal? Then it moves horizontally.

The whole of Robur's flying apparatus depended on these two movements, as will be seen from the following detailed description, which can be divided under three heads--the platform, the engines of suspension and propulsion, and the machinery.

Platform.--This was a framework a hundred feet long and twelve wide, a ship's deck in fact, with a projecting prow. Beneath was a hull solidly built, enclosing the engines, stores, and provisions of all sorts, including the watertanks. Round the deck a few light uprights supported a wire trellis that did duty for bulwarks. On the deck were three houses, whose compartments were used as cabins for the crew, or as machine rooms. In the center house was the machine which drove the suspensory helices, in that forward was the machine that drove the bow screw, in that aft was the machine that drove the stern screw. In the bow were the cook's galley and the crew's quarters; in the stern were several cabins, including that of the engineer, the saloon, and above them all a glass house in which stood the helmsman, who steered the vessel by means of a powerful rudder. All these cabins were lighted by port-holes filled with toughened glass, which has ten times the resistance of ordinary glass. Beneath the hull was a system of flexible springs to ease off the concussion when it became advisable to land.

Engines of suspension and propulsion.--Above the deck rose thirty-seven vertical axes, fifteen along each side, and seven, more elevated, in the centre. The "Albatross" might be called a clipper with thirty-seven masts. But these masts instead of sails bore each two horizontal screws, not very large in spread or diameter, but driven at prodigious speed. Each of these axes had its own movement independent of the rest, and each alternate one spun round in a different direction from the others, so as to avoid any tendency to gyration. Hence the screws as they rose on the vertical column of air retained their equilibrium by their horizontal resistance. Consequently the apparatus was furnished with seventy-four suspensory screws, whose three branches were connected by a metallic circle which economized their motive force. In front and behind, mounted on horizontal axes, were two propelling screws, each with four arms. These screws were of much larger diameter than the suspensory ones, but could be worked at quite their speed. In fact, the vessel combined the systems of Cossus, La Landelle, and Ponton d'Amécourt, as perfected by Robur. But it was in the choice and application of his motive force that he could claim to be an inventor.

Machinery.--Robur had not availed himself of the vapor of water or other liquids, nor compressed air and other mechanical motion. He employed electricity, that agent which one day will be the soul of the industrial world. But he required no electro-motor to produce it. All he trusted to was piles and accumulators. What were the elements of these piles, and what were the acids he used, Robur only knew. And the construction of the accumulators was kept equally secret. Of what were their positive and negative plates? None can say. The engineer took good care--and not unreasonably--to keep his secret unpatented. One thing was unmistakable, and that was that the piles were of extraordinary strength; and the accumulators left those of Faure-Sellon-Volckmar very far behind in yielding currents whose ampères ran into figures up to then unknown. Thus there was obtained a power to drive the screws and communicate a suspending and propelling force in excess of all his requirements under any circumstances.

But--it is as well to repeat it--this belonged entirely to Robur. He kept it a close secret. And, if the president and secretary of the Weldon Institute did not happen to discover it, it would probably be lost to humanity.

It need not be shown that the apparatus possessed sufficient stability. Its center of gravity proved that at once. There was no danger of its making alarming angles with the horizontal, still less of its capsizing.
And now for the metal used by Robur in the construction of his aeronef--a name which can be exactly applied to the "Albatross." What was this material, so hard that the bowie-knife of Phil Evans could not scratch it, and Uncle Prudent could not explain its nature? Simply paper!

For some years this fabrication had been making considerable progress. Unsized paper, with the sheets impregnated with dextrin and starch and squeezed in hydraulic presses, will form a material as hard as steel. There are made of it pulleys, rails, and wagon-wheels, much more solid than metal wheels, and far lighter. And it was this lightness and solidity which Robur availed himself of in building his aerial locomotive. Everything--framework, hull, houses, cabins--were made of straw-paper turned hard as metal by compression, and--what was not to be despised in an apparatus flying at great heights--incor;mbustible. The different parts of the engines and the screws were made of gelatinized fiber, which combined in sufficient degree flexibility with resistance. This material could be used in every form. It was insoluble in most gases and liquids, acids or essences, to say nothing of its insulating properties, and it proved most valuable in the electric machinery of the "Albatross."

Robur, his mate Tom Turner, an engineer and two assistants, two steersman and a cook--eight men all told--formed the crew of the aeronef, and proved ample for all the maneuvers required in aerial navigation. There were arms of the chase and of war; fishing appliances; electric lights; instruments of observation, compasses, and sextants for checking the course, thermometers for studying the temperature, different barometers, some for estimating the heights attained, others for indicating the variations of atmospheric pressure; a storm-glass for forecasting tempests; a small library; a portable printing press; a field-piece mounted on a pivot; breech loading and throwing a three-inch shell; a supply of powder, bullets, dynamite cartridges; a cooking-stove, warmed by currents from the accumulators; a stock of preserves, meats and vegetables sufficient to last for months. Such were the outfit and stores of the aeronef--in addition to the famous trumpet.

There was besides a light india-rubber boat, insubmersible, which could carry eight men on the surface of a river, a lake, or a calm sea.

But were there any parachutes in case of accident? No. Robur did not believe in accidents of that kind. The axes of the screws were independent. The stoppage of a few would not affect the motion of the others; and if only half were working, the "Albatross" could still keep afloat in her natural element.

"And with her," said Robur to his guests--guests in spite of themselves--"I am master of the seventh part of the world, larger than Africa, Oceania, Asia, America, and Europe, this aerial Icarian sea, which millions of Icarians will one day people."

Chapter VIII
THE BALLOONISTS REFUSE TO BE CONVINCED

The President of the Weldon Institute was stupefied; his companion was astonished. But neither of them would allow any of their very natural amazement to be visible.

The valet Frycollin did not conceal his terror at finding himself borne through space on such a machine, and he took no pains whatever to hide it.

The suspensory screws were rapidly spinning overhead. Fast as they were going, they would have to triple their speed if the "Albatross" was to ascend to higher zones. The two propellers were running very easily and driving the ship at about eleven knots an hour.

As they leaned over the rail the passengers of the "Albatross" could perceive a long sinuous liquid ribbon which meandered like a mere brook through a varied country amid the gleaming of many lagoons obliquely struck by the rays of the sun. The brook was a river, one of the most important in that district. Along its left bank was a chain of mountains extending out of sight.

"And will you tell us where we are?" asked Uncle Prudent, in a voice tremulous with anger.

"I have nothing to teach you," answered Robur.

"And will you tell us where we are going?" asked Phil Evans.

"Through space."

"And how long will that last?"

"Until it ends."

"Are we going round the world?" asked Phil Evans ironically.

"Further than that," said Robur.

"And if this voyage does not suit us?" asked Uncle Prudent.

"It will have to suit you."

That is a foretaste of the nature of the relations that were to obtain between the master of the "Albatross" and his guests, not to say his prisoners. Manifestly he wished to give them time to cool down, to admire the marvelous
apparatus which was bearing them through the air, and doubtless to compliment the inventor. And so he went off to
the other end of the deck, leaving them to examine the arrangement of the machinery and the management of the
ship or to give their whole attention to the landscape which was unrolling beneath them.

"Uncle Prudent," said Evans, "unless I am mistaken we are flying over Central Canada. That river in the
northwest is the St. Lawrence. That town we are leaving behind is Quebec."

It was indeed the old city of Champlain, whose zinc roofs were shining like reflectors in the sun. The
"Albatross" must thus have reached the forty-sixth degree of north latitude, and thus was explained the premature
advance of the day with the abnormal prolongation of the dawn.

"Yes," said Phil Evans, "There is the town in its amphitheater, the hill with its citadel, the Gibraltar of North
America. There are the cathedrals. There is the Custom House with its dome surmounted by the British flag!"

Phil Evans had not finished before the Canadian city began to slip into the distance.

Robur, seeing that the president and secretary of the Weldon Institute had directed their attention to the external
arrangements of the "Albatross," walked up to them and said: "Well, gentlemen, do you believe in the possibility of
aerial locomotion by machines heavier than air?"

It would have been difficult not to succumb to the evidence. But Uncle Prudent and Phil Evans did not reply.

"You are silent," continued the engineer. "Doubtless hunger makes you dumb! But if I undertook to carry you
through the air, I did not think of feeding you on such a poorly nutritive fluid. Your first breakfast is waiting for
you."

As Uncle Prudent and Phil Evans were feeling the pangs of hunger somewhat keenly they did not care to stand
upon ceremony. A meal would commit them to nothing; and when Robur put them back on the ground they could
resume full liberty of action.

And so they followed into a small dining-room in the aftermost house. There they found a well-laid table at
which they could take their meals during the voyage. There were different preserves; and, among other things, was a
sort of bread made of equal parts of flour and meat reduced to powder and worked together with a little lard, which
boiled in water made excellent soup; and there were rashers of fried ham, and for drink there was tea.

Neither had Frycollin been forgotten. He was taken forward and there found some strong soup made of this
bread. In truth he had to be very hungry to eat at all, for his jaws shook with fear, and almost refused to work. "If it
was to break! If it was to break!" said the unfortunate Negro. Hence continual faintings. Only think! A fall of over
four thousand feet, which would smash him to a jelly!

An hour afterwards Uncle Prudent and Phil Evans appeared on the deck. Robur was no longer there. At the stem
the man at the wheel in his glass cage, his eyes fixed on the compass, followed imperturbably without hesitation the
route given by the engineer.

As for the rest of the crew, breakfast probably kept them from their posts. An assistant engineer, examining the
machinery, went from one house to the other.

If the speed of the ship was great the two colleagues could only estimate it imperfectly, for the "Albatross" had
passed through the cloud zone which the sun showed some four thousand feet below.

"I can hardly believe it," said Phil Evans.

"Don't believe it!" said Uncle Prudent. And going to the bow they looked out towards the western horizon.

"Another town," said Phil Evans.

"Do you recognize it?"

"Yes! It seems to me to be Montreal."

"Montreal? But we only left Quebec two hours ago!"

"That proves that we must be going at a speed of seventy-five miles an hour."

Such was the speed of the aeronef; and if the passengers were not inconvenienced by it, it was because they were
going with the wind. In a calm such speed would have been difficult and the rate would have sunk to that of an
express. In a head-wind the speed would have been unbearable.

Phil Evans was not mistaken. Below the "Albatross" appeared Montreal, easily recognizable by the Victoria
Bridge, a tubular bridge thrown over the St. Lawrence like the railway viaduct over the Venice lagoon. Soon they
could distinguish the town's wide streets, its huge shops, its palatial banks, its cathedral, recently built on the model
of St. Peter's at Rome, and then Mount Royal, which commands the city and forms a magnificent park.

Luckily Phil Evans had visited the chief towns of Canada, and could recognize them without asking Robur. After
Montreal they passed Ottawa, whose falls, seen from above, looked like a vast cauldron in ebullition, throwing off
masses of steam with grand effect.

"There is the Parliament House."

And he pointed out a sort of Nuremburg toy planted on a hill top. This toy with its polychrome architecture
resembled the House of Parliament in London much as the Montreal cathedral resembles St. Peter's at Rome. But that was of no consequence; there could be no doubt it was Ottawa.

Soon the city faded off towards the horizon, and formed but a luminous spot on the ground.

It was almost two hours before Robur appeared. His mate, Tom Turner, accompanied him. He said only three words. These were transmitted to the two assistant engineers in the fore and aft engine-houses. At a sign the helmsman changed the direction of the "Albatross" a couple of points to the southwest; at the same time Uncle Prudent and Phil Evans felt that a greater speed had been given to the propellers.

In fact, the speed had been doubled, and now surpassed anything that had ever been attained by terrestrial Engines. Torpedo-boats do their twenty-two knots an hour; railway trains do their sixty miles an hour; the ice-boats on the frozen Hudson do their sixty-five miles an hour; a machine built by the Patterson company, with a cagged wheel, has done its eighty miles; and another locomotive between Trenton and Jersey City has done its eighty-four.

But the "Albatross," at full speed, could do her hundred and twenty miles an hour, or 176 feet per second. This speed is that of the storm which tears up trees by the roots. It is the mean speed of the carrier pigeon, and is only surpassed by the flight of the swallow (220 feet per second) and that of the swift (274 feet per second).

In a word, as Robur had said, the "Albatross," by using the whole force of her screws, could make the tour of the globe in two hundred hours, or less than eight days.

Is it necessary to say so? The phenomenon whose appearance had so much puzzled the people of both worlds was the aeronef of the engineer. The trumpet which blared its startling fanfares through the air was that of the mate, Tom Turner. The flag planted on the chief monuments of Europe, Asia, America, was the flag of Robur the Conqueror and his "Albatross."

And if up to then the engineer had taken many precautions against being recognized, if by preference he traveled at night, clearing the way with his electric lights, and during the day vanishing into the zones above the clouds, he seemed now to have no wish to keep his secret hidden. And if he had come to Philadelphia and presented himself at the meeting of the Weldon Institute, was it not that they might share in his prodigious discovery, and convince "ipso facto" the most incredulous? We know how he had been received, and we see what reprisals he had taken on the president and secretary of the club.

Again did Robur approach his prisoners, who affected to be in no way surprised at what they saw, of what had succeeded in spite of them. Evidently beneath the cranium of these two Anglo-Saxon heads there was a thick crust of obstinacy, which would not be easy to remove.

On his part, Robur did not seem to notice anything particular, and coolly continued the conversation which he had begun two hours before.

"Gentlemen," said he, "you ask yourselves doubtless if this apparatus, so marvelously adapted for aerial locomotion, is susceptible of receiving greater speed. It is not worth while to conquer space if we cannot devour it. I wanted the air to be a solid support to me, and it is. I saw that to struggle against the wind I must be stronger than the wind, and I am. I had no need of sails to drive me, nor oars nor wheels to push me, nor rails to give me a faster road. Air is what I wanted, that was all. Air surrounds me as it surrounds the submarine boat, and in it my propellers act like the screws of a steamer. That is how I solved the problem of aviation. That is what a balloon will never do, nor will any machine that is lighter than air."

Silence, absolute, on the part of the colleagues, which did not for a moment disconcert the engineer. He contented himself with a half-smile, and continued in his interrogative style, "Perhaps you ask if to this power of the "Albatross" to move horizontally there is added an equal power of vertical movement—in a word, if, when, we visit the higher zones of the atmosphere, we can compete with an aerostat? Well, I should not advise you to enter the "Go-Ahead" against her!"

The two colleagues shrugged their shoulders. That was probably what the engineer was waiting for.

Robur made a sign. The propelling screws immediately stopped, and after running for a mile the "Albatross" pulled up motionless.

At a second gesture from Robur the suspensory helices revolved at a speed that can only be compared to that of a siren in acoustical experiments. Their f-r-r-r-r rose nearly an octave in the scale of sound, diminishing gradually in intensity as the air became more rarified, and the machine rose vertically, like a lark singing his song in space.

"Master! Master!" shouted Frycollin. "See that it doesn't break!"

A smile of disdain was Robur's only reply. In a few minutes the "Albatross" had attained the height of 8,700 feet, and extended the range of vision by seventy miles, the barometer having fallen 480 millimeters.

Then the "Albatross" descended. The diminution of the pressure in high altitudes leads to the diminution of oxygen in the air, and consequently in the blood. This has been the cause of several serious accidents which have happened to aeronauts, and Robur saw no reason to run any risk.

The "Albatross" thus returned to the height she seemed to prefer, and her propellers beginning again, drove her
off to the southwest.

"Now, sirs, if that is what you wanted you can reply." Then, leaning over the rail, he remained absorbed in contemplation.

When he raised his head the president and secretary of the Weldon Institute stood by his side.

"Engineer Robur," said Uncle Prudent, in vain endeavoring to control himself, "we have nothing to ask about what you seem to believe, but we wish to ask you a question which we think you would do well to answer."

"Speak."

"By what right did you attack us in Philadelphia in Fairmount Park? By what right did you shut us up in that prison? By what right have you brought us against our will on board this flying machine?"

"And by what right, Messieurs Balloonists, did you insult and threaten me in your club in such a way that I am astonished I came out of it alive?"

"To ask is not to answer," said Phil Evans, "and I repeat, by what right?"

"Do you wish to know?"

"If you please."

"Well, by the right of the strongest!"

"That is cynical."

"But it is true."

"And for how long, citizen engineer," asked Uncle Prudent, who was nearly exploding, "for how long do you intend to exercise that right?"

"How can you?" said Robur, ironically, "how can you ask me such a question when you have only to cast down your eyes to enjoy a spectacle unparalleled in the world?"

The "Albatross" was then sweeping across the immense expanse of Lake Ontario. She had just crossed the country so poetically described by Cooper. Then she followed the southern shore and headed for the celebrated river which pours into it the waters of Lake Erie, breaking them to powder in its cataracts.

In an instant a majestic sound, a roar as of the tempest, mounted towards them and, as if a humid fog had been projected into the air, the atmosphere sensibly freshened. Below were the liquid masses. They seemed like an enormous flowing sheet of crystal amid a thousand rainbows due to refraction as it decomposed the solar rays. The sight was sublime.

Before the falls a foot-bridge, stretching like a thread, united one bank to the other. Three miles below was a suspension-bridge, across which a train was crawling from the Canadian to the American bank.

"The falls of Niagara!" exclaimed Phil Evans. And as the exclamation escaped him, Uncle Prudent was doing all he could do to admire nothing of these wonders.

A minute afterwards the "Albatross" had crossed the river which separates the United States from Canada, and was flying over the vast territories of the West.

Chapter IX
ACROSS THE PRAIRIE

In one of the cabins of the after-house Uncle Prudent and Phil Evans had found two excellent berths, with clean linen, change of clothes, and traveling-cloaks and rugs. No Atlantic liner could have offered them more comfort. If they did not sleep soundly it was that they did not wish to do so, or rather that their very real anxiety prevented them. In what adventure had they embarked? To what series of experiments had they been invited? How would the business end? And above all, what was Robur going to do with them?

Frycollin, the valet, was quartered forward in a cabin adjoining that of the cook. The neighborhood did not please him; he liked to rub shoulders with the great in this world. But if he finally went to sleep it was to dream of fall after fall, of projections through space, which made his sleep a horrible nightmare.

However, nothing could be quieter than this journey through the atmosphere, whose currents had grown weaker with the evening. Beyond the rustling of the blades of the screws there was not a sound, except now and then the whistle from some terrestrial locomotive, or the calling of some animal. Strange instinct! These terrestrial beings felt the aeronef glide over them, and uttered cries of terror as it passed. On the morrow, the 14th of June, at five o'clock, Uncle Prudent and Phil Evans were walking on the deck of the "Albatross."

Nothing had changed since the evening; there was a lookout forward, and the helmsman was in his glass cage. Why was there a look-out? Was there any chance of collision with another such machine? Certainly not. Robur had not yet found imitators. The chance of encountering an aerostat gliding through the air was too remote to be regarded. In any case it would be all the worse for the aerostat--the earthen pot and the iron pot. The "Albatross" had nothing to fear from the collision.
But what could happen? The aeronef might find herself like a ship on a lee shore if a mountain that could not be outflanked or passed barred the way. These are the reefs of the air, and they have to be avoided as a ship avoids the reefs of the sea. The engineer, it is true, had given the course, and in doing so had taken into account the altitude necessary to clear the summits of the high lands in the district. But as the aeronef was rapidly nearing a mountainous country, it was only prudent to keep a good lookout, in case some slight deviation from the course became necessary.

Looking at the country beneath them, Uncle Prudent and Phil Evans noticed a large lake, whose lower southern end the "Albatross" had just reached. They concluded, therefore, that during the night the whole length of Lake Erie had been traversed, and that, as they were going due west, they would soon be over Lake Michigan. "There can be no doubt of it," said Phil Evans, "and that group of roofs on the horizon is Chicago."

He was right. It was indeed the city from which the seventeen railways diverge, the Queen of the West, the vast reservoir into which flow the products of Indiana, Ohio, Wisconsin, Missouri, and all the States which form the western half of the Union.

Uncle Prudent, through an excellent telescope he had found in his cabin, easily recognized the principal buildings. His colleague pointed out to him the churches and public edifices, the numerous "elevators" or mechanical, granaries, and the huge Sherman Hotel, whose windows seemed like a hundred glittering points on each of its faces.

"If that is Chicago," said Uncle Prudent, "it is obvious that we are going farther west than is convenient for us if we are to return to our starting-place."

And, in fact, the "Albatross" was traveling in a straight line from the Pennsylvania capital.

But if Uncle Prudent wished to ask Robur to take him eastwards he could not then do so. That morning the engineer did not leave his cabin. Either he was occupied in some work, or else he was asleep, and the two colleagues sat down to breakfast without seeing him.

The speed was the same as that during last evening. The wind being easterly the rate was not interfered with at all, and as the thermometer only falls a degree centigrade for every seventy meters of elevation the temperature was not insupportable. And so, in chatting and waiting for the engineer, Uncle Prudent and Phil Evans walked about beneath the forest of screws, whose gyratory movement gave their arms the appearance of semi-diaphanous disks.

The State of Illinois was left by its northern frontier in less than two hours and a half; and they crossed the Father of Waters, the Mississippi, whose double-decked steam-boats seemed no bigger than canoes. Then the "Albatross" flew over Iowa after having sighted Iowa City about eleven o'clock in the morning.

A few chains of hills, "bluffs" as they are called, curved across the face of the country trending from the south to the northwest, whose moderate height necessitated no rise in the course of the aeronef. Soon the bluffs gave place to the large plains of western Iowa and Nebraska--immense prairies extending all the way to the foot of the Rocky Mountains. Here and there were many rios, affluents or minor affluents of the Missouri. On their banks were towns and villages, growing more scattered as the "Albatross" sped farther west.

Nothing particular happened during this day. Uncle Prudent and Phil Evans were left entirely to themselves. They hardly noticed Frycollin sprawling at full length in the bow, keeping his eyes shut so that he could see nothing. And they were not attacked by vertigo, as might have been expected. There was no guiding mark, and there was nothing to cause the vertigo, as there would have been on the top of a lofty building. The abyss has no attractive power when it is gazed at from the car of a balloon or deck of an aeronef. It is not an abyss that opens beneath the aeronaut, but an horizon that rises round him on all sides like a cup.

In a couple of hours the "Albatross" was over Omaha, on the Nebraskan frontier--Omaha City, the real head of the Pacific Railway, that long line of rails, four thousand five hundred miles in length, stretching from New York to San Francisco. For a moment they could see the yellow waters of the Missouri, then the town, with its houses of wood and brick in the center of a rich basin, like a buckle in the iron belt which clasps North America round the waist. Doubtless, also, as the passengers in the aeronef could observe all these details, the inhabitants of Omaha noticed the strange machine. Their astonishment at seeing it gliding overhead could be no greater than that of the president and secretary of the Weldon Institute at finding themselves on board.

Anyhow, the journals of the Union would be certain to notice the fact. It would be the explanation of the astonishing phenomenon which the whole world had been wondering over for some time.

In an hour the "Albatross" had left Omaha and crossed the Platte River, whose valley is followed by the Pacific Railway in its route across the prairie. Things looked serious for Uncle Prudent and Phil Evans.

"It is serious, then, this absurd project of taking us to the Antipodes."

"And whether we like it or not!" exclaimed the other.

"Robur had better take care! I am not the man to stand that sort of thing."
"Nor am I!" replied Phil Evans. "But be calm, Uncle Prudent, be calm."
"Be calm!"
"And keep your temper until it is wanted."

By five o'clock they had crossed the Black Mountains covered with pines and cedars, and the "Albatross" was over the appropriately named Bad Lands of Nebraska--a chaos of ochre-colored hills, of mountainous fragments fallen on the soil and broken in their fall. At a distance these blocks take the most fantastic shapes. Here and there amid this enormous game of knucklebones there could be traced the imaginary ruins of medieval cities with forts and dungeons, pepper-box turrets, and machicolated towers. And in truth these Bad Lands are an immense ossuary where lie bleaching in the sun myriads of fragments of pachyderms, chelonians, and even, some would have us believe, fossil men, overwhelmed by unknown cataclysms ages and ages ago.

When evening came the whole basin of the Platte River had been crossed, and the plain extended to the extreme limits of the horizon, which rose high owing to the altitude of the "Albatross."

During the night there were no more shrill whistles of locomotives or deeper notes of the river steamers to trouble the quiet of the starry firmament. Long bellowing occasionally reached the aeronef from the herds of buffalo that roamed over the prairie in search of water and pasturage. And when they ceased, the trampling of the grass under their feet produced a dull roaring similar to the rushing of a flood, and very different from the continuous f-r-r-r-r of the screws.

Then from time to time came the howl of a wolf, a fox, a wild cat, or a coyote, the "Canis latrans," whose name is justified by his sonorous bark.

Occasionally came penetrating odors of mint, and sage, and absinthe, mingled with the more powerful fragrance of the conifers which rose floating through the night air.

At last came a menacing yell, which was not due to the coyote. It was the shout of a Redskin, which no Tenderfoot would confound with the cry of a wild beast.

Chapter X
WESTWARD--BUT WHITHER?

The next day, the 15th of June, about five o'clock in the morning, Phil Evans left his cabin. Perhaps he would today have a chance of speaking to Robur? Desirous of knowing why he had not appeared the day before, Evans addressed himself to the mate, Tom Turner.

Tom Turner was an Englishman of about forty-five, broad in the shoulders and short in the legs, a man of iron, with one of those enormous characteristic heads that Hogarth rejoiced in.

"Shall we see Mr. Robur to-day?" asked Phil Evans.
"I don't know," said Turner.
"I need not ask if he has gone out."
"Perhaps he has."
"And when will he come back?"
"When he has finished his cruise."

And Tom went into his cabin.

With this reply they had to be contented. Matters did not look promising, particularly as on reference to the compass it appeared that the "Albatross" was still steering southwest.

Great was the contrast between the barren tract of the Bad Lands passed over during the night and the landscape then unrolling beneath them.

The aeronef was now more than six hundred miles from Omaha, and over a country which Phil Evans could not recognize because he had never been there before. A few forts to keep the Indians in order crowned the bluffs with their geometric lines, formed oftener of palisades than walls. There were few villages, and few inhabitants, the country differing widely from the auriferous lands of Colorado many leagues to the south.

In the distance a long line of mountain crests, in great confusion as yet, began to appear. They were the Rocky Mountains.

For the first time that morning Uncle Prudent and Phil Evans were sensible of a certain lowness of temperature which was not due to a change in the weather, for the sun shone in superb splendor.

"It is because of the "Albatross" being higher in the air," said Phil Evans.

In fact the barometer outside the central deck-house had fallen 540 millimeters, thus indicating an elevation of about 10,000 feet above the sea. The aeronef was at this altitude owing to the elevation of the ground. An hour before she had been at a height of 13,000 feet, and behind her were mountains covered with perpetual snow.

There was nothing Uncle Prudent and his companion could remember which would lead them to discover where
they were. During the night the "Albatross" had made several stretches north and south at tremendous speed, and that was what had put them out of their reckoning.

After talking over several hypotheses more or less plausible they came to the conclusion that this country encircled with mountains must be the district declared by an Act of Congress in March, 1872, to be the National Park of the United States. A strange region it was. It well merited the name of a park--a park with mountains for hills, with lakes for ponds, with rivers for streamlets, and with geysers of marvelous power instead of fountains.

In a few minutes the "Albatross" glided across the Yellowstone River, leaving Mount Stevenson on the right, and coasting the large lake which bears the name of the stream. Great was the variety on the banks of this basin, ribbed as they were with obsidian and tiny crystals, reflecting the sunlight on their myriad facets. Wonderful was the arrangement of the islands on its surface; magnificent were the blue reflections of the gigantic mirror. And around the lake, one of the highest in the globe, were multitudes of pelicans, swans, gulls and geese, bernicles and divers. In places the steep banks were clothed with green trees, pines and larches, and at the foot of the escarpments there shot upwards innumerable white fumaroles, the vapor escaping from the soil as from an enormous reservoir in which the water is kept in permanent ebullition by subterranean fire.

The cook might have seized the opportunity of securing an ample supply of trout, the only fish the Yellowstone Lake contains in myriads. But the "Albatross" kept on at such a height that there was no chance of indulging in a catch which assuredly would have been miraculous.

In three quarters of an hour the lake was overpassed, and a little farther on the last was seen of the geyser region, which rivals the finest in Iceland. Leaning over the rail, Uncle Prudent and Phil Evans watched the liquid columns which leaped up as though to furnish the aeronef with a new element. There were the Fan, with the jets shot forth in rays, the Fortress, which seemed to be defended by waterspouts, the Faithful Friend, with her plume crowned with the rainbows, the Giant, spouting forth a vertical torrent twenty feet round and more than two hundred feet high.

Robur must evidently have been familiar with this incomparable spectacle, unique in the world, for he did not appear on deck. Was it, then, for the sole pleasure of his guests that he had brought the aeronef above the national domain? If so, he came not to receive their thanks. He did not even trouble himself during the daring passage of the Rocky Mountains, which the "Albatross" approached at about seven o'clock.

By increasing the speed of her wings, as a bird rising in its flight, the "Albatross" would clear the highest ridges of the chain, and sink again over Oregon or Utah. But the maneuver was unnecessary. The passes allowed the barrier to be crossed without ascending for the higher ridges. There are many of these canyons, or steep valleys, more or less narrow, through which they could glide, such as Bridger Gap, through which runs the Pacific Railway into the Mormon territory, and others to the north and south of it.

It was through one of these that the "Albatross" headed, after slackening speed so as not to dash against the walls of the canyon. The steersman, with a sureness of hand rendered more effective by the sensitiveness of the rudder, maneuvered his craft as if she were a crack racer in a Royal Victoria match. It was really extraordinary. In spite of all the jealousy of the two enemies of "lighter than air," they could not help being surprised at the perfection of this engine of aerial locomotion.

In less than two hours and a half they were through the Rockies, and the "Albatross" resumed her former speed of sixty-two miles an hour. She was steering southwest so as to cut across Utah diagonally as she neared the ground. She had even dropped several hundred yards when the sound of a whistle attracted the attention of Uncle Prudent and Phil Evans. It was a train on the Pacific Railway on the road to Salt Lake City.

And then, in obedience to an order secretly given, the "Albatross" dropped still lower so as to chase the train, which was going at full speed. She was immediately sighted. A few heads showed themselves at the doors of the cars. Then numerous passengers crowded the gangways. Some did not hesitate to climb on the roof to get a better view of the flying machine. Cheers came floating up through the air; but no Robur appeared in answer to them.

The "Albatross" continued her descent, slowing her suspensory screws and moderating her speed so as not to leave the train behind. She flew about it like an enormous beetle or a gigantic bird of prey. She headed off, to the right and left, and swept on in front, and hung behind, and proudly displayed her flag with the golden sun, to which the conductor of the train replied by waving the Stars and Stripes.

In vain the prisoners, in their desire to take advantage of the opportunity, endeavored to make themselves known to those below. In vain the president of the Weldon Institute roared forth at the top of his voice, "I am Uncle Prudent of Philadelphia!" And the secretary followed suit with, "I am Phil Evans, his colleague!" Their shouts were lost in the thousand cheers with which the passengers greeted the aeronef.

Three or four of the crew of the "Albatross" had appeared on the deck, and one of them, like sailors when passing a ship less speedy than their own, held out a rope, an ironical way of offering to tow them.

And then the "Albatross" resumed her original speed, and in half an hour the express was out of sight. About one o'clock there appeared a vast disk, which reflected the solar rays as if it were an immense mirror.
"That ought to be the Mormon capital, Salt Lake City," said Uncle Prudent. And so it was, and the disk was the roof of the Tabernacle, where ten thousand saints can worship at their ease. This vast dome, like a convex mirror, threw off the rays of the sun in all directions.

It vanished like a shadow, and the "Albatross" sped on her way to the southwest with a speed that was not felt, because it surpassed that of the chasing wind. Soon she was in Nevada over the silver regions, which the Sierra separates from the golden lands of California.

"We shall certainly reach San Francisco before night," said Phil Evans.

"And then?" asked Uncle Prudent.

It was six o'clock precisely when the Sierra Nevada was crossed by the same pass as that taken by the railway. Only a hundred and eighty miles then separated them from San Francisco, the Californian capital.

At the speed the "Albatross" was going she would be over the dome by eight o'clock.

At this moment Robur appeared on deck. The colleagues walked up to him.

"Engineer Robur," said Uncle Prudent, "we are now on the very confines of America! We think the time has come for this joke to end."

"I never joke," said Robur.

He raised his hand. The "Albatross" swiftly dropped towards the ground, and at the same time such speed was given her as to drive the prisoners into their cabin. As soon as the door was shut, Uncle Prudent exclaimed,

"I could strangle him!"

"We must try to escape," said Phil Evans.

"Yes; cost what it may!"

A long murmur greeted their ears. It was the beating of the surf on the seashore. It was the Pacific Ocean!

Chapter XI
THE WIDE PACIFIC

Uncle Prudent and Phil Evans had quite made up their minds to escape. If they had not had to deal with the eight particularly vigorous men who composed the crew of the aeronef they might have tried to succeed by main force. But as they were only two--for Frycollin could only be considered as a quantity of no importance--force was not to be thought of. Hence recourse must be had to strategy as soon as the "Albatross" again took the ground. Such was what Phil Evans endeavored to impress on his irascible colleague, though he was in constant fear of Prudent aggravating matters by some premature outbreak.

In any case the present was not the time to attempt anything of the sort. The aeronef was sweeping along over the North Pacific. On the following morning, that of June 16th, the coast was out of sight. And as the coast curves off from Vancouver Island up to the Aleutians--belonging to that portion of America ceded by Russia to the United States in 1867--it was highly probable that the "Albatross" would cross it at the end of the curve, if her course remained unchanged.

How long the night appeared to be to the two friends! How eager they were to get out of their cabins! When they came on deck in the morning the dawn had for some hours been silvering the eastern horizon. They were nearing the June solstice, the longest day of the year in the northern hemisphere, when there is hardly any night along the sixtieth parallel.

Either from custom or intention Robur was in no hurry to leave his deck-house, When he came out this morning he contented himself with bowing to his two guests as he passed them in the stern of the aeronef.

And now Frycollin ventured out of his cabin. His eyes red with sleeplessness, and dazed in their look, he tottered along, like a man whose foot feels it is not on solid ground. His first glance was at the suspensory screws, which were working with gratifying regularity without any signs of haste. That done, the Negro stumbled along to the rail, and grasped it with both hands, so as to make sure of his balance. Evidently he wished to view the country over which the "Albatross" was flying at the height of seven hundred feet or more.

At first he kept himself well back behind the rail. Then he shook it to make sure it was firm; then he drew himself up; then he bent forward; then he stretched out his head. It need not be said that while he was executing these different maneuvers he kept his eyes shut. At last he opened them.

What a shout! And how quickly he fled! And how deeply his head sank back into his shoulders! At the bottom of the abyss he had seen the immense ocean. His hair would have risen on end--if it had not been wool.

"The sea! The sea!" he cried. And Frycollin would have fallen on the deck had not the cook opened his arms to receive him.

This cook was a Frenchman, and probably a Gascon, his name being Francois Tapage. If he was not a Gascon he must in his infancy have inhaled the breezes of the Garonne. How did this Francois Tapage find himself in the
service of the engineer? By what chain of accidents had he become one of the crew of the "Albatross?" We can hardly say; but in any case he spoke English like a Yankee. "Eh, stand up!" he said, lifting the Negro by a vigorous clutch at the waist.

"Master Tapage!" said the poor fellow, giving a despairing look at the screws.

"At your service, Frycollin."

"Did this thing ever smash?"

"No, but it will end by smashing."

"Why? Why?"

"Because everything must end.

"And the sea is beneath us!"

"If we are to fall, it is better to fall in the sea."

"We shall be drowned."

"We shall be drowned, but we shall not be smashed to a jelly."

The next moment Frycollin was on all fours, creeping to the back of his cabin.

During this day the aeronef was only driven at moderate speed. She seemed to skim the placid surface of the sea, which lay beneath. Uncle Prudent and his companion remained in their cabin, so that they did not meet with Robur, who walked about smoking alone or talking to the mate. Only half the screws were working, yet that was enough to keep the apparatus afloat in the lower zones of the atmosphere.

The crew, as a change from the ordinary routine, would have endeavored to catch a few fish had there been any sign of them; but all that could be seen on the surface of the sea were a few of those yellow-bellied whales which measure about eighty feet in length. These are the most formidable cetaceans in the northern seas, and whalers are very careful in attacking them, for their strength is prodigious. However, in harpooning one of these whales, either with the ordinary harpoon, the Fletcher fuse, or the javelin-bomb, of which there was an assortment on board, there would have been danger to the men of the "Albatross."

But what was the good of such useless massacre? Doubtless to show off the powers of the aeronef to the members of the Weldon Institute. And so Robur gave orders for the capture of one of these monstrous cetaceans.

At the shout of "A whale! A whale!" Uncle Prudent and Phil Evans came out of their cabin. Perhaps there was a whaler in sight! In that case all they had to do to escape from their flying prison was to jump into the sea, and chance being picked up by the vessel.

The crew were all on deck. "Shall we try, sir?" asked Tom Turner.

"Yes," said Robur.

In the engine-room the engineer and his assistant were at their posts ready to obey the orders signaled to them. The "Albatross" dropped towards the sea, and remained, about fifty feet above it.

There was no ship in sight—of that the two colleagues soon assured themselves—nor was there any land to be seen to which they could swim, providing Robur made no attempt to recapture them.

Several jets of water from the spout holes soon announced the presence of the whales as they came to the surface to breathe. Tom Turner and one of the men were in the bow. Within his reach was one of those javelin-bombs, of Californian make, which are shot from an arquebus and which are shaped as a metallic cylinder terminated by a cylindrical shell armed with a shaft having a barbed point. Robur was a little farther aft, and with his right hand signaled to the engineers, while with his left, he directed the steersman. He thus controlled the aeronef in every way, horizontally and vertically, and it is almost impossible to conceive with what speed and precision the "Albatross" answered to his orders. She seemed a living being, of which he was the soul.

"A whale! A whale!" shouted Tom Turner, as the back of a cetacean emerged from the surface about four cable-lengths in front of the "Albatross."

The "Albatross" swept towards it, and when she was within sixty feet of it she stopped dead.

Tom Turner seized the arquebus, which was resting against a cleat on the rail. He fired, and the projectile, attached to a long line, entered the whale's body. The shell, filled with an explosive compound, burst, and shot out a small harpoon with two branches, which fastened into the animal's flesh.

"Look out!" shouted Turner.

Uncle Prudent and Phil Evans, much against their will, became greatly interested in the spectacle.

The whale, seriously wounded, gave the sea such a slap with his tail, that the water dashed up over the bow of the aeronef. Then he plunged to a great depth, while the line, which had been previously wetted in a tub of water to prevent its taking fire, ran out like lightning. When the whale rose to the surface he started off at full speed in a northerly direction.

It may be imagined with what speed the "Albatross" was towed in pursuit. Besides, the propellers had been stopped. The whale was let go as he would, and the ship followed him. Turner stood ready to cut the line in case a
fresh plunge should render this towing dangerous.

For half an hour, and perhaps for a distance of six miles, the "Albatross" was thus dragged along, but it was obvious that the whale was tiring. Then, at a gesture from Robur the assistant engineers started the propellers astern, so as to oppose a certain resistance to the whale, which was gradually getting closer.

Soon the aeronef was gliding about twenty-five feet above him. His tail was beating the waters with incredible violence, and as he turned over on his back an enormous wave was produced.

Suddenly the whale turned up again, so as to take a header, as it were, and then dived with such rapidity that Turner had barely time to cut the line.

The aeronef was dragged to the very surface of the water. A whirlpool was formed where the animal had disappeared. A wave dashed up on to the deck as if the aeronef were a ship driving against wind and tide.

Luckily, with a blow of the hatchet the mate severed the line, and the "Albatross," freed from her tug, sprang aloft six hundred feet under the impulse of her ascensional screws. Robur had maneuvered his ship without losing his coolness for a moment.

A few minutes afterwards the whale returned to the surface--dead. From every side the birds flew down on to the carcass, and their cries were enough to deafen a congress. The "Albatross," without stopping to share in the spoil, resumed her course to the west.

In the morning of the 17th of June, at about six o'clock, land was sighted on the horizon. This was the peninsula of Alaska, and the long range of breakers of the Aleutian Islands.

The "Albatross" glided over the barrier where the fur seals swarm for the benefit of the Russo-American Company. An excellent business is the capture of these amphibians, which are from six to seven feet long, russet in color, and weigh from three hundred to four hundred pounds. There they were in interminable files, ranged in line of battle, and countable by thousands.

Although they did not move at the passage of the "Albatross," it was otherwise with the ducks, divers, and loons, whose husky cries filled the air as they disappeared beneath the waves and fled terrified from the aerial monster.

The twelve hundred miles of the Behring Sea between the first of the Aleutians and the extreme end of Kamtschatka were traversed during the twenty-four hours of this day and the following night. Uncle Prudent and Phil Evans found that here was no present chance of putting their project of escape into execution. Flight was not to be thought of among the deserts of Eastern Asia, nor on the coast of the sea of Okhotsk. Evidently the "Albatross" was bound for Japan or China, and there, although it was not perhaps quite safe to trust themselves to the mercies of the Chinese or Japanese, the two friends had made up their minds to run if the aeronef stopped.

But would she stop? She was not like a bird which grows fatigued by too long a flight, or like a balloon which has to descend for want of gas. She still had food for many weeks and her organs were of marvelous strength, defying all weakness and weariness.

During the 18th of June she swept over the peninsula of Kamtschatka, and during the day there was a glimpse of Petropaulovski and the volcano of Kloutschew. Then she rose again to cross the Sea of Okhotsk, running down by the Kurile Isles, which seemed to be a breakwater pierced by hundreds of channels. On the 19th, in the morning, the "Albatross" was over the strait of La Perouse between Saghalien and Northern Japan, and had reached the mouth of the great Siberian river, the Amoor.

Then there came a fog so dense that the aeronef had to rise above it. At the altitude she was at there was no obstacle to be feared, no elevated monuments to hinder her passage, no mountains against which there was risk of being shattered in her flight. The country was only slightly varied. But the fog was very disagreeable, and made everything on board very damp.

All that was necessary was to get above this bed of mist, which was nearly thirteen hundred feet thick, and the ascensional screws being increased in speed, the "Albatross" was soon clear of the fog and in the sunny regions of the sky. Under these circumstances, Uncle Prudent and Phil Evans would have found some difficulty in carrying out their plan of escape, even admitting that they could leave the aeronef.

During the day, as Robur passed them he stopped for a moment, and without seeming to attach any importance to what he said, addressed them carelessly as follows: "Gentlemen, a sailing-ship or a steamship caught in a fog from which it cannot escape is always much delayed. It must not move unless it keeps its whistle or its horn going. It must reduce its speed, and any instant a collision may be expected. The "Albatross" has none of these things to fear. What does fog matter to her? She can leave it when she chooses. The whole of space is hers." And Robur continued his stroll without waiting for an answer, and the puffs of his pipe were lost in the sky.

"Uncle Prudent," said Phil Evans, "it seems that this astonishing "Albatross" never has anything to fear."

"That we shall see!" answered the president of the Weldon Institute.

The fog lasted three days, the 19th, 20th, and 21st of June, with regrettable persistence. An ascent had to be made to clear the Japanese mountain of Fujiyama. When the curtain of mist was drawn aside there lay below them
an immense city, with palaces, villas, gardens, and parks. Even without seeing it Robur had recognized it by the barking of the innumerable dogs, the cries of the birds of prey, and above all, by the cadaverous odor which the bodies of its executed criminals gave off into space.

The two colleagues were out on the deck while the engineer was taking his observations in case he thought it best to continue his course through the fog.

"Gentlemen," said he, "I have no reason for concealing from you that this town is Tokyo, the capital of Japan."

Uncle Prudent did not reply. In the presence of the engineer he was almost choked, as if his lungs were short of air.

"This view of Tokyo," continued Robur, "is very curious."

"Curious as it may be--" replied Phil Evans.

"It is not as good as Peking?" interrupted the engineer.

"That is what I think, and very shortly you shall have an opportunity of judging."

Impossible to be more agreeable!

The "Albatross" then gliding southeast, had her course changed four points, so as to head to the eastward.

Chapter XII
THROUGH THE HIMALAYAS

During the night the fog cleared off. There were symptoms of an approaching typhoon—a rapid fall of the barometer, a disappearance of vapor, large clouds of ellipsoid form clinging to a copper sky, and, on the opposite horizon, long streaks of carmine on a slate-colored field, with a large sector quite clear in the north. Then the sea was smooth and calm and at sunset assumed a deep scarlet hue.

Fortunately the typhoon broke more to the south, and had no other result than to sweep away the mist which had been accumulating during the last three days.

In an hour they had traversed the hundred and twenty-five miles of the Korean strait, and while the typhoon was raging on the coast of China, the "Albatross" was over the Yellow Sea. During the 22nd and 23rd she was over the Gulf of Pechelee, and on the 24th she was ascending the valley of the Peiho on her way to the capital of the Celestial Empire.

Leaning over the rail, the two colleagues, as the engineer had told them, could see distinctly the immense city, the wall which divides it into two parts—the Manchu town, and the Chinese town—the twelve suburbs which surround it, the large boulevards which radiate from its center, the temples with their green and yellow roofs bathed in the rising sun, the grounds surrounding the houses of the mandarins; then in the middle of the Manchu town the eighteen hundred acres of the Yellow town, with its pagodas, its imperial gardens, its artificial lakes, its mountain of coal which towers above the capital; and in the center of the Yellow town, like a square of Chinese puzzle enclosed in another, the Red town, that is the imperial palace, with all the peaks of its outrageous architecture.

Below the "Albatross" the air was filled with a singular harmony. It seemed to be a concert of Aeolian harps. In the air were a hundred kites of different forms, made of sheets of palm-leaf, and having at their upper end a sort of bow of light wood with a thin slip of bamboo beneath. In the breath of the wind these slips, with all their notes varied like those of a harmonicon, gave forth a most melancholy murmuring. It seemed as though they were breathing musical oxygen.

It suited Robur's whim to run close up to this aerial orchestra, and the "Albatross" slowed as she glided through the sonorous waves which the kites gave off through the atmosphere.

But immediately an extraordinary effect was produced amongst the innumerable population. Beatings of the tom-toms and sounds of other formidable instruments of the Chinese orchestra, gun reports by the thousand, mortars fired in hundreds, all were brought into play to scare away the aeronef. Although the Chinese astronomers may have recognized the aerial machine as the moving body that had given rise to such disputes, it was to the Celestial million, from the humblest tankader to the best-buttoned mandarin, an apocalyptical monster appearing in the sky of Buddha.

The crew of the "Albatross" troubled themselves very little about these demonstrations. But the strings which held the kites, and were tied to fixed pegs in the imperial gardens, were cut or quickly hauled in; and the kites were either drawn in rapidly, sounding louder as they sank, or else fell like a bird shot through both wings, whose song ends with its last sigh.

A noisy fanfare escaped from Tom Turner's trumpet, and drowned the final notes of the aerial concert. It did not interrupt the terrestrial fusillade. At last a shell exploded a few feet below the "Albatross," and then she mounted into the inaccessible regions of the sky.

Nothing happened during the few following days of which the prisoners could take advantage. The aeronef kept
on her course to the southwest, thereby showing that it was intended to take her to India. Twelve hours after leaving Peking, Uncle Prudent and Phil Evans caught a glimpse of the Great Wall in the neighborhood of Chen-Si. Then, avoiding the Lung Mountains, they passed over the valley of the Hoangho and crossed the Chinese border on the Tibet side.

Tibet consists of high table-lands without vegetation, with here and there snowy peaks and barren ravines, torrents fed by glaciers, depressions with glittering beds of salt, lakes surrounded by luxurious forests, with icy winds sweeping over all.

The barometer indicated an altitude of thirteen thousand feet above the level of the sea. At that height the temperature, although it was in the warmest months of the northern hemisphere, was only a little above freezing. This cold, combined with the speed of the "Albatross," made the voyage somewhat trying, and although the friends had warm traveling wraps, they preferred to keep to their cabin.

It need hardly be said that to keep the aeronef in this rarefied atmosphere the suspensory screws had to be driven at extreme speed. But they worked with perfect regularity, and the sound of their wings almost acted as a lullaby.

During this day, appearing from below about the size of a carrier pigeon, she passed over Garlock, a town of western Tibet, the capital of the province of Cari Khorsum.

On the 27th of June, Uncle Prudent and Phil Evans sighted an enormous barrier, broken here and there by several peaks, lost in the snows that bounded the horizon.

Leaning against the fore-cabin, so as to keep their places notwithstanding the speed of the ship, they watched these colossal masses, which seemed to be running away from the aeronef.

"The Himalayas, evidently," said Phil Evans; "and probably Robur is going round their base, so as to pass into India."

"So much the worse," answered Uncle Prudent. "On that immense territory we shall perhaps be able to--"  
"Unless he goes round by Burma to the east, or Nepal to the west."

"Anyhow, I defy him to go through them."

"Indeed!" said a voice.

The next day, the 28th of June, the "Albatross" was in front of the huge mass above the province of Zang. On the other side of the chain was the province of Nepal. These ranges block the road into India from the north. The two northern ones, between which the aeronef was gliding like a ship between enormous reefs are the first steps of the Central Asian barrier. The first was the Kuen Lung, the other the Karakorum, bordering the longitudinal valley parallel to the Himalayas, from which the Indus flows to the west and the Brahmapootra to the east.

What a superb orographical system! More than two hundred summits have been measured, seventeen of which exceed twenty-five thousand feet. In front of the "Albatross," at a height of twenty-nine thousand feet, towered Mount Everest. To the right was Dhawalagiri, reaching twenty-six thousand eight hundred feet, and relegated to second place since the measurement of Mount Everest.

Evidently Robur did not intend to go over the top of these peaks; but probably he knew the passes of the Himalayas, among others that of Ibi Ganim, which the brothers Schlagintweit traversed in 1856 at a height of twenty-two thousand feet. And towards it he went.

Several hours of palpitation, becoming quite painful, followed; and although the rarefaction of the air was not such as to necessitate recourse being had to the special apparatus for renewing oxygen in the cabins, the cold was excessive.

Robur stood in the bow, his sturdy figure wrapped in a great-coat. He gave the orders, while Tom Turner was at the helm. The engineer kept an attentive watch on his batteries, the acid in which fortunately ran no risk of congelation. The screws, running at the full strength of the current, gave forth a note of intense shrillness in spite of the trifling density of the air. The barometer showed twenty-three thousand feet in altitude.

Magnificent was the grouping of the chaos of mountains! Everywhere were brilliant white summits. There were no lakes, but glaciers descending ten thousand feet towards the base. There was no herbage, only a few phanerogams on the limit of vegetable life. Down on the lower flanks of the range were splendid forests of pines and cedars. Here were none of the gigantic ferns and interminable parasites stretching from tree to tree as in the thickets of the jungle. There were no animals--no wild horses, or yaks, or Tibetan bulls. Occasionally a scared gazelle showed itself far down the slopes. There were no birds, save a couple of those crows which can rise to the utmost limits of the respirable air.

The pass at last was traversed. The "Albatross" began to descend. Coming from the hills out of the forest region there was now beneath them an immense plain stretching far and wide.

Then Robur stepped up to his guests, and in a pleasant voice remarked, "India, gentlemen!"
Chapter XIII
OVER THE CASPIAN

The engineer had no intention of taking his ship over the wondrous lands of Hindustan. To cross the Himalayas was to show how admirable was the machine he commanded; to convince those who would not be convinced was all he wished to do.

But if in their hearts Uncle Prudent and his colleague could not help admiring so perfect an engine of aerial locomotion, they allowed none of their admiration to be visible. All they thought of was how to escape. They did not even admire the superb spectacle that lay beneath them as the "Albatross" flew along the river banks of the Punjab.

At the base of the Himalayas there runs a marshy belt of country, the home of malarious vapors, the Terai, in which fever is endemic. But this offered no obstacle to the "Albatross," or, in any way, affected the health of her crew. She kept on without undue haste towards the angle where India joins on to China and Turkestan, and on the 29th of June, in the early hours of the morning, there opened to view the incomparable valley of Cashmere.

Yes! Incomparable is this gorge between the major and the minor Himalayas--furrowed by the buttresses in which the mighty range dies out in the basin of the Hydaspes, and watered by the capricious windings of the river which saw the struggle between the armies of Porus and Alexander, when India and Greece contended for Central Asia. The Hydaspes is still there, although the two towns founded by the Macedonian in remembrance of his victory have long since disappeared.

During the morning the aeronef was over Serinuggur, which is better known under the name of Cashmere. Uncle Prudent and his companion beheld the superb city clustered along both banks of the river; its wooden bridges stretching across like threads, its villas and their balconies standing out in bold outline, its hills shaded by tall poplars, its roofs grassed over and looking like molehills; its numerous canals, with boats like nut-shells, and boatmen like ants; its palaces, temples, kiosks, mosques, and bungalows on the outskirts; and its old citadel of Hari-Pawata on the slope of the hill like the most important of the forts of Paris on the slope of Mont Valerien.

"That would be Venice," said Phil Evans, "if we were in Europe."

"And if we were in Europe," answered Uncle Prudent, "we should know how to find the way to America."

The "Albatross" did not linger over the lake through which the river flows, but continued her flight down the valley of the Hydaspes.

For half an hour only did she descend to within thirty feet of the river and remained stationary. Then, by means of an india-rubber pipe, Tom Turner and his men replenished their water supply, which was drawn up by a pump worked by the accumulators. Uncle Prudent and Phil Evans stood watching the operation. The same idea occurred to each of them. They were only a few feet from the surface of the stream. They were both good swimmers. A plunge would give them their liberty; and once they had reached the river, how could Robur get them back again? For his propellers to work, he must keep at least six feet above the ground.

In a moment all the chances pro and con were run over in their heads. In a moment they were considered, and the prisoners rushed to throw themselves overboard, when several pairs of hands seized them by the shoulders.

They had been watched; and flight was utterly impossible.

This time they did not yield without resisting. They tried to throw off those who held them. But these men of the "Albatross" were no children.

"Gentlemen," said the engineer, "when people, have the pleasure of traveling with Robur the Conqueror, as you have so well named him, on board his admirable "Albatross," they do not leave him in that way. I may add you never leave him."

Phil Evans drew away his colleague, who was about to commit some act of violence. They retired to their cabin, resolved to escape, even if it cost them their lives.

Immediately the "Albatross" resumed her course to the west. During the day at moderate speed she passed over the territory of Cabulistan, catching a momentary glimpse of its capital, and crossed the frontier of the kingdom of Herat, nearly seven hundred miles from Cashmere.

In these much-disputed countries, the open road for the Russians to the English possessions in India, there were seen many columns and convoys, and, in a word, everything that constitutes in men and material an army on the march. There were heard also the roar of the cannon and the crackling of musketry. But the engineer never meddled with the affairs of others where his honor or humanity was not concerned. He passed above them. If Herat as we are told, is the key of Central Asia, it mattered little to him if it was kept in an English or Muscovite pocket. Terrestrial interests were nothing to him who had made the air his domain.

Besides, the country soon disappeared in one of those sandstorms which are so frequent in these regions. The wind called the "tebbad" bears along the seeds of fever in the impalpable dust it raises in its passage. And many are the caravans that perish in its eddies.

To escape this dust, which might have interfered with the working of the screws, the "Albatross" shot up some
six thousand feet into a purer atmosphere.

And thus vanished the Persian frontier and the extensive plains. The speed was not excessive, although there were no rocks ahead, for the mountains marked on the map are of very moderate altitude. But as the ship approached the capital, she had to steer clear of Demavend, whose snowy peak rises some twenty-two thousand feet, and the chain of Elbruz, at whose foot is built Teheran.

As soon as the day broke on the 2nd of July the peak of Demavend appeared above the sandstorm, and the "Albatross" was steered so as to pass over the town, which the wind had wrapped in a mantle of dust.

However, about six o'clock her crew could see the large ditches that surround it, and the Shah's palace, with its walls covered with porcelain tiles, and its ornamental lakes, which seemed like huge turquoises of beautiful blue.

It was but a hasty glimpse. The "Albatross" now headed for the north, and a few hours afterwards she was over a little hill at the northern angle of the Persian frontier, on the shores of a vast extent of water which stretched away out of sight to the north and east.

The town was Ashurada, the most southerly of the Russian stations. The vast extent of water was a sea. It was the Caspian.

The eddies of sand had been passed. There was a view of a group of European houses rising along a promontory, with a church tower in the midst of them.

The "Albatross" swooped down towards the surface of the sea. Towards evening she was running along the coast--which formerly belonged to Turkestan, but now belongs to Russia--and in the morning of the 3rd of July she was about three hundred feet above the Caspian.

There was no land in sight, either on the Asiatic or European side. On the surface of the sea a few white sails were bellying in the breeze. These were native vessels recognizable by their peculiar rig--kesebeys, with two masts; kayuks, the old pirate-boats, with one mast; teimils, and smaller craft for trading and fishing. Here and there a few puffs of smoke rose up to the "Albatross" from the funnels of the Ashurada steamers, which the Russians keep as the police of these Turcoman waters.

That morning Tom Turner was talking to the cook, Tapage, and to a question of his replied, "Yes; we shall be about forty-eight hours over the Caspian."

"Good!" said the cook; "Then we can have some fishing."

"Just so."

They were to remain for forty-eight hours over the Caspian, which is some six hundred and twenty-five miles long and two hundred wide, because the speed of the "Albatross" had been much reduced, and while the fishing was going on she would be stopped altogether.

The reply was heard by Phil Evans, who was then in the bow, where Frycollin was overwhelming him with piteous pleadings to be put "on the ground."

Without replying to this preposterous request, Evans returned aft to Uncle Prudent; and there, taking care not to be overheard, he reported the conversation that had taken place.

"Phil Evans," said Uncle Prudent, "I think there can be no mistake as to this scoundrel's intention with regard to us."

"None," said Phil Evans. "He will only give us our liberty when it suits him, and perhaps not at all."

"In that case we must do all we can to get away from the 'Albatross'."

"A splendid craft, she is, I must admit."

"Perhaps so," said Uncle Prudent; "but she belongs to a scoundrel who detains us on board in defiance of all right. For us and ours she is a constant danger. If we do not destroy her--"

"Let us begin by saving ourselves" answered Phil Evans; "we can see about the destruction afterwards."

"Just so," said Uncle Prudent. "And we must avail ourselves of every chance that comes, along. Evidently the "Albatross" is going to cross the Caspian into Europe, either by the north into Russia or by the west into the southern countries. Well, no matter where we stop, before we get to the Atlantic, we shall be safe. And we ought to be ready at any moment."

"But," asked Evans, "how are we to get out?"

"Listen to me," said Uncle Prudent. "It may happen during the night that the "Albatross" may drop to within a few hundred feet of the ground. Now there are on board several ropes of that length, and, with a little pluck we might slip down them--"

"Yes," said Evans. "If the case is desperate I don't mind--"

"Nor I. During the night there's no one about except the man at the wheel. And if we can drop one of the ropes forward without being seen or heard--"

"Good! I am glad to see you are so cool; that means business. But just now we are over the Caspian. There are several ships in sight. The "Albatross" is going down to fish. Cannot we do something now?"
"Sh! They are watching us much more than you think," said Uncle Prudent. "You saw that when we tried to jump into the Hydaspes."

"And who knows that they don't watch us at night?" asked Evans.

"Well, we must end this; we must finish with this "Albatross" and her master."

It will be seen how in the excitement of their anger the colleagues--Uncle Prudent in particular--were prepared to attempt the most hazardous things. The sense of their powerlessness, the ironical disdain with which Robur treated them, the brutal remarks he indulged in--all contributed towards intensifying the aggravation which daily grew more manifest.

This very day something occurred which gave rise to another most regrettable altercation between Robur and his guests. This was provoked by Frycollin, who, finding himself above the boundless sea, was seized with another fit of terror. Like a child, like the Negro he was, he gave himself over to groaning and protesting and crying, and withering in a thousand contortions and grimaces.

"I want to get out! I want to get out! I am not a bird! Booohoo! I don't want to fly, I want to get out!"

Uncle Prudent, as may be imagined, did not attempt to quiet him. In fact, he encouraged him, and particularly as the incessant howling seemed to have a strangely irritating effect on Robur.

When Tom Turner and his companions were getting ready for fishing, the engineer ordered them to shut up Frycollin in his cabin. But the Negro never ceased his jumping about, and began to kick at the wall and yell with redoubled power.

It was noon. The "Albatross" was only about fifteen or twenty feet above the water. A few ships, terrified at the apparition, sought safety in flight.

As may be guessed, a sharp look-out was kept on the prisoners, whose temptation to escape could not but be intensified. Even supposing they jumped overboard they would have been picked up by the india-rubber boat. As there was nothing to do during the fishing, in which Phil Evans intended to take part, Uncle Prudent, raging furiously as usual, retired to his cabin.

The Caspian Sea is a volcanic depression. Into it flow the waters of the Volga, the Ural, the Kour, the Kouma, the Jemba, and others. Without the evaporation which relieves it of its overflow, this basin, with an area of 17,000 square miles, and a depth of from sixty to four hundred feet, would flood the low marshy ground to its north and east. Although it is not in communication with the Black Sea or the Sea of Aral, being at a much lower level than they are, it contains an immense number of fish--such fish, be it understood, as can live in its bitter waters, the bitterness being due to the naphtha which pours in from the springs on the south.

The crew of the "Albatross" made no secret of their delight at the change in their food the fishing would bring them.

"Look out!" shouted Turner, as he harpooned a good-size fish, not unlike a shark.

It was a splendid sturgeon seven feet long, called by the Russians beluga, the eggs of which mixed up with salt, vinegar, and white wine form caviar. Sturgeons from the river are, it may be, rather better than those from the sea; but these were welcomed warmly enough on board the "Albatross."

But the best catches were made with the drag-nets, which brought up at each haul carp, bream, salmon, saltwater pike, and a number of medium-sized sterlets, which wealthy gourmets have sent alive to Astrakhan, Moscow, and Petersburg, and which now passed direct from their natural element into the cook's kettle without any charge for transport.

An hour's work sufficed to fill up the larders of the aeronef, and she resumed her course to the north.

During the fishing Frycollin had continued shouting and kicking at his cabin wall, and making a tremendous noise.

"That wretched nigger will not be quiet, then?" said Robur, almost out of patience.

"It seems to me, sir, he has a right to complain," said Phil Evans.

"Yes, and I have a right to look after my ears," replied Robur.

"Engineer Robur!" said Uncle Prudent, who had just appeared on deck.

"President of the Weldon Institute!"

They had stepped up to one another, and were looking into the whites of each other's eyes. Then Robur shrugged his shoulders. "Put him at the end of a line," he said.

Turner saw his meaning at once. Frycollin was dragged out of his cabin. Loud were his cries when the mate and one of the men seized him and tied him into a tub, which they hitched on to a rope--one of those very ropes, in fact, that Uncle Prudent had intended to use as we know.

The Negro at first thought he was going to be hanged. Not he was only going to be towed!

The rope was paid out for a hundred feet and Frycollin found himself hanging in space.

He could then shout at his ease. But fright contracted his larynx, and he was mute.
Uncle Prudent and Phil Evans endeavored to prevent this performance. They were thrust aside.
"It is scandalous! It is cowardly!" said Uncle Prudent, quite beside himself with rage.
"Indeed!" said Robur.
"It is an abuse of power against which I protest."
"Protest away!"
"I will be avenged, Mr. Robur."
"Avenge when you like, Mr. Prudent."
"I will have my revenge on you and yours."
The crew began to close up with anything but peaceful intentions. Robur motioned them away.
"Yes, on you and yours!" said Uncle Prudent, whom his colleague in vain tried to keep quiet.
"Whenever you please!" said the engineer.
"And in every possible way!"
"That is enough now," said Robur, in a threatening tone. "There are other ropes on board. And if you don't be quiet I'll treat you as I have done your servant!"
Uncle Prudent was silent, not because he was afraid, but because his wrath had nearly choked him; and Phil Evans led him off to his cabin.

During the last hour the air had been strangely troubled. The symptoms could not be mistaken. A storm was threatening. The electric saturation of the atmosphere had become so great that about half-past two o'clock Robur witnessed a phenomenon that was new to him.

In the north, whence the storm was traveling, were spirals of half-luminous vapor due to the difference in the electric charges of the various beds of cloud. The reflections of these bands came running along the waves in myriads of lights, growing in intensity as the sky darkened.

The "Albatross" and the storm were sure to meet, for they were exactly in front of each other.

And Frycollin? Well! Frycollin was being towed—and towed is exactly the word, for the rope made such an angle, with the aeronef, now going at over sixty knots an hour, that the tub was a long way behind her.

The crew were busy in preparing for the storm, for the "Albatross" would either have to rise above it or drive through its lowest layers. She was about three thousand feet above the sea when a clap of thunder was heard. Suddenly the squall struck her. In a few seconds the fiery clouds swept on around her.

Phil Evans went to intercede for Frycollin, and asked him to be taken on board again. But Robur had already given orders to that effect, and the rope was being hauled in, when suddenly there took place an inexplicable slackening in the speed of the screws.

The engineer rushed to the central deck-house. "Power! More power!" he shouted. "We must rise quickly and get over the storm!"

"Impossible, sir!"
"What is the matter?"
"The currents are troubled! They are intermittent!" And, in fact, the "Albatross" was falling fast.

As with the telegraph wires on land during a storm, so was it with the accumulators of the aeronef. But what is only an inconvenience in the case of messages was here a terrible danger.

"Let her down, then," said Robur, "and get out of the electric zone! Keep cool, my lads!"
He stepped on to his quarter-deck and his crew went to their stations.

Although the "Albatross" had sunk several hundred feet she was still in the thick of the cloud, and the flashes played across her as if they were fireworks. It seemed as though she was struck. The screws ran more and more slowly, and what began as a gentle descent threatened to become a collapse.

In less than a minute it was evident they would get down to the surface of the sea. Once they were immersed no power could drag them from the abyss.

Suddenly the electric cloud appeared above them. The "Albatross" was only sixty feet from the crest of the waves. In two or three seconds the deck would be under water.

But Robur, seizing the propitious moment, rushed to the central house and seized the levers. He turned on the currents from the piles no longer neutralized by the electric tension of the surrounding atmosphere. In a moment the screws had regained their normal speed and checked the descent; and the "Albatross" remained at her slight elevation while her propellers drove her swiftly out of reach of the storm.

Frycollin, of course, had a bath—though only for a few seconds. When he was dragged on deck he was as wet as if he had been to the bottom of the sea. As may be imagined, he cried no more.

In the morning of the 4th of July the "Albatross" had passed over the northern shore of the Caspian.
Chapter XIV
THE AERONEF AT FULL SPEED

If ever Prudent and Evans despaired on escaping from the "Albatross" it was during the two days that followed. It may be that Robur considered it more difficult to keep a watch on his prisoners while he was crossing Europe, and he knew that they had made up their minds to get away.

But any attempt to have done so would have been simply committing suicide. To jump from an express going sixty miles an hour is to risk your life, but to jump from a machine going one hundred and twenty miles an hour would be to seek your death.

And it was at this speed, the greatest that could be given to her, that the "Albatross" tore along. Her speed exceeded that of the swallow, which is one hundred and twelve miles an hour.

At first the wind was in the northeast, and the "Albatross" had it fair, her general course being a westerly one. But the wind began to drop, and it soon became impossible for the colleagues to remain on the deck without having their breath taken away by the rapidity of the flight. And on one occasion they would have been blown overboard if they had not been dashed up against the deck-house by the pressure of the wind.

Luckily the steersman saw them through the windows of his cage, and by the electric bell gave the alarm to the men in the fore-cabin. Four of them came aft, creeping along the deck.

Those who have been at sea, beating to windward in half a gale of wind, will understand what the pressure was like. But here it was the "Albatross" that by her incomparable speed made her own wind.

To allow Uncle Prudent and Phil Evans to get back to their cabin the speed had to be reduced. Inside the deck-house the "Albatross" bore with her a perfectly breathable atmosphere. To stand such driving the strength of the apparatus must have been prodigious. The propellers spun round so swiftly that they seemed immovable, and it was with irresistible power that they screwed themselves through the air.

The last town that had been noticed was Astrakhan, situated at the north end of the Caspian Sea. The Star of the Desert—it must have been a poet who so called it—has now sunk from the first rank to the fifth or sixth. A momentary glance was afforded at its old walls, with their useless battlements, the ancient towers in the center of the city, the mosques and modern churches, the cathedral with its five domes, gilded and dotted with stars as if it were a piece of the sky, as they rose from the bank of the Volga, which here, as it joins the sea, is over a mile in width.

Thenceforward the flight of the "Albatross" became quite a race through the heights of the sky, as if she had been harnessed to one of those fabulous hippogriffs which cleared a league at every sweep of the wing.

At ten o'clock in the morning, of the 4th of July the aeronef, heading northwest, followed for a little the valley of the Volga. The steppes of the Don and the Ural stretched away on each side of the river. Even if it had been possible to get a glimpse of these vast territories there would have been no time to count the towns and villages. In the evening the aeronef passed over Moscow without saluting the flag on the Kremlin. In ten hours she had covered the twelve hundred miles which separate Astrakhan from the ancient capital of all the Russias.

From Moscow to St. Petersburg the railway line measures about seven hundred and fifty miles. This was but a half-day's journey, and the "Albatross," as punctual as the mail, reached St. Petersburg and the banks of the Neva at two o'clock in the morning.

Then came the Gulf of Finland, the Archipelago of Abo, the Baltic, Sweden in the latitude of Stockholm, and Norway in the latitude of Christiania. Ten hours only for these twelve hundred miles! Verily it might be thought that no human power would henceforth be able to check the speed of the "Albatross," and as if the resultant of her force of projection and the attraction of the earth would maintain her in an unvarying trajectory round the globe.

But she did stop nevertheless, and that was over the famous fall of the Rjukanfos in Norway. Gousta, whose summit dominates this wonderful region of Tellermarken, stood in the west like a gigantic barrier apparently impassable. And when the "Albatross" resumed her journey at full speed her head had been turned to the south.

And during this extraordinary flight what was Frycollin doing? He remained silent in a corner of his cabin, sleeping as well as he could, except at meal times.

Tapage then favored him with his company and amused himself at his expense. "Eh! eh! my boy!" said he. "So you are not crying any more? Perhaps it hurt you too much? That two hours hanging cured you of it? At our present rate, what a splendid air-bath you might have for your rheumatics!"

"It seems to me we shall soon go to pieces!"
"Perhaps so; but we shall go so fast we shan't have time to fall! That is some comfort!"
"Do you think so?"
"I do."

To tell the truth, and not to exaggerate like Tapage, it was only reasonable that owing to the excessive speed the work of the suspensory screws should be somewhat lessened. The "Albatross" glided on its bed of air like a Congreve rocket.
"And shall we last long like that?" asked Frycollin.
"Long? Oh, no, only as long as we live!"
"Oh!" said the Negro, beginning his lamentations.
"Take care, Fry, take care! For, as they say in my country, the master may send you to the seesaw!" And Frycollin gulped down his sobs as he gulped down the meat which, in double doses, he was hastily swallowing.

Meanwhile Uncle Prudent and Phil Evans, who were not men to waste time in wrangling when nothing could come of it, agreed upon doing something. It was evident that escape was not to be thought of. But if it was impossible for them to again set foot on the terrestrial globe, could they not make known to its inhabitants what had become of them since their disappearance, and tell them by whom they had been carried off, and provoke--how was not very clear--some audacious attempt on the part of their friends to rescue them from Robur?

Communicate? But how? Should they follow the example of sailors in distress and enclose in a bottle a document giving the place of shipwreck and throw it into the sea? But here the sea was the atmosphere. The bottle would not swim. And if it did not fall on somebody and crack his skull it might never be found.

The colleagues were about to sacrifice one of the bottles on board when an idea occurred to Uncle Prudent. He took snuff, as we know, and we may pardon this fault in an American, who might do worse. And as a snuff-taker he possessed a snuff-box, which was now empty. This box was made of aluminum. If it was thrown overboard any honest citizen that found it would pick it up, and, being an honest citizen, he would take it to the police-office, and there they would open it and discover from the document what had become of the two victims of Robur the Conqueror!

And this is what was done. The note was short, but it told all, and it gave the address of the Weldon Institute, with a request that it might be forwarded. Then Uncle Prudent folded up the note, shut it in the box, bound the box round with a piece of worsted so as to keep it from opening it as it fell. And then all that had to be done was to wait for a favorable opportunity.

During this marvelous flight over Europe it was not an easy thing to leave the cabin and creep along the deck at the risk of being suddenly and secretly blown away, and it would not do for the snuff-box to fall into the sea or a gulf or a lake or a watercourse, for it would then perhaps be lost. At the same time it was not impossible that the colleagues might in this way get into communication with the habitable globe.

It was then growing daylight, and it seemed as though it would be better to wait for the night and take advantage of a slackening speed or a halt to go out on deck and drop the precious snuff-box into some town.

When all these points had been thought over and settled, the prisoners, found they could not put their plan into execution--on that day, at all events--for the "Albatross," after leaving Gousta, had kept her southerly course, which took her over the North Sea, much to the consternation of the thousands of coasting craft engaged in the English, Dutch, French, and Belgian trade. Unless the snuff-box fell on the deck of one of these vessels there was every chance of its going to the bottom of the sea, and Uncle Prudent and Phil Evans were obliged to wait for a better opportunity. And, as we shall immediately see, an excellent chance was soon to be offered them.

At ten o'clock that evening the "Albatross" reached the French coast near Dunkirk. The night was rather dark. For a moment they could see the lighthouse at Grisnez cross its electric beam with the lights from Dover on the other side of the strait. Then the "Albatross" flew over the French territory at a mean height of three thousand feet. There was no diminution in her speed. She shot like a rocket over the towns and villages so numerous in northern France. She was flying straight on to Paris, and after Dunkirk came Doullens, Amiens, Creil, Saint Denis. She never left the line; and about midnight she was over the "city of light," which merits its name even when its inhabitants are asleep or ought to be.

By what strange whim was it that she was stopped over the city of Paris? We do not know; but down she came till she was within a few hundred feet of the ground. Robur then came out of his cabin, and the crew came on to the deck to breathe the ambient air.

Uncle Prudent and Phil Evans took care not to miss such an excellent opportunity. They left their deck-house and walked off away from the others so as to be ready at the propitious moment. It was important their action should not be seen.

The "Albatross," like a huge coleopter, glided gently over the mighty city. She took the line of the boulevards, then brilliantly lighted by the Edison lamps. Up to her there floated the rumble of the vehicles as they drove along the streets, and the roll of the trains on the numerous railways that converge into Paris. Then she glided over the highest monuments as if she was going to knock the ball off the Pantheon or the cross off the Invalides. She hovered over the two minarets of the Trocadero and the metal tower of the Champ de Mars, where the enormous reflector was inundating the whole capital with its electric rays.

This aerial promenade, this nocturnal loitering, lasted for about an hour. It was a halt for breath before the voyage was resumed.
And probably Robur wished to give the Parisians the sight of a meteor quite unforeseen by their astronomers. The lamps of the "Albatross" were turned on. Two brilliant sheaves of light shot down and moved along over the squares, the gardens, the palaces, the sixty thousand houses, and swept the space from one horizon to the other.

Assuredly the "Albatross" was seen this time—and not only well seen but heard, for Tom Turner brought out his trumpet and blew a rousing tarantaratara.

At this moment Uncle Prudent leant over the rail, opened his hand, and let his snuff-box fall.

Immediately the "Albatross" shot upwards, and past her, higher still, there mounted the noisy cheering of the crowd then thick on the boulevards—a hurrah of stupefaction to greet the imaginary meteor.

The lamps of the aeronef were turned off, and the darkness and the silence closed in around as the voyage was resumed at the rate of one hundred and twenty miles an hour.

This was all that was to be seen of the French capital. At four o'clock in the morning the "Albatross" had crossed the whole country obliquely; and so as to lose no time in traversing the Alps or the Pyrenees, she flew over the face of Provence to the cape of Antibes. At nine o'clock next morning the San Pietrini assembled on the terrace of St. Peter at Rome were astounded to see her pass over the eternal city. Two hours afterwards she crossed the Bay of Naples and hovered for an instant over the fuliginous wreaths of Vesuvius. Then, after cutting obliquely across the Mediterranean, in the early hours of the afternoon she was signaled by the look-outs at La Goulette on the Tunisian coast.

After America, Asia! After Asia, Europe! More than eighteen thousand miles had this wonderful machine accomplished in less than twenty-three clays!

And now she was off over the known and unknown regions of Africa!

It may be interesting to know what had happened to the famous snuff-box after its fall?

It had fallen in the Rue de Rivoli, opposite No. 200, when the street was deserted. In the morning it was picked up by an honest sweep, who took it to the prefecture of police. There it was at first supposed to be an infernal machine. And it was untied, examined, and opened with care.

Suddenly a sort of explosion took place. It was a terrific sneeze on the part of the inspector.

The document was then extracted from the snuff-box, and to the general surprise, read as follows:

"Messrs. Prudent and Evans, president and secretary of the Weldon Institute, Philadelphia, have been carried off in the aeronef Albatross belonging to Robur the engineer."

"Please inform our friends and acquaintances."

"P. and P. E."

Thus was the strange phenomenon at last explained to the people of the two worlds. Thus was peace given to the scientists of the numerous observatories on the surface of the terrestrial globe.

Chapter XV
A SKIRMISH IN DAHOMEY

At this point in the circumnavigatory voyage of the "Albatross" it is only natural that some such questions as the following should be asked. Who was this Robur, of whom up to the present we know nothing but the name? Did he pass his life in the air? Did his aeronef never rest? Had he not some retreat in some inaccessible spot in which, if he had need of repose or revictualing, he could betake himself? It would be very strange if it were not so. The most powerful flyers have always an eyrie or nest somewhere.

And what was the engineer going to do with his prisoners? Was he going to keep them in his power and condemn them to perpetual aviation? Or was he going to take them on a trip over Africa, South America, Australasia, the Indian Ocean, the Atlantic and the Pacific, to convince them against their will, and then dismiss them with, "And now gentlemen, I hope you will believe a little more in heavier than air?"

To these questions, it is now impossible to reply. They are the secrets of the future. Perhaps the answers will be revealed. Anyhow the bird-like Robur was not seeking his nest on the northern frontier of Africa. By the end of the day he had traversed Tunis from Cape Bon to Cape Carthage, sometimes hovering, and sometimes darting along at top speed. Soon he reached the interior, and flew down the beautiful valley of Medjeida above its yellow stream hidden under its luxuriant bushes of cactus and oleander; and scared away the hundreds of parrots that perch on the telegraph wires and seem to wait for the messages to pass to bear them away beneath their wings.

Two hours after sunset the helm was put up and the "Albatross" bore off to the southeast; and on the morrow, after clearing the Tell Mountains, she saw the rising of the morning star over the sands of the Sahara.

On the 30th of July there was seen from the aeronef the little village of Geryville, founded like Laghouat on the frontier of the desert to facilitate the future conquest of Kabylia. Next, not without difficulty, the peaks of Stillero were passed against a somewhat boisterous wind. Then the desert was crossed, sometimes leisurely over the Ksars
or green oases, sometimes at terrific speed that far outstripped the flight of the vultures. Often the crew had to fire into the flocks of these birds which, a dozen or so at a time, fearlessly hurled them selves on to the aeronef to the extreme terror of Frycollin.

But if the vultures could only reply with cries and blows of beaks and talons, the natives, in no way less savage, were not sparing of their musket-shots, particularly when crossing the Mountain of Sel, whose green and violet slope bore its cape of white. Then the "Albatross" was at last over the grand Sahara; and at once she rose into the higher zones so as to escape from a simoom which was sweeping a wave of ruddy sand along the surface of the ground like a bore on the surface of the sea.

Then the desolate tablelands of Chetka scattered their ballast in blackish waves up to the fresh and verdant valley of Ain-Massin. It is difficult to conceive the variety of the territories which could be seen at one view. To the green hills covered with trees and shrubs there succeeded long gray undulations draped like the folds of an Arab burnous and broken in picturesque masses. In the distance could be seen the wadys with their torrential waters, their forests of palm-trees, and blocks of small houses grouped on a hill around a mosque, among them Metlili, where there vegetates a religious chief, the grand marabout Sidi Chick.

Before night several hundred miles had been accomplished above a flattish country ridged occasionally with large sandhills. If the "Albatross" had halted, she would have come to the earth in the depths of the Wargla oasis hidden beneath an immense forest of palm-trees. The town was clearly enough displayed with its three distinct quarters, the ancient palace of the Sultan, a kind of fortified Kasbah, houses of brick which had been left to the sun to bake, and artesian wells dug in the valley--where the aeronef could have renewed her water supply. But, thanks to her extraordinary speed, the waters of the Hydaspes taken in the vale of Cashmere still filled her tanks in the center of the African desert.

Was the "Albatross" seen by the Arabs, the Mozabites, and the Negroes who share amongst them the town of Wargla? Certainly, for she was saluted with many hundred gunshot, and the bullets fell back before they reached her.

Then came the night, that silent night in the desert of which Felicien David has so poetically told us the secrets. During the following hours the course lay southwesterly, cutting across the routes of El Golea, one of which was explored in 1859 by the intrepid Duveyrier.

The darkness was profound. Nothing could be seen of the Trans-Saharan Railway constructing on the plans of Duponchel--a long ribbon of iron destined to bind together Algiers and Timbaktu by way of Laghouat and Gardaia, and destined eventually to run down into the Gulf of Guinea.

Then the "Albatross" entered the equatorial region below the tropic of Cancer. Six hundred miles from the northern frontier of the Sahara she crossed the route on which Major Laing met his, death in 1846, and crossed the road of the caravans from Morocco to the Sudan, and that part of the desert swept by the Tuaregs, where could be heard what is called "the song of the sand," a soft and plaintive murmur that seems to escape from the ground.

Only one thing happened. A cloud of locusts came flying along, and there fell such a cargo of them on board as to threaten to sink the ship. But all hands set to work to clear the deck, and the locusts were thrown over except a few hundred kept by Tapage for his larder. And he served them up in so succulent a fashion that Frycollin forgot for the moment his perpetual trances and said, "these are as good as prawns."

The aeronef was then eleven hundred miles from the Wargla oasis and almost on the northern frontier of the Sudan. About two o'clock in the afternoon a city appeared in the bend of a large river. The river was the Niger. The city was Timbuktu.

If, up to then, this African Mecca had only been visited by the travelers of the ancient world Batouta, Khazan, Imbert, Mungo Park, Adams, Laing, Caillé, Barth, Lenz, on that day by a most singular chance the two Americans could boast of having seen, heard, and smelt it, on their return to America--if they ever got back there.

Of having seen it, because their view included the whole triangle of three or four miles in circumference; of having heard it, because the day was one of some rejoicing and the noise was terrible; of having smelt it, because the olfactory nerve could not but be very disagreeably affected by the odors of the Youbou-Kamo square, where the meatmarket stands close to the palace of the ancient Somai kings.

The engineer had no notion of allowing the president and secretary of the Weldon Institute to be ignorant that they had the honor of contemplating the Queen of the Sudan, now in the power of the Tuaregs of Taganet.

"Gentlemen, Timbuktu!" he said, in the same tone as twelve days before he had said, "Gentlemen, India!" Then he continued, "Timbuktu is an important city of from twelve to thirteen thousand inhabitants, formerly illustrious in science and art. Perhaps you would like to stay there for a day or two?"

Such a proposal could only have been made ironically. "But," continued he, "it would be dangerous among the Negroes, Berbers, and Foullanes who occupy, it--particularly as our arrival in an aeronef might prejudice them against you."
“Sir,” said Phil Evans, in the same tone, “for the pleasure of leaving you we would willingly risk an unpleasant reception from the natives. Prison for prison, we would rather be in Timbuktu than on the "Albatross."

"That is a matter of taste," answered the engineer. "Anyhow, I shall not try the adventure, for I am responsible for the safety of the guests who do me the honor to travel with me."

"And so," said Uncle Prudent, explosively, "you are not content with being our jailer, but you insult us."

"Oh! a little irony, that is all!"

"Are there any weapons on board?"

"Oh, quite an arsenal."

"Two revolvers will do, if I hold one and you the other."

"A duel!" exclaimed Robur, "a duel, which would perhaps cause the death of one of us."

"Which certainly would cause it."

"Well! No, Mr. President of the Weldon Institute, I very much prefer keeping you alive."

"To be sure of living yourself. That is wise."

"Wise or not, it suits me. You are at liberty to think as you like, and to complain to those who have the power to help you--if you can."

"And that we have done, Mr. Robur."

"Indeed!"

"Was it so difficult when we were crossing the inhabited part of Europe to drop a letter overboard?"

"Did you do that?" said Robur, in a paroxysm of rage.

"And if we have done it?"

"If you have done it--you deserve--"

"What, sir?"

"To follow your letter overboard."

"Throw us over, then. We did do it."

Robur stepped towards them. At a gesture from him Tom Turner and some of the crew ran up. The engineer was seriously tempted to put his threat into execution, and, fearful perhaps of yielding to it, he precipitately rushed into his cabin.

"Good!" exclaimed Phil Evans.

"And what he will dare not do," said Uncle Prudent, "I Will do! Yes, I Will do!"

At the moment the population of Timbuktu were crowding onto the squares and roads and the terraces built like amphitheaters. In the rich quarters of Sankere and Sarahama, as in the miserable huts at Raguidi, the priests from the minarets were thundering their loudest maledictions against the aerial monster. These were more harmless than the rifle-bullets; though assuredly, if the aeronef had come to earth she would have certainly been torn to pieces.

For some miles noisy flocks of storks, francolins, and ibises escorted the "Albatross" and tried to race her, but in her rapid flight she soon distanced them.

The evening came. The air was troubled by the roarings of the numerous herds of elephants and buffaloes which wander over this land, whose fertility is simply marvelous. For forty-eight hours the whole of the region between the prime meridian and the second degree, in the bend of the Niger, was viewed from the "Albatross."

If a geographer had only such an apparatus at his command, with what facility could he map the country, note the elevations, fix the courses of the rivers and their affluents, and determine the positions of the towns and villages! There would then be no huge blanks on the map of Africa, no dotted lines, no vague designations which are the despair of cartographers.

In the morning of the 11th the "Albatross" crossed the mountains of northern Guinea, between the Sudan and the gulf which bears their name. On the horizon was the confused outline of the Kong mountains in the kingdom of Dahomey.

Since the departure from Timbuktu Uncle Prudent and Phil Evans noticed that the course had been due south. If that direction was persisted in they would cross the equator in six more degrees. The "Albatross" would then abandon the continents and fly not over the Bering Sea, or the Caspian Sea, or the North Sea, or the Mediterranean, but over the Atlantic Ocean.

This look-out was not particularly pleasing to the two friends, whose chances of escape had sunk to below zero. But the "Albatross" had slackened speed as though hesitating to leave Africa behind. Was Robur thinking of going back? No; but his attention had been particularly attracted to the country which he was then crossing.

We know--and he knew--that the kingdom of Dahomey is one of the most powerful on the West Coast of Africa. Strong enough to hold its own with its neighbor Ashantee, its area is somewhat small, being contained within three hundred and sixty leagues from north to south, and one hundred and eighty from east to west. But its population numbers some seven or eight hundred thousand, including the neighboring independent territories of Whydah and
Ardrah.

If Dahomey is not a large country, it is often talked about. It is celebrated for the frightful cruelties which signalize its annual festivals, and by its human sacrifices--fearful hecatombs intended to honor the sovereign it has lost and the sovereign who has succeeded him. It is even a matter of politeness when the King of Dahomey receives a visit from some high personage or some foreign ambassador to give him a surprise present of a dozen heads, cut off in his honor by the minister of justice, the "minghan," who is wonderfully skilled in that branch of his duties.

When the "Albatross" came flying over Dahomey, the old King Bahadou had just died, and the whole population was proceeding to the enthronization of his successor. Hence there was great agitation all over the country, and it did not escape Robur that everybody was on the move.

Long lines of Dahomians were hurrying along the roads from the country into the capital, Abomey. Well kept roads radiating among vast plains clothed with giant trees, immense fields of manioc, magnificent forests of palms, cocoa-trees, mimosas, orange-trees, mango-trees--such was the country whose perfumes mounted to the "Albatross," while many parrots and cardinals swarmed among the trees.

The engineer, leaning over the rail, seemed deep in thought, and exchanged but a few words with Tom Turner. It did not look as though the "Albatross" had attracted the attention of those moving masses, which were often invisible under the impenetrable roof of trees. This was doubtless due to her keeping at a good altitude amid a bank of light cloud.

About eleven o'clock in the morning the capital was sighted, surrounded by its walls, defended by a fosse measuring twelve miles round, with wide, regular streets on the flat plain, and a large square on the northern side occupied by the king's palace. This huge collection of buildings is commanded by a terrace not far from the place of sacrifice. During the festival days it is from this high terrace that they throw the prisoners tied up in wicker baskets, and it can be imagined with what fury these unhappy wretches are cut in pieces.

In one of the courtyards which divide the king's palace there were drawn up four thousand warriors, one of the contingents of the royal army--and not the least courageous one. If it is doubtful if there are any Amazons an the river of that name, there is no doubt of there being Amazons at Dahomey. Some have a blue shirt with a blue or red scarf, with white-and-blue striped trousers and a white cap; others, the elephant-huntresses, have a heavy carbine, a short-bladed dagger, and two antelope horns fixed to their heads by a band of iron. The artillery-women have a blue-and-red tunic, and, as weapons, blunderbusses and old cast cannons; and another brigade, consisting of vestal virgins, pure as Diana, have blue tunics and white trousers. If we add to these Amazons, five or six thousand men in cotton drawers and shirts, with a knotted tuft to increase their stature, we shall have passed in review the Dahomian army.

Abomey on this day was deserted. The sovereign, the royal family, the masculine and feminine army, and the population had all gone out of the capital to a vast plain a few miles away surrounded by magnificent forests.

On this plain the recognition of the new king was to take place. Here it was that thousands of prisoners taken during recent razzias were to be immolated in his honor.

It was about two o'clock when the "Albatross" arrived over the plain and began to descend among the clouds which still hid her from the Dahomians.

There were sixteen thousand people come from all parts of the kingdom, from Whydah, and Kerapay, and Ardrah, and Tombory, and the most distant villages.

The new king--a sturdy fellow named Bou-Nadi--some five-and-twenty years old, was seated on a hillock shaded by a group of wide-branched trees. Before him stood his male army, his Amazons, and his people.

At the foot of the mound fifty musicians were playing on their barbarous instruments, elephants' tusks giving forth a husky note, deerskin drums, calabashes, guitars, bells struck with an iron clapper, and bamboo flutes, whose shrill whistle was heard over all. Every other second came discharges of guns and blunderbusses, discharges of cannons with the carriages jumping so as to imperil the lives of the artillery-women, and a general uproar so intense that even the thunder would be unheard amidst it.

In one corner of the plain, under a guard of soldiers, were grouped the prisoners destined to accompany the defunct king into the other world. At the obsequies of Ghozo, the father of Bahadou, his son had dispatched three thousand, and Bou-Nadi could not do less than his predecessor. For an hour there was a series of discourses, harangues, palavers and dances, executed not only by professionals, but by the Amazons, who displayed much martial grace.

But the time for the hecatomb was approaching. Robur, who knew the customs of Dahomey, did not lose sight of the men, women, and children reserved for butchery.

The minghan was standing at the foot of the hillock. He was brandishing his executioner's sword, with its curved blade surmounted by a metal bird, whose weight rendered the cut more certain.

This time he was not alone. He could not have performed the task. Near him were grouped a hundred executioners, all accustomed to cut off heads at one blow.
The "Albatross" came slowly down in an oblique direction. Soon she emerged from the bed of clouds which hid her till she was within three hundred feet of the ground, and for the first time she was visible from below.

Contrary to what had hitherto happened, the savages saw in her a celestial being come to render homage to King Baha-dou. The enthusiasm was indescribable, the shouts were interminable, the prayers were terrific—prayers addressed to this supernatural hippogriff, which "had doubtless come to" take the king's body to the higher regions of the Dahomian heaven. And now the first head fell under the minghan's sword, and the prisoners were led up in hundreds before the horrible executioners.

Suddenly a gun was fired from the "Albatross." The minister of justice fell dead on his face!

"Well aimed, Tom!" said Robur,

His comrades, armed as he was, stood ready to fire when the order was given.

But a change came over the crowd below. They had understood. The winged monster was not a friendly spirit, it was a hostile spirit. And after the fall of the minghan loud shouts for revenge arose on all sides. Almost immediately a fusillade resounded over the plain.

These menaces did not prevent the "Albatross" from descending boldly to within a hundred and fifty feet of the ground. Uncle Prudent and Phil Evans, whatever were their feelings towards Robur, could not help joining him in such a work of humanity.

"Let us free the prisoners!" they shouted.

"That is what I am going to do!" said the engineer.

And the magazine rifles of the "Albatross" in the hands of the colleagues, as in the hands of the crew, began to rain down the bullets, of which not one was lost in the masses below. And the little gun shot forth its shrapnel, which really did marvels.

The prisoners, although they did not understand how the help had come to them, broke their bonds, while the soldiers were firing at the aeronef. The stern screw was shot through by a bullet, and a few holes were made in the hull. Frycollin, crouching in his cabin, received a graze from a bullet that came through the deck-house.

"Ah! They will have them!" said Tom Turner. And, rushing to the magazine, he returned with a dozen dynamite cartridges, which he distributed to the men. At a sign from Robur, these cartridges were fired at the hillock, and as they reached the ground exploded like so many small shells.

The king and his court and army and people were stricken with fear at the turn things had taken. They fled under the trees, while the prisoners ran off without anybody thinking of pursuing them.

In this way was the festival interfered with. And in this way did Uncle Prudent and, Phil Evans recognize the power of the aeronef and the services it could render to humanity.

Soon the "Albatross" rose again to a moderate height, and passing over Whydah lost to view this savage coast which the southwest wind hems round with an inaccessible surf. And she flew out over the Atlantic.

Chapter XVI

OVER THE ATLANTIC

Yes, the Atlantic! The fears of the two colleagues were realized; but it did not seem as though Robur had the least anxiety about venturing over this vast ocean. Both he and his men seemed quite unconcerned about it and had gone back to their stations.

Whither was the "Albatross" bound? Was she going more than round the world as Robur had said? Even if she were, the voyage must end somewhere. That Robur spent his life in the air on board the aeronef and never came to the ground was impossible. How could he make up his stock of provisions and the materials required for working his machines? He must have some retreat, some harbor of refuge—in some unknown and inaccessible spot where the "Albatross" could revictual. That he had broken off all connections with the inhabitants of the land might be true, but with every point on the surface of the earth, certainly not.

That being the case, where was this point? How had the engineer come to choose it? Was he expected by a little colony of which he was the chief? Could he there find a new crew?

What means had he that he should be able to build so costly a vessel as the "Albatross" and keep her building secret? It is true his living was not expensive. But, finally, who was this Robur? Where did he come from? What had been his history? Here were riddles impossible to solve; and Robur was not the man to assist willingly in their solution.

It is not to be wondered at that these insoluble problems drove the colleagues almost to frenzy. To find themselves whipped off into the unknown without knowing what the end might be doubting even if the adventure would end, sentenced to perpetual aviation, was this not enough to drive the President and secretary of the Weldon Institute to extremities?
Meanwhile the "Albatross" drove along above the Atlantic, and in the morning when the sun rose there was nothing to be seen but the circular line where earth met sky. Not a spot of land was insight in this huge field of vision. Africa had vanished beneath the northern horizon.

When Frycollin ventured out of his cabin and saw all this water beneath him, fear took possession of him. Of the hundred and forty-five million square miles of which the area of the world's waters consists, the Atlantic claims about a quarter; and it seemed as though the engineer was in no hurry to cross it. There was now no going at full speed, none of the hundred and twenty miles an hour at which the "Albatross" had flown over Europe. Here, where the southwest winds prevail, the wind was ahead of them, and though it was not very strong, it would not do to defy it and the "Albatross" was sent along at a moderate speed, which, however, easily outstripped that of the fastest mail-boat.

On the 13th of July she crossed the line, and the fact was duly announced to the crew. It was then that Uncle Prudent and Phil Evans ascertained that they were bound for the southern hemisphere. The crossing of the line took place without any of the Neptunian ceremonies that still linger on certain ships. Tapage was the only one to mark the event, and he did so by pouring a pint of water down Frycollin's neck.

On the 18th of July, when beyond the tropic of Capricorn, another phenomenon was noticed, which would have been somewhat alarming to a ship on the sea. A strange succession of luminous waves widened out over the surface of the ocean with a speed estimated at quite sixty miles an hour. The waves ran along at about eight feet from one another, tracing two furrows of light. As night fell a bright reflection rose even to the "Albatross," so that she might have been taken for a flaming aerolite. Never before had Robur sailed on a sea of fire--fire without heat--which there was no need to flee from as it mounted upwards into the sky.

The cause of this light must have been electricity; it could not be attributed to a bank of fish spawn, nor to a crowd of those animalculae that give phosphorescence to the sea, and this showed that the electrical tension of the atmosphere was considerable.

In the morning an ordinary ship would probably have been lost. But the "Albatross" played with the winds and waves like the powerful bird whose name she bore. If she did not walk on their surface like the petrels, she could like the eagles find calm and sunshine in the higher zones.

They had now passed the forty-seventh parallel. The day was but little over seven hours long, and would become even less as they approached the Pole.

About one o'clock in the afternoon the "Albatross" was floating along in a lower current than usual, about a hundred feet from the level of the sea. The air was calm, but in certain parts of the sky were thick black clouds, massed in mountains, on their upper surface, and ruled off below by a sharp horizontal line. From these clouds a few lengthy protuberances escaped, and their points as they fell seemed to draw up hills of foaming water to meet them.

Suddenly the water shot up in the form of a gigantic hourglass, and the "Albatross" was enveloped in the eddy of an enormous waterspout, while twenty others, black as ink, raged around her. Fortunately the gyroratory movement of the water was opposite to that of the suspensory screws, otherwise the aeronef would have been hurled into the sea. But she began to spin round on herself with frightful rapidity. The danger was immense, and perhaps impossible to escape, for the engineer could not get through the spout which sucked him back in defiance of his propellers. The men, thrown to the ends of the deck by centrifugal force, were grasping the rail to save themselves from being shot off.

"Keep cool!" shouted Robur.

They wanted all their coolness, and their patience, too. Uncle Prudent and Phil Evans, who had just come out of their cabin, were hurled back at the risk of flying overboard. As she spun the "Albatross" was carried along by the spout, which pirouetted along the waves with a speed enough to make the helices jealous. And if she escaped from the spout she might be caught by another, and jerked to pieces with the shock.

"Get the gun ready!" said Robur.

The order was given to Tom Turner, who was crouching behind the swivel amidships where the effect of the centrifugal force was least felt. He understood. In a moment he had opened the breech and slipped a cartridge from the ammunition-box at hand. The gun went off, and the waterspouts collapsed, and with them vanished the platform of cloud they seemed to bear above them.

"Nothing broken on board?" asked Robur.

"No," answered Tom Turner. "But we don't want to have another game of humming-top like that!"

For ten minutes or so the "Albatross" had been in extreme peril. Had it not been for her extraordinary strength of build she would have been lost.

During this passage of the Atlantic many were the hours whose monotony was unbroken by any phenomenon whatever. The days grew shorter and shorter, and the cold became keen. Uncle Prudent and Phil Evans saw little of Robur. Seated in his cabin, the engineer was busy laying out his course and marking it on his maps, taking his
observations whenever he could, recording the readings of his barometers, thermometers, and chronometers, and
making full entries in his log-book.

The colleagues wrapped themselves well up and eagerly watched for the sight of land to the southward. At Uncle
Prudent's request Frycollin tried to pump the cook as to whither the engineer was bound, but what reliance could be
placed on the information given by this Gascon? Sometimes Robur was an ex-minister of the Argentine Republic,
sometimes a lord of the Admiralty, sometimes an ex-President of the United States, sometimes a Spanish general
temporarily retired, sometimes a Viceroy of the Indies who had sought a more elevated position in the air. Sometimes
he possessed millions, thanks to successful razzias in the aeronef, and he had been proclaimed for piracy. Sometimes
he had been ruined by making the aeronef, and had been forced to fly aloft to escape from his creditors. As to
knowing if he were going to stop anywhere, no! But if he thought of going to the moon, and found there a
convenient anchorage, he would anchor there! "Eh! Fry! My boy! That would just suit you to see what was going on
up there."

"I shall not go! I refuse!" said the Negro, who took all these things seriously.

"And why, Fry, why? You might get married to some pretty bouncing Lunarian!"

Frycollin reported this conversation to his master, who saw it was evident that nothing was to be learnt about
Robur. And so he thought still more of how he could have his revenge on him.

"Phil," said he one day, "is it quite certain that escape is impossible?"

"Impossible."

"Be it so! But a man is always his own property; and if necessary, by sacrificing his life--"

"If we are to make that sacrifice," said Phil Evans, "the sooner the better. It is almost time to end this. Where is
the "Albatross" going? Here we are flying obliquely over the Atlantic, and if we keep on we shall get to the coast of
Patagonia or Tierra del Fuego. And what are we to do then? Get into the Pacific, or go to the continent at the South
Pole? Everything is possible with this Robur. We shall be lost in the end. It is thus a case of legitimate self-defence,
and if we must perish--"

"Which we shall not do," answered Uncle Prudent, "without being avenged, without annihilating this machine
and all she carries."

The colleagues had reached a stage of impotent fury, and were prepared to sacrifice themselves if they could
only destroy the inventor and his secret. A few months only would then be the life of this prodigious aeronef, of
whose superiority in aerial locomotion they had such convincing proofs! The idea took such hold of them that they
thought of nothing else but how to put it into execution. And how? By seizing on some of the explosives on board
and simply blowing her up. But could they get at the magazines?

Fortunately for them, Frycollin had no suspicion of their scheme. At the thought of the "Albatross" exploding in
midair, he would not have shrunk from betraying his master.

It was on the 23rd of July that the land reappeared in the southwest near Cape Virgins at the entrance of the
Straits of Magellan. Under the fifty-second parallel at this time of year the night was eighteen hours long and the
temperature was six below freezing.

At first the "Albatross," instead of keeping on to the south, followed the windings of the coast as if to enter the
Pacific. After passing Lomas Bay, leaving Mount Gregory to the north and the Brecknocks to the west, they sighted
Puerto Arena, a small Chilean village, at the moment the churchbells were in full swing; and a few hours later they
were over the old settlement at Port Famine.

If the Patagonians, whose fires could be seen occasionally, were really above the average in stature, the
passengers in the aeronef were unable to say, for to them they seemed to be dwarfs. But what a magnificent
landscape opened around during these short hours of the southern day! Rugged mountains, peaks eternally capped
with snow, with thick forests rising on their flanks, inland seas, bays deep set amid the peninsulas, and islands of the
Archipelago. Clarence Island, Dawson Island, and the Land of Desolation, straits and channels, capes and
promontories, all in inextricable confusion, and bound by the ice in one solid mass from Cape Forward, the most
southerly point of the American continent, to Cape Horn the most southerly point of the New World.

When she reached Fort Famine the "Albatross" resumed her course to the south. Passing between Mount Tam on
the Brunswick Peninsula and Mount Graves, she steered for Mount Sarmiento, an enormous peak wrapped in snow,
which commands the Straits of Magellan, rising six thousand four hundred feet from the sea. And now they were
over the land of the Fuegians, Tierra del Fuego, the land of fire. Six months later, in the height of summer, with days
from fifteen to sixteen hours long, how beautiful and fertile would most of this country be, particularly in its
northern portion! Then, all around would be seen valleys and pasturages that could form the feeding-grounds of
thousands of animals; then would appear virgin forests, gigantic trees—birches, beeches, ash-trees, cypresses, tree-
ferns—and broad plains overrun by herds of guanacos, vicunas, and ostriches. Now there were armies of penguins
and myriads of birds; and, when the "Albatross" turned on her electric lamps the guillemots, ducks, and geese came
crowding on board enough to fill Tapage's larder a hundred times and more.

Here was work for the cook, who knew how to bring out the flavor of the game and keep down its peculiar oiliness. And here was work for Frycollin in plucking dozen after dozen of such interesting feathered friends.

That day, as the sun was setting about three o'clock in the afternoon, there appeared in sight a large lake framed in a border of superb forest. The lake was completely frozen over, and a few natives with long snowshoes on their feet were swiftly gliding over it.

At the sight of the "Albatross," the Fuegians, overwhelmed with terror--scattered in all directions, and when they could not get away they hid themselves, taking, like the animals, to the holes in the ground.

The "Albatross" still held her southerly course, crossing the Beagle Channel, and Navarin Island and Wollaston Island, on the shores of the Pacific. Then, having accomplished 4,700 miles since she left Dahomey, she passed the last islands of the Magellan archipelago, whose most southerly outpost, lashed by the everlasting surf, is the terrible Cape Horn.

Chapter XVII
THE SHIPWRECKED CREW

Next day was the 24th of July; and the 24th of July in the southern hemisphere corresponds to the 24th of January in the northern. The fifty-sixth degree of latitude had been left behind. The similar parallel in northern Europe runs through Edinburgh.

The thermometer kept steadily below freezing, so that the machinery was called upon to furnish a little artificial heat in the cabins. Although the days begin to lengthen after the 21st day of June in the southern hemisphere, yet the advance of the "Albatross" towards the Pole more than neutralized this increase, and consequently the daylight became very short. There was thus very little to be seen. At night time the cold became very keen; but as there was no scarcity of clothing on board, the colleagues, well wrapped up, remained a good deal on deck thinking over their plans of escape, and watching for an opportunity. Little was seen of Robur; since the high words that had been exchanged in the Timbuktu country, the engineer had left off speaking to his prisoners. Frycollin seldom came out of the cook-house, where Tapage treated him most hospitably, on condition that he acted as his assistant. This position was not without its advantages, and the Negro, with his master's permission, very willingly accepted it. Shut up in the galley, he saw nothing of what was passing outside, and might even consider himself beyond the reach of danger. He was, in fact, very like the ostrich, not only in his stomach, but in his folly.

But whither went the "Albatross?" Was she in mid-winter bound for the southern seas or continents round the Pole? In this icy atmosphere, even granting that the elements of the batteries were unaffected by such frost, would not all the crew succumb to a horrible death from the cold? That Robur should attempt to cross the Pole in the warm season was bad enough, but to attempt such a thing in the depth of the winter night would be the act of a madman.

Thus reasoned the President and Secretary of the Weldon Institute, now they had been brought to the end of the continent of the New World, which is still America, although it does not belong to the United States.

What was this intractable Robur going to do? Had not the time arrived for them to end the voyage by blowing up the ship?

It was noticed that during the 24th of July the engineer had frequent consultations with his mate. He and Tom Turner kept constant watch on the barometer--not so much to keep themselves informed of the height at which they were traveling as to be on the look-out for a change in the weather. Evidently some indications had been observed of which it was necessary to make careful note.

Uncle Prudent also remarked that Robur had been taking stock of the provisions and stores, and everything seemed to show that he was contemplating turning back.

"Turning back!" said Phil Evans. "But where to?"

"Where he can reprovision the ship," said Uncle Prudent.

"That ought to be in some lonely island in the Pacific with a colony of scoundrels worthy of their chief."

"That is what I think. I fancy he is going west, and with the speed he can get up it would not take him long to get home."

"But we should not be able to put our plan into execution. If we get there--"

"We shall not get there!"

The colleagues had partly guessed the engineer's intentions. During the day it became no longer doubtful that when the "Albatross" reached the confines of the Antarctic Sea her course was to be changed. When the ice has formed about Cape Horn the lower regions of the Pacific are covered with icefields and icebergs. The floes then form an impenetrable barrier to the strongest ships and the boldest navigators. Of course, by increasing the speed of her wings the "Albatross" could clear the mountains of ice accumulated on the ocean as she could the mountains of
earth on the polar continent—if it is a continent that forms the cap of the southern pole. But would she attempt it in the middle of the polar night, in an atmosphere of sixty below freezing?

After she had advanced about a hundred miles to the south the "Albatross" headed westerly, as if for some unknown island of the Pacific. Beneath her stretched the liquid plain between Asia and America. The waters now had assumed that singular color which has earned for them the name of the Milky Sea. In the half shadow, which the enfeebled rays of the sun were unable to dissipate, the surface of the Pacific was a milky white. It seemed like a vast snowfield, whose undulations were imperceptible at such a height. If the sea had been solidified by the cold, and converted into an immense icefield, its aspect could not have been much different. They knew that the phenomenon was produced by myriads of luminous particles of phosphorescent corpuscles; but it was surprising to come across such an opalescent mass beyond the limits of the Indian Ocean.

Suddenly the barometer fell after keeping somewhat high during the earlier hours of the day. Evidently the indications were such as a shipmaster might feel anxious at, though the master of an aeronef might despise them. There was every sign that a terrible storm had recently raged in the Pacific.

It was one o'clock in the afternoon when Tom Turner came up to the engineer and said, "Do you see that black spot on the horizon, sir—there away to due north of us? That is not a rock?"

"No, Tom; there is no land out there."

"Then it must be a ship or a boat."

Uncle Prudent and Phil Evans, who were in the bow, looked in the direction pointed out by the mate.

Robur asked for the glass and attentively observed the object.

"It is a boat," said he, "and there are some men in it."

"Shipwrecked?" asked Tom.

"Yes! They have had to abandon their ship, and, knowing nothing of the nearest land, are perhaps dying of hunger and thirst! Well, it shall not be said that the "Albatross" did not come to their help!"

The orders were given, and the aeronef began to sink towards the sea. At three hundred yards from it the descent was stopped, and the propellers drove ahead full speed towards the north.

It was a boat. Her sail flapped against the mast as she rose and fell on the waves. There was no wind, and she was making no progress. Doubtless there was no one on board with strength enough left to work the oars. In the boat were five men asleep or helpless, if they were not dead.

The "Albatross" had arrived above them, and slowly descended. On the boat's stern was the name of the ship to which she belonged—the "Jeannette" of Nantes.

"Hallo, there!" shouted Turner, loud enough for the men to hear, for the boat was only eighty feet below him.

There was no answer. "Fire a gun!" said Robur.

The gun was fired and the report rang out over the sea.

One of the men looked up feebly. His eyes were haggard and his face was that of a skeleton. As he caught sight of the "Albatross" he made a gesture as of fear.

"Don't be afraid," said Robur in French, "we have come to help you. Who are you?"

"We belong to the barque "Jeannette," and I am the mate. We left her a fortnight ago as she was sinking. We have no water and no food."

The four other men had now sat up. Wan and exhausted, in a terrible state of emaciation, they lifted their hands towards the "Albatross."

"Look-out!" shouted Robur.

A line was let down, and a pail of fresh water was lowered into the boat. The men snatched at it and drank it with an eagerness awful to see.

"Bread, bread!" they exclaimed.

Immediately a basket with some food and five pints of coffee descended towards them. The mate with difficulty restrained them in their ravenousness.

"Where are we?" asked the mate at last.

"Fifty miles from the Chili coast and the Chonos Archipelago," answered Robur.

"Thanks. But we are becalmed, and—?"

"We are going to tow you."

"Who are you?"

"People who are glad to be of assistance to you," said Robur.

The mate understood that the incognito was to be respected. But had the flying machine sufficient power to tow them through the water?

Yes; and the boat, attached to a hundred feet of rope, began to move off towards the east. At ten o'clock at night the land was sighted—or rather they could see the lights which indicated its position. This rescue from the sky had
come just in time for the survivors of the "Jeannette," and they had good reason to believe it miraculous.

When they had been taken to the mouth of the channel leading among the Chonos Islands, Robur shouted to them to cast off the tow-line. This, with many a blessing to those who had saved them, they did, and the "Albatross" headed out to the offing.

Certainly there was some good in this aeronef, which could thus help those who were lost at sea! What balloon, perfect as it might be, would be able to perform such a service? And between themselves Uncle Prudent and Phil Evans could not but admire it, although they were quite disposed to deny the evidence of their senses.

Chapter XVIII
OVER THE VOLCANO

The sea was as rough as ever, and the symptoms became alarming. The barometer fell several millimeters. The wind came in violent gusts, and then for a moment or so failed altogether. Under such circumstances a sailing vessel would have had to reef in her topsails and her foresail. Everything showed that the wind was rising in the northwest. The storm-glass became much troubled and its movements were most disquieting.

At one o'clock in the morning the wind came on again with extreme violence. Although the aeronef was going right in its teeth she was still making progress at a rate of from twelve to fifteen miles an hour. But that was the utmost she could do.

Evidently preparations must be made for a cyclone, a very rare occurrence in these latitudes. Whether it be called a hurricane, as in the Atlantic, a typhoon, as in Chinese waters a simoom, as in the Sahara, or a tornado, as on the western coast, such a storm is always a gyratory one, and most dangerous for any ship caught in the current which increases from the circumference to the center, and has only one spot of calm, the middle of the vortex.

Robur knew this. He also knew it was best to escape from the cyclone and get beyond its zone of attraction by ascending to the higher strata. Up to then he had always succeeded in doing this, but now he had not an hour, perhaps not a minute, to lose.

In fact the violence of the wind sensibly increased. The crests of the waves were swept off as they rose and blown into white dust on the surface of the sea. It was manifest that the cyclone was advancing with fearful velocity straight towards the regions of the pole.

"Higher!" said Robur.

"Higher it is," said Tom Tumor.

An extreme ascensional power was communicated to the aeronef, and she shot up slantingly as if she was traveling on a plane sloping downwards from the southwest. Suddenly the barometer fell more than a dozen millimeters and the "Albatross" paused in her ascent.

What was the cause of the stoppage? Evidently she was pulled back by the air; some formidable current had diminished the resistance to the screws. When a steamer travels upstream more work is got out of her screw than when the water is running between the blades. The recoil is then considerable, and may perhaps be as great as the current. It was thus with the "Albatross" at this moment.

But Robur was not the man to give in. His seventy-four screws, working perfectly together, were driven at their maximum speed. But the aeronef could not escape; the attraction of the cyclone was irresistible. During the few moments of calm she began to ascend, but the heavy pull soon drew her back, and she sunk like a ship as she founders.

Evidently if the violence of the cyclone went on increasing the "Albatross" would be but as a straw caught in one of those whirlwinds that root up the trees, carry off roofs, and blow down walls.

Robur and Tom could only speak by signs. Uncle Prudent and Phil Evans clung to the rail and wondered if the cyclone was not playing their game in destroying the aeronef and with her the inventor--and with the inventor the secret of his invention.

But if the "Albatross" could not get out of the cyclone vertically could she not do something else? Could she not gain the center, where it was comparatively calm, and where they would have more control over her? Quite so, but to do this she would have to break through the circular currents which were sweeping her round with them. Had she sufficient mechanical power to escape through them?

Suddenly the upper part of the cloud fell in. The vapor condensed in torrents of rain. It was two o'clock in the morning. The barometer, oscillating over a range of twelve millimeters, had now fallen to 27.91, and from this something should be taken on account of the height of the aeronef above the level of the sea.

Strange to say, the cyclone was out of the zone to which such storms are generally restricted, such zone being bounded by the thirtieth parallel of north latitude and the twenty-sixth parallel of south latitude. This may perhaps explain why the eddying storm suddenly turned into a straight one. But what a hurricane! The tempest in
Connecticut on the 22nd of March, 1882, could only have been compared to it, and the speed of that was more than three hundred miles an hour.

The "Albatross" had thus to fly before the wind or rather she had to be left to be driven by the current, from which she could neither mount nor escape. But in following this unchanging trajectory she was bearing due south, towards those polar regions which Robur had endeavored to avoid. And now he was no longer master of her course; she would go where the hurricane took her.

Tom Turner was at the helm, and it required all his skill to keep her straight. In the first hours of the morning--if we can so call the vague tint which began to rise over the horizon--the "Albatross" was fifteen degrees below Cape Horn; twelve hundred miles more and she would cross the antarctic circle. Where she was, in this month of July, the night lasted nineteen hours and a half. The sun's disk--without warmth, without light--only appeared above the horizon to disappear almost immediately. At the pole the night lengthened into one of a hundred and seventy-nine hours. Everything showed that the "Albatross" was about to plunge into an abyss.

During the day an observation, had it been possible, would have given 66° 40' south latitude. The aeronef was within fourteen hundred miles of the pole.

Irresistibly was she drawn towards this inaccessible corner of the globe, her speed eating up, so to speak, her weight, although she weighed less than before, owing to the flattening of the earth at the pole. It seemed as though she could have dispensed altogether with her suspensory screws. And soon the fury of the storm reached such a height that Robur thought it best to reduce the speed of her helices as much as possible, so as to avoid disaster. And only enough speed was given to keep the aeronef under control of the rudder.

Amid these dangers the engineer retained his imperturbable coolness, and the crew obeyed him as if their leader's mind had entered into them. Uncle Prudent and Phil Evans had not for a moment left the deck; they could remain without being disturbed. The air made but slight resistance. The aeronef was like an aerostat, which drifts with the fluid masses in which it is plunged.

Is the domain of the southern pole a continent or an archipelago? Or is it a palaeocrystic sea, whose ice melts not even during the long summer? We know not. But what we do know is that the southern pole is colder than the northern one--a phenomenon due to the position of the earth in its orbit during winter in the antarctic regions.

During this day there was nothing to show that the storm was abating. It was by the seventy-fifth meridian to the west that the "Albatross" crossed into the circumpolar region. By what meridian would she come out--if she ever came out?

As she descended more to the south the length of the day diminished. Before long she would be plunged in that continuous night which is illuminated only by the rays of the moon or the pale streamers of the aurora. But the moon was then new, and the companions of Robur might see nothing of the regions whose secret has hitherto defied human curiosity. There was not much inconvenience on board from the cold, for the temperature was not nearly so low as was expected.

It seemed as though the hurricane was a sort of Gulf Stream, carrying a certain amount of heat along with it.

Great was the regret that the whole region was in such profound obscurity. Even if the moon had been in full glory but few observations could have been made. At this season of the year an immense curtain of snow, an icy carapace, covers up the polar surface. There was none of that ice "blink" to be seen, that whitish tint of which the reflection is absent from dark horizons. Under such circumstances, how could they distinguish the shape of the ground, the extent of the seas, the position of the islands? How could they recognize the hydrographic network of the country or the orographic configuration, and distinguish the hills and mountains from the icebergs and floes?

A little after midnight an aurora illuminated the darkness. With its silver fringes and spangles radiating over space, it seemed like a huge fan open over half the sky. Its farthest electric effluences were lost in the Southern Cross, whose four bright stars were gleaming overhead. The phenomenon was one of incomparable magnificence, and the light showed the face of the country as a confused mass of white.

It need not be said that they had approached so near to the pole that the compass was constantly affected, and gave no precise indication of the course pursued. Its inclination was such that at one time Robur felt certain they were passing over the magnetic pole discovered by Sir James Ross. And an hour later, in calculating the angle the needle made with the vertical, he exclaimed: "the South Pole is beneath us!"

A white cap appeared, but nothing could be seen of what it bid under its ice.

A few minutes afterwards the aurora died away, and the point where all the world's meridians cross is still to be discovered.

If Uncle Prudent and Phil Evans wished to bury in the most mysterious solitudes the aeronef and all she bore, the moment was propitious. If they did not do so it was doubtless because the explosive they required was still denied to them.

The hurricane still raged and swept along with such rapidity that had a mountain been met with the aeronef
would have been dashed to pieces like a ship on a lee shore. Not only had the power gone to steer her horizontally, but the control of her elevation had also vanished.

And it was not unlikely that mountains did exist in these antarctic lands. Any instant a shock might happen which would destroy the "Albatross." Such a catastrophe became more probable as the wind shifted more to the east after they passed the prime meridian. Two luminous points then showed themselves ahead of the "Albatross." There were the two volcanos of the Ross Mountains--Erebus and Terror. Was the "Albatross" to be shriveled up in their flames like a gigantic butterfly?

An hour of intense excitement followed. One of the volcanoes, Erebus, seemed to be rushing at the aeronef, which could not move from the bed of the hurricane. The cloud of flame grew as they neared it. A network of fire barred their road. A brilliant light shone round over all. The figures on board stood out in the bright light as if come from another world. Motionless, without a sound or a gesture, they waited for the terrible moment when the furnace would wrap them in its fires.

But the storm that bore the "Albatross" saved them from such a fearful fate. The flames of Erebus were blown down by the hurricane as it passed, and the "Albatross" flew over unhurt. She swept through a hail of ejected material, which was fortunately kept at bay by the centrifugal action of the suspensory screws. And she harmlessly passed over the crater while it was in full eruption.

An hour afterwards the horizon hid from their view the two colossal torches which light the confines of the world during the long polar night.

At two o'clock in the morning Balleny Island was sighted on the coast of Discovery Land, though it could not be recognized owing to its being bound to the mainland by a cement of ice.

And the "Albatross" emerged from the polar circle on the hundred and seventy-fifth meridian. The hurricane had carried her over the icebergs and ice floes, against which she was in danger of being dashed a hundred times or more. She was not in the hands of the helmsman, but in the hand of God--and God is a good pilot.

The aeronef sped along to the north, and at the sixtyieth parallel the storm showed signs of dying away. Its violence sensibly diminished. The "Albatross" began to come under control again. And, what was a great comfort, had again entered the lighted regions of the globe; and the day reappeared about eight o'clock in the morning.

Robur had been carried by the storm into the Pacific over the polar region, accomplishing four thousand three hundred and fifty miles in nineteen hours, or about three miles a minute, a speed almost double that which the "Albatross" was equal to with her propellers under ordinary circumstances. But he did not know where he then was owing to the disturbance of the needle in the neighborhood of the magnetic pole, and he would have to wait till the sun shone out under convenient conditions for observation. Unfortunately, heavy clouds covered the sky all that day and the sun did not appear.

This was a disappointment more keenly felt as both propelling screws had sustained damage during the tempest. Robur, much disconcerted at this accident, could only advance at a moderate speed during this day, and when he passed over the antipodes of Paris was only going about eighteen miles an hour. It was necessary not to aggravate the damage to the screws, for if the propellers were rendered useless the situation of the aeronef above the vast seas of the Pacific would be a very awkward one. And the engineer began to consider if he could not effect his repairs on the spot, so as to make sure of continuing his voyage.

In the morning of the 27th of July, about seven o'clock, land was sighted to the north. It was soon seen to be an island. But which island was it of the thousands that dot the Pacific? However, Robur decided to stop at it without landing. He thought, that he could repair damages during the day and start in the evening.

The wind had died away completely and this was a favorable circumstance for the maneuver he desired to execute. At least, if she did not remain stationary the "Albatross" would be carried he knew not where.

A cable one hundred and fifty feet long with an anchor at the end was dropped overboard. When the aeronef reached the shore of the island the anchor dragged up the first few rocks and then got firmly fixed between two large blocks. The cable then stretched to full length under the influence of the suspensory screws, and the "Albatross" remained motionless, riding like a ship in a roadstead.

It was the first time she had been fastened to the earth since she left Philadelphia.

Chapter XIX
ANCHORED AT LAST

When the "Albatross" was high in the air the island could be seen to be of moderate size. But on what parallel was it situated? What meridian ran through it? Was it an island in the Pacific, in Australasia, or in the Indian Ocean? When the sun appeared, and Robur had taken his observations, they would know; but although they could not trust to the indications of the compass there was reason to think they were in the Pacific.
At this height--one hundred and fifty feet--the island which measured about fifteen miles round, was like a three-pointed star in the sea.

Off the southwest point was an islet and a range of rocks. On the shore there were no tide-marks, and this tended to confirm Robur in his opinion as to his position for the ebb and flow are almost imperceptible in the Pacific.

At the northwest point there was a conical mountain about two hundred feet high.

No natives were to be seen, but they might be on the opposite coast. In any case, if they had perceived the aeronef, terror had made them either hide themselves or run away. The "Albatross" had anchored on the southwest point of the island. Not far off, down a little creek, a small river flowed in among the rocks. Beyond were several winding valleys; trees of different kinds; and birds--partridges and bustards--in great numbers. If the island was not inhabited it was habitable. Robur might surely have landed on it; if he had not done so it was probably because the ground was uneven and did not offer a convenient spot to beach the aeronef.

While he was waiting for the sun the engineer began the repairs he reckoned on completing before the day was over. The suspensory screws were undamaged and had worked admirably amid all the violence of the storm, which, as we have said, had considerably lightened their work. At this moment half of them were in action, enough to keep the "Albatross" fixed to the shore by the taut cable. But the two propellers had suffered, and more than Robur had thought. Their blades would have to be adjusted and the gearing seen to by which they received their rotatory movement.

It was the screw at the bow which was first attacked under Robur's superintendence. It was the best to commence with, in case the "Albatross" had to leave before the work was finished. With only this propeller he could easily keep a proper course.

Meanwhile Uncle Prudent and his colleague, after walking about the deck, had sat down aft. Frycollin was strangely reassured. What a difference! To be suspended only one hundred and fifty feet from the ground!

The work was only interrupted for a moment while the elevation of the sun above the horizon allowed Robur to take an horizon angle, so that at the time of its culmination he could calculate his position.

The result of the observation, taken with the greatest exactitude, was as follows:

Longitude, 176° 10' west. Latitude, 44° 25' south.

This point on the map answered to the position of the Chatham Islands, and particularly of Pitt Island, one of the group.

"That is nearer than I supposed," said Robur to Tom Turner.

"How far off are we?"

"Forty-six degrees south of X Island, or two thousand eight hundred miles."

"All the more reason to get our propellers into order," said the mate. "We may have the wind against us this passage, and with the little stores we have left we ought to get to X as soon as possible."

"Yes, Tom, and I hope to get under way tonight, even if I go with one screw, and put the other to-rights on the voyage."

"Mr. Robur," said Tom "What is to be done with those two gentlemen and their servant?"

"Do you think they would complain if they became colonists of X Island?"

But where was this X? It was an island lost in the immensity of the Pacific Ocean between the Equator and the Tropic of Cancer--an island most appropriately named by Robur in this algebraic fashion. It was in the north of the South Pacific, a long way out of the route of inter-oceanic communication. There it was that Robur had founded his little colony, and there the "Albatross" rested when tired with her flight. There she was provisioned for all her voyages. In X Island, Robur, a man of immense wealth, had established a shipyard in which he built his aeronef. There he could repair it, and even rebuild it. In his warehouses were materials and provisions of all sorts stored for the fifty inhabitants who lived on the island.

When Robur had doubled Cape Horn a few days before his intention had been to regain X Island by crossing the Pacific obliquely. But the cyclone had seized the "Albatross," and the hurricane had carried her away to the south. In fact, he had been brought back to much the same latitude as before, and if his propellers had not been damaged the delay would have been of no importance.

His object was therefore to get back to X Island, but as the mate had said, the voyage would be a long one, and the winds would probably be against them. The mechanical power of the "Albatross" was, however, quite equal to taking her to her destination, and under ordinary circumstances she would be there in three or four days.

Hence Robur's resolve to anchor on the Chatham Islands. There was every opportunity for repairing at least the fore-screw. He had no fear that if the wind were to rise he would be driven to the south instead of to the north. When night came the repairs would be finished, and he would have to maneuver so as to weigh anchor. If it were too firmly fixed in the rocks he could cut the cable and resume his flight towards the equator.

The crew of the "Albatross," knowing there was no time to lose, set to work vigorously.
While they were busy in the bow of the aeronef, Uncle Prudent and Phil Evans held a little conversation together which had exceptionally important consequences.

"Phil Evans," said Uncle Prudent, "you have resolved, as I have, to sacrifice your life?"

"Yes, like you."

"It is evident that we can expect nothing from Robur."

"Nothing."

"Well, Phil Evans, I have made up my mind. If the "Albatross" leaves this place tonight, the night will not pass without our having accomplished our task. We will smash the wings of this bird of Robur's! This night I will blow it into the air!"

"The sooner the better," said Phil Evans.

It will be seen that the two colleagues were agreed on all points even in accepting with indifference the frightful death in store for them. "Have you all you want?" asked Evans.

"Yes. Last night, while Robur and his people had enough to do to look after the safety of the ship, I slipped into the magazine and got hold of a dynamite cartridge."

"Let us set to work, Uncle Prudent."

"No. Wait till tonight. When the night comes we will go into our cabin, and you shall see something that will surprise you."

At six o'clock the colleagues dined together as usual. Two hours afterwards they retired to their cabin like men who wished to make up for a sleepless night.

Neither Robur nor any of his companions had a suspicion of the catastrophe that threatened the "Albatross."

This was Uncle Prudent's plan. As he had said, he had stolen into the magazine, and there had possessed himself of some powder and cartridge like those used by Robur in Dahomey. Returning to his cabin, he had carefully concealed the cartridge with which he had resolved to blow up the "Albatross" in mid-air.

Phil Evans, screened by his companion, was now examining the infernal machine, which was a metallic canister containing about two pounds of dynamite, enough to shatter the aeronef to atoms. If the explosion did not destroy her at once, it would do so in her fall. Nothing was easier than to place this cartridge in a corner of the cabin, so that it would blow in the deck and tear away the framework of the hull.

But to obtain the explosion it was necessary to adjust the fulminating cap with which the cartridge was fitted. This was the most delicate part of the operation, for the explosion would have to be carefully timed, so as not to occur too soon or too late.

Uncle Prudent had carefully thought over the matter. His conclusions were as follows. As soon as the fore propeller was repaired the aeronef would resume her course to the north, and that done Robur and his crew would probably come aft to put the other screw into order. The presence of these people about the cabin might interfere with his plans, and so he had resolved to make a slow match do duty as a time-fuse.

"When I got the cartridge," said he to Phil Evans, "I took some gunpowder as well. With the powder I will make a fuse that will take some time to burn, and which will lead into the fulminate. My idea is to light it about midnight, so that the explosion will take place about three or four o'clock in the morning."

"Well planned!" said Phil Evans.

The colleagues, as we see, had arrived at such a stage as to look with the greatest nonchalance on the awful destruction in which they were about to perish. Their hatred against Robur and his people had so increased that they would sacrifice their own lives to destroy the "Albatross" and all she bore. The act was that of madmen, it was horrible; but at such a pitch had they arrived after five weeks of anger that could not vent itself, of rage that could not be gratified.

"And Frycollin?" asked Phil Evans, "have we the right to dispose of his life?"

"We shall sacrifice ours as well!" said Uncle Prudent. But it is doubtful if Frycollin would have thought the reason sufficient.

Immediately Uncle Prudent set to work, while Evans kept watch in the neighborhood of the cabin. The crew were all at work forward. There was no fear of being surprised. Uncle Prudent began by rubbing a small quantity of the powder very fine; and then, having slightly moistened it, he wrapped it up in a piece of rag in the shape of a match. When it was lighted he calculated it would burn about an inch in five minutes, or a yard in three hours. The match was tried and found to answer, and was then wound round with string and attached to the cap of the cartridge. Uncle Prudent had all finished about ten o'clock in the evening without having excited the least suspicion.

During the day the work on the fore screw had been actively carried on, but it had had to be taken on board to adjust the twisted blades. Of the piles and accumulators and the machinery that drove the ship nothing was damaged.

When night fell Robur and his men knocked off work. The fore propeller not been got into place, and to finish it would take another three hours. After some conversation with Tom Turner it was decided to give the crew a rest,
and postpone what required to be done to the next morning.

The final adjustment was a matter of extreme nicetry, and the electric lamps did not give so suitable a light for such work as the daylight.

Uncle Prudent and Phil Evans were not aware of this. They had understood that the screw would be in place during the night, and that the "Albatross" would be on her way to the north.

The night was dark and moonless. Heavy clouds made the darkness deeper. A light breeze began to rise. A few puffs came from the southwest, but they had no effect on the "Albatross." She remained motionless at her anchor, and the cable stretched vertically downward to the ground.

Uncle Prudent and his colleague, imagining they were under way again, sat shut up in their cabin, exchanging but a few words, and listening to the f-r-r-r-f of the suspensory screws, which drowned every other sound on board. They were waiting till the time of action arrived.

A little before midnight Uncle Prudent said, "It is time!" Under the berths in the cabin was a sliding box, forming a small locker, and in this locker Uncle Prudent put the dynamite and the slow-match. In this way the match would burn without betraying itself by its smoke or spluttering. Uncle Prudent lighted the end and pushed back the box under the berth with "Now let us go aft, and wait."

They then went out, and were astonished not to find the steersman at his post. Phil Evans leant out over the rail.

"The "Albatross" is where she was," said he in a low voice. "The work is not finished. They have not started!"

Uncle Prudent made a gesture of disappointment. "We shall have to put out the match," said he.

"No," said Phil Evans, "we must escape!"

"Escape?"

"Yes! down the cable! Fifty yards is nothing!"

"Nothing, of course, Phil Evans, and we should be fools not to take the chance now it has come."

But first they went back to the cabin and took away all they could carry, with a view to a more or less prolonged stay on the Chatham Islands. Then they shut the door and noiselessly crept forward, intending to wake Frycollin and take him with them.

The darkness was intense. The clouds were racing up from the southwest, and the aeronef was tugging at her anchor and thus throwing the cable more and more out of the vertical. There would be no difficulty in slipping down it.

The colleagues made their way along the deck, stopping in the shadow of the deckhouses to listen if there was any sound. The silence was unbroken. No light shone from the portholes. The aeronef was not only silent; she was asleep.

Uncle Prudent was close to Frycollin's cabin when Phil Evans stopped him. "The look-out!" he said.

A man was crouching near the deck-house. He was only half asleep. All flight would be impossible if he were to give the alarm. Close by were a few ropes, and pieces of rag and waste used in the work at the screw.

An instant afterwards the man was gagged and blindfolded and lashed to the rail unable to utter a sound or move an inch. This was done almost without a whisper.

Uncle Prudent and Phil Evans listened. All was silent within the cabins. Every one on board was asleep. They reached Frycollin's cabin. Tapage was snoring away in a style worthy of his name, and that promised well.

To his great surprise, Uncle Prudent had not even to push Frycollin's door. It was open. He stepped into the doorway and looked around. "Nobody here!" he said.

"Nobody! Where can be he?" asked Phil Evans.

They went into the bow, thinking Frycollin might perhaps be asleep in the corner. Still they found nobody.

"Has the fellow got the start of us?" asked Uncle Prudent.

"Whether he has or not," said Phil Evans, "we can't wait any longer. Down you go."

Without hesitation the fugitives one after the other clambered over the side and, seizing the cable with hands and feet slipped down it safe and sound to the ground.

Think of their joy at again treading the earth they had lost for so long--at walking on solid ground and being no longer the playthings of the atmosphere!

They were staring up the creek to the interior of the island when suddenly a form rose in front of them. It was Frycollin. The Negro had had the same idea as his master and the audacity to start without telling him. But there was no time for recriminations, and Uncle Prudent was in search of a refuge in some distant part of the island when Phil Evans stopped him.

"Uncle Prudent," said he. "Here we are safe from Robur. He is doomed like his companions to a terrible death. He deserves it, we know. But if he would swear on his honor not to take us prisoners again--"

"The honor of such a man--"
Uncle Prudent did not finish his sentence.

There was a noise on the "Albatross." Evidently, the alarm had been given. The escape was discovered.

"Help! Help!" shouted somebody. It was the look-out man, who had got rid of his gag. Hurried footsteps were heard on deck. Almost immediately the electric lamps shot beams over a large circle.

"There they are! There they are!" shouted Tom Turner. The fugitives were seen.

At the same instant an order was given by Robur, and the suspensory screws being slowed, the cable was hauled in on board, and the "Albatross" sank towards the ground.

At this moment the voice of Phil Evans was heard shouting, "Engineer Robur, will you give us your word of honor to leave us free on this island?"

"Never!" said Robur. And the reply was followed by the report of a gun, and the bullet grazed Phil's shoulder.

"Ah! The brutes!" said Uncle Prudent. Knife in hand, he rushed towards the rocks where the anchor had fixed itself. The aeronef was not more than fifty feet from the ground.

In a few seconds the cable was cut, and the breeze, which had increased considerably, striking the "Albatross" on the quarter, carried her out over the sea.

Chapter XX
THE WRECK OF THE ALBATROSS

It was then twenty minutes after midnight. Five or six shots had been fired from the aeronef. Uncle Prudent and Frycollin, supporting Phil Evans, had taken shelter among the rocks. They had not been hit. For the moment there was nothing to fear.

As the "Albatross" drifted off from Pitt Island she rose obliquely to nearly three thousand feet. It was necessary to increase the ascensional power to prevent her falling into the sea.

When the look-out man had got clear of his gag and shouted, Robur and Tom Turner had rushed up to him and torn off his bandage. The mate had then run back to the stern cabin. It was empty! Tapage had searched Frycollin's cabin, and that also was empty.

When he saw that the prisoners had escaped, Robur was seized with a paroxysm of anger. The escape meant the revelation of his secret to the world. He had not been much concerned at the document thrown overboard while they were crossing Europe, for there were so many chances that it would be lost in its fall; but now!

As he grew calm, "They have escaped," said he. "Be it so! But they cannot get away from Pitt Island, and in a day or so I will go back! I will recapture them! And then--"

In fact, the safety of the three fugitives was by no means assured. The "Albatross" would be repaired, and return well in hand. Before the day was out they might again be in the power of the engineer.

Before the day was out! But in two hours the "Albatross" would be annihilated! The dynamite cartridge was like a torpedo fastened to her hull, and would accomplish her destruction in mid-air. The breeze freshened, and the aeronef was carried to the northeast. Although her speed was but moderate, she would be out of sight of the Chatham Islands before sunrise. To return against the wind she must have her propellers going, particularly the one in the bow.

"Tom," said the engineer, "turn the lights full on."

"Yes, Sir."

"And all hands to work."

"Yes, Sir."

There was no longer any idea of putting off the work till tomorrow. There was now no thought of fatigue. Not one of the men of the "Albatross" failed to share in the feelings of his chief. Not one but was ready to do anything to recapture the fugitives!

As soon as the screw was in place they would return to the island and drop another anchor, and give chase to the fugitives. Then only would they begin repairing the stern-screw; and then the aeronef could resume her voyage across the Pacific to X Island.

It was important, above all things, that the "Albatross" should not be carried too far to the northeast, but unfortunately the breeze grew stronger, and she could not head against it, or even remain stationary. Deprived of her propellers she was an unguidable balloon. The fugitives on the shore knew that she would have disappeared before the explosion blew her to pieces.

Robur felt much disappointment at seeing his plans so interfered with. Would it not take him much longer than he thought to get back to his old anchorage?

While the work at the screw was actively pushed on, he resolved to descend to the surface of the sea, in the hope that the wind would there be lighter. Perhaps the "Albatross" would be able to remain in the neighborhood until she
was again fit to work to windward. The maneuver was instantly executed. If a passing ship had sighted the aerial machine as she sunk through the air, with her electric lights in full blaze, with what terror would she have been seized!

When the "Albatross" was a few hundred feet from the waves she stopped. Unfortunately Robur found that the breeze was stronger here than above, and the aeronef drifted off more rapidly. He risked being blown a long, way off to the northeast, and that would delay his return to Pitt Island. In short, after several experiments, he found it better to keep his ship well up in the air, and the "Albatross" went aloft to about ten thousand feet. There, if she did not remain stationary, the drifting was very slight. The engineer could thus hope that by sunrise at such an altitude he would still be in sight of the island.

Robur did not trouble himself about the reception the fugitives might have received from the natives—if there were any natives. That they might help them mattered little to him. With the powers of offense possessed by the "Albatross" they would be promptly terrified and dispersed. The capture of the prisoners was certain, and once he had them again, "They will not escape from X Island!"

About one o’clock in the morning the fore-screw was finished, and all that had to be done was to get it back to its place. This would take about an hour. That done, the "Albatross" would be headed southwest and the stern-screw could be taken in hand.

And how about the match that was burning in the deserted cabin? The match of which more than a third was now consumed? And the spark that was creeping along to the dynamite?

Assuredly if the men of the aeronef had not been so busy one of them would have heard the feeble sputtering that was going on in the deck-house. Perhaps he would have smelt the burning powder! He would doubtless have become uneasy! And told Tom Turner! And then they would have looked about, and found the box and the infernal machine; and then there would have been time to save this wonderful "Albatross" and all she bore!

But the men were at work in the bow, twenty yards away from the cabin. Nothing brought them to that part of the deck; nothing called off their attention from their work. Robur was there working with his hands, excellent mechanic as he was. He hurried on the work, but nothing was neglected, everything was carefully done. Was it not necessary that he should again become absolute master of his invention? If he did not recapture the fugitives they would get away home. They would begin inquiring into matters. They might even discover X Island, and there would be an end to this life, which the men of the "Albatross" had created for themselves, a life that seemed superhuman and sublime.

Tom Turner came up to the engineer. It was a quarter past one. "It seems to me, sir, that the breeze is falling, and going round to the west."

"What does the barometer say?" asked Robur, after looking up at the sky.

"It is almost stationary, and the clouds seem gathering below us."

"So they are, and it may be raining down at the sea; but if we keep above the rain it makes no difference to us. It will not interfere with the work."

"If it is raining it is not a heavy rain," said Tom. "The clouds do not look like it, and probably the wind has dropped altogether."

"Perhaps so, but I think we had better not go down yet. Let us get into going order as soon as we can, and then we can do as we like."

At a few minutes after two the first part of the work was finished. The fore-screw was in its place, and the power was turned on. The speed was gradually increased, and the "Albatross," heading to the southwest, returned at moderate speed towards the Chatham Islands.

"Tom," said Robur, "it is about two hours and a half since we got adrift. The wind has not changed all the time. I think we ought to be over the island in an hour."

"Yes, sir. We are going about forty feet a second. We ought to be there about half-past three."

"All the better. It would suit us best to get back while it is dark, and even beach the "Albatross" if we can. Those fellows will fancy we are a long way off to the northward, and never think of keeping a look-out. If we have to stop a day or two on the island—"

"We'll stop, and if we have to fight an army of natives?"

"We'll fight," said Robur. "We'll fight then for our "Albatross.""

The engineer went forward to the men, who were waiting for orders. "My lads," he said to them, "we cannot knock off yet. We must work till day comes."

They were all ready to do so. The stern-screw had now to be treated as the other had been. The damage was the same, a twisting from the violence of the hurricane during the passage across the southern pole.

But to get the screw on board it seemed best to stop the progress of the aeronef for a few minutes, and even to drive her backwards. The engines were reversed. The aeronef began to fall astern, when Tom Turner was surprised
by a peculiar odor.

This was from the gas given off by the match, which had accumulated in the box, and was now escaping from the cabin. "Hallo!" said the mate, with a sniff.

"What is the matter?" asked Robur.

"Don't you smell something? Isn't it burning powder?"

"So it is, Tom."

"And it comes from that cabin."

"Yes, the very cabin--"

"Have those scoundrels set it on fire?"

"Suppose it is something else!" exclaimed Robur. "Force the door, Tom; drive in the door!"

But the mate had not made one step towards it when a fearful explosion shook the "Albatross." The cabins flew into splinters. The lamps went out. The electric current suddenly failed. The darkness was complete. Most of the suspensory screws were twisted or broken, but a few in the bow still revolved.

At the same instant the hull of the aeronef opened just behind the first deck-house, where the engines for the fore-screw were placed; and the after-part of the deck collapsed in space.

Immediately the last suspensory screw stopped spinning, and the "Albatross" dropped into the abyss.

It was a fall of ten thousand feet for the eight men who were clinging to the wreck; and the fall was even faster than it might have been, for the fore propeller was vertical in the air and still working!

It was then that Robur, with extraordinary coolness, climbed up to the broken deck-house, and seizing the lever reversed the rotation, so that the propeller became a suspender. The fall continued, but it was checked, and the wreck did not fall with the accelerating swiftness of bodies influenced solely by gravitation; and if it was death to the survivors of the "Albatross" from their being hurled into the sea, it was not death by asphyxia amid air which the rapidity of descent rendered unbreathable.

Eighty seconds after the explosion, all that remained of the "Albatross" plunged into the waves!

Chapter XXI

THE INSTITUTE AGAIN

Some weeks before, on the 13th of June, on the morning after the sitting during which the Weldon Institute had been given over to such stormy discussions, the excitement of all classes of the Philadelphia population, black or white, had been much easier to imagine than to describe.

From a very early hour conversation was entirely occupied with the unexpected and scandalous incident of the night before. A stranger calling himself an engineer, and answering to the name of Robur, a person of unknown origin, of anonymous nationality, had unexpectedly presented himself in the club-room, insulted the balloonists, made fun of the aeronauts, boasted of the marvels of machines heavier than air, and raised a frightful tumult by the remarks with which he greeted the menaces of his adversaries. After leaving the desk, amid a volley of revolver shots, he had disappeared, and in spite of every endeavor, no trace could be found of him.

Assuredly here was enough to exercise every tongue and excite every imagination. But by how much was this excitement increased when in the evening of the 13th of June it was found that neither the president nor secretary of the Weldon Institute had returned to their homes! Was it by chance only that they were absent? No, or at least there was nothing to lead people to think so. It had even been agreed that in the morning they would be back at the club, one as president, the other as secretary, to take their places during a discussion on the events of the preceding evening.

And not only was there the complete disappearance of these two considerable personages in the state of Pennsylvania, but there was no news of the valet Frycollin. He was as undiscoverable as his master. Never had a Negro since Toussaint L'Ouverture, Soulouque, or Dessaline had so much talked about him.

The next day there was no news. Neither the colleagues nor Frycollin had been found. The anxiety became serious. Agitation commenced. A numerous crowd besieged the post and telegraph offices in case any news should be received. There was no news.

And they had been seen coming out of the Weldon Institute loudly talking together, and with Frycollin in attendance, go down Walnut Street towards Fairmount Park! Jem Chip, the vegetarian, had even shaken hands with the president and left him with "Tomorrow!"

And William T. Forbes, the manufacturer of sugar from rags, had received a cordial shake from Phil Evans who had said to him twice, "Au revoir! Au revoir!"

Miss Doll and Miss Mat Forbes, so attached to Uncle Prudent by the bonds of purest friendship, could not get over the disappearance, and in order to obtain news of the absent, talked even more than they were accustomed to.
Three, four, five, six days passed. Then a week, then two weeks, and there was nothing to give a clue to the missing three. The most minute search had been made in every quarter. Nothing! In the park, even under the trees and brushwood. Nothing! Always nothing! Although here it was noticed that the grass looked to be pressed down in a way that seemed suspicious and certainly was inexplicable; and at the edge of the clearing there were traces of a recent struggle. Perhaps a band of scoundrels had attacked the colleagues here in the deserted park in the middle of the night!

It was possible. The police proceeded with their inquiries in all due form and with all lawful slowness. They dragged the Schuylkill river, and cut into the thick bushes that fringe its banks; and if this was useless it was not quite a waste, for the Schuylkill is in great want of a good weeding, and it got it on this occasion. Practical people are the authorities of Philadelphia!

Then the newspapers were tried. Advertisements and notices and articles were sent to all the journals in the Union without distinction of color. The "Daily Negro," the special organ of the black race, published a portrait of Frycollin after his latest photograph. Rewards were offered to whoever would give news of the three absentees, and even to those who would find some clue to put the police on the track. "Five thousand dollars! Five thousand dollars to any citizen who would--"

Nothing was done. The five thousand dollars remained with the treasurer of the Weldon Institute.

Undiscoverable! Undiscoverable! Undiscoverable! Uncle Prudent and Phil Evans, of Philadelphia!

It need hardly be said that the club was put to serious inconvenience by this disappearance of its president and secretary. And at first the assembly voted urgency to a measure which suspended the work on the "Go-Ahead."

How, in the absence of the principal promoters of the affair, of those who had devoted to the enterprise a certain part of their fortune in time and money--how could they finish the work when these were not present? It were better, then, to wait.

And just then came the first news of the strange phenomenon which had exercised people's minds some weeks before. The mysterious object had been again seen at different times in the higher regions of the atmosphere. But nobody dreamt of establishing a connection between this singular reappearance and the no less singular disappearance of the members of the Weldon Institute. In fact, it would have required a very strong dose of imagination to connect one of these facts with the other.

Whatever it might be, asteroid or aerolite or aerial monster, it had reappeared in such a way that its dimensions and shape could be much better appreciated, first in Canada, over the country between Ottawa and Quebec, on the very morning after the disappearance of the colleagues, and later over the plains of the Far West, where it had tried its speed against an express train on the Union Pacific.

At the end of this day the doubts of the learned world were at an end. The body was not a product of nature, it was a flying machine, the practical application of the theory of "heavier than air." And if the inventor of the aeronef had wished to keep himself unknown he could evidently have done better than to try it over the Far West. As to the mechanical force he required, or the engines by which it was communicated, nothing was known, but there could be no doubt the aeronef was gifted with an extraordinary faculty of locomotion. In fact, a few days afterwards it was reported from the Celestial Empire, then from the southern part of India, then from the Russian steppes.

Who was then this bold mechanician that possessed such powers of locomotion, for whom States had no frontiers and oceans no limits, who disposed of the terrestrial atmosphere as if it were his domain? Could it be this Robur whose theories had been so brutally thrown in the face of the Weldon Institute the day he led the attack against the utopia of guidable balloons? Perhaps such a notion occurred to some of the wide-awake people, but none dreamt that the said Robur had anything to do with the disappearance of the president and secretary of the Institute.

Things remained in this state of mystery when a telegram arrived from France through the New York cable at 11-37 A.M. on July 13. And what was this telegram? It was the text of the document found at Paris in a snuff-box revealing what had happened to the two personages for whom the Union was in mourning.

So, then, the perpetrator of this kidnapping "was" Robur the engineer, come expressly to Philadelphia to destroy in its egg the theory of the balloonists. He it was who commanded the "Albatross!" He it was who carried off by way of reprisal Uncle Prudent, Phil Evans and Frycollin; and they might be considered lost for ever. At least until some means were found of constructing an engine capable of contending with this powerful machine their terrestrial friends would never bring them back to earth.

What excitement! What stupefaction! The telegram from Paris had been addressed to the members of the Weldon Institute. The members of the club were immediately informed of it. Ten minutes later all Philadelphia received the news through its telephones, and in less than an hour all America heard of it through the innumerable electric wires of the new continent.

No one would believe it! "It is an unseasonable joke," said some. "It is all smoke," said others. How could such a thing be done in Philadelphia, and so secretly, too? How could the "Albatross" have been beached in Fairmount Park?
without its appearance having been signaled all over Pennsylvania?

Very good. These were the arguments. The incredulous had the right of doubting. But the right did not last long. Seven days after the receipt of the telegram the French mail-boat "Normandie" came into the Hudson, bringing the famous snuff-box. The railway took it in all haste from New York to Philadelphia.

It was indeed the snuff-box of the President of the Weldon Institute. Jem Chip would have done on at day to take some more substantial nourishment, for he fell into a swoon when he recognized it. How many a time had he taken from it the pinch of friendship! And Miss Doll and Miss Mat also recognized it, and so did William T. Forbes, Truck Milnor, Bat T. Fynn, and many other members. And not only was it the president's snuff-box, it was the president's writing!

Then did the people lament and stretch out their hands in despair to the skies. Uncle Prudent and his colleague carried away in a flying machine, and no one able to deliver them!

The Niagara Falls Company, in which Uncle Prudent was the largest shareholder, thought of suspending its business and turning off its cataracts. The Wheelton Watch Company thought of winding up its machinery, now it had lost its manager.

Nothing more was heard of the aeronef. July passed, and there was no news. August ran its course, and the uncertainty on the subject of Robur's prisoners was as great as ever. Had he, like Icarus, fallen a victim to his own temerity?

The first twenty-seven days of September went by without result, but on the 28th a rumor spread through Philadelphia that Uncle Prudent and Phil Evans had during the afternoon quietly walked into the president's house. And, what was more extraordinary, the rumor was true, although very few believed it.

They had, however, to give in to the evidence. There could be no doubt these were the two men, and not their shadows. And Frycollin also had come back! The members of the club, then their friends, then the crowd, swarmed into the president's house, and shook hands with the president and secretary, and cheered them again and again. Jem Chip was there, having left his luncheon's joint of boiled lettuces, and William T. Forbes and his daughters, and all the members of the club. It is a mystery how Uncle Prudent and Phil Evans emerged alive from the thousands who welcomed them.

On that evening was the weekly meeting of the Institute. It was expected that the colleagues would take their places at the desk. As they had said nothing of their adventures, it was thought they would then speak, and relate the impressions of their voyage. But for some reason or other both were silent. And so also was Frycollin, whom his congeners in their delirium had failed to dismember.

But though the colleagues did not tell what had happened to them, that is no reason why we should not. We know what occurred on the night of the 27th and 28th of July; the daring escape to the earth, the scramble among the rocks, the bullet fired at Phil Evans, the cut cable, and the "Albatross" deprived of her propellers, drifting off to the northeast at a great altitude. Her electric lamps rendered her visible for some time. And then she disappeared.

The fugitives had little to fear. Now could Robur get back to the island for three or four hours if his screws were out of gear? By that time the "Albatross" would have been destroyed by the explosion, and be no more than a wreck floating on the sea; those whom she bore would be mangled corpses, which the ocean would not even give up again. The act of vengeance would be accomplished.

Uncle Prudent and Phil Evans looked upon it as an act of legitimate self-defence, and felt no remorse whatever. Evans was but slightly wounded by the rifle bullet, and the three made their way up from the shore in the hope of meeting some of the natives. The hope was realized. About fifty natives were living by fishing off the western coast. They had seen the aeronef descend on the island, and they welcomed the fugitives as if they were supernatural beings. They worshipped them, we ought rather to say. They accommodated them in the most comfortable of their huts.

As they had expected, Uncle Prudent and Phil Evans saw nothing more of the aeronef. They concluded that the catastrophe had taken place in some high region of the atmosphere, and that they would hear no more of Robur and his prodigious machine.

Meanwhile they had to wait for an opportunity of returning to America. The Chatham Islands are not much visited by navigators, and all August passed without sign of a ship. The fugitives began to ask themselves if they had not exchanged one prison for another.

At last a ship came to water at the Chatham Islands. It will not have been forgotten that when Uncle Prudent was seized he had on him several thousand paper dollars, much more than would take him back to America. After thanking their adorers, who were not sparing of their most respectful demonstrations, Uncle Prudent, Phil Evans, and Frycollin embarked for Auckland. They said nothing of their adventures, and in two weeks landed in New Zealand.

At Auckland, a mail-boat took them on board as passengers, and after a splendid passage the survivors of the
“Albatross” stepped ashore at San Francisco. They said nothing as to who they were or whence they had come, but as they had paid full price for their berths no American captain would trouble them further. At San Francisco they took the first train out on the Pacific Railway, and on the 27th of September, they arrived at Philadelphia, That is the compendious history of what had occurred since the escape of the fugitives. And that is why this very evening the president and secretary of the Weldon Institute took their seats amid a most extraordinary attendance.

Never before had either of them been so calm. To look at them it did not seem as though anything abnormal had happened since the memorable sitting of the 12th of June. Three months and a half had gone, and seemed to be counted as nothing. After the first round of cheers, which both received without showing the slightest emotion, Uncle Prudent took off his hat and spoke.

"Worthy citizens," said he, "the meeting is now open."

Tremendous applause. And properly so, for if it was not extraordinary that the meeting was open, it was extraordinary that it should be opened by Uncle Prudent and Phil Evans.

The president allowed the enthusiasm to subside in shouts and clappings; then he continued: “At our last meeting, gentlemen, the discussion was somewhat animated--(hear, hear)–between the partisans of the screw before and those of the screw behind for our balloon the "Go-Ahead." (Marks of surprise.) We have found a way to bring the beforists and the behindists in agreement. That way is as follows: we are going to use two screws, one at each end of the car.” Silence, and complete stupefaction.

That was all.

Yes, all! Of the kidnapping of the president and secretary of the Weldon Institute not a word! Not a word of the "Albatross" nor of Robur! Not a word of the voyage! Not a word of the way in which the prisoners had escaped! Not a word of what had become of the aeronef, if it still flew through space, or if they were to be prepared for new reprisals on the member's of the club!

Of course the balloonists were longing to ask Uncle Prudent and the secretary about all these things, but they looked so close and so serious that they thought it best to respect their attitude. When they thought fit to speak they would do so, and it would be an honor to hear. After all, there might be in all this some secret which would not yet be divulged.

And then Uncle Prudent, resuming his speech amid a silence up to then unknown in the meetings of the Weldon Institute, said, "Gentlemen, it now only remains for us to finish the aerostat 'Go-Ahead.' It is left to her to effect the conquest of the air! The meeting is at an end!"

Chapter XXII
THE GO-AHEAD IS LAUNCHED

On the following 19th of April, seven months after the unexpected return of Uncle Prudent and Phil Evans, Philadelphia was in a state of unwonted excitement. There were neither elections nor meetings this time. The aerostat "Go-Ahead," built by the Weldon Institute, was to take possession of her natural element.

The celebrated Harry W. Tinder, whose name we mentioned at the beginning of this story, had been engaged as aeronaut. He had no assistant, and the only passengers were to be the president and secretary of the Weldon Institute.

Did they not merit such an honor? Did it not come to them appropriately to rise in person to protest against any apparatus that was heavier than air?

During the seven months, however, they had said nothing of their adventures; and even Frycollin had not uttered a whisper of Robur and his wonderful clipper. Probably Uncle Prudent and his friend desired that no question should arise as to the merits of the aeronef, or any other flying machine.

Although the "Go-Ahead" might not claim the first place among aerial locomotives, they would have nothing to say about the inventions of other aviators. They believed, and would always believe, that the true atmospheric vehicle was the aerostat, and that to it alone belonged the future.

Besides, he on whom they had been so terribly--and in their idea so justly--avenged, existed no longer. None of those who accompanied him had survived. The secret of the "Albatross" was buried in the depths of the Pacific!

That Robur had a retreat, an island in the middle of that vast ocean, where he could put into port, was only a hypothesis; and the colleagues reserved to themselves the right of making inquiries on the subject later on. The grand experiment which the Weldon Institute had been preparing for so long was at last to take place. The "Go-Ahead" was the most perfect type of what had up to then been invented in aerostatic art--she was what an "Inflexible" or a "Formidable" is in ships of war.

She possessed all the qualities of a good aerostat. Her dimensions allowed of her rising to the greatest height a balloon could attain; her impermeability enabled her to remain for an indefinite time in the atmosphere; her solidity
would defy any dilation of gas or violence of wind or rain; her capacity gave her sufficient ascensional force to lift with all their accessories an electric engine that would communicate to her propellers a power superior to anything yet obtained. The "Go-Ahead" was of elongated form, so as to facilitate her horizontal displacement. Her car was a platform somewhat like that of the balloon used by Krebs and Renard; and it carried all the necessary outfit, instruments, cables, grapnels, guide-ropes, etc., and the piles and accumulators for the mechanical power. The car had a screw in front, and a screw and rudder behind. But probably the work done by the machines would be very much less than that done by the machines of the "Albatross."

The "Go-Ahead" had been taken to the clearing in Fairmount Park, to the very spot where the aeronef had landed for a few hours.

Her ascensional power was due to the very lightest of gaseous bodies. Ordinary lighting gas possesses an elevating force of about 700 grams for every cubic meter. But hydrogen possesses an ascensional force estimated at 1,100 grams per cubic meter. Pure hydrogen prepared according to the method of the celebrated Henry Gifford filled the enormous balloon. And as the capacity of the "Go-Ahead" was 40,000 cubic meters, the ascensional power of the gas she contained was 40,000 multiplied by 1,100 or 44,000 kilograms.

On this 29th of April everything was ready. Since eleven o'clock the enormous aerostat had been floating a few feet from the ground ready to rise in mid-air. It was splendid weather and seemed to have been made specially for the experiment, although if the breeze had been stronger the results might have been more conclusive. There had never been any doubt that a balloon could be guided in a calm atmosphere; but to guide it when the atmosphere is in motion is quite another thing; and it is under such circumstances that the experiment should be tried.

But there was no wind today, nor any sign of any. Strange to say, North America on that day omitted to send on to Europe one of those first-class storms which it seems to have in such inexhaustible numbers. A better day could not have been chosen for an aeronautic experiment.

The crowd was immense in Fairmount Park; trains had poured into the Pennsylvania capital sightseers from the neighboring states; industrial and commercial life came to a standstill that the people might troop to the show-master, workmen, women, old men, children, members of Congress, soldiers, magistrates, reporters, white natives and black natives, all were there. We need not stop to describe the excitement, the unaccountable movements, the sudden pushings, which made the mass heave and swell. Nor need we recount the number of cheers which rose from all sides like fireworks when Uncle Prudent and Phil Evans appeared on the platform and hoisted the American colors. Need we say that the majority of the crowd had come from afar not so much to see the "Go-Ahead" as to gaze on these extraordinary men?

Why two and not three? Why not Frycollin? Because Frycollin thought his campaign in the "Albatross" sufficient for his fame. He had declined the honor of accompanying his master, and he took no part in the frenzied declamations that greeted the president and secretary of the Weldon Institute.

Of the members of the illustrious assembly not one was absent from the reserved places within the ropes. There were Truck Milnor, Bat T. Fynn, and William T. Forbes with his two daughters on his arm. All had come to affirm by their presence that nothing could separate them from the partisans of "lighter than air."

About twenty minutes past eleven a gun announced the end of the final preparations. The "Go-Ahead" only waited the signal to start. At twenty-five minutes past eleven the second gun was fired.

The "Go-Ahead" was about one hundred and fifty feet above the clearing, and was held by a rope. In this way the platform commanded the excited crowd. Uncle Prudent and Phil Evans stood upright and placed their left hands on their hearts, to signify how deeply they were touched by their reception. Then they extended their right hands towards the zenith, to signify that the greatest of known balloons was about to take possession of the supra-terrestrial domain.

A hundred thousand hands were placed in answer on a hundred thousand hearts, and a hundred thousand other hands were lifted to the sky.

The third gun was fired at half-past eleven. "Let go!" shouted Uncle Prudent; and the "Go-Ahead" rose "majestically"—an adverb consecrated by custom to all aerostatic ascents.

It really was a superb spectacle. It seemed as if a vessel were just launched from the stocks. And was she not a vessel launched into the aerial sea? The "Go-Ahead" went up in a perfectly vertical line—a proof of the calmness of the atmosphere—and stopped at an altitude of eight hundred feet.

Then she began her horizontal maneuvering. With her screws going she moved to the east at a speed of twelve yards a second. That is the speed of the whale—not an inappropriate comparison, for the balloon was somewhat of the shape of the giant of the northern seas.

A salvo of cheers mounted towards the skillful aeronauts. Then under the influence of her rudder, the "Go-Ahead" went through all the evolutions that her steersman could give her. She turned in a small circle; she moved forwards and backwards in a way to convince the most refractory disbeliever in the guiding of balloons. And if there
had been any disbeliever there he would have been simply annihilated.

But why was there no wind to assist at this magnificent experiment? It was regrettable. Doubtless the spectators would have seen the "Go-Ahead" unhesitatingly execute all the movements of a sailing-vessel in beating to windward, or of a steamer driving in the wind's eye.

At this moment the aerostat rose a few hundred yards. The maneuver was understood below. Uncle Prudent and his companions were going in search of a breeze in the higher zones, so as to complete the experiment. The system of cellular balloons--analogous to the swimming bladder in fishes--into which could be introduced a certain amount of air by pumping, had provided for this vertical motion. Without throwing out ballast or losing gas the aeronaut was able to rise or sink at his will. Of course there was a valve in the upper hemisphere which would permit of a rapid descent if found necessary. All these contrivances are well known, but they were here fitted in perfection.

The "Go-Ahead" then rose vertically. Her enormous dimensions gradually grew smaller to the eye, and the necks of the crowd were almost cricked as they gazed into the air. Gradually the whale became a porpoise, and the porpoise became a gudgeon. The ascensional movement did not cease until the "Go-Ahead" had reached a height of fourteen thousand feet. But the air was so free from mist that she remained clearly visible.

However, she remained over the clearing as if she were a fixture. An immense bell had imprisoned the atmosphere and deprived it of movement; not a breath of wind was there, high or low. The aerostat maneuvered without encountering any resistance, seeming very small owing to the distance, much as if she were being looked at through the wrong end of a telescope.

Suddenly there was a shout among the crowd, a shout followed by a hundred thousand more. All hands were stretched towards a point on the horizon. That point was the northwest. There in the deep azure appeared a moving body, which was approaching and growing larger. Was it a bird beating with its wings the higher zones of space? Was it an aerolite shooting obliquely through the atmosphere? In any case, its speed was terrific, and it would soon be above the crowd. A suspicious communicated itself electrically to the brains of all on the clearing.

But it seemed as though the "Go-Ahead" had sighted this strange object. Assuredly it seemed as though she feared some danger, for her speed was increased, and she was going east as fast as she could.

Yes, the crowd saw what it meant! A name uttered by one of the members of the Weldon Institute was repeated by a hundred thousand mouths:

"The "Albatross!" The "Albatross!""

Chapter XXIII
THE GRAND COLLAPSE

It was indeed the "Albatross!" It was indeed Robur who had reappeared in the heights of the sky! It was he who like a huge bird of prey was going to strike the "Go-Ahead."

And yet, nine months before, the aeronef, shattered by the explosion, her screws broken, her deck smashed in two, had been apparently annihilated.

Without the prodigious coolness of the engineer, who reversed the gyratory motion of the fore propeller and converted it into a suspensory screw, the men of the "Albatross" would all have been asphyxiated by the fall. But if they had escaped asphyxia, how had they escaped being drowned in the Pacific?

The remains of the deck, the blades of the propellers, the compartments of the cabins, all formed a sort of raft. When a wounded bird falls on the waves its wings keep it afloat. For several hours Robur and his men remained unhelped, at first on the wreck, and afterwards in the india-rubber boat that had fallen uninjured. A few hours after sunrise they were sighted by a passing ship, and a boat was lowered to their rescue.

Robur and his companions were saved, and so was much of what remained of the aeronef. The engineer said that his ship had perished in a collision, and no further questions were asked him.

The ship was an English three-master, the "Two Friends," bound for Melbourne, where she arrived a few days afterwards.

Robur was in Australia, but a long way from X Island, to which he desired to return as soon as possible.

In the ruins of the aftermost cabin he had found a considerable sum of money, quite enough to provide for himself and companions without applying to anyone for help. A short time after he arrived in Melbourne he became the owner of a small brigantine of about a hundred tons, and in her he sailed for X Island.

There he had but one idea--to be avenged. But to secure his vengeance he would have to make another "Albatross." This after all was an easy task for him who made the first. He used up what he could of the old material; the propellers and engines he had brought back in the brigantine. The mechanism was fitted with new piles and new accumulators, and, in short, in less than eight months, the work was finished, and a new "Albatross," identical with the one destroyed by the explosion, was ready to take flight. And he had the same crew.
The "Albatross" left X Island in the first week of April. During this aerial passage Robur did not want to be seen from the earth, and he came along almost always above the clouds. When he arrived over North America he descended in a desolate spot in the Far West. There the engineer, keeping a profound incognito, learnt with considerable pleasure that the Weldon Institute was about to begin its experiments, and that the "Go-Ahead," with Uncle Prudent and Phil Evans, was going to start from Philadelphia on the 29th of April.

Here was a chance for Robur and his crew to gratify their longing for revenge. Here was a chance for inflicting on their foes a terrible vengeance, which in the "Go-Ahead" they could not escape. A public vengeance, which would at the same time prove the superiority of the aeronef to all aerostats and contrivances of that nature!

And that is why, on this very day, like a vulture from the clouds, the aeronef appeared over Fairmount Park.

Yes! It was the "Albatross," easily recognizable by all those who had never before seen her.

The "Go-Ahead" was in full flight; but it soon appeared that she could not escape horizontally, and so she sought her safety in a vertical direction, not dropping to the ground, for the aeronef would have cut her off, but rising to a zone where she could not perhaps be reached. This was very daring, and at the same time very logical.

But the "Albatross" began to rise after her. Although she was smaller than the "Go-Ahead," it was a case of the swordfish and the whale.

This could easily be seen from below and with what anxiety! In a few moments the aerostat had attained a height of sixteen thousand feet.

The "Albatross" followed her as she rose. She flew round her flanks, and maneuvered round her in a circle with a constantly diminishing radius. She could have annihilated her at a stroke, and Uncle Prudent and his companions would have been dashed to atoms in a frightful fall.

The people, mute with horror, gazed breathlessly; they were seized with that sort of fear which presses on the chest and grips the legs when we see anyone fall from a height. An aerial combat was beginning in which there were none of the chances of safety as in a sea-fight. It was the first of its kind, but it would not be the last, for progress is one of the laws of this world. And if the "Go-Ahead" was flying the American colors, did not the "Albatross" display the stars and golden sun of Robur the Conqueror?

The "Go-Ahead" tried to distance her enemy by rising still higher. She threw away the ballast she had in reserve; she made a new leap of three thousand feet; she was now but a dot in space. The "Albatross," which followed her round and round at top speed, was now invisible.

Suddenly a shout of terror rose from the crowd. The "Go-Ahead" increased rapidly in size, and the aeronef appeared dropping with her. This time it was a fall. The gas had dilated in the higher zones of the atmosphere and had burst the balloon, which, half inflated still, was falling rapidly.

But the aeronef, slowing her suspensory screws, came down just as fast. She ran alongside the "Go-Ahead" when she was not more than four thousand feet from the ground.

Would Robur destroy her?

No; he was going to save her crew!

And so cleverly did he handle his vessel that the aeronaut jumped on board.

Would Uncle Prudent and Phil Evans refuse to be saved by him? They were quite capable of doing so. But the crew threw themselves on them and dragged them by force from the "Go-Ahead" to the "Albatross."

Then the aeronef gilded off and remained stationary, while the balloon, quite empty of gas, fell on the trees of the clearing and hung there like a gigantic rag.

An appalling silence reigned on the ground. It seemed as though life were suspended in each of the crowd; and many eyes had been closed so as not to behold the final catastrophe. Uncle Prudent and Phil Evans had again become the prisoners of the redoubtable Robur. Now he had recaptured them, would he carry them off into space, where it was impossible to follow him?

It seemed so.

However, instead of mounting into the sky the "Albatross" stopped six feet from the ground. Then, amid profound silence, the engineer's voice was heard.

"Citizens of the United States," he said, "The president and secretary of the Weldon Institute are again in my power. In keeping them I am only within my right. But from the passion kindled in them by the success of the "Albatross" I see that their minds are not prepared for that important revolution which the conquest of the air will one day bring, Uncle Prudent and Phil Evans, you are free!"

The president, the secretary, and the aeronaut had only to jump down.

Then Robur continued.

"Citizens of the United States, my experiment is finished; but my advice to those present is to be premature in nothing, not even in progress. It is evolution and not revolution that we should seek. In a word, we must not be before our time. I have come too soon today to withstand such contradictory and divided interests as yours. Nations
are not yet fit for union.

"I go, then; and I take my secret with me. But it will not be lost to humanity. It will belong to you the day you are educated enough to profit by it and wise enough not to abuse it. Citizens of the United States--Good-by!"

And the "Albatross," beating the air with her seventy-four screws, and driven by her propellers, shot off towards the east amid a tempest of cheers.

The two colleagues, profoundly humiliated, and through them the whole Weldon Institute, did the only thing they could. They went home.

And the crowd by a sudden change of front greeted them with particularly keen sarcasms, and, at their expense, are sarcastic still.

And now, who is this Robur? Shall we ever know?

We know today. Robur is the science of the future. Perhaps the science of tomorrow. Certainly the science that will come!

Does the "Albatross" still cruise in the atmosphere in the realm that none can take from her? There is no reason to doubt it.

Will Robur, the Conqueror, appear one day as he said? Yes! He will come to declare the secret of his invention, which will greatly change the social and political conditions of the world.

As for the future of aerial locomotion, it belongs to the aeronef and not the aerostat.

It is to the "Albatross" that the conquest of the air will assuredly fall.

THE ADVENTURES OF A SPECIAL CORRESPONDENT
AMONG THE VARIOUS RACES AND COUNTRIES OF CENTRAL ASIA
BEING THE EXPLOITS AND EXPERIENCES OF CLAUDIUS BOMBARNAC OF "THE TWENTIETH CENTURY"

BY JULES VERNE

CHAPTER I.
CLAUDIUS BOMBARNAC,
Special Correspondent,
"Twentieth Century."
Tiflis, Transcaucasia.

Such is the address of the telegram I found on the 13th of May when I arrived at Tiflis.

This is what the telegram said:

"As the matters in hand will terminate on the 15th instant Claudius Bombarnac will repair to Uzun Ada, a port on the east coast of the Caspian. There he will take the train by the direct Grand Transasiatic between the European frontier and the capital of the Celestial Empire. He will transmit his impressions in the way of news, interviewing remarkable people on the road, and report the most trivial incidents by letter or telegram as necessity dictates. The Twentieth Century trusts to the zeal, intelligence, activity and tact of its correspondent, who can draw on its bankers to any extent he may deem necessary."

It was the very morning I had arrived at Tiflis with the intention of spending three weeks there in a visit to the Georgian provinces for the benefit of my newspaper, and also, I hoped, for that of its readers.

Here was the unexpected, indeed; the uncertainty of a special correspondent's life.

At this time the Russian railways had been connected with the line between Poti, Tiflis and Baku. After a long and increasing run through the Southern Russian provinces I had crossed the Caucasus, and imagined I was to have a little rest in the capital of Transcaucasia. And here was the imperious administration of the Twentieth Century giving me only half a day's halt in this town! I had hardly arrived before I was obliged to be off again without unstrapping my portmanteau! But what would you have? We must bow to the exigencies of special correspondence and the modern interview!

But all the same I had been carefully studying this Transcaucasian district, and was well provided with geographic and ethnologic memoranda. Perhaps it may be as well for you to know that the fur cap, in the shape of a turban, which forms the headgear of the mountaineers and cossacks is called a "papakha," that the overcoat gathered in at the waist, over which the cartridge belt is hung, is called a "tcherkeska" by some and "bechmet" by others! Be prepared to assert that the Georgians and Armenians wear a sugar-loaf hat, that the merchants wear a "touloupa," a sort of sheepskin cape, that the Kurd and Parsee still wear the "bourka," a cloak in a material something like plush which is always waterproofed.
And of the headgear of the Georgian ladies, the "tassakravi," composed of a light ribbon, a woolen veil, or piece of muslin round such lovely faces; and their gowns of startling colors, with the wide open sleeves, their under skirts fitted to the figure, their winter cloak of velvet, trimmed with fur and silver gimp, their summer mantle of white cotton, the "tchadre," which they tie tight on the neck--all those fashions in fact so carefully entered in my notebook, what shall I say of them?

Learn, then, that their national orchestras are composed of "zournas," which are shrill flutes; "salamouris," which are squeaky clarinets; mandolines, with copper strings, twanged with a feather; "tchianouris," violins, which are played upright; "dimplipitos," a kind of cymbals which rattle like hail on a window pane.

Know that the "schaska" is a sword hung from a bandolier trimmed with studs and silver embroidery, that the "kindjall" or "kandijar" is a dagger worn in the belt, that the armament of the soldiers of the Caucasus is completed by a long Damascus gun ornamented with bands of chiseled metal.

Know that the "tarantass" is a sort of berline hung on five pieces of rather elastic wood between wheels placed rather wide apart and of moderate height; that this carriage is driven by a "yemtchik," on the front seat, who has three horses, to whom is added a postilion, the "falêtre," when it is necessary to hire a fourth horse from the "smatritel," who is the postmaster on the Caucasian roads.

Know, then, that the verst is two-thirds of a mile, that the different nomadic people of the governments of Transcaucasia are composed of Kalmucks, descendants of the Eleuthes, fifteen thousand, Kirghizes of Mussulman origin eight thousand, Koundrof Tartars eleven hundred, Sartof Tartars a hundred and twelve, Nogais eight thousand five hundred, Turkomans nearly four thousand.

And thus, after having so minutely absorbed my Georgia, here was this ukase obliging me to abandon it! And I should not even have time to visit Mount Ararat or publish my impressions of a journey in Transcaucasia, losing a thousand lines of copy at the least, and for which I had at my disposal the 32,000 words of my language actually recognized by the French Academy.

It was hard, but there was no way out of it. And to begin with, at what o'clock did the train for Tiflis start from the Caspian?

The station at Tiflis is the junction of three lines of railway: the western line ending at Poti on the Black Sea, where the passengers land coming from Europe, the eastern line which ends at Baku, where the passengers embark to cross the Caspian, and the line which the Russians have just made for a length of about a hundred miles between Ciscaucasia and Transcaucasia, from Vladikarkaz to Tiflis, crossing the Arkhot range at a height of four thousand five hundred feet, and which connects the Georgian capital with the railways of Southern Russia.

I went to the railway station at a run, and rushed into the departure office.

"When is there a train for Baku?" I asked.

"You are going to Baku?" answered the clerk.

And from his trap-door he gave me one of those looks more military than civil, which are invariably found under the peak of a Muscovite cap.

"I think so," said I, perhaps a little sharply, "that is, if it is not forbidden to go to Baku."

"No," he replied, dryly, "that is, if you are provided with a proper passport."

"I will have a proper passport," I replied to this ferocious functionary, who, like all the others in Holy Russia, seemed to me an intensified gendarme.

Then I again asked what time the train left for Baku.

"Six o'clock to-night."  
"And when does it get there?"

"Seven o'clock in the morning."  
"Is that in time to catch the boat for Uzun Ada?"

"In time."

And the man at the trap-door replied to my salute by a salute of mechanical precision.

The question of passport did not trouble me. The French consul would know how to give me all the references required by the Russian administration.

Six o'clock to-night, and it is already nine o'clock in the morning! Bah! When certain guide books tell you how to explore Paris in two days, Rome in three days, and London in four days, it would be rather curious if I could not do Tiflis in a half day. Either one is a correspondent or one is not!

It goes without saying that my newspaper would not have sent me to Russia, if I could not speak fluently in Russian, English and German. To require a newspaper man to know the few thousand languages which are used to express thought in the five parts of the world would be too much; but with the three languages above named, and French added, one can go far across the two continents. It is true, there is Turkish of which I had picked up a few phrases, and there is Chinese of which I did not understand a single word. But I had no fear of remaining dumb in
although rather sour, accompanied by the boiled fowl, known as pilau--has rather a pleasant taste about it.

in those regretted days, when the sun still distilled it on the hillsides of Pauillac. In truth this Caucasian wine,

enough for them, not without a certain addition of vodka, which is the Muscovite brandy.

proceeding dear to the natives of Transcaucasia. As to the Russians, who are generally sober, the infusion of tea is

as you drink in using the large-necked bottles into which you dip your nose before your lips. At least that is the

be shampooed, or to be cracked or suppled.

invented them when he wanted them, that genial precursor of high-pressure correspondence! But I have no time to

the joints. I remember what was said by our great Dumas whose peregrinations were never devoid of incidents; he

centigrade. There you will find in use the highest development of massage, the suppling of the spine, the cracking of

enough for me. Linen? I will get it on the road, in English fashion.

never! The little portmanteau I can carry in my hand, the bag slung across my shoulders, and a traveling suit will be

are not worth as much as those of Lyons.

profusion of the fabrics of Teheran, Shiraz, Kandahar, Kabul, carpets marvelous in weaving and colors, silks, which

it interesting.

Central Asia will fail for want of interest. A special correspondent of the Twentieth Century will know how to make

picturesque lines of horsemen, pedestrians, horses, camels, asses, carts. Bah! I have no fear that my journey across

it. Since the establishment of the Transasiatic railways, it is not often that you can meet with those interminable and

Russian Turkestan. I should like to arrive with one and depart with the other. That is not possible, and I am sorry for

one just coming in, composed of Armenian merchants. There is one going out, formed of traders in Persia and

manipulated undulations of which will make you sea-sick. And everywhere amid the confusion of market booths, the

women in holiday costume, moving about with faces uncovered, both Georgians and Armenians, thereby showing that they are Christians.

As to the men, they are Apollos of the Belvedere, not so simply clothed, having the air of princes, and I should

like to know if they are not so. Are they not descended from them? But I will genealogize later on. Let us continue

our exploration at full stride. A minute lost is ten lines of correspondence, and ten lines of correspondence is--that

depends on the generosity of the newspaper and its managers.

Quick to the grand caravanserai. There you will find the caravans from all points of the Asiatic continent. Here is

one just coming in, composed of Armenian merchants. There is one going out, formed of traders in Persia and

Russian Turkestan. I should like to arrive with one and depart with the other. That is not possible, and I am sorry for

it. Since the establishment of the Transasiatic railways, it is not often that you can meet with those interminable and

picturesque lines of horsemen, pedestrians, horses, camels, asses, carts. Bah! I have no fear that my journey across

Central Asia will fail for want of interest. A special correspondent of the Twentieth Century will know how to make

it interesting.

Here now are the bazaars with the thousand products of Persia, China, Turkey, Siberia, Mongolia. There is a

profusion of the fabrics of Teheran, Shiraz, Kandahar, Kabul, carpets marvelous in weaving and colors, silks, which

are not worth as much as those of Lyons.

Will I buy any? No; to embarrass oneself with packages on a trip from the Caspian to the Celestial Empire, never! The little portmanteau I can carry in my hand, the bag slung across my shoulders, and a traveling suit will be enough for me. Linen? I will get it on the road, in English fashion.

Let us stop in front of the famous baths of Tiflis, the thermal waters of which attain a temperature of 60 degrees

centigrade. There you will find in use the highest development of massage, the suppling of the spine, the cracking of

the joints. I remember what was said by our great Dumas whose peregrinations were never devoid of incidents; he

invented them when he wanted them, that genial precursor of high-pressure correspondence! But I have no time to

be shampooed, or to be cracked or suppled.

Stop! The Hôtel de France. Where is there not a Hôtel de France? I enter, I order breakfast--a Georgian breakfast

watered with a certain Kachelie wine, which is said to never make you drunk, that is, if you do not sniff up as much

as you drink in using the large-necked bottles into which you dip your nose before your lips. At least that is the

proceeding dear to the natives of Transcaucasia. As to the Russians, who are generally sober, the infusion of tea is

enough for them, not without a certain addition of vodka, which is the Muscovite brandy.

I, a Frenchman, and even a Gascon, am content to drink my bottle of Kachelie, as we drank our Château Laffite,
in those regretted days, when the sun still distilled it on the hillsides of Pauillac. In truth this Caucasian wine,

although rather sour, accompanied by the boiled fowl, known as pilau--has rather a pleasant taste about it.

It is over and paid for. Let us mingle with the sixteen thousand inhabitants of the Georgian capital. Let us lose
ourselves in the labyrinth of its streets, among its cosmopolitan population. Many Jews who button their coats from left to right, as they write—the contrary way to the other Aryan peoples. Perhaps the sons of Israel are not masters in this country, as in so many others? That is so, undoubtedly; a local proverb says it takes six Jews to outwit an Armenian, and Armenians are plentiful in these Transcaucasian provinces.

I reach a sandy square, where camels, with their heads out straight, and their feet bent under in front, are sitting in hundreds. They used to be here in thousands, but since the opening of the Transcaspian railway some years ago now, the number of these humped beasts of burden has sensibly diminished. Just compare one of these beasts with a goods truck or a luggage van!

Following the slope of the streets, I come out on the quays by the Koura, the bed of which divides the town into two unequal parts. On each side rise the houses, one above the other, each one looking over the roof of its neighbors. In the neighborhood of the river there is a good deal of trade. There you will find much moving about of vendors of wine, with their goatskins bellying out like balloons, and vendors of water with their buffalo skins, fitted with pipes looking like elephants' trunks.

Here am I wandering at a venture; but to wander is human, says the collegians of Bordeaux, as they muse on the quays of the Gironde.

"Sir," says a good little Jew to me, showing me a certain habitation which seems a very ordinary one, "you are a stranger?"
"Quite."
"Then do not pass this house without stopping a moment to admire it."
"And why?"
"There lived the famous tenor Satar, who sang the contre-fa from his chest. And they paid him for it!"

I told the worthy patriarch that I hoped he would be able to sing a contre-sol even better paid for; and I went up the hill to the right of the Koura, so as to have a view of the whole town.

At the top of the hill, on a little open space where a reciter is declaiming with vigorous gestures the verses of Saadi, the adorable Persian poet, I abandon myself to the contemplation of the Transcaucasian capital. What I am doing here, I propose to do again in a fortnight at Pekin. But the pagodas and yamens of the Celestial Empire can wait awhile, here is Tiflis before my eyes; walls of the citadels, belfries of the temples belonging to the different religions, a metropolitan church with its double cross, houses of Russian, Persian, or Armenian construction; a few roofs, but many terraces; a few ornamental frontages, but many balconies and verandas; then two well-marked zones, the lower zone remaining Georgian, the higher zone, more modern, traversed by a long boulevard planted with fine trees, among which is seen the palace of Prince Bariatinsky, a capricious, unexpected marvel of irregularity, which the horizon borders with its grand frontier of mountains.

It is now five o'clock. I have no time to deliver myself in a remunerative torrent of descriptive phrases. Let us hurry off to the railway station.

There is a crowd of Armenians, Georgians, Mingrelians, Tartars, Kurds, Israelites, Russians, from the shores of the Caspian, some taking their tickets—Oh! the Oriental color—direct for Baku, some for intermediate stations.

This time I was completely in order. Neither the clerk with the gendarme's face, nor the gendarmes themselves could hinder my departure.

I take a ticket for Baku, first class. I go down on the platform to the carriages. According to my custom, I install myself in a comfortable corner. A few travelers follow me while the cosmopolitan populace invade the second and third-class carriages. The doors are shut after the visit of the ticket inspector. A last scream of the whistle announces that the train is about to start.

Suddenly there is a shout—a shout in which anger is mingled with despair, and I catch these words in German:
"Stop! Stop!"
I put down the window and look out.

A fat man, bag in hand, traveling cap on head, his legs embarrassed in the skirts of a huge overcoat, short and breathless. He is late.

The porters try to stop him. Try to stop a bomb in the middle of its trajectory! Once again has right to give place to might.

The Teuton bomb describes a well-calculated curve, and has just fallen into the compartment next to ours, through the door a traveler had obligingly left open.

The train begins to move at the same instant, the engine wheels begin to slip on the rails, then the speed increases.

We are off.
CHAPTER II.

We were three minutes late in starting; it is well to be precise. A special correspondent who is not precise is a geometer who neglects to run out his calculations to the tenth decimal. This delay of three minutes made the German our traveling companion. I have an idea that this good man will furnish me with some copy, but it is only a presentiment.

It is still daylight at six o'clock in the evening in this latitude. I have bought a time-table and I consult it. The map which accompanies it shows me station by station the course of the line between Tiflis and Baku. Not to know the direction taken by the engine, to be ignorant if the train is going northeast or southeast, would be insupportable to me, all the more as when night comes, I shall see nothing, for I cannot see in the dark as if I were an owl or a cat.

My time-table shows me that the railway skirts for a little distance the carriage road between Tiflis and the Caspian, running through Saganlong, Poily, Elisabethpol, Karascal, Aliat, to Baku, along the valley of the Koura. We cannot tolerate a railway which winds about; it must keep to a straight line as much as possible. And that is what the Transgeorgian does.

Among the stations there is one I would have gladly stopped at if I had had time, Elisabethpol. Before I received the telegram from the Twentieth Century, I had intended to stay there a week. I had read such attractive descriptions of it, and I had but a five minutes' stop there, and that between two and three o'clock in the morning! Instead of a town resplendent in the rays of the sun, I could only obtain a view of a vague mass confusedly discoverable in the pale beams of the moon!

Having ended my careful examination of the time-table, I began to examine my traveling companions. There were four of us, and I need scarcely say that we occupied the four corners of the compartment. I had taken the farthest corner facing the engine. At the two opposite angles two travelers were seated facing each other. As soon as they got in they had pulled their caps down on their eyes and wrapped themselves up in their cloaks--evidently they were Georgians as far as I could see. But they belonged to that special and privileged race who sleep on the railway, and they did not wake up until we reached Baku. There was nothing to be got out of those people; the carriage is not a carriage for them, it is a bed.

In front of me was quite a different type with nothing of the Oriental about it; thirty-two to thirty-five years old, face with a reddish beard, very much alive in look, nose like that of a dog standing at point, mouth only too glad to talk, hands free and easy, ready for a shake with anybody; a tall, vigorous, broad-shouldered, powerful man. By the way in which he settled himself and put down his bag, and unrolled his traveling rug of bright-hued tartan, I had recognized the Anglo-Saxon traveler, more accustomed to long journeys by land and sea than to the comforts of his home, if he had a home. He looked like a commercial traveler. I noticed that his jewelry was in profusion; rings on his fingers, pin in his scarf, studs on his cuffs, with photographic views in them, showy trinkets hanging from the watch-chain across his waistcoat. Although he had no earrings and did not wear a ring at his nose I should not have been surprised if he turned out to be an American--probably a Yankee.

That is my business. To find out who are my traveling companions, whence they come, where they go, is that not the duty of a special correspondent in search of interviews? I will begin with my neighbor in front of me. That will not be difficult, I imagine. He is not dreaming or sleeping, or looking out on the landscape lighted by the last rays of the sun. If I am not mistaken he will be just as glad to speak to me as I am to speak to him--and reciprocally.

I will see. But a fear restrains me. Suppose this American--and I am sure he is one--should also be a special, perhaps for the World or the New York Herald, and suppose he has also been ordered off to do this Grand Asiatic. That would be most annoying! He would be a rival!

My hesitation is prolonged. Shall I speak, shall I not speak? Already night has begun to fall. At last I was about to open my mouth when my companion prevented me.

"You are a Frenchman?" he said in my native tongue.

"Yes, sir," I replied in his.

Evidently we could understand each other.

The ice was broken, and then question followed on question rather rapidly between us. You know the Oriental proverb:

"A fool asks more questions in an hour than a wise man in a year."

But as neither my companion nor myself had any pretensions to wisdom we asked away merrily.

"Wait a bit," said my American.

I italicize this phrase because it will recur frequently, like the pull of the rope which gives the impetus to the swing.

"Wait a bit! I'll lay ten to one that you are a reporter!"

"And you would win! Yes. I am a reporter sent by the Twentieth Century to do this journey."

"Going all the way to Pekin?"
"To Pekin."
"So am I," replied the Yankee.
And that was what I was afraid of.
"Same trade?" said I indifferently.
"No. You need not excite yourself. We don't sell the same stuff, sir."
"Claudius Bombarnac, of Bordeaux, is delighted to be on the same road as--"
"Fulk Ephrinell, of the firm of Strong, Bulbul & Co., of New York City, New York, U.S.A."
And he really added U.S.A.
We were mutually introduced. I a traveler in news, and he a traveler in--In what? That I had to find out.
The conversation continues. Ephrinell, as may be supposed, has been everywhere--and even farther, as he
observes. He knows both Americas and almost all Europe. But this is the first time he has set foot in Asia. He talks
and talks, and always jerks in Wait a bit, with inexhaustible loquacity. Has the Hunson the same properties as the
Garomne?
I listen to him for two hours. I have hardly heard the names of the stations yelled out at each stop, Saganlong,
Poily, and the others. And I really should have liked to examine the landscape in the soft light of the moon, and
made a few notes on the road.
Fortunately my fellow traveler had already crossed these eastern parts of Georgia. He pointed out the spots of
interest, the villages, the watercourses, the mountains on the horizon. But I hardly saw them. Confound these
railways! You start, you arrive, and you have seen nothing on the road!
"No!" I exclaim, "there is none of the charm about it as there is in traveling by post, in troika, tarantass, with the
surprises of the road, the originality of the inns, the confusion when you change horses, the glass of vodka of the
yemtchiks--and occasionally the meeting with those honest brigands whose race is nearly extinct."
"Mr. Bombarnac," said Ephrinell to me, "are you serious in regretting all those fine things?"
"Quite serious," I reply. "With the advantages of the straight line of railway we lose the picturesqueness of the
curved line, or the broken line of the highways of the past. And, Monsieur Ephrinell, when you read of traveling in
Transcaucasia forty years ago, do you not regret it? Shall I see one of those villages inhabited by Cossacks who are
soldiers and farmers at one and the same time? Shall I be present at one of those merry-makings which charm the
tourist? those djiquitovkas with the men upright on their horses, throwing their swords, discharging their pistols, and
escorting you if you are in the company of some high functionary, or a colonel of the Staniza."
"Undoubtedly we have lost all those fine things," replies my Yankee. "But, thanks to these iron ribbons which
will eventually encircle our globe like a hogshead of cider or a bale of cotton, we can go in thirteen days from Tiflis
to Pekin. That is why, if you expect any incidents, to enliven you--"
"Certainly, Monsieur Ephrinell."
"Illusions, Mr. Bombarnac! Nothing will happen either to you or me. Wait a bit, I promise you a journey, the
most prosaic, the most homely, the flattest--flat as the steppes of Kara Koum, which the Grand Transasiatic traverses
in Turkestan, and the plains of the desert of Gobi it crosses in China--"
"Well, we shall see, for I travel for the pleasure of my readers."
"And I travel merely for my own business."
And at this reply the idea recurred to me that Ephrinell would not be quite the traveling companion I had
dreamed of. He had goods to sell, I had none to buy. I foresaw that our meeting would not lead to a sufficient
intimacy during our long journey. He was one of those Yankees who, as they say, hold a dollar between their teeth,
which it is impossible to get away from them, and I should get nothing out of him that was worth having.
And although I knew that he traveled for Strong, Bulbul & Co., of New York, I had never heard of the firm. To
listen to their representative, it would appear that Strong, Bulbul & Co. ought to be known throughout the world.
But then, how was it that they were unknown to me, a pupil of Chincholle, our master in everything! I was quite
at a loss because I had never heard of the firm of Strong, Bulbul & Co.
I was about to interrogate Ephrinell on this point, when he said to me:
"Have you ever been in the United States, Mr. Bombarnac?"
"No, Monsieur Ephrinell."
"You will come to our country some day?"
"Perhaps."
"Then you will not forget to explore the establishment of Strong, Bulbul & Co.?"
"Explore it?"
"That is the proper word."
"Good! I shall not fail to do so."
"You will see one of the most remarkable industrial establishments of the New Continent."
"I have no doubt of it; but how am I to know it?"

"Wait a bit, Mr. Bombarnac. Imagine a colossal workshop, immense buildings for the mounting and adjusting of the pieces, a steam engine of fifteen hundred horse-power, ventilators making six hundred revolutions a minute, boilers consuming a hundred tons of coals a day, a chimney stack four hundred and fifty feet high, vast outhouses for the storage of our goods, which we send to the five parts of the world, a general manager, two sub-managers, four secretaries, eight under-secretaries, a staff of five hundred clerks and nine hundred workmen, a whole regiment of travelers like your servant, working in Europe, Asia, Africa, America, Australasia, in short, a turnover exceeding annually one hundred million dollars! And all that, Mr. Bombarnac, for making millions of--yes, I said millions--"

At this moment the train commenced to slow under the action of its automatic brakes, and he stopped.

"Elisabethpol! Elisabethpol!" shout the guard and the porters on the station.

Our conversation is interrupted. I lower the window on my side, and open the door, being desirous of stretching my legs.

Ephrinell did not get out.

Here was I striding along the platform of a very poorly lighted station. A dozen travelers had already left the train. Five or six Georgians were crowding on the steps of the compartments. Ten minutes at Elisabethpol; the timetable allowed us no more.

As soon as the bell begins to ring I return to our carriage, and when I have shut the door I notice that my place is taken. Yes! Facing the American, a lady has installed herself with that Anglo-Saxon coolness which is as unlimited as the infinite. Is she young? Is she old? Is she pretty? Is she plain? The obscurity does not allow me to judge. In any case, my French gallantry prevents me from claiming my corner, and I sit down beside this person who makes no attempt at apology.

Ephrinell seems to be asleep, and that stops my knowing what it is that Strong, Bulbul & Co., of New York, manufacture by the million.

The train has started. We have left Elisabethpol behind. What have I seen of this charming town of twenty thousand inhabitants, built on the Gandja-tchaï, a tributary of the Koura, which I had specially worked up before my arrival? Nothing of its brick houses hidden under verdure, nothing of its curious ruins, nothing of its superb mosque built at the beginning of the eighteenth century. Of its admirable plane trees, so sought after by crows and blackbirds, and which maintain a supportable temperature during the excessive heats of summer, I had scarcely seen the higher branches with the moon shining on them. And on the banks of the stream which bears its silvery murmuring waters along the principal street, I had only seen a few houses in little gardens, like small crenelated fortresses. All that remained in my memory would be an indecisive outline, seized in flight from between the steam puffs of our engine. And why are these houses always in a state of defence? Because Elisabethpol is a fortified town exposed to the frequent attacks of the Lesghians of Chirvan, and these mountaineers, according to the best-informed historians, are directly descended from Attila's hordes.

It was nearly midnight. Weariness invited me to sleep, and yet, like a good reporter, I must sleep with one eye and one ear open.

I fall into that sort of slumber provoked by the regular trepidations of a train on the road, mingled with ear-splitting whistles and the grind of the brakes as the speed is slowed, and tumultuous roars as passing trains are met with, besides the names of the stations shouted out during the short stoppages, and the banging of the doors which are opened or shut with metallic sonority.

In this way I heard the shouts of Geran, Varvara, Oudjarry, Kiourdamir, Klourdane, then Karasoul, Navagi. I sat up, but as I no longer occupied the corner from which I had been so cavalierly evicted, it was impossible for me to look through the window.

And then I began to ask what is hidden beneath this mass of veils and wraps and petticoats, which has usurped my place. Is this lady going to be my companion all the way to the terminus of the Grand Transasiatic? Shall I exchange a sympathetic salute with her in the streets of Pekin? And from her my thoughts wander to my companion who is snoring in the corner in a way that would make all the ventilators of Strong, Bulbul & Co. quite jealous. And what is it these big people make? Is it iron bridges, or locomotives, or armor plates, or steam boilers, or mining pumps? From what my American told me, I might find a rival to Creusot or Cokerill or Essen in this formidable establishment in the United States of America. At least unless he has been taking a rise out of me, for he does not seem to be "green," as they say in his country, which means to say that he does not look very much like an idiot, this Ephrinell!

And yet it seems that I must gradually have fallen sound asleep. Withdrawn from exterior influences, I did not even hear the stentorian respiration of the Yankee. The train arrived at Aliat, and stayed there ten minutes without my being aware of it. I am sorry for it, for Aliat is a little seaport, and I should like to have had a first glimpse of the Caspian, and of the countries ravaged by Peter the Great. Two columns of the historico-fantastic might have been
made out of that, with the aid of Bouillet and Larousse.

"Baku! Baku!"

The word repeated as the train stopped awoke me.

It was seven o'clock in the morning.

CHAPTER III.

The boat did not start until three o'clock in the afternoon. Those of my companions who intended to cross the Caspian hurried off to the harbor; it being necessary to engage a cabin, or to mark one's place in the steamer's saloon.

Ephrinell precipitately left me with these words:

"I have not an instant to lose. I must see about the transport of my baggage."

"Have you much?"

"Forty-two cases."

"Forty-two cases!" I exclaimed.

"And I am sorry I have not double as many. Allow me--"

If he had had a voyage of eight days, instead of one of twenty-four hours, and had to cross the Atlantic instead of the Caspian, he could not have been in a greater hurry.

As you may imagine, the Yankee did not for a moment think of offering his hand to assist our companion in descending from the carriage. I took his place. The lady leaned on my arm and jumped--no, gently put her foot on the ground. My reward was a thank you, sir, uttered in a hard, dry, unmistakably British voice.

Thackeray has said somewhere that a well-brought-up Englishwoman is the completest of the works of God on this earth. My only wish is to verify this gallant affirmation in the case of my companion. She has put back her veil. Is she a young woman or an old girl? With these Englishwomen one never knows! Twenty-five years is apparently about her age, she has an Albionesque complexion, a jerky walk, a high dress like an equinoctial tide, no spectacles, although she has eyes of the intense blue which are generally short-sighted. While I bend my back as I bow, she honors me with a nod, which only brings into play the vertebrae of her long neck, and she walks off straight toward the way out.

Probably I shall meet this person again on the steamboat. For my part, I shall not go down to the harbor until it is time to start. I am at Baku: I have half a day to see Baku, and I shall not lose an hour, now that the chances of my wanderings have brought me to Baku.

It is possible that the name may in no way excite the reader's curiosity. But perhaps it may inflame his imagination if I tell him that Baku is the town of the Guebres, the city of the Parsees, the metropolis of the fire-worshippers.

Encircled by a triple girdle of black battlemented walls, the town is built near Cape Apcheron, on the extreme spur of the Caucasian range. But am I in Persia or in Russia? In Russia undoubtedly, for Georgia is a Russian province; but we can still believe we are in Persia, for Baku has retained its Persian physiognomy. I visit a palace of the khans, a pure product of the architecture of the time of Schahriar and Scheherazade, "daughter of the moon," his gifted romancer, a palace in which the delicate sculpture is as fresh as it came from the chisel. Further on rise some slender minarets, and not the bulbous roofs of Moscow the Holy, at the angles of an old mosque, into which one can enter without taking off one's boots. True, the muezzin no longer declaims from it some sonorous verse of the Koran at the hour of prayer. And yet Baku has portions of it which are real Russian in manners and aspect, with their wooden houses without a trace of Oriental color, a railway station of imposing aspect, worthy of a great city in Europe or America, and at the end of one of the roads, a modern harbor, the atmosphere of which is foul with the coal smoke vomited from the steamer funnels.

And, in truth, one asks what they are doing with coal in this town of naphtha. What is the good of coal when the bare and arid soil of Apcheron, which grows only the Pontic absinthium, is so rich in mineral oil? At eighty francs the hundred kilos, it yields naphtha, black or white, which the exigencies of supply will not exhaust for centuries.

A marvelous phenomenon indeed! Do you want a light or a fire? Nothing can be simpler; make a hole in the ground, the gas escapes, and you apply a match. That is a natural gasometer within the reach of all purses.

I should have liked to visit the famous sanctuary of Atesh Gah; but it is twenty-two versts from the town, and time failed me. There burns the eternal fire, kept up for centuries by the Parsee priests from India, who never touch animal food.

This reminds me that I have not yet breakfasted, and as eleven o'clock strikes, I make my way to the restaurant at the railway, where I have no intention of conforming myself to the alimentary code of the Parsees of Atesh Gah.

As I am entering, Ephrinell rushes out.
"Breakfast?" say I.  
"I have had it," he replies.  
"And your cases?"  
"I have still twenty-nine to get down to the steamer. But, pardon, I have not a moment to lose. When a man represents the firm of Strong, Bulbul & Co., who send out every week five thousand cases of their goods--"  
"Go, go, Monsieur Ephrinell, we will meet on board. By the by, you have not met our traveling companion?"
"What traveling companion?"
"The young lady who took my place in the carriage."
"Was there a young lady with us?"
"Of course."
"Well you are the first to tell me so, Mr. Bombarnac. You are the first to tell me so."
And thereupon the American goes out of the door and disappears. It is to be hoped I shall know before we get to Pekin what it is that Strong, Bulbul & Co. send out in such quantities. Five thousand cases a week--what an output, and what a turnover!

I had soon finished my breakfast and was off again. During my walk I was able to admire a few magnificent Lesghians; these wore the grayish tcherkesse, with the cartridge belts on the chest, the bechmet of bright red silk, the gaiters embroidered with silver, the boots flat, without a heel, the white papak on the head, the long gun on the shoulders, the schaska and kandijar at the belt--in short men of the arsenal as there are men of the orchestra, but of superb aspect and who ought to have a marvelous effect in the processions of the Russian emperor.

It is already two o'clock, and I think I had better get down to the boat. I must call at the railway station, where I have left my light luggage at the cloakroom.

Soon I am off again, bag in one hand, stick in the other, hastening down one of the roads leading to the harbor.

At the break in the wall where access is obtained to the quay, my attention is, I do not know why, attracted by two people walking along together. The man is from thirty to thirty-five years old, the woman from twenty-five to thirty, the man already a grayish brown, with mobile face, lively look, easy walk with a certain swinging of the hips. The woman still a pretty blonde, blue eyes, a rather fresh complexion, her hair frizzed under a cap, a traveling costume which is in good taste neither in its unfashionable cut nor in its glaring color. Evidently a married couple come in the train from Tiflis, and unless I am mistaken they are French.

But although I look at them with curiosity, they take no notice of me. They are too much occupied to see me. In their hands, on their shoulders, they have bags and cushions and wraps and sticks and sunshades and umbrellas. They are carrying every kind of little package you can think of which they do not care to put with the luggage on the steamer. I have a good mind to go and help them. Is it not a happy chance--and a rare one--to meet with French people away from France?

Just as I am walking up to them, Ephrinell appears, drags me away, and I leave the couple behind. It is only a postponement. I will meet them again on the steamboat and make their acquaintance on the voyage.

"Well," said I to the Yankee, "how are you getting on with your cargo?"
"At this moment, sir, the thirty-seventh case is on the road."
"And no accident up to now?"
"No accident."
"And what may be in those cases, if you please?"
"In those cases? Ah! There is the thirty-seventh!" he exclaimed, and he ran out to meet a truck which had just come onto the quay.

There was a good deal of bustle about, and all the animation of departures and arrivals. Baku is the most frequented and the safest port on the Caspian. Derbent, situated more to the north, cannot keep up with it, and it absorbs almost the entire maritime traffic of this sea, or rather this great lake which has no communication with the neighboring seas. The establishment of Uzun Ada on the opposite coast has doubled the trade which used to pass through Baku. The Transcaspian now open for passengers and goods is the chief commercial route between Europe and Turkestan.

In the near future there will perhaps be a second route along the Persian frontier connecting the South Russian railways with those of British India, and that will save travelers the navigation of the Caspian. And when this vast basin has dried up through evaporation, why should not a railroad be run across its sandy bed, so that trains can run through without transhipment at Baku and Uzun Ada?

While we are waiting for the realization of this desideratum, it is necessary to take the steamboat, and that I am preparing to do in company with many others.

Our steamer is called the Astara, of the Caucasus and Mercury Company. She is a big paddle steamer, making three trips a week from coast to coast. She is a very roomy boat, designed to carry a large cargo, and the builders
have thought considerably more of the cargo than of the passengers. After all, there is not much to make a fuss about in a day's voyage.

There is a noisy crowd on the quay of people who are going off, and people who have come to see them off, recruited from the cosmopolitan population of Baku. I notice that the travelers are mostly Turkomans, with about a score of Europeans of different nationalities, a few Persians, and two representatives of the Celestial Empire. Evidently their destination is China.

The Astara is loaded up. The hold is not big enough, and a good deal of the cargo has overflowed onto the deck. The stern is reserved for passengers, but from the bridge forward to the topgallant forecastle, there is a heap of cases covered with tarpaulins to protect them from the sea.

There Ephrinell's cases have been put. He has lent a hand with Yankee energy, determined not to lose sight of his valuable property, which is in cubical cases, about two feet on the side, covered with patent leather, carefully strapped, and on which can be read the stenciled words, "Strong, Bulbul & Co., New York."

"Are all your goods on board?" I asked the American.
"There is the forty-second case just coming," he replied.
And there was the said case on the back of a porter already coming along the gangway.
It seemed to me that the porter was rather tottery, owing perhaps to a lengthy absorption of vodka.
"Wait a bit!" shouted Ephrinell. Then in good Russian, so as to be better understood, he shouted:
"Look out! Look out!"
It is good advice, but it is too late. The porter has just made a false step. The case slips from his shoulders, falls--luckily over the rail of the Astara--breaks in two, and a quantity of little packets of paper scatter their contents on the deck.

What a shout of indignation did Ephrinell raise! What a whack with his fist did he administer to the unfortunate porter as he repeated in a voice of despair: "My teeth, my poor teeth!"

And he went down on his knees to gather up his little bits of artificial ivory that were scattered all about, while I could hardly keep from laughing.

Yes! It was teeth which Strong, Bulbul & Co., of New York made! It was for manufacturing five thousand cases a week for the five parts of the world that this huge concern existed! It was for supplying the dentists of the old and new worlds; it was for sending teeth as far as China, that their factory required fifteen hundred horse power, and burned a hundred tons of coal a day! That is quite American!

After all, the population of the globe is fourteen hundred million, and as there are thirty-two teeth per inhabitant, that makes forty-five thousand millions; so that if it ever became necessary to replace all the true teeth by false ones, the firm of Strong, Bulbul & Co. would not be able to supply them.

But we must leave Ephrinell gathering up the odontological treasures of the forty-second case. The bell is ringing for the last time. All the passengers are aboard. The Astara is casting off her warps.

Suddenly there are shouts from the quay. I recognize them as being in German, the same as I had heard at Tiflis when the train was starting for Baku.

It is the same man. He is panting, he runs, he cannot run much farther. The gangway has been drawn ashore, and the steamer is already moving off. How will this late comer get on board?

Luckily there is a rope out astern which still keeps the Astara near the quay. The German appears just as two sailors are manoeuvring with the fender. They each give him a hand and help him on board.

Evidently this fat man is an old hand at this sort of thing, and I should not be surprised if he did not arrive at his destination.

However, the Astara is under way, her powerful paddles are at work, and we are soon out of the harbor.

About a quarter of a mile out there is a sort of boiling, agitating the surface of the sea, and showing some deep trouble in the waters. I was then near the rail on the starboard quarter, and, smoking my cigar, was looking at the harbor disappearing behind the point round Cape Apcheron, while the range of the Caucasus ran up into the western horizon.

Of my cigar there remained only the end between my lips, and taking a last whiff, I threw it overboard.

In an instant a sheet of flame burst out all round the steamer. The boiling came from a submarine spring of naphtha, and the cigar end had set it alight.

Screams arise. The Astara rolls amid sheaves of flame; but a movement of the helm steers us away from the flaming spring, and we are out of danger.

The captain comes aft and says to me in a frigid tone:
"That was a foolish thing to do."

And I reply, as I usually reply under such circumstances:
"Really, captain, I did not know--"
"You ought always to know, sir!"
These words are uttered in a dry, cantankerous tone a few feet away from me.
I turn to see who it is.
It is the Englishwoman who has read me this little lesson.

CHAPTER IV.
I am always suspicious of a traveler's "impressions." These impressions are subjective--a word I use because it is the fashion, although I am not quite sure what it means. A cheerful man looks at things cheerfully, a sorrowful man looks at them sorrowfully. Democritus would have found something enchanting about the banks of the Jordan and the shores of the Dead Sea. Heraclitus would have found something disagreeable about the Bay of Naples and the beach of the Bosphorus. I am of a happy nature--you must really pardon me if I am rather egotistic in this history, for it is so seldom that an author's personality is so mixed up with what he is writing about--like Hugo, Dumas, Lamartine, and so many others. Shakespeare is an exception, and I am not Shakespeare--and, as far as that goes, I am not Lamartine, nor Dumas, nor Hugo.

However, opposed as I am to the doctrines of Schopenhauer and Leopardi, I will admit that the shores of the Caspian did seem rather gloomy and dispiriting. There seemed to be nothing alive on the coast; no vegetation, no birds. There was nothing to make you think you were on a great sea. True, the Caspian is only a lake about eighty feet below the level of the Mediterranean, but this lake is often troubled by violent storms. A ship cannot "get away," as sailors say: it is only about a hundred leagues wide. The coast is quickly reached eastward or westward, and harbors of refuge are not numerous on either the Asiatic or the European side.

There are a hundred passengers on board the Astara--a large number of them Caucasians trading with Turkestan, and who will be with us all the way to the eastern provinces of the Celestial Empire.

For some years now the Transcaspian has been running between Uzun Ada and the Chinese frontier. Even between this part and Samarkand it has no less than sixty-three stations; and it is in this section of the line that most of the passengers will alight. I need not worry about them, and I will lose no time in studying them. Suppose one of them proves interesting, I may pump him and peg away at him, and just at the critical moment he will get out.

No! All my attention I must devote to those who are going through with me. I have already secured Ephrinell, and perhaps that charming Englishwoman, who seems to me to be going to Pekin. I shall meet with other traveling companions at Uzun Ada. With regard to the French couple, there is nothing more at present, but the passage of the Caspian will not be accomplished before I know something about them. There are also these two Chinamen who are evidently going to China. If I only knew a hundred words of the "Kouan-hoa," which is the language spoken in the Celestial Empire, I might perhaps make something out of these curious guys. What I really want is some personage with a story, some mysterious hero traveling incognito, a lord or a bandit. I must not forget my trade as a reporter of occurrences and an interviewer of mankind--at so much a line and well selected. He who makes a good choice has a good chance.

I go down the stairs to the saloon aft. There is not a place vacant. The cabins are already occupied by the passengers who are afraid of the pitching and rolling. They went to bed as soon as they came on board, and they will not get up until the boat is alongside the wharf at Uzun Ada. The cabins being full, other travelers have installed themselves on the couches, amid a lot of little packages, and they will not move from there.

As I am going to pass the night on deck, I return up the cabin stairs. The American is there, just finishing the repacking of his case.

"Would you believe it!" he exclaims, "that that drunken moujik actually asked me for something to drink?"

"I hope you have lost nothing, Monsieur Ephrinell?" I reply.

"No; fortunately."

"May I ask how many teeth you are importing into China in those cases?"

"Eighteen hundred thousand, without counting the wisdom teeth!"

And Ephrinell began to laugh at this little joke, which he fired off on several other occasions during the voyage.

I left him and went onto the bridge between the paddle boxes.

It is a beautiful night, with the northerly wind beginning to freshen. In the offing, long, greenish streaks are sweeping over the surface of the sea. It is possible that the night may be rougher than we expect. In the forepart of the steamer are many passengers, Turkomans in rags, Kirghizes wrapped up to the eyes, moujiks in emigrant costume--poor fellows, in fact, stretched on the spare spars, against the sides, and along the tarpaulins. They are almost all smoking or nibbling at the provisions they have brought for the voyage. The others are trying to sleep and forget their fatigue, and perhaps their hunger.

It occurs to me to take a stroll among these groups. I am like a hunter beating the brushwood before getting into
the hiding place. And I go among this heap of packages, looking them over as if I were a custom house officer.

A rather large deal case, covered with a tarpaulin, attracts my attention. It measures about a yard and a half in height, and a yard in width and depth. It has been placed here with the care required by these words in Russian, written on the side, "Glass--Fragile--Keep from damp," and then directions, "Top--Bottom," which have been respected. And then there is the address, "Mademoiselle Zinca Klork, Avenue Cha-Coua, Pekin, Petchili, China."

This Zinca Klork--her name showed it--ought to be a Roumanian, and she was taking advantage of this through train on the Grand Transasiatic to get her glass forwarded. Was this an article in request at the shops of the Middle Kingdom? How otherwise could the fair Celestials admire their almond eyes and their elaborate hair?

The bell rang and announced the six-o'clock dinner. The dining-room is forward. I went down to it, and found it already occupied by some forty people.

Ephrinell had installed himself nearly in the middle. There was a vacant seat near him; he beckoned to me to occupy it, and I hastened to take possession.

Was it by chance? I know not; but the Englishwoman was seated on Ephrinell's left and talking to him. He introduced me.

"Miss Horatia Bluett," he said.

Opposite I saw the French couple conscientiously studying the bill of fare.

At the other end of the table, close to where the food came from--and where the people got served first--was the German passenger, a man strongly built and with a ruddy face, fair hair, reddish beard, clumsy hands, and a very long nose which reminded one of the proboscidean feature of the plantigrades. He had that peculiar look of the officers of the Landsturm threatened with premature obesity.

"He is not late this time," said I to Ephrinell.

"The dinner hour is never forgotten in the German Empire!" replied the American.

"Do you know the German's name?"

"Baron Weisschnitzerdörfer."

"And with that name is he going to Pekin?"

"To Pekin, like that Russian major who is sitting near the captain of the Astara."

I looked at the man indicated. He was about fifty years of age, of true Muscovite type, beard and hair turning gray, face prepossessing. I knew Russian: he ought to know French. Perhaps he was the fellow traveler of whom I had dreamed.

"You said he was a major, Mr. Ephrinell?"

"Yes, a doctor in the Russian army, and they call him Major Noltitz."

Evidently the American was some distance ahead of me, and yet he was not a reporter by profession.

As the rolling was not yet very great, we could dine in comfort. Ephrinell chatted with Miss Horatia Bluett, and I understood that there was an understanding between these two perfectly Anglo-Saxon natures.

In fact, one was a traveler in teeth and the other was a traveler in hair. Miss Horatia Bluett represented an important firm in London, Messrs. Holmes-Holme, to whom the Celestial Empire annually exports two millions of female heads of hair. She was going to Pekin on account of the said firm, to open an office as a center for the collection of the Chinese hair crop. It seemed a promising enterprise, as the secret society of the Blue Lotus was agitating for the abolition of the pigtail, which is the emblem of the servitude of the Chinese to the Manchu Tartars.

"Come," thought I, "if China sends her hair to England, America sends her teeth: that is a capital exchange, and everything is for the best."

We had been at the table for a quarter of an hour, and nothing had happened. The traveler with the smooth complexion and his blonde companion seemed to listen to us when we spoke in French. It evidently pleased them, and they were already showing an inclination to join in our talk. I was not mistaken, then; they are compatriots, but of what class?

At this moment the Astara gave a lurch. The plates rattled on the table; the covers slipped; the glasses upset some of their contents; the hanging lamps swung out of the vertical--or rather our seats and the table moved in accordance with the roll of the ship. It is a curious effect, when one is sailor enough to bear it without alarm.

"Eh!" said the American; "here is the good old Caspian shaking her skin."

"Are you subject to seasickness?" I asked.

"No more than a porpoise," said he. "Are you ever seasick?" he continued to his neighbor.

"Never," said Miss Horatia Bluett.

On the other side of the table there was an interchange of a few words in French.

"You are not unwell, Madame Caterna?"

"No, Adolphe, not yet; but if this continues, I am afraid--"

"Well, Caroline, we had better go on deck. The wind has hauled a point to the eastward, and the Astara will soon
be sticking her nose in the feathers."

His way of expressing himself shows that "Monsieur Catera"—if that was his name—was a sailor, or ought to have been one. That explains the way he rolls his hips as he walks.

The pitching now becomes very violent. The majority of the company cannot stand it. About thirty of the passengers have left the table for the deck. I hope the fresh air will do them good. We are now only a dozen in the dining room, including the captain, with whom Major Noltitz is quietly conversing. Ephrinell and Miss Bluett seem to be thoroughly accustomed to these inevitable incidents of navigation. The German baron drinks and eats as if he had taken up his quarters in some bier-halle at Munich, or Frankfort, holding his knife in his right hand, his fork in his left, and making up little heaps of meat, which he salts and peppers and covers with sauce, and then inserts under his hairy lip on the point of his knife. Fie! What behavior! And yet he gets on splendidly, and neither rolling nor pitching makes him lose a mouthful of food or drink.

A little way off are the two Celestials, whom I watch with curiosity.

One is a young man of distinguished bearing, about twenty-five years old, of pleasant physiognomy, in spite of his yellow skin and his narrow eyes. A few years spent in Europe have evidently Europeanized his manners and even his dress. His mustache is silky, his eye is intelligent his hair is much more French than Chinese. He seems to me a nice fellow, of a cheerful temperament, who would not ascend the "Tower of Regret," as the Chinese have it, oftener than he could help.

His companion, on the contrary, whom he always appears to be making fun of, is of the type of the true porcelain doll, with the moving head; he is from fifty to fifty-five years old, like a monkey in the face, the top of his head half shaven, the pigtail down his back, the traditional costume, frock, vest, belt, baggy trousers, many-colored slippers; a China vase of the Green family. He, however, could hold out no longer, and after a tremendous pitch, accompanied by a long rattle of the crockery, he got up and hurried on deck. And as he did so, the younger Chinaman shouted after him, "Cornaro! Cornaro!" at the same time holding out a little volume he had left on the table.

What was the meaning of this Italian word in an Oriental mouth? Did the Chinaman speak the language of Boccaccio? The Twentieth Century ought to know, and it would know.

Madame Catera arose, very pale, and Monsieur Catera, a model husband, followed her on deck.

The dinner over, leaving Ephrinell and Miss Bluett to talk of brokerages and prices current, I went for a stroll on the poop of the Astara. Night had nearly closed in. The hurrying clouds, driven from the eastward, draped in deep folds the higher zones of the sky, with here and there a few stars peeping through. The wind was rising. The white light of the steamer clicked as it swung on the foremast. The red and green lights rolled with the ship, and projected their long colored rays onto the troubled waters.

I met Ephrinell, Miss Horatia Bluett having retired to her cabin; he was going down into the saloon to find a comfortable corner on one of the couches. I wished him good night, and he left me after gratifying me with a similar wish.

As for me, I will wrap myself in my rug and lie down in a corner of the deck, and sleep like a sailor during his watch below.

It is only eight o'clock. I light my cigar, and with my legs wide apart, to assure my stability as the ship rolled, I begin to walk up and down the deck. The deck is already abandoned by the first-class passengers, and I am almost alone. On the bridge is the mate, pacing backward and forward, and watching the course he has given to the man at the wheel, who is close to him. The paddles are impetuously beating into the sea, and now and then breaking into thunder, as one or the other of the wheels runs wild, as the rolling lifts it clear of the water. A thick smoke rises from the funnel, which occasionally belches forth a shower of sparks.

At nine o'clock the night is very dark. I try to make out some steamer's lights in the distance, but in vain, for the Caspian has not many ships on it. I can hear only the cry of the sea birds, gulls and scoters, who are abandoning themselves to the caprices of the wind.

During my promenade, one thought besets me: is the voyage to end without my getting anything out of it as copy for my journal? My instructions made me responsible for producing something, and surely not without reason. What? Not an adventure from Tiflis to Pekin? Evidently that could only be my fault! And I resolved to do everything to avoid such a misfortune.

It is half-past ten when I sit down on one of the seats in the stern of the Astara. But with this increasing wind it is impossible for me to remain there. I rise, therefore, and make my way forward. Under the bridge, between the paddle boxes, the wind is so strong that I seek shelter among the packages covered by the tarpaulin. Stretched on one of the boxes, wrapped in my rug, with my head resting against the tarpaulin, I shall soon be asleep.

After some time, I do not exactly know how much, I am awakened by a curious noise. Whence comes this noise? I listen more attentively. It seems as though some one is snoring close to my ear.
"That is some steerage passenger," I think. "He has got under the tarpaulin between the cases, and he will not do so badly in his improvised cabin."

By the light which filters down from the lower part of the binnacle, I see nothing.

I listen again. The noise has ceased.

I look about. There is no one on this part of the deck, for the second-class passengers are all forward.

Then I must have been dreaming, and I resume my position and try again to sleep.

This time there is no mistake. The snoring has begun again, and I am sure it is coming from the case against which I am leaning my head.

"Goodness!" I say. "There must be an animal in here!"

An animal? What? A dog? A cat? Why have they hidden a domestic animal in this case? Is it a wild animal? A panther, a tiger, a lion?

Now I am off on the trail! It must be a wild animal on its way from some menagerie to some sultan of Central Asia. This case is a cage, and if the cage opens, if the animal springs out onto the deck--here is an incident, here is something worth chronicling; and here I am with my professional enthusiasm running mad. I must know at all costs to whom this wild beast is being sent; is it going to Uzon Ada, or is it going to China? The address ought to be on the case.

I light a wax vesta, and as I am sheltered from the wind, the flame keeps upright.

By its light what do I read?

The case containing the wild beast is the very one with the address:

"Mademoiselle Zinca Klork, Avenue Cha-Coua, Pekin, China."

Fragile, my wild beast! Keep from damp, my lion! Quite so! But for what does Miss Zinca Klork, this pretty--for the Roumanian ought to be pretty, and she is certainly a Roumanian--for what does she want a wild beast sent in this way?

Let us think about it and be reasonable. This animal, whatever it may be, must eat and drink. From the time it starts from Uzon Ada it will take eleven days to cross Asia, and reach the capital of the Celestial Empire. Well, what do they give it to drink, what do they give it to eat, if he is not going to get out of his cage, if he is going to be shut up during the whole of the journey? The officials of the Grand Transasiatic will be no more careful in their attentions to the said wild beast than if he were a glass, for he is described as such; and he will die of inanition!

All these things sent my brain whirling. My thoughts bewildered me. "Is it a lovely dream that dazes me, or am I awake?" as Margaret says in Faust, more lyrically than dramatically. To resist is impossible. I have a two-pound weight on each eyelid. I lay down along by the tarpaulin; my rug wraps me more closely, and I fall into a deep sleep.

How long have I slept? Perhaps for three or four hours. One thing is certain, and that is that it is not yet daylight when I awake.

I rub my eyes, I rise, I go and lean against the rail.

The Astara is not so lively, for the wind has shifted to the northeast.

The night is cold. I warm myself by walking about briskly for half an hour. I think no more of my wild beast. Suddenly remembrance returns to me. Should I not call the attention of the stationmaster to this disquieting case? But that is no business of mine. We shall see before we start.

I look at my watch. It is only three o'clock in the morning. I will go back to my place. And I do so with my head against the side of the case. I shut my eyes.

Suddenly there is a new sound. This time I am not mistaken. A half-stifled sneeze shakes the side of the case. Never did an animal sneeze like that!

Is it possible? A human being is hidden in this case and is being fraudulently carried by the Grand Transasiatic to the pretty Roumanian? But is it a man or a woman? It seems as though the sneeze had a masculine sound about it.

It is impossible to sleep now. How long the day is coming! How eager I am to examine this box! I wanted incidents--well! and here is one, and if I do not get five lines out of this--

The eastern horizon grows brighter. The clouds in the zenith are the first to color. The sun appears at last all watery with the mists of the sea.

I look; it is indeed the case addressed to Pekin. I notice that certain holes are pierced here and there, by which the air inside can be renewed. Perhaps two eyes are looking through these holes, watching what is going on outside? Do not be indiscreet!

At breakfast gather all the passengers whom the sea has not affected: the young Chinaman, Major Noltitz, Ephrinell, Miss Bluett, Monsieur Caterna, the Baron Weisschnitzerdörfer, and seven or eight other passengers. I am careful not to let the American into the secret of the case. He would be guilty of some indiscretion, and then good-by to my news par!

About noon the land is reported to the eastward, a low, yellowish land, with no rocky margin, but a few sandhills
in the neighborhood of Krasnovodsk.

In an hour we are in sight of Uzun Ada, and twenty-seven minutes afterward we set foot in Asia.

CHAPTER V.

Travelers used to land at Mikhailov, a little port at the end of the Transcaspian line; but ships of moderate tonnage hardly had water enough there to come alongside. On this account, General Annenkof, the creator of the new railway, the eminent engineer whose name will frequently recur in my narrative, was led to found Uzun Ada, and thereby considerably shorten the crossing of the Caspian. The station was built in three months, and it was opened on the 8th of May, 1886.

Fortunately I had read the account given by Boulangier, the engineer, relating to the prodigious work of General Annenkof, so that I shall not be so very much abroad during the railway journey between Uzun Ada and Samarkand, and, besides, I trust to Major Noltitz, who knows all about the matter. I have a presentiment that we shall become good friends, and in spite of the proverb which says, "Though your friend be of honey do not lick him!" I intend to "lick" my companion often enough for the benefit of my readers.

We often hear of the extraordinary rapidity with which the Americans have thrown their railroads across the plains of the Far West. But the Russians are in no whit behind them, if even they have not surpassed them in rapidity as well as in industrial audacity.

People are fully acquainted with the adventurous campaign of General Skobeleff against the Turkomans, a campaign of which the building of the railway assured the definite success. Since then the political state of Central Asia has been entirely changed, and Turkestan is merely a province of Asiatic Russia, extending to the frontiers of the Chinese Empire. And already Chinese Turkestan is very visibly submitting to the Muscovite influence which the vertiginous heights of the Pamir plateau have not been able to check in its civilizing march.

I was about to cross the countries which were formerly ravaged by Tamerlane and Genghis Khan, those fabulous countries of which the Russians in 1886 possessed six hundred and fifteen thousand square kilometres, with thirteen hundred thousand inhabitants. The southern part of this region now forms the Transcaspian province, divided into six districts, Fort Alexandrovski, Krasnovodsk, Askhabad, Karibent, Merv, Pendjeh, governed by Muscovite colonels or lieutenant-colonels.

As may be imagined, it hardly takes an hour to see Uzun Ada, the name of which means Long Island. It is almost a town, but a modern town, traced with a square, drawn with a line or a large carpet of yellow sand. No monuments, no memories, bridges of planks, houses of wood, to which comfort is beginning to add a few mansions in stone. One can see what this, first station of the Transcaspian will be like in fifty years; a great city after having been a great railway station.

Do not think that there are no hotels. Among others there is the Hôtel du Czar, which has a good table, good rooms and good beds. But the question of beds has no interest for me. As the train starts at four o’clock this afternoon, to begin with, I must telegraph to the Twentieth Century, by the Caspian cable, that I am at my post at the Uzun Ada station. That done, I can see if I can pick up anything worth reporting.

Nothing is more simple. It consists in opening an account with those of my companions with whom I may have to do during the journey. That is my custom, I always find it answers, and while waiting for the unknown, I write down the known in my pocketbook, with a number to distinguish each:


As to the Chinese, they will have a number later on, when I have made up my mind about them. As to the individual in the box, I intend to enter into communication with him, or her, and to be of assistance in that quarter if I can do so without betraying the secret.

The train is already marshaled in the station. It is composed of first and second-class cars, a restaurant car and two baggage vans. These cars are painted of a light color, an excellent precaution against the heat and against the cold. For in the Central Asian provinces the temperature ranges between fifty degrees centigrade above zero and twenty below, and in a range of seventy degrees it is only prudent to minimize the effects.

These cars are in a convenient manner joined together by gangways, on the American plan. Instead of being shut up in a compartment, the traveler strolls about along the whole length of the train. There is room to pass between the stuffed seats, and in the front and rear of each car are the platforms united by the gangways. This facility of communication assures the security of the train.

Our engine has a bogie on four small wheels, and is thus able to negotiate the sharpest curves; a tender with water and fuel; then come a front van, three first-class cars with twenty-four places each, a restaurant car with pantry and kitchen, four second-class cars and a rear van; in all twelve vehicles, counting in the locomotive and tender. The
first class cars are provided with dressing rooms, and their seats, by very simple mechanism, are convertible into beds, which, in fact, are indispensable for long journeys. The second-class travelers are not so comfortably treated, and besides, they have to bring their victuals with them, unless they prefer to take their meals at the stations. There are not many, however, who travel the complete journey between the Caspian and the eastern provinces of China—that is to say about six thousand kilometres. Most of them go to the principal towns and villages of Russian Turkestan, which have been reached by the Transcaspian Railway for some years, and which up to the Chinese frontier has a length of over 1,360 miles.

This Grand Transasiatic has only been open six weeks and the company is as yet only running two trains a week. All has gone well up to the present; but I ought to add the significant detail that the railway men carry a supply of revolvers to arm the passengers with if necessary. This is a wise precaution in crossing the Chinese deserts, where an attack on the train is not improbable.

I believe the company are doing their best to ensure the punctuality of their trains; but the Chinese section is managed by Celestials, and who knows what has been the past life of those people? Will they not be more intent on the security of their dividends than of their passengers?

As I wait for the departure I stroll about on the platform, looking through the windows of the cars, which have no doors along the sides, the entrances being at the ends.

Everything is new; the engine is as bright as it can be, the carriages are brilliant in their new paint, their springs have not begun to give with wear, and their wheels run true on the rails. Then there is the rolling stock with which we are going to cross a continent. There is no railway as long as this—not even in America. The Canadian line measures five thousand kilometres, the Central Union, five thousand two hundred and sixty, the Santa Fe line, four thousand eight hundred and seventy-five, the Atlantic Pacific, five thousand six hundred and thirty, the Northern Pacific, six thousand two hundred and fifty. There is only one line which will be longer when it is finished, and that is the Grand Transsiberian, from the Urals to Vladivostock, which will measure six thousand five hundred kilometres.

Between Tiflis and Pekin our journey will not last more than thirteen days, from Uzun Ada it will only last eleven. The train will only stop at the smaller stations to take in fuel and water. At the chief towns like Merv, Bokhara, Samarkand, Tashkend, Kachgar, Kokhand, Sou Tcheou, Lan Tcheou, Tai Youan, it will stop a few hours—and that will enable me to do these towns in reporter style.

Of course, the same driver and stoker will not take us through. They will be relieved every six hours. Russians will take us up to the frontier of Turkestan, and Chinese will take us on through China.

But there is one representative of the company who will not leave his post, and that is Popof, our head guard, a true Russian of soldierly bearing, hairy and bearded, with a folded overcoat and a Muscovite cap. I intend to talk a good deal with this gallant fellow, although he is not very talkative. If he does not despise a glass of vodka, opportunity offered, he may have a good deal to say to me; for ten years he has been on the Transcaspian between Uzun Ada and the Pamirs, and during the last month he has been all along the line to Pekin.

I call him No. 7 in my notebook, and I hope he will give me information enough. I only want a few incidents of the journey, just a few little incidents worthy of the Twentieth Century.

Among the passengers I see on the platform are a few Jews, recognizable more by their faces than their attire. Formerly, in Central Asia, they could only wear the "toppe," a sort of round cap, and a plain rope belt, without any silk ornamentation—under pain of death. And I am told that they could ride on asses in certain towns and walk on foot in others. Now they wear the oriental turban and roll in their carriages if their purse allows of it. Who would hinder them now they are subjects of the White Czar, Russian citizens, rejoicing in civil and political rights equal to those of their Turkoman compatriots?

There are a few Tadjiks of Persian origin, the handsomest men you can imagine. They have booked for Merv, or Bokhara, or Samarkand, or Tachkend, or Kokhand, and will not pass the Russo-Chinese frontier. As a rule they are second-class passengers. Among the first-class passengers I noticed a few Usbegs of the ordinary type, with retreating foreheads and prominent cheek bones, and brown complexions, who were the lords of the country, and from whose families come the emirs and khans of Central Asia.

But are there not any Europeans in this Grand Transasiatic train? It must be confessed that I can only count five or six. There are a few commercial travelers from South Russia, and one of those inevitable gentlemen from the United Kingdom, who are inevitably to be found on the railways and steamboats. It is still necessary to obtain permission to travel on the Transcaspian, permission which the Russian administration does not willingly accord to an Englishman; but this man has apparently been able to get one.

And he seems to me to be worth notice. He is tall and thin, and looks quite the fifty years that his gray hairs proclaim him to be. His characteristic expression is one of haughtiness, or rather disdain, composed in equal parts of love of all things English and contempt for all things that are not. This type is occasionally so insupportable, even to
his compatriots, that Dickens, Thackeray and others have often made fun of it. How he turned up his nose at the station at Uzun Ada, at the train, at the men, at the car in which he had secured a seat by placing in it his traveling bag! Let us call him No. 8 in my pocketbook.

There seem to be no personages of importance. That is a pity. If only the Emperor of Russia, on one side, or the Son of Heaven, on the other, were to enter the train to meet officially on the frontier of the two empires, what festivities there would be, what grandeur, what descriptions, what copy for letters and telegrams!

It occurs to me to have a look at the mysterious box. Has it not a right to be so called? Yes, certainly. I must really find out where it has been put and how to get at it easily.

The front van is already full of Ephrinell's baggage. It does not open at the side, but in front and behind, like the cars. It is also furnished with a platform and a gangway. An interior passage allows the guard to go through it to reach the tender and locomotive if necessary. Popof's little cabin is on the platform of the first car, in the left-hand corner. At night it will be easy for me to visit the van, for it is only shut in by the doors at the ends of the passage arranged between the packages. If this van is reserved for luggage registered through to China, the luggage for the Turkestan stations ought to be in the van at the rear.

When I arrived the famous box was still on the platform.

In looking at it closely I observe that airholes have been bored on each of its sides, and that on one side it has two panels, one of which can be made to slide on the other from the inside. And I am led to think that the prisoner has had it made in order that he can, if necessary, leave his prison--probably during the night.

Just now the porters are beginning to lift the box. I have the satisfaction of seeing that they attend to the directions inscribed on it. It is placed, with great care, near the entrance to the van, on the left, the side with the panels outward, as if it were the door of a cupboard. And is not the box a cupboard? A cupboard I propose to open?

It remains to be seen if the guard in charge of the luggage is to remain in this van. No. I find that his post is just outside it.

"There it is, all right!" said one of the porters, looking to see that the case was as it should be, top where top should be, and so on.

"There is no fear of its moving," said another porter; "the glass will reach Pekin all right, unless the train runs off the metals."

"Or it does not run into anything," said the other; "and that remains to be seen."

They were right--these good fellows--it remained to be seen--and it would be seen.

The American came up to me and took a last look at his stock of incisors, molars and canines, with a repetition of his invariable "Wait a bit."

"You know, Monsieur Bombarnac," he said to me, "that the passengers are going to dine at the Hôtel du Czar before the departure of the train. It is time now. Will you come with me?"

"I follow you."

And we entered the dining room. All my numbers are there: 1, Ephrinell, taking his place as usual by the side of 2, Miss Horatia Bluett. The French couple, 4 and 5, are also side by side. Number 3, that is Major Noltitz, is seated in front of numbers 9 and 10, the two Chinese to whom I have just given numbers in my notebook. As to the fat German, number 6, he has already got his long nose into his soup plate. I see also that the Guard Popol, number 7, has his place at the foot of the table. The other passengers, Europeans and Asiatics, are installed, passim with the evident intention of doing justice to the repast.

Ah! I forgot my number 8, the disdainful gentleman whose name I don't yet know, and who seems determined to find the Russian cookery inferior to the English.

I also notice with what attention Monsieur Caterna looks after his wife, and encourages her to make up for the time lost when she was unwell on board the Astara. He keeps her glass filled, he chooses the best pieces for her, etc.

"What a good thing it is," I hear him say, "that we are not to leeward of the Teuton, for there would be nothing left for us!"

He is to windward of him--that is to say, the dishes reach him before they get to the baron, which, however, does not prevent his clearing them without shame.

The observation, in sea language, made me smile, and Caterna, noticing it, gave me a wink with a slight movement of the shoulder toward the baron.

It is evident that these French people are not of high distinction, they do not belong to the upper circles; but they are good people, I will answer for it, and when we have to rub shoulders with compatriots, we must not be too particular in Turkestan.

The dinner ends ten minutes before the time fixed for our departure. The bell rings and we all make a move for the train, the engine of which is blowing off steam.

Mentally, I offer a last prayer to the God of reporters and ask him not to spare me adventures. Then, after
satisfying myself that all my numbers are in the first-class cars, so that I can keep an eye on them, I take my place.

The Baron Weisschnitzerdörfer—what an interminable name—is not behindhand this time. On the contrary, it is
the train this time which is five minutes late in starting; and the German has begun to complain, to chafe and to
swear, and threatens to sue the company for damages. Ten thousand roubles—not a penny less!—if it causes him to
fail. Fail in what, considering that he is going to Pekin?

At length the last shriek of the whistle cleaves the air, the cars begin to move, and a loud cheer salutes the
departure of the Grand Transasiatic express.

CHAPTER VI.

The ideas of a man on horseback are different to those which occur to him when he is on foot. The difference is
even more noticeable when he is on the railway. The association of his thoughts, the character of his reflections are
all affected by the speed of the train. They "roll" in his head, as he rolls in his car. And so it comes about that I am in
a particularly lively mood, desirous of observing, greedy of instruction, and that at a speed of thirty-one miles an
hour. That is the rate at which we are to travel through Turkestan, and when we reach the Celestial Empire we shall
have to be content with eighteen.

That is what I have just ascertained by consulting my time-table, which I bought at the station. It is accompanied
by a long slip map, folded and refolded on itself, which shows the whole length of the line between the Caspian and
the eastern coast of China. I study, then, my Transasiatic, on leaving Uzun Ada, just as I studied my Transgeorgian
when I left Tiflis.

The gauge of the line is about sixty-three inches—as is usual on the Russian lines, which are thus about four
inches wider than those of other European countries. It is said, with regard to this, that the Germans have made a
great number of axles of this length, in case they have to invade Russia. I should like to think that the Russians have
taken the same precautions in the no less probable event of their having to invade Germany.

On either side of the line are long sandhills, between which the train runs out from Uzun Ada; when it reaches
the arm of the sea which separates Long Island from the continent, it crosses an embankment about 1,200 yards
long, edged with masses of rock to protect it against the violence of the waves.

We have already passed several stations without stopping, among others Mikhailov, a league from Uzun Ada.
Now they are from ten to eleven miles apart. Those I have seen, as yet, look like villas, with balustrades and Italian
roofs, which has a curious effect in Turkestan and the neighborhood of Persia. The desert extends up to the
neighborhood of Uzun Ada, and the railway stations form so many little oases, made by the hand of man. It is man,
in fact, who has planted these slender, sea-green poplars, which give so little shade; it is man who, at great expense,
has brought here the water whose refreshing jets fall back into an elegant vase. Without these hydraulic works there
would not be a tree, not a corner of green in these oases. They are the nurses of the line, and dry-nurses are of no use
to locomotives.

The truth is that I have never seen such a bare, arid country, so clear of vegetation; and it extends for one
hundred and fifty miles from Uzun Ada. When General Annenkof commenced his works at Mikhailov, he was
obliged to distil the water from the Caspian Sea, as if he were on board ship. But if water is necessary to produce
steam, coal is necessary to vaporize the water. The readers of the Twentieth Century will ask how are the furnaces
fed in a country in which there is neither coal nor wood? Are there stores of these things at the principal stations of
the Transcaspian? Not at all. They have simply put in practice an idea which occurred to our great chemist, Sainte-
Claire Deville, when first petroleum was used in France. The furnaces are fed, by the aid of a pulverizing apparatus,
with the residue produced from the distillation of the naphtha, which Baku and Derbent produce in such
inexhaustible quantities. At certain stations on the line there are vast reservoirs of this combustible mineral, from
which the tenders are filled, and it is burned in specially adapted fireboxes. In a similar way naphtha is used on the
steamboats on the Volga and the other affluents of the Caspian.

I repeat, the country is not particularly varied. The ground is nearly flat in the sandy districts, and quite flat in the
alluvial plains, where the brackish water stagnates in pools. Nothing could be better for a line of railway. There are
no cuttings, no embankments, no viaducts, no works of art—to use a term dear to engineers, very "dear," I should
say. Here and there are a few wooden bridges from two hundred to three hundred feet long. Under such
circumstances the cost per kilometre of the Transcaspian did not exceed seventy-five thousand francs.

The monotony of the journey would only be broken on the vast oases of Merv, Bokhara and Samarkand.

But let us busy ourselves with the passengers, as we can do all the more easily from our being able to walk from
one end to the other of the train. With a little imagination we can make ourselves believe we are in a sort of traveling
village, and I am just going to take a run down main street.

Remember that the engine and tender are followed by the van at the angle of which is placed the mysterious
case, and that Popof's compartment is in the left-hand corner of the platform of the first car.

Inside this car I notice a few Sarthes of tall figure and haughty face, draped in their long robes of bright colors, from beneath which appear the braided leather boots. They have splendid eyes, a superb beard, arched nose, and you would take them for real lords, provided we ignore the word Sarthe, which means a pedlar, and these were going evidently to Tachkend, where these pedlars swarm.

In this car the two Chinese have taken their places, opposite each other. The young Celestial looks out of window. The old one--Ta-lao-ye, that is to say, a person well advanced in years--is incessantly turning over the pages of his book. This volume, a small 32mo, looks like our Annuaire du Bureau des Longitudes, and is covered in plush, like a breviary, and when it is shut its covers are kept in place by an elastic band. What astonishes me is that the proprietor of this little book does not seem to read it from right to left. Is it not written in Chinese characters? We must see into this!

On two adjoining seats are Ephrinell and Miss Horatia Bluett. Their talk is of nothing but figures. I don't know if the practical American murmurs at the ear of the practical Englishwoman the adorable verse which made the heart of Lydia palpitate:

"Nee tecum possum vivere sine te,"

but I do know that Ephrinell can very well live without me. I have been quite right in not reckoning on his company to charm away the tedium of the journey. The Yankee has completely "left" me--that is the word--for this angular daughter of Albion.

I reach the platform. I cross the gangway and I am at the door of the second car.

In the right-hand corner is Baron Weisschnitzerdörfer. His long nose--this Teuton is as short-sighted as a mole--rubs the lines of the book he reads. The book is the time-table. The impatient traveler is ascertaining if the train passes the stations at the stated time. Whenever it is behind there are new recriminations and menaces against the Grand Transasiatic Company.

In this car there are also the Caternas, who have made themselves quite comfortable. In his cheery way, the husband is talking with a good deal of gesticulation, sometimes touching his wife's hands, sometimes putting his arms round her waist; and then he turns his head toward the platform and says something aside. Madame Caterna leans toward him, makes little confused grimaces, and then leans back into the corner and seems to reply to her husband, who in turn replies to her. And as I leave I hear the chorus of an operetta in the deep voice of Monsieur Caterna.

In the third car, occupied by many Turkomans and three or four Russians, I perceive Major Noltitz. He is talking with one of his countrymen. I will willingly join in their conversation if they make me any advances, but I had better maintain a certain reserve; the journey has only begun.

I then visit the dining car. It is a third longer than the other cars, a regular dining room, with one long table. At the back is a pantry on one side, a kitchen on the other, where the cook and steward are at work, both of them Russians. This dining car appears to me capitally arranged. Passing through it, I reach the second part of the train, where the second-class passengers are installed. Kirghizes who do not look very intelligent with their depressed heads, their prognathous jaws stuck well out in front, their little beards, flat Cossack noses and very brown skins. These wretched fellows are Mahometans and belong either to the Grand Horde wandering on the frontier between China and Siberia, or to the Little Horde between the Ural Mountains and the Aral Sea. A second-class car, or even a third-class car, is a palace for these people, accustomed to the encampments on the Steppes, to the miserable "iourts" of villages. Neither their beds nor their seats are as good as the stuffed benches on which they have seated themselves with true Asiatic gravity.

With them are two or three Nogais going to Eastern Turkestan. Of a higher race than the Kirghizes, being Tartars, it is from them that come the learned men and professors who have made illustrious the opulent cities of Bokhara and Samarkand. But science and its teaching do not yield much of a livelihood, even when reduced to the mere necessaries of life, in these provinces of Central Asia. And so these Nogais take employment as interpreters. Unfortunately, since the diffusion of the Russian language, their trade is not very remunerative.

Now I know the places of my numbers, and I know where to find them when I want them. As to those going through to Pekin, I have no doubt of Ephrinell and Miss Horatia Bluett nor the German baron, nor the two Chinese, nor Major Noltitz, nor the Caternas, nor even for the haughty gentleman whose bony outline I perceive in the corner of the second car.

As to these travelers who are not going across the frontier, they are of most perfect insignificance in my eyes. But among my companions I have not yet found the hero of my chronicle! let us hope he will declare himself as we proceed.

My intention is to take notes hour by hour--what did I say? To "minute" my journey. Before the night closes in I go out on the platform of the car to have a last look at the surrounding country. An hour with my cigar will take me
to Kizil Arvat, where the train has to stop for some time. In going from the second to the first car I meet Major Noltitz. I step aside to let him pass. He salutes me with that grace which distinguishes well-bred Russians. I return his salute. Our meeting is restricted to this exchange of politeness, but the first step is taken.

Popof is not just now in his seat. The door of the luggage van being open, I conclude that the guard has gone to talk with the driver. On the left of the van the mysterious box is in its place. It is only half-past six as yet, and there is too much daylight for me to risk the gratification of my curiosity.

The train advances through the open desert. This is the Kara Koum, the Black Desert. It extends from Khiva over all Turkestan comprised between the Persian frontier and the course of the Amou Daria. In reality the sands of the Kara Koum are no more black than the waters of the Black Sea or than those of the White Sea are white, those of the Red Sea red, or those of the Yellow River yellow. But I like these colored distinctions, however erroneous they may be. In landscapes the eye is caught by colors. And is there not a good deal of landscape about geography?

It appears that this desert was formerly occupied by a huge central basin. It has dried up, as the Caspian will dry up, and this evaporation is explained by the powerful concentration of the solar rays on the surface of the territories between the Sea of Aral and the Plateau of the Pamir.

The Kara Koum is formed of low sandy hills which the high winds are constantly shifting and forming. These "barkans," as the Russians call them, vary in height from thirty to ninety feet. They expose a wide surface to the northern hurricanes which drive them gradually southward. And on this account there is a well-justified fear for the safety of the Transcaspian. It had to be protected in some efficacious way, and General Annenkof would have been much embarrassed if provident Nature had not, at the same time as she gave the land favorable for the railway to be laid along, given the means of stopping the barkanes.

Behind these sand hills grow a number of spring shrubs, clumps of tamarisk, star thistles, and that Haloxylon ammodendron which Russians call, not so scientifically, "saksaul." Its deep, strong roots are as well adapted for binding together the ground as those of Hippophae rhamnoides, an arbutus of the Eleagnaceous family, which is used for binding together the sands in southern Europe.

To these plantations of saksauls the engineers of the line have added in different places a series of slopes of worked clay, and in the most dangerous places a line of palisades.

These precautions are doubtless of use; but if the road is protected, the passengers are hardly so, when the sand flies like a bullet hail, and the wind sweeps up from the plain the whitish efflorescences of salt. It is a good thing for us that we are not in the height of the hot season; and it is not in June or July or August that I would advise you to take a trip on the Grand Transasiatic.

I am sorry that Major Noltitz does not think of coming out on the gangway to breathe the fresh air of the Kara Koum. I would offer him one of those choice regalias with which my case is well provided. He would tell me if these stations I see on my time-table, Balla-Ischem, Aidine, Pereval, Kansandjik, Ouchak, are of any interest—which they do not seem to be. But it would not do for me to disturb his siesta. And yet his conversation ought to be interesting, for as a surgeon in the Russian army he took part in the campaigns of Generals Skobeleff and Annenkof. When our train ran through the little stations that it honors only with a whistle, he could tell me if this one or that one had been the scene of any incident of the war. As a Frenchman I am justified in questioning him about the Russian expedition across Turkestan, and I have no doubt that my fellow passenger will be pleased to gratify me. He is the only one I can really trust besides Popof.

But why is Popof not in his seat? He also is not insensible to the charms of a cigar. It would seem that his conversation with the engineer has not finished yet.

Ah! Here he is coming from the front of the luggage van. He comes out of it and shuts the door; he remains for a moment and is about to take a seat. A hand which holds a cigar, is stretched out toward him. Popof smiles and soon his perfumed puffs are mingling voluptuously with mine.

For fifteen years I think I said our guard had been in the Transcaspian service. He knows the country up to the Chinese frontier, and five or six times already he has been over the whole line known as the Grand Transasiatic.

Popof was on duty on the section between Mikhailov and Kizil Arvat when the line opened—a section which was begun in the December of 1880 and finished in ten months, in November, 1881. Five years later the locomotive entered Merv, on the 14th July, 1886, and eighteen months later it was welcomed at Samarkand. Now the road through Turkestan joins the road through the Celestial Empire, and the ribbon of iron extends without interruption from the Caspian Sea to Pekin.

When Popof had given me this information, I asked if he knew anything of our fellow travelers, I meant those who were going through to China. And in the first place of Major Noltitz?

"The major," said Popof, "has lived a long time in the Turkestan provinces, and he is going to Pekin to organize the staff of a hospital for our compatriots, with the permission of the Czar, of course."

"I like this Major Noltitz," I said, "and I hope to make his acquaintance very soon."
"He would be equally pleased to make yours," replied Popof.
"And these two Chinese, do you know them?"
"Not in the least, Monsieur Bombarnac; all I know is the name on the luggage."
"What is that?"
"The younger man's name is Pan-Chao, the elder's is Tio-King. Probably they have been traveling in Europe for some years. As to saying where they come from, I cannot. I imagine that Pan-Chao belongs to some rich family, for he is accompanied by his doctor."
"This Tio-King?"
"Yes, Doctor Tio-King."
"And do they only speak Chinese?"
"Probably; I have not heard them speak any other language together."
On this information from Popof, I will keep to the number nine I have given to young Pan-Chao, and to the ten with which I have labelled Doctor Tio-King.
"Ephrinell?" I exclaimed, "and Miss Horatia Bluett, the Englishwoman? Oh! You can tell me nothing about them I don't know."
"Shall I tell you what I think about that couple, Monsieur Bombarnac?"
"What do you think?"
"That as soon as they reach Pekin, Miss Bluett will become Mrs. Ephrinell."
"And may Heaven bless their union, Popof, for they are really made for each other."
I saw that on this subject Popof and I held similar ideas.
"And the two French people, that couple so affectionate." I asked, "who are they?"
"Have they not told you?"
"No, Popof."
"You need not be anxious, Monsieur Bombarnac. Besides, if you wish to know their profession, it is written at full length on all their luggage.
"And that is?"
"Stage people who are going to a theater in China."
Stage people! If that explains the attitudes, and mobile physiognomy, and demonstrative gestures of Caterna, it does not explain his maritime allusions.
"And do you know what line these players are in?"
"The husband is comic lead."
"And the wife?"
"She is leading lady."
"And where are these lyrical people going?"
"To Shanghai, where they have an engagement at the French theater."
That is capital. I will talk about the theater, and behind the scenes, and such matters, and, as Popof said, I shall soon make the acquaintance of the cheery comedian and his charming wife. But it is not in their company that I shall discover the hero of romance who is the object of my desire.
As to the scornful gentleman, our guide knew nothing beyond that his luggage bore the address in full: Sir Francis Trevellyan, Trevellyan Hall, Trevellyanshire.
"A gentleman who does not answer when he is spoken to!" added Popof.
Well, my number eight will have to be dumb man, and that will do very well.
"Now we get to the German," said I.
"Baron Weisschnittzerdörfer?"
"He is going to Pekin, I think."
"To Pekin and beyond."
"Beyond?"
"Yes; he is on a trip round the world."
"A trip round the world?"
"In thirty-nine days."
And so after Mrs. Bisland who did the famous tour in seventy-three days, and Train who did it in seventy, this German was attempting to do it in thirty-nine?
True, the means of communication are more rapid the line is more direct, and by using the Grand Transasiatic which puts Pekin within a fortnight of the Prussian capital, the baron might halve the old time by Suez and Singapore--but--
"He will never do it!" I exclaimed.
"Why not?" asked Popof.
"Because he is always late. He nearly missed the train at Tiflis, he nearly missed the boat at Baku--"
"But he did not miss the start from Uzun Ada."
"It doesn't matter, Popof. I shall be much surprised if this German beats an American at globe trotting."

CHAPTER VII.
The train arrived at Kizil Arvat, two hundred and forty-two versts from the Caspian, at thirteen minutes past seven in the evening instead of seven o'clock. This slight delay provoked thirteen objurgations from the baron, one for each minute.

We have two hours to wait at Kizil Arvat. Although the day is closing in, I could not employ my time better than in visiting this little town, which contains more than two thousand inhabitants, Russians, Persians and Turkmans. There is not much to see, however, either within it or around it; there are no trees—not even a palm tree—only pasturages and fields of cereals, watered by a narrow stream. My good fortune furnished me with a companion, or I should rather say a guide, in Major Noltitz.

Our acquaintance was made very simply. The major came up to me, and I went up to him as soon as we set foot on the platform of the railway station.

"Sir," said I, "I am a Frenchman, Claudius Bombarnac, special correspondent of the Twentieth Century, and you are Major Noltitz of the Russian army. You are going to Pekin, so am I. I can speak your language, and it is very likely that you can speak mine."

The major made a sign of assent.

"Well, Major Noltitz, instead of remaining strangers to each other during the long transit of Central Asia, would it please you for us to become more than mere traveling companions? You know all about this country that I do not know, and it would be a pleasure for me to learn from you."

"Monsieur Bombarnac," replied the major in French, without a trace of accent, "I quite agree with you."

Then he added with a smile:

"As to learning from me, one of your most eminent critics, if I remember rightly, has said that the French only like to learn what they know."

"I see that you have read Sainte Beuve, Major Noltitz; perhaps this sceptical academician was right in a general way. But for my part, I am an exception to the rule, and I wish to learn what I do not know. And in all that concerns Russian Turkestan, I am in a state of ignorance."

"I am entirely at your disposal," said the major, "and I will be happy to tell you all about General Annenkof, for I was all through the work with him."

"I thank you, Major Noltitz. I expected no less than the courtesy of a Russian towards a Frenchman."

"And," said the major, "if you will allow me to quote that celebrated sentence in the Danicheffs, 'It will be always thus so long as there are Frenchmen and Russians.'"

"The younger Dumas after Sainte Beuve?" I exclaimed. "I see, major, that I am talking to a Parisian--"

"Of Petersburg, Monsieur Bombarnac."

And we cordially shook hands. A minute afterwards, we were on our way through the town, and this is what Major Noltitz told me:

It was towards the end of 1885 that General Annenkof finished, at Kizil Arvat, the first portion of this railway measuring about 140 miles, of which 90 were through a desert which did not yield a single drop of water. But before telling me how this extraordinary work was accomplished, Major Noltitz reminded me of the facts which had gradually prepared the conquest of Turkestan and its definite incorporation with the Russian Empire.

As far back as 1854 the Russians had imposed a treaty of alliance on the Khan of Khiva. Some years afterwards, eager to pursue their march towards the east, the campaigns of 1860 and 1864 had given them the Khanats of Kokhand and Bokhara. Two years later, Samarkand passed under their dominion after the battles of Irdjar and Zerabuleh.

There remained to be conquered the southern portion of Turkestan, and chiefly the oasis of Akhal Tekke, which is contiguous to Persia. Generals Sourakine and Lazaroff attempted this in their expeditions of 1878 and 1879. Their plans failed, and it was to the celebrated Skobelev, the hero of Plevna, that the czar confided the task of subduing the valiant Turkoman tribes.

Skobelev landed at the port of Mikhailov—the port of Uzun Ada was not then in existence—and it was in view of facilitating his march across the desert that his second in command, Annenkof, constructed the strategic railway
which in ten months reached Kizil Arvat.

This is how the Russians built the line with a rapidity superior, as I have said, to that of the Americans in the far west, a line that was to be of use for commerce and for war.

To begin with, the general got together a construction train consisting of thirty-four wagons. Four of these were two-decked for the officers, twenty more had two decks and were used by the workmen and soldiers; one wagon served as a dining room, four as kitchens, one as an ambulance, one as a telegraph office, one as a forge, one as a provision store, and one was held in reserve. These were his traveling workshops and also his barracks in which fifteen hundred workmen, soldiers and otherwise, found their board and lodging. The train advanced as the rails were laid. The workmen were divided into two brigades; they each worked six hours a day, with the assistance of the country people who lived in tents and numbered about fifteen thousand. A telegraph wire united the works with Mikhailov, and from there a little Decauville engine worked the trains which brought along the rails and sleepers.

In this way, helped by the horizontality of the ground, a day's work yielded nearly five miles of track, whereas in the plains of the United States only about half that rate was accomplished. Labor cost little; forty-five francs a month for the men from the oasis, fifty centimes a day for those who came from Bokhara.

It was in this way that Skobeleff's soldiers were taken to Kizil Arvat, and then eighty-four miles beyond to Gheok Tepe. This town did not surrender until after the destruction of its ramparts and the massacre of twelve thousand of its defenders; but the oasis of Akhal Tekke was in the power of the Russians. The inhabitants of the Atek oasis were only too willing as they had implored the help of the czar in their struggle with Kouli Khan, the chief of the Mervians. These latter to the number of two hundred and fifty thousand, followed their example, and the first locomotive entered Merv station in July, 1886.

"And the English?" I asked Major Noltitz. "In what way have they looked upon the progress of the Russians through Central Asia?"

"Jealously, of course. Think for a moment what it means when the Russian railways are united with the Chinese, instead of the Indian. The Transcaspian in connection with the line between Herat and Delhi! And consider that the English have not been as fortunate in Afghanistan as we have been in Turkestan. You have noticed the gentleman in our train?"

"I have. He is Sir Francis Trevellyan of Trevellyan Hall, Trevellyanshire."

"Well, Sir Francis Trevellyan has nothing but looks of contempt and shrugs of the shoulder for all we have done. His nation's jealousy is incarnate in him, and England will never be content that our railways should go from Europe to the Pacific Ocean, while the British railways end at the Indian Ocean."

This interesting conversation had lasted for the hour and a half during which we walked about the streets of Kizil Arvat. It was time to return to the station, and we did so.

Of course, matters did not end here. It was agreed that the major should leave his seat in the third car and occupy that next to mine in the first. We had already been two inhabitants of the same town; well, we would become two neighbors in the house, or, rather, two friends in the same room.

At nine o'clock the signal to start was given. The train leaving Kizil Arvat went off in a southwesterly direction towards Askhabad, along the Persian frontier.

For another half hour the major and I continued to talk of one thing or another. He told me that if the sun had not set, I should have been able to see the summits of the Great and Little Balkans of Asia which rise above the bay of Krasnovodsk.

Already most of our companions had taken up their quarters for the night on their seats, which by an ingenious mechanism could be transformed into beds, on which you could stretch yourself at full length, lay your head on a pillow, wrap yourself in rugs, and if you didn't sleep well it would be on account of a troubled conscience.

Major Noltitz had nothing to reproach himself with apparently, for a few minutes after he had said good night he was deep in the sleep of the just.

As for me, if I remained awake it was because I was troubled in my mind. I was thinking of my famous packing case, of the man it contained, and this very night I had resolved to enter into communication with him. I thought of the people who had done this sort of thing before. In 1889, 1891, and 1892, an Austrian tailor, Hermann Zeitung, had come from Vienna to Paris, from Amsterdam to Brussels, from Antwerp to Christiania in a box, and two sweethearts of Barcelona, Erres and Flora Anglora, had shared a box between them from Spain into France.

But I must wait until Popof had retired to rest. The train would not stop until it reached Gheok Tepe at one o'clock in the morning. During the run from Kizil Arvat to Gheok Tepe I reckoned that Popof would have a good sleep, and then, or never, I would put my plan into execution.

Hold! an idea! Suppose it is Zeitung who makes a trade of this sort of thing and manages to make a little money out of public generosity? It ought to be Zeitung, it must be! Confound it! he is not at all interesting! And here was I reckoning on this fellow. Well, we shall see. I shall know him by his photographs, and perhaps I may make use of
him.

Half an hour went by, and the noise of a door shutting on the platform of the car told me that our guard had just entered his little box. In spite of my desire to visit the baggage car I waited patiently, for it was possible that Popof was not yet sound asleep.

Within, all is quiet under the veiled light of the lamps.
Without, the night is very dark, and the rattle of the train mingles with the whistling of the rather high wind.
I rise. I draw aside the curtain of one of the lamps. I look at my watch.
It is a few minutes past eleven. Still two hours to Gheok Tepe.

The moment has come. I glide between the seats to the door of the car. I open it gently and shut it after me without being heard by my companions, without waking any one.

Here I am on the platform, which shakes as the train travels. Amid the unfathomable darkness which envelops the Kara Koum, I experience the feeling of a night at sea when on board.
A feeble light filters through the blind of the guard's box. Shall I wait till it is extinct, or, as is very probable, will it not last till the morning?

Anyhow, Popof is not asleep, as I discover by the noise he makes in turning over. I keep quiet, leaning against the balustrade of the platform.
Leaning forward my looks are attracted by the luminous ray thrown forward by the headlight of the engine. It seems as though we are running on a road of fire. Above me the clouds are racing across with great rapidity, and a few constellations glitter through their rifts, Cassiopeia, the Little Bear, in the north, and in the zenith Vega of Lyra.

At length absolute silence reigns on the platforms. Popof, who is in charge of the train, has his eyes closed in sleep. Assured of safety I cross the gangway and am in front of the baggage van.
The door is only fastened with a bar which is hung between two staples.
I open it and shut it behind me.
I do this without noise, for if I do not want to attract Popof's attention, I do not want as yet to attract the attention of the man in the packing case.

Although the darkness is deep in the van, although there is no side window, I know my position. I know where the case is placed; it is in the left corner as I enter. The thing is not to knock against any other case—not against one of those belonging to Ephrinell, for what a row there would be if I set all those artificial teeth chattering!

Carefully feeling with feet and hands, I reach the case. No cat could have been more gentle or more silent as I felt its edges.

I leaned over and placed my ear timidly against the outer panel.
There was no sound of breathing.
The products of the house of Strong, Bulbul & Co., of New York, could not be more noiseless in their boxes.
A fear seizes upon me—the fear of seeing all my reporter's hopes vanish. Was I deceived on board the Astara? That respiration, that sneeze; had I dreamed it all? Was there no one in the case, not even Zeitung? Were these really glass goods exported to Miss Zinca Klork, Avenue Cha-Coua, Pekin, China?
No! Feeble as it is, I detect a movement inside the case! It becomes more distinct, and I ask if the panel is going to slide, if the prisoner is coming out of his prison to breathe the fresh air?

What I had better do to see and not to be seen is to hide between two cases. Thanks to the darkness there is nothing to fear.

Suddenly a slight cracking greets my ear. I am not the sport of an illusion; it is the crack of a match being lighted.
Almost immediately a few feeble rays pierce the ventilation holes of the case.
If I had had any doubts as to the position held by the prisoner in the scale of being, I have none now. At the least it must be an ape who knows the use of fire, and also the handling of matches. Travelers tell us that such animals exist, but we have to take the statement on trust.

Why should I not confess it? A certain emotion came over me and I had to take care I did not run away.
A minute elapsed. Nothing shows that the panel has been moved, nothing gives me reason to suppose that the unknown is coming out.

Cautiously I wait. Then I have an idea to make something out of this light. The case is lighted within; if I were to peep through those holes?
I creep toward the case. A single apprehension chills my brain. If the light were suddenly extinguished!
I am against the panel, which I take care not to touch, and I put my eyes close to one of the holes.
There is a man in the box, and it is not the Austrian tailor, Zeitung! Thank Heaven! I will soon make him my No. 11.

The man's features I can make out clearly. He is from twenty-five to twenty-six years of age. He does not shave,
and his beard is brown. He is of the true Roumanian type, and that confirms me in my notion regarding his
Roumanian correspondent. He is good-looking, although his face denotes great energy of character, and he must be
energetic to have shut himself up in a box like this for such a long journey. But if he has nothing of the malefactor
about him, I must confess that he does not look like the hero I am in search of as the chief personage in my story.

After all, they were not heroes, that Austrian and that Spaniard who traveled in their packing cases. They were
young men, very simple, very ordinary, and yet they yielded columns of copy. And so this brave No. 11, with
amplifications, antonyms, diaphoreses, epitases, tropes, metaphors, and other figures of that sort, I will beat out, I
will enlarge, I will develop—as they develop a photographic negative.

Besides to travel in a box from Tiflis to Pekin is quite another affair than traveling from Vienna or Barcelona to
Paris, as was done by Zeitung, Erres and Flora Anglora.

I add that I will not betray my Roumanian; I will report him to no one. He may rely on my discretion; he may
reckon on my good offices if I can be of use to him when he is found out.

But what is he doing now? Well, he is seated on the bottom of his case and placidly eating his supper by the light
of a little lamp. A box of preserves is on his knee, biscuit is not wanting, and in a little cupboard I notice some full
bottles, besides a rug and overcoat hooked up on the wall.

Evidently No. 11 is quite at home. He is there in his cell like a snail in his shell. His house goes with him; and he
saves the thousand francs it would have cost him to journey from Tiflis to Pekin, second-class. I know he is
committing a fraud, and that the law punishes such fraud. He can come out of his box when he likes and take a walk
in the van, or even at night venture on the platform. Now! I do not blame him, and when I think of his being sent to
the pretty Roumanian, I would willingly take his place.

An idea occurs to me which may not perhaps be as good as it seems. That is to rap lightly on the box so as to
enter into communication with my new companion, and learn who he is, and whence he comes, for I know whither
he goes. An ardent curiosity devours me, I must gratify it. There are moments when a special correspondent is
metamorphosed into a daughter of Eve.

But how will the poor fellow take it? Very well, I am sure. I will tell him that I am a Frenchman, and a
Roumanian knows he can always trust a Frenchman. I will offer him my services. I will propose to soften the rigors
of his imprisonment by my interviews, and to make up the scarcity of his meals by little odds and ends. He will have
nothing to fear from my imprudences.

I rap the panel.
The light suddenly goes out.
The prisoner has suspended his respiration.
I must reassure him.
"Open!" I say to him gently in Russian.
"Open--"
I cannot finish the sentence; for the train gives a sudden jump and slackens speed.
But we cannot yet have reached Gheok Tepe?
There is a noise outside.
I rush out of the van and shut the door behind me.
It was time.
I have scarcely reached the platform before Popof's door opens, and without seeing me he hurries through the van
on to the engine.

Almost immediately the train resumes its normal speed and Popof reappears a minute afterwards.
"What is the matter, Popof?"
"What is often the matter, Monsieur Bombarnac. We have smashed a dromedary."
"Poor brute!"
"Poor brute? He might have thrown us off the line!"
"Stupid brute, then!"

CHAPTER VIII.

Before the train reaches Gheok Tepe I am back in the car. Confound this dromedary! If he had not managed to
get smashed so clumsily No. 11 would no longer be unknown to me. He would have opened his panel, we would
have talked in a friendly way, and separated with a friendly shake of the hand. Now he will be full of anxiety, he
knows his fraud is discovered, that there is some one who has reason to suspect his intentions, some one who may
not hesitate to betray his secret. And then, after being taken out of his case, he will be put under guard at the next
station, and it will be useless for Mademoiselle Zinca Klork to expect him in the capital of the Chinese Empire!
Yes! It would be better for me to relieve his anxiety this very night. That is impossible, for the train will soon stop at Gheok Tepe, and then at Askhabad which it will leave in the first hour of daylight. I can no longer trust to Popof's going to sleep.

I am absorbed in these reflections, when the locomotive stops in Gheok Tepe station at one o'clock in the morning. None of my companions have left their beds.

I get out on to the platform and prowl around the van. It would be too risky to try and get inside. I should have been glad to visit the town, but the darkness prevents me from seeing anything. According to what Major Noltitz says it still retains the traces of Skobelev's terrible assault in 1880—dismantled walls, bastions in ruins. I must content myself with having seen all that with the major's eyes.

The train starts at two o'clock in the morning, after having been joined by a few passengers who Popof tells me are Turkomans. I will have a look at them when daylight comes.

For ten minutes I remained on the car platform and watched the heights of the Persian frontier on the extreme limit of the horizon. Beyond the stretch of verdant oasis watered by a number of creeks, we crossed wide cultivated plains through which the line made frequent diversions.

Having discovered that Popof did not intend to go to sleep again, I went back to my corner.

At three o'clock there was another stop. The name of Askhabad was shouted along the platform. As I could not remain still I got out, leaving my companions sound asleep, and I ventured into the town.

Askhabad is the headquarters of the Transcaspian, and I opportunely remembered what Boulangier, the engineer, had said about it in the course of that interesting journey he had made to Merv. All that I saw on the left as I went out of the station, was the gloomy outline of the Turkoman Fort, dominating the new town, the population of which has doubled since 1887. It forms a confused mass behind a thick curtain of trees.

When I returned at half-past three, Popof was going through the luggage van, I know not why. What must be the Roumanian's anxiety during this movement to and fro in front of his box!

As soon as Popof reappeared I said to him: "Anything fresh?"
"Nothing, except the morning breeze!" said he.
"Very fresh!" said I. "Is there a refreshment bar in the station?"
"There is one for the convenience of the passengers."
"And for the convenience of the guards, I suppose? Come along, Popof."
And Popof did not want asking twice.

The bar was open, but there did not seem to be much to choose from. The only liquor was "Koumiss," which is fermented mare's milk, and is the color of faded ink, very nourishing, although very liquid. You must be a Tartar to appreciate this koumiss. At least that is the effect it produced on me. But Popof thought it excellent, and that was the important point.

Most of the Sarthes and Kirghizes who got out at Askhabad, have been replaced by other second-class passengers, Afghan merchants and smugglers, the latter particularly clever in their line of business. All the green tea consumed in Central Asia is brought by them from China through India, and although the transport is much longer, they sell it at a much lower price than the Russian tea. I need not say that their luggage was examined with Muscovite minuteness.

The train started again at four o'clock. Our car was still a sleeper. I envied the sleep of my companions, and as that was all I could do, I returned to the platform.

The dawn was appearing in the east. Here and there were the ruins of the ancient city, a citadel girdled with high ramparts and a succession of long porticos extending over fifteen hundred yards. Running over a few embankments, necessitated by the inequalities of the sandy ground, the train reaches the horizontal steppe.

We are running at a speed of thirty miles an hour in a southwesterly direction, along the Persian frontier. It is only beyond Douchak that the line begins to leave it. During this three hours' run the two stations at which the train stops are Gheours, the junction for the road to Mesched, whence the heights of the Iran plateau are visible, and Artyk where water is abundant although slightly brackish.

The train then traverses the oasis of the Atek, which is an important tributary of the Caspian. Verdure and trees are everywhere. This oasis justifies its name, and would not disgrace the Sahara. It extends to the station of Douchak at the six hundred and sixtieth verst, which we reach at six o'clock in the morning.

We stop here two hours, that is to say, there are two hours for us to walk about. I am off to look at Douchak with Major Noltitz as my cicerone.

A traveler precedes us out of the railway station; I recognize Sir Francis Trevellyan. The major makes me notice that this gentleman's face is more sullen than usual, his lip more scornful, his attitude more Anglo-Saxon.

"And do you know why, Monsieur Bombarnac? Because this station at Douchak might be the terminus of a line from British India through the Afghan frontier, Kandahar, the Bolan Pass and the Pendjeh oasis, that would unite the
two systems."

"And how long would the line be?"

"About six hundred miles. But the English will not meet the Russians in a friendly way. But if we could put Calcutta within twelve days of London, what an advantage that would be for their trade!"

Talking in this way the major and I "did" Douchak. Some years ago it was foreseen how important this village would be. A branch line unites it with Teheran in Persia, while there has, as yet, been no survey for a line to India. While gentlemen cast in the mould of Sir Francis Trevellyan are in the majority in the United Kingdom, the Asiatic network of railways will never be complete.

I was led to question the major regarding the safety of the Grand Transasiatic across the provinces of Central Asia.

In Turkestan, he told me, the safety is well assured. The Russian police keep constant watch over it; there is a regular police force at the stations, and as the stations are not far apart, I don't think the travelers have much to fear from the nomad tribes. Besides, the Turkomans are kept in their place by the Russian administration. During the years the Transcaspian has been at work, there has been no attack to hinder the train service.

"That is comforting, Major Noltitz. And as to the section between the frontier and Pekin?"

"That is another matter," replied the major. "Over the Pamir plateau, up to Kachgar, the road is carefully guarded; but beyond that, the Grand Transasiatic is under Chinese control, and I have not much confidence in that."

"Are the stations very far from each other?" I asked.

"Very far, sometimes."

"And the Russians in charge of the train are replaced by Chinese, are they not?"

"Yes, with the exception of Popof, who goes through with us."

"So that we shall have Chinese engine drivers and stokers? Well, major, that seems rather alarming, and the safety of the travelers--"

"Let me undeceive you, Monsieur Bombarnac. These Chinese are just as clever as we are. They are excellent mechanics, and it is the same with the engineers who laid out the line through the Celestial Empire. They are certainly a very intelligent race, and very fit for industrial progress."

"I think, major, that they will one day become masters of the world--after the Slavs, of course!"

"I do not know what the future may have in store," said Major Noltitz, with a smile. "But, returning to the Chinese, I say that they are of quick comprehension, with an astonishing facility of assimilation. I have seen them at work, and I speak from experience."

"Agreed," said I; "but if there is no danger under this head, are there not a lot of scoundrels prowling about Mongolia and Northern China?"

"And you think these scoundrels will be daring enough to attack the train?"

"Exactly, major, and that is what makes me feel easy."

"What? Makes you feel easy?"

"Quite so, for my sole anxiety is that our journey may not be devoid of incident."

"Really, Mr. Special Correspondent, I admire you. You must have incidents--"

"As a doctor must have patients. Now a real good adventure--"

"Well, Monsieur Bombarnac, I am afraid you will be disappointed, as I have heard that the company has treated several chiefs of the robber bands--"

"As the Greek Government treated Hadji Stavros in About's romance."

"Precisely; and who knows that if in their wisdom--"

"I don't believe it."

"Why not? It would be quite in the modern style, this way of assuring the safety of the trains during the run through the Celestial Empire. Anyhow, there is one of these highwaymen, who has retained his independence and liberty of action, a certain Ki-Tsang."

"Who is he?"

"A bold bandit chief, half-Chinaman, half-Mongol. Having for some time been a terror to Yunnan, he was being too closely pursued, and has now moved into the northern provinces. His presence has ever been reported in that part of Mongolia served by the Grand Transasiatic."

"Well, he ought to furnish a few paragraphs."

"The paragraphs Ki-Tsang will furnish you with may cost you too dearly."

"Bah! major, the Twentieth Century is quite rich enough to pay for its glory."

"To pay with its money, perhaps, but we may have to pay with our lives! Luckily our companions have not heard you talk in this way, or they might come in a body and demand your expulsion from the train. So be careful, and keep a guard on your desires as a newspaper man in quest of adventures. Above all, don't have anything to do with
this Ki-Tsang. It would be all the better in the interest of the passengers."
"But not of the passage, major."

We returned towards the station. The stoppage at Douchak had another half hour to last. As I walked on the quay, I observed something going on which would change the make-up of our train.

Another van had arrived from Teheran by the branch line to Mesphed, which puts the Persian capital in communication with the Transcaspian.

This van was bolted and barred, and accompanied by a squad of Persian police, whose orders seemed to be not to lose sight of it.

I don't know what made me think so, but it seemed as though this van had something mysterious about it, and as the major had left me, I went and spoke to Popof, who was watching over the proceedings.

"Popof, where is that van going?"
"To Pekin."
"And what has it got in it?"
"What has it got in it? An exalted personage."
"An exalted personage?"
"Are you surprised?"
"I am. In this van?"
"It is his own idea."
"Well, Popof, when this exalted personage gets out perhaps you will let me know?"
"He Will not get out."
"Why not?"
"Because he is dead."
"Dead?"
"Yes, and it is his body they are taking to Pekin, where he will be interred with all the honors due to him."

So that we were to have an important personage in our train--in the shape of a corpse, it is true. Never mind! I asked Popof to discover the name of the defunct. He ought to be some mandarin of mark. As soon as I knew it I would send a telegram to the Twentieth Century.

While I was looking at this van, a new passenger came up and examined it with no less curiosity than I did.

This traveler was a fine-looking man of about forty, wearing gracefully the costume of the richer Mongols, a tall fellow, with rather a gloomy look, a military moustache, tawny complexion, and eyes that never shut.

"Here is a splendid fellow," I said to myself. "I don't know if he will turn out the hero of the drama I am in search of, but, anyhow, I will number him twelve in my traveling troupe."

This leading star, I soon learned from Popof, bore the name of Faruskiar. He was accompanied by another Mongol, of inferior rank, of about the same age, whose name was Ghangir. As they looked at the van being attached to the tail of the train in front of the luggage van, they exchanged a few words. As soon as the arrangements were complete the Persians took their places in the second-class car, which preceded the mortuary van, so as to have the precious corpse always under their surveillance.

At this moment there was a shout on the station platform I recognized the voice. It was the Baron Weisschnitzendorfer shouting:

"Stop! stop!"

This time it was not a train on the start, but a hat in distress. A sudden gust had swept through the station and borne off the baron's hat--a helmet-shaped hat of a bluish color. It rolled on the platform, it rolled on the rails, it skimmed the enclosure and went out over the wall, and its owner ran his hardest to stop it.

At the sight of this wild pursuit the Cateras held their sides, the young Chinaman, Pan Chao, shouted with laughter, while Dr. Tio-King remained imperturbably serious.

The German purple, puffing and panting, could do no more. Twice he had got his hand on his hat, and twice it had escaped him, and now suddenly he fell full length with his head lost under the folds of his overcoat; whereupon Catera began to sing the celebrated air from "Miss Helyett":

"Ah! the superb point of view--ew--ew--ew! Ah! the view unexpected by you--you--you--you!"

I know nothing more annoying than a hat carried away by the wind, which bounds hither and thither, and spins and jumps, and glides, and slides, and darts off just as you think you are going to catch it. And if that should happen to me I will forgive those who laugh at the comic endeavor.

But the baron was in no mood for forgiveness. He bounded here, and bounded there, he jumped on to the line. They shouted to him, "Look out! look out!" for the Merv was coming in at some speed. It brought death to the hat, the engine smashed it pitilessly, and it was only a torn rag when it was handed to the baron. And then began again a series of imprecations on the Grand Transasiatic.
The signal is given. The passengers, old and new, hurry to their places. Among the new ones I notice three
Mongols, of forbidding appearance, who get into the second-class car.

As I put my foot on the platform I hear the young Chinese say to his companion:
"Well, Dr. Tio-King, did you see the German with his performing hat? How I laughed!"

And so Pan Chao speaks French. What do I say? Better than French—he speaks Persian! Most extraordinary! I
must have a talk with him.

CHAPTER IX.
We started to time. The baron could not complain this time. After all, I understood his impatience; a minute's
delay might cause him to lose the mail boat from Tien Tsin to Japan.

The day looked promising, that is to say, there might have been a wind strong enough to put out the sun as if it
were a candle, such a hurricane as sometimes stops the locomotives of the Grand Transasiatic, but to-day it is
blowing from the west, and will be supportable, as it blows the train along. We can remain out on the platforms.

I want to enter into conversation with Pan Chao. Popof was right; he must be the son of some family of
distinction who has been spending some years in Paris for education and amusement. He ought to be one of the most
regular visitors at the Twentieth Century "five o'clocks."

Meanwhile I will attend to other business. There is that man in the case. A whole day will elapse before I can
relieve his anxiety. In what a state he must be! But as it would be unwise for me to enter the van during the day, I
must wait until night.

I must not forget that an interview with the Caternas is included in the programme. There will be no difficulty in
that, apparently.

What will not be so easy is to get into conversation with my No. 12, his superb lordship Faruskiar. He seems
rather stiff, does this Oriental.

Ah! There is a name I must know as soon as possible, that of the mandarin returning to China in the form of a
mortuary parcel. With a little ingenuity Popof may manage to ascertain it from one of the Persians in charge of his
Excellency. If it would only be that of some grand functionary, the Pao-Wang, or the Ko-Wang, or the viceroy of the
two Kiangs, the Prince King in person!

For an hour the train is running through the oasis. We shall soon be in the open desert. The soil is formed of
alluvial beds extending up to the environs of Merv. I must get accustomed to this monotony of the journey which
will last up to the frontier of Turkestan. Oasis and desert, desert and oasis. As we approach the Pamir the scenery
will change a little. There are picturesque bits of landscape in that orographic knot which the Russians have had to
cut as Alexander cut the gordian knot that was worth something to the Macedonian conqueror of Asia. Here is a
good augury for the Russian conquest.

But I must wait for this crossing of the Pamir and its varied scenery. Beyond lay the interminable plains of
Chinese Turkestan, the immense sandy desert of Gobi, where the monotony of the journey will begin again.

It is half-past ten. Breakfast will soon be served in the dining car. Let us take a walk through the length of the
train.

Where is Epherinell? I do not see him at his post by the side of Miss Horatia Bluett, whom I questioned on the
subject after saluting her politely.

"Mr. Epherinell has gone to give an eye to his cases," she replies.

In the rear of the second car Faruskiar and Ghangir have installed themselves; they are alone at this moment, and
are talking together in a low tone.

As I return I meet Epherinell, who is coming back to his traveling companion. He shakes my hand Yankee
fashion. I tell him that Miss Horatia Bluett has given me news of him.

"Oh!" says he, "what a woman yonder! What a splendid saleswoman! One of those English--"

"Who are good enough to be Americans!" I add.

"Wait a bit!" he replies, with a significant smile.

As I am going put, I notice that the two Chinamen are already in the dining car, and that Dr. Tio-King's little
book is on the table.

I do not consider it too much of a liberty for a reporter to pick up this little book, to open it and to read the title,
which is as follows:

The temperate and regular life, Or the art of living long in perfect health. Translated from the Italian of Louis
Comaro, a Venetian noble. To which is added the way of correcting a bad constitution, and enjoying perfect felicity
to the most advanced years. and to die only from the using up of the original humidity in extreme old age. Salerno,
1782.
And this is the favorite reading of Dr. Tio-King! And that is why his disrespectful pupil occasionally gives him the nickname of Cornaro!

I have not time to see anything else in this volume than Abstinentia adjicit vitam; but this motto of the noble Venetian I have no intention of putting in practice, at least at breakfast time.

There is no change in the order in which we sit down to table. I find myself close to Major Noltitz, who is looking attentively at Faruskiar and his companion, placed at the extremity of the table. We are asking ourselves who this haughty Mongol could be.

"Ah!" said I, laughing at the thought which crossed my mind, "if that is--"

"Who?" asked the major.

"The chief of the brigands, the famous Ki-Tsang."

"Have your joke, Monsieur Bombarnac, but under your breath, I advise you!"

"You see, major, he would then be an interesting personage and worth a long interview!"

We enjoyed our meal as we talked. The breakfast was excellent, the provisions having come freshly on board at Askhabad and Douchak. For drink we had tea, and Crimean wine, and Kazan beer; for meat we had mutton cutlets and excellent preserves; for dessert a melon with pears and grapes of the best quality.

After breakfast I went to smoke my cigar on the platform behind the dining car. Caterna almost immediately joins me. Evidently the estimable comedian has seized the opportunity to enter into conversation with me.

His intelligent eyes, his smooth face, his cheeks accustomed to false whiskers, his lips accustomed to false moustaches, his head accustomed to wigs red, black, or gray, bald or hairy, according to his part, everything denoted the actor made for the life of the boards. But he had such an open, cheery face, such an honest look, so frank an attitude, that he was evidently a really good fellow.

"Sir," said he to me, "are two Frenchmen going all the way from Baku to Pekin without making each other's acquaintance?"

"Sir," I replied, "when I meet a compatriot--"

"Who is a Parisian--"

"And consequently a Frenchman twice over," I added, "I am only too glad to shake hands with him! And so, Monsieur Caterna--"

"You know my name?"

"As you know mine, I am sure."

"Of course, Monsieur Claudius Bombarnac, correspondent of the Twentieth Century."

"At your service, believe me."

"A thousand thanks, Monsieur Bombarnac, and even ten thousand, as they say in China, whither Madame Caterna and I are bound."

"To appear at Shanghai in the French troupe at the residency as--"

"You know all that, then?"

"A reporter!"

"Quite so."

"I may add, from sundry nautical phrases I have noticed, that you have been to sea."

"I believe you, sir. Formerly coxswain of Admiral de Boissondy's launch on board the Redoubtable."

"Then I beg to ask why you, a sailor, did not go by way of the sea?"

"Ah, there it is, Monsieur Bombarnac. Know that Madame Caterna, who is incontestably the first leading lady of the provinces, and there is not one to beat her as a waiting maid or in a man's part, cannot stand the sea. And when I heard of the Grand Transasiatic, I said to her, 'Be easy, Caroline! Do not worry yourself about the perfidious element. We will cross Russia, Turkestan, and China, without leaving terra firma!' And that pleased her, the little darling, so brave and so devoted, so--I am at a loss for a word--well, a lady who will play the duenna in case of need, rather than leave the manager in a mess! An artiste, a true artiste!"

It was a pleasure to listen to Caterna; he was in steam, as the engineer says, and the only thing to do was to let him blow off. Surprising as it may seem, he adored his wife, and I believe she was equally fond of him. A well-matched couple, evidently, from what I learned from my comedian, never embarrassed, very wide awake, content with his lot, liking nothing so much as the theater--above all the provincial theater--where he and his wife had played in drama, vaudeville, comedy, opera, opera comique, opera, spectacle, pantomime, happy in the entertainment which began at five o'clock in the afternoon and ended at one o'clock in the morning, in the grand theaters of the chief cities, in the saloon of the mayor, in the barn of the village, without boots, without patches, sometimes even without spectators--thus saving the return of the money--professionals fit for anything, no matter what.

As a Parisian, Caterna must have been the wag of the forecastle when he was at sea. As clever with his
instrument of brass or wood, he possessed a most varied and complete assortment of jokes, songs, monologues, and
dialogues. This he told me with an immense amount of attitude and gesture, now here, now there, legs, arms, hands,
and feet all going together. I should never feel dull in the company of such a merry companion.

"And where were you before you left France?" I asked.

"At La Ferté-sous-Jouarre, where Madame Caterna achieved a genuine success as Elsa in 'Lohengrin,' which we
played without music. But it is an interesting piece, and it was well done."

"You must have been a good deal about the world, Monsieur Caterna?"

"I believe you; Russia, England, both Americas. Ah! Monsieur Claudius."

He already called me Claudius.

"Ah! Monsieur Claudius, there was a time when I was the idol of Buenos Ayres, and the pet of Rio Janeiro! Do
not think I would tell you an untruth! No! I know myself. Bad at Paris, I am excellent in the provinces. In Paris you
play for yourself; in the provinces you play for the others! And then what a repertory!"

"My compliments, my dear compatriot!"

"I accept them, Monsieur Claudius, for I like my trade. What would you have? All the world cannot expect to be
a senator or--a special correspondent."

"There, that is wicked, Monsieur Caterna," said I, with a laugh.

"No; it is the last word."

And while the unwearied actor ran on in this way, stations appeared one after the other between the shrieks of
the whistle, Kulka, Nisachurch, Kulla Minor and others, not particularly cheerful to look at; then Bairam Ali at the
seven hundred and ninety-fifth verst and Kourlan Kala at the eight hundred and fifteenth.

"And to tell you the truth," continued Caterna, "we have made a little money by going about from town to town.
At the bottom of our boxes are a few Northern debentures, of which I think a good deal, and take much care, and
they have been honestly got, Monsieur Claudius. Although we live under a democratic government, the rule of
equality, the time is still far off when you will see the noble father dining beside the prefect at the table of the judge
of appeal, and the actress open the ball with the prefect at the house of the general-in-chief! Well! We can dine and
dance among ourselves--"

"And be just as happy, Monsieur Caterna."

"Certainly no less, Monsieur Claudius," replied the future premier comic of Shanghai, shaking an imaginary frill
with the graceful ease of one of Louis XV.'s noblemen.

At this point, Madame Caterna came up. She was in every way worthy of her husband, sent into the world to
reply to him in life as on the stage, one of those genial theater folks, born one knows not where or how, but
thoroughly genuine and good-natured.

"I beg to introduce you to Caroline Caterna," said the actor, in much the same tone as he would have introduced
me to Patti or Sarah Bernhardt.

"Having shaken hands with your husband," said I, "I shall be happy to shake hands with you, Madame Caterna."

"There you are, then," said the actress, "and without ceremony, foot to the front, and no prompting."

"As you see, no nonsense about her, and the best of wives--"

"As he is the best of husbands."

"I believe I am, Monsieur Claudius," said the actor, "and why? Because I believe that marriage consists entirely
in the precept to which husbands should always conform, and that is, that what the wife likes the husband should eat
often."

It will be understood that it was touching to see this honest give-and-take, so different from the dry business
style of the two commercials who were in conversation in the adjoining car.

But here is Baron Weisschnitzerdörfer, wearing a traveling cap, coming out of the dining car, where I imagine
he has not spent his time consulting the time-table.

"The good man of the hat trick!" said Caterna, after the baron went back into the car without favoring us with a
salute.

"He is quite German enough!" said Madame Caterna.

"And to think that Henry Heine called those people sentimental oaks!" I added.

"Then he could not have known that one!" said Caterna. "Oak, I admit, but sentimental--"

"Do you know why the baron has patronized the Grand Transasiatic?" I asked.

"To eat sauerkraut at Pekin!" said Caterna.

"Not at all. To rival Miss Nelly Bly. He is trying to get around the world in thirty-nine days."

"Thirty-nine days!" exclaimed Caterna. "You should say a hundred and thirty-nine!"

And in a voice like a husky clarinet the actor struck up the well-known air from the Cloches de Corneville:

"I thrice have been around the world."
CHAPTER X.

At a quarter-past twelve our train passed the station of Kari Bata, which resembles one of the stations on the line from Naples to Sorrento, with its Italian roofs. I noticed a vast Asiatico-Russian camp, the flags waving in the fresh breeze. We have entered the Mervian oasis, eighty miles long and eight wide, and containing about six hundred thousand hectares--there is nothing like being precise at the finish. Right and left are cultivated fields, clumps of fine trees, an uninterrupted succession of villages, huts among the thickets, fruit gardens between the houses, flocks of sheep and herds of cattle among the pastures. All this rich country is watered by the Mourgab--the White Water--or its tributaries, and pheasants swarm like crows on the plains of Normandy. At one o'clock in the afternoon the train stopped at Merv Station, over five hundred miles from Uzun Ada.

The town has been often destroyed and rebuilt. The wars of Turkestan have not spared it. Formerly, it seems, it was a haunt of robbers and bandits, and it is a pity that the renowned Ki-Tsang did not live in those days. Perhaps he would have become a Genghis Khan?

Major Noltitz told me of a Turkoman saying to the following effect: "If you meet a Mervian and a viper, begin by killing the Mervian and leave the viper till afterwards."

I fancy it would be better to begin with killing the viper now that the Mervian has become a Russian.

We have seven hours to stop at Merv. I shall have time to visit this curious town. Its physical and moral transformation has been profound, owing to the somewhat arbitrary proceedings of the Russian administration. It is fortunate that its fortress, five miles round, built by Nour Verdy in 1873, was not strong enough to prevent its capture by the czar, so that the old nest of malefactors has become one of the most important cities of the Transcaspian.

I said to Major Noltitz:
"If it is not trespassing on your kindness, may I ask you to go with me?"
"Willingly," he answered; "and as far as I am concerned, I shall be very pleased to see Merv again."

We set out at a good pace.

"I ought to tell you," said the major, "that it is the new town we are going to see."

"And why not the old one first? That would be more logical and more chronological."

"Because old Merv is eighteen miles away, and you will hardly see it as you pass. So you must refer to the accurate description given of it by your great geographer Elisée Reclus."

And certainly readers will not lose anything by the change.

The distance from the station to new Merv is not great. But what an abominable dust! The commercial town is built on the left of the river--a town in the American style, which would please Ephrinell, wide streets straight as a line crossing at right angles; straight boulevards with rows of trees; much bustle and movement among the merchants in Oriental costume, in Jewish costume, merchants of every kind; a number of camels and dromedaries, the latter much in request for their powers of withstanding fatigue and which differ in their hinder parts from their African congenerers. Not many women along the sunny roads which seem white hot. Some of the feminine types are, however, sufficiently remarkable, dressed out in a quasi-military costume, wearing soft boots and a cartouche belt in the Circassian style. You must take care of the stray dogs, hungry brutes with long hair and disquieting fangs, of a breed reminding one of the dogs of the Caucasus, and these animals--according to Boulangier the engineer--have eaten a Russian general.

"Not entirely," replies the major, confirming the statement. "They left his boots."

In the commercial quarter, in the depths of the gloomy ground floors, inhabited by the Persians and the Jews, within the miserable shops are sold carpets of incredible fineness, and colors artistically combined, woven mostly by old women without any Jacquard cards.

On both banks of the Mourgab the Russians have their military establishment. There parade the Turkoman soldiers in the service of the czar. They wear the blue cap and the white epaulettes with their ordinary uniform, and drill under the orders of Russian officers.

A wooden bridge, fifty yards long, crosses the river. It is practicable not only for foot-passengers, but for trains, and telegraph wires are stretched above its parapets.

On the opposite bank is the administrative town, which contains a considerable number of civil servants, wearing the usual Russian cap.

In reality the most interesting place to see is a sort of annexe, a Tekke village, in the middle of Merv, whose inhabitants have retained the villainous characteristics of this decaying race, the muscular bodies, large ears, thick
lips, black beard. And this gives the last bit of local color to be found in the new town.

At a turning in the commercial quarter we met the commercials, American and English.

"Mr. Ephrinell," I said, "there is nothing curious in this modern Merv."

"On the contrary, Mr. Bombarnac, the town is almost Yankee, and it will soon see the day when the Russians will give it tramways and gaslights!"

"That will come!"

"I hope it will, and then Merv will have a right to call itself a city."

"For my part, I should have preferred a visit to the old town, with its mosque, its fortress, and its palace. But that is a little too far off, and the train does not stop there, which I regret."

"Pooh!" said the Yankee. "What I regret is, that there is no business to be done in these Turkoman countries! The men all have teeth--"

"And the women all have hair," added Horatia Bluett.

"Well, miss, buy their hair, and you will not lose your time."

"That is exactly what Holmes-Holme of London will do as soon as we have exhausted the capillary stock of the Celestial Empire."

And thereupon the pair left us.

I then suggested to Major Noltitz--it was six o'clock--to dine at Merv, before the departure of the train. He consented, but he was wrong to consent. An ill-fortune took us to the Hotel Slav, which is very inferior to our dining car--at least as regards its bill of fare. It contained, in particular, a national soup called "borchtch," prepared with sour milk, which I would carefully refrain from recommending to the gourmets of the Twentieth Century.

With regard to my newspaper, and that telegram relative to the mandarin our train is "conveying" in the funereal acceptation of the word? Has Popof obtained from the mutes who are on guard the name of this high personage?

Yes, at last! And hardly are we within the station than he runs up to me, saying:

"I know the name."

"And it is?"

"Yen Lou, the great mandarin Yen Lou of Pekin."

"Thank you, Popof."

I rush to the telegraph office, and from there I send a telegram to the Twentieth Century.

"Merv, 16th May, 7 p.m.

"Train, Grand Transasiatic, just leaving Merv. Took from Douchak the body of the great mandarin Yen Lou coming from Persia to Pekin."

It cost a good deal, did this telegram, but you will admit it was well worth its price.

The name of Yen Lou was immediately communicated to our fellow travelers, and it seemed to me that my lord Faruskiar smiled when he heard it.

We left the station at eight o'clock precisely. Forty minutes afterwards we passed near old Merv, and the night being dark I could see nothing of it. There was, however, a fortress with square towers and a wall of some burned bricks, and ruined tombs, and a palace and remains of mosques, and a collection of archaeological things, which would have run to quite two hundred lines of small text.

"Console yourself," said Major Noltitz. "Your satisfaction could not be complete, for old Merv has been rebuilt four times. If you had seen the fourth town, Bairam Ali of the Persian period, you would not have seen the third, which was Mongol, still less the Musalman village of the second epoch, which was called Sultan Sandjar Kala, and still less the town of the first epoch. That was called by some Iskander Kala, in honor of Alexander the Macedonian, and by others Ghiaour Kala, attributing its foundation to Zoroaster, the founder of the Magian religion, a thousand years before Christ. So I should advise you to put your regrets in the waste-paper basket."

And that is what I did, as I could do no better with them.

Our train is running northeast. The stations are twenty or thirty versts apart. The names are not shouted, as we make no stop, and I have to discover them on my time-table. Such are Keltchi, Ravina--why this Italian name in this Turkoman province?--Peski, Repetek, etc. We cross the desert, the real desert without a thread of water, where artesian wells have to be sunk to supply the reservoirs along the line.

The major tells me that the engineers experienced immense difficulty in fixing the sandhills on this part of the railway. If the palisades had not been sloped obliquely, like the barbs of a feather, the line would have been covered by the sand to such an extent as to stop the running of the trains. As soon as this region of sandhills had been passed we were again on the level plain on which the rails had been laid so easily.

Gradually my companions go to sleep, and our carriage is transformed into a sleeping car.

I then return to my Roumanian. Ought I to attempt to see him to-night? Undoubtedly; and not only to satisfy a very natural curiosity, but also to calm his anxiety. In fact, knowing his secret is known to the person who spoke to...
him through the panel of his case, suppose the idea occurred to him to get out at one of the stations, give up his journey, and abandon his attempt to rejoin Mademoiselle Zinca Klork, so as to escape the company's pursuit? That is possible, after all, and my intervention may have done the poor fellow harm--to say nothing of my losing No. 11, one of the most valuable in my collection.

I am resolved to visit him before the coming dawn. But, in order to be as careful as possible, I will wait until the train has passed Tchardjoui, where it ought to arrive at twenty-seven past two in the morning. There we shall stop a quarter of an hour before proceeding towards the Amu-Daria. Popof will then retire to his den, and I shall be able to slip into the van, without fear of being seen.

How long the hours appear! Several times I have almost fallen asleep, and twice or thrice I have had to go out into the fresh air on the platform.

The train enters Tchardjoui Station to the minute. It is an important town of the Khanate of Bokhara, which the Transcaspian reached towards the end of 1886, seventeen months after the first sleeper was laid. We are not more than twelve versts from the Amu-Daria, and beyond that river I shall enter on my adventure.

I have said that the stop at Tchardjoui ought to last a quarter of an hour. A few travelers alight, for they have booked to this town which contains about thirty thousand inhabitants. Others get in to proceed to Bokhara and Samarkand, but these are only second-class passengers. This produces a certain amount of bustle on the platform.

I also get out and take a walk up and down by the side of the front van, and I notice the door silently open and shut. A man creeps out on to the platform and slips away through the station, which is dimly lighted by a few petroleum lamps.

It is my Roumanian. It can be no one else. He has not been seen, and there he is, lost among the other travelers. Why this escape? Is it to renew his provisions at the refreshment bar? On the contrary, is not his intention, as I am afraid it is, to get away from us?

Shall I stop him? I will make myself known to him; promise to help him. I will speak to him in French, in English, in German, in Russian--as he pleases. I will say to him: "My friend, trust to my discretion; I will not betray you. Provisions? I will bring them to you during the night. Encouragements? I will heap them on you as I will the refreshments. Do not forget that Mademoiselle Zinca Klork, evidently the most lovely of Roumanians, is expecting you at Pekin, etc."

Behold me then following him without appearing to do so. Amid all this hurry to and fro he is in little danger of being noticed. Neither Popof nor any of the company's servants would suspect him to be a swindler. Is he going towards the gate to escape me?

No! He only wants to stretch his legs better than he can do in the van. After an imprisonment which has lasted since he left Baku--that is to say, about sixty hours--he has earned ten minutes of freedom.

He is a man of middle height, lithe in his movements, and with a gliding kind of walk. He could roll himself up like a cat and find quite room enough in his case. He wears an old vest, his trousers are held up by a belt, and his cap is a fur one--all of dark color.

I am at ease regarding his intentions. He returns towards the van, mounts the platform, and shuts the door gently behind him. As soon as the train is on the move I will knock at the panel, and this time--

More of the unexpected. Instead of waiting at Tchardjoui one-quarter of an hour we have to wait three. A slight injury to one of the brakes of the engine has had to be repaired, and, notwithstanding the German baron's remonstrances, we do not leave the station before half-past three, as the day is beginning to dawn.

It follows from this that if I cannot visit the van I shall at least see the Amou-Daria.

The Amou-Daria is the Oxus of the Ancients, the rival of the Indus and the Ganges. It used to be a tributary of the Caspian, as shown on the maps, but now it flows into the Sea of Aral. Fed by the snows and rains of the Pamir plateau, its sluggish waters flow between low clay cliffs and banks of sand. It is the River-Sea in the Turkoman tongue, and it is about two thousand five hundred kilometres long.

The train crosses it by a bridge a league long, the line being a hundred feet and more above its surface at low water, and the roadway trembles on the thousand piles which support it, grouped in fives between each of the spans, which are thirty feet wide.

In ten months, at a cost of thirty-five thousand roubles, General Annenkof built this bridge, the most important one on the Grand Transasiatic.

The river is of a dull-yellow color. A few islands emerge from the current here and there, as far as one can see. Popof pointed out the stations for the guards on the parapet of the bridge.

"What are they for?" I asked.

"For the accommodation of a special staff, whose duty it is to give the alarm in case of fire, and who are provided with fire-extinguishers."

This is a wise precaution. Not only have sparks from the engines set it on fire in several places, but there are
other disasters possible. A large number of boats, for the most part laden with petroleum, pass up and down the Amou-Daria, and it frequently happens that these become fire-ships. A constant watch is thus only too well justified, for if the bridge were destroyed, its reconstruction would take a year, during which the transport of passengers from one bank to the other would not be without its difficulties.

At last the train is going slowly across the bridge. It is broad daylight. The desert begins again at the second station, that of Karakoul. Beyond can be seen the windings of an affluent of the Amou-Daria, the Zarafchane, "the river that rolls with gold," the course of which extends up to the valley of the Sogd, in that fertile oasis on which stands the city of Samarkand.

At five o'clock in the morning the train stops at the capital of the Khanate of Bokhara, eleven hundred and seven versits from Uzun Ada.

CHAPTER XI.
The Khanates of Bokhara and Samarkand used to form Sogdiana, a Persian satrapy inhabited by the Tadjiks and afterwards by the Usbegs, who invaded the country at the close of the fifteenth century. But another invasion, much more modern, is to be feared, that of the sands, now that the saksaous intended to bring the sandhills to a standstill, have almost completely disappeared.

Bokhara, the capital of the Khanate, is the Rome of Islam, the Noble City, the City of Temples, the revered centre of the Mahometan religion. It was the town with the seven gates, which an immense wall surrounded in the days of its splendor, and its trade with China has always been considerable. Today it contains eighty thousand inhabitants.

I was told this by Major Noltitz, who advised me to visit the town in which he had lived several times. He could not accompany me, having several visits to pay. We were to start again at eleven o'clock in the morning. Five hours only to wait and the town some distance from the railway station! If the one were not connected with the other by a Decauville—a French name that sounds well in Sogdiana—time would fail for having even a slight glimpse of Bokhara.

It is agreed that the major will accompany me on the Decauville; and when we reach our destination he will leave me to attend to his private affairs. I cannot reckon on him. Is it possible that I shall have to do without the company of any of my numbers?

Let us recapitulate. My Lord Faruskiar? Surely he will not have to worry himself about the mandarin Yen Lou, shut up in this traveling catafalque! Fulk Ephrinell and Miss Horatia Bluett? Useless to think of them when we are talking about palaces, minarets, mosques and other archaeological inutilities. The actor and the actress? Impossible, for Madame Caterna is tired, and Monsieur Caterna will consider it his duty to stay with her. The two Celestials? They have already left the railway station. Ah! Sir Francis Trevellyan. Why not? I am not a Russian, and it is the Russians he cannot stand. I am not the man who conquered Central Asia. I will try and open this closely shut gentleman.

I approach him; I bow; I am about to speak. He gives me a slight inclination and turns on his heel and walks off! The animal!

But the Decauville gives its last whistle. The major and I occupy one of the open carriages. Half an hour afterwards we are through the Dervaze gate, the major leaves me, and here am I, wandering through the streets of Bokhara.

If I told the readers of the Twentieth Century that I visited the hundred schools of the town, its three hundred mosques—almost as many mosques as there are churches in Rome, they would not believe me, in spite of the confidence that reporters invariably receive. And so I will confine myself to the strict truth.

As I passed along the dusty roads of the city, I entered at a venture any of the buildings I found open. Here it was a bazaar where they sold cotton materials of alternate colors called "al adjas," handkerchiefs as fine as spider webs, leather marvelously worked, silks the rustle of which is called "tchakhtchukh," in Bokhariot, a name that Meilhac and Halevy did wisely in not adopting for their celebrated heroine. There it was a shop where you could buy sixteen sorts of tea, eleven of which are green, that being the only kind used in the interior of China and Central Asia, and among these the most sought after, the "louka," one leaf of which will perfume a whole teapot.

Farther on I emerged on the quay of the Divanbeghi, reservoirs, bordering one side of a square planted with elms. Not far off is the Arche, which is the fortified palace of the emir and has a modern clock over the door. Arminius Vambery thought the palace had a gloomy look, and so do I, although the bronze cannon which defend the entrance appear more artistic than destructive. Do not forget that the Bokhariot soldiers, who perambulate the streets in white breeches, black tunicas, astrakan caps, and enormous boots, are commanded by Russian officers freely decorated with golden embroidery.
Near the palace to the right is the largest mosque of the town, the mosque of Mesjidi Kelan, which was built by Abdallah Khan Sheibani. It is a world of cupolas, clock towers, and minarets, which the storks appear to make their home, and there are thousands of these birds in the town.

Rambles on at a venture I reach the shores of the Zarafchane on the northeast of the town. Its fresh limpid waters fill its bed once or twice a fortnight. Excellent this for health! When the waters appear men, women, children, dogs, bipeds, quadrupeds, bathe together in tumultuous promiscuousness, of which I can give no idea, nor recommend as an example.

Going northwest towards the centre of the city, I came across groups of dervishes with pointed hats, a big stick in their hands, their hair straggling in the breeze, stopping occasionally to take their part in a dance which would not have disgraced the fanatics of the Elysée Montmartre during a chant, literally vociferated, and accentuated by the most characteristic steps.

Let us not forget that I went through the book market. There are no less than twenty-six shops where printed books and manuscripts are sold, not by weight like tea or by the box like vegetables, but in the ordinary way. As to the numerous "medresses," the colleges which have given Bokhara its renown as a university--I must confess that I did not visit one. Weary and worn I sat down under the elms of the Divanbeghi quay. There, enormous samovars are continually on the boil, and for a "tenghe," or six pence three farthings, I refreshed myself with "shivin," a tea of superior quality which only in the slightest degree resembles that we consume in Europe, which has already been used, so they say, to clean the carpets in the Celestial Empire.

That is the only remembrance I retain of the Rome of Turkestan. Besides, as I was not able to stay a month there, it was as well to stay there only a few hours.

At half-past ten, accompanied by Major Noltitz, whom I found at the terminus of the Decauville, I alighted at the railway station, the warehouses of which are crowded with bales of Bokhariot cotton, and packs of Mervian wool.

I see at a glance that all my numbers are on the platform, including my German baron. In the rear of the train the Persians are keeping faithful guard round the mandarin Yen Lou. It seems that three of our traveling companions are observing them with persistent curiosity; these are the suspicious-looking Mongols we picked up at Douchak. As I pass near them I fancy that Faruskiar makes a signal to them, which I do not understand. Does he know them? Anyhow, this circumstance rather puzzles me.

The train is no sooner off than the passengers go to the dining car. The places next to mine and the major's, which had been occupied since the start, are now vacant, and the young Chinaman, followed by Dr. Tio-King, take advantage of it to come near us. Pan Chao knows I am on the staff of the Twentieth Century, and he is apparently as desirous of talking to me as I am of talking to him.

I am not mistaken. He is a true Parisian of the boulevard, in the clothes of a Celestial. He has spent three years in the world where people amuse themselves, and also in the world where they learn. The only son of a rich merchant in Pekin, he has traveled under the wing of this Tio-King, a doctor of some sort, who is really the most stupid of baboons, and of whom his pupil makes a good deal of fun.

Dr. Tio-King, since he discovered Cornaro's little book on the quays of the Seine, has been seeking to make his existence conform to the "art of living long in perfect health." This credulous Chinaman of the Chinese had become thoroughly absorbed in the study of the precepts so magisterially laid down by the noble Venetian. And Pan Chao is always chaffing him thereupon, though the good man takes no notice.

We were not long before we had a few specimens of his monomania, for the doctor, like his pupil, spoke very good French.

"Before we begin," said Pan Chao, "tell me, doctor, how many fundamental rules there are for finding the correct amounts of food and drink?"

"Seven, my young friend," replied Tio-King with the greatest seriousness. "The first is to take only just so much nourishment as to enable you to perform the purely spiritual functions."

"And the second?"

"The second is to take only such an amount of nourishment as will not cause you to feel any dullness, or heaviness, or bodily lassitude. The third--"

"Ah! We will wait there, to-day, if you don't mind, doctor," replied Pan Chao. "Here is a certain maintuy, which seems rather good, and--"

"Take care, my dear pupil! That is a sort of pudding made of hashed meat mixed with fat and spices. I fear it may be heavy--"

"Then, doctor, I would advise you not to eat it. For my part, I will follow these gentlemen."

And Pan Chao did--and rightly so, for the maintuy was delicious--while Doctor Tio-King contented himself with the lightest dish on the bill of fare. It appeared from what Major Noltitz said that these maintuys fried in fat are even more savory. And why should they not be, considering that they take the name of "zenbusis," which signifies
"women’s kisses?"

When Caterna heard this flattering phrase, he expressed his regret that zenbusis did not figure on the breakfast table. To which his wife replied by so tender a look that I ventured to say to him:

"You can find zenbusis elsewhere than in Central Asia, it seems to me."

"Yes," he replied, "they are to be met with wherever there are lovable women to make them."

And Pan Chao added, with a laugh:

"And it is again at Paris that they make them the best."

He spoke like a man of experience, did my young Celestial.

I looked at Pan Chao; I admired him.

How he eats! What an appetite! Not of much use to him are the observations of the doctor on the immoderate consumption of his radical humidity.

The breakfast continued pleasantly. Conversation turned on the work of the Russians in Asia. Pan Chao seemed to me well posted up in their progress. Not only have they made the Transcaspian, but the Transsiberian, surveyed in 1888, is being made, and is already considerably advanced. For the first route through Iscim, Omsk, Tomsk, Krasnojarsk, Nijni-Ufimsk, and Irkutsk, a second route has been substituted more to the south, passing by Orenburg, Akmolinsk, Minoussinsk, Abatoni and Vladivostock. When these six thousand kilometres of rails are laid, Petersburg will be within six days of the Japan Sea. And this Transsiberian, which will exceed in length the Transcontinental of the United States, will cost no more than seven hundred and fifty millions.

It will be easily imagined that this conversation on the Russian enterprise is not very pleasing to Sir Francis Trevellyan. Although he says not a word and does not lift his eyes from the plate, his long face flushes a little.

"Well, gentlemen," said I, "what we see is nothing to what our nephews will see. We are traveling to-day on the Grand Transasiatic. But what will it be when the Grand Transasiatic is in connection with the Grand Transafrican."

"And how is Asia to be united by railway with Africa?" asked Major Noltitz.

"Through Russia, Turkey, Italy, France and Spain. Travelers will go from Pekin to the Cape of Good Hope without change of carriage."

"And the Straits of Gibraltar?" asked Pan Chao.

At this Sir Francis Trevellyan raised his ears.

"Yes, Gibraltar?" said the major.

"Go under it!" said I. "A tunnel fifteen kilometres long is a mere nothing! There will be no English Parliament to oppose it as there is to oppose that between Dover and Calais! It will all be done some day, all--and that will justify the vein:

"Omnia jam fieri quae posse negabam."

My sample of Latin erudition was only understood by Major Noltitz, and I heard Caterna say to his wife:

"That is volapuk."

"There is no doubt," said Pan Chap, "that the Emperor of China has been well advised in giving his hand to the Russians instead of the English. Instead of building strategic railways in Manchouria, which would never have had the approbation of the czar, the Son of Heaven has preferred to continue the Transcaspian across China and Chinese Turkestan."

"And he has done wisely," said the major. "With the English it is only the trade of India that goes to Europe, with the Russians it is that of the whole Asiatic continent."

I look at Sir Francis Trevellyan. The color heightens on his cheeks, but he makes no movement. I ask if these attacks in a language he understands perfectly will not oblige him to speak out. And yet I should have been very much embarrassed if I had had to bet on or against it.

Major Noltitz then resumed the conversation by pointing out the incontestable advantages of the Transasiatic with regard to the trade between Grand Asia and Europe in the security and rapidity of its communications. The old hatreds will gradually disappear under European influence, and in that respect alone Russia deserves the approbation of every civilized nation. Is there not a justification for those fine words of Skobeleff after the capture of Gheok Tepe, when the conquered feared reprisals from the victors: "In Central Asian politics we know no outcasts?"

"And in that policy," said the major, "lies our superiority over England."

"No one can be superior to the English."

Such was the phrase I expected from Sir Francis Trevellyan--the phrase I understand English gentlemen always use when traveling about the world. But he said nothing. But when I rose to propose a toast to the Emperor of Russia and the Russians, and the Emperor of China and the Chinese, Sir Francis Trevellyan abruptly left the table. Assuredly I was not to have the pleasure of hearing his voice to-day.

I need not say that during all this talk the Baron Weisschnitzerdörfer was fully occupied in clearing dish after dish, to the extreme amazement of Doctor Tio-King. Here was a German who had never read the precepts of
Cornaro, or, if he had read them, transgressed them in the most outrageous fashion.

For the same reason, I suppose, neither Faruskiar nor Ghangir took part in it, for they only exchanged a few words in Chinese.

But I noted rather a strange circumstance which did not escape the major.

We were talking about the safety of the Grand Transasiatic across Central Asia, and Pan Chao had said that the road was not so safe as it might be beyond the Turkestan frontier, as, in fact, Major Noltitz had told me. I was then led to ask if he had ever heard of the famous Ki Tsang before his departure from Europe.

"Often," he said, "for Ki Tsang was then in the Yunnan provinces. I hope we shall not meet him on our road."

My pronunciation of the name of the famous bandit was evidently incorrect, for I hardly understood Pan Chao when he repeated it with the accent of his native tongue.

But one thing I can say, and that is that when he uttered the name of Ki Tsang, Faruskiar knitted his brows and his eyes flashed. Then, with a look at his companion, he resumed his habitual indifference to all that was being said around him.

Assuredly I shall have some difficulty in making the acquaintance of this man. These Mongols are as close as a safe, and when you have not the word it is difficult to open them.

The train is running at high speed. In the ordinary service, when it stops at the eleven stations between Bokhara and Samarkand, it takes a whole day over the distance. This time it took but three hours to cover the two hundred kilometres which separate the two towns, and at two o'clock in the afternoon it entered the illustrious city of Tamerlane.

CHAPTER XII.

Samarkand is situated in the rich oasis watered by the Zarafchane in the valley of Sogd. A small pamphlet I bought at the railway station informs me that this great city is one of the four sites in which geographers "agree" to place the terrestrial paradise. I leave this discussion to the exegetists of the profession.

Burned by the armies of Cyrus in B.C. 329, Samarkand was in part destroyed by Genghis Khan, about 1219. When it had become the capital of Tamerlane, its position, which certainly could not be improved upon, did not prevent its being ravaged by the nomads of the eighteenth century. Such alternations of grandeur and ruin have been the fate of all the important towns of Central Asia.

We had five hours to stop at Samarkand during the day, and that promised something pleasant and several pages of copy. But there was no time to lose. As usual, the town is double; one half, built by the Russians, is quite modern, with its verdant parks, its avenues of birches, its palaces, its cottages; the other is the old town, still rich in magnificent remains of its splendor, and requiring many weeks to be conscientiously studied.

This time I shall not be alone. Major Noltitz is free; he will accompany me. We had already left the station when the Caternas presented themselves.

"Are you going for a run round the town, Monsieur Claudius?" asked the actor, with a comprehensive gesture to show the vast surroundings of Samarkand.

"Such is our intention."

"Will Major Noltitz and you allow me to join you?"

"How so?"

"With Madame Caterna, for I do nothing without her."

"Our explorations will be so much the more agreeable," said the major, with a bow to the charming actress.

"And," I added, with a view to save fatigue and gain time, "my dear friends, allow me to offer you an arba."

"An arba!" exclaimed Caterna, with a swing of his hips. "What may that be, an arba?"

"One of the local vehicles."

"Let us have an arba."

We entered one of the boxes on wheels which were on the rank in front of the railway station. Under promise of a good "silao," that is to say, something to drink, the yemtchik or coachman undertook to give wings to his two doves, otherwise his two little horses, and we went off at a good pace.

On the left we leave the Russian town, arranged like a fan, the governor's house, surrounded by beautiful gardens, the public park and its shady walks, then the house of the chief of the district which is just on the boundary of the old town.

As we passed, the major showed us the fortress, round which our arba turned. There are the graves of the Russian soldiers who died in the attack in 1868, near the ancient palace of the Emir of Bokhara.

From this point, by a straight narrow road, our arba reached the Righistan square, which, as my pamphlet says, "must not be confounded with the square of the same name at Bokhara."
It is a fine quadrilateral, perhaps a little spoiled by the fact that the Russians have paved it and ornamented it with lamps—which would certainly, please Ephrinell, if he decides upon visiting Samarkand. On three sides of the square are the well-preserved ruins of three medresses, where the mollahs give children a good education. These medresses—there are seventeen of these colleges at Samarkand, besides eighty-five mosques—are called Tilla-Kari, Chir Dar and Oulong Beg.

In a general way they resemble each other; a portico in the middle leading to interior courts, built of enameled brick, tinted pale blue or pale yellow, arabesques designed in gold lines on a ground of turquoise blue, the dominant color; leaning minarets threatening to fall and never falling, luckily for their coating of enamel, which the intrepid traveller Madame De Ujfalvy-Bourdon, declares to be much superior to the finest of our crackle enamels—and these are not vases to put on a mantelpiece or on a stand, but minarets of good height.

These statues are still in the state described by Marco Polo, the Venetian traveler of the thirteenth century.

"Well, Monsieur Bombarnac," asked the major, "do you not admire the square?"

"It is superb," I say.

"Yes," says the actor, "what a splendid scene it would make for a ballet, Caroline! That mosque, with a garden alongside, and that other one with a court--"

"You are right, Adolphe," said his wife; "but we would have to put those towers up straight and have a few luminous fountains."

"Excellent notion, Caroline! Write us a drama, Monsieur Claudius, a spectacle piece, with a third act in this square. As for the title--"

"Tamerlane is at once suggested!" I reply. The actor made a significant grimace. The conqueror of Asia seemed to him to be wanting in actuality. And leaning toward his wife, Caterina hastened to say:

"As a scene, I have seen a better at the Porte-Saint Martin, in the Fils de la Nuit--"

"And I have at the Châtelet in Michael Strogoff."

We cannot do better than leave our comedians alone. They look at everything from the theatrical point of view. They prefer the air gauze and the sky-blue foliage, the branches of the stage trees, the agitated canvas of the ocean waves, the prospectives of the drop scene, to the sites the curtain represents, a set scene by Cambon or Rubé or Jambon to no matter what landscape; in short, they would rather have art than nature. And I am not the man to try and change their opinions on the subject.

As I have mentioned the name of Tamerlane, I asked Major Noltitz if we were going to visit the tomb of the famous Tartar. The major replied that we would see it as we returned; and our itinerary brought us in front of the Samarkand bazaar.

The arba stopped at one of the entrances to this vast rotunda, after taking us in and out through the old town, the houses of which consist of only one story, and seem very comfortless.

Here is the bazaar in which are accumulated enormous quantities of woollen stuffs, velvet-pile carpets in the brightest of colors, shawls of graceful patterns, all thrown anyhow on the counters of the shops. Before these samples the sellers and buyers stand, noisily arriving at the lowest price. Among the fabrics is a silk tissue known as Kanaous, which is held in high esteem by the Samarkand ladies, although they are very far from appreciating the similar product of Lyons manufacture, which it excels neither in quality nor appearance.

Madame Caterina appeared extraordinarily tempted, as if she were among the counters of the Bon Marché or the Louvre.

"That stuff would do well for my costume in the Grande Duchesse!" she said.

"And those slippers would suit me down to the ground as Ali Bajou in the Caid!" said Caterina.

And while the actress was investing in a remnant of Kanaous, the actor paid for a pair of those green slippers which the Turkomans wear when they enter a mosque. But this was not without recourse to the kindness of the major, who acted as interpreter between the Caterinas and the merchant, whose "Yoks! Yoks!" sounded like a lot of crackers in his large mouth.

The arba started again and went off toward the square of Ribi-Khanym, where stands the mosque of that name which was that of one of Tamerlane's wives. If the square is not as regular as that of Righistan, it is in my opinion rather more picturesque. There are strangely grouped ruins, the remains of arcades, half-unroofed cupolas, columns without capitals, the shafts of which have retained all the brightness of their enamelling; then a long row of elliptical porticoes closing in one side of the vast quadrilateral. The effect is really grand, for these old monuments of the splendor of Samarkand stand out from a background of sky and verdure that you would seek in vain, even at the Grand Opera, if our actor does not object. But I must confess we experienced a deeper impression when, toward the northeast of the town, our arba deposited us in front of the finest of the mosques of Central Asia, which dates from the year 795 of the Hegira (1392 of our era).

I cannot, writing straight away, give you an idea of this marvel. If I were to thread the words, mosaics,
pediments, spandrels, bas-reliefs, niches, enamels, corbels, all on a string in a sentence, the picture would still be incomplete. It is strokes of the brush that are wanted, not strokes of the pen. Imagination remains abashed at the remains of the most splendid architecture left us by Asiatic genius.

It is in the farthest depths of this mosque that the faithful go to worship at the tomb of Kassimben-Abbas, a venerated Mussulman saint, and we are told that if we open the tomb a living man will come forth from it in all his glory. But the experiment has not been made as yet, and we prefer to believe in the legend.

We had to make an effort to throw off our contemplative mood; and fortunately the Caternas did not trouble our ecstasy by evoking any of their recollections of the theater. Doubtless they had shared in our impressions.

We resumed our seats in the arba, and the yemtchik took us at the gallop of his doves along shady roads which the Russian administration keeps up with care.

Along these roads we met and passed many figures worthy of notice. Their costumes were varied enough, "Khalats," in startling colors, and their heads enturbaned most coquettishly. In a population of forty thousand there was, of course, a great mingling of races. Most of them seemed to be Tadjiks of Iranian origin. They are fine strong fellows, whose white skin has disappeared beneath the tan of the open air and the unclouded sun. Here is what Madame de Ujfalvy-Bourdon says of them in her interesting book: "Their hair is generally black, as is also their beard, which is very abundant. Their eyes are never turned up at the corners, and are almost always brown. The nose is very handsome, the lips are not thick, the teeth are small. The forehead is high, broad, and the general shape of the face is oval."

And I cannot refrain from mentioning a note of approval from Caterna when he saw one of these Tadjiks superbly draped in his many-colored Khalat.

"What a splendid lead! What an admirable Melingue! You can see him in Richips's Nana Sahib or Meurice's Schamyl."

"He would make a lot of money! replied Madame Caterna.

"He just would--I believe you, Caroline!" replied the enthusiastic actor.

And for him, as for all other theatrical folks, is not the money the most serious and the least disputable manifestation of the dramatic art?

It was already five o'clock, and in this incomparable city of Samarkand scene succeeded scene. There! I am getting into that way of looking at it now. Certainly the spectacle should finish before midnight. But as we start at eight o'clock, we shall have to lose the end of the piece. But as I considered that, for the honor of special correspondents in general, it would never do to have been at Samarkand without seeing Tamerlane's tomb, our arba returned to the southwest, and drew up near the mosque of Gour Emir, close to the Russian town. What a sordid neighborhood, what a heap of mud huts and straw huts, what an agglomeration of miserable hovels we have just been through!

The mosque has a grand appearance. It is crowned with its dome, in which the raw blue of the turquoise is the chief color, and which looks like a Persian cap; and on its only minaret, which has now lost its head, there glitter the enamelled arabesques which have retained their ancient purity.

We visited the central hall beneath the cupola. There stands the tomb of the lame Timour the Conqueror. Surrounded by the four tombs of his sons and his patron saint, beneath a stone of black jade covered with inscriptions, whiten the bones of Tamerlane, in whose name is gathered the whole fourteenth century of Asiatic history. The walls of the hall are covered with slabs of jade, on which are engraven innumerable scrolls of foliage, and in the southwest stands a little column marking the direction of Mecca. Madame De Ujfalvy-Bourdon has justly compared this part of the mosque of Gour Emir to a sanctuary, and we had the same impression. This impression took a still more religious tone when, by a dark and narrow stairway, we descended to the crypt in which are the tombs of Tamerlane's wives and daughters.

"But who was this Tamerlane?" asked Caterna. "This Tamerlane everybody is talking about."

"Tamerlane," replied Major Noltitz, "was one of the greatest conquerors of the world, perhaps the greatest, if you measure greatness by the extent of the conquests. Asia to the east of the Caspian Sea, Persia and the provinces to the north of it, Russia to the Sea of Azof, India, Syria, Asia Minor, China, on which he threw two hundred thousand men--he had a whole continent as the theater of his wars."

"And he was lame!" said Madame Caterna.

"Yes, madame, like Genseric, like Shakespeare, like Byron, like Walter Scott, like Talleyrand, but that did not hinder his getting along in the world. But how fanatic and bloodthirsty he was! History affirms that at Delhi he massacred a hundred thousand captives, and at Bagdad he erected an obelisk of eighty thousand heads."

"I like the one in the Place de la Concorde better," said Caterna, "and that is only in one piece."

At this observation we left the mosque of Gour Emir, and as it was time to "hurry up," as our actor said, the arba was driven briskly toward the station.
For my part, in spite of the observations of the Caternas, I was fully in tone with the local color due to the marvels of Samarkand, when I was roughly shaken back into modern reality.

In the streets—yes—in the streets near the railway station, in the very center of Tamerlane's capital, I passed two bicyclists.

"Ah!" exclaimed Caterna. "Messrs. Wheeler!"

And they were Turkomans!

After that nothing more could be done than leave a town so dishonored by the masterpiece of mechanical locomotion, and that was what we did at eight o'clock.

CHAPTER XIII.

We dined an hour after the train left. In the dining car were several newcomers, among others two negroes whom Caterna began to speak of as darkies.

None of these travelers, Popof told me, would cross the Russo-Chinese frontier, so that they interested me little or not at all.

During dinner, at which all my numbers were present—I have twelve now, and I do not suppose I shall go beyond that—I noticed that Major Noltitz continued to keep his eye on his lordship Faruskiar. Had he begun to suspect him? Was it of any importance in his opinion that this Mongol seemed to know, without appearing to do so, the three second-class travelers, who were also Mongols? Was his imagination working with the same activity as mine, and was he taking seriously what was only a joke on my part? That I, a man of letters, a chronicler in search of scenes and incidents, should be pleased to see in his personage a rival of the famous Ki Tsang, or Ki Tsang himself, could be understood; but that he, a serious man, doctor in the Russian army, should abandon himself to such speculations no one would believe. Never mind now, we shall have something more to say about it by and by.

As for me, I had soon forgotten all about the Mongol for the man in the case. Tired as I am after that long run through Samarkand, if I get a chance to visit him to-night I will.

Dinner being over, we all begin to make ourselves comfortable for the night, with the intention of sleeping till we reach Tachkend.

The distance from Samarkand to Tachkend is three hundred kilometres. The train will not get in there before seven o'clock in the morning. It will stop three times at small stations for water and fuel—circumstances favorable to the success of my project. I add that the night is dark, the sky overcast, no moon, no stars. It threatens rain; the wind is freshening. It is no time for walking on platforms, and nobody walks there. It is important to choose the moment when Popof is sound asleep.

It is not necessary for the interview to be a long one. That the gallant fellow should be reassured—that is the essential point—and he will be, as soon as I have made his acquaintance. A little information concerning him, concerning Mademoiselle Zinca Klork, whence he comes, why he is going to Pekin, why he chose such a mode of transport, his provisions for the journey, how he gets into the case, his age, his trade, his birthplace, what he has done in the past, what he hopes to do in the future, etc., etc., and I have done all that a conscientious reporter can do. That is what I want to know; that is what I will ask him. It is not so very much.

And in the first place let us wait until the car is asleep. That will not be long, for my companions are more or less fatigued by the hours they have spent in Samarkand. The beds were ready immediately after dinner. A few of the passengers tried a smoke on the platform, but the gust drove them in very quickly. They have all taken up their places under the curtained lamps, and toward half-past ten the respiration of some and the snoring of others are blended with the continued grinding of the train on the steel rails.

I remained outside last of all, and Popof exchanged a few words with me.

"We shall not be disturbed to-night," he said to me, "and I would advise you to make the most of it. To-morrow night we shall be running through the defiles of the Pamir, and we shall not travel so quietly, I am afraid."

"Thanks, Popof, I will take your advice, and sleep like a marmot."

Popof wished me good night and went into his cabin.

I saw no use in going back into the car, and remained on the platform. It was impossible to see anything either to the left or right of the line. The oasis of Samarkand had already been passed, and the rails were now laid across a long horizontal plain. Many hours would elapse before the train reached the Syr Daria, over which the line passes by a bridge like that over the Amou-Daria, but of less importance.

It was about half-past eleven when I decided to open the door of the van, which I shut behind me.

I knew that the young Roumanian was not always shut up in his box, and the fancy might just have taken him to stretch his limbs by walking from one end of the other of the van.

The darkness is complete. No jet of light filters through the holes of the case. That seems all the better for me. It
is as well that my No. 11 should not be surprised by too sudden an apparition. He is doubtless asleep. I will give two little knocks on the panel, I will awake him, and we will explain matters before he can move.

I feel as I go. My hand touches the case; I place my ear against the panel and I listen.

There is not a stir, not a breath! Is my man not here? Has he got away? Has he slipped out at one of the stations without my seeing him? Has my news gone with him? Really, I am most uneasy; I listen attentively.

No! He has not gone. He is in the case. I hear distinctly his regular and prolonged respiration. He sleeps. He sleeps the sleep of the innocent, to which he has no right, for he ought to sleep the sleep of the swindler of the Grand Transasiatic.

I am just going to knock when the locomotive's whistle emits its strident crow, as we pass through a station. But the train is not going to stop, I know, and I wait until the whistling has ceased.

I then give a gentle knock on the panel.

There is no reply.

However, the sound of breathing is not so marked as before.

I knock more loudly.

This time it is followed by an involuntary movement of surprise and fright.

"Open, open!" I say in Russian.

There is no reply.

"Open!" I say again. "It is a friend who speaks. You have nothing to fear!"

If the panel is not lowered, as I had hoped, there is the crack of a match being lighted and a feeble light appears in the case.

I look at the prisoner through the holes in the side.

There is a look of alarm on his face; his eyes are haggard. He does not know whether he is asleep or awake.

"Open, my friend, I say, open and have confidence. I have discovered your secret. I shall say nothing about it. On the other hand, I may be of use to you."

The poor man looks more at ease, although he does not move.

"You are a Roumanian, I think," I add, "and I am a Frenchman."

"Frenchman? You are a Frenchman?"

And this reply was given in my own language, with a foreign accent.

One more bond between us.

The panel slips along its groove, and by the light of a little lamp I can examine my No. 11, to whom I shall be able to give a less arithmetical designation.

"No one can see us, nor hear us?" he asked in a half-stifled voice.

"No one."

"The guard?"

"Asleep."

My new friend takes my hands, he clasps them. I feel that he seeks a support. He understands he can depend on me. And he murmurs:

"Do not betray me--do not betray me."

"Betray you, my boy? Did not the French newspapers sympathize with that little Austrian tailor, with those two Spanish sweethearts, who sent themselves by train in the way you are doing? Were not subscriptions opened in their favor? And can you believe that I, a journalist--"

"You are a journalist?"

"Claudius Bombarnac, special correspondent of the Twentieth Century."

"A French journal--"

"Yes, I tell you."

"And you are going to Pekin?"

"Through to Pekin."

"Ah! Monsieur Bombarnac, Providence has sent you onto my road."

"No, it was the managers of my journal, and they delegated to me the powers they hold from Providence, courage and confidence. Anything I can do for you I will."

"Thanks, thanks."

"What is your name?"

"Kinko."

"Kinko? Excellent name!"

"Excellent?"

"For my articles! You are a Roumanian, are you not?"
"Roumanian of Bucharest."
"But you have lived in France?"
"Four years in Paris, where I was apprentice to an upholsterer in the Faubourg Saint Antoine."
"And you went back to Bucharest?"
"Yes, to work at my trade there until the day came when it was impossible for me to resist the desire to leave--"
"To leave? Why?"
"To marry!"
"To marry--Mademoiselle Zinca--"
"Zinca?"
"Yes, Mademoiselle Zinca Klork, Avenue Cha-Coua, Pekin, China!"
"You know?"
"Certainly. The address is on the box."
"True."
"As to Mademoiselle Zinca Klork--"
"She is a young Roumanian. I knew her in Paris, where she was learning the trade of a milliner. Oh, charming--"
"I am sure upon it. You need not dwell on that."
"She also returned to Bucharest, until she was invited to take the management of a dressmaker's at Pekin. We loved, monsieur; she went--and we were separated for a year. Three weeks ago she wrote to me. She was getting on over there. If I could go out to her, I would do well. We should get married without delay. She had saved something. I would soon earn as much as she had. And here I am on the road--in my turn--for China."
"In this box?"
"What would you have, Monsieur Bombarnac?" asked Kinko, reddening. "I had only money enough to buy a packing case, a few provisions, and get myself sent off by an obliging friend. It costs a thousand francs to go from Tiflis to Pekin. But as soon as I have gained them, the company will be repaid, I assure you."
"I believe you, Kinko, I believe you; and on your arrival at Pekin?"
"Zinca has been informed. The box will be taken to Avenue Cha-Coua, and she--"
"Will pay the carriage?"
"Yes."
"And with pleasure, I will answer for it."
"You may be sure of it, for we love each other so much."
"And besides, Kinko, what would one not do for a sweetheart who consents to shut himself up in a box for a fortnight, and arrives labelled 'Glass,' 'Fragile,' 'Beware of damp--'"
"Ah, you are making fun of a poor fellow."
"Not at all; and you may rest assured I will neglect nothing which will enable you to arrive dry and in one piece at Mademoiselle Zinca Klork's--in short, in a perfect state of preservation!"
"Again I thank you," said Kinko, pressing my hands. "Believe me, you will not find me ungrateful."
"Ah! friend Kinko, I shall be paid, and more than paid!"
"And how?"
"By relating, as soon as I can do so without danger to you, the particulars of your journey from Tiflis to Pekin. Think now--what a heading for a column: 'A LOVER IN A BOX! ZINCA AND KINKO!! 1,500 LEAGUES THROUGH CENTRAL ASIA IN A LUGGAGE VAN!!'"

The young Roumanian could not help smiling.
"You need not be in too much of a hurry!" he said.
"Never fear! Prudence and discretion, as they say at the matrimonial agencies."

Then I went to the door of the van to see that we were in no danger of surprise, and then the conversation was resumed. Naturally, Kinko asked me how I had discovered his secret. I told him all that had passed on the steamer during the voyage across the Caspian. His breathing had betrayed him. The idea that at first I took him for a wild beast seemed to amuse him. A wild beast! A faithful poodle, rather! Then with a sneeze he went up the animal scale to human rank.

"But," said he to me, lowering his voice, "two nights ago I thought all was lost. The van was closed. I had just lighted my little lamp, and had begun my supper when a knock came against the panel--"
"I did that, Kinko, I did that. And that night we should have become acquainted if the train had not run into a dromedary."

"It was you! I breathe again!" said Kinko. "In what dreams I have lived! It was known that some one was hidden in this box. I saw myself discovered, handed over to the police, taken to prison at Merv or Bokhara, and my little
Zinca waiting for me in vain; and never should I see her again, unless I resumed the journey on foot. Well, I would have resumed, yes, I would.”

And he said it with such an air of resolution that it was impossible not to see that the young Roumanian had unusual spirit.

"Brave Kinko!" I answered. "I am awfully sorry to have caused you such apprehensions. Now you are at ease again, and I fancy your chances have improved now we have made friends."

I then asked Kinko to show me how he managed in his box.

Nothing could be simpler or better arranged. At the bottom was a seat on which he sat with the necessary space for him to stretch his legs when he placed them obliquely; under the seat, shut in by a lid, were a few provisions, and table utensils reduced to a simple pocket knife and metal mug; an overcoat and a rug hung from a nail, and the little lamp he used at nighttime was hooked onto one of the walls.

The sliding panel allowed the prisoner to leave his prison occasionally. But if the case had been placed among other packages, if the porters had not deposited it with the precautions due to its fragility, he would not have been able to work the panel, and would have had to make a friend somehow before the end of the journey. Fortunately, there is a special Providence for lovers, and divine intervention in favor of Kinko and Zinca Klork was manifested in all its plenitude. He told me that very night he had taken a walk either in the van or else on the station platform where the train had stopped.

"I know that, Kinko. That was at Bokhara. I saw you!"

"You saw me?"

"Yes, and I thought you were trying to get away. But if I saw you, it was because I knew of your presence in the van, and I was there watching you, no one else having an idea of spying on you. Nevertheless, it was dangerous; do not do it again; let me replenish your larder when I get an opportunity."

"Thank you, Monsieur Bombarnac, thank you! I do not believe I am in danger of being discovered, unless at the Chinese frontier—or rather at Kachgar."

"And why?"

"The custom house is very keen on goods going into China. I am afraid they will come round the packages, and that my box—"

"In fact, Kinko," I replied, "there are a few difficult hours for you."

"If they find me out?"

"I shall be there, and I will do all I can to prevent anything unpleasant happening."

"Ah! Monsieur Bombarnac!" exclaimed Kinko, in a burst of gratitude. "How can I repay you?"

"Very easily, Kinko."

"And in what way?"

"Ask me to your marriage with the lovely Zinca."

"I will! And Zinca will embrace you."

"She will be only doing her duty, friend Kinko, and I shall be only doing mine in returning two kisses for one."

We exchanged a last grip of the hand; and, really, I think there were tears in the good fellow's eyes when I left him. He put out his lamp, he pushed back the panel, then through the case I heard one more "thanks" and an "au revoir."

I came out of the van, I shut the door, I assured myself that Popof was still asleep. In a few minutes, after a breath or two of the night air, I go into my place near Major Noltitz.

And before I close my eyes my last thought is that, thanks to the appearance of the episodic Kinko, the journey of their energetic "Special" will not be displeasing to my readers.
Crossing a fertile region where poplars like distaffs rise gracefully erect, skirting fields bristling with vines, running by gardens where fruit trees abound, our train stops at the new town.

As is inevitable since the Russian conquest, there are two towns side by side at Tachkend as at Samarkand, as at Bokhara, as at Merv. Here the old town has tortuous streets, houses of mud and clay, bazaars of poor appearance, caravanserais built of bricks dried in the sun, a few mosques, and schools as numerous as if the czar had decreed by ukase that everything French should be imitated. It is true that the scholars are wanting, but there is no want of schools.

The population of Tachkend does not differ very much from that met with in other parts of Turkestan. It comprises Sarthes, Usbegs, Tadjiks, Khirgizes, Nogais, Israelites, a few Afghans and Hindoos and--as may be naturally supposed--a fair supply of Russians.

It is perhaps at Tachkend that the Jews are gathered in the greatest numbers. And from the day that the town passed under Russian administration their situation has considerably improved. From that epoch dates the complete civil and political liberty they now enjoy.

I have only two hours to spare in visiting the town, and I do my work in true reporter style. You should have seen me dashing through the grand bazaar, a mere wooden building, which is crammed with Oriental stuffs, silk goods, metal ware, specimens of Chinese manufacture, including some very fine examples of porcelain.

In the streets of old Tachkend a certain number of women are to be met with. I need hardly say that there are no slaves in this country, much to the displeasure of the Mussulmans. Nowadays woman is free--even in her household.

"An old Turkoman," said Major Noltitz, "once told me that a husband's power is at an end now that he cannot thrash his wife without being threatened with an appeal to the czar; and that marriage is at an end!"

I do not know if the fair sex is still beaten, but the husbands know what they may expect if they knock their wives about. Will it be believed that these peculiar Orientals can see no progress in this prohibition to beat their wives? Perhaps they remember that the Terrestrial Paradise is not far off--a beautiful garden between the Tigris and Euphrates, unless it was between the Amou and the Syr-Daria. Perhaps they have not forgotten that mother Eve lived in this preadamite garden, and that if she had been thrashed a little before her first fault, she would probably not have committed it. But we need not enlarge on that.

I did not hear, as Madam Ujfalvy-Bourdon did, the band playing the Pompiers de Nanterre in the governor-general's garden. No! On this occasion they were playing Le Pere la Victoire, and if these are not national airs they are none the less agreeable to French ears.

We left Tachkend at precisely eleven o'clock in the morning. The country through which the Grand Transasiatic is now running is not so monotonous. The plain begins to undulate, for we are approaching the outer ramifications of the eastern orographic system. We are nearing the tableland of the Pamirs. At the same time we continue at normal speed along this section of a hundred and fifty kilometres which separates us from Khodjend.

As soon as we are on the move I begin to think of Kinko. His little love romance has touched me to the heart. This sweetheart who sent himself off--this other sweetheart who is going to pay the expenses--I am sure Major Noltitz would be interested in these two turtle doves, one of which is in a cage; he would not be too hard on this defrauder of the company, he would be incapable of betraying him. Consequently I have a great desire to tell him of my expedition into the baggage van. But the secret is not mine. I must do nothing that might get Kinko into trouble.

And so I am silent, and to-night I will, if possible, take a few provisions to my packing case--to my snail in his shell, let us say. And is not the young Roumanian like a snail in his shell, for it is as much as he can do to get out of it?

We reach Khodjend about three in the afternoon. The country is fertile, green, carefully cultivated. It is a succession of kitchen gardens, which seem to be well-kept immense fields sown with clover, which yield four or five crops a year. The roads near the town are bordered with long rows of mulberry trees, which diversify the view with eccentric branches.

Again, this pair of cities, old and new. Both of them had only thirty thousand inhabitants in 1868 and they have from forty-five to fifty thousand now. Is it the influence of the surroundings which produces the increase of the birth rate? Is the province affected by the prolific example of the Celestial Empire? No! It is the progress of trade, the concentration of merchants of all nations onto these new markets.

Our halt at Khodjend has lasted three hours. I have made my professional visit and walked on the banks of the Syr-Dana. This river, which bathes the foot of the high mountains of Mogol-Taou, is crossed by a bridge, the middle section of which gives passage to ships of moderate tonnage.

The weather is very warm. The town being protected by its shelter of mountains, the breezes of the steppe cannot reach it, and it is one of the hottest places in Turkestan.

I met the Caternas, delighted with their excursion. The actor said to me in a tone of the best humor: "Never shall I forget Khodjend, Monsieur Claudius."
"And why will you never forget Khodjend, Monsieur Caterna?"

"Do you see these peaches?" he asked, showing me the fruit he was carrying.

"They are magnificent--"

"And not dear! A kilo for four kopeks--that is to say, twelve centimes!"

"Eh!" I answer. "That shows that peaches are rather common in this country. That is the Asiatic apple and it was one of those apples that Mrs. Adam took a bite at--"

"Then I excuse her!" said Madame Caterna, munching away at one of these delicious peaches.

After leaving Tachkend the railway had curved toward the south, so as to reach Khodjend; but after leaving town it curved to the east in the direction of Kokhan. It is at Tachkend that it is nearest to the Transsiberian, and a branch line is being made to Semipalatiinsk to unite the railway systems of Central and Northern Asia.

Beyond we shall run due east, and by Marghelan and Och pass through the gorges of the Pamirs so as to reach the Turkesto-Chinese frontier.

The train had only just started when the travelers took their seats at the table, where I failed to notice any fresh arrival. We shall not pick up any more until we reach Kachgar. There the Russian cookery will give place to the Chinese, and although the name does not recall the nectar and ambrosia of Olympus, it is probable that we shall not lose by the change.

Ephrinell is in his usual place. Without going as far as familiarity, it is obvious that a close intimacy, founded on a similarity in tastes and aptitudes exists between Miss Horatia Bluett and the Yankee. There is no doubt, in our opinion, but what it will end in a wedding as soon as the train arrives. Both will have their romance of the rail. Frankly, I like that of Kinko and Zuza Klork much better. It is true the pretty Roumanian is not here!

We are all very friendly, and by "we" I mean my most sympathetic numbers, the major, the Caternas, young Pan Chao, who replies with very Parisian pleasantries to the actor’s fooleries.

The dinner is a pleasant one and a good one. We learn what is the fourth rule formulated by Cornaco, that Venetian noble, and with the object of determining the right amount for drinking and eating. Pan Chao pressed the doctor on this subject, and Tio-King replied, with a seriousness truly buddhic:

"The rule is founded on the quantity of nourishment proportionate for each temperament as regards the difference of ages, and the strength and the food of various kinds."

"And for your temperament, doctor?" asked Caterna, "what is the right quantity?"

"Fourteen ounces of solid or liquid--"

"An hour?"

"No, sir, a day," replied Tio-King. "And it was in this manner that the illustrious Cornaro lived from the age of thirty-six, so as to leave himself enough strength of body and mind to write his fourth treatise when he was eighty-five, and to live to a hundred and two."

"In that case, give me my fifth cutlet," said Pan Ghao, with a burst of laughter.

There is nothing more agreeable than to talk before a well-served table; but I must not forget to complete my notes regarding Kokham. We were not due there till nine o'clock, and that would be in the nighttime. And so I asked the major to give me some information regarding this town, which is the last of any importance in Russian Turkestan.

"I know it all the better," said the major, "from having been in garrison there for fifteen months. It is a pity you have not time to visit it, for it remains very Asiatic, and there has not been time yet for it to grow a modern town. There is a square there unrivalled in Asia, a palace in great style, that of the old Khan of Khondajar, situated on a mound about a hundred yards high, and in which the governor has left his Sarthe artillery. It is considered wonderful, and there is good reason for it. You will lose by not going there a rare opportunity of bringing in the high-flown words of your language in description: the reception hall transformed into a Russian church, a labyrinth of rooms with the floors of the precious Karagatch wood, the rose pavilion, in which visitors receive a truly Oriental hospitality, the interior court of Moorish decoration recalling the adorable architectural fancies of the Alhambra, the terraces with their splendid views, the harem where the thousand wives of the Sultan—a hundred more than Solomon—live in peace together, the lacework of the fronts, the gardens with their shady walks under the ancient vines—that is what you would have seen—"

"And which I have already seen with your eyes, dear major," said I. "My readers will not complain. Pray tell me if there are any bazaars in."

"A Turkestan town without bazaars would be like London without its docks."

"And Paris without its theaters!" said the actor.

"Yes, there are bazaars at Kokhan, one of them on the Sokh bridge, the two arms of which traverse the town and in it the finest fabrics of Asia are sold for tillahs of gold, which are worth three roubles and sixty kopeks of our money."
"I am sure, major, that you are going to mention mosques after bazaars."
"Certainly."
"And medresses?"
"Certainly; but you must understand that some of them are as good as the mosques and medresses of Samarkand of Bokhara."

I took advantage of the kindness of Major Noltitz and thanks to him, the readers of the Twentieth Century need not spend a night in Kokhan. I will leave my pen inundated with the solar rays of this city of which I could only see a vague outline.

The dinner lasted till rather late, and terminated in an unexpected manner by an offer from Caterna to recite a monologue.

I need scarcely say that the offer was gladly accepted.

Our train more and more resembled a small rolling town. It had even its casino, this dining-car in which we were gathered at the moment. And it was thus in the eastern part of Turkestan, four hundred kilometres from the Pamir plateau, at dessert after our excellent dinner served in a saloon of the Grand Transasiatic, that the Obsession was given with remarkable talent by Monsieur Caterna, grand premier comique, engaged at Shanghai theater for the approaching season.

"Monsieur," said Pan Chao, "my sincere compliments. I have heard young Coquelin--"
"A master, monsieur; a master!" said Caterna.
"Whom you approach--"
"Respectfully--very respectfully!"

The bravos lavished on Caterna had no effect on Sir Francis Trevellyan, who had been occupying himself with onomatopoeic exclamations regarding the dinner, which he considered execrable. He was not amused—not even sadly, as his countrymen have been for four hundred years, according to Froissart. And yet nobody took any notice of this grumbling gentleman's recriminations.

Baron Weisschnitzerdörfer had not understood a single word of this little masterpiece, and had he understood it, he would not have been able to appreciate this sample of Parisian monologomania.

As to my lord Faruskiar and his inseparable Ghangir, it seemed that in spite of their traditional reserve, the surprising grimaces, the significant gestures, the comical intonations, had interested them to a certain extent.

The actor had noticed it, and appreciated this silent admiration.

As he rose from the table he said to me:

"He is magnificent, this seigneur! What dignity! What a presence! What a type of the farthest East! I like his companion less—a third-rate fellow at the outside! But this superb Mongol! Caroline, cannot you imagine him as 'Morales' in the Pirates of the Savannah?"

"Not in that costume, at any rate," said I.

"Why not, Monsieur Claudius? One day at Perpignan I played 'Colonel de Montéclin' in the Closerie des Genets in the costume of a Japanese officer--"

"And he was applauded!" added Madame Caterna.

During dinner the train had passed Kastakos station, situated in the center of a mountainous region. The road curved a good deal, and ran over viaducts and through tunnels—as we could tell by the noise.

A little time afterward Popof told us that we were in the territory of Ferganah, the name of the ancient khanate of Kokhan, which was annexed by Russia in 1876, with the seven districts that compose it. These districts, in which Sarthes are in the majority, are administered by prefects, sub-prefects, and mayors. Come, then, to Ferganah, to find all the machinery of the constitution of the year VIII.

Beyond there is an immense steppe, extending before our train. Madame de Ujfalvy-Bourdon has justly compared it to a billiard table, so perfect in its horizontality. Only it is not an ivory ball which is rolling over its surface, but an express of the Grand Transasiatic running at sixty kilometres an hour.

Leaving the station of Tchontchai behind, we enter station at nine o'clock in the evening. The stoppage is to last two hours. We get out onto the platform.

As we are leaving the car I am near Major Noltitz, who asks young Pan Chao:

"Have you ever heard of this mandarin Yen Lou, whose body is being taken to Pekin?"

"Never, major."

"But he ought to be a personage of consideration, to be treated with the honor he gets."

"That is possible," said Pan Chao; "but we have so many personages of consideration in the Celestial Empire."

"And so, this mandarin, Yen Lou?"

"I never heard him mentioned."

Why did Major Noltitz ask the Chinaman this question? What was he thinking about?
CHAPTER XV.

Kokhan, two hours to stop. It is night. The majority of the travelers have already taken up their sleeping quarters in the car, and do not care to alight.

Here am I on the platform, walking the deck as I smoke. This is rather an important station, and from the engine house comes a more powerful locomotive than those which have brought the train along since we left Uzun Ada. These early engines were all very well as long as the line lay over an almost horizontal plain. But now we are among the gorges of the Pamir plateau, there are gradients of such steepness as to require more engine power.

I watch the proceedings, and when the locomotive has been detached with its tender, the baggage van--with Kinko in--is at the head of the train.

The idea occurs to me that the young Roumanian may perhaps venture out on the platform. It would be an imprudence for he runs the risk of being seen by the police, the "gardovois," who move about taking a good look at the passengers. What my No. 11 had better do is to remain in his box, or at least in his van. I will go and get a few provisions, liquid and solid, and take them to him, even before the departure of the train, if it is possible to do so without fear of being noticed.

The refreshment room at the station is open, and Popof is not there. If he was to see me making purchases he would be astonished, as the dining car contains everything we might want.

At the bar I get a little cold meat, some bread, and a bottle of vodka.

The station is not well lighted. A few lamps give only a feeble light. Popof is busy with one of the railway men. The new engine has not yet been attached to the train. The moment seems favorable. It is useless to wait until we have left. If I can reach Kinko I shall be able to sleep through the night--and that will be welcome, I admit.

I step onto the train, and after assuring myself that no one is watching me, I enter the baggage van, saying as I do so:

"It is I."

In fact it is as well to warn Kinko in case he is out of his box. But he had not thought of getting out, and I advise him to be very careful. He is very pleased at the provisions, for they are a change to his usual diet.

"I do not know how to thank you, Monsieur Bombarnac," he says to me.

"If you do not know, friend Kinko," I reply, "do not do it; that is very simple."

"How long do we stop at?"

"Two hours."

"And when shall we be at the frontier?"

"To-morrow, about one in the afternoon."

"And at Kachgar?"

"Fifteen hours afterward, in the night of the nineteenth."

"There the danger is, Monsieur Bombarnac."

"Yes, Kinko; for if it is difficult to enter the Russian possessions, it is no less difficult to get out of them, when the Chinese are at the gates. Their officials will give us a good look over before they will let us pass. At the same time they examine the passengers much more closely than they do their baggage. And as this van is reserved for the luggage going through to Pekin, I do not think you have much to fear. So good night. As a matter of precaution, I would rather not prolong my visit."

"Good night, Monsieur Bombarnac, good night."

I have come out, I have regained my couch, and I really did not hear the starting signal when the train began to move.

The only station of any importance which the railway passed before sunrise, was that of Marghelan, where the stoppage was a short one.

Marghelan, a populous town--sixty thousand inhabitants--is the real capital of Ferganah. That is owing to the fact that does not enjoy a good reputation for salubrity. It is of course, a double town, one town Russian, the other Turkoman. The latter has no ancient monuments, and no curiosities, and my readers must pardon my not having interrupted my sleep to give them a glance at it.

Following the valley of Schakhimardan, the train has reached a sort of steppe and been able to resume its normal speed.

At three o'clock in the morning we halt for forty-five minutes at Och station.

There I failed in my duty as a reporter, and I saw nothing. My excuse is that there was nothing to see.

Beyond this station the road reaches the frontier which divides Russian Turkestan from the Pamir plateau and the
This part of Central Asia is continually being troubled by Plutonian disturbances beneath its surface. Northern Turkistan has frequently suffered from earthquake—the terrible experience of 1887 will not have been forgotten—and at Tachkend, as at Samarkand, I saw the traces of these commotions. In fact, minor oscillations are continually being observed, and this volcanic action takes place all along the fault, where lay the stores of petroleum and naphtha, from the Caspian Sea to the Pamir plateau.

In short, this region is one of the most interesting parts of Central Asia that a tourist can visit. If Major Noltitz had never been beyond Och station, at the foot of the plateau, he knew the district from having studied it on the modern maps and in the most recent books of travels. Among these I would mention those of Capus and Bonvalot—again two French names I am happy to salute out of France. The major is, nevertheless, anxious to see the country for himself, and although it is not yet six o’clock in the morning, we are both out on the gangway, glasses in hand, maps under our eyes.

The Pamir, or Bam-i-Douniah, is commonly called the "Roof of the World." From it radiate the mighty chains of the Thian Shan, of the Kuen Lun, of the Kara Korum, of the Himalaya, of the Hindoo Koosh. This orographic system, four hundred kilometres across, which remained for so many years an impassable barrier, has been surmounted by Russian tenacity. The Sclav race and the Yellow race have come into contact.

We may as well have a little book learning on the subject; but it is not I that speak, but Major Noltitz.

The travelers of the Aryan people have all attempted to explore the plateau of the Pamir. Without going back to Marco Polo in the thirteenth century, what do we find? The English with Forsyth, Douglas, Biddulph, Younghur, and the celebrated Gordon who died on the Upper Nile; the Russians with Fendchenko, Skobelev, Prjevalsky, Grombtchevsky, General Pevtzoff, Prince Galitzin, the brothers Groum-Grimailo; the French with Auvergne, Bonvalot, Capus, Papin, Breteuil, Blanc, Ridgway, O'Connor, Dutreuil de Rhins, Joseph Martin, Grenard, Edouard Blanc; the Swedes with Doctor Swen-Hedin.

This Roof of the World, one would say that some devil on two sticks had lifted it up in his magic hand to let us see its mysteries. We know now that it consists of an inextricable entanglement of valleys, the mean altitude of which exceeds three thousand metres; we know that it is dominated by the peaks of Gouroudmi and Kauffmann, twenty-two thousand feet high, and the peak of Tagarma, which is twenty-seven thousand feet; we know that it sends off to the west the Oxus and the Amou Daria, and to the east the Tarim; we know that it chiefly consists of primary rocks, in which are patches of schist and quartz, red sands of secondary age, and the clayey, sandy loess of the quaternary period which is so abundant in Central Asia.

The difficulties the Grand Transasiatic had in crossing this plateau were extraordinary. It was a challenge from the genius of man to nature, and the victory remained with genius. Through the gently sloping passes which the Kirghizes call "bels," viaducts, bridges, embankments, cuttings, tunnels had to be made to carry the line. Here are sharp curves, gradients which require the most powerful locomotives, here and there stationary engines to haul up the train with cables, in a word, a herculean labor, superior to the works of the American engineers in the defiles of the Sierra Nevada and the Rocky Mountains.

The desolate aspect of these territories makes a deep impression on the imagination. As the train gains the higher altitudes, this impression is all the more vivid. There are no towns, no villages—nothing but a few scattered huts, in which the Pamirian lives a solitary existence with his family, his horses, his herds of yaks, or "koutars," which are cattle with horses' tails, his diminutive sheep, his thick-haired goats. The moulting of these animals, if we may so phrase it, is a natural consequence of the climate, and they change the dressing gown of winter for the white fur coat of summer. It is the same with the dog, whose coat becomes whiter in the hot season.

As the passes are ascended, wide breaks in the ranges yield frequent glimpses of the more distant portions of the plateau. In many places are clumps of birches and junipers, which are the principal trees of the Pamir, and on the undulating plains grow tamarisks and sedges and mugwort, and a sort of reed very abundant by the sides of the saline pools, and a dwarf labiate called "terskenne" by the Kirghizes.

The major mentioned certain animals which constitute a somewhat varied fauna on the heights of the Pamir. It is an enigma that these beasts coexist with theKirghizes and are only observed as being observed, and this volcanic action takes place all along the fault, where lay the stores of petroleum and naphtha, from the Caspian Sea to the Pamir plateau. The major is, nevertheless, anxious to see the country for himself, and although it is not yet six o’clock in the morning, we are both out on the gangway, glasses in hand, maps under our eyes.

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The major mentioned certain animals which constitute a somewhat varied fauna on the heights of the Pamir. It is even necessary to keep an eye on the platforms of the cars in case a stray panther or bear might seek a ride without any right to travel either first or second class. During the day our companions were on the lookout from both ends of the cars. What shouts arose when plantigrades or felines capered along the line with intentions that certainly seemed suspicious! A few revolver shots were discharged, without much necessity perhaps, but they amused as well as reassured the travelers. In the afternoon we were witnesses of a magnificent shot, which killed instantly an enormous panther just as he was landing on the side step of the third carriage.

"It is thine, Marguerite!" exclaimed Caterna. And could he have better expressed his admiration than in appropriating the celebrated reply of Buridan to the Dauphine's wife—and not the queen of France, as is wrongly stated in the famous drama of the Tour de Nesle?
It was our superb Mongol to whom we were indebted for this marksman's masterpiece.

"What a hand and what an eye!" said I to the major, who continued to look on Faruskiar with suspicion.

Among the other animals of the Pamirian fauna appeared wolves and foxes, and flocks of those large wild sheep with gnarled and gracefully curved horns, which are known to the natives as arkars. High in the sky flew the vultures, bearded and unbearded, and amid the clouds of white vapor we left behind us were many crows and pigeons and turtledoves and wagtails.

The day passed without adventure. At six o'clock in the evening we crossed the frontier, after a run of nearly two thousand three hundred kilometres, accomplished in four days since leaving Uzun Ada. Two hundred and fifty kilometres beyond we shall be at Kachgar. Although we are now in Chinese Turkestan, it will not be till we reach that town that we shall have our first experience of Chinese administration.

Dinner over about nine o'clock, we stretched ourselves on our beds, in the hope, or rather the conviction, that the night will be as calm as the preceding one.

It was not to be so.

At first the train was running down the slopes of the Pamir at great speed. Then it resumed its normal rate along the level.

It was about one in the morning when I was suddenly awakened.

At the same time Major Noltitz and most of our companions jumped up.

There were loud shouts in the rear of the train.

What had happened?

Anxiety seized upon the travelers—that confused, unreasonable anxiety caused by the slightest incident on a railroad.

"What is the matter? What is the matter?"

These words were uttered in alarm from all sides and in different languages.

My first thought was that we were attacked. I thought of the famous Ki-Tsang, the Mongol pirate, whose help I had so imprudently called upon—for my chronicle.

In a moment the train began to slow, evidently preparing to stop.

Popof came into the van, and I asked him what had happened.

"An accident," he replied.

"Serious?"

"No, a coupling has broken, and the two last vans are left behind."

As soon as the train pulls up, a dozen travelers, of whom I am one, get out onto the track.

By the light of the lantern it is easy to see that the breakage is not due to malevolence. But it is none the less true that the two last vans, the mortuary van and the rear van occupied by the goods guard, are missing. How far off are they? Nobody knows.

You should have heard the shouts of the Persian guards engaged in escorting the remains of Yen Lou, for which they were responsible! The travelers in their van, like themselves, had not noticed when the coupling broke. It might be an hour, two hours, since the accident.

What ought to be done was clear enough. The train must be run backward and pick up the lost vans.

Nothing could be more simple. But—and this surprised me—the behavior of my lord Faruskiar seemed very strange. He insisted in the most pressing manner that not a moment should be lost. He spoke to Popof, to the driver, to the stoker, and for the first time I discovered that he spoke Russian remarkably well.

There was no room for discussion. We were all agreed on the necessity of a retrograde movement.

Only the German baron protested. More delays! A waste of time for the sake of a mandarin—and a dead mandarin!

He had to walk about and bear it. As to Sir Francis Trevelyan, he merely shrugged his shoulders, as much as to say: "What management! What couplings! We should not get this sort of thing on an Anglo-Indian line!"

Major Noltitz was as much struck as I was at the behavior of my lord Faruskiar. This Mongol, usually so calm, so impassible, with his cool look beneath his motionless eyelid, had become a prey to a sort of furious anxiety which he appeared incapable of controlling. His companion was as excited as he was. But what was there in these two missing vans which could be of interest to them? They had not even any luggage in the rear van! Was it the mandarin, Yen Lou? Was it for that reason that at Donchak they had so carefully watched the van which contained the corpse? I could see clearly enough that the major thought it all very suspicious.

The train began to run back as soon as we had taken our places. The German baron attempted to curse, but Faruskiar gave him such a look that he did not care to get another, and stowed himself away in the corner.

Dawn appeared in the east when the two wagons were found a kilometre off, and the train gently slowed up to them after an hour's run.
Faruksiar and Ghangir went to help in coupling on the vans, which was done as firmly as possible. Major Noltitz and I noticed that they exchanged a few words with the other Mongols. After all, there was nothing astonishing in that, for they were countrymen of theirs.

We resume our seats in the train, and the engineer tries to make up for lost time.

Nevertheless, the train does not arrive at Kachgar without a long delay, and it is half-past four in the morning when we enter the capital of Chinese Turkestan.

* * * * *

CHAPTER XVI.

Kachgaria is Oriental Turkestan which is gradually being metamorphosed into Russian Turkestan.

The writers in the New Review have said: "Central Asia will only be a great country when the Muscovite administration have laid hands on Tibet, or when the Russians lord it at Kachgar."

Well, that is a thing half done! The piercing of the Pamir has joined the Russian railway with the Chinese line which runs from one frontier of the Celestial Empire to the other. The capital of Kachgaria is now as much Russian as Chinese. The Sclav race and the Yellow race have rubbed elbows and live in peace. How long will it last? To others leave the future; I am content with the present.

We arrive at half-past four; we leave at eleven. The Grand Transasiatic shows itself generous. I shall have time to see Kachgar, on condition of allowing myself an hour less than the time stated.

For what was not done at the frontier has to be done at Kachgar. Russians and Chinese are one as bad as the other when there are vexing formalities; papers to verify, passports to sign, etc., etc. It is the same sort of meddling, minute and over-fastidious, and we must put up with it. We must not forget the terrible threat of the formula the functionary of the Celestial Empire affixes to his acts--"Tremble and obey!" I am disposed to obey, and I am prepared to appear before the authorities of the frontier. I remember the fears of Kinko, and it is with regard to him that the trembling is to be done, if the examination of the travelers extends to their packages and luggage.

Before we reached Kachgar, Major Noltitz said to me:

"Do not imagine that Chinese Turkestan differs very much from Russian Turkestan. We are not in the land of pagodas, junks, flower boats, yamens, hongs and porcelain towers. Like Bokhara, Merv and Samarkand, Kachgar is a double town. It is with the Central Asian cities as it is with certain stars, only they do not revolve round one another."

The major’s remark was very true. It was not so long ago since emirs reigned over Kachgaria, since the monarchy of Mohammed Yakoub extended over the whole of Turkestan, since the Chinese who wished to live here had to adjure the religion of Buddha and Confucius and become converts to Mahometanism, that is, if they wished to be respectable. What would you have? In these days we are always too late, and those marvels of the Oriental cosmorama, those curious manners, those masterpieces of Asiatic art, are either memories or ruins. The railways will end by bringing the countries they traverse down to the same level, to a mutual resemblance which will certainly be equality and may be fraternity. In truth, Kachgar is no longer the capital of Kachgaria; it is a station on the Grand Transasiatic, the junction between the Russian and Chinese lines, and the strip of iron which stretches for three thousand kilometres from the Caspian to this city runs on for nearly four thousand more to the capital of the Celestial Empire.

I return to the double town. The new one is Yangi-Chahr: the old one, three and a half miles off, is Kachgar. I have seen both, and I will tell you what they are like.

In the first place, both the old and the new towns are surrounded with a villainous earthen wall that does not predispose you in their favor. Secondly, it is in vain that you seek for any monument whatever, for the materials of construction are identical for houses as for palaces. Nothing but earth, and not even baked earth. It is not with mud dried in the sun that you can obtain regular lines, clean profiles and finely worked sculptures. Your architecture must be in stone or marble, and that is precisely what you do not get in Chinese Turkestan.

A small carriage quickly took the major and myself to Kachgar, which is three miles round. The Kizil-Sou, that is to say the Red River, which is really yellow, as a Chinese river ought to be, clasps it between its two arms, which are united by two bridges. If you wish to see a few ruins of some interest, you must go a short distance beyond the town, where there are the remains of fortifications dating from five hundred or two thousand years ago, according to the imagination of the archaeologist. What is certain is that Kachgar submitted to the furious assault of Tamerlane, and we will agree that without the exploits of this terrible cripple the history of Central Asia would be singularly monotonous. Since his time there have been fierce sultans, it is true--among others that Ouali-Khan-Toulla, who, in 1857, strangled Schlagintweit, one of the most learned and most daring explorers of the Asiatic continent. Two tablets of bronze, presented by the Geographical Societies of Paris and Petersburg, ornament his commemorative
monument.

Kachgar is an important centre of trade, which is almost entirely in Russian hands. Khotan silks, cotton, felt, woollen carpets, cloth, are the principal articles in the markets, and these are exported beyond the frontier between Tachkend and Koulja, to the north of Oriental Turkestan.

Here, as the major told me, Sir Francis Trevelyan should have special cause for manifesting his ill humor. In fact, an English embassy under Chapman and Gordon in 1873 and 1874 had been sent from Kashmir to Kachgar by way of Kothan and Yarkand. At this time the English had reason to hope that commercial relations could be established to their advantage. But instead of being in communication with the Indian railways, the Russian railways are in communication with the Chinese, and the result of this junction has been that English influence has had to give place to Russian.

The population of Kachgar is Turkoman, with a considerable mixture of Chinese, who willingly fulfil the duties of domestics, artisans or porters. Less fortunate than Chapman and Gordon, Major Noltitz and I were not able to see the Kachgarian capital when the armies of the tumultuous emir filled its streets. There were none of those Djiguit foot soldiers who were mounted, nor of those Sarbaz who were not. Vanished had those magnificent bodies of Taifourchis, armed and disciplined in the Chinese manner, those superb lancers, those Kalmuck archers, bending bows five feet high, those "tigers" with their daubed shields and their matchlocks. All have disappeared, the picturesque warriors of Kachgaria and the emir with them.

At nine o'clock we are on our return to Yangi-Chahr. There, at the end of the streets near the citadel, what do we see? The Caternas in ecstatic admiration before a troop of musical dervishes.

Who says dervish says beggar, and who says beggar evokes the completest type of filth and laziness. But with what an extraordinary combination of gestures, with what attitudes in the management of the long-stringed guitar, with what acrobatic swingings of the body do they accompany their singing of their legends and poetry which could not be more profane. The instinct of the old actor was awakened in Catera. He could not keep still; it was too much for him.

And so these gestures, these attitudes, these swingings he imitated there with the vigor of an old topman joined to that of a leading premier, and I saw him as he was figuring in this quadrille of dancing dervishes.

"Eh! Monsieur Claudius!" he said, "it is not difficult to copy the exercises of these gallant fellows! Make me a Turkestan operetta, let me act a dervish, and you will see if I don't do it to the very life."

"I do not doubt it, my dear Catera," I replied; "but before you do that, come into the restaurant at the railway station and bid farewell to Turkestan cookery, for we shall soon be reduced to Chinese."

The offer is accepted all the more willingly, for the reputation of the Kachgarian cooks is well justified, as the major made us remark.

In fact, the Caternas, the major, young Pan Chao and I were astonished and enchanted at the quantity of dishes that were served us, as well as at their quality. Sweets alternated capriciously with roasts and grills. And as the Caternas could never forget--any more than they could forget the famous peaches of Khodjend--there are a few of these dishes which the English embassy wished to retain in remembrance, for they have given the composition in the story of their journey: pigs' feet dusted with sugar and browned in fat with a dash of pickles; kidneys fried with sweet sauce and served with fritters.

Caterna asked for the first twice, and for the other three times.

"I take my precautions," said he. "Who knows what the dining-car kitchen will give us on the Chinese railways? Let us beware of shark fins, which may perhaps be ratherorny, and of swallows' nests which may not be quite fresh!"

It is ten o'clock when a stroke of the gong announces that the police formalities are about to begin. We leave the table after a parting glass of Choa-Hing wine, and a few minutes afterward are in the waiting room.

All my numbers are present, with the exception, of course, of Kinko, who would have done honor to our breakfast if it had been possible for him to take part in it. There was Doctor Tio-King, his Cornaro under his arm; Fulk Ephrinell and Miss Horatia Bluett, mingling their teeth and hair, figuratively, be it understood; Sir Francis Trevellyan, motionless and silent, intractable and stiff, smoking his cigar on the threshold; Faruskiar, accompanied by Ghangir; Russian, Turkoman, Chinese travelers--in all from sixty to eighty persons. Every one had in his turn to present himself at the table, which was occupied by two Celestials in uniform; a functionary speaking Russian fluently, an interpreter for German, French and English.

The Chinese was a man about fifty, with a bald head, a thick moustache, a long pigtail, and spectacles on his nose. Wrapped in a flowery robe, fat as if he belonged to the most distinguished people in the country, he had not a prepossessing face. After all, it was only a verification of our papers, and as ours were in order it did not much matter how repulsive he looked.

"What an air he has!" murmured Madame Catera.
"The air of a Chinaman!" said her husband, "and frankly I do not want to have one like it."

I am one of the first to present my passport, which bears the visas of the consul at Tiflis and the Russian authorities at Uzun-Ada. The functionary looks at it attentively. When you are dealing with a mandarin, you should always be on the lookout. Nevertheless, the examination raises no difficulty, and the seal of the green dragon declares me all in order.

The same result with regard to the actor and actress. Nevertheless it was worth while looking at Caterna while his papers were being examined. He assumed the attitude of a criminal endeavoring to mollify a magistrate, he made the sheepiest of eyes, and smiled the most deprecating of smiles, and seemed to implore a grace or rather a favor, and yet the most obdurate of the Chinamen had not a word to say to him.

"Correct," said the interpreter.
"Thank you, my prince!" replied Caterna, with the accent of a Paris street boy. As to Ephrinell and Miss Bluett, they went through like a posted letter. If an American commercial and an English ditto were not in order, who would be? Uncle Sam and John Bull are one as far as that goes.

The other travelers, Russian and Turkoman, underwent examination without any difficulty arising. Whether they were first-class or second-class, they had fulfilled the conditions required by the Chinese administration, which levies a rather heavy fee for each visa, payable in roubles, taels or sapeks.

Among the travelers I observed an American clergyman bound to Pekin. This was the Reverend Nathaniel Morse, of Boston, one of those honest Bible distributors, a Yankee missionary, in the garb of a merchant, and very keen in business matters. At a venture I make him No. 13 in my notebook.

The verification of the papers of young Pan Chao and Doctor Tio-King gave rise to no difficulty, and on leaving they exchanged "ten thousand good mornings" with the more amiable of the Chinese representatives.

When it came to the turn of Major Noltitz, a slight incident occurred. Sir Francis Trevellyan, who came to the table at the same moment, did not seem inclined to give way. However, nothing resulted but haughty and provoking looks. The gentleman did not even take the trouble to open his mouth. It is evidently written above that I am not to hear the sound of his voice! The Russian and the Englishman each received the regulation visa, and the affair went no further.

My lord Faruskiar, followed by Ghangir, then arrived before the man in spectacles, who looked at him with a certain amount of attention. Major Noltitz and I watched him. How would he submit to this examination? Perhaps we were to be undeceived regarding him.

But what was our surprise and even our stupefaction at the dramatic outburst which at once took place!

After throwing a glance at the papers presented to him by Ghangir, the Chinese functionary rose and bowed respectfully to Faruskiar, saying:
"May the General Manager of the Grand Transasiatic deign to receive my ten thousand respects!"

General Manager, that is what he is, this lord Faruskiar! All is explained. During our crossing of Russian Turkestan he had maintained his incognito like a great personage in a foreign country; but now on the Chinese railways he resumed the rank which belonged to him.

And I--in a joke, it is true--had permitted myself to identify him with the pirate Ki-Tsang. And Major Noltitz, who had spent his time suspecting him! At last I have some one of note in our train--I have him, this somebody, I will make his acquaintance, I will cultivate it like a rare plant, and if he will only speak Russian I will interview him down to his boots!

Good! I am completely upset, and I could not help shrugging my shoulders, when the major whispers to me:
"Perhaps one of the bandit chiefs with whom the Grand Transasiatic had to make terms!"
"Come, major, be serious."

The visit was nearing its end when Baron Weisschnitzerdörfer appeared.
He is preoccupied, he is troubled, he is anxious, he is confused, he is fidgety. Why is he shaking, and bending, and diving into his pockets like a man who has lost something valuable?
"Your papers!" demands the interpreter in German.
"My papers!" replies the baron, "I am looking for them. I have not got them; they were in my letter case."
And he dived again into his trousers pockets, his waistcoat pockets, his coat pockets, his great-coat pockets--there were twenty of them at the least--and he found nothing.
"Be quick--be quick!" said the interpreter. "The train cannot wait!"
"I object to its going without me!" exclaimed the baron. "These papers--how have they gone astray? I must have let them drop out of my case. They should have given them back to me--"

At this moment the gong awoke the echoes of the interior of the railway station.
"Wait! wait! Donner vetter! Can't you wait a few moments for a man who is going round the world in thirty-nine days--!"
"The Grand Transasiatic does not wait," says the interpreter.

Without waiting for any more, Major Noltitz and I reach the platform, while the baron continues to struggle in the presence of the impassible Chinese functionaries.

I examine the train and see that its composition has been modified on account of there being fewer travelers between Kachgar and Pekin. Instead of twelve carriages, there are now only ten, placed in the following order: engine, tender, front van, two first-class cars, dining car, two second-class cars, the van with the defunct mandarin, rear van.

The Russian locomotives, which have brought us from Uzun-Ada, have been replaced by a Chinese locomotive, burning not naphtha but coal, of which there are large deposits in Turkestan, and stores at the chief stations along the line.

My first care is to look in at the front van. The custom-house officers are about to visit it, and I tremble for poor Kinko.

It is evident that the fraud has not been discovered yet, for there would have been a great stir at the news. Suppose the case is passed? Will its position be shifted? Will it be put hind side before or upside down? Kinko will not then be able to get out, and that would be a complication.

The Chinese officers have come out of the van and shut the door, so that I cannot give a glance into it. The essential point is that Kinko has not been caught in the act. As soon as possible I will enter the van, and as bankers say, "verify the state of the safe."

Before getting into our car, Major Noltitz asks me to follow him to the rear of the train.

The scene we witness is not devoid of interest; it is the giving over of the corpse of the mandarin Yen Lou by the Persian guards to a detachment of soldiers of the Green Standard, who form the Chinese gendarmerie. The defunct passes into the care of twenty Celestials, who are to occupy the second-class car in front of the mortuary van. They are armed with guns and revolvers, and commanded by an officer.

"Well," said I to the major, "this mandarin must be some very exalted personage if the Son of Heaven sends him a guard of honor--"

"Or of defence," replies the major.

Faruskiar and Ghangir assist at these proceedings, in which there is nothing surprising. Surely the general manager of the line ought to keep an eye on the illustrious defunct, entrusted to the care of the Grand Transasiatic?

The gong was struck for the last time; we hasten into our cars.

And the baron, what has become of him?

Here he comes out on to the platform like a whirlwind. He has found his papers at the bottom of his nineteenth pocket. He has obtained the necessary visa--and it was time.

"Passengers for Pekin, take your seats!" shouts Popof in a sonorous voice.

The train trembles, it starts, it has gone.

CHAPTER XVII.

We are off on a Chinese railway, single line, the train drawn by a Chinese engine, driven by a Chinese driver. Let us hope we shall not be telescoped on the road, for among the passengers is one of the chief functionaries of the company in the person of Faruskiar.

After all, if an accident should happen it will break the monotony of the journey, and furnish me with an episode. I am forced to admit that up to the present my personages have not behaved as I expected. The drama does not run well, the action languishes. We want something startling to bring all the actors on--what Caterina would call "a good fourth act."

But then Ephrinell and Miss Bluet are all the time absorbed in their commercial tête-à-tête. Pan Chao and the doctor amused me for a time, but they are not equal to it now. The actor and the actress are of no use without opportunity. Kinko, Kinko himself, on whom I had built such hopes, has passed the frontier without difficulty, he will reach Pekin, he will marry Zinca Klork. Decidedly there is a want of excitement. I cannot get anything out of the corpse of Yen Lou! and the readers of the Twentieth Century who looked to me for something sensational and thrilling.

Must I have recourse to the German baron? No! he is merely ridiculous, stupidly ridiculous, and he has no interest for me.

I return to my idea: I want a hero, and up to the present no hero has appeared on the scene. Evidently the moment has come to enter into more intimate relations with Faruskiar. Perhaps he will not now be so close in his incognito. We are under his orders, so to say. He is the mayor of our rolling town, and a mayor owes something to those he governs. Besides, in the event of Kinko's fraud being discovered I may as well secure the
protection of this high functionary.

Our train runs at only moderate speed since we left Kachgar. On the opposite horizon we can see the high lands of the Pamir; to the southwest rises the Bolor, the Kachgarian belt from which towers the summit of Tagharma lost among the clouds.

I do not know how to spend my time. Major Noltitz has never visited the territories crossed by the Grand Transasiatic, and I am deprived of the pleasure of taking notes from his dictation. Dr. Tio-King does not lift his nose from his Cornaro, and Pan Chao reminds me more of Paris and France than of Pekin and China; besides, when he came to Europe he came by Suez, and he knows no more of Oriental Turkestan than he does of Kamtschatka. All the same, we talk. He is a pleasant companion, but a little less amiability and a little more originality would suit me better.

I am reduced to strolling from one car to another, lounging on the platforms, interrogating the horizon, which obstinately refuses to reply, listening on all sides.

Hello! there are the actor and his wife apparently in animated conversation. I approach. They sing in an undertone. I listen.

"I'm fond of my turkeys--eys--eys," says Madame Catera.
"I'm fond of my wethers--ers--ers," says Monsieur Catera, in any number of baritones.

It is the everlasting duet between Pipo and Bettina; and they are rehearsing for Shanghai. Happy Shanghai! They do not yet know the Masciiotte!

Ephrinell and Miss Bluett are talking away with unusual animation, and I catch the end of the dialogue.

"I am afraid," said she, "that hair will be rising in Pekin--"

"And I," said he, "that teeth will be down. Ah! If a good war would only break out in which the Russians would give the Chinaman a smack on the jaw."

There now! Smack them on the jaw, in order that Strong, Bulbul & Co., of New York, might have a chance of doing a trade!

Really I do not know what to do, and we have a week's journey before us. To Jericho with the Grand Transasiatic and its monotonous security! The Great Trunk from New York to San Francisco has more life in it! At least, the redskins do sometimes attack the trains, and the chance of a scalping on the road cannot but add to the charm of the voyage!

But what is that I hear being recited, or rather intoned at the end of our compartment?

"There is no man, whoever he may be, who cannot prevent himself from eating too much, and avoid the evils due to repletion. On those who are intrusted with the direction of public affairs this is more incumbent than on others--"

It is Dr. Tio-King reading Cornaro aloud, in order that he may remember his principles better. Eh! after all, this principle is not to be despised. Shall I send it by telegram to our cabinet ministers? They might, perhaps, dine with more discretion after it.

During this afternoon I find by the guide-book that we shall cross the Yamanyar over a wooden bridge. This stream descends from the mountains to the west, which are at least twenty-five thousand feet high, and its rapidity is increased by the melting of the snows. Sometimes the train runs through thick jungles, amid which Popof assures me tigers are numerous. Numerous they may be, but I have not seen one. And yet in default of redskins we might get some excitement out of tiger-skins. What a heading for a newspaper, and what a stroke of luck for a journalist! TERRIBLE CATASTROPHE. A GRAND TRANSASIATIC EXPRESS ATTACKED BY TIGERS. FIFTY VICTIMS. AN INFANT DEVORED BEFORE ITS MOTHER'S EYES--the whole thickly leaded and appropriately displayed.

Well, no! The Turkoman felidae did not give me even that satisfaction! And I treat them--as I treat any other harmless cats.

The two principal stations have been Yanghi-Hissar, where the train stops ten minutes, and Kizil, where it stops a quarter of an hour. Several blast furnaces are at work here, the soil being ferruginous, as is shown by the word "Kizil," which means red.

The country is fertile and well cultivated, growing wheat, maize, rice, barley and flax, in its eastern districts. Everywhere are great masses of trees, willows, mulberries, poplars. As far as the eye can reach are fields under culture, irrigated by numerous canals, also green fields in which are flocks of sheep; a country half Normandy, half Provence, were it not for the mountains of the Pamir on the horizon. But this portion of Kachgaria was terribly ravaged by war when its people were struggling for independence. The land flowed with blood, and along by the railway the ground is dotted with tumuli beneath which are buried the victims of their patriotism. But I did not come to Central Asia to travel as if I were in France! Novelty! Novelty! The unforeseen! The appalling!

It was without the shadow of an accident, and after a particularly fine run, that we entered Yarkand station at
four o'clock in the afternoon.

If Yarkand is not the administrative capital of eastern Turkestan, it is certainly the most important commercial city of the province.

"Again two towns together," said I to Major Noltitz. "That I have from Popof."

"But this time," said the major, "it was not the Russians who built the new one."

"New or old," I added, "I am afraid is like the others we have seen, a wall of earth, a few dozen gateways cut in the wall, no monuments or buildings of note, and the eternal bazaars of the East."

I was not mistaken, and it did not take four hours to visit both Yarkands, the newer of which is called Yanji-Shahr.

Fortunately, the Yarkand women are not forbidden to appear in the streets, which are bordered by simple mud huts, as they were at the time of the "dadkwahs," or governors of the province. They can give themselves the pleasure of seeing and being seen, and this pleasure is shared in by the farangis—as they call foreigners, no matter to what nation they may belong. They are very pretty, these Asiatics, with their long tresses, their transversely striped bodices, their skirts of bright colors, relieved by Chinese designs in Kothan silk, their high-heeled embroidered boots, their turbans of coquettish pattern, beneath which appear their black hair and their eyebrows united by a bar.

A few Chinese passengers alighted at Yarkand, and gave place to others exactly like them—among others a score of coolies—and we started again at eight o'clock in the evening.

During the night we ran the three hundred and fifty kilometres which separate Yarkand from Kothan.

A visit I paid to the front van showed me that the box was still in the same place. A certain snoring proved that Kinko was inside as usual, and sleeping peacefully. I did not care to wake him, and I left him to dream of his adorable Roumanian.

In the morning Popof told me that the train, which was now traveling about as fast as an omnibus, had passed Kargalik, the junction for the Kilian and Tong branches. The night had been cold, for we are still at an altitude of twelve hundred metres. Leaving Guma station, the line runs due east and west, following the thirty-seventh parallel, the same which traverses in Europe, Seville, Syracuse and Athens.

We sighted only one stream of importance, the Kara-kash, on which appeared a few drifting rafts, and files of horses and asses at the fords between the pebbly banks. The railroad crosses it about a hundred kilometres from Khotan, where we arrived at eight o'clock in the morning.

Two hours to stop, and as the town may give me a foretaste of the cities of China, I resolve to take a run through it.

It seems to be a Turkoman town built by the Chinese, or perhaps a Chinese town built by Turkomans. Monuments and inhabitants betray their double origin. The mosques look like pagodas, the pagodas look like mosques.

And I was not astonished when the Caternas, who would not miss this opportunity of setting foot in China, were rather disappointed.

"Monsieur Claudius," said the actor to me, "there is not a single scene here that would suit the Prise de Pékin!"

"But we are not at Pekin, my dear Catera."

"That is true, and it has to be remembered, if we are to be thankful for little."

"Thankful for very little," as the Italians say.

"Well, if they say that, they are no fools."

As we were about to board the car again, I saw Popof running toward me, shouting:

"Monsieur Bombarnac!"

"What is the matter, Popof?"

"A telegraph messenger asked me if there was any one belonging to the Twentieth Century in the train."

"A telegraph messenger?"

"Yes, on my replying in the affirmative, he gave me this telegram for you."

"Give it me! give it me!"

I seize the telegram, which has been waiting for me for some days. Is it a reply to my wire sent from Merv, relative to the mandarin Yen Lou?

I open it. I read it. And it falls from my hand.

This is what it said:


"It is not the corpse of a mandarin that the train is taking to Pekin, but the imperial treasure, value fifteen millions, sent from Persia to China, as announced in the Paris newspapers eight days ago; endeavor to be better informed for the future."

* * * * *
CHAPTER XVIII.

"Millions--there are millions in that pretended mortuary van!"

In spite of myself, this imprudent phrase had escaped me in such a way that the secret of the imperial treasure was instantly known to all, to the railway men as well as to the passengers. And so, for greater security, the Persian government, in agreement with the Chinese government, has allowed it to be believed that we were carrying the corpse of a mandarin, when we were really taking to Pekin a treasure worth fifteen million of francs.

Heaven pardon me, what a howler--pardonable assuredly--but what a howler I had been guilty of! But why should I have doubted what Popof told me, and why should Popof have suspected what the Persians had told him regarding this Yen Lou? There was no reason for our doubting their veracity.

I am none the less deeply humiliated in my self-esteem as a journalist, and I am much annoyed at the call to order which I have brought upon myself. I shall take very good care not to breathe a word of my misadventure, even to the major. Is it credible? In Paris the Twentieth Century is better informed of what concerns the Grand Transasiatic than I am! They knew that an imperial treasure is in the van, and I did not! Oh! the mistakes of special correspondents!

Now the secret is divulged, and we know that this treasure, composed of gold and precious stones, formerly deposited in the hands of the Shah of Persia, is being sent to its legitimate owner, the Son of Heaven.

That is why my lord Faruskiar, who was aware of it in consequence of his position as general manager of the company, had joined the train at Douchak so as to accompany the treasure to its destination. That is why he and Ghangir--and the three other Mongols--had so carefully watched this precious van, and why they had shown themselves so anxious when it had been left behind by the breakage of the coupling, and why they were so eager for its recovery. Yes, all is explained!

That is also why a detachment of Chinese soldiers has taken over the van at Kachgar, in relief of the Persians! That is why Pan-Chao never heard of Yen Lou, nor of any exalted personage of that name existing in the Celestial Empire!

We started to time, and, as may be supposed, our traveling companions could talk of nothing else but the millions which were enough to enrich every one in the train.

"This pretended mortuary van has always been suspicious to me," said Major Noltitz. "And that was why I questioned Pan-Chao regarding the dead mandarin."

"I remember," I said; "and I could not quite understand the motive of your question. It is certain now that we have got a treasure in tow."

"And I add," said the major, "that the Chinese government has done wisely in sending an escort of twenty well-armed men. From Kothan to Lan Teheou the trains will have two thousand kilometres to traverse through the desert, and the safety of the line is not as great as it might be across the Gobi."

"All the more so, major, as the redoubtable Ki-Tsang has been reported in the northern provinces."

"Quite so, and a haul of fifteen millions is worth having by a bandit chief."

"But how could the chief be informed of the treasure being sent?"

"That sort of people always know what it is their interest to know."

"Yes," thought I, "although they do not read the Twentieth Century."

Meanwhile different opinions were being exchanged on the gangways. Some would rather travel with the millions than carry a corpse along with them, even though it was that of a first-class mandarin. Others considered the carrying of the treasure a danger to the passengers. And that was the opinion of Baron Weisschnitzerdörfer in a furious attack on Popof.

"You ought to have told us about it, sir, you ought to have told us about it! Those millions are known to be in the train, and they will tempt people to attack us. And an attack, even if repulsed, will mean delay, and delay I will not submit to! No, sir, I will not!"

"No one will attack us," replied Popof. "No one will dream of doing it!"

"And how do you know that? how do you know that?"

"Be calm, pray."

"I will not be calm; and if there is a delay, I will hold the company responsible!"

That is understood; a hundred thousand florins damages to Monsieur le Baron Tour de Monde.

Let us pass to the other passengers.

Ephrinell looked at the matter, of course, from a very practical point of view.

"There can be no doubt that our risks have been greatly increased by this treasure, and in case of accident on account of it, the Life Travelers' Society, in which I am insured, will, I expect, refuse to pay, so that the Grand
"Transasiatic Company will have all the responsibility."

"Of course," said Miss Bluett; "and if they had not found the missing van the company would have been in a serious difficulty with China. Would it not, Fulk?"

"Exactly, Horatia!"

Horatia and Fulk--nothing less.

The Anglo-American couple were right, the enormous loss would have had to be borne by the Grand Transasiatic, for the company must have known they were carrying a treasure and not a corpse--and thereby they were responsible.

As to the Caternas, the millions rolling behind did not seem to trouble them. The only reflection they inspired was, "Ah! Caroline, what a splendid theater we might build with all that money!"

But the best thing was said by the Reverend Nathaniel Morse, who had joined the train at Kachgar.

"It is never comfortable to be dragging a powder magazine after one!"

Nothing could be truer, and this van with its imperial treasure was a powder magazine that might blow up our train.

The first railway was opened in China about 1877 and ran from Shanghai to Fou-Tcheou. The Grand Transasiatic followed very closely the Russian road proposed in 1874 by Tachkend, Kouldja, Kami, Lan Tcheou, Singan and Shanghai. This railway did not run through the populous central provinces which can be compared to vast and humming hives of bees--and extraordinarily prolific bees. As before curving off to Lan Tcheou; it reaches the great cities by the branches it gives out to the south and southeast. Among others, one of these branches, that from Tai Youan to Nanking, should have put these two towns of the Chan-Si and Chen-Toong provinces into communication. But at present the branch is not ready for opening, owing to an important viaduct not having finished building.

The completed portion gives me direct communication across Central Asia. That is the main line of the Transasiatic. The engineers did not find it so difficult of construction as General Annenkof did the Transcaspian. The deserts of Kara Koum and Gobi are very much alike; the same dead level, the same absence of elevations and depressions, the same suitability for the iron road. If the engineers had had to attack the enormous chain of the Kuen Lun, Nan Chan, Amie, Gangar Oola, which forms the frontier of Tibet, the obstacles would have been such that it would have taken a century to surmount them. But on a flat, sandy plain the railway could be rapidly pushed on up to Lan Tcheou, like a long Decauville of three thousand kilometres.

It is only in the vicinity of this city that the art of the engineer has had a serious struggle with nature in the costly and troublesome road through the provinces of Kan-Sou, Chan-Si and Petchili.

As we go along I must mention a few of the principal stations at which the train stops to take in coal and water. On the right-hand side the eye never tires of the distant horizon of mountains which bounds the tableland of Tibet to the north. On the left the view is over the interminable steppes of the Gobi. The combination of these territories constitutes the Chinese Empire if not China proper, and we shall only reach that when we are in the neighborhood of Lan Tcheou.

It would seem, therefore, as though the second part of the journey would be rather uninteresting, unless we are favored with a few startling incidents. But it seems to me that we are certainly in the possession of the elements out of which something journalistic can be made.

At eleven o'clock the train left Kothan station, and it was nearly two o'clock in the afternoon when it reached Keria, having left behind the small stations of Urang, Langar, Pola and Tschiria.

In 1889-90 this road was followed by Pevtsoff from Kothan to Lob-Nor at the foot of the Kuen Lun, which divides Chinese Turkestan from Tibet. The Russian traveler went by Keria, Nia, Tchertchen, as we are doing so easily, but then his caravan had to contend with much danger and difficulty--which did not prevent his reporting ten thousand kilometres of surveys, without reckoning altitude and longitude observations of the geographical points. It is an honor for the Russian government to have thus continued the work of Prijevalsky.

From Keria station you can see to the southwest the heights of Kara Koum and the peak of Dapsang, to which different geographers assign a height of eight thousand metres. At its foot extends the province of Kachmir. There the Indus rises in a number of inconsiderable sources which feed one of the greatest rivers of the Peninsula. Thence from the Pamir tableland extends the mighty range of the Himalaya, where rise the highest summits on the face of the globe.

Since we left Kothan we have covered a hundred and fifty kilometres in four hours. It is not a high rate of speed, but we cannot expect on this part of the Transasiatic the same rate of traveling we experienced on the Transcaspian. Either the Chinese engines are not so fast, or, thanks to their natural indolence, the engine drivers imagine that from thirty to forty miles an hour is the maximum that can be obtained on the railways of the Celestial Empire.

At five o'clock in the afternoon we were at another station, Nia, where General Pevtsoff established a
The passengers we picked up were only Chinese, men and women. There were only a few for the first class, and these only went short journeys.

We had not started a quarter of an hour when Ephrinell, with the sferious manner of a merchant intent on some business, came up to me on the gangway.

"Monsieur Bombarnac," he said, "I have to ask a favor of you."

Eh! I thought, this Yankee knows where to find me when he wants me.
"Only too happy, I can assure you," said I. "What is it about?"
"I want you to be a witness--"
"An affair of honor? And with whom, if you please?"
"Miss Horatia Bluett."
"You are going to fight Miss Bluett!" I exclaimed, with a laugh.
"Not yet. I am going to marry her."
"Marry her?"
"Yes! a treasure of a woman, well acquainted with business matters, holding a splendid commission--"
"My compliments, Mr. Ephrinell! You can count on me--"
"And probably on M. Catera?"
"He would like nothing better, and if there is a wedding breakfast he will sing at your dessert--"
"As much as he pleases," replied the American. "And now for Miss Bluett's witnesses."
"Quite so."
"Do you think Major Noltitz would consent?"
"A Russian is too gallant to refuse. I will ask him, if you like."
"Thank you in advance. As to the second witness, I am rather in a difficulty. This Englishman, Sir Francis Trevellyan--"
"A shake of the head is all you will get from him."
"Baron Weisschnitzerdörfler?"
"Ask that of a man who is doing a tour of the globe, and who would never get through a signature of a name of that length!"
"Then I can only think of Pan-Chao, unless we try Popof--"
"Either would do it with pleasure. But there is no hurry, Mr. Ephrinell, and when you get to Pekin you will have no difficulty in finding a fourth witness."
"What! to Pekin? It is not at Pekin that I hope to marry Miss Bluett!"
"Where, then? At Sou Tcheou or Lan Tcheou, while we stop a few hours?"
"Wait a bit, Monsieur Bombarnac! Can a Yankee wait?"
"Then it is to be--"
"Here."
"In the train?"
"In the train."
"Then it is for me to say, Wait a bit!"
"Not twenty-four hours."
"But to be married you require--"
"An American minister, and we have the Reverend Nathaniel Morse."
"He consents?"
"As if he would not! He would marry the whole train if it asked him!"
"Bravo, Mr. Ephrinell! A wedding in a train will be delightful."
"We should never put off until to-morrow what we can do to-day."
"Yes, I know, time is money."
"No! Time is time, simply, and I do not care to lose a minute of it."

Ephrinell clasped my hand, and as I had promised, I went to take the necessary steps regarding the witnesses necessary for the nuptial ceremonial.

It needs not be said that the commercials were of full age and free to dispose of themselves, to enter into marriage before a clergyman, as is done in America, and without any of the fastidious preliminaries required in France and other formalistic countries. Is this an advantage or otherwise? The Americans think it is for the best, and, as Cooper says, the best at home is the best everywhere.

I first asked Major Noltitz, who willingly agreed to be Miss Bluett's witness.
"These Yankees are astonishing," he said to me.
"Precisely because they are astonished at nothing, major." I made a similar proposition to Pan-Chao.
"Delighted, Monsieur Bombarnac," he replied. "I will be the witness of this adorable and adored Miss Bluett! If a wedding between an Englishwoman and an American, with French, Russian and Chinese witnesses, does not offer every guarantee of happiness, where are we likely to meet with it?"
And now for Caterina.
The actor would have consented for any number of weddings.
"What a notion for a vaudeville or an operetta!" he exclaimed. "We have the Mariage au tambour, the Mariage aux olives, the Mariage aux lanternes--well, this will be the Mariage en railway, or the Marriage by Steam! Good titles, all those, Monsieur Claudius! Your Yankee can reckon on me! Witness old or young, noble father or first lover, marquis or peasant, as you like, I am equal to it--"
"Be natural, please," said I. "It will have a good effect, considering the scenery."
"Is Madame Caterina to come to the wedding?"
"Why not--as bridesmaid!"

In all that concerns the traditional functions we must have no difficulties on the Grand Transasiatic.

It is too late for the ceremony to take place to-day. Ephrinell understood that certain conventionalities must be complied with. The celebration could take place in the morning. The passengers could all be invited, and Faruskiar might be prevailed on to honor the affair with his presence.

During dinner we talked of nothing else. After congratulating the happy couple, who replied with true Anglo-Saxon grace, we all promised to sign the marriage contract.
"And we will do honor to your signatures," said Ephrinell, in the tone of a tradesman accepting a bill.

The night came, and we retired, to dream of the marriage festivities of the morrow. I took my usual stroll into the car occupied by the Chinese soldiers, and found the treasure of the Son of Heaven faithfully guarded. Half the detachment were awake and half were asleep.

About one o'clock in the morning I visited Kinko, and handed him over my purchases at Nia. The young Roumanian was in high spirits. He anticipated no further obstacles, he would reach port safely, after all.
"I am getting quite fat in this box," he told me.
I told him about the Ephrinell-Bluett marriage, and how the union was to be celebrated next morning with great pomp.
"Ah!" said he, with a sigh. "They are not obliged to wait until they reach Pekin!"
"Quite so, Kinko; but it seems to me that a marriage under such conditions is not likely to be lasting! But after all, that is the couple's lookout."

At three o'clock in the morning we stopped forty minutes at Tchertchen, almost at the foot of the ramifications of the Kuen Lun. None of us had seen this miserable, desolate country, treeless and verdureless, which the railway was now crossing on its road to the northeast.

Day came; our train ran the four hundred kilometres between Tchertchen and Tcharkalyk, while the sun caressed with its rays the immense plain, glittering in its saline efflorescences.

CHAPTER XIX.

When I awoke I seemed to have had an unpleasant dream. A dream in no way like those we interpret by the Clef d'Or. No! Nothing could be clearer. The bandit chief Ki Tsang had prepared a scheme for the seizure of the Chinese treasure; he had attacked the train in the plains of Gobi; the car is assaulted, pillaged, ransacked; the gold and precious stones, to the value of fifteen millions, are torn from the grasp of the Celestials, who yield after a courageous defence. As to the passengers, another two minutes of sleep would have settled their fate--and mine.

But all that disappeared with the vapors of the night. Dreams are not fixed photographs; they fade in the sun, and end by effacing themselves.

In taking my stroll through the train as a good townsman takes his stroll through the town, I am joined by Major Noltitz. After shaking hands, he showed me a Mongol in the second-class car, and said to me, "That is not one of those we picked up at Douchak when we picked up Faruskiar and Ghangir."
"That is so," said I; "I never saw that face in the train before."
Popof, to whom I applied for information, told me that the Mongol had got in at Tchertchen. "When he arrived," he said, "the manager spoke to him for a minute, from which I concluded that he also was one of the staff of the Grand Transasiatic."

I had not noticed Faruskiar during my walk. Had he alighted at one of the small stations between Tchertchen and
Tcharkalyk, where we ought to have been about one o'clock in the afternoon?

No, he and Ghangir were on the gangway in front of our car. They seemed to be in animated conversation, and only stopped to take a good look toward the northeastern horizon. Had the Mongol brought some news which had made them throw off their usual reserve and gravity? And I abandoned myself to my imagination, foreseeing adventures, attacks of bandits, and so on, according to my dream.

I was recalled to reality by the Reverend Nathaniel Morse, who said to me, "It is fixed for to-day, at nine o'clock; do not forget."

That meant the marriage of Fulk Ephrinell and Horatia Bluett. Really, I was not thinking of it. It is time for me to go and dress for the occasion. All I can do will be to change my shirt. It is enough that one of the husband's witnesses should be presentable; the other, Catera, will be sure to be magnificent!

In fact, the actor had gone into the luggage van--how I trembled for Kinko!--and there, with Popof's assistance, had got out of one of his boxes a somewhat free-and-easy costume, but one certain of success at a wedding: A primrose coat with metal buttons, and a buttonhole, a sham diamond pin in the cravat, poppy-colored breeches, copper buckles, flowered waistcoat, clouded stockings, thread gloves, black pumps, and white beaver hat. What a number of bridegrooms and uncles of bridegrooms our friend had been in this traditional attire! He looked superb, with his beaming face, his close-shaven chin, and blue cheeks, and his laughing eyes and rosy lips.

Madame Catera was quite as glorious in her array. She had easily discovered a bridesmaid's costume in her wardrobe, bodice with intercrossing stripes, short petticoat in green woolen, mauve stockings, straw hat with artificial flowers, a suspicion of black on the eyelids and of rouge on the cheeks. There you have the provincial stage beauty, and if she and her husband like to play a village piece after the breakfast, I can promise them bravos enough.

It was at nine o'clock that this marriage was to take place, announced by the bell of the tender, which was to sound full clang as if it were a chapel bell. With a little imagination, we could believe we were in a village. But whither did this bell invite the witnesses and guests? Into the dining car, which had been conveniently arranged for the ceremony, as I had taken good care.

It was no longer a dining car; it was a hall car, if the expression is admissible. The big table had been taken away, and replaced by a small table which served as a desk. A few flowers bought at Tchertchen had been arranged in the corners of the car, which was large enough to hold nearly all who wished to be present--and those who could not get inside could look on from the gangways.

That all the passengers might know what was going on, we had put up a notice at the doors of the first and second-class cars, couched in the following terms:

"Mr. Fulk Ephrinell, of the firm of Messrs. Strong, Bulbul & Co., of New York City, has the honor to invite you to his wedding with Miss Horatia Bluett, of the firm of Messrs. Holmes-Holme, London, which will take place in the dining car on this the 22d of May, at nine o'clock precisely. The Reverend Nathaniel Morse, of Boston, U.S.A., will officiate.

"Miss Horatia Bluett, of the firm of Messrs. Holmes-Holme, of London, has the honor to invite you to her wedding with Mr. Fulk Ephrinell, of the firm of Messrs. Strong, Bulbul & Co., of New York City, etc., etc."

If I do not make half a dozen pars out of all this I am no newspaper man!

Meanwhile I learn from Popof the precise spot where the ceremony will take place.

Popof points it out on the map. It is a hundred and fifty kilometres from Tcharkalyk station, in the middle of the desert, amid the plains which are traversed by a little stream which flows into the Lob Nor. For twenty leagues there is no station, and the ceremony is not likely to be interrupted by any stoppage.

It need hardly be said that at half-past eight I and Catera were ready for the call.

Major Noltitz and Pan-Chao had got themselves up in all due form for the solemnity. The major looked as serious as a surgeon who was going to cut off a leg. The Chinaman looked as gay as a Parisian at a village bridal.

Doctor Tio-King and Cornaro, one carrying the other, were to be at this little festivity. The noble Venetian was a bachelor, if I am not mistaken, but I do not think he gives any opinion on marriage, at least I have no recollection of its being in the chapter headed "Safe and easy means of promptly remedying the different accidents that threaten life."

"And," added Pan-Chao, who has just quoted this Cornarian phrase, "I suppose marriage ought to be included among those accidents!"

A quarter to nine. No one has yet seen the happy couple. Miss Bluett is in one of the toilet cabinets in the first van, where she is probably preparing herself. Fulk Ephrinell is perhaps struggling with his cravat and giving a last polish to his portable jewelry. I am not anxious. We shall see them as soon as the bell rings.

I have but one regret, and that is that Faruskiar and Ghangir should be too busy to join us. Why do they continue to look out over the immense desert? Before their eyes there stretches not the cultivated steppe of the Lob Nor region, but the Gobi, which is barren, desolate and gloomy, according to the reports of Grjimailo, Blanc and Martin.
It may be asked why these people are keeping such an obstinate lookout.

"If my presentiments do not deceive me," said Major Noltitz, "there is some reason for it."

What does he mean? But the bell of the tender, the tender bell, begins its joyous appeal. Nine o'clock; it is time to go into the dining car.

Caterna comes near me, and I hear him singing:

"It is the turret bell, Which sud-denly is sounding."

While Madame Caterna replies to the trio of the Dame Blanche by the refrain of the Dragons de Villars:

"And it sounds, sounds, sounds, It sounds and resounds--"

The passengers move in a procession, the four witnesses first, then the guests from the end of the village--I mean of the train; Chinese, Turkomans, Tartars, men and women, all curious to assist at the ceremony. The four Mongols remain on the last gangway near the treasure which the Chinese soldiers do not leave for an instant.

We reach the dining car.

The clergyman is seated at the little table, on which is the certificate of marriage he has prepared according to the customary form. He looks as though he was accustomed to this sort of thing, which is as much commercial as matrimonial.

The bride and bridegroom have not appeared.

"Ah!" said I to the actor, "perhaps they have changed their minds."

"If they have," said Caterna, laughing, "the reverend gentleman can marry me and my wife over again. We are in wedding garments, and it is a pity to have had all this fuss for nothing, isn't it, Caroline?"

"Yes, Adolphe--"

But this pleasing second edition of the wedding of the Caternas did not come off. Here is Mr. Fulk Ephrinell, dressed this morning just as he was dressed yesterday--and--detail to note--with a pencil behind the lobe of his left ear, for he has just been making out an account for his New York house.

Here is Miss Horatia Bluett, as thin, as dry, as plain as ever, her dust cloak over her traveling gown, and in place of jewelry a noisy bunch of keys, which hangs from her belt.

The company politely rise as the bride and bridegroom enter. They "mark time," as Caterna says. Then they advance toward the clergyman, who is standing with his hand resting on a Bible, open probably at the place where Isaac, the son of Abraham, espouses Rebecca, the daughter of Rachel.

We might fancy we were in a chapel if we only had a harmonium.

And the music is here! If it is not a harmonium, it is the next thing to it. An accordion makes itself heard in Caterna's hands. As an ancient mariner, he knows how to manipulate this instrument of torture, and here he is swinging out the andante from Norma with the most accordionesque expression.

It seems to give great pleasure to the natives of Central Asia. Never have their ears been charmed by the antiquated melody that the pneumatic apparatus was rendering so expressively.

But everything must end in this world, even the andante from Norma. and the Reverend Nathaniel Morse began to favor the young couple with the speech which had clone duty many times before under similar circumstances.

"The two souls that blend together--Flesh of my flesh--Increase and multiply--"

In my opinion he had much better have got to work like a notary: "Before us, there has been drawn up a deed of arrangement regarding Messrs. Ephrinell, Bluett & Co.--"

My thought remained unfinished. There are shouts from the engine. The brakes are suddenly applied with a scream and a grind. Successive shocks accompany the stoppage of the train. Then, with a violent bump, the cars pull up in a cloud of sand.

What an interruption to the nuptial ceremony!

Everything is upset in the dining car, men, furniture, bride, bridegroom and witnesses. Not one kept his equilibrium. It is an indescribable pell-mell, with cries of terror and prolonged groans. But I hasten to point out that there was nothing serious, for the stoppage was not all at once.

"Quick!" said the major. "Out of the train!"

* * * * *

CHAPTER XX.

In a moment the passengers, more or less bruised and alarmed, were out on the track. Nothing but complaints and questions uttered in three or four different languages, amid general bewilderment.

Faruskiar, Ghangir and the four Mongols were the first to jump off the cars. They are out on the line, kandijar in one hand, revolver in the other. No doubt an attack has been organized to pillage the train.

The rails have been taken up for about a hundred yards, and the engine, after bumping over the sleepers, has
come to a standstill in a sandhill.

"What! The railroad not finished--and they sold me a through ticket from Tiflis to Pekin? And I came by this Transasiatic to save nine days in my trip round the world!"

In these phrases, in German, hurled at Popof, I recognized the voice of the irascible baron. But this time he should have addressed his reproaches not to the engineers of the company, but to others.

We spoke to Popof, while Major Noltitz continued to watch Faruskiar and the Mongols.

"The baron is mistaken," said Popof, "the railway is completed, and if a hundred yards of rails have been lifted here, it has been with some criminal intention."

"To stop the train!" I exclaimed.

"And steal the treasure they are sending to Pekin!" says Caterina.

"There is no doubt about that," says Popof. "Be ready to repulse an attack."

"Is it Ki-Tsang and his gang that we have to do with?" I asked.

Ki-Tsang! The name spread among the passengers and caused inexpressible terror.

The major said to me in a low voice: "Why Ki-Tsang? Why not my lord Faruskiar?"

"He--the manager of the Transasiatic?"

"If it is true that the company had to take several of these robber chiefs into its confidence to assure the safety of the trains--"

"I will never believe that, major."

"As you please, Monsieur Bombarnac. But assuredly Faruskiar knew that this pretended mortuary van contained millions."

"Come, major, this is no time for joking."

No, it was the time for defending, and defending one's self courageously.

The Chinese officer has placed his men around the treasure van. They are twenty in number, and the rest of the passengers, not counting the women, amount to thirty. Popof distributes the weapons which are carried in case of attack. Major Noltitz, Caterina, Pan-Chao, Ephrinell, driver and stoker, passengers, Asiatic and European, all resolve to fight for the common safety.

On the right of the line, about a hundred yards away, stretches a deep, gloomy thicket, a sort of jungle, in which doubtless are hidden the robbers, awaiting the signal to pounce upon us.

Suddenly there is a burst of shouting, the thicket has given passage to the gang in ambush--some sixty Mongols, nomads of the Gobi. If these rascals beat us, the train will be pillaged, the treasure of the Son of Heaven will be stolen, and, what concerns us more intimately, the passengers will be massacred without mercy.

And Faruskiar, whom Major Noltitz so unjustly suspected? I look at him. His face is no longer the same; his fine features have become pale, his height has increased, there is lightning in his eyes.

Well! If I was mistaken about the mandarin Yen Lou, at least I had not mistaken the general manager of the Transasiatic or the famous bandit of Yunnan.

However, as soon as the Mongols appeared, Popof hurried Madame Caterina, Miss Horatia Bluett, and the other women into the cars. We took every means for putting them in safety.

My only weapon was a six-shot revolver, and I knew how to use it.

Ah! I wanted incidents and accidents, and impressions of the journey! Well, the chronicler will not fail to chronicle, on condition that he emerges safe and sound from the fray, for the honor of reporting in general and the glory of the Twentieth Century in particular.

But is it not possible to spread trouble among the assailants, by beginning with blowing out Ki-Tsang's brains, if Ki-Tsang is the author of this ambuscade? That would bring matters to a crisis.

The bandits fire a volley, and begin brandishing their arms and shouting. Faruskiar, pistol in one hand, kandijar in the other, has rushed onto them, his eyes gleaming, his lips covered with a slight foam. Ghangir is at his side, followed by four Mongols whom he is exciting by word and gesture.

Major Noltitz and I throw ourselves into the midst of our assailants. Caterina is in front of us, his mouth open, his white teeth ready to bite, his eyes blinking, his revolver flourishing about. The actor has given place to the old sailor who has reappeared for the occasion.

"These beggars want to board us!" said he. "Forward, forward, for the honor of the flag! To port, there, fire! To starboard, there, fire! All together, fire!"

And it was with no property daggers he was armed, nor dummy pistols loaded with Edouard Philippe's inoffensive powder. No! A revolver in each hand, he was bounding along, firing, as he said, right and left and everywhere.

Pan-Chao also exposed himself bravely, a smile on his lips, gallantly leading on the other Chinese passengers. Popof and the railwaymen did their duty bravely. Sir Francis Trevellyan, of Trevellyan Hall, took matters very
coolly, but Ephrinell abandoned himself to true Yankee fury, being no less irritated at the interruption to his marriage as to the danger run by his forty-two packages of artificial teeth.

And in short, the band of robbers met with a much more serious resistance than they expected.

And Baron Weissenzitterdörfer? Well, he is one of the most furious of us all. He sweats blood and water, his fury carries him away at the risk of his being massacred. Many times we have to rescue him. These rails lifted, this train stopped, this attack in the open Gobi desert, the delays that it will all occasion, the mailboat lost at Tientsin, the voyage round the world spoiled, his plan come to grief before he had half accomplished it! What a shock to his German self-esteem!

Faruskiar, my hero—I cannot call him anything else—displays extraordinary intrepidity, bearing himself the boldest in the struggle, and when he had exhausted his revolver, using his kandijar like a man who had often faced death and never feared it.

Already there were a few wounded on both sides, perhaps a few dead among the passengers who lay on the line. I have had my shoulder grazed by a bullet, a simple scratch I have hardly noticed. The Reverend Nathaniel Morse does not think that his sacred character compels him to cross his arms, and, from the way he works, one would not imagine that it was the first time he has handled firearms. Caterina has his hat shot through, and it will be remembered that it is his village bridegroom's hat, the gray beaver, with the long fur. He utters a gigantic maritime oath, something about thunder and portholes, and then, taking a most deliberate aim, quietly shoots stone dead the ruffian who has taken such a liberty with his best headgear.

For ten minutes or so the battle continues with most alarming alternations. The number of wounded on both sides increases, and the issue is still doubtful. Faruskiar and Ghangir and the Mongols have been driven back toward the precious van, which the Chinese guard have not left for an instant. But two or three of them have been mortally wounded, and their officer has just been killed by a bullet in the head. And my hero does all that the most ardent courage can do for the defence of the treasure of the Son of Heaven.

I am getting uneasy at the prolongation of the combat. It will continue evidently as long as the chief of the band—-a tall man with a black beard—urges on his accomplices to the attack on the train. Up till now he has escaped unhurt, and, in spite of all we can do, he is gaining ground. Shall we be obliged to take refuge in the vans, as behind the walls of a fortress, to entrench ourselves, to fight until the last has succumbed? And that will not be long, if we cannot stop the retrograde movement which is beginning on our side.

To the reports of the guns there are now added the cries of the women, who in their terror are running about the gangways, although Miss Bluett and Madame Catera are trying to keep them inside the cars. A few bullets have gone through the panels, and I am wondering if any of them have hit Kinko.

Major Noltitz comes near me and says: "This is not going well."
"No, it is not going well," I reply, "and I am afraid the ammunition will give out. We must settle their commander-in-chief. Come, major--"

But what we are about to do was done by another at that very instant.

This other was Faruskiar. Bursting through the ranks of the assailants, he cleared them off the line, in spite of the blows they aimed at him. He is in front of the bandit chief, he raises his arm, he stabs him full in the chest.

Instantly the thieves beat a retreat, without even carrying off their dead and wounded. Some run across the plain, some disappear in the thickets. Why pursue them, now that the battle has ended in our favor? And I must say that without the admirable valor of Faruskiar, I do not expect any of us would have lived to tell the story.

But the chief of the bandits is not dead, although the blood flows abundantly from his chest.
He has fallen with one knee on the ground, one hand up, with the other he is supporting himself.
Faruskiar stands over him, towering above him.
Suddenly he rises in a last effort, his arm threatens his adversary, he looks at him.
A last thrust of the kandijar is driven into his heart.
Faruskiar returns, and in Russian, with perfect calmness, remarks:
"Ki-Tsang is dead! So perish all who bear weapons against the Son of Heaven!"

CHAPTER XXI.

And so it was Ki-Tsang who had just attacked the Grand Transasiatic on the plains of Gobi. The pirate of Vunnan had learned that a van containing gold and precious stones of enormous value had formed part of this train! And was there anything astonishing in that, considering that the newspapers, even those of Paris, had published the fact many days before? So Ki-Tsang had had time to prepare his attempt, and had lifted a portion of the rails, and would probably have succeeded in carrying off the treasure if Faruskiar had not brought him to his feet. That is why our hero had been so uneasy all the morning; if he had been looking out over the desert so persistently, it was
because he had been warned of Ki-Tsang's plans by the last Mongol who had joined the train at Tchertchen! Under any circumstances we had now nothing to fear from Ki-Tsang. The manager of the company had done justice on the bandit—speedy justice, I admit. But we are in the midst of the deserts of Mongolia, where there are no juries as yet, which is a good thing for the Mongols.

"Well," said I to the major, "I hope you have abandoned your suspicions with regard to my lord Faruskiar?"

"To a certain extent, Monsieur Bombarnac!" Only to a certain extent? Evidently Major Noltitz is difficult to please.

But let us hasten on and count our victims. On our side there are three dead, including the Chinese officer, and more than twelve wounded, four of them seriously, the rest slightly, so that they can continue their journey to Pekin. Popof escaped without a scratch, Catera with a slight graze which his wife insists on bathing.

The major has the wounded brought into the cars and does the best for them under the circumstances. Doctor Tio-King offers his services, but they seem to prefer the Russian army surgeon, and that I understand. As to those who have fallen it is best for us to take them on to the next station and there render them the last services.

The thieves had abandoned their dead. We covered them over with a little sand, and that is all we need say.

The place where we had been stopped was halfway between Tcharkalyk and Tchertchen, the only two stations from which we could procure help. Unfortunately they were no longer in telegraphic communication, Ki-Tsang having knocked down the posts at the same time as he lifted the rails.

Hence a discussion as to what was the best thing to be done, which was not of long duration.

As the engine had run off the rails, the very first thing to do was evidently to get it onto them again; then as there was a gap in the line, the simplest thing to do was to run back to Tchertchen, and wait there until the company's workmen had repaired the damage, which they could easily do in a couple of days.

We set to work without losing a moment. The passengers were only too glad to help Popof and the officials who had at their disposal a few tools, including jacks, levers and hammers, and in three hours the engine and tender were again on the line.

The most difficult business is over. With the engine behind we can proceed at slow speed to Tchertchen. But what lost time! What delays! And what recriminations from our German baron, what donnervetters and teufels and other German expletives!

I have omitted to say that immediately after the dispersal of the bandits we had in a body thanked Faruskiar. The hero received our thanks with all the dignity of an Oriental.

"I only did my duty as general manager of the company," he replied, with a truly noble modesty.

And then at his orders the Mongols had set to work, and I noticed that they displayed indefatigable ardor, for which they earned our sincere felicitations.

Meanwhile Faruskiar and Ghangir were often talking together in a whisper, and from these interviews arose a proposition which none of us expected.

"Guard," said Faruskiar, addressing Popof, "it is my opinion that we had much better run on to Tcharkalyk than go back; it would suit the passengers much better."

"Certainly, sir, it would be preferable," said Popof; "but the line is broken between here and Tcharkalyk, and we cannot get through."

"Not at present, but we could get the cars through if we could temporarily repair the line."

That was a proposal worth consideration, and we assembled to consider it, Major Noltitz, Pan-Chao, Fulk Ephrinell, Catera, the clergyman, Baron Weisschnitzerdorf, and a dozen others—all who understood Russian.

Faruskiar spoke as follows:

"I have been looking at the portion of the line damaged by the band of Ki-Tsang. Most of the sleepers are still in place. As to the rails, the scoundrels have simply thrown them onto the sand, and by replacing them end to end it would be easy to get the train over to the uninjured track. It would not take a day to do this, and five hours afterward we should be at Tcharkalyk."

Excellent notion, at once approved of by Popof, the driver, the passengers, and particularly by the baron. The plan was possible, and if there were a few rails useless, we could bring to the front those we had already run over, and in this way get over the difficulty.

Evidently this Faruskiar is a man, he is our true chief, he is the personage I was in want of, and I will sound his name over the entire universe in all the trumpets of my chronicle!

And yet Major Noltitz is mistaken enough to see in him only a rival to this Ki-Tsang, whose crimes have just received their final punishment from his hand!

We set to work to replace the sleepers that had been shifted aside from where they had left their mark, and we continued our task without intermission.

Having no fear of being noticed amid the confusion which followed the attack, I went into the luggage van to
assure myself that Kinko was safe and sound, to tell him what had passed, to caution him on no account to come put
of his box. He promised me, and I was at ease regarding him.

It was nearly three o'clock when we began work. The rails had been shifted for about a hundred yards. As
Faruskiar remarked, it was not necessary for us to fix them permanently. That would be the task of the workmen the
company would send from Tcharkalyk when we reached that station, which is one of the most important on the line.

As the rails were heavy we divided ourselves into detachments. First-class and second-class, all worked together
with good will. The baron displayed tremendous ardor. Ephrinell, who thought no more of his marriage than if he
had never thought about it, devoted strict attention to business. Pan-Chao was second to nobody, and even Doctor
Tio-King strove to make himself useful—in the fashion of the celebrated Auguste, the fly on the chariot wheel.

"It is hot, this Gobi sun!" said Caterna.

Alone sat Sir Francis Trevellyan of Trevellyanshire, calm and impassive in his car, utterly regardless of our
efforts.

At seven o'clock thirty yards of the line had been repaired. The night was closing in. It was decided to wait until
the morning. In half a day we could finish the work, and in the afternoon we could be off again.

We were in great want of food and sleep. After so rude a task, how rude the appetite! We met in the dining car
without distinction of classes. There was no scarcity of provisions, and a large breach was made in the reserves.
Never mind! We can fill up again at Tcharkalyk.

Caterna is particularly cheery, talkative, facetious, communicative, overflowing. At dessert he and his wife sang
the air—appropriate to the occasion—from the Voyage en Chine, which we caught up with more power than
precision:

"China is a charming land Which surely ought to please you."

Oh! Labiche, could you ever have imagined that this adorable composition would one day charm passengers in
distress on the Grand Transasiatic? And then our actor—a little fresh, I admit—had an idea. And such an idea! Why
not resume the marriage ceremony interrupted by the attack on the train?

"What marriage?" asked Ephrinell.

"Yours, sir, yours," replied Caterna. "Have you forgotten it? That is rather too good!"

The fact is that Fulk Ephrinell, on the one part, and Horatia Bluett, on the other part, seemed to have forgotten
that it had not been for the attack of Ki-Tsang and his band they would now have been united in the gentle bonds of
matrimony.

But we were all too tired. The Reverend Nathaniel Morse was unequal to the task; he would not have strength
effect enough to bless the pair, and the pair would not have strength enough to support his blessing. The ceremony could
be resumed on the day after to-morrow. Between Tcharkalyk and Lan Tcheou there was a run of nine hundred
kilometres, and that was quite long enough for this Anglo-American couple to be linked together in.

And so we all went to our couches or benches for a little refreshing sleep. But at the same time the requirements
of prudence were not neglected.

Although it appeared improbable, now that their chief had succumbed, the bandits might still make a nocturnal
attack. There were always these cursed millions of the Son of Heaven to excite their covetousness, and if we are not
on our guard—

But we feel safe. Faruskiar in person arranges for the surveillance of the train. Since the death of the officer he
has taken command of the Chinese detachment. He and Ghangir are on guard over the imperial treasure, and
according to Caterna, who is never in want of a quotation from some comic opera:

"This night the maids of honor will be guarded well."

And, in fact, the imperial treasure was much better guarded than the beautiful Athenais de Solange between the
first and second acts of the Mousquetaires de la Reine.

At daybreak next morning we are at work. The weather is superb. The day will be warm. Out in the Asian desert
on the 24th of May the temperature is such that you can cook eggs if you only cover them with a little sand.

Zeal was not wanting, and the passengers worked as hard as they had done the night before. The line was
gradually completed. One by one the sleepers were replaced, the rails were laid end to end, and about four o'clock in
the afternoon the gap was bridged.

At once the engine began to advance slowly, the cars following until they were over the temporary track and safe
again. Now the road is clear to Tcharkalyk; what do I say? to Pekin.

We resume our places. Popof gives the signal for departure as Caterna trolls out the chorus of victory of the
admiral's sailors in Haydee.

A thousand cheers reply to him. At ten o'clock in the evening the train enters Tcharkalyk station.

We are exactly thirty hours behind time. But is not thirty hours enough to make Baron Weisschnittzerdörfer lose
the mail from Tient-Tsin to Yokohama?
CHAPTER XXII.

I, who wanted an incident, have had one to perfection. I am thankful enough not to have been one of the victims. I have emerged from the fray safe and sound. All my numbers are intact, barring two or three insignificant scratches. Only No. 4 has been traversed by a bullet clean through--his hat.

At present I have nothing in view beyond the Bluett-Ephrinell marriage and the termination of the Kinko affair. I do not suppose that Faruskiar can afford us any further surprises. I can reckon on the casual, of course, for the journey has another five days to run. Taking into account the delay occasioned by the Ki-Tsang affair that will make thirteen days from the start from Uzun Ada.

Thirteen days! Heavens! And there are the thirteen numbers in my notebook! Supposing I were superstitious?

We remained three hours at Tcharkalyk. Most of the passengers did not leave their beds. We were occupied with declarations relative to the attack on the train, to the dead which the Chinese authorities were to bury, to the wounded who were to be left at Tcharkalyk, where they would be properly looked after. Pan-Chao told me it was a populous town, and I regret I was unable to visit it.

The company sent off immediately a gang of workmen to repair the line and set up the telegraph posts; and in a day everything would be clear again.

I need scarcely say that Faruskiar, with all the authority of the company's general manager, took part in the different formalities that were needed at Tcharkalyk. I do not know how to praise him sufficiently. Besides, he was repaid for his good offices by the deference shown him by the staff at the railway station.

At three in the morning we arrived at Kara Bouran, where the train stopped but a few minutes. Here the railway crosses the route of Gabriel Bonvalot and Prince Henri of Orleans across Tibet in 1889-90, a much more complete journey than ours, a circular trip from Paris to Paris, by Berlin, Petersbourg, Moscow, Nijni, Perm, Tobolsk, Omsk, Semipalatinsk, Kouldja, Tcharkalyk, Batong, Yunnan, Hanoi, Saigon, Singapore, Ceylon, Aden, Suez, Marseilles, the tour of Asia, and the tour of Europe.

The train halts at Lob Nor at four o'clock and departs at six. This lake, the banks of which were visited by General Povtzoff in 1889, when he returned from his expedition to Tibet, is an extensive marsh with a few sandy islands, surrounded by two or three feet of water. The country through which the Tarim slowly flows had already been visited by Fathers Hue and Gabet, the explorers Prjevalski and Carey up to the Davana pass, situated a hundred and fifty kilometres to the south. But from that pass Gabriel Bonvalot and Prince Henri of Orleans, camping sometimes at fifteen thousand feet of altitude, had ventured across virgin territories to the foot of the superb Himalayan chain.

Our itinerary lay eastwards toward Kara Nor, skirting the base of the Nan Chan mountains, behind which lies the region of Tsaidam. The railway dare not venture among the mountainous countries of the Kou-Kou-Nor, and we were on our way to the great city of Lan Tcheou along, the base of the hills.

Gloomy though the country might be, there was no reason for the passengers to be so. This glorious sun, with its rays gilding the sands of the Gobi as far as we could see, announced a perfect holiday. From Lob Nor to Kara Nor there are three hundred and fifty kilometres to run, and between the lakes we will resume the interrupted marriage of Fulk Ephrinell and Horatia Bluett, if nothing occurs to again delay their happiness.

The dining car has been again arranged for the ceremony, the witnesses are ready to resume their parts, and the happy pair cannot well be otherwise than of the same mind.

The Reverend Nathaniel Morse, in announcing that the marriage will take place at nine o'clock, presents the compliments of Mr. Ephrinell and Miss Bluett.

Major Noltitz and I, Caterna and Pan-Chao are under arms at the time stated.

Caterna did not think it his duty to resume his costume, nor did his wife. They were dressed merely for the grand dinner party which took place at eight o'clock in the evening--the dinner given by Ephrinell to his witnesses and to the chief first-class passengers. Our actor, puffing out his left cheek, informed me that he had a surprise for us at dessert. What? I thought it wise not to ask.

A little before nine o'clock the bell of the tender begins to ring. Be assured it does not announce an accident. Its joyous tinkling calls us to the dining car, and we march in procession toward the place of sacrifice.

Ephrinell and Miss Bluett are already seated at the little table in front of the worthy clergyman, and we take our places around them.

On the platforms are grouped the spectators, anxious to lose nothing of the nuptial ceremony.

My lord Faruskiar and Ghangir, who had been the object of a personal invitation, had just arrived. The assembly respectfully rises to receive them. They will sign the deed of marriage. It is a great honor, and if it were my marriage I should be proud to see the illustrious name of Faruskiar figure among the signatures to the deed.
The ceremony begins, and this time the Reverend Nathaniel Morse was able to finish his speech, so regrettably interrupted on the former occasion.

The young people rise, mud the clergyman asks them if they are mutually agreed as to marriage.

Before replying, Miss Bluett turns to Ephrinell, and says:
"It is understood that Holmes-Holme will have twenty-five per cent. of the profits of our partnership."
"Fifteen," said Ephrinell, "only fifteen."
"That is not fair, for I agree to thirty per cent, from Strong, Bulbul & Co."
"Well, let us say twenty per cent., Miss Bluett."
"Be it so, Mr. Ephrinell."
"But that is a good deal for you!" whispered Caterna in my ear.

The marriage for a moment was in check for five per cent.!

But all is arranged. The interests of the two houses have been safeguarded. The Reverend Nathaniel Morse repeats the question.

A dry "yes" from Horatia Bluett, a short "yes" from Fulk Ephrinell, and the two are declared to be united in the bonds of matrimony.

The deed is then signed, first by them, then by the witnesses, then by Faruskiar, and the other signatures follow. At length the clergyman adds his name and flourish, and that closes the series of formalities according to rule.

"There they are, riveted for life," said the actor to me, with a little lift of his shoulder.

"For life--like two bullfinches," said the actress, who had not forgotten that these birds are noted for the fidelity of their armours.

"In China," said Pan-Chao, "it is not the bullfinch but the mandarin duck that symbolizes fidelity in marriage."
"Ducks or bullfinches, it is all one," said Caterna philosophically.

The ceremony is over. We compliment the newly married pair. We return to our occupation, Ephrinell to his accounts, Mrs. Ephrinell to her work. Nothing is changed in the train. There are only two more married people.

Major Noltitz, Pan-Chao and I go out and smoke on one of the platforms, leaving to their preparations the Caternas, who seem to be having a sort of rehearsal in their corner. Probably it is the surprise for the evening.

There is not much variety in the landscape. All along is this monotonous desert of Gobi with the heights of the Humboldt mountains on the right reaching on to the ranges of Nan Chan. The stations are few and far between, and consist merely of an agglomeration of huts, with the signal cabin standing up among them like a monument. Here the tender fills up with water and coal. Beyond the Kara Nor, where a few towns appear, the approach to China Proper, populous and laborious, becomes more evident.

This part of the desert of Gobi has little resemblance to the regions of Eastern Turkestan we crossed on leaving Kachgar. These regions are as new to Pan-Chao and Doctor Tio-King as to us Europeans.

I should say that Faruskiar no longer disdains to mingle in our conversation. He is a charming man, well informed and witty, with whom I shall become better acquainted when we reach Pekin. He has already invited me to visit him at his yamen. Nothing is changed in the train. There are only two more married people.

While the train is running at full speed we talk of one thing and another. With regard to Kachgaria, which had been mentioned, Faruskiar gave us a few very interesting details regarding the province, which had been so greatly troubled by insurrectionary movements. It was at this epoch that the capital, holding out against Chinese covetousness, had not yet submitted to Russian domination. Many times numbers of Celestials had been massacred in the revolts of the Turkestan chiefs, and the garrison had taken refuge in the fortress of Yanghi-Hissar.

Among these insurgent chiefs there was one, a certain Ouali-Khan-Toulla, whom I have mentioned with regard to the murder of Schlagintweit, and who for a time had become master of Kachgaria. He was a man of great intelligence, but of uncommon ferocity. And Faruskiar told us an anecdote giving us an idea of these pitiless Orientals.

"There was at Kachgar," he said, "an armorer of repute, who, wishing to secure the favors of Ouali-Khan-Toulla, made a costly sword. When he had finished his work he sent his son, a boy of ten, to present the sword, hoping to receive some remuneration from the royal hand. He received it. The Khan admired the sword, and asked if the blade was of the first quality. 'Yes,' said the boy. 'Then approach!' said the Khan, and at one blow he smote off the head, which he sent back to the father with the price of the blade he had thus proved to be of excellent quality."

This story he told really well. Had Caterna heard it, he would have asked for a Turkestan opera on the subject.

The day passed without incident. The train kept on at its moderate speed of forty kilometres an hour, an average that would have been raised to eighty had they listened to Baron Weisschnitzendorfer. The truth is that the Chinese driver had no notion of making up the time lost between Tcherthen and Tcharkalyk.
At seven in the evening we reach Kara Nor, to stay there fifty minutes. This lake, which is not as extensive as Lob Nor, absorbs the waters of the Soule Ho, coming down from the Nan Chan mountains. Our eyes are charmed with the masses of verdure that clothe its southern bank, alive with the flight of numerous birds. At eight o’clock, when we left the station, the sun had set behind the sandhills, and a sort of mirage produced by the warming of the lower zones of the atmosphere prolonged the twilight above the horizon.

The dining car has resumed its restaurant appearance, and here is the wedding banquet, instead of the usual fare. Twenty guests have been invited to this railway love feast, and, first of them, my lord Faruskiar. But for some reason or other he has declined Ephrinell’s invitation.

I am sorry for it, for I hoped that good luck would place me near him.

It occurred to me then that this illustrious name was worth sending to the office of the Twentieth Century, this name and also a few lines relative to the attack on the train and the details of the defense. Never was information better worth sending by telegram, however much it might cost. This time there is no risk of my bringing a lecture down on myself. There is no mistake possible, as in the case of that pretended mandarin, Yen-Lou, which I shall never forget—but then, it was in the country of the false Smerdis and that must be my excuse.

It is agreed that as soon as we arrive at Sou-Tcheou, the telegraph being repaired at the same time as the line, I will send off a despatch, which will reveal to the admiration of Europe the brilliant name of Faruskiar.

We are seated at the table. Ephrinell has done the thing as well as circumstances permit. In view of the feast, provisions were taken in at Tcharkalyk. It is not Russian cookery, but Chinese, and by a Chinese chef to which we do honor. Luckily we are not condemned to eat it with chopsticks, for forks are not prohibited at the Grand Transasiatic table.

I am placed to the left of Mrs. Ephrinell, Major Noltitz to the right of her husband. The other guests are seated as they please. The German baron, who is not the man to refuse a good dinner, is one of the guests. Sir Francis Trevellyan did not even make a sign in answer to the invitation that was tendered him.

To begin with, we had chicken soup and plovers’ eggs, then swallows’ nests cut in threads, stewed spawn of crab, sparrow gizzards, roast pig’s feet and sauce, mutton marrow, fried sea slug, shark’s fin—very gelatinous; finally bamboo shoots in syrup, and water lily roots in sugar, all the most out-of-the-way dishes, watered by Chao Hing wine, served warm in metal tea urns.

The feast is very jolly and—what shall I say?—very confidential, except that the husband takes no notice of the wife, and reciprocally.

What an indefatigable humorist is our actor? What a continuous stream of wheezes, unintelligible for the most part, of antediluvian puns, of pure nonsense at which he laughs so heartily that it is difficult not to laugh with him. He wanted to learn a few words of Chinese, and Pan-Chao having told him that “tching-tching” means thanks, he has been tching-tching at every opportunity, with burlesque intonation.

Then we have French songs, Russian songs, Chinese songs—among others the “Shiang-Touo-Tching,” the Chanson de la Reverie, in which our young Celestial repeats that the flowers of the peach tree are of finest fragrance at the third moon, and those of the red pomegranate at the fifth.

The dinner lasts till ten o’clock. At this moment the actor and actress, who had retired during dessert, made their entry, one in a coachman’s overcoat, the other in a nurse’s jacket, and they gave us the Sonnettes with an energy, a go, a dash—well, it would only be fair to them if Claretie, on the recommendation of Meilhac and Halevy, offers to put them on the pension list of the Comédie Française.

At midnight the festival is over. We all retire to our sleeping places. We do not even hear them shouting the names of the stations before we come to Kan-Tcheou, and it is between four and five o’clock in the morning that a halt of forty minutes retains us at the station of that town.

The country is changing as the railway runs south of the fortieth degree, so as to skirt the eastern base of the Nan Shan mountains. The desert gradually disappears, villages are not so few, the density of the population increases. Instead of sandy flats, we get verdant plains, and even rice fields, for the neighboring mountains spread their abundant streams over these high regions of the Celestial Empire. We do not complain of this change after the dreariness of the Kara-Koum and the solitude of Gobi. Since we left the Caspian, deserts have succeeded deserts, except when crossing the Pamir. From here to Pekin picturesque sites, mountain horizons, and deep valleys will not be wanting along the Grand Transasiatic.

We shall enter China, the real China, that of folding screens and porcelain, in the territory of the vast province of Kin-Sou. In three days we shall be at the end of our journey, and it is not I, a mere special correspondent, vowed to perpetual movement, who will complain of its length. Good for Kinko, shut up in his box, and for pretty Zinca Klork, devoured by anxiety in her house in the Avenue Cha-Coua!

We halt two hours at Sou-Tcheou. The first thing I do is to run to the telegraph office. The complaisant Pan-Chao offers to be my interpreter. The clerk tells us that the posts are all up again, and that messages can be sent
through to Europe.

At once I favor the Twentieth Century with the following telegram:

"Sou-Tcheou, 25th May, 2:25 P.M.

"Train attacked between Tcherchten and Tcharkalyk by the gang of the celebrated Ki-Tsang; travelers repulsed
the attack and saved the Chinese treasure; dead and wounded on both sides; chief killed by the heroic Mongol
grandee Faruskiar, general manager of the company, whose name should be the object of universal admiration."

If this telegram does not gratify the editor of my newspaper, well--

Two hours to visit Sou-Tcheou, that is not much.

In Turkestan we have seen two towns side by side, an ancient one and a modern one. Here, in China, as Pan-
Chao points out, we have two and even three or four, as at Pekin, enclosed one within the other.

Here Tai-Tchen is the outer town, and Le-Tchen the inner one. It strikes us at first glance that both look desolate.
Everywhere are traces of fire, here and there pagodas or houses half destroyed, a mass of ruins, not the work of time,
but the work of war. This shows that Sou-Tcheou, taken by the Mussulmans and retaken by the Chinese, has
undergone the horrors of those barbarous contests which end in the destruction of buildings and the massacre of
their inhabitants of every age and sex.

It is true that population rapidly increases in the Celestial Empire; more rapidly than monuments are raised from
their ruins. And so Sou-Tcheou has become populous again within its double wall as in the suburbs around. Trade is
flourishing, and as we walked through the principal streets we noticed the well-stocked shops, to say nothing of the
perambulating pedlars.

Here, for the first time, the Caternas saw pass along between the inhabitants, who stood at attention more from
fear than respect, a mandarin on horseback, preceded by a servant carrying a fringed parasol, the mark of his
master's dignity.

But there is one curiosity for which Sou-Tcheou is worth a visit. It is there that the Great Wall of China ends.

After descending to the southeast toward Lan-Tcheou, the wall runs to the northeast, covering the provinces of
Kian-Sou, Chan-si, and Petchili to the north of Pekin. Here it is little more than an embankment with a tower here
and there, mostly in ruins. I should have failed in my duty as a chronicler if I had not noticed this gigantic work at its
beginning, for it far surpasses the works of our modern fortifications.

"Is it of any real use, this wall of China?" asked Major Noltitz.

"To the Chinese, I do not know," said I; "but certainly it is to our political orators for purposes of comparison,
when discussing treaties of commerce. Without it, what would become of the eloquence of our legislators?"

CHAPTER XXIII.

I have not seen Kinko for two days, and the last was only to exchange a few words with him to relieve his
anxiety.

To-night I will try and visit him. I have taken care to lay in a few provisions at Sou-Tcheou.

We started at three o'clock. We have got a more powerful engine on. Across this undulating country the
gradients are occasionally rather steep. Seven hundred kilometres separate us from the important city of Lan-
Tcheou, where we ought to arrive to-morrow morning, running thirty miles an hour.

I remarked to Pan-Chao that this average was not a high one.

"What would you have?" he replied, crunching the watermelon seeds. "You will not change, and nothing will
change the temperament of the Celestials. As they are conservatives in all things, so will they be conservative in this
matter of speed, no matter how the engine may be improved. And, besides, Monsieur Bombarnac, that there are
railways at all in the Middle Kingdom is a wonder to me."

"I agree with you, but where you have a railway you might as well get all the advantage out of it that you can."
"Bah!" said Pan-Chao carelessly.

"Speed," said I, "is a gain of time--and to gain time--"

"Time does not exist in China, Monsieur Bombarnac, and it cannot exist for a population of four hundred
millions. There would not be enough for everybody. And so we do not count by days and hours, but always by
moons and watches."

"Which is more poetical than practical," I remark.

"Practical, Mr. Reporter? You Westerners are never without that word in your mouth. To be practical is to be the
slave of time, work, money, business, the world, everybody else, and one's self included. I confess that during my
stay in Europe--you can ask Doctor Tio-King--I have not been very practical, and now I return to Asia I shall be less
so. I shall let myself live, that is all, as the cloud floats in the breeze, the straw on the stream, as the thought is borne
away by the imagination."
"I see," said I, "we must take China as it is."

"And as it will probably always be, Monsieur Bombarnac. Ah! if you knew how easy the life is--an adorable dolce far niente between folding screens in the quietude of the yamens. The cares of business trouble us little; the cares of politics trouble us less. Think! Since Fou Hi, the first emperor in 2950, a contemporary of Noah, we are in the twenty-third dynasty. Now it is Manchoo; what it is to be next what matters? Either we have a government or we have not; and which of its sons Heaven has chosen for the happiness of four hundred million subjects we hardly know, and we hardly care to know."

It is evident that the young Celestial is a thousand and ten times wrong, to use the numerative formula; but it is not for me to tell him so.

At dinner Mr. and Mrs. Ephrinell, sitting side by side, hardly exchanged a word. Their intimacy seems to have decreased since they were married. Perhaps they are absorbed in the calculation of their reciprocal interests, which are not yet perfectly amalgamated. Ah! they do not count by moons and watches, these Anglo-Saxons! They are practical, too practical!

We have had a bad night. The sky of purple sulphury tint became stormy toward evening, the atmosphere became stifling, the electrical tension excessive. It meant a "highly successful" storm, to quote Caterna, who assured me he had never seen a better one except perhaps in the second act of Freyschütz. In truth the train ran through a zone, so to speak, of vivid lightning and rolling thunder, which the echoes of the mountains prolonged indefinitely. I think there must have been several lightning strokes, but the rails acted as conductors, and preserved the cars from injury. It was a fine spectacle, a little alarming, these fires in the sky that the heavy rain could not put out--these continuous discharges from the clouds, in which were mingled the strident whistlings of our locomotive as we passed through the stations of Yanlu, Youn Tcheng, Houlan-Sien and Da-Tsching.

By favor of this troubled night I was able to communicate with Kinko, to take him some provisions and to have a few minutes' conversation with him.

"Is it the day after to-morrow," he asked, "that we arrive at Pekin?"

"Yes, the day after to-morrow, if the train is not delayed."

"Oh, I am not afraid of delays! But when my box is in the railway station at Pekin, I have still to get to the Avenue Cha-Coua--"

"What does it matter, will not the fair Zinca Klork come and call for it?"

"No. I advised her not to do so."

"And why?"

"Women are so impressionable! She would want to see the van in which I had come, she would claim the box with such excitement that suspicions would be aroused. In short, she would run the risk of betraying me."

"You are right, Kinko."

"Besides, we shall reach the station in the afternoon, very late in the afternoon perhaps, and the unloading of the packages will not take place until next morning--"

"Probably."

"Well, Monsieur Bombarnac, if I am not taking too great a liberty, may I ask a favor of you?"

"What is it?"

"That you will be present at the departure of the case, so as to avoid any mistake."

"I will be there, Kinko, I will be there. Glass fragile, I will see that they don't handle it too roughly. And if you like I will accompany the case to Avenue Cha-Coua--"

"I hardly like to ask you to do that--"

"You are wrong, Kinko. You should not stand on ceremony with a friend, and I am yours, Kinko. Besides, it will be a pleasure to me to make the acquaintance of Mademoiselle Zinca Klork. I will be there when they deliver the box, the precious box. I will help her to get the nails out of it--"

"The nails out of it, Monsieur Bombarnac? My panel? Ah, I will jump through my panel!"

A terrible clap of thunder interrupted our conversation. I thought the train had been thrown off the line by the commotion of the air. I left the young Roumanian and regained my place within the car.

In the morning--26th of May, 7 A.M.--we arrived at Lan-Tcheou. Three hours to stop, three hours only.

"Come, Major Noltitz, come, Pan-Chao, come, Caterna, we have not a minute to spare."

But as we are leaving the station we are stopped by the appearance of a tall, fat, gray, solemn personage. It is the governor of the town in a double robe of white and yellow silk, fan in hand, buckled belt, and a mantilla--a black mantilla which would have looked much better on the shoulders of a manola. He is accompanied by a certain number of globular mandarins, and the Celestials salute him by holding out their two fists, which they move up and down as they nod their heads.

"Ah! What is this gentleman going to do? Is it some Chinese formality? A visit to the passengers and their
baggage? And Kinko, what about him?"

Nothing alarming, after all. It is only about the treasure of the Son of Heaven. The governor and his suite have stopped before the precious van, bolted and sealed, and are looking at it with that respectful admiration which is experienced even in China before a box containing many millions.

I ask Popof what is meant by the governor's presence, has it anything to do with us?

"Not at all," says Popof; "the order has come from Pekin to telegraph the arrival of the treasure. The governor has done so, and he is awaiting a reply as to whether he is to send it on to Pekin or keep it provisionally at Lan-Tcheou."

"That will not delay us?"

"I don't think so."

"Then come on," said I to my companions. But if the imperial treasure was a matter of indifference to us, it did not seem to be so to Faruskiar. But whether this van started or did not start, whether it was attached to our train or left behind, what could it matter to him? Nevertheless, he and Ghangir seemed to be much put about regarding it, although they tried to hide their anxiety, while the Mongols, talking together in a low tone, gave the governor anything but friendly glances.

Meanwhile the governor had just heard of the attack on the train and of the part that our hero had taken in defence of the treasure, with what courage he had fought, and how he had delivered the country from the terrible Ki-Tsang. And then in laudatory terms, which Pan-Chao translated to us, he thanked Faruskiar, complimented him, and gave him to understand that the Son of Heaven would reward him for his services.

The manager of the Grand Transasiatic listened with that tranquil air that distinguished him, not without impatience, as I could clearly see. Perhaps he felt himself superior to praises as well as recompenses, no matter from how great a height they might come. In that I recognized all the Mongol pride.

But we need not wait. The treasure van may remain here or go on to Pekin, but it makes no difference to us! Our business is to visit Lan-Tcheou.

What we did briefly I will more briefly tell.

There is an outer town and an inner one. No ruins this time. A very lively city, population swarming like ants and very active, familiarized by the railway with the presence of strangers whom they do not follow about with indiscreet curiosity as they used to do. Huge quarters occupy the right of the Hoang Ho, two kilometres wide. This Hoang Ho is the yellow river, the famous yellow river, which, after a course of four thousand four hundred kilometres, pours its muddy waters into the Gulf of Petchili.

"Is not its mouth near Tien Tsin, where the baron thinks of catching the mail for Yokohama?" asks the major.

"That is so," I reply.

"He will miss it," says the actor.

"Unless he trots, our globe-trotter."

"A donkey's trot does not last long," says Catera, "and he will not catch the boat."

"He will catch it if the train is no later," said the major. "We shall be at Tien Tsin on the 23d at six o'clock in the morning, and the steamer leaves at eleven."

"Whether he misses the boat or not, my friends, do not let us miss our walk."

A bridge of boats crosses the river, and the stream is so swift that the footway rises and falls like the waves of the sea. Madame Catera, who had ventured on it, began to turn pale.

"Caroline, Caroline," said her husband, "you will be seasick! Pull yourself together; pull yourself together!"

She "pulled herself together," and we went up towards a pagoda which rises over the town.

Like all the monuments of this kind, the pagoda resembles a pile of dessert dishes placed one on the other, but the dishes are of graceful form, and if they are in Chinese porcelain it is not astonishing.

We get an outside view of a cannon foundry, a rifle factory, the workmen being natives. Through a fine garden we reach the governor's house, with a capricious assemblage of bridges, kiosks, fountains and doors like vases. There are more pavilions and upturned roofs than there are trees and shady walks. Then there are paths paved with bricks, among them the remains of the base of the Great Wall.

It is ten minutes to ten when we return to the station, absolutely tired out; for the walk has been a rough one, and almost suffocating, for the heat is very great.

My first care is to look after the van with the millions. It is there as usual behind the train under the Chinese guard.

The message expected by the governor has arrived; the order to forward on the van to Pekin, where the treasure is to be handed over to the finance minister.

Where is Faruskiar? I do not see him. Has he given us the slip?

No! There he is on one of the platforms, and the Mongols are back in the car.
Ephrinell has been off to do a round of calls--with his samples, no doubt--and Mrs. Ephrinell has also been out on business, for a deal in hair probably. Here they come, and without seeming to notice one another they take their seats.

The other passengers are only Celestials. Some are going to Pekin; some have taken their tickets for intermediate stations like Si-Ngan, Ho Nan, Lou-Ngan, Tai-Youan. There are a hundred passengers in the train. All my numbers are on board. There is not one missing. Thirteen, always thirteen!

We were still on the platform, just after the signal of departure had been given, when Caterna asked his wife what was the most curious thing she had seen at Lan-Tcheou.

"The most curious thing, Adolphe? Those big cages, hung on to the walls and trees, which held such curious birds--"

"Very curious, Madame Caterna," said Pan-Chao. "Birds that talk--"

"What--parrots?"

"No; criminals' heads."

"Horrible!" said the actress, with a most expressive grimace.

"What would you have, Caroline?" said Caterna. "It is the custom of the country."

CHAPTER XXIV.

On leaving Lan-Tcheou, the railway crosses a well-cultivated country, watered by numerous streams, and hilly enough to necessitate frequent curves. There is a good deal of engineering work; mostly bridges, viaducts on wooden trestles of somewhat doubtful solidity, and the traveler is not particularly comfortable when he finds them bending under the weight of the train. It is true we are in the Celestial Empire, and a few thousand victims of a railway accident is hardly anything among a population of four hundred millions.

"Besides," said Pan-Chao, "the Son of Heaven never travels by railway."

So much the better.

At six o'clock in the evening we are at King-Tcheou, after skirting for some time the capricious meanderings of the Great Wall. Of this immense artificial frontier built between Mongolia and China, there remain only the blocks of granite and red quartzite which served as its base, its terrace of bricks with the parapets of unequal heights, a few old cannons eaten into with rust and hidden under a thick veil of lichens, and then the square towers with their ruined battlements. The interminable wall rises, falls, bends, bends back again, and is lost to sight on the undulations of the ground.

At six o'clock we halt for half an hour at King-Tcheou, of which I only saw a few pagodas, and about ten o'clock there is a halt of three-quarters of an hour at Si-Ngan, of which I did not even see the outline.

All night was spent in running the three hundred kilometres which separate this town from Ho Nan, where we had an hour to stop.

I fancy the Londoners might easily imagine that this town of Ho Nan was London, and perhaps Mrs. Ephrinell did so. Not because there was a Strand with its extraordinary traffic, nor a Thames with its prodigious movement of barges and steamboats. No! But because we were in a fog so thick that it was impossible to see either houses or pagodas.

The fog lasted all day, and this hindered the progress of the train. These Chinese engine-drivers are really very skilful and attentive and intelligent.

We were not fortunate in our last day's journey before reaching Tien Tsin! What a loss of copy! What paragraphs were melted away in these unfathomable vapors! I saw nothing of the gorges and ravines, through which runs the Grand Transasitc; nothing of the valley of Lou-Ngan, where we stopped at eleven o'clock; nothing of the two hundred and thirty kilometres which we accomplished amid the wreaths of a sort of yellow steam, worthy of a yellow country, until we stopped about ten o'clock at night at Tai-Youan.

Ah! the disagreeable day.

Luckily the fog rose early in the evening. Now it is night--and a very dark night, too.

I go to the refreshment bar and buy a few cakes and a bottle of wine. My intention is to pay a last visit to Kinko. We will drink to his health, to his approaching marriage with the fair Roumanian. He has traveled by fraud, I know, and if the Grand Transasitc only knew! But the Grand Transasitc will not know.

During the stoppage Faruskiar and Ghangir are walking on the platform and looking at the train. But it is not the van at the rear that is attracting their attention, but the van in front, and they seem to be much interested in it.

Are they suspicious of Kinko? Not the hypothesis is unlikely. The driver and stoker seem to be the object of their very particular attention. They are two brave Chinamen who have just come on duty, and perhaps Faruskiar is not sorry to see men in whom he can trust, with this imperial treasure and a hundred passengers behind them!
The hour for departure strikes, and at midnight the engine begins to move, emitting two or three loud whistles. As I have said, the night is very dark, without moon, without stars. Long clouds are creeping across the lower zones of the atmosphere. It will be easy for me to enter the van without being noticed. And I have not been too liberal in my visits to Kinko during these twelve days on the road.

At this moment Popof says to me:
"Are you not going to sleep to-night, Monsieur Bombarnac?"
"I am in no hurry," I reply; "after this foggy day, spent inside the car, I am glad of a breath of fresh air. Where does the train stop next?"
"At Fuen-Choo, when it has passed the junction with the Nanking line."
"Good night, Popof."
"Good night, Monsieur Bombarnac."
I am alone.

The idea occurs to me to walk to the rear of the train, and I stop for an instant on the gangway in front of the treasure van.

The passengers, with the exception of the Chinese guard, are all sleeping their last sleep—their last, be it understood, on the Grand Transasiatic.

Returning to the front of the train, I approach Popof's box, and find him sound asleep.

I then open the door of the van, shut it behind me, and signal my presence to Kinko.

The panel is lowered, the little lamp is lighted. In exchange for the cakes and wine I receive the brave fellow's thanks, and we drink to the health of Zinca Klork, whose acquaintance I am to make on the morrow.

It is ten minutes to one. In twelve minutes, so Popof says, we shall pass the junction with the Nanking branch. This branch is only completed for five or six kilometres, and leads to the viaduct over the Tjon valley. This viaduct is a great work—I have the details from Pan-Chao—and the engineers have as yet only got in the piers, which rise for a hundred feet above the ground.

As I know we are to halt at Fuen-Choo, I shake hands with Kinko, and rise to take my leave.

At this moment I seem to hear some one on the platform in the rear of the van.
"Look out, Kinko!" I say in a whisper.
The lamp is instantly extinguished, and we remain quite still.
I am not mistaken. Some one is opening the door of the van.
"Your panel," I whisper.
The panel is raised, the car is shut, and I am alone in the dark.
Evidently it must be Popof who has come in. What will he think to find me here? The first time I came to visit the young Roumanian I hid among the packages. Well, I will hide a second time. If I get behind Ephrinell's boxes it is not likely that Popof will see me, even by the light of his lantern.
I do so; and I watch.

It is not Popof, for he would have brought his lantern.

I try to recognize the people who have just entered. It is difficult. They have glided between the packages, and after opening the further door, they have gone out and shut it behind them.
They are some of the passengers, evidently; but why here—at this hour?
I must know. I have a presentiment that something is in the wind
Perhaps by listening?
I approach the front door of the van, and in spite of the rumbling of the train I hear them distinctly enough—
Thousand and ten thousand devils! I am not mistaken! It is the voice of my lord Faruskiar. He is talking with Ghangir in Russian. It is indeed Faruskiar. The four Mongols have accompanied him. But what are they doing there? For what motive are they on the platform which is just behind the tender? And what are they saying?
What they are saying is this.
Of these questions and answers exchanged between my lord Faruskiar and his companions, I do not lose a word.
"When shall we be at the junction?"
"In a few minutes."
"Are you sure that Kardek is at the points?"
"Yes; that has been arranged."
What had been arranged? And who is this Kardek they are talking about?
The conversation continues.
"We must wait until we get the signal," says Faruskiar.
"Is that a green light?" asks Ghangir.
"Yes—it will show that the switch is over."
I do not know if I am in my right senses. The switch over? What switch?
A half minute elapses. Ought I not to tell Popof? Yes--I ought.
I was turning to go out of the van, when an exclamation kept me back.
"The signal--there is the signal!" says Ghangir.
"And now the train is on the Nanking branch!" replies Faruskiar.
The Nanking branch? But then we are lost. At five kilometres from here is the Tjon viaduct in course of
construction, and the train is being precipitated towards an abyss.
Evidently Major Noltitz was not mistaken regarding my lord Faruskiar. I understand the scheme of the
scoundrels. The manager of the Grand Transasiatic is a scoundrel of the deepest dye. He has entered the service of the
company to await his opportunity for some extensive haul. The opportunity has come with the millions of the
Son of Heaven I Yes! The whole abominable scheme is clear enough to me. Faruskiar has defended the imperial
treasure against Ki-Tsang to keep it from the chief of the bandits who stopped the train, whose attack would have
interfered with his criminal projects! That is why he had fought so bravely. That is why he had risked his life and
behaved like a hero. And thou, poor beast of a Claudius, how thou hast been sold! Another howler! Think of that,
my friend!
But somehow we ought to prevent this rascal from accomplishing his work. We ought to save the train which is
running full speed towards the unfinished viaduct, we ought to save the passengers from a frightful catastrophe. As
to the treasure Faruskiar and his accomplices are after, I care no more than for yesterday's news! But the passengers-
-and myself--that is another affair altogether.
I will go back to Popof. Impossible. I seem to be nailed to the floor of the van. My head swims--
Is it true we are running towards the abyss? No! I am mad. Faruskiar and his accomplices would be hurled over
as well. They would share our fate. They would perish with us! But there are shouts in front of the train. The screams of people being killed. There is no doubt now. The driver and the stoker are being strangled. I feel the speed of the train begin to slacken.
I understand. One of the ruffians knows how to work the train, and he is slowing it to enable them to jump off
and avoid the catastrophe.
I begin to master my torpor. Staggering like a drunken man, I crawl to Kinko's case. There, in a few words, I tell
him what has passed, and I exclaim:
"We are lost!"
"No--perhaps" he replies.
Before I can move, Kinko is out of his box. He rushes towards the front door; he climbs on to the tender.
"Come along! Come along!" he shouts.
I do not know how I have done it, but here I am at his side, on the foot-plate, my feet in the blood of the driver
and stoker, who have been thrown off on to the line.
Faruskiar and his accomplices are no longer here.
But before they went one of them has taken off the brakes, jammed down the regulator to full speed, thrown
fresh coals into the fire-box, and the train is running with frightful velocity.
In a few minutes we shall reach the Tjon viaduct.
Kinko, energetic and resolute, is as cool as a cucumber. But in vain he tries to move the regulator, to shut off the
steam, to put on the brake. These valves and levers, what shall we do with them?
"I must tell Popof!" I shout.
"And what can he do? No; there is only one way--"
"And what is that?"
"Rouse up the fire," says Kinko, calmly; "shut down the safety valves, and blow up the engine."
And was that the only way--a desperate way--of stopping the train before it reached the viaduct?
Kinko scattered the coal on to the fire bars. He turned on the greatest possible draught, the air roared across the
furnace, the pressure goes up, up, amid the heaving of the motion, the bellowsings of the boiler, the beating of the
pistons. We are going a hundred kilometres an hour.
"Get back!" shouts Kinko above the roar. "Get back into the van."
"And you, Kinko?"
"Get back, I tell you."
I see him hang on to the valves, and put his whole weight on the levers.
"Go!" he shouts.
I am off over the tender. I am through the van. I awake Popof, shouting with all my strength:
"Get back! Get back!"
A few passengers suddenly waking from sleep begin to run from the front car.
Suddenly there is an explosion and a shock. The train at first jumps back. Then it continues to move for about half a kilometre.
It stops.
Popof, the major, Caterna, most of the passengers are out on the line in an instant.
A network of scaffolding appears confusedly in the darkness, above the piers which were to carry the viaduct across the Tjon valley.
Two hundred yards further the train would have been lost in the abyss.

CHAPTER XXV.
And I, who wanted "incident," who feared the weariness of a monotonous voyage of six thousand kilometres, in the course of which I should not meet with an impression or emotion worth clothing in type!
I have made another muddle of it, I admit! My lord Faruskiar, of whom I had made a hero--by telegraph--for the readers of the Twentieth Century. Decidedly my good intentions ought certainly to qualify me as one of the best pavers of a road to a certain place you have doubtless heard of.
We are, as I have said, two hundred yards from the valley of the Tjon, so deep and wide as to require a viaduct from three hundred and fifty to four hundred feet long. The floor of the valley is scattered over with rocks, and a hundred feet down. If the train had been hurled to the bottom of that chasm, not one of us would have escaped alive. This memorable catastrophe--most interesting from a reporter's point of view--would have claimed a hundred victims. But thanks to the coolness, energy and devotion of the young Roumanian, we have escaped this terrible disaster.
All? No! Kinko has paid with his life for the safety of his fellow passengers.
Amid the confusion my first care was to visit the luggage van, which had remained uninjured. Evidently if Kinko had survived the explosion he would have got back into his box and waited till I put myself in communication with him.
Alas! The coffer is empty--empty as that of a company which has suspended payment. Kinko has been the victim of his sacrifice.
And so there has been a hero among our traveling companions, and he was not this Faruskiar, this abominable bandit hidden beneath the skin of a manager, whose name I have so stupidly published over the four corners of the globe! It was this Roumanian, this humble, this little, this poor fellow, whose sweetheart will wait for him in vain, and whom she will never again see! Well, I will do him justice! I will tell what he has done. As to his secret, I shall be sorry if I keep it. If he defrauded the Grand Transasiatic, it is thanks to that fraud that a whole train has been saved. We were lost, we should have perished in the most horrible of deaths if Kinko had not been there!
I went back on to the line, my heart heavy, my eyes full of tears.
Assuredly Faruskiar's scheme--in the execution of which he had executed his rival Ki-Tsang--had been cleverly contrived in utilizing this branch line leading to the unfinished viaduct. Nothing was easier than to switch off the train if an accomplice was at the points. And as soon as the signal was given that we were on the branch, all he had to do was to gain the foot-plate, kill the driver and stoker, slow the train and get off, leaving the steam on full to work up to full speed.
And now there could be no doubt that the scoundrels worthy of the most refined tortures that Chinese practice could devise were hastening down into the Tjon valley. There, amid the wreck of the train, they expected to find the fifteen millions of gold and precious stones, and this treasure they could carry off without fear of surprise when the night enabled them to consummate this fearful crime. Well! They have been robbed, these robbers, and I hope that they will pay for their crime with their lives, at the least. I alone know what has passed, but I will tell the story, for poor Kinko is no more.
Yes! My mind is made up. I will speak as soon as I have seen Zinca Klork. The poor girl must be told with consideration. The death of her betrothed must not come upon her like a thunderclap. Yes! To-morrow, as soon as we are at Pekin.
After all, if I do not say anything about Kinko, I may at least denounce Faruskiar and Ghangir and the four Mongols. I can say that I saw them go through the van, that I followed them, that I found they were talking on the gangway, that I heard the screams of the driver and stoker as they were strangled on the foot-plate, and that I then returned to the cars shouting: "Back! Back!" or whatever it was.
Besides, as will be seen immediately, there was somebody else whose just suspicions had been changed into certainty, who only awaited his opportunity to denounce Faruskiar.
We are now standing at the head of the train, Major Noltitz, the German baron, Caterna, Ephrinell, Pan-Chao, Popof, about twenty travelers in all. The Chinese guard, faithful to their trust, are still near the treasure which not
one of them has abandoned. The rear guard has brought along the tail lamps, and by their powerful light we can see in what a state the engine is.

If the train, which was then running at enormous velocity, had not stopped suddenly--and thus brought about its destruction--it was because the boiler had exploded at the top and on the side. The wheels being undamaged, the engine had run far enough to come gradually to a standstill of itself, and thus the passengers had been saved a violent shock.

Of the boiler and its accessories only a few shapeless fragments remained. The funnel had gone, the dome, the steam chest; there was nothing but torn plates, broken, twisted tubes, split cylinders, and loose connecting rods--gaping wounds in the corpse of steel.

And not only had the engine been destroyed, but the tender had been rendered useless. Its tank had been cracked, and its load of coals scattered over the line. The luggage-van, curious to relate, had miraculously escaped without injury.

And looking at the terrible effects of the explosion, I could see that the Roumanian had had no chance of escape, and had probably been blown to fragments.

Going a hundred yards down the line I could find no trace of him--which was not to be wondered at. At first we looked on at the disaster in silence; but eventually conversation began.

"It is only too evident," said one of the passengers, "that our driver and stoker have perished in the explosion."

"Poor fellows!" said Popof. "But I wonder how the train could have got on the Nanking branch without being noticed?"

"The night was very dark," said Ephrinell, "and the driver could not see the points."

"That is the only explanation possible," said Popof, "for he would have tried to stop the train, and, on the contrary, we were traveling at tremendous speed."

"But," said Pan-Chao, "how does it happen the Nanking branch was open when the Tjon viaduct is not finished? Had the switch been interfered with?"

"Undoubtedly," said Popof, "and probably out of carelessness."

"No," said Ephrinell, deliberately. "There has been a crime--a crime intended to bring about the destruction of the train and passengers--"

"And with what object?" asked Popof.

"The object of stealing the imperial treasure," said Ephrinell. "Do you forget that those millions would be a temptation to scoundrels? Was it not for the purpose of robbing the train that we were attacked between Tchertchen and Tcharkalyk?"

The American could not have been nearer the truth.

"And so," said Popof, "after Ki-Tsang's attempt, you think that other bandits--"

Up to now Major Noltitz had taken no part in the discussion. Now he interrupted Popof, and in a voice heard by all he asked:

"Where is Faruskiar?"

They all looked about and tried to discover what had become of the manager of the Transasiatic.

"And where is his friend Ghangir?" asked the major.

There was no reply.

"And where are the four Mongols who were in the rear van?" asked Major Noltitz.

And none of them presented themselves.

They called my lord Faruskiar a second time.

Faruskiar made no response.

Popof entered the car where this personage was generally to be found.

It was empty.

Empty? No. Sir Francis Trevellyan was calmly seated in his place, utterly indifferent to all that happened. Was it any business of his? Not at all. Was he not entitled to consider that the Russo-Chinese railways were the very apex of absurdity and disorder? A switch opened, nobody knew by whom! A train on the wrong line! Could anything be more ridiculous than this Russian mismanagement?

"Well, then!" said Major Noltitz, "the rascal who sent us on to the Nanking line, who would have hurled us into the Tjon valley, to walk off with the imperial treasure, is Faruskiar."

"Faruskiar!" the passengers exclaimed. And most of them refused to believe it.

"What!" said Popof. "The manager of the company who so courageously drove off the bandits and killed their chief Ki-Tsang with his own hand?"

Then I entered on the scene.

"The major is not mistaken. It was Faruskiar who laid this fine trap for us."
And amid the general stupefaction I told them what I knew, and what good fortune had enabled me to ascertain. I told them how I had overheard the plan of Faruskiar and his Mongols, when it was too late to stop it, but I was silent regarding the intervention of Kinko. The moment had not come, and I would do him justice in due time.

To my words there succeeded a chorus of maledictions and menaces.

What! This seigneur Faruskiar, this superb Mongol, this functionary we had seen at work! No! It was impossible.

But they had to give in to the evidence. I had seen; I had heard; I affirmed that Faruskiar was the author of this catastrophe in which all our train might have perished, was the most consummate bandit who had ever disgraced Central Asia!

"You see, Monsieur Bombarnac," said Major Noltitz, "that I was not mistaken in my first suspicion."

"It is only too true," I replied, without any false modesty, "that I was taken in by the grand manners of the abominable rascal."

"Monsieur Claudius," said Caterna, "put that into a romance, and see if anybody believes it likely."

Caterna was right; but unlikely as it may seem, it was. And, besides, I alone knew Kinko's secret. It certainly did seem as though it was miraculous for the locomotive to explode just on the verge of the abyss.

Now that all danger had disappeared we must take immediate measures for running back the cars on to the Pekin line.

"The best thing to do is for one of us to volunteer--"

"I will do that," said Caterna.

"What is he to do?" I asked.

"Go to the nearest station, that of Fuen Choo, and telegraph to Tai-Youan for them to send on a relief engine."

"How far is it to Fuen Choo?" asked Ephrinell.

"About six kilometres to Nanking junction, and about five kilometres beyond that."

"Eleven kilometres," said the major; "that is a matter of an hour and a half for good walkers. Before three o'clock the engine from Tai-Youan ought to be here. I am ready to start."

"So am I," said Popof! "I think several of us ought to go. Who knows if we may not meet Faruskiar and his Mongols on the road?"

"You are right, Popof," said Major Noltitz, "and we should be armed."

This was only prudent, for the bandits who ought to be on their way to the Tjon viaduct could not be very far off. Of course, as soon as they found that their attempt had failed, they would hasten to get away. How would they dare--six strong--to attack a hundred passengers, including the Chinese guard?

Twelve of us, including Pan-Chao, Caterna, and myself, volunteered to accompany Major Noltitz. But by common accord we advised Popof not to abandon the train, assuring him that we would do all that was necessary at Fuen Choo.

Then, armed with daggers and revolvers--it was one o'clock in the morning--we went along the line to the junction, walking as fast as the very dark night permitted.

In less than two hours we arrived at Fuen Choo station without adventure. Evidently Faruskiar had cleared off. The Chinese police would have to deal with the bandit and his accomplices. Would they catch him? I hoped so, but I doubted.

At the station Pan-Chao explained matters to the stationmaster, who telegraphed for an engine to be sent from Tai-Youan to the Nanking line.

At three o'clock, just at daybreak, we returned to wait for the engine at the junction. Three-quarters of an hour afterwards its whistle announced its approach, and it stopped at the bifurcation of the lines. We climbed up on to the tender, and half an hour later had rejoined the train.

The dawn had come on sufficiently for us to be able to see over a considerable distance. Without saying anything to anybody, I went in search of the body of my poor Kinko. And I could not find it among the wreck.

As the engine could not reach the front of the train, owing to their being only a single line, and no turning-table, it was decided to couple it on in the rear and run backwards to the junction. In this way the box, alas! without the Roumanian in it, was in the last carriage.

We started, and in half an hour we were on the main line again.

Fortunately it was not necessary for us to return to Tai-Youan, and we thus saved a delay of an hour and a half. At the junction the engine was detached and run for a few yards towards Pekin, then the vans and cars, one by one, were pushed on to the main line, and then the engine backed and the train proceeded, made up as before the accident. By five o'clock we were on our way across Petchili as if nothing had happened.

I have nothing to say regarding this latter half of the journey, during which the Chinese driver--to do him justice--in no way endeavored to make up for lost time. But if a few hours more or less were of no importance to us, it was
otherwise with Baron Weissschnitzerdörfer, who wanted to catch the Yokohama boat at Tien Tsin.

When we arrived there at noon the steamer had been gone for three-quarters of an hour; and when the German globe-trotter, the rival of Bly and Bisland, rushed on to the platform, it was to learn that the said steamer was then going out of the mouths of the Pei-Ho into the open sea.

Unfortunate traveler! We were not astonished when, as Gatema said, the baron "let go both broadsides" of Teutonic maledictions. And really he had cause to curse in his native tongue.

We remained but a quarter of an hour at Tien Tsin. My readers must pardon me for not having visited this city of five hundred thousand inhabitants, the Chinese town with its temples, the European quarter in which the trade is concentrated, the Pei-Ho quays where hundreds of junks load and unload. It was all Faruskiar's fault, and were it only for having wrecked my reportorial endeavors he ought to be hanged by the most fantastic executioner in China.

Nothing happened for the rest of our run. I was very sorry at the thought that I was not bringing Kinko along with me, and that his box was empty. And he had asked me to accompany him to Mademoiselle Zinca Klork! How could I tell this unfortunate girl that her sweetheart would never reach Pekin station?

Everything ends in this world below, even a voyage of six thousand kilometres on the Grand Transasiatic; and after a run of thirteen days, hour after hour, our train stopped at the gates of the capital of the Celestial Empire.

CHAPTER XXVI.

"Pekin!" shouted Popof. "All change here."

And Caterna replied with truly Parisian unction:

"I believe you, my boy!"

And we all changed.

It was four o'clock in the afternoon. For people fatigued with three hundred and twelve hours of traveling, it was no time for running about the town—what do I say?—the four towns inclosed one within the other. Besides, I had plenty of time. I was going to stop some weeks in this capital.

The important thing was to find a hotel in which one could live passably. From information received I was led to believe that the hotel of Ten Thousand Dreams, near the railway station, might be sufficiently in accord with Western notions.

As to Mademoiselle Klork, I will postpone my visit till to-morrow. I will call on her before the box arrives, and even then I shall be too soon, for I shall take her the news of Kinko's death.

Major Noltitz will remain in the same hotel as I do. I have not to bid him farewell, nor have I to part with the Caternas, who are going to stay a fortnight before starting for Shanghai. As to Pan-Chao and Dr. Tio-King, a carriage is waiting to take them to the yamen in which the young Chinaman's family live. But we shall see each other again. Friends do not separate at a simple good-by, and the grip of the hand I gave him as he left the car will not be the last.

Mr. and Mrs. Ephrinell lose no time in leaving the station on business, which obliges them to find a hotel in the commercial quarter of the Chinese town. But they do not leave without receiving my compliments. Major Noltitz and I go up to this amiable couple, and the conventional politenesses are reciprocally exchanged.

"At last," said I to Ephrinell, "the forty-two packages of Strong, Bulbul & Co. have come into port. But it is a wonder the explosion of our engine did not smash your artificial teeth."

"Just so," said the American, "my teeth had a narrow escape. What adventures they have had since we left Tiflis? Decidedly this journey has been less monotonous than I expected."

"And," added the major, "you were married on the way—unless I am mistaken!"

"Wait a bit!" replied the Yankee in a peculiar tone. "Excuse me; we are in a hurry."

"We will not keep you, Mr. Ephrinell," I replied, "and to Mrs. Ephrinell and yourself allow us to say au revoir!"

"Au revoir!" replied the Americanized lady, rather more dryly at her arrival than at her departure.

Then, turning, she said:

"I have no time to wait, Mr. Ephrinell."

"Nor have I, Mrs. Ephrinell," replied the Yankee.

Mr.! Mrs.! And not so long ago they were calling each other Fulk and Horatia.

And then, without taking each other's arm, they walked out of the station. I believe he turned to the right and she to the left; but that is their affair.

There remains my No. 8, Sir Francis Trevellyan, the silent personage, who has not said a word all through the piece—I mean all through the journey. I wanted to hear his voice, if it was only for one second.

Eh! If I am not mistaken, here is the opportunity at last.

There is the phlegmatic gentleman contemptuously looking up and down the cars. He has just taken a cigar from
his yellow morocco case, but when he looks at his match-box he finds it empty.

My cigar—a particularly good one—is alight, and I am smoking it with the blessed satisfaction of one who enjoys it, and regretting that there is not a man in all China who has its equal.

Sir Francis Trevellyan has seen the light burning at the end of my cigar, and he comes towards me.

I think he is going to ask me for a light. He stretches out his hand, and I present him with my cigar.

He takes it between his thumb and forefinger, knocks off the white ash, lights up, and then, if I had not heard him ask for a light, I at least expected him to say, "Thank you, sir!"

Not at all! Sir Francis Trevellyan takes a few puffs at his own cigar, and then nonchalantly throws mine on to the platform. And then without even a bow, he walks leisurely off out of the railway station.

Did you say nothing? No, I remained astounded. He gave me neither a word nor a gesture. I was completely dumfounded at this ultra-Britannic rudeness, while Major Noltitz could not restrain a loud outburst of laughter.

Ah! If I should see this gentleman again. But never did I see again Sir Francis Trevellyan of Trevellyan Hall, Trevellyanshire.

Half an hour afterwards we are installed at the Hotel of Ten Thousand Dreams. There we are served with a dinner in Chinese style. The repast being over—towards the second watch—we lay ourselves on beds that are too narrow in rooms with little comfort, and sleep not the sleep of the just, but the sleep of the exhausted—and that is just as good.

I did not wake before ten o'clock, and I might have slept all the morning if the thought had not occurred to me that I had a duty to fulfil. And what a duty! To call in the Avenue Cha Coua before the delivery of the unhappy case to Mademoiselle Zinca Klork.

I arise. Ah! If Kinko had not succumbed, I should have returned to the railway station—I should have assisted, as I had promised, in the unloading of the precious package. I would have watched it on to the cart, and I would have accompanied it to the Avenue Cha Coua, I would even have helped in carrying him up to Mademoiselle Zinca Klork! And what a double explosion of joy there would have been when Kinko jumped through the panel to fall into the arms of the fair Roumanian!

But no! When the box arrives it will be empty—empty as a heart from which all the blood has escaped.

I leave the Hotel of Ten Thousand Dreams about eleven o'clock, I call one of those Chinese carriages, which look like palanquins on wheels, I give the address of Mademoiselle Klork, and I am on the way.

You know, that among the eighteen provinces of China Petchili occupies the most northerly position. Formed of nine departments, it has for its capital Pekin, otherwise known as Chim-Kin-Fo, an appellation which means a "town of the first order, obedient to Heaven."

I do not know if this town is really obedient to Heaven, but it is obedient to the laws of rectilinear geometry. There are four towns, square or rectangular, one within the other. The Chinese town, which contains the Tartar town, which contains the yellow town, or Houng Tching, which contains the Red Town, or Tsen-Kai-Tching, that is to say, "the forbidden town." And within this symmetrical circuit of six leagues there are more than two millions of those inhabitants, Tartars or Chinese, who are called the Germans of the East, without mentioning several thousands of Mongols and Tibetans. That there is much bustle in the streets, I can see by the obstacles my vehicle encounters at every step, itinerating peddlers, carts heavily laden, mandarins and their noisy following. I say nothing of those abominable wandering dogs, half jackals, half wolves, hairless and mangy, with deceitful eyes, threatening jaws, and having no other food than the filthy rubbish which foreigners detest. Fortunately I am not on foot, and I have no business in the Red Town, admittance to which is denied, nor in the yellow town nor even in the Tartar town.

The Chinese town forms, a rectangular parallelogram, divided north and south by the Grand Avenue leading from the Houn Ting gate to the Tien gate, and crossed east and west by the Avenue Cha-Coua, which runs from the gate of that name to the Cpuan-Tsa gate. With this indication nothing could be easier than to find the dwelling of Mademoiselle Zinca Klork, but nothing more difficult to reach, considering the block in the roads in this outer ring.

A little before twelve I arrived at my destination. My vehicle had stopped before a house of modest appearance, occupied by artisans as lodgings, and as the signboard said more particularly by strangers.

It was on the first floor, the window of which opened on to the avenue, that the young Roumanian lived, and where, having learned her trade as a milliner in Paris, she was engaged in it at Pekin.

I go up to the first floor. I read the name of Madame Zinca Klork on a door. I knock. The door is opened.

I am in the presence of a young lady who is perfectly charming, as Kinko said. She is a blonde of from twenty-two to twenty-three years old, with the black eyes of the Roumanian type, an agreeable figure, a pleasant, smiling face. In fact, has she not been informed that the Grand Transasiatic train has been in the station ever since last evening, in spite of the circumstances of the journey, and is she not awaiting her betrothed from one moment to another?

And I, with a word, am about to extinguish this joy. I am to wither that smile.
Mademoiselle Klork is evidently much surprised at seeing a stranger in her doorway. As she has lived several
years in France, she does not hesitate to recognize me as a Frenchman, and asks to what she is indebted for my visit.
I must take care of my words, for I may kill her, poor child.
"Mademoiselle Zinca--" I say.
"You know my name?" she exclaims.
"Yes, mademoiselle. I arrived yesterday by the Grand Transasiotic."
The girl turned pale; her eyes became troubled. It was evident that she feared something. Had Kinko been found
in his box? Had the fraud been discovered? Was he arrested? Was he in prison?
I hastened to add:
"Mademoiselle Zinca--certain circumstances have brought to my knowledge--the journey of a young
Roumanian--"
"Kinko--my poor Kinko--they have found him?" she asks in a trembling voice.
"No--no--" say I, hesitating. "No one knows--except myself. I often visited him in the luggage-van at night; we
were companions, friends. I took him a few provisions--"
"Oh! thank you, sir!" says the lady, taking me by the hands. "With a Frenchman Kinko was sure of not being
betrayed, and even of receiving help! Thank you, thank you!"
I am more than ever afraid of the mission on which I have come.
"And no one suspected the presence of my dear Kinko?" she asks.
"No one."
"What would you have had us do, sir? We are not rich. Kinko was without money over there at Tiflis, and I had
not enough to send him his fare. But he is here at last. He will get work, for he is a good workman, and as soon as
we can we will pay the company--"
"Yes; I know, I know."
"And then we are going to get married, monsieur. He loves me so much, and I love him. We met one another in
Paris. He was so kind to me. Then when he went back to Tiflis I asked him to come to me in that box. Is the poor
fellow ill?"
"No, Mademoiselle Zinca, no."
"Ah! I shall be happy to pay the carriage of my dear Kinko."
"Yes--pay the carriage--"
"It will not be long now?"
"No; this afternoon probably."
I do not know what to say.
"Monsieur," says mademoiselle, "we are going to get married as soon as the formalities are complied with; and if
it is not abusing your confidence, will you do us the honor and pleasure of being present?"
"At your marriage--certainly. I promised my friend Kinko I would."
Poor girl! I cannot leave her like this. I must tell her everything.
"Mademoiselle Zinca--Kinko--"
"He asked you to come and tell me he had arrived?"
"Yes--but--you understand--he is very tired after so long a journey--"
"Tired?"
"Oh! do not be alarmed--"
"Is he ill?"
"Yes--rather--rather ill--"
"Then I will go--I must see him--I pray you, sir, come with me to the station--"
"No; that would be an imprudence--remain here--remain--"
Zinca Klork looked at me fixedly.
"The truth, monsieur, the truth! Hide nothing from me--Kinko--"
"Yes--I have sad news--to give you." She is fainting. Her lips tremble. She can hardly speak.
"He has been discovered!" she says. "His fraud is known--they have arrested him--"
"Would to heaven it was no worse. We have had accidents on the road. The train was nearly annihilated--a
frightful catastrophe--"
"He is dead! Kinko is dead!"
The unhappy Zinca falls on to a chair--and to employ the imaginative phraseology of the Chinese--her tears roll
down like rain on an autumn night. Never have I seen anything so lamentable. But it will not do to leave her in this
state, poor girl! She is becoming unconscious. I do not know where I am. I take her hands. I repeat:
"Mademoiselle Zinca! Mademoiselle Zinca!"
Suddenly there is a great noise in front of the house. Shouts are heard. There is a tremendous to do, and amid the tumult I hear a voice.

Good Heavens! I cannot be mistaken. That is Kinko's voice!
I recognize it. Am I in my right senses?
Zinca jumps up, springs to the window, opens it, and we look out.

There is a cart at the door. There is the case, with all its inscriptions: This side up, this side down, fragile, glass, beware of damp, etc., etc. It is there--half smashed. There has been a collision. The cart has been run into by a carriage, as the case was being got down. The case has slipped on to the ground. It has been knocked in. And Kinko has jumped out like a jack-in-the-box--but alive, very much alive!

I can hardly believe my eyes! What, my young Roumanian did not perish in the explosion? No! As I shall soon hear from his own mouth, he was thrown on to the line when the boiler went up, remained there inert for a time, found himself uninjured--miraculously--kept away till he could slip into the van unperceived. I had just left the van after looking for him in vain, and supposing that he had been the first victim of the catastrophe.

Then--oh! the irony of fate!--after accomplishing a journey of six thousand kilometres on the Grand Transasiatic, shut up in a box among the baggage, after escaping so many dangers, attack by bandits, explosion of engine, he was here, by the mere colliding of a cart and a carriage in a Pekin Street, deprived of all the good of his journey--fraudulent it may be--but really if--I know of no epithet worthy of this climax.

The carter gave a yell at the sight of a human being who had just appeared. In an instant the crowd had gathered, the fraud was discovered, the police had run up. And what could this young Roumanian do who did not know a word of Chinese, but explain matters in the sign language? And if he could not be understood, what explanation could he give?

Zinca and I ran down to him.
"My Zinca--my dear Zinca!" he exclaims, pressing the girl to his heart.
"My Kinko--my dear Kinko!" she replies, while her tears mingle with his.
"Monsieur Bombarnac!" says the poor fellow, appealing for my intervention.
"Kinko," I reply, "take it coolly, and depend on me. You are alive, and we thought you were dead."
"But I am not much better off!" he murmurs.

Mistake! Anything is better than being dead--even when one is menaced by prison, be it a Chinese prison. And that is what happens, in spite of the girl's supplications and my entreaties. And Kinko is dragged off by the police, amid the laughter and howls of the crowd.

But I will not abandon him! No, if I move heaven and earth, I will not abandon him.

CHAPTER XXVII.

If ever the expression, "sinking in sight of port," could be used in its precise meaning, it evidently can in this case. And I must beg you to excuse me. But although a ship may sink by the side of the jetty, we must not conclude that she is lost. That Kinko's liberty is in danger, providing the intervention of myself and fellow passengers is of no avail, agreed. But he is alive, and that is the essential point.

But we must not waste an hour, for if the police is not perfect in China, it is at least prompt and expeditious. Soon caught, soon hanged--and it will not do for them to hang Kinko, even metaphorically.

I offer my arm to Mademoiselle Zinca, and I lead her to my carriage, and we return rapidly towards the Hotel of the Ten Thousand Dreams.

There I find Major Noltitz and the Caternas, and by a lucky chance young Pan-Chao, without Dr. Tio-King. Pan-Chao would like nothing better than to be our interpreter before the Chinese authorities.

And then, before the weeping Zinca, I told my companions all about Kinko, how he had traveled, how I had made his acquaintance on the journey. I told them that if he had defrauded the Transasiatic Company it was thanks to this fraud that he was able to get on to the train at Uzun Ada. And if he had not been in the train we should all have been engulfed in the abyss of the Tjon valley.

And I enlarged on the facts which I alone knew. I had surprised Faruskiar at the very moment he was about to accomplish his crime, but it was Kinko who, at the peril of his life, with coolness and courage superhuman, had thrown on the coals, hung on to the lever of the safety valves, and stopped the train by blowing up the engine.

What an explosion there was of exclamatory ohs and ahs when I had finished my recital, and in a burst of gratitude, somewhat of the theatrical sort, our actor shouted:
"Hurrah for Kinko! He ought to have a medal!"

Until the Son of Heaven accorded this hero a green dragon of some sort, Madame Catera took Zinca's hand, drew her to her heart and embraced her--embraced her without being able to restrain her tears. Just think of a love
story interrupted at the last chapter!

But we must hasten, and as Catera says, "all on the scene for the fifth"--the fifth act, in which dramas generally clear themselves up.

"We must not let this brave fellow suffer!" said Major Noltitz; "we must see the Grand Transasiatic people, and when they learn the facts they will be the first to stop the prosecution."

"Doubtless," I said, "for it cannot be denied that Kinko saved the train and its passengers."

"To say nothing of the imperial treasure," added Catera, "the millions of his majesty!"

"Nothing could be truer," said Pan-Chao. "Unfortunately Kinko has fallen into the hands of the police, and they have taken him to prison, and it is not easy to get out of a Chinese prison."

"Let us be off," I replied, "and see the company."

"See here," said Madame Catera, "is there any need of a subscription to defray the cost of the affair?"

"The proposal does you honor, Caroline," said the actor, putting his hand in his pocket.

"Gentlemen," said pretty Zinca Klork, her eyes bathed in tears, "do save him before he is sentenced--"

"Yes, my darling," said Madame Catera, "yes, my heart, we will save your sweetheart for you, and if a benefit performance--"'

"Bravo, Caroline, bravo!" exclaimed Catera, applauding with the vigor of the sub-chief of the claque.

We left the young Roumanian to the caresses, as exaggerated as they were sincere, of the worthy actress. Madame Catera would not leave her, declaring that she looked upon her as her daughter, that she would protect her like a mother. Then Pan-Chao, Major Noltitz, Catera, and I went off to the company's offices at the station.

The manager was in his office, and we were admitted.

He was a Chinese in every acceptation of the word, and capable of every administrative Chinesery--a functionary who functioned in a way that would have moved his colleagues in old Europe to envy.

Pan-Chao told the story, and, as he understood Russian, the major and I took part in the discussion.

Yes! There was a discussion. This unmistakable Chinaman did not hesitate to contend that Kinko's case was a most serious one. A fraud undertaken on such conditions, a fraud extending over six thousand kilometres, a fraud of a thousand francs on the Grand Transasiatic Company and its agents.

We replied to this Chinesing Chinee that it was all very true, but that the damage had been inconceivable, that if the defrauder had not been in the train he could not have saved it at the risk of his life, and at the same time he could not have saved the lives of the passengers.

Well, would you believe it? This living China figure gave us to understand that from a certain point of view it would have been better to regret the deaths of a hundred victims--

"Yes! We knew that! Perish the colonies and all the passengers rather than a principle!"

In short, we got nothing. Justice must take its course against the fraudulent Kinko.

We retired while Catera poured out all the locutions in his marine and theatrical vocabulary.

What was to be done?

"Gentlemen," said Pan-Chao, "I know how things are managed in Pekin and the Celestial Empire. Two hours will not elapse from the time Kinko is arrested to the time he is brought before the judge charged with this sort of crime. He will not only be sent to prison, but the bastinado--"

"The bastinado--like that idiot Zizel in Si j'etais Roi?" asked the actor.

"Precisely," replied Pan-Chao.

"We must stop that abomination," said Major Noltitz.

"We can try at the least," said Pan-Chao. "I propose we go before the court when I will try and defend the sweetheart of this charming Roumanian, and may I lose my face if I do not get him off."

That was the best, the only thing to do. We left the station, invaded a vehicle, and arrived in twenty minutes before a shabby-looking shanty, where the court was held.

There was a crowd. The affair had got abroad. It was known that a swindler had come in a box in a Grand Transasiatic van free, gratis, and for nothing from Tiflis to Pekin. Every one wished to see him; every one wanted to recognize the features of this charming Roumanian, and may I lose my face if I do not get him off."

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There was a crowd. The affair had got abroad. It was known that a swindler had come in a box in a Grand Transasiatic van free, gratis, and for nothing from Tiflis to Pekin. Every one wished to see him; every one wanted to recognize the features of this genius--it was not yet known that he was a hero.

There he is, our brave companion, between two rascally looking policemen, yellow as quinces. These fellows are ready to walk him off to prison at the judge's order, and to give him a few dozen strokes on the soles of his feet if he is condemned to that punishment.

Kinko is thoroughly disheartened, which astonishes me on the part of one I know to be so energetic. But as soon as he sees us his face betrays a ray of hope.

At this moment the carter, brought forward by the police, relates the affair to a good sort of fellow in spectacles, who shakes his head in anything but a hopeful way for the prisoner, who, even if he were as innocent as a new-born child, could not defend himself, inasmuch as he did not know Chinese.
Then it is that Pan-Chao presents himself. The judge recognized him and smiled. In fact, our companion was the son of a rich merchant in Pekin, a tea merchant in the Toung-Tien and Soung-Fong-Cao trade. And these nods of the judge's head became more sympathetically significant.

Our young advocate was really pathetic and amusing. He interested the judge, he excited the audience with the story of the journey, he told them all about it, and finally he offered to pay the company what was due to them.

Unfortunately the judge could not consent. There had been material damages, moral damages, etc., etc.

Thereupon Pan-Chao became animated, and although we understood nothing he said, we guessed that he was speaking of the courage of Kinko, of the sacrifice he had made for the safety of the travelers, and finally, as a supreme argument, he pleaded that his client had saved the imperial treasure.

Useless eloquence? Arguments were of no avail with this pitiless magistrate, who had not acquitted ten prisoners in his life. He spared the delinquent the bastinado; but he gave him six months in prison, and condemned him in damages against the Grand Transasiatic Company. And then at a sign from this condemning machine poor Kinko was taken away.

Let not my readers pity Kinko's fate. I may as well say at once that everything was arranged satisfactorily.

Next morning Kinko made a triumphal entry into the house in the Avenue Cha-Coua, where we were assembled, while Madame Caterna was showering her maternal consolations on the unhappy Zinca Klork.

The newspapers had got wind of the affair. The Chi Bao of Pekin and the Chinese Times of Tien-Tsin had demanded mercy for the young Roumanian. These cries for mercy had reached the feet of the Son of Heaven—the very spot where the imperial ears are placed. Besides, Pan-Chao had sent to his majesty a petition relating the incidents of the journey, and insisting on the point that had it not been for Kinko's devotion, the gold and precious stones would be in the hands of Faruskiar and his bandits. And, by Buddha! that was worth something else than six months in prison.

Yes! It was worth 15,000 taels, that is to say, more than 100,000 francs, and in a fit of generosity the Son of Heaven remitted these to Kinko with the remittal of his sentence.

I decline to depict the joy, the happiness, the intoxication which this news brought by Kinko in person, gave to all his friends, and particularly to the fair Zinca Klork. These things are expressible in no language—not even in Chinese, which lends itself so generously to the metaphorical.

And now my readers must permit me to finish with my traveling companions whose numbers have figured in my notebook.

Nos. 1 and 2, Fulk Ephrinell and Miss Horatia Bluett: not being able to agree regarding the various items stipulated in their matrimonial contract, they were divorced three days after their arrival in Pekin. Things were as though the marriage had never been celebrated on the Grand Transasiatic, and Miss Horatia Bluett remained Miss Horatia Bluett. May she gather cargoes of heads of hair from Chinese polls; and may he furnish with artificial teeth every jaw in the Celestial Empire!

No. 3, Major Noltitz: he is busy at the hospital he has come to establish at Pekin on behalf of the Russian government, and when the hour for separation strikes, I feel that I shall leave a true friend behind me in these distant lands.

Nos. 4 and 5, the Caternas: after a stay of three weeks in the capital of the Celestial Empire, the charming actor and actress set out for Shanghai, where they are now the great attraction at the French Residency.

No. 6, Baron Weisschnitzerdörfer, whose incommensurable name I write for the last time: well, not only did the globe-trotter miss the steamer at Tien-Tsin, but a month later he missed it at Yokohama; six weeks after that he was shipwrecked on the coast of British Columbia, and then, after being thrown off the line between San Francisco and New York, he managed to complete his round of the world in a hundred and eighty-seven days instead of thirty-nine.

Nos. 9 and 10, Pan-Chao and Dr. Tio-King: what can I say except that Pan-Chao is always the Parisian you know, and that if he comes to France we shall meet at dinner at Durand's or Marguery's. As to the doctor, he has got down to eating only the yolk of an egg a day, like his master, Cornaro, and he hopes to live to a hundred and two as did the noble Venetian.

No. 8, Sir Francis Trevellyan, and No. 12, Seigneur Faruskiar: I have never heard of the one who owes me an apology and a cigar, nor have I heard that the other has been hanged. Doubtless, the illustrious bandit, having sent in his resignation of the general managership of the Grand Transasiatic, continues his lucrative career in the depths of the Mongol provinces.

Now for Kinko, my No. 11: I need hardly say that my No. 11 was married to Zinca Klork with great ceremony. We were all at the wedding, and if the Son of Heaven had richly endowed the young Roumanian, his wife received a magnificent present in the name of the passengers of the train he had saved.

That is the faithful story of this journey. I have done my best to do my duty as special correspondent all down
the line, and perhaps my editors may be satisfied, notwithstanding the slip or two you have heard about.

As to me, after spending three weeks in Pekin, I returned to France by sea.

And now I have to make a confession, which is very painful to my self-esteem. The morning after I arrived in the Chinese capital I received a telegram thus worded, in reply to the one I had sent from Lan-Tcheou:

Claudius Bombarnac, Pekin, China.

Twentieth Century requests its correspondent, Claudius Bombarnac, to present its compliments and respects to the heroic Seigneur Faruskiar.

But I always say that this telegram never reached him, so that he has been spared the unpleasantness of having to reply to it.

THE END.

The Blockade Runners
by Jules Verne

Chapter I

THE DOLPHIN

The Clyde was the first river whose waters were lashed into foam by a steam-boat. It was in 1812 when the steamer called the Comet ran between Glasgow and Greenock, at the speed of six miles an hour. Since that time more than a million of steamers or packet-boats have plied this Scotch river, and the inhabitants of Glasgow must be as familiar as any people with the wonders of steam navigation.

However, on the 3rd of December, 1862, an immense crowd, composed of shipowners, merchants, manufacturers, workmen, sailors, women, and children, thronged the muddy streets of Glasgow, all going in the direction of Kelvin Dock, the large shipbuilding premises belonging to Messrs. Tod & MacGregor. This last name especially proves that the descendants of the famous Highlanders have become manufacturers, and that they have made workmen of all the vassals of the old clan chieftains.

Kelvin Dock is situated a few minutes’ walk from the town, on the right bank of the Clyde. Soon the immense timber-yards were thronged with spectators; not a part of the quay, not a wall of the wharf, not a factory roof showed an unoccupied place; the river itself was covered with craft of all descriptions, and the heights of Govan, on the left bank, swarmed with spectators.

There was, however, nothing extraordinary in the event about to take place; it was nothing but the launching of a ship, and this was an everyday affair with the people of Glasgow. Had the Dolphin, then — for that was the name of the ship built by Messrs. Tod & MacGregor — some special peculiarity? To tell the truth, it had none.

It was a large ship, about 1,500 tons, in which everything combined to obtain superior speed. Her engines, of 500 horse-power, were from the workshops of Lancefield Forge; they worked two screws, one on either side the stern-post, completely independent of each other. As for the depth of water the Dolphin would draw, it must be very inconsiderable; connoisseurs were not deceived, and they concluded rightly that this ship was destined for shallow straits. But all these particulars could not in any way justify the eagerness of the people: taken altogether, the Dolphin was nothing more or less than an ordinary ship. Would her launching present some mechanical difficulty to be overcome? Not any more than usual. The Clyde had received many a ship of heavier tonnage, and the launching of the Dolphin would take place in the usual manner.

In fact, when the water was calm, the moment the ebb-tide set in, the workmen began to operate. Their mallets kept perfect time falling on the wedges meant to raise the ship’s keel: soon a shudder ran through the whole of her massive structure; although she had only been slightly raised, one could see that she shook, and then gradually began to glide down the well greased wedges, and in a few moments she plunged into the Clyde. Her stern struck the muddy bed of the river, then she raised herself on the top of a gigantic wave, and, carried forward by her start, would have been dashed against the quay of the Govan timber-yards, if her anchors had not restrained her.

The launch had been perfectly successful, the Dolphin swayed quietly on the waters of the Clyde, all the spectators clapped their hands when she took possession of her natural element, and loud hurrahs arose from either bank.

But wherefore these cries and this applause? Undoubtedly the most eager of the spectators would have been at a loss to explain the reason of his enthusiasm. What was the cause, then, of the lively interest excited by this ship? Simply the mystery which shrouded her destination; it was not known to what kind of commerce she was to be appropriated, and in questioning different groups the diversity of opinion on this important subject was indeed
astonishing.

However, the best informed, at least those who pretended to be so, agreed in saying that the steamer was going to take part in the terrible war which was then ravaging the United States of America, but more than this they did not know, and whether the Dolphin was a privateer, a transport ship, or an addition to the Federal marine was what no one could tell.

"Hurrah!" cried one, affirming that the Dolphin had been built for the Southern States.
"Hip! hip! hip!" cried another, swearing that never had a faster boat crossed to the American coasts.

Thus its destination was unknown, and in order to obtain any reliable information one must be an intimate friend, or, at any rate, an acquaintance of Vincent Playfair & Co., of Glasgow.

A rich, powerful, intelligent house of business was that of Vincent Playfair & Co., in a social sense, an old and honourable family, descended from those tobacco lords who built the finest quarters of the town. These clever merchants, by an act of the Union, had founded the first Glasgow warehouse for dealing in tobacco from Virginia and Maryland. Immense fortunes were realised; mills and foundries sprang up in all parts, and in a few years the prosperity of the city attained its height.

The house of Playfair remained faithful to the enterprising spirit of its ancestors, it entered into the most daring schemes, and maintained the honour of English commerce. The principal, Vincent Playfair, a man of fifty, with a temperament essentially practical and decided, although somewhat daring, was a genuine shipowner. Nothing affected him beyond commercial questions, not even the political side of the transactions, otherwise he was a perfectly loyal and honest man.

However, he could not lay claim to the idea of building and fitting up the Dolphin; she belonged to his nephew, James Playfair, a fine young man of thirty, the boldest skipper of the British merchant marine.

It was one day at the Tontine coffee-room under the arcades of the town hall, that James Playfair, after having impatiently scanned the American journal, disclosed to his uncle an adventurous scheme.

"Uncle Vincent," said he, coming to the point at once, "there are two millions of pounds to be gained in less than a month."

"And what to risk?" asked Uncle Vincent.
"A ship and a cargo."
"Nothing else?"
"Nothing, except the crew and the captain, and that does not reckon for much."
"Let us see," said Uncle Vincent.
"It is all seen," replied James Playfair. "You have read the Tribune, the New York Herald, The Times, the Richmond Inquirer, the American Review?"

"Scores of times, nephew."
"You believe, like me, that the war of the United States will last a long time still?"
"A very long time."
"You know how much this struggle will affect the interests of England, and especially those of Glasgow?"
"And more especially still the house of Playfair & Co.," replied Uncle Vincent.
"Theirs especially," added the young Captain.
"I worry myself about it every day, James, and I cannot think without terror of the commercial disasters which this war may produce; not but that the house of Playfair is firmly established, nephew; at the same time it has correspondents which may fail. Ah! those Americans, slave-holders or Abolitionists, I have no faith in them!"

If Vincent Playfair was wrong in thus speaking with respect to the great principles of humanity, always and everywhere superior to personal interests, he was, nevertheless, right from a commercial point of view. The most important material was failing at Glasgow, the cotton famine became every day more threatening, thousands of workmen were reduced to living upon public charity. Glasgow possessed 25,000 looms, by which 625,000 yards of cotton were spun daily; that is to say, fifty millions of pounds yearly. From these numbers it may be guessed what disturbances were caused in the commercial part of the town when the raw material failed altogether. Failures were hourly taking place, the manufactories were closed, and the workmen were dying of starvation.

It was the sight of this great misery which had put the idea of his bold enterprise into James Playfair’s head.

"I will go for cotton, and will get it, cost what it may."

But, as he also was a merchant as well as his uncle Vincent, he resolved to carry out his plan by way of exchange, and to make his proposition under the guise of a commercial enterprise.

"Uncle Vincent," said he, "this is my idea."
"Well, James?"
"It is simply this: we will have a ship built of superior sailing qualities and great bulk."
"That is quite possible."
"We will load her with ammunition of war, provisions, and clothes."
"Just so."
"I will take the command of this steamer, I will defy all the ships of the Federal marine for speed, and I will run the blockade of one of the southern ports."
"You must make a good bargain for your cargo with the Confederates, who will be in need of it," said his uncle.
"And I shall return laden with cotton."
"Which they will give you for nothing."
"As you say, Uncle. Will it answer?"
"It will; but shall you be able to get there?"
"I shall, if I have a good ship."
"One can be made on purpose. But the crew?"
"Oh, I will find them. I do not want many men; enough to work with, that is all. It is not a question of fighting with the Federals, but distancing them."
"They shall be distanced," said Uncle Vincent, in a peremptory tone; "but now, tell me, James, to what port of the American coast do you think of going?"
"Up to now, Uncle, ships have run the blockade of New Orleans, Wilmington, and Savannah, but I think of going straight to Charleston; no English boat has yet been able to penetrate into the harbour, except the Bermuda. I will do like her, and, if my ship draws but very little water, I shall be able to go where the Federalists will not be able to follow."
"The fact is," said Uncle Vincent, "Charleston is overwhelmed with cotton; they are even burning it to get rid of it."
"Yes," replied James; "besides, the town is almost invested; Beauregard is running short of provisions, and he will pay me a golden price for my cargo!"
"Well, nephew, and when will you start?"
"In six months; I must have the long winter nights to aid me."
"It shall be as you wish, nephew."
"It is settled, then, Uncle?"
"Settled!"
"Shall it be kept quiet?"
"Yes; better so."

And this is how it was that five months later the steamer Dolphin was launched from the Kelvin Dock timber-yards, and no one knew her real destination.

Chapter II
GETTING UNDER SAIL

The Dolphin was rapidly equipped, her rigging was ready, and there was nothing to do but fit her up. She carried three schooner-masts, an almost useless luxury; in fact, the Dolphin did not rely on the wind to escape the Federalists, but rather on her powerful engines.

Towards the end of December a trial of the steamer was made in the gulf of the Clyde. Which was the more satisfied, builder or captain, it is impossible to say. The new steamer shot along wonderfully, and the patent log showed a speed of seventeen miles an hour, a speed which as yet no English, French, or American boat had ever obtained. The Dolphin would certainly have gained by several lengths in a sailing match with the fastest opponent.

The loading was begun on the 25th of December, the steamer having ranged along the steamboat-quay a little below Glasgow Bridge, the last which stretches across the Clyde before its mouth. Here the wharfs were heaped with a heavy cargo of clothes, ammunition, and provisions which were rapidly carried to the hold of the Dolphin. The nature of this cargo betrayed the mysterious destination of the ship, and the house of Playfair could no longer keep it secret; besides, the Dolphin must not be long before she started. No American cruiser had been signalled in English waters; and, then, when the question of getting the crew came, how was it possible to keep silent any longer? They could not embark them, even, without informing the men whither they were bound, for, after all, it was a matter of life and death, and when one risks one's life, at least it is satisfactory to know how and wherefore.

However, this prospect hindered no one; the pay was good, and everyone had a share in the speculation, so that a great number of the finest sailors soon presented themselves. James Playfair was only embarrassed which to choose, but he chose well, and in twenty-four hours his muster-roll bore the names of thirty sailors who would have done honour to her Majesty's yacht.

The departure was settled for the 3rd of January; on the 31st of December the Dolphin was ready, her hold full of ammunition and provisions, and nothing was keeping her now.

The skipper went on board on the 2nd of January, and was giving a last look round his ship with a captain's eye,
when a man presented himself at the fore part of the Dolphin, and asked to speak with the Captain. One of the
sailors led him on to the poop.

He was a strong, hearty-looking fellow, with broad shoulders and ruddy face, the simple expression of which ill-
concealed a depth of wit and mirth. He did not seem to be accustomed to a seafaring life, and looked about him with
the air of a man little used to being on board a ship; however, he assumed the manner of a Jack-tar, looking up at the
rigging of the Dolphin, and waddling in true sailor fashion.

When he had reached the Captain, he looked fixedly at him, and said, "Captain James Playfair?"

"The same," replied the skipper. "What do you want with me?"

"To join your ship."

"There is no room; the crew is already complete."

"Oh, one man, more or less, will not be in the way; quite the contrary."

"You think so?" said James Playfair, giving a sidelong glance at his questioner.

"I am sure of it," replied the sailor.

"But who are you?" asked the Captain.

"A rough sailor, with two strong arms, which, I can tell you, are not to be despised on board a ship, and which I
now have the honour of putting at your service."

"But there are other ships besides the Dolphin, and other captains besides James Playfair. Why do you come
here?"

"Because it is on board the Dolphin that I wish to serve, and under the orders of Captain James Playfair."

"I do not want you."

"There is always need of a strong man, and if to prove my strength you will try me with three or four of the
strongest fellows of your crew, I am ready."

"That will do," replied James Playfair. "And what is your name?"

"Crockston, at your service."

The Captain made a few steps backwards in order to get a better view of the giant who presented himself in this
odd fashion. The height, the build, and the look of the sailor did not deny his pretensions to strength.

"Where have you sailed?" asked Playfair of him.

"A little everywhere."

"And do you know where the Dolphin is bound for?"

"Yes; and that is what tempts me."

"Ah, well! I have no mind to let a fellow of your stamp escape me. Go and find the first mate, and get him to
enrol you."

Having said this, the Captain expected to see the man turn on his heels and run to the bows, but he was mistaken.
Crockston did not stir.

"Well! did you hear me?" asked the Captain.

"Yes, but it is not all," replied the sailor. "I have something else to ask you."

"Ah! You are wasting my time," replied James, sharply; "I have not a moment to lose in talking."

"I shall not keep you long," replied Crockston; "two words more and that is all; I was going to tell you that I
have a nephew."

"He has a fine uncle, then," interrupted James Playfair.

"Hah! Hah!" laughed Crockston.

"Have you finished?" asked the Captain, very impatiently.

"Well, this is what I have to say, when one takes the uncle, the nephew comes into the bargain."

"Ah! indeed!"

"Yes, that is the custom, the one does not go without the other."

"And what is this nephew of yours?"

"A lad of fifteen whom I am going to train to the sea; he is willing to learn, and will make a fine sailor some
day."

"How now, Master Crockston," cried James Playfair; "do you think the Dolphin is a training-school for cabin-
boys?"

"Don't let us speak ill of cabin-boys: there was one of them who became Admiral Nelson, and another Admiral
Franklin."

"Upon my honour, friend," replied James Playfair, "you have a way of speaking which I like; bring your
nephew, but if I don't find the uncle the hearty fellow he pretends to be, he will have some business with me. Go,
and be back in an hour."

Crockston did not want to be told twice; he bowed awkwardly to the Captain of the Dolphin, and went on to the
quay. An hour afterwards he came on board with his nephew, a boy of fourteen or fifteen, rather delicate and weakly looking, with a timid and astonished air, which showed that he did not possess his uncle’s self-possession and vigorous corporeal qualities. Crockston was even obliged to encourage him by such words as these:

"Come," said he, "don’t be frightened, they are not going to eat us, besides, there is yet time to return."

"No, no," replied the young man, "and may God protect us!"

The same day the sailor Crockston and his nephew were inscribed in the muster-roll of the Dolphin.

The next morning, at five o’clock, the fires of the steamer were well fed, the deck trembled under the vibrations of the boiler, and the steam rushed hissing through the escape-pipes. The hour of departure had arrived.

A considerable crowd, in spite of the early hour, flocked on the quays and on Glasgow Bridge; they had come to salute the bold steamer for the last time. Vincent Playfair was there to say good-bye to Captain James, but he conducted himself on this occasion like a Roman of the good old times. His was a heroic countenance, and the two loud kisses with which he gratified his nephew were the indication of a strong mind.

"Go, James," said he to the young Captain, "go quickly, and come back quicker still; above all, don’t abuse your position. Sell at a good price, make a good bargain, and you will have your uncle’s esteem."

On this recommendation, borrowed from the manual of the perfect merchant, the uncle and nephew separated, and all the visitors left the boat.

At this moment Crockston and John Stiggs stood together on the forecastle, while the former remarked to his nephew, "This is well, this is well; before two o’clock we shall be at sea, and I have a good opinion of a voyage which begins like this."

For reply the novice pressed Crockston’s hand.

James Playfair then gave the orders for departure.

"Have we pressure on?" he asked of his mate.

"Yes, Captain," replied Mr. Mathew.

"Well, then, weigh anchor."

This was immediately done, and the screws began to move. The Dolphin trembled, passed between the ships in the port, and soon disappeared from the sight of the people, who shouted their last hurrâhs.

The descent of the Clyde was easily accomplished, one might almost say that this river had been made by the hand of man, and even by the hand of a master. For sixty years, thanks to the dredges and constant dragging, it has gained fifteen feet in depth, and its breadth has been tripled between the quays and the town. Soon the forests of masts and chimneys were lost in the smoke and fog; the noise of the foundry hammers and the hatchets of the timber-yards grew fainter in the distance. After the village of Partick had been passed the factories gave way to country houses and villas. The Dolphin, slackening her speed, sailed between the dykes which carry the river above the shores, and often through a very narrow channel, which, however, is only a small inconvenience for a navigable river, for, after all, depth is of more importance than width. The steamer, guided by one of those excellent pilots from the Irish sea, passed without hesitation between floating buoys, stone columns, and biggings, surmounted with lighthouses, which mark the entrance to the channel. Beyond the town of Renfrew, at the foot of Kilpatrick hills, the Clyde grew wider. Then came Bouling Bay, at the end of which opens the mouth of the canal which joins Edinburgh to Glasgow. Lastly, at the height of four hundred feet from the ground, was seen the outline of Dumbarton Castle, almost indiscernible through the mists, and soon the harbour-boats of Glasgow were rocked on the waves which the Dolphin caused. Some miles farther on Greenock, the birthplace of James Watt, was passed: the Dolphin now found herself at the mouth of the Clyde, and at the entrance of the gulf by which it empties its waters into the Northern Ocean. Here the first undulations of the sea were felt, and the steamer ranged along the picturesque coast of the Isle of Arran. At last the promontory of Cantyre, which runs out into the channel, was doubled; the Isle of Rattelin was hailed, the pilot returned by a shore-boat to his cutter, which was cruising in the open sea; the Dolphin, returning to her Captain’s authority, took a less frequented route round the north of Ireland, and soon, having lost sight of the last European land, found herself in the open ocean.

Chapter III

THINGS ARE NOT WHAT THEY SEEM

The Dolphin had a good crew, not fighting men, or boarding sailors, but good working men, and that was all she wanted. These brave, determined fellows were all, more or less, merchants; they sought a fortune rather than glory; they had no flag to display, no colours to defend with cannon; in fact, all the artillery on board consisted of two small swivel signal-guns.

The Dolphin shot bravely across the water, and fulfilled the utmost expectations of both builder and captain. Soon she passed the limit of British seas; there was not a ship in sight; the great ocean route was free; besides, no ship of the Federal marine would have a right to attack her beneath the English flag. Followed she might be, and prevented from forcing the blockade, and precisely for this reason had James Playfair sacrificed everything to the
speed of his ship, in order not to be pursued.

Howbeit a careful watch was kept on board, and, in spite of the extreme cold, a man was always in the rigging ready to signal the smallest sail that appeared on the horizon. When evening came, Captain James gave the most precise orders to Mr. Mathew.

"Don't leave the man on watch too long in the rigging; the cold may seize him, and in that case it is impossible to keep a good look-out; change your men often."

"I understand, Captain," replied Mr. Mathew.

"Try Crockston for that work; the fellow pretends to have excellent sight; it must be put to trial; put him on the morning watch, he will have the morning mists to see through. If anything particular happens call me."

This said, James Playfair went to his cabin. Mr. Mathew called Crockston, and told him the Captain's orders.

"To-morrow, at six o'clock," said he, "you are to relieve watch of the main masthead."

For reply, Crockston gave a decided grunt, but Mr. Mathew had hardly turned his back when the sailor muttered some incomprehensible words, and then cried:

"What on earth did he say about the mainmast?"

At this moment his nephew, John Stiggs, joined him on the forecastle.

"Well, my good Crockston," said he.

"It's all right, all right," said the seaman, with a forced smile; "there is only one thing, this wretched boat shakes herself like a dog coming out of the water, and it makes my head confused."

"Dear Crockston, and it is for my sake."

"For you and him," replied Crockston, "but not a word about that, John. Trust in God, and He will not forsake you."

So saying, John Stiggs and Crockston went to the sailor's berth, but the sailor did not lie down before he had seen the young novice comfortably settled in the narrow cabin which he had got for him.

The next day, at six o'clock in the morning, Crockston got up to go to his place; he went on deck, where the first officer ordered him to go up into the rigging, and keep good watch.

At these words the sailor seemed undecided what to do; then, making up his mind, he went towards the bows of the Dolphin.

"Yes," replied Mr. Mathew, impatiently; "you are looking for the bars of the main on the foremast. You are like a cockney, who doesn't know how to twist a cat-o'-nine-tails, or make a splice. On board what ship can you have been, man? The mainmast, stupid, the mainmast!"

The sailors who had run up to hear what was going on burst out laughing when they saw Crockston's disconcerted look, as he went back to the forecastle.

"So," said he, looking up the mast, the top of which was quite invisible through the morning mists; "so, am I to climb up here?"

"Well, where are you off to now?" cried Mr. Mathew.

"Where you sent me," answered Crockston.

"I told you to go to the mainmast."

"And I am going there," replied the sailor, in an unconcerned tone, continuing his way to the poop.

"Are you a fool?" cried Mr. Mathew, impatiently; "you are looking for the bars of the main on the foremost. You are like a cockney, who doesn't know how to twist a cat-o'-nine-tails, or make a splice. On board what ship can you have been, man? The mainmast, stupid, the mainmast!"

The sailors who had run up to hear what was going on burst out laughing when they saw Crockston's disconcerted look, as he went back to the forecastle.

"So," said he, looking up the mast, the top of which was quite invisible through the morning mists; "so, am I to climb up here?"

"Yes," replied Mr. Mathew, "and hurry yourself! By St. Patrick, a Federal ship would have time to get her bowsprit fast in our rigging before that lazy fellow could get to his post. Will you go up?"

Without a word, Crockston got on the bulwarks with some difficulty; then he began to climb the rigging with most visible awkwardness, like a man who did not know how to make use of his hands or feet. When he had reached the topgallant, instead of springing lightly on to it, he remained motionless, clinging to the ropes, as if he had been seized with giddiness. Mr. Mathew, irritated by his stupidity, ordered him to come down immediately.

"That fellow there," said he to the boatswain, "has never been a sailor in his life. Johnston, just go and see what he has in his bundle."

The boatswain made haste to the sailor's berth.

In the meantime Crockston was with difficulty coming down again, but, his foot having slipped, he slid down the rope he had hold of, and fell heavily on the deck.

"Clumsy blockhead! land-lubber!" cried Mr. Mathew, by way of consolation. "What did you come to do on board the Dolphin! Ah! you entered as an able seaman, and you cannot even distinguish the main from the foremost! I shall have a little talk with you."

Crockston made no attempt to speak; he bent his back like a man resigned to anything he might have to bear; just then the boatswain returned.

"This," said he to the first officer, "is all that I have found; a suspicious portfolio with letters."

"Give them here," said Mr. Mathew. "Letters with Federal stamps! Mr. Halliburtt, of Boston! An Abolitionist! a
Federalist! Wretch! you are nothing but a traitor, and have sneaked on board to betray us! Never mind, you will be paid for your trouble with the cat-o'-nine-tails! Boatswain, call the Captain, and you others just keep an eye on that rogue there."

Crockston received these compliments with a hideous grimace, but he did not open his lips. They had fastened him to the capstan, and he could move neither hand nor foot.

A few minutes later James Playfair came out of his cabin and went to the forecastle, where Mr. Mathew immediately acquainted him with the details of the case.

"What have you to say?" asked James Playfair, scarcely able to restrain his anger.

"Nothing," replied Crockston.

"And what did you come on board my ship for?"

"Nothing."

"And what do you expect from me now?"

"Nothing."

"Who are you? An American, as letters seem to prove?" Crockston did not answer.

"Boatswain," said James Playfair, "fifty lashes with the cat-o'-nine-tails to loosen his tongue. Will that be enough, Crockston?"

"It will remain to be seen," replied John Stiggs’ uncle without moving a muscle.

"Now then, come along, men," said the boatswain.

At this order, two strong sailors stripped Crockston of his woollen jersey; they had already seized the formidable weapon, and laid it across the prisoner’s shoulders, when the novice, John Stiggs, pale and agitated, hurried on deck.

"Captain!" exclaimed he.

"Ah! the nephew!" remarked James Playfair.

"Captain," repeated the novice, with a violent effort to steady his voice, "I will tell you what Crockston does not want to say. I will hide it no longer; yes, he is American, and so am I; we are both enemies of the slave-holders, but not traitors come on board to betray the Dolphin into the hands of the Federalists."

"What did you come to do, then?" asked the Captain, in a severe tone, examining the novice attentively. The latter hesitated a few seconds before replying, then he said, "Captain, I should like to speak to you in private."

Whilst John Stiggs made this request, James Playfair did not cease to look carefully at him; the sweet young face of the novice, his peculiarly gentle voice, the delicacy and whiteness of his hands, hardly disguised by paint, the large eyes, the animation of which could not bide their tenderness — all this together gave rise to a certain suspicion in the Captain’s mind. When John Stiggs had made his request, Playfair glanced fixedly at Crockston, who shrugged his shoulders; then he fastened a questioning look on the novice, which the latter could not withstand, and said simply to him, "Come."

John Stiggs followed the Captain on to the poop, and then James Playfair, opening the door of his cabin, said to the novice, whose cheeks were pale with emotion, "Be so kind as to walk in, miss."

John, thus addressed, blushed violently, and two tears rolled involuntarily down his cheeks.

"Don’t be alarmed, miss," said James Playfair, in a gentle voice, "but be so good as to tell me how I come to have the honour of having you on board?"

The young girl hesitated a moment, then, reassured by the Captain’s look, she made up her mind to speak.

"Sir," said she, "I wanted to join my father at Charleston; the town is besieged by land and blockaded by sea. I knew not how to get there, when I heard that the Dolphin meant to force the blockade. I came on board your ship, and I beg you to forgive me if I acted without your consent, which you would have refused me."

"Certainly," said James Playfair.

"I did well, then, not to ask you," resumed the young girl, with a firmer voice.

The Captain crossed his arms, walked round his cabin, and then came back.

"What is your name?" said he.

"Jenny Halliburtt."

"Your father, if I remember rightly the address on the letters, is he not from Boston?"

"Yes, sir."

"And a Northerner is thus in a southern town in the thickest of the war?"

"My father is a prisoner; he was at Charleston when the first shot of the Civil War was fired, and the troops of the Union driven from Fort Sumter by the Confederates. My father’s opinions exposed him to the hatred of the slavist part, and by the order of General Beauregard he was imprisoned. I was then in England, living with a relation who has just died, and left alone, with no help but that of Crockston, our faithful servant, I wished to go to my father and share his prison with him."

"What was Mr. Halliburtt, then?" asked James Playfair.
"A loyal and brave journalist," replied Jenny proudly, one of the noblest editors of the Tribune, and the one who was the boldest in defending the cause of the negroes."

"An Abolitionist," cried the Captain angrily; "one of those men who, under the vain pretence of abolishing slavery, have deluged their country with blood and ruin."

"Sir!" replied Jenny Halliburtt, growing pale, "you are insulting my father; you must not forget that I stand alone to defend him."

The young Captain blushed scarlet; anger mingled with shame struggled in his breast; perhaps he would have answered the young girl, but he succeeded in restraining himself, and, opening the door of the cabin, he called "Boatswain!"

The boatswain came to him directly.

"This cabin will henceforward belong to Miss Jenny Halliburtt. Have a cot made ready for me at the end of the poop; that's all I want."

The boatswain looked with a stupefied stare at the young novice addressed in a feminine name, but on a sign from James Playfair he went out.

"And now, miss, you are at home," said the young Captain of the Dolphin. Then he retired.

Chapter IV

CROCKSTON'S TRICK

It was not long before the whole crew knew Miss Halliburtt's story, which Crockston was no longer hindered from telling. By the Captain's orders he was released from the capstan, and the cat-o'-nine-tails returned to its Place.

"A pretty animal," said Crockston, "especially when it shows its velvety paws."

As soon as he was free, he went down to the sailors' berths, found a small portmanteau, and carried it to Miss Jenny; the young girl was now able to resume her feminine attire, but she remained in her cabin, and did not again appear on deck.

As for Crockston, it was well and duly agreed that, as he was no more a sailor than a horse-guard, he should be exempt from all duty on board.

In the meanwhile the Dolphin, with her twin screws cutting the waves, sped rapidly across the Atlantic, and there was nothing now to do but keep a strict look-out. The day following the discovery of Miss Jenny's identity, James Playfair paced the deck at the poop with a rapid step; he had made no attempt to see the young girl and resume the conversation of the day before.

Whilst he was walking to and fro, Crockston passed him several times, looking at him askant with a satisfied grin. He evidently wanted to speak to the Captain, and at last his persistent manner attracted the attention of the latter, who said to him, somewhat impatiently:

"How now, what do you want? You are turning round me like a swimmer round a buoy: when are you going to leave off?"

"Excuse me, Captain," answered Crockston, winking, "I wanted to speak to you."

"Speak, then."

"Oh, it is nothing very much. I only wanted to tell you frankly that you are a good fellow at bottom."

"Why at bottom?"

"At bottom and surface also."

"I don't want your compliments."

"I am not complimenting you. I shall wait to do that when you have gone to the end."

"To what end?"

"To the end of your task."

"Ah! I have a task to fulfil?"

"Decidedly, you have taken the young girl and myself on board; good! You have given up your cabin to Miss Halliburtt; good! You released me from the cat-o'-nine-tails; nothing could be better. You are going to take us straight to Charleston; that's delightful, but it is not all."

"How not all?" cried James Playfair, amazed at Crockston's boldness.

"No, certainly not," replied the latter, with a knowing look, "the father is prisoner there."

"Well, what about that?"

"Well, the father must be rescued."

"Rescue Miss Halliburtt's father?"

"Most certainly, and it is worth risking something for such a noble man and courageous citizen as he."

"Master Crockston," said James Playfair, frowning, "I am not in the humour for your jokes, so have a care what you say."

"You misunderstand me, Captain," said the American. "I am not joking in the least, but speaking quite seriously.
What I have proposed may at first seem very absurd to you; when you have thought it over, you will see that you cannot do otherwise."

"What, do you mean that I must deliver Mr. Halliburtt?"

"Just so. You can demand his release of General Beauregard, who will not refuse you."

"But if he does refuse me?"

"In that case," replied Crockston, in a deliberate tone, "we must use stronger measures, and carry off the prisoner by force."

"So," cried James Playfair, who was beginning to get angry, "so, not content with passing through the Federal fleets and forcing the blockade of Charleston, I must run out to sea again from under the cannon of the forts, and this to deliver a gentleman I know nothing of, one of those Abolitionists whom I detest, one of those journalists who shed ink instead of their blood!"

"Oh, it is but a cannon-shot more or less!" added Crockston.

"Master Crockston," said James Playfair, "mind what I say: if ever you mention this affair again to me, I will send you to the hold for the rest of the passage, to teach you manners."

Thus saying, the Captain dismissed the American, who went off murmuring, "Ah, well, I am not altogether displeased with this conversation: at any rate, the affair is broached; it will do, it will do!"

James Playfair had hardly meant it when he said an Abolitionist whom I detest; he did not in the least side with the Federals, but he did not wish to admit that the question of slavery was the predominant reason for the civil war of the United States, in spite of President Lincoln’s formal declaration. Did he, then, think that the Southern States, eight out of thirty-six, were right in separating when they had been voluntarily united? Not so; he detested the Northerners, and that was all; he detested them as brothers separated from the common family — true Englishmen — who had thought it right to do what he, James Playfair, disapproved of with regard to the United States: these were the political opinions of the Captain of the Dolphin. But, more than this, the American war interfered with him personally, and he had a grudge against those who had caused this war; one can understand, then, how he would receive a proposition to deliver an Abolitionist, thus bringing down on him the Confederates, with whom he pretended to do business.

However, Crockston’s insinuation did not fail to disturb him; he cast the thought from him, but it returned unceasingly to his mind, and when Miss Jenny came on deck the next day for a few minutes, he dared not look her in the face.

And really it was a great pity, for this young girl, with the fair hair and sweet, intelligent face, deserved to be looked at by a young man of thirty. But James felt embarrassed in her presence; he felt that this charming creature who had been educated in the school of misfortune possessed a strong and generous soul; he understood that his silence towards her inferred a refusal to acquiesce in her dearest wishes; besides, Miss Jenny never looked out for James Playfair, neither did she avoid him. Thus for the first few days they spoke little or not at all to each other. Miss Halliburtt scarcely ever left her cabin, and it is certain she would never have addressed herself to the Captain of the Dolphin if it had not been for Crockston’s strategy, which brought both parties together.

The worthy American was a faithful servant of the Halliburtt family; he had been brought up in his master’s house, and his devotion knew no bounds. His good sense equalled his courage and energy, and, as has been seen, he had a way of looking things straight in the face. He was very seldom discouraged, and could generally find a way out of the most intricate dangers with a wonderful skill.

This honest fellow had taken it into his head to deliver Mr. Halliburtt, to employ the Captain’s ship, and the Captain himself for this purpose, and to return with him to England. Such was his intention, so long as the young girl had no other object than to rejoin her father and share his captivity. It was this Crockston tried to make the Captain understand, as we have seen, but the enemy had not yet surrendered; on the contrary.

"Now," said he, "it is absolutely necessary that Miss Jenny and the Captain come to an understanding; if they are going to be sulky like this all the passage we shall get nothing done. They must speak, discuss; let them dispute even, so long as they talk, and I’ll be hanged if during their conversation James Playfair does not propose himself what he refused me to-day."

But when Crockston saw that the young girl and the young man avoided each other, he began to be perplexed.

"We must look sharp," said he to himself, and the morning of the fourth day he entered Miss Halliburtt’s cabin, rubbing his hands with an air of perfect satisfaction.

"Good news!" cried he, "good news! You will never guess what the Captain has proposed to me. A very noble young man he is. Now try."

"Ah!" replied Jenny, whose heart beat violently, "has he proposed to—"

"To deliver Mr. Halliburtt, to carry him off from the Confederates, and bring him to England."

"Is it true?" cried Jenny.
"It is as I say, miss. What a good-hearted man this James Playfair is! These English are either all good or all bad. Ah! he may reckon on my gratitude, and I am ready to cut myself in pieces if it would please him."

Jenny’s joy was profound on hearing Crockston’s words. Deliver her father! She had never dared to think of such a plan, and the Captain of the Dolphin was going to risk his ship and crew!

"That’s what he is," added Crockston; "and this, Miss Jenny, is well worth an acknowledgment from you."

"More than an acknowledgment," cried the young girl; "a lasting friendship!"

And immediately she left the cabin to find James Playfair, and express to him the sentiments which flowed from her heart.

"Getting on by degrees," muttered the American.

James Playfair was pacing to and fro on the poop, and, as may be thought, he was very much surprised, not to say amazed, to see the young girl come up to him, her eyes moist with grateful tears, and, holding out her hand to him, saying:

"Thank you, sir, thank you for your kindness, which I should never have dared to expect from a stranger."

"Miss," replied the Captain, as if he understood nothing of what she was talking, and could not understand, "I do not know — "

"Nevertheless, sir, you are going to brave many dangers, perhaps compromise your interests for me, and you have done so much already in offering me on board an hospitality to which I have no right whatever — "

"Pardon me, Miss Jenny," interrupted James Playfair, "but I protest again I do not understand your words. I have acted towards you as any well-bred man would towards a lady, and my conduct deserves neither so many thanks nor so much gratitude."

"Mr. Playfair," said Jenny, "it is useless to pretend any longer; Crockston has told me all!"

"Ah!" said the Captain, "Crockston has told you all; then I understand less than ever the reason for your leaving your cabin, and saying these words which — "

Whilst speaking the Captain felt very much embarrassed; he remembered the rough way in which he had received the American’s overtures, but Jenny, fortunately for him, did not give him time for further explanation; she interrupted him, holding out her hand and saying:

"Mr. James, I had no other object in coming on board your ship except to go to Charleston, and there, however cruel the slave-holders may be, they will not refuse to let a poor girl share her father’s prison; that was all. I had never thought of a return as possible; but, since you are so generous as to wish for my father’s deliverance, since you will attempt everything to save him, be assured you have my deepest gratitude."

James did not know what to do or what part to assume; he bit his lip; he dared not take the hand offered him; he saw perfectly that Crockston had compromised him, so that escape was impossible. At the same time he had no thoughts of delivering Mr. Halliburtt, and getting complicated in a disagreeable business: but how dash to the ground the hope which had arisen in this poor girl’s heart? How refuse the hand which she held out to him with a feeling of such profound friendship? How change to tears of grief the tears of gratitude which filled her eyes?

So the young man tried to reply evasively, in a manner which would ensure his liberty of action for the future.

"Miss Jenny," said he, "rest assured I will do everything in my power for — "

And he took the little hand in both of his, but with the gentle pressure he felt his heart melt and his head grow confused: words to express his thoughts failed him. He stammered out some incoherent words:

"Miss — Miss Jenny — for you — "

Crockston, who was watching him, rubbed his hands, grinning and repeating to himself:

"It will come! it will come! it has come!"

How James Playfair would have managed to extricate himself from his embarrassing position no one knows, but fortunately for him, if not for the Dolphin, the man on watch was heard crying:

"Ahoy, officer of the watch!"

"What now?" asked Mr. Mathew.

"A sail to windward!"

James Playfair, leaving the young girl, immediately sprang to the shrouds of the mainmast.

Chapter V

THE SHOT FROM THE IROQUOIS, AND MISS JENNY’S ARGUMENTS

Until now the navigation of the Dolphin had been very fortunate. Not one ship had been signalised before the sail hailed by the man on watch.

The Dolphin was then in 32° 51’ lat., and 57° 43’ W. longitude. For forty-eight hours a fog, which now began to rise, had covered the ocean. If this mist favoured the Dolphin by hiding her course, it also prevented any observations at a distance being made, and, without being aware of it, she might be sailing side by side, so to speak, with the ships she wished most to avoid.
Now this is just what had happened, and when the ship was signalled she was only three miles to windward.

When James Playfair had reached the cross-trees, he saw distinctly, through an opening in the mist, a large Federal corvette in full pursuit of the Dolphin.

After having carefully examined her, the Captain came down on deck again, and called to the first officer.

"Mr. Mathew," said he, "what do you think of this ship?"

"I think, Captain, that it is a Federal cruiser, which suspects our intentions."

"There is no possible doubt of her nationality," said James Playfair. "Look!"

At this moment the starry flag of the North United States appeared on the gaff-yards of the corvette, and the latter asserted her colours with a cannon-shot.

"An invitation to show ours," said Mr. Mathew. "Well, let us show them; there is nothing to be ashamed of."

"What’s the good?" replied James Playfair. "Our flag will hardly protect us, and it will not hinder those people from paying us a visit. No; let us go ahead."

"And go quickly," replied Mr. Mathew, "for, if my eyes do not deceive me, I have already seen that corvette lying off Liverpool, where she went to watch the ships in building: my name is not Mathew, if that is not the Iroquois on her taffrail."

"And is she fast?"

"One of the fastest vessels of the Federal marine."

"What guns does she carry?"

"Eight."

"Pooh!"

"Oh, don’t shrug your shoulders, Captain," said Mr. Mathew, in a serious tone; "two out of those eight guns are rifled, one is a sixty-pounder on the forecastle, and the other a hundred-pounder on deck."

"Upon my soul!" exclaimed James Playfair, "they are Parrott’s, and will carry three miles."

"Yes, and farther than that, Captain."

"Ah, well! Mr. Mathew, let their guns be sixty or only four-pounders, and let them carry three miles or five hundred yards, it is all the same if we can go fast enough to avoid their shot. We will show this Iroquois how a ship can go when she is built on purpose to go. Have the fires drawn forward, Mr. Mathew."

The first officer gave the Captain’s orders to the engineer, and soon volumes of black smoke curled from the steamer’s chimneys.

This proceeding did not seem to please the corvette, for she made the Dolphin the signal to lie to, but James Playfair paid no attention to this warning, and did not change his ship’s course.

"Now," said he, "we shall see what the Iroquois will do; here is a fine opportunity for her to try her guns. Go ahead full speed!"

"Good!" exclaimed Mr. Mathew; "she will not be long in saluting us."

Returning to the poop, the Captain saw Miss Halliburtt sitting quietly near the bulwarks.

"Miss Jenny," said he, "we shall probably be chased by that corvette you see to windward, and as she will speak to us with shot, I beg to offer you my arm to take you to your cabin again."

"Thank you, very much, Mr. Playfair," replied the young girl, looking at him, "but I am not afraid of cannon-shots."

"However, miss, in spite of the distance, there may be some danger."

"Oh, I was not brought up to be fearful; they accustom us to everything in America, and I assure you that the shot from the Iroquois will not make me lower my head."

"You are brave, Miss Jenny."

"Let us admit, then, that I am brave, and allow me to stay by you."

"I can refuse you nothing, Miss Halliburtt," replied the Captain, looking at the young girl’s calm face.

These words were hardly uttered when they saw a line of white smoke issue from the bulwarks of the corvette; before the report had reached the Dolphin a projectile whizzed through the air in the direction of the steamer.

At about twenty fathoms from the Dolphin the shot, the speed of which had sensibly lessened, skimmed over the surface of the waves, marking its passage by a series of water-jets; then, with another burst, it rebounded to a certain height, passed over the Dolphin, grazing the mizzen-yards on the starboard side, fell at thirty fathoms beyond, and was buried in the waves.

"By Jove!" exclaimed James Playfair, "we must get along; another slap like that is not to be waited for."

"Oh!" exclaimed Mr. Mathew, "they will take some time to reload such pieces."

"Upon my honour, it is an interesting sight," said Crockston, who, with arms crossed, stood perfectly at his ease looking at the scene.

"Ah! that’s you," cried James Playfair, scanning the American from head to foot.
"It is me, Captain," replied the American, undisturbed. "I have come to see how these brave Federals fire; not badly, in truth, not badly."

The Captain was going to answer Crockston sharply, but at this moment a second shot struck the sea on the starboard side.

"Good!" cried James Playfair, "we have already gained two cables on this Iroquois. Your friends sail like a buoy; do you hear, Master Crockston?"

"I will not say they don't," replied the American, "and for the first time in my life it does not fail to please me."

A third shot fell still farther astern, and in less than ten minutes the Dolphin was out of range of the corvette's guns.

"So much for patent-logs, Mr. Mathew," said James Playfair; "thanks to those shot we know how to rate our speed. Now have the fires lowered; it is not worth while to waste our coal uselessly."

"It is a good ship that you command," said Miss Halliburtt to the young Captain.

"Yes, Miss Jenny, my good Dolphin makes her seventeen knots, and before the day is over we shall have lost sight of that corvette."

James Playfair did not exaggerate the sailing qualities of his ship, and the sun had not set before the masts of the American ship had disappeared below the horizon.

This incident allowed the Captain to see Miss Halliburtt's character in a new light; besides, the ice was broken, henceforward, during the whole of the voyage; the interviews between the Captain and his passenger were frequent and prolonged; be found her to be a young girl, calm, strong, thoughtful, and intelligent, speaking with great ease, having her own ideas about everything, and expressing her thoughts with a conviction which unconsciously penetrated James Playfair's heart.

She loved her country, she was zealous in the great cause of the Union, and expressed herself on the civil war in the United States with an enthusiasm of which no other woman would have been capable. Thus it happened, more than once, that James Playfair found it difficult to answer her, even when questions purely mercantile arose in connection with the war: Miss Jenny attacked them none the less vigorously, and would come to no other terms whatever. At first James argued a great deal, and tried to uphold the Confederates against the Federals, to prove that the Secessionists were in the right, and that if the people were united voluntarily they might separate in the same manner. But the young girl would not yield on this point; she demonstrated that the question of slavery was predominant in the struggle between the North and South Americans, that it was far more a war in the cause of morals and humanity than politics, and James could make no answer. Besides, during these discussions, which he listened to attentively, it is difficult to say whether he was more touched by Miss Halliburtt's arguments or the charming manner in which she spoke; but at last he was obliged to acknowledge, among other things, that slavery was the principal feature in the war, that it must be put an end to decisively, and the last horrors of barbarous times abolished.

It has been said that the political opinions of the Captain did not trouble him much. He would have sacrificed his most serious opinion before such enticing arguments and under like circumstances; he made a good bargain of his ideas for the same reason, but at last he was attacked in his tenderest point; this was the question of the traffic in which the Dolphin was being employed, and, consequently, the ammunition which was being carried to the Confederates.

"Yes, Mr. James," said Miss Halliburtt, "gratitude does not hinder me from speaking with perfect frankness; on the contrary, you are a brave seaman, a clever merchant, the house of Playfair is noted for its respectability; but in this case it fails in its principles, and follows a trade unworthy of it."

"How!" cried James, "the house of Playfair ought not to attempt such a commercial enterprise?"

"No! it is taking ammunition to the unhappy creatures in revolt against the government of their country, and it is lending arms to a bad cause."

"Upon my honour, Miss Jenny, I will not discuss the right of the Confederates with you; I will only answer you with one word: I am a merchant, and as such I only occupy myself with the interests of my house; I look for gain wherever there is an opportunity of getting it."

"That is precisely what is to be blamed, Mr. James," replied the young girl; "profit does not excuse it; thus, when you supply arms to the Southerners, with which to continue a criminal war, you are quite as guilty as when you sell opium to the Chinese, which stupefies them."

"Oh, for once, Miss Jenny, this is too much, and I cannot admit — "

"No; what I say is just, and when you consider it, when you understand the part you are playing, when you think of the results for which you are responsible, you will yield to me in this point, as in so many others."

James Playfair was dumfounded at these words; he left the young girl, a prey to angry thoughts, for he felt his powerlessness to answer; then he sulked like a child for half an hour, and an hour later he returned to the singular
young girl who could overwhelm him with convincing arguments with quite a pleasant smile.

In short, however it may have come about, and although he would not acknowledge it to himself, Captain James Playfair belonged to himself no longer; he was no longer commander-in-chief on board his own ship.

Thus, to Crockston’s great joy, Mr. Halliburtt’s affairs appeared to be in a good way; the Captain seemed to have decided to undertake everything in his power to deliver Miss Jenny’s father, and for this he would be obliged to compromise the Dolphin, his cargo, his crew, and incur the displeasure of his worthy Uncle Vincent.

Chapter VI
SULLIVAN ISLAND CHANNEL

Two days after the meeting with the Iroquois, the Dolphin found herself abreast of the Bermudas, where she was assailed by a violent squall. These isles are frequently visited by hurricanes, and are celebrated for shipwrecks. It is here that Shakespeare has placed the exciting scene of his drama, The Tempest, in which Ariel and Caliban dispute for the empire of the floods.

The squall was frightful; James Playfair thought once of running for one of the Bermudas, where the English had a military post: it would have been a sad waste of time, and therefore especially to be regretted; happily the Dolphin behaved herself wonderfully well in the storm, and, after flying a whole day before the tempest, she was able to resume her course towards the American coast.

But if James Playfair had been pleased with his ship, he had not been less delighted with the young girl’s bravery; Miss Halliburtt had passed the worst hours of the storm at his side, and James knew that a profound, imperious, irresistible love had taken possession of his whole being.

"Yes," said he, "this brave girl is mistress on board; she turns me like the sea a ship in distress — I feel that I am foundering! What will Uncle Vincent say? Ah! poor nature, I am sure that if Jenny asked me to throw all this cursed cargo into the sea, I should do it without hesitating, for love of her."

Happily for the firm of Playfair & Co., Miss Halliburtt did not demand this sacrifice; nevertheless, the poor Captain had been taken captive, and Crockston, who read his heart like an open book, rubbed his hands gleefully.

"We will hold him fast!" he muttered to himself, "and before a week has passed my master will be quietly installed in one of the best cabins of the Dolphin."

As for Miss Jenny, did she perceive the feelings which she inspired? Did she allow herself to share them? No one could say, and James Playfair least of all; the young girl kept a perfect reserve, and her secret remained deeply buried in her heart.

But whilst love was making such progress in the heart of the young Captain, the Dolphin sped with no less rapidity towards Charleston.

On the 13th of January, the watch signalled land ten miles to the west. It was a low-lying coast, and almost blended with the line of the sea in the distance. Crockston was examining the horizon attentively, and about nine o’clock in the morning he cried:

"Charleston lighthouse!"

Now that the bearings of the Dolphin were set, James Playfair had but one thing to do, to decide by which channel he would run into Charleston Bay.

"If we meet with no obstacles," said he, "before three o’clock we shall be in safety in the docks of the port."

The town of Charleston is situated on the banks of an estuary seven miles long and two broad, called Charleston Harbour, the entrance to which is rather difficult. It is enclosed between Morris Island on the south and Sullivan Island on the north. At the time when the Dolphin attempted to force the blockade Morris Island already belonged to the Federal troops, and General Gillmore had caused batteries to be erected overlooking the harbour. Sullivan Island, on the contrary, was in the hands of the Confederates, who were also in possession of Moultrie Fort, situated at the extremity of the island; therefore it would be advantageous to the Dolphin to go as close as possible to the northern shores to avoid the firing from the forts on Morris Island.

Five channels led into the estuary, Sullivan Island Channel, the Northern Channel, the Overall Channel, the Principal Channel, and lastly, the Lawford Channel; but it was useless for strangers, unless they had skilful pilots on board, or ships drawing less than seven feet of water, to attempt this last; as for Northern and Overall Channels, they were in range of the Federalist batteries, so that it was no good thinking of them. If James Playfair could have had his choice, he would have taken his steamer through the Principal Channel, which was the best, and the bearings of which were easy to follow; but it was necessary to yield to circumstances, and to decide according to the event. Besides, the Captain of the Dolphin knew perfectly all the secrets of this bay, its dangers, the depths of its water at low tide, and its currents, so that he was able to steer his ship with the greatest safety as soon as he entered one of these narrow straits. The great question was to get there.

Now this work demanded an experienced seaman, and one who knew exactly the qualities of the Dolphin.
In fact, two Federal frigates were now cruising in the Charleston waters. Mr. Mathew soon drew James Playfair’s attention to them.

"They are preparing to ask us what we want on these shores," said he.

"Ah, well! we won't answer them," replied the Captain, "and they will not get their curiosity satisfied."

In the meanwhile the cruisers were coming on full steam towards the Dolphin, who continued her course, taking care to keep out of range of their guns. But in order to gain time James Playfair made for the south-west, wishing to put the enemies’ ships off their guard; the latter must have thought that the Dolphin intended to make for Morris Island Channel. Now there they had batteries and guns, a single shot from which would have been enough to sink the English ship; so the Federals allowed the Dolphin to run towards the south-west, contenting themselves by observing her without following closely.

Thus for an hour the respective situations of the ships did not change, for James Playfair, wishing to deceive the cruisers as to the course of the Dolphin, had caused the fires to be moderated, so that the speed was decreased. However, from the thick volumes of smoke which escaped from the chimneys, it might have been thought that he was trying to get his maximum pressure, and, consequently his maximum of rapidity.

"They will be slightly astonished presently," said James Playfair, "when they see us slip through their fingers!"

In fact, when the Captain saw that he was near enough to Morris Island, and before a line of guns, the range of which he did not know, he turned his rudder quickly, and the ship resumed her northerly course, leaving the cruisers two miles to windward of her; the latter, seeing this manoeuvre, understood the steamer’s object, and began to pursue her in earnest, but it was too late. The Dolphin doubled her speed under the action of the screws, and distanced them rapidly. Going nearer to the coast, a few shell were sent after her as an acquittal of conscience, but the Federals were outdone, for their projectiles did not reach half-way. At eleven o’clock in the morning, the steamer ranging near Sullivan Island, thanks to her small draft, entered the narrow strait full steam; there she was in safety, for no Federalist cruiser dared follow her in this channel, the depth of which, on an average, was only eleven feet at low tide.

"How!" cried Crockston, "and is that the only difficulty?"

"Oh! oh! Master Crockston," said James Playfair, "the difficulty is not in entering, but in getting out again."

"Nonsense!" replied the American, "that does not make me at all uneasy; with a boat like the Dolphin and a Captain like Mr. James Playfair, one can go where one likes, and come out in the same manner."

Nevertheless, James Playfair, with telescope in his hand, was attentively examining the route to be followed. He had before him excellent coasting guides, with which he could go ahead without any difficulty or hesitation.

Once his ship was safely in the narrow channel which runs the length of Sullivan Island, James steered bearing towards the middle of Fort Moultrie as far as the Pickney Castle, situated on the isolated island of Shute’s Folly; on the other side rose Fort Johnson, a little way to the north of Fort Sumter.

At this moment the steamer was saluted by some shot which did not reach her, from the batteries on Morris Island. She continued her course without any deviation, passed before Moultrieville, situated at the extremity of Sullivan Island, and entered the bay.

Soon Fort Sumter on the left protected her from the batteries of the Federalists.

This fort, so celebrated in the civil war, is situated three miles and a half from Charleston, and about a mile from each side of the bay: it is nearly pentagonal in form, built on an artificial island of Massachusetts granite; it took ten years to construct and cost more than 900,000 dollars.

It was from this fort, on the 13th of April, 1861, that Anderson and the Federal troops were driven, and it was against it that the first shot of the Confederates was fired. It is impossible to estimate the quantity of iron and lead which the Federals showered down upon it. However, it resisted for almost three years, but a few months after the passage of the Dolphin it fell beneath General Gillmore’s three-hundred-pounders on Morris Island.

But at this time it was in all its strength, and the Confederate flag floated proudly above it.

Once past the fort, the town of Charleston appeared, lying between Ashley and Cooper Rivers.

James Playfair threaded his way through the buoys which mark the entrance of the channel, leaving behind the Charleston lighthouse, visible above Morris Island. He had hoisted the English flag, and made his way with wonderful rapidity through the narrow channels. When he had passed the quarantine buoy, he advanced freely into the centre of the bay. Miss Halliburtt was standing on the poop, looking at the town where her father was kept prisoner, and her eyes filled with tears.

At last the steamer’s speed was moderated by the Captain’s orders; the Dolphin ranged along the end of the south and east batteries, and was soon moored at the quay of the North Commercial Wharf.

Chapter VII
A SOUTHERN GENERAL

The Dolphin, on arriving at the Charleston quay, had been saluted by the cheers of a large crowd. The
inhabitants of this town, strictly blockaded by sea, were not accustomed to visits from European ships. They asked each other, not without astonishment, what this great steamer, proudly bearing the English flag, had come to do in their waters; but when they learned the object of her voyage, and why she had just forced the passage Sullivan, when the report spread that she carried a cargo of smuggled ammunition, the cheers and joyful cries were redoubled.

James Playfair, without losing a moment, entered into negotiation with General Beauregard, the military commander of the town. The latter eagerly received the young Captain of the Dolphin, who had arrived in time to provide the soldiers with the clothes and ammunition they were so much in want of. It was agreed that the unloading of the ship should take place immediately, and numerous hands came to help the English sailors.

Before quitting his ship James Playfair had received from Miss Halliburtt the most pressing injunctions with regard to her father, and the Captain had placed himself entirely at the young girl’s service.

"Miss Jenny," he had said, "you may rely on me; I will do the utmost in my power to save your father, but I hope this business will not present many difficulties. I shall go and see General Beauregard to-day, and, without asking him at once for Mr. Halliburtt’s liberty, I shall learn in what situation he is, whether he is on bail or a prisoner."

"My poor father!" replied Jenny, sighing; "he little thinks his daughter is so near him. Oh that I could fly into his arms!"

"A little patience, Miss Jenny; you will soon embrace your father. Rely upon my acting with the most entire devotion, but also with prudence and consideration."

This is why James Playfair, after having delivered the cargo of the Dolphin up to the General, and bargained for an immense stock of cotton, faithful to his promise, turned the conversation to the events of the day.

"So," said he, "you believe in the triumph of the slave-holders?"

"I do not for a moment doubt of our final success, and, as regards Charleston, Lee’s army will soon relieve it: besides, what do you expect from the Abolitionists? Admitting that which will never be, that the commercial towns of Virginia, the two Carolinas, Georgia, Alabama, fall under their power, what then? Will they be masters of a country they can never occupy? No, certainly not; and for my part, if they are ever victorious, they shall pay dearly for it."

"And you are quite sure of your soldiers?" asked the Captain. "You are not afraid that Charleston will grow weary of a siege which is ruining her?"

"No, I do not fear treason; besides, the traitors would be punished remorselessly, and I would destroy the town itself by sword or fire if I discovered the least Unionist movement. Jefferson Davis confided Charleston to me, and you may be sure that Charleston is in safe hands."

"Have you any Federal prisoners?" asked James Playfair, coming to the interesting object of the conversation.

"Yes, Captain," replied the General, "it was at Charleston that the first shot of separation was fired. The Abolitionists who were here attempted to resist, and, after being defeated, they have been kept as prisoners of war."

"And have you many?"

"About a hundred."

"Free in the town?"

"They were until I discovered a plot formed by them: their chief succeeded in establishing a communication with the besiegers, who were thus informed of the situation of affairs in the town. I was then obliged to lock up these dangerous guests, and several of them will only leave their prison to ascend the slope of the citadel, where ten confederate balls will reward them for their federalism."

"What! to be shot!" cried the young man, shuddering involuntarily.

"Yes, and their chief first of all. He is a very dangerous man to have in a besieged town. I have sent his letters to the President at Richmond, and before a week is passed his sentence will be irrevocably passed."

"Who is this man you speak of?" asked James Playfair, with an assumed carelessness.

"A journalist from Boston, a violent Abolitionist with the confounded spirit of Lincoln."

"And his name?"

"Jonathan Halliburtt."

"Poor wretch!" exclaimed James, suppressing his emotion. "Whatever he may have done, one cannot help pitying him. And you think that he will be shot?"

"I am sure of it," replied Beauregard. "What can you expect? War is war; one must defend oneself as best one can."

"Well, it is nothing to me," said the Captain. "I shall be far enough away when this execution takes place."

"What! you are thinking of going away already."

"Yes, General, business must be attended to; as soon as my cargo of cotton is on board I shall be out to sea again. I was fortunate enough to enter the bay, but the difficulty is in getting out again. The Dolphin is a good ship; she can beat any of the Federal vessels for speed, but she does not pretend to distance cannon-balls, and a shell in
her hull or engine would seriously affect my enterprise."

"As you please, Captain," replied Beauregard; "I have no advice to give you under such circumstances. You are
doing your business, and you are right. I should act in the same manner were I in your place; besides, a stay at
Charleston is not very pleasant, and a harbour where shells are falling three days out of four is not a safe shelter for
your ship; so you will set sail when you please; but can you tell me what is the number and the force of the Federal
vessels cruising before Charleston?"

James Playfair did his best to answer the General, and took leave of him on the best of terms; then he returned to
the Dolphin very thoughtful and very depressed from what he had just heard.

"What shall I say to Miss Jenny? Ought I to tell her of Mr. Halliburtt’s terrible situation? Or would it be better to
keep her in ignorance of the trial which is awaiting her? Poor child!"

He had not gone fifty steps from the governor’s house when he ran against Crockston. The worthy American had
been watching for him when he ran against Crockston. The worthy American had

"Well, Captain?"

James Playfair looked steadily at Crockston, and the latter soon understood he had no favourable news to give
him.

"Have you seen Beauregard?" he asked.
"Yes," replied James Playfair.
"And have you spoken to him about Mr. Halliburtt?"
"No, it was he who spoke to me about him."
"Well, Captain?"
"Well, I may as well tell you everything, Crockston."
"Everything, Captain."
"General Beauregard has told me that your master will be shot within a week."

At this news anyone else but Crockston would have grown furious or given way to bursts of grief, but the
American, who feared nothing, only said, with almost a smile on his lips:

"Pooh! what does it matter?"
"How! what does it matter?" cried James Playfair. "I tell you that Mr. Halliburtt will be shot within a week, and
you answer, what does it matter?"
"And I mean it — if in six days he is on board the Dolphin, and if in seven days the Dolphin is on the open sea."
"Right!" exclaimed the Captain, pressing Crockston’s hand. "I understand, my good fellow, you have got some
pluck; and for myself, in spite of Uncle Vincent, I would throw myself overboard for Miss Jenny."

"No one need be thrown overboard," replied the American, "only the fish would gain by that: the most important
business now is to deliver Mr. Halliburtt."

"But you must know that it will be difficult to do so."
"Pooh!" exclaimed Crockston.
"It is a question of communicating with a prisoner strictly guarded."
"Certainly."
"And to bring about an almost miraculous escape."
"Nonsense," exclaimed Crockston; "a prisoner thinks more of escaping than his guardian thinks of keeping him;
that’s why, thanks to our help, Mr. Halliburtt will be saved."
"You are right, Crockston."
"Always right."
"But now what will you do? There must be some plan: and there are precautions to be taken."
"I will think about it."
"But when Miss Jenny learns that her father is condemned to death, and that the order for his execution may
come any day — "

"She will know nothing about it, that is all."
"Yes, it will be better for her and for us to tell her nothing."
"Where is Mr. Halliburtt imprisoned?" asked Crockston.
"In the citadel," replied James Playfair.
"Just so! . . . On board now?"
"On board, Crockston!"

Chapter VIII
THE ESCAPE

Miss Jenny, sitting at the poop of the Dolphin, was anxiously waiting the Captain’s return; when the latter went
up to her she could not utter a word, but her eyes questioned James Playfair more eagerly than her lips could have
done. The latter, with Crockston’s help, informed the young girl of the facts relating to her father’s imprisonment. He said that he had carefully broached the subject of the prisoners of war to Beauregard, but, as the General did not seem disposed at all in their favour, he had thought it better to say no more about it, but think the matter over again.

"Since Mr. Halliburtt is not free in the town, his escape will be more difficult; but I will finish my task, and I promise you, Miss Jenny, that the Dolphin shall not leave Charleston without having your father on board."

"Thank you, Mr. James; I thank you with my whole heart."

At these words James Playfair felt a thrill of joy through his whole being. He approached the young girl with moist eyes and quivering lips; perhaps he was going to make an avowal of the sentiments he could no longer repress, when Crockston interfered:

"This is no time for grieving," said he; "we must go to work, and consider what to do."

"Have you any plan, Crockston?" asked the young girl.

"I always have a plan," replied the American: "it is my peculiarity."

"But a good one?" said James Playfair.

"Excellent! and all the ministers in Washington could not devise a better; it is almost as good as if Mr. Halliburtt was already on board."

Crockston spoke with such perfect assurance, at the same time with such simplicity, that it must have been the most incredulous person who could doubt his words.

"We are listening, Crockston," said James Playfair.

"Good! You, Captain, will go to General Beauregard, and ask a favour of him which he will not refuse you."

"And what is that?"

"You will tell him that you have on board a tiresome subject, a scamp who has been very troublesome during the voyage, and excited the crew to revolt. You will ask of him permission to shut him up in the citadel; at the same time, on the condition that he shall return to the ship on her departure, in order to be taken back to England, to be delivered over to the justice of his country."

"Good!" said James Playfair, half smiling, "I will do all that, and Beauregard will grant my request very willingly."

"I am perfectly sure of it," replied the American.

"But," resumed Playfair, "one thing is wanting."

"What is that?"

"The scamp."

"He is before you, Captain."

"What, the rebellious subject?"

"Is myself; don’t trouble yourself about that."

"Oh! you brave, generous heart," cried Jenny, pressing the American’s rough hands between her small white palms.

"Go, Crockston," said James Playfair; "I understand you, my friend; and I only regret one thing — that is, that I cannot take your place."

"Everyone his part," replied Crockston; "if you put yourself in my place you would be very much embarrassed, which I shall not be; you will have enough to do later on to get out of the harbour under the fire of the Feds and Rebs, which, for my part, I should manage very badly."

"Well, Crockston, go on."

"Once in the citadel — I know it — I shall see what to do, and rest assured I shall do my best; in the meanwhile, you will be getting your cargo on board."

"Oh, business is now a very unimportant detail," said the Captain.

"Not at all! And what would your Uncle Vincent say to that? We must join sentiment with work; it will prevent suspicion; but do it quickly. Can you be ready in six days?"

"Yes."

"Well, let the Dolphin be ready to start on the 22nd."

"She shall be ready."

"On the evening of the 22nd of January, you understand, send a gig with your best men to White Point, at the end of the town; wait there till nine o’clock, and then you will see Mr. Halliburtt and your servant."

"But how will you manage to effect Mr. Halliburtt’s deliverance, and also escape yourself?"

"That’s my look-out."

"Dear Crockston, you are going to risk your life then, to save my father!"

"Don’t be uneasy, Miss Jenny, I shall risk absolutely nothing, you may believe me."

"Well," asked James Playfair, "when must I have you locked up?"
"To-day — you understand — I demoralise your crew; there is no time to be lost."
"Would you like any money? It may be of use to you in the citadel."
"Money to buy the gaoler! Oh, no, it would be a poor bargain; when one goes there the gaoler keeps the money and the prisoner! No, I have surer means than that; however, a few dollars may be useful; one must be able to drink, if needs be."
"And intoxicate the gaoler."
"No, an intoxicated gaoler would spoil everything. No, I tell you I have an idea; let me work it out."
"Here, my good fellow, are ten dollars."
"It is too much, but I will return what is over."
"Well, then, are you ready?"
"Quite ready to be a downright rogue."
"Let us go to work, then."
"Crockston," said the young girl, in a faltering voice, "you are the best man on earth."
"I know it," replied the American, laughing good-humouredly. "By the by, Captain, an important item."
"What is that?"
"If the General proposes to hang your rebel — you know that military men like sharp work — "
"Well, Crockston?"
"Well, you will say that you must think about it."
"I promise you I will." The same day, to the great astonishment of the crew, who were not in the secret, Crockston, with his feet and hands in irons, was taken on shore by a dozen sailors, and half an hour after, by Captain James Playfair's request, he was led through the streets of the town, and, in spite of his resistance, was imprisoned in the citadel.

During this and the following days the unloading of the Dolphin was rapidly accomplished; the steam cranes lifted out the European cargo to make room for the native goods. The people of Charleston, who were present at this interesting work, helped the sailors, whom they held in great respect, but the Captain did not leave the brave fellows much time for receiving compliments; he was constantly behind them, and urged them on with a feverish activity, the reason of which the sailors could not suspect.

Three days later, on the 18th of January, the first bales of cotton began to be packed in the hold: although James Playfair troubled himself no more about it, the firm of Playfair and Co. were making an excellent bargain, having obtained the cotton which encumbered the Charleston wharves at very far less than its value.

In the meantime no news had been heard of Crockston. Jenny, without saying anything about it, was a prey to incessant fears; her pale face spoke for her, and James Playfair endeavoured his utmost to ease her mind.

"I have all confidence in Crockston," said he; "he is a devoted servant, as you must know better than I do, Miss Jenny. You must make yourself quite at ease; believe me, in three days you will be folded in your father's arms."

"Ah! Mr. James," cried the young girl, "how can I ever repay you for such devotion? How shall we ever be able to thank you?"

"I will tell you when we are in English seas," replied the young Captain.

Jenny raised her tearful face to him for a moment, then her eyelids drooped, and she went back to her cabin.

James Playfair hoped that the young girl would know nothing of her father's terrible situation until he was in safety, but she was apprised of the truth by the involuntary indiscretion of a sailor.

The reply from the Richmond cabinet had arrived by a courier who had been able to pass the line of outposts; the news of the approaching execution was not long in spreading through the town, and it was brought on board by one of the sailors of the Dolphin; the man told the Captain, without thinking that Miss Halliburtt was within hearing; the young girl uttered a piercing cry, and fell unconscious on the deck. James Playfair carried her to her cabin, but the most assiduous care was necessary to restore her to life.

When she opened her eyes again, she saw the young Captain, who, with a finger on his lips, enjoined absolute silence. With difficulty she repressed the outbreak of her grief, and James Playfair, leaning towards her, said gently:

"Jenny, in two hours your father will be in safety near you, or I shall have perished in endeavouring to save him!"

Then he left the cabin, saying to himself, "And now he must be carried off at any price, since I must pay for his liberty with my own life and those of my crew."

The hour for action had arrived, the loading of the cotton cargo had been finished since morning; in two hours the ship would be ready to start.

James Playfair had left the North Commercial Wharf and gone into the roadstead, so that he was ready to make use of the tide, which would be high at nine o'clock in the evening.
It was seven o’clock when James left the young girl, and began to make preparations for departure. Until the present time the secret had been strictly kept between himself, Crockston, and Jenny; but now he thought it wise to inform Mr. Mathew of the situation of affairs, and he did so immediately.

"Very well, sir," replied Mr. Mathew, without making the least remark, "and nine o’clock is the time?"

"Nine o’clock, and have the fires lit immediately, and the steam got up."

"It shall be done, Captain."

"The Dolphin may remain at anchor; we will cut our moorings and sheer off, without losing a moment."

"Just so."

"Have a lantern placed at the mainmast-head; the night is dark, and will be foggy; we must not risk losing our way in returning. You had better have the bell for starting rung at nine o’clock."

"Your orders shall be punctually attended to, Captain."

"And now, Mr. Mathew, have a shore-boat manned with six of our best men. I am going to set out directly for White Point. I leave Miss Jenny in your charge, and may God protect us!"

"May God protect us!" repeated the first officer.

Then he immediately gave the necessary orders for the fires to be lighted, and the shore-boat provided with men. In a few minutes the boat was ready, and James Playfair, after bidding Jenny good-bye, stepped into it, whilst at the same time he saw volumes of black smoke issuing from the chimneys of the ship, and losing itself in the fog.

The darkness was profound; the wind had fallen, and in the perfect silence the waters seemed to slumber in the immense harbour, whilst a few uncertain lights glimmered through the mist. James Playfair had taken his place at the rudder, and with a steady hand he guided his boat towards White Point. It was a distance of about two miles; during the day James had taken his bearings perfectly, so that he was able to make direct for Charleston Point.

Eight o’clock struck from the church of St. Philip when the shore-boat ran aground at White Point.

There was an hour to wait before the exact time fixed by Crockston; the quay was deserted, with the exception of the sentinel pacing to and fro on the south and east batteries. James Playfair grew impatient, and the minutes seemed hours to him.

At half-past eight he heard the sound of approaching steps; he left his men with their oars clear and ready to start, and went himself to see who it was; but he had not gone ten feet when he met a band of coastguards, in all about twenty men. James drew his revolver from his waist, deciding to make use of it, if needs be; but what could he do against these soldiers, who were coming on to the quay?

The leader came up to him, and, seeing the boat, asked:

"Whose craft is that?"

"It is a gig belonging to the Dolphin," replied the young man.

"And who are you?"

"Captain James Playfair."

"I thought you had already started, and were now in the Charleston channels."

"I am ready to start. I ought even now to be on my way but — "

"But — " persisted the coastguard.

A bright idea shot through James’s mind, and he answered:

"One of my sailors is locked up in the citadel, and, to tell the truth, I had almost forgotten him; fortunately I thought of him in time, and I have sent my men to bring him."

"Ah! that troublesome fellow; you wish to take him back to England?"

"Yes.

"He might as well be hung here as there," said the coast-guard, laughing at his joke.

"So I think," said James Playfair, "but it is better to have the thing done in the regular way."

"Not much chance of that, Captain, when you have to face the Morris Island batteries."

"Don’t alarm yourself. I got in and I’ll get out again."

"Prosperous voyage to you!"

"Thank you."

With this the men went off, and the shore was left silent.

At this moment nine o’clock struck; it was the appointed moment. James felt his heart beat violently; a whistle was heard; he replied to it, then he waited, listening, with his hand up to enjoin perfect silence on the sailors. A man appeared enveloped in a large cloak, and looking from one side to another. James ran up to him.

"Mr. Halliburtt?"

"I am he," replied the man with the cloak.

"God be praised!" cried James Playfair. "Embark without losing a minute. Where is Crockston?"

"Crockston!" exclaimed Mr. Halliburtt, amazed. "What do you mean?"
"The man who has saved you and brought you here was your servant Crockston."
"The man who came with me was the gaoler from the citadel," replied Mr. Halliburtt.
"The gaoler!" cried James Playfair.
Evidently he knew nothing about it, and a thousand fears crowded in his mind.
"Quite right, the gaoler," cried a well-known voice. "The gaoler is sleeping like a top in my cell."
"Crockston! you! Can it be you?" exclaimed Mr. Halliburtt.
"No time to talk now, master; we will explain everything to you afterwards. It is a question of life or death. Get in quick!"

The three men took their places in the boat.
"Push off!" cried the captain.

Immediately the six oars dipped into the water; the boat darted like a fish through the waters of Charleston Harbour.

Chapter IX
BETWEEN TWO FIRES

The boat, pulled by six robust oarsmen, flew over the water. The fog was growing dense, and it was with difficulty that James Playfair succeeded in keeping to the line of his bearings. Crockston sat at the bows, and Mr. Halliburtt at the stern, next the Captain. The prisoner, only now informed of the presence of his servant, wished to speak to him, but the latter enjoined silence.

However, a few minutes later, when they were in the middle of the harbour, Crockston determined to speak, knowing what thoughts were uppermost in Mr. Halliburtt’s mind.

"Yes, my dear master," said he, "the gaoler is in my place in the cell, where I gave him two smart blows, one on the head and the other on the stomach, to act as a sleeping draught, and this when he was bringing me my supper; there is gratitude for you. I took his clothes and his keys, found you, and let you out of the citadel, under the soldiers’ noses. That is all I have done."

"But my daughter — ?" asked Mr. Halliburtt.
"Is on board the ship which is going to take you to England."
"My daughter there! there!" cried the American, springing from his seat.
"Silence!" replied Crockston, "a few minutes, and we shall be saved."

The boat flew through the darkness, but James Playfair was obliged to steer rather by guess, as the lanterns of the Dolphin were no longer visible through the fog. He was undecided what direction to follow, and the darkness was so great that the rowers could not even see to the end of their oars.

"Well, Mr. James?" said Crockston.
"We must have made more than a mile and a half," replied the Captain. "You don’t see anything, Crockston?"
"Nothing; nevertheless, I have good eyes; but we shall get there all right. They don’t suspect anything out there."

These words were hardly finished when the flash of a gun gleamed for an instant through the darkness, and vanished in the mist.
"A signal!" cried James Playfair.
"Whew!" exclaimed Crockston. "It must have come from the citadel. Let us wait."
A second, then a third shot was fired in the direction of the first, and almost the same signal was repeated a mile in front of the gig.
"That is from Fort Sumter," cried Crockston, "and it is the signal of escape. Urge on the men; everything is discovered."

"Pull for your lives, my men!" cried James Playfair, urging on the sailors, "those gun-shots cleared my route. The Dolphin is eight hundred yards ahead of us. Stop! I hear the bell on board. Hurrah, there it is again! Twenty pounds for you if we are back in five minutes!"

The boat skidded over the waves under the sailors’ powerful oars. A cannon boomed in the direction of the town. Crockston heard a ball whiz past them.

The bell on the Dolphin was ringing loudly. A few more strokes and the boat was alongside. A few more seconds and Jenny fell into her father’s arms.

The gig was immediately raised, and James Playfair sprang on to the poop.
"Is the steam up, Mr. Mathew?"
"Yes, Captain."
"Have the moorings cut at once."

A few minutes later the two screws carried the steamer towards the principal channel, away from Fort Sumter.
"Mr. Mathew," said James, "we must not think of taking the Sullivan Island channel; we should run directly under the Confederate guns. Let us go as near as possible to the right side of the harbour out of range of the Federal
batteries. Have you a safe man at the helm?"

"Yes, Captain."

"Have the lanterns and the fires on deck extinguished; there is a great deal too much light, but we cannot help the reflection from the engine-rooms."

During this conversation the Dolphin was going at a great speed; but in altering her course to keep to the right side of the Charleston Harbour she was obliged to enter a channel which took her for a moment near Fort Sumter; and when scarcely half a mile off all the guns bearing on her were discharged at the same time, and a shower of shot and shell passed in front of the Dolphin with a thundering report.

"Too soon, stupids," cried James Playfair, with a burst of laughter. "Make haste, make haste, Mr. Engineer! We shall get between two fires."

The stokers fed the furnaces, and the Dolphin trembled all over with the effort of the engine as if she was on the point of exploding.

At this moment a second report was heard, and another shower of balls whizzed behind the Dolphin.

"Too late, stupids," cried the young Captain, with a regular roar.

Then Crockston, who was standing on the poop, cried, "That's one passed. A few minutes more, and we shall have done with the Rebs."

"Then do you think we have nothing more to fear from Fort Sumter?" asked James.

"Nothing at all, but everything from Fort Moultrie, at the end of Sullivan Island; but they will only get a chance at us for half a minute, and then they must choose their time well, and shoot straight if they want to reach us. We are getting near."

"Right; the position of Fort Moultrie will allow us to go straight for the principal channel. Fire away then, fire away!"

At the same moment, and as if in obedience to James Playfair, the fort was illuminated by a triple line of lightning. A frightful crash was heard; then a crackling sound on board the steamer.

"Touched this time!" exclaimed Crockston.

"Mr. Mathew!" cried the Captain to his second, who was stationed at the bows, "what has been damaged?"

"The bowsprit broken."

"Any wounded?"

"No, Captain."

"Well, then, the masts may go to Jericho. Straight into the pass! Straight! and steer towards the island."

"We have passed the Rebs!" cried Crockston; "and, if we must have balls in our hull, I would much rather have the Northerners; they are more easily digested."

In fact, the Dolphin could not yet consider herself out of danger; for, if Morris Island was not fortified with the formidable pieces of artillery which were placed there a few months later, nevertheless its guns and mortars could easily have sunk a ship like the Dolphin.

The alarm had been given to the Federals on the island, and to the blockading squadron, by the firing from Forts Sumter and Moultrie. The besiegers could not make out the reason of this night attack; it did not seem to be directed against them. However, they were obliged to consider it so, and were ready to reply.

It occupied James Playfair's thoughts whilst making towards the passes of Morris Island; and he had reason to fear, for in a quarter of an hour's time lights gleamed rapidly through the darkness. A shower of small shell fell round the steamer, scattering the water over her bulwarks; some of them even struck the deck of the Dolphin, but not on their points, which saved the ship from certain ruin. In fact, these shell, as it was afterwards discovered, could break into a hundred fragments, and each cover a superficial area of a hundred and twenty square feet with Greek fire, which would burn for twenty minutes, and nothing could extinguish it. One of these shell alone could set a ship on fire. Fortunately for the Dolphin, they were a new invention, and as yet far from perfect. Once thrown into the air, a false rotary movement kept them inclined, and, when falling, instead of striking on their points, where is the percussion apparatus, they fell flat. This defect in construction alone saved the Dolphin. The falling of these shells did her little harm, and under the pressure of her over-heated boilers she continued to advance into the pass.

At this moment, and in spite of his orders, Mr. Halliburtt and his daughter went to James Playfair on the poop; the latter urged them to return to their cabins, but Jenny declared that she would remain by the Captain. As for Mr. Halliburtt, who had just learnt all the noble conduct of his deliverer, he pressed his hand without being able to utter a word.

The Dolphin was speeding rapidly towards the open sea. There were only three miles more before she would be in the waters of the Atlantic; if the pass was free at its entrance, she was saved. James Playfair was wonderfully well acquainted with all the secrets of Charleston Bay, and he guided his ship through the darkness with an unerring hand. He was beginning to think his daring enterprise successful, when a sailor on the forecastle cried:
"A ship!"
"A ship?" cried James.
"Yes, on the larboard side."

The fog had cleared off, and a large frigate was seen making towards the pass, in order to obstruct the passage of the Dolphin. It was necessary, cost what it might, to distance her, and urge the steam-engine to an increase of speed, or all was lost.

"Port the helm at once!" cried the Captain.

Then he sprang on to the bridge above the engine. By his orders one of the screws was stopped, and under the action of the other the Dolphin, veering with an extraordinary rapidity, avoided running foul of the frigate, and advanced like her to the entrance of the pass. It was now a question of speed.

James Playfair understood that in this lay his own safety, Miss Jenny’s, her father’s, and that of all his crew.

The frigate was considerably in advance of the Dolphin. It was evident from the volumes of black smoke issuing from her chimneys that she was getting up her steam. James Playfair was not the man to be left in the background.

"How are the engines?" cried he to the engineer.

"At the maximum speed," replied the latter; "the steam is escaping by all the valves."

"Fasten them down," ordered the Captain.

And his orders were executed at the risk of blowing up the ship.

The Dolphin again increased her speed; the pistons worked with frightful rapidity; the metal plates on which the engine was placed trembled under the terrific force of their blows. It was a sight to make the boldest shudder.

"More pressure!" cried James Playfair; "put on more pressure!"

"Impossible!" replied the engineer. "The valves are tightly closed; our furnaces are full up to the mouths."

"What difference! Fill them with cotton soaked in spirits; we must pass that frigate at any price."

At these words the most daring of the sailors looked at each other, but did not hesitate. Some bales of cotton were thrown into the engine-room, a barrel of spirits broached over them, and this expensive fuel placed, not without danger, in the red-hot furnaces. The stokers could no longer hear each other speak for the roaring of the flames. Soon the metal plates of the furnaces became red-hot; the pistons worked like the pistons of a locomotive; the steamgauge showed a frightful tension; the steamer flew over the water; her boards creaked, and her chimneys threw out volumes of smoke mingled with flames. She was going at a headlong speed, but, nevertheless, she was gaining on the frigate — passed her, distanced her, and in ten minutes was out of the channel.

"Saved!" cried the Captain.

"Saved!" echoed the crew, clapping their hands.

Already the Charleston beacon was disappearing in the south-west; the sound of firing from the batteries grew fainter, and it might with reason be thought that the danger was all past, when a shell from a gun-boat cruising at large was hurled whizzing through the air. It was easy to trace its course, thanks to the line of fire which followed it.

Then was a moment of anxiety impossible to describe; every one was silent, and each watched fearfully the arch described by the projectile. Nothing could be done to escape it, and in a few seconds it fell with a frightful noise on the fore-deck of the Dolphin.

The terrified sailors crowded to the stern, and no one dared move a step, whilst the shell was burning with a brisk crackle.

But one brave man alone among them ran up to the formidable weapon of destruction. It was Crockston; he took the shell in his strong arms, whilst showers of sparks were falling from it; then, with a superhuman effort, he threw it overboard.

Hardly had the shell reached the surface of the water when it burst with a frightful report.

"Hurrah! hurrah!" cried the whole crew of the Dolphin unanimously, whilst Crockston rubbed his hands.

Some time later the steamer sped rapidly through the waters of the Atlantic; the American coast disappeared in the darkness, and the distant lights which shot across the horizon indicated that the attack was general between the batteries of Morris Island and the forts of Charleston Harbour.

Chapter X

ST. MUNGO

The next day at sunrise the American coast had disappeared; not a ship was visible on the horizon, and the Dolphin, moderating the frightful rapidity of her speed, made quietly towards the Bermudas.

It is useless to recount the passage across the Atlantic, which was marked by no accidents, and ten days after the departure from Queenstown the French coast was hailed.

What passed between the Captain and the young girl may be imagined, even by the least observant individuals. How could Mr. Halliburtt acknowledge the devotion and courage of his deliverer, if it was not by making him the
happiest of men? James Playfair did not wait for English seas to declare to the father and daughter the sentiments which overflowed his heart, and, if Crockston is to be believed, Miss Jenny received his confession with a happiness she did not try to conceal.

Thus it happened that on the 14th of February, 18—, a numerous crowd was collected in the dim aisles of St. Mungo, the old cathedral of Glasgow. There were seamen, merchants, manufacturers, magistrates, and some of every denomination gathered here. There was Miss Jenny in bridal array and beside her the worthy Crockston, resplendent in apple-green clothes, with gold buttons, whilst Uncle Vincent stood proudly by his nephew.

In short, they were celebrating the marriage of James Playfair, of the firm of Vincent Playfair & Co., of Glasgow, with Miss Jenny Halliburtt, of Boston.

The ceremony was accomplished amidst great pomp. Everyone knew the history of the Dolphin, and everyone thought the young Captain well recompensed for his devotion. He alone said that his reward was greater than he deserved.

In the evening there was a grand ball and banquet at Uncle Vincent’s house, with a large distribution of shillings to the crowd collected in Gordon Street. Crockston did ample justice to this memorable feast, while keeping himself perfectly within bounds.

Everyone was happy at this wedding; some at their own happiness, and others at the happiness around them, which is not always the case at ceremonies of this kind.

Late in the evening, when the guests had retired, James Playfair took his uncle’s hand.
"Well, Uncle Vincent," said he to him.
"Well, Nephew James?"
"Are you pleased with the charming cargo I brought you on board the Dolphin?" continued Captain Playfair, showing him his brave young wife.
"I am quite satisfied," replied the worthy merchant; "I have sold my cotton at three hundred and seventy-five per cent. profit."

End of The Blockade Runners

THE FUR COUNTRY
or
Seventy Degrees North Latitude

CHAPTER I.
A SOIRÉE AT FORT RELIANCE.

On the evening of the 17th March 1859, Captain Craventy gave a fête at Fort Reliance. Our readers must not at once imagine a grand entertainment, such as a court ball, or a musical soirée with a fine orchestra. Captain Craventy’s reception was a very simple affair, yet he had spared no pains to give it éclat.

In fact, under the auspices of Corporal Joliffe, the large room on the ground-floor was completely transformed. The rough walls, constructed of roughly-hewn trunks of trees piled up horizontally, were still visible, it is true, but their nakedness was disguised by arms and armour, borrowed from the arsenal of the fort, and by an English tent at each corner of the room. Two lamps suspended by chains, like chandeliers, and provided with tin reflectors, relieved the gloomy appearance of the blackened beams of the ceiling, and sufficiently illuminated the misty atmosphere of the room. The narrow windows, some of them mere loop-holes, were so encrusted with hoar-frost, that it was impossible to look through them; but two or three pieces of red bunting, tastily arranged about them, challenged the admiration of all who entered. The floor, of rough joists of wood laid parallel with each other, had been carefully swept by Corporal Joliffe. No sofas, chairs, or other modern furniture, impeded the free circulation of the guests. Wooden benches half fixed against the walls, huge blocks of wood cut with the axe, and two tables with clumsy legs, were all the appliances of luxury the saloon could boast of. But the partition wall, with a narrow door leading into the next room, was decorated in a style alike costly and picturesque. From the beams hung magnificent furs admirably arranged, the equal of which could not be seen in the more favoured regions of Regent Street or the Perspective-Newski. It seemed as if the whole fauna of the ice-bound North were here represented by their finest skins. The eye wandered from the furs of wolves, grey bears, polar bears, otters, wolverenes, beavers, muskrats, water pole-cats, ermines, and silver foxes; and above this display was an inscription in brilliantly-coloured and artistically shaped cardboard—the motto of the world-famous Hudson’s Bay Company—
"PROPELLE CUTUM."
"Really, Corporal Joliffe, you have surpassed yourself!" said Captain Craventy to his subordinate.
"I think I have, I think I have!" replied the Corporal; "but honour to whom honour is due, Mrs Joliffe deserves part of your commendation; she assisted me in everything."
"A wonderful woman, Corporal."
"Her equal is not to be found, Captain."

An immense brick and earthenware stove occupied the centre of the room, with a huge iron pipe passing from it through the ceiling, and conducting the dense black smoke into the outer air. This stove contained a roaring fire constantly fed with fresh shovelfuls of coal by the stoker, an old soldier specially appointed to the service. Now and then a gust of wind drove back a volume of smoke into the room, dimming the brightness of the lamps, and adding fresh blackness to the beams of the ceiling, whilst tongues of flame shot forth from the stove. But the guests of Fort Reliance thought little of this slight inconvenience; the stove warmed them, and they could not pay too dearly for its cheering heat, so terribly cold was it outside in the cutting north wind.

The storm could be heard raging without, the snow fell fast, becoming rapidly solid and coating the already frosted window panes with fresh ice. The whistling wind made its way through the cranks and chinks of the doors and windows, and occasionally the rattling noise drowned every other sound. Presently an awful silence ensued. Nature seemed to be taking breath; but suddenly the squall recommenced with terrific fury. The house was shaken to its foundations, the planks cracked, the beams groaned. A stranger less accustomed than the habitués of the fort to the war of the elements, would have asked if the end of the world were come.

But, with two exceptions, Captain Craventy’s guests troubled themselves little about the weather, and if they had been outside they would have felt no more fear than the stormy petrels disporting themselves in the midst of the tempest. Two only of the assembled company did not belong to the ordinary society of the neighbourhood, two women, whom we shall introduce when we have enumerated Captain Craventy’s other guests: these were, Lieutenant Jaspar Hobson, Sergeant Long, Corporal Joliffe, and his bright active Canadian wife, a certain Mac-Nab and his wife, both Scotch, John Rae, married to an Indian woman of the country, and some sixty soldiers or employés of the Hudson’s Bay Company. The neighbouring forts also furnished their contingent of guests, for in these remote lands people look upon each other as neighbours although their homes may be a hundred miles apart. A good many employés or traders came from Fort Providence or Fort Resolution, of the Great Slave Lake district, and even from Fort Chippeway and Fort Liard further south. A rare break like this in the monotony of their secluded lives, in these hyperborean regions, was joyfully welcomed by all the exiles, and even a few Indian chiefs, about a dozen, had accepted Captain Craventy’s invitation. They were not, however, accompanied by their wives, the luckless squaws being still looked upon as little better than slaves. The presence of these natives is accounted for by the fact that they are in constant intercourse with the traders, and supply the greater number of furs which pass through the hands of the Hudson’s Bay Company, in exchange for other commodities. They are mostly Chippeway Indians, well grown men with hardy constitutions. Their complexions are of the peculiar reddish black colour always ascribed in Europe to the evil spirits of fairyland. They wear very picturesque cloaks of skins and mantles of fur, with a head-dross of eagle’s feathers spread out like a lady’s fan, and quivering with every motion of their thick black hair.

Such was the company to whom the Captain was doing the honours of Fort Reliance. There was no dancing for want of music, but the "buffet" admirably supplied the want of the hired musicians of the European balls. On the table rose a pyramidal pudding made by Mrs Joliffe’s own hands; it was an immense truncated cone, composed of flour, fat, rein-deer venison, and musk beef. The eggs, milk, and citron prescribed in recipe books were, it is true, wanting, but their absence was atoned for by its huge proportions. Mrs Joliffe served out slice after slice with liberal hands, yet there remained enough and to spare. Piles of sandwiches also figured on the table, in which ship biscuits took the place of thin slices of English bread and butter, and dainty morsels of corned beef that of the ham and stuffed veal of the old world. The sharp teeth of the Chippeway Indians made short work of the tough biscuits; and for drink there was plenty of whisky and gin handed round in little pewter pots, not to speak of a great bowl of punch which was to close the entertainment, and of which the Indians talked long afterwards in their wigwams.

Endless were the compliments paid to the Joliffes that evening, but they deserved them; how zealously they waited on the guests, with what easy grace they distributed the refreshments! They did not need prompting, they anticipated the wishes of each one. The sandwiches were succeeded by slices of the inexhaustible pudding, the pudding by glasses of gin or whisky.

"No, thank you, Mr Joliffe."
"You are too good, Corporal; but let me have time to breathe."
"Mrs Joliffe, I assure you, I can eat no more."
"Corporal Joliffe, I am at your mercy."
"No more, Mrs Joliffe, no more, thank you!"
for travelling led her constantly to explore new lands. She was tall, and her face, framed in long braids of hair, Barnett had given proof of the qualities of a great traveller. She had been a widow for fifteen years, and her passion mountains of Thibet, across an unknown corner of New Holland, from Swan Bay to the Gulf of Carpentaria, Paulina mentioned at the meetings of the Royal Geographical Society. In her journeys up the Brahmaputra, as far as the name of Paulina Barnett, the rival of the Pfeiffers, Tinnis, and Haimaires of Hull, has been several times honourably
already touched with white, was full of energy. She was near-sighted, and a double eye-glass rested upon her long
straight nose, with its mobile nostrils. We must confess that her walk was somewhat masculine, and her whole
appearance was suggestive of moral power, rather than of female grace. She was an Englishwoman from Yorkshire,
possessed of some fortune, the greater part of which was expended in adventurous expeditions, and some new
scheme of exploration had now brought her to Fort Reliance. Having crossed the equinoctial regions, she was
doubtless anxious to penetrate to the extreme limits of the hyperborean. Her presence at the fort was an event. The
governor of the Company had given her a special letter of recommendation to Captain Craventy, according to which
the latter was to do all in his power to forward the design of the celebrated traveller to reach the borders of the Arctic
Ocean. A grand enterprise! To follow in the steps of Hearne, Mackenzie, Rae, Franklin, and others. What fatigues,
what trials, what dangers would have to be gone through in the conflict with the terrible elements of the Polar
climate! How could a woman dare to venture where so many explorers have drawn back or perished? But the
stranger now shut up in Fort Reliance was no ordinary woman; she was Paulina Barnett, a laureate of the Royal
Society.

We must add that the celebrated traveller was accompanied by a servant named Madge. This faithful creature
was not merely a servant, but a devoted and courageous friend, who lived only for her mistress. A Scotchwoman of
the old type, whom a Caleb might have married without loss of dignity. Madge was about five years older than Mrs
Barnett, and was tall and strongly built. The two were on the most intimate terms; Paulina looked upon Madge as an
elder sister, and Madge treated Paulina as her daughter.

It was in honour of Paulina Barnett that Captain Craventy was this evening treating his employés and the
Chippeway Indians. In fact, the lady traveller was to join the expedition of Jaspar Hobson for the exploration of the
north. It was for Paulina Barnett that the large saloon of the factory resounded with joyful hurrahs. And it was no
wonder that the stove consumed a hundredweight of coal on this memorable evening, for the cold outside was
twenty-four degrees Fahrenheit below zero, and Fort Reliance is situated in 61° 47’ N. Lat., at least four degrees
from the Polar circle.

CHAPTER II.
THE HUDSON’S BAY FUR COMPANY.
"Captain Craventy?"
"Mrs Barnett?"

What do you think of your Lieutenant, Jaspar Hobson?"
"I think he is an officer who will go far."

"What do you mean by the words, Will go far? Do you mean that he will go beyond the Twenty-fourth parallel?"

Captain Craventy could not help smiling at Mrs Paulina Barnett’s question. They were talking together near the
stove, whilst the guests were passing backwards and forwards between the eating and drinking tables.

"Madam," replied the Captain, "all that a man can do, will be done by Jaspar Hobson. The Company has charged
him to explore the north of their possessions, and to establish a factory as near as possible to the confines of the
American continent, and he will establish it."

"That is a great responsibility for Lieutenant Hobson!" said the traveller.

"It is, madam, but Jaspar Hobson has never yet drawn back from a task imposed upon him, however formidable
it may have appeared."

"I can quite believe it, Captain," replied Mrs Barnett, "and we shall now see the Lieutenant at work. But what
induces the Company to construct a fort on the shores of the Arctic Ocean?"

"They have a powerful motive, madam," replied the Captain.

"I may add a double motive. At no very distant date, Russia will probably cede her American possessions to the
Government of the United States. [*1] When this cession has taken place, the Company will find access to the
Pacific Ocean extremely difficult, unless the North-west passage discovered by Mc’Clure be practicable. [*1
Captain Craventy’s prophecy has since been realised.] Fresh explorations will decide this, for the Admiralty is about
to send a vessel which will coast along the North American continent, from Behring Strait to Coronation Gulf, on
the eastern side of which the new-Art is to be established. If the enterprise succeed, this point will become an
important factory, the centre of the northern fur trade. The transport of furs across the Indian territories involves a
vast expenditure of time and money, whereas, if the new route be available, steamers will take them from the new
fort to the Pacific Ocean in a few days."

"That would indeed be an important result of the enterprise, if this North-west passage can really be used," replied Mrs Paulina Barnett; "but I think you spoke of a double motive."

"I did, madam," said the Captain, "and I alluded to a matter of vital interest to the Company. But I must beg of
you to allow me to explain to you in a few words how the present state of things came about, how it is in fact that
the very source of the trade of this once flourishing Company is in danger of destruction."
The Captain then proceeded to give a brief sketch of the history of the famous Hudson’s Bay Company.

In the earliest times men employed the skins and furs of animals as clothing. The fur trade is therefore of very great antiquity. Luxury in dress increased to such an extent, that sumptuary laws were enacted to control too great extravagance, especially in furs, for which there was a positive passion. Vair and the furs of Siberian squirrels were prohibited at the middle of the 12th century.

In 1553 Russia founded several establishments in the northern steppes, and England lost no time in following her example. The trade in sables, ermines, and beavers, was carried on through the agency of the Samoiedes; but during the reign of Elizabeth, a royal decree restricted the use of costly furs to such an extent, that for several years this branch of industry was completely paralysed.

On the 2nd May, 1670, a licence to trade in furs in the Hudson’s Bay Territory was granted to the Company, which numbered several men of high rank amongst its shareholders : the Duke of York, the Duke of Albemarle, the Earl of Shaftesbury, &c. Its capital was then only £8420. Private companies were formidable rivals to its success; and French agents, making Canada their headquarters, ventured on hazardous but most lucrative expeditions. The active competition of these bold hunters threatened the very existence of the infant Company.

The conquest of Canada, however, somewhat lessened the danger of its position. Three years after the taking of Quebec, 1776, the fur trade received a new impulse. English traders became familiar with the difficulties of trade of this kind; they learned the customs of the country, the ways of the Indians and their system of exchange of goods, but for all this the Company as yet made no profits whatever. Moreover, towards 1784 some merchants of Montreal combined to explore the fur country, and founded that powerful North-west Company, which soon became the centre of the fur trade. In 1798 the new Company shipped furs to the value of no less than £120,000, and the existence of the Hudson’s Bay Company was again threatened.

We must add, that the North-west Company shrank from no act, however iniquitous, if its interests were at stake. Its agents imposed on their own employés, speculated on the misery of the Indians, robbed them when they had themselves made them drunk, setting at defiance the Act of Parliament forbidding the sale of spirituous liquors on Indian territory; and consequently realising immense profits, in spite of the competition of the various Russian and American companies which had sprung up—the American Fur Company amongst others, founded in 1809, with a capital of a million of dollars, which was carrying on operations on the west of the Rocky Mountains.

The Hudson’s Bay Company was probably in greater danger of ruin than any other; but in 1821, after much discussion, a treaty was made, in accordance with which its old rival the North-west Company became amalgamated with it, the two receiving the common title of "The Hudson’s Bay Fur Company."

Now the only rival of this important association is the American St Louis Fur Company. The Hudson’s Bay Company has numerous establishments scattered over a domain extending over 3,700,000 square miles. Its principal factories are situated on James Bay, at the mouth of the Severn, in the south, and towards the frontiers of Upper Canada, on Lakes Athapeskow, Winnipeg, Superior, Methye, Buffalo, and near the Colombia, Mackenzie, Saskatchewan, and Assiniboin rivers, &c. Fort York, commanding the course of the river Nelson, is the headquarters of the Company, and contains its principal fur depot. Moreover, in 1842 it took a lease of all the Russian establishments in North America at an annual rent of £40,000, so that it is now working on its own account the vast tracts of country between the Mississippi and the Pacific Ocean. It has sent out intrepid explorers in every direction: Hearne, towards the Polar Sea, in 1770, to the discovery of the Coppermine River; Franklin, in 1819 to 1822, along 5550 miles of the American coast; Mackenzie, who, after having discovered the river to which he gave his name, reached the shores of the Pacific at 52° 24’ N. Lat. The following is a list of the quantities of skins and furs despatched to Europe by the Hudson’s Bay Company in 1833-34, which will give an exact idea of the extent of its trade:

- Beavers . . . . . . . . . . . 1,074
- Skins and young Beavers,. . 92,288
- Musk Rats,. . . . . . . . . 694,092
- Badgers,. . . . . . . . . . 1,069
- Bears,. . . . . . . . . . 7,451
- Ermines,. . . . . . . . . . 491
- Foes,. . . . . . . . . . 9,937
- Lynxes,. . . . . . . . . . 14,255
- Sables,. . . . . . . . . . 64,490
- Polecats,. . . . . . . . . 25,100
- Otters,. . . . . . . . . 22,303
- Raccoons,. . . . . . . . . 713
- Swans,. . . . . . . . . . 7,918
Wolves, ............ 8,484
Wolverines, ............ 1,571

Such figures ought to bring in a large profit to the Hudson’s Bay Company, but unfortunately they have not been maintained, and for the last twenty years have been decreasing.

The cause of this decline was the subject of Captain Craventy’s explanation to Mrs Paulina Barnett.

"Until 1839, madam," said he, "the Company was in a flourishing condition. In that year the number of furs exported was 2,350,000, but since then the trade has gradually declined, and this number is now reduced by one-half at least."

"But what do you suppose is the cause of this extraordinary decrease in the exportation of furs?" inquired Mrs Barnett.

"The depopulation of the hunting territories, caused by the activity, and, I must add, the want of foresight of the hunters. The game was trapped and killed without mercy. These massacres were conducted in the most reckless and short-sighted fashion. Even females with young and their little ones did not escape. The consequence is, that the animals whose fur is valuable have become extremely rare. The otter has almost entirely disappeared, and is only to be found near the islands of the North Pacific. Small colonies of beavers have taken refuge on the shores of the most distant rivers. It is the same with many other animals, compelled to flee before the invasion of the hunters. The traps, once crowded with game, are now empty. The price of skins is rising just when a great demand exists for furs. Hunters have gone away in disgust, leaving none but the most intrepid and indefatigable, who now penetrate to the very confines of the American continent."

"Yes," said Mrs Paulina Barnett, "the fact of the fur-bearing animals having taken refuge beyond the polar circle, is a sufficient explanation of the Company’s motive in founding a factory on the borders of the Arctic Ocean."

"Not only so, madam," replied the Captain, "the Company is also compelled to seek a more northern centre of operations, for an Act of Parliament has lately greatly reduced its domain."

"And the motive for this reduction?" inquired the traveller.

"A very important question of political economy was involved, madam; one which could not fail greatly to interest the statesmen of Great Britain. In a word, the interests of the Company and those of civilisation are antagonistic. It is to the interest of the Company to keep the territory belonging to it in a wild uncultivated condition. Every attempt at clearing ground was pitilessly put a stop to, as it drove away the wild animals, so that the monopoly enjoyed by the Hudson’s Bay Company was detrimental to all agricultural enterprise. All questions not immediately relating to their own particular trade, were relentlessly put aside by the governors of the association. It was this despotic, and, in a certain sense, immoral system, which provoked the measures taken by Parliament, and, in 1837, a commission appointed by the Colonial Secretary decided that it was necessary to annex to Canada all the territories suitable for cultivation, such as the Red River and Saskatchewan districts, and to leave to the Company only that portion of its land which appeared to be incapable of future civilisation. The next year the Company lost the western slopes of the Rocky Mountains, which it held direct from the Colonial Office, and you will now understand, madam, how the agents of the Company, having lost their power over their old territories, are determined before giving up their trade to try to work the little known countries of the north, and so open a communication with the Pacific by means of the North-west passage."

Mrs Paulina Barnett was now well informed as to the ulterior projects of the celebrated Company. Captain Craventy had given her a graphic sketch of the situation, and it is probable he would have entered into further details, had not an incident cut short his harangue.

Corporal Joliffe announced in a loud voice that, with Mrs Joliffe’s assistance, he was about to mix the punch. This news was received as it deserved. The bowl—or rather, the basin—was filled with the precious liquid. It contained no less than ten pints of coarse rum. Sugar, measured out by Mrs Joliffe, was piled up at the bottom, and on the top floated slices of lemon shrivelled with age. Nothing remained to be done but to light this alcoholic lake, and the Corporal, match in hand, awaited the order of his Captain, as if he were about to spring a mine.

"All right, Joliffe!" at last said Captain Craventy.

The light was applied to the bowl, and in a moment the punch was in flames, whilst the guests applauded and clapped their hands. Ten minutes afterwards, full glasses of the delightful beverage were circulating amongst the guests, fresh bidders for them coming forward in endless succession, like speculators on the Stock Exchange.

"Hurrah! hurrah! hurrah! three cheers for Mrs Barnett! A cheer for the Captain."

In the midst of these joyful shouts cries were heard from outside. Silence immediately fell upon the company assembled.

"Sergeant Long," said the Captain, "go and see what is the matter."

And at his chief’s order, the Sergeant, leaving his glass unfinished, left the room.
CHAPTER III.
A SAVANT THAWED.

Sergeant Long hastened to the narrow passage from which opened the outer door of the fort, and heard the cries redoubled, and combined with violent blows on the postern gate, surrounded by high walls, which gave access to the court. The Sergeant pushed open the door, and plunging into the snow, already a foot deep; he waded through it, although half-blinded by the cutting sleet, and nipped by the terrible cold.

"What the devil does any one want at this time of night?" exclaimed the Sergeant to himself, as he mechanically removed the heavy bars of the gate; "none but Esquimaux would dare to brave such a temperature as this!"

"Open! open! open!" they shouted from without.

"I am opening," replied Sergeant Long, who really seemed to be a long time about it.

At last the door swung open, and the Sergeant was almost upset by a sledge, drawn by six dogs, which dashed past him like a flash of lightning. Worthy Sergeant Long only just escaped being crushed, but he got up without a murmur, closed the gate, and returned to the house at his ordinary pace, that is to say, at the rate of seventy-five strides a minute.

But Captain Craventy, Lieutenant Jaspar Hobson, and Corporal Joliffe were already outside, braving the intense cold, and staring at the sledge, white with snow, which had just drawn up in front of them.

A man completely enveloped in furs now descended from it,

"Fort Reliance?" he inquired.

"The same," replied the Captain.

"Captain Craventy?"

"Behold him! Who are you?"

"A courier of the Company."

"Are you alone?"

"No, I bring a traveller."

"A traveller! And what does he want?"

"He is come to see the moon."

At this reply, Captain Craventy said to himself the man must be a fool. But there was no time to announce this opinion, for the courier had taken an inert mass from the sledge, a kind of bag covered with snow, and was about to carry it into the house, when the Captain inquired

"What is that bag?"

"It is my traveller," replied the courier.

"Who is this traveller?"

"The astronomer, Thomas Black."

"But he is frozen."

"Well, he must be thawed."

Thomas Black, carried by the Sergeant, the Corporal, and the courier, now made his entrance into the house of the fort, and was taken to a room on the first floor, the temperature of which was bearable, thanks to a glowing stove. He was laid upon a bed, and the Captain took his hand.

It was literally frozen. The wrappers and furred mantles, in which Thomas Black was rolled up like a parcel requiring care, were removed, and revealed a man of about fifty. He was short and stout, his hair was already touched with grey, his beard was untrimmed, his eyes were closed, and his lips pressed together as if glued to one another. If he breathed at all, it was so slightly that the frost-work on the windows would not have been affected by it. Joliffe undressed him, and turned him rapidly on to his face and back again, with the words—

"Come, come, sir, when do you mean to return to consciousness?"

But the visitor who had arrived in so strange a manner showed no signs of returning life, and Corporal Joliffe could think of no better means to restore the lost vital heat than to give him a bath in the bowl of hot punch.

Very happily for Thomas Black, however, Lieutenant Jaspar Hobson had another idea.

"Snow, bring snow!" he cried.

There was plenty of it in the court of Fort Reliance; and whilst the Sergeant went to fetch the snow, Joliffe removed all the astronomer’s clothes. The body of the unfortunate man was covered with white frost-bitten patches. It was urgently necessary to restore the circulation of the blood in the affected portions. This result Jaspar Hobson hoped to obtain by vigorous friction with the snow. We know that this is the means generally employed in the polar countries to set going afresh the circulation of the blood arrested by the intense cold, even as the rivers are arrested in their courses by the icy touch of winter. Sergeant Loin soon returned, and he and Joliffe gave the new arrival such a rubbing as he had probably never before received. It was not soft and agreeable friction, but a vigorous shampooing most lustily performed, more like the scratching of a curry-comb than the caresses of a human hand.
And during the operation the loquacious Corporal continued to exhort the unconscious traveller.

"Come, come, sir. What do you mean by getting frozen like this. Now, don’t be so obstinate!"

Probably it was obstinacy which kept Thomas Black from deigning to show a sign of life. At the end of half an hour the rubbers began to despair, and were about to discontinue their exhausting efforts, when the poor man sighed several times.

"He lives; he is coming to!" cried Jaspar Hobson.

After having warmed the outside of his body, Corporal Joliffe hurried to do the same for the inside, and hastily fetched a few glasses of the punch. The traveller really felt much revived by them; the colour returned to his cheeks, expression to his eyes, and words to his lips, so that Captain Craventy began to hope that he should have an explanation from Thomas Black himself of his strange arrival at the fort in such a terrible condition.

At last the traveller, well covered with wraps, rose on his elbow, and said in a voice still faint

"Fort Reliance?"

"The same," replied the Captain.

"Captain Craventy?"

"He is before you, and is happy to bid you welcome. But may I inquire what brings you to Fort Reliance?"

"He is come to see the moon," replied the courier, who evidently thought this a happy answer.

It satisfied Thomas Black too, for he bent his head in assent and resumed—

"Lieutenant Hobson?"

"I am here," replied the Lieutenant.

"You have not yet started?"

"Not. yet, sir."

"Then," replied Thomas Black, "I have only to thank you, and to go to sleep until to-morrow morning."

The Captain and his companions retired, leaving their strange visitor to his repose. Half an hour later the fête was at an end, and the guests had regained their respective homes, either in the different rooms of the fort, or the scattered houses outside the enceinte.

The next day Thomas Black was rather better. His vigorous constitution had thrown off the effects of the terrible chill he had had. Any one else would have died from it; but he was not like other men.

And now who was this astronomer? Where did he come from? Why had he undertaken this journey across the territories of the Company in the depth of winter? What did the courier’s reply signify?— To see the moon! The moon could be seen anywhere; there was no need to come to the hyperborean regions to look at it!

Such were the thoughts which passed through Captain Craventy’s mind. But the next day, after an hour’s talk with his new guest, he had learned all he wished to know.

Thomas Black was an astronomer attached to the Greenwich Observatory, so brilliantly presided over by Professor Airy. Mr Black was no theorist, but a sagacious and intelligent observer; and in the twenty years during which he had devoted himself to astronomy, he had rendered great services to the science of ouranography. In private life he was a simple nonentity; he existed only for astronomy; he lived in the heavens, not upon the earth; and was a true descendant of the witty La Fontaine’s savant who fell into a well. He could talk of nothing but stars and constellations. He ought to have lived in a telescope. As an observer he had not his rival; his patience was inexhaustible; he could watch for months for a cosmical phenomenon. He had a specialty of his own, too; he had studied luminous meteors and shooting stars, and his discoveries in this branch of astronomical science were considerable. When ever minute observations or exact measurements and definitions were required, Thomas Black was chosen for the service; for his clearness of sight was something remarkable. The power of observation is not given to everyone, and it will not therefore be surprising that the Greenwich astronomer should have been chosen for the mission we are about to describe, which involved results so interesting for selenographic science.

We know that during a total eclipse of the sun the moon is surrounded by a luminous corona. But what is the origin of this corona? Is it a real substance? or is it only an effect of the diffraction of the sun’s rays near the moon? This is a question which science has hitherto been unable to answer.

As early as 1706 this luminous halo was scientifically described. The corona was minutely examined during the total eclipse of 1715 by Lonville and Halley, by Maraldi in 1724, by Antonio de’Ulloa in 1778, and by Bonditch and Ferrer in 1806; but their theories were so contradictory that no definite conclusion could be arrived at. During the total eclipse of 1842, learned men of all nations—Airy, Arago, Keytal, Langier, Mauvais, Otto, Struve, Petit, Baily, &c.—endeavoured to solve the mystery of the origin of the phenomenon; but in spite of all their efforts, “the disagreement,” says Arago, “of the observations taken in different places by skilful astronomers of one and the same eclipse, have involved the question in fresh obscurity, so that it is now impossible to come to any certain conclusion as to the cause of the phenomenon.” Since this was written, other total eclipses have been studied with no better results.
Reliance were well supplied with food. Nature provided for all their wants; and clothed in the skins of foxes, legions of tittamegs, the Coregonus of naturalists, disported themselves in the water, so that the inhabitants of Fort often exceeding forty pounds. Pikes, voracious lobes, a sort of charr or grayling called "blue fish," and countless excellent. The waters of the Slave Lake were full of fish; trout in them attained to an immense size, their weight south the hunters from the fort successfully pursued bisons, elks, and Canadian porcupines, the flesh of which is the lake produced very fine willows. Game was abundant in the underwood, even during the bad season. Further winter. Timber was plentiful in these forests, which consisted almost entirely of poplar, pine, and birch. The islets on conformation of its soil, all influence its climate.

is nearly the same as that of the Azores. The nature of a country, its position with regard to the oceans, and even the so much colder than Europe. In April the streets of New York are still white with snow, yet the latitude of New York distributed in equal quantities, do not follow the terrestrial parallels, and that with the same latitude, America is ever such fine vegetation in this remote district. The Great Slave Lake is not really in a higher latitude than Stockholm or Christiania. We have only to remember that the isothermal lines, or belts of equal heat, along which heat is constructed on its shores—Fort Providence on the north, and Fort Resolution on the south. Fort Reliance is situated on the north-east extremity, and is about three hundred miles from the Chesterfield inlet, a long narrow estuary formed by the waters of Hudson’s Bay.

The Great Slave Lake is dotted with little islands, the granite and gneiss of which they are formed jutting up in several places. Its northern banks are clothed with thick woods, shutting out the barren frozen district beyond, not inaptly called the “Cursed Land.” The southern regions, on the other hand, are flat, without a rise of any kind, and the soil is mostly calcareous. The large ruminants of the polar districts—the buffaloes or bisons, the flesh of which forms almost the only food of the Canadian and native hunters—seldom go further north than the Great Slave Lake.

The trees on the northern shores of the lake form magnificent forests. We need not be astonished at meeting with such fine vegetation in this remote district. The Great Slave Lake is not really in a higher latitude than Stockholm or Christiania. We have only to remember that the isothermal lines, or belts of equal heat, along which heat is distributed in equal quantities, do not follow the terrestrial parallels, and that with the same latitude, America is ever so much colder than Europe. In April the streets of New York are still white with snow, yet the latitude of New York is nearly the same as that of the Azores. The nature of a country, its position with regard to the oceans, and even the conformation of its soil, all influence its climate.

In summer Fort Reliance was surrounded with masses of verdure, refreshing to the sight after the long dreary winter. Timber was plentiful in these forests, which consisted almost entirely of poplar, pine, and birch. The islets on the lake produced very fine willows. Game was abundant in the underwood, even during the bad season. Further south the hunters from the fort successfully pursued bisons, elks, and Canadian porcupines, the flesh of which is excellent. The waters of the Slave Lake were full of fish; trout in them attained to an immense size, their weight often exceeding forty pounds. Pikes, voracious lobes, a sort of charr or grayling called "blue fish," and countless legions of tittamegs, the Coregonus of naturalists, disported themselves in the water, so that the inhabitants of Fort Reliance were well supplied with food. Nature provided for all their wants; and clothed in the skins of foxes,
martens, bears, and other Arctic animals, they were able to brave the rigour of the winter.

The fort, properly so called, consisted of a wooden house with a ground-floor and one upper storey. In it lived the commandant and his officers. The barracks for the soldiers, the magazines of the Company, and the offices where exchanges were made, surrounded this house. A little chapel, which wanted nothing but a clergyman, and a powder-magazine, completed the buildings of the settlement. The whole was surrounded by palisades twenty-five feet high, defended by a small bastion with a pointed roof at each of the four corners of the parallelogram formed by the enceinte. The fort was thus protected from surprise, a necessary precaution in the days when the Indians, instead of being the purveyors of the Company, fought for the independence of their native land, and when the agents and soldiers of rival associations disputed the possession of the rich fur country.

At that time the Hudson’s Bay Company employed about a million men on its territories. It held supreme authority over them, an authority which could even inflict death. The governors of the factories could regulate salaries, and arbitrarily fix the price of provisions and furs; and as a result of this irresponsible power, they often realised a profit of no less than three hundred per cent.

We shall see from the following table, taken from the "Voyage of Captain Robert Lade," on what terms exchanges were formerly made with those Indians who have since become the best hunters of the Company. Beavers’ skins were then the currency employed in buying and selling.

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>One gun</td>
<td>10 beavers’ skins</td>
</tr>
<tr>
<td>Half a pound of powder</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>Four pounds of shot</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>One axe</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>Six knives</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>One pound of glass beads</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>One laced coat</td>
<td>6 &quot;</td>
</tr>
<tr>
<td>One coat not laced</td>
<td>5 &quot;</td>
</tr>
<tr>
<td>One laced female dress</td>
<td>6 &quot;</td>
</tr>
<tr>
<td>One pound of tobacco</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>One box of powder</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>One comb and one looking glass</td>
<td>2 &quot;</td>
</tr>
</tbody>
</table>

But a few years ago beaver-skins became so scarce that the currency had to be changed. Bison-furs are now the medium of trade. When an Indian presents himself at the fort, the agents of the Company give him as many pieces of wood as he brings skins, and he exchanges these pieces of wood for manufactured articles on the premises; and as the Company fix the price of the articles they buy and sell, they cannot fail to realise large profits.

Such was the mode of proceeding in Fort Reliance and other factories; so that Mrs Paulina Barnett was able to watch the working of the system during her stay, which extended until the 16th April. Many a long talk did she have with Lieutenant Hobson, many were the projects they formed, and firmly were they both determined to allow no obstacle to check their advance. As for Thomas Black, he never opened his lips except when his own special mission was discussed. He was wrapped up in the subject of the luminous corona and red prominences of the moon; he lived but to solve the problem, and in the end made Mrs Paulina Barnett nearly as enthusiastic as himself. How eager the two were to cross the Arctic Circle, and how far off the 18th July 1860 appeared to both, but especially to the impatient Greenwich astronomer, can easily be imagined.

The preparations for departure could not be commenced until the middle of March, and a month passed before they were completed. In fact, it was a formidable undertaking to organise such an expedition for crossing the Polar regions. Everything had to betaken with them—food, clothes, tools, arms, ammunition, and a nondescript collection of
various requisites.

The troops, under the command of Lieutenant Jaspar Hobson, were one chief and two subordinate officers, with ten soldiers, three of whom took their wives with them. They were all picked men, chosen by Captain Craventy on account of their energy and resolution. We append a list of the whole party:—

1. Lieutenant Jaspar Hobson.
11. Sabine, soldier.
2. Sergeant Long.
12. Hope, do.
3. Corporal Joliffe.
4. Petersen, soldier
14. Mrs Rae
5. Belcher, do.
15. Mrs Joliffe.
6. Rae, do
16. Mrs Mac-Nab.
7. Marbre, do
17. Mrs Paulina Barnett.
8. Garry, do
18. Madge.
9. Pond, do
19. Thomas Black
10. Mac-Nab, do.

In all, nineteen persons to be transported several hundreds of miles through a desert and imperfectly-known country.

With this project in view, however, the Company had collected everything necessary for the expedition. A dozen sledges, with their teams of dogs, were in readiness. These primitive vehicles consisted of strong but light planks joined together by transverse bands. A piece of curved wood, turning up at the end like a skate, was fixed beneath the sledge, enabling it to cleave the snow without sinking deeply into it. Six swift and intelligent dogs, yoked two and two, and controlled by the long thong brandished by the driver, drew the sledges, and could go at a rate of fifteen miles an hour.

The wardrobe of the travellers consisted of garments made of reindeer-skins, lined throughout with thick furs. All wore linen next the skin as a protection against the sudden changes of temperature frequent in these latitudes. Each one, officer or soldier, male or female, wore seal-skin boots sewn with twine, in the manufacture of which the natives excel. These boots are absolutely impervious, and are so flexible that they are admirably adapted for walking. Pine-wood snow-shoes, two or three feet long, capable of supporting the weight of a man on the most brittle snow, and enabling him to pass over it with the rapidity of a skater on ice, can be fastened to the soles of the seal-skin boots. Fur caps and deer-skin belts completed the costumes.

For arms, Lieutenant Hobson had the regulation musketoons provided by the Company, pistols, ordnance sabres, and plenty of ammunition; for tools: axes, saws, adzes, and other instruments required in carpentering. Then there was the collection of all that would be needed for setting up a factory in the remote district for which they were bound: a stove; a smelting furnace, two airpumps for ventilation, an India-rubber boat, only inflated when required, &c., &c.

The party might have relied for provisions on the hunters amongst them. Some of the soldiers were skilful trackers of game, and there were plenty of reindeer in the Polar regions. Whole tribes of Indians, or Esquimaux, deprived of bread and all other nourishment, subsist entirely on this venison, which is both abundant and palatable. But as delays and difficulties had to be allowed for, a certain quantity of provisions was taken with them. The flesh of the bison, elk, and deer, amassed in the large battues on the south of the lake; corned beef, which will keep for any length of time; and some Indian preparations, in which the flesh of animals, ground to powder, retains its nutritive properties in a very small bulk, requiring no cooking, and forming a very nourishing diet, were amongst the stores provided in case of need.

Lieutenant Hobson likewise took several casks of rum and whisky; but he was firmly resolved to economise these spirits, so injurious to the health in cold latitudes, as much as possible. The Company had placed at his disposal a little portable medicine-chest, containing formidable quantities of lime-juice, lemons, and other simple remedies necessary to check, or if possible to prevent, the scorbutic affections which take such a terrible form in these regions.
All the men had been chosen with great care; none were too stout or too thin, and all had for years been accustomed to the severity of the climate, and could therefore more easily endure the fatigues of an expedition to the Polar Sea. They were all brave, high-spirited fellows, who had taken service of their own accord. Double pay had been promised them during their stay at the confines of the American continent, should they succeed in making a settlement beyond the seventieth parallel.

The sledge provided for Mrs Barnett and her faithful Madge was rather more comfortable than the others. She did not wish to be treated better than her travelling companions, but yielded to the urgent request of Captain Craventy, who was but carrying out the wishes of the Company.

The vehicle which brought Thomas Black to Fort Reliance also conveyed him and his scientific apparatus from it. A few astronomical instruments, of which there were not many in those days—a telescope for his selenographic observations, a sextant for taking the latitude, a chronometer for determining the longitudes, a few maps, a few books, were all stored away in this sledge, and Thomas Black relied upon his faithful dogs to lose nothing by the way.

Of course the food for the various teams was not forgotten. There were altogether no less than seventy-two dogs, quite a herd to provide for by the way, and it was the business of the hunters to cater for them. These strong intelligent animals were bought of the Chippeway Indians, who know well how to train them for their arduous calling.

The little company was most skilfully organised. The zeal of Lieutenant Jaspar Hobson was beyond all praise. Proud of his mission, and devoted to his task; he neglected nothing which could insure success. Corporal Joliffe, always a busybody, exerted himself without producing any very tangible results; but his wife was most useful and devoted; and Mrs Paulina Barnett had already struck up a great friendship with the brisk little Canadian woman, whose fair hair and large soft eyes were so pleasant to look at.

We need scarcely add that Captain Craventy did all in his power to further the enterprise. The instructions he had received from the Company showed what great importance they attached to the success of the expedition, and the establishment of a new factory beyond the seventieth parallel. We may therefore safely affirm that every human effort likely to insure success which could be made was made; but who could tell what insurmountable difficulties nature might place in the path of the brave Lieutenant I who could tell what awaited him and his devoted little band.

CHAPTER V.
FROM FORT RELIANCE TO FORT ENTERPRISE.

The first fine days came at last. The green carpet of the hills began to appear here and there where the snow had melted. A few migratory birds from the south-such as swans, bald-headed eagles, &c.—passed through the warmer air. The poplars, birches, and willows began to bud, and the redhead ducks, of which there are so many species in North America, to skim the surface of the numerous pools formed by the melted snow. Guillemots, puffins, and eider ducks sought colder latitudes; and little shrews no bigger than a hazel-nut ventured from their holes, tracing strange figures on the ground with their tiny-pointed tails. It was intoxicating once more to breathe the fresh air of spring, and to bask in the sunbeams. Nature awoke once more from her heavy sleep in the long winter night, and smiled as she opened her eyes.

The renovation of creation in spring is perhaps more impressive in the Arctic regions than in any other portion of the globe, on account of the greater contrast with what has gone before.

The thaw was not, however, complete. The thermometer, it is true, marked 41° Fahrenheit above zero; but the mean temperature of the nights kept the surface of the snowy plains solid—a good thing for the passage of sledges, of which Jaspar Hobson meant to avail himself before the thaw became complete.

The ice of the lake was still unbroken. During the last month several successful hunting expeditions had been made across the vast smooth plains, which were already frequented by game. Mrs Barnett was astonished at the skill with which the men used their snow-shoes, scudding along at the pace of a horse in full gallop. Following Captain Craventy’s advice, the lady herself practised walking in these contrivances, and she soon became very expert in sliding over the snow.

During the last few days several bands of Indians had arrived at the fort to exchange the spoils of the winter chase for manufactured goods. The season had been bad. There were a good many polecats and sables; but the furs of beavers, otters, lynxes, ermines, and foxes were scarce. It was therefore a wise step for the Company to endeavour to explore a new country, where the wild animals had hitherto escaped the rapacity of man.

On the morning of the 16th April Lieutenant Jaspar Hobson and his party were ready to start. The route across the known districts, between the Slave Lake and that of the Great Bear beyond the Arctic Circle, was already determined. Jaspar Hobson was to make for Fort Confidence, on the northern extremity of the latter lake; and he was to revictual at Fort Enterprise, a station two hundred miles further to the north-west, on the shores of the Snare Lake, by travelling at the rate of fifteen miles a day the Lieutenant hoped to halt there about the beginning of May.
From this point the expedition was to take the shortest route to Cape Bathurst, on the North American coast. It was agreed that in a year Captain Craventy should send a convoy with provisions to Cape Bathurst, and that a detachment of the Lieutenant’s men was to go to meet this convoy, to guide it to the spot where the new fort was to be erected. This plan was a guarantee against any adverse circumstances, and left a means of communication with their fellow-creatures open to the Lieutenant and his voluntary companions in exile.

On the 16th April dogs and sledges were awaiting the travellers at the postern gate. Captain Craventy called the men of the party together and said a few kind words to them. He urged them above all things to stand by one another in the perils they might be called upon to meet; reminded them that the enterprise upon which they were about to enter required self-denial and devotion, and that submission to their officers was an indispensable condition of success. Cheers greeted the Captain’s speech, the adieux were quickly made, and each one took his place in the sledge assigned to him. Jaspar Hobson and Sergeant Long went first; then Mrs Paulina Barnett and Madge, the latter dexterously wielding the long Esquimaux whip, terminating in a stiff thong. Thomas Black and one of the soldiers, the Canadian, Petersen, occupied the third sledge; and the others followed, Corporal and Mrs Joliffe bringing up the rear. According to the orders of Lieutenant Hobson, each driver kept as nearly as possible at the same distance from the preceding sledge, so as to avoid all confusion—a necessary precaution, as a collision between two sledges going at full speed, might have had disastrous results.

On leaving Fort Reliance, Jaspar Hobson at once directed his course towards the north-west. The first thing to be done was to cross the large river connecting Lakes Slave and Wolmsley, which was, however, still frozen so hard as to be undistinguishable from the vast white plains around. A uniform carpet of snow covered the whole country, and the sledges, drawn by their swift teams, sped rapidly over the firm smooth surface.

The weather was fine, but still very cold. The sun, scarce above the horizon, described a lengthened curve; and its rays, reflected on the snow, gave more light than heat. Fortunately not a breath of air stirred, and this lessened the severity of the cold, although the rapid pace of the sledges through the keen atmosphere must have been trying to any one not inured to the rigour of a Polar climate.

"A good beginning," said Jaspar Hobson to the Sergeant, who sat motionless beside him as if rooted to his seat; "the journey has commenced favourably. The sky is cloudless; the temperature propitious, our equipages shoot along like express trains, and as long as this fine weather lasts we shall get on capitally. What do you think, Sergeant Long?"

"I agree with you, Lieutenant," replied the Sergeant, who never differed from his chief.

"Like myself, Sergeant, you are determined to push on as far north as possible—are you not?" resumed Lieutenant Hobson.

"You have but to command to be obeyed, Lieutenant."

"I know it, Sergeant; I know that with you to bear is to obey. Would that all our men understood as you do the importance of our mission, and would devote themselves body and soul to the interests of the Company! Ah, Sergeant Long, I know if I gave you an impossible order—"

"Lieutenant, there is no such thing as an impossible order."

"What? Suppose now I ordered you to go to the North Pole?"

"Lieutenant, I should go!"

"And to comeback!" added Jaspar Hobson with a smile.

"I should come back," replied Sergeant Long simply.

During this colloquy between Lieutenant Hobson and his Sergeant a slight ascent compelled the sledges to slacken speed, and Mrs Barnett and Madge also exchanged a few sentences. These two intrepid women, in their otter-skin caps and white bear-skin mantles, gazed in astonishment upon the rugged scenery around them, and at the white outlines of the huge glaciers standing out against the horizon. They had already left behind them the hills of the northern banks of the Slave Lake, with their summits crowned with the gaunt skeletons of trees. The vast plains stretched before them in apparently endless succession. The rapid flight and cries of a few birds of passage alone broke the monotony of the scene. Now and then a troop of swans, with plumage so white that the keenest sight could not distinguish them from the snow when they settled on the ground, rose into view in the clear blue atmosphere and pursued their journey to the north.

"What an extraordinary country!" exclaimed Mrs Paulina Barnett. "What a difference between these Polar regions and the green prairies of Australia! You remember, Madge, how we suffered from the heat on the shores of the Gulf of Carpentaria—you remember the cloudless sky and the parching sunbeams?"

"My dear," replied Madge, "I have not the gift of remembering like you. You retain your impressions, I forget mine."

"What, Madge!" cried Mrs Barnett, "you have forgotten the tropical heat of India arid Australia? You have no recollection of our agonies when water failed us in the desert, when the pitiless sun scorched us to the bone, when
even the night brought us no relief from our sufferings!"

"No, Paulina," replied Madge, wrapping her furs more closely round her, "no, I remember nothing. How could I now recollect the sufferings to which you allude—the heat, the agonies of thirst—when we are surrounded on every side by ice, and I have but to stretch my arm out of this sledge to pick up a handful of snow? You talk to me of heat, when we are freezing beneath our bear skins; you recall the broiling rays of the sun when its April beams cannot melt the icicles on our lips! No, child, no, don't try to persuade me it's hot anywhere else; don't tell me I ever complained of being too warm, for I sha’n't believe you!"

Mrs Paulina Barnett could not help smiling.

"So, poor Madge," she said, "you are very cold!"

"Yes, child, I am cold; but I rather like this climate. I've no doubt it's very healthy, and I think North America will agree with me. It's really a very fine country!"

"Yes, Madge; it is a fine country, and we have as yet seen none of the wonders it contains. But wait until we reach the Arctic Ocean; wait until the winter shuts us in with its gigantic icebergs and thick covering of snow; wait till the northern storms break over us, and the glories of the Aurora Borealis and of the splendid constellations of the Polar skies are spread out above our heads; wait till we have lived through the strange long six months' night, and then indeed you will understand the infinite variety, the infinite beauty, of our Creator's handiwork!"

Thus spoke Mrs Paulina Barnett, carried away by her vivid imagination. She could see nothing but beauty in these deserted regions, with their rigorous climate. Her enthusiasm got the better of the time of her judgment. Her sympathy with nature enabled her to read the touching poetry of the ice-bound north—the poetry embodied in the Sagas, and sung by the bards of the time of Ossian. But Madge, more matter of fact than her mistress, disguised from herself neither the dangers of an expedition to the Arctic Ocean, nor the sufferings involved in wintering only thirty degrees at the most from the North Pole.

And indeed the most robust had sometimes succumbed to the fatigues, privations, and mental and bodily agonies endured in this severe climate. Jaspar Hobson had not, it is true, to press on to the very highest latitudes of the globe; he had not to reach the pole itself, or to follow in the steps of Parry, Ross, Mc'Clure, Kean, Morton, and others. But after once crossing the Arctic Circle, there is little variation in the temperature; it does not increase in coldness in proportion to the elevation reached. Granted that Jaspar Hobson did not think of going beyond the seventieth parallel, we must still remember that Franklin and his unfortunate companions died of cold and hunger before they had penetrated beyond 68° N. lat.

Very different was the talk in the sledge occupied by Mr and Mrs Joliffe. Perhaps the gallant Corporal had too often drunk to the success of the expedition on starting; for, strange to say, he was disputing with his little wife. Yes, he was actually contradicting her, which never happened except under extraordinary circumstances!

"No, Mrs Joliffe," he was saying, "no, you have nothing to fear. A sledge is not more difficult to guide than a pony-carriage, and the devil take me if I can't manage a team of dogs!"

"I don't question your skill," replied Mrs Joliffe; "I only ask you not to go so fast. You are in front of the whole caravan now, and I hear Lieutenant Hobson calling out to you to resume your proper place behind."

"Let him call, Mrs Joliffe, let him call."

And the Corporal, urging on his dogs with a fresh cut of the whip, dashed along at still greater speed.

"Take care, Joliffe," repeated his little wife; "not so fast, we are going down hill."

"Down hill, Mrs Joliffe; you call that down hill? why, it's up hill!"

"I tell you we are going down!" repeated poor Mrs Joliffe.

"And I tell you we are going up; look how the dogs pull!"

Whoever was right, the dogs became uneasy. The ascent was, in fact, pretty steep; the sledge dashed along at a reckless pace, and was already considerably in advance of the rest of the party. Mr and Mrs Joliffe bumped up and down every instant, the surface of the snow became more and more uneven, and the pair, flung first to one side and then to the other, knocked against each other and the sledge, and were horribly bruised and shaken. But the Corporal would listen neither to the advice of his wife nor to the shouts of Lieutenant Hobson. The latter, seeing the danger of this reckless course, urged on his own animals, and the rest of the caravan followed at a rapid pace.

But the Corporal became more and more excited—the speed of his equipage delighted him. He shouted, he gesticulated, and flourished his long whip like an accomplished sportsman.

"Wonderful things these whips!" he cried; "the Esquimaux wield them with unrivalled skill!"

"But you are not an Esquimaux!" cried Mrs Joliffe, trying in vain to arrest the arm of her imprudent husband.

"I have heard tell," resumed the Corporal—"I've heard tell that the Esquimaux can touch any dog they like in any part, that they can even cut out a bit of one of their ears with the stiff thong at the end of the whip. I am going to try." "Don't try, don't try, Joliffe!" screamed the poor little woman, frightened out of her wits.
"Don’t be afraid, Mrs Joliffe, don’t be afraid; I know what I can do. The fifth dog on the right is misbehaving himself.; I will correct him a little!"

But Corporal Joliffe was evidently not yet enough of an Esquimaux to be able to manage the whip with its thong four feet longer than the sledge; for it unrolled with an ominous hiss, and rebounding, twisted itself round Corporal Joliffe’s own neck, sending his fur cap into the air, perhaps with one of his ears in it.

At this moment the dogs flung themselves on one side, the sledge was overturned, and the pair were flung into the snow. Fortunately it was thick and soft, so that they escaped unhurt. But what a disgrace for the Corporal! how reproachfully his little wife looked at him, and how stern was the reprimand of Lieutenant Hobson!

The sledge was picked up, but it was decided that henceforth the reins of the dogs, like those of the household, were to be in the hands of Mrs Joliffe. The crest-fallen Corporal was obliged to submit, and the interrupted journey was resumed.

No incident worth mentioning occurred during the next fifteen days. The weather continued favourable, the cold was not too severe, and on the 1st May the expedition arrived at Fort Enterprise.

CHAPTER VI.
A WAPITI DUEL.

Two hundred miles had been traversed since the expedition left Fort Reliance. The travellers, taking advantage of the long twilight, pressed on day and night, and were literally overcome with fatigue when they reached Fort Enterprise, near the shores of Lake Snare.

This fort was no more than a depot of provisions, of little importance, erected a few years before by the Hudson’s Bay Company. It served as a resting-place for the men taking the convoys of furs from the Great Bear Lake, some three hundred miles further to the north-west. About a dozen soldiers formed the garrison. The fort consisted of a wooden house surrounded by palisades. But few as were the comforts it offered, Lieutenant Hobson’s companions gladly took refuge in it and rested there for two days.

The gentle influence of the Arctic spring was beginning to be felt. Here and there the snow had melted, and the temperature of the nights was no longer below freezing point. A few delicate mosses and slender grasses clothed the rugged ground with their soft verdure; and from between the stones peeped the moist calices of tiny, almost colourless, flowers. These faint signs of reawakening vegetation, after the long night of winter, were refreshing to eyes weary of the monotonous whiteness of the snow; and the scattered specimens of the Flora of the Arctic regions were welcomed with delight.

Mrs Paulina Barnett and Jaspar Hobson availed themselves of this leisure time to visit the shores of the little lake. They were both students and enthusiastic lovers of nature. Together they wandered amongst the ice masses, already beginning to break up, and the waterfalls created by the action of the rays of the sun. The surface itself of Lake Snare was still intact, not a crack denoted the approaching thaw; but it was strewn with the ruins of mighty icebergs, which assumed all manner of picturesque forms, and the beauty of which was heightened when the light, diffused by the sharp edges of the ice, touched them with all manner of colours. One might have fancied that a rainbow, crushed in a powerful hand, had been flung upon the ground, its fragments crossing each other as they fell.

“What a beautiful scene!” exclaimed Mrs Paulina Barnett. “These prismatic effects vary at every change of our position. Does it not seem as if we were bending over the opening of an immense kaleidoscope, or are you already weary of a sight so new and interesting to me?”

“No, madam,” replied the Lieutenant; “although I was born and bred on this continent, its beauties never pall upon me. But if your enthusiasm is so great when you see this scenery with the sun shining upon it, what will it be when you are privileged to behold the terrible grandeur of the winter? To own the truth, I think the sun, so much thought of in temperate latitudes, spoils my Arctic home.”

“Indeed!” exclaimed Mrs Barnett, smiling at the Lieutenant’s last remark; “for my part, I think the sun a capital travelling companion, and I shall not be disposed to grumble at the warmth it gives even in the Polar regions!”

“Ah, madam,” replied Jaspar Hobson, “I am one of those who think it best to visit Russia in the winter, and the Sahara Desert in the summer. You then see their peculiar characteristics to advantage. The sun is a star of the torrid and temperate zones, and is out of place thirty degrees from the North Pole. The true sky of this country is the pure frigid sky of winter, bright with constellations, and sometimes flushed with the glory of the Aurora Borealis. This land is the land of the night, not of the day; and you have yet to make acquaintance with the delights and marvels of the long Polar night.”

“Have you ever visited the temperate zones of Europe and America?” inquired Mrs Barnett.

“Yes, madam; and I admired them as they deserved. But I returned home with fresh love and enthusiasm for my native land. Cold is my element, and no merit is due to me for braving it. It has no power over me; and, like the Esquimaux. I can live for months together in a snow hut.”
"Really, Lieutenant Hobson, it is quite cheering to hear our dreaded enemy spoken of in such terms. I hope to prove myself worthy to be your companion, and wherever you venture, we will venture together."

"I agree, madam, I agree; and may all the women and soldiers accompanying me show themselves as resolute as you. If so, God helping us, we shall indeed advance far."

"You have nothing to complain of yet," observed the lady. "Not a single accident has occurred, the weather has been propitious, the cold not too severe-everything has combined to aid us."

"Yes, madam; but the sun which you admire so much will soon create difficulties for us, and strew obstacles in our path."

"What do you mean, Lieutenant Hobson?"

"I mean that the heat will soon have changed the aspect of the country; that the melted ice will impede the sliding of the sledges; that the ground will become rough and uneven; that our panting dogs will no longer carry us along with the speed of an arrow; that the rivers and lakes will resume their liquid state, and that we shall have to ford or go round them. All of these changes, madam, due to the influence of the solar rays, will cause delays, fatigue, and dangers, the very least of which will be the breaking of the brittle snow beneath our feet, or the falling of the avalanches from the summits of the icebergs. For all this we have to thank the gradual rise of the sun higher and higher above the horizon. Bear this in mind, madam: of the four elements of the old creation, only one is necessary to us here, the air; the other three, fire, earth, and water, are de trop in the Arctic regions."

Of course the Lieutenant was exaggerating, and Mrs Barnett could easily have retorted with counter-arguments; but she liked to hear his raptures in praise of his beloved country, and she felt that his enthusiasm was a guarantee that he would shrink from no obstacle.

Yet Jaspar Hobson was right when he said the sun would cause difficulties. This was seen when the party set out again on the 4th May, three days later. The thermometer, even in the coldest part of the night, marked more than 32° Fahrenheit. A complete thaw set in, the vast white sheet of snow resolved itself into water. The irregularities of the rocky soil caused constant jolting of the sledges, and the passengers were roughly shaken. The roads were so heavy that the dogs had to go at a slow trot, and the reins were therefore again entrusted to the hands of the imprudent Corporal Joliffe. Neither shouts nor flourishings of the whip had the slightest effect on the jaded animals.

From time to time the travellers lightened the sledges by walking little way. This mode of locomotion suited the hunters, who were now gradually approaching the best districts for game in the whole of English America. Mrs Paulina Barnett and Madge took a great interest in the chase, whilst Thomas Black professed absolute indifference to all athletic exercise. He had not come all this distance to hunt the polecat or the ermine, but merely to look at the moon at the moment when her disc should cover that of the sun. When the queen of the night rose above the horizon, the impatient astronomer would gaze at her with eager eyes, and one day the Lieutenant said to him

"It would be a bad look-out for you, Mr Black, if by any unlucky chance the moon should fail to keep her appointment on the 16th July 1860."

"Lieutenant Hobson," gravely replied the astronomer, "if the moon were guilty of such a breach of good manners, I should indeed have cause to complain."

The chief hunters of the expedition were the soldiers Marbre and Sabine, both very expert at their business. Their skill was wonderful; and the cleverest Indians would not have surpassed them in keenness of sight, precision of aim, or manual address. They were alike trappers and hunters, and were acquainted with all the nets and snares for taking sables, otters, wolves, foxes, bears, &c. No artifice was unknown to them, and Captain Craventy had shown his wisdom in choosing two such intelligent men to accompany the little troop.

Whilst on the march however, Marbre and Sabine had no time for setting traps. They could not separate from the others for more than an hour or two at a time, and were obliged to be content with the game which passed within range of their rifles. Still they were fortunate enough to kill two of the large American ruminants, seldom met with in such elevated latitudes.

On the morning of the 15th May the hunters asked permission to follow some fresh traces they had found, and the Lieutenant not only granted it, but himself accompanied them with Mrs Paulina Barnett, and they went several miles out of their route towards the east.

The impressions were evidently the result of the passage of about half-a-dozen large deer. There could be no mistake about it; Marbre and Sabine were positive on that point, and could even have named the species to which the animals belonged.

"You seem surprised to have met with traces of these animals here, Lieutenant," said Mrs Barnett.

"Well, madam," replied Hobson, "this species is rarely seen beyond 57° N. lat. We generally hunt them at the south of the Slave Lake, where they feed upon the shoots of willows and poplars, and certain wild roses to which they are very partial."
"I suppose these creatures, like those with valuable furs, have fled from the districts scour ed by the hunters."

"I see no other explanation of their presence at 65° N. lat.," replied the Lieutenant-"that is, if the men are not mistaken as to the origin of the footprints."

"No, no, sir," cried Sabine; "Marbre and I are not mistaken. These traces were left by deer, the deer we hunters call red deer, and the natives wapitis."

"He is quite right," added Marbre; "old trappers like us are not to be taken in; besides, don’t you hear that peculiar whistling sound?"

The party had now reached the foot of a little hill, and as the snow had almost disappeared from its sides they were able to climb it, and hastened to the summit, the peculiar whistling noticed by Marbre becoming louder, mingled with cries resembling the braying of an ass, and proving that the two hunters were not mistaken.

Once at the top of the hill, the adventurers looked eagerly towards the east. The undulating plains were still white with snow, but its dazzling surface was here and there relieved with patches of stunted light green vegetation. A few gaunt shrubs stretched forth their bare and shrivelled branches, and huge icebergs with precipitous sides stood out against the grey background of the sky.

"Wapitis! wapitis!—there they are!" cried Sabine and Marbre at once, pointing to a group of animals distinctly visible about a quarter of a mile to the east.

"What are they doing?" asked Mrs Barnett.

"They are fighting, madam," replied Hobson; "they always do when the heat of the Polar sun inflames their blood—another deplorable result of the action of the radiant orb of day!"

From where they stood the party could easily watch the group of wapitis. They were fine specimens of the family of deer known under the various names of stags with rounded antlers, American stags, roebucks, grey elks and red elks, &c. These graceful creatures have slender legs and brown skins with patches of red hair, the colour of which becomes darker in the warmer season. The fierce males are easily distinguished from the females by their fine white antlers, the latter being entirely without these ornaments. These wapitis were once very numerous all over North America, and the United States imported a great many; but clearings were begun on every side, the forest trees fell beneath the axe of the pioneer of civilisation, and the wapitis took refuge in the more peaceful districts of Canada; but they were soon again disturbed, and wandered to the shores of Hudson’s Bay. So that although the wapiti thrives in a cold country, Lieutenant Hobson was right in saying that it seldom penetrates beyond 57° N. latitude; and the specimens now found had doubtless fled before the Chippeway Indians, who hunt them without mercy.

The wapitis were so engrossed in their desperate struggle that they were unconscious of the approach of the hunters; but they would probably not have ceased fighting, had they been aware of it. Marbre and Sabine, aware of their peculiarity in this respect, might therefore have advanced fearlessly upon them, and have taken aim at leisure.

Lieutenant Hobson suggested that they should do so.

"Beg pardon, sir," replied Marbre; "but let us spare our powder and shot. These beasts are engaged in a war to the death, and we shall arrive in plenty of time to pick up the vanquished."

"Have these wapitis a commercial value?" asked Mrs Paulina Barnett.

"Yes, madam," replied Hobson; "and their skin, which is not quite so thick as that of the elk, properly so called makes very valuable leather. By rubbing this skin with the fat and brains of the animal itself, it is rendered flexible, and neither damp nor dryness injures it. The Indians are therefore always eager to procure the skins of the wapitis."

"Does not the flesh make admirable venison?"

"Pretty good, madam; only pretty good. It is tough, and does not taste very nice; the fat becomes hard directly it is taken from the fire, and sticks to the teeth. It is certainly inferior as an article of food to the flesh of other deer; but when meat is scarce we are glad enough to eat it, and it supports life as well as anything else."

Mrs Barnett and Lieutenant Hobson had been chatting together for some minutes, when, with the exception of two, the wapitis suddenly ceased fighting. Was their rage satiated? or had they perceived the hunters, and felt the approach of danger? Whatever the cause, all but two fine creatures fled towards the east With incredible speed; in a few instants they were out of sight, and the swiftest horse could not have caught them up.

Meanwhile, however, two magnificent specimens remained on the field of battle. Heads down, antlers to antlers, hind legs stretched and quivering, they butted at each other without a moment’s pause. Like two wrestlers struggling for a prize which neither will yield, they would not separate, but whirled round and round together on their front legs as if riveted to one another. What implacable rage! exclaimed Mrs Barnett.

"Yes," replied the Lieutenant; "the wapitis really are most spiteful beasts. I have no doubt they are fighting out an old quarrel."

"Would not this be the time to approach them, when they are blinded with rage?"

"There’s plenty of time, ma’am," said Sabine; "they won’t escape us now. They will not stir from where they are
when we are three steps from them, the rifles at our shoulders, and our fingers on the triggers!"

Indeed? Yes, madam," added Hobson, who had carefully examined the wapitis after the hunter’s remark; "and whether at our hands or from the teeth of wolves, those wapitis will meet death where they now stand."

"I don’t understand what you mean, Lieutenant," said Mrs Barnett.

"Well, go nearer, madam," he replied; "don’t be afraid of startling the animals; for, as our hunter says, they are no longer capable of flight."

The four now descended the hill, and in a few minutes gained the theatre of the struggle. The wapitis had not moved. They were pushing at each other like a couple of rams, and seemed to be inseparably glued together.

In fact, in the heat of the combat the antlers of the two creatures had become entangled together to such an extent that they could no longer separate without breaking them. This often happens in the hunting districts. It is not at all uncommon to find antlers thus connected lying on the ground; the poor encumbered animals soon die of hunger, or they become an easy prey to wild beasts.

Two bullets put an end to the fight between the wapitis; and Marbre and Sabine taking immediate possession, carried off their skins to be subsequently prepared, leaving their bleeding carcasses to be devoured by wolves and bears.

CHAPTER VII.
THE ARCTIC CIRCLE.

The expedition continued to advance towards the north-west; but the great inequalities of the ground made it hard work for the dogs to get along, and the poor creatures, who could hardly be held in when they started, were now quiet enough. Eight or ten miles a day were as much as they could accomplish, although Lieutenant Hobson urged them on to the utmost.

He was anxious to get to Fort Confidence, on the further side of the Great Bear Lake, where he hoped to obtain some useful information. Had the Indians frequenting the northern banks of the lake been able to cross the districts on the shores of the sea? was the Arctic Ocean open at this time of year? These were grave questions, the reply to which would decide the fate of the new factory.

The country through which the little troop was now passing was intersected by numerous streams, mostly tributaries of the two large rivers, the Mackenzie and Coppermine, which flow from the south to the north, and empty themselves into the Arctic Ocean. Lakes, lagoons, and numerous pools are formed between these two principal arteries; and as they were no longer frozen over, the sledges could not venture upon them, and were compelled to go around them, which caused considerable delay. Lieutenant Hobson was certainly right in saying that winter is the time to visit the hyperborean regions, for they are then far easier to traverse. Mrs Paulina Barnett had reason to own the justice of this assertion than once.

This region, included in the “Cursed Land,” was, besides, completely deserted, as are the greater portion of the districts of the extreme north of America. It has been estimated that there is but one inhabitant to every ten square miles. Besides the scattered natives, there are some few thousand agents or soldiers of the different fur-trading companies; but they mostly congregate in the southern districts and about the various factories. No human footprints gladden the eyes of the travellers, the only traces on the sandy soil were those of ruminants and rodents. Now and then a fierce polar bear was seen, and Mrs Paulina Barnett expressed her surprise at not meeting more of these terrible carnivorous beasts, of whose daily attacks on whalers and persons shipwrecked in Baffin’s Bay and on the coasts of Greenland and Spitzbergen she had read in the accounts of those who had wintered in the Arctic regions.

"Wait for the winter, madam," replied the Lieutenant; “wait till the cold makes them hungry, and then you will perhaps see as many as you care about!”

On the 23d May, after a long and fatiguing journey, the expedition at last reached the Arctic Circle. We know that this latitude 23° 27’ 57” from the North Pole, forms the mathematical limit beyond which the rays of the sun do not penetrate in the winter, when the northern districts of the globe are turned away from the orb of day. Here, then, the travellers entered the true Arctic region, the northern Frigid Zone.

The latitude had been very carefully obtained by means of most accurate instruments, which were handled with equal skill by the astronomer and by Lieutenant Hobson. Mrs Barnett was present at the operation, and had the satisfaction of hearing that she was at last about to cross the Arctic Circle. It was with a feeling of just pride that she received the intelligence.

“You have already passed through the two Torrid Zones in your previous journeys," said the Lieutenant, "and now you are on the verge of the Arctic Circle. Few explorers have ventured into such totally different regions. Some, so to speak, have a specialty for hot countries, and choose Africa or Australia as the field for their investigations. Such were Barth, Burton, Livingstone Speke, Douglas, Stuart, &c. Others, on the contrary, have a passion for the Arctic regions, still so little known. Mackenzie, Franklin, Penny, Kane, Parry, Rae, &c., preceded us on our present journey; but we must congratulate you, Mrs Barnett, on being a more cosmopolitan traveller than all
of them."

"I must see everything or at least try to see everything, Lieutenant," replied Mrs Paulina; "and I think the
dangers and difficulties are about equal everywhere. Although we have not to dread the fevers of the unhealthy
torrid regions, or the attacks of the fierce black races, in this Frigid Zone, the cold is a no less formidable enemy;
and I suspect that the white bears we are liable to meet with here will give us quite as warm a reception as would the
tiers of Thibet or the lions of Africa. In Torrid and Frigid Zones alike there are vast unexplored tracts which will
long defy the efforts of the boldest adventurers."

"Yes, madam," replied Jaspar Hobson; "but I think the hyperborean regions will longer resist thorough
exploration. The natives are the chief obstacle in tropical regions, and I am well aware how many travellers have
fallen victims to savages. But civilisation will necessarily subdue the wild races sooner or later; whereas in the
Arctic and Antarctic Zones it is not the inhabitants who arrest the progress of the explorer, but Nature herself who
repels those who approach her, and paralyses their energies with the bitter cold!"

"You think, then, that the secrets of the most remote districts of Africa and Australia will have been fathomed
before the Frigid Zone has been entirely examined?"

"Yes, madam," replied the Lieutenant; "and I think my opinion is founded on facts. The most intrepid
discoverers of the Arctic regions - Parry, Penny, Franklin, M’Clure, Dane, and Morton — did not get beyond 83°
north latitude, seven degrees from the pole — whereas Australia has several times been crossed from south to north
by the bold Stuart; and even Africa, with all its terrors, was traversed by Livingstone from the Bay of Loanga to the
mouth of the Zambesi. We are, therefore, nearer to geographical knowledge of the equatorial countries than of the
Polar districts."

"Do you think that the Pole itself will ever be reached by man?" inquired Mrs Paulina Barnett.

"Certainly," replied Hobson, adding with a smile, "by man or woman. But I think other means must be tried of
reaching this point, where all the meridians of the globe cross each other, than those hitherto adopted by travellers.
We hear of the open sea, of which certain explorers are said to have caught a glimpse. But if such a sea, free from
ice, really exist, it is very difficult to get at, and no one can say positively whether it extends to the North Pole. For
my part, I think an open sea would increase rather than lessen the difficulties of explorers. As for me, I would rather
count upon firm footing, whether on ice or rock, all the way. Then I would organise successive expeditions,
establishing depôts of provisions and fuel nearer and nearer to the Pole; and so, with plenty of time, plenty of
money, and perhaps the sacrifice of a good many lives, I should in the end solve the great scientific problem. I
should, I think, at last reach the hitherto inaccessible goal!"

"I think you are right, Lieutenant," said Mrs Barnett; "and if ever you try the experiment, I should not be afraid
to join you, and would gladly go to set up the Union Jack at the North Pole. But that is not our present object."

"Not our immediate object, madam," replied Hobson; "but when once the projects of the Company are realised,
when the new fort has been erected on the confines of the American continent, it may become the natural starting-
point of all expeditions to the north. Besides, should the fur-yielding animals, too zealously hunted, take refuge at
the Pole, we should have to follow them."

"Unless costly furs should go out of fashion," replied Mrs Barnett.

"Oh, madam," cried the Lieutenant, "there will always be some pretty woman whose wish for a sable muff or an
ermine tippet must be gratified!"

"I am afraid so," said Mrs Barnett, laughing; "and probably the first discoverer of the Pole will have been led
thither in pursuit of a sable or a silver fox."

"That is my conviction," replied Hobson. "Such is human nature, and greed of gain will always carry a man
further than zeal for science."

"What! do you utter such sentiments?" exclaimed Mrs Barnett.

"Well, madam, what am I but an employé of the Hudson’s Bay Company? and does the Company risk its capital
and agents with any other hope than an increase of profits?"

"Lieutenant Hobson," said Mrs Barnett, "I think I know you well enough to assert that on occasion you would be
ready to devote body and soul to science. If a purely geographical question called you to the Pole, I feel sure you
would not hesitate to go. But," she added, with a smile, "the solution of this great problem is still far distant. We
have but just reached the verge of the Arctic Circle, but I hope we may cross it without any very great difficulty."

"That I fear is doubtful," said the Lieutenant, who had been attentively examining the sky during their
conversation. "The weather has looked threatening for the last few days. Look at the uniformly grey hue of the
heavens. That mist will presently resolve itself into snow; and if the wind should rise ever so little, we shall have to
battle with a fearful storm. I wish we were at the Great Bear Lake!"

"Do not let us lose any time, then," said Mrs Barnett, rising; "give the signal to start at once."

The Lieutenant needed no urging. Had he been alone, or accompanied by a few men as energetic as himself, he
would have pressed on day and night; but he was obliged to make allowance for the fatigue of others, although he
never spared himself. He therefore granted a few hours of rest to his little party, and it was not until three in the
afternoon that they again set out.

Jaspar Hobson was not mistaken in prophesying a change in the weather. It came very soon. During the
afternoon of the same day the mist became thicker, and assumed a yellowish and threatening hue. The Lieutenant,
although very uneasy, allowed none of his anxiety to appear, but had a long consultation with Sergeant Long whilst
the dogs of his sledge were laboriously preparing to start.

Unfortunately, the district now to be traversed was very unsuitable for sledges. The ground was very uneven; ravines
were of frequent occurrence; and masses of granite or half-thawed icebergs blocked up the road, causing
constant delay. The poor dogs did their best, but the drivers’ whips no longer produced any effect upon them.

And so the Lieutenant and his men were often obliged to walk to rest the exhausted animals, to push the sledges,
or even sometimes to lift them when the roughness of the ground threatened to upset them. The incessant fatigue
was, however, borne by all without a murmur. Thomas Black alone, absorbed in his one idea, never got out of his
sledge, and indeed he was so corpulent that all exertion was disagreeable to him.

The nature of the soil changed from the moment of entering the Arctic Circle. Some geological convulsion had
evidently upheaved the enormous blocks strewn upon the surface. The vegetation, too, was of a more distinctive
documentivity. Wherever they were sheltered from the keen north winds, the flanks of the hills were clothed not only
with shrubs, but with large trees, all of the same species — pines, willows, and firs — proving by their presence that
a certain amount of vegetative force is retained even in the Frigid Zone. Jaspar Hobson hoped to find such
specimens of the Arctic Flora even on the verge of the Polar Sea; for these trees would supply him with wood to
build his fort, and fuel to warm its inhabitants. The same thought passed through the minds of his companions, and
they could not help wondering at the contrast between this comparatively fertile region, and the long white plains
stretching between the Great Slave Lake and Fort Enterprise.

At night the yellow mist became more opaque; the wind rose, the snow began to fall in large flakes, and the
ground was soon covered with a thick white carpet. In less than an hour the snow was a foot deep, and as it did not
freeze but remained in a liquid state, the sledges could only advance with extreme difficulty; the curved fronts stuck
in the soft substance, and the dogs were obliged to stop again and again.

Towards eight o’clock in the evening the wind became very boisterous. The snow, driven before it, was flung
upon the ground or whirled in the air, forming one huge whirlpool. The dogs, beaten back by the squall and blinded

snow, could advance no further. The party was then in a narrow gorge between huge icebergs, over which the
storm raged with fearful fury. Pieces of ice, broken off by the hurricane, were hurled into the pass; partial
avalanches, any one of which could have crushed the sledges and their inmates, added to its dangers, and to press on
became impossible. The Lieutenant no longer insisted, and after consulting with Sergeant Long, gave the order to
halt. It was now necessary to find a shelter from the snow-drift; but this was no difficult matter to men accustomed
to Polar expeditions. Jaspar Hobson and his men knew well what they had to do under the circumstances. It was not
the first time they had been surprised by a tempest some hundred miles from the forts of the Company, without so
much as an Esquimaux hut or Indian hovel in which to lay their heads.

"To the icebergs! to the icebergs!" cried Jaspar Hobson.

Every one understood what he meant. Snow houses were to be hollowed out of the frozen masses, or rather holes
were to be dug, in which each person could cower until the storm was over. Knives and hatchets were soon at work
on the brittle masses of ice, and in three-quarters of an hour some ten dens had been scooped out large enough to
contain two or three persons each. The dogs were left to themselves, their own instinct leading them to find
sufficient shelter under the snow.

Before ten o’clock all the travellers were crouching in the snow houses, in groups of two or three, each choosing
genial companions. Mrs Barnett, Madge, and Lieutenant Hobson occupied one hut, Thomas Black and Sergeant
Long another, and so on. These retreats were warm, if not comfortable; and the Esquimaux and Indians have no
other refuge even in the bitterest cold. The adventurers could therefore fearlessly await the end of the storm as long
as they took care not to let the openings of their holes become blocked up with the snow, which they had to shovel
away every half hour. So violent was the storm that even the Lieutenant and his soldiers could scarcely set foot
outside. Fortunately, all were provided with sufficient food, and were able to endure their beaver-like existence
without suffering from cold or hunger.

For forty-eight hours the fury of the tempest continued to increase. The wind roared in the narrow pass, and tore
off the tops of the icebergs. Loud reports, repeated twenty times by the echoes, gave notice of the fall of avalanches,
and Jaspar Hobson began to fear that his further progress would be barred by the masses of debris accumulated
between the mountains. Other sounds mingled with these reports, which Lieutenant Hobson knew too well, and he
did not disguise from Mrs Barnett that bears were prowling about the pass. But fortunately these terrible animals
were too much occupied with their own concerns to discover the retreat of the travellers; neither the dogs nor the sledges, buried in the snow, attracted their attention, and they passed on without doing any harm.

The last night, that of the 25th or 26th May, was even more terrible. So great was the fury of the hurricane that a general overthrow of icebergs appeared imminent. A fearful death would then have awaited the unfortunate travellers beneath the ruins of the broken masses. The blocks of ice cracked with an awful noise, and certain oscillations gave warning that breaches had been made threatening their solidity. However, no great crash occurred, the huge mountains remained intact, and towards the end of the night one of those sudden changes so frequent in the Arctic regions took place; the tempest ceased suddenly beneath the influence of intense cold, and with the first dawn of day peace was restored.

CHAPTER VIII.
THE GREAT BEAR LAKE.

This sudden increase of cold was most fortunate. Even in temperate climes there are generally three or four bitter days in May; and they were most serviceable now in consolidating the freshly-fallen snow, and making it practicable for sledges. Lieutenant Hobson, therefore, lost no time in resuming his journey, urging on the dogs to their utmost speed.

The route was, however, slightly changed. Instead of bearing due north, the expedition advanced towards the west, following, so to speak, the curve of the Arctic Circle. The Lieutenant was most anxious to reach Fort Confidence, built on the northern extremity of the Great Bear Lake. These few cold days were of the greatest service to him; he advanced rapidly, no obstacle was encountered, and his little troop arrived at the factory on the 30th May.

At this time Forts Confidence and Good Hope were the most advanced posts of the Company in the north. Fort Confidence was a most important position, built on the northern extremity of the lake, close to its waters, which being frozen over in winter, and navigable in summer, afforded easy access to Fort Franklin, on the southern shores, and promoted the coming and going of the Indian hunters with their daily spoils. Many were the hunting and fishing expeditions which started from Forts Confidence and Good Hope, especially from the former. The Great Bear Lake is quite a Mediterranean Sea, extending over several degrees of latitude and longitude. Its shape is very irregular: two promontories jut into it towards the centre, and the upper portion forms a triangle; its appearance, as a whole, much resembling the extended skin of a ruminant without the head.

Fort Confidence was built at the end of the "right paw," at least two hundred miles from Coronation Gulf, one of the numerous estuaries which irregularly indent the coast of North America. It was therefore situated beyond the Arctic Circle, but three degrees south of the seventieth parallel, north of which the Hudson’s Bay Company proposed forming a new settlement.

Fort Confidence, as a whole, much resembled other factories further south. It consisted of a house for the officers, barracks for the soldiers, and magazines for the furs - all of wood, surrounded by palisades. The captain in command was then absent. He had gone towards the east on a hunting expedition with a few Indians and soldiers. The last season had not been good, costly furs had been scarce; but to make up for this the lake had supplied plenty of otter-skins. The stock of them had, however, just been sent to the central factories in the south, so that the magazines of Fort Confidence were empty on the arrival of our party.

In the absence of the Captain a Sergeant did the honours of the fort to Jaspar Hobson and his companions. This second officer, Felton by name was a brother-in-law of Sergeant Long. He showed the greatest readiness to assist the views of the Lieutenant, who being anxious to rest his party, decided on remaining two or three days at Fort Confidence. In the absence of the little garrison there was plenty of room, and dogs and men were soon comfortably installed. The best room in the largest house was of course given to Mrs Paulina Barnett, who was delighted with the politeness of Sergeant Felton.

Jaspar Hobson’s first care was to ask Felton if any Indians from the north were then beating the shores of the Great Bear Lake.

"Yes, Lieutenant," replied the Sergeant; "we have just received notice of the encampment of a party of Hare Indians on the other northern extremity of the lake."

"How far from here?" inquired Hobson.

"About thirty miles," replied Sergeant Felton. "Do you wish to enter into communication with these Indians?"

"Yes," said Hobson; they may be able to give me some valuable information about the districts bordering on the Arctic Ocean, and bounded by Cape Bathurst. Should the site be favourable, I propose constructing our new fort somewhere about there."

"Well, Lieutenant, nothing is easier than to go to the Hare encampment."

"Along the shores of the lake?"

"No, across it; it is now free from ice, and the wind is favourable. We will place a cutter and a boatman at your service, and in a few hours you will be in the Indian settlement."
"Thank you, Sergeant; to-morrow, then." Whenever you like, Lieutenant."

The start was fixed for the next morning; and when Mrs Paulina Barnett heard of the plan, she begged the Lieutenant to allow her to accompany him, which of course he readily did.

But now to tell how the rest of this first day was passed. Mrs Barnett, Hobson, two or three soldiers, Madge, Mrs Mac-Nab, and Joliffe explored the shores of the lake under the guidance of Felton. The neighbourhood was by no means barren of vegetation; the hills, now free from snow, were crowned by resinous trees of the Scotch pine species. These trees, which attain a height of some forty feet, supply the inhabitants of the forts with plenty of fuel through the long winter. Their thick trunks and dark gloomy branches form a striking feature of the landscape; but the regular clumps of equal height, sloping down to the very edge of the water, are somewhat monotonous. Between the groups of trees the soil was clothed with a sort of whitish weed, which perfumed the air with a sweet thyme odour. Sergeant Felton informed his guests that this plant was called the "herb of incense" on account of the fragrance it emits when burnt.

Some hundred steps from the fort the party came to a little natural harbour shut in by high granite rocks, which formed an admirable protection from the heavy surf. Here was anchored the fleet of Fort Confidence, consisting of a single fishing-boat—the very one which was to take Mrs Barnett and Hobson to the Indian encampment the next day. From this harbour an extensive view was obtained of the lake; its waters slightly agitated by the wind, with its irregular shores broken by jagged capes and intersected by creeks. The wooded heights beyond, with here and there the rugged outline of a floating iceberg standing out against the clear blue air, formed the background on the north; whilst on the south a regular sea horizon, a circular line clearly cutting sky and water, and at this moment glittering in the sunbeams, bounded the sight.

The whole scene was rich in animal and vegetable life. The surface of the water, the shores strewn with flints and blocks of granite, the slopes with their tapestry of herbs, the tree-crowned hill-tops, were all alike frequented by various specimens of the feathered tribe. Several varieties of ducks, uttering their different cries and calls, eider ducks, whistlers spotted redshanks, "old women," those loquacious birds whose beak is never closed, skimmed the surface of the lake. Hundreds of puffins and guillemots with outspread wings darted about in every direction, and beneath the trees strutted ospreys two feet high—a kind of hawk with a grey body, blue beak and claws, and orange-coloured eyes, which build their huge nests of marine plants in the forked branches of trees. The hunter Sabine managed to bring down a couple of these gigantic ospreys, which measured nearly six feet from tip to tip of their wings, and were therefore magnificent specimens of these migratory birds, who feed entirely on fish, and take refuge on the shores of the Gulf of Mexico when winter sets in, only visiting the higher latitudes of North America during the short summer.

But the most interesting event of the day was the capture of an otter, the skin of which was worth several hundred roubles.

The furs of these valuable amphibious creatures were once much sought after in China; and although the demand for them has considerably decreased in the Celestial Empire, they still command very high prices in the Russian market. Russian traders, ready to buy up sea-otter skins, travel all along the coasts of New Cornwall as far as the Arctic Ocean; and of course, thus hunted, the animal is becoming very rare. It has taken refuge further and further north, and the trackers have now to pursue it on the shores of the Kamtchatka Sea, and in the islands of the Behring Archipelago.

"But," added Sergeant Felton, after the preceding explanation, "American inland otters are not to be despised, and those which frequent the Great Bear Lake are worth from £50 to £60 each."

The Sergeant was right; magnificent otters are found in these waters, and he himself skilfully tracked and killed one in the presence of his visitors which was scarcely inferior in value to those from Kamtchatka itself. The creature measured three feet from the muzzle to the end of its tail; it had webbed feet, short legs, and its fur, darker on the upper than on the under part of its body, was long and silky.

"A good shot, Sergeant," said Lieutenant Hobson, who with Mrs Barnett had been attentively examining the magnificent fur of the dead animal.

"Yes, Lieutenant," replied Felton; "and if each day brought us such a skin as that, we should have nothing to complain of. But much time is wasted in watching these animals, who swim and dive with marvellous rapidity. We generally hunt them at night, as they very seldom venture from their homes in the trunks of trees or the holes of rocks in the daytime, and even expert hunters find it very difficult to discover their retreats."

"And are these otters also becoming scarcer and scarcer?" inquired Mrs Barnett.

"Yes, madam," replied the Sergeant; "and when this species becomes extinct, the profits of the Company will sensibly decline. All the hunters try to obtain its fur, and the Americans in particular are formidable rivals to us. Did you not meet any American agents on your journey up, Lieutenant?"

"Not one," replied Hobson. "Do they ever penetrate as far as this?"
"Oh yes!" said the Sergeant; "and when you hear of their approach, I advise you to be on your guard."

"Are these agents, then, highway robbers?" asked Mrs Paulina Barnett.

"No, madam," replied the Sergeant; "but they are formidable rivals, and when game is scarce, hunters often come to blows about it. I daresay that if the Company's attempt to establish a fort on the verge of the Arctic Ocean be successful, its example will at once be followed by these Americans, whom Heaven confound!"

"Bah!" exclaimed the Lieutenant; "the hunting districts are vast, and there's room beneath the sun for everybody. As for us, let's make a start to begin with. Let us press on as long as we have firm ground beneath our feet, and God be with us!"

After a walk of three hours the visitors returned to Fort Confidence, where a good meal of fish and fresh venison awaited them. Sergeant Long did the honours of the table, and after a little pleasant conversation, all retired to forget their fatigues in a healthy and refreshing sleep.

The next day, May 31st, Mrs Barnett and Jaspar Hobson were on foot at five A.M. The Lieutenant intended to devote this day to visiting the Indian encampment, and obtaining as much useful information as possible. He asked Thomas Black to go with him, but the astronomer preferred to remain on terra firma. He wished to make a few astronomical observations, and to determine exactly the latitude and longitude of Fort Confidence; so that Mrs Barnett and Jaspar Hobson had to cross the lake alone, under the guidance of an old boatman named Norman, who had long been in the Company's service.

The two travellers were accompanied by Sergeant Long as far as the little harbour, where they found old Norman ready to embark. Their little vessel was but an open fishing-boat, six feet long, rigged like a cutter, which one man could easily manage. The weather was beautiful, and the slight breeze blowing from the north-east was favourable to the crossing. Sergeant Felton took leave of his guests with many apologies for being unable to accompany them in the absence of his chief. The boat was let loose from its moorings, and tacking to starboard, shot across the clear waters of the lake.

The little trip passed pleasantly enough. The taciturn old sailor sat silent in the stern of the boat with the tiller tucked under his arm. Mrs Barnett and Lieutenant Hobson, seated opposite to each other, examined with interest the scenery spread out before them. The boat skirted the northern shores of the lake at about three miles' distance, following a rectilinear direction, so that the wooded heights sloping gradually to the west were distinctly visible. From this side the district north of the lake appeared perfectly flat, and the horizon receded to a considerable distance. The whole of this coast contrasted strongly with the sharp angle, at the extremity of which rose Fort Confidence, framed in green pines. The flag of the Company was still visible floating from the tower of the fort. The oblique rays of the sun lit up the surface of the water, and striking on the floating icebergs, seemed to convert them into molten silver of dazzling brightness. No trace remained of the solid ice-mountains of the winter but these moving relics, which the solar rays could scarcely dissolve, and which seemed, as it were, to protest against the brilliant but not very powerful Polar sun, now describing a diurnal arc of considerable length.

Mrs Barnett and the Lieutenant, as was their custom, communicated to each other the thoughts suggested by the strange scenes through which they were passing. They laid up a store of pleasant recollections for the future whilst the boat floated rapidly along upon the peaceful waves.

The party started at six in the morning, and at nine they neared the point on the northern bank at which they were to land. The Indian encampment was situated at the north-west angle of the Great Bear Lake. Before ten o'clock old Norman ran the boat aground on a low bank at the foot of a cliff of moderate height. Mrs Barnett and the Lieutenant landed at once. Two or three Indians, with their chief, wearing gorgeous plumes, hastened to meet them, and addressed them in fairly intelligible English.

These Hare Indians, like the Copper and Beaver Indians, all belong to the Chippeway race, and differ but little in customs and costumes from their fellow-tribes. They are in constant communication with the factories, and have become, so to speak, "Britainised" — at least as much so as is possible for savages. They bring the spoils of the chase to the forts, and there exchange them for the necessaries of life, which they no longer provide for themselves. They are in the pay of the Company, they live upon it, and it is not surprising that they have lost all originality. To find a native race as yet uninfluenced by contact with Europeans we must go to still higher latitudes, to the ice-bound regions frequented by the Esquimaux, who, like the Greenlanders, are the true children of Arctic lands.

Mrs Barnett and Jaspar Hobson accompanied the Indians to their camp, about half a mile from the shore, and found some thirty natives there, men, women, and children, who supported themselves by hunting and fishing on the borders of the lake. These Indians had just come from the northernmost districts of the American continent, and were able to give the Lieutenant some valuable, although necessarily incomplete, information on the actual state of the sea-coast near the seventieth parallel. The Lieutenant heard with considerable satisfaction that a party of Americans or Europeans had been seen oil the confines of the Polar Sea, and that it was open at this time of year. About Cape Bathurst, properly so called, the point for which he intended to make, the Hare Indians could tell him
nothing. Their chief said, however, that the district between the Great Bear Lake and Cape Bathurst was very
difficult to cross, being hilly and intersected by streams, at this season of the year free from ice. He advised the
Lieutenant to go down the Coppermine river, from the north-east of the lake, which would take him to the coast by
the shortest route. Once at the Arctic Ocean, it would be easy to skirt along its shores and to choose the best spot at
Which to halt.

Lieutenant Hobson thanked the Indian chief, and took leave after giving him a few presents. Then accompanied
by Mrs Barnett, he explored the neighbourhood of the camp, not returning to the boat until nearly three o’clock in
the afternoon.

CHAPTER IX.

A STORM ON THE LAKE.

The old sailor was impatiently awaiting the return of the travellers; for during the last hour the weather had
changed, and the appearance of the sky was calculated to render any one accustomed to read the signs of the clouds
uneasy. The sun was obscured by a thick mist, the wind had fallen, but - an ominous moaning was heard from the
south of the lake. These symptoms of an approaching change of temperature were developed with all the rapidity
peculiar to these elevated latitudes.

"Let us be off, sir! let us be off!" cried old Norman, looking anxiously at the fog above his head. "Let us start
without losing an instant. There are terrible signs in the air!"

"Indeed," exclaimed the Lieutenant, "the appearance of the sky is quite changed, and we never noticed it, Mrs
Barnett!"

"Are you afraid of a storm?" inquired the lady of old Norman.

"Yes, madam," replied the old sailor; "and the storms on the Great Bear Lake are often terrible. The hurricane
rages as if upon the open Atlantic Ocean. This sudden fog bodes us no good; but the tempest may hold back for
three or four hours, and by that time we shall be at Fort Confidence. Let us then start without a moment’s delay, for
the boat would not be safe near these rocks."

The Lieutenant, feeling that the old man, accustomed as he was to navigate these waters, was better able to judge
than himself, decided to follow his advice, and embarked at once with Mrs Barnett.

But just as they were pushing off, old Norman, as if possessed by some sudden presentiment, murmured —
"Perhaps it would be better to wait."

Lieutenant Hobson overheard these words, and looked inquiringly at the old boatman, already seated at the helm.
Had he been alone he would not have hesitated to start, but as Mrs Barnett was with him caution was necessary. The
lady at once saw and understood his hesitation.

"Never mind about me, Lieutenant," she said; "act as if I were not present. Let us start immediately, as our brave
guide suggests."

"We are off, then," cried Norman, letting go the moorings, "to the fort by the shortest route."

For about an hour the bark made little head. The sail, scarcely filled by the fitful breeze, flapped against the
mast. The fog became thicker. The waves began to rise and the boat to rock considerably; for the approaching
hurricane affected the water sooner than the atmosphere itself. The two travellers sat still and silent, whilst the old
sailor peered into the darkness with bloodshot eyes. Prepared for all contingencies, he awaited the shock of the wind,
ready to pay out rapidly should the attack be very violent. The conflict of the elements had not, however, as yet
commenced; and all would have been well if they had been able to advance, but after an hour’s sail they were still
only about two hours’ distance from the Indian encampment. A few gusts of wind from the shore drove them out of
their course, and the dense fog rendered it impossible for them to make out the coast-line. Should the wind settle in
the north it would probably go hard with the light boat, which, unable to hold its own course, would be drifted out
into the lake no one knew where.

"We are scarcely advancing at all," said the Lieutenant to old Norman.

"No, sir," replied Norman; "the wind is not strong enough to fill the sail, and if it were, I fear it comes from the
wrong quarter. If so," he added, pointing to the south, "we may see Fort Franklin before Fort Confidence."

"Well," said Mrs Barnett cheerfully, "our trip will have been all the more complete. This is a magnificent lake,
well worth exploring from north to south. I suppose, Norman, one might get back even from Fort Franklin?"

"Yes, madam, if we ever reach it," replied the old man. "But tempests lasting fifteen days are by no means rare
on this lake; and if our bad luck should drive us to the south, it may be a month before Lieutenant Hobson again sees
Fort Confidence."

"Let us be careful, then," said the Lieutenant; "for such a delay, would hinder our projects very much. Do the
best you can under the circumstances, and if you think it would be prudent, go back to the north. I don’t suppose
Mrs Barnett would mind a walk of twenty or twenty-five miles."

I should be glad enough to go back to the north, Lieutenant," replied Norman, "if it were still possible. But look,
the wind seems likely to settle against us. All I can attempt is to get to the cape on the north-east, and if it doesn’t blow too hard, I hope to succeed."

But at about half-past four the storm broke. The shrill whistling of the wind was heard far above their heads, but the state of the atmosphere prevented it from as yet descending upon the lake; this was, however, only delayed for a brief space of time. The cries of frightened birds flying through the fog mingled with the noise of the wind. Suddenly the mist was torn open, and revealed low jagged masses of rain-cloud chased towards the south. The fears of the old sailor were realised. The wind blew from the north, and it was not long before the travellers learned the meaning of a squall upon the lake.

"Look out!" cried old Norman, tightening sail so as to get his boat ahead of the wind, whilst keeping her under control of the helm.

The squall came. It caught the boat upon the flank, and it was turned over on its side; but recovering itself, it was flung upon the crest of a wave. The billows surged as if upon an open sea. The waters of the lake not being very deep, struck against the bottom and rebounded to an immense height.

"Help! help!" cried old Norman, hurriedly struggling to haul down his sail.

Mrs Barnett and Hobson endeavoured to come to his assistance, but without success, for they knew nothing of the management of a boat. Norman, unable to leave the helm, and the halliards being entangled at the top of the mast, could not take in the sail. Every moment the boat threatened to capsize, and heavy seas broke over its sides. The sky became blacker and blacker, cold rain mingled with snow fell in torrents, whilst the squall redoubled its fury, lashing the crests of the waves into foam.

"Cut it! cut it!" screamed Norman above the roaring of the storm.

The Lieutenant, his cap blown away and his eyes blinded by the spray, seized Norman’s knife and cut the halliard like a harp-string; but the wet cordage no longer acted in the grooves of the pulleys, and the yard remained attached to the top of the mast.

Norman, totally unable to make head against the wind, now resolved to tack about for the south, dangerous as it would be to have the boat before the wind, pursued by waves advancing at double its speed. Yes, to tack, although this course would probably bring them all to the southern shores of the lake, far away from their destination.

The Lieutenant and his brave companion were well aware of the danger which threatened them. The frail boat could not long resist the blows of the waves, it would either be crushed or capsized; the lives of those within it were in the hands of God.

But neither yielded to despair; clinging to the sides of the boat, wet to the skin, chilled to the bone by the cutting blast, they strove to gaze through the thick mist and fog. All trace of the land had disappeared, and so great was the obscurity that at a cable’s length from the boat clouds and waves could not be distinguished from each other. Now and then the two travellers looked inquiringly into old Norman’s face, who, with teeth set and hands clutching the tiller; tried to keep his boat as much as possible under wind.

But the violence of the squall became such that the boat could not long maintain this course. The waves which struck its bow would soon have inevitably crushed it; the front planks were already beginning to separate, and when its whole weight was flung into the hollows of the waves it seemed as if it could rise no more.

"We must tack, we must tack, whatever happens!" murmured the old sailor.

And pushing the tiller and paying out sail, he turned the head of the boat to the south. The sail, stretched to the utmost, brought the boat round with giddy rapidity, and the immense waves, chased by the wind, threatened to engulf the little bark. This was the great danger of shifting with the wind right aft. The billows hurled themselves in rapid succession upon the boat, which could not evade them. It filled rapidly, and the water bad to be baled out without a moment’s pause, or it must have fpundered. As they got nearer and nearer to the middle of the lake the waves became rougher. Nothing there broke the fury of the wind; no clumps of trees, no hills, checked for a moment the headlong course of the hurricane. Now and then momentary glimpses were obtained through the fog of icebergs dancing like buoys upon the waves, and driven towards the south of the lake.

It was half-past five. Neither Norman nor the Lieutenant had any idea of where they were, or whither they were going. They had lost all control over the boat, and were at the mercy of the winds and waves.

And now at about a hundred feet behind the boat a huge wave upreared its foam-crowned crest, whilst in front a black whirlpool was formed by the sudden sinking of the water. All surface agitation, crushed by the wind, had disappeared around this awful gulch, which, growing deeper and blacker every moment, drew the devoted little vessel towards its fatal embrace. Ever nearer came the mighty wave, all lesser billows sinking into insignificance before it. It gained upon the boat, another moment and it would crush it to atoms. Norman, looking round, saw its approach; and Mrs Barnett and the Lieutenant, with eyes fixed and staring, awaited in fearful suspense the blow from which there was no escape. The wave broke over them with the noise of thunder; it enveloped the stern of the boat in foam, a fearful crash was heard, and a cry burst from the lips of the Lieutenant and his companion, smothered beneath the
They thought that all was over, and that the boat had sunk; but no, it rose once more, although more than half filled with water.

The Lieutenant uttered a cry of despair. Where was Norman? The poor old sailor had disappeared!

Mrs Paulina Barnett looked inquiringly at Hobson.

"Norman!" he repeated, pointing to his empty place.

"Unhappy man!" murmured Mrs Barnett; and at the risk of being flung from the boat rocking on the waves, the two started to their feet and looked around them. But they could see and hear nothing. No cry for help broke upon their ears. No dead body floated in the white foam. The old sailor had met his death in the element he loved so well.

Mrs Barnett and Hobson sank back upon their seats. They were now alone, and must see to their own safety; but neither of them knew anything of the management of a boat, and even an experienced hand could scarcely have controlled it now. They were at the mercy of the waves, and the bark, with distended sail, swept along in mad career.

What could the Lieutenant do to check or direct its course?

What a terrible situation for our travellers, to be thus overtaken by a tempest in a frail bark which they could not manage!

"We are lost!" said the Lieutenant.

"No, Lieutenant," replied Mrs Barnett; "let us make another effort. Heaven helps those who help themselves!"

Lieutenant Hobson now for the first time realised with how intrepid a woman fate had thrown him.

The first thing to be done was to get rid of the water which weighed down the boat. Another wave shipped would have filled it in a moment, and it must have sunk at once. The vessel lightened, it would have a better chance of rising on the waves; and the two set to work to bale out the water. This was no easy task; for fresh waves constantly broke over them, and the scoop could not be laid aside for an instant. Mrs Barnett was indefatigable, and the Lieutenant, leaving the bailing to her, took the helm himself, and did the best he could to guide the boat with the wind right aft.

To add to the danger, night, or rather darkness, for in these latitudes night only lasts a few hours at this time of year, fell upon them. Scarce a ray of light penetrated through the heavy clouds and fog. They could not see two yards before them, and the boat must have been dashed to pieces had it struck a floating iceberg. This danger was indeed imminent, for the loose ice-masses advance with such rapidity that it is impossible to get out of their way.

"You have no control over the helm?" said Mrs Barnett in a slight lull of the storm.

No, madam he replied; "and you must prepare for the worst."

"I am ready!" replied the courageous woman simply.

As she spoke a loud rippling sound was heard. The sail, torn away by the wind, disappeared like a white cloud. The boat sped rapidly along for a few instants, and then stopped suddenly, the waves buffeting it about like an abandoned wreck. Mrs Barnett and Hobson, flung to the bottom of the boat, bruised, shaken, and torn, felt that all was lost. Not a shred of canvas was left to aid in navigating the craft; and what with the spray, the snow, and the rain, they could scarcely see each other, whilst the uproar drowned their voices. Expecting every moment to perish, they remained for an hour in painful suspense, commending themselves to God, who alone could save them.

Neither of them could have said how long they waited when they were aroused by a violent shock.

The boat had just struck an enormous iceberg, a floating block with rugged, slippery sides, to which it would be impossible to cling.

At this sudden blow, which could not have been parried, the bow of the boat was split open, and the water poured into it in torrents.

"We are sinking! we are sinking!" cried Jasper Hobson.

He was right. The boat was settling down; the water had already reached the seats.

"Madam, madam, I am here! I will not leave you!" added the Lieutenant.

"No, no," cried Mrs Barnett: "alone, you may save yourself; together, we should perish. Leave me! leave me!"

"Never!" cried Hobson.

But he had scarcely pronounced this word when the boat, struck by another wave, filled and sank.

Both were drawn under water by the eddy caused by the sudden settling down of the boat, but in a few instants they rose to the surface. Hobson was a strong swimmer, and struck out with one arm, supporting his companion with the other. But it was evident that he could not long sustain a conflict with the furious waves, and that he must perish with her he wished to save.

At this moment a strange sound attracted his attention. It was not the cry of a frightened bird, but the shout of a human voice! By one supreme effort Hobson raised himself above the waves and looked around him.

But he could distinguish nothing in the thick fog. And yet he again heard cries, this time nearer to him. Some bold men were coming to his succour! Alas! if it were so, they would arrive too late. Encumbered by his clothes, the
Lieutenant felt himself sinking with the unfortunate lady, whose head he could scarcely keep above the water. With a last despairing effort he uttered a heartrending cry and disappeared beneath the waves.

It was, however, no mistake—he had heard voices. Three men, wandering about by the lake, had seen the boat in danger, and put off to its rescue. They were Esquimaux, the only men who could have hoped to weather such a storm, for theirs are the only boats constructed to escape destruction in these fearful tempests.

The Esquimaux boat or kayak is a long pirogue raised at each end, made of a light framework of wood, covered with stretched seal-skins strongly stitched with the sinews of the Walrus. In the upper part of the boat; also covered with skins, is an opening in which the Esquimaux takes his place, fastening his waterproof jacket to the back of his seat; so that he is actually joined to his bark, which riot a drop of water can penetrate. This light, easily-managed kayak, floating as it does, on the crests of the waves, can never be submerged; and if it be sometimes capsized, a blow of the paddle rights it again directly; so that it is able to live and make way in seas in which any other boat would certainly be dashed to pieces.

The three Esquimaux, guided by the Lieutenant’s last despairing cry, arrived at the scene of the wreck joints in time. Hobson and Mrs Barnett, already half drowned, felt themselves drawn up by powerful hands; but in the darkness they were unable to discover who were their deliverers. One of the men took the Lieutenant and laid him across his own boat, another did the same for Mrs Barnett, and the three kayaks, skilfully managed with the paddles, six feet long, sped rapidly over the white foam.

Half an hour afterwards, the shipwrecked travellers were lying on the sandy beach three miles above Fort Providence.

The old sailor alone was missing!

CHAPTER X.
A RETROSPECT.

It was about ten o’clock the same night when Mrs Barnett and Lieutenant Hobson knocked at the postern gate of the fort. Great was the joy on seeing them, for they had been given up for lost; but this joy was turned to mourning at the news of the death of Norman. The brave fellow had been beloved by all, and his loss was sincerely mourned.

The intrepid and devoted Esquimaux received phlegmatically the earnest expressions of gratitude of those they had saved, and could riot be persuaded to come to the fort. What they had done seemed to them only natural, and these were not the first persons they had rescued; so they quietly returned to their wild life of adventure on the lake, where they hunted the otters and water-birds day and night.

For the next three nights the party rested. Hobson always intended to set out on June 2d; and on that day, all having recovered from their fatigues and the storm having abated, the order was given to start.

Sergeant Felton had done all in his power to make his guests comfortable and to aid their enterprise; some of the jaded dogs were replaced by fresh animals, and now the Lieutenant found all his sledges drawn up in good order at the door of the enceinte, and awaiting the travellers.

The adieux were soon over. Each one thanked Sergeant Felton for his hospitality, and Mrs Paulina Barnett was most profuse in her expressions of gratitude. A hearty shake of the hand between the Sergeant and his brother-in-law, Long, completed the leave-taking,

Each pair got into the sledge assigned to them; but this time Mrs Barnett and the Lieutenant shared one vehicle, Madge and Sergeant Long following them.

According to the advice of the Indian chief, Hobson determined to get to the coast by the shortest route, and to take a north-easterly direction. After consulting, his map, which merely gave a rough outline of the configuration of the country, it seemed best to him to descend the valley of the Coppermine, a large river which flows into Coronation Gulf.

The distance between Fort Confidence and the mouth of this river is only a degree and a half—that is to say, about eighty-five or ninety miles. The deep hollow formed by the gulf is bounded on the north by Cape Krusenstein, and from it the coast juts out towards the north-west, ending in Cape Bathurst, which is above the seventieth parallel.

The Lieutenant, therefore, now changed the route he had hitherto followed, directing his course to the east, so as to reach the river in a few hours.

In the afternoon of the next day, June 3d, the river was gained. It was now free from ice, and its clear and rapid waters flowed through a vast valley, intersected by numerous but easily fordable streams. The sledges advanced pretty rapidly, and as they went along, Hobson gave his companion some account of the country through which they were passing. A sincere friendship founded on mutual esteem, had sprung up between these two. Mrs Paulina Barnett was an earnest student with a special gift for discovery, and was therefore always glad to converse with travellers and explorers. Hobson, who knew his beloved North America by heart, was able to answer all her inquiries fully.

"About ninety years ago," he said, "the territory through which the Coppermine flows was unknown, and we are
indebted for its discovery to the agents of the Hudson’s Bay Company. But as always happens in scientific matters, in seeking one thing, another was found. Columbus was trying to find Asia, and discovered America."

"And what were the agents of the Hudson’s Bay Company seeking? The famous North-West Passage?"

"No, madam," replied the young Lieutenant. "A century ago the Company had no interest in the opening of a new route, which would have been more valuable to its rivals than to it. It is even said that in 1741 a certain Christopher Middleton, sent to explore these latitudes, was publicly charged with receiving a bribe of £500 from the Company to say that there was not, and could not be, a sea passage between the oceans."

"That was not much to the credit of the celebrated Company," said Mrs Barnett.

"I do not defend it in the matter," replied Hobson; "and its interference was severely censured by Parliament in 1746, when a reward of £20,000 was offered by the Government for the discovery of the passage in question. In that year two intrepid explorers, William Moor and Francis Smith, penetrated as far as Repulse Bay in the hope of discovering the much-longed-for passage. But they were unsuccessful, and returned to England after an absence of a year and a half."

"But did not other captains follow in their steps, resolved to conquer where they had failed?" inquired Mrs Barnett.

"No, madam; and in spite of the large reward offered by Parliament, no attempt was made to resume explorations in English America until thirty years afterwards, when some agents of the Company took up the unfinished task of Captains Moor and Smith."

"The Company had then relinquished the narrow-minded egotistical position it had taken up?"

"No, madam, not yet. Samuel Hearne, the agent, only went to reconnoitre the position of a copper-mine which native miners had reported. On November 6, 1769, this agent left Fort Prince of Wales, on the river Churchill, near the western shores of Hudson’s Bay. He pressed boldly on to the north-west; but the excessive cold and the exhaustion of his provisions compelled him to return without accomplishing anything. Fortunately he was not easily discouraged, and on February 23rd of the next year he set out again, this time taking some Indians with him. Great hardships were endured in this second journey. The fish and game on which Hearne had relied often failed him; and he had once nothing to eat for seven days but wild fruit, bits of old leather, and burnt bones. He was again compelled to return to the fort a disappointed man. But he did not even yet despair, and started a third time, December 7th, 1770; and after a struggle of nineteen months, he discovered the Coppermine river, July 13th, 1772, the course of which he followed to its mouth. According to his own account, he saw the open sea, and in any case he was the first to penetrate to the northern coast of America."

"But the North-West Passage—that is to say, the direct communication by sea between the Atlantic and Pacific Oceans—was not then discovered?"

"Oh no, madam," replied the Lieutenant; "and what countless adventurous sailors have since gone to seek it! Phipps in 1773, James Cook and Clerke in 1776 to 1779, Kotzebue in 1815 to 1818, Ross, Parry, Franklin, and others have attempted this difficult task; but it was reserved to M’Clure in our own day to pass from one ocean to the other across the Polar Sea."

"Well, Lieutenant, that was a geographical discovery of which we English may well be proud. But do tell me if the Hudson’s Bay Company did not adopt more generous views, and send out some other explorer after the return of Hearne."

"It did, madam; and it was thanks to it that Captain Franklin was able to accomplish his voyage of 1819 to 1822 between the river discovered by Hearne and Cape Turnagain. This expedition endured great fatigue and hardships; provisions often completely failed, and two Canadians were assassinated and eaten by their comrades. But in spite of all his sufferings, Captain Franklin explored no less than five thousand five hundred and fifty miles of the hitherto unknown coast of North America!"

"He was indeed a man of energy," added Mrs Barnett; "and he gave proof of his great qualities in starting on a fresh Polar expedition after all he had gone through."

"Yes," replied the Lieutenant; "and he met a terrible death in the land his own intrepidity had discovered. It has now been proved, however, that all his companions did not perish with him. Many are doubtless still wandering about on the vast ice-fields. I cannot think of their awful condition without a shudder. One day," he added earnestly, and with strange emotion—"one day I will search the unknown lands where the dreadful catastrophe took place, and —"

"And," exclaimed Mrs Barnett, pressing his hand, "I will accompany you. Yes, this idea has occurred to me more than once, as it has to you; and my heart beats high when I think that fellow countrymen of my own-Englishmen—are awaiting succour."

"Which will come too late for most of them, madam," said the Lieutenant; "but rest assured some will even yet be saved."
"God grant it, Lieutenant!" replied Mrs Barnett; "and it appears to me that the agents of the Company, living as they do close to the coast, are better fitted than any one else to fulfil this duty of humanity."

"I agree with you, madam; they are, as they have often proved, inured to the rigours of the Arctic climate. Was it not they who aided Captain Back in his voyage in 1834, when he discovered King William’s Land, where Franklin met his fate? Was it not two of us, Dease and Simpson, who were sent by the Governor of Hudson’s Bay to explore the shores of the Polar Sea in 1838, and whose courageous efforts first discovered Victoria Land? It is my opinion that the future reserves for the Hudson’s Bay Company the final conquest of the Arctic regions. Gradually its factories are advancing further and further north, following the retreat of the fur-yielding animals; and one day a fort will be erected on the Pole itself, that mathematical point where meet all the meridians of the globe."

During this and the succeeding journeys Jaspar Hobson related his own adventures since he entered the service of the Company his struggles with the agents of rival associations, and his efforts to explore the unknown districts of the north or west; and Mrs Barnett, on her side, told of her travels in the tropics. She spoke of all she had done, and of all she hoped still to accomplish; so that the long hours, lightened by pleasant conversation, passed rapidly away.

Meanwhile the dogs advanced at full gallop towards the north. The Coppermine valley widened sensibly as they neared the Arctic Ocean. The hills on either side sank lower and lower, and only scattered clumps of resinous trees broke the monotony of the landscape. A few blocks of ice, drifted down by the river, still resisted the action of the sun; but each day their number decreased, and a canoe, or even a good-sized boat, might easily have descended the stream, the course of which was unimpeded by any natural barrier or aggregation of rocks. The bed of the Coppermine was both deep and wide; its waters were very clear, and being fed by the melted snow, flowed on at a considerable pace, never, however, forming dangerous rapids. Its course, at first very sinuous, became gradually less and less winding, and at last stretched along in a straight line for several miles. Its banks, composed of fine firm sand, and clothed in part with short dry herbage, were wide and level, so that the long train of sledges sped rapidly over them.

The expedition travelled day and night— if we can speak of the night, when the sun, describing an almost horizontal circle, scarcely disappeared at all. The true night only lasted two hours, and the dawn succeeded the twilight almost immediately. The weather was fine; the sky clear, although somewhat misty on the horizon; and everything combined to favour the travellers.

For two days they kept along the river-banks without meeting with any difficulties. They saw but few fur-bearing animals; but there were plenty of birds, which might have been counted by thousands. The absence of otters, sables, beavers, ermines, foxes, &c., did not trouble the Lieutenant much, for he supposed that they had been driven further north by over-zealous tracking; and indeed the marks of encampments, extinguished fires, &c., told of the more or less recent passage of native hunters. Hobson knew that he would have to penetrate a good deal further north, and that part only of his journey would be accomplished when he got to the mouth of the Coppermine river. He was therefore most eager to reach the limit of Hearne’s exploration, and pressed on as rapidly as possible.

Every one shared the Lieutenant’s impatience, and resolutely resisted fatigue in order to reach the Arctic Ocean with the least possible delay. They were drawn onwards by an indefinable attraction; the glory of the unknown dazzled their sight. Probably real hardships would commence when they did arrive at the much-desired coast. But no matter, they longed to battle with difficulties, and to press straight onwards to their aim. The district they were now traversing could have no direct interest for them; the real exploration would only commence on the shores of the Arctic Ocean. Each one, then, would gladly hail the arrival in the elevated western districts for which they were bound, cut across though they were by the seventieth parallel of north latitude.

On the 5th June, four days after leaving Fort Confidence the river widened considerably. The western banks, curving slightly, ran almost due north; whilst the eastern rounded off into the coastline, stretching away as far as the eye could reach.

Lieutenant Hobson paused, and waving his hand to his companions, pointed to the boundless ocean.

CHAPTER XI.

ALONG THE COAST.

Coronation Gulf, the large estuary dotted with the islands forming the Duke of York Archipelago, which the party had now reached, was a sheet of water with irregular banks, let in, as it were, into the North American continent. At its western angle opened the mouth of the Coppermine; and on the east a long narrow creek called Bathurst Inlet ran into the mainland, from which stretched the jagged broken coast with its pointed capes and rugged promontories, ending in that confusion of straits, sounds, and channels which gives such a strange appearance to the maps of North America. On the other side the coast turned abruptly to the north beyond the mouth of the Coppermine River, and ended in Cape Krusenstern.

After consulting with Sergeant Long, Lieutenant Hobson decided to give his party a day’s rest here.

The exploration, properly so called, which was to enable the Lieutenant to fix upon a suitable site for the
establishment of a fort, was now really about to begin. The Company had advised him to keep as much as possible above the seventieth parallel, and on the shores of the Arctic Ocean. To obey his orders Hobson was obliged to keep to the west; for on the east—with the exception, perhaps, of the land of Boothia, crossed by the seventieth parallel—the whole country belongs rather to the Arctic Circle, and the geographical conformation of Boothia is as yet but imperfectly known.

After carefully ascertaining the latitude and longitude, and verifying his position by the map, the Lieutenant found that he was a hundred miles below the seventieth degree. But beyond Cape Krusenstern, the coast-line, running in a north-easterly direction, abruptly crosses the seventieth parallel at a sharp angle near the one hundred and thirtieth meridian, and at about the same elevation as Cape Bathurst, the spot named as a rendezvous by Captain Craventy. He must therefore make for that point, and should the site appear suitable the new fort would be erected there.

"There," said the Lieutenant to his subordinate, Long, "we shall be in the position ordered by the Company. There the sea, open for a great part of the year, will allow the vessels from Behring Strait to come right up to the fort, bringing us fresh provisions and taking away our commodities."

"Not to mention," added Sergeant Long, "that our men will be entitled to double pay all the time they are beyond the seventieth parallel."

"Of course that is understood," replied Hobson; "and I daresay they will accept it without a murmur."

"Well then, Lieutenant," said Long simply, "we have now only to start for Cape Bathurst."

But as a day of rest had been promised, the start did not actually take place until the next day, June 6th.

The second part of the journey would naturally be very different from the first. The rules with regard to the sledges keeping their rank need no longer be enforced, and each couple drove as it pleased them. Only short distances were traversed at a time; halts were made at every angle of the coast, and the party often walked. Lieutenant Hobson only urged two things upon his companions not to go further than three miles from the coast, and to rally their forces twice a day, at twelve o’clock and in the evening. At night they all encamped in tents.

The weather continued very fine and the temperature moderate, maintaining a mean height of 59° Fahrenheit above zero. Two or three times sudden snowstorms came on; but they did not last long, and exercised no sensible influence upon the temperature.

The whole of the American coast between Capes Krusenstern and Parry, comprising an extent of more than two hundred and fifty miles, was examined with the greatest care between the 6th and 20th of June. Geographical observations were accurately taken, and Hobson, most effectively aided by Thomas Black, was able to rectify certain errors in previous marine surveys; whilst the primary object of the expedition—the examination into the quality and quantity of the game in the surrounding districts—was not neglected.

Were these lands well stocked with game? Could they count with certainty not only on a good supply of furs, but also of meat? Would the resources of the country provide a fort with provisions in the summer months at least? Such were the grave questions which Lieutenant Hobson had to solve, and which called for immediate attention. We give a summary of the conclusions at which he arrived.

Game, properly so called, of the kind for which Corporal Joliffe amongst others had a special predilection, was not abundant. There were plenty of birds of the duck tribe; but only a few Polar hares, difficult of approach, poorly represented the rodents of the north. There seemed, however, to be a good many bears about. Marbre and Sabine had come upon the fresh traces of several. Some were even seen and tracked; but, as a rule, they kept at a respectful distance. In the winter, however, driven by famine from higher latitudes, there would probably be more than enough of these ravenous beasts prowling about the shores of the Arctic Ocean.

"There is certainly no denying," said Corporal Joliffe, "that bear’s flesh is very good eating when once it’s in the larder; but there is something very problematical about it beforehand, and it’s always just possible that the hunters themselves may meet the fate they intended for the bears!"

This was true enough. It was no use counting upon the bears to provision their fort. Fortunately traces were presently found of herds of a far more useful animal, the flesh of which is the principal food of the Indians and Esquimaux. We allude to the reindeer; and Corporal Joliffe announced with the greatest satisfaction that there were plenty of these ruminants on this coast. The ground was covered with the lichen to which they are so partial, and which they cleverly dig out from under the snow.

There could be no mistake as to the footprints left by the reindeer, as, like the camel, they have a small nail-like hoof with a convex surface. Large herds, sometimes numbering several thousand animals, are seen running wild in certain parts of America. Being easily domesticated, they are employed to draw sledges; and they also supply the factories with excellent milk, more nourishing than that of cows. Their dead bodies are not less useful. Their thick skin provides clothes, their hair makes very good thread, and their flesh is palatable; so that they are really the most valuable animals to be found in these latitudes, and Hobson, being assured of their presence, was relieved from half
his anxiety.

As he advanced he had also reason to be satisfied with regard to the fur-bearing animals. By the little streams rose many beaver lodges and musk-rat tunnels. Badgers, lynxes, ermines, wolverenes, sables, polecats, &c., frequented these districts, hitherto undisturbed by hunters. They had thus far come to no trace of the presence of man, and the animals had chosen their refuge well. Footprints were also found of the fine blue and silver foxes, which are becoming more and more rare, and the fur of which is worth its weight in gold. Sabine and Mac-Nab might many a time have shot a very valuable animal on this excursion, but the Lieutenant had wisely forbidden all hunting of the kind. He did not wish to alarm the animals before the approaching season—that is to say, before the winter months, when their furs become thicker and more beautiful. It was also desirable not to overload the sledges. The hunters saw the force of his reasoning; but for all that, their fingers itched when they came within shot-range of a sable or some valuable fox. Their Lieutenant’s orders were, however, not to be disobeyed.

Polar bears and birds were, therefore, all that the hunters had to practise upon in this second stage of their journey. The former, however, not yet rendered bold by hunger, soon scampered off, and no serious struggle with them ensued.

The poor birds suffered for the enforced immunity of the quadrupeds. White-headed eagles, huge birds with a harsh screeching cry; fishing hawks, which build their nests in dead trees and migrate to the Arctic regions in the summer; snow buntings with pure white plumage, wild geese, which afford the best food of all the Anseres tribe; ducks with red heads and black breasts; ash-coloured crows, a kind of mocking jay of extreme ugliness; eider ducks; scoters or black divers, &c. &c., whose mingled cries awake the echoes of the Arctic regions, fell victims by hundreds to the unerring aim of Marbre and Sabine. These birds haunt the high latitudes by millions, and it would be impossible to form an accurate estimate of their number on the shores of the Arctic Ocean. Their flesh formed a very pleasant addition to the daily rations of biscuit and corned beef, and we can understand that the hunters laid up a good stock of them in the fifteen days during which they were debarred from attacking more valuable game.

There would then be no lack of animal food; the magazines of the Company would be well stocked with game, and its offices filled with furs and traders; but something more was wanted to insure success to the undertaking. Would it be possible to obtain a sufficient supply of fuel to contend with the rigour of an Arctic winter at so elevated a latitude?

Most fortunately the coast, was well wooded; the hills which sloped down towards the sea were crowned with green trees, amongst which the pine predominated. Some of the woods might even be called forests, and would constitute an admirable reserve of timber for the fort. Here and there Hobson noticed isolated groups of willows, poplars, dwarf birch-trees, and numerous thickets of arbutus. At this time of the warm season all these trees were covered with verdure, and were an unexpected and refreshing sight to eyes so long accustomed to the rugged, barren polar landscape. The ground at the foot of the hills was carpeted with a short herbage devoured with avidity by the reindeer, and forming their only sustenance in winter. On the whole, then, the Lieutenant had reason to congratulate himself on having chosen the north-west of the American continent for the foundation of a new settlement.

We have said that these territories, so rich in animals, were apparently deserted by men. The travellers saw neither Esquimaux, who prefer the districts round Hudson’s Bay, nor Indians, who seldom venture so far beyond the Arctic Circle. And indeed in these remote latitudes hunters may be overtaken by storms, or be suddenly surprised by winter, and cut off from all communication with their fellow-creatures. We can easily imagine that Lieutenant Hobson was by no means sorry not to meet any rival explorers. What he wanted was an unoccupied country, a deserted land, suitable as a refuge for the fur-bearing animals; and in this matter he had the full sympathy of Mrs Barnett, who, as the guest of the Company, naturally took a great interest in the success of its schemes.

Fancy, then, the disappointment of the Lieutenant, when on the morning of the 20th June he came to an encampment but recently abandoned.

It was situated at the end of a narrow creek called Darnley Bay, of which Cape Parry is the westernmost point. There at the foot of a little hill were the stakes which had served to mark the limits of the camp, and heaps of cinders, the extinct embers of the fires.

The whole party met at this encampment, and all understood how great a disappointment it involved for Lieutenant Hobson.

"What a pity!" he exclaimed. "I would rather have met a whole family of polar bears!"

"But I daresay the men who encamped here are already far off," said Mrs Barnett; "very likely they have returned to their usual hunting grounds."

"That is as it may be," replied the Lieutenant. "If these be the traces of Esquimaux, they are more likely to have gone on than to have turned back; and if they be those of Indians, they are probably, like ourselves, seeking a new hunting district; and in either case it will be very unfortunate for us."

"But," said Mrs Barnett, "cannot we find out to what race the travellers do belong? Can’t we ascertain if they be
Esquimaux or Indians from the south? I should think tribes of such a different origin, and of such dissimilar customs, would not encamp in the same manner."

Mrs Barnett was right; they might possibly solve the mystery after a thorough examination of the ground.

Jaspar Hobson and others set to work, carefully examining every trace, every object left behind, every mark on the ground; but in vain, there was nothing to guide them to a decided opinion. The bones of some animals scattered about told them nothing, and the Lieutenant, much annoyed, was about to abandon the useless search, when he heard an exclamation from Mrs Joliffe, who had wandered a little way to the left.

All hurried towards the young Canadian, who remained fixed to the spot, looking attentively at the ground before her.

As her companions came up she said—
"You are looking for traces, Lieutenant; well, here are some."

And Mrs Joliffe pointed to a good many footprints clearly visible in the firm clay.

These might reveal something; for the feet of the Indians and Esquimaux, as well as their boots, are totally different from each other.

But what chiefly struck Lieutenant Hobson was the strange arrangement of these impressions. They were evidently made by a human foot, a shod foot; but, strange to say, the ball alone appeared to have touched the ground! The marks were very numerous, close together, often crossing one another, but confined to a very small circle.

Jaspar Hobson called the attention of the rest of the party to this singular circumstance.
"These were not made by a person walking," he said.
"Nor by a person jumping," added Mrs Barnett; "for there is no mark of a heel."
"No," said Mrs Joliffe; "these footprints were left by a dancer."

She was right, as further examination proved. They were the marks left by a dancer, and a dancer engaged in some light and graceful exercise, for they were neither clumsy nor deep.

But who could the light-hearted individual be who had been impelled to dance in this sprightly fashion some degrees above the Arctic Circle?

"It was certainly not an Esquimaux," said the Lieutenant.
"Nor an Indian," cried Corporal Joliffe.
"No, it was a Frenchman," said Sergeant Long quietly.

And all agreed that none but a Frenchman could have been capable of dancing on such a spot.

CHAPTER XII.

THE MIDNIGHT SUN.

Sergeant Long’s assertion must appear to have been founded on insufficient evidence. That there had been dancing no one could deny, but that the dancer was a Frenchman, however probable, could not be considered proved.

However, the Lieutenant shared the opinion of his subordinate, which did not appear too positive to any of the party, who all agreed in feeling sure that some travellers, with at least one compatriot of Vestris amongst them, had recently encamped on this spot.

Of course Lieutenant Hobson was by no means pleased at this he was afraid of having been preceded by rivals in the north-western districts of English America; and secret as the Company had kept its scheme, it had doubtless been divulged in the commercial centres of Canada and the United States.

The Lieutenant resumed his interrupted march; but he was full of care and anxiety, although he would not now have dreamed of retracing his steps.

"Frenchmen are then sometimes met with in these high latitudes?" was Mrs Barnett’s natural question after this incident.

"Yes, madam," replied the Lieutenant; "or if not exactly Frenchmen, the descendants of the masters of Canada when it belonged to France, which comes to much the same thing. These men are in fact our most formidable rivals."

"But I thought," resumed Mrs Barnett, "that after the absorption by the Hudson’s Bay Company of the old North-West Company, that it had no longer any rivals on the American continent."

"Although there is no longer any important association for trading in furs except our own, there are a good many perfectly independent private companies, mostly American, which have retained French agents or their descendants in their employ."

"Are these agents then held in such high esteem?" asked Mrs Barnett.

"Yes, madam, and with good reason. During the ninety-four years of French supremacy in Canada, French agents always proved themselves superior to ours. We must be just even to our rivals."
"Especially to our rivals," added Mrs Barnett.

"Yes, especially... At that time French hunters, starting from Montreal, their headquarters, pressed on to the north with greater hardihood than any others. They lived for years with the Indian tribes, sometimes intermarrying with them. The natives called them the ‘Canadian travellers,’ and were on the most intimate terms with them. They were bold, clever fellows, expert at navigating streams, light-hearted and merry, adapting themselves to circumstances with the easy flexibility of their race, and always ready to sing or dance."

"And do you suppose that hunting is the only object of the party whose traces we have just discovered?"

"I don’t think any other hypotheses at all likely," replied Hobson. "They are sure to be seeking new hunting grounds. But as we cannot possibly stop them, we must make haste to begin our own operations, and compete boldly with all rivals."

Lieutenant Hobson was now prepared for the competition he could not prevent, and he urged on the march of his party as much as possible, hoping that his rivals might not follow him beyond the seventieth parallel.

The expedition now descended towards the south for some twenty miles, in order the more easily to pass round Franklin Bay. The country was still covered with verdure, and the quadrupeds and birds already enumerated were as plentiful as ever; so that they could reasonably hope that the whole of the north-western coasts of the American continent were populated in the same manner.

The ocean which bathed these shores stretched away as far as the eye could reach. Recent atlases give no land beyond the north American coast-line, and it is only the icebergs which impede the free navigation of the open sea from Behring Strait to the Pole itself.

On the 4th July the travellers skirted round another deep bay called Washburn Bay, and reached the furthest point of a little lake, until then imperfectly known, covering but a small extent of territory, scarcely two square miles—in fact it was rather a lagoon, or large pond of sweet water, than a lake.

The sledges went on easily and rapidly, and the appearance of the country was most encouraging to the explorers. It seemed that the extremity of Cape Bathurst would be a most favourable site for the new fort, as with this lagoon behind them, and the sea open for four or five months in the warm season, and giving access to the great highway of Behring Strait, before them, it would be easy for the exiles to lay in fresh provisions and to export their commodities.

On the 5th June, about three o’clock in the afternoon, the party at last halted at the extremity of Cape Bathurst. It remained to ascertain the exact position of this cape, which the maps place above the seventieth parallel. It was, however, impossible to rely upon the marine surveys of the coast, as they had never yet been made with exactitude. Jaspar Hobson decided to wait and ascertain the latitude and longitude.

"What prevents us from settling here?" asked Corporal Joliffe. "You will own, Lieutenant, that it is a very inviting spot."

"It will seem more inviting still if you get double pay here, my worthy Corporal," replied Hobson.

"No doubt," said Joliffe; "and the orders of the Company must be obeyed."

"Then wait patiently till to-morrow," added Hobson; "and if we find that Cape Bathurst is really beyond 70° north latitude, we will pitch our tent here."

The site was indeed admirably suited for the foundation of a new settlement. The wooded heights surrounding the lagoon would supply plenty of pine, birch, and other woods for the construction of the fort, and for stocking, it with fuel. The Lieutenant and some of his companions went to the very edge of the cape, and found that towards the west the coast-line formed a lengthened curve, beyond which icebergs of a considerable height shut out the view. The water of the lagoon, instead of being brackish as they expected from its close vicinity to the sea, was perfectly sweet; but had it not been so, drinkable water would not have failed the little colony, as a fresh and limpid stream ran a few yards to the south-east of Cape Bathurst, and emptied itself into the Arctic Ocean through a narrow inlet, which, protected by a singular accumulation of sand and earth instead of by rocks, would have afforded a refuge to several vessels from the winds of the offing, and might be turned to account for the anchorage of the ships which it was hoped would come to the new settlement from Behring Strait. Out of compliment to the lady of the party, and much to her delight, Lieutenant Hobson named the stream Paulina river, and the little harbour Port Barnett.

By building the fort a little behind the actual cape, the principal house and the magazines would be quite sheltered from the coldest winds. The elevation of the cape would help to protect them from the snow-drifts, which sometimes completely bury large buildings beneath their heavy avalanches in a few hours. There was plenty of room between the foot of the promontory and the bank of the lagoon for all the constructions necessary to a fort. It could even be surrounded by palisades, which would break the shock of the icebergs; and the cape itself might be surrounded with a fortified redoubt, if the vicinity of rivals should render such a purely defensive erection necessary; and the Lieutenant, although with no idea of commencing anything of the kind as yet, naturally rejoiced at having met with an easily defensible position.
The weather remained fine, and it was quite warm enough. There was not a cloud upon the sky; but, of course, the clear blue air of temperate and torrid zones could not be expected here, and the atmosphere was generally charged with a light mist. What would Cape Bathurst be like in the long winter night of four months when the ice-mountains became fixed and rigid, and the hoarse north wind swept down upon the icebergs in all its fury? None of the party gave a thought to that time now; for the weather was beautiful, the verdant landscape smiled, and the waves sparkled in the sunbeams, whilst the temperature remained warm and pleasant.

A provisional camp, the sledges forming its only material, was arranged for the night on the banks of the lagoon; and towards evening Mrs Barnett, the Lieutenant, Sergeant Long, and even Thomas Black, explored the surrounding district in order to ascertain its resources. It appeared to be in every respect suitable; and Hobson was eager for the next day, that he might determine the exact situations, and find out if it fulfilled the conditions imposed by the Company.

"Well, Lieutenant," said the astronomer when the examination was over, "this is really a charming spot, such as I should not have imagined could have existed beyond the Arctic Circle."

"Ah, Mr Black!" cried Hobson, "the finest countries in the world are to be found here, and I am impatient to ascertain our latitude and longitude."

"Especially the latitude," said the astronomer, whose eclipse was never out of his thoughts; "and I expect your brave companions are as eager as yourself. Double pay beyond the seventieth parallel!"

"But, Mr Black," said Mrs Barnett, "do you not yourself take an interest a purely scientific interest, in getting beyond that parallel?"

"Of course, madam, of course I am anxious to get beyond it, but not so terribly eager. According to our calculations, however, made with absolute accuracy, the solar eclipse which I am ordered to watch will only be total to an observer placed beyond the seventieth degree, and on this account I share the Lieutenant’s impatience to determine the position of Cape Bathurst."

"But I understand, Mr Black," said Mrs Barnett, "that this solar eclipse will not take place until the 18th July 1860?"

"Yes, madam, on the 18th July 1860."

"And it is now only the 15th June 1859! So that the phenomenon will not be visible for more than a year!"

"I am quite aware of it, Mrs Barnett," replied the astronomer; "but if I had not started till next year I should have run a risk of being too late."

"You would, Mr Black," said Hobson, "and you did well to start a year beforehand. You are now quite sure not to miss your eclipse. I own that our journey from Fort Reliance has been accomplished under exceptionally favourable circumstances. We have had little fatigue and few delays. To tell you the truth, I did not expect to get to this part of the coast until the middle of August; and if the eclipse had been expected this year, instead of next; you really might have been too late. Moreover, we do not yet know if we are beyond the seventieth parallel."

"I do not in the least regret the journey I have taken in your company, Lieutenant, and I shall patiently wait until next year for my eclipse. The fair Phœbe, I fancy, is a sufficiently grand lady to be waited for."

The next day, July 6th, a little after noon, Hobson and the astronomer made their preparations for taking the exact bearings of Cape Bathurst. The sun shone clearly enough for them to take the outlines exactly. At this season of the year, too, it had reached its maximum height above the horizon; and consequently its culmination, on its transit across the meridian, would facilitate the work of the two observers.

Already the night before, and the same morning, by raking different altitudes, and by means of a calculation of right ascensions, the Lieutenant and the astronomer had ascertained the longitude with great accuracy. But it was about the latitude that Hobson was most anxious; for what would the meridian of Cape Bathurst matter to him should it not be situated beyond the seventieth parallel?

Noon approached. The men of the expedition gathered round the observers with their sextants ready in their hands. The brave fellows awaited the result of the observation with an impatience which will be readily understood. It was now to be decided whether they had come to the end of their journey, or whether they must search still further for a spot fulfilling the conditions imposed by the Company.

Probably no good result would have followed upon further explorations. According to the maps of North America-imperfect, it is true-the western coast beyond Cape Bathurst sloped down below the seventieth parallel, not again rising above it until it entered Russian America, where the English had as yet no right to settle; so that Hobson had shown considerable judgment in directing his course to Cape Bathurst after a thorough examination of the maps of these northern regions. This promontory is, in fact, the only one which juts out beyond the seventieth parallel along the whole of the North American continent, properly so called-that is to say, in English America. It remained to be proved that it really occupied the position assigned to it in maps.

At this moment the sun was approaching the culminating-point of its course, and the two observers pointed the
telescopes of their sextants upon it. By means of inclined mirrors attached to the instruments, the sun ought apparently to go back to the horizon itself; and the moment when it seemed to touch it with the lower side of its disc would be precisely that at which it would occupy the highest point of the diurnal arc, and consequently the exact moment when it would pass the meridian—in other words, it would be noon at the place where the observation was taken.

All watched in anxious silence.

"Noon!" cried Jaspar Hobson and the astronomer at once.

The telescopes were immediately lowered. The Lieutenant and Thomas Black read on the graduated limbs the value of the angles they had just obtained, and at once proceeded to note down their observations.

A few minutes afterwards, Lieutenant Hobson rose and said, addressing his companions

"My friends, from this date, July 6th, I promise you double pay in the name of the Hudson’s Bay Company!"

"Hurrah! hurrah! hurrah for the Company!" shouted the worthy companions of the Lieutenant with one voice.

Cape Bathurst and its immediate neighbourhood were in very truth above the seventieth degree of north latitude.

We give the result of these simultaneous observations, which agreed to a second.

Longitude, 127° 36’ 12” west of the meridian of Greenwich.

Latitude, 70° 44’ 37” north.

And that very evening these hardy pioneers, encamped so far from the inhabited world, watched the mighty luminary of day touch the edges of the western horizon without dipping beneath it.

For the first time they saw the shining of the midnight sun.

CHAPTER XIII.

FORT HOPE.

The site of the new fort was now finally determined on. It would be impossible to find a better situation than on the level ground behind Cape Bathurst, on the eastern bank of the lagoon Hobson determined to commence the construction of the principal house at once. Meanwhile all must accommodate themselves as best they could; and the sledges were ingeniously utilised to form a provisional encampment.

His men being very skilful, the Lieutenant hoped to have the principal house ready in a month. It was to be large enough to accommodate for a time the nineteen persons of the party. Later, and before the excessive cold set in, if there should be time, the barracks for the soldiers and the magazines for the furs and skins were to be built. There was not much chance of getting it all done before the end of September; and after that date, the winter, with its first bitter frosts and long nights, would arrest all further progress.

Of the ten soldiers chosen by Captain Craventy, two-Marbre and Sabine-were skilful hunters; the other eight handled the hatchet with as much address as the musket. Like sailors, they could turn their hands to anything, and were now to be treated more like workmen than soldiers, for they were to build a fort which there was as yet no enemy to attack. Petersen, Belcher, Rae, Garry, Pond, Hope, and Kellet formed a body of clever, zealous carpenters, under the able superintendence of lilac-Nab, a Scotchman from Stirling, who had had considerable experience in the building both of houses and boats. The men were well provided with tools-hatchets, centre-bits, adzes, planes, hand-saws, mallets, hammers, chisels, &c. &c. Rae was most skilful at blacksmith’s work, and with the aid of a little portable forge he was able to make all the pins, tenons, bolts, nails, screws, nuts, &c., required in carpentry. They had no mason in the party; but none was wanted, as all the buildings of the factories in the north are of wood. Fortunately there were plenty of trees about Cape Bathurst, although as Hobson had already remarked to Mrs Barnett, there was not a rock, a stone, not even a flint or a pebble, to be seen. The shore was strewn with innumerable quantities of bivalve shells broken by the surf, and with seaweed or zoophytes, mostly sea-urchins and asteriadin; but the soil consisted entirely of earth and sand, without a morsel of silica or broken granite; and the cape itself was but an accumulation of soft earth, the particles of which were scarcely held together by the vegetation with which it was clothed.

In the afternoon of the same day, July 6th Hobson and Mac-Nab the carpenter went to choose the site of the principal house on the plateau at the foot of Cape Bathurst. From this point the view embraced the lagoon and the western districts to a distance of ten or twelve miles. On the right, about four miles off, towered icebergs of a considerable height, partly draped in mist; whilst on the left stretched apparently boundless plains, vast steppes which it would be impossible to distinguish from the frozen surface of the lagoon or from the sea itself in the winter.

The spot chosen, Hobson and Mac-Nab set out the outer walls of the house with the line. This outline formed a rectangle measuring sixty feet on the larger side, and thirty on the smaller. The façade of the house would therefore have a length of sixty feet it was to have a door and three windows on the side of the promontory, where the inner court was to be situated, and four windows on the side of the lagoon. The door was to open at the left corner, instead of in the middle, of the back of the house, for the sake of warmth. This arrangement would impede the entrance of the outer air to the further rooms, and add considerably to the comfort of the inmates of the fort.
According to the simple plan agreed upon by the Lieutenant and his master-carpenter, there were to be four compartments in the house: the first to be an antechamber with a double door to keep out the wind; the second to serve as a kitchen, that the cooking which would generate damp, might be all done quite away from the living-rooms; the third, a large hall, where the daily meals were to be served in common; and the fourth, to be divided into several cabins, like the state-rooms on board ship.

The soldiers were to occupy the dining-hall provisionally, and a kind of camp-bed was arranged for them at the end of the room. The Lieutenant, Mrs Barnett, Thomas Black, Madge, Mrs Joliffe, Mrs Mac-Nab, and Mrs Rae were to lodge in the cabins of the fourth compartment. They would certainly be packed pretty closely; but it was only a temporary state of things, and when the barracks were constructed, the principal house would be reserved to the officer in command, his sergeant, Thomas Black, Mrs Barnett, and her faithful Madge, who never left her. Then the fourth compartment might perhaps be divided into three cabins, instead of four; for to avoid corners as much as possible is a rule which should never be forgotten by those who winter in high latitudes. Nooks and corners are, in fact, so many receptacles of ice. The partitions impede the ventilation; and the moisture, generated in the air, freezes readily, and makes the atmosphere of the rooms unhealthy causing grave maladies to those who sleep in them.

On this account many navigators who have to winter in the midst of ice have one large room in the centre of their vessel, which is shared by officers and sailors in common. For obvious reasons, however, Hobson could not adopt this plan.

From the preceding description we shall have seen that the future house was to consist merely of a ground-floor. The roof was to be high, and its sides to slope considerably, so that water could easily run off them. The snow would, however, settle upon them; and when once they were covered with it, the house would be, so to speak, hermetically closed, and the inside temperature would be kept at the same mean height. Snow is, in fact, a very bad conductor of heat: it prevents it from entering, it is true; but, what is more important in an Arctic winter, it also keeps it from getting out.

The carpenter was to build two chimneys-one above the kitchen, the other in connection with the stove of the large dining-room, which was to heat it and the compartment containing the cabins. The architectural effect of the whole would certainly be poor; but the house would be as comfortable as possible, and what more could any one desire?

Certainly an artist who had once seen it would not soon forget this winter residence, set down in the gloomy Arctic twilight in the midst of snow-drifts, half hidden by icicles, draped in white from roof to foundation, its walls encrusted with snow, and the smoke from its fires assuming strangely-contorted forms in the wind.

But now to tell of the actual construction of this house, as yet existing only in imagination. This, of course, was the business of Mac-Nab and his men; and while the carpenters were at work, the foraging party to whom the commissariat was entrusted would not be idle. There was plenty for every one to do.

The first step was to choose suitable timber, and a species of Scotch fir was decided on, which grew conveniently upon the neighbouring hills, and seemed altogether well adapted to the multifarious uses to which it would be put. For in the rough and ready style of habitation which they were planning, there could be no variety of material; and every part of the house-outside and inside walls, flooring, ceiling, partitions, rafters, ridges, framework, and tiling—would have to be contrived of planks, beams, and timbers. As may readily be supposed, finished workmanship was not necessary for such a description of building, and Mac-Nab was able to proceed very rapidly without endangering the safety of the building. About a hundred of these firs were chosen and felled-they were neither barked nor squared—and formed so many timbers, averaging some twenty feet in length. The axe and the chisel did not touch them except at the ends, in order to form the tenons and mortises by which they were to be secured to one another. Very few days sufficed to complete this part of the work, and the timbers were brought down by the dogs to the site fixed on for the principal building. To start with, the Bite had been carefully levelled. The soil, a mixture of fine earth and sand, had been beaten and consolidated with heavy blows. The brushwood with which it was originally covered was burnt, and the thick layer of ashes thus produced would prevent the damp from penetrating the floors. A clean and dry foundation having been thus secured on which to lay the first joists, upright posts were fixed at each corner of the site, and at the extremities of the inside walls, to form the skeleton of the building. The posts were sunk to a depth of some feet in the ground, after their ends had been hardened in the fire; and were slightly hollowed at each side to receive the crossbeams of the outer wall, between which the openings for the doors and windows had been arranged for. These posts were held together at the top by horizontal beams well let into the mortises, and consolidating the whole building. On these horizontal beams, which represented the architraves of the two fronts, rested the high trusses of the roof, which overhung the walls like the eaves of a chalet. Above this squared architrave were laid the joists of the ceiling, and those of the floor upon the layer of ashes.

The timbers, both in the inside and outside walls, were only laid side by side. To insure their being properly joined, Rae the blacksmith drove strong iron bolts through them at intervals; and when even this contrivance proved
insufficient to close the interstices as hermetically as was necessary, Mac-Nab had recourse to calking, a process which seamen find invaluable in rendering vessels water-tight; only as a substitute for tow he used a sort of dry moss, with which the eastern side of the cape was covered, driving it into the crevices with calking-irons and a hammer, filling up each hollow with layers of hot tar, obtained without difficulty from the pine-trees, and thus making the walls and boarding impervious to the rain and damp of the winter season.

The door and windows in the two fronts were roughly but strongly built, and the small panes of the latter glazed with isinglass, which, though rough, yellow, and almost opaque, was yet the best substitute for glass which the resources of the country afforded; and its imperfections really mattered little, as the windows were sure to be always open in fine weather; while during, the long night of the Arctic winter they would be useless, and have to be kept closed and defended by heavy shutters with strong bolts against the violence of the gales. Meanwhile the house was being quickly fitted up inside. By means of a double door between the outer and inner halls a too sudden change of temperature was avoided, and the wind was prevented from blowing with unbroken force into the rooms. The air-pumps, brought from Fort Reliance, were so fixed as to let in fresh air whenever excessive cold prevented the opening of doors or windows -one being made to eject the impure air from within, the other to renew the supply; for the Lieutenant had given his whole mind to this important matter.

The principal cooking utensil was a large iron furnace, which had been brought piecemeal from Fort Reliance, and which the carpenter put up without any difficulty. The chimneys for the kitchen and ball, however, seemed likely to tax the ingenuity of the workmen to the utmost, as no material within their reach was strong enough for the purpose, and stone, as we have said before, was nowhere to be found in the country around Cape Bathurst.

The difficulty appeared insurmountable, when the invincible Lieutenant suggested that they should utilise the shells with which the shore was strewn.

"Make chimneys of shells!" cried the carpenter.

"Yes, Mac-Nab," replied Hobson; "we must collect the shells, grind them, burn them, and make them into lime, then mould the lime into bricks, and use them in the same way."

"Let us try the shells, by all means," replied the carpenter; and so the idea was put in practice at once, and many tons collected of calcareous shells identical with those found in the lowest stratum of the Tertiary formations.

A furnace was constructed for the decomposition of the carbonate which is so large an ingredient of these shells, and thus the lime required was obtained in the space of a few hours. It would perhaps be too much to say that the substance thus made was as entirely satisfactory as if it had gone through all the usual processes; but it answered its purpose, and strong conical chimneys soon adorned the roof, to the great satisfaction of Mrs Paulina Barnett, who congratulated the originator of the scheme warmly on its success, only adding laughingly, that she hoped the chimneys would not smoke.

"Of course they will smoke, madam," replied Hobson coolly; "all chimneys do!"

All this was finished within a month, and on the 6th of August they were to take possession of the new house.

While Mac-Nab and his men were working so hard, the foraging party, with the Lieutenant at its head, had been exploring the environs of Cape Bathurst, and satisfied themselves that there would be no difficulty in supplying the Company’s demands for fur and feathers, so soon as they could set about hunting in earnest. In the meantime they prepared the way for future sport, contenting themselves for the present with the capture of a few couples of reindeer, which they intended to domesticate for the sake of their milk and their young. They were kept in a paddock about fifty yards from the house, and entrusted to the care of Mac-Nab’s wife, an Indian woman, well qualified to take charge of them.

The care of the household fell to Mrs Paulina Barnett, and this good woman, with Madge’s help, was invaluable in providing for all the small wants, which would inevitably have escaped the notice of the men.

After scouring the country within a radius of several miles, the Lieutenant notified, as the result of his observations, that the territory on which they had established themselves, and to which he gave the name of Victoria Land, was a large peninsula about one hundred and fifty square miles in extent, with very clearly-defined boundaries, connected with the American continent by an isthmus, extending from the lower end of Washburn Bay on the east, as far as the corresponding slope on the opposite coast. The Lieutenant next proceeded to ascertain what were the resources of the lake and river, and found great reason to be satisfied with the result of his examination. The shallow waters of the lake teemed with trout, pike, and other available fresh-water fish; and the little river was a favourite resort of salmon and shoals of white bait and smelts. The supply of sea-fish was not so good; and though many a grampus and whale passed by in the offing, the latter probably flying from the harpoons of the Behring Strait fishermen there were no means of capturing them unless one by chance happened to get stranded on the coast; nor would Hobson allow any of the seals which abounded on the western shore to be taken until a satisfactory conclusion should be arrived at as to how to use them to the best advantage.

The colonists now considered themselves fairly installed stalled in their new abode, and after due deliberation...
The factory was therefore entirely encircled, and at each extremity of the lagoon Mac-Nab undertook to erect along the coast at no great distance from Fort Hope, and he well knew how essential it was to be safe from a coup de animals or the hostilities of the natives. The Lieutenant had not forgotten an outrage which had been committed.

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"Yes, indeed; I have been thinking of that, and mean to make all possible use of the produce of the country so as to economise our stores. As soon as we can, we will make some foraging expeditions. We need not think about the furs at present, for there will be plenty of time during the winter to stock the Company's depôts. Besides, the furred animals have not got their winter clothing on yet, and the skins would lose fifty per cent. of their value if taken now. Let us content ourselves for the present with provisioning Fort Hope. Reindeer, elk, - and any wapitis that may have ventured so far north are the only game worth our notice just now; it will be no small undertaking to provide food for twenty people and sixty dogs."

The Lieutenant loved order, and determined to do everything in the most methodical manner, feeling confident that if his companions would help him to the utmost of their power, nothing need be wanting to the success of the expedition.

The weather at this season was almost always fine, and might be expected to continue so for five weeks longer, when the snow would begin to fall. It was very important that the carpenters-should make all possible use of the interval; and as soon as the principal house was finished, Hobson set them to work to build an enormous kennel or shed in which to keep the teams of dogs. This doghouse was built at the very foot of the promontory, against the hill, and about forty yards to the right of the house. Barracks for the accommodation of the men were to be built opposite this kennel on the left, while the store and powder magazines were to occupy the front of the enclosure.

Hobson determined with almost excessive prudence to have the Factory enclosed before the winter set in. A strong fence of pointed stakes, planted firmly in the ground, was set up as a protection against the inroads of wild animals or the hostilities of the natives. The Lieutenant had not forgotten an outrage which had been committed along the coast at no great distance from Fort Hope, and he well knew how essential it was to be safe from a coup de main. The factory was therefore entirely encircled, and at each extremity of the lagoon Mac-Nab undertook to erect

unanimously agreed to bestow upon the settlement the name of Fort Good Hope.

Alas! the auspicious title was never to be inscribed upon a map. The undertaking, begun so bravely and with such prospects of success, was destined never to be carried out, and another disaster would have to be added to the long list of failures in Arctic enterprise.

CHAPTER XIV.

SOME EXCURSIONS.

It did not take long to furnish the new abode. A camp-bed was set up in the hall, and the carpenter Mac-Nab constructed a most substantial table, around which were ranged fixed benches. A few movable seats and two enormous presses completed the furniture of this apartment. The inner room, which was also ready, was divided by solid partitions into six dormitories, the two end ones alone being lighted by windows looking to the front and back. The only furniture was a bed and a table. Mrs Paulina Barnett and Madge were installed in one which looked immediately out upon the lake. Hobson offered the other with the window in it to Thomas Black, and the astronomer took immediate possession of it. The Lieutenant’s own room was a dark cell adjoining the hall, with no window but a bull’s eye pierced through the partition. Mrs Joliffe, Mrs Mac-Nab, and Mrs Rae, with their husbands, occupied the other dormitories. These good people agreed so well together that it would have been a pity to separate them. Moreover, an addition was expected shortly to the little colony; and Mac-Nab had already gone so far as to secure the services of Mrs Barnett as godmother, an honour which gave the good woman much satisfaction. The sledge had been entirely unloaded, and the bedding carried into the different rooms. All utensils, stores, and provisions which were not required for immediate use were stowed away in a garret, to which a ladder gave access. The winter clothing-such as boots, overcoats, furs, and skins-were also taken there, and protected from the damp in large chests. As soon as these arrangements were completed, the Lieutenant began to provide for the heating of the house.

Knowing that the most energetic measures were necessary to combat the severity of the Arctic winter, and that during the weeks of intensest cold there would be no possibility of leaving the house to forage for supplies, he ordered a quantity of fuel to be brought from the wooded hills in the neighbourhood, and took care to obtain a plentiful store of oil from the seals which abounded on the shore.

In obedience to his orders, and under his directions, the house was provided with a condensing apparatus which would receive the internal moisture, and was so constructed that the ice which would form in it could easily be removed.

This question of heating was a very serious one to the Lieutenant.

"I am a native of the Polar regions, madam," he often said to Mrs Barnett; "I have some experience in these matters, and I have read over and over again books written by those who have wintered in these latitudes. It is impossible to take too many precautions in preparing to pass a winter in the Arctic regions, and nothing must be left to chance where a single neglect may prove fatal to the enterprise."

"Very true, Mr Hobson," replied Mrs Barnett; "and you have evidently made up your mind to conquer the cold; but there is the food to be thought of too."

"Yes, indeed; I have been thinking of that, and mean to make all possible use of the produce of the country so as to economise our stores. As soon as we can, we will make some foraging expeditions. We need not think about the furs at present, for there will be plenty of time during the winter to stock the Company's depôts. Besides, the furred animals have not got their winter clothing on yet, and the skins would lose fifty per cent. of their value if taken now. Let us content ourselves for the present with provisioning Fort Hope. Reindeer, elk, - and any wapitis that may have ventured so far north are the only game worth our notice just now; it will be no small undertaking to provide food for twenty people and sixty dogs."

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a wooden sentry-box commanding the coast-line, from which a watch could be kept without any danger. The men worked indefatigably, and it seemed likely that everything would be finished before the cold season set in.

In the meantime hunting parties were organised. The capture of seals being put off for a more convenient season, the sportsmen prepared to supply the fort with game, which might be dried and preserved for consumption during the bad season.

Accordingly Marbre and Sabine, sometimes accompanied by the Lieutenant and Sergeant Long, whose experience was invaluable, scoured the country daily for miles round; and it was no uncommon sight to see Mrs Paulina Barnett join them and step briskly along shouldering her gun bravely, and never allowing herself to be outstripped by her companions.

Throughout the month of August these expeditions were continued with great success, and the store of provisions increased rapidly. Marbre and Sabine were skilled in all the artifices which sportsmen employ in stalking their prey—particularly the reindeer, which are exceedingly wary. How patiently they would face the wind lest the creature’s keen sense of smell should warn it of their approach! and how cunningly they lured it on to its destruction by displaying the magnificent antlers of some former victim above the birch-bushes!

They found a useful alley (sic) in a certain little traitorous bird to which the Indians have given the name of “monitor.” It is a kind of daylight owl, about the size of a pigeon, and has earned its name by its habit of calling the attention of hunters to their quarry, by uttering a sharp note like the cry of a child.

When about fifty reindeer, or, to give them their Indian name, "caribous," had been brought down by the guns, the flesh was cut into long strips for food, the skins being kept to be tanned and used for shoe-leather.

Besides the caribous, there were also plenty of Polar hares, which formed an agreeable addition to the larder. They were much less timorous than the European species, and allowed themselves to be caught in great numbers. They belong to the rodent family, and have long ears, brown eyes, and a soft fur resembling swan’s down. They weigh from ten to fifteen pounds each, and their flesh is excellent. Hundreds of them were cared for winter use, and the remainder converted into excellent pies by the skilful hands of Mrs Joliffe.

While making provision for future wants, the daily supplies were not neglected. In addition to the Polar bares, which underwent every variety of culinary treatment from Mrs Joliffe, and won for her compliments innumerable from hunters and workmen alike, many waterfowl figured in the bill of fare. Besides the ducks which abounded on the shores of the lagoon, large flocks of grousé congregated round the clumps of stunted willows. They belong, as their zoological name implies, to the partridge family, and might be aptly described as white partridges with long black-spotted feathers in the tail. The Indians call them willow-fowl; but to a European sportsman they are neither more nor less than blackcock (Tetrao tetrix). When roasted slightly before a quick clear fire they proved delicious.

Then there were the supplies furnished by lake and stream. Sergeant Long was a first-rate angler, and nothing could surpass the skill and patience with which he whipped the water and cast his s line. The faithful Madge, another worthy disciple of Isaak Walton was perhaps his only equal. Day after day the two sallied forth together rod in hand, to spend the day in mute companionship by the river-side, whence they were sure to return in triumph laden with some splendid specimens of the salmon tribe.

But to return to our sportsmen; they soon found that their hunting excursions were not to be free from peril. Hobson perceived with some alarm that bears were very numerous in the neighbourhood and that scarcely a day passed without one or more of them being sighted. Sometimes these unwelcome visitors belonged to the family of brown bears, so common throughout the whole “Cursed Land;” but now and then a solitary specimen of the formidable Polar bear warned the hunters what dangers they might have to encounter so soon as the first frost should drive great numbers of these fearful animals to the neighbourhood of Cape Bathurst. Every book of Arctic explorations is full of accounts of the frequent perils to which travellers and whalers are exposed from the ferocity of these animals.

Now and then, too, a distant pack of wolves was seen, which receded like a wave at the approach of the hunters, or the sound of their bark was heard as they followed the trail of a reindeer or wapiti. These creatures were large grey wolves, about three feet high, with long tails, whose fur becomes white in the winter. They abounded in this part of the country, where food was plentiful; and frequented wooded spots, where they lived in holes like foxes. During the temperate season, when they could get as much as they wanted to eat, they were scarcely dangerous, and fled with the characteristic cowardice of their race at the first sign of pursuit; but when impelled by hunger, their numbers rendered them very formidable; and from the fact of their lairs being close at hand, they never left the country even in the depth of winter.

One day the sportsmen returned to Fort Hope, bringing with them an unpleasant-looking animal, which neither Mrs Paulina Barnett nor the astronomer, Thomas Black, had ever before seen. It was a carnivorous creature of the plantigrada family, and greatly resembled the American glutton, being strongly built, with short legs, and, like all animals of the feline tribe, a very supple back; its eyes were small and horny, and it was armed with curved claws.
"What is this horrid creature?" inquired Mrs Paulina Barnett of Sabine, who replied in his usual sententious manner—

"A Scotchman would call it a 'quick-hatch,' an Indian an 'okeelcoo-haw-gew,' and a Canadian a 'carcajou.'"

"And what do you call it?"

"A wolverene, ma'am," returned Sabine, much delighted with the elegant way in which he had rounded his sentence.

The wolverene, as this strange quadruped is called by zoologists, lives in hollow trees or rocky caves, whence it issues at night and creates great havoc amongst beavers, musk-rats, and other rodents, sometimes fighting with a fox or a wolf for its spoils. Its chief characteristics are great cunning, immense muscular power, and an acute sense of smell. It is found in very high latitudes; and the short fur with which it is clothed becomes almost black in the winter months, and forms a large item in the Company’s exports.

During their excursions the settlers paid as much attention to the Flora of the country as to its Fauna; but in those regions vegetation, has necessarily a hard struggle for existence, as it must brave every season of the year, whereas the animals are able to migrate to a warmer climate during the winter.

The hills on the eastern side, of the lake were well covered with pine and fir trees; and Jaspar also noticed the "tacamahac," a species of poplar which grows to a great height and shoots forth yellowish leaves which turn green in the autumn. These trees and larches were, however, few and sickly looking, as if they found the oblique rays of the sun insufficient to make them thrive. The black fir, or Norway spruce fir, throve better, especially when situated in ravines well sheltered from the north wind. The young shoots of this tree are very valuable, yielding a favourite beverage known in North America as "spruce-beer." A good crop of these branchlets was gathered in and stored in the cellar of Fort Hope. There were also the dwarf birch, a shrub about two feet high, native to very cold climates, and whole thickets of cedars, which are so valuable for fuel.

Of vegetables which could be easily grown and used for food, this barren land yielded but few; and Mrs Joliffe, who took a great interest in "economic" botany, only met with two plants which were available in cooking.

One of these, a bulb, very difficult to classify, because its leaves fall off just at the flowering season, turned out to be a wild leek, and yielded a good crop of onions, each about the size of an egg.

The other plant was that known throughout North America as "Labrador tea;" it grew abundantly on the shores of the lagoon between the clumps of willow and arbutus, and formed the principal food of the Polar hares. Steeped in boiling water, and flavoured with a few drops of brandy or gin, it formed an excellent beverage, and served to economise the supply of China tea which the party had brought from Fort Reliance.

Knowing the scarcity of vegetables, Jaspar Hobson had plenty of seeds with him, chiefly sorrel and scurvy-grass (Cochlearia), the antiscorbutic properties of which are invaluable in these latitudes. In choosing the site of the settlement, such care had been taken to find a spot sheltered from the keen blasts, which shrivel vegetation like a fire, that there was every chance of these seeds yielding a good crop in the ensuing season.

The dispensary of the new fort contained other antiscorbutics, in the shape of casks of lemon and lime juice, both of which are absolutely indispensable to an Arctic expedition. Still the greatest economy was necessary with regard to the stores, as a long period of bad weather might cut off the communication between Fort Hope and the southern stations.

CHAPTER XV.

FIFTEEN MILES FROM CAPE BATHURST.

September had now commenced, and as upon the most favourable calculation only three more weeks would intervene before the bad season set in and interrupted the labours of the explorers, the greatest haste was necessary in completing the new buildings, and Mae-Nab and his workmen surpassed themselves in industry. The dog-house was on the eve of being finished, and very little remained to be done to the palisading which was, to encircle the fort. An inner court had been constructed, in the shape of a half-moon, fenced with tall pointed stakes, fifteen feet high, to which a postern gave entrance. Jaspar Hobson favoured the system of an unbroken enclosure with detached forts (a great improvement upon the tactics of Vauban and Cormontaigne), and knew that to make his defence complete the summit of Cape Bathurst, which was the key of the position, must be fortified; until that could be done, however, he thought the palisading would be a sufficient protection, at least against quadrupeds.

The next thing was to lay in a supply of oil and lights, and accordingly an expedition was organised to a spot about fifteen miles distant where seals were plentiful, Mrs Paulina Barnett being invited to accompany the sportsmen, not indeed for the sake of watching the poor creatures slaughtered, but to satisfy her curiosity with regard to the country around Cape Bathurst, and to see some cliff’s on that part of the coast which were worthy of notice. The Lieutenant chose as his other companions, Sergeant Long, and the soldiers Petersen, Hope, and Kellet, and the party set off at eight o’clock in the morning in two sledges, each drawn by six dogs, on which the bodies of the seals
being cut off, and with jagged tremulous outlines standing out against the sky. They had hitherto escaped the notice of the

On the west, the aspect of the country explained the presence of the volcanic débris on the shore; for at a distance of

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party soon reached the foot of the cliff, and Petersen, Hope, and Kellet, took up their position as sentinels on the

After a monotonous journey along a flat and sandy shore, the party reached their destination, and, having unharnessed the teams, they were left behind lest they should startle the seals.

At the first glance around them, all were equally struck with the contrast between the appearance of this district and that of Cape Bathurst.

Here the coast line was broken and fretted, showing manifest traces of its igneous origin; whereas the site of the fort was of sedimentary formation and aqueous origin. Stone, so conspicuously absent at the cape, was here plentiful; the black sand and porous lava were strewn with huge boulders deeply imbedded in the soil, and there were large quantities of the aluminium, silica, and felspar pebbles peculiar to the crystalline strata of one class of igneous rocks. Glittering Labrador stones, and many other kinds of felspar, red, green, and blue, were sprinkled on the unfrequented beach, with grey and yellow pumice-stone, and lustrous variegated obsidian. Tall cliffs, rising some two hundred feet above the sea, frowned down upon the bay; and the Lieutenant resolved to climb them, and obtain a good view of the eastern side of the country. For this there was plenty of time, as but few of the creatures they had come to seek were as yet to be seen, and the proper time for the attack would be when they assembled for the afternoon siesta in which the amphibious mammalia always indulge. The Lieutenant, however, quickly discovered that the animals frequenting this coast were not, as he had been led to suppose, true seals, although they belonged to the Phocidæ family, but morses or walruses, sometimes called sea-cows. They resemble the seals in general form, but the canine teeth of the upper jaw curved down-wards are much more largely developed.

Following the coast line, which curved considerably, and to which they gave the name of "Walruses' Bay," the party soon reached the foot of the cliff, and Petersen, Hope, and Kellet, took up their position as sentinels on the little promontory, whilst Mrs Barnett, Hobson, and Long, after promising not to lose sight of their comrades, and to be on the look-out for their signal, proceeded to climb the cliff, the summit of which they reached in about a quarter of an hour. From this position they were able to survey the whole surrounding country; at their feet lay the vast sea, stretching northwards as far as the eye could reach, its expanse so entirely unbroken by islands or icebergs that the travellers came to the conclusion, that this portion of the Arctic waters was navigable as far as Behring Straits, and that during the summer season the North-West Passage to Cape Bathurst would be open to the Company's ships. On the west, the aspect of the country explained the presence of the volcanic débris on the shore; for at a distance of about ten miles was a chain of granitic hills, of conical form, with blunted crests, looking as if their summits had been cut off, and with jagged tremulous outlines standing out against the sky. They had hitherto escaped the notice

been cut off, and with jagged tremulous outlines standing out against the sky. They had hitherto escaped the notice
of our party, as they were concealed by the cliffs on the Cape Bathurst side, and Jaspar Hobson examined them in silence, but with great attention, before he proceeded to study the eastern side, which consisted of a long strip of perfectly level coast-line stretching away to Cape Bathurst. Any one provided with a good field-glass would have been able to distinguish the fort of Good Hope, and perhaps even the cloud of blue smoke, which was no doubt at that very moment issuing from Mrs Joliffe’s kitchen chimney.

The country behind them seemed to possess two entirely distinct characters; to the east and south the cape was bounded by a vast plain, many hundreds of square miles in extent, while behind the cliff, from “Walruses’ Bay” to the mountains mentioned above, the country had undergone terrible convulsions, showing clearly that it owed its origin to volcanic eruptions. The Lieutenant was much struck with this marked contrast, and Sergeant Long asked him whether he thought the mountains on the western horizon were volcanoes.

“Undoubtedly,” said Hobson; “all these pumice-stones and pebbles have been discharged by them to this distance, and if we were to go two or three miles farther, we should find ourselves treading upon nothing but lava and ashes.”

“Do you suppose,” inquired the Sergeant, “that all these volcanoes are still active?”

“That I cannot tell you yet.”

“But there is no smoke issuing from any of them,” added the Sergeant.

“That proves nothing; your pipe is not always in your mouth, and it is just the same with volcanoes, they are not always smoking.”

“I see,” said the Sergeant; “but it is a great puzzle to me how volcanoes can exist at all on Polar continents.”

“Well, there are riot many of them!” said Mrs Barnett.

“No, madam,” replied Jaspar, “but they are not so very rare either; they are to be found in Jan Mayen’s Land, the Aleutian Isles, Kamtchatka, Russian America, and Iceland, as well as in the Antarctic circle, in Tierra del Fuego, and Australasia. They are the chimneys of the great furnace in the centre of the earth, where Nature makes her chemical experiments, and it appears to me that the Creator of all things has taken care to place these safety-valves wherever they were most needed.”

“I suppose so,” replied the Sergeant; “and yet it does seem very strange to find them in this icy climate.”

“Why should they not be here as well as anywhere else, Sergeant? I should say that ventilation holes are likely to be more numerous at the Poles than at the Equator!”

“Why so?” asked the Sergeant in much surprise.

“Because, if these safety-valves are forced open by the pressure of subterranean gases, it will most likely be at the spots where the surface of the earth is thinnest, and as the globe is flattened at the poles, it would appear natural that—but Kellet is making signs to us,” added the Lieutenant, breaking off abruptly; “will you join us, Mrs Barnett?”

“No, thank you. I will stay here until we return to the fort. I don’t care to watch the walrus slaughtered!”

The beach was soon reached, and some hundred walrus had collected, either waddling about on their clumsy webbed feet, or sleeping in family groups. Some few of the larger males-creatures nearly four feet long, clothed with very short reddish fur—kept guard over the herd.

Great caution was required in approaching these formidable looking animals, and the hunters took advantage of every bit of cover afforded by rocks and inequalities of the ground, so as to get within easy range of them and cut off their retreat to the sea.

On land these creatures are clumsy and awkward, moving in jerks or with creeping motions like huge caterpillars, but in water—their native element—they are nimble and even graceful; indeed their strength is so great, that they have been known to overturn the whalers in pursuit of them.

As the hunters drew near the sentinels took alarm, and raising their heads looked searchingly around them; but before they could warn their companions of danger, Hobson and Kellet rushed upon them from one side, the Sergeant, Petersen, and Hope from the other, and after lodging a ball in each of their bodies, despatched them with their spears, whilst the rest of the herd plunged into the sea.

The victory was an easy one; the five victims were very large and their tusks, though slightly rough, of the best quality. They were chiefly valuable, however, on account of the oil; of which—being in excellent condition—they would yield a large quantity. The bodies were packed in the sledges, and proved no light weight for the dogs.

It was now one o’clock, and Mrs Barnett having joined them, the party set out on foot—the sledges being full-to return to the fort. There were but ten miles to be traversed, but ten miles in a straight line is a weary journey, proving the truth of the adage “It’s a long lane that has no turning.” They beguiled the tediousness of the way by chatting pleasantly, and Mrs Barnett was ready to join in the conversation, or to listen with interest to the accounts the worthy soldiers gave of former adventures; but in spite of the brave struggle against ennui they advanced but slowly,
and the poor dogs found it hard work to drag the heavily-laden sledges over the rough ground. Had it been covered with frozen snow the distance would have been accomplished in a couple of hours.

The merciful Lieutenant often ordered a halt to give the teams breathing-time, and the Sergeant remarked that it would be much more convenient for the inhabitants of the fort, if the morses would settle a little nearer Cape Bathurst.

"They could riot find a suitable spot," replied the Lieutenant, with a melancholy shake of the head.

"Why not?" inquired Mrs Barnett with some surprise.

"Because they only congregate where the slope of the beach is gradual enough to allow of their creeping up easily from the sea. Now Cape Bathurst rises abruptly, like a perpendicular wall, from water three hundred fathoms deep. It is probable that ages ago portion of the continent was rent away in some violent volcanic convulsion, and flung into the Arctic Ocean. Hence the absence of morses on the beach of our cape."

CHAPTER XVI.

TWO SHOTS.

The first half of September passed rapidly away. Had Fort Hope been situated at the Pole itself, that is to say, twenty degrees farther north, the polar night would have set in on the 21st of that month. But under the seventieth parallel the sun would be visible above the horizon for another month. Nevertheless, the temperature was already decidedly colder, the thermometer fell during the night to 31° Fahrenheit; and thin coatings of ice appeared here and there, to be dissolved again in the day-time.

But the settlers were able to await the coming of winter without alarm; they had a more than sufficient store of provisions, their supply of dried venison had largely increased, another score of morses had been killed, the tame rein-deer were warmly and comfortably housed, and a huge wooden shed behind the house was filled with fuel. In short, everything was prepared for the Polar night.

And now all the wants of the inhabitants of the fort being provided for, it was time to think of the interests of the Company. The Arctic creatures had now assumed their winter furs, and were therefore of the greatest value, and Hobson organised shooting parties for the remainder of the fine weather, intending to set traps when the snow should prevent further excursions.

They would have plenty to do to satisfy the requirements of the Company, for so far north it was of no use to depend on the Indians, who are the purveyors of the factories.

The first expedition was to the haunt of a family of beavers, long since noted by the watchful Lieutenant, on a tributary of the stream already referred to. It is true, the fur of the beaver is not now as valuable as when it was used for hats, and fetched £16 per kilogramme (rather more than 2 lb.); but it still commands a high price as the animal is becoming very scarce, in consequence of the reckless way in which it has been hunted.

When the party reached their destination, the Lieutenant called Mrs Barnett's attention to the great ingenuity displayed by beavers in the construction of their submarine city. There were some hundred animals in the little colony now to be invaded, and they lived together in pairs in the "holes" or "vaults" they had hollowed out near the stream. They had already commenced their preparations for the winter, and were hard at work constructing their dams and laying up their piles of wood. A dam of admirable structure had already been built across the stream, which was deep and rapid enough not to freeze far below the surface, even in the severest weather. This dam, which was convex towards the current, consisted of a collection of upright stakes interlaced with branches and roots, the whole being cemented together and rendered watertight with the clayey mud of the river, previously pounded by the animals' feet. The beavers use their tails—which are large and flat, with scales instead of hair at the root—for plastering over their buildings and beating the clay into shape.

"The object of this dam," said the Lieutenant to Mrs Barnett, "is to secure to the beavers a sufficient depth of water at all seasons of the year, and to enable the engineers of the tribe to build the round buts called houses or lodges, the tops of which you can just see. They are extremely solid structures, and the walls made of stick, clay, roots, &c., are two feet thick. They can only be entered from below the water, and their owners have therefore to dive when they go home-an admirable arrangement for their protection. Each lodge contains two stories; in the lower the winter stock of branches, bark, and roots, is laid up, and the upper is the residence of the householder and his family."

"There is, however, not a beaver in sight," said Mrs Barnett; "is this a deserted village?"

"Oh no," replied the Lieutenant, "the inhabitants are now all asleep and resting; they only work in the night, and we mean to surprise them in their holes."

This was, in fact, easily done, and in an hour's time about a hundred of the ill-fated rodents had been captured, twenty of which were of very great value, their fur being black, and therefore especially esteemed. That of the others was also long, glossy, and silky, but of a reddish hue mixed with chestnut brown. Beneath the long fur, the beavers have a second coat of close short hair of a greyish-white colour.
The hunters returned to the fort much delighted with the result of their expedition. The beavers’ skins were warehoused and labelled as “parchments” or “young beavers,” according to their value.

Excursions of a similar kind were carried on throughout the month of September, and during the first half of October, with equally happy results.

A few badgers were taken, the skin being used as an ornament for the collars of draught horses, and the hair for making brushes of every variety. These carnivorous creatures belong to the bear family, and the specimens obtained by Hobson were of the genus peculiar to North America, sometimes called the Taxel badger.

Another animal of the rodent family, nearly as industrious as the beaver, largely contributed to the stores of the Company. This was the musk-rat or musquash. Its head and body are about a foot long and its tail ten inches. Its fur is in considerable demand. These creatures, like the rest of their family, multiply with extreme rapidity, and a great number were easily unearthed.

In the pursuit of lynxes and wolverines or gluttons, fire-arms bad to be used. The lynx has all the suppleness and agility of the feline tribe to which it belongs, and is formidable even to the rein-deer; Marbre and Sabine were, however, well up to their work, and succeeded in killing more than sixty of them. A few wolverines or gluttons were also despatched, their fur is reddish-brown, and that of the lynx, light-red with black spots; both are of considerable value.

Very few ermines or stoats were seen, and Jaspar Hobson ordered his men to spare any which happened to cross their path until the winter, when they should have assumed their beautiful snow-white coats with the one black spot at the tip of the tail. At present the upper fur was reddish-brown and the under yellowish white, so that, as Sabine expressed it, it was desirable to let them "ripen," or, in other words,-to wait for the cold to bleach them.

Their cousins, the polecats, however, which emit so disagreeable an odour, fell victims in great numbers to the hunters, who either tracked them to their homes in hollow trees, or shot them as they glided through the branches.

Martens, properly so-called, were hunted with great zeal. Their fur is in considerable demand, although not so valuable as that of the sable, which becomes a dark lustrous brown in the winter. The latter did not, however, come in the way of our hunters, as it only frequents the north of Europe and Asia as far as Kamtchatka, and is chiefly hunted by the inhabitants of Siberia. They had to be cone tent with the polecats and pine-martens, called "Canada-martens," which frequent the shores of the Arctic Ocean.

All the weasels and martens are very difficult to catch; they wriggle their long supple bodies through the smallest apertures with great ease, and thus elude their pursuers. In the winter, however, they are easily taken in traps, and Marbre and Sabine looked forward to make up for lost time then, when, said they, "there shall be plenty of their furs in the Company’s stores."

We have now only to mention the Arctic or blue and silver foxes, to complete the list of animals which swelled the profits of the Hudson’s Bay Company.

The furs of these foxes are esteemed in the Russian and English markets above all others, and that of the blue fox is the most valuable of all. This pretty creature has a black muzzle, and the fur is not as one would suppose blue, but whitish-brown; its great price-six times that of any other kind-arises from its superior softness, thickness, and length. A cloak belonging to the Emperor of Russia, composed entirely of fur from the neck of the blue fox (the fur from the neck is considered better than that from any other part), was shown at the London Exhibition of 1851, and valued at £3400 sterling.

Several of these foxes were sighted at Cape Bathurst, but all escaped the hunters; whilst only about a dozen silver foxes fell into their hands. The fur of the latter-of a lustrous black dotted with white-is much sought after in England and Russia, although it does not command so high a price as that of the foxes mentioned above.

One of the silver foxes captured was a splendid creature, with a coal-black fur tipped with white at the extreme end of the tail, and with a dash of the same on the forehead. The circumstances attending its death deserve relation in detail, as they proved that Hobson was right in the precautions he had taken.

On the morning of the 24th September, two sledges conveyed Mrs Barnett, the Lieutenant, Sergeant Long, Marbre, and Sabine, to Walruses’ Bay. Some traces of foxes had been noticed the evening before, amongst some rocks clothed with scanty herbage and the direction taken by the animals was very clearly indicated. The hunters followed up the trail of a large animal, and were rewarded by bringing down a very fine silver fox.

Several other animals of the same species were sighted, and the hunters divided into two parties-Marbre and Sabine going after one foe, and Mrs Barnett, Hobson, and the Sergeant, trying to cut off the retreat of another fine animal hiding behind some rocks.

Great caution and some artifice was necessary to deal with this crafty animal, which took care not to expose itself to a shot. The pursuit lasted for half-an-hour without success; but at last the poor creature, with the sea on one side and its three enemies on the other, had recourse in its desperation to a flying leap, thinking thus to escape with its life. But Hobson was too quick for it; and as it bounded by like a flash of lightning, it was struck by a shot, and to
every one's surprise, the report of the Lieutenant's gun was succeeded by that of another, and a second ball entered
the body of the fox, which fell to the ground mortally wounded.

"Hurrah! hurrah!" cried Hobson, "it is mine!"

"And mine!" said another voice, and a stranger stepped forward and placed his foot upon the fox just as the
Lieutenant was about to raise it.

Hobson drew back in astonishment. He thought the second ball had been fired by the Sergeant, and found
himself face to face with a stranger whose gun was still smoking.

The rivals gazed at each other in silence.

The rest of the party now approached, and the stranger was quickly joined by twelve comrades, four of whom
were like himself "Canadian travellers," and eight Chippeway Indians.

The leader was a tall man—a fine specimen of his class—those Canadian trappers described in the romances of
Washington Irving, whose competition Hobson had dreaded with such good reason. He wore the traditional costume
ascribed to his fellow-hunters by the great American writer; a blanket loosely arranged about his person, a striped
cotton shirt, wide cloth trousers, leather gaiters, deerskin mocassins, and a sash of checked woollen stuff round the
waist, from which were suspended his knife, tobacco-pouch, pipe, and a few useful tools.

Hobson was right. The man before him was a Frenchman, or at least a descendant of the French Canadians,
perhaps an agent of the American Company come to act as a spy on the settlers in the fort. The other four Canadians
wore a costume resembling that of their leader, but of coarser materials.

The Frenchman bowed politely to Mrs Barnett, and the Lieutenant was the first to break the silence, during
which he had not removed his eyes from his rival's face.

"This fox is mine, sir," he said quietly.

"It is if you killed it!" replied the other in good English, but with a slightly foreign accent.

"Excuse me, sir," replied Hobson rather sharply, "it is mine in any case."

The stranger smiled scornfully at this lofty reply, so exactly what he expected from an agent of the Hudson's
Bay Company, which claims supremacy over all the northern districts, from the Atlantic to the Pacific.

"Do you mean to say," he said at last, gracefully toying with his gun, "that you consider the Hudson’s Bay
Company mistress of the whole of North America?"

"Of course I do," said Hobson; "and if, as I imagine, you belong to an American company—

"To the St Louis Fur Company," replied the stranger with a bow.

"I think," added the Lieutenant, "that you will find it difficult to show the grants entitling you to any privileges
here."

"Grants! privileges!" cried the Canadian scornfully, "old world terms which are out of place in America!"

"You are not now on American but on English ground," replied the Lieutenant proudly.

"This is no time for such a discussion," said the hunter rather warmly. "We all know the old claims made by the
English in general, and the Hudson’s Bay Company in particular, to these hunting grounds; but I expect coming
events will soon alter this state of things, and America will be America from the Straits of Magellan to the North
Pole!"

"I do not agree with you," replied Hobson dryly.

"Well, sir, however that may be," said the Canadian, "let us suffer this international question to remain in
abeyance for the present. Whatever rights the Company may arrogate to itself, it is very clear that in the extreme
north of the continent, and especially on the coast, the territory belongs to whoever occupies it. You have founded a
factory on Cape Bathurst, therefore we will respect your domain, and you on your side will avoid ours, when the St
Louis fur-traders have established their projected fort at another point on the northern shore of America."

The Lieutenant frowned at this speech, for he well knew what complications would arise in the future when the
Hudson’s Bay Company would be compelled to struggle for supremacy with powerful rivals, and that quarrelling
and even bloodshed would ensue; he could not, however, but acknowledge that this was not the time to begin the
discussion, and he was not sorry when the hunter, whose manners, to tell the truth, were very polite, placed the
dispute on another footing.

"As for this present matter," said the Canadian, "it is of minor importance, and we must settle it according to the
rules of the chase. Our guns are of different calibre, and our balls can be easily distinguished; let the fox belong to
whichever of us really killed it."

The proposition was a fair one, and the body of the victim was examined accordingly. One ball had entered at
the side, the other at the heart; and the latter was from the gun of the Canadian.

"The fox is your property, sir," said Jaspar Hobson, vainly endeavouring to conceal his chagrin at seeing this
valuable spoil fall into the enemy's hands.

The Canadian took it, but instead of throwing it over his shoulder and carrying it off, he turned to Mrs Barnett,
and said " Ladies are fond of beautiful furs, and although, perhaps, if they knew better what dangers and difficulties have to be surmounted in order to obtain them, they might not care so much about them, they are not likely to refuse to wear them on that account, and I hope, madam, you will favour me by accepting this one in remembrance of our meeting."

Mrs Barnett hesitated for a moment, but the gift was offered with so much courtesy and kindliness of manner, that it would have seemed churlish to refuse, and she therefore accepted it with many thanks.

This little ceremony over, the stranger again bowed politely, and, followed by his comrades, quickly disappeared behind the rocks, whilst the Lieutenant and his party returned to Fort Good Hope. Hobson was very silent and thoughtful all the way; for he could not but feel that the existence of a rival company would greatly compromise the success of his undertaking, and lead to many future difficulties.

CHAPTER XVII.
THE APPROACH OF WINTER.

It was the 21st of September. The sun was then passing through the autumnal equinox, that is to say, the day and night were of equal length all over the world. These successive alternations of light and darkness were hailed with delight by the inhabitants of the fort. It is easier to sleep in the absence of the sun, and darkness refreshes and strengthens the eyes, weary with the unchanging brightness of several months of daylight.

We know that during the equinox the tides are generally at their greatest height; we have high water or flood, for the sun and moon being in conjunction, their double influence is brought to bear upon the waters. It was, therefore, necessary to note carefully the approaching tide at Cape Bathurst. Jaspar Hobson had made bench marks some days before, so as to estimate exactly the amount of vertical displacement of the waters between high and low tide; he found, however, that in spite of all the reports of previous observers, the combined solar and lunar influence was hardly felt in this part of the Arctic Ocean. There was scarcely any tide at all, and the statements of navigators on the subject were contradicted.

"There is certainly something unnatural here!" said Lieutenant Hobson to himself.

He did not in fact know what to think, but other cares soon occupied his mind, and he did not long endeavour to get to the rights of this singular peculiarity.

On the 29th September the state of the atmosphere changed considerably. The thermometer fell to 41° Fahrenheit, and the sky became covered with clouds which were soon converted into heavy rain. The bad season was approaching.

Before the ground should be covered with snow, Mrs Joliffe was busy sowing the seeds of Cochlearia (scurvy grass) and sorrel, in the hope that as they were very hardy, and would be well protected from the rigour of the winter by the snow itself, they would come up in the spring. Her garden, consisting of several acres hidden behind the cliff of the cape, had been prepared beforehand, and it was sown during the last days of September.

Hobson made his companions assume their winter garments before the great cold set in, and all were soon suitably clothed in the linen under vests, deerskin cloaks, sealskin pantaloons, fur bonnets, and waterproof boots with which they were provided. We may also say that the rooms were suitably dressed; the wooden walls were hung with skins, in order to prevent the formation upon them of coats of ice in sudden falls of temperature. About this time, Rae set up his condensers for collecting the vapour suspended in the air, which were to be emptied twice a week. The heat of the stove was regulated according to the variations of the external temperature, so as to keep the thermometer of the rooms at 50° Fahrenheit. The house would soon be covered with thick snow, which would prevent any waste of the internal warmth, and by this combination of natural and artificial protections they hoped to be able successfully to contend with their two most formidable enemies, cold and damp.

On the 2nd October the thermometer fell still lower, and the first snow storm came on; there was but little wind, and there were therefore none of those violent whirlpools of snow called drifts, but a vast white carpet of uniform thickness soon clothed the cape, the enceinte of fort, and the coast. The waters of the lake and sea, not yet petrified by the icy hand of winter, were of a dull, gloomy, greyish hue, and on the northern horizon the first icebergs stood out against the misty sky. The blockade had not yet commenced, but nature was collecting her materials, soon to be cemented by the cold into an impenetrable barrier.

The " young ice " was rapidly forming on the liquid surfaces of sea and lake. The lagoon was the first to freeze over; large whitish-grey patches appeared here and there, signs of a hard frost setting in, favoured by the calmness of the atmosphere. and after a night during which the thermometer had remained at 15° Fahrenheit, the surface of the lake was smooth and firm enough to satisfy the most fastidious skaters of the Serpentine. On the verge of the horizon, the sky assumed that peculiar appearance which whalers call ice-blink, and which is the result of the glare of light reflected obliquely from the surface of the ice against the opposite atmosphere. Vast tracts of the ocean became gradually solidified, the ice-fields, formed by the accumulation of icicles, became welded to the coast, presenting a surface broken and distorted by the action of the waves, and contrasting strongly with the smooth
mirror of the lake. Here and there floated these long pieces, scarcely cemented together at the edges, known as "drift ice," and the "hummocks," or protuberances caused by the squeezing of one piece against another, were also of frequent occurrence.

In a few days the aspect of Cape Bathurst and the surrounding districts was completely changed. Mrs Barnett's delight and enthusiasm knew no bounds; everything was new to her, and she would have thought no fatigue or suffering too great to be endured for the sake of witnessing such a spectacle. She could imagine nothing more sublime than this invasion of winter with all its mighty forces, this conquest of the northern regions by the cold. All trace of the distinctive features of the country had disappeared; the land was metamorphosed, a new country was springing into being before her admiring eyes, a country gifted with a grand and touching beauty. Details were lost, only the large outlines were given, scarcely marked out against the misty sky. One transformation scene followed another with magic rapidity. The ocean, which but lately lifted up its mighty waves, was hushed and still; the verdant soil of various hues was replaced by a carpet of dazzling whiteness; the woods of trees of different kinds were converted into groups of gaunt skeletons draped in hoar-frost; the radiant orb of day had become a pale disc, languidly running its allotted course in the thick fog, and visible but for a few hours a day, whilst the sea horizon, no longer clearly cut against the sky, was hidden by an endless chain of ice-bergs, broken into countless rugged forms, and building up that impenetrable ice-wall, which Nature has set up between the Pole and the bold explorers who endeavour to reach it.

We can well understand to how many discussions and conversations the altered appearance of the country gave rise. Thomas Black was the only one who remained indifferent to the sublime beauty of the scene. But what could one expect of an astronomer so wrapped up in his one idea, that he might be said to be present in the little colony in the body, but absent in spirit? He lived in the contemplation of the heavenly bodies, passing from the examination of one constellation to that of another, roving in imagination through the vast realms of space, peopled by countless radiant orbs, and fuming with rage when fogs or clouds hid the objects of his devotion from his sight. Hobson consoled him by promising him fine cold nights admirably suited to astronomical observations, when he could watch the beautiful Aurora Borealis, the lunar halos, and other phenomena of Polar countries worthy even of his admiration.

The cold was not at this time too intense; there was no wind, and it is the wind which makes the cold so sharp and biting. Hunting was vigorously carried on for some days. The magazines became stocked with new furs, and fresh stores of provisions were laid up. Partridges and ptarmigans on their way to the south passed over the fort in great numbers, and supplied fresh and wholesome meat. Polar or Arctic hares were plentiful, and had already assumed their white winter robes. About a hundred of these rodents formed a valuable addition to the reserves of the colony.

There were also large flocks of the whistling swan or hooper, one of the finest species of North America. The hunters killed several couples of them, handsome birds, four or five feet in entire length, with white plumage, touched with copper colour on the head and upper part of neck. They were on their way to a more hospitable zone, where they could find the aquatic plants and insects they required for food, and they sped through the air at a rapid pace, for it is as much their native element as water. Trumpeter swans, with a cry like the shrill tone of a clarion, which are about the same size as the hoopers, but have black feet and beaks, also passed in great numbers, but neither Marbre nor Sabine were fortunate enough to bring down any of them. However, they shouted out "au revoir" in significant tones, for they knew that they would return with the first breezes of spring and that they could then be easily caught. Their skin, plumage, and down, are all of great value, and they are therefore eagerly hunted. In some favourable years tens of thousands of them have been exported, fetching half a guinea a piece.

During these excursions, which only lasted for a few hours, and were often interrupted by bad weather, packs of wolves were often met with. There was no need to go far to find them, for, rendered bold by hunger, they already ventured close to the factory. Their scent is very keen, and they were attracted by the smell from the kitchen. During the night they could be heard howling in a threatening manner. Although not dangerous individually, these carnivorous beasts are formidable in packs, and the hunters therefore took care to be well armed when they went beyond the enceinte of the fort.

The bears were still more aggressive. Not a day passed without several of these animals being seen. At night they would come close up to the enclosure, and sane were even wounded with shot, but got off, staining the snow with their blood, so that up to October 10th not one had left its warm and valuable fur in the hands of the hunters. Hobson would not have them molested, rightly judging that with such formidable creatures it was best to remain on the defensive, and it was not improbable that, urged on by hunger, they might attack Fort Hope before very long. Then the little colony could defend itself, and provision its stores at the same time.

For a few days the weather continued dry and cold, the surface of the snow was firm and suitable for walking, so that a few excursions were made without difficulty along the coast on the south of the fort. The Lieutenant was
received the name of Michael Hope. The ceremony of baptism was performed with considerable solemnity, and a healthy boy, of whom the head carpenter was extremely proud. Mrs Barnett stood god-mother to the child, which

Cooper. Some thirty of these snares were set round Fort Hope, and were to be visited at pretty frequent intervals. over a space of several miles by the famous hunters whose adventurous life has been so poetically described by

marten, for instance, which touched it with its paw, could not fail to be crushed. Such were the traps set in the winter end of the horizontal piece of wood was baited with venison, and every animal of a moderate height, a fox or a

as to fall on the least touch-in fact, the same sort of trap as that used for snaring birds in fields on a large scale. The

of Cape Bathurst throughout the winter.

regions until the commencement of the Polar night, but they too were soon to take their departure.

was about to commence. The last Arctic birds forsook the gloomy shores of the Polar Sea, only a few pairs of those

the sun was only above the horizon for a few hours and the actual winter, implying entire confinement within doors,

injury.

the blood were not restored by immediate friction with snow. Garry, Belcher, Hope, and other members of the little

when the north wind blows strongly. The air seemed to be made of needles, and those who ventured out of the house

to the postern, the shed, and the stable of the dogs and rein-deer. Excursions became more and more rare, and it was impossible to walk without snow-shoes.

When the snow has become hardened by frost, it easily sustains the weight of a man; but when it is soft and yielding, and the unfortunate pedestrian sinks into it up to his knees, the snow-shoes used by Indians are invaluable.

Lieutenant Hobson and his companions were quite accustomed to walk in them, and could glide about over the snow as rapidly as skaters on ice; Mrs Barnett had early practised wearing them, and was quite as expert in their use as the rest of the party. The frozen lake as well as the coast was scoured by these indefatigable explorers, who were even able to advance several miles from the shore on the solid surface of the ocean now covered with ice several feet thick. It was, however, very tiring work, for the ice-fields were rugged and uneven, strewn with piled-up ridges of ice and hummocks which had to be turned. Further out a chain of icebergs, some five hundred feet high, barred their progress. These mighty icebergs, broken into fantastic and picturesque forms, were a truly magnificent spectacle. Here they looked like the whitened ruins of a town with curtains battered in, and monuments and columns overthrown; there like some volcanic land torn and convulsed by earthquakes and eruptions; a confusion of glaciers and glittering ice-peaks with snowy ramparts and buttresses, valleys, and crevasses, mountains and hillocks, tossed and distorted like the famous Alps of Switzerland. A few scattered birds, petrels, guillemots, and puffins, lingering behind their fellows, still enlivened the vast solitude with their piercing cries; huge white bears roamed about amongst the hummocks, their dazzling coats scarcely distinguishable from the shining ice-true there was enough to interest and excite our adventurous lady traveller, and even Madge, the faithful Madge, shared the enthusiasm of her mistress. How far, how very far, were both from the tropic zones of India or Australia!

The frozen ocean was firm enough to have allowed of the passage of a park of artillery, or the erection of a monument, and many were the excursions on its surface until the sudden lowering of the temperature rendered all exertion so exhausting that they had to be discontinued. The pedestrians were out of breath after taking a few steps, and the dazzling whiteness of the glittering snow could not be endured by the naked eye; indeed, the reverberation or flickering glare of the undulatory reflection of the light from the surface of the snow, has been known to cause several cases of blindness amongst the Esquimaux.

A singular phenomenon due to the refraction of rays of light was now observed: distances, depths, and heights lost their true proportions, five or six yards of ice looked like two, and many were the falls and ludicrous results of this optical illusion.

On October 14th the thermometer marked 3° Fahrenheit below zero, a severe temperature to endure, especially when the north wind blows strongly. The air seemed to be made of needles, and those who ventured out of the house were in great danger of being frost-bitten, when death or mortification would ensue if the suspended circulation of the blood were not restored by immediate friction with snow. Garry, Belcher, Hope, and other members of the little community were attacked by frost-bite, but the parts affected being rubbed in time they escaped without serious injury.

It will readily be understood that all manual labour had now become impossible. The days were extremely short, the sun was only above the horizon for a few hours and the actual winter, implying entire confinement within doors, was about to commence. The last Arctic birds forsook the gloomy shores of the Polar Sea, only a few pairs of those speckled quails remained which the Indians appropriately call "winter birds," because they wait in the Arctic regions until the commencement of the Polar night, but they too were soon to take their departure.

Lieutenant Hobson, therefore, urged on the setting of the traps and snares which were to remain in different parts of Cape Bathurst throughout the winter.

These traps consisted merely of rough joists supported on a square, formed of three pieces of wood so balanced as to fall on the least touch-in fact, the same sort of trap as that used for snaring birds in fields on a large scale. The end of the horizontal piece of wood was baited with venison, and every animal of a moderate height, a fox or a marten, for instance, which touched it with its paw, could not fail to be crushed. Such were the traps set in the winter over a space of several miles by the famous hunters whose adventurous life has been so poetically described by Cooper. Some thirty of these snares were set round Fort Hope, and were to be visited at pretty frequent intervals.

On the 12th November a new member was born to the little colony. Mrs Mac-Nab was safely confined of a fine healthy boy, of whom the head carpenter was extremely proud. Mrs Barnett stood god-mother to the child, which received the name of Michael Hope. The ceremony of baptism was performed with considerable solemnity, and a
kind of fête was held in honour of the little creature which had just come into the world beyond the 70th degree N. Lat.

A few days afterwards, on November 20th, the sun sunk below the horizon not to appear again for two months. The Polar night had commenced!

CHAPTER XVIII.

THE POLAR NIGHT.

The long night was ushered in by a violent storm. The cold was perhaps a little less severe, but the air was very damp, and, in spite of every precaution, the humidity penetrated into the house, and the condensers, which were emptied every morning, contained several pounds of ice.

Outside drifts whirled past like waterspouts—the snow seemed no longer to fall horizontally but vertically. The Lieutenant was obliged to insist upon the door being kept shut, for had it been opened the passages would immediately have become blocked up. The explorers were literally prisoners.

The window shutters were hermetically closed, and the lamps were kept burning through the long hours of the sleepless night.

But although darkness reigned without, the noise of the tempest replaced the silence usually so complete in these high latitudes. The roaring of the wind between the house and the cliff never ceased for a moment, the house trembled to its foundations, and had it not been for the solidity of its construction, must have succumbed to the violence of the hurricane. Fortunately the accumulation of snow round the walls broke the force of the squall, and Mac-Nabs only fear was for the chimneys, which were liable to be blown over. However, they remained firm, although they had constantly to be freed from the snow which blocked up the openings.

In the midst of the whistling of the wind, loud reports were heard, of which Mrs Barnett could not conjecture the cause. It was the falling of icebergs in the offing. The echoes caught up the sounds, which were rolled along like the reverberations of thunder. The round shook as the ice-fields split open, crushed by the falling of these mighty mountains, and none but those thoroughly inured to the horrors of these wild rugged climates could witness these strange phenomena without a shudder. Lieutenant Hobson and his companions were accustomed to all these things, and Mrs Barnett and Madge were gradually becoming so, and were, besides, not altogether unfamiliar with those terrible winds which move at the rate of forty miles an hour, and overturn twenty-four pounders. Here, however, the darkness and the snow aggravated the dread might of the storm; that which was not crushed was buried and smothered, and, probably twelve hours after the commencement of the tempest, house, kennel, shed, and enceinte would have disappeared beneath a bed of snow of uniform thickness.

The time was not wasted during this long imprisonment. All these good people agreed together perfectly, and neither ill-humour nor ennui marred the contentment of the little party shut up in such a narrow space. They were used to life under similar conditions at Forts Enterprise and Reliance, and there was nothing to excite Mrs Barnett’s surprise in their ready accommodation of themselves to circumstances.

Part of the day was occupied with work, part with reading and games. Garments had to be made and mended, arms to be kept bright and in good repair, boots to be manufactured, and the daily journal to be issued in which Lieutenant Hobson recorded the slightest events of this northern wintering—the weather, the temperature, the direction of the wind, the appearance of meteors so frequent in the Polar regions, &c., &c. Then the house had to be kept in order, the rooms must be swept, and the stores of furs must be visited every day to see if they were free from damp; the fires and stoves, too, required constant superintendence, and perpetual vigilance was necessary to prevent the accumulation of particles of moisture in the corners.

To each one was assigned a task, the duty of each one was laid down in rules fixed up in the large room, so that without being overworked, the occupants of the fort were never without something to do. Thomas Black screwed and unscrewed his instruments, and looked over his astronomical calculations, remaining almost always shut up in his cabin, fretting and fuming at the storm which prevented him from making nocturnal observations. The three married women had also plenty to see to: Mrs Mac-Nab busied herself with her baby who got on wonderfully, whilst Mrs Joliffe, assisted by Mrs Rae, and with the Corporal always at her heels, presided in the kitchen.

When work was done the entire party assembled in the large room, spending the whole of Sunday together. Reading was the chief amusement. The Bible and some books of travels were the whole library of the fort; but they were all the good folks required. Mrs Barnett generally read aloud, and her audience listened with delight. The Bible and accounts of adventures received a fresh charm when read out in her clear earnest voice; her gestures were so expressive that imaginary persons seemed to live when she spoke of them, and all were glad when she took up the book. She was, in fact, the life and soul of the little community, eager alike to give and receive instruction; she combined the charm and grace of a woman with the energy of a man, and she consequently became the idol of the rough soldiers, who would have willingly laid down their lives in her service. Mrs Barnett shared everything with her companions, never holding herself aloof or remaining shut up in her cabin, but working zealously amongst the
The storm, however, showed no signs of abating. The party had now been confined to the house for three days, and the snow-drifts were as wild and furious as ever. Lieutenant Hobson began to get anxious. It was becoming imperatively necessary to renew the air of the rooms, which was too much charged with carbonic acid. The light of the lamps began to pale in the unhealthy atmosphere, and the air-pumps would not act, the pipes being choked up with ice; they were not, in fact, intended to be used when the house was buried in snow. It was necessary to take counsel; the Lieutenant and Sergeant Long put their heads together, and it was decided on November 23d that, as the wind beat with rather less violence on the front of the house, one of the windows at the end of the Passage on that side should be opened.

This was no light matter. It was easy enough to open the window from inside, but the shutter outside was encrusted over with thick lumps of ice, and resisted every effort to move it. It had to be taken off its hinges, and the hard mass of snow was then attacked with pickaxe and shovel; it was at least ten feet thick, and it was not until a kind of channel had been scooped out that the outer air was admitted.

Hobson, the Sergeant, several soldiers, and Mrs Barnett herself ventured to creep through this tunnel or channel, but not without considerable difficulty, for the wind rushed in with fearful fury.

What a scene was presented by Cape Bathurst and the surrounding plain. It was mid-day, and but a few faint twilight rays glimmered upon the southern horizon. The cold was not so intense as one would have supposed, and the thermometer marked only 15° Fahrenheit above zero; but the snow-drifts whirled along with terrific force, and all would inevitably have been thrown to the ground, had not the snow in which they were standing up to their waists helped to sustain them against the gusts of wind. Everything around them was white, the walls of the enceinte, and the whole of the house even to the roof were completely covered over, and nothing but a few blue wreaths of smoke would have betrayed the existence of a human habitation to a stranger.

Under the circumstances the "promenade" was soon over; but Mrs Barnett had made good use of her time, and would never forget the awful beauty of the Polar regions in a snow-storm, a beauty upon which few women had been privileged to look.

A few moments sufficed to renew the atmosphere of the house, and all unhealthy vapours were quickly dispersed by the introduction of a pure and refreshing current of air.

The Lieutenant and his companions hurried in, and the window was again closed; but after that the snow before it was removed every day for the sake of ventilation.

The entire week passed in a similar manner; fortunately the rein-deer and dogs had plenty of food, so that there was no need to visit them. The eight days during which the occupants of the fort were imprisoned so closely, could not fail to be somewhat irksome to strong men, soldiers and hunters, accustomed to plenty of exercise in the open air; and we must own that listening to reading aloud gradually lost its charm, and even cribbage became uninteresting. The last thought at night was a hope that the tempest might have ceased in the morning, a hope disappointed every day. Fresh snow constantly accumulated upon the windows, the wind roared, the icebergs burst with a crash like thunder, the smoke was forced back into the rooms, and there were no signs of a diminution of the fury of the storm.

At last, however, on the 28th November the Aneroid barometer in the large room gave notice of an approaching change in the state of the atmosphere. It rose rapidly, whilst the thermometer outside fell almost suddenly to less than four degrees below zero. These were symptoms which could not be mistaken, and on the 29th November the silence all around the fort told that the tempest had ceased.

Every one was eager to get out, time confinement had lasted long enough. The door could not be opened, and all had to get through the window, and clear away the fresh accumulation of snow; this time, however, it was no soft mass they had to remove, but compact blocks of ice, which required pick-axes to break them up.

It took about half-an-hour to clear a passage, and then every one in the fort, except Mrs Mac-Nab, who was not yet up, hastened into the interior court, glad once more to be able to walk about.

The cold was still intense, but the wind having given down it was possible to endure it, although great care was necessary to escape serious consequences on leaving the heated rooms for the open air, the difference between the temperature inside and outside being some fifty-four degrees.

It was eight o’clock in the morning. Myriads of brilliant constellations studded the sky, and at the zenith shone the Pole star. Although in both hemispheres there are in reality but 5000 fixed stars visible to the naked eye, their number appeared to the observers incalculable. Exclamations of admiration burst involuntarily from the lips of the delighted astronomer as he gazed into the cloudless heavens, once more undimmed by mists or vapours. Never had a more beautiful sky been spread out before the eyes of an astronomer.

Whilst Thomas Black was raving in ecstasy, dead to all terrestrial matters, his companions had wandered as far
as the enceinte. The snow was as bard as a rock, And so slippery that there were a good many tumbles, but no serious injuries.

It is needless to state that the court of the fort was completely filled up. The roof of the house alone appeared above the white mass, the surface of which had been worn smooth by the action of the wind; of the palisade nothing was visible but the top of the stakes, and the least nimble of the wild animals they dreaded could easily have climbed over them. But what was to be done? It was no use to think of clearing away a mass of frozen snow ten feet thick, extending over so large an extent of ground. All they could attempt would be to dig away the ice inside the enceinte, so as to form a kind of moat, the countervall of which would protect the palisade. But alas the winter was only beginning, and a fresh tempest might at any time fill in the ditch a few hours.

Whilst the Lieutenant was examining the works, which could no more protect his fort than a single sunbeam could melt the solid layer of snow,-Mrs Joliffe suddenly exclaimed:

"And our dogs! our reindeer!"

It was indeed time to think about the poor animals. The dog house and stable being lower than the house were probably entirely covered, and the supply of air had perhaps been completely cut off. Some hurried to the dog-house, others to the reindeer stable, and all fears were quickly dispelled. The wall of ice, which connected the northern corner of the house with the cliff, had partly protected the two buildings, and the snow round them was not more than four feet thick, so that the apertures left in the walls had not been closed up. The animals were all well, and when the door was opened, the dogs rushed out barking with delight.

The cold was so intense, that after an hour’s walk every one began to think of the glowing stove in the large room at home. There was nothing left to be done outside, the traps buried beneath ten feet of snow could not be visited, so all returned to the house, the window, was closed, and the party sat down to the dinner awaiting them with sharpened appetites.

We can readily imagine that the conversation turned on the intensity of the cold, which had so rapidly converted the soft snow into a solid mass. It was no light matter, and might to a certain extent compromise the safety of the little colony.

"But, Lieutenant," said Mrs Barnett, "can we not count upon a few days’ thaw-will not all this snow be rapidly converted into water?"

"Oh no, madam," replied Hobson, "a thaw at this time of year is not at all likely. Indeed I expect the thermometer will fall still lower, and it is very much to be regretted that we were unable to remove the snow when it was soft."

What, you think the temperature likely to become much colder?"
"I do most certainly, madam, 4° below zero-what is that at this latitude?"

"What would it be if we were at the Pole itself?"

"The Pole, madam, is probably not the coldest point of the globe, for most navigators agree that the sea is there open. From certain peculiarities of its geographical position it would appear that a certain spot on the shores of North Georgia, 95° longitude and 78° latitude, has the coldest mean temperature in the world: 2° below zero all the year round. It is, therefore, called the ‘pole of cold.’ "

"But," said Mrs Barnett, "we are more than 8° further south than that famous point."

"Well, I don’t suppose we shall suffer as much as at Cape Bathurst as we might have done in North Georgia. I only tell you of the ‘pole of cold,’ that you may not confound it with the Pole properly so-called when the lowness of the temperature is discussed. Great cold has besides been experienced on other points of the globe. The difference is, that the low temperature is not there maintained."

"To what places do you allude?" inquired Mrs Barnett; "I assure you I take the greatest interest in this matter of degrees of cold."

"As far as I can remember, madam," replied the Lieutenant, Arctic explorers state that at Melville Island the temperature fell to 61° below zero, and at Port Felix to 65°."

"But Melville Island and Port Felix are some degrees farther north latitude than Cape Bathurst, are they not?"

"Yes, madam, but in a certain sense we may say that their latitude proves nothing. A combination of different atmospheric conditions is requisite to produce intense cold. Local and other causes largely modify climate. If I remember rightly in 1845… Sergeant Long, you were at Fort Reliance at that date?"

"Yes, sir," replied Long.

"Well, was it not in January of that year that the cold was so excessive?"

"Yes it was, I remember only too well that the thermometer marked 70° below zero."

"What!" exclaimed Mrs Barnett, "at Fort Reliance, on the Great Slave Lake?"

"Yes, madam," replied the Lieutenant, "and that was at 65° north latitude only, which is the same parallel as that of Christiania and St Petersburg."
"Then we must be prepared for everything."
"Yes, indeed, we must when we winter in Arctic countries."

During the 29th and 30th November, the cold did not decrease, and it was necessary to keep up huge fires to prevent the freezing in all the corners of the house of the moisture in the atmosphere. Fortunately there was plenty of fuel, and it was not spared. A mean temperature of 52° Fahrenheit was maintained indoors in spite of the intensity of the cold without.

Thomas Black was so anxious to take stellar observations, now that the sky was so clear, that he braved the rigour of the outside temperature, hoping to be able to examine some of the magnificent constellations twinkling on the zenith. But he was compelled to desist—his instruments "burnt" his hands! "Burnt" is the only word to express the sensation produced by touching a metallic body subjected to the influence of intense cold. Exactly similar results are produced by the sudden introduction of heat into an animate body, and the sudden withdrawal of the same from it, as the astronomer found to his cost when he left the skin of his fingers on his instruments. He had to give up taking observations.

However, the heavens made him the best amends in their power by displaying the most beautiful and indescribable phenomena of a lunar halo and an Aurora Borealis.

The lunar halo was a white corona with a pale red edge encircling the moon. This luminous meteor was about forty-five degrees in diameter, and was the result of the diffraction of the lunar rays through the small prismatic ice-crystals floating in the atmosphere. The queen of the night shone with renewed splendour and heightened beauty from the centre of the luminous ring, the colour and consistency of which resembled the milky transparent lunar rainbows which have been so often described by astronomers.

Fifteen hours later the heavens were lit up by a magnificent Aurora Borealis, the arch of which extended over more than a hundred geographical degrees. The vertex of this arch was situated in the magnetic meridian, and, as is often the case, the rays darted by the luminous meteor were of all the colours of the rainbow, red preponderating. Here and there, the stars seemed to be floating in blood Glowing lines of throbbing colour spread from the dark segment on the horizon, some of them passing the zenith and quenching the light of the moon in their electric waves, which oscillated and trembled as if swept by a current of air.

No description could give an adequate idea of the glory which flushed the northern sky, converting it into a vast dome of fire, but after the magnificent spectacle had been enjoyed for about half an hour, it suddenly disappeared—not fading gradually away after concentration of its rays, or a diminution of its splendour, but dying abruptly, as if an invisible hand had cut off the supply of electricity which gave it life.

It was time it was over, for the sake of Thomas Black, for in another five minutes he would have been frozen where he stood!

CHAPTER XIX.
A NEIGHBOURLY VISIT.

On the 2nd December; the intensity of the cold decreased. The phenomena of the lunar halo and Aurora Borealis were symptoms which a meteorologist would have been at no loss to interpret. They implied the existence of a certain quantity of watery vapour in the atmosphere, and the barometer fell slightly, whilst the thermometer rose to 15° above zero.

Although this temperature would have seemed very cold to the inhabitants of a temperate zone, it was easily endured by the colonists. The absence of wind made a great difference, and Hobson having noticed that the upper layers of snow were becoming softer, ordered his men to clear it away from the outer approaches of the enceinte. Mac-Nab and his subordinates set to work zealously, and completed their task in a few days. The traps were now uncovered and re-set. A good many footprints showed that there were plenty of furred animals about the cape, and as they could not get any other food, it was probable that the bait in the snares would soon attract them. In accordance with the advice of Marbre the hunter, a reindeer trap was constructed in the Esquimaux style. A trench was dug twelve feet deep, and of a uniform width of ten feet. A see-saw plank, which would rebound when lowered, was laid across it. A bait of herbs was placed at one end of the plank, and any animal venturing to take them, was inevitably flung to the bottom of the pit, and the plank immediately returning to its former position, would allow of the trapping of another animal in the same manner. Once in, there was no getting out. The only difficulty Marbre had to contend with in making his trap, was the extreme hardness of the ground to be dug out, but both he and the Lieutenant were not a little surprised at finding beneath some five feet of earth and sand a bed of snow, as hard as a rock, which appeared to be very thick.

After closely examining the geological structure of the ground, Hobson observed:
"This part of the coast must have been subjected to intense cold for a considerable length of time a great many years ago. Probably the ice rests on a bed of granite, and the earth and sand upon it have accumulated gradually."
"Well, sir, our trap won't be any the worse for that, the reindeer will find a slippery wall, which it will be
impossible for them to climb."

Marbre was right, as the event proved.

On the 5th September, he and Sabine were on their way to the trench, when they heard loud growls. They stood still and listened.

"It's no reindeer making that noise," said Marbre, "I know well enough what creature has fallen into our pit."

"A bear?" replied Sabine.

"Yes," said Marbre, whose eyes glistened with delight.

"Well," remarked Sabine, "we won't grumble at that, bears' steaks are as good as reindeers', and we get the fur in! Come along."

The two hunters were armed. They quickly slipped balls into their guns, which were already loaded with lead, and hurried to the trap. The see-saw plank had swung back into its place, but the bait had disappeared, having probably been dragged down, into the trench. The growls became louder and fiercer, and looking down the hunters saw that it was indeed a bear they had taken. A huge mass was huddled together in one corner of the pit, looking in the gloom like a pile of white fur with two glittering eyes. The sides of the trench had been ploughed up by the creature's sharp claws, and had they been made of earth instead of ice, it would certainly have managed to scramble out, but it could get no hold on the slippery surface, and it had only managed to enlarge its prison, not to escape from it.

Under the circumstances the capture was easy. Two balls carefully aimed put an end to the bear's life, and the next thing to do was to get it out of the pit. The two hunters returned to the fort for reinforcements, and ten of the soldiers, provided with ropes, returned with them. It was not without considerable difficulty that the body was hauled up. It was a huge creature, six feet long, weighing six hundred pounds, and must have possessed immense strength. It belonged to the sub-order of white bears, and had the flattened head, long neck, short and slightly curved claws, narrow muzzle, and smooth white fur characteristic of the species. The edible portions of this valuable animal were confided to Mrs Joliffe, and b her carefully prepared for the table.

The next week the traps were in full activity. Some twenty martens were taken, in all the beauty of their winter clothing, but only two or three foxes. These cunning creatures divined the snare laid for them, and scratching up the ground near the trap, they often managed to run off with the bait without being caught. This made Sabine beside himself with rage for," he said, "such a subterfuge was unworthy of a respectable fox."

About the 10th December, the wind having veered round to the south-west, the snow again began to fall, but not in thick flakes, or in large quantities. The wind being high, however, the cold was severely felt, and it was necessary to settle in-doors again, and resume domestic occupations. Hobson distributed lime lozenges and lime juice to every one as a precaution against the scorbutic affections, which damp cold produces. No symptoms of scurvy had fortunately as yet appeared amongst the occupants of the fort, thanks to the sanitary precautions taken.

The winter solstice was now approaching, when the darkness of the Polar night would be most profound, as the sun would be at the lowest maximum point below the horizon of the northern hemisphere. At midnight the southern edges of the long white plains were touched with a faint glimmer of twilight, that was all, and it would be impossible to imagine anything more melancholy than the gloomy stillness and darkness of the vast expanse.

Hobson felt more secure from the attacks of wild beasts, now that the approaches to the enceinte had been cleared of snow, which was a fortunate circumstance, as ominous growlings were heard, the nature of which no one could mistake.

There was no fear of visits from Indian hunters or Canadians at this time of year, but an incident occurred proving that these districts were not altogether depopulated even in the winter, and which was quite an episode in the long dreary dark months. Some human beings still lingered on the coast hunting morses and camping under the snow. They belonged to the race of Esquimaux, °` or eaters of raw flesh," which is scattered over the continent of North America, from Baffin's Bay to Behring Strait, seldom, however, advancing farther south than the Great Slave Lake.

On the morning of the 14th December, or rather nine hours before midday, Sergeant Long, on his return from an excursion along the coast, ended his report to the Lieutenant by saying, that if his eyes had not deceived him, a tribe of nomads were encamped about four miles from the fort, near a little cape jutting out from the coast.

"What do you suppose these nomads are?" inquired Hobson.

"Either men or morses," replied the Sergeant. "There's no medium!"

The brave Sergeant would have been considerably surprised if any one had told him that some naturalists admit the existence of the "medium," the idea of which he scouted; and certain savants have with some humour classed the Esquimaux as an "intermediate species" between roan and the sea-cow.

Lieutenant Hobson, Mrs Barnett, Madge, and a few others at once went to ascertain the truth of the report. Well wrapt up, and on their guard against a sudden chill, their feet cased in furred boots, and guns and hatchets in their
hands, they issued from the postern, and made their way over the frozen snow along the coast, strewn with masses of ice.

The moon, already in the last quarter, shed a few faint rays through the mists which shrouded the ice-fields. After marching for about an hour, the Lieutenant began to think that the Sergeant had been mistaken, and that what he had seen were morses, who had returned to their native element through the holes in the ice which they always keep open.

But Long, pointing to a grey wreath of smoke curling out of a conical protuberance on the ice-field some hundred steps off, contented himself with observing quietly—

"The morses are smoking, then!"

As he spoke some living creatures came out of the but dragging themselves along the snow. They were Esquimaux, but whether male or female none but a native could have said, for their costumes were all exactly alike.

Indeed, without in the least sharing the opinion of the naturalist quoted above, any one might have taken the rough shaggy figures for seals or some other amphibious animals. There were six of them—four full-grown, and two children. Although very short, they were broad-chested and muscular. They had the flat noses, long eye-lashes, large mouths, thick lips, long black coarse hair, and beardless chins of their race. Their costume consisted of a round coat made of the skin of the walrus, a hood, boots, trousers, and mittens of the same material. They gazed at the Europeans in silence.

"Does any one understand Esquimaux?" inquired the Lieutenant.

No one was acquainted with that idiom, and every one started when a voice immediately exclaimed in English, "Welcome! welcome!"

It was an Esquimaux, and, as they learned later, a woman, who, approaching Mrs Barnett, held out her hand.

The lady, much surprised, replied in a few words, which the native girl readily understood, and the whole family was invited to follow the Europeans to the fort.

The Esquimaux looked searchingly at the strangers, and after a few moments’ hesitation they accompanied the Lieutenant, keeping close together, however:

Arrived at the enceinte, the native woman, seeing the house, of the existence of which she had had no idea, exclaimed—

"House! snow-house!"

She asked if it were made of snow, which was a natural question enough, for the house was all but hidden beneath the white mass which covered the ground. She was made to understand that it was built of wood; she then turned and said a few words to her companions, who made signs of acquiescence, and they all passed through the postern, and were taken to the large room in the chief building.

They removed their hoods, and it became possible to distinguish sexes. There were two men, about forty or fifty years old, with yellowish-red complexions, sharp teeth, and projecting cheek-bones, which gave them something of the appearance of carnivorous animals; two women, still young whose matted hair was adorned with the teeth and claws of Polar bears; and two children, about five or six years old, poor little creatures with intelligent faces, who looked about them with wide wondering eyes.

"I believe the Esquimaux are always hungry," said Hobson, "so I don’t suppose our guests would object to a slice of venison."

In obedience to the Lieutenant’s order, Joliffe brought some reindeer-venison, which the poor creatures devoured with greedy avidity; but the young woman who had answered in English behaved with greater refinement, and watched Mrs Barnett and the women of the fort without once removing her eyes from them. Presently noticing the baby in Mrs Mac-Nab’s arms; she rose and ran up to it, speaking to it in a soft voice, and caressing it tenderly.

Indeed if not exactly superior, the young girl was certainly more civilised than her companions, which was especially noticeable when, being attacked by a slight fit of coughing, she put her hand before her mouth in the manner enjoined by the first rules of civilised society.

This significant gesture did not escape any one, and Mrs Barnett, who chatted for some time with the Esquimaux woman, learned from her in a few short sentences that she had been for a year in the service of the Danish governor of Upper Navik, whose wife was English, and that she had left Greenland to follow her family to the hunting grounds. The two men were her brothers; the other woman was her sister-in-law, married to one of the men, and mother of the two children. They were all returning from Melbourne Island, on the eastern coast of English America, and were making for Point Barrow, on the western coast of Russian America, the home of their tribe, and—were considerably astonished to find a factory established on Cape Bathurst. Indeed the two men shook their heads when they spoke of it. Did they disapprove of the construction of a fort at this particular point of the coast? Did they think the situation ill-chosen? In spite of all his endeavours, Hobson could get no satisfactory reply to these questions, or rather he could not understand the answers he received.
The name of the young girl was Kalumah, and she seemed to have taken a great fancy to Mrs Barnett. But sociable as she was, she appeared to feel no regret at having left the governor of Upper Navik, and to be sincerely attached to her relations.

After refreshing themselves with the reindeer-venison, and drinking half-a-pint of rum, in which the children had their share, the Esquimaux took leave of their hosts; but before saying goodbye, the young girl invited Mrs Barnett to visit their snow-hut, and the lady promised to do so the next day, weather permitting.

The next day was fine, and accompanied by Madge, Lieutenant Hobson, and a few soldiers, well armed in case any bears should be prowling about, Mrs Barnett set out for " Cape Esquimaux," as they had named the spot where the little colony had encamped.

Kalumah hastened forward to meet her friend of yesterday, and pointed to the but with an air of pride. It was a large cone of snow, with an opening in the summit, through which the smoke from the fire inside made its way. These snow-houses, called igloos in the language of the Esquimaux, are constructed with great rapidity, and are admirably suited to the climate. In them their owners can endure a temperature 40° below zero, without fires, and without suffering much. In the summer the Esquimaux encamp in tents made of seal and reindeer skins, which are called tupics.

It was no easy matter to get into this hut. The only opening was a hole close to the ground, and it was necessary to creep through a kind of passage three or four feet long, which is about the thickness of the walls of these snow-houses. But a traveller by profession, a laureate of the Royal Society, could not hesitate, and Mrs Paulina Barnett did not hesitate! Followed by Madge, she bravely entered the narrow tunnel in imitation of her guide. Lieutenant Hobson and his men dispensed with paying their respects inside.

And Mrs Barnett soon discovered that the chief difficulty was not getting into the hut, but remaining in it when there. The room was heated by a fire, on which the bones of morses were burning; and the air was full of the smell of the fetid oil of a lamp, of greasy garments, and the flesh of the amphibious animals which form the chief article of an Esquimaux’s diet. It was suffocating and sickening! Madge could not stand it, and hurried out at once, but Mrs Barnett, rather than hurt the feelings of the young native, showed superhuman courage, and extended her visit over five long minutes!-five centuries! The two children and their mother were at home, but the men had gone to hunt morses four or five miles from their camp.

Once out of the hut, Mrs Barnett drew a long sigh of relief, and the colour returned to her blanched cheeks.

"Well, madam," inquired the Lieutenant, "what do you think of Esquimaux houses?"

"The ventilation leaves something to be desired!" she replied simply.

The interesting native family remained encamped near Cape Esquimaux for eight days. The men passed twelve hours out of every twenty-four hunting morses. With a patience which none but sportsmen could understand, they would watch for the amphibious animals near the holes through which they come up to the surface of the ice-field to breathe. When the morse appears, a rope with a running noose is flung round its body a little below the head, and it is dragged on to the ice-field, often with considerable difficulty, and killed with hatchets. It is really more like fishing than bunting. It is considered a great treat to drink the warm blood of the walrus, and the Esquimaux often indulge in it to excess.

Kalumah came to the fort every day in spite of the severity of the weather. She was never tired of going through the different rooms, and watching Mrs Joliffe at her cooking or sewing. She asked the English name of everything, and talked for hours together with Mrs Barnett, if the term “talking” can be applied to an exchange of words after long deliberation on both sides. When Mrs Barnett read aloud, Kalumah listened with great attention, although she probably understood nothing of what she heard.

The young native girl had a sweet voice, and sometimes sang some strange melancholy rhythmical songs with a peculiar metre, and, if we may so express it, a frosty ring about them, peculiarly characteristic of their origin.

Mrs Barnett had the patience to translate one of these Greenland sagas, which was sung to a sad air, interspersed with long pauses, and filled with strange intervals, which produced an indescribable effect. We give an English rendering of Mrs Barnett’s translation, which may give a faint idea of this strange hyperborean poetry.

GREENLAND SONG
Dark Is the sky,
The sun sinks wearily;
My trembling heart, with sorrow filled,
Aches drearily!
My sweet child at my songs is smiling still,
While at his tender heart the icicles lie chill.
Child of my dreams I
Thy love doth cheer me;
The cruel biting frost I brave
But to be near thee!
Ah me, Ah me, could these hot tears of mine
But melt the icicles around that heart of thine!
Could we once more
Meet heart to heart,
Thy little hands close clasped in mine,
No more to part.
Then on thy chill heart rays from heaven above
Should fall, and softly melt it with the warmth of love!

On the 20th December the Esquimaux family came to take leave of the occupants of the fort. Kalumah was sorry to part with Mrs Barnett, who would gladly have retained her in her service, but the young native could not be persuaded to leave her own people; she promised, however, to return to Fort Hope in the summer.

Her farewell was touching. She presented Mrs Barnett with a copper ring, and received in exchange a necklace of black beads, which she immediately put on. Hobson gave the poor people a good stock of provisions, which they packed in their sledge; and after a few words of grateful acknowledgment from Kalumah, the whole party set out towards the west, quickly disappearing in the thick fogs on the shore.

CHAPTER XX.

MERCURY FREEZES.

A few days of dry calm weather favoured the operations of the hunters, but they did not venture far from the fort; the abundance of game rendered it unnecessary to do so, and Lieutenant Hobson could justly congratulate himself on having chosen so favourable a situation for the new settlement. A great number of furred animals of all kinds were taken in the traps, and Sabine and Marbre killed a good many Polar hares. Some twenty starving wolves were shot. Hunger rendered the latter animals aggressive, and bands of them gathered about the fort, filling the air with hoarse howls, and amongst the " hummocks " on the ice-fields sometimes prowled huge bears, whose movements were watched with great interest.

On the 25th December all excursions had again to be given up. The wind veered suddenly to the north, and the cold became exceedingly severe. It was impossible to remain out of doors without being frost-bitten. The Fahrenheit thermometer fell to 18° below zero, and the gale roared like a volley of musketry. Hobson took care to provide the animals with food enough to last several weeks.

Christmas Day, the day of home-gatherings so dear to the heart of all Englishmen, was kept with due solemnity. The colonists returned thanks to God for preserving them through so many perils; and the workmen, who had a holiday in honour of the day, afterwards assembled with their masters and the ladies round a well-filled board, on which figured two huge Christmas puddings.

In the evening a huge bowl of punch flamed in the centre of the table; the lamps were put out, and for a time the room was lighted only by the livid flames of the spirit, the familiar objects assuming strange fantastic forms. The spirits of the soldiers rose as they watched the flickering illumination, and their excitement was not lessened after imbibing some of the burning liquid.

But now the flames began to pale; bluish tongues still fitfully licked the plump sides of the national pudding for a few minutes, and then died away.

Strange to say, although the lamps had not been relit, the room did not become dark on the extinction of the flames. A bright red light was streaming through the window, which had passed unnoticed in the previous illumination.

The revellers started to their feet, and looked at each other in astonishment.
"A fire!" cried several.

But unless the house itself were burning, there could not be a fire anywhere near Cape Bathurst.

The Lieutenant rushed to the window, and at once understood the cause of the phenomenon. It was an eruption.

Indeed, above the western cliffs beyond Walruses’ Bay the horizon was on fire. The summits of the igneous hills, some miles from Cape Bathurst, could not be seen; but the sheaf of flame shot up to a considerable height, lighting up the whole country in a weird, unearthly manner.

"It is more beautiful than the Aurora Borealis!" exclaimed Mrs Barnett.

Thomas Black indignantly protested against this assertion. A terrestrial phenomenon more beautiful than a meteor! But no one was disposed to argue with him about it, for all hurried out, in spite of the bitter gale and biting cold, to watch the glorious spectacle of the flashing sheaf of flames standing out against the black background of the night sky.

Had not the mouths and ears of the party been cased in furs, they would have been able to hear the rumbling
noise of the eruption, and to tell each other of the impressions made upon them by this magnificent sight; but, as it was, they could neither speak nor hear. They might well be content, however, with gazing upon such a glorious scene—a scene which once looked upon could never be forgotten. The glowing sheets of flames contrasted alike with the gloomy darkness of the heavens and the dazzling whiteness of the far-stretching carpet of snow, and produced effects of light and shade which no pen or pencil could adequately portray. The throbbing reverberations spread beyond the zenith, gradually quenching the light of all the stars. The white ground became dashed with golden tints, the hummocks on the ice-field and the huge icebergs in the background reflecting the glimmering colours like so many glowing mirrors. The rays of light, striking on the edges or surfaces of the ice, became bent and diffracted; the angles and varying inclinations on which they fell fretting them into fringes of colour, and reflecting them back with changed and heightened beauty. It was like a fairy scene in which ice and snow combined to add éclat to a mélée of rays in which luminous s waves rushed upon each other, breaking into coloured ripples.

But the excessive cold soon drove the admiring spectators back to their warm dwelling, and many a nose paid dearly for the feast enjoyed by the eyes.

During the following days the cold became doubly severe. The mercurial thermometer was of course no longer of any use for marking degrees, and an alcohol thermometer had to be used. On the night of the 28th to the 29th December the column fell to 32° below zero.

The stoves were piled up with fuel, but the temperature in the house could not be maintained above 20° degrees. The bedrooms were exceedingly cold, and ten feet from the stove, in the large room, its heat could not be felt at all. The little baby had the warmest corner, and its cradle was rocked in turn by those who came to the fire. Opening doors or windows was strictly forbidden, as the vapour in the rooms would immediately have been converted into snow, and in the passage the breathing of the inmates already produced that result. Every now and then dull reports were heard, which startled those unaccustomed to living in such high latitudes. They were caused by the cracking of the trunks of trees, of which the walls were composed under the influence of the intense cold. The stock of rum and gin stowed away in the garret had to be brought down into the sitting-room, as the alcohol was freezing and sinking to the bottom of the bottles. The spruce-beer made from a decoction of young fir-branchlets burst the barrels in which it was kept as it froze, whilst all solid bodies resisted the introduction of heat as if they were petrified.

Wood burnt very slowly, and Hobson was obliged to sacrifice some of the walrus-oil to quicken its combustion. Fortunately the chimneys drew well, so that there was no disagreeable smell inside, although for a long distance outside the air was impregnated with the fetid odour of the smoke from Fort Hope, which a casual observer might therefore have pronounced an unhealthy building.

The bedrooms were exceedingly cold, and ten feet from the stove, in the large room, its heat could not be felt at all. One symptom we must notice was the great thirst from which every one suffered. To relieve it, different liquids had to be melted at the fire, for it would have been dangerous to eat ice. Another effect of the cold was intense drowsiness, which Hobson earnestly entreated his companions to resist. Some appeared unable to do so; but Mrs Barnett was invaluable in setting an example of constant activity; always brave, she kept herself awake, and encouraged others by her kindness, brightness, and sympathy. Sometimes she read aloud accounts of travels, or sang some old familiar English song, in the chorus of which all joined. These joyous strains roused up the sleepers whether they would or no, and their voices soon swelled the chorus. The long days of imprisonment passed wearily by, and the Lieutenant, consulting the outside thermometer through the windows, announced that the cold was still on the increase. On the 31st December, the mercury was all frozen hard, in the cistern of the instrument, so that the temperature was 44° below freezing point.

The next day, 1st January 1860, Lieutenant Hobson wished Mrs Barnett a happy new year, and complimented her on the courage and good temper with which she endured the miseries of this northern winter. The astronomer was not forgotten in the universal interchange of good wishes amongst the members of the little colony; but his only thought on entering another year was, that it was the beginning of that in which the great eclipse was to take place. Fortunately the general health still remained good, and any symptoms of scurvy were promptly checked by the use of lime-juice and lime-lozenges.

It would not do, however, to rejoice too soon. The winter had still to last three months. The sun would doubtless reappear above the horizon in due time; but there was no reason to think that the cold had reached its maximum intensity, especially as in most northern countries February is the month during which the temperature falls lowest. However that might be, there was no decrease in the severity of the weather during the first days of the new year, and on the 8th January the alcohol thermometer placed outside the window of the passage marked 66° below zero. A few degrees more and the minimum temperature at Fort Reliance in 1835 would be reached!

Jaspar Hobson grew more and more uneasy at the continued severity of the cold. He began to fear that the furred animals would have to seek a less rigorous climate further south, which would of course thwart all his plans for hunting in the early spring. Moreover, he sometimes heard subterranean rumblings, which were evidently connected with the volcanic eruption. The western horizon still glowed with the reflection of the burning lava, and it was
evident that some great convulsion was going on in the bowels of the earth. Might not the close vicinity of an active volcano be dangerous to the new fort? Such was the question which the subterranean rumblings forced upon the mind of the Lieutenant, but he kept his vague apprehensions to himself.

Of course under these circumstances no one dreamt of leaving the house. The animals were well provided for, and being accustomed to long fasts in the winter, required no attention from their masters, so that there really was no necessity for any exposure out of doors. It was difficult enough to endure the inside temperature, even with the help of a plentiful combustion of wood and oil; for, in spite of every precaution, damp crept into the ill-ventilated rooms, and layers of ice, increasing in thickness every day, were formed upon the beams. The condensers were choked up, and one of them burst from the pressure of the ice.

Lieutenant Hobson did not spare his fuel; he was, in fact, rather lavish of it in his anxiety to raise the temperature, which, when the fires got low—as of course sometimes happened—fell to 15° Fahrenheit. The men on guard, who relieved each other every hour, had strict orders to keep up the fires, and great was the dismay of the Lieutenant when Sergeant Long said to him one day—

"We shall be out of wood soon!"

"Out of wood!" exclaimed Hobson.

"I mean our stock is getting low, and we must lay in fresh stores soon. Of course I know, though, that it will be at the risk of his life that any one goes out in this cold!"

"Yes," replied Hobson. "It was a mistake not to build the wooden shed close to the house, and to make no direct communication with it. I see that now it is too late. I ought not to have forgotten that we were going to winter beyond the seventieth parallel. But what's done can't be undone. How long will the wood last?"

"There is enough to feed the furnace and stove for another two or three days," replied the Sergeant.

"Let us hope by that time that the severity of the cold may have decreased, and that we may venture across the court of the fort without danger."

"I doubt it, sir," replied Long, shaking his head. "The atmosphere is very clear, the wind is still in the north, and I shall not be surprised if this temperature is maintained for another fifteen days—until the new moon, in fact."

"Well, my brave fellow," said the Lieutenant, "we won't die of cold if we can help it, and the day we have to brave the outside air"

"We will brave it, sir," said Long.

Hobson pressed his subordinate's hand, well knowing the poor fellow's devotion.

We might fancy that Hobson and the Sergeant were exaggerating when they alluded to fatal results from sudden exposure to the open air, but they spoke from experience, gained from long residence in the rigorous Polar regions. They had seen strong men fall fainting on the ice under similar circumstances; their breath failed them, and they were taken up in a state of suffocation. Incredible as such facts may appear, they have been of frequent occurrence amongst those who have wintered in the extreme north. In their journey along the shores of Hudson's Bay in 1746, Moor and Smith saw many incidents of this kind,—some of their companions were killed, struck down by the cold, and there can be no doubt that sudden death may result from braving a temperature in which mercury freezes.

Such was the distressing state of things at Fort Hope, when a new danger arose to aggravate the sufferings of the colonists.

CHAPTER XXI.
THE LARGE POLAR BEARS.

The only one of the four windows through which it was possible to look into the court of the fort was that opening at the end of the entrance passage. The outside shutters had not been closed; but before it could be seen through it had to be washed with boiling water, as the panes were covered with a thick coating of ice. This was done several times a day by the Lieutenant’s orders, when the districts surrounding the fort were carefully examined, and the state of the sky, and of the alcohol thermometer placed outside, were accurately noted.

On the 6th January, towards eleven o'clock in the morning, Kellet, whose turn it was to look out, suddenly called the Sergeant, and pointed to some moving masses indistinctly visible in the gloom. Long, approaching the window, observed quietly—

"They are bears!"

In fact half-a-dozen of these formidable animals had succeeded in getting over the palisades, and, attracted by the smoke from the chimneys, were advancing upon the house.

On hearing of the approach of the bears, Hobson at once ordered the window of the passage to be barricaded inside; it was the only unprotected opening in the house, and when it was secured it appeared impossible for the bears to effect an entrance. The window was, therefore, quickly closed up with bars, which the carpenter Mac-Nab wedged firmly in, leaving a narrow slit through which to watch the movements of the unwelcome visitors.

"Now," observed the head carpenter, "these gentlemen can't get in without our permission, and we have time to
hold a council of war."

"Well, Lieutenant," exclaimed Mrs Barnett, "nothing has been wanting to our northern winter! After the cold come the bears."

"Not after," replied the Lieutenant, "but, which is a serious matter, with the cold, and a cold ago intense that we cannot venture outside! I really don’t know how we shall get rid of these tiresome brutes."

"I suppose they will soon get tired of prowling about," said the lady, "and return as they came."

Hobson shook his head as if he had his doubts.

"You don’t know these animals, madam. They are famished with hunger, and will not go until we make them!"

"Are you anxious, then?"

"Yes and no," replied the Lieutenant. "I don’t think the bears will get in; but neither do I see how we can get out, should it become necessary for us to do so."

With these words Hobson turned to the window, and Mrs Barnett joined the other women, who had gathered round the Sergeant, and were listening to what he had to say about the bears. He spoke like a man well up in his subject, for he had had many an encounter with these formidable carnivorous creatures, which are often met with even towards the south, where, however, they can be safely attacked, whilst here the siege would be a regular blockade, for the cold would quite prevent any attempt at a sortie.

Throughout the whole day the movements of the bears were attentively watched. Every now and then one of them would lay his great head against the window-pane and an ominous growl was heard.

The Lieutenant and the Sergeant took counsel together, and it was agreed that if their enemies showed no sign of beating a retreat, they would drill a few loopholes in the walls of the house, and fire at them. But it was decided to put off this desperate measure for a day or two, as it was desirable to avoid giving access to the outer air; the inside temperature being already far too low. The walrus oil to be burnt was frozen so hard that it had to be broken up with hatchets.

The day passed without any incident. The bears went and came, prowling round the house, but attempting no direct attack. Watch was kept all night, and at four o’clock in the morning they seemed to have left the court—at any rate, they were nowhere to be seen.

But about seven o’clock Marbre went up to the loft to fetch some provisions, and on his return announced that the bears were walking about on the roof.

Hobson, the Sergeant, Mac-Nab, and two or three soldiers seized their arms, and rushed to the ladder in the passage, which communicated with the loft by a trap-door. The cold was, however, so intense in the loft that the men could not hold the barrels of their guns, and their breath froze as it left their lips and floated about them as snow.

Marbre was right; the bears were all on the roof, and the sound of their feet and their growls could be distinctly heard. Their great claws caught in the laths of the roof beneath the ice, and there was some danger that they might have sufficient strength to tear away the woodwork.

The Lieutenant and his men, becoming giddy and faint from the intense cold, were soon obliged to go down, and Hobson announced the state of affairs in as hopeful a tone as he could assume.

"The bears," he said, "are now upon the roof. We ourselves have nothing to fear, as they can’t get into our rooms; but they may force an entrance to the loft, and devour the furs stowed away there. Now these furs belong to the Company, and it is our duty to preserve them from injury I ask you then, my friends, to aid me in removing them to a place of safety."

All eagerly volunteered, and relieving each other in parties of two or three, for none could have supported the intense severity of the cold for long at a time, they managed to carry all the furs into the large room in about an hour.

Whilst the work was proceeding, the bears continued their efforts to get in, and tried to lift up the rafters of the roof. In some places the laths became broken by their weight, and poor Mac-Nab was in despair; he had not reckoned upon such a contingency when he constructed the roof, and expected to see it give way every moment.

The day passed, however, without any change in the situation. The bears did not get in; but a no less formidable enemy, the cold, gradually penetrated into every room. The fires in the stoves burnt low; the fuel in reserve was almost exhausted; and before twelve o’clock, the last piece of wood would be burnt, and the genial warmth of the stove would no longer cheer the unhappy colonists.

Death would then await them-death in its most fearful form, from cold. The poor creatures, huddled together round the stove, felt that their own vital heat must soon become exhausted, but not a word of complaint passed their lips. The women bore their sufferings with the greatest heroism, and Mrs Mac-Nab pressed her baby convulsively to her ice-cold breast. Some of the soldiers slept, or rather were wrapped in a heavy torpor, which could scarcely be called sleep.

At three o’clock in the morning Hobson consulted the thermometer hanging in the large room, about ten feet
from the stove.

It marked 4° Fahrenheit below zero.

The Lieutenant pressed his hand to his forehead, and looked mournfully at his silent companions without a word. His half-condensed breath shrouded his face in a white cloud, and he was standing rooted to the spot when a hand was laid upon his shoulder. He started, and looked round to see Mrs Barnett beside him.

"Something must be done, Lieutenant Hobson!" exclaimed the energetic woman; "we cannot die like this without an effort to save ourselves!"

"Yes," replied the Lieutenant, feeling revived by the moral courage of his companion—"yes, something must be done!" and he called together Long, Mac-Nab, and Rae the blacksmith, as the bravest men in his party. All, together with Mrs Barnett, hastened to the window, and having washed the panes with boiling water, they consulted the thermometer outside.

"Seventy-two degrees!" cried Hobson. "My friends, two courses only are open to us, we can risk our lives to get a fresh supply of fuel, or we can burn the benches, beds, partition walls, and everything in the house to feed our stoves for a few days longer. A desperate alternative, for the cold may last for some time yet; there is no sign of a change in the weather."

"Let us risk our lives to get fuel!" said Sergeant Long.

All agreed that it would be the best course, and without another word each one set to work to prepare for the emergency.

The following were the precautions taken to save the lives of those who were about to risk themselves for the sake of the general good:

The shed in which the wood was stored was about fifty steps on the left, behind, the principal house. It was decided that one of the men should try and run to the shed. He was to take one rope wound round his body, and to carry another in his hand, one end of which was to be held by one of his comrades. Once at the shed, he was to load one of the sledges there with fuel, and tie one rope to the front, and the other to the back of the vehicle, so that it could be dragged backwards and forwards between the house and the shed without much danger. A tug violently shaking one or the other cord would be the signal that the sledge was filled with fuel at the shed, or unloaded at the house.

A very clever plan, certainly; but two things might defeat it. The door of the shed might be so blocked up with ice that it would be very difficult to open it, or the bears might come down from the roof and prowl about the court. Two risks to be run!

Long, Mac-Nab, and Rae, all three volunteered for the perilous service; but the Sergeant reminded the other two that they were married, and insisted upon being the first to venture.

When the Lieutenant expressed a wish to go himself, Mrs Barnett said earnestly, "You are our chief; you have no right to expose yourself. Let Sergeant Long go."

Hobson could not but realise that his office imposed caution, and being called upon to decide which of his companions should go, he chose the Sergeant. Mrs Barnett pressed the brave man's hand with ill-concealed emotion; and the rest of the colonists, asleep or stupefied, knew nothing of the attempt about to be made to save their lives.

Two long ropes were got ready. The Sergeant wound one round his body above the warm furs, worth some thousand pounds sterling, in which he was encased, and tied the other to his belt, on which he hung a tinder-box and a loaded revolver. Just before starting he swallowed down half a glass of rum, as he said, "to insure a good load of wood."

Hobson, Rae, and Mac-Nab accompanied the brave fellow through the kitchen, where the fire had just gone out, and into the passage. Rae climbed up to the trap-door of the loft, and peeping through it, made sure that the bears were still on the roof. The moment for action had arrived.

One door of the passage was open, and in spite of the thick furs in which they were wrapped, all felt chilled to the very marrow of their bones; and when the second door was pushed open, they recoiled for an instant, panting for breath, whilst the moisture held in suspension in the air of the passage covered the walls and the floor with fine snow.

The weather outside was extremely dry, and the stars shone with extraordinary brilliancy. Sergeant Long rushed out without a moment's hesitation, dragging the cord behind him, one end of which was held by his companions; the outer door was pushed to, and Hobson, Mac-Nab, and Rae went back to the passage and closed the second door, behind which they waited. If Long did not return in a few minutes, they might conclude that his enterprise had succeeded, and that, safe in the shed, he was loading the first train with fuel. Ten minutes at the most ought to suffice for this operation, if he had been able to get the door open.

When the Sergeant was fairly off, Hobson and Mac-Nab walked together towards the end of the passage.
Meanwhile Rae had been watching the bears and the loft. It was so dark that all hoped Long’s movements would escape the notice of the hungry animals.

Ten minutes elapsed, and the three watchers went back to the narrow space between the two doors, waiting for the signal to be given to drag in the sledge.

Five minutes more. The cord remained motionless in their hands! Their anxiety can be imagined. It was a quarter of an hour since the Sergeant had started, plenty of time for all he had to do, and he had given no signal.

Hobson waited a few minutes longer, and then tightening his hold of the end of the rope, he made a sign to his companions to pull with him. If the load of wood were not quite ready, the Sergeant could easily stop it from being dragged away.

The rope was pulled vigorously. A heavy object seemed to slide along the snow. In a few moments it reached the outer door.

It was the body of the Sergeant, with the rope round his waist. Poor Long had never reached the shed. He had fallen fainting to the ground, and after twenty minutes’ exposure to such a temperature there was little hope that he would revive.

A cry of grief and despair burst from the lips of Mac-Nab and Rae. They lifted their unhappy comrade from the ground, and carried him into the passage; but as the Lieutenant was closing the outer door, something pushed violently against it, and a horrible growl was heard.

"Help!" cried Hobson.

Mac-Nab and Rae rushed to their officer’s assistance; but Mrs Barnett had been beforehand with them and was struggling with all her strength to help Hobson to close the door. In vain; the monstrous brute, throwing the whole weight of its body against it, would force its way into the passage in another moment.

Mrs Barnett, whose presence of mind did not forsake her now, seized one of the pistols in the Lieutenant’s belt, and waiting quietly until the animal shoved its head between the door and the wall, discharged the contents into its open mouth.

The bear fell backwards, mortally wounded no doubt, and the door was shut and securely fastened.

The body of the Sergeant was then carried into the large room. But, alas! the fire was dying out. How was it possible to restore the vital heat with no means of obtaining warmth?

"I will go—I will go and fetch some wood!" cried the blacksmith Rae.

"Yes, Rae, we will go together!" exclaimed Mrs Barnett, whose courage was unabated.

"No, my friends, no!" cried Hobson; "you would fall victims to the cold, or the bears, or both. Let us burn all there is to burn in the house, and leave the rest to God!"

And the poor half-frozen settlers rose and laid about them with their hatchets like madmen. Benches, tables, and partition walls were thrown down, broken up, crushed to pieces, and piled up in the stove of the large room and kitchen furnace. Very soon good fires were burning, on which a few drops of walrus-oil were poured, so that the temperature of the rooms quickly rose a dozen degrees.

Every effort was made to restore the Sergeant. He was rubbed with warm rum, and gradually the circulation of his blood was restored. The white blotches with which parts of his body were covered began to disappear; but he had suffered dreadfully, and several hours elapsed before he could articulate a word. He was laid in a warm bed, and Mrs Barnett and Madge watched by him until the next morning.

Meanwhile Hobson, Mac-Nab, and Rae consulted bow best to escape from their terrible situation. It was impossible to shut their eyes to the fact that in two days this fresh supply of fuel would be exhausted, and then, if the cold continued, what would become of them all? The new moon had risen forty-eight hours ago, and there was no sign of a change in the weather! The north wind still swept the face of the country with its icy breath; the barometer remained at " fine dry weather; "and there was not a vapour to be seen above the endless succession of ice-fields. There was reason to fear that the intense cold would last a long time yet, but what was to be done? Would it do to try once more to get to the wood-shed, when the bears had been roused by the shot, and rendered doubly dangerous? Would it be possible to attack these dreadful creatures in the open air? No, it would be madness, and certain death for all!

Fortunately the temperature of the rooms had now become more bearable, and in the morning Mrs Joliffe served up a breakfast of hot meat and tea. Hot grog was served out, and the brave Sergeant was able to take his share. The heat from the stoves warmed the bodies and reanimated the drooping courage of the poor colonists, who were now ready to attack the bears at a word from Hobson. But the Lieutenant, thinking the forces unequally matched, would not risk the attempt; and it appeared likely that the day would pass without any incident worthy of note, when at about three o’clock in the afternoon a great noise was heard on the top of the house.

"There they are!" cried two or three soldiers, hastily arming themselves with hatchets and pistols.

It was evident that the bears had torn away one of the rafters of the roof, and got into the loft.
"Let every one remain where he is!" cried the Lieutenant. "Rae, the trap!"

The blacksmith rushed into the passage, scaled the ladder, and shut and securely fastened the trap-door.

A dreadful noise was now heard—growling, stamping of feet, and tearing of claws. It was doubtful whether the danger of the anxious listeners was increased, or the reverse. Some were of opinion that if all the bears were in the loft, it would be easier to attack them. They would be less formidable in a narrow space, and there would not be the same risk of suffocation from cold. Of course a conflict with such fierce creatures must still be very perilous, but it no longer appeared so desperate as before.

It was now debated whether it would be better to go and attack the besiegers, or to remain on the defensive. Only one soldier could get through the narrow trap-door at a time, and this mace Hobson hesitate, and finally resolve to wait. The Sergeant and others, whose bravery none could doubt, agreed that he was in the right, and it might be possible that some new incident would occur to modify the situation. It was almost impossible for the bears to break through the beams of the ceiling, as they had the rafters of the roof, so that there was little fear that they would get on to the ground-floor.

The day passed by in anxious expectation, and at night no one could sleep for the uproar made by the furious beasts.

The next day, about nine o'clock, a fresh complication compelled Hobson to take active steps.

He knew that the pipes of the stove and kitchen furnace ran all along the loft, and being made of lime-bricks but imperfectly cemented together, they could not resist great pressure for any length of time. Now some of the bears scratched at the masonry, whilst others leant against the pipes for the sake of the warmth from the stove; so that the bricks began to give way, and soon the stoves and furnace ceased to draw.

This really was an irreparable misfortune, which would have disheartened less energetic men. But things were not yet at their worst. Whilst the fire became lower and lower, a thick, nauseous, acrid smoke filled the house; the pipes were broken, and the smoke soon became so thick that the lamps went out. Hobson now saw that he must leave the house if he wished to escape suffocation, but to leave the house would be to perish with cold. At this fresh misfortune some of the women screamed; and Hobson, seizing a hatchet, shouted in a loud voice,

"To the bears! to the bears, my friends!"

It was the forlorn-hope. These terrible creatures must be destroyed. All rushed into the passage and made for the ladder, Hobson leading the way. The trap-door was opened, and a few shots were fired into the black whirlpool of smoke. Mingled howls and screams were heard, and blood began to flow on both sides; but the fearful conflict was waged in profound darkness.

In the midst of the mêlée a terrible rumbling sound suddenly drowned the tumult, the ground became violently agitated, and the house rocked as if it were being torn up from its foundations. The beams of the walls separated, and through the openings Hobson and his companions saw the terrified bears rushing away into the darkness, howling with rage and fright.

CHAPTER XXII.

FIVE MONTHS MORE.

A violent earthquake had shaken Cape Bathurst. Such convulsions were probably frequent in this volcanic region, and the connection between them and eruptions was once more demonstrated.

Hobson well understood the significance of what had occurred, and waited in anxious suspense. He knew that the earth might open and swallow up the little colony; but only one shock was felt, and that was rather a rebound than a vertical upheaval, which made the house lean over towards the lake, and burst open its walls. Immediately after this one shock, the ground again became firm and motionless.

The house, although damaged, was still habitable; the breaches in the walls were quickly repaired, and the pipes of the chimneys were patched together again somehow. Fortunately the wounds the soldiers had received in their struggle with the bears were slight, and merely required dressing.

Two miserable days ensued, during which the woodwork of the beds and the planks of the partition walls were burnt, and the most pressing repairs executed by Mac-Nab and his men. The piles, well driven into the earth, had not yielded; but it was evident that the earthquake had caused a sinking of the level of the coast on which the fort was built, which might seriously compromise the safety of the building. Hobson was most anxious to ascertain the extent of the alteration of elevation, but the pitiless cold prevented him from venturing outside.

But at last there were symptoms of an approaching change in the weather. The stars shone with rather less brilliancy, and on the 11th January the barometer fell slightly; hazy vapours floated in the air, the condensation of which would raise the temperature; and on the 12th January the wind veered to the south-west, and snow fell at irregular intervals.

The thermometer outside suddenly rose to 15° above zero, and to the frozen colonists it was like the beginning
At eleven o'clock the same morning all were out of doors. They were like a band of captives unexpectedly set free. They were, however, absolutely forbidden to go beyond the enceinte of the fort, in case of awkward meetings.

The sun had not yet reappeared above the horizon, but it approached it nearly enough to produce a long twilight, during which objects could be distinctly seen to a distance of two miles; and Hobson’s first thought was to ascertain what difference the earthquake had produced in the appearance of the surrounding districts.

Certain changes had been effected. The crest of the promontory of Cape Bathurst had been broken off, and large pieces of the cliff had been flung upon the beach. The whole mass of the cape seemed to have been bent towards the lake, altering the elevation of the plateau on which the fort was built. The soil on the west appeared to have been depressed, whilst that on the east had been elevated. One of the results of this change of level would unfortunately be, that when the thaw set in, the waters of the lake and of Paulina river, in obedience to the law, requiring liquids to maintain their level, would inundate a portion of the western coast. The stream would probably scoop out another bed, and the natural harbour at its mouth would be destroyed. The hills on the eastern bank seemed to be considerably depressed, but the cliffs on the west were too far off for any accurate observations to be made.

The important alteration produced by the earthquake may, in fact, be summed up in a very few words: the horizontal character of the ground was replaced by a slope from east to west.

"Well, Lieutenant," said Mrs Barnett, laughing, "you were good enough to give my name to the port and river, and now there will be neither Paulina nor Port Barnett. I must say I have been hardly used."

"Well, madam," replied Hobson, "although the river is gone, the lake remains, and we will call it Lake Barnett. I hope that it at least will remain true to you."

Mr and Mrs Joliffe, on leaving the house, had hurried, one to the doghouse, the other to the reindeer-stable. The dogs had not suffered much from their lone confinement, and rushed into the court barking with delight. One reindeer had died, but the others, though thin, appeared to be in good health.

"Well, madam," said the Lieutenant, "we have got through our troubles better than we could have expected."

"I never despaired," replied the lady. "The miseries of an Arctic winter would not conquer men like you and your companions."

"To own the truth, madam," replied Hobson, "I never experienced such intense cold before, in all the years I have spent in the north; and if it had lasted many days longer we should all have been lost."

"The earthquake came in the nick of time then, not only to drive away the bears, but also to modify the extremity of the cold?"

"Perhaps so, madam. All natural phenomena influence each other to a certain extent. But the volcanic structure of the soil makes me rather uneasy. I cannot but regret the close vicinity of this active volcano. If the lava from it cannot reach us, the earthquakes connected with it can. Just look at our house now!"

"Oh, all that can be put right when the fine weather comes, and you will make it all the stronger for the painful experience you have gained."

"Of course we shall, but meanwhile I am afraid you won’t find it very comfortable."

"Are you speaking to me, Lieutenant? to an old traveller like me? I shall imagine myself one of the crew of a small vessel, and now that it does not pitch and toss, I shall have no fear of being sea-sick."

"What you say does not surprise me," replied Hobson; "we all know your grandeur of character, your moral courage and imperturbable good temper. You have done much to help us all to bear our troubles, and I thank you in my own name and that of my men."

"You flatter me, Lieutenant; you flatter me."

"No, no; I only say what every one thinks. But may I ask you one question. You know that next June, Captain Craventy is to send us a convoy with provisions, which will take back our furs to Fort Reliance. I suppose our friend Thomas Black, after having seen his eclipse, will return with the Captain’s men. Do you mean to accompany him?"

"Do you mean to send me back?" asked the lady with a smile.

"O madam!"—

"Well, my superior officer," replied Mrs Barnett, extending her hand to the Lieutenant, "I shall ask you to allow me to spend another winter at Fort Hope. Next year one of the Company’s ships will probably anchor off Cape Bathurst, and I shall return in it. Having come overland, I should like to go back by Behring Strait."

The Lieutenant was delighted with his companion’s decision. The two had become sincerely attached to each other, and had many tastes and qualities in common. The hour of separation could not fail to be painful to both; and who could tell what further trials awaited ‘the colonists, in which their combine, influence might sustain the courage of the rest?

On the 20th January the sun at last reappeared, and the Polar night was at an end. It only remained above the horizon for a few minutes, and was greeted with joyous hurrahs by the settlers. From this date the days gradually
increased in length.

Throughout the month of February, and until the 15th March, there were abrupt transitions from fine to bad weather. The fine days were so cold that the hunters could not go out; and in the bad weather snowstorms kept them in. It was only between whiles that any outdoor work could be done; and long excursions were out of the question. There was no necessity for them, however, as the traps were in full activity. In the latter end of the winter, martens, foxes, ermines, wolverines, and other valuable animals were taken in large numbers, and the trappers had plenty to do.

In March an excursion was ventured on as far as Walruses’ Bay and it was noticed that the earthquake had considerably altered the form of the cliffs, which were much depressed; whilst the igneous hills beyond, with their summits wrapped in mist, seemed to look larger and more threatening than ever.

About the 20th March the hunters sighted the first swans migrating from the south, and uttering shrill cries as they flew. A few snow buntings and winter hawks were also seen. But the ground was still covered with thick layers of frozen snow, and the sun was powerless to melt the hard surface of the lake and sea.

The breaking up of the frost did not commence until early in April. The ice burst with a noise like the discharge of artillery.

Sudden changes took place in the appearance of the icebergs broken by collisions, undermined by the action of the water once more set free, huge masses rolled over with an awful crash, in consequence of the displacement of their centre of gravity, causing fractures and fissures in the ice-fields which greatly accelerated their breaking up.

At this time the mean temperature was 32° above zero, so that the upper layer of ice on the beach rapidly dissolved, whilst the chain of icebergs, drifted along by the currents of the Polar Sea, gradually drew back and became lost in the fogs on the horizon. On the 15th April the sea was open, and a vessel from the Pacific Ocean coming through Behring Strait, could certainly have skirted along the American coast, and have anchored off Cape Bathurst.

Whilst the ice was disappearing from the ocean, Lake Barnett was also laying aside its slippery armour, much to the delight of the thousands of ducks and other water-fowl which began to teem upon its banks. As Hobson had foreseen, however, the level of the lake was affected by the slope of the soil. That part of the beach which stretched away from the enceinte of the fort, and was bounded on the east by wooded hills, had increased considerably in extent; and Hobson estimated that the waters of the lake had reeded five hundred paces on the eastern bank. As a natural consequence, the water on the western side had risen, and if not held back by some natural barrier, would inundate the country.

On the whole, it was fortunate that the slope was from east to west; for had it been from west to east, the factory must have been submerged.

The little river dried up as soon as the thaw set free its waters. It might almost be said to have run back to its source, so abrupt was the slope of its bed from north to south.

"We have now to erase a river from the map of the Arctic regions," observed Hobson to his Sergeant. "It would have been embarrassing if we had been dependent on the truant for drinkable water. Fortunately we have still Lake Barnett, and I don’t suppose our thirsty men will drain it quite dry."

"Yes, we’ve got the lake," replied the Sergeant; "but do you think its waters have remained sweet?"

Hobson started and looked at his subordinate with knitted brows. It had not occurred to him that a fissure in the ground might have established a communication between the lake and the sea! Should it be so, ruin must ensue, and the factory would inevitably have to be abandoned after all.

The Lieutenant and Hobson rushed to the lake and found their fears groundless. Its waters were still sweet.

Early in May the snow had disappeared in several places, and a scanty vegetation clothed the soil. Tiny mosses and slender grasses timidly pushed up their stems above the ground, and the sorrel and cochlearia seeds which Mrs Joliffe had planted began to sprout. The carpet of snow had protected them through the bitter winter; but they had still to be saved from the beaks of birds and the teeth of rodents. This arduous and important task was confided to the worthy Corporal, who acquitted himself of it with the zeal and devotion of a scarecrow in a kitchen garden.

The long days had now returned, and hunting was resumed.

Hobson was anxious to have a good stock of furs for the agents from Fort Reliance to take charge of when they arrived, as they would do in a few weeks. Marbre, Sabine, and the others, therefore, commenced the campaign. Their excursions were neither long nor fatiguing: they never went further than two miles from Cape Bathurst, for they had never before been in a district so well stocked with game; and they were both surprised and delighted. Martens, reindeer, hares, caribous, foxes, and ermines passed close to their guns.

One thing, however, excited some regret in the minds of the colonists, not a trace was to be seen of their old enemies the bears; and it seemed as if they had taken all their relations with them. Perhaps the earthquake had frightened them away, for they have a very delicate nervous organisation, if such an expression can be applied to a
mild quadruped. It was a pity they were gone, for vengeance could not be wreaked upon them.

The month of May was very wet. Rain and snow succeeded each other. The mean temperature was only 41\(^\circ\) above zero. Fogs were of frequent occurrence, and so thick that it would often have been imprudent to go any distance from the fort. Petersen and Kellet once caused their companions grave anxiety by disappearing for forty-eight hours. They had lost their way, and turned to the south when they thought they were near to Walruses’ Bay. They came back exhausted and half dead with hunger.

June came at last, and with it really fine warm weather. The colonists were able to leave off their winter clothing. They worked zealously at repairing the house, the foundations of which had to be propped up; and Hobson also ordered the construction of a large magazine at the southern corner of the court. The quantity of game justified the expenditure of time and labour involved: the number of furs collected was already considerable, and it was necessary to have some place set aside in which to keep them.

The Lieutenant now expected every day the arrival of the detachment to be sent by Captain Craventy. A good many things were still required for the new settlement. The stores were getting low; and if the party had left the fort in the beginning of May, they ought to reach Cape Bathurst towards the middle of June. It will be remembered that the Captain and his Lieutenant had fixed upon the cape as the spot of rendezvous, and Hobson having constructed his fort on it, there was no fear of the reinforcements failing to find him.

From the 15th June the districts surrounding the cape were carefully watched. The British flag waved from the summit of the cliff, and could be seen at a considerable distance. It was probable that the convoy would follow the Lieutenant’s example, and skirt along the coast from Coronation Gulf. If not exactly the shortest, it was the surest route, at a time when the sea being free from ice, the coast-line could be easily followed.

When the month of June passed without the arrival of the expected party, Hobson began to feel rather uneasy, especially as the country again became wrapped in fogs. He began to fear that the agents might lose their way, and often talked the matter over with Mrs Barnett, Mac-Nab, and Rae.

Thomas Black made no attempt to conceal his uneasiness, for he was anxious to return with the party from Fort Reliance as soon as he had seen his eclipse; and should anything keep them back from coming, he would have to resign himself to another winter, a prospect which did not please him at all; and in reply to his eager questions, Hobson could say little to reassure him.

The 4th July dawned. No news! Some men sent to the southeast to reconnoitre, returned, bringing no tidings. Either the agents had never started, or they had lost their way. The latter hypothesis was unfortunately the more probable. Hobson knew Captain Craventy, and felt confident that he had sent off the convoy at the time named.

His increasing anxiety will therefore be readily understood. The fine season was rapidly passing away. Another two months and the Arctic winter, with its bitter winds, its whirlpools of snow, and its long nights, would again set in.

Hobson, as we well know, was not a man to yield to misfortune without a struggle. Something must be done, and with the ready concurrence of the astronomer the following plan was decided on.

It was now the 5th July. In another fortnight—July 18th—the solar eclipse was to take place, and after that Thomas Black would be free to leave Fort Hope. It was therefore agreed that if by that time the agents had not arrived, a convoy of a few men and four or five sledges should leave the factory, and make for the Great Slave Lake, taking with them some of the most valuable furs; and if no accident befell them, they might hope to arrive at Fort Reliance in six weeks at the latest—that is to say, towards the end of August.

This matter settled, Thomas Black shrank back into his shell, and became once more the man of one idea, awaiting the moment when the moon, passing between the orb of day and “himself,” should totally eclipse the disc of the sun.

CHAPTER XXIII.
THE ECLIPSE OF THE 18TH JULY 1860.

The mists did not disperse. The sun shone feebly through thick curtains of fog, and the astronomer began to have a great dread lest the eclipse should not be visible after all. Sometimes the fog was so dense that the summit of the cape could not be seen from the court of the fort.

Hobson got more and more uneasy. He had no longer any doubt that the convoy had gone astray in the strange land; moreover, vague apprehensions and sad forebodings increased his depression. He could not look into the future with any confidence—why, he would have found it impossible to explain. Everything apparently combined to reassure him. In spite of the great rigour of the winter, his little colony was in excellent health. No quarrels had arisen amongst the colonists, and their zeal and enthusiasm was still unabated. The surrounding districts were well stocked with game, the harvest of furs had surpassed his expectations, and the Company might well be satisfied with the result of the enterprise. Even if no fresh supply of provisions arrived, the resources of the country were such that the prospect of a second winter need awake no misgivings. Why, then, was Lieutenant Hobson losing hope and
confidence?

He and Mrs Barnett had many a talk on the subject; and the latter did all she could to raise the drooping spirits of
the commanding officer, urging upon him all the considerations enumerated above; and one day walking with him
along the beach, she pleaded the cause of Cape Bathurst and the factory, built at the cost of so much suffering, with
more than usual eloquence.

"Yes, yes, madam, you are right," replied Hobson; "but we can’t help our presentiments. I am no visionary.
Twenty times in my soldier’s life I have been in critical circumstances, and have never lost presence of mind for one
instant; and now for the first time in my life I am uneasy about the future. If I had to face a positive danger, I should
have no fear; but a vague uncertain peril of which I have only a presentiment"

"What danger do you mean?" inquired Mrs Barnett; "a danger from men, from animals, or the elements?"

"Of animals I have no dread whatever, madam; it is for them to tremble before the hunters of Cape Bathurst, nor
do I fear men; these districts are frequented by none but Esquimaux, and the Indians seldom venture so far north."

"Besides, Lieutenant," said Mrs Barnett, "the Canadians, whose arrival you so much feared in the fine season,
have never appeared."

"I am very sorry for it, madam."

"What! you regret the absence of the rivals who are so evidently hostile to your Company?"

"Madam, I am both glad and sorry that they have not come; that will of course puzzle you. But observe that the
expected convoy from Fort Reliance has not arrived. It is the same with the agents of the St Louis Fur Company;
they might have come, and they have not done so. Not a single Esquimaux has visited this part of the coast during
the summer either"—

"And what do you conclude from all this?" inquired Mrs Barnett.

"I conclude that it is not so easy to get to Cape Bathurst or to Fort Hope as we could wish."

The lady looked into the Lieutenant’s anxious face, struck with the melancholy and significant intonation of the
word easy.

"Lieutenant Hobson," she said earnestly, "if you fear neither men nor animals, I must conclude that your anxiety
has reference to the elements."

"Madam," he replied, "I do not know if my spirit be broken, or if my presentiments blind me, but there seems to
me to be something uncanny about this district. If I had known it better I should not have settled down in it. I have
already called your attention to certain peculiarities, which to me appear inexplicable; the total absence of stones
everywhere, and the clear-cut line of the coast. I can’t make out about the primitive formation of this end of the
continent. I know that the vicinity of a volcano may cause some phenomena; but you remember what I said to you
on the subject of the tides?"

"Oh yes, perfectly."

"Where the sea ought according to the observations of explorers in these latitudes, to have risen fifteen or twenty
feet, it has scarcely risen one!"

"Yes; but that you accounted for by the irregular distribution of land and the narrowness of the straits."

"I tried to account for it, that is all," replied Hobson; "but the day before yesterday I noticed a still more
extraordinary phenomenon, which I cannot even try to explain, and I doubt if the greatest savants could do so
either."

Mrs Barnett looked inquiringly at Hobson.

"What has happened?" she exclaimed.

"Well, the day before yesterday, madam, when the moon was full, and according to the almanac the tide ought to
have been very high, the sea did not even rise one foot, as it did before-it did not rise at all."

"Perhaps you may be mistaken observed Mrs Barnett."

"I am not mistaken. I saw it with my own eyes. The day before yesterday, July 4th, there was positively no tide
on the coast of Cape Bathurst."

"And what do you conclude from that?" inquired Mrs Barnett.

"I conclude madam," replied the Lieutenant, "either that the laws of nature are changed, or that this district is
very peculiarly situated . . . or rather . . . I conclude nothing . . . I explain nothing . . . I am puzzled. . . I do not
understand it; and therefore . . . therefore I am anxious."

Mrs Barnett asked no more questions. Evidently the total absence of tides was as unnatural and inexplicable as
would be the absence of the sun from the meridian at noon. Unless the earthquake had so modified the conformation
of the coast of the Arctic regions as to account for it—but no, such an idea could not be entertained by any one
accustomed to note terrestrial phenomena.

As for supposing that the Lieutenant could be mistaken in his observations, that was impossible; and that very
day he and Mrs Barnett, by means of beach-marks made on the beach, ascertained beyond all doubt that whereas a
year before the sea rose a foot, there was now no tide whatever.

The matter was kept a profound secret, as Hobson was unwilling to render his companions anxious. But he might often be seen standing motionless and silent upon the summit of the cape, gazing across the sea, which was now open, and stretched away as far as the eye could reach.

During the month of July hunting the furred animals was discontinued, as the martens, foxes, and others had already lost their winter beauty. No game was brought down but that required for food, such as caribous, Polar hares, &c., which, strange to say, instead of being scared away by the guns, continued to multiply near the fort. Mrs Barnett did not fail to note this peculiar, and, as the event proved, significant fact.

No change had taken place in the situation on the 15th July. No news from Fort Reliance. The expected convoy did not arrive, and Hobson resolved to execute his project of sending to Captain Craventy, as Captain Craventy did not come to him.

Of course none but Sergeant Long could be appointed to the command of the little troop, although the faithful fellow would rather not have been separated from his Lieutenant. A considerable time must necessarily elapse before he could get back to Fort Hope. He would have to pass the winter at Fort Reliance, and return the next summer. Eight months at least! It is true either Mac-Nab or Rae could have taken the Sergeant’s place; but then they were married, and the one being a master carpenter, and the other the only blacksmith, the colonists could not well have dispensed with their services.

Such were the grounds on which the Lieutenant chose Long, and the Sergeant submitted with military obedience. The four soldiers elected to accompany him were Belcher, Pond, Petersen, and Kellet, who declared their readiness to start.

Four sledges and their teams of dogs were told off for the service. They were to take a good stock of provisions, and the most valuable of the furs. Foxes, ermines, martens, swans, lynxes, musk-rats, gluttons, &c., all contributed to the precious convoy. The start was fixed for the morning of the 19th July, the day after the eclipse. Of course Thomas Black was to accompany the Sergeant, and one sledge was to convoy his precious person and instruments.

The worthy savant endured agonies of suspense in the few days preceding the phenomenon which he awaited with so much impatience. He might well be anxious; for one day it was fine and another wet, now mists obscured the sun, or thick fogs hid it all together; and the wind veered to every point of the horizon with provoking fickleness and uncertainty. What if during the few moments of the eclipse the queen of the night and the great orb of day should be wrapped in an opaque cloud at the critical moment, so that he, the astronomer, Thomas Black, come so far to watch the phenomenon, should be unable to see the luminous corona or the red prominences! How terrible would be the disappointment! How many dangers, how much suffering, how much fatigue, would have been gone through in vain!

"To have come so far to see the moon, and not to see it!" he cried in a comically piteous tone.

No, he could not face the thought and early of an evening he would climb to the summit of the cape and gaze into the heavens. The fair Phoebe was nowhere to be seen; for it being three days before new moon, she was accompanying the sun in his daily course, and her light was quenched in his beams.

Many a time did Thomas Black relieve his over-burdened heart by pouring out his troubles to Mrs Barnett. The good lady felt sincerely sorry for him, and one day, anxious to reassure him, she told him that the barometer showed a certain tendency to rise, and reminded him that they were in the fine season.

"The fine season!" cried the poor astronomer" shrugging his shoulders. "Who can speak of a fine season in such a country as this?"

"Well, but, Mr Black," said Mrs Barnett, "suppose, for the sake of argument, that you miss this eclipse by any unlucky chance, I suppose there will be another some day. The eclipse of July 18th will not be the last of this century."

"No, madam, no," returned Black; "there will be five more total eclipses of the sun before 1900. One on the 31st December 1861, which will be total for the Atlantic Ocean, the Mediterranean, and the Sahara Desert; a second on the 22d December 1870, total for the Azores, the south of Spain, Algeria, Sicily, and Turkey; a third on the 19th August 1887, total for the north-east of Germany, the south of Russia, and Central Asia; a fourth on the 9th April 1896, visible in Greenland, Lapland, and Siberia; and lastly, a fifth on the 28th May 1900, which will be total for the United States, Spain, Algeria, and Egypt."

"Well, Mr Black," resumed Mrs Barnett, "if you lose the eclipse of the 18th July 1860, you can console yourself by looking forward to that of the 31st December 1861. It will only be seventeen months!"

"I can console myself, madam," said the astronomer gravely, "by looking forward to that of 1896. I shall have to wait not seventeen months but thirty-six years!"

"May I ask why?"
"Because of all the eclipses, it alone—that of 9th August 1896—will be total for places in high latitudes, such as Lapland, Siberia, or Greenland."

"But what is the special interest of an observation taken in these elevated latitudes?"

"What special interest?" cried Thomas Black; why, a scientific interest of the highest importance. Eclipses have very rarely been watched near the Pole, where the sun, being very little above the horizon, is considerably increased in size. The disc of the moon which is to intervene between us and the sun is subject to a similar apparent extension, and therefore it may be that the red prominences and the luminous corona can be more thoroughly examined. This, madam, is why I have travelled all this distance to watch the eclipse above the seventieth parallel. A similar opportunity will not occur until 1896, and who can tell if I shall be alive then?"

To this burst of enthusiasm there was no reply to be made; and the astronomer's anxiety and depression increased, for the inconstant weather seemed more and more disposed to play him some ill-natured trick.

It was very fine on the 16th July, but the next day it was cloudy and misty and Thomas Black became really ill. The feverish state he had been in for so long seemed likely to result in a serious illness. Mrs Barnett and Hobson tried in vain to soothe him, and Sergeant Long and the others could not understand how it was possible to be so unhappy for love of the moon.

At last the great day—the 18th July—dawned. According to the calculations of astronomers, the total eclipse was to last four minutes thirty-seven seconds—that is to say, from forty-three minutes fifteen seconds past eleven to forty-seven minutes fifty-seven seconds past eleven A.M.

"What do I ask? what do I ask?" moaned the astronomer, tearing his hair. "Only one little corner of the sky free from clouds! only the small space in which the eclipse is to take place! And for how long? For four short minutes! After that, let it snow, let it thunder, let the elements break loose in fury, I should care no more for it all than a snail for a chronometer."

It is not to be denied that Thomas Black had some grounds for his fears. It really seemed likely that observations would be impossible. At daybreak the horizon was shrouded in mists. Heavy clouds were coming up from the south, and covering the very portion of the sky in which the eclipse was to take place. But doubtless the patron saint of astronomers had pity on poor Black, for towards eight o'clock a slight wind arose and swept the mists and clouds from the sky, leaving it bright and clear!

A cry of gratitude burst from the lips of the astronomer, and his heart beat high with newly-awakened hope. The sun shone brightly, and the moon, so soon to darken it, was as yet invisible in its glorious beams.

Thomas Black's instruments were already carefully placed on the promontory, and having pointed them towards the southern horizon, he awaited the event with calmness restored, and the coolness necessary for taking his observation. What was there left to fear?

Nothing, unless it was that the sky might fall upon his head! At nine o'clock there was not a cloud, not a vapour left upon the sky from the zenith to the horizon. Never were circumstances more favourable to an astronomical observation.

The whole party were anxious to take part in the observation, and all gathered round the astronomer on Cape Bathurst. Gradually the sun rose above the horizon, describing an extended arc above the vast plain stretching away to the south. No one spoke, but awaited the eclipse in solemn silence.

Towards half-past nine the eclipse commenced. The disc of the moon seemed to graze that of the sun. But the moon's shadow was not to fall completely on the earth, hiding the sun, until between forty-three minutes past eleven and forty-seven minutes past eleven. That was the time fixed in the almanacs, and every one knows that no error can creep into them, established, verified, and controlled as they are by the scientific men of all the observatories in the world.

The astronomer had brought a good many glasses with him, and he distributed them amongst his companions, that all might watch the progress of the phenomenon without injury to the eyes.

The brown disc of the moon gradually advanced, and terrestrial objects began to assume a peculiar orange hue, whilst the atmosphere on tire zenith completely changed colour. At a quarter-past ten half the disc of the sun was darkened, and a few dogs which happened to be at liberty showed signs of uneasiness and bowed pityously. The wild ducks, thinking night had come, began to utter sleepy calls—and to seek their nests, and the mothers gathered their little ones under their wings. The hush of eventide fell upon all animated nature.

At eleven o'clock two-thirds of the sun were covered, and all terrestrial objects became a kind of vinous red. A gloomy twilight set in, to be succeeded during the four minutes of totality by absolute darkness. A few planets, amongst them Mercury and Venus, began to appear, and some constellations—Caplet, [symbol] and [symbol] of Taurus, and [symbol] of Orion. The darkness deepened every moment.

Thomas Black remained motionless with his eye glued to the glass of his instrument, eagerly watching the progress of the phenomenon. At forty-three minutes past eleven the discs of the two luminaries ought to be exactly
opposite to each other, that of the moon completely hiding that of the sun.

"Forty-three minutes past eleven," announced Hobson, who was attentively watching the minute hand of his chronometer.

Thomas Black remained motionless, stooping over his instrument. Half a minute passed, and then the astronomer [astronomer] drew himself up, with eyes distended and eager. Once more he bent over the telescope, and cried in a choked voice—

"She is going! she is going! The moon, the moon is going! She is disappearing, running away!"

True enough the disc of the moon was gliding away from that of the sun without having completely covered it!

The astronomer had fallen backwards, completely overcome. The four minutes were past. The luminous corona had not appeared!

"What is the matter?" inquired Hobson.

"The matter is," screamed the poor astronomer, "that the eclipse was not total—not total for this portion of the globe! Do you hear? It was not to-t-a-l! I say not to-t-a-l! !"

"Then your almanacs are incorrect."

"Incorrect! Don’t tell that to me, if you please, Lieutenant Hobson!"

"But what then?" said Hobson, suddenly changing countenance.

"Why," said Black, "we are not after all on the seventieth parallel! !"

"Only fancy!" cried Mrs Barnett.

"We can soon prove it," said the astronomer whose eyes flashed with rage and disappointment. "The sun will pass the meridian in a few minutes. . . . My sextant-quick . . . make haste!"

One of the soldiers rushed to the house and fetched the instrument required.

The astronomer pointed it upon the sun; he watched the orb of day pass the meridian, and rapidly noted down a few calculations.

"What was the situation of Cape Bathurst a year ago when we took the latitude?" he inquired.

"Seventy degrees, forty-four minutes, and thirty-seven seconds," replied Hobson.

"Well, sir, it is now seventy-three degrees, seven minutes, and twenty seconds! You see we are not under the seventieth parallel! !"

"Or rather we are no longer there!" muttered Hobson.

A sudden light had broken in upon his mind, all the phenomena hitherto so inexplicable were now explained.

Cape Bathurst had drifted three degrees farther north since the arrival of the Lieutenant and his companions!

End of Part I

PART II

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CHAPTER I.
A FLOATING FORT.
And so Fort Hope, founded by Lieutenant Hobson on the borders of the Polar Sea, had drifted! Was the
courageous agent of the Company to blame for this? No; any one might have been deceived as he had been. No
human prevision could have foreseen such a calamity. He meant to build upon a rock, and he had not even built
upon sand. The peninsula of Victoria, which the best maps of English America join to the American continent, had
been torn suddenly away from it. This peninsula was in fact nothing but an immense piece of ice, five hundred
square miles in extent, converted by successive deposits of sand and earth into apparently solid ground well clothed
with vegetation. Connected with the mainland for thousands of centuries, the earthquake of the 8th of January had
dragged it away from its moorings, and it was now a floating island, at the mercy of the winds and waves, and had
been carried along the Arctic Ocean by powerful currents for the last three months!

Yes, Fort Hope was built upon ice! Hobson at once understood the mysterious change in their latitude. The
isthmus—that is to say, the neck of land which connected the peninsula of Victoria with the mainland—had been
snapped in two by a subterranean convulsion connected with the eruption of the volcano some months before. As
long as the northern winter continued, the frozen sea maintained things as they were; but when the thaw came, when
the ice fields, melted beneath the rays of the sun, and the huge icebergs, driven out into the offing, drew back to the
farthest limits of the horizon—when the sea at last became open, the whole peninsula drifted away, with its woods,
its cliffs, its promontories, its inland lagoon, and its coast-line, under the influence of a current about which nothing
was known. For months this drifting had been going on unnoticed by the colonists, who even when hunting did not
go far from Fort Hope. Beach-marks, if they had been made, would have been useless; for heavy mists obscured
everything at a short distance, the ground remained apparently firm and motionless, and there was, in short, nothing
to hint to the Lieutenant and his men that they had become islanders. The position of the new island with regard to
the rising and setting of the sun was the same as before. Had the cardinal points changed their position, had the
island turned round, the Lieutenant, the astronomer, or Mrs Barnett, would certainly have noticed and understood
the change; but in its course the island had thus far followed a parallel of latitude, and its motion, though rapid, had
been imperceptible.

Although Hobson had no doubt of the moral and physical courage and determination of his companions, he
determined not to acquaint them with the truth. It would be time enough to tell them of their altered position when it
had been thoroughly studied. Fortunately the good fellows, soldiers or workmen, took little notice of the
astronomical observations, and not being able to see the consequences involved, they did not trouble themselves
about the change of latitude just announced.
The Lieutenant determined to conceal his anxiety, and seeing no remedy for the misfortune, mastered his emotion by a strong effort, and tried to console Thomas Black, who was lamenting his disappointment and tearing his hair.

The astronomer had no doubt about the misfortune of which he was the victim. Not having, like the Lieutenant, noticed the peculiarities of the district, he did not look beyond the one fact in which he was interested: on the day fixed, at the time named, the moon had not completely eclipsed the sun. And what could he conclude but that, to the disgrace of observatories, the almanacs were false, and that the long desired eclipse, his own eclipse, Thomas Black’s, which he had come so far and through so many dangers to see, had not been “total” for this particular district under the seventieth parallel! No, no, it was impossible to believe it; he could not face the terrible certainty, and he was overwhelmed with disappointment. He was soon to learn the truth, however.

Meanwhile Hobson let his men imagine that the failure of the eclipse could only interest himself and the astronomer, and they returned to their ordinary occupations; but as they were leaving, Corporal Joliffe stopped suddenly and said, touching his cap—

"May I ask you one question, sir?"

"Of course, Corporal; say on," replied the Lieutenant, who wondered what was coming.

But Joliffe hesitated, and his little wife nudged his elbow.

"Well, Lieutenant," resumed the Corporal, "it’s just about the seventieth degree of latitude—if we are not where we thought we were."

The Lieutenant frowned.

"Well," he replied evasively, "we made a mistake in our reckoning, ... our first observation was wrong; ... but what does that concern you?"

"Please, sir, it’s because of the pay," replied Joliffe with a scowl. "You know well enough that the Company promised us double pay."

Hobson drew a sigh of relief. It will be remembered that the men had been promised higher pay if they succeeded in settling on or above the seventieth degree north latitude, and Joliffe, who always had an eye to the main chance, had looked upon the whole matter from a monetary point of view, and was afraid the bounty would be withheld.

"You needn’t be afraid," said Hobson with a smile; "and you can tell your brave comrades that our mistake, which is really inexplicable, will not in the least prejudice your interests. We are not below, but above the seventieth parallel, and so you will get your double pay."

"Thank you, sir, thank you," replied Joliffe with a beaming face. "It isn’t that we think much about money, but that the money sticks to us."

And with this sage remark the men drew off, little dreaming what a strange and fearful change had taken place in the position of the country.

Sergeant Long was about to follow the others when Hobson stopped him with the words—

"Remain here, Sergeant Long."

The subordinate officer turned on his heel and waited for the Lieutenant to address him.

All had now left the cape except Mrs Barnett, Madge, Thomas Black, and the two officers.

Since the eclipse Mrs Barnett had not uttered a word. She looked inquiringly at Hobson, who tried to avoid meeting her eyes.

For some time not another word was spoken. All involuntarily turned towards the south, where the broken isthmus was situated; but from their position they could only see the sea horizon on the north. Had Cape Bathurst been situated a few hundred feet more above the level of the ocean, they would have been able at a glance to ascertain the limits of their island home.

All were deeply moved at the sight of Fort Hope and all its occupants borne away from all solid ground, and floating at the mercy of winds and waves.

"Then, Lieutenant," said Mrs Barnett at last, "all the strange phenomena you observed are now explained!"

"Yes, madam," he replied, "everything is explained. The peninsula of Victoria, now an island, which we thought firm ground with an immovable foundation, is nothing more than a vast sheet of ice welded for centuries to the American continent. Gradually the wind has strewn it with earth and sand, and scattered over them the seeds from which have sprung the trees and mosses with which it is clothed. Rain-water filled the lagoon, and produced the little river; vegetation transformed the appearance of the ground; but beneath the lake, beneath the soil of earth and sand—in a word, beneath our feet is a foundation of ice, which floats upon the water by reason of its being specifically lighter than it. Yes, it is a sheet of ice which bears us up, and is carrying us away, and this is why we have not found a single flint or stone upon its surface. This is why its shores are perpendicular, this is why we found ice ten feet below the surface when we dug the reindeer pit—this, in short, is why the tide was not noticeable on the
peninsula, which rose and sank with the ebb and flow of the waves!"

"Everything is indeed explained," said Mrs Barnett, "and your presentiments did not deceive you; but can you explain why the tides, which do not affect us at all now, were to a slight extent perceptible on our arrival?"

"Simply because, madam, on our arrival the peninsula was still connected by means of its flexible isthmus with the American continent. It offered a certain resistance to the current, and on its northern shores the tide rose two feet beyond low-water mark, instead of the twenty we reasonably expected. But from the moment when the earthquake broke the connecting link, from the moment when the peninsula became an island free from all control, it rose and sank with the ebb and flow of the tide; and, as we noticed together at full moon a few days ago, no sensible difference was produced on our shores."

In spite of his despair, Thomas Black listened attentively to Hobson's explanations, and could not but see the reasonableness of his deductions, but he was furious at such a rare, unexpected, and, as he said, "ridiculous" phenomenon occurring just so as to make him miss the eclipse, and he said not a word, but maintained a gloomy, even haughty silence.

"Poor Mr Black," said Mrs Barnett, "it must be owned that an astronomer was never more hardly used than you since the world began!"

"In any case, however," said Hobson, turning to her, "we have neither of us anything to reproach ourselves with. No one can find fault with us. Nature alone is to blame. The earthquake cut off our communication with the mainland, and converted our peninsula into a floating island, and this explains why the furred and other animals imprisoned like ourselves, have become so numerous round the fort!"

"This, too, is why the rivals you so much dreaded have not visited us, Lieutenant!" exclaimed Madge.

"And this," added the Sergeant, "accounts for the non-arrival of the convoy sent to Cape Bathurst by Captain Craventy."

"And this is why," said Mrs. Barnett, looking at the Lieutenant, "I must give up all hope of returning to Europe this year at least!"

The tone of voice in which the lady made this last remark showed that she resigned herself to her fate more readily than could have been expected. She seemed suddenly to have made up her mind to make the best of the situation, which would no doubt give her an opportunity of making a great many interesting observations. And after all, what good would grumbling have done? Recriminations were worse than useless. They could not have altered their position, or have checked the course of the wandering island, and there was no means of reuniting it to a continent. No; God alone could decide the future of Fort Hope. They must bow to His will.

CHAPTER II.
WHERE ARE WE?

It was necessary carefully to study the unexpected and novel situation in which the agents of the Company now found themselves, and Hobson did so with his chart before him.

He could not ascertain the longitude of Victoria Island—the original name being retained—until the next day, and the latitude had already been taken. For the longitude, the altitude of the sun must be ascertained before and after noon, and two hour angles must be measured.

At two o'clock P.M. Hobson and Black took the height of the sun above the horizon with the sextant, and they hoped to recommence the same operation the next morning towards ten o'clock A.M., so as to be able to infer from the two altitudes obtained the exact point of the Arctic Ocean then occupied by their island.

The party did not, however, at once return to the fort, but remained talking together for some little time on the promontory. Madge declared she was quite resigned, and evidently thought only of her mistress, at whom she could not look without emotion; she could not bear to think of the sufferings and trials her "dear girl" might have to go through in the future. She was ready to lay down her life for "Paulina," but what good could that do now. She knew, however, that Mrs Barnett was not a woman to sink under her misfortunes, and indeed at present there was really no need for any one to despair.

There was no immediate danger to be dreaded, and a catastrophe might even yet be avoided. This Hobson carefully explained to his companions.

Two dangers threatened the island floating along the coast of North America, only two.

It would be drawn by the currents of the open sea to the high Polar latitudes, from which there is no return.

Or the current would take it to the south, perhaps through the Behring Strait into the Pacific Ocean.

In the former contingency, the colonists, shut in by ice and surrounded by impassable icebergs, would have no means of communication with their fellow-creatures, and would die of cold and hunger in the solitudes of the north.

In the latter contingency, Victoria Island, driven by the currents to the western waters of the Pacific, would gradually melt and go to pieces beneath the feet of its inhabitants.

In either case death would await the Lieutenant and his companions, and the fort, erected at the cost of so much
labour and suffering, would be destroyed.

But it was scarcely probable that either of these events would happen. The season was already considerably advanced, and in less than three months the sea would again be rendered motionless by the icy hand of the Polar winter. The ocean would again be converted into an ice-field, and by means of sledges they might get to the nearest land—the coast of Russian America if the island remained in the east, or the coast of Asia if it were driven to the west.

"For," added Hobson, "we have absolutely no control over our floating island. Having no sail to hoist, as in a boat, we cannot guide it in the least. Where it takes us we must go."

All that Hobson said was clear, concise, and to the point. There could be no doubt that the bitter cold of winter would solder Victoria Island to the vast ice-field, and it was highly probable that it would drift neither too far north nor too far south. To have to cross a few hundred miles of ice was no such terrible prospect for brave and resolute men accustomed to long excursions in the Arctic regions. It would be necessary, it was true, to abandon Fort Hope—the object of so many hopes, and to lose the benefit of all their exertions, but what of that? The factory, built upon a shifting soil, could be of no further use to the Company. Sooner or later it would be swallowed up by the ocean, and what was the good of useless regrets? It must, therefore, be deserted as soon as circumstances should permit.

The only thing against the safety of the colonists was—and the Lieutenant dwelt long on this point—that during the eight or nine weeks which must elapse before the solidification of the Arctic Ocean, Victoria Island might be dragged too far north or south.

Arctic explorers had often told of pieces of ice being drifted an immense distance without any possibility of stopping them.

Everything then depended on the force and direction of the currents from the opening of Behring Strait; and it would be necessary carefully to ascertain all that a chart of the Arctic Ocean could tell. Hobson had such a chart, and invited all who were with him on the cape to come to his room and look at it; but before going down to the fort he once more urged upon them the necessity of keeping their situation a secret.

"It is not yet desperate," he said, "and it is therefore quite unnecessary to damp the spirits of our comrades, who will perhaps not be able to understand, as we do, all the chances in our favour."

"Would it not be prudent to build a boat large enough to hold us all, and strong enough to carry us a few hundred miles over the sea?" observed Mrs Barnett.

"It would be prudent certainly," said Hobson, "and we will do it. I must think of some pretext for beginning the work at once, and give the necessary orders to the head carpenter. But taking to a boat can only be a forlorn hope when everything else has failed. We must try all we can to avoid being on the island when the ice breaks up, and we must make for the mainland as soon as ever the sea is frozen over."

Hobson was right. It would take about three months to build a thirty or thirty-five ton vessel, and the sea would not be open when it was finished. It would be very dangerous to embark the whole party when the ice was breaking up all round, and he would be well out of his difficulties if he could get across the ice to firm ground before the next thaw set in. This was why Hobson thought a boat a forlorn hope, a desperate makeshift, and every one agreed with him.

Secrecy was once more promised, for it was felt that Hobson was the best judge of the matter, and a few minutes later the five conspirators were seated together in the large room of Fort Hope, which was then deserted, eagerly examining an excellent map of the oceanic and atmospheric currents of the Arctic Ocean, special attention being naturally given to that part of the Polar Sea between Cape Bathurst and Behring Strait.

Two principal currents divide the dangerous latitudes comprehended between the Polar Circle and the imperfectly known zone, called the North-West Passage since McClure’s daring discovery—at least only two have been hitherto noticed by marine surveyors.

One is called the Kamtchatka Current. It takes its rise in the offing outside the peninsula of that name, follows the coast of Asia, and passes through Behring Strait, touching Cape East, a promontory of Siberia. After running due north for about six hundred miles from the strait, it turns suddenly to the east, pretty nearly following the same parallel as McClure’s Passage, and probably doing much to keep that communication open for a few mouths in the warm season.

The other current, called Behring Current, flows just the other way. After running from east to west at about a hundred miles at the most from the coast, it comes into collision, so to speak, with the Kamtchatka Current at the opening of the strait, and turning to the south approaches the shores of Russian America, crosses Behring Sea, and finally breaks on the kind of circular dam formed by the Aleutian Islands.

Hobson’s map gave a very exact summary of the most recent nautical observations, so that it could be relied on.

The Lieutenant examined it carefully before speaking, and then pressing his hand to his head, as if oppressed by some sad presentiment, he observed—
"Let us hope that fate will not take us to remote northern latitudes. Our wandering island would run a risk of never returning."

"Why, Lieutenant?" broke in Mrs Barnett.

"Why, madam?" replied Hobson; "look well at this part of the Arctic Ocean, and you will readily understand why. Two currents, both dangerous for us, run opposite ways. When they meet, the island must necessarily become stationary, and that at a great distance from any land. At that point it will have to remain for the winter, and when the next thaw sets in, it will either follow the Kamtchatka Current to the deserted regions of the north-west, or it will float down with the Behring Current to be swallowed up by the Pacific Ocean."

"That will not happen, Lieutenant," said Madge in a tone of earnest conviction; "God would never permit that."

"I can’t make out," said Mrs Barnett, "whereabouts in the Polar Sea we are at this moment; for I see but one current from the offing of Cape Bathurst which bears directly to the north-west, and that is the dangerous Kamtchatka Current. Are you not afraid that it has us in its fatal embrace, and is carrying us with it to the shores of North Georgia?"

"I think not," replied Hobson, after a moment’s reflection.

"Why not?"

"Because it is a very rapid current, madam; and if we had been following it for three months, we should have had some land in sight by this time, and there is none, absolutely none!"

"Where, then, do you suppose we are?" inquired Mrs Barnett.

"Most likely between the Kamtchatka Current and the coast, perhaps in some vast eddy unmarked upon the map."

"That cannot be, Lieutenant," replied Mrs Barnett, quickly.

"Why not, madam, why not?"

"Because if Victoria Island were in an eddy, it would have veered round to a certain extent, and our position with regard to the cardinal points would have changed in the last three months, which is certainly not the case."

"You are right, madam, you are quite right. The only explanation I can think of is, that there is some other current, not marked on our map. Oh, that to morrow were here that I might find out our longitude; really this uncertainty is terrible!"

"To-morrow will come," observed Madge.

There was nothing to do but to wait. The party therefore separated, all returning to their ordinary occupations. Sergeant Long informed his comrades that the departure for Fort Reliance, fixed for the next day, was put off. He gave as reasons that the season was too far advanced to get to the southern factory before the great cold set in, that the astronomer was anxious to complete his meteorological observations, and would therefore submit to another winter in the north, that game was so plentiful provisions from Fort Reliance were not needed. &c., &c. But about all these matters the brave fellows cared little.

Lieutenant Hobson ordered his men to spare the furred animals in future, and only to kill edible game, so as to lay up fresh stores for the coming winter; he also forbade them to go more than two miles from the fort, not wishing Marbre and Sabine to come suddenly upon a sea-horizon, where the isthmus connecting the peninsula of Victoria with the mainland was visible a few months before. The disappearance of the neck of land would inevitably have betrayed everything.

The day appeared endless to Lieutenant Hobson. Again and again he returned to Cape Bathurst either alone, or accompanied by Mrs Barnett. The latter, inured to danger, showed no fear; she even joked the Lieutenant about his floating island being perhaps, after all, the proper conveyance for going to the North Pole. "With a favourable current might they not reach that hitherto inaccessible point of the globe?"

Lieutenant Hobson shook his head as he listened to his companion’s fancy, and kept his eyes fixed upon the horizon, hoping to catch a glimpse of some land, no matter what, in the distance. But no, sea and sky met in an absolutely unbroken circular line, confirming Hobson’s opinion that Victoria Island was drifting to the west rather than in any other direction.

"Lieutenant," at last said Mrs Barnett, "don’t you mean to make a tour of our island as soon as possible?"

"Yes, madam, of course; as soon as I have taken our bearings, I mean to ascertain the form and extent of our dominions. It seems, however, that the fracture was made at the isthmus itself, so that the whole peninsula has become an island."

"A strange destiny is ours, Lieutenant," said Mrs Barnett. "Others return from their travels to add new districts to geographical maps, but we shall have to efface the supposed peninsula of Victoria!"

The next day, July 18th, the sky was very clear, and at ten o’clock in the morning Hobson obtained a satisfactory altitude of the sun, and, comparing it with that of the observation of the day before, he ascertained exactly the longitude in which they were.
The island was then in 157° 37' longitude west from Greenwich.
The latitude obtained the day before at noon almost immediately after the eclipse was, as we know, 73° 7' 20"
north.
The spot was looked out on the map in the presence of Mrs Barnett and Sergeant Long.
It was indeed a most anxious moment, and the following result was arrived at.
The wandering island was moving in a westerly direction, borne along by a current unmarked on the chart, and
unknown to hydrographers, which was evidently carrying it towards Behring Strait. All the dangers foreseen by
Hobson were then imminent, if Victoria Island did not again touch the mainland before the winter.
"But how far are we from the American continent? that is the most important point just at present," said Mrs
Barnett.

Hobson took his compasses, and carefully measured the narrowest part of the sea between the coast and the
seventieth parallel.
"We are actually more than two hundred and fifty miles from Point Barrow, the northernmost extremity of
Russian America," he replied.
"We ought to know, then, how many miles the island has drifted since it left the mainland," said Sergeant Long.
"Seven hundred miles at least," replied Hobson, after having again consulted the chart.
"And at about what time do you suppose the drifting commenced?"
"Most likely towards the end of April; the ice-field broke up then, and the icebergs which escaped melting drew
back to the north. We may, therefore, conclude that Victoria Island has been moving along with the current parallel
with the coast at an average rate of ten miles a day."
"No very rapid pace after all!" exclaimed Mrs Barnett.
"Too fast, madam, when you think where we may be taken during the two months in which the sea will remain
open in this part of the Arctic Ocean."
The three friends remained silent, and looked fixedly at the chart of the fearful Polar regions, towards which they
were being irresistibly drawn, and which have hitherto successfully resisted all attempts to explore them.
"There is, then, nothing to be done? Nothing to try?" said Mrs Barnett after a pause.
"Nothing, madam," replied Hobson; "nothing whatever. We must wait; we must all pray for the speedy arrival of
the Arctic winter generally so much dreaded by sailors, but which alone can save us now. The winter will bring ice,
our only anchor of salvation, the only power which can arrest the course of this wandering island."
CHAPTER III.
A TOUR OF THE ISLAND.
From that day, July 18th, it was decided that the bearings should be taken as on board a vessel whenever the
state of the atmosphere rendered the operation possible. Was not the island, in fact, a disabled ship, tossed about
without sails or helm.
The next day after taking the bearings, Hobson announced that without change of latitude the island had
advanced several miles farther west. Mac-Nab was ordered to commence the construction of a huge boat, Hobson
telling him, in explanation, that he proposed making a reconnaissance of the coast as far as Russian America next
summer. The carpenter asked no further questions, but proceeded to choose his wood, and fixed upon the beach at
the foot of Cape Bathurst as his dockyard, so that he might easily be able to launch his vessel.
Hobson intended to set out the same day on his excursion round the island in which he and his comrades were
imprisoned. Many changes might take place in the configuration of this sheet of ice, subject as it was to the
influence of the variable temperature of the waves, and it was important to determine its actual form at the present
time, its area, and its thickness in different parts. The point of rupture, which was most likely at the isthmus itself,
ought to be examined with special care; the fracture being still fresh, it might be possible to ascertain the exact
arrangement of the stratified layers of ice and earth of which the soil of the island was composed.
But in the afternoon the sky clouded over suddenly, and a violent squall, accompanied with thick mists, swept
down upon the fort. Presently torrents of rain fell, and large hailstones rattled on the roof, whilst a few distant claps
of thunder were heard, a phenomenon of exceedingly rare occurrence in such elevated latitudes.
Hobson was obliged to put off his trip, and wait until the fury of the elements abated, but during the 20th, 21st,
and 22d July, no change occurred. The storm raged, the floods of heaven were let loose, and the waves broke upon
the beach with a deafening roar. Liquid avalanches were flung with such force upon Cape Bathurst, that there was
reason to dread that it might give way; its stability was, in fact, somewhat problematical, as it consisted merely of an
aggregation of sand and earth, without any firm foundation. Vessels at sea might well be pitied in this fearful gale,
but the floating island was of too vast a bulk to be affected by the agitation of the waves, and remained indifferent to
their fury.
During the night of the 22d July the tempest suddenly ceased. A strong breeze from the north-east dispelled the
last mists upon the horizon. The barometer rose a few degrees, and the weather appeared likely to favour Hobson's expedition.

He was to be accompanied by Mrs Barnett and Sergeant Long, and expected to be absent a day or two. The little party took some salt meat, biscuits, and a few flasks of rum with them, and there was nothing in their excursion to surprise the rest of the colonists. The days were just then very long, the sun only disappearing below the horizon for a few hours.

There were no wild animals to be feared now. The bears seemed to have fled by instinct from the peninsula whilst it was still connected with the mainland, but to neglect no precaution each of the three explorers was provided with a gun. The Lieutenant and his subordinate also carried hatchets and ice-chisels, which a traveller in the Polar regions should never be without.

During the absence of the Lieutenant and the Sergeant, the command of the fort fell to Corporal Joliffe, or rather to his little wife, and Hobson knew that he could trust her. Thomas Black could not be depended on; he would not even join the exploring party; he promised, however, to watch the northern latitudes very carefully, and to note any change which should take place in the sea or the position of the cape during the absence of the Lieutenant.

Mrs Barnett had endeavoured to reason with the unfortunate astronomer, but he would listen to nothing. He felt that Nature had deceived him, and that he could never forgive her.

After many a hearty farewell, the Lieutenant and his two companions left the fort by the postern gate, and, turning to the west, followed the lengthened curve of the coast between Capes Bathurst and Esquimaux.

It was eight o'clock in the morning; the oblique rays of the sun struck upon the beach, and touched it with many a brilliant tint, the angry billows of the sea were sinking to rest, and the birds, ptarmigans, guillemots, puffins, and petrels, driven away by the storm, were returning by thousands. Troops of ducks were hastening back to Lake Barnett, flying close, although they knew it not, to Mrs Joliffe’s saucepan. Polar hares, martens, musk rats, and ermines rose before the travellers and fled at their approach, but not with any great appearance of haste or terror. The animals evidently felt drawn towards their old enemies by a common danger.

"They know well enough that they are hemmed in by the sea and cannot quit the island," observed Hobson.

"They are all in the habit of seeking warmer climates in the south in the winter, are they not?" inquired Mrs Barnett.

"Yes, madam, but unless they are presently able to cross the ice-field, they will have to remain prisoners like ourselves, and I am afraid the greater number will die of cold or hunger.

"I hope they will be good enough to supply us with food for a long time," observed the Sergeant," and I think it is very fortunate that they had not the sense to run away before the rupture of the isthmus."

"The birds will, however, leave us?" added Mrs Barnett.

"Oh yes, madam, everything with wings will go, they can traverse long distances without fatigue, and, more fortunate than ourselves, they will regain terra firma."

"Could we not use them as messengers?" asked Mrs Barnett.

"A good idea, madam, a capital idea," said Hobson. "We might easily catch some hundreds of these birds, and tie a paper round their necks with our exact situation written upon it. John Ross in 1848 tried similar means to acquaint the survivors of the Franklin expedition with the presence of his ships, the Enterprise and the Investigator in the Polar seas. He caught some hundreds of white foxes in traps, rivetted a copper collar round the neck of each with all the necessary information engraved upon it, and then set them free in every direction."

"Perhaps some of the messengers may have fallen into the hands of the shipwrecked wanderers."

"Perhaps so," replied Hobson; "I know that an old fox was taken by Captain Hatteras during his voyage of discovery, wearing a collar half worn away and hidden beneath his thick white fur. What we cannot do with the quadrupeds, we will do with the birds."

Chatting thus and laying plans for the future, the three explorers continued to follow the coast. They noticed no change; the abrupt cliffs covered with earth and sand showed no signs of a recent alteration in the extent of the island. It was, however, to be feared that the vast sheet of ice would be worn away at the base by the action of the warm currents, and on this point Hobson was naturally anxious.

By eleven o'clock in the morning the eight miles between Capes Bathurst and Esquimaux had been traversed. A few traces of the encampment of Kalumah’s party still remained; of course the snow huts had entirely disappeared, but some cinders and walrus bones marked the spot.

The three explorers halted here for a short time, they intended to pass the few short hours of the night at Walruses’ Bay, which they hoped to reach in a few hours. They breakfasted seated on a slightly rising ground covered with a scanty and stunted herbage. Before their eyes lay the ocean bounded by a clearly-defined sea-horizon, without a sail or an iceberg to break the monotony of the vast expanse of water.

"Should you be very much surprised if some vessel came in sight now, Lieutenant?" inquired Mrs Barnett.
"I should be very agreeably surprised, madam," replied Hobson. "It is not at all uncommon for whalers to come as far north as this, especially now that the Arctic Ocean is frequented by whales and chacholots, but you must remember that it is the 23rd July, and the summer is far advanced. The whole fleet of whaling vessels is probably now in Gulf Kotzebue, at the entrance to the strait. Whalers shun the sudden changes in the Arctic Ocean, and with good reason. They dread being shut in the ice; and the icebergs, avalanches, and, ice-fields they avoid, are the very things for which we earnestly pray."

"They will come, Lieutenant," said Long; "have patience, in another two months the waves will no longer break upon the shores of Cape Esquimaux."

"Cape Esquimaux!" observed Mrs Barnett with a smile. "That name, like those we gave to the other parts of the peninsula, may turn out unfortunate too. We have lost Port Barnett and Paulina River; who can tell whether Cape Esquimaux and Walruses' Bay may not also disappear in time?"

"They too will disappear, madam," replied Hobson, "and after them the whole of Victoria Island, for nothing now connects it with a continent, and it is doomed to destruction. This result is inevitable, and our choice of geographical names will be thrown away; but fortunately the Royal Society has not yet adopted them, and Sir Roderick Murchison will have nothing to efface on his maps."

"One name he will," exclaimed the Sergeant.
"Which?" inquired Hobson.
"Cape Bathurst," replied Long.
"Ah, yes, you are right. Cape Bathurst must now be removed from maps of the Polar regions."

Two hours' rest were all the explorers cared for, and at one o'clock they prepared to resume their journey. Before starting Hobson once more looked round him from the summit of Cape Esquimaux; but seeing nothing worthy of notice, he rejoined Mrs Barnett and Sergeant Long.

"Madam," he said, addressing the lady, "you have not forgotten the family of natives we met here last winter?"
"Oh no, I have always held dear little Kalumah in friendly remembrance. She promised to come and see us again at Fort Hope, but she will not be able to do so. But why do you ask me about the natives now?"
"Because I remember something to which, much to my regret, I did not at the time attach sufficient importance."
"What was that?"
"You remember the uneasy surprise the men manifested at finding a big a factory at the foot of Cape Bathurst."
"Oh yes, perfectly."
"You remember that I tried to make out what the natives meant, and that I could not do so?"
"Yes, I remember."
"Well," added Hobson, "I know now why they shook their heads. From tradition, experience, or something, the Esquimaux knew what the peninsula really was, they knew we had not built on firm ground. But as things had probably remained as they were for centuries, they thought there was no immediate danger, and that it was not worth while to explain themselves."
"Very likely you are right," replied Mrs Barnett; "but I feel sure that Kalumah had no suspicion of her companion's fears, or she would have warned us."

Hobson quite agreed with Mrs Barnett, and Sergeant Long observed—

"It really seems to have been by a kind of fatality that we settled ourselves upon this peninsula just before it was torn away from the mainland. I suppose, Lieutenant, that it had been connected for a very long time, perhaps for centuries."

"You might say for thousands and thousands of years, Sergeant," replied Hobson. "Remember that the soil on which we are treading has been brought here by the wind, little by little, that the sand has accumulated grain by grain! Think of the time it must have taken for the seeds of firs, willows, and arbutus to become shrubs and trees! Perhaps the sheet of ice on which we float was welded to the continent before the creation of man!"

"Well," cried Long, "it really might have waited a few centuries longer before it drifted. How much anxiety and how many dangers we might then have been spared!"

Sergeant Long's most sensible remark closed the conversation, and the journey was resumed.

From Cape Esquimaux to Walruses' Bay the coast ran almost due south, following the one hundred and twenty-seventh meridian. Looking behind them they could see one corner of the lagoon, its waters sparkling in the sunbeams, and a little beyond the wooded heights in which it was framed. Large eagles soared above their heads, their cries and the loud flapping of their wings breaking the stillness, and furred animals of many kinds, martens, polecats, ermines, &c., crouching behind some rising ground, or hiding amongst the stunted bushes and willows, gazed inquiringly at the intruders. They seemed to understand that they had nothing to fear. Hobson caught a glimpse of a few beavers wandering about, evidently ill at ease, and puzzled at the disappearance of the little river. With no ledges to shelter them, and no stream by which to build a new home, they were doomed to die of cold when
the severe frost set in. Sergeant Long also saw a troop of wolves crossing the plain.

It was evident that specimens of the whole Arctic Fauna were imprisoned on the island, and there was every reason to fear that, when famished with hunger, all the carnivorous beasts would be formidable enemies to the occupants of Fort Hope.

Fortunately, however, one race of animals appeared to be quite unrepresented. Not a single white bear was seen! Once the Sergeant thought he saw an enormous white mass moving about on the other side of a clump of willows, but on close examination decided that he was mistaken.

The coast near Walruses’ Bay was, on the whole, only slightly elevated above the sea-level, and in the distance the waves broke into running foam as they do upon a sloping beach. It was to be feared that the soil had little stability, but there was no means of judging of the modifications which had taken place since their last visit, and Hobson much regretted that he had not made bench marks about Cape Bathurst before he left, that he might judge of the amount of sinking or depression which took place. He determined, however, to take this precaution on his return.

It will be understood that, under the circumstances, the party did not advance very rapidly. A pause was often made to examine the soil, or to see if there were any sign of an approaching fracture on the coast, and sometimes the explorers wandered inland for half a mile. Here and there the Sergeant planted branches of willow or birch to serve as landmarks for the future, especially wherever undermining seemed to be going on rapidly and the solidity of the ground was doubtful. By this means it would be easy to ascertain the changes which might take place.

They did advance, however, and at three o’clock in the afternoon they were only three miles from Walruses’ Bay, and Hobson called Mrs Barnett’s attention to the important changes which had been effected by the rupture of the isthmus.

Formerly the south-western horizon was shut in by a long slightly curved coast-line, formed by the shores of Liverpool Bay. Now a sea-line bounded the view, the continent having disappeared. Victoria Island ended in an abrupt angle where it had broken off, and all felt sure that on turning round that angle the ocean would be spread out before them, and that its waves would bathe the whole of the southern side of the island, which was once the connecting-link between Walruses’ Bay and Washburn Bay.

Mrs Barnett could not look at the changed aspect of the scene without emotion. She had expected it, and yet her heart beat almost audibly. She gazed across the sea for the missing continent, which was now left several hundred miles behind, and it rushed upon her mind with a fresh shock that she would never set foot on America again. Her agitation was indeed excusable, and it was shared by the Lieutenant and the Sergeant.

All quickened their steps, eager to reach the abrupt angle in the south. The ground rose slightly as they advanced, and the layers of earth and sand became thicker; this of course was explained by the former proximity of this part of the coast to the true continent. The thickness of the crust of ice and of the layer of earth at the point of junction increasing, as it probably did, every century, explained the long resistance of the isthmus, which nothing but some extraordinary convulsion could have overcome. Such a convulsion was the earthquake of the 8th January, which, although it had only affected the continent of North America, had sufficed to break the connecting-link, and to launch Victoria Island upon the wide ocean.

At four o’clock P.M., the angle was reached. Walruses’ Bay, formed by an indentation of the firm ground, had disappeared! It had remained behind with the continent.

"By my faith, madam!” exclaimed the Sergeant, “it’s lucky for you we didn’t call it Paulina Barnett Bay!"

“Yes,” replied the lady, “I begin to think I am an unlucky godmother for newly-discovered places.”

CHAPTER IV.

A NIGHT ENCAMPMENT.

And so Hobson had not been mistaken about the point of rupture. It was the isthmus which had yielded in the shock of the earthquake. Not a trace was to be seen of the American continent, not a single cliff, even the volcano on the west had disappeared. Nothing but the sea everywhere.

The island on this side ended in a cape, coming to an almost sharp point, and it was evident that the substratum of ice, fretted by the warmer waters of the current and exposed to all the fury of the elements, must rapidly dissolve.

The explorers resumed their march, following the course of the fracture, which ran from west to east in an almost straight line. Its edges were not jagged or broken, but clear cut, as if the division had been made with a sharp instrument, and here and there the conformation of the soil could be easily examined. The banks- half ice, half sand and earth-rose some ten feet from the water. They were perfectly perpendicular, without the slightest slope, and in some places there were traces of recent landslips. Sergeant Long pointed to several small blocks of ice floating in the offing, and rapidly melting, which had evidently been broken off from their island. The action of the warm surf would, of course, soon eat away the new coast-line, which time had not yet clothed with a kind of cement of snow and sand, such as covered the rest of the beach, and altogether the state of things was very far from reassuring.

Before taking any rest, Mrs Barnett, Hobson, and Long, were anxious to finish their examination of the southern
edge of the island. There would be plenty of daylight, for the sun would not set until eleven o’clock P.M. The briliant orb of day was slowly advancing along the western horizon, and its oblique rays cast long shadows of themselves before the explorers, who conversed at intervals after long silent pauses, during which they gazed at the sea and thought of the dark future before them.

Hobson intended to encamp for the night at Washburn Bay. When there eighteen miles would have been traversed, and, if he were not mistaken, half his circular journey would be accomplished. After a few hours’ repose he meant to return to Fort Hope along the western coast.

No fresh incident marked the exploration of the short distance between Walruses’ Bay and Washburn Bay, and at seven o’clock in the evening the spot chosen for the encampment was reached. A similar change had taken place here. Of Washburn Bay, nothing remained but the curve formed by the coast-line of the island, and which was once its northern boundary. It stretched away without a break for seven miles to the cape they had named Cape Michael. This side of the island did not appear to have suffered at all in consequence of the rupture. The thickets of pine and birch, massed a little behind the cape, were in their fullest beauty at this time of year, and a good many furred animals were disporting themselves on the plain.

A halt was made at Washburn Bay, and the explorers were able to enjoy an extended view on the south, although they could not see any great distance on the north. The sun was so low on the horizon, that its rays were intercepted by the rising ground on the west, and did not reach the little bay. It was not, however, yet night, nor could it be called twilight, as the sun had not set.

"Lieutenant," said Long, "if by some miracle a bell were now to ring, what do you suppose it would mean?"

"That it was supper-time," replied Hobson. "Don’t you agree with me, Mrs Barnett?"

"Indeed I do," replied the lady addressed, "and as our cloth is spread for us, let us sit down. This moss, although slightly worn, will suit us admirably, and was evidently intended for us by Providence."

The bag of provisions was opened; some salt meat, a hare paté from Mrs Joliffe’s larder, with a few biscuits, formed their frugal supper.

The meal was quickly over, and Hobson returned to the southwest angle of the island, whilst Mrs Barnett rested at the foot of a low fir tree, and Sergeant Long made ready the night quarters.

The Lieutenant was anxious to examine the piece of ice which formed the island, to ascertain, if possible, something of its structure. A little bank, produced by a landslip, enabled him to step down to the level of the sea, and from there he was able to look closely at the steep wall which formed the coast. Where he stood the soil rose scarcely three feet above the water. The upper part consisted of a thin layer of earth and sand mixed with crushed shells; and the lower of hard, compact, and, if we may so express it, "metallic" ice, strong enough to support the upper soil of the island.

This layer of ice was not more than one foot above the sea-level. In consequence of the recent fracture, it was easy to see the regular disposition of the sheets of ice piled up horizontally, and which had evidently been produced by successive frosts in comparatively quieter waters.

We know that freezing commences on the surface of liquids, and as the cold increases, the thickness of the crust becomes greater, the solidification proceeding from the top downwards. That at least is the case in waters that are at rest; it has, however, been observed that the very reverse is the case in running waters—the ice forming at the bottom, and subsequently rising to the surface.

It was evident, then, that the floe which formed the foundation of Victoria Island had been formed in calm waters on the shores of the North American continent. The freezing had evidently commenced on the surface, and the thaw would begin at the bottom, according to a well-known law; so that the ice-field would gradually decrease in weight as it became thawed by the warmer waters through which it was passing, and the general level of the island would sink in proportion.

This was the great danger.

As we have just stated, Hobson noticed that the solid ice, the ice-field properly so called, was only about one foot above the sea-level! We know that four-fifths of a floating mass of ice are always submerged. For one foot of an iceberg or ice-field above the water, there are four below it. It must, however, be remarked that the density, or rather specific weight of floating ice, varies considerably according to its mode of formation or origin. The ice-masses which proceed from sea water, porous, opaque, and tinged with blue or green, according as they are struck by the rays of the sun, are lighter than ice formed from fresh water. All things considered, and making due allowance for the weight of the mineral and vegetable layer above the ice, Hobson concluded it to be about four or five feet thick below the sea-level. The different declivities of the island, the little hills and rising ground, would of course only affect the upper soil, and it might reasonably be supposed that the wandering island was not immersed more than five feet.

This made Hobson very anxious. Only five feet! Setting aside the causes of dissolution to which the ice-field
might be subjected, would not the slightest shock cause a rupture of the surface? Might not a rough sea or a gale of wind cause a dislocation of the ice-field, which would lead to its breaking up into small portions, and to its final decomposition? Oh for the speedy arrival of the winter, with its bitter cold! Would that the column of mercury were frozen in its cistern! Nothing but the rigour of an Arctic winter could consolidate and thicken the foundation of their island, and establish a means of communication between it and the continent.

Hobson returned to the halting-place little cheered by his discoveries, and found Long busy making arrangements for the night; for he had no idea of sleeping beneath the open sky, although Mrs Barnett declared herself quite ready to do so. He told the Lieutenant that he intended to dig a hole in the ice big enough to hold three persons—in fact to make a kind of snow-hut, in which they would be protected from the cold night air.

"In the land of the Esquimaux," he said, "nothing is wiser than to do as the Esquimaux do."

Hobson approved, but advised the Sergeant not to dig too deeply, as the ice was not more than five feet thick.

Long set to work. With the aid of his hatchet and ice-chisel he had soon cleared away the earth, and hollowed out a kind of passage sloping gently down to the crust of ice.

He next attacked the brittle mass, which had been covered over with sand and earth for so many centuries. It would not take more than an hour to hollow out a subterranean retreat, or rather a burrow with walls of ice, which would keep in the heat, and therefore serve well for a resting-place during the short night.

Whilst Long was working away like a white ant, Hobson communicated the result of his observations to Mrs Barnett. He did not disguise from her that the construction of Victoria Island rendered him very uneasy. He felt sure that the thinness of the ice would lead to the opening of ravines on the surface before long; where, it would be impossible to foresee, and of course it would be equally impossible to prevent them. The wandering Island might at any moment settle down in consequence of a change in its specific gravity, or break up into more or less numerous islets, the duration of which must necessarily be ephemeral. He judged, therefore, that it would be best for the members of the colony to keep together as much as possible, and not to leave the fort, that they might all share the same chances.

Hobson was proceeding further to unfold his views when cries for help were heard.

Mrs Barnett started to her feet, and both looked round in every direction, but nothing was to be seen.

The cries were now redoubled, and Hobson exclaimed—

"The Sergeant! the Sergeant!"

And followed by Mrs Barnett, he rushed towards the burrow, and he had scarcely reached the opening of the snow-house before he saw Sergeant Long clutching with both hands at his knife, which he had stuck in the wall of ice, and calling out loudly, although with the most perfect self-possession.

His head and arms alone were visible. Whilst he was digging, the ice had given way suddenly beneath him, and he was plunged into water up to his waist.

Hobson merely said—

"Keep hold!"

And creeping through the passage, he was soon at the edge of the hole. The poor Sergeant seized his hand, and he was soon rescued from his perilous position.

"Good God! Sergeant!" exclaimed Mrs Barnett; "what has happened?"

"Nothing," replied Long, shaking himself like a wet spaniel, "except that the ice gave way under me, and I took a compulsory bath."

"You forgot what I told you about not digging too deeply, then," said Hobson.

"Beg pardon, sir; I hadn't cut through fifteen inches of the ice, and I expect there was a kind of cavern where I was working—the ice did not touch the water. It was just like going through a ceiling. If I hadn't been able to hang on by my knife, I should have slipped under the island like a fool, and that would have been a pity, wouldn't it, madam?"

"A very great pity, my brave fellow," said Mrs Barnett, pressing his hand.

Long's explanation was correct; for some reason or another—most likely from an accumulation of air—the ice had formed a kind of vault above the water, and of course it soon gave way under the weight of the Sergeant and the blows of his chisel.

The same thing might happen in other parts of the island, which was anything but reassuring. Where could they be certain of treading on firm ground? Might not the earth give way beneath their feet at any minute? What heart, however brave, would not have sunk at the thought of the thin partition between them and the awful gulf of the ocean?

Sergeant Long, however, thought but little of his bath, and was ready to begin mining in some other place. This Mrs Barnett would not allow. A night in the open air would do her no harm; the shelter of the coppice near would be protection enough for them all; and Sergeant Long was obliged to submit.
The camp was, therefore, moved back some thirty yards from the beach, to a rising ground on which grew a few clumps of pines and willows which could scarcely be called a wood. Towards ten o’clock the disc of the sun began to dip below the horizon, and before it disappeared for the few hours of the night a crackling fire of dead branches was blazing at the camp.

Long had now a fine opportunity of drying his legs, of which he gladly availed himself. He and Hobson talked together earnestly until twilight set in, and Mrs Barnett occasionally joined in the conversation, doing the best she could to cheer the disheartened Lieutenant. The sky was bright with stars, and the holy influence of the night could not fail to calm his troubled spirit. The wind murmured softly amongst the pines; even the sea appeared to be wrapt in slumber, its bosom slightly heaving with the swell, which died away upon the beach with a faint rippling sound. All creation was hushed, not even the wail of a sea bird broke upon the ear; the crisp crackling of the dead branches was exchanged for a steady flame, and nothing but the voices of the wanderers broke the sublime, the awful silence of the night.

“Who would imagine,” said Mrs Barnett, “that we were floating on the surface of the ocean! It really requires an effort to realise it, for the sea which is carrying us along in its fatal grasp appears to be absolutely motionless!”

“Yes, madam,” replied Hobson; and if the floor of our carriage were solid, if I did not know that sooner or later the keel of our boat will be missing, that some day its hull will burst open, and finally, if I knew where we are going, I should rather enjoy floating on the ocean like this.”

“Well, Lieutenant,” rejoined Mrs Barnett, “could there be a pleasanter mode of travelling than ours? We feel no motion. Our island has exactly the same speed as the current which is bearing it away. Is it not like a balloon voyage in the air? What could be more delightful than advancing with one’s house, garden, park, &c.? A wandering island, with a solid insubmersible foundation, would really be the most comfortable and wonderful conveyance that could possibly be imagined. I have heard of hanging gardens. Perhaps some day floating parks will be invented which will carry us all over the globe! Their size will render them insensible to the action of the waves, they will have nothing to fear from storms, and perhaps with a favourable wind they might be guided by means of immense sails! What marvels of vegetation would be spread before the eyes of the passengers when they passed from temperate to torrid zones! With skilful pilots, well acquainted with the currents, it might be possible to remain in one latitude, and enjoy a perpetual spring.”

Hobson could not help smiling at Mrs Barnett’s fancies. The brave woman ran on with such an easy flow of words, she talked with as little effort as Victoria Island moved. And was she not right? It would have been a very pleasant mode of travelling if there had been no danger of their conveyance melting and being swallowed up by the sea.

The night passed on, and the explorers slept a few hours. At daybreak they breakfasted, and thoroughly enjoyed their meal. The warmth and rest had refreshed them, and they resumed their journey at about six o’clock A.M.

From Cape Michael to the former Port Barnett the coast ran in an almost straight line from south to north for about eleven miles. There was nothing worthy of note about it; the shores were low and pretty even all the way, and seemed to have suffered no alteration since the breaking of the isthmus. Long, in obedience to the Lieutenant, made bench marks along the beach, that any future change might be easily noted.

Hobson was naturally anxious to get back to Fort Hope the same day, and Mrs Barnett was also eager to return to her friends. It was of course desirable under the circumstances that the commanding officer should not be long absent from the fort.

All haste was therefore made, and by taking a short cut they arrived at noon at the little promontory which formerly protected Port Barnett from the east winds.

It was not more than eight miles from this point to Fort Hope, and before four o’clock P.M the shouts of Corporal Joliffe welcomed their return to the factory.

CHAPTER V.

FROM JULY 25TH TO AUGUST 20TH.

Hobson’s first care on his return to the fort, was to make inquiries of Thomas Black as to the situation of the little colony. No change had taken place for the last twenty-four hours, but, as subsequently appeared, the island had floated one degree of latitude further south, whilst still retaining its motion towards the west. It was now at the same distance from the equator as Icy Cape, a little promontory of western Alaska, and two hundred miles from the American coast. The speed of the current seemed to be less here than in the eastern part of the Arctic Ocean, but the island continued to advance, and, much to Hobson’s annoyance, towards the dreaded Behring Strait. It was now only the 24th July, and a current of average speed would carry it in another month through the strait and into the heated waves of the Pacific, where it would melt “like a lump of sugar in a glass of water.”

Mrs Barnett acquainted Madge with the result of the exploration of the island. She explained to her the arrangement of the layers of earth and ice at the part where the isthmus had been broken off; told her that the
thickness of the ice below the sea level was estimated at five feet; related the accident to Sergeant Long—in short, she made her fully understand the reasons there were to fear the breaking up or sinking of the ice field.

The rest of the colony had, however, no suspicion of the truth; a feeling of perfect security prevailed. It never occurred to any of the brave fellows that Fort Hope was floating above an awful abyss, and that the lives of all its inhabitants were in danger. All were in good health, the weather was fine, and the climate pleasant and bracing. The baby Michael got on wonderfully; he was beginning to toddle about between the house and the palisade; and Corporal Joliffe, who was extremely fond of him, was already beginning to teach him to hold a gun, and to understand the first duties of a soldier. Oh, if Mrs Joliffe would but present him with such a son! but, alas! the blessing of children, for which he and his wife prayed every day, was as yet denied to them.

Meanwhile the soldiers had plenty to do.

Mac-Nab and his men—Petersen, Belcher, Garry, Pond, and Hope—worked zealously at the construction of a boat, a difficult task, likely to occupy them for several months. But as their vessel would be of no use until next year after the thaw, they neglected none of their duties at the factory on its account. Hobson let things go on as if the future of the factory were not compromised, and persevered in keeping the men in ignorance. This serious question was often discussed by the officer and his "staff," and Mrs Barnett and Madge differed from their chief on the subject. They thought it would be better to tell the whole truth; the men were brave and energetic, not likely to yield to despair, and the shock would not be great if they heard of it now, instead of only when their situation was so hopeless that it could not be concealed. But in spite of the justice of these remarks, Hobson would not yield, and he was supported by Sergeant Long. Perhaps, after all, they were right; they were both men of long experience, and knew the temper of their men.

And so the work of provisioning and strengthening the fort proceeded. The palisaded enceinte was repaired with new stakes, and made higher in many places, so that it really formed a very strong fortification. Mac-Nab also put into execution, with his chief’s approval, a plan he had long had at heart. At the corners abutting on the lake he built two little pointed sentry-boxes, which completed the defences; and Corporal Joliffe anticipated with delight the time when he should be sent to relieve guard: he felt that they gave a military look to the buildings, and made them really imposing.

The palisade was now completely finished, and Mac-Nab, remembering the sufferings of the last winter, built a new wood shed close up against the house itself, with a door of communication inside, so that there would be no need to go outside at all. By this contrivance the fuel would always be ready to hand. On the left side of the house, opposite the shed, Mac-Nab constructed a large sleeping-room for the soldiers, so that the camp-bed could be removed from the common room. This room was also to be used for meals, and work. The three married couples had private rooms walled off, so that the large house was relieved of them as well as of all the other soldiers. A magazine for furs only was also erected behind the house near the powder-magazine, leaving the loft free for stores; and the rafters and ribs of the latter were bound with iron cramps, that they might be able to resist all attacks. Mac-Nab also intended to build a little wooden chapel, which had been included in Hobson’s original plan of the factory; but its erection was put off until the next summer.

With what eager interest would the Lieutenant have once watched the progress of his establishment! Had he been building on firm ground, with what delight would he have watched the houses, sheds, and magazines rising around him! He remembered the scheme of crowning Cape Bathurst with a redoubt for the protection of Fort Hope with a sigh. The very name of the factory, "Fort Hope," made his heart sink within him; for should it not more truly be called "Fort Despair?"

These various works took up the whole summer, and there was no time for ennui. The construction of the boat proceeded rapidly. Mac-Nab meant it to be of about thirty tons measurement, which would make it large enough to carry some twenty passengers several hundred miles in the fine season. The carpenter had been fortunate enough to find some bent pieces of wood, so that he was able quickly to form the first ribs of the vessel, and soon the stern and stempost, fixed to the keel, were upon the dockyard at the foot of Cape Bathurst.

Whilst the carpenters were busy with hatchets, saws, and adzes, the hunters were eagerly hunting the reindeer and Polar hares, which abounded near the fort. The Lieutenant, however, told Marbre and Sabine not to go far away, stating as a reason, that until the buildings were completed he did not wish to attract the notice of rivals. The truth was, he did not wish the changes which had taken place to be noticed.

One day Marbre inquired if it was not now time to go to Walruses’ Bay, and get a fresh supply of morses-oil for burning, and Hobson replied rather hastily—

"No, Marbre; it would be useless."

The Lieutenant knew only too well that Walruses’ Bay was two hundred miles away, and that there were no morses to be hunted on the island.
It must not be supposed that Hobson considered the situation desperate even now. He often assured Mrs Barnett, Madge, and Long that he was convinced the island would hold together until the bitter cold of winter should thicken its foundation and arrest its course at one and the same time.

After his journey of discovery, Hobson estimated exactly the area of his new dominions. The island measured more than forty miles round, from which its superficial area[r] would appear to be about one hundred and forty miles at the least. By way of comparison, we may say that Victoria Island was rather larger than St Helena, and its area was about the same as that of Paris within the line of fortifications. If then it should break up into fragments, the separate parts might still be of sufficient size to be habitable for some time.

When Mrs Barnett expressed her surprise that a floating ice-field could be so large, Hobson replied by reminding her of the observations of Arctic navigators. Parry, Penny, and Franklin had met with ice-fields in the Polar seas one hundred miles long and fifty broad. Captain Kellet abandoned his boat on an ice-field measuring at least three hundred square miles, and what was Victoria Island compared to it?

Its size was, however, sufficient to justify a hope that it would resist the action of the warm currents until the cold weather set in. Hobson would not allow himself to doubt; his despair arose rather from the knowledge that the fruit of all his cares, anxieties, and dangers must eventually be swallowed up by the deep, and it was no wonder that he could take no interest in the works that were going on.

Mrs Barnett kept up a good heart through it all; she encouraged her comrades in their work, and took her share in it, as if she had still a future to look forward to. Seeing what an interest Mrs Joliffe took in her plants, she joined her every day in the garden. There was now a fine crop of sorrel and scurvy-grass—thanks to the Corporal’s unwearying exertions to keep off the birds of every kind, which congregated by hundreds.

The taming of the reindeer had been quite successful; there were now a good many young, and little Michael had been partly brought up on the milk of the mothers. There were now some thirty head in the herd which grazed near the fort, and a supply of the herbage on which they feed was dried and laid up for the winter. These useful animals, which are easily domesticated, were already quite familiar with all the colonists, and did not go far from the enceinte. Some of them were used in sledges to carry timber backwards and forwards. A good many reindeer, still wild, now fell into the trap half way between the fort and Port Barnett. It will be remembered that a large bear was once taken in it; but nothing of the kind occurred this season—none fell victims but the reindeer, whose flesh was salted and laid by for future use. Twenty at least were taken, which in the ordinary course of things would have gone down to the south in the winter.

One day, however, the reindeer-trap suddenly became useless in consequence of the conformation of the soil. After visiting it as usual, the hunter Marbre approached Hobson, and said to him in a significant tone——

"I have just paid my daily visit to the reindeer-trap, sir."

"Well, Marbre, I hope you have been as successful to-day as yesterday, and have caught a couple of reindeer," replied Hobson.

"No, sir, no," replied Marbre, with some embarrassment.
"Your trap has not yielded its ordinary contingent then?"
"No, sir; and if any animal had fallen in, it would certainly have been drowned!"
"Drowned!" cried the Lieutenant, looking at the hunter with an anxious expression.
"Yes, sir," replied Marbre, looking attentively at his superior, "the pit is full of water."
"Ah!" said Hobson, in the tone of a man who attached no importance to that, "you know your pit was partly hollowed out of ice; its walls have melted with the heat of the sun, and then "——

"Beg pardon for interrupting you, sir," said Marbre; "but the water cannot have been produced by the melting of ice."

"Why not, Marbre?" "Because if it came from ice it would be sweet, as you explained to me once before. Now the water in our pit is salt!"

Master of himself as he was, Hobson could not help changing countenance slightly, and he had not a word to say.

"Besides," added Marbre, "I wanted to sound the trench, to see how deep the water was, and to my great surprise, I can tell you, I could not find the bottom."

"Well, Marbre," replied Hobson hastily, "there is nothing so wonderful in that. Some fracture of the soil has established a communication between the sea and the trap. So don’t be uneasy about it, my brave fellow, but leave the trap alone for the present, and be content with setting snares near the fort."

Marbre touched his cap respectfully, and turned on his heel, but not before he had given his chief a searching glance.

Hobson remained very thoughtful for a few moments. Marbre’s tidings were of grave importance. It was evident that the bottom of the trench, gradually melted by the warm waters of the sea, had given way.
Hobson at once called the Sergeant, and having acquainted him with the incident, they went together, unnoticed by their companions, to the beach at the foot of Cape Bathurst, where they had made the bench-marks.

They examined them carefully, and found that since they last did so, the floating island had sunk six inches.

"We are sinking gradually," murmured Sergeant Long. "The ice is wearing away."

"Oh for the winter! the winter!" cried Hobson, stamping his foot upon the ground.

But as yet, alas! there was no sign of the approach of the cold season. The thermometer maintained a mean height of 59° Fahrenheit, and during the few hours of the night the column of mercury scarcely went down three degrees.

Preparations for the approaching winter went on apace, and there was really nothing wanting to Fort Hope, although it had not been revictualled by Captain Craventy’s detachment. The long hours of the Arctic night might be awaited in perfect security. The stores were of course carefully husbanded. There still remained plenty of spirits, only small quantities having been consumed; and there was a good stock of biscuits, which, once gone, could not be replaced. Fresh venison and salt meat were to be had in abundance, and with some antiscorbutic vegetables, the diet was most healthy; and all the members of the little colony were well.

A good deal of timber was cut in the woods clothing the eastern slopes of Lake Barnett. Many were the birch-trees, pines, and firs which fell beneath the axe of Mac-Nab, and were dragged to the house by the tamed reindeer. The carpenter did not spare the little forest, although he cut his wood judiciously; for he never dreamt that timber might fail him, imagining, as he did, Victoria Island to be a peninsula, and knowing the districts near Cape Michael to be rich in different species of trees.

Many a time did the unconscious carpenter congratulate his Lieutenant on having chosen a spot so favoured by Heaven. Woods, game, furred animals, a lagoon teeming with fish, plenty of herbs for the animals, and, as Corporal Joliffe would have added, double pay for the men. Was not Cape Bathurst a corner of a privileged land, the like of which was not to be found in the whole Arctic regions? Truly Hobson was a favourite of Heaven, and ought to return thanks to Providence every day for the discovery of this unique spot.

Ah, Mac-Nab, you little knew how you wrung the heart of your master when you talked in that strain!

The manufacture of winter garments was not neglected in the factory. Mrs Barnett, Madge, Mrs Mac-Nab, Mrs Rae, and Mrs Joliffe—when she could leave her fires—were alike indefatigable. Mrs Barnett knew that they would all have to leave the fort in the depth of winter, and was determined that every one should be warmly clothed. They would have to face the bitterest cold for a good many days during the Polar night, if Victoria Island should halt far from the continent. Boots and clothes ought indeed to be strong and well made, for crossing some hundreds of miles under such circumstances. Mrs Barnett and Madge devoted all their energies to the matter in hand, and the furs, which they knew it would be impossible to save, were turned to good account. They were used double, so that the soft hair was both inside and outside of the clothes; and when wearing them, the whole party would be as richly attired as the grandest princesses, or the most wealthy ladies. Those not in the secret were rather surprised at the free use made of the Company’s property; but Hobson’s authority was not to be questioned, and really martens, polecats, musk-rats, beavers, and foxes multiplied with such rapidity near the fort, that all the furs used could easily be replaced by a few shots, or the setting of a few traps; and when Mrs Mac-Nab saw the beautiful ermine coat which had been made for her baby, her delight was unbounded, and she no longer wondered at anything.

So passed the days until the middle of the month of August. The weather continued fine, and any mists which gathered on the horizon were quickly dispersed by the sunbeams.

Every day Hobson took the bearings, taking care, however, to go some distance from the fort, that suspicions might not be aroused, and he also visited different parts of the island, and was reassured by finding that no important changes appeared to be taking place.

On the 16th August Victoria Island was situated in 167° 27’ west longitude, and 70° 49’ north latitude. It had, therefore, drifted slightly to the south, but without getting any nearer to the American coast, which curved considerably.

The distance traversed by the island since the fracture of the isthmus, or rather since the last thaw, could not be less than eleven or twelve hundred miles to the west.

But what was this distance compared to the vast extent of the ocean? Had not boats been known to be drifted several thousands of miles by currents? Was not this the case with the English ship Resolute, the American brig Advance, and with the Fox, all of which were carried along upon ice-fields until the winter arrested their advance?

CHAPTER VI.
TEN DAYS OF TEMPEST

From the 17th to the 20th August the weather continued fine, and the temperature moderate. The mists on the horizon were not resolved into clouds, and altogether the weather was exceptionally beautiful for such an elevated position. It will be readily understood, however, that Hobson could take no pleasure in the fineness of the climate.
On the 21st August, however, the barometer gave notice of an approaching change. The column of mercury suddenly fell considerably, the sun was completely hidden at the moment of culmination, and Hobson was unable to take his bearings.

The next day the wind changed and blew strongly from the north-west, torrents of rain falling at intervals. Meanwhile, however, the temperature did not change to any sensible extent, the thermometer remaining at 54° Fahrenheit.

Fortunately the proposed works were now all finished, and MacNab had completed the carcass of his boat, which was planked and ribbed. Hunting might now be neglected a little, as the stores were complete, which was fortunate, for the weather became very bad. The wind was high, the rain incessant, and thick fogs rendered it impossible to go beyond the enceinte of the fort.

"What do you think of this change in the weather, Lieutenant?" inquired Mrs Barnett on the morning of the 27th August; "might it not be in our favour?"

"I should not like to be sure of it, madam," replied Hobson; "but anything is better for us than the magnificent weather we have lately had, during which the sun made the waters warmer and warmer. Then, too, the wind from the north-west is so very strong that it may perhaps drive us nearer to the American continent."

"Unfortunately," observed Long, "we can’t take our bearings every day now. It’s impossible to see either sun, moon, or stars in this fog. Fancy attempting to take an altitude now!"

"We shall see well enough to recognise America, if we get anywhere near it," said Mrs Barnett. "Whatever land we approach will be welcome. It will most likely be some part of Russian America—probably Western Alaska."

"You are right, madam," said Hobson; "for, unfortunately, in the whole Arctic Ocean there is not an island, an islet, or even a rock to which we could fasten our vessel!"

"Well," rejoined Mrs Barnett, "why should not our conveyance take us straight to the coasts of Asia? Might not the currents carry us past the opening of Bearing Strait and land us on the shores of Siberia?"

"No, madam, no," replied Hobson; "our ice-field would soon meet the Kamtchatka current, and be carried by it to the northwest. It is more likely, however, that this wind will drive us towards the shores of Russian America."

"We must keep watch, then," said Mrs Barnett, "and ascertain our position as soon as possible."

"We shall indeed keep watch," replied Hobson, "although this fog is very much against us If we should be driven on to the coast, the shock will be felt even if we cannot see. Let’s hope the island will not fall to pieces in this storm! That is at present our principal danger. Well, when it comes we shall see what there is to be done, and meanwhile we must wait patiently."

Of course this conversation was not held in the public room, where the soldiers and women worked together. It was in her own room, with the window looking out on the court, that Mrs Barnett received visitors. It was almost impossible to see indoors even in the daytime, and the wind could be heard rushing by outside like an avalanche. Fortunately, Cape Bathurst protected the house from the north-east winds, but the sand and earth from its summit were hurled down upon the roof with a noise like the pattering of hail. Mac Nab began to feel fresh uneasiness about his chimneys, which it was absolutely necessary to keep in good order. With the roaring of the wind was mingled that of the sea, as its huge waves broke upon the beach. The storm had become a hurricane.

In spite of the fury of the gale, Hobson determined on the morning of the 28th of August to climb to the summit of Cape Bathurst, in order to examine the state of the horizon, the sea, and the sky. He therefore wrapped himself up, taking care to have nothing about him likely to give hold the wind, and set out.

He got to the foot of the cape without much difficulty. The sand and earth blinded him, it is true, but protected by the cliff he had not as yet actually faced the wind. The fatigue began when he attempted to climb the almost perpendicular sides of the promontory; but by clutching at the tufts of herbs with which they were covered, he managed to get to the top, but there the fury of the gale was such that he could neither remain standing nor seated; he was therefore forced to fling himself upon his face behind the little coppice and cling to some shrubs, only raising his head and shoulders above the ground.

The appearance of sea and sky was indeed terrible. The spray dashed over the Lieutenant’s head, and half-a-mile from the cape water and clouds were confounded together in a thick mist. Low jagged rain-clouds were chased along the heavens with giddy rapidity, and heavy masses of vapour were piled upon the zenith. Every now and then an awful stillness fell upon the land, and the only sounds were the breaking of the surf upon the beach and the roaring of the angry billows; but then the tempest recommenced with redoubled fury, and Hobson felt the cape tremble to its foundations. Sometimes the rain poured down with such violence that it resembled grape-shot.

It was indeed a terrible hurricane from the very worst quarter of the heavens. This north-east wind might blow for a long time and cause all manner of havoc. Yet Hobson, who would generally have grieved over the destruction around him, did not complain,—on the contrary, he rejoiced; for if, as he hoped, the island held together, it must be driven to the south-west by this wind, so much more powerful than the currents. And the south-west meant land—
Island, and above all whether this wind has, as I hope, driven it near to the American continent.

Hobson’s first care was to tell his comrades that the hurricane was not yet at its height, and that it would probably last a long time yet. He announced these tidings with the manner of one bringing good news, and every one looked at him in astonishment. Their chief officer really seemed to take a delight in the fury of the elements.

On the 30th Hobson again braved the tempest, not this time climbing the cape, but going down to the beach. What was his joy at noticing some long weeds floating on the top of the waves, of a kind which did not grow on Victoria Island. Christopher Columbus’ delight was not greater when he saw the sea-weed which told him of the proximity of land.

The Lieutenant hurried back to the fort, and told Mrs Barnett and Sergeant Long of his discovery. He had a good mind to tell every one the whole truth now, but a strange presentiment kept him silent.

The occupants of the fort had plenty to amuse them in the long days of compulsory confinement. They went on improving the inside of the various buildings, and dug trenches in the court to carry away the rain-water. Mac-Nab, a hammer in one hand and a nail in the other, was always busy at a job in some corner or another, and nobody took much note of the tempest outside in the daytime; but at night it was impossible to sleep, the wind beat upon the buildings like a battering-ram; between the house and the cape sometimes whirled a huge waterspout of extraordinary dimensions; the planks cracked, the beams seemed about to separate, and there was danger of the whole structure tumbling down. Mac-Nab and his men lived in a state of perpetual dread, and had to be continually on the watch.

Meanwhile, Hobson was uneasy about the stability of the island itself, rather than that of the house upon it. The tempest became so violent, and the sea so rough, that there was really a danger of the dislocation of the ice-field. It seemed impossible for it to resist much longer, diminished as it was in thickness and subject to the perpetual action of the waves. It is true that its inhabitants did not feel any motion, on account of its vast extent, but it suffered from it none the less. The point at issue was simply:—Would the island last until it was flung upon the coast, or would it fall to pieces before it touched firm ground?

There could be no doubt that thus far it had resisted. As the Lieutenant explained to Mrs Barnett, had it already been broken, had the ice-field already divided into a number of islets, the occupants of the fort must have noticed it, for the different pieces would have been small enough to be affected by the motion of the sea, and the people on any one of them would have been pitched about like passengers on a boat. This was not the case, and in his daily observations Lieutenant Hobson had noticed no movement whatever, not so much as a trembling of the island, which appeared as firm and motionless as when it was still connected by its isthmus with the mainland.

But the breaking up, which had not yet taken place, might happen at any minute.

Hobson was most anxious to ascertain whether Victoria Island, driven by the north-west wind out of the current, had approached the continent. Everything, in fact, depended upon this, which was their last chance of safety. But without sun, moon, or stars, instruments were of course useless, as no observations could be taken, and the exact position of the island could not be determined. If, then, they were approaching the land, they would only know it when the land came in sight, and Hobson’s only means of ascertaining anything in time to be of any service, was to get to the south of his dangerous dominions. The position of Victoria Island with regard to the cardinal points had not sensibly altered all the time. Cape Bathurst still pointed to the north, as it did when it was the advanced post of North America. It was, therefore, evident that if Victoria Island should come alongside of the continent, it would touch it with its southern side,—the communication would, in a word, be re-established by means of the broken isthmus; it was, therefore, imperative to ascertain what was going on in that direction.

Hobson determined to go to Cape Michael, however terrible the storm might be, but he meant to keep the real motive of his reconnaissance a secret from his companions. Sergeant Long was to accompany him.

About four o’clock P.M., on the 31st August, Hobson sent for the Sergeant in his own room, that they might arrange together for all eventualities.

"Sergeant Long," he began, "it is necessary that we should, without delay, ascertain the position of Victoria Island, and above all whether this wind has, as I hope, driven it near to the American continent."

"I quite agree with you, sir," replied Long, "and the sooner we find out the better."

"But it will necessitate our going down to the south of the island."

"I am ready, sir."
"I know, Sergeant, that you are always ready to do your duty, but you will not go alone. Two of us ought to go, that we may be able to let our comrades know if any land is in sight; and besides I must see for myself ... we will go together."

"When you like, Lieutenant, just when you think best."

"We will start this evening at nine o’clock, when everybody else has gone to bed."

"Yes, they would all want to come with us," said Long, "and they must not know why we go so far from the factory."

"No, they must not know," replied Hobson, "and if I can, I will keep the knowledge of our awful situation from them until the end."

"It is agreed then, sir?"

"Yes. You will take a tinder-box and some touchwood [Footnote: A fungus used as tinder (Polyporous ignarius).] with you, so that we can make a signal if necessary—if land is in sight in the south, for instance."

"Yes, sir."

"We shall have a rough journey, Sergeant."

"What does that matter, sir, but by the way—the lady?"

"I don’t think I shall tell her. She would want to go with us."

"And she could not," said the Sergeant, "a woman could not battle with such a gale. Just see how its fury is increasing at this moment!"

Indeed the house was rocking to such an extent that it seemed likely to be torn from its foundations.

"No," said Hobson, "courageous as she is, she could not, she ought not to accompany us. But on second thought, it will be best to tell her of our project. She ought to know in case any accident should befall us."

"Yes," replied Long, "we ought not to keep anything from her, and if we do not come back."

"At nine o’clock then, Sergeant."

"At nine o’clock."

And with a military salute Sergeant Long retired.

A few minutes later Hobson was telling Mrs Barnett of his scheme. As he expected the brave woman insisted on accompanying him, and was quite ready to face the tempest. Hobson did not dissuade her by dwelling on the dangers of the expedition, he merely said that her presence was necessary at the fort during his absence, and that her remaining would set his mind at ease. If any accident happened to him it would be a comfort to know that she would take his place.

Mrs Barnett understood and said no more about going; but only urged Hobson not to risk himself unnecessarily. To remember that he was the chief officer, that his life was not his own, but necessary to the safety of all. The Lieutenant promised to be as prudent as possible; but added that the examination of the south of the island must be made at once, and he would make it. The next day Mrs Barnett merely told her companions that the Lieutenant and the Sergeant had gone to make a final reconnaissance before the winter set in.

CHAPTER VII.

A FIRE AND A CRY.

The Lieutenant and the Sergeant spent the evening in the large room of the fort, where all were assembled except the astronomer, who still remained shut up in his cabin. The men were busy over their various occupations, some cleaning their arms, others mending or sharpening their tools. The women were stitching away industriously, and Mrs Paulina Barnett was reading aloud; but she was often interrupted not only by the noise of the wind, which shook the walls of the house like a battering-ram, but by the cries of the baby. Corporal Joliffe, who had undertaken to amuse him, had enough to do. The young gentleman had ridden upon his playmate’s knees until they were worn out, and the Corporal at last put the indefatigable little cavalier on the large table, where he rolled about to his heart’s content until he fell asleep.

At eight o’clock prayers were read as usual, the lamps were extinguished, and all retired to rest.

When every one was asleep, Hobson and Long crept cautiously across the large room and gained the passage, where they found Mrs Barnett, who wished to press their hands once more.

"Till to-morrow," she said to the Lieutenant.

"Yes," replied Hobson, "to-morrow, madam, without fail."

"But if you are delayed?"

"You must wait patiently for us," replied the Lieutenant, "for if in examining the southern horizon we should see a fire, which is not unlikely this dark night, we should know that we were near the coasts of New Georgia, and then it would be desirable for me to ascertain our position by daylight. In fact, we may be away forty eight hours. If, however, we can get to Cape Michael before midnight, we shall be back at the fort to-morrow evening. So wait patiently, madam, and believe that we shall incur no unnecessary risk."
"But," added the lady, "suppose you don’t get back to morrow, suppose you are away more than two days?"
"Then we shall not return at all," replied Hobson simply.

The door was opened, Mrs Barnett closed it behind the Lieutenant and his companion and went back to her own room, where Madge awaited her, feeling anxious and thoughtful.

Hobson and Long made their way across the inner court through a whirlwind which nearly knocked them down; but clinging to each other, and leaning on their iron-bound staffs, they reached the postern gates, and set out between the hills and the eastern bank of the lagoon.

A faint twilight enabled them to see their way. The moon, which was new the night before, would not appear above the horizon, and there was nothing to lessen the gloom of the darkness, which would, however, last but a few hours longer.

The wind and rain were as violent as ever. The Lieutenant and his companion wore impervious boots and waterproof cloaks well pulled in at the waist, and the hood completely covering their heads. Thus protected they got along at a rapid pace, for the wind was behind them, and sometimes drove them on rather faster than they cared to go. Talking was quite out of the question, and they did not attempt it, for they were deafened by the hurricane, and out of breath with the buffeting they received.

Hobson did not mean to follow the coast, the windings of which would have taken him a long way round, and have brought him face to face with the wind, which swept over the sea with nothing to break its fury. His idea was to cut across in a straight line from Cape Bathurst to Cape Michael, and he was provided with a pocket compass with which to ascertain his bearings. He hoped by this means to cross the ten or eleven miles between him and his goal, just before the twilight faded and gave place to the two hours of real darkness.

Bent almost double, with rounded shoulders and stooping heads, the two pressed on. As long as they kept near the lake they did not meet the gale full face, the little hills crowned with trees afforded them some protection, the wind howled fearfully as it bent and distorted the branches, almost tearing the trunks up by the roots; but it partly exhausted its strength, and even the rain when it reached the explorers was converted into impalpable mist, so that for about four miles they did not suffer half as much as they expected to.

But when they reached the southern skirts of the wood, where the hills disappeared, and there were neither trees nor rising ground, the wind swept along with awful force, and involuntarily they paused for a moment. They were still six miles from Cape Michael.

"We are going to have a bad time of it," shouted Lieutenant Hobson in the Sergeant’s ear.
"Yes, the wind and rain will conspire to give us a good beating," answered Long.
"I am afraid that now and then we shall have hail as well," added Hobson.
"It won’t be as deadly as grape-shot," replied Long coolly, "and we have both been through that, and so forwards!"
"Forwards, my brave comrade!"

It was then ten o’clock. The twilight was fading away, dying as if drowned in the mists or quenched by the wind and the rain. There was still, however, some light, and the Lieutenant struck his flint, and consulted his compass, passing a piece of burning touchwood over it, and then, drawing his cloak more closely around him, he plunged after the Sergeant across the unprotected plain.

At the first step, both were flung violently to the ground, but they managed to scramble up, and clinging to each other with their backs bent like two old crippled peasants, they struck into a kind of ambling trot.

There was a kind of awful grandeur in the storm to which neither was insensible. Jagged masses of mist and ragged rain-clouds swept along the ground. The loose earth and sand were whirled into the air and flung down again like grape-shot, and the lips of Hobson and his companion were wet with salt spray, although the sea was two or three miles distant at least.

During the rare brief pauses in the gale, they stopped and took breath, whilst the Lieutenant ascertained their position as accurately as possible.

The tempest increased as the night advanced, the air and water seemed to be absolutely confounded together, and low down on the horizon was formed one of those fearful waterspouts which can overthrow houses, tear up forests, and which the vessels whose safety they threaten attack with artillery. It really seemed as if the ocean itself was being torn from its bed and flung over the devoted little island.

Hobson could not help wondering how it was that the ice-field which supported it was not broken in a hundred places in this violent convulsion of the sea, the roaring of which could be distinctly heard where he stood. Presently Long, who was a few steps in advance, stopped suddenly, and turning round managed to make the Lieutenant hear the broken words—
"Not that way!"
"Why not?"
"The sea!"
"What, the sea! We cannot possibly have got to the southeast coast!"
"Look, look, Lieutenant!"

It was true, a vast sheet of water was indistinctly visible before them, and large waves were rolling up and breaking at the Lieutenant’s feet.

Hobson again had recourse to his flint, and with the aid of some lighted touchwood consulted the needle of his compass very carefully.

"No," he said, "the sea is farther to the left, we have not yet passed the wood between us and Cape Michael."
"Then it is——"

"It is a fracture of the island!" cried Hobson, as both were compelled to fling themselves to the ground before the wind, "either a large portion of our land has been broken off and drifted away, or a gulf has been made, which we can go round. Forwards!"

They struggled to their feet and turned to the right towards the centre of the island. For about ten minutes they pressed on in silence, fearing, not without reason, that all communication with the south of the island would be found to be cut off. Presently, however, they no longer heard the noise of the breakers.

"It is only a gulf." screamed Hobson in the Sergeant’s ear. "Let us turn round."

And they resumed their original direction towards the south, but both knew only too well that they had a fearful danger to face, for that portion of the island on which they were was evidently cracked for a long distance, and might at any moment separate entirely; should it do so under the influence of the waves, they would inevitably be drifted away, whither they knew not. Yet they did not hesitate, but plunged into the mist, not even pausing to wonder if they should ever get back.

What anxious forebodings must, however, have pressed upon the heart of the Lieutenant. Could he now hope that the island would hold together until the winter? had not the inevitable breaking up already commenced? If the wind should not drive them on to the coast, were they not doomed to perish very soon, to be swallowed up by the deep, leaving no trace behind them? What a fearful prospect for all the unconscious inhabitants of the fort!

But through it all the two men, upheld by the consciousness of a duty to perform, bravely struggled on against the gale, which nearly tore them to pieces, along the new beach, the foam sometimes bathing their feet, and presently gained the large wood which shut in Cape Michael. This they would have to cross to get to the coast by the shortest route, and they entered it in complete darkness, the wind thudding among the branches over their heads. Everything seemed to be breaking to pieces around them, the dislocated branches intercepted their passage, and every moment they ran a risk of being crushed beneath a falling tree, or they stumbled over a stump they had not been able to see in the gloom. The noise of the waves on the other side of the wood was a sufficient guide to their steps, and sometimes the furious breakers shook the weakened ground beneath their feet. Holding each other’s hands lest they should lose each other, supporting each other, and the one helping the other up when he fell over some obstacle, they at last reached the point for which they were bound.

But the instant they quitted the shelter of the wood a perfect whirlwind tore them asunder, and flung them upon the ground.

"Sergeant, Sergeant! Where are you?" cried Hobson with all the strength of his lungs.
"Here, here!" roared Long in reply.

And creeping on the ground they struggled to reach each other; but it seemed as if a powerful hand rivetted them to the spot on which they had fallen, and it was only after many futile efforts that they managed to reach each other. Having done so, they tied their belts together to prevent another separation, and crept along the sand to a little rising ground crowned by a small clump of pines. Once there they were a little more protected, and they proceeded to dig themselves a hole, in which they crouched in a state of absolute exhaustion and prostration.

It was half-past eleven o’clock P.M.

For some minutes neither spoke. With eyes half closed they lay in a kind of torpor, whilst the trees above them bent beneath the wind, and their branches rattled like the bones of a skeleton. But yet again they roused themselves from this fatal lethargy, and a few mouthfuls of rum from the Sergeant’s flask revived them.

"Let us hope these trees will hold," at last observed Hobson.
"And that our hole will not blow away with them," added the Sergeant, crouching in the soft sand.
"Well!" said Hobson, "here we are at last, a few feet from Cape Michael, and as we came to make observations, let us make them. I have a presentiment, Sergeant, only a presentiment, remember, that we are not far from firm ground!"

Had the southern horizon been visible the two adventurers would have been able to see two-thirds of it from their position; but it was too dark to make out anything, and if the hurricane had indeed driven them within sight of land, they would not be able to see it until daylight, unless a fire should be lighted on the continent.
As the Lieutenant had told Mrs Barnett, fishermen often visited that part of North America, which is called New Georgia, and there are a good many small native colonies, the members of which collect the teeth of mammoths, these fossil elephants being very numerous in these latitudes. A few degrees farther south, on the island of Sitka, rises New-Archangel, the principal settlement in Russian America, and the head-quarters of the Russian Fur Company, whose jurisdiction once extended over the whole of the Aleutian Islands. The shores of the Arctic Ocean are, however, the favourite resort of hunters, especially since the Hudson’s Bay Company took a lease of the districts formerly in the hands of the Russians; and Hobson, although he knew nothing of the country, was well acquainted with the habits of those who were likely to visit it at this time of the year, and was justified in thinking that he might meet fellow-countrymen, perhaps even members of his own Company, or, failing them, some native Indians, scouring the coasts.

But could the Lieutenant reasonably hope that Victoria Island had been driven towards the coast?

"Yes, a hundred times yes," he repeated to the Sergeant again and again. "For seven days a hurricane has been blowing from the northeast, and although I know that the island is very flat, and there is not much for the wind to take hold of, still all these little hills and woods spread out like sails must have felt the influence of the wind to a certain extent. Moreover, the sea which bears us along feels its power, and large waves are certainly running in shore. It is impossible for us to have remained in the current which was dragging us to the west, we must have been driven out of it, and towards the south. Last time we took our bearings we were two hundred miles from the coast, and in seven days "——

"Your reasonings are very just, Lieutenant," replied the Sergeant, "and I feel that whether the wind helps us or not, God will not forsake us. It cannot be His will that so many unfortunate creatures should perish, and I put my trust in Him!"

The two talked on in broken sentences, making each other hear above the roaring of the storm, and struggling to pierce the gloom which closed them in on every side; but they could see nothing, not a ray of light broke the thick darkness.

About half past one A.M. the hurricane ceased for a few minutes, whilst the fury of the sea seemed to be redoubled, and the large waves, lashed into foam, broke over each other with a roar like thunder.

Suddenly Hobson seizing his companion’s arm shouted——

"Sergeant, do you hear?"

"What?"

"The noise of the sea?"

"Of course I do, sir," replied Long, listening more attentively, "and the sound of the breakers seems to me not"——

"Not exactly the same... isn’t it Sergeant; listen, listen, it is like the sound of surf!... it seems as if the waves were breaking against rocks!"

Hobson and the Sergeant now listened intently, the monotonous sound of the waves dashing against each other in the offing was certainly exchanged for the regular rolling sound produced by the breaking of water against a hard body; they heard the reverberating echoes which told of the neighbourhood of rocks, and they knew that along the whole of the coast of their island there was not a single stone, and nothing more sonorous than the earth and sand of which it was composed!

Could they have been deceived? The Sergeant tried to rise to listen better, but he was immediately flung down by the hurricane, which recommenced with renewed violence. The lull was over, and again the noise of the waves was drowned in the shrill whistling of the wind, and the peculiar echo could no longer be made out.

The anxiety of the two explorers will readily be imagined. They again crouched down in their hole, doubting whether it would not perhaps be prudent to leave even this shelter, for they felt the sand giving way beneath them, and the pines cracking at their very roots. They persevered, however, in gazing towards the south, every nerve strained to the utmost, in the effort to distinguish objects through the darkness.

The first grey twilight of the dawn might soon be expected to appear, and a little before half-past two A.M. Long suddenly exclaimed:

"I see it!"

"What?"

"A fire!"

"A fire?"

"Yes, there—over there!"

And he pointed to the south-west. Was he mistaken? No, for Hobson also made out a faint glimmer in the direction indicated.

"Yes!" he cried, "yes, Sergeant, a fire; there is land there!"
"Unless it is a fire on board ship," replied Long.

"A ship at sea in this weather!" exclaimed Hobson, "impossible! No, no, there is land there, land I tell you, a few miles from us!"

"Well, let us make a signal!"

"Yes, Sergeant, we will reply to the fire on the mainland by a fire on our island!"

Of course neither Hobson nor Long had a torch, but above their heads rose resinous pines distorted by the hurricane.

"Your flint, Sergeant," said Hobson.

Long at once struck his flint, lighted the touchwood, and creeping along the sand climbed to the foot of the thicket of firs, where he was soon joined by the Lieutenant. There was plenty of deadwood about, and they piled it up at the stems of the trees, set fire to it, and soon, the wind helping them, they had the satisfaction of seeing the whole thicket in a blaze

"Ah!" said Hobson, "as we saw their fire, they will see ours!"

The firs burnt with a lurid glare like a large torch. The dried resin in the old trunks aided the conflagration, and they were rapidly consumed. At last the crackling ceased, the flames died away, and all was darkness.

Hobson and Long looked in vain for an answering fire—nothing was to be seen. For ten minutes they watched, hoping against hope, and were just beginning to despair, when suddenly a cry was heard, a distinct cry for help. It was a human voice, and it came from the sea.

The cry was not, however, repeated.

The daylight was now gradually beginning to appear, and the violence of the tempest seemed to be decreasing. Soon it was light enough for the horizon to be examined.

But there was no land in sight, sea and sky were still blended in one unbroken circle.

CHAPTER VIII.

MRS. PAULINA BARNETT’S EXCURSION.

The whole morning Hobson and Sergeant Long wandered about the coast. The weather was much improved, the rain had ceased, and the wind had veered round to the south-east with extraordinary suddenness, without unfortunately decreasing in violence, causing fresh anxiety to the Lieutenant, who could no longer hope to reach the mainland.

The south-east wind would drive the wandering island farther from the continent, and fling it into the dangerous currents, which must drift it to the north of the Arctic Ocean.

The Lieutenant felt very uneasy, as they were naturally afraid that the island might have separated into two parts in the storm. The gulf observed the night before might have spread farther, and if so they would be cut off from their friends.

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They soon reached the wood they had crossed the night before. Numbers of trees were lying on the ground, some with broken stems, others torn up by the roots from the soft soil, which had not afforded them sufficient support. The few which remained erect were stripped of their leaves, and their naked branches creaked and moaned as the south-east wind swept over them.

Two miles beyond this desolated forest the wanderers arrived at the edge of the gulf they had seen the night before without being able to judge of its extent. They examined it carefully, and found that it was about fifty feet wide, cutting the coast line straight across near Cape Michael and what was formerly Fort Barnett, forming a kind of estuary running more than a mile and a half inland. If the sea should again become rough in a fresh storm, this gulf would widen more and more.

Just as Hobson approached the beach, he saw a large piece of ice separate from the island and float away!
"Ah!" murmured Long, "that is the danger!"

Both then turned hurriedly to the west, and walked as fast as they could round the huge gulf, making direct for Fort Hope.

They noticed no other changes by the way, and towards four o’clock they crossed the court and found all their comrades at their usual occupations.

Hobson told his men that he had wished once more before the winter to see if there were any signs of the approach of Captain Craventy’s convoy, and that his expedition had been fruitless.

"Then, sir," observed Marbre, "I suppose we must give up all idea of seeing our comrades from Fort Reliance for this year at least?"

"I think you must," replied Hobson simply, re-entering the public room.

Mrs Barnett and Madge were told of the two chief events of the exploration: the fire and the cry. Hobson was quite sure that neither lib nor the Sergeant were mistaken. The fire had really been seen, the cry had really been heard; and after a long consultation every one came to the conclusion that a ship in distress had passed within sight during the night, and that the island had not approached the American coast.

The south-east wind quickly chased away the clouds and mists, so that Hobson hoped to be able to take his bearings the next day. The night was colder and a fine snow fell, which quickly covered the ground. This first sign of winter was hailed with delight by all who knew of the peril of their situation.

On the 2nd September the sky gradually became free from vapours of all kinds, and the sun again appeared. Patiently the Lieutenant awaited its culmination; at noon he took the latitude, and two hours later a calculation of hour-angles gave him the longitude.

The following were the results obtained: Latitude, 70° 57’; longitude, 170° 30’.

So that, in spite of the violence of the hurricane, the island had remained in much the same latitude, although it had been drifted somewhat farther west. They were now abreast of Behring Strait, but four hundred miles at least north of Capes East and Prince of Wales, which jut out on either side at the narrowest part of the passage.

The situation was, therefore, more dangerous than ever, as the island was daily getting nearer to the dangerous Kamtchatka Current, which, if it once seized it in its rapid waters, might carry it far away to the north. Its fate would now soon be decided. It would either stop where the two currents met, and there be shut in by the ice of the approaching winter, or it would be drifted away and lost in the solitudes of the remote hyperborean regions.

Hobson was painfully moved on ascertaining the true state of things, and being anxious to conceal his emotion, he shut himself up in his own room and did not appear again that day. With his chart before him, he racked his brains to find some way out of the difficulties with which he was beset.

The temperature fell some degrees farther the same day, and the mists, which had collected above the south-eastern horizon the day before, resolved themselves into snow during the night, so that the next day the white carpet was two inches thick. Winter was coming at last.

On September 3rd Mrs Barnett resolved to go a few miles along the coast towards Cape Esquimaux. She wished to see for herself the changes lately produced. If she had mentioned her project to the Lieutenant, he would certainly have offered to accompany her; but she did not wish to disturb him, and decided to go without him, taking Madge with her. There was really nothing to fear, the only formidable animals, the bears, seemed to have quite deserted the island after the earthquake; and two women might, without danger, venture on a walk of a few hours without an escort.

Madge agreed at once to Mrs Barnett’s proposal, and without a word to any one they set out at eight o’clock A.M., provided with an ice-chisel, a flask of spirits, and a wallet of provisions.

After leaving Cape Bathurst they turned to the west. The sun was already dragging its slow course along the horizon, for at this time of year it would only be a few degrees above it at its culmination. But its oblique rays were clear and powerful, and the snow was already melting here and there beneath their influence.

The coast was alive with flocks of birds of many kinds; ptarmigans, guillemots, puffins, wild geese, and ducks of every variety fluttered about, uttering their various cries, skimming the surface of the sea or of the lagoon, according as their tastes led them to prefer salt or fresh water.

Mrs Barnett had now a capital opportunity of seeing how many furred animals haunted the neighbourhood of Fort Hope. Martens, ermines, musk-rats, and foxes were numerous, and the magazines of the factory might easily have been filled with their skins, but what good would that be now? The inoffensive creatures, knowing that hunting was suspended, went and came fearlessly, venturing close up to the palisade, and becoming tamer every day. Their instinct doubtless told them that they and their old enemies were alike prisoners on the island, and a common danger bound them together. It struck Mrs Barnett as strange that the two enthusiastic hunters—Marbre and Sabine—should obey the Lieutenant’s orders to spare the furred animals without remonstrance or complaint, and appeared not even to wish to shoot the valuable game around them. It was true the foxes and others had not yet assumed their winter
robes, but this was not enough to explain the strange indifference of the two hunters.

Whilst walking at a good pace and talking over their strange situation, Mrs Barnett and Madge carefully noted the peculiarities of the sandy coast. The ravages recently made by the sea were distinctly visible. Fresh landslips enabled them to see new fractures in the ice distinctly. The strand, fretted away in many places, had sunk to an enormous extent, and the waves washed along a level beach when the perpendicular shores had once checked their advance. It was evident that parts of the island were now only on a level with the ocean.

"O Madge!" exclaimed Mrs Barnett, pointing to the long smooth tracts on which the curling waves broke in rapid succession, "our situation has indeed become aggravated by the awful storm! It is evident that the level of the whole island is gradually becoming lower. It is now only a question of time. Will the winter come soon enough to save us? Everything depends upon that."

"The winter will come, my dear girl," replied Madge with her usual unshaken confidence. "We have already had two falls of snow. Ice is beginning to accumulate, and God will send it us in time, I feel sure."

"You are right, Madge, we must have faith!" said Mrs Barnett. "We women who do not trouble ourselves about the scientific reasons for physical phenomena can hope, when men who are better informed, perhaps, despair. That is one of our blessings, which our Lieutenant unfortunately does not share. He sees the significance of facts, he reflects, he calculates, he reckons up the time still remaining to us, and I see that he is beginning to lose all hope."

"He is a brave, energetic man, for all that," replied Madge.

"Yes," added Mrs Barnett, "and if it be in the power of man to save us, he will do it."

By nine o’clock the two women had walked four miles. They were often obliged to go inland for some little distance, to avoid parts of the coast already invaded by the sea. Here and there the waves had encroached half-a-mile beyond the former high-water line, and the thickness of the ice-field had been considerably reduced. There was danger that it would soon yield in many places, and that new bays would be formed all along the coast.

As they got farther from the fort Mrs Barnett noticed that the number of furred animals decreased considerably. The poor creatures evidently felt more secure near a human habitation. The only formidable animals which had not been led by instinct to escape in time from the dangerous island were a few wolves, savage beasts which even a common danger did not conciliate. Mrs Barnett and Madge saw several wandering about on the plains, but they did not approach, and soon disappeared behind the hills on the south of the lagoon.

"What will become of all these imprisoned animals," said Madge, "when all food fails them, and they are famished with hunger in the winter?"

"They will not be famished in a hurry, Madge," replied Mrs Barnett, "and we shall have nothing to fear from them; all the martens, ermines, and Polar hares, which we spare will fall an easy prey to them. That is not our danger; the brittle ground beneath our feet, which may at any moment give way, is our real peril. Only look how the sea is advancing here. It already covers half the plain, and the waves, still comparatively warm, are eating away our island above and below at the same time! If the cold does not stop it very soon, the sea will shortly join the lake, and we shall lose our lagoon as we lost our river and our port!"

"Well, if that should happen it will indeed be an irreparable misfortune!" exclaimed Madge.

"Why?" asked Mrs Barnett, looking inquiringly at her companion.

"Because we shall have no more fresh water," replied Madge.

"Oh, we shall not want for fresh water, Madge," said Mrs Barnett, "the rain, the snow, the ice, the icebergs of the ocean, the very ice-field on which we float, will supply us with that; no, no, that is not our danger."

About ten o’clock Mrs Barnett and Madge had readied the rising ground above Cape Esquimaux, but at least two miles inland, for they had found it impossible to follow the coast, worn away as it was by the sea. Being rather tired with the many détours they had had to make, they decided to rest a few minutes before setting off on their return to Fort Hope. A little hill crowned by a clump of birch trees and a few shrubs afforded a pleasant shelter, and a bank covered with yellow moss, from which the snow had melted, served them as a seat. The little wallet was opened, and they shared their simple repast like sisters.

Half an hour later, Mrs Barnett proposed that they should climb along the promontory to the sea, and find out the exact state of Cape Esquimaux. She was anxious to know if the point of it had resisted the storm, and Madge declared herself ready to follow "her dear girl" wherever she went, but at the same time reminded her that they were eight or nine miles from Cape Bathurst already, and that they must not make Lieutenant Hobson uneasy by too long an absence.

But some presentiment made Mrs Barnett insist upon doing as she proposed, and she was right, as the event proved. It would only delay them half an hour after all.

They had not gone a quarter of a mile before Mrs Barnett stopped suddenly, and pointed to some clear and regular impressions upon the snow. These marks must have been made within the last nine or ten hours, or the last fall of snow would have covered them over.
"What animal has passed along here, I wonder?" said Madge.

"It was not an animal," said Mrs Barnett, bending down to examine the marks more closely, "not a quadruped certainly, for its four feet would have left impressions very different from these. Look, Madge, they are the footprints of a human person!"

"But who could have been here?" inquired Madge; "none of the soldiers or women have left the fort, and we are on an island, remember. You must be mistaken, my dear; but we will follow the marks, and see where they lead us."

They did so, and fifty paces farther on both again paused.

"Look, Madge, look!" cried Mrs Barnett, seizing her companion's arm, "and then say if I am mistaken."

Near the footprints there were marks of a heavy body having been dragged along the snow, and the impression of a hand.

"It is the hand of a woman or a child!" cried Madge.

"Yes!" replied Mrs Barnett; "a woman or a child has fallen here exhausted, and risen again to stumble farther on; look, the footprints again, and farther on more falls!"

"Who, who could it have been?" exclaimed Mrs Barnett. "Some unfortunate creature imprisoned like ourselves for three or four months perhaps. Or some shipwrecked wretch flung upon the coast in the storm. You remember the fire and the cry of which Sergeant Long and Lieutenant Hobson spoke. Come, come, Madge, there may be some one in danger for us to save!"

And Mrs Barnett, dragging Madge with her, ran along following the traces, and further on found that they were stained with blood.

The brave, tender-hearted woman, had spoken of saving some one in danger; had she then forgotten that there was no safety for any upon the island, doomed sooner or later to be swallowed up by the ocean?

The impressions on the ground led towards Cape Esquimaux. And the two carefully traced them, but the footprints presently disappeared, whilst the blood-stains increased, making an irregular pathway along the snow. It was evident the poor wretch had been unable to walk farther, and had crept along on hands and knees; here and there fragments of torn clothes were scattered about, bits of sealskin and fur.

"Come, come," cried Mrs Barnett, whose heart beat violently.

Madge followed her, they were only a few yards from Cape Esquimaux, which now rose only a few feet upon the sea-level against the background of the sky, and was quite deserted.

The impressions now led them to the right of the cape, and running along they soon climbed to the top, but there was still nothing, absolutely nothing, to be seen. At the foot of the cape, where the slight ascent began, the traces turned to the right, and led straight to the sea.

Mrs Barnett was turning to the right also, but just as she was stepping on to the beach, Madge, who had been following her and looking about uneasily, caught hold of her hand, and exclaimed—

"Stop! stop!" "No, Madge, no!" cried Mrs Barnett, who was drawn along by a kind of instinct in spite of herself.

"Stop, stop, and look!" cried Madge, tightening her hold on her mistress's hand.

On the beach, about fifty paces from Cape Esquimaux, a large white mass was moving about and growling angrily.

It was an immense Polar bear, and the two women watched it with beating hearts. It was pacing round and round a bundle of fur on the ground, which it smelt at every now and then, lifting it up and letting it fall again. The bundle of fur looked like the dead body of a walrus.

Mrs Barnett and Madge did not know what to think, whether to advance or to retreat, but presently as the body was moved about a kind of hood fell back from the head, and some long locks of brown hair were thrown over the snow.

"It is a woman! a woman!" cried Mrs Barnett, eager to rush to her assistance and find out if she were dead or alive!

"Stop!" repeated Madge, holding her back; "the bear won't harm her."

And, indeed, the formidable creature merely turned the body over, and showed no inclination of tearing it with its dreadful claws. It went away and came back apparently uncertain what to do. It had not yet perceived the two women who were so anxiously watching it.

Suddenly a loud crack was heard. The earth shook, and it seemed as if the whole of Cape Esquimaux were about to be plunged into the sea.

A large piece of the island had broken away, and a huge piece of ice, the centre of gravity of which had been displaced by the alteration in its specific weight, drifted away, carrying with it the bear and the body of the woman.

Mrs Barnett screamed, and would have flung herself upon the broken ice before it floated away, if Madge had not clutched her hand firmly, saying quietly——
“Stop! stop!”

At the noise produced by the breaking off of the piece of ice, the bear started back with a fearful growl, and, leaving the body, rushed to the side where the fracture had taken place; but he was already some forty feet from the coast, and in his terror he ran round and round the islet, tearing up the ground with his claws, and stamping the sand and snow about him.

Presently he returned to the motionless body, and, to the horror of the two women, seized it by the clothes with his teeth, and carrying it to the edge of the ice, plunged with it into the sea.

Being a powerful swimmer, like the whole race of Arctic bears, he soon gained the shores of the island. With a great exertion of strength he managed to climb up the ice, and having reached the surface of the island he quietly laid down the body he had brought with him.

Mrs Barnett could no longer be held back, and, shaking off Madge’s hold, she rushed to the beach, never thinking of the danger she ran in facing a formidable carnivorous creature.

The bear, seeing her approach, reared upon his hind legs, and came towards her, but at about ten paces off he paused, shook his great head, and turning round with a low growl, quietly walked away towards the centre of the island, without once looking behind him. He, too, was evidently affected by the mysterious fear which had tamed all the wild animals on the island.

Mrs Barnett was soon bending over the body stretched about the snow.

A cry of astonishment burst from her lips:

"Madge, Madge, come!" she exclaimed.

Madge approached and looked long and fixedly at the inanimate body. It was the young Esquimaux girl Kalumah!

CHAPTER IX.

KALUMAH’S ADVENTURES.

Kalumah on the floating island, two hundred miles from the American coast. It was almost incredible!

The first thing to be ascertained was whether the poor creature still breathed. Was it possible to restore her to life? Mrs Barnett loosed her clothes, and found that her body was not yet quite cold. Her heart beat very feebly, but it did beat. The blood they had seen came from a slight wound in her hand; Madge bound it up with her handkerchief, and the bleeding soon ceased.

At the same time Mrs Barnett raised the poor girl’s head, and managed to pour a few drops of rum between her parted lips. She then bathed her forehead and temples with cold water, and waited.

A few minutes passed by, and neither of the watchers were able to utter a word, so anxious were they lest the faint spark of life remaining to the young Esquimaux should be quenched.

But at last Kalumah’s breast heaved with a faint sigh, her hands moved feebly, and presently she opened her eyes, and recognising her preserver she murmured—

"Mrs Barnett! Mrs Barnett!"

The lady was not a little surprised at hearing her own name. Had Kalumah voluntarily sought the floating island, and did she expect to find her old European friends on it? If so, how had she come to know it, and how had she managed to reach the island, two hundred miles from the mainland? How could she have guessed that the ice-field as bearing Mrs Barnett and all the occupants of Fort Hope away from the American coast? Really it all seemed quite inexplicable.

"She lives—she will recover!" exclaimed Madge, who felt the vital heat and pulsation returning to the poor bruised body.

"Poor child, poor child!" said Mrs Barnett, much affected; "she murmured my name when she was at the point of death."

But now Kalumah again half opened her eyes, and looked about her with a dreamy unsatisfied expression, presently, however, seeing Mrs Barnett, her face brightened, the same name again burst from her lips, and painfully raising her hand she let it fall on that of her friend.

The anxious care of the two women soon revived Kalumah, whose extreme exhaustion arose not only from fatigue but also from hunger. She had eaten nothing for forty-eight hours. Some pieces of cold venison and a little rum refreshed her, and she soon felt able to accompany her newly-found friends to the fort.

Before starting, however, Kalumah, seated on the sand between Mrs Barnett and Madge, overwhelmed them with thanks and expressions of attachment. Then she told her story: she had not forgotten the Europeans of Fort Hope, and the thought of Mrs Paulina Barnett had been ever present with her. It was not by chance, as we shall see, that she had come to Victoria Island.

The following is a brief summary of what Kalumah related to Mrs Barnett:—

Our readers will remember the young Esquimaux’s promise to come and see her friends at Fort Hope again in
the fine season of the next year. The long Polar night being over, and the month of May having come round, Kalumah set out to fulfill her pledge. She left Russian America, where she had wintered, and accompanied by one of her brothers-in-law, started for the peninsula of Victoria.

Six weeks later, towards the middle of June, she got to that part of British America which is near Cape Bathurst. She at once recognized the volcanic mountains shutting in Liverpool Bay, and twenty miles farther east she came to Walruses’ Bay, where her people had so often hunted morses and seals.

But beyond the bay on the north, there was nothing to be seen. The coast suddenly sank to the south-east in an almost straight line. Cape Esquimaux and Cape Bathurst had alike disappeared.

Kalumah understood what had happened. Either the whole of the peninsula had been swallowed up by the waves, or it was floating away as an island, no one knew whither!

Kalumah’s tears flowed fast at the loss of those whom she had come so far to see.

Her brother-in-law, however, had not appeared surprised at the catastrophe. A kind of legend or tradition had been handed down amongst the nomad tribes of North America, that Cape Bathurst did not form part of the mainland, but had been joined on to it thousands of years before, and would sooner or later be torn away in some convulsion of nature. Hence the surprise at finding the factory founded by Hobson at the foot of the cape. But with the unfortunate reserve characteristic of their race, and perhaps also under the influence of that enmity which all natives feel for those who settle in their country, they said nothing to the Lieutenant, whose fort was already finished. Kalumah knew nothing of this tradition, which after all rested on no trustworthy evidence, and probably belonged to the many northern legends relating to the creation. This was how it was that the colonists of Fort Hope were not warned of the danger they ran in settling on such a spot.

Had a word in season been spoken to Hobson he would certainly have gone farther in search of some firmer foundation for his fort than this soil, certain peculiarities of which he had noticed at the first.

When Kalumah had made quite sure that all trace of Cape Bathurst was gone, she explored the coast as far as the further side of Washburn Bay, but without finding any sign of those she sought, and at last there was nothing left for her to do but to return to the fisheries of Russian America.

Kalumah now gave up all hope of again seeing Mrs Barnett and the other colonists of Fort Hope. She concluded that they had all been swallowed up by the ocean long ago.

At this part of her tale the young Esquimaux looked at Mrs Barnett with eyes full of tears, and pressed her hand affectionately, and then she murmured her thanks to God for her own preservation through the means of her friend.

Kalumah on her return home resumed her customary occupations, and worked with the rest of her tribe at the fisheries near Icy Cape, a point a little above the seventieth parallel, and more than six hundred miles from Cape Bathurst.

Nothing worthy of note happened during the first half of the month of April; but towards the end the storm began which had caused Hobson so much uneasiness, and which had apparently extended its ravages over the whole of the Arctic Ocean and beyond Behring Strait. It was equally violent at Icy Cape and on Victoria Island, and, as the Lieutenant ascertained in taking his bearings, the latter was then not more than two hundred miles from the coast.

As Mrs Barnett listened to Kalumah, her previous information enabled her rapidly to find the key to the strange events which had taken place, and to account for the arrival of the young native on the island.

During the first days of the storm the Esquimaux of Icy Cape were confined to their huts. They could neither get out nor fish. But during the night of the 31st August a kind of presentiment led Kalumah to venture down to the beach, and, braving the wind and rain in all their fury, she peered anxiously through the darkness at the waves rising mountains high.

Presently she thought she saw a huge mass driven along by the hurricane parallel with the coast. Gifted with extremely keen sight—as are all these wandering tribes accustomed to the long dark Polar nights—she felt sure that she was not mistaken.

Something of vast bulk was passing two miles from the coast, and that something could be neither a whale, a boat, nor, at this time of the year, even an iceberg.

But Kalumah did not stop to reason. The truth flashed upon her like a revelation. Before her excited imagination rose the images of her friends. She saw them all once more, Mrs Barnett, Madge, Lieutenant Hobson, the baby she had covered with kisses at Fort Hope. Yes, they were passing, borne along in the storm on a floating ice-field!

Kalumah did not doubt or hesitate a moment. She felt that she must tell the poor shipwrecked people, which she was sure they were, of the close vicinity of the land. She ran to her hut, seized a torch of tow and resin, such as the Esquimaux use when fishing at night, lit it and waved it on the beach at the summit of Icy Cape.
This was the fire which Hobson and Long had seen when crouching on Cape Michael on the night of the 31st August.

Imagine the delight and excitement of the young Esquimaux when a signal replied to hers, when she saw the huge fire lit by Lieutenant Hobson, the reflection of which reached the American coast, although he did not dream that he was so near it.

But it quickly went out, the lull in the storm only lasted a few minutes, and the fearful gale, veering round to the south-east, swept along with redoubled violence.

Kalumah feared that her "prey," so she called the floating island, was about to escape her, and that it would not be driven on to the shore. She saw it fading away, and knew that it would soon disappear in the darkness and be lost to her on the boundless ocean.

It was indeed a terrible moment for the young native, and she determined at all hazards to let her friends know of their situation. There might yet be time for them to take some steps for their deliverance, although every hour took them farther from the continent.

She did not hesitate a moment, her kayak was at hand, the frail bark in which she had more than once braved the storms of the Arctic Ocean, she pushed it down to the sea, hastily laced on the sealskin jacket fastened to the canoe, and, the long paddle in her hand, she plunged into the darkness.

Mrs Barnett here pressed the brave child to her heart, and Madge shed tears of sympathy.

When launched upon the roaring ocean, Kalumah found the change of wind in her favour. The waves dashed over her kayak, it is true, but they were powerless to harm the light boat, which floated on their crests like a straw. It was capsized several times, but a stroke of the paddle righted it at once.

After about an hour's hard work, Kalumah could see the wandering island more distinctly, and had no longer any doubt of effecting her purpose, as she was but a quarter of a mile from the beach.

It was then that she uttered the cry which Hobson and Long had heard.

But, alas! Kalumah now felt herself being carried away towards the west by a powerful current, which could takefirmer hold of her kayak than of the floating island!

In vain she struggled to beat back with her paddle, the light boat shot along like an arrow. She uttered scream after scream, but she was unheard, for she was already far away, and when the day broke the coasts of Alaska and the island she had wished to reach, were but two distant masses on the horizon.

Did she despair? Not yet. It was impossible to get back to the American continent in the teeth of the terrible wind which was driving the island before it at a rapid pace, taking it out two hundred miles in thirty-six hours, and assisted by the current from the coast.

There was but one thing left to do. To get to the island by keeping in the same current which was drifting it away.

But, alas! the poor girl's strength was not equal to her courage, she was faint from want of food, and, exhausted as she was, she could no longer wield her paddle.

For some hours she struggled on, and seemed to be approaching the island, although those on it could not see her, as she was but a speck upon the ocean. She struggled on until her stiffened arms and bleeding hands fell powerless, and, losing consciousness, she was floated along in her frail kayak at the mercy of winds and waves.

She did not know how long this lasted, she remembered nothing more, until a sudden shock roused her, her kayak had struck against something, it opened beneath her, and she was plunged into cold water, the freshness of which revived her. A few moments later, she was flung upon the sand in a dying state by a large wave.

This had taken place the night before, just before dawn—that is to say, about two or three o'clock in the morning. Kalumah had then been seventy hours at sea since she embarked!

The young native had no idea where she had been thrown, whether on the continent or on the floating island, which she had so bravely sought, but she hoped the latter. Yes, hoped that she had reached her friends, although she knew that the wind and current had driven them into the open sea, and not towards the coast!

The thought revived her, and, shattered as she was, she struggled to her feet, and tried to follow the coast.

She had, in fact, been providentially thrown on that portion of Victoria Island which was formerly the upper corner of Walruses' Bay. But, worn away as it was by the waves, she did not recognise the land with which she had once been familiar.

She tottered on, stopped, and again struggled to advance; the beach before her appeared endless, she had so often to go round where the sea had encroached upon the sand. And so dragging herself along, stumbling and scrambling up again, she at last approached the little wood where Mrs. Barnett and Madge had halted that very morning. We know that the two women found the footprints left by Kalumah in the snow not far from this very spot, and it was at a short distance farther on that the poor girl fell for the last time. Exhausted by fatigue and hunger, she still managed to creep along on hands and knees for a few minutes longer.
A great hope kept her from despair, for she had at last recognised Cape Esquimaux, at the foot of which she and her people had encamped the year before. She knew now that she was but eight miles from the factory, and that she had only to follow the path she had so often traversed when she went to visit her friends at Fort Hope.

Yes, this hope sustained her, but she had scarcely reached the beach when her forces entirely failed her, and she again lost all consciousness. But for Mrs Barnett she would have died.

"But, dear lady," she added, "I knew that you would come to my rescue, and that God would save me by your means."

We know the rest. We know the providential instinct which led Mrs Barnett and Madge to explore this part of the coast on this very day, and the presentiment which made them visit Cape Esquimaux after they had rested, and before returning to Fort Hope. We know too—as Mrs Barnett related to Kalumah—how the piece of ice had floated away, and how the bear had acted under the circumstances.

"And after all," added Mrs Barnett with a smile, "it was not I who saved you, but the good creature without whose aid you would never have come back to us, and if ever we see him again we will treat him with the respect due to your preserver."

During this long conversation Kalumah was rested and refreshed, and Mrs Barnett proposed that they should return to the fort at once, as she had already been too long away. The young girl immediately rose ready to start.

Mrs Barnett was indeed most anxious to tell the Lieutenant of all that had happened during the night of the storm, when the wandering island had neared the American continent, but she urged Kalumah to keep her adventures secret, and to say nothing about the situation of the island. She would naturally be supposed to have come along the coast, in fulfilment of the promise she had made to visit her friends in the fine season. Her arrival would tend only to strengthen the belief of the colonists that no changes had taken place in the country around Cape Bathurst, and to set at rest the doubts any of them might have entertained.

It was about three o’clock when Madge and Mrs Barnett, with Kalumah hanging on her arm, set out towards the east, and before five o’clock in the afternoon they all arrived at the postern of the fort.

CHAPTER X.
THE KAMTCHATKA CURRENT.

We can readily imagine the reception given to Kalumah by all at the fort. It seemed to them that the communication with the outer world was reopened. Mrs Mac-Nab, Mrs Rae and Mrs Joliffe overwhelmed her with caresses, but Kalumah’s first thought was for the little child, she caught sight of him immediately, and running to him covered him with kisses.

The young native was charmed and touched with the hospitality of her European hosts. A positive fête was held in her honour and every one was delighted that she would have to remain at the fort for the winter, the season being too far advanced for her to get back to the settlements of Russian America before the cold set in.

But if all the settlers were agreeably surprised at the appearance of Kalumah, what must Lieutenant Hobson have thought when he saw her leaning on Mrs Barnett’s arm. A sudden hope flashed across his mind like lightning, and as quickly died away: perhaps in spite of the evidence of his daily observations Victoria Island had run aground somewhere on the continent unnoticed by any of them.

Mrs Barnett read the Lieutenant’s thoughts in his face, and shook her head sadly.

He saw that no change had taken place in their situation, and waited until Mrs Barnett was able to explain Kalumah’s appearance.

A few minutes later he was walking along the beach with the lady, listening with great interest to her account of Kalumah’s adventures.

So he had been right in all his conjectures. The north-east hurricane had driven the island out of the current. The ice-field had approached within a mile at least of the American continent. It had not been a fire on board ship which they had seen, or the cry of a shipwrecked mariner which they had heard. The mainland had been close at hand, and had the north-east wind blown hard for another hour Victoria Island would have struck against the coast of Russian America. And then at this critical moment a fatal, a terrible wind had driven the island away from the mainland back to the open sea, and it was again in the grasp of the irresistible current, and was being carried along with a speed which nothing could check, the mighty south-east wind aiding its headlong course, to that terribly dangerous spot where it would be exposed to contrary attractions, either of which might lead to its destruction and that of all the unfortunate people dragged along with it.

For the hundredth time the Lieutenant and Mrs Barnett discussed all the bearings of the case, and then Hobson inquired if any important changes had taken place in the appearance of the districts between Cape Bathurst and Walruses’ Bay?

Mrs Barnett replied that in some places the level of the coast appeared to be lowered, and that the waves now covered tracts of sand which were formerly out of their reach. She related what had happened at Cape Esquimaux,
and the important fracture which had taken place at that part of the coast.

Nothing could have been less satisfactory. It was evident that the ice-field forming the foundation of the island was breaking up. What had happened at Cape Esquimaux might at any moment be reproduced at Cape Bathurst. At any hour of the day or night the houses of the factory might be swallowed up by the deep, and the only thing which could save them was the winter, the bitter winter which was fortunately rapidly approaching.

The next day, September 4th, when Hobson took his bearings, he found that the position of Victoria Island had not sensibly changed since the day before. It had remained motionless between the two contrary currents, which was on the whole the very best thing that could have happened.

"If only the cold would fix us where we are, if the ice wall would shut us in, and the sea become petrified around us," exclaimed Hobson, "I should feel that our safety was assured. We are but two hundred miles from the coast at this moment, and by venturing across the frozen ice fields we might perhaps reach either Russian America or Kamtchatka. Winter, winter at any price, let the winter set in, no matter how rapidly."

Meanwhile, according to the Lieutenant’s orders, the preparations for the winter were completed. Enough forage to last the dogs the whole of the Polar night was stored up. They were all in good health, but getting rather fat with having nothing to do. They could not be taken too much care of, as they would have to work terribly hard in the journey across the ice after the abandonment of Fort Hope. It was most important to keep up their strength, and they were fed on raw reindeer venison, plenty of which was easily attainable.

The tame reindeer also prospered, their stable was comfortable, and a good supply of moss was laid by for them in the magazines of the fort. The females provided Mrs Joliffe with plenty of milk for her daily culinary needs.

The Corporal and his little wife had also sown fresh seeds, encouraged by the success of the last in the warm season. The ground had been prepared beforehand for the planting of scurvy-grass and Labrador Tea. It was important that there should be no lack of these valuable anti-scorbutics.

The sheds were filled with wood up to the very roof. Winter might come as soon as it liked now, and freeze the mercury in the cistern of the thermometer, there was no fear that they would again be reduced to burn their furniture as they had the year before. Mac-Nab and his men had become wise by experience, and the chips left from the boat-building added considerably to their stock of fuel.

About this time a few animals were taken which had already assumed their winter furs, such as martens, polecats, blue foxes, and ermines. Marbre and Sabine had obtained leave from the Lieutenant to set some traps outside the enceinte. He did not like to refuse them this permission, lest they should become discontented, as he had really no reason to assign for putting a stop to the collecting of furs, although he knew full well that the destination of these harmless creatures could do nobody any good. Their flesh was, however, useful for feeding the dogs, and enabled them to economise the reindeer venison.

All was now prepared for the winter, and the soldiers worked with an energy which they would certainly not have shown if they had been told the secret of their situation.

During the next few days the bearings were taken with the greatest care, but no change was noticeable in the situation of Victoria Island; and Hobson, finding that it was motionless, began to have fresh hope. Although there were as yet no symptoms of winter in inorganic nature, the temperature maintaining a mean height of 49° Fahrenheit, some swans flying to the south in search of a warmer climate was a good omen. Other birds capable of a long-sustained flight over vast tracts of the ocean began to desert the island. They knew full well that the continent of America and of Asia, with their less severe climates and their plentiful resources of every kind, were not far off, and that their wings were strong enough to carry them there. A good many of these birds were caught; and by Mrs Barnett’s advice the Lieutenant tied round their necks a stiff cloth ticket, on which was inscribed the position of the wandering island, and the names of its inhabitants. The birds were then set free, and their captors watched them winging their way to the south with envious eyes.

Of course none were in the secret of the sending forth of these messengers, except Mrs Barnett, Madge, Kalumah, Hobson, and Long.

The poor quadrupeds were unable to seek their usual winter refuges in the south. Under ordinary circumstances the reindeer, Polar hares, and even the wolves would have left early in September for the shores of the Great Bear and Slave Lakes, a good many degrees farther south; but now the sea was an insurmountable barrier, and they, too, would have to wait until the winter should render it passable. Led by instinct they had doubtless tried to leave the island, but, turned back by the water, the instinct of self-preservation had brought them to the neighbourhood of Fort Hope, to be near the men who were once their hunters and most formidable enemies, but were now, like themselves, rendered comparatively inoffensive by their imprisonment.

The observations of the 5th, 6th, 7th, 8th, and 9th September, revealed no alteration in the position of Victoria Island. The large eddy between the two currents kept it stationary. Another fifteen days, another three weeks of this state of things, and Hobson felt that they might be saved.
But they were not yet out of danger, and many terrible, almost supernatural, trials still awaited the inhabitants of Fort Hope.

On the 10th of September observations showed a displacement of Victoria Island. Only a slight displacement, but in a northerly direction.

Hobson was in dismay; the island was finally in the grasp of the Kamtchatka Current, and was drifting towards the unknown latitudes where the large icebergs come into being; it was on its way to the vast solitudes of the Arctic Ocean, interdicted to the human race, from which there is no return.

Hobson did not hide this new danger from those who were in the secret of the situation. Mrs Barnett, Madge, Kalumah, and Sergeant Long received this fresh blow with courage and resignation.

"Perhaps," said Mrs Barnett, "the island may stop even yet. Perhaps it will move slowly. Let us hope on ... and wait! The winter is not far off, and we are going to meet it. In any case God's will be done!" "My friends," said Hobson earnestly, "do you not think I ought now to tell our comrades. You see in what a terrible position we are and all that may await us! Is it not taking too great a responsibility to keep them in ignorance of the peril they are in?"

"I should wait a little longer," replied Mrs Barnett without hesitation; "I would not give them all over to despair until the last chance is gone."

"That is my opinion also," said Long.

Hobson had thought the same, and was glad to find that his companions agreed with him in the matter.

On the 11th and 12th September, the motion towards the north was more noticeable. Victoria Island was drifting at a rate of from twelve to thirteen miles a day, so that each day took them the same distance farther from the land and nearer to the north. They were, in short, following the decided course made by the Kamtchatka Current, and would quickly pass that seventieth degree which once cut across the extremity of Cape Bathurst, and beyond which no land of any kind was to be met with in this part of the Arctic Ocean.

Every day Hobson looked out their position on the map, and saw only too clearly to what awful solitudes the wandering island was drifting.

The only hope left consisted, as Mrs Barnett had said, in the fact that they were going to meet the winter. In thus drifting towards the north they would soon encounter those ice-cold waters, which would consolidate and strengthen the foundations of the island. But if the danger of being swallowed up by the waves was decreased, would not the unfortunate colonists have an immense distance to traverse to get back from these remote northern regions? Had the boat been finished, Lieutenant Hobson would not have hesitated to embark the whole party in it, but in spite of the zealous efforts of the carpenter it was not nearly ready, and indeed it taxed Mac-Nab's powers to the uttermost to construct a vessel on which to trust the lives of twenty persons in such a dangerous sea.

By the 16th September Victoria Island was between seventy-three and eighty miles north of the spot where its course had been arrested for a few days between the Behring and Kamtchatka Cur rents There were now, however, many signs of the approach of winter Snow fell frequently and in large flakes The column of mercury fell gradually The mean temperature was still 44° Fahrenheit during the day, but at night it fell to 32°. The sun described an extremely lengthened curve above the horizon, not rising more than a few degrees even at noon, and disappearing for eleven hours out of every twenty four.

At last, on the night of the 16th September, the first signs of ice appeared upon the sea in the shape of small isolated crystals like snow, which stained the clear surface of the water As was noticed by the famous explorer Scoresby, these crystals immediately calmed the waves, like the oil which sailors pour upon the sea to produce a momentary cessation of its agitation These crystals showed a tendency to weld themselves together, but they were broken and separated by the motion of the water as soon as they had combined to any extent.

Hobson watched the appearance of the "young ice" with extreme attention. He knew that twenty four hours would suffice to make the ice-crust two or three inches thick, strong enough in fact to bear the weight of a man He therefore expected that Victoria Island would shortly be arrested in its course to the north.

But the day ended the work of the night, and if the speed of the island slackened during the darkness in consequence of the obstacles in its path, they were removed in the next twelve hours, and the island was carried rapidly along again by the powerful current.

The distance from the northern regions became daily less, and nothing could be done to lessen the evil.

At the autumnal equinox on the 21st of September, the day and night were of equal length, and from that date the night gradually became longer and longer. The winter was coming at last, but it did not set in rapidly or with any rigour Victoria Island was now nearly a degree farther north than the seventieth parallel, and on this 21st September, a rotating motion was for the first time noticed, a motion estimated by Hobson at about a quarter of the circumference.

Imagine the anxiety of the unfortunate Lieutenant. The secret he had so long carefully kept was now about to be betrayed by nature to the least clear sighted. Of course the rotation altered the cardinal points of the island. Cape
Bathurst no longer pointed to the north, but to the east. The sun, moon, and stars rose and set on a different horizon, and it was impossible that men like Mac-Nab, Rae, Marbre and others, accustomed to note the signs of the heavens, could fail to be struck by the change, and understand its meaning.

To Hobson’s great satisfaction, however, the brave soldiers appeared to notice nothing, the displacement with regard to the cardinal points was not, it was true, very considerable, and it was often too foggy for the rising and setting of the heavenly bodies to be accurately observed.

Unfortunately the rotation appeared to be accompanied by an increase of speed. From that date Victoria Island drifted at the rate of a mile an hour. It advanced farther and farther north, farther and farther away from all land. Hobson did not even yet despair, for it was not in his nature to do so, but he felt confused and astray, and longed for the winter with all his heart.

At last the temperature began to fall still lower. Snow fell plentifully on the 23d and 24th September, and increased the thickness of the coating of ice on the sea. Gradually the vast ice-field was formed on every side, the island in its advance continually broke it up, but each day it became firmer and better able to resist. The sea succumbed to the petrifying hand of winter, and became frozen as far as the eye could reach, and on September 27th, when the bearings were taken, it was found that Victoria Island had not moved since the day before. It was imprisoned in a vast ice-field, it was motionless in longitude 177° 22', and latitude 77° 57'—more than six hundred miles from any continent.

CHAPTER XI

A COMMUNICATION FROM LIEUTENANT HOBSON.

Such was the situation. To use Sergeant Long’s expression, the island had "cast anchor," and was as stationary as when the isthmus connected it with the mainland. But six hundred miles now separated it from inhabited countries, six hundred miles which would have to be traversed in sledges across the solidified surface of the sea, amongst the icebergs which the cold would build up, in the bitterest months of the Arctic winter.

It would be a fearful undertaking, but hesitation was impossible. The winter, for which Lieutenant Hobson had so ardently longed, had come at last, and arrested the fatal march of the island to the north. It would throw a bridge six hundred miles long from their desolate home to the continents on the south, and the new chances of safety must not be neglected, every effort must be made to restore the colonists, so long lost in the hyperborean regions, to their friends.

As Hobson explained to his companions, it would be madness to linger till the spring should again thaw the ice, which would be to abandon themselves once more to the capricious Behring currents. They must wait until the sea was quite firmly frozen over, which at the most would be in another three or four weeks. Meanwhile the Lieutenant proposed making frequent excursions on the ice-field encircling the island, in order to ascertain its thickness, its suitability for the passage of sledges, and the best route to take across it so as to reach the shores of Asia or America.

"Of course," observed Hobson to Mrs Barnett and Sergeant Long, "we would all rather make for Russian America than Asia, if a choice is open to us."

"Kalumah will be very useful to us," said Mrs Barnett, "for as a native she will be thoroughly acquainted with the whole of Alaska."

"Yes, indeed," replied Hobson, "her arrival was most fortunate for us. Thanks to her, we shall be easily able to get to the settlement of Fort Michael on Norton Sound, perhaps even to New Archangel, a good deal farther south, where we can pass the rest of the winter."

"Poor Fort Hope!" exclaimed Mrs Barnett, "it goes to my heart to think of abandoning it on this island. It has been built at the cost of so much trouble and fatigue, everything about it has been so admirably arranged by you, Lieutenant! I feel as if my heart would break when we leave it finally."

"You will not suffer more than I shall, madam," replied Hobson, "and perhaps not so much. It is the chief work of my life; I have devoted all my powers to the foundation of Fort Hope, so unfortunately named, and I shall never cease to regret having to leave it. And what will the Company say which confided this task to me, for after all I am but its humble agent."

"It will say," cried Mrs Barnett with enthusiasm, "it will say that you have done your duty, that you are not responsible for the caprices of nature, which is ever more powerful than man. It will understand that you could not foresee what has happened, for it was beyond the penetration of the most far-sighted man, and it will know that it owes the preservation of the whole party to your prudence and moral courage."

"Thank you, madam," replied the Lieutenant, pressing Mrs Barnett’s hand, "thank you for your warm-hearted words. But I have had some experience of men, and I know that success is always admired and failure condemned. But the will of Heaven be done!"

Sergeant Long, anxious to turn the Lieutenant from his melancholy thoughts, now began to talk about the preparations for the approaching departure, and asked if it was not time to tell his comrades the truth.
"Let us wait a little longer," replied Hobson. "We have saved the poor fellows much anxiety and worry already, let us keep silent until the day is fixed for the start, and then we will reveal the whole truth."

This point being decided, the ordinary occupations of the factory went on for a few weeks longer.

How different was the situation of the colonists a year ago, when they were all looking forward to the future in happy unconsciousness!

A year ago the first symptoms of the cold season were appearing, even as they were now. The "young ice" was gradually forming along the coast. The lagoon, its waters being quieter than those of the sea, was the first to freeze over. The temperature remained about one or two degrees above freezing point in the day, and fell to three or four degrees below in the night. Hobson again made his men assume their winter garments, the linen vests and furs before described. The condensers were again set up inside the house, the air vessel and air-pumps were cleaned, the traps were set round the palisades on different parts of Cape Bathurst, and Marbre and Sabine got plenty of game, and finally the last touches were given to the inner rooms of the principal house.

Although Fort Hope was now about two degrees farther north than at the same time the year before, there was no sensible difference in the state of the temperature. The fact is, the distance between the seventieth and seventy-second parallels is not great enough to affect the mean height of the thermometer, on the contrary, it really seemed to be less cold than at the beginning of the winter before. Perhaps, however, that was because the colonists were now, to a certain extent, acclimatised.

Certainly the winter did not set in so abruptly as last time. The weather was very damp, and the atmosphere was always charged with vapour, which fell now as rain now as snow. In Lieutenant Hobson’s opinion, at least, it was not nearly cold enough.

The sea froze all round the island, it is true, but not in a regular or continuous sheet of ice. Large blackish patches here and there showed that the icicles were not thoroughly cemented together. Loud resonant noises were constantly heard, produced by the breaking of the ice field when the rain melted the imperfectly welded edges of the blocks composing it. There was no rapid accumulation of lump upon lump such as is generally seen in intense cold. Icebergs and hummocks were few and scattered, and no ice-wall as yet shut in the horizon.

"This season would have just been the thing for the explorers of the North West Passage, or the seekers of the North Pole," repeated Sergeant Long again and again, "but it is most unfavourable for us, and very much against our ever getting back to our own land!"

This went on throughout October, and Hobson announced that the mean temperature was no lower than 32° Fahrenheit, and it is well known that several days of cold, 7° or 8° below zero, are required for the sea to freeze hard.

Had proof been needed that the ice-field was impassable, a fact noticed by Mrs Barnett and Hobson would have sufficed.

The animals imprisoned in the island, the furred animals, reindeer, wolves, &c., would have left the island had it been possible to cross the sea, but they continued to gather in large numbers round the factory, and to seek the vicinity of man. The wolves came actually within musket-range of the enceinte to devour the martens and Polar hares, which were their only food. The famished reindeer having neither moss nor herbs on which to browse, roved about Cape Bathurst in herds. A solitary bear, no doubt the one to which Mrs Barnett and Kalumah felt they owed a debt of gratitude, often passed to and fro amongst the trees of the woods, on the banks of the lagoon, and the presence of all these animals, especially of the ruminants, which require an exclusively vegetable diet, proved that flight was impossible.

We have said that the thermometer remained at freezing point, and Hobson found on consulting his journal that at the same time the year before, it had already marked 20° Fahrenheit below zero, proving how unequally cold is distributed in the capricious Polar regions.

The colonists therefore did not suffer much, and were not confined to the house at all. It was, however, very damp indeed, rain mixed with snow fell constantly, and the falling of the barometer proved that the atmosphere was charged with vapour.

Throughout October the Lieutenant and Long made many excursions to ascertain the state of the ice-field in the offing; one day they went to Cape Michael, another to the edge of the former Walruses’ Bay, anxious to see if it would be possible to cross to the continent of America or Asia, or if the start would have to be put off.

But the surface of the ice-field was covered with puddles of water, and in some parts riddled with holes, which would certainly have been impassable for sledges. It seemed as if it would be scarcely safe for a single traveller to venture across the half-liquid, half-solid masses. It was easy to see that the cold had been neither severe nor equally maintained, for the ice consisted of an accumulation of sharp points, crystals, prisms, polyhedrons, and figures of every variety, like an aggregation of stalactites. It was more like a glacier than a "field," and even if it had been practicable, walking on it would have been very tiring.
Hobson and Long managed with great difficulty to scramble over a mile or two towards the south, but at the expense of a vast amount of time, so that they were compelled to admit that they must wait some time yet, and they returned to Fort Hope disappointed and disheartened.

The first days of November came, and the temperature fell a little, but only a very few degrees, which was not nearly enough. Victoria Island was wrapped in damp fogs, and the lamps had to be lit during the day. It was necessary, however, to economise the oil as much as possible, as the supply was running short. No fresh stores had been brought by Captain Craventy’s promised convoy, and there were no more walruses to be hunted. Should the dark winter be prolonged, the colonists would be compelled to have recourse to the fat of animals, perhaps even to the resin of the firs, to get a little light. The days were already very short, and the pale disc of the sun, yielding no warmth, and deprived of all its brightness, only appeared above the horizon for a few hours at a time. Yes, winter had come with its mists, its rain, and its snow, but without the long desired cold.

On the 11th November something of a fête was held at Fort Hope. Mrs Joliffe served up a few extras at dinner, for it was the anniversary of the birth of little Michael Mac-Nab. He was now a year old, and was the delight of everybody. He had large blue eyes and fair curly hair, like his father, the head carpenter, who was very proud of the resemblance. At dessert the baby was solemnly weighed. It was worth something to see him struggling in the scales, and to hear his astonished cries! He actually weighed thirty-four pounds! The announcement of this wonderful weight was greeted with loud cheers, and Mrs Mac-Nab was congratulated by everybody on her fine boy. Why Corporal Joliffe felt that he ought to share the compliments it is difficult to imagine, unless it was as a kind of foster-father or nurse to the baby. He had carried the child about, dandled and rocked him so often, that he felt he had something to do with his specific weight!

The next day, November 12th, the sun did not appear above the horizon. The long Polar night was beginning nine days sooner than it had done the year before, in consequence of the difference in the latitude of Victoria Island then and now.

The disappearance of the sun did not, however, produce any change in the state of the atmosphere. The temperature was as changeable as ever. The thermometer fell one day and rose the next. Rain and snow succeeded each other. The wind was soft, and did not settle in any quarter, but often veered round to every point of the compass in the course of a single day. The constant damp was very unhealthy, and likely to lead to scorbutic affections amongst the colonists, but fortunately, although the lime juice and lime lozenges were running short, and no fresh stock had been obtained, the scurvy-grass and sorrel had yielded a very good crop, and, by the advice of Lieutenant Hobson, a portion of them was eaten daily.

Every effort must, however, be made to get away from Fort Hope. Under the circumstances, three months would scarcely be long enough for them all to get to the nearest continent. It was impossible to risk being overtaken by the thaw on the ice-field, and therefore if they started at all it must be at the end of November.

The journey would have been difficult enough, even if the ice had been rendered solid everywhere by a severe winter, and in this uncertain weather it was a most serious matter.

On the 13th November, Hobson, Mrs Barnett, and the Sergeant met to decide on the day of departure. The Sergeant was of opinion that they ought to leave the island as soon as possible.

"For," he said, "we must make allowance for all the possible delays during a march of six hundred miles. We ought to reach the continent before March, or we may be surprised by the thaw, and then we shall be in a worse predicament than we are on our island."

"But," said Mrs Barnett, "is the sea firm enough for us to cross it?"

"I think it is," said Long, "and the ice gets thicker every day. The barometer, too, is gradually rising, and by the time our preparations are completed, which will be in about another week, I think, I hope that the really cold weather will have set in."

"The winter has begun very badly," said Hobson, "in fact everything seems to combine against us. Strange seasons have often been experienced on these seas, I have heard of whalers being able to navigate in places where, even in the summer at another time they would not have had an inch of water beneath their keels. In my opinion there is not a day to be lost, and I cannot sufficiently regret that the ordinary temperature of these regions does not assist us."

"It will later," said Mrs Barnett, "and we must be ready to take advantage of every chance in our favour. When do you propose starting, Lieutenant?"

"At the end of November at the latest," replied Hobson, "but if in a week hence our preparations are finished, and the route appears practicable, we will start then."

"Very well," said Long, "we will get ready without losing an instant."

"Then," said Mrs Barnett, "you will now tell our companions of the situation in which they are placed?"

"Yes, madam, the moment to speak and the time for action have alike arrived."
"And when do you propose enlightening them?"

"At once. Sergeant Long," he added, turning to his subordinate, who at once drew himself up in a military attitude, "call all your men together in the large room to receive a communication."

Sergeant Long touched his cap, and turning on his heel left the room without a word.

For some minutes Mrs Barnett and Hobson were left alone, but neither of them spoke.

The Sergeant quickly returned, and told Hobson that his orders were executed.

The Lieutenant and the lady at once went into the large room. All the members of the colony, men and women, were assembled in the dimly lighted room.

Hobson came forward, and standing in the centre of the group said very gravely—

"My friends, until to-day I have felt it my duty, in order to spare you useless anxiety, to conceal from you the situation of our fort. An earthquake separated us from the continent. Cape Bathurst has broken away from the mainland. Our peninsula is but an island of ice, a wandering island"——

At this moment Marbre stepped forward, and said quietly.

"We knew it, sir!"

CHAPTER XII.

A CHANCE TO BE TRIED.

The brave fellows knew it then! And that they might not add to the cares of their chief, they had pretended to know nothing, and had worked away at the preparations for the winter with the same zeal as the year before.

Tears of emotion stood in Hobson's eyes, and he made no attempt to conceal them, but seizing Marbre's outstretched hand, he pressed it in his own.

Yes, the soldiers all knew it, for Marbre had guessed it long ago. The filling of the reindeer trap with salt water, the non-arrival of the detachment from Fort Reliance, the observations of latitude and longitude taken every day, which would have been useless on firm ground, the precautions observed by Hobson to prevent any one seeing him take the bearings, the fact of the animals remaining on the island after winter had set in, and the change in the position of the cardinal points during the last few days, which they had noticed at once, had all been tokens easily interpreted by the inhabitants of Fort Hope. The arrival of Kalumah had puzzled them, but they had concluded that she had been thrown upon the island in the storm, and they were right, as we are aware.

Marbre, upon whom the truth had first dawned, confided his suspicions to Mac-Nab the carpenter and Rae the blacksmith. All three faced the situation calmly enough, and agreed that they ought to tell their comrades and wives, but decided to let the Lieutenant think they knew nothing, and to obey him without question as before.

"You are indeed brave fellows, my friends," exclaimed Mrs Barnett, who was much touched by this delicate feeling, "you are true soldiers!"

"Our Lieutenant may depend upon us," said Mac-Nab, "he has done his duty, and we will do ours."

"I know you will, dear comrades," said Hobson, "and if only Heaven will help and not forsake us, we will help ourselves."

The Lieutenant then related all that had happened since the time when the earthquake broke the isthmus, and converted the districts round Cape Bathurst into an island. He told how, when the sea became free from ice in the spring, the new island had been drifted more than two hundred miles away from the coast by an unknown current, how the hurricane had driven it back within sight of land, how it had again been carried away in the night of the 31st August, and, lastly, how Kalumah had bravely risked her life to come to the aid of her European friends. Then he enumerated the changes the island had undergone, explaining how the warmer waters had worn it away, and his fear that it might be carried to the Pacific, or seized by the Kamtchatka Current, concluding his narrative by stating that the wandering island had finally stopped on the 27th of last September.

The chart of the Arctic seas was then brought, and Hobson pointed out the position occupied by the island—six hundred miles from all land.

He ended by saying that the situation was extremely dangerous, that the island would inevitably be crushed when the ice broke up, and that, before having recourse to the boat—which could not be used until the next summer—they must try to get back to the American continent by crossing the ice-field.

"We shall have six hundred miles to go in the cold and darkness of the Polar night. It will be hard work, my friends, but you know as well as I do that there can be no shrinking from the task."

"When you give the signal to start, Lieutenant, we will follow you," said Mac-Nab.

All being of one mind, the preparations for departure were from that date rapidly pushed forward. The men bravely faced the fact that they would have six hundred miles to travel under very trying circumstances. Sergeant Long superintended the works, whilst Hobson, the two hunters, and Mrs Barnett, often went to test the firmness of the ice-field. Kalumah frequently accompanied them, and her remarks, founded on experience, might possibly be of great use to the Lieutenant. Unless they were prevented they were to start on the 20th November, and there was not a
moment to lose.

As Hobson had foreseen, the wind having risen, the temperature fell slightly, and the column of mercury marked 24° Fahrenheit.

Snow, which soon became hardened, replaced the rain of the preceding days. A few more days of such cold and sledges could be used. The little bay hollowed out of the cliffs of Cape Michael was partly filled with ice and snow; but it must not be forgotten that its calmer waters froze more quickly than those of the open sea, which were not yet in a satisfactory condition.

The wind continued to blow almost incessantly, and with considerable violence, but the motion of waves interfered with the regular formation and consolidation of the ice. Large pools of water occurred here and there between the pieces of ice, and it was impossible to attempt to cross it.

"The weather is certainly getting colder," observed Mrs Barnett to Lieutenant Hobson, as they were exploring the south of the island together on the 10th November, "the temperature is becoming lower and lower, and these liquid spaces will soon freeze over."

"I think you are right, madam," replied Hobson, "but the way in which they will freeze over will not be very favourable to our plans. The pieces of ice are small, and their jagged edges will stick up all over the surface, making it very rough, so that if our sledges get over it at all, it will only be with very great difficulty."

"But," resumed Mrs Barnett, "if I am not mistaken, a heavy fall of snow, lasting a few days or even a few hours, would suffice to level the entire surface!"

"Yes, yes," replied Hobson, "but if snow should fall, it will be because the temperature has risen; and if it rises, the ice-field will break up again, so that either contingency will be against us!"

"It really would be a strange freak of fortune if we should experience a temperate instead of an Arctic winter in the midst of the Polar Sea!" observed Mrs Barnett.

"It has happened before, madam, it has happened before. Let me remind you of the great severity of last cold season; now it has been noticed that two long bitter winters seldom succeed each other, and the whalers of the northern seas know it well. A bitter winter when we should have been glad of a mild one, and a mild one when we so sorely need the reverse. It must be owned, we have been strangely unfortunate thus far! And when I think of six hundred miles to cross with women and a child!"

And Hobson pointed to the vast white plain, with strange irregular markings like guipure work, stretching away into the infinite

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And Hobson pointed to the vast white plain, with strange irregular markings like guipure work, stretching away into the infinite distance. Sad and desolate enough it looked, the imperfectly frozen surface cracking every now and then with an ominous sound. A pale moon, its light half quenched in the damp mists, rose but a few degrees above the gloomy horizon and shot a few faint beams upon the melancholy scene. The half-darkness and the refraction combined doubled the size of every object. Icebergs of moderate height assumed gigantic proportions, and were in some cases distorted into the forms of fabulous monsters. Birds passed overhead with loud flapping of wings, and in consequence of this optical illusion the smallest of them appeared as large as a condor or a vulture. In the midst of the icebergs yawned apparently huge black tunnels, into which the boldest man would scarcely dare to venture, and now and then sudden convulsions took place, as the icebergs, worn away at the base, heeled over with a crash, the sonorous echoes taking up the sounds and carrying them along. The rapid changes resembled the transformation scenes of fairyland, and terrible indeed must all those phenomena have appeared to the luckless colonists who were about to venture across the ice-field!

In spite of her moral and physical courage Mrs Barnett could not control an involuntary shudder. Soul and body alike shrunk from the awful prospect, and she was tempted to shut her eyes and stop her ears that she might see and hear no more. When the moon was for a moment veiled behind a heavy cloud, the gloom of the Polar landscape became still more awe-inspiring, and before her mind’s eye rose a vision of the caravan of men and women struggling across these vast solitudes in the midst of hurricanes, snow-storms, avalanches, and in the thick darkness of the Arctic night!

Mrs Barnett, however, forced herself to look; she wished to accustom her eyes to these scenes, and to teach herself not to shrink from facing their terrors. But as she gazed a cry suddenly burst from her lips, and seizing Hobson’s hand, she pointed to a huge object, of ill-defined dimensions, moving about in the uncertain light, scarcely a hundred paces from where they stood.

It was a white monster of immense size, more than a hundred feet high. It was pacing slowly along over the broken ice, bounding from one piece to another, and beating the air with its huge feet, between which it could have held ten large dogs at least. It, too, seemed to be seeking a practicable path across the ice—it, too, seemed anxious to fly from the doomed island. The ice gave way beneath its weight, and it had often considerable difficulty in regaining its feet.

The monster made its way thus for about a quarter of a mile across the ice, and then, its farther progress being barred, it turned round and advanced towards the spot where Mrs Barnett and the Lieutenant stood.

Hobson seized the gun which was slung over his shoulder and presented it at the animal, but almost immediately lowering the weapon, he said to Mrs Barnett—

"A bear, madam, only a bear, the size of which has been greatly magnified by refraction."

It was, in fact, a Polar bear, and Mrs Barnett drew a long breath of relief as she understood the optical illusion of
which presently resolved themselves into heavy rain instead of the sadly-needed snow, the column of mercury from this change in the state of the atmosphere. Whilst the cold decreased the sky became covered with clouds, back to Victoria Island across the ever-changing, ever-moving blocks of ice.

underwent the greatest fatigue in these short excursions, and more than once they ran a risk of being unable to get impossible for sledges to cross it, it was dangerous for unencumbered pedestrians. Hobson and his two men compelled to admit that it was broken by rents, crevasses, and fissures in every direction. Not only would it be corner of the old Walruses' Bay. They even ventured out about a mile and a half upon the ice-field, but were intermittent. Hobson, Marbre, and Sabine went along the coast every day from Cape Michael to what was once the severe enough to freeze the surface of the sea, with any uniformity, and the snow which fell was fine and November.

phenomena of the high latitudes, such as the Aurora Borealis, halos, parhelia, &c. &c. Hobson would have been glad to take some fuel with him, as he would not meet with a tree, a shrub, unfortunately getting low—and an ample reserve of sorrel, scurvy-grass, rum, spirits of wine, for making warm drinks, &c. &c. Hobson was right, the imprisoned animal had tried to leave the island and to get to the continent, and having failed it was returning to the coast. Shaking its head and growling, it passed some twenty paces from the two watchers, and, either not seeing them or disdaining to take any notice of them, it walked heavily on towards Cape Michael, and soon disappeared behind the rising ground.

Lieutenant Hobson and Mrs Barnett returned sadly and silently to the fort.

The preparations for departure went on as rapidly, however, as if it were possible to leave the island. Nothing was neglected to promote the success of the undertaking, every possible danger had to be foreseen, and not only had the ordinary difficulties and dangers of a journey across the ice to be allowed for, but also the sudden changes of weather peculiar to the Polar regions, which so obstinately resist every attempt to explore them.

The teams of dogs required special attention. They were allowed to run about near the fort, that they might regain the activity of which too long a rest had, to some extent, deprived them, and they were soon in a condition to make a long march.

The sledges were carefully examined and repaired. The rough surface of the ice-field would give them many violent shocks, and they were therefore thoroughly overhauled by Mac-Nab and his men, the inner framework and the curved fronts being carefully repaired and strengthened.

Two large waggon sledges were built, one for the transport of provisions, the other for the peltries. These were to be drawn by the tamed reindeer, which had been well trained for the service. The peltries or furs were articles of luxury with which it was not perhaps quite prudent to burden the travellers, but Hobson was anxious to consider the interests of the Company as much as possible, although he was resolved to abandon them, en route, if they harassed or impeded his march. No fresh risk was run of injury of the furs, for of course they would have been lost if left at the factory.

It was of course quite another matter with the provisions, of which a good and plentiful supply was absolutely necessary. It was of no use to count on the product of the chase this time. As soon as the passage of the ice-field became practicable, all the edible game would get on ahead and reach the mainland before the caravan. One waggon sledge was therefore packed with salt meat, corned beef, hare pâtés, dried fish, biscuits—the stock of which was unfortunately getting low—and an ample reserve of sorrel, scurvy-grass, rum, spirits of wine, for making warm drinks, &c. &c. Hobson would have been glad to take some fuel with him, as he would not meet with a tree, a shrub, or a bit of moss throughout the march of six hundred miles, nor could he hope for pieces of wreck or timber cast up by the sea, but he did not dare to overload his sledges with wood. Fortunately there was no lack of warm comfortable garments, and in case of need they could draw upon the reserve of peltries in the waggon.

Thomas Black, who since his misfortune had altogether retired from the world, shunning his companions, taking part in none of the consultations, and remaining shut up in his own room, reappeared as soon as the day of departure was definitely fixed. But even then he attended to nothing but the sledge which was to carry his person, his instruments, and his registers. Always very silent, it was now impossible to get a word out of him. He had forgotten everything, even that he was a scientific man, and since he had been deceived about the eclipse, since the solution of the problem of the red prominences of the moon had escaped him, he had taken no notice of any of the peculiar phenomena of the high latitudes, such as the Aurora Borealis, halos, parhelia, &c.

During the last few days every one worked so hard that all was ready for the start on the morning of the 18th November.

But, alas! the ice-field was still impassable. Although the thermometer had fallen slightly, the cold had not been severe enough to freeze the surface of the sea, with any uniformity, and the snow which fell was fine and intermittent. Hobson, Marbre, and Sabine went along the coast every day from Cape Michael to what was once the corner of the old Walruses' Bay. They even ventured out about a mile and a half upon the ice-field, but were compelled to admit that it was broken by rents, crevasses, and fissures in every direction. Not only would it be impossible for sledges to cross it, it was dangerous for unencumbered pedestrians. Hobson and his two men underwent the greatest fatigue in these short excursions, and more than once they ran a risk of being unable to get back to Victoria Island across the ever-changing, ever-moving blocks of ice.

Really all nature seemed to be in league against the luckless colonists.

On the 18th and 19th November, the thermometer rose, whilst the barometer fell. Fatal results were to be feared from this change in the state of the atmosphere. Whilst the cold decreased the sky became covered with clouds, which presently resolved themselves into heavy rain instead of the sadly-needed snow, the column of mercury
standing at 34° Fahrenheit. These showers of comparatively warm water melted the snow and ice in many places, and the result can easily be imagined. It really seemed as if a thaw were setting in, and there were symptoms of a general breaking up of the ice-field. In spite of the dreadful weather, however, Hobson went to the south of the island every day, and every day returned more disheartened than before.

On the 20th, a tempest resembling in violence that of the month before, broke upon the gloomy Arctic solitudes, compelling the colonists to give up going out, and to remain shut up in Fort Hope for two days.

CHAPTER XIII.

ACROSS THE ICE-FIELD.

At last, on the 22d of November, the weather moderated. In a few hours the storm suddenly ceased. The wind veered round to the north, and the thermometer fell several degrees. A few birds capable of a long-sustained flight took wing and disappeared. There really seemed to be a likelihood that the temperature was at last going to become what it ought to be at this time of the year in such an elevated latitude. The colonists might well regret that it was not now what it had been during the last cold season, when the column of mercury fell to 72° Fahrenheit below zero.

Hobson determined no longer to delay leaving Victoria Island, and on the morning of the 22d the whole of the little colony was ready to leave the island, which was now firmly welded to the ice-field, and by its means connected with the American continent, six hundred miles away.

At half-past eleven A.M., Hobson gave the signal of departure. The sky was grey but clear, and lighted up from the horizon to the zenith by a magnificent Aurora Borealis. The dogs were harnessed to the sledges, and three couple of reindeer to the waggon sledges. Silently they wended their way towards Cape Michael, where they would quit the island, properly so called, for the ice-field.

The caravan at first skirted along the wooded hill on the east of Lake Barnett, but as they were rounding the corner all paused to look round for the last time at Cape Bathurst, which they were leaving never to return. A few snow-encrusted rafters stood out in the light of the Aurora Borealis, a few white lines marked the boundaries of the enceinte of the factory, a—white mass here and there, a few blue wreaths of smoke from the expiring fire never to be rekindled; this was all that could be seen of Fort Hope, now useless and deserted, but erected at the cost of so much labour and so much anxiety.

"Farewell, farewell, to our poor Arctic home!" exclaimed Mrs. Barnett, waving her hand for the last time; and all sadly and silently resumed their journey.

At one o’clock the detachment arrived at Cape Michael, after having rounded the gulf which the cold had imperfectly frozen over. Thus far the difficulties of the journey had not been very great, for the ground of the island was smooth compared to the ice-field, which was strewn with icebergs, hummocks, and packs, between which, practicable passes had to be found at the cost of an immense amount of fatigue.

Towards the evening of the same day the party had advanced several miles on the ice-field, and a halt for the night was ordered; the encampment was to be formed by hollowing out snow-houses in the Esquimaux style. The work was quickly accomplished with the ice-chisels, and at eight o’clock, after a salt meat supper, every one had crept into the holes, which are much warmer than anybody would imagine.

Before retiring, however, Mrs. Barnett asked the Lieutenant how far he thought they had come.

"Not more than ten miles, I think," replied Hobson.

"Ten from six hundred!" exclaimed Mrs Barnett. "At this rate, it will take us three months to get to the American continent!"

"Perhaps more, madam," replied Hobson, "for we shall not be able to get on faster than this. We are not travelling as we were last year over the frozen plains between Fort Reliance and Cape Bathurst; but on a distorted ice-field crushed by the pressure of the icebergs across which there is no easy route. I expect to meet with almost insurmountable difficulties on the way; may we be able to conquer them! It is not of so much importance, however, to march quickly as to preserve our health, and I shall indeed think myself fortunate if all my comrades answer to their names in the roll-call on our arrival at Fort Reliance. Heaven grant we may have all landed at some point, no matter where, of the American continent in three months’ time; if so, we shall never be able to return thanks enough."

The night passed without incident; but during the long vigil which he kept, Hobson fancied he noticed certain ill-omened tremblings on the spot he had chosen for his encampment, and could not but fear that the vast ice-field was insufficiently cemented, and that there would be numerous rents in the surface which would greatly impede his progress, and render communication with firm ground very uncertain. Moreover, before he started, he had observed that none of the animals had left the vicinity of the fort, and they would certainly have sought a warmer climate had not their instinct warned them of obstacles in their way. Yet the Lieutenant felt that he had only done his duty in making this attempt to restore his little colony to an inhabited land, before the setting in of the thaw, and whether he succeeded or had to turn back he would have no reason to reproach himself.
The next day, November 23d, the detachment could not even advance ten miles towards the east, so great were the difficulties met with. The ice-field was fearfully distorted, and here and there many layers of ice were piled one upon another, doubtless driven along by the irresistible force of the ice-wall into the vast funnel of the Arctic Ocean. Hence a confusion of masses of ice, which looked as if they had been suddenly dropped by a hand incapable of holding them, and strewn about in every direction.

It was clear that a caravan of sledges, drawn by dogs and reindeer, could not possibly get over these blocks; and it was equally clear that a path could not be cut through them with the hatchet or ice-chisel. Some of the icebergs assumed extraordinary forms, and there were groups which looked like towns falling into ruins. Some towered three or four hundred feet above the level of the ice-field, and were capped with tottering masses of debris, which the slightest shake or shock or gust of wind would bring down in avalanches.

The greatest precautions were, therefore, necessary in rounding these ice-mountains, and orders were given not to speak above a whisper, and not to excite the dogs by cracking the whips in these dangerous passes.

But an immense amount of time was lost in looking for practicable passages, and the travellers were worn out with fatigue, often going ten miles round before they could advance one in the required direction towards the east. The only comfort was that the ground still remained firm beneath their feet.

On the 24th November, however, fresh obstacles arose, which Hobson really feared, with considerable reason, would be insurmountable.

After getting over one wall of ice which rose some twenty miles from Victoria Island, the party found themselves on a much less undulating ice-field, the different portions of which had evidently not been subjected to any great pressure. It was clear that in consequence of the direction of the currents the influence of the masses of permanent ice in the north had not here been felt, and Hobson and his comrades soon found that this ice-field was intersected with wide and deep crevasses not yet frozen over. The temperature here was comparatively warm, and the thermometer maintained a mean height of more than 34° Fahrenheit. Salt water, as is well known, does not freeze so readily as fresh, but requires several degrees of cold below freezing point before it becomes solidified, and the sea was therefore still liquid. All the icebergs and floes here had come from latitudes farther north, and, if we may so express it, lived upon the cold they had brought with them. The whole of the southern portion of the Arctic Ocean was most imperfectly frozen, and a warm rain was falling, which hastened the dissolution of what ice there was.

On the 24th November the advance of the travellers was absolutely arrested by a crevasse full of rough water strewn with small icicles—a crevasse not more than a hundred feet wide, it is true, but probably many miles long.

For two whole hours the party skirted along the western edge of this gap, in the hope of coming to the end of it and getting to the other side, so as to resume their march to the east, but it was all in vain, they were obliged to give it up and encamp on the wrong side.

Hobson and Long, however, proceeded for another quarter of a mile along the interminable crevasse, mentally cursing the mildness of the winter which had brought them into such a strait.

"We must pass somehow," said Long, "for we can’t stay where we are."

"Yes, yes," replied the Lieutenant, "and we shall pass it, either by going up to the north, or down to the south, it must end somewhere. But after we have got round this we shall come to others, and so it will go on perhaps for hundred of miles, as long as this uncertain and most unfortunate weather continues!"

"Well, Lieutenant, we must ascertain the truth once for all before we resume our journey," said the Sergeant.

"We must indeed, Sergeant," replied Hobson firmly, "or we shall run a risk of not having crossed half the distance between us and America after travelling five or six hundred miles out of our way. Yes, before going farther, I must make quite sure of the state of the ice-field, and that is what I am about to do."

And without another word Hobson stripped himself, plunged into the half-frozen water, and being a powerful swimmer a few strokes soon brought him to the other side of the crevasse, when he disappeared amongst the icebergs.

A few hours later the Lieutenant reached the encampment, to which Long had already returned, in an exhausted condition. He took Mrs Barnett and the Sergeant aside, and told them that the ice-field was impracticable, adding—

"Perhaps one man on foot without a sledge or any encumbrances might get across, but for a caravan it is impossible. The crevasses increase towards the east, and a boat would really be of more use than a sledge if we wish to reach the American coast."

"Well," said Long, "if one man could cross, ought not one of us to attempt it, and go and seek assistance for the rest."

"I thought of trying it myself," replied Hobson.

"You, Lieutenant!"

"You, sir!" cried Mrs Barnett and Long in one breath.
These two exclamations showed Hobson how unexpected and inopportune his proposal appeared. How could he, the chief of the expedition, think of deserting those confided to him, even although it was in their interests and at great risk to himself. It was quite impossible, and the Lieutenant did not insist upon it.

"Yes," he said, "I understand how it appears to you, my friends, and I will not abandon you. It would, indeed, be quite useless for any one to attempt the passage; he would not succeed, he would fall by the way, and find a watery grave when the thaw sets in. And even suppose he reached New Archangel, how could he come to our rescue? Would he charter a vessel to seek for us? Suppose he did, it could not start until after the thaw. And who can tell where the currents will then have taken Victoria Island, either yet farther north or to the Behring Sea!

"Yes, Lieutenant, you are right," replied Long; "let us remain together, and if we are to be saved in a boat, there is Mac-Nab’s on Victoria Island, and for it at least we shall not have to wait!"

Mrs Barnett had listened without saying a word, but she understood that the ice-field being impassible, they had now nothing to depend on but the carpenter’s boat, and that they would have to wait bravely for the thaw.

"What are you going to do, then?" she inquired at last.

"Return to Victoria Island."

"Let us return then, and God be with us!"

The rest of the travellers had now gathered round the Lieutenant, and he laid his plans before them.

At first all were disposed to rebel, the poor creatures had been counting on getting back to their homes, and felt absolutely crushed at the disappointment, but they soon recovered their dejection and declared themselves ready to obey.

Hobson then told them the results of the examination he had just made. They learnt that the obstacles in their way on the east were so numerous that it would be absolutely impossible to pass with the sledges and their contents, and as the journey would last several months, the provisions, &c., could not be dispensed with.

"We are now," added the Lieutenant, "cut off from all communication with the mainland, and by going farther towards the east we run a risk, after enduring great fatigues, of finding it impossible to get back to the island, now our only refuge. If the thaw should overtake us on the ice-field, we are lost. I have not disguised nor have I exaggerated the truth, and I know, my friends, that I am speaking to men who have found that I am not a man to turn back from difficulties. But I repeat, the task we have set ourselves is impossible!"

The men trusted their chief implicitly. They knew his courage and energy, and felt as they listened to his words that it was indeed impossible to cross the ice. It was decided to start on the return journey to Fort Hope the next day, and it was accomplished under most distressing circumstances. The weather was dreadful, squalls swept down upon the ice-field, and rain fell in torrents. The difficulty of finding the way in the darkness through the labyrinth of icebergs can well be imagined!

It took no less than four days and four nights to get back to the island. Several teams of dogs with their sledges fell into the crevasses, but thanks to Hobson’s skill, prudence, and devotion, he lost not one of his party. But what terrible dangers and fatigues they had to go through, and how awful was the prospect of another winter on the wandering island to the unfortunate colonists!

CHAPTER XIV.

THE WINTER MONTHS.

The party did not arrive at Fort Hope until the 28th, after a most arduous journey. They had now nothing to depend on but the boat, and that they could not use until the sea was open, which would not be for six months.

Preparations for another winter were therefore made. The sledges were unloaded, the provisions put back in the pantry, and the clothes, arms, furs, &c., in the magazines. The dogs returned to their dog-house, and the reindeer to their stable.

Great was the despair of Thomas Black at this return to seclusion. The poor astronomer carried his instruments, his books, and his MSS. back to his room, and more angry than ever with "the evil fate which pursued him," he held himself aloof from everything which went on in the factory.

All were again settled at their usual winter avocations the day after their arrival, and the monotonous winter life once more commenced. Needlework, mending the clothes, taking care of the furs, some of which might yet be saved, the observation of the weather, the examination of the ice-field, and reading aloud, were the daily occupations. Mrs Barnett was, as before, the leader in everything, and her influence was everywhere felt. If, as sometimes happened, now that all were uneasy about the future, a slight disagreement occurred between any of the soldiers, a few words from Mrs Barnett soon set matters straight, for she had acquired wonderful power over the little world in which she moved, and she always used it for the good of the community.

Kalumah had become a great favourite with everybody, for she was always pleasant and obliging. Mrs Barnett had undertaken her education, and she got on quickly, for she was both intelligent and eager to learn. She improved her English speaking, and also taught her to read and write in that language. There were, however, twelve masters
for Kalumah, all eager to assist in this branch of her education, as the soldiers had all been taught reading, writing, and arithmetic either in England or in English colonies.

The building of the boat proceeded rapidly, and it was to be planked and decked before the end of the month. Mac-Nab and some of his men worked hard in the darkness outside, with no light but the flames of burning resin, whilst others were busy making the rigging in the magazines of the factory. Although the season was now far advanced, the weather still remained very undecided. The cold was sometimes intense, but owing to the prevalence of west winds it never lasted long.

Thus passed the whole of December, rain and intermittent falls of snow succeeded each other, the temperature meanwhile varying from 26° to 34° Fahrenheit. The consumption of fuel was moderate, although there was no need to economise it, the reserves being considerable. It was otherwise with the oil, upon which they depended for light, for the stock was getting so low that the Lieutenant could at last only allow the lamps to be lit for a few hours every day. He tried using reindeer fat for lighting the house, but the smell of it was so unbearable that every one preferred being in the dark. All work had of course to be given up for the time, and very tedious did the long dark hours appear.

Some Auroræ Borealis and two or three lunar halos appeared at full moon, and Thomas Black might now have minutely observed all these phenomenon, and have made precise calculations on their intensity, their coloration, connection with the electric state of the atmosphere, and their influence upon the magnetic needle, &c. But the astronomer did not even leave his room. His spirit was completely crushed.

On the 30th December the light of the moon revealed a long circular line of icebergs shutting in the horizon on the north and east of Victoria Island. This was the ice-wall, the frozen masses of which were piled up to a height of some three or four hundred feet. Two-thirds of the island were hemmed in by this mighty barrier, and it seemed probable that the blockade would become yet more complete.

The sky was clear for the first week of January. The new year, 1861, opened with very cold weather, and the column of mercury fell to 8° Fahrenheit. It was the lowest temperature that had yet been experienced in this singular winter, although it was anything but low for such a high latitude.

The Lieutenant felt it his duty once more to take the latitude and longitude of the island by means of stellar observations, and found that its position had not changed at all.

About this time, in spite of all their economy, the oil seemed likely to fail altogether. The sun would not appear above the horizon before early in February, so that there was a month to wait, during which there was a danger of the colonists having to remain in complete darkness. Thanks to the young Esquimaux, however, a fresh supply of oil for the lamps was obtained.

On the 3rd January Kalumah walked to Cape Bathurst to examine the state of the ice. All along the south of the island the ice-field was very compact, the icicles of which it was composed were more firmly welded together, there were no liquid spaces between them, and the surface of the floe, though rough, was perfectly firm everywhere. This was no doubt caused by the pressure of the chain of icebergs on the horizon, which drove the ice towards the north, and squeezed it against the island.

Although she saw no crevasses or rents, the young native noticed many circular holes neatly cut in the ice, the use of which she knew perfectly well. They were the holes kept open by seals imprisoned beneath the solid crust of ice, and by which they came to the surface to breathe and look for mosses under the snow on the coast.

Kalumah knew that in the winter bears will crouch patiently near these holes, and watching for the moment when the seal comes out of the water, they rush upon it, hug it to death in their paws, and carry it off. She knew, too, that the Esquimaux, not less patient than the bears, also watch for the appearance of these animals, and throwing a running noose over their heads when they push them up, drag them to the surface.

What bears and Esquimaux could do might certainly also be done by skilful hunters, and Kalumah hastened back to the fort to tell the Lieutenant of what she had seen, feeling sure that where these holes were seals were not far off.

Hobson sent for the hunters, and the young native described to them the way in which the Esquimaux capture these animals in the winter, and begged them to try.

She had not finished speaking before Sabine had a strong rope with a running noose ready in his hand and accompanied by Hobson, Mrs Barnett, Kalumah, and two or three soldiers, the hunters hurried to Cape Bathurst, and whilst the women remained on the beach, the men made their way to the holes pointed out by Kalumah. Each one was provided with a rope, and stationed himself at a different hole.

A long time of waiting ensued—no sign of the seals, but at last the water in the hole Marbre had chosen began to bubble, and a head with long tusks appeared. It was that of a walrus. Marbre flung his running noose skillfully over its neck and pulled it tightly. His comrades rushed to his assistance, and with some difficulty the huge beast was dragged upon the ice, and despatched with hatchets.

It was a great success, and the colonists were delighted with this novel fishing. Other walruses were taken in the
same way, and furnished plenty of oil, which, though not strictly of the right sort, did very well for the lamps, and there was no longer any lack of light in any of the rooms of Fort Hope.

The cold was ever now not very severe, and had the colonists been on the American mainland they could only have rejoiced in the mildness of the winter. They were sheltered by the chain of icebergs from the north and west winds, and the month of January passed on with the thermometer never many degrees below freezing point, so that the sea round Victoria Island was never frozen hard. Fissures of more or less extent broke the regularity of the surface in the offing, as was proved by the continued presence of the ruminants and furred animals near the factory, all of which had become strangely tame, forming in fact part of the menagerie of the colony.

According to Hobson’s orders, all these creatures were unmolested. It would have been useless to kill them, and a reindeer was only occasionally slaughtered to obtain a fresh supply of venison. Some of the furred animals even ventured into the enceinte, and they were not driven away. The martens and foxes were in all the splendour of their winter clothing, and under ordinary circumstances would have been of immense value. These rodents found plenty of moss under the snow, thanks to the mildness of the season, and did not therefore live upon the reserves of the factory.

It was with some apprehensions for the future that the end of the winter was awaited, but Mrs Barnett did all in her power to brighten the monotonous existence of her companions in exile.

Only one incident occurred in the month of January, and that one was distressing enough. On the 7th, Michael Mac-Nab was taken ill—severe headache, great thirst and alternations of shivering and fever, soon reduced the poor little fellow to a sad state. His mother and father, and indeed all his friends, were in very great trouble. No one knew what to do, as it was impossible to say what his illness was, but Madge, who retained her senses about her, advised cooling drinks and poultices. Kalumah was indefatigable, remaining day and night by her favourite’s bedside, and refusing to take any rest.

About the third day there was no longer any doubt as to the nature of the malady. A rash came out all over the child’s body, and it was evident that he had malignant scarlatina, which would certainly produce internal inflammation.

Children of a year old are rarely attacked with this terrible disease, but cases do occasionally occur. The medicine-chest of the factory was necessarily insufficiently stocked, but Madge, who had nursed several patients through scarlet fever, remembered that tincture of belladonna was recommended, and administered one or two drops to the little invalid every day. The greatest care was taken lest he should catch cold; he was at once removed to his parents’ room, and the rash soon came out freely. Tiny red points appeared on his tongue, his lips, and even on the globes of his eyes. Two days later his skin assumed a violet hue, then it became white and fell off in scales.

It was now that double care was required to combat the great internal inflammation, which proved the severity of the attack. Nothing was neglected, the boy was, in fact, admirably nursed, and on the 20th January, twelve days after he was taken ill, he was pronounced out of danger.

Great was the joy in the factory. The baby was the child of the fort, of the regiment! He was born in the terrible northern latitudes, in the colony itself, he had been named Michael Hope, and he had come to be regarded as a kind of talisman in the dangers and difficulties around, and all felt sure that God would not take him from them.

Poor Kalumah would certainly not have survived him had he died, but he gradually recovered, and fresh hope seemed to come back when he was restored to the little circle.

The 23d of January was now reached, after all these distressing alternations of hope and fear. The situation of Victoria Island had not changed in the least, and it was still wrapped in the gloom of the apparently interminable Polar night. Snow fell abundantly for some days, and was piled up on the ground to the height of two feet.

On the 27th a somewhat alarming visit was received at the fort. The soldiers Belcher and Pond, when on guard in front of the enceinte in the morning, saw a huge bear quietly advancing towards the fort. They hurried into the large room, and told Mrs Barnett of the approach of the formidable carnivorous beast.

"Perhaps it is only our bear again," observed Mrs Barnett to Hobson, and accompanied by him, and followed by the Sergeant, Sabine, and some soldiers provided with guns,—he fearlessly walked to the postern.

The bear was now about two hundred paces off, and was walking along without hesitation, as if he had some settled plan in view.

"I know him!" cried Mrs Barnett, "it is your bear, Kalumah, your preserver!"

"Oh, don’t kill my bear!" exclaimed the young Esquimaux.

"He shall not be killed," said the Lieutenant, "don’t injure him, my good fellows," he added to the men, "he will probably return as he came."

"But suppose he intends coming into the enceinte?" said Long, who had his doubts as to the friendly propensities of Polar bears.

"Let him come, Sergeant," said Mrs Barnett, "he is a prisoner like ourselves, and you know prisoners"—
"Don’t eat each other," added Hobson. "True, but only when they belong to the same species. For your sake, however, we will spare this fellow-sufferer, and only defend ourselves if he attack us. I think, however, it will be as prudent to go back to the House. We must not put too strong a temptation in the way of our carnivorous friend!"

This was certainly good advice, and all returned to the large room, the windows were closed, but not the shutters. Through the panes the movements of the visitor were watched. The bear, finding the postern unfastened, quietly pushed open the door, looked in, carefully examined the premises, and finally entered the enceinte. Having reached the centre, he examined the buildings around him, went towards the reindeer stable and dog-house, listened for a moment to the howlings of the dogs and the uneasy noises made by the reindeer, then continued his walk round the palisade, and at last came and leant his great head against one of the windows of the large room.

To own the truth everybody started back, several of the soldiers seized their guns, and Sergeant Long began to fear he had let the joke go too far.

But Kalumah came forward, and looked through the thin partition with her sweet eyes. The bear seemed to recognise her, at least so she thought, and doubtless satisfied with his inspection, he gave a hearty growl, and turning away left the enceinte, as Hobson had prophesied, as he entered it.

This was the bear’s first and last visit to the fort, and on his departure everything went on as quietly as before.

The little boy’s recovery progressed favourably, and at the end of the month he was as rosy and as bright as ever.

At noon on the 3rd of February, the northern horizon was touched with a faint glimmer of light which did not fade away for an hour, and the yellow disc of the sun appeared for an instant for the first time since the commencement of the long Polar night.

CHAPTER XV.

THE LAST EXPLORING EXPEDITION.

From this date, February 3rd, the sun rose each day higher above the horizon, the nights were, however, still very long, and, as is often the case in February, the cold increased, the thermometer marking only 1º Fahrenheit, the lowest temperature experienced throughout this extraordinary winter.

"When does the thaw commence in these northern seas?" inquired Mrs Barnett of the Lieutenant.

"In ordinary seasons," replied Hobson, "the ice does not break up until early in May; but the winter has been so mild that unless a very hard frost should now set in, the thaw may commence at the beginning of April. At least that is my opinion." "We shall still have two months to wait then?"

"Yes, two months, for it would not be prudent to launch our boat too soon amongst the floating ice; and I think our best plan will be to wait until our island has leached the narrowest part of Behring Strait, which is not more than two hundred miles wide."

"What do you mean?" exclaimed Mrs Barnett, considerably surprised at the Lieutenant’s reply. "Have you forgotten that it was the Kamtchatka Current which brought us where we now are, and which may seize us again when the thaw sets in and carry us yet farther north?"

"I do not think it will, madam; indeed I feel quite sure that that will not happen. The thaw always takes place in from north to south, and although the Kamtchatka Current runs the other way, the ice always goes down the Behring Current. Other reasons there are for my opinion which I cannot now enumerate. But the icebergs invariably drift towards the Pacific, and are there melted by its warmer waters. Ask Kalumah if I am not right. She knows these latitudes well, and will tell you that the thaw always proceeds from the north to the south."

Kalumah when questioned confirmed all that the Lieutenant had said, so that it appeared probable that the island would be drifted to the south like a huge ice-floe, that is to say, to the narrowest part of Behring Strait, which is much frequented in the summer by the fishermen of New Archangel, who are the most experienced mariners of those waters. Making allowance for all delays they might then hope to set foot on the continent before May, and although the cold had not been very intense there was every reason to believe that the foundations of Victoria Island had been thickened and strengthened by a fresh accumulation of ice at the base, and that it would hold together for several months to come.

There was then nothing for the colonists to do but to wait patiently,—still to wait!

The convalescence of little Michael continued to progress favourably. On the 20th of February he went out for the first time, forty days after he was taken ill. By this we mean that he went from his bedroom into the large room, where he was petted and made much of. His mother, acting by Madge’s advice, put off weaning him for some little time, and he soon got back his strength. The soldiers had made many little toys for him during his illness, and he was now as happy as any child in the wide world.

The last week of February was very wet, rain and snow falling alternately. A strong wind blew from the north-west, and the temperature was low enough for large quantities of snow to fall; the gale, however, increased in violence, and on the side of Cape Bathurst and the chain of icebergs the noise of the tempest was deafening. The huge ice-masses were flung against each other, and fell with a roar like that of thunder. The ice on the north was
compressed and piled up on the shores of the island. There really seemed to be a danger that the cape itself— which was but a kind of iceberg capped with earth and sand— would be flung down.

Some large pieces of ice, in spite of their weight, were driven to the very foot of the palisaded encinte; but fortunately for the factory the cape retained its position; had it given way all the buildings must inevitably have been crushed beneath it.

It will be easily understood that the position of Victoria Island, at the opening of a narrow strait about which the ice accumulated in large quantities, was extremely perilous, for it might at any time be swept by a horizontal avalanche, or crushed beneath the huge blocks of ice driven inland from the offing, and so become engulfed before the thaw. This was a new danger to be added to all the others already threatening the little band. Mrs Barnett, seeing the awful power of the pressure in the offing, and the violence with which the moving masses of ice crushed upon each other, realised the full magnitude of the peril they would all be in when the thaw commenced. She often mentioned her fears to the Lieutenant, and he shook his head like a man who had no reply to make.

Early in March the squall ceased, and the full extent of the transformation of the ice-field was revealed. It seemed as if by a kind of glissade the chain of icebergs had drawn nearer to the island. In some parts it was not two miles distant, and it advanced like a glacier on the move, with the difference that the latter has a descending and the ice-wall a horizontal motion. Between the lofty chain of ice-mountains the ice-field was fearfully distorted: strewn with hummocks, broken obelisks, shattered blocks, overturned pyramids, it resembled a tempest-tossed sea or a ruined town, in which not a building or a monument had remained standing, and above it all the mighty icebergs reared their snowy crests, standing out against the sky with their pointed peaks, their rugged cones, and solid buttresses, forming a fitting frame for the weird fantastic landscape at their feet.

At this date the little vessel was quite finished. This boat was rather heavy in shape, as might have been expected, but she did credit to Mac-Nab, and shapéd as she was like a barge at the bows, she ought the better to withstand the shocks of the floating ice. She might have been taken for one of those Dutch boats which venture upon the northern waters. Her rig, which was completed, consisted, like that of a cutter, of a mainsail and a jib carried on a single mast. The tent canvass of the factory had been made use of for sailcloth.

This boat would carry the whole colony, and if, as the Lieutenant hoped, the island were drifted to Behring Strait, the vessel would easily make her way to land, even from the widest part of the passage. There was then nothing to be done but wait for the thaw.

Hobson now decided to make a long excursion to the south to ascertain the state of the ice-field, to see whether there were any signs of its breaking up, to examine the chain of icebergs by which it was hemmed in, to make sure, in short, whether it would really be useless to attempt to cross to the American continent. Many incidents might occur, many fresh dangers might arise before the thaw, and it would therefore be but prudent to make a reconnaissance on the ice-field.

The expedition was organised and the start fixed for March 7th. Hobson, Mrs Barnett, Kalumah, Marbre, and Sabine were to go, and, if the route should be practicable, they would try and find a passage across the chain of icebergs. In any case, however, they were not to be absent for more than forty-eight hours.

A good stock of provisions was prepared, and, well provided for every contingency, the little party left Fort Hope on the morning of the 7th March and turned towards Cape Michael.

The thermometer then marked 32° Fahrenheit. The atmosphere was misty, but the weather was perfectly calm. The sun was now above the horizon for seven or eight hours a day, and its oblique rays afforded plenty of light.

At nine o’clock, after a short halt, the party descended the slope of Cape Michael and made their way across the ice-fields in a southeasterly direction. On this side the ice wall rose not three miles from the cape.

The march was of course very slow. Every minute a crevasse had to be turned, or a hummock too high to be climbed. It was evident that a sledge could not have got over the rough distorted surface, which consisted of an accumulation of blocks of ice of every shape and size, some of which really seemed to retain their equilibrium by a miracle. Others had been but recently overturned, as could be seen from the clearly cut fractures and sharp corners. Not a sign was to be seen of any living creature, no footprints told of the passage of man or beast, and the very birds that used to haunt these awful solitudes had deserted them.

Mrs Barnett was astonished at the scene before her, and asked the Lieutenant how they could possibly have crossed the ice-fields if they had started in December, and he replied by reminding her that it was then in a very different condition; the enormous pressure of the advancing icebergs had not then commenced, the surface of the sea was comparatively even, and the only danger was from its insufficient solidification. The irregularities which now barred their passage did not exist early in the winter.

They managed, however, to advance towards the mighty ice-wall, Kalumah generally leading the way. Like a chamois on the Alpine rocks, the young girl firmly treads the ice-masses with a swiftness of foot and an absence of hesitation which was really marvellous. She knew by instinct the best way through the labyrinth of icebergs, and
they wound through the narrow passages pointed out by Marbre and Sabine. They expected to get out of the valley walls on either side.

and the orb of day, already high in the heavens, flung some of its rays across the valley and lit up the glittering ice-9th.

render return through the winding valley difficult. It would not do, however, to approach too near to these beetling cliffs, the solidity of which was very doubtful. Internal fractures and rents were already commencing, the work of destruction and decomposition was proceeding rapidly, aided by the imprisoned air-bubbles; and the fragility of the huge structure, built up by the cold, was manifest to every eye. It could not survive the Arctic winter, it was doomed to melt beneath the sunbeams, and it contained material enough to feed large rivers.

Lieutenant Hobson had warned his companions of the danger of the avalanches which constantly fall from the summits of the icebergs, and they did not therefore go far along their base. That this prudence was necessary was proved by the falling of a huge block, at two o’clock, at the entrance to a kind of valley which they were about to cross. It must have weighed more than a hundred tons, and it was dashed upon the ice-field with a fearful crash, bursting like a bomb-shell. Fortunately no one was hurt by the splinters.

Every one was up at eight o’clock the next morning, and Hobson decided to follow the valley for another mile, in the hope of finding out whether it went right through the ice-wall. The direction of the pass, judging from the position of the sun, had now changed from north to south east, and as early as eleven o’clock the party came out on the opposite side of the chain of icebergs. The passage was therefore proved to run completely through the barrier.

From two to five o’clock the explorers followed a narrow winding path leading down amongst the icebergs; they were anxious to know if it led right through them, but could not at once ascertain. In this valley, as it might be called, they were able to examine the internal structure of the icy barrier. The blocks of which it was built up were here arranged with greater symmetry than outside. In some places trunks of trees were seen embedded in the ice, all, however, of Tropical not Polar species, which had evidently been brought to Arctic regions by the Gulf Stream, and would be taken back to the ocean when the thaw should have converted into water the ice which now held them in its chill embrace.

At five o’clock it became too dark to go any further. The travellers had not gone more than about two miles in the valley, but it was so sinuous, that it was impossible to estimate exactly the distance traversed.

The signal to halt was given by the Lieutenant, and Marbre and Sabine quickly dug out a grotto in the ice with their chisels, into which the whole party crept, and after a good supper all were soon asleep.

The aspect of the ice-field on the eastern side was exactly similar to that on the west. The same confusion of ice-masses, the same accumulation of hummocks and icebergs, as far as the eye could reach, with occasional alternations of smooth surfaces of small extent, intersected by numerous crevasses, the edges of which were already melting fast. The same complete solitude, the same desertion, not a bird, not an animal to be seen.

Mrs Barnett climbed to the top of the hummock, and there remained for an hour, gazing upon the sad and desolate Polar landscape before her. Her thoughts involuntarily flew back to the miserable attempt to escape that had been made five months before. Once more she saw the men and women of the hapless caravan encamped in the darkness of these frozen solitudes, or struggling against insurmountable difficulties to reach the mainland.

At last the Lieutenant broke in upon her reverie, and said—

"Madam, it is more than twenty-four hours since we left the fort. We now know the thickness of the ice-wall, and as we promised not to be away longer than forty-eight hours, I think it is time to retrace our steps."

Mrs Barnett saw the justice of the Lieutenant’s remark. They had ascertained that the barrier of ice was of moderate thickness, that it would melt away quickly enough to allow of the passage of Mac-Nab’s boat after the thaw, and it would therefore be well to hasten back lest a snow-storm or change in the weather of any kind should render return through the winding valley difficult.

The party breakfasted and set out on the return journey about one o’clock P.M.

The night was passed as before in an ice-cavern, and the route resumed at eight o’clock the next morning, March 9th.

The travellers now turned their backs upon the sun, as they were making for the west, but the weather was fine, and the orb of day, already high in the heavens, flung some of its rays across the valley and lit up the glittering ice-walls on either side.

Mrs Barnett and Kalumah were a little behind the rest of the party chatting together, and looking about them as they wound through the narrow passages pointed out by Marbre and Sabine. They expected to get out of the valley
quickly, and be back at the fort before sunset, as they had only two or three miles of the island to cross after leaving the ice. This would be a few hours after the time fixed, but not long enough to cause any serious anxiety to their friends at home.

They made their calculation without allowing for an incident which no human perspicacity could possibly have foreseen.

It was about ten o’clock when Marbre and Sabine, who were some twenty paces in advance of the rest, suddenly stopped and appeared to be debating some point. When the others came up, Sabine was holding out his compass to Marbre, who was staring at it with an expression of the utmost astonishment.

“What an extraordinary thing!” he exclaimed, and added, turning to the Lieutenant—

"Will you tell me, sir, the position of the island with regard to the ice-wall, is it on the east or west?"

"On the west," replied Hobson, not a little surprised at the question, "you know that well enough, Marbre"

"I know it well enough! I know it well enough!" repeated Marbre, shaking his head, "and if it is on the west, we are going wrong, and away from the inland!"

"What, away from the island!” exclaimed the Lieutenant, struck with the hunter’s air of conviction.

"We are indeed, sir," said Marbre; "look at the compass; my name is not Marbre if it does not show that we are walking towards the east not the west!"

"Impossible!" exclaimed Mrs Barnett.

"Look, madam," said Sabine.

It was true. The needle pointed in exactly the opposite direction to that expected. Hobson looked thoughtful and said nothing.

"We must have made a mistake when we left the ice cavern this morning," observed Sabine, "we ought to have turned to the left instead of to the right."

"No, no," said Mrs Barnett, "I am sure we did not make a mistake!"

"But"—said Marbre.

"But," interrupted Mrs Barnett, "look at the sun. Does it no longer rise in the east? Now as we turned our backs on it this morning, and it is still behind us, we must be walking towards the west, so that when we get out of the valley on the western side of the chain of icebergs, we must come to the island we left there."

Marbre, struck dumb by this irrefutable argument, crossed his arms and said no more.

"Then if so," said Sabine, "the sun and the compass are in complete contradiction of each other?"

"At this moment they are," said Hobson, "and the reason is simple enough; in these high northern latitudes, and in latitudes in the neighbourhood of the magnetic pole, the compasses are sometimes disturbed, and the deviation of their needles is so great as entirely to mislead travellers."

"All right then," said Marbre, "we have only to go on keeping our backs to the sun."

"Certainly," replied Lieutenant Hobson, "there can be no hesitation which to choose, the sun or our compass, nothing disturbs the sun."

The march was resumed, the sun was still behind them, and there was really no objection to be made to Hobson’s theory, founded, as it was, upon the position then occupied by the radiant orb of day.

The little troop marched on, but they did not get out of the valley as soon as they expected. Hobson had counted on leaving the ice-wall before noon, and it was past two when they reached the opening of the narrow pass.

Strange as was this delay, it had not made any one uneasy, and the astonishment of all can readily be imagined when, on stepping on to the ice field, at the base of the chain of icebergs, no sign was to be seen of Victoria Island, which ought to have been opposite to them.

Yes!—The island, which on this side had been such a conspicuous object, owing to the height of Cape Michael crowned with trees, had disappeared. In its place stretched a vast ice-field lit up by the sunbeams.

All looked around them, and then at each other in amazement.

"The island ought to be there!" cried Sabine.

"But it is not there," said Marbre. "Oh, sir—Lieutenant—where is it? what has become of it?"

But Hobson had not a word to say in reply, and Mrs Barnett was equally dumfounded.

Kalumah now approached Lieutenant Hobson, and touching his arm, she said—

"We went wrong in the valley, we went up it instead of down it, we shall only get back to where we were yesterday by crossing the chain of icebergs. Come, come!"

Hobson and the others mechanically followed Kalumah, and trusting in the young native’s sagacity, retraced their steps. Appearances were, however, certainly against her, for they were now walking towards the sun in an easterly direction.

Kalumah did not explain her motives, but muttered as she went along—

"Let us make haste!"
All were quite exhausted, and could scarcely get along, when they found themselves on the other side of the ice-wall, after a walk of three hours. The night had now fallen, and it was too dark to see if the island was there, but they were not long left in doubt.

At about a hundred paces off, burning torches were moving about, whilst reports of guns and shouts were heard. The explorers replied, and were soon joined by Sergeant Long and others, amongst them Thomas Black, whose anxiety as to the fate of his friends had at last roused him from his torpor. The poor fellows left on the island had been in a terrible state of uneasiness, thinking that Hobson and his party had lost their way. They were right, but what was it that had made them think so?

Twenty-four hours before, the immense ice-field and the island had turned half round, and in consequence of this displacement they were no longer on the west, but on the east of the ice-wall!

CHAPTER XVI
THE BREAK-UP OF THE ICE

Two hours later all had returned to Fort Hope, and the next day the sun for the first time shone upon that part of the coast which was formerly on the west of the island. Kalumah, to whom this phenomenon was familiar, had been right, and if the sun had not been the guilty party neither had the compass!

The position of Victoria Island with regard to the cardinal points was again completely changed. Since it had broken loose from the mainland the island—and not only the island, but the vast ice field in which it was enclosed—had turned half round. This displacement proved that the ice-field was not connected with the continent, and that the thaw would soon set in.

"Well, Lieutenant," said Mrs. Barnett, "this change of front is certainly in our favour. Cape Bathurst and Fort Hope are now turned towards the north-east, in other words towards the point nearest to the continent, and the ice-wall, through which our boat could only have made its way by a difficult and dangerous passage, is no longer between us and America. And so all is for the best, is it not?" added Mrs. Barnett with a smile.

"Indeed it is," replied Hobson, who fully realised all that was involved in this change of the position of Victoria Island.

No incident occurred between the 10th and 21st March, but there were indications of the approaching change of season. The temperature varied from 43° to 50° Fahrenheit, and it appeared likely that the breaking up of the ice would commence suddenly. Fresh crevasses opened, and the unfrozen water flooded the surface of the ice. As the whalers poetically express it, the "wounds of the ice-field bled copiously," and the opening of these "wounds" was accompanied by a sound like the roar of artillery. A warm rain fell for several hours, and accelerated the dissolution of the solid coating of the ocean.

The birds, ptarmigans, puffins, ducks, &c., which had deserted the island in the beginning of the winter, now returned in large numbers. Marbre and Sabine killed a few of them, and on some were found the tickets tied round their necks by the Lieutenant several months before. Flocks of white trumpeter swans also reappeared, and filled the air with their loud clarion tones; whilst the quadrupeds, rodents, and carnivora alike continued to frequent the vicinity of the fort like tame domestic animals.

Whenever the state of the sky permitted, which was almost every day, Hobson took the altitude of the sun. Sometimes Mrs Barnett, who had become quite expert in handling the sextant, assisted him, or took the observation in his stead. It was now most important to note the very slightest changes in the latitude and longitude of the island. It was still doubtful to which current it would be subject after the thaw, and the question whether it would be drifted north or south was the chief subject of the discussions between the Lieutenant and Mrs Barnett.

The brave lady had always given proof of an energy superior to that of most of her sex, and now she was to be seen every day braving fatigue, and venturing on to the half decomposed, or "pancake" ice, in all weathers, through snow or rain, and on her return to the factory ready to cheer and help everybody, and to superintend all that was going on. We must add that her efforts were ably seconded by the faithful Madge.

Mrs Barnett had compelled herself to look the future firmly in the face, and although she could not fail to fear for the safety of all, and sad presentiments haunted her, she never allowed herself to betray any uneasiness. Her courage and confidence never seemed to waver, she was as ever the kind encouraging friend of each and all, and none could have dreamt of the conflict of spirit going on beneath her quiet exterior demeanour. Lieutenant Hobson’s admiration of her character was unbounded, and he had also entire confidence in Kalumah, often trusting to her natural instinct as implicitly as a hunter to that of his dog.

The young Esquimaux was, in fact, very intelligent, and familiar from babyhood with the phenomena of the Polar regions. On board a whaler she might have advantageously replaced many an ice-master or pilot whose business it is to guide a boat amongst the ice.

Every day Kalumah went to examine the state of the ice-field.

The nature of the noise produced by the breaking of the icebergs in the distance was enough to tell her how far
the decomposition had advanced. No foot was surer than hers upon the ice, no one could spring more lightly forwards than she when her instinct told her that the smooth surface was rotten underneath, and she would scud across an ice-field riddled with fissures without a moment’s hesitation.

From the 20th to the 30th March, the thaw made rapid progress. Rain fell abundantly and accelerated the dissolution of the ice. It was to be hoped that the ice-field would soon open right across, and that in about fifteen days Hobson would be able to steer his boat into the open sea. He was determined to lose no time, as he did not know but that the Kamtchatka Current might sweep the island to the north before it could come under the influence of the Behring Current.

"But," Kalumah repeated again and again, "there is no fear of that, the breaking up of the ice does not proceed upwards but downwards. The danger is there!" she added, pointing to the south in the direction of the vast Pacific Ocean.

The young girl’s confidence on this point reassured Hobson, for he had no reason now to dread the falling to pieces of the island in the warm waters of the Pacific. He meant everybody to be on board the boat before that could happen, and they would not have far to go to get to one or the other continent, as the strait is in reality a kind of funnel through which the waters flow between Cape East on the Asiatic side and Cape Prince of Wales on the American.

This will explain the eager attention with which the slightest change in the position of the island was noticed. The bearings were taken every day, and everything was prepared for an approaching and perhaps sudden and hurried embarkation.

Of course all the ordinary avocations of the factory were now discontinued. There was no hunting or setting of traps. The magazines were already piled up with furs, most of which would be lost. The hunters and trappers had literally nothing to do; but Mac-Nab and his men, having finished their boat, employed their leisure time in strengthening the principal house of the fort, which would probably be subjected to considerable pressure from the accumulation of ice on the coast during the further progress of the thaw, unless indeed Cape Bathurst should prove a sufficient protection. Strong struts were fixed against the outside walls, vertical props were placed inside the rooms to afford additional support to the beams of the ceiling, and the roof was strengthened so that it could bear a considerable weight. These various works were completed early in April, and their utility, or rather their vital importance, was very soon manifested.

Each day brought fresh symptoms of returning spring, which seemed likely to set in early after this strangely mild Polar winter. A few tender shoots appeared upon the trees, and the newly-thawed sap swelled the bark of beeches, willows, and arbutus. Tiny mosses tinged with pale green the slopes under the direct influence of the sunbeams; but they were not likely to spread much, as the greedy rodents collected about the fort pounced upon and devoured them almost before they were above the ground.

Great were the sufferings of Corporal Joliffe at this time. We know that he had undertaken to protect the plot of ground cultivated by his wife. Under ordinary circumstances he would merely have had to drive away feathered pilferers, such as guillemots or puffins, from his sorrel and scurvy grass. A scarecrow would have been enough to get rid of them, still more the Corporal in person. But now all the rodents and ruminants of the Arctic fauna combined to lay siege to his territory; reindeer, Polar hares, musk-rats, shrews, martens, &c., braved all the threatening gestures of the Corporal, and the poor man was in despair, for whilst he was defending one end of his field the enemy was preying upon the other.

It would certainly have been wiser to let the poor creatures enjoy unmolested the crops which could be of no use to the colonists, as the fort was to be so soon abandoned, and Mrs Barnett tried to persuade the angry Corporal to do so, when he came to her twenty times a day with the same wearisome tale, but he would not listen to her:

"To lose the fruit of all our trouble!" he repeated; "to leave an establishment which was prospering so well! To give up the plants Mrs Joliffe and I sowed so carefully!... O madam, sometimes I feel disposed to let you all go, and stay here with my wife! I am sure the Company would give up all claim on the island to us"——

Mrs Barnett could not help laughing at this absurd speech, and sent the Corporal to his little wife, who had long ago resigned herself to the loss of her sorrel, scurvy grass, and other medicinal herbs.

We must here remark, that the health of all the colonists remained good, they had at least escaped illness; the baby, too, was now quite well again, and throve admirably in the mild weather of the early spring.

The thaw continued to proceed rapidly from the 2nd to the 5th April. The weather was warm but cloudy, and rain fell frequently in large drops. The wind blew from the south west, and was laden with the heated dust of the continent. Unfortunately the sky was so hazy, that it was quite impossible to take observations, neither sun, moon, nor stars could be seen through the heavy mists, and this was the more provoking, as it was of the greatest importance to note the slightest movements of the island.

It was on the night of the 7th April that the actual breaking up of the ice commenced. In the morning the
Lieutenant, Mrs Barnett, Kalumah, and Sergeant Long, had climbed to the summit of Cape Bathurst, and saw that a
great change had taken place in the chain of icebergs. The huge barrier had parted nearly in the middle, and now
formed two separate masses, the larger of which seemed to be moving northwards.

Was it the Kamtchatka Current which produced this motion? Would the floating island take the same direction?
The intense anxiety of the Lieutenant and his companions can easily be imagined. Their fate might now be decided
in a few hours, and if they should be drifted some hundred miles to the north, it would be very difficult to reach the
continent in a vessel so small as theirs.

Unfortunately it was impossible to ascertain the nature or extent of the displacement which was going on. One
thing was, however, evident, the island was not yet moving, at least not in the same direction as the ice-wall. It
therefore seemed probable that whilst part of the ice field was floating to the north, that portion immediately
surrounding the island still remained stationary.

This displacement of the icebergs did not in the least alter the opinion of the young Esquimaux. Kalumah still
maintained that the thaw would proceed from north to south, and that the ice wall would shortly feel the influence of
the Behring Current. To make herself more easily understood, she traced the direction of the current on the sand
with a little piece of wood, and made signs that in following it the island must approach the American continent. No
argument could shake her conviction on this point, and it was almost impossible not to feel reassured when listening
to the confident expressions of the intelligent native girl.

The events of the 8th, 9th, and 10th April, seemed, however, to prove Kalumah to be in the wrong. The northern
portion of the chain of icebergs drifted farther and farther north. The breaking up of the ice proceeded rapidly and
with a great noise, and the ice field opened all round the island with a deafening crash. Out of doors it was
impossible to hear one’s self speak, a ceaseless roar like that of artillery drowned every other sound.

About half a mile from the coast on that part of the island overlooked by Cape Bathurst, the blocks of ice were
already beginning to crowd together, and to pile themselves upon each other. The ice-wall had broken up into
numerous separate icebergs, which were drifting towards the north. At least it seemed as if they were moving in that
direction. Hobson became more and more uneasy, and nothing that Kalumah could say reassured him. He replied by
counter-arguments, which could not shake her faith in her own belief.

At last, on the morning of the 11th April, Hobson showed Kalumah the last icebergs disappearing in the north,
and again endeavoured to prove to her that facts were against her.

"No, no!" replied Kalumah, with an air of greater conviction than ever, "no, the icebergs are not going to the
north, but our island is going to the south!"

She might perhaps be right after all, and Hobson was much struck by this last reply. It was really possible that
the motion of the icebergs towards the north was only apparent, and that Victoria Island, dragged along with the ice-
field, was drifting towards the strait. But it was impossible to ascertain whether this were really the case, as neither
the latitude nor longitude could be taken.

The situation was aggravated by a phenomenon peculiar to the Polar regions, which rendered it still darker and
more impossible to take observations of any kind.

At the very time of the breaking up of the ice, the temperature fell several degrees. A dense mist presently
enveloped the Arctic latitudes, but not an ordinary mist. The soil was covered with a white crust, totally distinct
from hoar-frost—it was, in fact, a watery vapour which congeals on its precipitation. The minute particles of which
this mist was composed formed a thick layer on trees, shrubs, the walls of the fort, and any projecting surface which
bristled with pyramidal or prismatic crystals, the apexes of which pointed to the wind.

Hobson at once understood the nature of this atmospheric phenomenon, which whalers and explorers have often
noticed in the spring in the Polar regions.

"It is not a mist or fog," he said to his companions, "it is a ‘frost-rime’, a dense vapour which remains in a state
of complete congelation."

But whether a fog or a frozen mist this phenomenon was none the less to be regretted, for it rose a hundred feet
at least above the level of the sea, and it was so opaque that the colonists could not see each other when only two or
three paces apart.

Every one’s disappointment was very great. Nature really seemed determined to try them to the uttermost. When
the break up of the ice had come at last, when the wandering island was to leave the spot in which it had so long
been imprisoned, and its movements ought to be watched with the greatest care, this fog prevented all observations.

This state of things continued for four days. The frost-rime did not disappear until the 15th April, but on the
morning of that date a strong wind from the south rent it open and dispersed it.

The sun shone brightly once more, and Hobson eagerly seized his instruments. He took the altitude, and found
that the exact position of Victoria Island was then: Latitude, 69° 57'; longitude, 179° 33'.

Kalumah was right, Victoria Island, in the grasp of the Behring Current, was drifting towards the south.
CHAPTER XVII.
THE AVALANCHE.

The colonists were then at last approaching the more frequented latitudes of Behring Sea. There was no longer any danger that they would be drifted to the north, and all they had to do was to watch the displacement of the island, and to estimate the speed of its motion, which would probably be very unequal, on account of the obstacles in its path. Hobson most carefully noted every incident, taking alternately solar and stellar altitudes, and the next day, April 16th, after ascertaining the bearings, he calculated that if its present speed were maintained, Victoria Island would reach the Arctic Circle, from which it was now separated at the most by four degrees of latitude, towards the beginning of May.

It was probable that, when the island reached the narrowest portion of the strait, it would remain stationary until the thaw broke it up, the boat would then be launched, and the colonists would set sail for the American continent.

Everything was ready for an immediate embarkation, and the inhabitants of the island waited with greater patience and confidence than ever. They felt, poor things, that the end of their trials was surely near at last, and that nothing could prevent their landing on one side or the other of the strait in a few days.

This prospect cheered them up wonderfully, and the gaiety natural to them all, which they had lost in the terrible anxiety they had so long endured, was restored. The common meals were quite festal, as there was no need for economising the stores under present circumstances. The influence of the spring became more and more sensibly felt, and every one enjoyed the balmy air, and breathed more freely than before.

During the next few days, several excursions were made to the interior of the island and along the coast. Everywhere the furred animals, &c., still abounded, for even now they could not cross to the continent, the connection between it and the ice-field being broken, and their continued presence was a fresh proof that the island was no longer stationary.

No change had taken place on the island at Cape Esquimaux, Cape Michael, along the coast, or on the wooded heights of the interior, and the banks of the lagoon. The large gulf which had opened near Cape Michael during the storm had closed in the winter, and there was no other fissure on the surface of the soil.

During these excursions, bands of wolves were seen scudding across parts of the island. Of all the animals these fierce carnivorous beasts were the only ones which the feeling of a common danger had not tamed.

Kalumah’s preserver was seen several times. This worthy bear paced to and fro on the deserted plains in melancholy mood, pausing in his walk as the explorers passed, and sometimes following them to the fort, knowing well that he had nothing to fear from them.

On the 20th April Lieutenant Hobson ascertained that the wandering island was still drifting to the south. All that remained of the ice-wall, that is to say, the southern portion of the icebergs, followed it, but as there were no bench marks, the changes of position could only be estimated by astronomical observations.

Hobson took several soundings in different parts of the ground, especially at the foot of Cape Bathurst, and on the shores of the lagoon. He was anxious to ascertain the thickness of the layer of ice supporting the earth and sand, and found that it had not increased during the winter, and that the general level of the island did not appear to have risen higher above that of the sea. The conclusion he drew from these facts was, that no time should be lost in getting away from the fragile island, which would rapidly break up and dissolve in the warmer waters of the Pacific.

About the 25th April the bearing of the island was again changed, the whole ice-field had moved round from east to west twelve points, so that Cape Bathurst pointed to the north-west. The last remains of the ice-wall now shut in the northern horizon, so that there could be no doubt that the ice-field was moving freely in the strait, and that it nowhere touched any land.

The fatal moment was approaching. Diurnal or nocturnal observations gave the exact position of the island, and consequently of the ice-field. On the 30th of April, both were together drifting across Kotzebue Sound, a large triangular gulf running some distance inland on the American coast, and bounded on the south by Cape Prince of Wales, which might, perhaps, arrest the course of the island if it should deviate in the very least from the middle of the narrow pass.

The weather was now pretty fine, and the column of mercury often marked 50° Fahrenheit. The colonists had left off their winter garments some weeks before, and held themselves in constant readiness to leave the island. Thomas Black had already transported his instruments and books into the boat, which was waiting on the beach. A good many provisions had also been embarked and some of the most valuable furs.

On the 2d of May a very carefully taken observation showed that Victoria Island had a tendency to drift towards the east, and consequently to reach the American continent. This was fortunate, as they were now out of danger of being taken any farther by the Kamtchaka Current, which, as is well known, runs along the coast of Asia. At last the tide was turning in favour of the colonists!

"I think our bad fortune is at last at an end," observed Sergeant Long to Mrs Barnett, "and that our misfortunes
are really over; I don’t suppose there are any more dangers to be feared now."

"I quite agree with you," replied Mrs Barnett, "and it is very fortunate that we had to give up our journey across 
the ice-field a few months ago; we ought to be very thankful that it was impassible!"

Mrs Barnett was certainly justified in speaking as she did, for what fearful fatigue and sufferings they would all 
have had to undergo in crossing five hundred miles of ice in the darkness of the Polar night!

On the 5th May, Hobson announced that Victoria Island had just crossed the Arctic Circle. It had at last re-
entered that zone of the terrestrial sphere in which at one period of the year the sun does not set. The poor people all 
felt that they were returning to the inhabited globe.

The event of crossing the Arctic Circle was celebrated in much the same way as crossing the Equator for the first 
time would be on board ship, and many a glass of spirits was drank in honour of the event.

There was now nothing left to do but to wait till the broken and half-melted ice should allow of the passage of 
the boat, which was to bear the whole colony to the land.

During the 7th May the island turned round to the extent of another quarter of its circumference. Cape Bathurst 
now pointed due north, and those masses of the old chain of icebergs which still remained standing were now above 
it, so that it occupied much the same position as that assigned to it in maps when it was united to the American 
continent. The island had gradually turned completely round, and the sun had risen successively on every point of its 
shores.

The observations of the 8th May showed that the island had become stationary near the middle of the passage, at 
least forty miles from Cape Prince of Wales, so that land was now at a comparatively short distance from it, and the 
safety of all seemed to be secured.

In the evening a good supper was served in the large room, and the healths of Mrs Barnett and of Lieutenant 
Hobson were proposed.

The same night the Lieutenant determined to go and see if any changes had taken place in the ice-field on the 
south, hoping that a practicable passage might have been opened.

Mrs Barnett was anxious to accompany him, but he persuaded her to rest a little instead, and started off, 
accompanied only by Sergeant Long.

Mrs Barnett, Madge, and Kalumah returned to the principal house after seeing them off, and the soldiers and 
women had already gone to bed in the different apartments assigned to them.

It was a fine night, there was no moon, but the stars shone very brightly, and as the ice-field vividly reflected 
their light, it was possible to see for a considerable distance.

It was nine o’clock when the two explorers left the fort and turned towards that part of the coast between Port 
Barnett and Cape Michael. They followed the beach for about two miles, and found the ice-field in a state of 
positive chaos. The sea was one vast aggregation of crystals of every size, it looked as if it had been petrified 
suddenly when tossing in a tempest, and, alas, there was even now no free passage between the ice-masses—it 
would be impossible for a boat to pass yet.

Hobson and Long remained on the ice-field talking and looking about them until midnight, and then seeing that 
there was still nothing to do but to wait, they decided to go back to Fort Hope and rest for a few hours.

They had gone some hundred paces, and had reached the dried-up bed of Paulina River, when an unexpected 
noise arrested them. It was a distant rumbling from the northern part of the ice-field, and it became louder and louder 
until it was almost deafening. Something dreadful was going on in the quarter from which it came, and Hobson 
fancied he felt the ice beneath his feet trembling, which was certainly far from reassuring.

"The noise comes from the chain of icebergs," exclaimed Long, "what can be going on there?"

Hobson did not answer, but feeling dreadfully anxious he rushed towards the fort dragging his companion after 
him.

"To the fort! to the fort." he cried at last, "the ice may have opened, we may be able to launch our boat on the 
sea!"

And the two ran as fast as ever they could towards Fort Hope by the shortest way.

A thousand conjectures crowded upon them. From what new phenomenon did the unexpected noise proceed? 
Did the sleeping inhabitants of the fort know what was going on? They must certainly have heard the noise, for, in 
vulgar language, it was loud enough to wake the dead.

Hobson and Long crossed the two miles between them and Fort Hope in twenty minutes, but before they reached 
the enceinte they saw the men and women they had left asleep hurrying away in terrified disorder, uttering cries of 
despair.

The carpenter Mac-Nab, seeing the Lieutenant, ran towards him with his little boy in his arms.

"Look, sir, look!" he cried, drawing his master towards a little hill which rose a few yards behind the fort.

Hobson obeyed, and saw that part of the ice-wall, which, when he left, was two or three miles off in the offing,
had fallen upon the coast of the island. Cape Bathurst no longer existed, the mass of earth and sand of which it was composed had been swept away by the icebergs and scattered over the palisades. The principal house and all the buildings connected with it on the north were buried beneath the avalanche. Masses of ice were crowding upon each other and tumbling over with an awful crash, crushing everything beneath them. It was like an army of icebergs taking possession of the island.

The boat which had been built at the foot of the cape was completely destroyed. The last hope of the unfortunate colonists was gone!

As they stood watching the awful scene, the buildings, formerly occupied by the soldiers and women, and from which they had escaped in time, gave way beneath an immense block of ice which fell upon them. A cry of despair burst from the lips of the houseless outcasts.

"And the others, where are they?" cried the Lieutenant in heart-rending tones.

"There!" replied Mac-Nab, pointing to the heap of sand, earth, and ice, beneath which the principal house had entirely disappeared.

Yes, the illustrious lady traveller, Madge, Kalumah, and Thomas Black, were buried beneath the avalanche which had surprised them in their sleep!

CHAPTER XVIII.

ALL AT WORK.

Fearful catastrophe had occurred. The ice-wall had been flung upon the wandering island, the volume below the water being five times that of the projecting part, it had come under the influence of the submarine currents, and, opening a way for itself between the broken ice-masses, it had fallen bodily upon Victoria Island, which, driven along by this mighty propelling force, was drifting rapidly to the south.

Mac-Nab and his companions, aroused by the noise of the avalanche dashing down upon the dog-house, stable, and principal house, had been able to escape in time, but now the work of destruction was complete. Not a trace remained of the buildings in which they had slept, and the island was bearing all its inhabitants with it to the unfathomable depths of the ocean! Perhaps, however, Mrs Barnett, Madge, Kalumah, and the astronomer, were still living! Dead or alive they must be dug out.

At this thought Hobson recovered his composure and shouted—

"Get shovels and pickaxes! The house is strong! it may have held together! Let us set to work!"

There were plenty of tools and pickaxes, but it was really impossible to approach the enceinte. The masses of ice were rolling down from the summits of the icebergs, and some parts of the ice-wall still towered amongst the ruins two hundred feet above the island. The force with which the tossing masses, which seemed to be surging all along the northern horizon, were overthrown can be imagined; the whole coast between the former Cape Bathurst and Cape Esquimaux was not only hemmed in, but literally invaded by these moving mountains, which, impelled by a force they could not resist, had already advanced more than a quarter of a mile inland.

Every moment the trembling of the ground and a loud report gave notice that another of these masses had rolled over, and there was a danger that the island would sink beneath the weight thrown upon it. A very apparent lowering of the level had taken place all along that part of the coast near Cape Bathurst, it was evidently gradually sinking down, and the sea had already encroached nearly as far as the lagoon.

The situation of the colonists was truly terrible, unable as they were to attempt to save their companions, and driven from the enceinte by the crashing avalanches, over which they had no power whatever. They could only wait, a prey to the most awful forebodings.

Day dawned at last, and how fearful a scene was presented by the districts around Cape Bathurst! The horizon was shut in on every side by ice-masses, but their advance appeared to be checked for the moment at least. The ruins of the ice-wall were at rest, and it was only now and then that a few blocks rolled down from the still tottering crests of the remaining icebergs. But the whole mass—a great part of its volume being sunk beneath the surface of the sea—was in the grasp of a powerful current, and was driving the island along with it to the south, that is to say, to the ocean, in the depths of which they would alike be engulfed.

Those who were thus borne along upon the island were not fully conscious of the peril in which they stood. They had their comrades to save, and amongst them the brave woman who had so won all their hearts, and for whom they would gladly have laid down their lives. The time for action had come, they could again approach the palisades, and there was not a moment to lose, as the poor creatures had already been buried beneath the avalanche for six hours.

We have already said that Cape Bathurst no longer existed. Struck by a huge iceberg it had fallen bodily upon the factory, breaking the boat and crushing the dog-house and stable with the poor creatures in them. The principal house next disappeared beneath the masses of earth and sand, upon which rolled blocks of ice to a height of fifty or sixty feet. The court of the fort was filled up, of the palisade not a post was to be seen, and it was from beneath this accumulation of earth, sand, and ice, that the victims were to be dug out.
Before beginning to work Hobson called the head carpenter to him, and asked if he thought the house could bear the weight of the avalanche.

"I think so, sir," replied Mac-Nab; "in fact, I may almost say I am sure of it. You remember how we strengthened it, it has been 'casemated,' and the vertical beams between the ceilings and floors must have offered great resistance; moreover, the layer of earth and sand with which the roof was first covered must have broken the shock of the fall of the blocks of ice from the icebergs." "God grant you may be right, Mac-Nab," replied Hobson, "and that we may be spared the great grief of losing our friends!"

The Lieutenant then sent for Mrs Joliffe, and asked her if plenty of provisions had been left in the house.

"Oh, yes," replied Mrs Joliffe, "there was plenty to eat in the pantry and kitchen."

"And any water?"

"Yes, water and rum too."

"All right, then," said Hobson, "they will not be starved—but how about air?"

To this question Mac-Nab could make no reply, and if, as he hoped, the house had not given way, the want of air would be the chief danger of the four victims. By prompt measures, however, they might yet be saved, and the first thing to be done was to open a communication with the outer air.

All set to work zealously, men and women alike seizing shovels and pickaxes. The masses of ice, sand, and earth, were vigorously attacked at the risk of provoking fresh downfalls; but the proceedings were ably directed by Mac-Nab.

It appeared to him best to begin at the top of the accumulated masses, so as to roll down loose blocks on the side of the lagoon. The smaller pieces were easily dealt with, with pick and crowbar, but the large blocks had to be broken up. Some of great size were melted with the aid of a large fire of resinous wood, and every means was tried to destroy or get rid of the ice in the shortest possible time.

But so great was the accumulation, that although all worked without pause, except when they snatched a little food, there was no sensible diminution in its amount when the sun disappeared below the horizon. It was not, however, really of quite so great a height as before, and it was determined to go on working from above through the night, and when there was no longer any danger of fresh falls Mac-Nab hoped to be able to sink a vertical shaft in the compact mass, so as to admit the outer air to the house as soon as possible.

All night long the party worked at the excavation, attacking the masses with iron and heat, as the one or the other seemed more likely to be effective. The men wielded the pickaxe whilst the women kept up the fires; but all were animated by one purpose—the saving of the lives of Mrs Barnett, Madge, Kalumah, and the astronomer.

When morning dawned the poor creatures had been buried for thirty hours in air necessarily very impure under so thick a cover.

The progress made in the night had been so great that Mac-Nab prepared to sink his shaft, which he meant to go straight down to the top of the house; and which, according to his calculation, would not have to be more than fifty feet deep. It would be easy enough to sink this shaft through the twenty feet of ice; but great difficulty would be experienced when the earth and sand were reached, as, being very brittle, they would of course constantly fill in the shaft, and its sides would therefore have to be lined. Long pieces of wood were prepared for this purpose, and the boring proceeded. Only three men could work at it together, and the soldiers relieved each other constantly, so that the excavation seemed likely to proceed rapidly.

As might be supposed the poor fellows alternated between hope and fear when some obstacle delayed them. When a sudden fall undid their work they felt discouraged, and nothing but Mac-Nab’s steady voice could have rallied them. As the men toiled in turn at their weary task the women stood watching them from the foot of a hill, saying little, but often praying silently. They had now nothing to do but to prepare the food, which the men devoured in their short intervals of repose.

The boring proceeded without any very great difficulty, but the ice was so hard that the progress was but slow. At the end of the second day Mac-Nab had nearly reached the layer of earth and sand, and could not hope to get to the top of the house before the end of the next day.

Night fell, but the work was continued by the light of torches. A "snow-house" was hastily dug out in one of the hummocks on the shore as a temporary shelter for the women and the little boy. The wind had veered to the southwest, and a cold rain began to fall, accompanied with occasional squalls; but neither the Lieutenant nor his men dreamt of leaving off work.

Now began the worst part of the task. It was really impossible to bore in the shifting masses of sand and earth, and it became necessary to prop up the sides of the shaft with wood, the loose earth being drawn to the surface in a bucket hung on a rope. Of course under the circumstances the work could not proceed rapidly, falls might occur at any moment, and the miners were in danger of being buried in their turn.

Mac-Nab was generally the one to remain at the bottom of the narrow shaft, directing the excavation, and
frequently sounding with a long pick, but as it met with no resistance, it was evident that it did not reach the roof of
the house.

When the morning once more dawned, only ten feet had been excavated in the mass of earth and sand, so that
twenty remained to be bored through before the roof of the house could be reached, that is to say, if it had not given
way, and still occupied the position it did before the fall of the avalanche.

It was now fifty-four hours since Mrs Barnett and her companions were buried!

Mac-Nab and the Lieutenant often wondered if they on their side had made any effort to open a communication
with the outer air. They felt sure that with her usual courage, Mrs Barnett would have tried to find some way out if
her movements were free. Some tools had been left in the house, and Kellet, one of the carpenter’s men,
remembered leaving his pickaxe in the kitchen. The prisoners might have broken open one of the doors and begun to
pierce a gallery across the layer of earth. But such a gallery could only be driven in a horizontal direction, and would
be a much longer business than the sinking of a shaft from above, for the masses flung down by the avalanche,
although only sixty feet deep, covered a space more than five hundred feet in diameter. Of course the prisoners
could not be aware of this fact, and if they should succeed in boring their horizontal gallery, it would be eight days
at least before they could cut through the last layer of ice, and by that time they would be totally deprived of air, if
not of food.

Nevertheless the Lieutenant carefully went over every portion of the accumulation himself, and listened intently
for any sounds of subterranean digging, but he heard nothing.

On the return of day the men toiled with fresh energy, bucket after bucket was drawn to the surface of the shaft
loaded with earth. The clumsy wooden props answered admirably in keeping the earth from filling in the pit, a few
falls occurred, but they were rapidly checked, and no fresh misfortunes occurred throughout the day, except that the
soldier Garry received a blow on the head from a falling block of ice. The wound was not however severe, and he
would not leave his work.

At four o’clock the shaft was fifty feet deep altogether, having been sunk through twenty feet of ice and thirty of
sand and earth.

It was at this depth that Mac-Nab had expected to reach the roof of the house, if it had resisted the pressure of
the avalanche.

He was then at the bottom of the shaft, and his disappointment and dismay can be imagined when, on driving his
pickaxe into the ground as far as it would go, it met with no resistance whatever.

Sabine was with him, and for a few moments he remained with his arms crossed, silently looking at his
companion.

"No roof then?" inquired the hunter.

"Nothing whatever," replied the carpenter, "but let us work on, the roof has bent of course, but the floor of the
loft cannot have given way. Another ten feet and we shall come to that floor, or else"——

Mac-Nab did not finish his sentence, and the two resumed their work with the strength of despair.

At six o’clock in the evening, another ten or twelve feet had been dug out.

Mac-Nab sounded again, nothing yet, his pick still sunk in the shifting earth, and flinging it from him, he buried
his face in his hands and muttered——

"Poor things, poor things!" He then climbed to the opening of the shaft by means of the wood-work.

The Lieutenant and the Sergeant were together in greater anxiety than ever, and taking them aside, the carpenter
told them of his dreadful disappointment.

"Then," observed Hobson, "the house must have been crushed by the avalanche, and the poor people in it"——

"No!" cried the head-carpenter with earnest conviction, "no, it cannot have been crushed, it must have resisted,
strengthened as it was. It cannot—it cannot have been crushed!"

"Well, then, what has happened?" said the Lieutenant in a broken voice, his eyes filling with tears.

"Simply this," replied Mac Nab, "the house itself has remained intact, but the ground on which it was built must
have sunk. The house has gone through the crust of ice which forms the foundation of the island. It has not been
crushed, but engulfed, and the poor creatures in it"——

"Are drowned!" cried Long.

"Yes, Sergeant, drowned without a moment’s notice—drowned like passengers on a foundered vessel!"

For some minutes the three men remained silent. Mac-Nab’s idea was probably correct. Nothing was more likely
than that the ice forming the foundation of the island had given way under such enormous pressure. The vertical
props which supported the beams of the ceiling, and rested on those of the floor, had evidently aided the catastrophe
by their weight, and the whole house had been engulfed.

"Well, Mac-Nab," said Hobson at last, "if we cannot find them alive"——

"We must recover their bodies," added the head carpenter.
“And with these words Mac-Nab, accompanied by the Lieutenant, went back to his work at the bottom of the shaft without a word to any of his comrades of the terrible form his anxiety had now assumed.

The excavation continued throughout the night, the men relieving each other every hour, and Hobson and Mac-Nab watched them at work without a moment’s rest.

At three o’clock in the morning Kellet’s pickaxe struck against something hard, which gave out a ringing sound. The head carpenter felt it almost before he heard it.

“We have reached them!” cried the soldier, “they are saved.”

“Hold your tongue, and go on working,” replied the Lieutenant in a choked voice.

It was now seventy-six hours since the avalanche fell upon the house!

Kellet and his companion Pond resumed their work. The shaft must have nearly reached the level of the sea, and Mac Nab therefore felt that all hope was gone.

In less than twenty minutes the hard body which Kellet had struck was uncovered, and proved to be one of the rafters of the roof. The carpenter flung himself to the bottom of the shaft, and seizing a pickaxe sent the laths of the roof flying on every side. In a few moments a large aperture was made, and a figure appeared at it which it was difficult to recognise in the darkness.

It was Kalumah!

"Help! help!” she murmured feebly.

Hobson let himself down through the opening, and found himself up to the waist in ice-cold water. Strange to say, the roof had not given way, but as Mac-Nab had supposed, the house had sunk, and was full of water. The water did not, however, yet fill the loft, and was not more than a foot above the floor. There was still a faint hope!

The Lieutenant, feeling his way in the darkness, came across a motionless body, and dragging it to the opening he consigned it to Pond and Kellet. It was Thomas Black.

Madge, also senseless, was next found; and she and the astronomer were drawn up to the surface of the ground with ropes, where the open air gradually restored them to consciousness.

Mrs Barnett was still missing, but Kalumah led Hobson to the very end of the loft, and there he found the unhappy lady motionless and insensible, with her head scarcely out of the water.

The Lieutenant lifted her in his arms and carried her to the opening, and a few moments later he had reached the outer air with his burden, followed by Mac-Nab with Kalumah.

Every one gathered round Mrs Barnett in silent anxiety, and poor Kalumah, exhausted as she was, flung herself across her friend’s body.

Mrs Barnett still breathed, her heart still beat feebly, and revived by the pure fresh air she at last opened her eyes.

A cry of joy burst from every lip, a cry of gratitude to Heaven for the great mercy vouchsafed, which was doubtless heard above.

Day was now breaking in the east, the sun was rising above the horizon, lighting up the ocean with its brilliant beams, and Mrs Barnett painfully staggered to her feet. Looking round her from the summit of the new mountain formed by the avalanche, which overlooked the whole island, she murmured in a changed and hollow voice——

"The sea! the sea!”

Yes, the ocean now encircled the wandering island, the sea was open at last, and a true sea-horizon shut in the view from east to west.

CHAPTER XIX.

BEHRING SEA.

The island, driven by the ice-wall, had then drifted at a great speed into Behring Sea, after crossing the strait without running aground on its shores! It was still hurrying on before the icy barrier, which was in the grasp of a powerful submarine current, hastening onwards on to its inevitable dissolution in the warmer waters of the Pacific, and the boat on which all had depended was useless!

As soon as Mrs Barnett had entirely recovered consciousness, she related in a few words the history of the seventy-four hours spent in the house now in the water. Thomas Black, Madge, and Kalumah had been aroused by the crash of the avalanche, and had rushed to the doors or windows. There was no longer any possibility of getting out, the mass of earth and sand, which was but a moment before Cape Bathurst, completely covered the house, and almost immediately afterwards the prisoners heard the crash of the huge ice-masses which were flung upon the factory.

In another quarter of an hour all felt that the house, whilst resisting the enormous pressure, was sinking through the soil of the island. They knew that the crust of the ice must have given way, and that the house would fill with water!

To seize a few provisions remaining in the pantry, and to take refuge in the loft, was the work of a moment. This
the poor creatures did from a dim instinct of self-preservation, but what hope could they really have of being saved! However, the loft seemed likely to resist, and two blocks of ice abutting from the roof saved it from being immediately crushed.

Whilst thus imprisoned the poor creatures could hear the constant falls from the icebergs, whilst the sea was gradually rising through the lower rooms. They must either be crushed or drowned!

But by little short of a miracle, the roof of the house, with its strong framework, resisted the pressure, and after sinking a certain depth the house remained stationary, with the water rather above the floor of the loft. The prisoners were obliged to take refuge amongst the rafters of the roof, and there they remained for many hours. Kalumah devoted herself to the service of the others, and carried food to them through the water. They could make no attempt to save themselves, succour could only come from without.

It was a terrible situation, for breathing was difficult in the vitiated air deficient as it was in oxygen, and charged with a great excess of carbonic acid.... A few hours later Hobson would only have found the corpses of his friends!

The horror of the position was increased by the gushing of the water through the lower rooms, which convinced Mrs Barnett that the island was drifting to the south. She had, in fact, guessed the whole truth; she knew that the ice-wall had heeled over and fallen upon the island, and concluded that the boat was destroyed. It was this last fact which gave such terrible significance to her first words when she looked around her after her swoon—

"The sea! the sea!"

Those about her, however, could think of nothing yet but the fact, that they had saved her for whom they would have died, and with her Madge, Kalumah, and Thomas Black. Thus far not one of those who had joined the Lieutenant in his disastrous expedition had succumbed to any of the fearful dangers through which they had passed.

But matters were not yet at their worst, and fresh troubles were soon to hasten the final catastrophe.

Hobson's first care after Mrs Barnett's recovery was to take the bearings of the inland. It was listless now to think of quitting it, as the sea was open and their boat destroyed. A few ruins alone remained of the mighty ice-wall, the upper portion of which had crushed Cape Bathurst whilst the submerged base was driving the island to the south.

The instruments and maps belonging to the astronomer were found in the ruins of the house, and were fortunately uninjured. The weather was cloudy, but Hobson succeeded in taking the altitude of the sun with sufficient accuracy for his purpose.

We give the result obtained at noon on the 12th May. Victoria Island was then situated in longitude 168°12’ west of Greenwich, and in latitude 63°37’ N. The exact spot was looked out on the chart, and proved to be in Norton Sound, between Cape Tchaplin on the Asiatic and Cape Stephens on the American coast, but a hundred miles from either.

"We must give up all hope of making the land of the continent then!" said Mrs Barnett.

"Yes, madam," replied Hobson; "all hope of that is at an end; the current is carrying us with great rapidity out into the offing, and our only chance is, that we may pass within sight of a whaler."

"Well, but," added Mrs Barnett, "if we cannot make the land of either continent, might not the current drive us on to one of the islands of Behring Sea?"

There was, in fact, a slight possibility that such a thing might happen, and all eagerly clutched at the hope, like a drowning man at a plank. There are plenty of islands in Behring Sea, St Lawrence, St Matthew, Nunivak, St Paul, George island, &c. The wandering island was in fact at that moment not far from St Lawrence, which is of a considerable size, and surrounded with islets; and should it pass it without stopping, there was yet a hope that the cluster of the Aleutian Islands, bounding Behring Sea on the south, might arrest its course.

Yes! St Lawrence might be a harbour of refuge for the colonists, and if it failed them, St Matthew, and the group of islets of which it is the centre, would still be left. It would not do, however, to count upon the Aleutian Islands, which were more than eight hundred miles away, and which they might never reach. Long, long before they got so far, Victoria Island, worn away by the warm sea-waves, and melted by the rays of the sun, which was already in the sign of Gemini, would most likely have sunk to the bottom of the ocean.

There is, however, no fixed point beyond which floating ice does not advance. It approaches nearer to the equator in the southern than in the northern hemisphere. Icebergs have been seen off the Cape of Good Hope, at about thirty-six degrees south latitude, but those which come down from the Arctic Ocean have never passed forty degrees north latitude. The weather conditions, which are of course variable, determine the exact locality where ice will melt; in severe and prolonged winters it remains solid in comparatively low latitudes, and vice versa in early springs.

Now the warm season of 1861 had set in very early, and this would hasten the dissolution of Victoria Island. The waters of Behring Sea had already changed from blue to green, as the great navigator Hudson observed they always do on the approach of icebergs, so that a catastrophe might be expected at any moment.

Hobson determined to do his best to avert the coming misfortune, and ordered a raft to be constructed which
would carry the whole colony, and might be guided to the continent somehow or other. There was every chance of meeting vessels now that the whaling season had commenced, and Mac-Nab was commissioned to make a large solid raft which would float when Victoria Island was engulfed.

But first of all, it was necessary to construct some shelter for the homeless inhabitants of the island. The simple plan appeared to be to dig out the old barracks, which had been built on to the principal house, and the walls of which were still standing. Every one set to work with a hearty good-will, and in a few days a shelter was provided from the inclemencies of the fickle weather.

Search was also made in the ruins of the large house, and a good many articles of more or less value were saved from the submerged rooms—tools, arms, furniture, the air pumps, and the air vessel, &c.

On the 13th May all hope of drifting on to the island of St Lawrence had to be abandoned. When the bearings were taken, it was found that they were passing at a considerable distance to the east of that island; and, as Hobson was well aware, currents do not run against natural obstacles, but turn them, so that little hope could be entertained of thus making the land. It is true the network of islands in the Catherine Archipelago, scattered over several degrees of latitude, might stop the island if it ever got so far. But, as we have before stated, that was not probable, although it was advancing at great speed; for this speed must decrease considerably when the ice-wall which was driving it along should be broken away or dissolved, unprotected as it was from the heat of the sun by any covering of earth or sand.

Lieutenant Hobson, Mrs Barnett, Sergeant Long, and the head carpenter often discussed these matters, and came to the conclusion that the island could certainly never reach the Aleutian group with so many chances against it.

On the 14th May, Mac-Nab and his men commenced the construction of a huge raft. It had to be as high as possible above the water, to prevent the waves from breaking over it, so that it was really a formidable undertaking. The blacksmith, Rae, had fortunately found a large number of the iron bolts which had been brought from Fort Reliance, and they were invaluable for firmly fastening together the different portions of the framework of the raft.

We must describe the novel site for the building of the raft suggested by Lieutenant Hobson. Instead of joining the timbers and planks together on the ground, they were joined on the surface of the lake. The different pieces of wood were prepared on the banks, and launched separately. They were then easily fitted together on the water. This mode of proceeding had two advantages:—

1. The carpenter would be able at once to judge of the point of flotation, and the stability which should be given to the raft.
2. When Victoria Island melted, the raft would already be floating, and would not be liable to the shocks it would receive if on land when the inevitable break-up came.

Whilst these works were going on, Hobson would wander about on the beach, either alone or with Mrs Barnett, examining the state of the sea, and the ever-changing windings of the coast-line, worn by the constant action of the waves. He would gaze upon the vast deserted ocean, from which the very icebergs had now disappeared, watching, ever watching, like a shipwrecked mariner, for the vessel which never came. The ocean solitudes were only frequented by cetacea, which came to feed upon the microscopic animalcules which form their principal food, and abounded in the green waters. Now and then floating trees of different kinds, which had been brought by the great ocean currents from warm latitudes, passed the island on their way to the north.

On the 16th May, Mrs Barnett and Madge were walking together on that part of the island between the former Cape Bathurst and Port Barnett. It was a fine warm day, and there had been no traces of snow on the ground for some time; all that recalled the bitter cold of the Polar regions were the relics left by the ice-wall on the northern part of the island; but even these were rapidly melting, and every day fresh waterfalls poured from their summits and bathed their sides. Very soon the sun would have completely dissolved every atom of ice.

Strange indeed was the aspect of Victoria Island. But for their terrible anxiety, the colonists must have gazed at it with eager interest. The ground was more prolific than it could have been in any former spring, transferred as it was to milder latitudes. The little mosses and tender flowers grew rapidly, and Mrs Joliffe’s garden was wonderfully successful. The vegetation of every kind, hitherto checked by the rigour of the Arctic winter, was not only more abundant, but more brilliantly coloured. The hues of leaves and flowers were no longer pale and watery, but warm and glowing, like the sunbeams which called them forth. The arbutus, willow, birch, fir, and pine trees were clothed with dark verdure; the sap—sometimes heated in a temperature of 68° Fahrenheit—burst open the young buds; in a word, the Arctic landscape was completely transformed, for the island was now beneath the same parallel of latitude as Christiania or Stockholm, that is to say, in one of the finest districts of the temperate zones.

But Mrs Barnett had now no eyes for these wonderful phenomena of nature. The shadow of the coming doom clouded her spirit. She shared the feeling of depression manifested by the hundreds of animals now collected round the factory. The foxes, martens, ermines, lynxes, beavers, musk-rats, gluttons, and even the wolves, rendered less savage by their instinctive knowledge of a common danger, approached nearer and nearer to their old enemy man, as if man could save them. It was a tacit, a touching acknowledgment of human superiority, under circumstances in
which that superiority could be of absolutely no avail.

No! Mrs Barnett cared no longer for the beauties of nature, and gazed without ceasing upon the boundless, pitiless, infinite ocean with its unbroken horizon.

"Poor Madge!" she said at last to her faithful companion; "it was I who brought you to this terrible pass—you who have followed me everywhere, and whose fidelity deserved a far different recompense! Can you forgive me?"

"There is but one thing I could never have forgiven you," replied Madge,—"a death I did not share!"

"Ah, Madge!" cried Mrs Barnett, "if my death could save the lives of all these poor people, how gladly would I die!"

"My dear girl," replied Madge, "have you lost all hope at last?"

"I have indeed," murmured Mrs Barnett, hiding her face on Madge's shoulder.

The strong masculine nature had given way at last, and Mrs Barnett was for a moment a feeble woman. Was not her emotion excusable in so awful a situation?

Mrs Barnett sobbed aloud, and large tears rolled down her cheeks.

Madge kissed and caressed her, and tried all she could to reassure her; and presently, raising her head, her poor mistress said—

"Do not tell them, Madge, how I have given way—do not betray that I have wept."

"Of course not," said Madge, "and they would not believe me if I did. It was but a moment's weakness. Be yourself, dear girl; cheer up, and take fresh courage."

"Do you mean to say you still hope yourself!" exclaimed Mrs Barnett, looking anxiously into her companion's face.

"I still hope!" said Madge simply.

But a few days afterwards, every chance of safety seemed to be indeed gone, when the wandering island passed outside the St Matthew group, and drifted away from the last land in Behring Sea!

CHAPTER XX.

IN THE OFFING.

Victoria Island was now floating in the widest part of Behring Sea, six hundred miles from the nearest of the Aleutian Islands, and two hundred miles from the nearest land, which was on the east. Supposing no accident happened, it would be three weeks at least before this southern boundary of Behring Sea could be reached.

Could the island last so long? Might it not burst open at any moment, subject as it was even now to the constant action of tepid water, the mean temperature of which was more than 50° Fahrenheit?

Lieutenant Hobson pressed on the construction of the raft as rapidly as possible, and the lower framework was already floating on the lagoon. Mac-Nab wished to make it as strong as possible, for it would have a considerable distance to go to reach the Aleutian Islands, unless they were fortunate enough to meet with a whaler.

No important alteration had lately taken place in the general configuration of the island. Reconnaissances were taken everyday, but great caution was necessary, as a fracture of the ground might at any moment cut off the explorers from the rest of the party.

The wide gulf near Cape Michael, which the winter had closed, had reopened gradually, and now ran a mile inland, as far as the dried-up bed of the little river. It was probable that it was soon to extend to the bed itself, which was of course of little thickness, having been hollowed out by the stream. Should it do so, the whole district between Cape Michael and Port Barnett, bounded on the west by the river bed, would disappear—that is to say, the colonists would lose a good many square miles of their domain. On this account Hobson warned every one not to wander far, as a rough sea would be enough to bring about the dreaded catastrophe.

Soundings were, however, taken, in several places with a view to ascertaining where the ice was thickest, and it was found that, near Cape Bathurst, not only was the layer of earth and sand of greater extent—which was of little importance—but the crust of ice was thicker than anywhere else. This was a most fortunate circumstance, and the holes made in sounding were kept open, so that the amount of diminution in the base of the island could be estimated every day. This diminution was slow but sure, and, making allowance for the unfortunate fact that the island was drifting into warmer waters, it was decided that it was impossible for it to last another three weeks.

The next week, from the 19th to the 25th May, the weather was very bad. A fearful storm broke over the island, accompanied by flash after flash of lightning and peals of thunder. The sea rose high, lashed by a powerful northwest wind, and its waves broke over the doomed island, making it tremble ominously. The little colony were on the watch, ready on an emergency to embark in the raft, the scaffolding of which was nearly finished, and some provisions and fresh water were taken on board.

Rain heavy enough to penetrate to the ice-crust fell in large quantities during this storm, and melted it in many places. On the slopes of some of the hills the earth was washed away, leaving the white foundations bare. These ravines were hastily filled up with soil to protect the ice from the action of the warm air and rain, and but for this
precaution the soil would have been everywhere perforated.

Great havoc was caused amongst the woods by this storm; the earth and sand were washed away from the roots of the trees, which fell in large numbers. In a single night the aspect of the country between the lake and the former Port Barnett was completely changed. A few groups of birch trees and thickets of firs alone remained—a fact significant of approaching decomposition, which no human skill could prevent! Every one knew and felt that the ephemeral inland was gradually succumbing—every one, except perhaps Thomas Black, who was still gloomily indifferent to all that was going on.

On the 23d of May, during the storm, the hunter Sabine left the house in the thick fog, and was nearly drowned in a large hole which had opened during the night on the site formerly occupied by the principal house of the factory.

Hitherto, as we are aware, the house, three quarters submerged, and buried beneath a mass of earth and sand, had remained fixed in the ice-crust beneath the island; but now the sea had evidently enlarged the crevasse, and the house with all it contained had sunk to rise no more. Earth and sand were pouring through this fissure, at the bottom of which surged the tempest-tossed waves.

Sabine’s comrades, hearing his cries, rushed to his assistance, and were just in time to save him as he was still clinging to the slippery walls of the abyss. He escaped with a ducking which might have had tragic consequences.

A little later the beams and planks of the house, which had slid under the island, were seen floating about in the offing like the spars of a wrecked vessel. This was the worst evil the storm had wrought, and would compromise the solidity of the island yet more, as the waves would now eat away the ice all round the crevasse.

In the course of the 25th May, the wind veered to the north-east, and although it blew strongly, it was no longer a hurricane; the rain ceased, and the sea became calmer. After a quiet night the sun rose upon the desolate scene, the Lieutenant was able to take the bearings accurately, and obtained the following result:

At noon on the 25th May, Victoria Island was in latitude 56° 13’, and longitude 170° 23’.

It had therefore advanced at great speed, having drifted nearly eight hundred miles since the breaking up of the ice set it free in Behring Strait two months before.

This great speed made the Lieutenant once more entertain a slight hope. He pointed out the Aleutian Islands on the map to his comrades, and said—

"Look at these islands; they are not now two hundred miles from us, and we may reach them in eight days."

"Eight days!" repeated Long, shaking his head; "eight days is a long time."

"I must add," continued Hobson, "that if our island had followed the hundred and sixty-eighth meridian, it would already have reached the parallel of these islands, but in consequence of a deviation of the Behring current, it is bearing in a south-westerly direction."

The Lieutenant was right, the current seemed likely to drag the island away from all land, even out of sight of the Aleutian Islands, which only extend as far as the hundred and seventieth meridian.

Mrs Barnett examined the map in silence. She saw the pencil-mark which denoted the exact spot then occupied by the island.

The map was made on a large scale, and the point representing the island looked but a speck upon the vast expanse of the Behring Sea. She traced back the route by which the island had come to its present position, marvelling at the fatality, or rather the immutable law, by which the currents which had borne it along had avoided all land, sheering clear of islands, and never touching either continent; and she saw the boundless Pacific Ocean, towards which she and all with her were hurrying.

She mused long upon this melancholy subject, and at last exclaimed suddenly—

"Could not the course of the island be controlled? Eight days at this pace would bring us to the last island of the Aleutian group."

"Those eight days are in the hands of God," replied Lieutenant Hobson gravely; "we can exercise no control upon them. Help can only come to us from above; there is nothing left for us to try."

"I know, I know!" said Mrs Barnett; "but Heaven helps those who help themselves. Is there really nothing we can do?"

Hobson shook his head doubtfully. His only hope was in the raft, and he was undecided whether to embark every one on it at once, contrive some sort of a sail with clothes, &c., and try to reach the nearest land, or to wait yet a little longer.

He consulted Sergeant Long, Mac-Nab, Rae, Marbre, and Sabine, in whom he had great confidence, and all agreed that it would be unwise to abandon the island before they were obliged. The raft, constantly swept as it would be by the waves, could only be a last resource, and would not move at half the pace of the island, still driven towards the south by the remains of the ice-wall. The wind generally blew from the east, and would be likely to drift the raft out into the offing from all land. They must still wait then, always wait; for the island was drifting rapidly.
towards the Aleutians. When they really approached the group they would be able to see what it would be best to do.

This was certainly the wisest course to take. In eight days, if the present speed were maintained, the island would either stop at the southern boundary of Behring Sea, or be dragged to the south west to the waters of the Pacific Ocean, where certain destruction awaited it.

But the adverse fate which seemed all along to have followed the hapless colonists had yet another blow in store for them: the speed on which they counted was now to fail them, as everything else had done.

During the night of the 26th May, the orientation of the island changed once more; and this time the results of the displacement were extremely serious. The island turned half round, and the icebergs still remaining of the huge ice-wall, which had shut in the northern horizon, were now on the south.

In the morning the shipwrecked travellers—what name could be more appropriate?—saw the sun rise above Cape Esquimaux instead of above Port Barnett.

Hardly a hundred yards off rose the icebergs, rapidly melting, but still of a considerable size, which till then had driven the island before them. The southern horizon was now partly shut in by them.

What would be the consequences of this fresh change of position? Would not the icebergs now float away from the island, with which they were no longer connected?

All were oppressed with a presentiment of some new misfortune, and understood only too well what Kellet meant when he exclaimed—

"This evening we shall have lost our screw!"

By this Kellet meant that the icebergs, being before instead of behind the island, would soon leave it, and as it was they which imparted to it its rapid motion, in consequence of their very great draught of water—their volume being six or seven feet below the sea level for every one above—they would now go on without it, impelled by the submarine current, whilst Victoria Island, not deep enough in the water to come under the influence of the current, would be left floating helplessly on the waves.

Yes! Kellet was right; the island would then be like a vessel with disabled masts and a broken screw.

No one answered the soldier's remark, and a quarter of an hour had not elapsed before a loud cracking sound was heard. The summits of the icebergs trembled, large masses broke away, and the icebergs, irresistibly drawn along by the submarine current, drifted rapidly to the south.

CHAPTER XXI.

THE ISLAND BECOMES AN ISLET.

Three hours later the last relics of the ice-wall had disappeared, proving that the island now remained stationary, and that all the force of the current was deep down below the waves, not on the surface of the sea.

The bearings were taken at noon with the greatest care and twenty-four hours later it was found that Victoria Island had not advanced one mile.

The only remaining hope was that some vessel should sight the poor shipwrecked creatures, either whilst still on the island, or after they had taken to their raft.

The island was now in 54° 33' latitude, and 177° 19' longitude, several hundred miles from the nearest land, namely, the Aleutian Islands.

Hobson once more called his comrades together, and asked them what they thought it would be best to do.

All agreed that they should remain on the island until it broke up, as it was too large to be affected by the state of the sea, and only take to the raft when the dissolution actually commenced. Once on the frail vessel, they must wait. Still wait!

The raft was now finished. Mac-Nab had made one large shed or cabin big enough to hold every one, and to afford some little shelter from the weather. A mast had been prepared, which could be put up if necessary, and the sails intended for the boat had long been ready. The whole structure was strong, although clumsy; and if the wind were favourable, and the sea not too rough, this rude assortment of planks and timbers might save the lives of the whole party.

"Nothing," observed Mrs Barnett,—"nothing is impossible to Him who rules the winds and waves."

Hobson carefully looked over the stores of provisions. The reserves had been much damaged by the avalanche, but there were plenty of animals still on the island, and the abundant shrubs and mosses supplied them with food. A few reindeer and hares were slaughtered by the hunters, and their flesh salted for future needs.

The health of the colonists was on the whole good. They had suffered little in the preceding mild winter, and all the mental trials they had gone through had not affected their physical well-being. They were, however, looking forward with something of a shrinking horror to the moment when they would have to abandon their island home, or, to speak more correctly, when it abandoned them. It was no wonder that they did not like the thought of floating on the ocean in a rude structure of wood subject to all the caprices of winds and waves. Even in tolerably fine weather seas would be shipped and every one constantly drenched with saltwater. Moreover, it must be remembered
that the men were none of them sailors, accustomed to navigation, and ready to risk their lives on a few planks, but soldiers, trained for service on land. Their island was fragile, it is true, and rested on a thin crust of ice; but then it was covered with a productive soil, trees and shrubs flourished upon it, its huge bulk rendered it insensible to the motion of the waves, and it might have been supposed to be stationary. They had, in fact, become attached to Victoria Island, on which they had lived nearly two years; every inch of the ground had become familiar to them; they had tilled the soil, and had come safely through so many perils in their wandering home, that in leaving it they felt as if they were parting from an old and sorely-tried friend.

Hobson fully sympathised with the feelings of his men, and understood their repugnance to embarking on the raft; but then he also knew that the catastrophe could not now be deferred much longer, and ominous symptoms already gave warning of its rapid approach.

We will now describe this raft. It was thirty feet square, and its deck rose two feet above the water. Its bulwarks would therefore keep out the small but not the large waves. In the centre the carpenter had built a regular deck-house, which would hold some twenty people. Round it were large lockers for the provisions and water-casks, all firmly fixed to the deck with iron bolts. The mast, thirty feet high, was fastened to the deck-house, and strengthened with stays attached to the corners of the raft. This mast was to have a square sail, which would only be useful when the wind was aft. A sort of rudder was fixed to this rough structure, the fittings of which were necessarily incomplete.

Such was the raft constructed by the head carpenter, on which twenty-one persons were to embark. It was floating peacefully on the little lake, strongly moored to the shore.

It was certainly constructed with more care than if it had been put together in haste on a vessel at sea doomed to immediate destruction. It was stronger and better fitted up; but, after all, it was but a raft.

On the 1st June a new incident occurred. Hope, one of the soldiers, went to fetch some water from the lake for culinary purposes, and when Mrs Joliffe tasted it, she found that it was salt. She called Hope, and said she wanted fresh, not salt water.

The man replied that he had brought it from the lake as usual, and as he and Mrs Joliffe were disputing about it, the Lieutenant happened to come in. Hearing Hope's repeated assertions that he had fetched the water from the lake, he turned pale and hurried to the lagoon.

The waters were quite salt; the bottom of the lake had evidently given way, and the sea had flowed in.

"No more fresh water!" exclaimed all the poor creatures together.

Lake Barnett had in fact disappeared, as Paulina River had done before.

Lieutenant Hobson hastened to reassure his comrades about drinkable water.

"There will be plenty of ice, my friends," he said. "We can always melt a piece of our island, and," he added, with a ghastly attempt at a smile, "I don't suppose we shall drink it all."

It is, in fact, well known that salt separates from sea-water in freezing and evaporation. A few blocks of ice were therefore "disinterred," if we may so express it, and melted for daily use, and to fill the casks on board the raft.

It would not do, however, to neglect this fresh warning given by nature. The invasion of the lake by the sea proved that the base of the island was rapidly melting. At any moment the ground might give way, and Hobson forbade his men to leave the factory, as they might be drifted away before they were aware of it.

The animals seemed more keenly alive than ever to approaching danger; they gathered yet more closely round the firmer part, and after the disappearance of the fresh water lake, they came to lick the blocks of ice. They were all uneasy, and some seemed to be seized with madness, especially the wolves, who rushed wildly towards the factory, and dashed away again howling piteously. The furred animals remained huddled together round the large well where the principal house had formerly stood. There were several hundreds of them, of different species, and the solitary bear roamed backwards and forwards, showing no more hostility to the quadrupeds than to men.

The number of birds, which had hitherto been considerable, now decreased. During the last few days all those capable of long-sustained flight—such as swans, &c, migrated towards the Aleutian Islands in the south, where they would find a sure refuge. This significant and ominous fact was noticed by Mrs Barnett and Madge, who were walking together on the beach.

"There is plenty of food for these birds on the island," observed Mrs Barnett, "and yet they leave it—they have a good reason, no doubt."

"Yes," replied Madge; "their instinct of self-preservation makes them take flight, and they give us a warning by which we ought to profit. The animals also appear more uneasy than usual."

Hobson now decided to take the greater part of the provisions and all the camping apparatus on board the raft, and when that was done, to embark with the whole party.

The sea was, however, very rough, and the waters of the former lake—now a kind of Mediterranean in miniature
were greatly agitated. The waves, confined in the narrow space, dashed mountains high, and broke violently upon the steep banks. The raft tossed up and down, and shipped sea after sea. The embarkation of provisions, &c., had to be put off.

Every one wished to pass one more quiet night on land, and Hobson yielded against his better judgment, determined, if it were calmer the next day, to proceed with the embarkation.

The night was more peaceful than had been expected; the wind went down, and the sea became calmer; it had but been swept by one of those sudden and brief hurricanes peculiar to these latitudes.

At eight o’clock in the evening the tumult ceased, and a slight surface agitation of the waters of lake and sea alone remained.

It was some slight comfort that the island would not now be broken up suddenly, as it must have done had the storm continued. Its dissolution was, of course, still close at hand, but would not, it was hoped, be sudden and abrupt.

The storm was succeeded by a slight fog, which seemed likely to thicken during the night. It came from the north, and owing to the changed position of the island, would probably cover the greater part of it.

Before going to bed, Hobson went down and examined the moorings of the raft, which were fastened to some strong birch-trees. To make security doubly sure, he tightened them, and the worst that could now happen would be, that the raft would drift out on to the lagoon, which was not large enough to be lost upon it.

CHAPTER XXII.

THE FOUR FOLLOWING DAYS.

The night was calm, and in the morning the Lieutenant resolved to order the embarkation of everything and everybody that very day. He, therefore, went down to the lake to look at the raft.

The fog was still thick, but the sunbeams were beginning to struggle through it. The clouds had been swept away by the hurricane of the preceding day, and it seemed likely to be hot.

When Hobson reached the banks of the lake, the fog was still too dense for him to make out anything on its surface, and he was waiting for it to clear away, when he was joined by Mrs Barnett, Madge, and several others.

The fog gradually cleared off, drawing back to the end of the lake, but the raft was nowhere to be seen.

Presently a gust of wind completely swept away the fog.

The raft was gone! There was no longer a lake! The boundless ocean stretched away before the astonished colonists!

Hobson could not check a cry of despair; and when he and his companions turned round and saw the sea on every side, they realised with a shock of horror that their island was now nothing more than an islet!

During the night six-sevenths of the district once belonging to Cape Bathurst had silently floated away, without producing a shock of any kind, so completely had the ice been worn away by the constant action of the waves, the raft had drifted out into the offing, and those whose last hope it had been could not see a sign of it on the desolate sea.

The unfortunate colonists were now overwhelmed with despair; their last hope gone, they were hanging above an awful abyss ready to swallow them up; and some of the soldiers in a fit of madness were about to throw themselves into the sea, when Mrs Barnett flung herself before them, entreating them to desist. They yielded, some of them weeping like children.

The awful situation of the colonists was indeed manifest enough, and we may well pity the Lieutenant surrounded by the miserable despairing creatures. Twenty-one persons on an islet of ice which must quickly melt beneath their feet! The wooded hills had disappeared with the mass of the island now engulfed; not a tree was left. There was no wood remaining but the planks of the rough lodging, which would not be nearly enough to build a raft to hold so many. A few days of life were all the colonists could now hope for; June had set in, the mean temperature exceeded 68° Fahrenheit, and the islet must rapidly melt.

As a forlorn hope, Hobson thought he would make a reconnoissance of his limited domain, and see if any part of it was thicker than where they were all now encamped. In this excursion he was accompanied by Mrs Barnett and Madge.

"Do you still hope!" inquired the lady of her faithful companion.

"I hope ever!" replied Madge.

Mrs Barnett did not answer, but walked rapidly along the coast at the Lieutenant’s side. No alteration had taken place between Cape Bathurst and Cape Esquimaux, that is to say, for a distance of eight miles. It was at Cape Esquimaux that the fracture had taken place, and running inland, it followed a curved line as far as the beginning of the lagoon, from which point the shores of the lake, now bathed by the waves of the sea, formed the new coast-line. Towards the upper part of the lagoon there was another fracture, running as far as the coast, between Cape Bathurst and what was once Port Barnett, so that the islet was merely an oblong strip, not more than a mile wide anywhere.
Of the hundred and forty square miles which once formed the total superficial area of the island, only twenty remained.

Hobson most carefully examined the new conformation of the islet, and found that its thickest part was still at the site of the former factory. He decided, therefore, to retain the encampment where it was, and, strange to say, the instinct of the quadrupeds still led them to congregate about it.

A great many of the animals had, however, disappeared with the rest of the island, amongst them many of the dogs which had escaped the former catastrophe. Most of the quadrupeds remaining were rodents; and the bear, which seemed terribly puzzled, paced round and round the islet like a caged animal.

About five o’clock in the evening the three explorers returned to the camp. The men and women were gathered together in gloomy silence in the rough shelter still remaining to them, and Mrs Joliffe was preparing some food. Sabine, who was less overcome than his comrades, was wandering about in the hope of getting some fresh venison, and the astronomer was sitting apart from everyone, gazing at the sea in an absent indifferent manner, as if nothing could ever rouse or astonish him again.

The Lieutenant imparted the results of his excursion to the whole party. He told them that they were safer where they were than they would be on any other spot, and he urged them not to wander about, as there were signs of another approaching fracture half way between the camp and Cape Esquimaux. The superficial area of the islet would soon be yet further reduced, and they could do nothing, absolutely nothing.

The day was really quite hot. The ice which had been “disinterred” for drinkable water melted before it was brought near the fire. Thin pieces of the ice crust of the steep beach fell off into the sea, and it was evident that the general level of the islet was being lowered by the constant wearing away of its base in the tepid waters.

No one slept the next night. Who could have closed his eyes with the knowledge that the abyss beneath might open at any moment?—who but the little unconscious child who still smiled in his mother’s arms, and was never for one instant out of them?

The next morning, June 4th, the sun rose in a cloudless sky. No change had taken place in the conformation of the islet during the night.

In the course of this day a terrified blue fox rushed into the shed, and could not be induced to leave it. The martens, ermines, polar hares, musk-rats, and beavers literally swarmed upon the site of the former factory. The wolves alone were unrepresented, and had probably all been swallowed up with the rest of the island. The bear no longer wandered from Cape Bathurst, and the furred animals seemed quite unconscious of its presence; nor did the colonists notice it much, absorbed as they were in the contemplation of the approaching doom, which had broken down all the ordinary distinctions of race.

A little before noon a sudden hope—too soon to end in disappointment—revived the drooping spirits of the colonists.

Sabine, who had been standing for some time on the highest part of the islet looking at the sea, suddenly cried—

"A boat! a boat!"

It was as if an electric shock had suddenly run through the group, for all started up and rushed towards the hunter.

The Lieutenant looked at him inquiringly, and the man pointed to a white vapour on the horizon. Not a word was spoken, but all watched in breathless silence as the form of a vessel gradually rose against the sky.

It was indeed a ship, and most likely a whaler. There was no doubt about it, and at the end of an hour even the keel was visible.

Unfortunately this vessel appeared on the east of the islet, that is to say, on the opposite side to that from which the raft had drifted, so that there could be no hope that it was coming to their rescue after meeting with the raft, which would have suggested the fact of fellow-creatures being in danger.

The question now was, would those in this vessel perceive the islet? Would they be able to make out signals on it? Alas! in broad daylight, with a bright sun shining, it was not likely they would. Had it been night some of the planks of the remaining shed might have made a fire large enough to be seen at a considerable distance, but the boat would probably have disappeared before the darkness set in; and, although it seemed of little use, signals were made, and guns fired on the islet.

The vessel was certainly approaching, and seemed to be a large three-master, evidently a whaler from New Archangel, which was on its way to Behring Strait after having doubled the peninsula of Alaska. It was to the windward of the islet, and tacking to starboard with its lower sails, top sails, and top-gallant sails all set. It was steadily advancing to the north. A sailor would have seen at a glance that it was not bearing towards the islet, but it might even yet perceive it, and alter its course.

"If it does see us," whispered Hobson in Long’s ear, "it is more likely to avoid us than to come nearer."

The Lieutenant was right, for there is nothing vessels dread more in these latitudes than the approach of icebergs.
and ice-floes; they look upon them as floating rocks, against which there is a danger of striking, especially in the night, and they therefore hasten to change their course when ice is sighted; and this vessel would most likely do the same, if it noticed the islet at all.

The alternations of hope and despair through which the anxious watchers passed may be imagined, but cannot be described. Until two o’clock in the afternoon they were able to believe that Heaven had at last taken pity on them—that help was coming—that their safety was assured. The vessel continued to approach in an oblique direction, and was presently not more than six miles from the islet. Signal after signal was tried, gun after gun fired, and some of the planks of the shed were burnt.

All in vain—either they were not seen, or the vessel was anxious to avoid the islet.

At half-past two it luffed slightly, and bore away to the northeast.

In another hour a white vapour was all that was visible, and that soon disappeared.

On this the soldier Kellet burst into a roar of hysterical laughter, and flinging himself on the ground, rolled over and over like a madman.

Mrs Barnett turned and looked Madge full in the face, as if to ask her if she still hoped, and Madge turned away her head.

On this same ill-fated day a crackling noise was heard, and the greater part of the islet broke off, and plunged into the sea. The cries of the drowning animals rent the air, and the islet was reduced to the narrow strip between the site of the engulfed house and Cape Bathurst. It was now merely a piece of ice.

CHAPTER XXIII.

ON A PIECE OF ICE.

A piece of ice, a jagged triangular strip of ice, measuring one hundred feet at its base, and scarcely five hundred in its greatest extent; and on it twenty-one human beings, some hundred furred animals, a few dogs, and a large bear, which was at this moment crouching at the very edge!

Yes! all the luckless colonists were there. Not one had yet been swallowed up. The last rupture had occurred when they were all in the shed. Thus far fate had spared them, probably that they might all perish together.

A silent sleepless night ensued. No one spoke or moved, for the slightest shake or blow might suffice to break the ice.

No one would touch the salt-meat served round by Mrs Joliffe. What would be the good of eating?

Nearly every one remained in the open air, feeling that it would be better to be drowned in the open sea than in a narrow wooden shed.

The next day, June 5th, the sun shone brightly down upon the heads of the doomed band of wanderers. All were still silent, and seemed anxious to avoid each other. Many gazed with troubled anxious eyes at the perfect circle of the horizon, of which the miserable little strip of ice formed the centre. But the sea was absolutely deserted—not a sail, not an ice-floe, not an islet! Their own piece of ice was probably the very last floating on the Behring Sea.

The temperature continued to rise. The wind had gone down, and a terrible calm had set in, a gentle swell heaved the surface of the sea, and the morsel of earth and ice, which was all that was left of Victoria Island, rose and sank without change of position, like a wreck—and what was it but a wreck?

But a wreck, a piece of woodwork, a broken mast, or a few planks, remain floating; they offer some resistance to the waves, they will not melt; but this bit of ice, this solidified water, must dissolve with the heat of the sun!

This piece of ice had formed the thickest part of the island, and this will explain its having lasted so long. A layer of earth and plenty of vegetation covered it, and the base of ice must have been of considerable thickness. The long bitter Polar winters must have “fed it with fresh ice,” in the countless centuries during which it was connected with the mainland. Even now its mean height was five or six feet above the sea level, and its base was probably of about the same thickness. Although in these quiet waters it was not likely to be broken, it could not fail gradually to melt, and the rapid dissolution could actually be watched at the edges, for as the long waves licked the sides, piece after piece of ground with its verdant covering sank to rise no more.

On this 5th June a fall of this nature occurred at about one o’clock P.M., on the site of the shed itself, which was very near the edge of the ice. There was fortunately no one in it at the time, and all that was saved was a few planks, and two or three of the timbers of the roofs. Most of the cooking utensils and all the astronomical instruments were lost. The colonists were now obliged to take refuge on the highest part of the islet, where nothing protected them from the weather, but fortunately a few tools had been left there, with the air pumps and the air-vessel, which Hobson had employed for catching a little of the rain-water for drinking purposes, as he no longer dared to draw for a supply upon the ice, every atom of which was of value.

At about four o’clock P.M., the soldier Kellet, the same who had already given signs of insanity, came to Mrs Barnett and said quietly—

"I am going to drown myself, ma’am."
"What, Kellet?" exclaimed the lady.

"I tell you I am going to drown myself," replied the soldier. "I have thought the matter well over: there is no escape for us, and I prefer dying at once to waiting to be killed."

"Kellet!" said Mrs Barnett, taking the man's hand and looking into his face, which was strangely composed, "you will not do that?"

"Yes, I will, ma'am; and as you have always been very good to us all, I wanted to wish you good-bye. Good-bye, ma'am!"

And Kellet turned towards the sea. Mrs Barnett, terrified at his manner, threw herself upon him and held him back. Her cries brought Hobson and Long to her assistance, and they did all in their power to dissuade the unhappy man from carrying out his purpose, but he was not to be moved, and merely shook his head.

His mind was evidently disordered, and it was useless to reason with him. It was a terrible moment, as his example might lead some of his comrades to commit suicide also. At all hazards he must be prevented from doing as he threatened.

"Kellet," said Mrs Barnett gently, with a half smile, "we have always been very good friends, have we not?"

"Yes, ma'am," replied Kellet calmly.

"Well, Kellet, if you like we will die together, but not to-day."

"What, ma'am?"

"No, my brave fellow, I am not ready; but to-morrow, to-morrow if you like."

The soldier looked more fixedly than ever at the courageous woman, and seemed to hesitate an instant; then he cast a glance of fierce longing at the sea, and passing his hand over his eyes, said—

"To-morrow!"

And without another word he quietly turned away and went back to his comrades.

"Poor fellow." murmured Mrs Barnett; "I have asked him to wait till to-morrow, and who can say whether we shall not all be drowned by that time!"

Throughout that night Hobson remained motionless upon the beach, pondering whether there might not yet be some means to check the dissolution of the islet—if it might not yet be possible to preserve it until they came in sight of land of some sort.

Mrs Barnett and Madge did not leave each other for an instant. Kalumah crouched like a dog at the feet of her mistress, and tried to keep her warm. Mrs Mac-Nab, wrapped in a few furs, the remains of the rich stores of Fort Hope, had fallen into a kind of torpor, with her baby clasped in her arms.

The stars shone with extraordinary brilliancy, and no sounds broke the stillness of the night but the rippling of the waves and the splash of pieces of ice as they fell into the sea. The colonists, stretched upon the ground in scattered groups, were as motionless as corpses on an abandoned wreck.

Sometimes Sergeant Long rose and peered into the night-mists, but seeing nothing, he resumed his horizontal position. The bear, looking like a great white snowball, cowered motionless at the very edge of the strip of ice.

This night also passed away without any incident to modify the situation. The grey morning dawned in the east, and the sun rose and dispersed the shadows of the night.

The Lieutenant's first care, as soon as it was light, was to examine the piece of ice. Its perimeter was still more reduced, and, alas! its mean height above the sea level had sensibly diminished. The waves, quiet as they were, washed over the greater part of it; the summit of the little hill alone was still beyond their reach.

Long, too, saw the changes which had taken place during the night, and felt that all hope was gone.

Mrs Barnett joined Lieutenant Hobson, and said to him—

"It will be to-day then!"

"Yes, madam, and you will keep your promise to Kellet!"

"Lieutenant Hobson," said the lady solemnly, "have we done all in our power!"

"We have, madam."

"Then God's will be done!"

One last attempt was, however, made during the day. A strong breeze set in from the offing, that is to say, a wind bearing to the south-east, the direction in which were situated the nearest of the Aleutian Islands. How far off no one could say, as without instruments the bearings of the island could not be taken. It was not likely to have drifted far, however, unless under the influence of the current, as it gave no hold to the wind.

Still it was just possible that they might be nearer land than they thought. If only a current, the direction of which it was impossible to ascertain, had taken them nearer to the much-longed-for Aleutian Islands, then, as the wind was bearing down upon those very islands, it might drive the strip of ice before it if a sail of some kind could be concocted. The ice had still several hours to float, and in several hours the land might come in sight, or, if not the land, some coasting or fishing vessel.
A forlorn hope truly, but it suggested an idea to the Lieutenant which he resolved to carry out. Could not a sail be contrived on the islet as on an ordinary raft? There could be no difficulty in that; and when Hobson suggested it to Mac-Nab, he exclaimed—

"You are quite right, sir;" adding to his men, "bring out all the canvas there is!"

Every one was quite revived by this plan, slight as was the chance it afforded, and all lent a helping hand, even Kellet, who had not yet reminded Mrs Barnett of her promise.

A beam, which had once formed part of the roof of the barracks, was sunk deep into the earth and sand of which the little hill was composed, and firmly fixed with ropes arranged like shrouds and a stay. A sail made of all the clothes and coverlets still remaining fastened on to a strong pole for a yard, was hoisted on the mast. This sail, or rather collection of sails, suitably set, swelled in the breeze, and by the wake it left, it was evident that the strip of ice was rapidly moving towards the south-east.

It was a success, and every one was cheered with newly-awakened hope. They were no longer stationary; they were advancing slowly, it was true, but still they were advancing. The carpenter was particularly elated; all eagerly scanned the horizon, and had they been told that no land could be sighted, they would have refused to believe it.

So it appeared, however; for the strip of ice floated along on the waves for three hours in the centre of an absolutely circular and unbroken horizon. The poor colonists still hoped on.

Towards three o'clock, the Lieutenant took the Sergeant aside, and said to him—

"We are advancing at the cost of the solidity and duration of our islet."

"What do you mean, sir?"

"I mean that the ice is being rapidly fretted away as it moves along. Its speed is hastening its dissolution, and since we set sail it has diminished one-third."

"Are you quite sure?"

"Absolutely certain. The ice is longer and flatter. Look, the sea is not more than ten feet from the hill!"

It was true, and the result was what might naturally have been expected from the motion of the ice.

"Sergeant," resumed Hobson, "do you think we ought to take down our sail?"

"I think," replied Long, after a moment's reflection, "that we should consult our comrades. We ought all to share the responsibility of a decision now."

The Lieutenant bent his head in assent, and the two returned to their old position on the little hill.

Hobson put the case before the whole party.

"The speed we have given to the ice," he said, "is causing it to wear away rapidly, and will perhaps hasten the inevitable catastrophe by a few hours. My friends, you must decide whether we shall still go on."

"Forwards!" cried all with one voice.

So it was decided, and, as it turned out, the decision was fraught with consequences of incalculable importance.

At six o'clock P.M. Madge rose, and pointing to a point on the south-east, cried—

"Land!"

Every one started up as if struck by lightning. Land there was indeed, on the south-east, twelve miles from the island.

"More sail! more sail!" shouted Hobson.

He was understood, and fresh materials were hastily brought. On the shrouds a sort of studding sail was rigged up of clothes, furs, everything, in short, that could give hold to the wind.

The speed increased as the wind freshened, but the ice was melting everywhere; it trembled beneath the feet of the anxious watchers, and might open at any moment. But they would not think of that; they were buoyed up with hope; safety was at hand, on the land they were rapidly nearing. They shouted—they made signals—they were in a delirium of excitement.

At half-past seven the ice was much nearer the land, but it was visibly melting, and sinking rapidly; water was gushing from it, and the waves were washing over it, sweeping off the terrified quadrupeds before the eyes of the colonists. Every instant they expected the whole mass to be engulfed, and it was necessary to lighten it like a sinking vessel. Every means was tried to check the dissolution; the earth and sand were carefully spread about, especially at the edges of the ice, to protect it from the direct influence of the sunbeams; and furs were laid here and there, as being bad conductors of heat. But it was all of no avail; the lower portion of the ice began to crack, and several fissures opened in the surface. It was now but a question of moments!

Night set in, and there was nothing left for the poor colonists to do to quicken the speed of the islet. Some of them tried to paddle about on planks. The coast was still four miles to windward.

It was a dark gloomy night, without any moon, and Hobson, whose heroic courage did not even now fail him, shouted—

"A signal, my friends! a signal!" A pile was made of all the remaining combustibles—two or three planks and a
beam. It was set fire to, and bright flames soon shot up, but the strip of ice continued to melt and sink. Presently the little hill alone remained above water, and on it the despairing wretches, with the few animals left alive, huddled together, the bear growling fiercely.

The water was still rising, and there was no sign that any one on land had seen the signal. In less than a quarter of an hour they must all be swallowed up.

Could nothing be done to make the ice last longer? In three hours, three short hours, they might reach the land, which was now but three miles to windward.

"Oh!" cried Hobson, "if only I could stop the ice from melting! I would give my life to know how! Yes, I would give my life!"

"There is one way," suddenly replied a voice.

It was Thomas Black who spoke, the astronomer, who had not opened his lips for so long, and who had long since appeared dead to all that was going on.

"Yes," he continued, "there is one way of checking the dissolution of the ice—there is one way of saving us all."

All gathered eagerly round the speaker, and looked at him inquiringly. They thought they must have misheard what he said.

"Well!" asked Hobson, "what way do you mean?"

"To the pumps!" replied Black simply.

Was he mad? Did he take the ice for a sinking vessel, with ten feet of water in the hold?

The air pumps were at hand, together with the air vessel, which Hobson had been using as a reservoir for drinking water, but of what use could they be? Could they harden the ice, which was melting all over?

"He is mad!" exclaimed Long.

"To the pumps!" repeated the astronomer; "fill the reservoir with air!"

"Do as he tells you!" cried Mrs Barnett.

The pumps were attached to the reservoir, the cover of which was closed and bolted. The pumps were then at once set to work, and the air was condensed under the pressure of several atmospheres. Then Black, taking one of the leather pipes connected with the reservoir, and opening the cock, let the condensed air escape, walking round the ice wherever it was melting.

Every one was astonished at the effect produced. Wherever the air was projected by the astronomer, the fissures filled up, and the surface re-froze.

"Hurrah! hurrah!" shouted all with one voice.

It was tiring enough to work the pumps, but there were plenty of volunteers. The edges of the ice were again solidified, as if under the influence of intense cold.

"You have saved us, Mr Black," said Lieutenant Hobson.

"Nothing could be more natural," replied the astronomer quietly.

Nothing, in fact, could have been more natural; and the physical effect produced may be described as follows:—

There were two reasons for the relegation:—First, under the pressure of the air, the water vaporised on the surface of the ice produced intense cold, and the compressed air in expanding abstracted the heat from the thawed surface, which immediately re-froze. Wherever the ice was opening the cold cemented the edges, so that it gradually regained its original solidity.

This went on for several hours, and the colonists, buoyed up by hope, toiled on with unwearying zeal.

They were nearing the coast, and when they were about a quarter of a mile from it, the bear plunged into the sea, and swimming to the shore, soon disappeared.

A few minutes afterwards the ice ran aground upon a beach, and the few animals still upon it hurried away in the darkness. The colonists "disembarked," and falling on their knees, returned thanks to God for their miraculous deliverance.

CHAPTER XXIV
CONCLUSION.

It was on the island of Blejinie, the last of the Aleutian group, at the extreme south of Behring Sea, that all the colonists of Fort Hope at last landed, after having traversed eighteen hundred miles since the breaking-up of the ice. They were hospitably received by some Aleutian fishermen who had hurried to their assistance, and were soon able to communicate with some English agents of the Hudson’s Bay Company.

After all the details we have given, it is needless to dwell on the courage and energy of the brave little band, which had proved itself worthy of its noble leader. We know how all struggled with their misfortunes, and how patiently they had submitted to the will of God. We have seen Mrs Barnett cheering every one by her example and sympathy; and we know that neither she nor those with her yielded to despair when the peninsula on which Fort Hope had been built was converted into a wandering island, when that island became an islet, and the islet a strip of
ice, nor even when that strip of ice was melting beneath the combined influence of sun and waves. If the scheme of
the Company was a failure, if the new fort had perished, no one could possibly blame Hobson or his companions,
who had gone through such extraordinary and unexpected trials. Of the nineteen persons under the Lieutenant’s
charge, not one was missing, and he had even two new members in his little colony, Kalumah and Mrs Barnett’s
godson, Michael Mac-Nab.

Six days after their rescue the shipwrecked mariners arrived at New Archangel, the capital of Russian America.
Here the friends, bound together by so many dangers shared, must part, probably for ever! Hobson and his men
were to return to Fort Reliance across English America, whilst Mrs Barnett, accompanied by Kalumah, who would
not leave her, Madge, and Thomas Black, intended to go back to Europe via San Francisco and the United States.

But whilst they were still altogether, the Lieutenant, addressing Mrs Barnett, said with considerable emotion—
"God bless you, madam, for all you have been to us. You have been our comforter, our consoler, the very soul of
our little world; and I thank you in the name of all."

Three cheers for Mrs Barnett greeted this speech, and each soldier begged to shake her by the hand, whilst the
women embraced her affectionately.

The Lieutenant himself had conceived so warm an affection for the lady who had so long been his friend and
counsellor, that he could not bid her good-bye without great emotion.

"Can it be that we shall never meet again?" he exclaimed.

"No, Lieutenant," replied Mrs Barnett;" we must, we shall meet again. If you do not come and see me in Europe,
I will come back to you at Fort Reliance, or to the new factory you will found some day yet."

On hearing this, Thomas Black, who had regained the use of his tongue since he had landed on terra firma, came
forward and said, with an air of the greatest conviction—

"Yes, we shall meet again in thirty-six years. My friends, I missed the eclipse of 1860, but I will not miss that
which will take place under exactly similar conditions in the same latitudes in 1896. And therefore I appoint a
meeting with you, Lieutenant, and with you, my dear madam, on the confines of the Arctic Ocean thirty six years
hence."

End of Part II

THE MASTER OF THE WORLD
By
Jules Verne

Chapter 1
WHAT HAPPENED IN THE MOUNTAINS

If I speak of myself in this story, it is because I have been deeply involved in its startling events, events
doubtless among the most extraordinary which this twentieth century will witness. Sometimes I even ask myself if
all this has really happened, if its pictures dwell in truth in my memory, and not merely in my imagination. In my
position as head inspector in the federal police department at Washington, urged on moreover by the desire, which
has always been very strong in me, to investigate and understand everything which is mysterious, I naturally became
much interested in these remarkable occurrences. And as I have been employed by the government in various
important affairs and secret missions since I was a mere lad, it also happened very naturally that the head of my
department placed In my charge this astonishing investigation, wherein I found myself wrestling with so many
impenetrable mysteries.

In the remarkable passages of the recital, it is important that you should believe my word. For some of the facts I
can bring no other testimony than my own. If you do not wish to believe me, so be it. I can scarce believe it all
myself.

The strange occurrences began in the western part of our great American State of North Carolina. There, deep
amid the Blue Ridge Mountains rises the crest called the Great Eyrie. Its huge rounded form is distinctly seen from
the little town of Morganton on the Catawba River, and still more clearly as one approaches the mountains by way
of the village of Pleasant Garden.

Why the name of Great Eyrie was originally given this mountain by the people of the surrounding region, I am
not quite sure. It rises rocky and grim and inaccessible, and under certain atmospheric conditions has a peculiarly
blue and distant effect. But the idea one would naturally get from the name is of a refuge for birds of prey, eagles
condors, vultures; the home of vast numbers of the feathered tribes, wheeling and screaming above peaks beyond the
reach of man. Now, the Great Eyrie did not seem particularly attractive to birds; on the contrary, the people of the
neighborhood began to remark that on some days when birds approached its summit they mounted still further, circled high above the crest, and then flew swiftly away, troubling the air with harsh cries.

Why then the name Great Eyrie? Perhaps the mount might better have been called a crater, for in the center of those steep and rounded walls there might well be a huge deep basin. Perhaps there might even lie within their circuit a mountain lake, such as exists in other parts of the Appalachian mountain system, a lagoon fed by the rain and the winter snows.

In brief was not this the site of an ancient volcano, one which had slept through ages, but whose inner fires might yet reawake? Might not the Great Eyrie reproduce in its neighborhood the violence of Mount Krakatoa or the terrible disaster of Mont Pelee? If there were indeed a central lake, was there not danger that its waters, penetrating the strata beneath, would be turned to steam by the volcanic fires and tear their way forth in a tremendous explosion, deluging the fair plains of Carolina with an eruption such as that of 1902 in Martinique?

Indeed, with regard to this last possibility there had been certain symptoms recently observed which might well be due to volcanic action. Smoke had floated above the mountain and once the country folk passing near had heard subterranean noises, unexplainable rumblings. A glow in the sky had crowned the height at night.

When the wind blew the smoky cloud eastward toward Pleasant Garden, a few cinders and ashes drifted down from it. And finally one stormy night pale flames, reflected from the clouds above the summit, cast upon the district below a sinister, warning light.

In presence of these strange phenomena, it is not astonishing that the people of the surrounding district became seriously disquieted. And to the disquiet was joined an imperious need of knowing the true condition of the mountain. The Carolina newspapers had flaring headlines, "The Mystery of Great Eyrie!" They asked if it was not dangerous to dwell in such a region. Their articles aroused curiosity and fear--curiosity among those who being in no danger themselves were interested in the disturbance merely as a strange phenomenon of nature, fear in those who were likely to be the victims if a catastrophe actually occurred. Those more immediately threatened were the citizens of Morganton, and even more the good folk of Pleasant Garden and the hamlets and farms yet closer to the mountain.

Assuredly it was regrettable that mountain climbers had not previously attempted to ascend to the summit of the Great Eyrie. The cliffs of rock which surrounded it had never been scaled. Perhaps they might offer no path by which even the most daring climber could penetrate to the interior. Yet, if a volcanic eruption menaced all the western region of the Carolinas, then a complete examination of the mountain was become absolutely necessary.

Now before the actual ascent of the crater, with its many serious difficulties, was attempted, there was one way which offered an opportunity of reconnoitering the interior, with out clambering up the precipices. In the first days of September of that memorable year, a well-known aeronaut named Wilker came to Morganton with his balloon. By waiting for a breeze from the east, he could easily rise in his balloon and drift over the Great Eyrie. There from a safe height above he could search with a powerful glass into its deeps. Thus he would know if the mouth of a volcano really opened amid the mighty rocks. This was the principal question. If this were settled, it would be known if the surrounding country must fear an eruption at some period more or less distant.

The ascension was begun according to the programme suggested. The wind was fair and steady; the sky clear; the morning clouds were disappearing under the vigorous rays of the sun. If the interior of the Great Eyrie was not filled with smoke, the aeronaut would be able to search with his glass its entire extent. If the vapors were rising, he, no doubt, could detect their source.

The balloon rose at once to a height of fifteen hundred feet, and there rested almost motionless for a half an hour. Evidently the east wind, which was brisk upon the Surface of the earth, did not make itself felt at that height. Then, unlucky chance, the balloon was caught in an adverse current, and began to drift toward the east. Its distance from the mountain chain rapidly increased. Despite all the efforts of the aeronaut, the citizens of Morganton saw the balloon disappear on the wrong horizon. Later, they learned that it had landed in the neighborhood of Raleigh, the capital of North Carolina.

This attempt having failed, it was agreed that it should be tried again under better conditions. Indeed, fresh rumblings were heard from the mountain, accompanied by heavy clouds and wavering glimmerings of light at night. Folk began to realize that the Great Eyrie was a serious and perhaps imminent source of danger. Yes, the entire country lay under the threat of some seismic or volcanic disaster.

During the first days of April of that year, these more or less vague apprehensions turned to actual panic. The newspapers gave prompt echo to the public terror. The entire district between the mountains and Morganton was sure that an eruption was at hand.

The night of the fourth of April, the good folk of Pleasant Garden were awakened by a sudden uproar. They thought that the mountains were falling upon them. They rushed from their houses, ready for instant flight, fearing to see open before them some immense abyss, engulfing the farms and villages for miles around.
The night was very dark. A weight of heavy clouds pressed down upon the plain. Even had it been day the crest of the mountains would have been invisible.

In the midst of this impenetrable obscurity, there was no response to the cries which arose from every side. Frightened groups of men, women, and children groped their way along the black roads in wild confusion. From every quarter came the screaming voices: "It is an earthquake!

"It is an eruption!

"Whence comes it?

"From the Great Eyrie!"

Into Morganton sped the news that stones, lava, ashes, were raining down upon the country.

Shrewd citizens of the town, however, observed that if there were an eruption the noise would have continued and increased, the flames would have appeared above the crater; or at least their lurid reflections would have penetrated the clouds. Now, even these reflections were no longer seen. If there had been an earthquake, the terrified people saw that at least their houses had not crumbled beneath the shock. It was possible that the uproar had been caused by an avalanche, the fall of some mighty rock from the summit of the mountains.

An hour passed without other incident. A wind from the west sweeping over the long chain of the Blue Ridge, set the pines and hemlocks wailing on the higher slopes. There seemed no new cause for panic; and folk began to return to their houses. All, however, awaited impatiently the return of day.

Then suddenly, toward three o'clock in the morning, another alarm! Flames leaped up above the rocky wall of the Great Eyrie. Reflected from the clouds, they illuminated the atmosphere for a great distance. A crackling, as if of many burning trees, was heard.

Had a fire spontaneously broken out? And to what cause was it due? Lightning could not have started the conflagration; for no thunder had been heard. True, there was plenty of material for fire; at this height the chain of the Blue Ridge is well wooded. But these flames were too sudden for any ordinary cause.

"An eruption! An eruption!"

The cry resounded from all sides. An eruption! The Great Eyrie was then indeed the crater of a volcano buried in the bowels of the mountains. And after so many years, so many ages even, had it reawakened? Added to the flames, was a rain of stones and ashes about to follow? Were the lavas going to pour down torrents of molten fire, destroying everything in their passage, annihilating the towns, the villages, the farms, all this beautiful world of meadows, fields and forests, even as far as Pleasant Garden and Morganton?

This time the panic was overwhelming; nothing could stop it. Women carrying their infants, crazed with terror, rushed along the eastward roads. Men, deserting their homes, made hurried bundles of their most precious belongings and set free their livestock, cows, sheep, pigs, which fled in all directions. What disorder resulted from this agglomeration, human and animal, under darkest night, amid forests, threatened by the fires of the volcano, along the border of marshes whose waters might be upheaved and overflow! With the earth itself threatening to disappear from under the feet of the fugitives! Would they be in time to save themselves, if a cascade of glowing lava came rolling down the slope of the mountain across their route?

Nevertheless, some of the chief and shrewder farm owners were not swept away in this mad flight, which they did their best to restrain. Venturing within a mile of the mountain, they saw that the glare of the flames was decreasing. In truth it hardly seemed that the region was immediately menaced by any further upheaval. No stones were being hurled into space; no torrent of lava was visible upon the slopes; no rumblings rose from the ground. There was no further manifestation of any seismic disturbance capable of overwhelming the land.

At length, the flight of the fugitives ceased at a distance where they seemed secure from all danger. Then a few ventured back toward the mountain. Some farms were reoccupied before the break of day.

By morning the crests of the Great Eyrie showed scarcely the least remnant of its cloud of smoke. The fires were certainly at an end; and if it were impossible to determine their cause, one might at least hope that they would not break out again.

It appeared possible that the Great Eyrie had not really been the theater of volcanic phenomena at all. There was no further evidence that the neighborhood was at the mercy either of eruptions or of earthquakes.

Yet once more about five o'clock, from beneath the ridge of the mountain, where the shadows of night still lingered, a strange noise swept across the air, a sort of whirring, accompanied by the beating of mighty wings. And had it been a clear day, perhaps the farmers would have seen the passage of a mighty bird of prey, some monster of the skies, which having risen from the Great Eyrie sped away toward the east.

Chapter 2

I REACH MORGANTON

The twenty-seventh of April, having left Washington the night before, I arrived at Raleigh, the capital of the State of North Carolina.
Two days before, the head of the federal police had called me to his room. He was awaiting me with some impatience. "John Strock," said he, "are you still the man who on so many occasions has proven to me both his devotion and his ability?"

"Mr. Ward," I answered, with a bow, "I cannot promise success or even ability, but as to devotion, I assure you, it is yours."

"I do not doubt it," responded the chief. "And I will ask you instead this more exact question: Are you as fond of riddles as ever? As eager to penetrate into mysteries, as I have known you before?"

"I am, Mr. Ward."

"Good, Strock; then listen."

Mr. Ward, a man of about fifty years, of great power and intellect, was fully master of the important position he filled. He had several times entrusted to me difficult missions which I had accomplished successfully, and which had won me his confidence. For several months past, however, he had found no occasion for my services. Therefore I awaited with impatience what he had to say. I did not doubt that his questioning implied a serious and important task for me.

"Doubtless you know," said he, "what has happened down in the Blueridge Mountains near Morganton."

"Surely, Mr. Ward, the phenomena reported from there have been singular enough to arouse anyone's curiosity."

"They are singular, even remarkable, Strock. No doubt about that. But there is also reason to ask, if these phenomena about the Great Eyrie are not a source of continued danger to the people there, if they are not forerunners of some disaster as terrible as it is mysterious."

"It is to be feared, sir."

"So we must know, Strock, what is inside of that mountain. If we are helpless in the face of some great force of nature, people must be warned in time of the danger which threatens them."

"It is clearly the duty of the authorities, Mr. Ward," responded I, "to learn what is going on within there."

"True, Strock; but that presents great difficulties. Everyone reports that it is impossible to scale the precipices of the Great Eyrie and reach its interior. But has anyone ever attempted it with scientific appliances and under the best conditions? I doubt it, and believe a resolute attempt may bring success."

"Nothing is impossible, Mr. Ward; what we face here is merely a question of expense."

"We must not regard expense when we are seeking to reassure an entire population, or to preserve it from a catastrophe. There is another suggestion I would make to you. Perhaps this Great Eyrie is not so inaccessible as is supposed. Perhaps a band of malefactors have secreted themselves there, gaining access by ways known only to themselves."

"What! You suspect that robbers--"

"Perhaps I am wrong, Strock; and these strange sights and sounds have all had natural causes. Well, that is what we have to settle, and as quickly as possible."

"I have one question to ask."

"Go ahead, Strock."

"When the Great Eyrie has been visited, when we know the source of these phenomena, if there really is a crater there and an eruption is imminent, can we avert it?"

"No, Strock; but we can estimate the extent of the danger. If some volcano in the Alleghanies threatens North Carolina with a disaster similar to that of Martinique, buried beneath the outpourings of Mont Pelee, then these people must leave their homes."

"I hope, sir, there is no such widespread danger."

"I think not, Strock; it seems to me highly improbable that an active volcano exists in the Blueridge mountain chain. Our Appalachian mountain system is nowhere volcanic in its origin. But all these events cannot be without basis. In short, Strock, we have decided to make a strict inquiry into the phenomena of the Great Eyrie, to gather all the testimony, to question the people of the towns and farms. To do this, I have made choice of an agent in whom we have full confidence; and this agent is you, Strock."

"Good! I am ready, Mr. Ward," cried I, "and be sure that I shall neglect nothing to bring you full information."

"I know it, Strock, and I will add that I regard you as specially fitted for the work. You will have a splendid opportunity to exercise, and I hope to satisfy, your favorite passion of curiosity."

"As you say, sir."

"You will be free to act according to circumstances. As to expenses, if there seems reason to organize an ascension party, which will be costly, you have carte blanche."

"I will act as seems best, Mr. Ward."

"Let me caution you to act with all possible discretion. The people in the vicinity are already over-excited. It will be well to move secretly. Do not mention the suspicions I have suggested to you. And above all, avoid arousing any
fresh panic."
"It is understood."
"You will be accredited to the Mayor of Morganton, who will assist you. Once more, be prudent, Strock, and acquaint no one with your mission, unless it is absolutely necessary. You have often given proofs of your intelligence and address; and this time I feel assured you will succeed."
I asked him only "When shall I start?"
"Tomorrow."
"Tomorrow, I shall leave Washington; and the day after, I shall be at Morganton."
How little suspicion had I of what the future had in store for me!
I returned immediately to my house where I made my preparations for departure; and the next evening found me in Raleigh. There I passed the night, and in the course of the next afternoon arrived at the railroad station of Morganton.
Morganton is but a small town, built upon strata of the jurassic period, particularly rich in coal. Its mines give it some prosperity. It also has numerous unpleasant mineral waters, so that the season there attracts many visitors. Around Morganton is a rich farming country, with broad fields of grain. It lies in the midst of swamps, covered with mosses and reeds. Evergreen forests rise high up the mountain slopes. All that the region lacks is the wells of natural gas, that invaluable natural source of power, light, and warmth, so abundant in most of the Alleghany valleys. Villages and farms are numerous up to the very borders of the mountain forests. Thus there were many thousands of people threatened, if the Great Eyrie proved indeed a volcano, if the convulsions of nature extended to Pleasant Garden and to Morganton.

The mayor of Morganton, Mr. Elias Smith, was a tall man, vigorous and enterprising, forty years old or more, and of a health to defy all the doctors of the two Americas. He was a great hunter of bears and panthers, beasts which may still be found in the wild gorges and mighty forests of the Alleghanies.

Mr. Smith was himself a rich land-owner, possessing several farms in the neighborhood. Even his most distant tenants received frequent visits from him. Indeed, whenever his official duties did not keep him in his so-called home at Morganton, he was exploring the surrounding country, irresistibly drawn by the instincts of the hunter.
I went at once to the house of Mr. Smith. He was expecting me, having been warned by telegram. He received me very frankly, without any formality, his pipe in his mouth, a glass of brandy on the table. A second glass was brought in by a servant, and I had to drink to my host before beginning our interview.
"Mr. Ward sent you," said he to me in a jovial tone. "Good; let us drink to Mr. Ward's health."
I clinked glasses with him, and drank in honor of the chief of police.
"And now," demanded Elias Smith, "what is worrying him?"
At this I made known to the mayor of Morganton the cause and the purpose of my mission in North Carolina. I assured him that my chief had given me full power, and would render me every assistance, financial and otherwise, to solve the riddle and relieve the neighborhood of its anxiety relative to the Great Eyrie.
Elias Smith listened to me without uttering a word, but not without several times refilling his glass and mine. While he puffed steadily at his pipe, the close attention which he gave me was beyond question. I saw his cheeks flush at times, and his eyes gleam under their bushy brows. Evidently the chief magistrate of Morganton was uneasy about Great Eyrie, and would be as eager as I to discover the cause of these phenomena.

When I had finished my communication, Elias Smith gazed at me for some moments in silence. Then he said, softly, "So at Washington they wish to know what the Great Eyrie hides within its circuit?"
"Yes, Mr. Smith."
"And you, also?"
"I do."
"So do I, Mr. Strock."
He and I were as one in our curiosity.
"You will understand," added he, knocking the cinders from his pipe, "that as a land-owner, I am much interested in these stories of the Great Eyrie, and as mayor, I wish to protect my constituents."
"A double reason," I commented, "to stimulate you to discover the cause of these extraordinary occurrences! Without doubt, my dear Mr. Smith, they have appeared to you as inexplicable and as threatening as to your people."
"Inexplicable, certainly, Mr. Strock. For on my part, I do not believe it possible that the Great Eyrie can be a volcano; the Alleghanies are nowhere of volcanic origins. I, myself, in our immediate district, have never found any geological traces of scoria, or lava, or any eruptive rock whatever. I do not think, therefore, that Morganton can possibly be threatened from such a source."
"You really think not, Mr. Smith?"
"Certainly."
"But these tremblings of the earth that have been felt in the neighborhood!"
"Yes these tremblings! These tremblings!" repeated Mr. Smith, shaking his head; "but in the first place, is it certain that there have been tremblings? At the moment when the flames showed most sharply, I was on my farm of Wildon, less than a mile from the Great Eyrie. There was certainly a tumult in the air, but I felt no quivering of the earth."
"But in the reports sent to Mr. Ward--"
"Reports made under the impulse of the panic," interrupted the mayor of Morganton. "I said nothing of any earth tremors in mine."
"But as to the flames which rose clearly above the crest?"
"Yes, as to those, Mr. Strock, that is different. I saw them; saw them with my own eyes, and the clouds certainly reflected them for miles around. Moreover noises certainly came from the crater of the Great Eyrie, hissings, as if a great boiler were letting off steam."
"You have reliable testimony of this?"
"Yes, the evidence of my own ears."
"And in the midst of this noise, Mr. Smith, did you believe that you heard that most remarkable of all the phenomena, a sound like the flapping of great wings?"
"I thought so, Mr. Strock; but what mighty bird could this be, which sped away after the flames had died down, and what wings could ever make such tremendous sounds. I therefore seriously question, if this must not have been a deception of my imagination. The Great Eyrie a refuge for unknown monsters of the sky! Would they not have been seen long since, soaring above their immense nest of stone? In short, there is in all this a mystery which has not yet been solved."
"But we will solve it, Mr. Smith, if you will give me your aid."
"Surely, Mr. Strock; tomorrow we will start our campaign."
"Tomorrow." And on that word the mayor and I separated. I went to a hotel, and established myself for a stay which might be indefinitely prolonged. Then having dined, and written to Mr. Ward, I saw Mr. Smith again in the afternoon, and arranged to leave Morganton with him at daybreak.

Our first purpose was to undertake the ascent of the mountain, with the aid of two experienced guides. These men had ascended Mt. Mitchell and others of the highest peaks of the Blue Ridge. They had never, however, attempted the Great Eyrie, knowing that its walls of inaccessible cliffs defended it on every side. Moreover, before the recent startling occurrences the Great Eyrie had not particularly attracted the attention of tourists. Mr. Smith knew the two guides personally as men daring, skillful and trustworthy. They would stop at no obstacle; and we were resolved to follow them through everything.

Moreover Mr. Smith remarked at the last that perhaps it was no longer as difficult as formerly to penetrate within the Great Eyrie.
"And why?" asked I.
"Because a huge block has recently broken away from the mountain side and perhaps it has left a practicable path or entrance."
"That would be a fortunate chance, Mr. Smith."
"We shall know all about it, Mr. Strock, no later than tomorrow."
"Till tomorrow, then."

Chapter 3
THE GREAT EYRIE
The next day at dawn, Elias Smith and I left Morganton by a road which, winding along the left bank of the Catawba River, led to the village of Pleasant Garden. The guides accompanied us, Harry Horn, a man of thirty, and James Bruck, aged twenty-five. They were both natives of the region, and in constant demand among the tourists who climbed the peaks of the Blue Ridge and Cumberland Mountains.

A light wagon with two good horses was provided to carry us to the foot of the range. It contained provisions for two or three days, beyond which our trip surely would not be protracted. Mr. Smith had shown himself a generous provider both in meats and in liquors. As to water the mountain springs would furnish it in abundance, increased by the heavy rains, frequent in that region during springtime.

It is needless to add that the Mayor of Morganton in his role of hunter, had brought along his gun and his dog, Nisko, who gamboled joyously about the wagon. Nisko, however, was to remain behind at the farm at Wildon, when we attempted our ascent. He could not possibly follow us to the Great Eyrie with its cliffs to scale and its crevasses to cross.
The day was beautiful, the fresh air in that climate is still cool of an April morning. A few fleecy clouds sped rapidly overhead, driven by a light breeze which swept across the long plains, from the distant Atlantic. The sun peeping forth at intervals, illuminated all the fresh young verdure of the countryside.

An entire world animated the woods through which we passed. From before our equipage fled squirrels, field-mice, parroquets of brilliant colors and deafening loquacity. Opossums passed in hurried leaps, bearing their young in their pouches. Myriads of birds were scattered amid the foliage of banyans, palms, and masses of rhododendrons, so luxuriant that their thickets were impenetrable.

We arrived that evening at Pleasant Garden, where we were comfortably located for the night with the mayor of the town, a particular friend of Mr. Smith. Pleasant Garden proved little more than a village; but its mayor gave us a warm and generous reception, and we supped pleasantly in his charming home, which stood beneath the shades of some giant beech-trees.

Naturally the conversation turned upon our attempt to explore the interior of the Great Eyrie. "You are right," said our host, "until we all know what is hidden within there, our people will remain uneasy."

"Has nothing new occurred," I asked, "since the last appearance of flames above the Great Eyrie?"

"Nothing, Mr. Strock. From Pleasant Garden we can see the entire crest of the mountain. Not a suspicious noise has come down to us. Not a spark has risen. If a legion of devils is in hiding there, they must have finished their infernal cookery, and soared away to some other haunt."

"Devils!" cried Mr. Smith. "Well, I hope they have not decamped without leaving some traces of their occupation, some parings of hoofs or horns or tails. We shall find them out."

On the morrow, the twenty-ninth of April, we started again at dawn. By the end of this second day, we expected to reach the farm of Wildon at the foot of the mountain. The country was much the same as before, except that our road led more steeply upward. Woods and marshes alternated, though the latter grew sparser, being drained by the sun as we approached the higher levels. The country was also less populous. There were only a few little hamlets, almost lost beneath the beech trees, a few lonely farms, abundantly watered by the many streams that rushed downward toward the Catawba River.

The smaller birds and beasts grew yet more numerous. "I am much tempted to take my gun," said Mr. Smith, "and to go off with Nisko. This will be the first time that I have passed here without trying my luck with the partridges and hares. The good beasts will not recognize me. But not only have we plenty of provisions, but we have a bigger chase on hand today. The chase of a mystery."

"And let us hope," added I, "we do not come back disappointed hunters."

In the afternoon the whole chain of the Blue Ridge stretched before us at a distance of only six miles. The mountain crests were sharply outlined against the clear sky. Well wooded at the base, they grew more bare and showed only stunted evergreens toward the summit. There the scraggly trees, grotesquely twisted, gave to the rocky heights a bleak and bizarre appearance. Here and there the ridge rose in sharp peaks. On our right the Black Dome, nearly seven thousand feet high, reared its gigantic head, sparkling at times above the clouds.

"Have you ever climbed that dome, Mr. Smith?" I asked.

"No," answered he, "but I am told that it is a very difficult ascent. A few mountaineers have climbed it; but they report that it has no outlook commanding the crater of the Great Eyrie."

"That is so," said the guide, Harry Horn. "I have tried it myself."

"Perhaps," suggested I, "the weather was unfavorable."

"On the contrary, Mr. Strock, it was unusually clear. But the wall of the Great Eyrie on that side rose so high, it completely hid the interior."

"Forward," cried Mr. Smith. "I shall not be sorry to set foot where no person has ever stepped, or even looked, before."

Certainly on this day the Great Eyrie looked tranquil enough. As we gazed upon it, there rose from its heights neither smoke nor flame.

Toward five o'clock our expedition halted at the Wildon farm, where the tenants warmly welcomed their landlord. The farmer assured us that nothing notable had happened about the Great Eyrie for some time. We supped at a common table with all the people of the farm; and our sleep that night was sound and wholly untroubled by premonitions of the future.

On the morrow, before break of day, we set out for the ascent of the mountain. The height of the Great Eyrie scarce exceeds five thousand feet. A modest altitude, often surpassed in this section of the Alleghanies. As we were already more than three thousand feet above sea level, the fatigue of the ascent could not be great. A few hours should suffice to bring us to the crest of the crater. Of course, difficulties might present themselves, precipices to scale, clefts and breaks in the ridge might necessitate painful and even dangerous detours. This was the unknown, the spur to our attempt. As I said, our guides knew no more than we upon this point. What made me anxious, was, of
course, the common report that the Great Eyrie was wholly inaccessible. But this remained unproven. And then there was the new chance that a fallen block had left a breach in the rocky wall.

"At last," said Mr. Smith to me, after lighting the first pipe of the twenty or more which he smoked each day, "we are well started. As to whether the ascent will take more or less time--"

"In any case, Mr. Smith," interrupted I, "you and I are fully resolved to pursue our quest to the end."

"Fully resolved, Mr. Strock."

"My chief has charged me to snatch the secret from this demon of the Great Eyrie."

"We will snatch it from him, willing or unwilling," vowed Mr. Smith, calling Heaven to witness. "Even if we have to search the very bowels of the mountain."

"As it may happen, then," said I, "that our excursion will be prolonged beyond today, it will be well to look to our provisions."

"Be easy, Mr. Strock; our guides have food for two days in their knapsacks, besides what we carry ourselves. Moreover, though I left my brave Nisko at the farm, I have my gun. Game will be plentiful in the woods and gorges of the lower part of the mountain, and perhaps at the top we shall find a fire to cook it, already lighted."

"Already lighted, Mr. Smith?"

"And why not, Mr. Strock? These flames! These superb flames, which have so terrified our country folk! Is their fire absolutely cold, is no spark to be found beneath their ashes? And then, if this is truly a crater, is the volcano so wholly extinct that we cannot find there a single ember? Bah! This would be but a poor volcano if it hasn't enough fire even to cook an egg or roast a potato. Come, I repeat, we shall see! We shall see!"

At that point of the investigation I had, I confess, no opinion formed. I had my orders to examine the Great Eyrie. If it proved harmless, I would announce it, and people would be reassured. But at heart, I must admit, I had the very natural desire of a man possessed by the demon of curiosity. I should be glad, both for my own sake, and for the renown which would attach to my mission if the Great Eyrie proved the center of the most remarkable phenomena—which I would discover the cause.

Our ascent began in this order. The two guides went in front to seek out the most practicable paths. Elias Smith and I followed more leisurely. We mounted by a narrow and not very steep gorge amid rocks and trees. A tiny stream trickled downward under our feet. During the rainy season or after a heavy shower, the water doubtless bounded from rock to rock in tumultuous cascades. But it evidently was fed only by the rain, for now we could scarcely trace its course. It could not be the outlet of any lake within the Great Eyrie.

After an hour of climbing, the slope became so steep that we had to turn, now to the right, now to the left; and our progress was much delayed. Soon the gorge became wholly impracticable; its cliff-like sides offered no sufficient foothold. We had to cling by branches, to crawl upon our knees. At this rate the top would not be reached before sundown.

"Faith!" cried Mr. Smith, stopping for breath, "I realize why the climbers of the Great Eyrie have been few, so few, that it has never been ascended within my knowledge."

"The fact is," I responded, "that it would be much toil for very little profit. And if we had not special reasons to persist in our attempt."

"You never said a truer word," declared Harry Horn. "My comrade and I have scaled the Black Dome several times, but we never met such obstacles as these."

"The difficulties seem almost impassable," added James Bruck.

The question now was to determine to which side we should turn for a new route; to right, or to left, arose impenetrable masses of trees and bushes. In truth even the scaling of cliffs would have been more easy. Perhaps if we could get above this wooded slope we could advance with surer foot. Now, we could only go ahead blindly, and trust to the instincts of our two guides. James Bruck was especially useful. I believe that that gallant lad would have equaled a monkey in lightness and a wild goat in agility. Unfortunately, neither Elias Smith nor I was able to climb where he could.

However, when it is a matter of real need with me, I trust I shall never be backward, being resolute by nature and well-trained in bodily exercise. Where James Bruck went, I was determined to go, also; though it might cost me some uncomfortable falls. But it was not the same with the first magistrate of Morganton, less young, less vigorous, larger, stouter, and less persistent than we others. Plainly he made every effort, not to retard our progress, but he panted like a seal, and soon I insisted on his stopping to rest.

In short, it was evident that the ascent of the Great Eyrie would require far more time than we had estimated. We had expected to reach the foot of the rocky wall before eleven o'clock, but we now saw that mid-day would still find us several hundred feet below it.

Toward ten o'clock, after repeated attempts to discover some more practicable route, after numberless turnings and returnings, one of the guides gave the signal to halt. We found ourselves at last on the upper border of the heavy
wood. The trees, more thinly spaced, permitted us a glimpse upward to the base of the rocky wall which constituted the true Great Eyrie.

"Whew!" exclaimed Mr. Smith, leaning against a mighty pine tree, "a little respite, a little repose, and even a little repast would not go badly."

"We will rest an hour," said I.

"Yes; after working our lungs and our legs, we will make our stomachs work."

We were all agreed on this point. A rest would certainly freshen us. Our only cause for inquietude was now the appearance of the precipitous slope above us. We looked up toward one of those bare strips called in that region, slides. Amid this loose earth, these yielding stones, and these abrupt rocks there was no roadway.

Harry Horn said to his comrade, "It will not be easy."

"Perhaps impossible," responded Bruck.

Their comments caused me secret uneasiness. If I returned without even having scaled the mountain, my mission would be a complete failure, without speaking of the torturing to my curiosity. And when I stood again before Mr. Ward, shamed and confused, I should cut but a sorry figure.

We opened our knapsacks and lunched moderately on bread and cold meat. Our repast finished, in less than half an hour, Mr. Smith sprang up eager to push forward once more. James Bruck took the lead; and we had only to follow him as best we could.

We advanced slowly. Our guides did not attempt to conceal their doubt and hesitation. Soon Horn left us and went far ahead to spy out which road promised most chance of success.

Twenty minutes later he returned and led us onward toward the northwest. It was on this side that the Black Dome rose at a distance of three or four miles. Our path was still difficult and painful, amid the sliding stones, held in place only occasionally by wiry bushes. At length after a weary struggle, we gained some two hundred feet further upward and found ourselves facing a great gash, which, broke the earth at this spot. Here and there were scattered roots recently upturned, branches broken off, huge stones reduced to powder, as if an avalanche had rushed down this flank of the mountain.

"That must be the path taken by the huge block which broke away from the Great Eyrie," commented James Bruck.

"No doubt," answered Mr. Smith, "and I think we had better follow the road that it has made for us."

It was indeed this gash that Harry Horn had selected for our ascent. Our feet found lodgment in the firmer earth which had resisted the passage of the monster rock. Our task thus became much easier, and our progress was in a straight line upward, so that toward half past eleven we reached the upper border of the "slide."

Before us, less than a hundred feet away, but towering a hundred feet straight upwards in the air rose the rocky wall which formed the final crest, the last defence of the Great Eyrie.

From this side, the summit of the wall showed capriciously irregular, rising in rude towers and jagged needles. At one point the outline appeared to be an enormous eagle silhouetted against the sky, just ready to take flight. Upon this side, at least, the precipice was insurmountable.

"Rest a minute," said Mr. Smith, "and we will see if it is possible to make our way around the base of this cliff."

"At any rate," said Harry Horn, "the great block must have fallen from this part of the cliff; and it has left no breach for entering."

They were both right; we must seek entrance elsewhere. After a rest of ten minutes, we clambered up close to the foot of the wall, and began to make a circuit of its base.

Assuredly the Great Eyrie now took on to my eyes an aspect absolutely fantastic. Its heights seemed peopled by dragons and huge monsters. If chimeras, griffins, and all the creations of mythology had appeared to guard it, I should have been scarcely surprised.

With great difficulty and not without danger we continued our tour of this circumvallation, where it seemed that nature had worked as man does, with careful regularity. Nowhere was there any break in the fortification; nowhere a fault in the strata by which one might clamber up. Always this mighty wall, a hundred feet in height!

After an hour and a half of this laborious circuit, we regained our starting-place. I could not conceal my disappointment, and Mr. Smith was not less chagrined than I.

"A thousand devils!" cried he, "we know no better than before what is inside this confounded Great Eyrie, nor even if it is a crater."

"Volcano, or not," said I, "there are no suspicious noises now; neither smoke nor flame rises above it; nothing whatever threatens an eruption."

This was true. A profound silence reigned around us; and a perfectly clear sky shone overhead. We tasted the perfect calm of great altitudes.

It was worth noting that the circumference of the huge wall was about twelve or fifteen hundred feet. As to the
space enclosed within, we could scarce reckon that without knowing the thickness of the encompassing wall. The surroundings were absolutely deserted. Probably not a living creature ever mounted to this height, except the few birds of prey which soared high above us.

Our watches showed three o'clock, and Mr. Smith cried in disgust, "What is the use of stopping here all day! We shall learn nothing more. We must make a start, Mr. Strock, if we want to get back to Pleasant Garden to-night."

I made no answer, and did not move from where I was seated; so he called again, "Come, Mr. Strock; you don't answer."

In truth, it cut me deeply to abandon our effort, to descend the slope without having achieved my mission. I felt an imperious need of persisting; my curiosity had redoubled. But what could I do? Could I tear open this unyielding earth? Overleap the mighty cliff? Throwing one last defiant glare at the Great Eyrie, I followed my companions.

The return was effected without great difficulty. We had only to slide down where we had so laboriously scrambled up. Before five o'clock we descended the last slopes of the mountain, and the farmer of Wildon welcomed us to a much needed meal.

"Then you didn't get inside?" said he.

"No," responded Mr. Smith, "and I believe that the inside exists only in the imagination of our country folk."

At half past eight our carriage drew up before the house of the Mayor of Pleasant Garden, where we passed the night. While I strove vainly to sleep, I asked myself if I should not stop there in the village and organize a new ascent. But what better chance had it of succeeding than the first? The wisest course was, doubtless, to return to Washington and consult Mr. Ward.

So, the next day, having rewarded our two guides, I took leave of Mr. Smith at Morganton, and that same evening left by train for Washington.

Chapter 4
A MEETING OF THE AUTOMOBILE CLUB

Was the mystery of the Great Eyrie to be solved some day by chances beyond our imagining? That was known only to the future. And was the solution a matter of the first importance? That was beyond doubt, since the safety of the people of western Carolina perhaps depended upon it.

Yet a fortnight after my return to Washington, public attention was wholly distracted from this problem by another very different in nature, but equally astonishing.

Toward the middle of that month of May the newspapers of Pennsylvania informed their readers of some strange occurrences in different parts of the state. On the roads which radiated from Philadelphia, the chief city, there circulated an extraordinary vehicle, of which no one could describe the form, or the nature, or even the size, so rapidly did it rush past. It was an automobile; all were agreed on that. But as to what motor drove it, only imagination could say; and when the popular imagination is aroused, what limit is there to its hypotheses?

At that period the most improved automobiles, whether driven by steam, gasoline, or electricity, could not accomplish much more than sixty miles an hour, a speed that the railroads, with their most rapid expresses, scarce exceed on the best lines of America and Europe. Now, this new automobile which was astonishing the world, traveled at more than double this speed.

It is needless to add that such a rate constituted an extreme danger on the highroads, as much so for vehicles, as for pedestrians. This rushing mass, coming like a thunder-bolt, preceded by a formidable rumbling, caused a whirlwind, which tore the branches from the trees along the road, terrified the animals browsing in adjoining fields, and scattered and killed the birds, which could not resist the suction of the tremendous air currents engendered by its passage.

And, a bizarre detail to which the newspapers drew particular attention, the surface of the roads was scarcely even scratched by the wheels of the apparition, which left behind it no such ruts as are usually made by heavy vehicles. At most there was a light touch, a mere brushing of the dust. It was only the tremendous speed which raised behind the vehicle such whirlwinds of dust.

"It is probable," commented the New York Herald, "that the extreme rapidity of motion destroys the weight."

Naturally there were protests from all sides. It was impossible to permit the mad speed of this apparition which threatened to overthrow and destroy everything in its passage, equipages and people. But how could it be stopped? No one knew to whom the vehicle belonged, nor whence it came, nor whither it went. It was seen but for an instant as it darted forward like a bullet in its dizzy flight. How could one seize a cannon-ball in the air, as it leaped from the mouth of the gun?

I repeat, there was no evidence as to the character of the propelling engine. It left behind it no smoke, no steam, no odor of gasoline, or any other oil. It seemed probable, therefore, that the vehicle ran by electricity, and that its
accumulators were of an unknown model, using some unknown fluid.

The public imagination, highly excited, readily accepted every sort of rumor about this mysterious automobile. It was said to be a supernatural car. It was driven by a specter, by one of the chauffeurs of hell, a goblin from another world, a monster escaped from some mythological menagerie, in short, the devil in person, who could defy all human intervention, having at his command invisible and infinite satanic powers.

But even Satan himself had no right to run at such speed over the roads of the United States without a special permit, without a number on his car, and without a regular license. And it was certain that not a single municipality had given him permission to go two hundred miles an hour. Public security demanded that some means be found to unmask the secret of this terrible chauffeur.

Moreover, it was not only Pennsylvania that served as the theater of his sportive eccentricities. The police reported his appearance in other states; in Kentucky near Frankfort; in Ohio near Columbus; in Tennessee near Nashville; in Missouri near Jefferson; and finally in Illinois in the neighborhood of Chicago.

The alarm having been given, it became the duty of the authorities to take steps against this public danger. To arrest or even to halt an apparition moving at such speed was scarcely practicable. A better way would be to erect across the roads solid gateways with which the flying machine must come in contact sooner or later, and be smashed into a thousand pieces.

"Nonsense!" declared the incredulous. "This madman would know well how to circle around such obstructions."

"And if necessary," added others, "the machine would leap over the barriers."

"And if he is indeed the devil, he has, as a former angel, presumably preserved his wings, and so he will take to flight."

But this last was but the suggestion of foolish old gossips who did not stop to study the matter. For if the King of Hades possessed a pair of wings, why did he obstinately persist in running around on the earth at the risk of crushing his own subjects, when he might more easily have hurled himself through space as free as a bird.

Such was the situation when, in the last week of May, a fresh event occurred, which seemed to show that the United States was indeed helpless in the hands of some unapproachable monster. And after the New World, would not the Old in its turn, be desecrated by the mad career of this remarkable automobilist?

The following occurrence was reported in all the newspapers of the Union, and with what comments and outcries it is easy to imagine.

A race was to be held by the automobile Club of Wisconsin, over the roads of that state of which Madison is the capital. The route laid out formed an excellent track, about two hundred miles in length, starting from Prairie-du-chien on the western frontier, passing by Madison and ending a little above Milwaukee on the borders of Lake Michigan. Except for the Japanese road between Nikko and Namode, bordered by giant cypresses, there is no better track in the world than this of Wisconsin. It runs straight and level as an arrow for sometimes fifty miles at a stretch. Many and noted were the machines entered for this great race. Every kind of motor vehicle was permitted to compete, even motorcycles, as well as automobiles. The machines were of all makes and nationalities. The sum of the different prizes reached fifty thousand dollars, so that the race was sure to be desperately contested. New records were expected to be made.

Calculating on the maximum speed hitherto attained, of perhaps eighty miles an hour, this international contest covering two hundred miles would last about three hours. And, to avoid all danger, the state authorities of Wisconsin had forbidden all other traffic between Prairie-du-chien and Milwaukee during three hours on the morning of the thirtieth of May. Thus, if there were any accidents, those who suffered would be themselves to blame.

There was an enormous crowd; and it was not composed only of the people of Wisconsin. Many thousands gathered from the neighboring states of Illinois, Michigan, Iowa, Indiana, and even from New York. Among the sportsmen assembled were many foreigners, English, French, Germans and Austrians, each nationality, of course, supporting the chauffeurs of its land. Moreover, as this was the United States, the country of the greatest gamblers of the world, bets were made of every sort and of enormous amounts.

The start was to be made at eight o’clock in the morning; and to avoid crowding and the accidents which must result from it, the automobiles were to follow each other at two minute intervals, along the roads whose borders were black with spectators.

The first ten racers, numbered by lot, were dispatched between eight o’clock and twenty minutes past. Unless there was some disastrous accident, some of these machines would surely arrive at the goal by eleven o’clock. The others followed in order.

An hour and a half had passed. There remained but a single contestant at Prairie-du-chien. Word was sent back and forth by telephone every five minutes as to the order of the racers. Midway between Madison and Milwaukee, the lead was held by a machine of Renault brothers, four cylindered, of twenty horsepower, and with Michelin tires. It was closely followed by a Harvard-Watson car and by a Dion-Bouton. Some accidents had already occurred, other
machines were hopelessly behind. Not more than a dozen would contest the finish. Several chauffeurs had been injured, but not seriously. And even had they been killed, the death of men is but a detail, not considered of great importance in that astonishing country of America.

Naturally the excitement became more intense as one approached the finishing line near Milwaukee. There were assembled the most curious, the most interested; and there the passions of the moment were unchained. By ten o'clock it was evident, that the first prize, twenty thousand dollars, lay between five machines, two American, two French, and one English. Imagine, therefore, the fury with which bets were being made under the influence of national pride. The regular book makers could scarcely meet the demands of those who wished to wager. Offers and amounts were hurled from lip to lip with feverish rapidity. "One to three on the Harvard-Watson!"

"One to two on the Dion-Bouton!"

"Even money on the Renault!"

These cries rang along the line of spectators at each new announcement from the telephones.

Suddenly at half-past nine by the town clock of Prairie-du-chien, two miles beyond that town was heard a tremendous noise and rumbling which proceeded from the midst of a flying cloud of dust accompanied by shrieks like those of a naval siren.

Scarcely had the crowds time to draw to one side, to escape a destruction which would have included hundreds of victims. The cloud swept by like a hurricane. No one could distinguish what it was that passed with such speed. There was no exaggeration in saying that its rate was at least one hundred and fifty miles an hour.

The apparition passed and disappeared in an instant, leaving behind it a long train of white dust, as an express locomotive leaves behind a train of smoke. Evidently it was an automobile with a most extraordinary motor. If it maintained this arrow-like speed, it would reach the contestants in the fore-front of the race; it would pass them with this speed double their own; it would arrive first at the goal.

And then from all parts arose an uproar, as soon as the spectators had nothing more to fear.

"It is that infernal machine."

"Yes; the one the police cannot stop."

"But it has not been heard of for a fortnight."

"It was supposed to be done for, destroyed, gone forever."

"It is a devil's car, driven by hellfire, and with Satan driving!"

In truth, if he were not the devil, who could this mysterious chauffeur be, driving with this unbelievable velocity, his no less mysterious machine? At least it was beyond doubt that this was the same machine which had already attracted so much attention. If the police believed that they had frightened it away, that it was never to be, heard of more, well, the police were mistaken which happens in America as elsewhere.

The first stunned moment of surprise having passed, many people rushed to the telephones to warn those further along the route of the danger which menaced, not only the people, but also the automobiles scattered along the road. When this terrible madman arrived like an avalanche they would be smashed to pieces, ground into powder, annihilated!

And from the collision might not the destroyer himself emerge safe and sound? He must be so adroit, this chauffeur of chauffeurs, he must handle his machine with such perfection of eye and hand, that he knew, no doubt, how to escape from every situation. Fortunately the Wisconsin authorities had taken such precautions that the road would be clear except for contesting automobiles. But what right had this machine among them!

And what said the racers themselves, who, warned by telephone, had to sheer aside from the road in their struggle for the grand prize? By their estimate, this amazing vehicle was going at least one hundred and thirty miles an hour. Fast as was their speed, it shot by them at such a rate that they could hardly make out even the shape of the machine, a sort of lengthened spindle, probably not over thirty feet long. Its wheels spun with such velocity that they could scarce be seen. For the rest, the machine left behind it neither smoke nor scent.

As for the driver, hidden in the interior of his machine, he had been quite invisible. He remained as unknown as when he had first appeared on the various roads throughout the country.

Milwaukee was promptly warned of the coming of this interloper. Fancy the excitement the news caused! The immediate purpose agreed upon was to stop this projectile, to erect across its route an obstacle against which it would smash into a thousand pieces. But was there time? Would not the machine appear at any moment? And what need was there, since the track ended on the edge of Lake Michigan, and so the vehicle would be forced to stop there anyway, unless its supernatural driver could ride the water as well as the land.

Here, also, as all along the route, the most extravagant suggestions were offered. Even those who would not admit that the mysterious chauffeur must be Satan in person allowed that he might be some monster escaped from the fantastic visions of the Apocalypse.

And now there were no longer minutes to wait. Any second might bring the expected apparition.
It was not yet eleven o'clock when a rumbling was heard far down the track, and the dust rose in violent whirlwinds. Harsh whistlings shrieked through the air warning all to give passage to the monster.

It did not slacken speed at the finish. Lake Michigan was not half a mile beyond, and the machine must certainly be hurled into the water! Could it be that the mechanician was no longer master of his mechanism?

There could be little doubt of it. Like a shooting star, the vehicle flashed through Milwaukee. When it had passed the city, would it plunge itself to destruction in the waters of Lake Michigan?

At any rate when it disappeared at a slight bend in the road no trace was to be found of its passage.

Chapter 5

ALONG THE SHORES OF NEW ENGLAND

At the time when the newspapers were filled with these reports, I was again in Washington. On my return I had presented myself at my chief's office, but had been unable to see him. Family affairs had suddenly called him away, to be absent some weeks. Mr. Ward, however, undoubtedly knew of the failure of my mission. The newspapers, especially those of North Carolina, had given full details of our ascent of the Great Eyrie.

Naturally, I was much annoyed by this delay which further fretted my restless curiosity. I could turn to no other plans for the future. Could I give up the hope of learning the secret of the Great Eyrie? No! I would return to the attack a dozen times if necessary, and despite every failure.

Surely, the winning of access within those walls was not a task beyond human power. A scaffolding might be raised to the summit of the cliff; or a tunnel might be pierced through its depth. Our engineers met problems more difficult every day. But in this case it was necessary to consider the expense, which might easily grow out of proportion to the advantages to be gained. A tunnel would cost many thousand dollars, and what good would it accomplish beyond satisfying the public curiosity and my own?

My personal resources were wholly insufficient for the achievement. Mr. Ward, who held the government's funds, was away. I even thought of trying to interest some millionaire. Oh, if I could but have promised one of them some gold or silver mines within the mountain! But such an hypothesis was not admissible. The chain of the Appalachians is not situated in a gold bearing region like that of the Pacific mountains, the Transvaal, or Australia.

It was not until the fifteenth of June that Mr. Ward returned to duty. Despite my lack of success he received me warmly. "Here is our poor Strock!" cried he, at my entrance. "Our poor Strock, who has failed!"

"No more, Mr. Ward, than if you had charged me to investigate the surface of the moon," answered I. "We found ourselves face to face with purely natural obstacles insurmountable with the forces then at our command."

"I do not doubt that, Strock, I do not doubt that in the least. Nevertheless, the fact remains that you have discovered nothing of what is going on within the Great Eyrie."

"Nothing, Mr. Ward."
"You saw no sign of fire?"
"None."
"And you heard no suspicious noises whatever?"
"None."
"Then it is still uncertain if there is really a volcano there?"
"Still uncertain, Mr. Ward. But if it is there, we have good reason to believe that it has sunk into a profound sleep."

"Still," returned Mr. Ward, "there is nothing to show that it will not wake up again any day, Strock. It is not enough that a volcano should sleep, it must be absolutely extinguished unless indeed all these threatening rumors have been born solely in the Carolinian imagination."

"That is not possible, sir," I said. "Both Mr. Smith, the mayor of Morganton and his friend the mayor of Pleasant Garden, are reliable men. And they speak from their own knowledge in this matter. Flames have certainly risen above the Great Eyrie. Strange noises have issued from it. There can be no doubt whatever of the reality of these phenomena."

"Granted," declared Mr. Ward. "I admit that the evidence is unassailable. So the deduction to be drawn is that the Great Eyrie has not yet given up its secret."

"If we are determined to know it, Mr. Ward, the solution is only a solution of expense. Pickaxes and dynamite would soon conquer those walls."

"No doubt," responded the chief, "but such an undertaking hardly seems justified, since the mountain is now quiet. We will wait awhile and perhaps nature herself will disclose her mystery."

"Mr. Ward, believe me that I regret deeply that I have been unable to solve the problem you entrusted to me," I said.
“Nonsense! Do not upset yourself, Strock. Take your defeat philosophically. We cannot always be successful, even in the police. How many criminals escape us! I believe we should never capture one of them, if they were a little more intelligent and less imprudent, and if they did not compromise themselves so stupidly. Nothing, it seems to me, would be easier than to plan a crime, a theft or an assassination, and to execute it without arousing any suspicions, or leaving any traces to be followed. You understand, Strock, I do not want to give our criminals lessons; I much prefer to have them remain as they are. Nevertheless there are many whom the police will never be able to track down.”

On this matter I shared absolutely the opinion of my chief. It is among rascals that one finds the most fools. For this very reason I had been much surprised that none of the authorities had been able to throw any light upon the recent performances of the "demon automobile." And when Mr. Ward brought up this subject, I did not conceal from him my astonishment.

He pointed out that the vehicle was practically unpursuable; that in its earlier appearances, it had apparently vanished from all roads even before a telephone message could be sent ahead. Active and numerous police agents had been spread throughout the country, but no one of them had encountered the delinquent. He did not move continuously from place to place, even at his amazing speed, but seemed to appear only for a moment and then to vanish into thin air. True, he had at length remained visible along the entire route from Prairie-du-Chien to Milwaukee, and he had covered in less than an hour and a half this track of two hundred miles.

But since then, there had been no news whatever of the machine. Arrived at the end of the route, driven onward by its own impetus, unable to stop, had it indeed been engulfed within the waters of Lake Michigan? Must we conclude that the machine and its driver had both perished, that there was no longer any danger to be feared from either? The great majority of the public refused to accept this conclusion. They fully expected the machine to reappear.

Mr. Ward frankly admitted that the whole matter seemed to him most extraordinary; and I shared his view. Assuredly if this infernal chauffeur did not return, his apparition would have to be placed among those superhuman mysteries which it is not given to man to understand.

We had fully discussed this affair, the chief and I; and I thought that our interview was at an end, when, after pacing the room for a few moments, he said abruptly, "Yes, what happened there at Milwaukee was very strange. But here is something no less so!"

With this he handed me a report which he had received from Boston, on a subject of which the evening papers had just begun to apprise their readers. While I read it, Mr. Ward was summoned from the room. I seated myself by the window and studied with extreme attention the matter of the report.

For some days the waters along the coast of Maine, Connecticut, and Massachusetts had been the scene of an appearance which no one could exactly describe. A moving body would appear amid the waters, some two or three miles off shore, and go through rapid evolutions. It would flash for a while back and forth among the waves and then dart out of sight.

The body moved with such lightning speed that the best telescopes could hardly follow it. Its length did not seem to exceed thirty feet. Its cigar-shaped form and greenish color, made it difficult to distinguish against the background of the ocean. It had been most frequently observed along the coast between Cape Cod and Nova Scotia. From Providence, from Boston, from Portsmouth, and from Portland motor boats and steam launches had repeatedly attempted to approach this moving body and even to give it chase. They could not get anywhere near it. Pursuit seemed useless. It darted like an arrow beyond the range of view.

Naturally, widely differing opinions were held as to the nature of this object. But no hypothesis rested on any secure basis. Seamen were as much at a loss as others. At first sailors thought it must be some great fish, like a whale. But it is well known that all these animals come to the surface with a certain regularity to breathe, and spout up columns of mingled air and water. Now, this strange animal, if it was an animal, had never "blown" as the whalers say; nor, had it ever made any noises of breathing. Yet if it were not one of these huge marine mammals, how was this unknown monster to be classed? Did it belong among the legendary dwellers in the deep, the krakens, the octopuses, the leviathans, the famous sea-serpents?

At any rate, since this monster, whatever it was, had appeared along the New England shores, the little fishing-smacks and pleasure boats dared not venture forth. Wherever it appeared the boats fled to the nearest harbor, as was but prudent. If the animal was of a ferocious character, none cared to await its attack.

As to the large ships and coast steamers, they had nothing to fear from any monster, whale or otherwise. Several of them had seen this creature at a distance of some miles. But when they attempted to approach, it fled rapidly away. One day, even, a fast United States gun boat went out from Boston, if not to pursue the monster, at least to send after it a few cannon shot. Almost instantly the animal disappeared, and the attempt was vain. As yet, however, the monster had shown no intention of attacking either boats or people.
At this moment Mr. Ward returned and I interrupted my reading to say, "There seems as yet no reason to complain of this sea-serpent. It flees before big ships. It does not pursue little ones. Feeling and intelligence are not very strong in fishes."

"Yet their emotions exist, Strock, and if strongly aroused---"

"But, Mr. Ward, the beast seems not at all dangerous. One of two things will happen. Either it will presently quit these coasts, or finally it will be captured and we shall be able to study it at our leisure here in the museum of Washington."

"And if it is not a marine animal?" asked Mr. Ward.

"What else can it be?" I protested in surprise.

"Finish your reading," said Mr. Ward.

I did so; and found that in the second part of the report, my chief had underlined some passages in red pencil.

For some time no one had doubted that this was an animal; and that, if it were vigorously pursued, it would at last be driven from our shores. But a change of opinion had come about. People began to ask if, instead of a fish, this were not some new and remarkable kind of boat.

Certainly in that case its engine must be one of amazing power. Perhaps the inventor before selling the secret of his invention, sought to attract public attention and to astound the maritime world. Such surety in the movements of his boat, grace in its every evolution, such ease in defying pursuit by its arrow-like speed, surely, these were enough to arouse world-wide curiosity!

At that time great progress had been made in the manufacture of marine engines. Huge transatlantic steamers completed the ocean passage in five days. And the engineers had not yet spoken their last word. Neither were the navies of the world behind. The cruisers, the torpedo boats, the torpedo-destroyers, could match the swiftest steamers of the Atlantic and Pacific, or of the Indian trade.

If, however, this were a boat of some new design, there had as yet been no opportunity to observe its form. As to the engines which drove it, they must be of a power far beyond the fastest known. By what force they worked, was equally a problem. Since the boat had no sails, it was not driven by the wind; and since it had no smoke-stack, it was not driven by steam.

At this point in the report, I again paused in my reading and considered the comment I wished to make.

"What are you puzzling over, Strock?" demanded my chief.

"It is this, Mr. Ward; the motive power of this so-called boat must be as tremendous and as unknown as that of the remarkable automobile which has so amazed us all."

"So that is your idea, is it, Strock?"

"Yes, Mr. Ward."

There was but one conclusion to be drawn. If the mysterious chauffeur had disappeared, if he had perished with his machine in Lake Michigan, it was equally important now to win the secret of this no less mysterious navigator. And it must be won before he in his turn plunged into the abyss of the ocean. Was it not the interest of the inventor to disclose his invention? Would not the American government or any other give him any price he chose to ask?

Yet unfortunately, since the inventor of the terrestrial apparition had persisted in preserving his incognito, was it not to be feared that the inventor of the marine apparition would equally preserve his? Even if the first machine still existed, it was no longer heard from; and would not the second, in the same way, after having disclosed its powers, disappear in its turn, without a single trace?

What gave weight to this probability was that since the arrival of this report at Washington twenty-four hours before, the presence of the extraordinary boat hadn't been announced from anywhere along the shore. Neither had it been seen on any other coast. Though, of course, the assertion that it would not reappear at all would have been hazardous, to say the least.

I noted another interesting and possibly important point. It was a singular coincidence which indeed Mr. Ward suggested to me, at the same moment that I was considering it. This was that only after the disappearance of the wonderful automobile had the no less wonderful boat come into view. Moreover, their engines both possessed a most dangerous power of locomotion. If both should go rushing at the same time over the face of the world, the same danger would threaten mankind everywhere, in boats, in vehicles, and on foot. Therefore it was absolutely necessary that the police should in some manner interfere to protect the public ways of travel.

That is what Mr. Ward pointed out to me; and our duty was obvious. But how could we accomplish this task? We discussed the matter for some time; and I was just about to leave when Mr. Ward made one last suggestion.

"Have you not observed, Strock," said he, "that there is a sort of fantastic resemblance between the general appearance of this boat and this automobile?"

"There is something of the sort, Mr. Ward."

"Well, is it not possible that the two are one?"
Chapter 6
THE FIRST LETTER

After leaving Mr. Ward I returned to my home in Long Street. There I had plenty of time to consider this strange case uninterrupted by either wife or children. My household consisted solely of an ancient servant, who having been formerly in the service of my mother, had now continued for fifteen years in mine.

Two months before I had obtained a leave of absence. It had still two weeks to run, unless indeed some unforeseen circumstance interrupted it, some mission which could not be delayed. This leave, as I have shown, had already been interrupted for four days by my exploration of the Great Eyrie.

And now was it not my duty to abandon my vacation, and endeavor to throw light upon the remarkable events of which the road to Milwaukee and the shore of New England had been in turn the scene? I would have given much to solve the twin mysteries, but how was it possible to follow the track of this automobile or this boat?

Seated in my easy chair after breakfast, with my pipe lighted, I opened my newspaper. To what should I turn? Politics interested me but little, with its eternal strife between the Republicans and the Democrats. Neither did I care for the news of society, nor for the sporting page. You will not be surprised, then, that my first idea was to see if there was any news from North Carolina about the Great Eyrie. There was little hope of this, however, for Mr. Smith had promised to telegraph me at once if anything occurred. I felt quite sure that the mayor of Morganton was as eager for information and as watchful as could have been myself. The paper told me nothing new. It dropped idly from my hand; and I remained deep in thought.

What most frequently recurred to me was the suggestion of Mr. Ward that perhaps the automobile and the boat which had attracted our attention were in reality one and the same. Very probably, at least, the two machines had been built by the same hand. And beyond doubt, these were similar engines, which generated this remarkable speed, more than doubling the previous records of earth and sea.

"The same inventor!" repeated I.

Evidently this hypothesis had strong grounds. The fact that the two machines had not yet appeared at the same time added weight to the idea. I murmured to myself, "After the mystery of Great Eyrie, comes that of Milwaukee and Boston. Will this new problem be as difficult to solve as was the other?"

I noted idly that this new affair had a general resemblance to the other, since both menaced the security of the general public. To be sure, only the inhabitants of the Blueridge region had been in danger from an eruption or possible earthquake at Great Eyrie. While now, on every road of the United States, or along every league of its coasts and harbors, every inhabitant was in danger from this vehicle or this boat, with its sudden appearance and insane speed.

I found that, as was to be expected, the newspapers not only suggested, but enlarged upon the dangers of the case. Timid people everywhere were much alarmed. My old servant, naturally credulous and superstitious, was particularly upset. That same day after dinner, as she was clearing away the things, she stopped before me, a water bottle in one hand, the serviette in the other, and asked anxiously, "Is there no news, sir?"

"None," I answered, knowing well to what she referred.

"The automobile has not come back?"

"No."

"Nor the boat?"

"Nor the boat There is no news even-in the best informed papers."

"But--your secret police information?"

"We are no wiser."

"Then, sir, if you please, of what use are the police?"

It is a question which has phased me more than once.

"Now you see what will happen," continued the old housekeeper, complainingly, "Some fine morning, he will come without warning, this terrible chauffeur, and rush down our street here, and kill us all!"

"Good! When that happens, there will be some chance of catching him."

"He will never be arrested, sir."

"Why not?"

"Because he is the devil himself, and you can't arrest the devil!"

Decidedly, thought I, the devil has many uses; and if he did not exist we would have to invent him, to give people some way of explaining the inexplicable. It was he who lit the flames of the Great Eyrie. It was he who smashed the record in the Wisconsin race. It is he who is scurrying along the shores of Connecticut and Massachusetts. But putting to one side this evil spirit who is so necessary, for the convenience of the ignorant, there
was no doubt that we were facing a most bewildering problem. Had both of these machines disappeared forever? They had passed like a meteor, like a star shooting through space; and in a hundred years the adventure would become a legend, much to the taste of the gossips of the next century.

For several days the newspapers of America and even those of Europe continued to discuss these events. Editorials crowded upon editorials. Rumors were added to rumors. Story tellers of every kind crowded to the front. The public of two continents was interested. In some parts of Europe there was even jealousy that America should have been chosen as the field of such an experience. If these marvelous inventors were American, then their country, their army and navy, would have a great advantage over others. The United States might acquire an incontestable superiority.

Under the date of the tenth of June, a New York paper published a carefully studied article on this phase of the subject. Comparing the speed of the swiftest known vessels with the smallest minimum of speed which could possibly be assigned to the new boat, the article demonstrated that if the United States secured this secret, Europe would be but three days away from her, while she would still be five days from Europe.

If our own police had searched diligently to discover the mystery of the Great Eyrie, the secret service of every country in the world was now interested in these new problems.

Mr. Ward referred to the matter each time I saw him. Our chat would begin by his rallying me about my ill-success in Carolina, and I would respond by reminding him that success there was only a question of expense.

"Never mind, my good Strock," said he, "there will come a chance for our clever inspector to regain his laurels. Take now this affair of the automobile and the boat. If you could clear that up in advance of all the detectives of the world, what an honor it would be to our department! What glory for you!"

"It certainly would, Mr. Ward. And if you put the matter in my charge--"

"Who knows, Strock? Let us wait a while! Let us wait!"

Matters stood thus when, on the morning of June fifteenth, my old servant brought me a letter from the letter-carrier, a registered letter for which I had to sign. I looked at the address. I did not know the handwriting. The postmark, dating from two days before, was stamped at the post office of Morganton.

Morganton! Here at last was, no doubt, news from Mr. Elias Smith.

"Yes!" exclaimed I, speaking to my old servant, for lack of another, "it must be from Mr. Smith at last. I know no one else in Morganton. And if he writes he has news!"

"Morganton?" said the old woman, "isn't that the place where the demons set fire to their mountain?"

"Exactly."

"Oh, sir! I hope you don't mean to go back there!"

"Because you will end by being burned up in that furnace of the Great Eyrie. And I wouldn't want you buried that way, sir."

"Cheer up, and let us see if it is not better news than that."

The envelope was sealed with red sealing wax, and stamped with a sort of coat of arms, surmounted with three stars. The paper was thick and very strong. I broke the envelope and drew out a letter. It was a single sheet, folded in four, and written on one side only. My first glance was for the signature.

There was no signature! Nothing but three initials at the end of the last line!

"The letter is not from the Mayor of Morganton," said I.

"Morganton?" said the old woman, "isn't that the place where the demons set fire to their mountain?"

"Exactly."

"Oh, sir! I hope you don't mean to go back there!"

"Because you will end by being burned up in that furnace of the Great Eyrie. And I wouldn't want you buried that way, sir."

"Cheer up, and let us see if it is not better news than that."

The hand-writing was bold. Both up strokes and down strokes very sharp, about twenty lines in all. Here is the letter, of which I, with good reason, retained an exact copy. It was dated, to my extreme stupefaction, from that mysterious Great Eyrie:

Great Eyrie, Blueridge Mtns,
To Mr. Strock: North Carolina, June 13th.
Chief Inspector of Police,
34 Long St., Washington, D. C.

Sir,

You were charged with the mission of penetrating the Great Eyrie.

You came on April the twenty-eighth, accompanied by the Mayor of Morganton and two guides.
You mounted to the foot of the wall, and you encircled it, finding it too high and steep to climb.
You sought a breech and you found none. Know this: none enter the Great Eyrie; or if one enters, he never returns.

"Do not try again, for the second attempt will not result as did the first, but will have grave consequences for
you.

"Heed this warning, or evil fortune will come to you.

"M. o. W."

Chapter 7
A THIRD MACHINE
I confess that at first this letter dumfounded me. "Ohs!" and "Ahs!" slipped from my open mouth. The old servant stared at me, not knowing what to think.

"Oh, sir! is it bad news?"

I answered for I kept few secrets from this faithful soul by reading her the letter from end to end. She listened with much anxiety.

"A joke, without doubt," said I, shrugging my shoulders.

"Well," returned my superstitious handmaid, "if it isn't from the devil, it's from the devil's country, anyway."

Left alone, I again went over this unexpected letter. Reflection inclined me yet more strongly to believe that it was the work of a practical joker. My adventure was well known. The newspapers had given it in full detail. Some satirist, such as exists even in America, must have written this threatening letter to mock me.

To assume, on the other hand, that the Eyrie really served as the refuge of a band of criminals, seemed absurd. If they feared that the police would discover their retreat, surely they would not have been so foolish as thus to force attention upon themselves. Their chief security would lie in keeping their presence there unknown. They must have realized that such a challenge from them would only arouse the police to renewed activity. Dynamite or melinitel would soon open an entrance to their fortress. Moreover, how could these men have, themselves, gained entrance into the Eyrie unless there existed a passage which we had failed to discover? Assuredly the letter came from a jester or a madman; and I need not worry over it, nor even consider it.

Hence, though for an instant I had thought of showing this letter to Mr. Ward, I decided not to do so. Surely he would attach no importance to it. However, I did not destroy it, but locked it in my desk for safe keeping. If more letters came of the same kind, and with the same initials, I would attach as little weight to them as to this.

Several days passed quietly. There was nothing to lead me to expect that I should soon quit Washington; though in my line of duty one is never certain of the morrow. At any moment I might be sent speeding from Oregon to Florida, from Maine to Texas. And this unpleasant thought haunted me frequently if my next mission were no more successful than that to the Great Eyrie, I might as well give up and hand in my resignation from the force. Of the mysterious chauffeur or chauffeurs, nothing more was heard. I knew that our own government agents, as well as foreign ones, were keeping keen watch over all the roads and rivers, all the lakes and the coasts of America. Of course, the size of the country made any close supervision impossible; but these twin inventors had not before chosen secluded and unfrequented spots in which to appear. The main highway of Wisconsin on a great race day, the harbor of Boston, incessantly crossed by thousands of boats, these were hardly what would be called hiding-places! If the daring driver had not perished of which there was always strong probability; then he must have left America. Perhaps he was in the waters of the Old World, or else resting in some retreat known only to himself, and in that case--

"Ah!" I repeated to myself, many times, "for such a retreat, as secret as inaccessible, this fantastic personage could not find one better than the Great Eyrie!" But, of course, a boat could not get there, any more than an automobile. Only high-flying birds of prey, eagles or condors, could find refuge there.

The nineteenth of June I was going to the police bureau, when, on leaving my house, I noticed two men who looked at me with a certain keenness. Not knowing them, I took no notice; and if my attention was drawn to the matter, it was because my servant spoke of it when I returned.

For some days, she said, she had noticed that two men seemed to be spying upon me in the street. They stood constantly, perhaps a hundred steps from my house; and she suspected that they followed me each time I went up the street.

"You are sure?" I asked.

"Yes, sir and no longer ago than yesterday, when you came into the house, these men came slipping along in your footsteps, and then went away as soon as the door was shut behind you."

"You must be mistaken?"

"I am not, sir."

"And if you met these two men, you would know them?"

"I would."

"Good;" I cried, laughing, "I see you have the very spirit for a detective. I must engage you as a member of our
"Joke if you like, sir. But I have still two good eyes, and I don't need spectacles to recognize people. Someone is spying on you, that's certain; and you should put some of your men to track them in turn."

"All right; I promise to do so," I said, to satisfy her. "And when my men get after them, we shall soon know what these mysterious fellows want of me."

In truth I did not take the good soul's excited announcement very seriously. I added, however, "When I go out, I will watch the people around me with great care."

"That will be best, sir."

My poor old housekeeper was always frightening herself at nothing. "If I see them again," she added, "I will warn you before you set foot out of doors."

"Agreed!" And I broke off the conversation, knowing well that if I allowed her to run on, she would end by being sure that Beelzebub himself and one of his chief attendants were at my heels.

The two following days, there was certainly no one spying on me, either at my exits or entrances. So I concluded my old servant had made much of nothing, as usual. But on the morning of the twenty-second of June, after rushing upstairs as rapidly as her age would permit, the devoted old soul burst into my room and in a half whisper gasped "Sir! Sir!"

"What is it?"

"They are there!"

"Who?" I queried, my mind on anything but the web she had been spinning about me.

"The two spies!"

"Ah, those wonderful spies!"

"Themselves! In the street! Right in front of our windows! Watching the house, waiting for you to go out."

I went to the window and raising just an edge of the shade, so as not to give any warning, I saw two men on the pavement.

They were rather fine-looking men, broad-shouldered and vigorous, aged somewhat under forty, dressed in the ordinary fashion of the day, with slouched hats, heavy woolen suits, stout walking shoes and sticks in hand. Undoubtedly, they were staring persistently at my apparently unwatchful house. Then, having exchanged a few words, they strolled off a little way, and returned again.

"Are you sure these are the same men you saw before?"

"Yes, sir."

Evidently, I could no longer dismiss her warning as an hallucination; and I promised myself to clear up the matter. As to following the men myself, I was presumably too well known to them. To address them directly would probably be of no use. But that very day, one of our best men should be put on watch, and if the spies returned on the morrow, they should be tracked in their turn, and watched until their identity was established.

At the moment, they were waiting to follow me to police headquarters? For it was there that I was bound, as usual. If they accompanied me I might be able to offer them a hospitality for which they would scarce thank me.

I took my hat; and while the housekeeper remained peeping from the window, I went down stairs, opened the door, and stepped into the street.

The two men were no longer there.

Despite all my watchfulness, that day I saw no more of them as I passed along the streets. From that time on, indeed, neither my old servant nor I saw them again before the house, nor did I encounter them elsewhere. Their appearance, however, was stamped upon my memory, I would not forget them.

Perhaps after all, admitting that I had been the object of their espionage, they had been mistaken in my identity. Having obtained a good look at me, they now followed me no more. So in the end, I came to regard this matter as of no more importance than the letter with the initials, M. o. W.

Then, on the twenty-fourth of June, there came a new event, to further stimulate both my interest and that of the general public in the previous mysteries of the automobile and the boat. The Washington Evening Star published the following account, which was next morning copied by every paper in the country.

"Lake Kirdall in Kansas, forty miles west of Topeka, is little known. It deserves wider knowledge, and doubtless will have it hereafter, for attention is now drawn to it in a very remarkable way.

This lake, deep among the mountains, appears to have no outlet. What it loses by evaporation, it regains from the little neighboring streamlets and the heavy rains.

Lake Kirdall covers about seventy-five square miles, and its level is but slightly below that of the heights which surround it. Shut in among the mountains, it can be reached only by narrow and rocky gorges. Several villages, however, have sprung up upon its banks. It is full of fish, and fishing-boats cover its waters.

Lake Kirdall is in many places fifty feet deep close to shore. Sharp, pointed rocks form the edges of this huge
basin. Its surges, roused by high winds, beat upon its banks with fury, and the houses near at hand are often deluged
with spray as if with the downpour of a hurricane. The lake, already deep at the edge, becomes yet deeper toward the
center, where in some places soundings show over three hundred feet of water.

"The fishing industry supports a population of several thousands, and there are several hundred fishing boats in
addition to the dozen or so of little steamers which serve the traffic of the lake. Beyond the circle of the mountains
lie the railroads which transport the products of the fishing industry throughout Kansas and the neighboring states.

"This account of Lake Kirdall is necessary for the understanding of the remarkable facts which we are about to
report."

And this is what the Evening Star then reported in its startling article. "For some time past, the fishermen have
noticed a strange upheaval in the waters of the lake. Sometimes it rises as if a wave surged up from its depths. Even
in perfectly calm weather, when there is no wind whatever, this upheaval sometimes arises in a mass of foam.

"Tossed about by violent waves and unaccountable currents, boats have been swept beyond all control. Sometimes
they have been dashed one against another, and serious damage has resulted.

"This confusion of the waters evidently has its origin somewhere in the depths of the lake; and various
explanations have been offered to account for it. At first, it was suggested that the trouble was due to seismic forces,
to some volcanic action beneath the lake; but this hypothesis had to be rejected when it was recognized that the
disturbance was not confined to one locality, but spread itself over the entire surface of the lake, either at one part or
another, in the center or along the edges, traveling along almost in a regular line and in a way to exclude entirely all
idea of earthquake or volcanic action.

"Another hypothesis suggested that it was a marine monster who thus upheaved the waters. But unless the beast
had been born in the lake and had there grown to its gigantic proportions unsuspected, which was scarce possible, he
must have come there from outside. Lake Kirdall, however, has no connection with any other waters. If this lake
were situated near any of the oceans, there might be subterranean canals; but in the center of America, and at the
height of some thousands of feet above sea-level, this is not possible. In short, here is another riddle not easy to
solve, and it is much easier to point out the impossibility of false explanations, than to discover the true one.

"Is it possible that a submarine boat is being experimented with beneath the lake? Such boats are no longer
impossible today. Some years ago, at Bridgeport, Connecticut, there was launched a boat, The Protector, which
could go on the water, under the water, and also upon land. Built by an inventor named Lake, supplied with two
motors, an electric one of seventy-five horse power, and a gasoline one of two hundred and fifty horse power, it was
also provided with wheels a yard in diameter, which enabled it to roll over the roads, as well as swim the seas.

"But even then, granting that the turmoil of Lake Kirdall might be produced by a submarine, brought to a high
degree of perfection, there remains as before the question how could it have reached Lake Kirdall? The lake, shut in
on all sides by a circle of mountains, is no more accessible to a submarine than to a sea-monster.

"In whatever way this last puzzling question may be solved, the nature of this strange appearance can no longer
be disputed since the twentieth of June. On that day, in the afternoon, the schooner 'Markel' while speeding with all
sails set, came into violent collision with something just below the water level. There was no shoal nor rock near; for
the lake in this part is eighty or ninety feet deep. The schooner with both her bow and her side badly broken, ran
great danger of sinking. She managed, however, to reach the shore before her decks were completely submerged.

"When the 'Markel' had been pumped out and hauled up on shore, an examination showed that she had received
a blow near the bow as if from a powerful ram.

"From this it seems evident that there is actually a submarine boat which darts about beneath the surface of Lake
Kirdall with most remarkable rapidity.

"The thing is difficult to explain. Not only is there a question as to how did the submarine get there? But why is
it there? Why does it never come to the surface? What reason has its owner for remaining unknown? Are other
disasters to be expected from its reckless course?"

The article in the Evening Star closed with this truly striking suggestion: "After the mysterious automobile, came
the mysterious boat. Now comes the mysterious submarine.

"Must we conclude that the three engines are due to the genius of the same inventor, and that the three vehicles
are in truth but one?"

Chapter 8
AT ANY COST

The suggestion of the Star came like a revelation. It was accepted everywhere. Not only were these three
vehicles the work of the same inventor; they were the same machine!

It was not easy to see how the remarkable transformation could be practically accomplished from one means of
locomotion to the other. How could an automobile become a boat, and yet more, a submarine? All the machine seemed to lack was the power of flying through the air. Nevertheless, everything that was known of the three different machines, as to their size, their shape, their lack of odor or of steam, and above all their remarkable speed, seemed to imply their identity. The public, grown blase with so many excitements, found in this new marvel a stimulus to reawaken their curiosity.

The newspapers dwelt now chiefly on the importance of the invention. This new engine, whether in one vehicle or three, had given proofs of its power. What amazing proofs! The invention must be bought at any price. The United States government must purchase it at once for the use of the nation. Assuredly, the great European powers would stop at nothing to be beforehand with America, and gain possession of an engine so invaluable for military and naval use. What incalculable advantages would it give to any nation, both on land and sea! Its destructive powers could not even be estimated, until its qualities and limitations were better known. No amount of money would be too great to pay for the secret; America could not put her millions to better use.

But to buy the machine, it was necessary to find the inventor; and there seemed the chief difficulty. In vain was Lake Kirdall searched from end to end. Even its depths were explored with a sounding-line without result. Must it be concluded that the submarine no longer lurked beneath its waters? But in that case, how had the boat gotten away? For that matter, how had it come? An insoluble problem!

The submarine was heard from no more, neither in Lake Kirdall nor elsewhere. It had disappeared like the automobile from the roads, and like the boat from the shores of America. Several times in my interviews with Mr. Ward, we discussed this matter, which still filled his mind. Our men continued everywhere on the lookout, but as unsuccessfully as other agents.

On the morning of the twenty-seventh of June, I was summoned into the presence of Mr. Ward.

"Well, Strock," said he, "here is a splendid chance for you to get your revenge."

"Revenge for the Great Eyrie disappointment?"

"Of course."

"What chance?" asked I, not knowing if he spoke seriously, or in jest.

"Why, here," he answered. "Would you not like to discover the inventor of this three-fold machine?"

"I certainly should, Mr. Ward. Give me the order to take charge of the matter, and I will accomplish the impossible, in order to succeed. It is true, I believe it will be difficult."

"Undoubtedly, Strock. Perhaps even more difficult than to penetrate into the Great Eyrie."

It was evident that Mr. Ward was intent on rallying me about my unsuccess. He would not do that, I felt assured, out of mere unkindness. Perhaps then he meant to rouse my resolution. He knew me well; and realized that I would have given anything in the world to recoup my defeat. I waited quietly for new instructions.

Mr. Ward dropped his jesting and said to me very generously, "I know, Strock, that you accomplished everything that depended on human powers; and that no blame attaches to you. But we face now a matter very different from that of the Great Eyrie. The day the government decides to force that secret, everything is ready. We have only to spend some thousands of dollars, and the road will be open."

"That is what I would urge."

"But at present," said Mr. Ward, shaking his head, "it is much more important to place our hands on this fantastic inventor, who so constantly escapes us. That is work for a detective, indeed; a master detective!"

"He has not been heard from again?"

"No; and though there is every reason to believe that he has been, and still continues, beneath the waters of Lake Kirdall, it has been impossible to find any trace of him anywhere around there. One would almost fancy he had the power of making himself invisible, this Proteus of a mechanic!"

"It seems likely," said I, "that he will never be seen until he wishes to be."

"True, Strock. And to my mind there is only one way of dealing with him, and that is to offer him such an enormous price that he cannot refuse to sell his invention."

Mr. Ward was right. Indeed, the government had already made the effort to secure speech with this hero of the day, than whom surely no human being has ever better merited the title. The press had widely spread the news, and this extraordinary individual must assuredly know what the government desired of him, and how completely he could name the terms he wished.

"Surely," added Mr. Ward, "this invention can be of no personal use to the man, that he should hide it from the rest of us. There is every reason why he should sell it. Can this unknown be already some dangerous criminal who, thanks to his machine, hopes to defy all pursuit?"

My chief then went on to explain that it had been decided to employ other means in search of the inventor. It was possible after all that he had perished with his machine in some dangerous maneuver. If so, the ruined vehicle might prove almost as valuable and instructive to the mechanical world as the man himself. But since the accident to the
schooner "Markel" on Lake Kirdall, no news of him whatever had reached the police.

On this point Mr. Ward did not attempt to hide his disappointment and his anxiety. Anxiety, yes, for it was manifestly becoming more and more difficult for him to fulfill his duty of protecting the public. How could we arrest criminals, if they could flee from justice at such speed over both land and sea? How could we pursue them under the oceans? And when dirigible balloons should also have reached their full perfection, we would even have to chase men through the air! I asked myself if my colleagues and I would not find ourselves some day reduced to utter helplessness? If police officials, become a useless incumbrance, would be definitely discarded by society?

Here, there recurred to me the jesting letter I had received a fortnight before, the letter which threatened my liberty and even my life. I recalled, also, the singular espionage of which I had been the subject. I asked myself if I had better mention these things to Mr. Ward. But they seemed to have absolutely no relation to the matter now in hand. The Great Eyrie affair had been definitely put aside by the government, since an eruption was no longer threatening. And they now wished to employ me upon this newer matter. I waited, then, to mention this letter to my chief at some future time, when it would be not so sore a joke to me.

Mr. Ward again took up our conversation. "We are resolved by some means to establish communication with this inventor. He has disappeared, it is true; but he may reappear at any moment, and in any part of the country. I have chosen you, Strock, to follow him the instant he appears. You must hold yourself ready to leave Washington on the moment. Do not quit your house, except to come here to headquarters each day; notify me, each time by telephone, when you start from home, and report to me personally the moment you arrive here."

"I will follow orders exactly, Mr. Ward," I answered. "But permit me one question. Ought I to act alone, or will it not be better to join with me?"

"That is what I intend," said the chief, interrupting me. "You are to choose two of our men whom you think the best fitted."

"I will do so, Mr. Ward. And now, if some day or other I stand in the presence of our man, what am I to do with him?"

"Above all things, do not lose sight of him. If there is no other way, arrest him. You shall have a warrant."

"A useful precaution, Mr. Ward. If he started to jump into his automobile and to speed away at the rate we know of, I must stop him at any cost. One cannot argue long with a man making two hundred miles an hour!"

"You must prevent that, Strock. And the arrest made, telegraph me. After that, the matter will be in my hands."

"Count on me, Mr. Ward; at any hour, day or night, I shall be ready to start with my men. I thank you for having entrusted this mission to me. If it succeeds, it will be a great honor-""

"And of great profit," added my chief, dismissing me.

Returning home, I made all preparations for a trip of indefinite duration. Perhaps my good housekeeper imagined that I planned a return to the Great Eyrie, which she regarded as an ante-chamber of hell itself. She said nothing, but went about her work with a most despairing face. Nevertheless, sure as I was of her discretion, I told her nothing. In this great mission I would confide in no one.

My choice of the two men to accompany me was easily made. They both belonged to my own department, and had many times under my direct command given proofs of their vigor, courage and intelligence. One, John Hart, of Illinois, was a man of thirty years; the other, aged thirty-two, was Nab Walker, of Massachusetts. I could not have had better assistants.

Several days passed, without news, either of the automobile, the boat, or the submarine. There were rumors in plenty; but the police knew them to be false. As to the reckless stories that appeared in the newspapers, they had most of them, no foundation whatever. Even the best journals cannot be trusted to refuse an exciting bit of news on the mere ground of its unreliability.

Then, twice in quick succession, there came what seemed trustworthy reports of the "man of the hour." The first asserted that he had been seen on the roads of Arkansas, near Little Rock. The second, that he was in the very middle of Lake Superior.

Unfortunately, these two notices were absolutely unreconcilable; for while the first gave the afternoon of June twenty-sixth, as the time of appearance, the second set it for the evening of the same day. Now, these two points of the United States territory are not less than eight hundred miles apart. Even granting the automobile this unthinkable speed, greater than any it had yet shown, how could it have crossed all the intervening country unseen? How could it traverse the States of Arkansas, Missouri, Iowa and Wisconsin, from end to end without anyone of our agents giving us warning, without any interested person rushing to a telephone?

After these two momentary appearances, if appearances they were, the machine again dropped out of knowledge. Mr. Ward did not think it worth while to dispatch me and my men to either point whence it had been reported.

Yet since this marvelous machine seemed still in existence, something must be done. The following official
notice was published in every newspaper of the United States under July 3d. It was couched in the most formal terms.

"During the month of April, of the present year, an automobile traversed the roads of Pennsylvania, of Kentucky, of Ohio, of Tennessee, of Missouri, of Illinois; and on the twenty-seventh of May, during the race held by the American Automobile Club, it covered the course in Wisconsin. Then it disappeared.

"During the first week of June, a boat maneuvering at great speed appeared off the coast of New England between Cape Cod and Cape Sable, and more particularly around Boston. Then it disappeared.

"In the second fortnight of the same month, a submarine boat was run beneath the waters of Lake Kirdall, in Kansas. Then it disappeared.

"Everything points to the belief that the same inventor must have built these three machines, or perhaps that they are the same machine, constructed so as to travel both on land and water.

"A proposition is therefore addressed to the said inventor, whoever he be, with the aim of acquiring the said machine.

"He is requested to make himself known and to name the terms upon which he will treat with the United States government. He is also requested to answer as promptly as possible to the Department of Federal Police, Washington, D. C., United States of America."

Such was the notice printed in large type on the front page of every newspaper. Surely it could not fail to reach the eye of him for whom it was intended, wherever he might be. He would read it. He could scarce fail to answer it in some manner. And why should he refuse such an unlimited offer? We had only to await his reply.

One can easily imagine how high the public curiosity rose. From morning till night, an eager and noisy crowd pressed about the bureau of police, awaiting the arrival of a letter or a telegram. The best reporters were on the spot. What honor, what profit would come to the paper which was first to publish the famous news! To know at last the name and place of the undiscoverable unknown! And to know if he would agree to some bargain with the government. If necessary all the millionaires in the country would open their inexhaustible purses!

The day passed. To how many excited and impatient people it seemed to contain more than twenty-four hours! And each hour held far more than sixty minutes! There came no answer, no letter, no telegram! The night following, there was still no news. And it was the same the next day and the next.

There came, however another result, which had been fully foreseen. The cables informed Europe of what the United States government had done. The different Powers of the Old World hoped also to obtain possession of the wonderful invention. Why should they not struggle for an advantage so tremendous? Why should they not enter the contest with their millions?

In brief, every great Power took part in the affair, France, England, Russia, Italy, Austria, Germany. Only the states of the second order refrained from entering, with their smaller resources, upon a useless effort. The European press published notices identical with that of the United States. The extraordinary "chauffeur" had only to speak, to become a rival to the Vanderbilts, the Astors, the Goulds, the Morgans, and the Rothschilds of every country of Europe.

And, when the mysterious inventor made no sign, what attractive offers were held forth to tempt him to discard the secrecy in which he was enwrapped! The whole world became a public market, an auction house whence arose the most amazing bids. Twice a day the newspapers would add up the amounts, and these kept rising from millions to millions. The end came when the United States Congress, after a memorable session, voted to offer the sum of twenty million dollars. And there was not a citizen of the States of whatever rank, who objected to the amount, so much importance was attached to the possession of this prodigious engine of locomotion. As for me, I said emphatically to my old housekeeper: "The machine is worth even more than that."

Evidently the other nations of the world did not think so, for their bids remained below the final sum. But how useless was this mighty struggle of the great rivals! The inventor did not appear! He did not exist! He had never existed! It was all a monstrous pretense of the American newspapers. That, at least, became the announced view of the Old World.

And so the time passed. There was no further news of our man, there was no response from him. He appeared no more. For my part, not knowing what to think, I commenced to lose all hope of reaching any solution to the strange affair.

Then on the morning of the fifteenth of July, a letter without postmark was found in the mailbox of the police bureau. After the authorities had studied it, it was given out to the Washington journals, which published it in facsimile, in special numbers. It was couched as follows:
Chapter 9
THE SECOND LETTER
On Board the Terror
July 15.
To the Old and New World,

The propositions emanating from the different governments of Europe, as also that which has finally been made by the United States of America, need expect no other answer than this:

I refuse absolutely and definitely the sums offered for my invention.

My machine will be neither French nor German, nor Austrian nor Russian, nor English nor American.

The invention will remain my own, and I shall use it as pleases me.

With it, I hold control of the entire world, and there lies no force within the reach of humanity which is able to resist me, under any circumstances whatsoever.

Let no one attempt to seize or stop me. It is, and will be, utterly impossible. Whatever injury anyone attempts against me, I will return a hundredfold.

As to the money which is offered me, I despise it! I have no need of it. Moreover, on the day when it pleases me to have millions, or billions, I have but to reach out my hand and take them.

Let both the Old and the New World realize this: They can accomplish nothing against me; I can accomplish anything against them.

I sign this letter:

The Master of the World.

Chapter 10
OUTSIDE THE LAW

Such was the letter addressed to the government of the United States. As to the person who had placed it in the mail-box of the police, no one had seen him.

The sidewalk in front of our offices had probably not been once vacant during the entire night. From sunset to sunrise, there had always been people, busy, anxious, or curious, passing before our door. It is true, however, that even then, the bearer of the letter might easily have slipped by unseen and dropped the letter in the box. The night had been so dark, you could scarcely see from one side of the street to the other.

I have said that this letter appeared in facsimile in all the newspapers to which the government communicated it. Perhaps one would naturally imagine that the first comment of the public would be, "This is the work of some practical joker." It was in that way that I had accepted my letter from the Great Eyrie, five weeks before.

But this was not the general attitude toward the present letter, neither in Washington, nor in the rest of America. To the few who would have maintained that the document should not be taken seriously, an immense majority would have responded. "This letter has not the style nor the spirit of a jester. Only one man could have written it; and that is the inventor of this unapproachable machine."

To most people this conclusion seemed indisputable owing to a curious state of mind easily explainable. For all the strange facts of which the key had hitherto been lacking, this letter furnished an explanation. The theory now almost universally accepted was as follows. The inventor had hidden himself for a time, only in order to reappear more startlingly in some new light. Instead of having perished in an accident, he had concealed himself in some retreat where the police were unable to discover him. Then to assert positively his attitude toward all governments he had written this letter. But instead of dropping it in the post in any one locality, which might have resulted in its being traced to him, he had come to Washington and deposited it himself in the very spot suggested by the government's official notice, the bureau of police.

Well! If this remarkable personage had reckoned that this new proof of his existence would make some noise in two worlds, he certainly figured rightly. That day, the millions of good folk who read and re-read their daily paper could to employ a well-known phrase, scarcely believe their eyes.

As for myself, I studied carefully every phrase of the defiant document. The hand-writing was black and heavy. An expert at chirography would doubtless have distinguished in the lines traces of a violent temperament, of a character stern and unsocial. Suddenly, a cry escaped me a cry that fortunately my housekeeper did not hear. Why had I not noticed sooner the resemblance of the handwriting to that of the letter I had received from Morganton?

Moreover, a yet more significant coincidence, the initials with which my letter had been signed, did they not stand for the words "Master of the World?"

And whence came the second letter? "On Board the 'Terror.'" Doubtless this name was that of the triple machine commanded by the mysterious captain. The initials in my letter were his own signature; and it was he who had
threatened me, if I dared to renew my attempt on the Great Eyrie.

I rose and took from my desk the letter of June thirteenth. I compared it with the facsimile in the newspapers. There was no doubt about it. They were both in the same peculiar hand-writing.

My mind worked eagerly. I sought to trace the probable deductions from this striking fact, known only to myself. The man who had threatened me was the commander of this "Terror"--startling name, only too well justified! I asked myself if our search could not now be prosecuted under less vague conditions. Could we not now start our men upon a trail which would lead definitely to success? In short, what relation existed between the "Terror" and the Great Eyrie? What connection was there between the phenomena of the Blueridge Mountains, and the no less phenomenal performances of the fantastic machine?

I knew what my first step should be; and with the letter in my pocket, I hastened to police headquarters. Inquiring if Mr. Ward was within and receiving an affirmative reply, I hastened toward his door, and rapped upon it with unusual and perhaps unnecessary vigor. Upon his call to enter, I stepped eagerly into the room.

The chief had spread before him the letter published in the papers, not a facsimile, but the original itself which had been deposited in the letter-box of the department.

"You come as if you had important news, Strock?"

"Judge for yourself, Mr. Ward;" and I drew from my pocket the letter with the initials.

Mr. Ward took it, glanced at its face, and asked, "What is this?"

"A letter signed only with initials, as you can see."

"And where was it posted?"

"In Morganton, in North Carolina."

"When did you receive it?"

"A month ago, the thirteenth of June."

"What did you think of it then?"

"That it had been written as a joke."

"And now Strock?"

"I think, what you will think, Mr. Ward, after you have studied it."

My chief turned to the letter again and read it carefully. "It is signed with three initials," said he.

"Yes, Mr. Ward, and those initials belong to the words, 'Master of the World,' in this facsimile."

"Of which this is the original," responded Mr. Ward, taking it up.

"It is quite evident," I urged, "that the two letters are by the same hand."

"It seems so."

"You see what threats are made against me, to protect the Great Eyrie."

"Yes, the threat of death! But Strock, you have had this letter for a month. Why have you not shown it to me before?"

"Because I attached no importance to it. Today, after the letter from the 'Terror,' it must be taken seriously."

"I agree with you. It appears to me most important. I even hope it may prove the means of tracking this strange personage."

"That is what I also hope, Mr. Ward."

"Only what connection can possibly exist between the 'Terror' and the Great Eyrie?"

"That I do not know. I cannot even imagine."

"There can be but one explanation," continued Mr. Ward, "though it is almost inadmissible, even impossible."

"And that is?"

"That the Great Eyrie was the spot selected by the inventor, where he gathered his material."

"That is impossible!" cried I. "In what way would he get his material in there? And how get his machine out? After what I have seen, Mr. Ward, your suggestion is impossible."

"Unless, Strock--"

"Unless what?" I demanded.

"Unless the machine of this Master of the World has also wings, which permit it to take refuge in the Great Eyrie."

At the suggestion that the "Terror," which had searched the deeps of the sea, might be capable also of rivaling the vultures and the eagles, I could not restrain an expressive shrug of incredulity. Neither did Mr. Ward himself dwell upon the extravagant hypothesis.

He took the two letters and compared them afresh. He examined them under a microscope, especially the signatures, and established their perfect identity. Not only the same hand, but the same pen had written them.

After some moments of further reflection, Mr. Ward said, "I will keep your letter, Strock. Decidedly, I think, that you are fated to play an important part in this strange affair or rather in these two affairs. What thread attaches them,
I cannot yet see; but I am sure the thread exists. You have been connected with the first, and it will not be surprising if you have a large part in the second."

"I hope so, Mr. Ward. You know how inquisitive I am."

"I do, Strock. That is understood. Now, I can only repeat my former order; hold yourself in readiness to leave Washington at a moment's warning."

All that day, the public excitement caused by the defiant letter mounted steadily higher. It was felt both at the White House and at the Capitol that public opinion absolutely demanded some action. Of course, it was difficult to do anything. Where could one find this Master of the World? And even if he were discovered, how could he be captured? He had at his disposal not only the powers he had displayed, but apparently still greater resources as yet unknown. How had he been able to reach Lake Kirdall over the rocks; and how had he escaped from it? Then, if he had indeed appeared on Lake Superior, how had he covered all the intervening territory unseen?

What a bewildering affair it was altogether! This, of course, made it all the more important to get to the bottom of it. Since the millions of dollars had been refused, force must be employed. The inventor and his invention were not to be bought. And in what haughty and menacing terms he had couched his refusal! So be it! He must be treated as an enemy of society, against whom all means became justified, that he might be deprived of his power to injure others. The idea that he had perished was now entirely discarded. He was alive, very much alive; and his existence constituted a perpetual public danger!

Influenced by these ideas, the government issued the following proclamation:

"Since the commander of the 'Terror' has refused to make public his invention, at any price whatever, since the use which he makes of his machine constitutes a public menace, against which it is impossible to guard, the said commander of the 'Terror' is hereby placed beyond the protection of the law. Any measures taken in the effort to capture or destroy either him or his machine will be approved and rewarded."

It was a declaration of war, war to the death against this "Master of the World" who thought to threaten and defy an entire nation, the American nation!

Before the day was over, various rewards of large amounts were promised to anyone who revealed the hiding place of this dangerous inventor, to anyone who could identify him, and to anyone who should rid the country of him.

Such was the situation during the last fortnight of July. All was left to the hazard of fortune. The moment the outlaw re-appeared he would be seen and signaled, and when the chance came he would be arrested. This could not be accomplished when he was in his automobile on land or in his boat on the water. No; he must be seized suddenly, before he had any opportunity to escape by means of that speed which no other machine could equal.

I was therefore all alert, awaiting an order from Mr. Ward to start out with my men. But the order did not arrive for the very good reason that the man whom it concerned remained undiscovered. The end of July approached. The newspapers continued the excitement. They published repeated rumors. New clues were constantly being announced. But all this was mere idle talk. Telegrams reached the police bureau from every part of America, each contradicting and nullifying the others. The enormous rewards offered could not help but lead to accusations, errors, and blunders, made, many of them, in good faith. One time it would be a cloud of dust, which must have contained the automobile. At another time, almost any wave on any of America's thousand lakes represented the submarine. In truth, in the excited state of the public imagination, apparitions assailed us from every side.

At last, on the twenty-ninth of July, I received a telephone message to come to Mr. Ward on the instant. Twenty minutes later I was in his cabinet.

"You leave in an hour, Strock," said he.

"Where for?"

"For Toledo."

"It has been seen?"

"Yes. At Toledo you will get your final orders."

"In an hour, my men and I will be on the way."

"Good! And, Strock, I now give you a formal order."

"What is it, Mr. Ward?"

"To succeed! This time to succeed!"

Chapter 11

THE CAMPAIGN

So the undiscoverable commander had reappeared upon the territory of the United States! He had never shown himself in Europe either on the roads or in the seas. He had not crossed the Atlantic, which apparently he could have
traversed in three days. Did he then intend to make only America the scene of his exploits? Ought we to conclude from this that he was an American?

Let me insist upon this point. It seemed clear that the submarine might easily have crossed the vast sea which separates the New and the Old World. Not only would its amazing speed have made its voyage short, in comparison to that of the swiftest steamship, but also it would have escaped all the storms that make the voyage dangerous. Tempests did not exist for it. It had but to abandon the surface of the waves, and it could find absolute calm a few score feet beneath.

But the inventor had not crossed the Atlantic, and if he were to be captured now, it would probably be in Ohio, since Toledo is a city of that state.

This time the fact of the machine's appearance had been kept secret, between the police and the agent who had warned them, and whom I was hurrying to meet. No journal--and many would have paid high for the chance--was printing this news. We had decided that nothing should be revealed until our effort was at an end. No indiscretion would be committed by either my comrades or myself.

The man to whom I was sent with an order from Mr. Ward was named Arthur Wells. He awaited us at Toledo. The city of Toledo stands at the western end of Lake Erie. Our train sped during the night across West Virginia and Ohio. There was no delay; and before noon the next day the locomotive stopped in the Toledo depot.

John Hart, Nab Walker and I stepped out with traveling bags in our hands, and revolvers in our pockets. Perhaps we should need weapons for an attack, or even to defend ourselves. Scarcely had I stepped from the train when I picked out the man who awaited us. He was scanning the arriving passengers impatiently, evidently as eager and full of haste as I.

I approached him. "Mr. Wells?" said I.
"Mr. Strock?" asked he.
"Yes."
"I am at your command," said Mr. Wells.
"Are we to stop any time in Toledo?" I asked.
"No; with your permission, Mr. Strock. A carriage with two good horses is waiting outside the station; and we must leave at once to reach our destination as soon as possible."
"We will go at once," I answered, signing to my two men to follow us. "Is it far?"
"Twenty miles."
"And the place is called?"
"Black Rock Creek."

Having left our bags at a hotel, we started on our drive. Much to my surprise I found there were provisions sufficient for several days packed beneath the seat of the carriage. Mr. Wells told me that the region around Black Rock Creek was among the wildest in the state. There was nothing there to attract either farmers or fishermen. We would find not an inn for our meals nor a room in which to sleep. Fortunately, during the July heat there would be no hardship even if we had to lie one or two nights under the stars.

More probably, however, if we were successful, the matter would not occupy us many hours. Either the commander of the "Terror" would be surprised before he had a chance to escape, or he would take to flight and we must give up all hope of arresting him.

I found Arthur Wells to be a man of about forty, large and powerful. I knew him by reputation to be one of the best of our local police agents. Cool in danger and enterprising always, he had proven his daring on more than one occasion at the peril of his life. He had been in Toledo on a wholly different mission, when chance had thrown him on the track of the "Terror."

We drove rapidly along the shore of Lake Erie, toward the southwest. This inland sea of water is on the northern boundary of the United States, lying between Canada on one side and the States of Ohio, Pennsylvania and New York on the other. If I stop to mention the geographical position of this lake, its depth, its extent, and the waters nearest around, it is because the knowledge is necessary for the understanding of the events which were about to happen.

The surface of Lake Erie covers about ten thousand square miles. It is nearly six hundred feet above sea level. It is joined on the northwest, by means of the Detroit River, with the still greater lakes to the westward, and receives their waters. It has also rivers of its own though of less importance, such as the Rocky, the Cuyahoga, and the Black. The lake empties at its northeastern end into Lake Ontario by means of Niagara River and its celebrated falls.

The greatest known depth of Lake Erie is over one hundred and thirty feet. Hence it will be seen that the mass of its waters is considerable. In short, this is a region of most magnificent lakes. The land, though not situated far northward, is exposed to the full sweep of the Arctic cold. The region to the northward is low, and the winds of winter rush down with extreme violence. Hence Lake Erie is sometimes frozen over from shore to shore.
The principal cities on the borders of this great lake are Buffalo at the east, which belongs to New York State, and Toledo in Ohio, at the west, with Cleveland and Sandusky, both Ohio cities, at the south. Smaller towns and villages are numerous along the shore. The traffic is naturally large, its annual value being estimated at considerably over two million dollars.

Our carriage followed a rough and little used road along the borders of the lake; and as we toiled along, Arthur Wells told me, what he had learned.

Less than two days before, on the afternoon of July twenty-seventh Wells had been riding on horseback toward the town of Herly. Five miles outside the town, he was riding through a little wood, when he saw, far up across the lake, a submarine which rose suddenly above the waves. He stopped, tied his horse, and stole on foot to the edge of the lake. There, from behind a tree he had seen with his own eyes seen this submarine advance toward him, and stop at the mouth of Black Rock Creek. Was it the famous machine for which the whole world was seeking, which thus came directly to his feet?

When the submarine was close to the rocks, two men climbed out upon its deck and stepped ashore. Was one of them this Master of the World, who had not been seen since he was reported from Lake Superior? Was this the mysterious "Terror" which had thus risen from the depths of Lake Erie?

"I was alone," said Wells. "Alone on the edge of the Creek. If you and your assistants, Mr. Strock had been there, we four against two, we would have been able to reach these men and seize them before they could have regained their boat and fled."

"Probably," I answered. "But were there no others on the boat with them? Still, if we had seized the two, we could at least have learned who they were."

"And above all," added Wells, "if one of them turned out to be the captain of the 'Terror'!"

"I have only one fear, Wells; this submarine, whether it is the one we seek or another, may have left the creek since your departure."

"We shall know about that in a few hours, now. Pray Heaven they are still there! Then when night comes?"

"But," I asked, "did you remain watching in the wood until night?"

"No; I left after an hour's watching, and rode straight for the telegraph station at Toledo. I reached there late at night and sent immediate word to Washington."

"That was night before last. Did you return yesterday to Black Rock Creek?"

"Yes."

"The submarine was still there?"

"In the same spot."

"And the two men?"

"The same two men. I judge that some accident had happened, and they came to this lonely spot to repair it."

"Probably so," said I. "Some damage which made it impossible for them to regain their usual hiding-place. If only they are still here!"

"I have reason to believe they will be, for quite a lot of stuff was taken out of the boat, and laid about upon the shore; and as well as I could discern from a distance they seemed to be working on board."

"Only the two men?"

"Only the two."

"But," protested I, "can two be sufficient to handle an apparatus of such speed, and of such intricacy, as to be at once automobile, boat and submarine?"

"I think not, Mr. Strock; but I only saw the same two. Several times they came to the edge of the little wood where I was hidden, and gathered sticks for a fire which they made upon the beach. The region is so uninhabited and the creek so hidden from the lake that they ran little danger of discovery. They seemed to know this."

"You would recognize them both again?"

"Perfectly. One was of middle size, vigorous, and quick of movement, heavily bearded. The other was smaller, but stocky and strong. Yesterday, as before, I left the wood about five o'clock and hurried back to Toledo. There I found a telegram from Mr. Ward, notifying me of your coming; and I awaited you at the station."

Summed up, then, the news amounted to this: For forty hours past a submarine, presumably the one we sought, had been hidden in Black Rock Creek, engaged in repairs. Probably these were absolutely necessary, and we should find the boat still there. As to how the "Terror" came to be in Lake Erie, Arthur Wells and I discussed that, and agreed that it was a very probable place for her. The last time she had been seen was on Lake Superior. From there to Lake Erie the machine could have come by the roads of Michigan, but since no one had remarked its passage and as both the police and the people were specially aroused and active in that portion of the country, it seemed more probable, that the "Terror" had come by water. There was a clear route through the chain of the Great Lakes and their rivers, by which in her character of a submarine she could easily proceed undiscovered.
And now, if the "Terror" had already left the creek, or if she escaped when we attempted to seize her, in what direction would she turn? In any case, there was little chance of following her. There were two torpedo-destroyers at the port of Buffalo, at the other extremity of Lake Erie. By treaty between the United States and Canada, there are no vessels of war whatever on the Great Lakes. These might, however, have been little launches belonging to the customs service. Before I left Washington Mr. Ward had informed me of their presence; and a telegram to their commanders would, if there were need, start them in pursuit of the "Terror." But despite their splendid speed, how could they vie with her! And if she plunged beneath the waters, they would be helpless. Moreover Arthur Wells averred that in case of a battle, the advantage would not be with the destroyers, despite their large crews, and many guns. Hence, if we did not succeed this night, the campaign would end in failure.

Arthur Wells knew Black Rock Creek thoroughly, having hunted there more than once. It was bordered in most places with sharp rocks against which the waters of the lake beat heavily. Its channel was some thirty feet deep, so that the "Terror" could take shelter either upon the surface or under water. In two or three places the steep banks gave way to sand beaches which led to little gorges reaching up toward the woods, two or three hundred feet.

It was seven in the evening when our carriage reached these woods. There was still daylight enough for us to see easily, even in the shade of the trees. To have crossed openly to the edge of the creek would have exposed us to the view of the men of the "Terror," if she were still there, and thus give her warning to escape.

"Had we better stop here?" I asked Wells, as our rig drew up to the edge of the woods.

"No, Mr. Strock," said he. "We had better leave the carriage deeper in the woods, where there will be no chance whatever of our being seen."

"Can the carriage drive under these trees?"

"It can," declared Wells. "I have already explored these woods thoroughly. Five or six hundred feet from here, there is a little clearing, where we will be completely hidden, and where our horses may find pasture. Then, as soon as it is dark, we will go down to the beach, at the edge of the rocks which shut in the mouth of the creek. Thus if the 'Terror' is still there, we shall stand between her and escape."

Eager as we all were for action, it was evidently best to do as Wells suggested and wait for night. The intervening time could well be occupied as he said. Leading the horses by the bridle, while they dragged the empty carriage, we proceeded through the heavy woods. The tall pines, the stalwart oaks, the cypress scattered here and there, made the evening darker overhead. Beneath our feet spread a carpet of scattered herbs, pine needles and dead leaves. Such was the thickness of the upper foliage that the last rays of the setting sun could no longer penetrate here. We had to feel our way; and it was not without some knocks that the carriage reached the clearing ten minutes later.

This clearing, surrounded by great trees, formed a sort of oval, covered with rich grass. Here it was still daylight, and the darkness would scarcely deepen for over an hour. There was thus time to arrange an encampment and to rest awhile after our hard trip over the rough and rocky roads.

Of course, we were intensely eager to approach the Creek and see if the "Terror" was still there. But prudence restrained us. A little patience, and the night-would enable us to reach a commanding position unsuspected. Wells urged this strongly; and despite my eagerness, I felt that he was right.

The horses were unharnessed, and left to browse under the care of the coachman who had driven us. The provisions were unpacked, and John Hart and Nab Walker spread out a meal on the grass at the foot of a superb cypress which recalled to me the forest odors of Morganton and Pleasant Garden. We were hungry and thirsty; and food and drink were not lacking. Then our pipes were lighted to calm the anxious moments of waiting that remained.

Silence reigned within the wood. The last song of the birds had ceased. With the coming of night the breeze fell little by little, and the leaves scarcely quivered even at the tops of the highest branches. The sky darkened rapidly after sundown and twilight deepened into obscurity.

I looked at my watch, it was half-past eight. "It is time, Wells."

"When you will, Mr. Strock."

"Then let us start."

We cautioned the coachman not to let the horses stray beyond the clearing. Then we started. Wells went in advance, I followed him, and John Hart and Nab Walker came behind. In the darkness, we three would have been helpless without the guidance of Wells. Soon we reached the farther border of the woods; and before us stretched the banks of Black Rock Creek.

All was silent; all seemed deserted. We could advance without risk. If the "Terror" was there, she had cast anchor behind the rocks. But was she there? That was the momentous question! As we approached the denouement of this exciting affair, my heart was in my throat.

Wells motioned to us to advance. The sand of the shore crunched beneath our steps. The two hundred feet between us and the mouth of the Creek were crossed softly, and a few minutes sufficed to bring us to the rocks at the
edge of the lake.

There was nothing! Nothing!
The spot where Wells had left the "Terror" twenty-four hours before was empty. The "Master of the World" was no longer at Black Rock Creek.

Chapter 12
BLACK ROCK CREEK
Human nature is prone to illusions. Of course, there had been all along a probability that the "Terror" had deserted the locality, even admitting that it was she Wells had seen the previous day. If some damage to her triple system of locomotion had prevented her from regaining either by land or by water her usual hiding-place, and obliged her to seek refuge in Black Rock Creek, what ought we to conclude now upon finding her here no longer? Obviously, that, having finished her repairs, she had continued on her way, and was already far beyond the waters of Lake Erie.

But probable as this result had been from the first, we had more and more ignored it as our trip proceeded. We had come to accept as a fact that we should meet the "Terror," that we should find her anchored at the base of the rocks where Wells had seen her.

And now what disappointment! I might even say, what despair! All our efforts gone for nothing! Even if the "Terror" was still upon the lake, to find her, reach her and capture her, was beyond our power, and it might as well be fully recognized beyond all human power.

We stood there, Wells and I, completely crushed, while John Hart and Nab Walker, no less chagrined, went tramping along the banks of the Creek, seeking any trace that had been left behind.

Posted there, at the mouth of the Creek, Wells and I exchanged scarcely a word. What need was there of words to enable us to understand each other! After our eagerness and our despair, we were now exhausted. Defeated in our well-planned attempt, we felt as unwilling to abandon our campaign, as we were unable to continue it.

Nearly an hour slipped by. We could not resolve to leave the place. Our eyes still sought to pierce the night. Sometimes a glimmer, due to the sparkle of the waters, trembled on the surface of the lake. Then it vanished, and with it the foolish hope that it had roused. Sometimes again, we thought we saw a shadow outlined against the dark, the silhouette of an approaching boat. Yet again some eddies would swirl up at our feet, as if the Creek had been stirred within its depths. These vain imaginings were dissipated one after the other. They were but the illusions raised by our strained fancies.

At length our companions rejoined us. My first question was, "Nothing new?"

"Nothing," said John Hart.
"You have explored both banks of the Creek?"
"Yes," responded Nab Walker, "as far as the shallow water above; and we have not seen even a vestige of the things which Mr. Wells saw laid on the shore."
"Let us wait awhile," said I, unable to resolve upon a return to the woods.
At that moment our attention was caught by a sudden agitation of the waters, which swelled upward at the foot of the rocks.
"It is like the swell from a vessel," said Wells.
"Yes," said I, instinctively lowering my voice. "What has caused it? The wind has completely died out. Does it come from something on the surface of the lake?"
"Or from something underneath," said Wells, bending forward, the better to determine.
The commotion certainly seemed as if caused by some boat, whether from beneath the water, or approaching the creek from outside upon the lake.
Silent, motionless, we strained eyes and ears to pierce the profound obscurity. The faint noise of the waves of the lake lapping on the shore beyond the creek, came to us distinctly through the night. John Hart and Nab Walker drew a little aside upon a higher ridge of rocks. As for me, I leaned close to the water to watch the agitation. It did not lessen. On the contrary it became momentarily more evident, and I began to distinguish a sort of regular throbbing, like that produced by a screw in motion.
"There is no doubt," declared Wells, leaning close to me, "there is a boat coming toward us."
"There certainly is," responded I, "unless they have whales or sharks in Lake Erie."
"No, it is a boat," repeated Wells. "Is she headed toward the mouth of the creek, or is she going further up it?"
"This is just where you saw the boat twice before?"
"Yes, just here."
"Then if this is the same one, and it can be no other, she will probably return to the same spot."
“There!” whispered Wells, extending his hand toward the entrance of the creek.

Our companions rejoined us, and all four, crouching low upon the bank, peered in the direction he pointed.

We vaguely distinguished a black mass moving through the darkness. It advanced very slowly and was still outside the creek, upon the lake, perhaps a cable's length to the northeast. We could scarcely hear even now the faint throbbing of its engines. Perhaps they had stopped and the boat was only gliding forward under their previous impulse.

It seemed, then, that this was indeed the submarine which Wells had watched, and it was returning to pass this night, like the last, within the shelter of the creek.

Why had it left the anchorage, if only to return? Had it suffered some new disaster, which again impaired its power? Or had it been before compelled to leave, with its repairs still unfinished? What cause constrained it to return here? Was there some imperious reason why it could no longer be turned into an automobile, and go darting away across the roads of Ohio?

To all these questions which came crowding upon me, I could give no answer. Furthermore both Wells and I kept reasoning under the assumption that this was really the "Terror" commanded by the "Master of the World" who had dated from it his letter of defiance to the government. Yet this premise was still unproven, no matter how confident we might feel of it.

Whatever boat this was, that stole so softly through the night, it continued to approach us. Assuredly its captain must know perfectly the channels and shores of Black Rock Creek, since he ventured here in such darkness. Not a light showed upon the deck. Not a single ray from within the cabin glimmered through any crevice.

A moment later, we heard some machinery moving very softly. The swell of the eddies grew stronger, and in a few moments the boat touched the quay.

This word "quay," only used in that region, exactly describes the spot. The rocks at our feet formed a level, five or six feet above the water, and descending to it perpendicularly, exactly like a landing wharf.

"We must not stop here," whispered Wells, seizing me by the arm.

"No," I answered, "they might see us. We must lie crouched upon the beach! Or we might hide in some crevice of the rocks."

"We will follow you."

There was not a moment to lose. The dark mass was now close at hand, and on its deck, but slightly raised above the surface of the water, we could trace the silhouettes of two men.

Were there, then, really only two on board? We stole softly back to where the ravines rose toward the woods above. Several niches in the rocks were at hand. Wells and I crouched down in one, my two assistants in another. If the men on the "Terror" landed, they could not see us; but we could see them, and would be able to act as opportunity offered.

There were some slight noises from the boat, a few words exchanged in our own language. It was evident that the vessel was preparing to anchor. Then almost instantly, a rope was thrown out, exactly on the point of the quay where we had stood.

Leaning forward, Wells could discern that the rope was seized by one of the mariners, who had leaped ashore. Then we heard a grappling-iron scrape along the ground.

Some moments later, steps crunched upon the sand. Two men came up the ravine, and went onward toward the edge of the woods, guiding their steps by a ship lantern.

Where were they going? Was Black Rock Creek a regular hiding place of the "Terror?" Had her commander a depot here for stores or provisions? Did they come here to restock their craft, when the whim of their wild voyaging brought them to this part of the continent? Did they know this deserted, uninhabited spot so well, that they had no fear of ever being discovered here?

"What shall we do?" whispered Wells.

"Wait till they return, and then--" My words were cut short by a surprise. The men were not thirty feet from us, when one of them chancing to turn suddenly, the light of their lantern fell full upon his face.

He was one of the two men who had watched before my house in Long Street! I could not be mistaken! I recognized him as positively as my old servant had done. It was he; it was assuredly one of the spies of whom I had never been able to find any further traces! There was no longer any doubt, my warning letter had come from them. It was therefore from the "Master of the World"; it had been written from the "T error" and this was the "Terror." Once more I asked myself what could be the connection between this machine and the Great Eyrie!

In whispered words, I told Wells of my discovery. His only comment was, "It is all incomprehensible!"

Meanwhile the two men had continued on their way to the woods, and were gathering sticks beneath the trees.

"What if they discover our encampment?" murmured Wells.

"No danger, if they do not go beyond the nearest trees."
"But if they do discover it?"
"They will hurry back to their boat, and we shall be able to cut off their retreat."

Toward the creek, where their craft lay, there was no further sound. I left my hiding-place; I descended the ravine to the quay; I stood on the very spot where the grappling-iron was fast among the rocks.

The "Terror" lay there, quiet at the end of its cable. Not a light was on board; not a person visible, either on the deck, or on the bank. Was not this my opportunity? Should I leap on board and there await the return of the two men?

"Mr. Strock!" It was Wells, who called to me softly from close at hand.

I drew back in all haste and crouched down beside him. Was it too late to take possession of the boat? Or would the attempt perhaps result in disaster from the presence of others watching on board?

At any rate, the two men with the lantern were close at hand returning down the ravine. Plainly they suspected nothing. Each carrying a bundle of wood, they came forward and stopped upon the quay.

Then one of them raised his voice, though not loudly. "Hullo! Captain!"

"All right," answered a voice from the boat.

Wells murmured in my ear, "There are three!"

"Perhaps four," I answered, "perhaps five or six!"

The situation grew more complicated. Against a crew so numerous, what ought we to do? The least imprudence might cost us dear! Now that the two men had returned, would they re-embark with their faggots? Then would the boat leave the creek, or would it remain anchored until day? If it withdrew, would it not be lost to us? It could leave the waters of Lake Erie, and cross any of the neighboring states by land; or it could retrace its road by the Detroit River which would lead it to Lake Huron and the Great Lakes above. Would such an opportunity as this, in the narrow waters of Black Rock Creek, ever occur again!

"At least," said I to Wells, "we are four. They do not expect attack; they will be surprised. The result is in the hands of Providence."

I was about to call our two men, when Wells again seized my arm. "Listen!" said he.

One of the men hailed the boat, and it drew close up to the rocks. We heard the Captain say to the two men ashore, "Everything is all right, up there?"

"Everything, Captain."

"There are still two bundles of wood left there?"

"Two."

"Then one more trip will bring them all on board the 'Terror.'"

The "Terror!" It WAS she!

"Yes; just one more trip," answered one of the men.

"Good; then we will start off again at daybreak."

Were there then but three of them on board? The Captain, this Master of the World, and these two men?

Evidently they planned to take aboard the last of their wood. Then they would withdraw within their machine, and go to sleep. Would not that be the time to surprise them, before they could defend themselves?

Rather than to attempt to reach and capture the ship in face of this resolute Captain who was guarding it, Wells and I agreed that it was better to let his men return unassailed, and wait till they were all asleep.

It was now half an hour after ten. Steps were once more heard upon the shore. The man with a lantern and his companion, again remounted the ravine toward the woods. When they were safely beyond hearing, Wells went to warn our men, while I stole forward again to the very edge of the water.

The "Terror" lay at the end of a short cable. As well as I could judge, she was long and slim, shaped like a spindle, without chimney, without masts, without rigging, such a shape as had been described when she was seen on the coast of New England.

I returned to my place, with my men in the shelter of the ravine; and we looked to our revolvers, which might well prove of service.

Five minutes had passed since the men reached the woods, and we expected their return at any moment. After that, we must wait at least an hour before we made our attack; so that both the Captain and his comrades might be deep in sleep. It was important that they should have not a moment either to send their craft darting out upon the waters of Lake Erie, or to plunge it beneath the waves where we would have been entrapped with it.

In all my career I have never felt such impatience. It seemed to me that the two men must have been detained in the woods. Something had barred their return.

Suddenly a loud noise was heard, the tumult of run-away horses, galloping furiously along the shore!

They were our own, which, frightened, and perhaps neglected by the driver, had broken away from the clearing, and now came rushing along the bank.
At the same moment, the two men reappeared, and this time they were running with all speed. Doubtless they had discovered our encampment, and had at once suspected that there were police hidden in the woods. They realized that they were watched, they were followed, they would be seized. So they dashed recklessly down the ravine, and after loosening the cable, they would doubtless endeavor to leap aboard. The “Terror” would disappear with the speed of a meteor, and our attempt would be wholly defeated!

"Forward," I cried. And we scrambled down the sides of the ravine to cut off the retreat of the two men.

They saw us and, on the instant, throwing down their bundles, fired at us with revolvers, hitting John Hart in the leg.

We fired in our turn, but less successfully. The men neither fell nor faltered in their course. Reaching the edge of the creek, without stopping to unloose the cable, they plunged overboard, and in a moment were clinging to the deck of the "Terror."

Their captain, springing forward, revolver in hand, fired. The ball grazed Wells.

Nab Walker and I seizing the cable, pulled the black mass of the boat toward shore. Could they cut the rope in time to escape us?

Suddenly the grappling-iron was torn violently from the rocks. One of its hooks caught in my belt, while Walker was knocked down by the flying cable. I was entangled by the iron and the rope and dragged forward--

The "Terror," driven by all the power of her engines, made a single bound and darted out across Black Rock Creek.

Chapter 13
ON BOARD THE TERROR

When I came to my senses it was daylight. A half light pierced the thick glass port-hole of the narrow cabin wherein someone had placed me--how many hours ago, I could not say! Yet it seemed to me by the slanting rays, that the sun could not be very far above the horizon.

I was resting in a narrow bunk with coverings over me. My clothes, hanging in a corner, had been dried. My belt, torn in half by the hook of the iron, lay on the floor.

I felt no wound nor injury, only a little weakness. If I had lost consciousness, I was sure it had not been from a blow. My head must have been drawn beneath the water, when I was tangled in the cable. I should have been suffocated, if someone had not dragged me from the lake.

Now, was I on board the "Terror?" And was I alone with the Captain and his two men? This seemed probable, almost certain. The whole scene of our encounter rose before my eyes, Hart lying wounded upon the bank; Wells firing shot after shot, Walker hurled down at the instant when the grappling hook caught my belt! And my companions? On their side, must not they think that I had perished in the waters of Lake Erie?

Where was the "Terror" now, and how was it navigating? Was it moving as an automobile? Speeding across the roads of some neighboring State? If so, and if I had been unconscious for many hours, the machine with its tremendous powers must be already far away. Or, on the other hand, were we, as a submarine, following some course beneath the lake?

No, the "Terror" was moving upon some broad liquid surface. The sunlight, penetrating my cabin, showed that the window was not submerged. On the other hand, I felt none of the jolting that the automobile must have suffered even on the smoothest highway. Hence the "Terror" was not traveling upon land.

As to deciding whether she was still traversing Lake Erie, that was another matter. Had not the Captain reascended the Detroit River, and entered Lake Huron, or even Lake Superior beyond? It was difficult to say.

At any rate I decided to go up on deck. From there I might be able to judge. Dragging myself somewhat heavily from the bunk, I reached for my clothes and dressed, though without much energy. Was I not probably locked within this cabin?

The only exit seemed by a ladder and hatchway above my head. The hatch rose readily to my hand, and I ascended half way on deck.

My first care was to look forward, backward, and on both sides of the speeding "Terror." Everywhere a vast expanse of waves! Not a shore in sight! Nothing but the horizon formed by sea and sky!

Whether it was a lake or the ocean I could easily settle. As we shot forward at such speed the water cut by the bow, rose furiously upward on either side, and the spray lashed savagely against me.

I tasted it. It was fresh water, and very probably that of Lake Erie. The sun was but midway toward the zenith so it could scarcely be more than seven or eight hours since the moment when the "Terror" had darted from Black Rock Creek.

This must therefore be the following morning, that of the thirty-first of July.
Considering that Lake Erie is two hundred and twenty miles long, and over fifty wide, there was no reason to be surprised that I could see no land, neither that of the United States to the southeast nor of Canada to the northwest.

At this moment there were two men on the deck, one being at the bow on the look-out, the other in the stern, keeping the course to the northeast, as I judged by the position of the sun. The one at the bow was he whom I had recognized as he ascended the ravine at Black Rock. The second was his companion who had carried the lantern. I looked in vain for the one whom they had called Captain. He was not in sight.

It will be readily appreciated how eager was my desire to stand in the presence of the creator of this prodigious machines of this fantastic personage who occupied and preoccupied the attention of all the world, the daring inventor who did not fear to engage in battle against the entire human race, and who proclaimed himself "Master of the World."

I approached the man on the look-out, and after a minute of silence I asked him, "Where is the Captain?"

He looked at me through half-closed eyes. He seemed not to understand me. Yet I knew, having heard him the night before, that he spoke English. Moreover, I noticed that he did not appear surprised to see me out of my cabin. Turning his back upon me, he continued to search the horizon.

I stepped then toward the stern, determined to ask the same question about the Captain. But when I approached the steersman, he waved me away with his hand, and I obtained no other response.

It only remained for me to study this craft, from which we had been repelled with revolver shots, when we had seized upon its anchor rope.

I therefore set leisurely to work to examine the construction of this machine, which was carrying me--whither? The deck and the upper works were all made of some metal which I did not recognize. In the center of the deck, a scuttle half raised covered the room where the engines were working regularly and almost silently. As I had seen before, neither masts, nor rigging! Not even a flagstaff at the stern! Toward the bow there arose the top of a periscope by which the "Terror" could be guided when beneath the water.

On the sides were folded back two sort of outshoots resembling the gangways on certain Dutch boats. Of these I could not understand the use.

In the bow there rose a third hatch-way which presumably covered the quarters occupied by the two men when the "Terror" was at rest.

At the stern a similar hatch gave access probably to the cabin of the captain, who remained unseen. When these different hatches were shut down, they had a sort of rubber covering which closed them hermetically tight, so that the water could not reach the interior when the boat plunged beneath the ocean.

As to the motor, which imparted such prodigious speed to the machine, I could see nothing of it, nor of the propeller. However, the fast speeding boat left behind it only a long, smooth wake. The extreme fineness of the lines of the craft, caused it to make scarcely any waves, and enabled it to ride lightly over the crest of the billows even in a rough sea.

As was already known, the power by which the machine was driven, was neither steam nor gasoline, nor any of those similar liquids so well known by their odor, which are usually employed for automobiles and submarines. No doubt the power here used was electricity, generated on board, at some high power. Naturally I asked myself whence comes this electricity, from piles, or from accumulators? But how were these piles or accumulators charged? Unless, indeed, the electricity was drawn directly from the surrounding air or from the water, by processes hitherto unknown. And I asked myself with intense eagerness if in the present situation, I might be able to discover these secrets.

Then I thought of my companions, left behind on the shore of Black Rock Creek. One of them, I knew, was wounded; perhaps the others were also. Having seen me dragged overboard by the hawser, could they possibly suppose that I had been rescued by the "Terror?" Surely not! Doubtless the news of my death had already been telegraphed to Mr. Ward from Toledo. And now who would dare to undertake a new campaign against this "Master of the World"?

These thoughts occupied my mind as I awaited the captain's appearance on the deck. He did not appear.

I soon began to feel very hungry; for I must have fasted now nearly twenty-four hours. I had eaten nothing since our hasty meal in the woods, even if that had been the night before. And judging by the pangs which now assailed my stomach, I began to wonder if I had not been snatched on board the "Terror" two days before,--or even more.

Happily the question if they meant to feed me, and how they meant to feed me, was solved at once. The man at the bow left his post, descended, and reappeared. Then, without saying a word, he placed some food before me and returned to his place. Some potted meat, dried fish, sea-biscuit, and a pot of ale so strong that I had to mix it with water, such was the meal to which I did full justice. My fellow travelers had doubtless eaten before I came out of the cabin, and they did not join me.

There was nothing further to attract my eyes, and I sank again into thought. How would this adventure finish?
Would I see this invisible captain at length, and would he restore me to liberty? Could I regain it in spite of him? That would depend on circumstances! But if the "Terror" kept thus far away from the shore, or if she traveled beneath the water, how could I escape from her? Unless we landed, and the machine became an automobile, must I not abandon all hope of escape?

Moreover--why should I not admit it?--to escape without having learned anything of the "Terror's" secrets would not have contented me at all. Although I could not thus far flatter myself upon the success of my campaign, and though I had come within a hairbreadth of losing my life and though the future promised far more of evil than of good, yet after all, a step forward had been attained. To be sure, if I was never to be able to re-enter into communication with the world, if, like this Master of the World who had voluntarily placed himself outside the law, I was now placed outside humanity, then the fact that I had reached the "Terror" would have little value.

The craft continued headed to the northeast, following the longer axis of Lake Erie. She was advancing at only half speed; for, had she been doing her best, she must some hours before have reached the northeastern extremity of the lake.

At this end Lake Erie has no other outlet than the Niagara River, by which it empties into Lake Ontario. Now, this river is barred by the famous cataract some fifteen miles beyond the important city of Buffalo. Since the "Terror" had not retreated by the Detroit River, down which she had descended from the upper lakes, how was she to escape from these waters, unless indeed she crossed by land?

The sun passed the meridian. The day was beautiful; warm but not unpleasantly so, thanks to the breeze made by our passage. The shores of the lake continued invisible on both the Canadian and the American side.

Was the captain determined not to show himself? Had he some reason for remaining unknown? Such a precaution would indicate that he intended to set me at liberty in the evening, when the "Terror" could approach the shore unseen.

Toward two o'clock, however, I heard a slight noise; the central hatchway was raised. The man I had so impatiently awaited appeared on deck.

I must admit he paid no more attention to me, than his men had done. Going to the stern, he took the helm. The man whom he had relieved, after a few words in a low tone, left the deck, descending by the forward hatchway. The captain, having scanned the horizon, consulted the compass, and slightly altered our course. The speed of the "Terror" increased.

This man, so interesting both to me and to the world, must have been some years over fifty. He was of middle height, with powerful shoulders still very erect; a strong head, with thick hair rather gray than white, smooth shaven cheeks, and a short, crisp beard. His chest was broad, his jaw prominent, and he had that characteristic sign of tremendous energy, bushy eyebrows drawn sharply together. Assuredly he possessed a constitution of iron, splendid health, and warm red blood beneath his sun burned skin.

Like his companions the captain was dressed in sea-clothes covered by an oil-skin coat, and with a woolen cap which could be pulled down to cover his head entirely, when he so desired.

Need I add that the captain of the "Terror" was the other of the two men, who had watched my house in Long street. Moreover, if I recognized him, he also must recognize me as chief-inspector Strock, to whom had been assigned the task of penetrating the Great Eyrie.

I looked at him curiously. On his part, while he did not seek to avoid my eyes, he showed at least a singular indifference to the fact that he had a stranger on board.

As I watched him, the idea came to me, a suggestion which I had not connected with the first view of him in Washington, that I had already seen this characteristic figure. Was it in one of the photographs held in the police department, or was it merely a picture in some shop window? But the remembrance was very vague. Perhaps I merely imagined it.

Well, though his companions had not had the politeness to answer me, perhaps he would be more courteous. He spoke the same language as I, although I could not feel quite positive that he was of American birth. He might indeed have decided to pretend not to understand me, so as to avoid all discussion while he held me prisoner.

In that case, what did he mean to do with me? Did he intend to dispose of me without further ceremony? Was he only waiting for night to throw me overboard? Did even the little which I knew of him, make me a danger of which he must rid himself? But in that case, he might better have left me at the end of his anchor line. That would have saved him the necessity of drowning me over again.

I turned, I walked to the stern, I stopped full in front of him. Then, at length, he fixed full upon me a glance that burned like a flame.

"Are you the captain?" I asked.
He was silent.
"This boat! Is it really the 'Terror'?

To this question also there was no response. Then I reached toward him; I would have taken hold of his arm.
He repelled me without violence, but with a movement that suggested tremendous restrained power.
Planting myself again before him, I demanded in a louder tone, "What do you mean to do with me?"
Words seemed almost ready to burst from his lips, which he compressed with visible irritation. As though to check his speech he turned his head aside. His hand touched a regulator of some sort, and the machine rapidly increased its speed.

Anger almost mastered me. I wanted to cry out "So be it! Keep your silence! I know who you are, just as I know your machine, recognized at Madison, at Boston, at Lake Kirdall. Yes; it is you, who have rushed so recklessly over our roads, our seas and our lakes! Your boat is the 'Terror' and you her commander, wrote that letter to the government. It is you who fancy you can fight the entire world. You, who call yourself the Master of the World!"

And how could he have denied it! I saw at that moment the famous initials inscribed upon the helm!
Fortunately I restrained myself; and despairing of getting any response to my questions, I returned to my seat near the hatchway of my cabin.

For long hours, I patiently watched the horizon in the hope that land would soon appear. Yes, I sat waiting! For I was reduced to that! Waiting! No doubt, before the day closed, the "Terror" must reach the end of Lake Erie, since she continued her course steadily to the northeast.

Chapter 14
NIAGARA
The hours passed, and the situation did not change. The steersman returned on deck, and the captain, descending, watched the movement of the engines. Even when our speed increased, these engines continued working without noise, and with remarkable smoothness. There was never one of those inevitable breaks, with which in most motors the pistons sometimes miss a stroke. I concluded that the "Terror," in each of its transformations must be worked by rotary engines. But I could not assure myself of this.

For the rest, our direction did not change. Always we headed toward the northeast end of the lake, and hence toward Buffalo.

Why, I wondered, did the captain persist in following this route? He could not intend to stop at Buffalo, in the midst of a crowd of boats and shipping of every kind. If he meant to leave the lake by water, there was only the Niagara River to follow; and its Falls would be impassable, even to such a machine as this. The only escape was by the Detroit River, and the "Terror" was constantly leaving that farther behind.

Then another idea occurred to me. Perhaps the captain was only waiting for night to return to the shore of the lake. There, the boat, changed to an automobile, would quickly cross the neighboring States. If I did not succeed in making my escape, during this passage across the land, all hope of regaining my liberty would be gone.

True, I might learn where this Master of the World hid himself. I might learn what no one had yet been able to discover, assuming always that he did not dispose of me at one time or another--and what I expected his "disposal" would be, is easily comprehended.

I knew the northeast end of Lake Erie well, having often visited that section of New York State which extends westward from Albany to Buffalo. Three years before, a police mission had led me to explore carefully the shores of the Niagara River, both above and below the cataract and its Suspension Bridge. I had visited the two principal islands between Buffalo and the little city of Niagara Falls, I had explored Navy Island and also Goat Island, which separates the American falls from those of the Canadian side.

Thus if an opportunity for flight presented itself, I should not find myself in an unknown district. But would this chance offer? And at heart, did I desire it, or would I seize upon it? What secrets still remained in this affair in which good fortune or was it evil fortune--had so closely entangled me!

On the other hand, I saw no real reason to suppose that there was any chance of my reaching the shores of the Niagara River. The "Terror" would surely not venture into this trap which had no exit. Probably she would not even go to the extremity of the lake.

Such were the thoughts that spun through my excited brain, while my eyes remained fixed upon the empty horizon.

And always one persistent question remained insolvable. Why had the captain written to me personally that threatening letter? Why had he spied upon me in Washington? What bond attached him to the Great Eyrie? There might indeed be subterranean canals which gave him passage to Lake Kirdall, but could he pierce the impenetrable fortress of the Eyrie? No! That was beyond him!

Toward four o'clock in the afternoon, reckoning by the speed of the "Terror" and her direction, I knew we must be approaching Buffalo; and indeed, its outlines began to show some fifteen miles ahead. During our passage, a few
boats had been seen, but we had passed them at a long distance, a distance which our captain could easily keep as great as he pleased. Moreover, the "Terror" lay so low upon the water, that at even a mile away it would have been difficult to discover her.

Now, however, the hills encircling the end of Lake Erie, came within vision, beyond Buffalo, forming the sort of funnel by which Lake Erie pours its waters into the channel of the Niagara river. Some dunes rose on the right, groups of trees stood out here and there. In the distance, several freight steamers and fishing smacks appeared. The sky became spotted with trails of smoke, which were swept along by a light eastern breeze.

What was our captain thinking of in still heading toward the port of Buffalo! Did not prudence forbid him to venture further? At each moment, I expected that he would give a sweep of the helm and turn away toward the western shore of the lake. Or else, I thought, he would prepare to plunge beneath the surface. But this persistence in holding our bow toward Buffalo was impossible to understand!

At length the helmsman, whose eyes were watching the northeastern shore, made a sign to his companion. The latter, leaving the bow, went to the central hatchway, and descended into the engine room. Almost immediately the captain came on deck, and joining the helmsman, spoke with him in a low voice.

The latter, extending his hand toward Buffalo, pointed out two black spots, which showed five or six miles distant on the starboard side. The captain studied them attentively. Then shrugging his shoulders, he seated himself at the stern without altering the course of the "Terror."

A quarter of an hour later, I could see plainly that there were two smoke clouds at the point they had studied so carefully. Little by little the black spots beneath these became more defined. They were two long, low steamers, which, coming from the port of Buffalo, were approaching rapidly.

Suddenly it struck me that these were the two torpedo destroyers of which Mr. Ward had spoken, and which I had been told to summon in case of need.

These destroyers were of the newest type, the swiftest boats yet constructed in the country. Driven by powerful engines of the latest make, they had covered almost thirty miles an hour. It is true, the "Terror" commanded an even greater speed, and always, if she were surrounded so that flight was impossible, she could submerge herself out of reach of all pursuit. In truth, the destroyers would have had to be submarines to attack the "Terror" with any chance of success. And I know not, if even in that case, the contest would have been equal.

Meanwhile, it seemed to me evident that the commanders of the two ships had been warned, perhaps by Mr. Wells who, returning swiftly to Toledo, might have telegraphed to them the news of our defeat. It appeared, moreover, that they had seen the "Terror," for they were headed at full speed toward her. Yet our captain, seemingly giving them no thought whatever, continued his course toward the Niagara River.

What would the torpedo destroyers do? Presumably, they would maneuver so as to seek to shut the "Terror" within the narrowing end of the lake where the Niagara offered her no passage.

Our captain now took the helm. One of the men was at the bow, the other in the engine room. Would the order be given for me to go down into the cabin?

It was not, to my extreme satisfaction. To speak frankly, no one paid any attention to me. It was as if I had not been on board. I watched, therefore, not without mixed emotions, the approach of the destroyers. Less than two miles distant now they separated in such a way as to hold the "Terror" between their fires.

As to the Master of the World, his manner indicated only the most profound disdain. He seemed sure that these destroyers were powerless against him. With a touch to his machinery he could distance them, no matter what their speed! With a few turns of her engine, the "Terror" would dart beyond their cannon shots! Or, in the depths of the lake, what projectiles could find the submarine?

Five minutes later, scarcely a mile separated us from the two powerful fighters which pursued us. Our captain permitted them to approach still closer. Then he pressed upon a handle. The "Terror," doubling the action of her propellers, leaped across the surface of the lake. She played with the destroyers! Instead of turning in flight, she continued her forward course. Who knew if she would not even have the audacity to pass between her two enemies, to coax them after her, until the hour when, as night closed in, they would be forced to abandon the useless pursuit!

The city of Buffalo was now in plain view on the border of the lake. I saw its huge buildings, its church towers, its grain elevators. Only four or five miles ahead, Niagara river opened to the northward.

Under these new conditions which way should I turn? When we passed in front of the destroyers, or perhaps between them, should I not throw myself into the waters I was a good swimmer, and such a chance might never occur again. The captain could not stop to recapture me. By diving could I not easily escape, even from a bullet? I should surely be seen by one or other of the pursuers. Perhaps, even, their commanders had been warned of my presence on board the "Terror." Would not a boat be sent to rescue me?

Evidently my chance of success would be even greater, if the "Terror" entered the narrow waters of Niagara River. At Navy Island I would be able to set foot on territory that I knew well. But to suppose that our captain would
rush into this river where he might be swept over the great cataract! That seemed impossible! I resolved to await the destroyers' closest approach and at the last moment I would decide.

Yet my resolution to escape was but half-hearted. I could not resign myself thus to lose all chance of following up this mystery. My instincts as a police official revolted. I had but to reach out my hand in order to seize this man who had been outlawed! Should I let him escape me! No! I would not save myself! Yet, on the other hand, what fate awaited me, and where would I be carried by the "Terror," if I remained on board?

It was a quarter past six. The destroyers, quivering and trembling under the strain of their speed, gained on us perceptibly. They were now directly astern, leaving between them a distance of twelve or fifteen cable lengths. The "Terror," without increasing her speed, saw one of them approach on the port side, the other to starboard.

I did not leave my place. The man at the bow was close by me. Immovable at the helm, his eyes burning beneath his contracted brows, the captain waited. He meant, perhaps, to finish the chase by one last maneuver.

Suddenly, a puff of smoke rose from the destroyer on our left. A projectile, brushing the surface of the water, passed in front of the "Terror," and sped beyond the destroyer on our right.

I glanced around anxiously. Standing by my side, the lookout seemed to await a sign from the captain. As for him, he did not even turn his head; and I shall never forget the expression of disdain imprinted on his visage.

At this moment, I was pushed suddenly toward the hatchway of my cabin, which was fastened above me. At the same instant the other hatchways were closed; the deck became watertight. I heard a single throb of the machinery, and the plunge was made, the submarine disappeared beneath the waters of the lake.

Cannon shot still boomed above us. Their heavy echo reached my ear; then everything was peace. Only a faint light penetrated through the porthole into my cabin. The submarine, without the least rolling or pitching, sped silently through the deeps.

I had seen with what rapidity, and also with what ease the transformation of the "Terror" had been made. No less easy and rapid, perhaps, would be her change to an automobile.

And now what would this Master of the World do? Presumably he would change his course, unless, indeed, he preferred to speed to land, and there continue his route along the roads. It still seemed more probable, however, that he would turn back toward the west, and after distancing the destroyers, regain the Detroit River. Our submersion would probably only last long enough to escape out of cannon range, or until night forbade pursuit.

Fate, however, had decreed a different ending to this exciting chase. Scarce ten minutes had passed when there seemed some confusion on board. I heard rapid words exchanged in the engine room. The steadily moving machinery became noisy and irregular. At once I suspected that some accident compelled the submarine to reascend.

I was not mistaken. In a moment, the semi-obscurity of my cabin was pierced by sunshine. The "Terror" had risen above water. I heard steps on the deck, and the hatchways were re-opened, including mine. I sprang up the ladder.

The captain had resumed his place at the helm, while the two men were busy below. I looked to see if the destroyers were still in view. Yes! Only a quarter of a mile away! The "Terror" had already been seen, and the powerful vessels which enforced the mandates of our government were swinging into position to give chase. Once more the "Terror" sped in the direction of Niagara River.

I must confess, I could make nothing of this maneuver. Plunging into a cul-de-sac, no longer able to seek the depths because of the accident, the "Terror" might, indeed, temporarily distance her pursuers; but she must find her path barred by them when she attempted to return. Did she intend to land, and if so, could she hope to outrun the telegrams which would warn every police agency of her approach?

We were now not half a mile ahead. The destroyers pursued us at top speed, though being now directly behind, they were in poor position for using their guns. Our captain seemed content to keep this distance; though it would have been easy for him to increase it, and then at nightfall, to dodge back behind the enemy.

Already Buffalo had disappeared on our right, and a little after seven o'clock the opening of the Niagara River appeared ahead. If he entered there, knowing that he could not return, our captain must have lost his mind! And in truth was he not insane, this man who proclaimed himself, who believed himself, Master of the World?

I watched him there, calm, impassive not even turning his head to note the progress of the destroyers and I wondered at him.

This end of the lake was absolutely deserted. Freight steamers bound for the towns on the banks of the upper Niagara are not numerous, as its navigation is dangerous. Not one was in sight. Not even a fishing-boat crossed the path of the "Terror." Even the two destroyers would soon be obliged to pause in their pursuit, if we continued our mad rush through these dangerous waters.

I have said that the Niagara River flows between New York and Canada. Its width, of about three quarters of a mile, narrows as it approaches the falls. Its length, from Lake Erie to Lake Ontario, is about fifteen leagues. It flows in a northerly direction, until it empties the waters of Lake Superior, Michigan, Huron, and Erie into Ontario, the last
lake of this mighty chain. The celebrated falls, which occur in the midst of this great river have a height of over a hundred and fifty feet. They are called sometimes the Horse-shoe Falls, because they curve inward like the iron shoe. The Indians have given them the name of “Thunder of Waters,” and in truth a mighty thunder roars from them without cessation, and with a tumult which is heard for several miles away.

Between Lake Erie, and the little city of Niagara Falls, two islands divide the current of the river, Navy Island, a league above the cataract, and Goat Island, which separates the American and the Canadian Falls. Indeed, on the lower point of this latter isle stood once that “Terrapin Tower” so daringly built in the midst of the plunging waters on the very edge of the abyss. It has been destroyed; for the constant wearing away of the stone beneath the cataract makes the ledge move with the ages slowly up the river, and the tower has been drawn into the gulf.

The town of Fort Erie stands on the Canadian shore at the entrance of the river. Two other towns are set along the banks above the falls, Schlosser on the right bank, and Chippewa on the left, located on either side of Navy Island. It is at this point that the current, bound within a narrower channel, begins to move at tremendous speed, to become two miles further on, the celebrated cataract.

The “Terror” had already passed Fort Erie. The sun in the west touched the edge of the Canadian horizon, and the moon, faintly seen, rose above the mists of the south. Darkness would not envelop us for another hour.

The destroyers, with huge clouds of smoke streaming from their funnels, followed us a mile behind. They sped between banks green with shade trees and dotted with cottages which lay along lovely gardens.

Obviously the “Terror” could no longer turn back. The destroyers shut her in completely. It is true their commanders did not know, as I did, that an accident to her machinery had forced her to the surface, and that it was impossible for her to escape them by another plunge. Nevertheless, they continued to follow, and would assuredly maintain their pursuit to the very last.

I marveled at the intrepidity of their chase through these dangerous waters. I marveled still more at the conduct of our captain. Within a half hour now, his course would be barred by the cataract. No matter how perfect his machine, it could not escape the power of the great falls. If the current once mastered our engines, we should inevitably disappear in the gulf nearly two hundred feet deep which the waters have dug at the base of the fall! Perhaps, however, our captain had still power to turn to one of the shores and flee by the automobile routes.

In the midst of this excitement, what action should I take personally? Should I attempt to gain the shores of Navy Island, if we indeed advanced that far? If I did not seize this chance, never after what I had learned of his secrets, never would the Master of the World restore me to liberty.

I suspected, however, that my flight was no longer possible. If I was not confined within my cabin, I no longer remained unwatched. While the captain retained his place at the helm, his assistant by my side never removed his eyes from me. At the first movement, I should be seized and locked within my room. For the present, my fate was evidently bound up with that of the “Terror.”

The distance which separated us from the two destroyers was now growing rapidly less. Soon they were but a few cable-lengths away. Could the motor of the “Terror,” since the accident, no longer hold its speeds? Yet the captain showed not the least anxiety, and made no effort to reach land!

We could hear the hissing of the steam which escaped from the valves of the destroyers, to mingle with the streamers of black smoke. But we heard, even more plainly, the roar of the cataract, now less than three miles away.

The “Terror” took the left branch of the river in passing Navy Island. At this point, she was within easy reach of the shore, yet she shot ahead. Five minutes later, we could see the first trees of Goat Island. The current became more and more irresistible. If the “Terror” did not stop, the destroyers could not much longer follow her. If it pleased our accursed captain to plunge us into the vortex of the falls, surely they did not mean to follow into the abyss!

Indeed, at this moment they signaled each other, and stopped the pursuit. They were scarce more than six hundred feet from the cataract. Then their thunders burst on the air and several cannon shot swept over the “Terror” without hitting its low-lying deck.

The sun had set, and through the twilight the moon’s rays shone upon us from the south. The speed of our craft, doubled by the speed of the current, was prodigious! In another moment, we should plunge into that black hollow which forms the very center of the Canadian Falls.

With an eye of horror, I saw the shores of Goat Island flashed by, then came the Isles of the Three Sisters, drowned in the spray from the abyss.

I sprang up; I started to throw myself into the water, in the desperate hope of gaining this last refuge. One of the men seized me from behind.

Suddenly a sharp noise was heard from the mechanism which throbbed within our craft. The long gangways folded back on the sides of the machine, spread out like wings, and at the moment when the “Terror” reached the very edge of the falls, she arose into space, escaping from the thundering cataract in the center of a lunar rainbow.
Chapter 15
THE EAGLE'S NEST

On the morrow, when I awoke after a sound sleep, our vehicle seemed motionless. It seemed to me evident that we were not running upon land. Yet neither were we rushing through or beneath the waters; nor yet soaring across the sky. Had the inventor regained that mysterious hiding-place of his, where no human being had ever set foot before him?

And now, since he had not disembarrassed himself of my presence, was his secret about to be revealed to me?

It seemed astonishing that I had slept so profoundly during most of our voyage through the air. It puzzled me and I asked if this sleep had not been caused by some drug, mixed with my last meal, the captain of the "Terror" having wished thus to prevent me from knowing the place where we landed. All that I can recall of the previous night is the terrible impression made upon me by that moment when the machine, instead of being caught in the vortex of the cataract rose under the impulse of its machinery like a bird with its huge wings beating with tremendous power!

So this machine actually fulfilled a four-fold use! It was at the same time automobile, boat, submarine, and airship. Earth, sea and air,—it could move through all three elements! And with what power! With what speed! All few instants sufficed to complete its marvelous transformations. The same engine drove it along all its courses! And I had been a witness of its metamorphoses! But that of which I was still ignorant, and which I could perhaps discover, was the source of the energy which drove the machine, and above all, who was the inspired inventor who, after having created it, in every detail, guided it with so much ability and audacity!

At the moment when the "Terror" rose above the Canadian Falls, I was held down against the hatchway of my cabin. The clear, moonlit evening had permitted me to note the direction taken by the air-ship. It followed the course of the river and passed the Suspension Bridge three miles below the falls. It is here that the irresistible rapids of the Niagara River begin, where the river bends sharply to descend toward Lake Ontario.

On leaving this point, I was sure that we had turned toward the east. The captain continued at the helm. I had not addressed a word to him. What good would it do? He would not have answered. I noted that the "Terror" seemed to be guided in its course through the air with surprising ease. Assuredly the roads of the air were as familiar to it as those of the seas and of the lands!

In the presence of such results, could one not understand the enormous pride of this man who proclaimed himself Master of the World? Was he not in control of a machine infinitely superior to any that had ever sprung from the hand of man, and against which men were powerless? In truth, why should he sell this marvel? Why should he accept the millions offered him? Yes, I comprehended now that absolute confidence in himself which was expressed in his every attitude. And where might not his ambition carry him, if by its own excess it mounted some day into madness!

A half hour after the "Terror" soared into the air, I had sunk into complete unconsciousness, without realizing its approach. I repeat, it must have been caused by some drug. Without doubt, our commander did not wish me to know the road he followed.

Hence I cannot say whether the aviator continued his flight through space, or whether the mariner sailed the surface of some sea or lake, or the chauffeur sped across the American roads. No recollection remains with me of what passed during that night of July thirty-first.

Now, what was to follow from this adventure? And especially concerning myself, what would be its end?

I have said that at the moment when I awoke from my strange sleep, the "Terror" seemed to me completely motionless. I could hardly be mistaken; whatever had been her method of progress, I should have felt some movement, even in the air. I lay in my berth in the cabin, where I had been shut in without knowing it, just as I had been on the preceding night which I had passed on board the "Terror" on Lake Erie.

My business now was to learn if I would be allowed to go on deck here where the machine had landed. I attempted to raise the hatchway. It was fastened.

"Ah!" said I, "am I to be kept here until the 'Terror' recommences its travels?" Was not that, indeed, the only time when escape was hopeless?

My impatience and anxiety may be appreciated. I knew not how long this halt might continue.

I had not a quarter of an hour to wait. A noise of bars being removed came to my ear. The hatchway was raised from above. A wave of light and air penetrated my cabin.

With one bound I reached the deck. My eyes in an instant swept round the horizon.

The "Terror," as I had thought, rested quiet on the ground. She was in the midst of a rocky hollow measuring from fifteen to eighteen hundred feet in circumference. A floor of yellow gravel carpeted its entire extent, unrelieved by a single tuft of herbage.

This hollow formed an almost regular oval, with its longer diameter extending north and south. As to the
surrounding-wall, what was its height, what the character of its crest, I could not judge. Above us was gathered a fog so heavy, that the rays of the sun had not yet pierced it. Heavy trails of cloud drifted across the sandy floor, Doubtless the morning was still young, and this mist might later be dissolved.

It was quite cold here, although this was the first day of August. I concluded therefore that we must be far in the north, or else high above sea-level. We must still be somewhere on the New Continent; though where, it was impossible to surmise. Yet no matter how rapid our flight had been, the air-ship could not have traversed either ocean in the dozen hours since our departure from Niagara.

At this moment, I saw the captain come from an opening in the rocks, probably a grotto, at the base of this cliff hidden in the fog. Occasionally, in the mists above, appeared the shadows of huge birds. Their raucous cries were the sole interruption to the profound silence. Who knows if they were not affrighted by the arrival of this formidable, winged monster, which they could not match either in might or speed.

Everything led me to believe that it was here that the Master of the World withdrew in the intervals between his prodigious journeys. Here was the garage of his automobile; the harbor of his boat; the hangar of his air-ship.

And now the "Terror" stood motionless at the bottom of this hollow. At last I could examine her; and it looked as if her owners had no intention of preventing me. The truth is that the commander seemed to take no more notice of my presence than before. His two companions joined him, and the three did not hesitate to enter together into the grotto I had seen. What a chance to study the machine, at least its exterior! As to its inner parts, probably I should never get beyond conjecture.

In fact, except for that of my cabin, the hatchways were closed; and it would be vain for me to attempt to open them. At any rate, it might be more interesting to find out what kind of propeller drove the "Terror" in these many transformations.

I jumped to the ground and found I was left at leisure, to proceed with this first examination.

The machine was as I have said spindle-shaped. The bow was sharper than the stern. The body was of aluminium, the wings of a substance whose nature I could not determine. The body rested on four wheels, about two feet in diameter. These had pneumatic tires so thick as to assure ease of movement at any speed. Their spokes spread out like paddles or battledores; and when the "Terror" moved either on or under the water, they must have increased her pace.

These wheels were not however, the principal propeller. This consisted of two "Parsons" turbines placed on either side of the keel. Driven with extreme rapidity by the engine, they urged the boat onward in the water by twin screws, and I even questioned if they were not powerful enough to propel the machine through the air.

The chief aerial support, however, was that of the great wings, now again in repose, and folded back along the sides. Thus the theory of the "heavier than air" flying machine was employed by the inventor, a system which enabled him to dart through space with a speed probably superior to that of the largest birds.

As to the agent which set in action these various mechanisms, I repeat, it was, it could be, no other than electricity. But from what source did his batteries get their power? Had he somewhere an electric factory, to which he must return? Were the dynamos, perhaps working in one of the caverns of this hollow?

The result of my examination was that, while I could see that the machine used wheels and turbine screws and wings, I knew nothing of either its engine, nor of the force which drove it. To be sure, the discovery of this secret would be of little value to me. To employ it I must first be free. And after what I knew--little as that really was--the Master of the World would never release me.

There remained, it is true, the chance of escape. But would an opportunity ever present itself? If there could be none during the voyages of the "Terror," might there possibly be, while we remained in this retreat?

The first question to be solved was the location of this hollow. What communication did it have with the surrounding region? Could one only depart from it by a flying-machine? And in what part of the United States were we? Was it not reasonable to estimate, that our flight through the darkness had covered several hundred leagues?

There was one very natural hypothesis which deserved to be considered, if not actually accepted. What more natural harbor could there be for the "Terror" than the Great Eyrie? Was it too difficult a flight for our aviator to reach the summit? Could he not soar anywhere that the vultures and the eagles could? Did not that inaccessible Eyrie offer to the Master of the World just such a retreat as our police had been unable to discover, one in which he might well believe himself safe from all attacks? Moreover, the distance between Niagara Falls and this part of the Blue Ridge Mountains, did not exceed four hundred and fifty miles, a flight which would have been easy for the "Terror."

Yes, this idea more and more took possession of me. It crowded out a hundred other unsupported suggestions. Did not this explain the nature of the bond which existed between the Great Eyrie and the letter which I had received with our commander's initials? And the threats against me if I renewed the ascent! And the espionage to which I had been subjected! And all the phenomena of which the Great Eyrie had been the theater, were they not to be attributed...
to this same cause—though what lay behind the phenomena was not yet clear? Yes, the Great Eyrie! The Great Eyrie!

But since it had been impossible for me to penetrate here, would it not be equally impossible for me to get out again, except upon the "Terror?" Ah, if the mists would but lift! Perhaps I should recognize the place. What was as yet a mere hypothesis, would become a starting point to act upon.

However, since I had freedom to move about, since neither the captain nor his men paid any heed to me, I resolved to explore the hollow. The three of them were all in the grotto toward the north end of the oval. Therefore I would commence my inspection at the southern end.

Reaching the rocky wall, I skirted along its base and found it broken by many crevices; above, arose more solid rocks of that feldspar of which the chain of the Alleghanies largely consists. To what height the rock wall rose, or what was the character of its summit, was still impossible to see. I must wait until the sun had scattered the mists.

In the meantime, I continued to follow along the base of the cliff. None of its cavities seemed to extend inward to any distance. Several of them contained debris from the hand of man, bits of broken wood, heaps of dried grasses. On the ground were still to be seen the footprints that the captain and his men must have left, perhaps months before, upon the sand.

My jailers, being doubtless very busy in their cabin, did not show themselves until they had arranged and packed several large bundles. Did they purpose to carry those on board the "Terror?" And were they packing up with the intention of permanently leaving their retreat?

In half an hour my explorations were completed and I returned toward the center. Here and there were heaped up piles of ashes, bleached by weather. There were fragments of burned planks and beams; posts to which clung rusted iron-work; armatures of metal twisted by fire; all the remnants of some intricate mechanism destroyed by the flames.

Clearly at some period not very remote the hollow had been the scene of a conflagration, accidental or intentional. Naturally I connected this with the phenomena observed at the Great Eyrie, the flames which rose above the crest, the noises which had so frightened the people of Pleasant Garden and Morganton. But of what mechanisms were these the fragments, and what reason had our captain for destroying them?

At this moment I felt a breath of air; a breeze came from the east. The sky swiftly cleared. The hollow was filled with light from the rays of the sun which appeared midway between the horizon and the zenith.

A cry escaped me! The crest of the rocky wall rose a hundred feet above me. And on the eastern side was revealed that easily recognizable pinnacle, the rock like a mounting eagle. It was the same that had held the attention of Mr. Elias Smith and myself, when we had looked up at it from the outer side of the Great Eyrie.

Thus there was no further doubt. In its flight during the night the airship had covered the distance between Lake Erie and North Carolina. It was in the depth of this Eyrie that the machine had found shelter! This was the nest, worthy of the gigantic and powerful bird created by the genius of our captain! The fortress whose mighty walls none but he could scale! Perhaps even, he had discovered in the depths of some cavern, some subterranean passage by which he himself could quit the Great Eyrie, leaving the "Terror" safely sheltered within.

At last I saw it all! This explained the first letter sent me from the Great Eyrie itself with the threat of death. If we had been able to penetrate into this hollow, who knows if the secrets of the Master of the World might not have been discovered before he had been able to set them beyond our reach?

I stood there, motionless; my eyes fixed on that mounting eagle of stone, prey to a sudden, violent emotion. Whatsoever might be the consequences to myself, was it not my duty to destroy this machine, here and now, before it could resume its menacing flight of mastery across the world!

Steps approached behind me. I turned. The inventor stood by my side, and pausing looked me in the face.

I was unable to restrain myself; the words burst forth—"The Great Eyrie! The Great Eyrie!"

"Yes, Inspector Strock."

"And you! You are the Master of the World?"

"Of that world to which I have already proved myself to be the most powerful of men."

"You!" I reiterated, stupefied with amazement.

"I," responded he, drawing himself up in all his pride, "I, Robur--Robur, the Conqueror!"

Chapter 16

ROBUR, THE CONQUEROR

Robur, the Conqueror! This then was the likeness I had vaguely recalled. Some years before the portrait of this extraordinary man had been printed in all the American newspapers, under date of the thirteenth of June, the day after this personage had made his sensational appearance at the meeting of the Weldon Institute at Philadelphia.

I had noted the striking character of the portrait at the time; the square shoulders; the back like a regular
trapezoid, its longer side formed by that geometrical shoulder line; the robust neck; the enormous spheroidal head.
The eyes at the least emotion, burned with fire, while above them were the heavy, permanently contracted brows,
which signified such energy. The hair was short and crisp, with a glitter as of metal in its lights. The huge breast rose
and fell like a blacksmith's forge; and the thighs, the arms and hands, were worthy of the mighty body. The narrow
beard was the same also, with the smooth shaven cheeks which showed the powerful muscles of the jaw.

And this was Robur the Conqueror, who now stood before me, who revealed himself to me, hurling forth his
name like a threat, within his own impenetrable fortress!

Let me recall briefly the facts which had previously drawn upon Robur the Conqueror the attention of the entire
world. The Weldon Institute was a club devoted to aeronautics under the presidency of one of the chief personages
of Philadelphia, commonly called Uncle Prudent. Its secretary was Mr. Phillip Evans. The members of the Institute
were devoted to the theory of the "lighter than air" machine; and under their two leaders were constructing an
enormous dirigible balloon, the "Go-Ahead."

At a meeting in which they were discussing the details of the construction of their balloon, this unknown Robur
had suddenly appeared and, ridiculing all their plans, had insisted that the only true solution of flight lay with the
heavier than air machines, and that he had proven this by constructing one.

He was in this turn doubted and ridiculed by the members of the club, who called him in mockery Robur the
Conqueror. In the tumult that followed, revolver shots were fired; and the intruder disappeared.

That same night he had by force abducted the president and the secretary of the club, and had taken them, much
against their will upon a voyage in the wonderful air-ship, the "Albatross," which he had constructed. He meant thus
to prove to them beyond argument the correctness of his assertions. This ship, a hundred feet long, was upheld in the
air by a large number of horizontal screws and was driven forward by vertical screws at its bow and stern. It was
managed by a crew of at least half a dozen men, who seemed absolutely devoted to their leader, Robur.

After a voyage almost completely around the world, Mr. Prudent and Mr. Evans managed to escape from the
"Albatross" after a desperate struggle. They even managed to cause an explosion on the airship, destroying it, and
involving the inventor and all his crew in a terrific fall from the sky into the Pacific ocean.

Mr. Prudent and Mr. Evans then returned to Philadelphia. They had learned that the "Albatross" had been
constructed on an unknown isle of the Pacific called Island X; but since the location of this hiding-place was wholly
unknown, its discovery lay scarcely within the bounds of possibility. Moreover, the search seemed entirely
unnecessary, as the vengeful prisoners were quite certain that they had destroyed their jailers.

Hence the two millionaires, restored to their homes, went calmly on with the construction of their own machine,
the "Go-Ahead." They hoped by means of it to soar once more into the regions they had traversed with Robur, and
to prove to themselves that their lighter than air machine was at least the equal of the heavy "Albatross." If they had
not persisted, they would not have been true Americans.

On the twentieth of April in the following year the "Go-Ahead" was finished and the ascent was made, from
Fairmount Park in Philadelphia. I myself was there with thousands of other spectators. We saw the huge balloon rise
gracefully; and, thanks to its powerful screws, it maneuvered in every direction with surprising ease. Suddenly a cry
was heard, a cry repeated from a thousand throats. Another airship had appeared in the distant skies and it now
approached with marvelous rapidity. It was another "Albatross," perhaps even superior to the first. Robur and his
men had escaped death in the Pacific; and, burning for revenge, they had constructed a second airship in their secret
Island X.

Like a gigantic bird of prey, the "Albatross" hurled itself upon the "Go-Ahead." Doubtless, Robur, while
avenging himself wished also to prove the immeasurable superiority of the heavier than air machines.

Mr. Prudent and Mr. Evans defended themselves as best they could. Knowing that their balloon had nothing like
the horizontal speed of the "Albatross," they attempted to take advantage of their superior lightness and rise above
her. The "Go-Ahead," throwing out all her ballast, soared to a height of over twenty thousand feet. Yet even there
the "Albatross" rose above her, and circled round her with ease.

Suddenly an explosion was heard. The enormous gas-bag of the "Go-Ahead," expanding under the dilation of its
contents at this great height, had finally burst.

Half-empty, the balloon fell rapidly.

Then to our universal astonishment, the "Albatross" shot down after her rival, not to finish the work of
destruction but to bring rescue. Yes! Robur, forgetting his vengeance, rejoined the sinking "Go-Ahead," and his men
lifted Mr. Prudent, Mr. Evans, and the aeronaut who accompanied them, onto the platform of his craft. Then the
balloon, being at length entirely empty, fell to its destruction among the trees of Fairmount Park.

The public was overwhelmed with astonishment, with fear! Now that Robur had recaptured his prisoners, how
would he avenge himself? Would they be carried away, this time, forever?

The "Albatross" continued to descend, as if to land in the clearing at Fairmount Park. But if it came within reach,
would not the infuriated crowd throw themselves upon the airship, tearing both it and its inventor to pieces?

The "Albatross" descended within six feet of the ground. I remember well the general movement forward with which the crowd threatened to attack it. Then Robur's voice rang out in words which even now I can repeat almost as he said them:

"Citizens of the United States, the president and the secretary of the Weldon Institute are again in my power. In holding them prisoners I would but be exercising my natural right of reprisal for the injuries they have done me. But the passion and resentment which have been roused both in them and you by the success of the 'Albatross,' show that the souls of men are not yet ready for the vast increase of power which the conquest of the air will bring to them. Uncle Prudent, Phillip Evans, you are free."

The three men rescued from the balloon leaped to the ground. The airship rose some thirty feet out of reach, and Robur recommenced:

"Citizens of the United States, the conquest of the air is made; but it shall not be given into your hands until the proper time. I leave, and I carry my secret with me. It will not be lost to humanity, but shall be entrusted to them when they have learned not to abuse it. Farewell, Citizens of the United States!"

Then the "Albatross" rose under the impulse of its mighty screws, and sped away amidst the hurrahs of the multitude.

I have ventured to remind my readers of this last scene somewhat in detail, because it seemed to reveal the state of mind of the remarkable personage who now stood before me. Apparently he had not then been animated by sentiments hostile to humanity. He was content to await the future; though his attitude undeniably revealed the immeasurable confidence which he had in his own genius, the immense pride which his almost superhuman powers had aroused within him.

It was not astonishing, moreover, that this haughtiness had little by little been aggravated to such a degree that he now presumed to enslave the entire world, as his public letter had suggested by its significant threats. His vehement mind had with time been roused to such over-excitement that he might easily be driven into the most violent excesses.

As to what had happened in the years since the last departure of the "Albatross," I could only partly reconstruct this even with my present knowledge. It had not sufficed the prodigious inventor to create a flying machine, perfect as that was! He had planned to construct a machine which could conquer all the elements at once. Probably in the workshops of Island X, a selected body of devoted workmen had constructed, one by one, the pieces of this marvelous machine, with its quadruple transformation. Then the second "Albatross" must have carried these pieces to the Great Eyrie, where they had been put together, within easier access of the world of men than the far-off island had permitted. The "Albatross" itself had apparently been destroyed, whether by accident or design, within the eyrie. The "Terror" had then made its appearance on the roads of the United States and in the neighboring waters. And I have told under what conditions, after having been vainly pursued across Lake Erie, this remarkable masterpiece had risen through the air carrying me a prisoner on board.

Chapter 17
IN THE NAME OF THE LAW

What was to be the issue of this remarkable adventure? Could I bring it to any denouement whatever, either sooner or later? Did not Robur hold the results wholly in his own hands? Probably I would never have such an opportunity for escape as had occurred to Mr. Prudent and Mr. Evans amid the islands of the Pacific. I could only wait. And how long might the waiting last!

To be sure, my curiosity had been partly satisfied. But even now I knew only the answer to the problems of the Great Eyrie. Having at length penetrated its circle, I comprehended all the phenomena observed by the people of the Blue Ridge Mountains. I was assured that neither the country-folk throughout the region, nor the townfolk of Pleasant Garden and Morganton were in danger of volcanic eruptions or earthquakes. No subterranean forces whatever were battling within the bowels of the mountains. No crater had arisen in this corner of the Alleghanies. The Great Eyrie served merely as the retreat of Robur the Conqueror. This impenetrable hiding-place where he stored his materials and provisions, had without doubt been discovered by him during one of his aerial voyages in the "Albatross." It was a retreat probably even more secure than that as yet undiscovered Island X in the Pacific.

This much I knew of him; but of this marvelous machine of his, of the secrets of its construction and propelling force, what did I really know? Admitting that this multiple mechanism was driven by electricity, and that this electricity was, as we knew it had been in the "Albatross," extracted directly from the surrounding air by some new process, what were the details of its mechanism? I had not been permitted to see the engine; doubtless I should never see it.
On the question of my liberty I argued thus: Robur evidently intends to remain unknown. As to what he intends to do with his machine, I fear, recalling his letter, that the world must expect from it more of evil than of good. At any rate, the incognito which he has so carefully guarded in the past he must mean to preserve in the future. Now only one man can establish the identity of the Master of the World with Robur the Conqueror. This man is I his prisoner, I who have the right to arrest him, I, who ought to put my hand on his shoulder, saying, "In the Name of the Law--"

On the other hand, could I hope for a rescue from without? Evidently not. The police authorities must know everything that had happened at Black Rock Creek. Mr. Ward, advised of all the incidents, would have reasoned on the matter as follows: when the "Terror" quitted the creek dragging me at the end of her hawser, I had either been drowned or, since my body had not been recovered, I had been taken on board the "Terror," and was in the hands of its commander.

In the first case, there was nothing more to do than to write "deceased" after the name of John Strock, chief inspector of the federal police in Washington.

In the second case, could my confreres hope ever to see me again? The two destroyers which had pursued the "Terror" into the Niagara River had stopped, perforce, when the current threatened to drag them over the falls. At that moment, night was closing in, and what could be thought on board the destroyers but that the "Terror" had been engulfed in the abyss of the cataract? It was scarce possible that our machine had been seen when, amid the shades of night, it rose above the Horseshoe Falls, or when it winged its way high above the mountains on its route to the Great Eyrie.

With regard to my own fate, should I resolve to question Robur? Would he consent even to appear to hear me? Was he not content with having hurled at me his name? Would not that name seem to him to answer everything? That day wore away without bringing the least change to the situation. Robur and his men continued actively at work upon the machine, which apparently needed considerable repair. I concluded that they meant to start forth again very shortly, and to take me with them. It would, however, have been quite possible to leave me at the bottom of the Eyrie. There would have been no way by which I could have escaped, and there were provisions at hand sufficient to keep me alive for many days.

What I studied particularly during this period was the mental state of Robur. He seemed to me under the dominance of a continuous excitement. What was it that his ever-seething brain now meditated? What projects was he forming for the future? Toward what region would he now turn? Would he put in execution the menaces expressed in his letter--the menaces of a madman?

The night of that first day, I slept on a couch of dry grass in one of the grottoes of the Great Eyrie. Food was set for me in this grotto each succeeding day. On the second and third of August, the three men continued at their work scarcely once, however, exchanging any words, even in the midst of their labors. When the engines were all repaired to Robur's satisfaction, the men began putting stores aboard their craft, as if expecting a long absence. Perhaps the "Terror" was about to traverse immense distances; perhaps even, the captain intended to regain his Island X, in the midst of the Pacific.

Sometimes I saw him wander about the Eyrie buried in thought, or he would stop and raise his arm toward heaven as if in defiance of that God with Whom he assumed to divide the empire of the world. Was not his overweening pride leading him toward insanity? An insanity which his two companions, hardly less excited than he, could do nothing to subdue! Had he not come to regard himself as mightier than the elements which he had so audaciously defied even when he possessed only an airship, the "Albatross?" And now, how much more powerful had he become, when earth, air and water combined to offer him an infinite field where none might follow him!

Hence I had much to fear from the future, even the most dread catastrophes. It was impossible for me to escape from the Great Eyrie, before being dragged into a new voyage. After that, how could I possibly get away while the "Terror" sped through the air or the ocean? My only chance must be when she crossed the land, and did so at some moderate speed. Surely a distant and feeble hope to cling to!

It will be recalled that after our arrival at the Great Eyrie, I had attempted to obtain some response from Robur, as to his purpose with me; but I had failed. On this last day I made another attempt.

In the afternoon I walked up and down before the large grotto where my captors were at work. Robur, standing at the entrance, followed me steadily with his eyes. Did he mean to address me?

"Captain," said I, "I have already asked you a question, which you have not answered. I ask it again: What do you intend to do with me?"

We stood face to face scarce two steps apart. With arms folded, he glared at me, and I was terrified by his glance. Terrified, that is the word! The glance was not that of a sane man. Indeed, it seemed to reflect nothing whatever of humanity within.

I repeated my question in a more challenging tone. For an instant I thought that Robur would break his silence.
and burst forth.
"What do you intend to do with me? Will you set me free?"

Evidently my captor's mind was obsessed by some other thought, from which I had only distracted him for a moment. He made again that gesture which I had already observed; he raised one defiant arm toward the zenith. It seemed to me as if some irresistible force drew him toward those upper zones of the sky, that he belonged no more to the earth, that he was destined to live in space; a perpetual dweller in the clouds.

Without answering me, without seeming to have understood me, Robur reentered the grotto.

How long this sojourn or rather relaxation of the "Terror" in the Great Eyrie was to last, I did not know. I saw, however, on the afternoon of this third of August that the repairs and the embarkation of stores were completed. The hold and lockers of our craft must have been completely crowded with the provisions taken from the grottoes of the Eyrie.

Then the chief of the two assistants, a man whom I now recognized as that John Turner who had been mate of the "Albatross," began another labor. With the help of his companion, he dragged to the center of the hollow all that remained of their materials, empty cases, fragments of carpentry, peculiar pieces of wood which clearly must have belonged to the "Albatross," which had been sacrificed to this new and mightier engine of locomotion. Beneath this mass there lay a great quantity of dried grasses. The thought came to me that Robur was preparing to leave this retreat forever!

In fact, he could not be ignorant that the attention of the public was now keenly fixed upon the Great Eyrie; and that some further attempt was likely to be made to penetrate it. Must he not fear that some day or other the effort would be successful, and that men would end by invading his hiding-place? Did he not wish that they should find there no single evidence of his occupation?

The sun disappeared behind the crests of the Blue Ridge. His rays now lighted only the very summit of Black Dome towering in the northwest. Probably the "Terror" awaited only the night in order to begin her flight. The world did not yet know that the automobile and boat could also transform itself into a flying machine. Until now, it had never been seen in the air. And would not this fourth transformation be carefully concealed, until the day when the Master of the World chose to put into execution his insensate menaces?

Toward nine o’clock profound obscurity enwrapped the hollow. Not a star looked down on us. Heavy clouds driven by a keen eastern wind covered the entire sky. The passage of the "Terror" would be invisible, not only in our immediate neighborhood, but probably across all the American territory and even the adjoining seas.

At this moment Turner, approaching the huge stack in the middle of the eyrie, set fire to the grass beneath.

The whole mass flared up at once. From the midst of a dense smoke, the roaring flames rose to a height which towered above the walls of the Great Eyrie. Once more the good folk of Morganton and Pleasant Garden would believe that the crater had reopened. These flames would announce to them another volcanic upheaval.

I watched the conflagration. I heard the roarings and cracklings which filled the air. From the deck of the "Terror," Robur watched it also.

Turner and his companion pushed back into the fire the fragments which the violence of the flames cast forth. Little by little the huge bonfire grew less. The flames sank down into a mere mass of burnt-out ashes; and once more all was silence and blackest night.

Suddenly I felt myself seized by the arm. Turner drew me toward the "Terror." Resistance would have been useless. And moreover what could be worse than to be abandoned without resources in this prison whose walls I could not climb?

As soon as I set foot on the deck, Turner also embarked. His companion went forward to the look-out; Turner climbed down into the engine-room, lighted by electric bulbs, from which not a gleam escaped outside.

Robur himself was at the helm, the regulator within reach of his hand, so that he could control both our speed and our direction. As to me, I was forced to descend into my cabin, and the hatchway was fastened above me. During that night, as on that of our departure from Niagara, I was not allowed to watch the movements of the "Terror."

Nevertheless, if I could see nothing of what was passing on board, I could hear the noises of the machinery. I had first the feeling that our craft, its bow slightly raised, lost contact with the earth. Some swerves and balancings in the air followed. Then the turbines underneath spun with prodigious rapidity, while the great wings beat with steady regularity.

Thus the "Terror," probably forever, had left the Great Eyrie, and launched into the air as a ship launches into the waters. Our captain soared above the double chain of the Alleghanies, and without doubt he would remain in the upper zones of the air until he had left all the mountain region behind.

But in what direction would he turn? Would he pass in flight across the plains of North Carolina, seeking the Atlantic Ocean? Or would he head to the west to reach the Pacific? Perhaps he would seek, to the south, the waters
of the Gulf of Mexico. When day came how should I recognize which sea we were upon, if the horizon of water and sky encircled us on every side?

Several hours passed; and how long they seemed to me! I made no effort to find forgetfulness in sleep. Wild and incoherent thoughts assailed me. I felt myself swept over worlds of imagination, as I was swept through space, by an aerial monster. At the speed which the "Terror" possessed, whither might I not be carried during this interminable night? I recalled the unbelievable voyage of the "Albatross," of which the Weldon Institute had published an account, as described by Mr. Prudent and Mr. Evans. What Robur, the Conqueror, had done with his first airship, he could do even more readily with this quadruple machine.

At length the first rays of daylight brightened my cabin. Would I be permitted to go out now, to take my place upon the deck, as I had done upon Lake Erie?

I pushed upon the hatchway: it opened. I came half way out upon the deck.

All about was sky and sea. We floated in the air above an ocean, at a height which I judged to be about a thousand or twelve hundred feet. I could not see Robur, so he was probably in the engine room. Turner was at the helm, his companion on the look-out.

Now that I was upon the deck, I saw what I had not been able to see during our former nocturnal voyage, the action of those powerful wings which beat upon either side at the same time that the screws spun beneath the flanks of the machine.

By the position of the sun, as it slowly mounted from the horizon, I realized that we were advancing toward the south. Hence if this direction had not been changed during the night this was the Gulf of Mexico which lay beneath us.

A hot day was announced by the heavy livid clouds which clung to the horizon. These warnings of a coming storm did not escape the eye of Robur when toward eight o'clock he came on deck and took Turner's place at the helm. Perhaps the cloud-bank recalled to him the waterspout in which the "Albatross" had so nearly been destroyed, or the mighty cyclone from which he had escaped only as if by a miracle above the Antarctic Sea.

It is true that the forces of Nature which had been too strong for the "Albatross," might easily be evaded by this lighter and more versatile machine. It could abandon the sky where the elements were in battle and descend to the surface of the sea; and if the waves beat against it there too heavily, it could always find calm in the tranquil depths.

Doubtless, however, there were some signs by which Robur, who must be experienced in judging, decided that the storm would not burst until the next day.

He continued his flight; and in the afternoon, when we settled down upon the surface of the sea, there was not a sign of bad weather. The "Terror" is a sea bird, an albatross or frigate-bird, which can rest at will upon the waves! Only we have this advantage, that fatigue has never any hold upon this metal organism, driven by the inexhaustible electricity!

The whole vast ocean around us was empty. Not a sail nor a trail of smoke was visible even on the limits of the horizon. Hence our passage through the clouds had not been seen and signaled ahead.

The afternoon was not marked by any incident. The "Terror" advanced at easy speed. What her captain intended to do, I could not guess. If he continued in this direction, we should reach some one of the West Indies, or beyond that, at the end of the Gulf, the shore of Venezuela or Colombia. But when night came, perhaps we would again rise in the air to clear the mountainous barrier of Guatemala and Nicaragua, and take flight toward Island X, somewhere in the unknown regions of the Pacific.

Evening came. The sun sank in an horizon red as blood. The sea glistened around the "Terror," which seemed to raise a shower of sparks in its passage. There was a storm at hand. Evidently our captain thought so. Instead of being allowed to remain on deck, I was compelled to re-enter my cabin, and the hatchway was closed above me.

In a few moments from the noises that followed, I knew that the machine was about to be submerged. In fact, five minutes later, we were moving peacefully forward through the ocean's depths.

Thoroughly worn out, less by fatigue than by excitement and anxious thought, I fell into a profound sleep, natural this time and not provoked by any soporific drug. When I awoke, after a length of time which I could not reckon, the "Terror" had not yet returned to the surface of the sea.

This maneuver was executed a little later. The daylight pierced my porthole; and at the same moment I felt the pitching and tossing to which we were subjected by a heavy sea.

I was allowed to take my place once more outside the hatchway; where my first thought was for the weather. A storm was approaching from the northwest. Vivid lightning darted amid the dense, black clouds. Already we could hear the rumbling of thunder echoing continuously through space. I was surprised--more than surprised, frightened!- -by the rapidity with which the storm rushed upward toward the zenith. Scarcely would a ship have had time to furl her sails to escape the shock of the blast, before it was upon her! The advance was as swift as it was terrible.

Suddenly the wind was unchained with unheard of violence, as if it had suddenly burst from this prison of cloud.
In an instant a frightful sea uprose. The breaking waves, foaming along all their crests, swept with their full weight over the "Terror." If I had not been wedged solidly against the rail, I should have been swept overboard!

There was but one thing to do--to change our machine again into a submarine. It would find security and calm at a few dozen feet beneath the surface. To continue to brave the fury of this outrageous sea was impossible.

Robur himself was on deck, and I awaited the order to return to my cabin--an order which was not given. There was not even any preparation for the plunge. With an eye more burning than ever, impassive before this frightful storm, the captain looked it full in the face, as if to defy it, knowing that he had nothing to fear.

It was imperative that the terror should plunge below without losing a moment. Yet Robur seemed to have no thought of doing so. No! He preserved his haughty attitude as of a man who in his immeasurable pride, believed himself above or beyond humanity.

Seeing him thus I asked myself with almost superstitious awe, if he were not indeed a demoniac being, escaped from some supernatural world.

A cry leaped from his mouth, and was heard amid the shrieks of the tempest and the howlings of the thunder. "I, Robur! Robur!--The master of the world!"

He made a gesture which Turner and his companions understood. It was a command; and without any hesitation these unhappy men, insane as their master, obeyed it.

The great wings shot out, and the airship rose as it had risen above the falls of Niagara. But if on that day it had escaped the might of the cataract, this time it was amidst the might of the hurricane that we attempted our insensate flight.

The air-ship soared upward into the heart of the sky, amid a thousand lightning flashes, surrounded and shaken by the bursts of thunder. It steered amid the blinding, darting lights, courting destruction at every instant.

Robur's position and attitude did not change. With one hand on the helm, the other on the speed regulators while the great wings beat furiously, he headed his machine toward the very center of the storm, where the electric flashes were leaping from cloud to cloud.

I must throw myself upon this madman to prevent him from driving his machine into the very middle of this aerial furnace! I must compel him to descend, to seek beneath the waters, a safety which was no longer possible either upon the surface of the sea or in the sky! Beneath, we could wait until this frightful outburst of the elements was at an end!

Then amid this wild excitement my own passion, all my instincts of duty, arose within me! Yes, this was madness! Yet must I not arrest this criminal whom my country had outlawed, who threatened the entire world with his terrible invention? Must I not put my hand on his shoulder and summon him to surrender to justice! Was I or was I not Strock, chief inspector of the federal police? Forgetting where I was, one against three, uplifted in mid-sky above a howling ocean, I leaped toward the stern, and in a voice which rose above the tempest, I cried as I hurled myself upon Robur:

"In the name of the law, I--"

Suddenly the "Terror" trembled as if from a violent shock. All her frame quivered, as the human frame quivers under the electric fluid. Struck by the lightning in the very middle of her powerful batteries, the air-ship spread out on all sides and went to pieces.

With her wings fallen, her screws broken, with bolt after bolt of the lightning darting amid her ruins, the "Terror" fell from the height of more than a thousand feet into the ocean beneath.

Chapter 18

THE OLD HOUSEKEEPER'S LAST COMMENT

When I came to myself after having been unconscious for many hours, a group of sailors whose care had restored me to life surrounded the door of a cabin in which I lay. By my pillow sat an officer who questioned me; and as my senses slowly returned, I answered to his questioning.

I told them everything. Yes, everything! And assuredly my listeners must have thought that they had upon their hands an unfortunate whose reason had not returned with his consciousness.

I was on board the steamer Ottawa, in the Gulf of Mexico, headed for the port of New Orleans. This ship, while flying before the same terrific thunder-storm which destroyed the "Terror," had encountered some wreckage, among whose fragments was entangled my helpless body. Thus I found myself back among humankind once more, while Robur the Conqueror and his two companions had ended their adventurous careers in the waters of the Gulf. The Master of the World had disappeared forever, struck down by those thunder-bolts which he had dared to brave in the regions of their fullest power. He carried with him the secret of his extraordinary machine.

Five days later the Ottawa sighted the shores of Louisiana; and on the morning of the tenth of August she
reached her port. After taking a warm leave of my rescuers, I set out at once by train for Washington, which more
than once I had despaired of ever seeing again.

I went first of all to the bureau of police, meaning to make my earliest appearance before Mr. Ward.

What was the surprise, the stupefaction, and also the joy of my chief, when the door of his cabinet opened before
me! Had he not every reason to believe, from the report of my companions, that I had perished in the waters of Lake
Erie?

I informed him of all my experiences since I had disappeared, the pursuit of the destroyers on the lake, the
soaring of the "Terror" from amid Niagara Falls, the halt within the crater of the Great Eyrie, and the catastrophe,
during the storm, above the Gulf of Mexico.

He learned for the first time that the machine created by the genius of this Robur, could traverse space, as it did
the earth and the sea.

In truth, did not the possession of so complete and marvelous a machine justify the name of Master of the World,
which Robur had taken to himself? Certain it is that the comfort and even the lives of the public must have been
forever in danger from him; and that all methods of defence must have been feeble and ineffective.

But the pride which I had seen rising bit by bit within the heart of this prodigious man had driven him to give
equal battle to the most terrible of all the elements. It was a miracle that I had escaped safe and sound from that
frightful catastrophe.

Mr. Ward could scarcely believe my story. "Well, my dear Strock," said he at last, "you have come back; and
that is the main thing. Next to this notorious Robur, you will be the man of the hour. I hope that your head will not
be turned with vanity, like that of this crazy inventor!"

"No, Mr. Ward," I responded, "but you will agree with me that never was inquisitive man put to greater straits to
satisfy his curiosity."

"I agree, Strock; and the mysteries of the Great Eyrie, the transformations of the "Terror," you have discovered
them! But unfortunately, the still greater secrets of this Master of the World have perished with him."

The same evening the newspapers published an account of my adventures, the truthfulness of which could not be
doubted. Then, as Mr. Ward had prophesied, I was the man of the hour.

One of the papers said, "Thanks to Inspector Strock the American police still lead the world. While others have
accomplished their work, with more or less success, by land and by sea, the American police hurl themselves in
pursuit of criminals through the depths of lakes and oceans and even through the sky."

Yet, in following, as I have told, in pursuit of the "Terror," had I done anything more than by the close of the
present century will have become the regular duty of my successors?

It is easy to imagine what a welcome my old housekeeper gave me when I entered my house in Long Street.
When my apparition--does not the word seem just--stood before her, I feared for a moment she would drop dead,
poor woman! Then, after hearing my story, with eyes streaming with tears, she thanked Providence for having saved
me from so many perils.

"Now, sir," said she, "now--was I wrong?"

"Wrong? About what?"

"In saying that the Great Eyrie was the home of the devil?"

"Nonsense; this Robur was not the devil!"

"Ah, well!" replied the old woman, "he was worthy of being so!"

THE PEARL OF LIMA: A STORY OF TRUE LOVE
by JULIÁN VERNE

CHAPTER I.

THE PLAZA-MAYOR.

The sun had disappeared behind the snowy peaks of the Cordilleras; but the beautiful Peruvian sky long retains,
through the transparent veil of night, the reflection of his rays; the atmosphere is impregnated with a refreshing
coolness, which in these burning latitudes affords freedom of breath; it is the hour in which one can live a European
life, and seek without on the verandas some cooling gentle zephyr; it seems as if a metallic roof was then interposed
between the sun and the earth, which, retaining the heat and suffering only the light to pass, offers beneath its shelter
a reparative repose.

This much desired hour had at last sounded from the clock of the cathedral. While the earliest stars were rising
above the horizon, the numerous promenaders were traversing the streets of Lima, wrapped in their light mantles,
and conversing gravely on the most trivial affairs. There was a great movement of the populace on the Plaza-Mayor, that forum of the ancient city of kings; artisans were profiting by the coolness to quit their daily labors; they circulated actively among the crowd, crying their various merchandise; the ladies of Lima, carefully enveloped in the mantillas which mask their countenances, with the exception of the right eye, darted stealthy glances on the surrounding masses; they undulated through the groups of smokers, like foam at the will of the waves; other señoritas, in ball costume, coiffed only with their abundant hair or some natural flowers, passed in large calêches, throwing on the caballeros nonchalant regards.

But these glances were not bestowed indiscriminately upon the young cavaliers; the thoughts of the noble ladies could rest only on aristocratic heights. The Indians passed without lifting their eyes upon them, knowing themselves to be beneath their notice; betraying by no gesture or word, the bitter envy of their hearts. They contrasted strongly with the half-breeds, or mestizos, who, repulsed like the former, vented their indignation in cries and protestations.

The proud descendants of Pizarro marched with heads high, as in the times when their ancestors founded the city of kings; their traditional scorn rested alike on the Indians whom they had conquered, and the mestizos, born of their relations with the natives of the New World. The Indians, on the contrary, were constantly struggling to break their chains, and cherished alike aversion toward the conquerors of the ancient empire of the Incas and their haughty and insolent descendants.

But the mestizos, Spanish in their contempt for the Indians, and Indian in their hatred which they had vowed against the Spaniards, burned with both these vivid and impassioned sentiments.

A group of these young people stood near the pretty fountain in the centre of the Plaza-Mayor. Clad in their poncho, a piece of cloth or cotton in the form of a parallelogram, with an opening in the middle to give passage to the head, in large pantaloons, striped with a thousand colors, coiffed with broad-brimmed hats of Guayaquil straw, they were talking, declaiming, gesticulating.

"You are right, André," said a very obsequious young man, whom they called Milleflores.

This was the friend, the parasite of André Certa, a young mestizo of swarthy complexion, whose thin beard gave a singular appearance to his countenance.

André Certa, the son of a rich merchant killed in the last émeute of the conspirator Lafuente, had inherited a large fortune; this he freely scattered among his friends, whose humble salutations he demanded in exchange for handfuls of gold.

"Of what use are these changes in government, these eternal pronunciamientos which disturb Peru to gratify private ambition?" resumed André, in a loud voice; "what is it to me whether Gambarra or Santa Cruz rule, if there is no equality."

"Well said," exclaimed Milleflores, who, under the most republican government, could never have been the equal of a man of sense.

"How is it," resumed André Certa, "that I, the son of a merchant, can ride only in a calêche drawn by mules? Have not my ships brought wealth and prosperity to the country? Is not the aristocracy of piasters worth all the titles of Spain?"

"It is a shame!" resumed the young mestizo. "There is Don Fernand, who passes in his carriage drawn by two horses! Don Fernand d'Aiquillo! He has scarcely property enough to feed his coachman and horses, and he must come to parade himself proudly about the square. And, hold! here is another! the Marquis Don Vegal!"

A magnificent carriage, drawn by four fine horses, at that moment entered the Plaza-Mayor; its only occupant was a man of proud mien, mingled with sadness; he gazed, without seeming to see them, on the multitude assembled to breathe the coolness of the evening. This man was the Marquis Don Vegal, knight of Alcantara, of Malta, and of Charles III. He had a right to appear in this pompous equipage; the viceroy and the archbishop could alone take precedence of him; but this great nobleman came here from ennui and not from ostentation; his thoughts were not depicted on his countenance, they were concentrated beneath his bent brow; he received no impression from exterior objects, on which he bestowed not a look, and heard not the envious reflections of the mestizos, when his four horses made their way through the crowd.

"I hate that man," said André Certa.

"You will not hate him long."

"I know it! All these nobles are displaying the last splendors of their luxury; I can tell where their silver and their family jewels go."

"You have not your entrée with the Jew Samuel for nothing."

"Certainly not! On his account-books are inscribed aristocratic creditors; in his strong-box are piled the wrecks of great fortunes; and in the day when the Spaniards shall be as ragged as their Caesar de Bazan, we will have fine sport."

"Yes, we will have fine sport, dear André, mounted on your millions, on a golden pedestal! And you are about to
double your fortune! When are you to marry the beautiful young daughter of old Samuel, a Limanienne to the end of her nails, with nothing Jewish about her but her name of Sarah?"

"In a month," replied André Certa, proudly, "there will be no fortune in Peru which can compete with mine."

"But why," asked some one, "do you not espouse some Spanish girl of high descent?"

"I despise these people as much as I hate them."

André Certa concealed the fact of his having been repulsed by several noble families, into which he had sought to introduce himself.

His interlocutor still wore an expression of doubt, and the brow of the mestizo had contracted, when the latter was rudely elbowed by a man of tall stature, whose gray hairs proclaimed him to be at least fifty, while the muscular force of his firmly knit limbs seemed undiminished by age.

This man was clad in a brown vest, through which appeared a coarse shirt with a broad collar; his short breeches, striped with green, were fastened by red garters to stockings of clay-color; on his feet were sandals made of _ojotas_, ox-hide prepared for this purpose; beneath his high-pointed hat gleamed large ear-rings. His complexion was dark. After having jostled André Certa, he looked at him fixedly, but with no particular expression.

"Miserable Indian!" exclaimed the mestizo, raising his hand upon him.

His companions restrained him. Milleflores, whose face was pale with terror, exclaimed:

"André! André! take care."

"A vile slave! to presume to elbow me!"

"It is a madman! it is the _Sambo_!"

The _Sambo_, as the name indicated, was an Indian of the mountains; he continued to fix his eyes on the mestizo, whom he had intentionally jostled. The latter, whose anger was unbounded, had seized a poignard at his girdle, and was about to have rushed on the impassable aggressor, when a guttural cry, like that of the _cilguero_, (a kind of linnet of Peru,) re-echoed in the midst of the tumult of promenaders, and the Sambo disappeared.

"Brutal and cowardly!" exclaimed André.

"Control yourself," said Milleflores, softly. "Let us leave the Plaza-Mayor; the Limanienne ladies are too haughty here."

As he said these words, the brave Milleflores looked cautiously around to see whether he was not within reach of the foot or arm of some Indian in the neighborhood.

"In an hour, I must be at the house of Jew Samuel," said André.

"In an hour! we have time to pass to the _Calle del Peligro_; you can offer some oranges or ananas to the charming _tapadas_ who promenade there. Shall we go, gentlemen?"

The group directed their steps toward the extremity of the square, and began to descend the street of Danger, where Milleflores hoped his good looks would be appreciated; but it was nightfall, and the young Limaniennes merited better than ever their name of _tapadas_ (hidden), for they drew their mantles more closely over their countenances.

The Plaza-Mayor was all alive; the cries and the tumult were redoubled; the guards on horseback, stationed before the central portico of the viceroy's palace, situated on the north side of the square, could scarcely maintain their position amid the shifting crowd; there were merchants for all customers and customers for all merchants. The greatest variety of trades seemed to be congregated there, and from the _Portal de Escribanos_ to the _Portal de Botoneros_, there was one immense display of articles of every kind, the Plaza-Mayor serving at once as promenade, bazaar, market and fair. The ground-floor of the viceroy's palace is occupied by shops; along the first story runs an immense gallery for this purpose; the crowd can promenade on days of public rejoicing; on the east side of the square rises the cathedral, with its steeples and light balustrades, proudly adorning its two towers; the basement story of the edifice being ten feet high, and containing warehouses full of the products of tropical climates.

In the centre of this square is situated the beautiful fountain, constructed in 1653, by the orders of the viceroy, the Comte de Salvatierra. From the top of the pillar, which rises in the middle of the fountain and is surmounted with a statue of Fame, the water falls in sheets, and is discharged into a basin beneath through the mouths of lions. It is here that the water-carriers (_aguadores_) load their mules with barrels, attach a bell to a hoop, and mount behind their liquid merchandise.

This square is therefore noisy from morning till evening, and when the stars of night rise above the snowy summits of the Cordilleras, the tumult of the _élite_ of Lima equals the matinal hubbub of the merchants.

Nevertheless, when the _oracion_ (evening _angelus_) sounds from the bell of the cathedral, all this noise suddenly ceases; to the clamor of pleasure succeeds the murmur of prayer; the women pause in their walk and put their hands on their rosaries, invoking the Virgin Mary. Then, not a merchant dares sell his merchandise, not a customer thinks of buying, and this square, so recently animated, seems to have become a vast solitude.

While the Limanians paused and knelt at the sound of the _angelus_, a young girl, carefully surrounded by her
discreet mantle, sought to pass through the praying multitude; she was followed by a mestizo woman, a sort of
duenna, who watched every glance and step. The duenna, as if she had not understood the warning bell, continued
her way through the devout populace: to the general surprise succeeded harsh epithets. The young girl would have
stopped, but the duenna kept on.

"Do you see that daughter of Satan?" said some one near her.

"Who is that _balarina_—that impious dancer?"

"It is one of the Carcaman women." (A reproachful name bestowed upon Europeans.)

The young girl at last stopped, blushing and confused.

Suddenly a _gaucho_, a merchant of mules, seized her by the shoulder, and would have compelled her to kneel;
but he had scarcely laid his hand upon her when a vigorous arm rudely felled him to the ground. This scene, rapid as
lightning, was followed by a moment of confusion.

"Save yourself, miss," said a gentle and respectful voice in the ear of the young girl.

The latter turned, pale with terror, and saw a young Indian of tall stature, who, with his arms tranquilly folded,
was awaiting with firm foot the attack of his adversary.

"We are lost!" exclaimed the duenna; "_niña, niña_, let us go, for the love of God!" and she seized the arm of the
young girl, who disappeared, while the crowd rose and dispersed.

The _gaucho_ had risen, bruised with his fall, and thinking it not prudent to seek revenge, rejoined his mules,
muttering threats.

CHAPTER II.

EVENING IN THE STREETS OF LIMA.

Night had succeeded, almost without intervening twilight, the glare of day. The two women quickened their
pace, for it was late; the young girl, still under the influence of strong emotion, maintained silence, while the duenna
murmured some mysterious paternosters—they walked rapidly through one of the sloping streets leading from the
Plaza-Mayor.

This place is situated more than four hundred feet above the level of the sea, and about a hundred and fifty rods
from the bridge thrown over the river Rimac, which forms the diameter of the city of Lima, arranged in a semicircle.

The city of Lima lies in the valley of the Rimac, nine leagues from its mouth; at the north and east commence the
first undulations of ground which form a part of the great chain of the Andes: the valley of Lungaucho, formed by
the mountains of San Cristoval and the Amancaës, which rise behind Lima, terminates in its suburbs. The city lies
on one bank of the river; the other is occupied by the suburb of San Lazaro, and is united to the city by a bridge of
five arches, the upper piers of which are triangular to break the force of the current; while the lower ones present to
the promenaders circular benches, on which the fashionables may lounge during the summer evenings, and where
they can contemplate a pretty cascade.

The city is two miles long from east to west, and only a mile and a quarter wide from the bridge to the walls; the
latter, twelve feet in height, ten feet thick at their base, are built of _adobes_, a kind of brick dried in the sun, and
made of potter's clay mingled with a great quantity of chopped straw: these walls are calculated to resist
earthquakes; the enclosure, pierced with seven gates and three posterns, terminates at its south-east extremity by the
little citadel of Santa Caterina.

Such is the ancient city of kings, founded in 1534 by Pizarro, on the day of Epiphany; it has been and is still the
theatre of constantly renewed revolutions. Lima, situated three miles from the sea, was formerly the principal
storehouse of America on the Pacific Ocean, thanks to its Port of Callao, built in 1779, in a singular manner. An old
vessel, filled with stones, sand, and rubbish of all sorts, was wrecked on the shore; piles of the mangrove-tree,
brung from Guayaquil and impervious to water, were driven around this as a centre, which became the immovable
base on which rose the mole of Callao.

The climate, milder and more temperate than that of Carthagena or Bahia, situated on the opposite side of
America, makes Lima one of the most agreeable cities of the New World: the wind has two directions from which it
never varies; either it blows from the south-east, and becomes cool by crossing the Pacific Ocean; or it comes from
the south-west, impregnated with the mild atmosphere of the forests and the freshness which it has derived from the
icy summits of the Cordilleras.

The nights beneath tropical latitudes are very beautiful and very clear; they mysteriously prepare that beneficent
dew which fertilizes a soil exposed to the rays of a cloudless sky—so the inhabitants of Lima prolong their nocturnal
conversations and receptions; household labors are quietly finished in the dwellings refreshed by the shadows, and
the streets are soon deserted; scarcely is some _pulperia_ still haunted by the drinkers of _chica_ or _quarapo_.

These, the young girl, whom we have seen, carefully avoided; crossing in the middle of the numerous squares
scattered about the city, she arrived, without interruption, at the bridge of the Rimac, listening to catch the slightest sound—which her emotion exaggerated, and hearing only the bells of a train of mules conducted by its _arriero_, or the joyous _stribillo_ of some Indian.

This young girl was called Sarah, and was returning to the house of the Jew Samuel, her father; she was clad in a _saya_ of satin—a kind of petticoat of a dark color, plaited in elastic folds, and very narrow at the bottom, which compelled her to take short steps, and gave her that graceful delicacy peculiar to the Limanienne ladies; this petticoat, ornamented with lace and flowers, was in part covered with a silk mantle, which was raised above the head and enveloped it like a hood; stockings of exquisite fineness and little satin shoes peeped out beneath the graceful _saya_; bracelets of great value encircled the arms of the young girl, whose rich toilet was of exquisite taste, and her whole person redolent of that charm so well expressed by the Spanish word _donaire_.

Milleflores might well say to André Certa that his betrothed had nothing of the Jewess but the name, for she was a faithful specimen of those admirable señoras whose beauty is above all praise.

The duenna, an old Jewess, whose countenance was expressive of avarice and cupidity, was a devoted servant of Samuel, who paid her liberally.

At the moment when these two women entered the suburb of San Lazaro, a man, clad in the robe of a monk, and with his head covered with a cowl, passed near them and looked at them attentively. This man, of tall stature, possessed a countenance expressive of gentleness and benevolence; it was Padre Joachim de Camarones; he threw a glance of intelligence on Sarah, who immediately looked at her follower.

The latter was still grumbling, muttering and whining, which prevented her seeing any thing; the young girl turned toward the good father and made a graceful sign with her hand.

"Well, señora," said the old woman, sharply, "is it not enough to have been insulted by these Christians, that you should stop to look at a priest?"

Sarah did not reply.

"Shall we see you one day, with rosary in hand, engaged in the ceremonies of the church?"

The ceremonies of the church—_las funciones de iglesia_—are the great business of the Limanian ladies.

"You make strange suppositions," replied the young girl, blushing.

"Strange as your conduct! What would my master Samuel say, if he knew what had taken place this evening?"

"Am I to blame because a brutal muleteer chose to address me?"

"I understand, señora," said the old woman, shaking her head, "and will not speak of the _gaucho__._"

"Then the young man did wrong in defending me from the abuse of the populace?"

"Is it the first time the Indian has thrown himself in your way?"

The countenance of the young girl was fortunately sheltered by her mantle, for the darkness would not have sufficed to conceal her emotion from the inquisitive glance of the duenna.

"But let us leave the Indian where he is," resumed the old woman, "it is not my business to watch him. What I complain of is, that in order not to disturb these Christians, you wished to remain among them! Had you not some desire to kneel with them? Ah, señora, your father would soon dismiss me if I were guilty of such apostasy."

But the young girl no longer heard; the remark of the old woman on the subject of the young Indian had inspired her with sweeter thoughts; it seemed to her that the intervention of this young man was providential; and she turned several times to see if he had not followed her in the shadow. Sarah had in her heart a certain natural confidence which became her wonderfully; she felt herself to be the child of these warm latitudes, which the sun decorates with surprising vegetation; proud as a Spaniard, if she had fixed her regards on this man, it was because he had stood proudly in the presence of her pride, and had not begged a glance as a reward of his protection.

In imagining that the Indian was near her, Sarah was not mistaken; Martin Paz, after having come to the assistance of the young girl, wished to ensure her safe retreat; so when the promenaders had dispersed, he followed her, without being perceived by her, but without concealing himself; the darkness alone favoring his pursuit.

This Martin Paz was a handsome young man, wearing with unparalleled nobility the national costume of the Indian of the mountains; from his broad-brimmed straw hat escaped fine black hair, whose curls harmonized with the bronze of his manly face. His eyes shone with infinite sweetness, like the transparent atmosphere of starry nights; his well-formed nose surmounted a pretty mouth, unlike that of most of his race. He was one of the noblest descendants of Manco-Capac, and his veins were full of that ardent blood which leads men to the accomplishment of lofty deeds.

He was proudly draped in his _poncho_ of brilliant colors; at his girdle hung one of those Malay poignards, so terrible in a practiced hand, for they seem to be riveted to the arm which strikes. In North America, on the shores of Lake Ontario, Martin Paz would have been a great chief among those wandering tribes which have fought with the English so many heroic combats.

Martin Paz knew that Sarah was the daughter of the wealthy Samuel; he knew her to be the most charming
woman in Lima; he knew her to be betrothed to the opulent mestizo André Certa; he knew that by her birth, her position and her wealth she was beyond the reach of his heart; but he forgot all these impossibilities in his all-absorbing passion. It seemed to him that this beautiful young girl belonged to him, as the llama to the Peruvian forests, as the eagle to the depths of immensity.

Plunged in his reflections, Martin Paz hastened his steps to see the saya of the young girl sweep the threshold of the paternal dwelling; and Sarah herself, half-opening then her mantilla, cast on him a bewildering glance of gratitude.

He was quickly joined by two Indians of the species of zambos, pillagers and robbers, who walked beside him.

"Martin Paz," said one of them to him, "you ought this very evening to meet our brethren in the mountains."

"I shall be there," coldly replied the other.

"The schooner Annonciation has appeared in sight from Callao, tacked for a few moments, then, protected by the point, rapidly disappeared. She will undoubtedly approach the land near the mouth of the Rimac, and our bark canoes must be there to relieve her of her merchandise. We shall need your presence."

"You are losing time by your observations. Martin Paz knows his duty and he will do it."

"It is in the name of the Sambo that we speak to you here."

"It is in my own name that I speak to you."

"Do you not fear that he will find your presence in the suburb of San Lazaro at this hour unaccountable?"

"I am where my fancy and my will have brought me."

"Before the house of the Jew?"

"Those of my brethren who are disposed to find fault can meet me to-night in the mountain."

The eyes of the three men sparkled, and this was all. The zambos regained the bank of the Rimac, and the sound of their footsteps died away in the darkness.

Martin Paz had hastily approached the house of the Jew. This house, like all those of Lima, had but two stories; the ground floor, built of bricks, was surmounted with walls formed of canes tied together and covered with plaster; all this part of the building, constructed to resist earthquakes, imitated, by a skillful painting, the bricks of the lower story; the square roof, called asoetas, was covered with flowers, and formed a terrace full of perfumes and pretty points of view.

A vast gate, placed between two pavilions, gave access to a court; but as usual, these pavilions had no window opening upon the street.

The clock of the parish church was striking eleven when Martin Paz stopped before the dwelling of Sarah. Profound silence reigned around; a flickering light within proved that the saloon of the Jew Samuel was still occupied.

Why does the Indian stand motionless before these silent walls? The cool atmosphere woos him with its transparency and its perfumes; the radiant stars send down upon the sleeping earth rays of diaphanous mildness; the white constellations illumine the darkness with their enchanting light; his heart believes in those sympathetic communications which brave time and distance.

A white form appears upon the terrace amid the flowers to which night has only left a vague outline, without diminishing their delicious perfumes; the dahlias mingle with the mentzelias, with the helianthus, and, beneath the occidental breeze, form a waving basket which surrounds Sarah, the young and beautiful Jewess.

Martin Paz involuntarily raises his hands and clasps them with adoration. Suddenly the white form sinks down, as if terrified.

Martin Paz turns, and finds himself face to face with André Certa.

"Since when do the Indians pass their nights in contemplation?"

André Certa spoke angrily.

"Since the Indians have trodden the soil of their ancestors."

"Have they no longer, on the mountain side, some yaravis to chant, some boleros to dance with the girls of their caste?"

"The cholos," replied the Indian, in a high voice, "bestow their devotion where it is merited; the Indians love according to their hearts."

André Certa became pale with anger; he advanced a step toward his immovable rival.

"Wretch! will you quit this place?"

"Rather quit it yourself," shouted Martin Paz; and two poignards gleamed in the two right hands of the adversaries; they were of equal stature, they seemed of equal strength, and the lightnings of their eyes were reflected in the steel of their arms.

André Certa rapidly raised his arm, which he dropped still more quickly. But his poignard had encountered the
Malay poignard of the Indian; at the fire which flashed from this shock, André saw the arm of Martin Paz suspended over his head, and immediately rolled on the earth, his arm pierced through.

"Help, help!" he exclaimed.

The door of the Jew's house opened at his cries. Some mestizoes ran from a neighboring house; some pursued the Indian, who fled rapidly; others raised the wounded man. He had swooned.

"Who is this man?" said one of them. "If he is a sailor, take him to the hospital of Spiritu Santo; if an Indian, to the hospital of Santa Anna."

An old man advanced toward the wounded youth; he had scarcely looked upon him when he exclaimed:

"Let the poor young man be carried into my house. This is a strange mischance."

This man was the Jew Samuel; he had just recognized the betrothed of his daughter.

Martin Paz, thanks to the darkness and the rapidity of his flight, may hope to escape his pursuers; he has risked his life; an Indian assassin of a mestizo! If he can gain the open country he is safe, but he knows that the gates of the city are closed at eleven o'clock in the evening, not to be re-opened till four in the morning.

He reaches at last the stone bridge which he had already crossed. The Indians, and some soldiers who had joined them, pursue him closely; he springs upon the bridge. Unfortunately a patrol appears at the opposite extremity; Martin Paz can neither advance nor retrace his steps; without hesitation he clears the parapet and leaps into the rapid current which breaks against the corners of the stones.

The pursuers spring upon the banks below the bridge to seize the swimmer at his landing.

But it is in vain; Martin Paz does not re-appear.

CHAPTER III.

THE JEW EVERY WHERE A JEW.

André Certa, once introduced into the house of Samuel, and laid in a bed hastily prepared, recovered his senses and pressed the hand of the old Jew. The physician, summoned by one of the domestics, was promptly in attendance. The wound appeared to be a slight one; the shoulder of the mestizo had been pierced in such a manner that the steel had only glided among the flesh. In a few days, André Certa might be once more upon his feet.

When Samuel was left alone with André, the latter said to him:

"You would do well to wall up the gate which leads to your terrace, Master Samuel."

"What fear you, André?"

"I fear lest Sarah should present herself there to the contemplation of the Indians. It was not a robber who attacked me; it was a rival, from whom I have escaped but by miracle!"

"By the holy tables, it is a task to bring up young girls!" exclaimed the Jew. "But you are mistaken, señor," he resumed, "Sarah will be a dutiful spouse. I spare no pains that she may do you honor."

André Certa half raised himself on his elbow.

"Master Samuel, there is one thing which you do not enough remember, that I pay you for the hand of Sarah a hundred thousand piasters."

"Señor," replied the Jew, with a miserly chuckle, "I remember it so well, that I am ready now to exchange this receipt for the money."

As he said this, Samuel drew from his pocket-book a paper which André Certa repulsed with his hand.

"The bargain is not complete until Sarah has become my wife, and she will never be such if her hand is to be disputed by such an adversary. You know, Master Samuel, what is my object; in espousing Sarah, I wish to be the equal of this nobility which casts such scornful glances upon us."

"And you will, señor, for you see the proudest grandees of Spain throng our saloons, around the pearl of Lima."

"Where has Sarah been this evening?"

"To the Israelitish temple, with old Ammon."

"Why should Sarah attend your religious rites?"

"I am a Jew, señor," replied Samuel proudly, "and would Sarah be my daughter if she did not fulfill the duties of my religion?"

The old Jew remained sad and silent for several minutes. His bent brow rested on one of his withered hands. His face usually bronze, was now almost pale; beneath a brown cap appeared locks of an indescribable color. He was clad in a sort of great-coat fastened around the waist.

This old man trafficked every where and in every thing; he might have been a descendant of the Judas who sold his Master for thirty pieces of silver. He had been a resident of Lima ten years; his taste and his economy had led him to choose his dwelling at the extremity of the suburb of San Lazaro, and from thence he entered into various speculations to make money. By degrees, Samuel assumed a luxury uncommon in misers; his house was
sumptuously furnished; his numerous domestics, his splendid equipages betokened immense revenues. Sarah was then eight years of age. Already graceful and charming, she pleased all, and was the idol of the Jew. All her inclinations were unhesitatingly gratified. Always elegantly dressed, she attracted the eyes of the most fastidious, of which her father seemed strangely careless. It will readily be understood how the mestizo, André Certa, became enamored of the beautiful Jewess. What would have appeared inexplicable to the public, was the hundred thousand piasters, the price of her hand; but this bargain was secret. And besides, Samuel trafficked in sentiments as in native productions. A banker, usurer, merchant, ship-owner, he had the talent to do business with everybody. The schooner _Annonciation_, which was hovering about the mouth of the Rimac, belonged to the Jew Samuel.

Amid this life of business and speculation this man fulfilled the duties of his religion with scrupulous punctuality; his daughter had been carefully instructed in the Israelitish faith and practices.

So, when the mestizo had manifested his displeasure on this subject, the old man remained mute and pensive, and André Certa broke the silence, saying:

"Do you forget that the motive for which I espouse Sarah will compel her to become a convert to Catholicism? It is not my fault," added the mestizo; "but in spite of you, in spite of me, in spite of herself, it will be so."

"You are right," said the Jew sadly; "but, by the Bible, Sarah shall be a Jewess as long as she is my daughter."

At this moment the door of the chamber opened, and the major-domo of the Jew Samuel respectfully entered.

"Is the murderer arrested?" asked the old man.

"We have reason to believe he is dead!"

"Dead!" repeated André, with a joyful exclamation.

"Caught between us and a company of soldiers," replied the major-domo, "he was obliged to leap over the parapet of the bridge."

"He has thrown himself into the Rimac!" exclaimed André.

"And how do you know that he has not reached the shore?" asked Samuel.

"The melting of the snow has made the current rapid at that spot; besides, we stationed ourselves on each side of the river, and he did not re-appear. I have left sentinels who will pass the night in watching the banks."

"It is well," said the old man; "he has met with a just fate. Did you recognize him in his flight?"

"Perfectly, sir; it was Martin Paz, the Indian of the mountains."

"Has this man been observing Sarah for some time past?"

"I do not know," replied the servant.

"Summon old Ammon."

The major-domo withdrew.

"These Indians," said the old man, "have secret understandings among themselves; I must know whether the pursuit of this man dates from a distant period."

The duenna entered, and remained standing before her master.

"Does my daughter," asked Samuel, "know any thing of what has taken place this morning?"

"When the cries of your servants awoke me, I ran to the chamber of the señora, and found her almost motionless and of a mortal paleness."

"Fatality!" said Samuel; "continue," added he, seeing that the mestizo was apparently asleep.

"To my urgent inquiries as to the cause of her agitation, the señora would not reply; she retired without accepting my services, and I withdrew."

"Has this Indian often thrown himself in her way?"

"I do not know, master; nevertheless I have often met him in the streets of San Lazaro."

"And you have told me nothing of this?"

"He came to her assistance this evening on the Plaza-Mayor," added the old duenna.

"Her assistance! how?"

The old woman related the scene with downcast head.

"Ah! my daughter wish to kneel among these Christians!" exclaimed the Jew, angrily; "and I knew nothing of all this! You deserve that I should dismiss you."

The duenna went out of the room in confusion.

"Do you not see that the marriage should take place soon?" said André Certa. "I am not asleep, Master Samuel! But I need rest, now, and I will dream of our espousals."

At these words, the old man slowly retired. Before regaining his room, he wished to assure himself of the condition of his daughter, and softly entered the chamber of Sarah.

The young girl was in an agitated slumber, in the midst of the rich silk drapery around her; a watch-lamp of alabaster, suspended from the arabesques of the ceiling, shed its soft light upon her beautiful countenance; the half-open window admitted, through lowered blinds, the quiet coolness of the air, impregnated with the penetrating
perfumes of the aloes and magnolia; creole luxury was displayed in the thousand objects of art which good taste and grace had dispersed on richly carved _étagères_; and, beneath the vague and placid rays of night, it seemed as if the soul of the child was sporting amid these wonders.

The old man approached the bed of Sarah: he bent over her to listen. The beautiful Jewess seemed disturbed by sorrowful thoughts, and more than once the name of Martin Paz escaped her lips.

Samuel regained his chamber, uttering maledictions.

At the first rays of morning, Sarah hastily arose. Liberta, a full-blooded Indian attached to her service, hastened to her; and, in pursuance of her orders, saddled a mule for his mistress and a horse for himself.

Sarah was accustomed to take morning-rides, accompanied by this Indian, who was entirely devoted to her.

She was clad in a _saya_ of a brown color, and a mantle of cashmere with long tassels; her head was not covered with the usual hood, but sheltered beneath the broad brim of a straw hat, which left her long black tresses to float over her shoulders; and to conceal any unusual pre-occupation, she held between her lips a _cigarette_ of perfumed tobacco.

Liberta, clad like an Indian of the mountains, prepared to accompany his mistress.

"Liberta," said the young girl to him, "remember to be blind and dumb."

Once in the saddle, Sarah left the city as usual, and began to ride through the country; she directed her way toward Callao. The port was in full animation: there had been a conflict during the night between the revenue-officers and a schooner, whose undecided movements betrayed a fraudulent speculation. The _Annonciation_ seemed to have been awaiting some suspicious barks near the mouth of the Rimac; but before the latter could reach her, she had been compelled to flee before the custom-house boats, which had boldly given her chase.

Various rumors were in circulation respecting the destination of this vessel—which bore no name on her stern. According to some, this schooner, laden with Colombian troops, was seeking to seize the principal vessels of Callao; for Bolivar had it in his heart to revenge the affront given to the soldiers left by him in Peru, and who had been driven from it in disgrace.

According to others, the schooner was simply a smuggler of European goods.

Without troubling herself about these rumors, more or less important, Sarah, whose ride to the port had been only a pretext, returned toward Lima, which she reached near the banks of the Rimac.

She ascended them toward the bridge: numbers of soldiers, mestizoes, and Indians, were stationed at various points on the shore.

Liberta had acquainted the young girl with the events of the night. In compliance with her orders, he interrogated some Indians leaning over the parapet, and learned that although Martin Paz had been undoubtedly drowned, his body had not yet been recovered.

Sarah was pale and almost fainting; it required all her strength of soul not to abandon herself to her grief.

Among the people wandering on the banks, she remarked an Indian with ferocious features—the Sambo! He was crouched on the bank, and seemed a prey to despair.

As Sarah passed near the old mountaineer, she heard these words, full of gloomy anger:

"Wo! wo! They have killed the son of the Sambo! They have killed my son!"

The young girl resolutely drew herself up, made a sign to Liberta to follow her; and this time, without caring whether she was observed or not, went directly to the church of Santa Anna; left her mule in charge of the Indian, entered the Catholic temple, and asking for the good Father Joachim, knelt on the stone steps, praying to Jesus and Mary for the soul of Martin Paz.

CHAPTER IV.

A SPANISH GRANDEE.

Any other than the Indian, Martin Paz, would have, indeed, perished in the waters of the Rimac; to escape death, his surprising strength, his insurmountable will, and especially his sublime coolness, one of the privileges of the free hordes of the _pampas_ of the New World, had all been found necessary.

Martin knew that his pursuers would concentrate their efforts to seize him below the bridge; it seemed impossible for him to overcome the current, and that the Indian must be carried down; but by vigorous strokes he succeeded in stemming the torrent; he dived repeatedly, and finding the under-currents less strong, at last ventured to land, and concealed himself behind a thicket of mangrove-trees.

But what was to become of him? Retreat was perilous; the soldiers might change their plans and ascend the river; the Indian must then inevitably be captured; he would lose his life, and, worse yet, Sarah. His decision was rapidly made; through the narrow streets and deserted squares he plunged into the heart of the city; but it was important that he should be supposed dead; he therefore avoided being seen, since his garments, dripping with water
and covered with sea-weed, would have betrayed him.

To avoid the indiscreet glances of some belated inhabitants, Martin Paz was obliged to pass through one of the widest streets of the city; a house still brilliantly illuminated presented itself: the _port-cochere_ was open to give passage to the elegant equipages which were issuing from the court, and conveying to their respective dwellings the nobles of the Spanish aristocracy.

The Indian adroitly glided into this magnificent dwelling; he could not remain in the street, where curious _zambos_ were thronging around, attracted by the carriages. The gates of the hotel were soon carefully closed, and the Indian found flight impossible.

Some lacqueys were going to and fro in the court; Martin Paz rapidly passed up a rich stairway of cedar-wood, ornamented with valuable tapestry; the saloons, still illuminated, presented no convenient place of refuge; he crossed them with the rapidity of lightning, and disappeared in a room filled with protecting darkness.

The last lustres were quickly extinguished, and the house became profoundly silent.

The Indian Paz, as a man of energy to whom moments are precious, hastened to reconnoitre the place, and to find the surest means of evasion; the windows of this chamber opened on an interior garden; flight was practicable, and Martin Paz was about to spring from them, when he heard these words:

"Señor, you have forgotten to take the diamonds which I had left on that table!"

Martin Paz turned. A man of noble stature and of great pride of countenance was pointing to a jewel-case.

At this insult Martin Paz laid his hand on his poignard. He approached the Spaniard, who stood unmoved, and, in a first impulse of indignation, raised his arm to strike him; but turning his weapon against himself, said, in a deep tone,

"Señor, if you repeat such words, I will kill myself at your feet."

The Spaniard, astonished, looked at the Indian more attentively, and through his tangled and dripping locks perceived so lofty a frankness, that he felt a strange sympathy fill his heart. He went toward the window, gently closed it, and returned toward the Indian, whose poignard had fallen to the ground.

"Who are you?" said he to him.

"The Indian, Martin Paz. I am pursued by soldiers for having defended myself against a mestizo who attacked me, and levelled him to the ground with a blow from my poignard. This mestizo is the betrothed of a young girl whom I love. Now, señor, you can deliver me to my enemies, if you judge it noble and right."

"Sir," replied the Spaniard, gravely, "I depart to-morrow for the Baths of Chorillos; if you please to accompany me, you will be for the present safe from pursuit, and will never have reason to complain of the hospitality of the Marquis Don Vegal."

Martin Paz bent coldly without manifesting any emotion.

"You can rest until morning on this bed," resumed Don Vegal; "no one here will suspect your retreat. Good-night, señor!"

The Spaniard went out of the room, and left the Indian, moved to tears by a confidence so generous; he yielded himself entirely to the protection of the marquis, and without thinking that his slumbers might be taken advantage of to seize him, slept with peaceful security.

The next day, at sunrise, the marquis gave the last orders for his departure, and summoned the Jew Samuel to come to him; in the meantime he attended the morning mass.

This was a custom generally observed by the aristocracy. From its very foundation Lima had been essentially Catholic. Besides its numerous churches, it numbered twenty-two convents, seventeen monasteries, and four _beaterios_, or houses of retreat for females who did not take the vows. Each of these establishments possessed a chapel, so that there were at Lima more than a hundred edifices for worship, where eight hundred secular or regular priests, three hundred _religieuses_, lay-brothers and sisters, performed the duties of religion.

As Don Vegal entered the church of Santa Anna, he noticed a young girl kneeling in prayer and in tears. There was so much of grief in her depression, that the marquis could not look at her without emotion; and he was preparing to console her by some kind words, when Father Joachim de Camarones approached him, saying in a low voice:

"Señor Don Vegal, pray do not approach her."

Then he made a sign to Sarah, who followed him to an obscure and deserted chapel.

Don Vegal directed his steps to the altar and listened to the mass; then, as he was returning, he thought involuntarily of the deep sadness of the kneeling maiden. Her image followed him to his hotel, and remained deeply engraven in his soul.

Don Vegal found in his saloon the Jew Samuel, who had come in compliance with his request. Samuel seemed to have forgotten the events of the night; the hope of gain animated his countenance with a natural gayety.

"What is your lordship's will?" asked he of the Spaniard.
"I must have thirty thousand piasters within an hour."
"Thirty thousand piasters! And who has them! By the holy king David, my lord, I am far from being able to furnish such a sum."
"Here are some jewels of great value," resumed Don Vegal, without noticing the language of the Jew; "besides I can sell you at a low price a considerable estate near Cusco."
"Ah! señor, lands ruin us—we have not arms enough left to cultivate them; the Indians have withdrawn to the mountains, and our harvests do not pay us for the trouble they cost."
"At what value do you estimate these diamonds?"
Samuel drew from his pocket a little pair of scales and began to weigh the stones with scrupulous skill. As he did this, he continued to talk, and, as was his custom, depreciated the pledges offered him.
"Diamonds! a poor investment! What would they bring? One might as well bury money! You will notice, señor, that this is not of the purest water. Do you know that I do not find a ready market for these costly ornaments? I am obliged to send such merchandise to the United Provinces! The Americans would buy them, undoubtedly, but to give them up to the sons of Albion. They wish besides, and it is very just, to gain an honest per centage, so that the depreciation falls upon me. I think that ten thousand piasters should satisfy your lordship. It is little, I know; but----"
"Have I not said," resumed the Spaniard, with a sovereign air of scorn, "that ten thousand piasters would not suffice?"
"Señor, I cannot give you a half real more!"
"Take away these caskets and bring me the sum I ask for. To complete the thirty thousand piasters which I need, you will take a mortgage on this house. Does it seem to you to be solid?"
"Ah, señor, in this city, subject to earthquakes, one knows not who lives or dies, who stands or falls."
And, as he said this, Samuel let himself fall on his heels several times to test the solidity of the floors.
"Well, to oblige your lordship, I will furnish you with the required sum; although, at this moment I ought not to part with money; for I am about to marry my daughter to the _caballero_ André Certa. Do you know him, sir?"
"I do not know him, and I beg of you to send me this instant, the sum agreed upon. Take away these jewels."
"Will you have a receipt for them?" asked the Jew.
Don Vegal passed into the adjoining room, without replying.
"Proud Spaniard!" muttered Samuel, "I will crush thy insolence, as I disperse thy riches! By Solomon! I am a skillful man, since my interests keep pace with my sentiments."

Don Vegal, on leaving the Jew, had found Martin Paz in profound dejection of spirits, mingled with mortification.
"What is the matter?" he asked affectionately.
"Señor, it is the daughter of the Jew whom I love."
"A Jewess!" exclaimed Don Vegal, with disgust.
But seeing the sadness of the Indian, he added:
"Let us go, _amigo_, we will talk of these things afterward!"

An hour later, Martin Paz, clad in Spanish costume, left the city, accompanied by Don Vegal, who took none of his people with him.

The Baths of Chorillos are situated at two leagues from Lima. This Indian parish possesses a pretty church; during the hot season it is the rendezvous of the fashionable Limanian society. Public games, interdicted at Lima, are permitted at Chorillos during the whole summer. The señoras there display unwonted ardor, and, in decorating himself for these pretty partners, more than one rich cavalier has seen his fortune dissipated in a few nights.

Chorillos was still little frequented; so Don Vegal and Martin Paz retired to a pretty cottage, built on the seashore, could live in quiet contemplation of the vast plains of the Pacific Ocean.

The Marquis Don Vegal, belonging to one of the most ancient families of Peru, saw about to terminate in himself the noble line of which he was justly proud; so his countenance bore the impress of profound sadness. After having mingled for some time in political affairs, he had felt an inexpressible disgust for the incessant revolutions brought about to gratify personal ambition; he had withdrawn into a sort of solitude, interrupted only at rare intervals by the duties of strict politeness.

His immense fortune was daily diminishing. The neglect into which his vast domains had fallen for want of laborers, had compelled him to borrow at a disadvantage; but the prospect of approaching mediocrity did not alarm him; that carelessness natural to the Spanish race, joined to the ennui of a useless existence, had rendered him insensible to the menaces of the future. Formerly the husband of an adored wife, the father of a charming little girl, he had seen himself deprived, by a horrible event, of both these objects of his love. Since then, no bond of affection had attached him to earth, and he suffered his life to float at the will of events.

Don Vegal had thought his heart to be indeed dead, when he felt it palpitate at contact with that of Martin Paz.
This ardent nature awoke fire beneath the ashes; the proud bearing of the Indian suited the chivalric hidalgo; and then, weary of the Spanish nobles, in whom he no longer had confidence, disgusted with the selfish mestizoes, who wished to aggrandize themselves at his expense, he took a pleasure in turning to that primitive race, who have disputed so valiantly the American soil with the soldiers of Pizarro.

According to the intelligence received by the marquis, the Indian passed for dead at Lima; but, looking on his attachment for the Jewess as worse than death itself, the Spaniard resolved doubly to save his guest, by leaving the daughter of Samuel to marry André Certa.

While Martin Paz felt an infinite sadness pervade his heart, Don Vegal avoided all allusion to the past, and conversed with the young Indian on indifferent subjects.

Meanwhile, one day, saddened by his gloomy preoccupations, the Spaniard said to him:

"Why, my friend, do you lower the nobility of your nature by a sentiment so much beneath you? Was not that bold Manco-Capac, whom his patriotism placed in the rank of heroes, your ancestor? There is a noble part left for a valiant man, who will not suffer himself to be overcome by an unworthy passion. Have you no heart to regain your independence?"

"We are laboring for this, señor," said the Indian; "and the day when my brethren shall rise _en masse_ is perhaps not far distant."

"I understand you; you allude to the war for which your brethren are preparing among their mountains; at a signal they will descend on the city, arms in hand--and will be conquered as they have always been! See how your interests will disappear amid these perpetual revolutions of which Peru is the theatre, and which will ruin it entirely, Indians and Spaniards, to the profit of the mestizoes, who are neither."

"We will save it ourselves," exclaimed Martin Paz.

"Yes, you will save it if you understand how to play your part! Listen to me, Paz, you whom I love from day to day as a son! I speak only the truth, and I should perjure myself were I to take an oath to that effect."

Don Vegal was silent. The passion of the young Indian increased from day to day; the marquis trembled to see him incur certain death by re-appearing at Lima. He hastened by all his desires, he would have hastened by all his efforts, the marriage of the Jewess!

To ascertain himself the state of things he quitted Chorillos one morning, returned to the city, and learned that André Certa had recovered from his wound. His approaching marriage was the topic of general conversation.

Don Vegal wished to see this woman whose image troubled the mind of Martin Paz. He repaired, at evening, to the Plaza-Mayor. The crowd was always numerous there. There he met Father Joachim de Camarones, his confessor and his oldest friend; he acquainted him with his mode of life. What was the astonishment of the good father to learn the existence of Martin Paz. He promised Don Vegal to watch also himself over the young Indian, and to convey to the marquis any intelligence of importance.

Suddenly the glances of Don Vegal rested on a young girl, enveloped in a black mantle, reclining in a calèche.

"Who is that beautiful person?" asked he of the father.

"It is the betrothed of André Certa, the daughter of the Jew Samuel."

"She! the daughter of the Jew!"

The marquis could hardly suppress his astonishment, and, pressing the hand of Father Joachim, pensively took the road to Chorillos.

He had just recognized in Sarah, the pretended Jewess, the young girl whom he had seen praying with such Christian fervor, at the church of Santa Anna.

CHAPTER V.
The Hatred of the Indians.
Since the Colombian troops, confided by Bolivar to the orders of General Santa Cruz, had been driven from lower Peru, this country, which had been incessantly agitated by _pronunciamentos_, military revolts, had recovered some calmness and tranquillity.

In fact, private ambition no longer had anything to expect; the president Gambarra seemed immovable in his palace of the Plaza-Mayor. In this direction there was nothing to fear; but the true danger, concealed, imminent, was not from these rebellions, as promptly extinguished as kindled, and which seemed to flatter the taste of the Americans for military parades.

This unknown peril escaped the eyes of the Spaniards, too lofty to perceive it, and the attention of the mestizoes, who never wished to look beneath them.

And yet there was an unusual agitation among the Indians of the city; they often mingled with the _serranos_, the inhabitants of the mountains; these people seemed to have shaken off their natural apathy. Instead of rolling themselves in their _ponchos_, with their feet turned to the spring sun, they were scattered throughout the country, stopping one another, exchanging private signals, and haunting the least frequented _pulperias_, in which they could converse without danger.

This movement was principally to be observed on one of the squares remote from the centre of the city. At the corner of a street stood a house, of only one story, whose wretched appearance struck the eye disagreeably.

A tavern of the lowest order, a _chingana_, kept by an old Indian woman, offered to the lowest _zambos_ the _chica_, beer of fermented maize, and the _quarapo_, a beverage made of the sugar-cane.

The concourse of Indians on this square took place only at certain hours, and principally when a long pole was raised on the roof of the inn as a signal of assemblage, then the _zambos_ of every profession, the _capataz_, _arrieros_, muleteers, the _carreteros_, carters, entered the _chingana_, one by one, and immediately disappeared in the great hall; the _padrona_ (hostess) seemed very busy, and leaving to her servant the care of the shop, hastened to serve herself her usual customers.

A few days after the disappearance of Martin Paz, there was a numerous assembly in the hall of the inn; one could scarcely through the darkness, rendered still more obscure by the tobacco-smoke, distinguish the frequenters of this tavern. Fifty Indians were ranged around a long table; some were chewing the _coca_, a kind of tea-leaf, mingled with a little piece of fragrant earth called _manubi_; others were drinking from large pots of fermented maize; but these occupations did not distract their attention, and they were closely listening to the speech of an Indian.

This was the Sambo, whose fixed eyes were strangely wild. He was clad as on the Plaza-Mayor. After having carefully observed his auditors, the Sambo commenced in these terms:

"The children of the Sun can converse on grave affairs; there is no perfidious ear to hear them; on the square, some of our friends, disguised as street-singers, will attract the attention of the passers-by, and we shall enjoy entire liberty."

In fact the tones of a mandoline and of a _viguela_ were echoing without.

The Indians within, knowing themselves in safety, lent therefore close attention to the words of the Sambo, in whom they placed entire confidence.

"What news can the Sambo give us of Martin Paz?" asked an Indian.

"None--is he dead or not? The Great Spirit only knows. I am expecting some of our brethren, who have descended the river to its mouth, perhaps they will have found the body of Martin Paz."

"He was a good chief," said Manangani, a ferocious Indian, much dreaded; "but why was he not at his post on the day when the schooner brought us arms?"

"Let the hour come," said the Sambo; "do my brethren know what enemy their arms should strike first?"

"These are the monopolizers of the riches of the soil, who will not suffer us to purchase a little comfort for our old age."
"You are mistaken; and your first blows must be struck elsewhere," said the Sambo, growing animated; "these are not the men who have dared for three hundred years past to tread the soil of our ancestors; it is not these rich men gorged with gold who have dragged to the tomb the sons of Manco-Capac; no, it is these proud Spaniards whom Fate has thrust on our independent shores! These are the true conquerors of whom you are the true slaves! If they have no longer wealth, they have authority; and, in spite of Peruvian emancipation, they crush and trample upon our natural rights. Let us forget what we are, to remember what our fathers have been!"

"Anda! anda!" exclaimed the assembly, with stamps of approbation.

After a few moments of silence, the Sambo assured himself, by interrogating various conspirators, that the friends of Cusco and of all Bolivia were ready to strike as a single man.

Then, resuming with fire:

"And our brethren of the mountains, brave Manangani, if they have all a heart of hatred equal to thine, a courage equal to thine, they will fall on Lima like an avalanche from the summit of the Cordilleras."

"The Sambo shall not complain of their boldness on the day appointed. Let the Indian leave the city, he shall not go far without seeing throng around him zambos burning for vengeance! In the gorges of San Cristoval and the Amancaës, more than one is couched on his poncho, with his poignard at his girdle, waiting until a long carbine shall be confided to his skillful hand. They also have not forgotten that they have to revenge on the vain Spaniards the defeat of Manco-Capac."

"Well said! Manangani; it is the god of hatred who speaks from thy mouth. My brethren shall know before long whom their chiefs have chosen to lead this great vengeance. President Gambarra is seeking only to consolidate his power; Bolivar is afar, Santa Cruz has been driven away; we can act with certainty. In a few days, the fête of the Amancaës will summon our oppressors to pleasure; then, let each be ready to march, and let the news be carried to the most remote villages of Bolivia."

At this moment three Indians entered the great hall. The Sambo hastened to meet them.

"Well?" said he to them.

"The body of Martin Paz has not been recovered; we have sounded the river in every direction; our most skillful divers have explored it with religious care, and the son of the Sambo cannot have perished in the waters of the Rimac."

"Have they killed him? What has become of him? Oh! wo, wo to them if they have killed my son! Let my brethren separate in silence; let each return to his post, look, watch and wait!"

The Indians went out and dispersed; the Sambo alone remained with Manangani, who asked him:

"Does the Sambo know what sentiment conducted his son to San Lazaro? The Sambo, I trust, is sure of his son?"

The eyes of the Indian flashed, and the blood mounted to his cheek. The ferocious Manangani recoiled.

But the Indian controlled himself, and said:

"If Martin Paz has betrayed his brethren, I will first kill all those to whom he has given his friendship, all those to whom he has given his love! Then I will kill him, and myself afterward, that nothing may be left beneath the sun of an infamous, and dishonored race."

At this moment, the padrona opened the door of the room, advanced toward the Sambo, and handed him a billet directed to his address.

"Who gave you this?" said he.

"I do not know; this paper may have been designedly forgotten by a _chica_-drinker. I found it on the table."

"Have there been any but Indians here?"

"There have been none but Indians."

The padrona went out; the Sambo unfolded the billet, and read aloud:

"A young girl has prayed for the return of Martin Paz, for she has not forgotten that the young Indian protected her and risked his life for her. If the Sambo has any news of his poor son, or any hope of finding him, let him surround his arm with a red handkerchief; there are eyes which see him pass daily."

The Sambo crushed the billet in his hand.

"The unhappy boy," said he, "has suffered himself to be caught by the eyes of a woman."

"Who is this woman?" asked Manangani.

"It is not an Indian," replied the Sambo, observing the billet; "it is some young girl of the other classes. Martin Paz, I no longer know thee!"

"Shall you do what this woman requests?"

"No," replied the Indian, violently; "let her lose all hope of seeing him again; let her die, if she will."

And the Sambo tore the billet in a rage.

"It must have been an Indian who brought this billet," observed Manangani.

"Oh, it cannot have been one of ours! He must have known that I often came to this inn, but I will set my foot in
it no more. We have occupied ourselves long enough with trifling affairs," resumed he, coldly; "let my brother return to the mountains; I will remain to watch over the city. We shall see whether the fête of the Amancaës will be joyous for the oppressors or the oppressed!"

The two Indians separated.

The plan of the conspiracy was well conceived and the hour of its execution well chosen. Peru, almost depopulated, counted only a small number of Spaniards and mestizos. The invasion of the Indians, gathered from every direction, from the forests of Brazil, as well as the mountains of Chili and the plains of La Plata, would cover the theatre of war with a formidable army. The great cities, like Lima, Cusco, Puña, might be utterly destroyed; and it was not to be expected that the Colombian troops, so recently driven away by the Peruvian government, would come to the assistance of their enemies in peril.

This social overturn might therefore have succeeded, if the secret had remained buried in the hearts of the Indians, and there surely could not be traitors among them?

But they were ignorant that a man had obtained private audience of the President Gambarra. This man informed him that the schooner _Annonciation_ had been captured from him by Indian pirates! That it had been laden with arms of all sorts; that canoes had unloaded it at the mouth of the Rimac; and he claimed a high indemnity for the service he thus rendered to the Peruvian government.

And yet this man had let his vessel to the agents of the Sambo; he had received for it a considerable sum, and had come to sell the secret which he had surprised.

By these traits the reader will recognize the Jew Samuel.

CHAPTER VI.
THE BETROTHAL.

André Certa, entirely recovered, sure of the death of Martin Paz, pressed his marriage: he was impatient to parade the young and beautiful Jewess through the streets of Lima.

Sarah constantly manifested toward him a haughty indifference; but he cared not for it, considering her as an article of sale, for which he had paid a hundred thousand piasters.

And yet André Certa suspected the Jew, and with good reason; if the contract was dishonorable, the contractors were still more so. So the mestizo wished to have a secret interview with Samuel, and took him one day to the Baths of Chorillos.

He was not sorry, besides, to try the chances of play before his wedding: public gaming, prohibited at Lima, is perfectly tolerated elsewhere. The passion of the Limanian ladies and gentlemen for this hazardous amusement is singular and irresistible.

The games were open some days before the arrival of the Marquis Don Vegal; thenceforth there was a perpetual movement of the populace on the road from Lima: some came on foot, who returned in carriages; others were about to risk and lose the last remnants of their fortunes.

Don Vegal and Martin Paz took no part in these exciting pleasures. The reveries of the young Indian had more noble causes; he was thinking of Sarah and of his benefactor.

The concourse of the Limanians to the Baths of Chorillos was without danger for him; little known by the inhabitants of the city, like all the mountain Indians he easily concealed himself from all eyes.

After his evening walk with the marquis, Martin Paz would return to his room, and leaning his elbow on the window, pass long hours in allowing his tumultuous thoughts to wander over the Pacific Ocean. Don Vegal lodged in a neighboring chamber, and guarded him with paternal tenderness.

The Spaniard always remembered the daughter of Samuel, whom he had so unexpectedly seen at prayer in the Catholic temple. But he had not dared to confide this important secret to Martin Paz while instructing him by degrees in Christian truths; he feared to re-animate sentiments which he wished to extinguish—for the poor Indian, unknown and proscribed, must renounce all hope of happiness! Father Joachim kept Don Vegal informed of the progress of affairs: the police had at last ceased to trouble themselves about Martin Paz; and with time and the influence of his protector, the Indian, become a man of merit and capable of great things, might one day take rank in the highest Peruvian society.

Weary of the uncertainty into which his incognito plunged him, Paz resolved to know what had become of the young Jewess. Thanks to his Spanish costume, he could glide into a gaming-saloon, and listen to the conversation of its various frequenters. André Certa was a man of so much importance, that his marriage, if it was approaching, would be the subject of conversation.

One evening, instead of directing his steps toward the sea, the Indian climbed over the high rocks on which the principal habitations of Chorillos are built; a house, fronted by broad stone steps, struck his eyes—he entered it
without noise.
The day had been hard for many of the wealthy Limanians; some among them, exhausted with the fatigues of the preceding night, were reposing on the ground, wrapped in their _ponchos_.

Other players were seated before a large green table, divided into four compartments by two lines, which intersected each other at the centre in right angles; on each of these compartments were the first letters of the words _azar_ and _suerte_, (chance and fate,) A and S.

At this moment, the parties of the _monte_ were animated; a mestizo was pursuing the unfavorable chance with feverish ardor.

"Two thousand piasters!" exclaimed he.
The banker shook the dice, and the player burst into imprecations.
"Four thousand piasters!" said he, again. And he lost once more.
Martin Paz, protected by the obscurity of the saloon, could look the player in the face, and he turned pale.
It was André Certa!
Near him, was standing the Jew Samuel.
"You have played enough, Señor André," said Samuel to him; "the luck is not for you."
"What business is it of yours?" replied the mestizo, roughly.
Samuel bent down to his ear.
"If it is not my business, it is your business to break off these habits during the days which precede your marriage."
"Eight thousand piasters!" resumed André Certa.
He lost again: the mestizo suppressed a curse and the banker resumed--"Play on!"
André Certa, drawing from his pocket some bills, was about to have hazarded a considerable sum; he had even deposited it on one of the tables, and the banker, shaking his dice, was about to have decided its fate, when a sign from Samuel stopped him short. The Jew bent again to the ear of the mestizo, and said--
"If nothing remains to you to conclude our bargain, it shall be broken off this evening!"
André Certa shrugged his shoulders, took up his money, and went out.
"Continue now," said Samuel to the banker; "you may ruin this gentleman after his marriage."
The banker bowed submissively. The Jew Samuel was the founder and proprietor of the games of Chorillos.
Wherever there was a _real_ to be made this man was to be met with.
He followed the mestizo; and finding him on the stone steps, said to him--
"I have secrets of importance to communicate. Where can we converse in safety?"
"Wherever you please," replied Certa, roughly.
"Señor, let not your passions ruin your prospects. I would neither confide my secret to the most carefully closed chambers, nor the most lonely plains. If you pay me dearly for it, it is worth telling and worth keeping."
As they spoke thus, these two men had reached the sea, near the cabins destined for the use of the bathers. They knew not that they were seen, heard and watched by Martin Paz, who glided like a serpent in the shadow.
"Let us take a canoe," said André, "and go out into the open sea; the sharks may, perhaps, show themselves discreet."
André detached from the shore a little boat, and threw some money to its guardian. Samuel embarked with him, and the mestizo pushed off. He vigorously plied two flexible oars, which soon took them a mile from the shore.
But as he saw the canoe put off, Martin Paz, concealed in a crevice of the rock, hastily undressed, and precipitating himself into the sea, swam vigorously toward the boat.
The sun had just buried his last rays in the waves of the ocean, and darkness hovered over the crests of the waves.
Martin Paz had not once reflected that sharks of the most dangerous species frequented these fatal shores. He stopped not far from the boat of the mestizo, and listened.
"But what proof of the identity of the daughter shall I carry to the father?" _ asked André Certa of the Jew.
"You will recall to him the circumstances under which he lost her."
"What were these circumstances?"
Martin Paz, now scarcely above the waves, listened without understanding. In a girdle attached to his body, he had a poignard; he waited.
"Her father," said the Jew, "lived at Concencion, in Chili: he was then the great nobleman he is now; only his fortune equalled his nobility. Obliged to come to Lima on business, he set out alone, leaving at Concencion his wife, and child aged fifteen months. The climate of Peru agreed with him, and he sent for the marchioness to rejoin him. She embarked on the _San-José_ of Valparaiso, with her confidential servants.
"I was going to Peru in the same ship. The _San-José_ was about to enter the harbor of Lima; but, near Juan
Fernandez, was struck by a terrific hurricane, which disabled her and threw her on her side—it was the affair of half an hour. The _San-José_ filled with water and was slowly sinking; the passengers and crew took refuge in the boat, but at sight of the furious waves, the marchioness refused to enter it; she pressed her infant in her arms, and remained in the ship. I remained with her—the boat was swallowed up at a hundred fathoms from the _San-José_, with all her crew. We were alone—the tempest blew with increasing violence. As my fortune was not on board, I had nothing to lose. The _San-José_, having five feet of water in her hold, drifted on the rocks of the shore, where she broke to pieces. The young woman was thrown into the sea with her daughter: fortunately, for me," said the Jew, with a gloomy smile, "I could seize the child, and reach the shore with it."

"All these details are exact?"

"Perfectly so. The father will recognize them. I had done a good day's work, señor; since she is worth to me the hundred thousand piasters which you are about to pay me. Now, let the marriage take place to-morrow."

"What does this mean?" asked Martin Paz of himself, still swimming in the shadow.

"Here is my pocket-book, with the hundred thousand piasters—take it, Master Samuel," replied André Certa to the Jew.

"Thanks, Señor Andrè," said the Israelite, seizing the treasure; "take this receipt in exchange—I pledge myself to restore you double this sum, if you do not become a member of one of the proudest families of Spain."

But the Indian had not heard this last sentence; he had dived to avoid the approach of the boat, and his eyes could see a shapeless mass gliding rapidly toward him. He thought it was the canoe—he was mistaken.

It was a _tintorea_—a shark of the most ferocious species.

Martin Paz did not quail, or he would have been lost. The animal approached him—the Indian dived; but he was obliged to come up, in order to breathe.... He looked at the sky, as if he was never to behold it again. The stars sparkled above his head; the _tintorea_ continued to approach. A vigorous blow with his tail struck the swimmer; Martin Paz felt his slimy scales brush his breast. The shark, in order to snatch at him, turned on his back and opened his jaws, armed with a triple row of teeth. Martin Paz saw the white belly of the animal gleam beneath the wave, and with a rapid hand struck it with his poignard.

Suddenly he found the waters around him red with blood. He dived—came up again at ten fathoms' distance—thought of the daughter of Samuel; and seeing nothing more of the boat of the mestizo, regained the shore in a few strokes, already forgetting that he had just escaped death.

He quickly rejoined Don Vegal. The latter, not having found him on his return, was anxiously waiting him. Paz made no allusion to his recent adventures; but seemed to take a lively pleasure in his conversation.

But the next day Martin Paz had left Chorillos, and Don Vegal, tortured with anxiety, hastily returned to Lima.

The marriage of André Certa with the daughter of the wealthy Samuel, was an important event. The beautiful señoritas had not given themselves a moment's rest; they had exhausted their ingenuity to invent some pretty corsage or novel head-dress; they had adorned themselves in trying without cessation the most varied toilets.

Numerous preparations were also going on in the house of Samuel; it was a part of the Jew's plan to give great publicity to the marriage of Sarah. The frescoes which adorned his dwelling according to the Spanish custom, had been newly painted; the richest hangings fell in large folds at the windows and doors of the habitation. Furniture carved in the latest fashion, of precious or fragrant wood, was crowded in vast saloons, impregnated with a delicious coolness. Rare shrubs, the productions of warm countries, seized the eye with their splendid colors, and one would have thought Spring had stolen along the balconies and terraces, to inundate them with flowers and perfumes.

Meanwhile, amid these smiling marvels, the young girl was weeping; Sarah no longer had hope, since the Sambo had none; and the Sambo had no hope, since he wore no sign of hope! The negro Liberta had watched the steps of the old Indian; he had seen nothing. Ah! if the poor child could have followed the impulses of her heart, she would have immured herself in one of those tranquil _beaterios_, to die there amid tears and prayer.

Urged by an irresistible attraction to the doctrines of Catholicism, the young Jewess had been secretly converted; by the cares of the good Father Joachim, she had been won over to a religion more in accordance with her feelings than that in which she had been educated. If Samuel had destined her for a Jew, she would have avowed her faith; but, about to espouse a Catholic, she reserved for her husband the secret of her conversion.

Father Joachim, in order to avoid scandal, and besides, better read in his breviary than in the human heart, had suffered Sarah to believe in the death of Martin Paz. The conversion of the young girl was the most important thing to him; he saw it assured by her union with André Certa, and he sought to accustom her to the idea of this marriage, the conditions of which he was far from respecting.

At last the day so joyous for some, so sad for others, had arrived. André Certa had invited the entire city to his nuptials; his invitations were refused by the noble families, who excused themselves on various pretexts. The mestizo, meanwhile, proudly held up his head, and scarcely looked at those of his own class. The little Millefiores in vain essayed his humblest vows; but he consoled himself with the idea that he was about to figure as an active party
in the repast which was to follow.

In the meantime, the young mestizoes were discoursing with him in the brilliant saloons of the Jew, and the
crowd of guests thronged around André Certa, who proudly displayed the splendors of his toilet.

The contract was soon to be signed; the sun had long been set, and the young girl had not appeared.

Doubtless she was discussing with her duenna and her maids the place of a ribbon or the choice of an ornament.
Perhaps, that enchanting timidity which so beautifully adorns the cheeks of a young girl, detained her still from their
inquisitive regards.

The Jew Samuel seemed a prey to secret uneasiness; André Certa bent his brow in an impatient manner; a sort of
embarrassment was depicted on the countenance of more than one guest, while the thousand of wax-lights, reflected
by the mirrors, filled the saloon with dazzling splendor.

Without, a man was wandering in mortal anxiety; it was the Marquis Don Vegal.

CHAPTER VII.
ALL INTERESTS AT STAKE.

Meanwhile, Sarah was left alone, alone with her anguish and her grief! She was about to give up her whole life
to a man whom she did not love! She leaned over the perfumed balcony of her chamber, which overlooked the
interior gardens. Through the green jalousies, her ear listened to the sounds of the slumbering country. Her lace
mantle, gliding over her arms, revealed a profusion of diamonds sparkling on her shoulders. Her sorrow, proud and
majestic, appeared through all her ornaments, and she might have been taken for one of those beautiful Greek slaves,
nobly draped in their antique garments.

Suddenly her glance rested on a man who was gliding silently among the avenues of the magnolia; she
recognized him; it was Liberta, her servant. He seemed to be watching some invisible enemy, now sheltering
himself behind a statue, now crouching on the ground.

Sarah was afraid, and looked around her. She was alone, entirely alone. Her eyes rested on the gardens, and she
became pale, paler still! Before her was transpiring a terrible scene. Liberta was in the grasp of a man of tall stature,
who had thrown him down; stifled sighs proved that a robust hand was pressing the lips of the Indian.

The young girl, summoning all her courage, was about to cry out, when she saw the two men rise! The negro
was looking fixedly at his adversary.

"It is you, then! it is you!" exclaimed he.

And he followed this man in a strange stupefaction. They arrived beneath the balcony of Sarah. Suddenly, before
she had time to utter a cry, Martin Paz appeared to her, like a phantom from another world; and, like the negro when
overthrown by the Indian, the young girl, bending before the glance of Martin Paz, could in her turn only repeat
these words,

"It is you, then! it is you!"

The young Indian fixed on her his motionless eyes, and said:

"Does the betrothed hear the sound of the festival? The guests are thronging into the saloons to see happiness
radiate from her countenance! Is it then a victim, prepared for the sacrifice, who is about to present herself to their
impatient eyes? Is it with these features, pale with sorrow, with eyes in which sparkle bitter tears, that the young girl
is to appear herself before her betrothed?"

Martin Paz spoke thus, in a tone full of sympathizing sadness, and Sarah listened vaguely as to those harmonies
which we hear in dreams!

The young Indian resumed with infinite sweetness:

"Since the soul of the young girl is in mourning, let her look beyond the house of her father, beyond the city
where she suffers and weeps; beyond the mountains, the palm-trees lift up their heads in freedom, the birds strike the
air with an independent wing; men have immensity to live in, and the young girls may unfold their spirits and their
hearts!"

Sarah raised her head toward Martin Paz. The Indian had drawn himself up to his full height, and with his arm
extended toward the summits of the Cordilleras, was pointing out to the young girl the path to liberty.

Sarah felt herself constrained by an irresistible force. Already the sound of voices reached her; they approached
her chamber; her father was undoubtedly about to enter; perhaps her lover would accompany him! The Indian
suddenly extinguished the lamp suspended above his head. A whistling, similar to the cry of the _cilguero_, and
reminding one of that heard on the Plaza-Mayor, pierced the silent darkness of night; the young girl swooned.

The door opened hastily; Samuel and André Certa entered. The darkness was profound; some servants ran with
torches. The chamber was empty.

"Death and fury!" exclaimed the mestizo.
"Where is she?" asked Samuel.
"You are responsible for her," said André, brutally.
At these words, the Jew felt a cold sweat freeze even his bones.
"Help! help!" he exclaimed.
And, followed by his domestics, he sprang out of the house.
Martin Paz fled rapidly through the streets of the city. The negro Liberta followed him; but did not appear disposed to dispute with him the possession of the young girl.
At two hundred paces from the dwelling of the Jew, Paz found some Indians of his companions, who had assembled at the whistle uttered by him.
"To our mountain _ranchos_!" exclaimed he.
"To the house of the Marquis Don Vegal!" said another voice behind him.
Martin Paz turned; the Spaniard was at his side.
"Will you not confide this young girl to me?" asked the marquis.
The Indian bent his head, and said in a low voice to his companions:
"To the dwelling of the Marquis Don Vegal!"
They turned their steps in this direction.

An extreme confusion reigned then in the saloons of the Jew. The news of Sarah's disappearance was a thunderbolt; the friends of André hastened to follow him. The _faubourg_ of San Lazaro was explored, hastily searched; but nothing could be discovered. Samuel tore his hair in despair. During the whole night the most active research was useless.
"Martin Paz is living!" exclaimed André Certa, in a moment of fury.
And the presentiment quickly acquired confirmation. The police were immediately informed of the elopement; its most active agents bestirred themselves; the Indians were closely watched, and if the retreat of the young girl was not discovered, evident proofs of an approaching revolt came to light, which accorded with the denunciations of the Jew.

André Certa lavished gold freely, but could learn nothing. Meanwhile, the gate-keepers declared that they had seen no person leave Lima; the young girl must therefore be concealed in the city.
Liberta, who returned to his master, was often interrogated; but no person seemed more astonished than himself at the elopement of Sarah.
Meanwhile, one man besides André Certa had seen in the disappearance of the young Jewess, a proof of the existence of Martin Paz; it was the Sambo. He was wandering in the streets of Lima, when the cry uttered by the Indian fixed his attention; it was a signal of rally well known to him! The Sambo was therefore a spectator of the capture of the young girl, and followed her to the dwelling of the marquis.
The Spaniard entered by a secret door, of which he alone had the key; so that his domestics suspected nothing. Martin Paz carried the young girl in his arms and laid her on a bed.
When Don Vegal, who had returned to re-enter by the principal door, reached the chamber where Sarah was reposing, he found Martin Paz kneeling beside her. The marquis was about to reproach the Indian with his conduct, when the latter said to him:
"You see, my father, whether I love you! Ah! why did you throw yourself in my way? We should have been already free in our mountains. But how, should I not have obeyed your words?"
Don Vegal knew not what to reply, his heart was seized with a powerful emotion. He felt how much he was beloved by Martin Paz.
"The day on which Sarah shall quit your dwelling to be restored to her father and her betrothed," sighed the Indian, "you will have a son and a friend less in the world."
As he said these last words, Paz moistened with his tears the hand of Don Vegal. They were the first tears this man had shed!
The reproaches of Don Vegal died away before this respectful submission. The young girl had become his guest; she was sacred! He could not help admiring Sarah, still in a swoon; he was prepared to love her, of whose conversion he had been a witness, and whom he would have been pleased to bestow as a companion upon the young Indian.
It was then that, on opening her eyes, Sarah found herself in the presence of a stranger.
"Where am I?" said she, with a sentiment of terror.
"With a generous man who has permitted me to call him my father," replied Martin Paz, pointing to the Spaniard.
The young girl, restored by the voice of the Indian to a consciousness of her position, covered her face with her trembling hands, and began to sob.
"Withdraw, friend," said Don Vegal to the young man; "withdraw."

Martin Paz slowly left the room, not without having pressed the hand of the Spaniard, and cast on Sarah a lingering look.

Then Don Vegal bestowed upon this poor child consolations of exquisite delicacy; he conveyed in suitable language his sentiments of nobility and honor. Attentive and resigned, the young girl comprehended what danger she had escaped; and she confided her future happiness to the care of the Spaniard. But amid phrases interrupted by sighs and mingled with tears, Don Vegal perceived the intense attachment of this simple heart for him whom she called her deliverer. He induced Sarah to take some repose, and watched over her with the solicitude of a father.

Martin Paz comprehended the duties that honor required of him, and, in spite of perils and dangers, would not pass the night beneath the roof of Don Vegal.

He therefore went out; his head was burning, his blood was boiling with fever in his veins.

He had not gone a hundred paces in the street, when five or six men threw themselves upon him, and, notwithstanding his obstinate defense, succeeded in binding him. Martin Paz uttered a cry of despair, which was lost in the night. He believed himself in the power of his enemies, and gave a last thought to the young girl.

A short time afterward the Indian was deposited in a room. The bandage which had covered his eyes was taken off. He looked around him, and saw himself in the lower hall of that tavern where his brethren had organized their approaching revolt.

The Sambo, Manangani, and others, surrounded him. A gleam of indignation flashed from his eyes, which was reciprocated by his captors.

"My son had then no pity on my tears," said the Sambo, "since he suffered me for so long a time to believe in his death?"

"Is it on the eve before a revolt that Martin Paz, our chief, should be found in the camp of our enemies?"

Martin Paz replied neither to his father, nor to Manangani.

"So our most important interests have been sacrificed to a woman!"

As he spoke thus, Manangani had approached Martin Paz; a poignard was gleaming in his hand. Martin Paz did not even look at him.

"Let us first speak," said the Sambo; "we will act afterward. If my son fails to conduct his brethren to the combat, I shall know now on whom to avenge his treason. Let him take care! the daughter of the Jew Samuel is not so well concealed that she can escape our hatred. My son will reflect. Struck with a mortal condemnation, proscribed, wandering among our masters, he will not have a stone on which to rest his sorrows. If, on the contrary, we resume our ancient country and our ancient power, Martin Paz, the chief of numerous tribes, may bestow upon his betrothed both happiness and glory."

Martin Paz remained silent; but a terrific conflict was going on within him. The Sambo had roused the most sensitive chords of his proud nature to vibrate; placed between a life of fatigues, of dangers, of despair, and an existence happy, honored, illustrious, he could not hesitate. But should he then abandon the Marquis Don Vegal, whose noble hopes destined him as the deliverer of Peru!

"Oh!" thought he, as he looked at his father, "they will kill Sarah, if I forsake them."

"What does my son reply to us?" imperiously demanded the Sambo.

"That Martin Paz is indispensable to your projects; that he enjoys a supreme authority over the Indians of the city; that he leads them at his will, and, at a sign, could have them dragged to death. He must therefore resume his place in the revolt, in order to ensure victory."

The bonds which still enchained him were detached by order of the Sambo; Martin Paz arose free among his brethren.

"My son," said the Indian, who was observing him attentively, "tomorrow, during the fête of the Amancaës, our brethren will fall like an avalanche on the unarmed Limanians. There is the road to the Cordilleras, there is the road to the city; you will go wherever your good pleasure shall lead you. Tomorrow! tomorrow! you will find more than one mestizo breast to break your poignard against. You are free."

"To the mountains!" exclaimed Martin Paz, with a stern voice.

The Indian had again become an Indian amid the hatred which surrounded him.

"To the mountains," repeated he, "and wo to our enemies, wo!"

And the rising sun illumined with its earliest rays the council of the Indian chiefs in the heart of the Cordilleras. These rays were joyless to the heart of the poor young girl, who wept and prayed. The marquis had summoned Father Joachim; and the worthy man had there met his beloved penitent. What happiness was it for her to kneel at the feet of the old priest, and to pour out her anguish and her afflictions.

But Sarah could not longer remain in the dwelling of the Spaniard. Father Joachim suggested this to Don Vegal, who knew not what part to take, for he was a prey to extreme anxiety. What had become of Martin Paz? He had fled
the house. Was he in the power of his enemies? Oh! how the Spaniard regretted having suffered him to leave it during that night of alarms! He sought him with the ardor, with the affection of a father; he found him not.

"My old friend," said he to Joachim, "the young girl is in safety near you; do not leave her during this fatal night."

"But her father, who seeks her--her betrothed, who awaits her?"

"One day--one single day! You know not whose existence is bound to that of this child. One day--one single day! at least until I find Martin Paz, he whom my heart and God have named my son!"

Father Joachim returned to the young girl; Don Vegal went out and traversed the streets of Lima.

The Spaniard was surprised at the noise, the commotion, the agitation of the city. It was that the great fête of the Amancaës, forgotten by him alone, the 24th of June, the day of St. John, had arrived. The neighboring mountains were covered with verdure and flowers; the inhabitants, on foot, on horseback, in carriages, were repairing to a celebrated table-land, situated at half a league from Lima, where the spectators enjoyed an admirable prospect; mestizoes and Indians mingled in the common fête; they walked gayly by groups of relatives or friends; each group, calling itself by the name of _partida_, carried its provisions, and was preceded by a player on the guitar, who chanted, accompanying himself, the most popular _yaravis_ and _llantos_. These joyous promenaders advanced with cries, sports, endless jests, through the fields of maize and of _alfalfa_, through the groves of banana, whose fruits hung to the ground; they traversed those beautiful _alamedas_, planted with willows, and forests of citron, and orange-trees, whose intoxicating perfumes were mingled with the wild fragrance from the mountains. All along the road, traveling cabarets offered to the promenaders the brandy of _pisco_ and the _chica_, whose copious libations excited to laughter and clamor; cavaliers made their horses caracole in the midst of the throng, and rivaled each other in swiftness, address, and dexterity; all the dances in vogue, from the _loudon_ to the _mismis_, from the _boleros_ to the _zamacuecas_, agitated and hurried on the _caballeros_ and black-eyed _sambas_. The sounds of the _viguela_ were soon no longer sufficient for the disordered movements of the dancers; the musicians uttered wild cries, which stimulated them to delirium; the spectators beat the measure with their feet and hands, and the exhausted couples sunk one after another to the ground.

There reigned in this fête, which derives its name from the little mountain-flowers, an inconceivable transport and freedom; and yet no private brawl mingled among the cries of public rejoicing; a few lancers on horseback, ornamented with their shining cuirasses, maintained here and there order among the populace.

The various classes of Limanian society mingled in these rejoicings, which are repeated every day throughout the month of July. Pretty _tapadas_ laughingly elbow beautiful girls, who bravely come, with uncovered faces, to meet joyous cavaliers; and when at last this multitude arrive at the _plateau_ of the Amancaës, an immense clamor of admiration is repeated by the mountain echoes.

At the feet of the spectators extends the ancient city of kings, proudly lifting toward heaven its towers and its steeples, whose bells are ringing joyous peals. San Pedro, Saint Augustine, the Cathedral, attract the eye to their roofs, resplendent with the rays of the sun. San Domingo, the rich church, the Madonna of which is never clad in the same garments two days in succession, raises above her neighbors her tapering spire; on the right, the vast plains of the Pacific Ocean are undulating to the breath of the occidental breeze, and the eye, as it roves from Callao to Lima, rests on those funereal _chulpas_, the last remains of the great dynasty of the Incas; at the horizon, Cape Morro-Solar frames, with its sloping hills, the wonderful splendors of this picture.

So the Limanians are never satisfied with these admirable prospects, and their noisy approbation deafens every year the echoes of San Cristoval and the Amancaës.

Now, while they fearlessly enjoyed these picturesque views, and were giving themselves up to an irresistible delight, a gloomy bloody funereal drama was preparing on the snowy summits of the Cordilleras.

CHAPTER VIII.

CONQUERORS AND CONQUERED.

A prey to his blind grief, Don Vegal walked at random. After having lost his daughter, the hope of his race and of his love, was he about to see himself also deprived of the child of his adoption whom he had wrested from death? Don Vegal had forgotten Sarah, to think only of Martin Paz.

He was struck with the great number of Indians, of _zambos_, of _chiños_, who were wandering about the streets; these men, who usually took an active part in the sports of the Amancaës, were now walking silently with singular pre-occupation. Often some busy chief gave them a secret order, and went on his way; and all, notwithstanding their _detours_, were assembling by degrees in the wealthiest quarters of Lima, in proportion as the Limanians were scattered abroad in the country.

Don Vegal, absorbed in his own researches, soon forgot this singular state of things. He traversed San Lazaro
throughout, saw André Certa there, enraged and armed, and the Jew Samuel, in the extremity of distress, not for the loss of his daughter, but for the loss of his hundred thousand piasters; but he found not Martin Paz, whom he was impatiently seeking. He ran to the consistorial prison. Nothing! He returned home. Nothing! He mounted his horse and hastened to Chorillos. Nothing! He returned at last, exhausted with fatigue, to Lima; the clock of the cathedral was striking four.

Don Vegal remarked some groups of Indians before his dwelling; but he could not, without compromising the man of whom he was in search, ask them--

"Where is Martin Paz?"

He re-entered, more despairing than ever.

Immediately a man emerged from a neighboring alley, and came directly to the Indians. This man was the Sambo.

"The Spaniard has returned," said he to them; "you know him now; he is one of the representatives of the race which crushes us--wo to him!"

"And when shall we strike?"

"When five o'clock sounds, and the tocsin from the mountain gives the signal of vengeance."

Then the Sambo marched with hasty steps to the _chingana_, and rejoined the chief of the revolt.

Meanwhile the sun had begun to sink beneath the horizon; it was the hour in which the Limanian aristocracy went in its turn to the Amancaés; the richest toilets shone in the equipages which defiled to the right and left beneath the trees along the road; there was an inextricable mêlée of foot-passengers, carriages, horses; a confusion of cries, songs, instruments, and vociferations.

The clock on the tower of the cathedral suddenly struck five! and a shrill funereal sound vibrated through the air; the tocsin thundered over the crowd, frozen in its delirium.

An immense cry resounded in the city. From every square, every street, every house issued the Indians, with arms in their hands, and fury in their eyes. The principal places of the city were thronged with these men, some of whom shook above their heads burning torches!

"Death to the Spaniards! death to the oppressors!" such was the watch-word of the rebels.

Those who attempted to return to Lima must have recoiled before these masses; but the summits of the hills were quickly covered with other enemies, and all retreat was impossible; the _zambos_ precipitated themselves like a thunderbolt on this crowd, exhausted with the fatigues of the festival, while the mountain Indians cleared for themselves a bloody path to rejoin their brethren of the city.

Imagine the aspect presented by Lima at this terrible moment. The rebels had left the square of the tavern, and were scattered in all quarters; at the head of one of the columns, Martin Paz was waving the black flag--the flag of independence; while the Indians in the other streets were attacking the houses appointed to ruin, Martin Paz took possession of the Plaza-Mayor with his company; near him, Manangani was uttering ferocious yells, and proudly displaying his bloody arms.

But the soldiers of the government, forewarned of the revolt, were ranged in battle array before the palace of the president; a frightful _fusillade_ greeted the insurgents at their entrance on the square; surprised by this unexpected discharge, which extended a goodly number of them on the ground, they sprang upon the troops with insurmountable impatience; a horrible mêlée followed, in which men fought body to body. Martin Paz and Manangani performed prodigies of valor, and escaped death only by miracle.

It was necessary at all hazards that the palace should be taken and occupied by their men.

"Forward!" cried Martin Paz, and his voice led the Indians to the assault. Although they were crushed in every direction, they succeeded in making the body of troops around the palace recoil. Already had Manangani sprang on the first steps; but he suddenly stopped as the opening ranks of soldiers unmasked two pieces of cannon ready to fire on the assailants.

There was not a moment to lose; the battery must be seized before it could be discharged.

"On!" cried Manangani, addressing himself to Martin Paz.

But the young Indian had just stooped and no longer heard him, for an Indian had whispered these words in his ear:

"They are pillaging the house of Don Vegal, perhaps assassinating him!"

At these words Martin Paz recoiled. Manangani seized him by the arm; but, repulsing him with a vigorous hand, the Indian darted toward the square.

"Traitor! infamous traitor!" exclaimed Manangani, discharging his pistols at Martin Paz.

At this moment the cannons were fired, and the grape swept the Indians on the steps.

"This way, brethren," cried Martin Paz, and a few fugitives, his devoted companions, joined him; with this little company he could make his way through the soldiers.
This flight had all the consequences of treason; the Indians believed themselves abandoned by their chief. Manangani in vain attempted to bring them back to the combat; a rapid _fusillade_ sent among them a shower of balls; thenceforth it was no longer possible to rally them; the confusion was at its height and the rout complete. The flames which arose in certain quarters attracted some fugitives to pillage; but the conquering soldiers pursued them with the sword, and killed a great number without mercy.

Meanwhile, Martin Paz had gained the house of Don Vegal; it was the theatre of a bloody struggle, headed by the Sambo himself; he had a double interest in being there; while contending with the Spanish noblemen, he wished to seize Sarah, as a pledge of the fidelity of his son.

On seeing Martin Paz return, he no longer doubted his treason, and turned his brethren against him.

The overthrown gate and walls of the court revealed Don Vegal, sword in hand, surrounded by his faithful servants, and contending with an invading mass. This man's courage and pride were sublime; he was the first to present himself to mortal blows, and his formidable arm had surrounded him with corpses.

But what could be done against this crowd of Indians, which was then increasing with all the conquered of the Plaza-Mayor. Don Vegal felt that his defenders were becoming exhausted, and nothing remained for him but death, when Martin Paz arrived, rapid as the thunderbolt, charged the aggressors from behind, forced them to turn against him, and, amid balls, poignard-strokes and maledictions, reached Don Vegal, to whom he made a rampart of his body. Courage revived in the hearts of the besieged.

"Well done, my son, well done!" said Don Vegal to Martin Paz, pressing his hand.

But the young Indian was gloomy.

"Well done! Martin Paz," exclaimed another voice which went to his very soul; he recognized Sarah, and his arm traced a bloody circle around him.

The company of Sambo gave way in its turn. Twenty times had this modern Brutus directed his blows against his son, without being able to reach him, and twenty times Martin had turned away the weapon about to strike his father.

Suddenly the ferocious Manangani, covered with blood, appeared beside the Sambo.

"Thou hast sworn," said he, "to avenge the treason of a wretch on his kindred, on his friends, on himself. Well, it is time! the soldiers are coming; the mestizo, André Certa, is with them."

"Come then," said the Sambo, with a ferocious laugh: "come then, for our vengeance approaches."

And both abandoned the house of Don Vegal, while their companions were being killed there. They went directly to the company who were arriving. The latter aimed at them; but without being intimidated, the Sambo approached the mestizo.

"You are André Certa," said he; "well, your betrothed is in the house of Don Vegal, and Martin Paz is about to carry her to the mountains."

This said, the Indians disappeared. Thus the Sambo had put face to face two mortal enemies, and, deceived by the presence of Martin Paz in the house of Don Vegal, the soldiers rushed upon the dwelling of the marquis.

André Certa was intoxicated with rage. As soon as he perceived Martin Paz, he rushed upon him.

"Here!" exclaimed the young Indian, and quitting the stone steps which he had so valiantly defended, he joined the mestizo. Meanwhile the companions of Martin Paz were repulsing the soldiers body to body.

Martin Paz had seized André Certa with his powerful hand, and clasped him so closely that the mestizo could not use his pistols. They were there, foot against foot, breast against breast, their faces touched, and their glances mingled in a single gleam; their movements became rapid, even invisible; neither friends nor enemies could approach them; in this terrible embrace respiration failed, both fell. André Certa raised himself above Martin Paz, whose poignard had escaped his grasp. The mestizo raised his arm, but the Indian succeeded in seizing it before it had struck. The moment was horrible. André Certa in vain attempted to disengage himself; Martin Paz, with supernatural strength, turned against the mestizo the poignard and the arm which held it, and plunged it into his heart.

Martin Paz arose all bloody. The place was free, the soldiers flying in every direction. Martin Paz might have conquered had he remained on the Plaza-Mayor. He fell into the arms of Don Vegal.

"To the mountains, my son; flee to the mountains! now I command it."

"Is my enemy indeed dead?" said Martin Paz, returning to the corpse of André Certa.

A man was that moment searching it, and held a pocket-book which he had taken from it. Martin Paz sprang on this man and overthrew him; it was the Jew Samuel.

The Indian picked up the pocket-book, opened it hastily, searched it, uttered a cry of joy, and springing toward the marquis, put in his hand a paper on which were written these words:

"Received of the Señor André Certa the sum of 100,000 piasters; I pledge myself to restore this sum doubled, if Sarah, whom I saved from the shipwreck of the _San-José_, and whom he is about to espouse, is not the daughter
and only heir of the Marquis Don Vegal.

"SAMUEL."

"My daughter! my daughter!" exclaimed the Spaniard, and he fell into the arms of Martin Paz, who carried him to the chamber of Sarah.

Alas! the young girl was no longer there; Father Joachim, bathed in his own blood, could articulate only these words:

"The Sambo!—carried off!--toward the river of Madeira!—"

And he fainted.

CHAPTER IX.

THE CATARACTS OF THE MADEIRA.

"On! on!" Martin Paz had exclaimed. And without saying a word, Don Vegal followed the Indian. His daughter!—he must find again his daughter! Mules were brought, prepared for a long journey among the Cordilleras; the two men mounted them, wrapped in their _ponchos_; large gaiters were attached by thongs above their knees; immense stirrups, armed with long spurs, surrounded their feet, and broad-brimmed Guayaquil hats sheltered their heads. Arms filled the holsters of each saddle; a carbine, formidable in the hands of Don Vegal, was suspended at his side. Martin Paz had encircled himself with his lasso, one extremity of which was fixed to the harness of his mule.

The Spaniard and the Indian spurred their horses to their utmost speed. At the moment of leaving the walls of the city they were joined by an Indian equipped like themselves. It was Liberta—Don Vegal recognized him; the faithful servant wished to share in their pursuit.

Martin Paz knew all the plains, all the mountains, which they were to traverse; he knew among what savage tribes, into what desert country the Sambo had conveyed his betrothed. His betrothed! he no longer dared give this name to the daughter of Don Vegal.

"My son," said the latter, "have you any hope in your heart?"

"As much as hatred and tenderness."

"The daughter of the Jew, in becoming my blood, has not ceased to be thine."

"Let us press on!" hastily replied Martin Paz.

On their way the travelers saw a great number of Indians flying to regain their _ranchos_ amid the mountains. The defection of Martin Paz had been followed by defeat. If the _émeute_ had triumphed in some places, it had received its death-blow at Lima.

The three cavaliers traveled rapidly, having but one idea, one object. They soon buried themselves among the almost impracticable passes of the Cordilleras. Difficult pathways circulated through these reddish masses, planted here and there with cocoanut and pine trees; the cedars, cotton-trees, and aloes were left behind them, with the plains covered with maize and lucerne; some thorny cactuses sometimes pricked their mules, and made them hesitate on the verge of precipices.

It was a difficult task to traverse the Cordilleras during these summer months; the melting of snows beneath the sun of June often made unforeseen cataracts spout from beneath the steps of the traveler; often frightful masses, detaching themselves from the summits of the peaks, were engulfed near them in fathomless abysses!

But they continued their march, fearing neither the hurricane nor the cold of these high solitudes; they traveled day and night, finding neither cities nor dwellings where they might for a moment repose; happy if in some deserted hut they found a mat of _tortora_ upon which to extend their wearied limbs, some pieces of meat dried in the sun, some calabashes full of muddy water.

They reached at last the summit of the Andes, 14,000 feet above the level of the sea. There, no more trees, no more vegetation; sometimes an _oso_ or _ucuman_, a sort of enormous black bear, came to meet them. Often, during the afternoon, they were enveloped in those formidable storms of the Cordilleras, which raise whirlwinds of snow from the loftiest summits. Don Vegal sometimes paused, unaccustomed to these frightful perils. Martin Paz then supported him in his arms, and sheltered him against the drifting snow. And yet lightnings flashed from the clouds, and thunders broke over these barren peaks, and filled the mountain recesses with their terrific roar.

At this point, the most elevated of the Andes, the travelers were seized with a malady called by the Indians _soroche_, which deprives the most intrepid man of his courage and his strength. A superhuman will is then necessary to keep one from falling motionless on the stones of the road, and being devoured by those immense condors which display above their vast wings! These three men spoke little; each wrapped himself in the silence which these vast deserts inspired.

On the eastern slope of the Cordilleras, they hoped to find traces of their enemies; they therefore traveled on, and were at last descending the chain of mountains; but the Andes are composed of a great number of salient peaks, so
that inaccessible precipices were constantly rising before them.

Nevertheless they soon found the trees of inferior levels; the llamas, the vigonias, which feed on the thin grass, announced the neighborhood of men. Sometimes they met _gauchos_ conducting their _arias_ of mules; and more than one _capataz_ (leader of a convoy) exchanged fresh animals for their exhausted ones.

In this manner they reached the immense virgin forests which cover the plains situated between Peru and Brazil; they began thenceforth to recover traces of the captors; and it was in the midst of these inextricable woods that Martin Paz recovered all his Indian sagacity.

Courage returned to the Spaniard, strength returned to Liberta, when a half-extinct fire and prints of footsteps proved the proximity of their enemies. Martin Paz noted all and studied all, the breaking of the little branches, the nature of the vestiges.

Don Vegal feared lest his unfortunate daughter should have been dragged on foot through the stones and thorns; but the Indian showed him some pebbles strongly imbedded in the earth, which indicated the pressure of an animal’s foot; above, branches had been pushed aside in the same direction, which could have been reached only by a person on horseback. The poor father comforted himself and recovered life and hope, and then Martin Paz was so confident, so skillful, so strong, that there were for him neither impassable obstacles nor insurmountable perils.

Nevertheless immense forests contracted the horizon around them, and trees multiplied incessantly before their fatigued eyes.

One evening, while the darkness was gathering beneath the opaque foliage, Martin Paz, Liberta and Don Vegal were compelled by fatigue to stop. They had reached the banks of a river; it was the river Madeira, which the Indian recognized perfectly; immense mangrove trees bent above the sleeping wave and were united to the trees on the opposite shore by capricious _lianes_ (vines), on which were balancing the _titipaying_ and the _concoulies_.

Had the captors ascended the banks? had they descended the course of the river? had they crossed it in a direct line? Such were the questions with which Martin Paz puzzled himself. He stepped a little aside from his companions, following with infinite difficulty some fugitive tracks; these brought him to a clearing a little less gloomy. Some footsteps indicated that a company of men had, perhaps, crossed the river at this spot, which was the opinion of the Indian, although he found around him no proof of the construction of a canoe; he knew that the Sambo might have cut down some tree in the middle of the forest, and having spoiled it of its bark, made of it a boat, which could have been carried on the arms of men to the shores of the Madeira. Nevertheless, he was still hesitating, when he saw a sort of black mass move near a thicket; he quickly prepared his lasso and made ready for an attack; he advanced a few paces, and perceived an animal lying on the ground, a prey to the final convulsions—it was a mule. The poor, expiring beast had been struck at a distance from the spot whither it had been dragged, leaving long traces of blood on its passage. Martin Paz no longer doubted that the Indians, unable to induce it to cross the river, had killed it with the stroke of a poignard, as a deep wound indicated. From this moment he felt certain of the direction of his enemies; and returned to his companions, who were already uneasy at his long absence.

"To-morrow, perhaps, we shall see the young girl!" said he to them.

"My daughter! Oh! my son! let us set out this instant," said the Spaniard; "I am no longer fatigued, and strength returns with hope—let us go!"

"But we must cross this river, and we cannot lose time in constructing a canoe."

"We will swim across."

"Courage, then, my father! Liberta and myself will sustain you."

All three laid aside their garments, which Martin Paz carried in a bundle upon his head; and all three glided silently into the water, for fear of awakening some of these dangerous _caïmans_ so numerous in the rivers of Brazil and Peru.

They arrived safely at the opposite shore: the first care of Martin Paz was to recover traces of the Indians; but in vain did he scrutinize the smallest leaves, the smallest pebbles—he could discover nothing; as the rapid current had carried them down in crossing, he ascended the bank of the river to the spot opposite that where he had found the mule, but nothing indicated the direction taken by the captors. It must have been that these, that their tracks might be entirely lost, had descended the river for several miles, in order to land far from the spot of their embarkation.

Martin Paz, that his companions might not be discouraged, did not communicate to them his fears; he said not even a word to Don Vegal respecting the mule, for fear of saddening him still more with the thought that his daughter must now be dragged through these difficult passes.

When he returned to the Spaniard, he found him asleep—fatigue had prevailed over grief and resolution; Martin Paz was careful not to awaken him; a little sleep might do him much good; but, while he himself watched, resting the head of Don Vegal on his knees and piercing with his quick glances the surrounding shadows, he sent Liberta to seek below on the river some trace which might guide them at the first rays of the sun.

The Indian departed in the direction indicated, gliding like a serpent between the high brush with which the
shores were bristling, and the sound of his footsteps was soon lost in the distance.

Thenceforth Martin Paz remained alone amid these gloomy solitudes: the Spaniard was sleeping peacefully; the names of his daughter and the Indian sometimes mingled in his dreams, and alone disturbed the silence of these obscure forests.

The young Indian was not mistaken; the Sambo had descended the Madeira three miles, then had landed with the young girl and his numerous companions, among whom might be numbered Manangani, still covered with hideous wounds.

The company of Sambo had increased during the journey. The Indians of the plains and the mountains had awaited with impatience the triumph of the revolt; on learning the failure of their brethren, they fell a prey to a gloomy despair; hearing that they had been betrayed by Martin Paz, they uttered yells of rage; when they saw that they had a victim to be sacrificed to their anger, they burst forth in cries of joy and followed the company of the old Indian.

They marched thus to the approaching sacrifice, devouring the young girl with sanguinary glances—it was the betrothed, the beloved of Martin Paz whom they were about to put to death; abuse was heaped upon her, and more than once the Sambo, who wished his revenge to be public, with difficulty wrested Sarah from their fury.

The young girl, pale, languishing, was without thought and almost without life amid this frightful horde; she had no longer the sentiment of motion, of will, of existence—she advanced, because bloody hands urged her onward; they might have abandoned her in the midst of these great solitudes—she could not have taken a step to have escaped death. Sometimes the remembrance of her father and of the young Indian passed before her eyes, but like a gleam of lightning bewildering her; then she fell again an inert mass on the poor mule, whose wounded feet could no longer sustain her. When beyond the river she was compelled to follow her captors on foot, two Indians taking her by the arm dragged her rapidly along, and a trace of blood marked on the sand and dead leaves her painful passage.

But the Sambo was no longer afraid of pursuit; he cared little that this blood betrayed the direction he had taken—he was approaching the termination of his journey, and soon the cataracts which abound in the currents of the great river sent up their deafening clamor.

The numerous company of Indians arrived at a sort of village, composed of a hundred huts, made of reeds interlaced and clay; at their approach, a multitude of women and children darted toward them with loud cries of joy—more than one found there his anxious family—more than one wife missed the father of her children!

These women soon learned the defeat of their party; their sadness was transformed into rage on learning the defection of Martin Paz, and on seeing his betrothed devoted to death.

Sarah remained immovable before these enemies and looked at them with a dim eye; all these hideous faces were making grimaces around her, and the most terrific threats were uttered in her ears—the poor child might have thought herself delivered over to the torturers of the infernal regions.

"Where is my husband?" said one; "it is thou who hast caused him to be killed!"

"And my brother, who will never again return to the cabin—what hast thou done with him? Death! death! Let each of us have a piece of her flesh! let each of us have a pain to make her suffer! Death! death!"

And these women, with dishevelled hair, brandishing knives, waving flaming brands, bearing enormous stones, approached the young girl, surrounded her, pressed her, crushed her.

"Back!" cried the Sambo, "back! and let all await the decision of their chiefs! This girl must disarm the anger of the Great Spirit, which has rested upon our arms; and she shall not serve for private revenge alone!"

The women obeyed the words of the old Indian, casting frightful glances on the young girl; the latter, covered with blood, remained extended on the pebbly shore.

Above this village, plunges, from a height of more than a hundred feet, a foaming cataract, which breaks against sharp rocks; the Madeira, contracted into a deep bed, precipitates this dense mass of water with frightful rapidity; a cloud of mist is eternally suspended above this torrent, whose fall sends its formidable and thundering roar afar.

It was in the midst of this foaming tempest that the unfortunate young girl was destined to die; at the first rays of the sun, exposed in a bark canoe above the cataract, she was to be precipitated with the mass of waters on the rude rocks against which the Madeira broke.

So the council of chiefs had decided; and they had delayed until the morrow the punishment of their victim, to give her a night of anguish, of torment, and of terror.

When the sentence was made known, cries of joy welcomed it, and a furious delirium seized the Indians.

It was a night of orgies—a night of blood and of horror; brandy increased the excitement of these wild natives; dances, accompanied with perpetual yells, surrounded the young girl, and wound their fantastic chains about the stake to which she was fastened. Sometimes the circle narrowed, and enclosed her in its furious whirls: the Indians ran through the uncultivated fields, brandishing blazing pine-branches, and surrounding the victim with light.
And it was thus until sunrise, and worse yet when its first rays illuminated the scene. The young girl was detached from the stake, and a hundred arms were stretched out to drag her to execution, when the name of Martin Paz involuntarily escaped her lips, and cries of hatred and of vengeance responded.

It was necessary to climb by steep paths the immense pile of rocks which led to the upper level of the river, and the victim arrived there all bloody; a canoe of bark awaited her a hundred paces above the fall; she was deposited in it, and fastened by bonds which entered her flesh.

"Vengeance and death!" exclaimed the whole tribe, with one voice.

The canoe was hurried on with increasing rapidity and began to whirl.

Suddenly a man appeared on the opposite shore—It is Martin Paz! Beside him, are Don Vegal and Liberta.

"My daughter! my daughter!" exclaims the father, kneeling on the shore.

"My father!" replied Sarah, raising herself up with superhuman strength.

The scene was indescribable. The canoe was rapidly hastening to the cataract, in whose foam it was already enveloped.

Martin Paz, standing on a rock, balanced his lasso which whistled around his head. At the instant the boat was about to be precipitated, the long leathern thong unfolded from above the head of the Indian, and surrounded the canoe with its noose.

"My daughter! my daughter!" exclaimed Don Vegal.

"My betrothed! my beloved!" cried Martin Paz.

"Death!" yelled the savage multitude.

Meanwhile Martin Paz redoubles his efforts; the canoe remains suspended over the abyss; the current cannot prevail over the strength of the young Indian; the canoe is drawn to him; the enemies are far on the opposite shore; the young girl is saved.

Suddenly an arrow whistles through the air, and pierces the heart of Martin Paz. He falls forward in the bark of the victim; and, re-descending the current of the river in her arms, is engulfed with Sarah in the vortex of the cataract.

A yell of triumph is heard above the sound of the torrent.

Liberta bore off the Spaniard amid a cloud of arrows, and disappeared with him.

Don Vegal regained Lima, where he died with grief and exhaustion.

The Sambo, who remained among his sanguinary tribes, was never heard of more.

The Jew Samuel kept the hundred thousand piasters he had received, and continued his usuries at the expense of the Limanian nobles.

Martin Paz and Sarah were, in their brief and final re-union, betrothed for eternity.
October, other men had unexpectedly appeared in sight of the island, on that deserted sea!

There could be no doubt about it! A vessel was there! But would she pass on, or would she put into port? In a few hours the colonists would definitely know what to expect.

Cyrus Harding and Herbert having immediately called Gideon Spilett, Pencroft, and Neb into the dining-room of Granite House, told them what had happened. Pencroft, seizing the telescope, rapidly swept the horizon, and stopping on the indicated point, that is to say, on that which had made the almost imperceptible spot on the photographic negative--

"I'm blessed but it is really a vessel!" he exclaimed, in a voice which did not express any great amount of satisfaction.

"Is she coming here?" asked Gideon Spilett.

"Impossible to say anything yet," answered Pencroft, "for her rigging alone is above the horizon, and not a bit of her hull can be seen."

"What is to be done?" asked the lad.

"Wait," replied Harding.

And for a considerable time the settlers remained silent, given up to all the thoughts, all the emotions, all the fears, all the hopes, which were aroused by this incident—the most important which had occurred since their arrival in Lincoln Island. Certainly, the colonists were not in the situation of castaways abandoned on a sterile islet, constantly contending against a cruel nature for their miserable existence, and incessantly tormented by the longing to return to inhabited countries. Pencroft and Neb, especially, who felt themselves at once so happy and so rich, would not have left their island without regret. They were accustomed, besides, to this new life in the midst of the domain which their intelligence had as it were civilised. But at any rate this ship brought news from the world, perhaps even from their native land. It was bringing fellow-creatures to them, and it may be conceived how deeply their hearts were moved at the sight!

From time to time Pencroft took the glass and rested himself at the window. From thence he very attentively examined the vessel, which was at a distance of twenty miles to the east. The colonists had as yet, therefore, no means of signalling their presence. A flag would not have been perceived; a gun would not have been heard; a fire would not have been visible. However, it was certain that the island, overtopped by Mount Franklin, could not have escaped the notice of the vessel's look-out. But why was this ship coming there? Was it simple chance which brought it to that part of the Pacific, where the maps mentioned no land except Tabor Islet, which itself was out of the route usually followed by vessels from the Polynesian Archipelagos, from New Zealand, and from the American coast? To this question, which each one asked himself, a reply was suddenly made by Herbert.

"Can it be the Duncan?" he cried.

The Duncan, as has been said, was Lord Glenarvan's yacht, which had left Ayrton on the islet, and which was to return there some day to fetch him. Now, the islet was not so far distant from Lincoln Island, but that a vessel, standing for the one, could pass in sight of the other. A hundred and fifty miles only separated them in longitude, and seventy in latitude.

"We must tell Ayrton," said Gideon Spilett, "and send for him immediately. He alone can say if it is the Duncan."

This was the opinion of all, and the reporter, going to the telegraphic apparatus which placed the corral in communication with Granite House, sent this telegram:--"Come with all possible speed."

In a few minutes the bell sounded.

"I am coming," replied Ayrton.

Then the settlers continued to watch the vessel.

"If it is the Duncan," said Herbert, "Ayrton will recognise her without difficulty, since he sailed on board her for some time."

"And if he recognises her," added Pencroft, "it will agitate him exceedingly!"

"Yes," answered Cyrus Harding; "but now Ayrton is worthy to return on board the Duncan, and pray Heaven that it is indeed Lord Glenarvan's yacht, for I should be suspicious of any other vessel. These are ill-famed seas, and I have always feared a visit from Malay pirates to our island."

"We could defend it," cried Herbert.

"No doubt, my boy," answered the engineer smiling, "but it would be better not to have to defend it."

"A useless observation," said Spilett. "Lincoln Island is unknown to navigators, since it is not marked even on the most recent maps. Do you not think, Cyrus, that that is a sufficient motive for a ship, finding herself unexpectedly in sight of new land, to try and visit rather than avoid it?"

"Certainly," replied Pencroft.

"I think so too," added the engineer. "It may even be said that it is the duty of a captain to come and survey any
land or island not yet known, and Lincoln Island is in this position."

"Well," said Pencroft, "suppose this vessel comes and anchors there a few cables-lengths from our island, what shall we do?" This sudden question remained at first without any reply. But Cyrus Harding, after some moments' thought, replied in the calm tone which was usual to him--

"What we shall do, my friends? What we ought to do is this:--we will communicate with the ship, we will take our passage on board her, and we will leave our island, after having taken possession of it in the name of the United States. Then we will return with any who may wish to follow us to colonise it definitely, and endow the American Republic with a useful station in this part of the Pacific Ocean!"

"Hurrah!" exclaimed Pencroft, "and that will be no small present which we shall make to our country! The colonisation is already almost finished; names are given to every part of the island; there is a natural port, fresh water, roads, a telegraph, a dockyard, and manufactories; and there will be nothing to be done but to inscribe Lincoln Island on the maps!"

"But if any one seizes it in our absence?" observed Gideon Spilett.

"Hang it!" cried the sailor. "I would rather remain all alone to guard it: and trust to Pencroft, they shouldn't steal it from him, like a watch from the pocket of a swell!"

For an hour it was impossible to say with any certainty whether the vessel was or was not standing towards Lincoln Island. She was nearer, but in what direction was she sailing? This Pencroft could not determine. However, as the wind was blowing from the north-east, in all probability the vessel was sailing on the starboard tack. Besides, the wind was favourable for bringing her towards the island, and, the sea being calm, she would not be afraid to approach although the shallows were not marked on the chart.

Towards four o'clock--an hour after he had been sent for--Ayrton arrived at Granite House. He entered the dining-room, saying--

"At your service, gentlemen."

Cyrus Harding gave him his hand, as was his custom to do, and, leading him to the window--

"Ayrton," said he, "we have begged you to come here for an important reason. A ship is in sight of the island."

Ayrton at first paled slightly, and for a moment his eyes became dim; then, leaning out of the window, he surveyed the horizon, but could see nothing.

"Take this telescope," said Spilett, "and look carefully, Ayrton, for it is possible that this ship may be the Duncan come to these seas for the purpose of taking you home again."

"The Duncan!" murmured Ayrton. "Already?" This last word escaped Ayrton's lips as if involuntarily, and his head drooped upon his hands.

Did not twelve years' solitude on a desert island appear to him a sufficient expiation? Did not the penitent yet feel himself pardoned, either in his own eyes or in the eyes of others?

"No," said he, "no! it cannot be the Duncan!"

"Look, Ayrton," then said the engineer, "for it is necessary that we should know beforehand what to expect."

Ayrton took the glass and pointed it in the direction indicated. During some minutes he examined the horizon without moving, without uttering a word. Then--

"It is indeed a vessel," said he, "but I do not think she is the Duncan."

"Why do you not think so?" asked Gideon Spilett. "Because the Duncan is a steam-yacht, and I cannot perceive any trace of smoke either above or near that vessel."

"Perhaps she is simply sailing," observed Pencroft. "The wind is favourable for the direction which she appears to be taking, and she may be anxious to economise her coal, being so far from land."

"It is possible that you may be right, Mr Pencroft," answered Ayrton, "and that the vessel has extinguished her fires. We must wait until she is nearer, and then we shall soon know what to expect."

So saying, Ayrton sat down in a corner of the room and remained silent. The colonists again discussed the strange ship, but Ayrton took no part in the conversation. All were in such a mood that they found it impossible to continue their work. Gideon Spilett and Pencroft were particularly nervous, going, coming, not able to remain still in one place. Herbert felt more curiosity. Neb alone maintained his usual calm manner. Was not his country that where his master was? As to the engineer, he remained plunged in deep thought, and in his heart feared rather than desired the arrival of the ship. In the meanwhile, the vessel was a little nearer the island. With the aid of the glass, it was ascertained that she was a brig, and not one of those Malay proas, which are generally used by the pirates of the Pacific. It was, therefore, reasonable to believe that the engineer's apprehensions would not be justified, and that the presence of this vessel in the vicinity of the island was fraught with no danger. Pencroft, after a minute examination, was able positively to affirm that the vessel was rigged as a brig, and that she was standing obliquely towards the coast, on the starboard tack, under her topsails and topgallant-sails. This was confirmed by Aytron. But by continuing in this direction she must soon disappear behind Claw Cape, as the wind was from the south-west, and to
watch her it would be then necessary to ascend the heights of Washington Bay, near Port Balloon—a provoking
circumstance, for it was already five o'clock in the evening, and the twilight would soon make any observation
extremely difficult.

"What shall we do when night comes on?" asked Gideon Spilett. "Shall we light a fire, so as to signal our
presence, on the coast?"

This was a serious question, and yet, although the engineer still retained some of his presentiments, it was
answered in the affirmative. During the night the ship might disappear and leave for ever, and, this ship gone, would
another ever return to the waters of Lincoln Island? Who could foresee what the future would then have in store for
the colonists?

"Yes," said the reporter, "we ought to make known to that vessel, whoever she may be, that the island is
inhabited. To neglect the opportunity which is offered to us might be to create everlasting regrets."

It was, therefore, decided that Neb and Pencroft should go to Port Balloon, and that there, at nightfall, they
should light an immense fire, the blaze of which would necessarily attract the attention of the brig.

But at the moment when Neb and the sailor were preparing to leave Granite House, the vessel suddenly altered
her course, and stood directly for Union Bay. The brig was a good sailer, for she approached rapidly. Neb and
Pencroft put off their departure, therefore, and the glass was put into Ayrton's hands, that he might ascertain for
certain whether the ship was or was not the Duncan. The Scotch yacht was also rigged as a brig. The question was,
whether a chimney could be discerned between the two masts of the vessel, which was now at a distance of only five
miles.

The horizon was still very clear. The examination was easy, and Ayrton soon let the glass fall again, saying—
"It is not the Duncan! It could not be her!"

Pencroft again brought the brig within the range of the telescope, and could see that she was of between three
and four hundred tons burden, wonderfully narrow, well-masted, admirably built, and must be a very rapid sailer.
But to what nation did she belong? That was difficult to say.

"And yet," added the sailor, "a flag is floating from her peak, but I cannot distinguish the colours of it."

"In half an hour we shall be certain about that," answered the reporter. "Besides, it is very evident that the
intention of the captain of this ship is to land, and, consequently, if not to-day, to-morrow at the latest, we shall
make his acquaintance."

"Never mind!" said Pencroft. "It is best to know whom we have to deal with, and I shall not be sorry to recognise
that fellow's colours!"

And, while thus speaking, the sailor never left the glass. The day began to fade, and with the day the breeze fell
also. The brig's ensign hung in folds, and it became more and more difficult to observe it.

"It is not the American flag," said Pencroft from time to time, "nor the English, the red of which could be easily
seen, nor the French or German colours, nor the white flag of Russia, nor the yellow of Spain. One would say it was
all one colour. Let's see: in these seas, what do we generally meet with? The Chilian flag?—but that is tri-colour.
Brazilian?—it is green. Japanese?—it is yellow and black, whilst this—"

At that moment the breeze blew out the unknown flag. Ayrton, seizing the telescope which the sailor had put
down, put it to his eye, and in a hoarse voice—

"The black flag!" he exclaimed.

And indeed the sombre bunting was floating from the mast of the brig, and they had now good reason for
considering her to be a suspicious vessel!

Had the engineer, then, been right in his presentiments? Was this a pirate vessel? Did she scour the Pacific,
competing with the Malay proas which still infest it? For what had she come to look at the shores of Lincoln Island?
Was it to them an unknown island, ready to become a magazine for stolen cargoes? Had she come to find on the
coast a sheltered port for the winter months? Was the settler's honest domain destined to be transformed into an
infamous refuge—the headquarters of the piracy of the Pacific?

All these ideas instinctively presented themselves to the colonists' imaginations. There was no doubt, besides, of
the signification which must be attached to the colour of the hoisted flag. It was that of pirates! It was that which the
Duncan would have carried, had the convicts succeeded in their criminal design! No time was lost before discussing
it.

"My friends," said Cyrus Harding, "perhaps this vessel only wishes to survey the coast of the island. Perhaps her
crew will not land. There is a chance of it. However that may be, we ought to do everything we can to hide our
presence here. The windmill on Prospect Heights is too easily seen. Let Ayrton and Neb go and take down the sails.
We must also conceal the windows of Granite House with thick branches. All the fires must be extinguished, so that
nothing may betray the presence of men on the island."

"And our vessel?" said Herbert.
"Oh," answered Pencroft, "she is sheltered in Port Balloon, and I defy any of those rascals there to find her!"

The engineer's orders were immediately executed. Neb and Ayrton ascended the plateau, and took the necessary precautions to conceal any indication of a settlement. Whilst they were thus occupied, their companions went to the border of Jacamar Wood, and brought back a large quantity of branches and creepers, which would at some distance appear as natural foliage, and thus disguise the windows in the granite cliff. At the same time, the ammunition and guns were placed ready so as to be at hand in case of an unexpected attack.

When all these precautions had been taken--

"My friends," said Harding, and his voice betrayed some emotion, "if these wretches endeavour to seize Lincoln Island, we shall defend it-- shall we not?"

"Yes, Cyrus," replied the reporter, "and if necessary we will die to defend it!"

The engineer extended his hand to his companions, who pressed it warmly.

Ayrton alone remained in his corner, not joining the colonists. Perhaps he, the former convict, still felt himself unworthy to do so!

Cyrus Harding understood what was passing in Ayrton's mind, and going to him--

"And you, Ayrton," he asked, "what will you do?"

"My duty," answered Ayrton.

He then took up his station near the window and gazed through the foliage.

It was now half-past seven. The sun had disappeared twenty minutes ago behind Granite House. Consequently the eastern horizon was becoming gradually obscured. In the meanwhile the brig continued to advance towards Union Bay. She was now not more than two miles off, and exactly opposite the plateau of Prospect Heights, for after having tacked off Claw Cape, she had drifted towards the north in the current of the rising tide. One might have said that at this distance she had already entered the vast bay, for a straight line drawn from Claw Cape to Cape Mandible would have rested on her starboard quarter.

Was the brig about to penetrate far into the bay? That was the first question. When once in the bay, would she anchor there? That was the second. Would she not content herself with only surveying the coast, and stand out to sea again without landing her crew? They would know this in an hour. The colonists could do nothing but wait.

Cyrus Harding had not seen the suspected vessel hoist the black flag without deep anxiety. Was it not a direct menace against the work which he and his companions had till now conducted so successfully? Had these pirates--for the sailors of the brig could be nothing else--already visited the island, since on approaching it they had hoisted their colours. Had they formerly invaded it, so that certain unaccountable peculiarities might be explained in this way? Did there exist in the as yet unexplored parts some accomplice ready to enter into communication with them?

To all these questions which he mentally asked himself, Harding knew not what to reply; but he felt that the safety of the colony could not but be seriously threatened by the arrival of the brig.

However, he and his companions were determined to fight to the last gasp. It would have been very important to know if the pirates were numerous and better armed than the colonists. But how was this information to be obtained?

Night fell. The new moon had disappeared. Profound darkness enveloped the island and the sea. No light could pierce through the heavy piles of clouds on the horizon. The wind had died away completely with the twilight. Not a leaf rustled on the trees, not a ripple murmured on the shore. Nothing could be seen of the ship, all her lights being extinguished, and if she was still in sight of the island, her whereabouts could not be discovered.

"Well! who knows?" said Pencroft. "Perhaps that cursed craft will stand off during the night, and we shall see nothing of her at daybreak."

As if in reply to the sailor's observation, a bright light flashed in the darkness, and a cannon-shot was heard.

The vessel was still there and had guns on board.

Six seconds elapsed between the flash and the report.

Therefore the brig was about a mile and a quarter from the coast.

At the same time, the chains were heard rattling through the hawse-holes.

The vessel had just anchored in sight of Granite House!

CHAPTER TWO.

DISCUSSIONS--PRESENTIMENTS--AYRTON'S PROPOSAL--IT IS ACCEPTED--AYRTON AND PENCROFT ON GRANT ISLET--CONVICTS FROM NORFOLK ISLAND--AYRTON'S HEROIC ATTEMPT--HIS RETURN--SIX AGAINST FIFTY.

There was no longer any doubt as to the pirates' intentions. They had dropped anchor at a short distance from the island, and it was evident that the next day by means of their boats they purposed to land on the beach!
Cyrus Harding and his companions were ready to act, but, determined though they were, they must not forget to be prudent. Perhaps their presence might still be concealed in the event of the pirates contenting themselves with landing on the shore without examining the interior of the island. It might be, indeed, that their only intention was to obtain fresh water from the Mercy, and it was not impossible that the bridge, thrown across a mile and a half from the mouth, and the manufactory at the Chimneys might escape their notice.

But why was that flag hoisted at the brig’s peak? What was that shot fired for? Pure bravado doubtless, unless it was a sign of the act of taking possession. Harding knew now that the vessel was well-armed. And what had the colonists of Lincoln Island to reply to the pirates’ guns? A few muskets only.

"However," observed Cyrus Harding, "here we are in an impregnable position. The enemy cannot discover the mouth of the outlet, now that it is hidden under reeds and grass, and consequently it would be impossible for them to penetrate into Granite House."

"But our plantations, our poultry-yard, our corral, all, everything!" exclaimed Pencroft, stamping his foot. "They may spoil everything, destroy everything in a few hours!"

"Everything, Pencroft," answered Harding, "and we have no means of preventing them."

"Are they numerous? that is the question," said the reporter. "If they are not more than a dozen, we shall be able to stop them, but forty, fifty, more perhaps!"

"Captain Harding," then said Ayrton, advancing towards the engineer, "will you give me leave."

"For what, my friend?"

"To go to that vessel to find out the strength of her crew."

"But Ayrton--" answered the engineer, hesitating, "you will risk your life--"

"Why not, sir?"

"That is more than your duty."

"I have more than my duty to do," replied Ayrton.

"Will you go to the ship in the boat?" asked Gideon Spilett.

"No, sir, but I will swim. A boat would be seen where a man may glide between wind and water."

"Do you know that the brig is a mile and a quarter from the shore?" said Herbert.

"I am a good swimmer, Mr Herbert."

"I tell you it is risking your life," said the engineer.

"That is no matter," answered Ayrton. "Captain Harding, I ask this as a favour. Perhaps it will be a means of raising me in my own eyes!"

"Go, Ayrton," replied the engineer, who felt sure that a refusal would have deeply wounded the former convict, now become an honest man.

"I will accompany you," said Pencroft.

"You mistrust me!" said Ayrton quickly.

Then more humbly,--

"Alas!"

"No! no!" exclaimed Harding with animation, "no, Ayrton, Pencroft does not mistrust you. You interpret his words wrongly."

"Indeed," returned the sailor, "I only propose to accompany Ayrton as far as the islet. It may be, although it is scarcely possible, that one of these villains has landed, and in that case two men will not be too many to hinder him from giving the alarm. I will wait for Ayrton on the islet, and he shall go alone to the vessel, since he has proposed to do so." These things agreed to, Ayrton made preparations for his departure. His plan was bold, but it might succeed, thanks to the darkness of the night. Once arrived at the vessel’s side, Ayrton, holding onto the main-chains, might reconnoitre the number and perhaps overhear the intentions of the pirates.

Ayrton and Pencroft, followed by their companions, descended to the beach. Ayrton undressed and rubbed himself with grease, so as to suffer less from the temperature of the water, which was still cold. He might, indeed, be obliged to remain in it for several hours.

Pencroft and Neb, during this time, had gone to fetch the boat, moored a few hundred feet higher up, on the bank of the Mercy, and by the time they returned, Ayrton was ready to start. A coat was thrown over his shoulders, and the settlers all came round him to press his hand.

Ayrton then shoved off with Pencroft in the boat.

It was half-past ten in the evening when the two adventurers disappeared in the darkness. Their companions returned to wait at the Chimneys.

The channel was easily traversed, and the boat touched the opposite shore of the islet. This was not done without precaution, for fear lest the pirates might be roaming about there. But after a careful survey, it was evident that the islet was deserted. Ayrton then, followed by Pencroft, crossed it with a rapid step, scaring the birds nestled in the
holes of the rocks; then, without hesitating, he plunged into the sea, and swam noiselessly in the direction of the
ship, in which a few lights had recently appeared, showing her exact situation. As to Pencroft, he crouched down in
a cleft of the rock, and awaited the return of his companion.

In the meanwhile, Ayrton, swimming with a vigorous stroke, glided through the sheet of water without
producing the slightest ripple. His head just emerged above it and his eyes were fixed on the dark hull of the brig,
from which the lights were reflected in the water. He thought only of the duty which he had promised to accomplish,
and nothing of the danger which he ran, not only on board the ship, but in the sea, often frequented by sharks. The
current bore him along and he rapidly receded from the shore.

Half an hour afterwards, Ayrton, without having been either seen or heard, arrived at the ship and caught hold
of the main-chains. He took breath, then, hoisting himself up, he managed to reach the extremity of the cutwater. There
were drying several pairs of sailors' trousers. He put on a pair. Then settling himself firmly, he listened. They were
not sleeping on board the brig. On the contrary, they were talking, singing, laughing. And these were the sentences,
accompanied with oaths, which principally struck Ayrton:--

"Our brig is a famous acquisition."
"She sails well, and merits her name of the Speedy."
"She would show all the navy of Norfolk a clean pair of heels."
"Hurrah for her captain!"
"Hurrah for Bob Harvey!"

What Ayrton felt when he overheard this fragment of conversation may be understood when it is known that in
this Bob Harvey he recognised one of his old Australian companions, a daring sailor, who had continued his
criminal career. Bob Harvey had seized, on the shores of Norfolk Island, this brig, which was loaded with arms,
ammunition, utensils, and tools of all sorts, destined for one of the Sandwich Islands. All his gang had gone on
board, and pirates after having been convicts, these wretches, more ferocious than the Malays themselves, scoured
the Pacific, destroying vessels, and massacring their crews.

The convicts spoke loudly, they recounted their deeds, drinking deeply at the same time, and this is what Ayrton
gathered. The actual crew of the Speedy was composed solely of English prisoners, escaped from Norfolk Island.

Here it may be well to explain what this island was. In 29 degrees 2 minutes south latitude, and 165 degrees 42
minutes east longitude, to the east of Australia, is found a little island, six miles in circumference, overlooked by
Mount Pitt, which rises to a height of 1100 feet above the level of the sea. This is Norfolk Island, once the seat of an
establishment in which were lodged the most intractable convicts from the English penitentiaries. They numbered
500, under an iron discipline, threatened with terrible punishments, and were guarded by 150 soldiers, and 150
employed under the orders of the governor. It would be difficult to imagine a collection of greater ruffians.
Sometimes,—although very rarely,—notwithstanding the extreme surveillance of which they were the object, many
managed to escape, and seizing vessels which they surprised, they infested the Polynesian Archipelagos. [Note.
Norfolk Island has long since been abandoned as a penal settlement.]

Thus had Bob Harvey and his companions done. Thus had Ayrton formerly wished to do. Bob Harvey had
seized the brig Speedy, anchored in sight of Norfolk Island; the crew had been massacred; and for a year this ship
had scoured the Pacific, under the command of Harvey, now a pirate, and well-known to Ayrton!

The convicts were, for the most part, assembled under the poop; but a few, stretched on the deck, were talking
loudly.

The conversation still continued amidst shouts and libations. Ayrton learned that chance alone had brought the
Speedy in sight of Lincoln Island: Bob Harvey had never yet set foot on it; but, as Cyrus Harding had conjectured,
finding this unknown land in his course, its position being marked on no chart, he had formed the project of visiting
it, and, if he found it suitable, of making it the brig's headquarters.

As to the black flag hoisted at the Speedy's peak, and the gun which had been fired, in imitation of men-of-war
when they lower their colours, it was pure piratical bravado. It was in no way a signal, and no communication yet
existed between the convicts and Lincoln Island.

The settlers' domain was now menaced with terrible danger. Evidently the island, with its water, its harbour, its
resources of all kinds so increased in value by the colonists, and the concealment afforded by Granite House, could
not but be convenient for the convicts; in their hands it would become an excellent place of refuge, and, being
unknown, it would assure them, for a long time perhaps, impunity and security. Evidently, also, the lives of the
settlers would not be respected, and Bob Harvey and his accomplices' first care would be to massacre them without
mercy. Harding and his companions had, therefore, not even the choice of flying and hiding themselves in the
island, since the convicts intended to reside there, and since, in the event of the Speedy departing on an expedition, it
was probable that some of the crew would remain on shore, so as to settle themselves there. Therefore, it would be
necessary to fight, to destroy every one of these scoundrels, unworthy of pity, and against whom any means would
be right. So thought Ayrton, and he well knew that Cyrus Harding would be of his way of thinking.

But was resistance and, in the last place, victory possible? That would depend on the equipment of the brig, and the number of men which she carried.

This Ayrton resolved to learn at any cost, and as an hour after his arrival the vociferations had begun to die away, and as a large number of the convicts were already buried in a drunken sleep, Ayrton did not hesitate to venture onto the Speedy's deck, which the extinguished lanterns now left in total darkness. He hoisted himself onto the cutwater, and by the bowsprit arrived at the forecastle. Then, gliding among the convicts stretched here and there, he made the round of the ship, and found that the Speedy carried four guns, which would throw shot of from eight to ten pounds in weight. He found also, on touching them, that these guns were breech-loaders. They were, therefore, of modern make, easily used, and of terrible effect.

As to the men lying on the deck, they were about ten in number, but it was to be supposed that more were sleeping down below. Besides, by listening to them, Ayrton had understood that there were fifty on board. That was a large number for the six settlers of Lincoln Island to contend with! But now, thanks to Ayrton's devotion, Cyrus Harding would not be surprised, he would know the strength of his adversaries, and would make his arrangements accordingly.

There was nothing more for Ayrton to do but to return, and render to his companions an account of the mission with which he had charged himself, and he prepared to regain the bows of the brig, so that he might let himself down into the water.

But to this man, whose wish was, as he had said, to do more than his duty, there came an heroic thought. This was to sacrifice his own life, but save the island and the colonists. Cyrus Harding evidently could not resist fifty ruffians, all well-armed, who, either by penetrating by main force into Granite House, or by starving out the besieged, could obtain from them what they wanted. And then he thought of his preservers—those who had made him again a man, and an honest man, those to whom he owed all—murdered without pity, their works destroyed, their island turned into a pirates' den! He said to himself that he, Ayrton, was the principal cause of so many disasters, since his old companion, Bob Harvey, had but realised his own plans, and a feeling of horror took possession of him. Then he was seized with an irresistible desire to blow up the brig, and with her, all whom she had on board. He would perish in the explosion, but he would have done his duty.

Ayrton did not hesitate. To reach the powder-room, which is always situated in the after-part of a vessel, was easy. There would be no want of powder in a vessel which followed such a trade, and a spark would be enough to destroy it in an instant.

Ayrton stole carefully along the between-decks, strewn with numerous sleepers, overcome more by drunkenness than sleep. A lantern was lighted at the foot of the mainmast, round which was hung a gun-rack, furnished with weapons of all sorts.

Ayrton took a revolver from the rack, and assured himself that it was loaded and primed. Nothing more was needed to accomplish the work of destruction. He then glided towards the stern, so as to arrive under the brig's poop at the powder-magazine.

It was difficult to proceed along the dimly-lighted deck without stumbling over some half-sleeping convict, who retorted by oaths and kicks. Ayrton was, therefore, more than once obliged to halt. But at last he arrived at the partition dividing the after-cabin, and found the door opening into the magazine itself.

Ayrton, compelled to force it open, set to work. It was a difficult operation to perform without noise, for he had to break a padlock. But under his vigorous hand, the padlock broke, and the door was open.

At that moment a hand was laid on Ayrton's shoulder.

"What are you doing here?" asked a tall man, in a harsh voice, who, standing in the shadow, quickly threw the light of a lantern on Ayrton's face.

Ayrton drew back. In the rapid flash of the lantern, he had recognised his former accomplice, Bob Harvey, who could not have known him, as he must have thought Ayrton long since dead.

"What are you doing here?" again said Bob Harvey, seizing Ayrton by the waistband.

But Ayrton, without replying, wrenched himself from his grasp and attempted to rush into the magazine. A shot fired into the midst of the powder-casks, and all would be over!

"Help, lads!" shouted Bob Harvey.

At his shout two or three pirates awoke, jumped up, and, rushing on Ayrton, endeavoured to throw him down. He soon extricated himself from their grasp. He fired his revolver, and two of the convicts fell; but a blow from a knife which he could not ward off made a gash in his shoulder.

Ayrton perceived that he could no longer hope to carry out his project. Bob Harvey had reclosed the door of the powder-magazine, and a movement on the deck indicated a general awakening of the pirates. Ayrton must reserve himself to fight at the side of Cyrus Harding. There was nothing for him but flight!
But was flight still possible? It was doubtful, yet Ayrton resolved to dare everything in order to rejoin his companions.

Four barrels of the revolver were still undischarged. Two were fired-- one, aimed at Bob Harvey, did not wound him, or at any rate only slightly; and Ayrton, profiting by the momentary retreat of his adversaries, rushed towards the companion-ladder to gain the deck. Passing before the lantern, he smashed it with a blow from the butt of his revolver. A profound darkness ensued, which favoured his flight. Two or three pirates, awakened by the noise, were descending the ladder at the same moment. A fifth shot from Ayrton laid one low, and the others drew back, not understanding what was going on. Ayrton was on deck in two bounds, and three seconds later, having discharged his last barrel in the face of a pirate who was about to seize him by the throat, he leapt over the bulwarks into the sea.

Ayrton had not made six strokes before shots were splashing around him like hail.

What were Pencroft's feelings, sheltered under a rock on the islet! what were those of Harding, the reporter, Herbert, and Neb, crouched in the Chimneys, when they heard the reports on board the brig! They rushed out onto the beach, and, their guns shouldered, they stood ready to repel any attack.

They had no doubt about it themselves! Ayrton, surprised by the pirates, had been murdered, and, perhaps, the wretches would profit by the night to make a descent on the island!

Half an hour was passed in terrible anxiety. The firing had ceased, and yet neither Ayrton nor Pencroft had reappeared. Was the islet invaded? Ought they not to fly to the help of Ayrton and Pencroft? But how? The tide being high at that time, rendered the channel impassable. The boat was not there! We may imagine the horrible anxiety which took possession of Harding and his companions!

At last, towards half-past twelve, a boat, carrying two men, touched the beach. It was Ayrton, slightly wounded in the shoulder, and Pencroft, safe and sound, whom their friends received with open arms.

All immediately took refuge in the Chimneys. There Ayrton recounted all that had passed, even to his plan for blowing up the brig, which he had attempted to put into execution.

All hands were extended to Ayrton, who did not conceal from them that their situation was serious. The pirates had been alarmed. They knew that Lincoln Island was inhabited. They would land upon it in numbers and well-armed. They would respect nothing. Should the settlers fall into their hands, they must expect no mercy!

"Well, we shall know how to die!" said the reporter.
"Let us go in and watch," answered the engineer.
"Have we any chance of escape, captain?" asked the sailor.
"Yes, Pencroft."
"Hum! six against fifty!"
"Yes! six! without counting--"
"Who?" asked Pencroft.
Cyrus did not reply, but pointed upwards.

CHAPTER THREE.


The night passed without incident. The colonists were on the qui vive, and did not leave their post at the Chimneys. The pirates, on their side, did not appear to have made any attempt to land. Since the last shots fired at Ayrton not a report, not even a sound, had betrayed the presence of the brig in the neighbourhood of the island. It might have been fancied that she had weighed anchor, thinking that she had to deal with her match, and had left the coast.

But it was no such thing, and when day began to dawn the settlers could see a confused mass through the morning mist. It was the Speedy.

"These, my friends," said the engineer, "are the arrangements which appear to me best to make before the fog completely clears away. It hides us from the eyes of the pirates, and we can act without attracting their attention. The most important thing is, that the convicts should believe that the inhabitants of the island are numerous, and consequently capable of resisting them. I therefore propose that we divide into three parties, the first of which shall be posted at the Chimneys, the second at the mouth of the Mercy. As to the third, I think it would be best to place it on the islet, so as to prevent, or at all events delay, any attempt at landing. We have the use of two rifles and four muskets. Each of us will be armed, and, as we are amply provided with powder and shot, we need not spare our fire. We have nothing to fear from the muskets, nor even from the guns of the brig. What can they do against these rocks? And, as we shall not fire from the windows of Granite House, the pirates will not think of causing irreparable
damage by throwing shell against it. What is to be feared is, the necessity of meeting hand-to-hand, since the convicts have numbers on their side. We must, therefore, try to prevent them from landing, but without discovering ourselves. Therefore, do not economise the ammunition. Fire often, but with a sure aim. We have each eight or ten enemies to kill, and they must be killed!"

Cyrus Harding had clearly represented their situation, although he spoke in the calmest voice, as if it was a question of directing a piece of work, and not ordering a battle. His companions approved these arrangements without even uttering a word. There was nothing more to be done but for each to take his place before the fog should be completely dissipated. Neb and Pencroft immediately ascended to Granite House and brought back a sufficient quantity of ammunition. Gideon Spilett and Ayrton, both very good marksmen, were armed with the two rifles, which carried nearly a mile. The four other muskets were divided amongst Harding, Neb, Pencroft, and Herbert.

The posts were arranged in the following manner:

Cyrus Harding and Herbert remained in ambush at the Chimneys, thus commanding the shore to the foot of Granite House.

Gideon Spilett and Neb crouched among the rocks at the mouth of the Mercy, from which the drawbridges had been raised, so as to prevent any one from crossing in a boat or landing on the opposite shore.

As to Ayrton and Pencroft, they shoved off in the boat, and prepared to cross the channel and to take up two separate stations on the islet. In this way, shots being fired from four different points at once, the convicts would be led to believe that the island was both largely peopled and strongly defended.

In the event of a landing being effected without their having been able to prevent it, and also if they saw that they were on the point of being cut off by the brig's boat, Ayrton and Pencroft were to return in their boat to the shore and proceed towards the threatened spot.

Before starting to occupy their posts, the colonists for the last time wrung each other's hands.

Pencroft succeeded in controlling himself sufficiently to suppress his emotion when he embraced Herbert, his boy! and then they separated.

In a few moments Harding and Herbert on one side, the reporter and Neb on the other, had disappeared behind the rocks, and five minutes later Ayrton and Pencroft, having without difficulty crossed the channel, disembarked on the islet and concealed themselves in the clefts of its eastern shore.

None of them could have been seen, for they themselves could scarcely distinguish the brig in the fog.

It was half-past six in the morning.

Soon the fog began to clear away, and the topmasts of the brig issued from the vapour. For some minutes great masses rolled over the surface of the sea, then a breeze sprang up, which rapidly dispelled the mist.

The Speedy now appeared in full view, with a spring on her cable, her head to the north, presenting her larboard side to the island. Just as Harding had calculated, she was not more than a mile and a quarter from the coast.

The sinister black flag floated from the peak.

The engineer, with his telescope, could see that the four guns on board were pointed at the island. They were evidently ready to fire at a moment's notice.

In the meanwhile the Speedy remained silent. About thirty pirates could be seen moving on the deck. A few were on the poop; two others posted in the shrouds, and armed with spy-glasses, were attentively surveying the island.

Certainly, Bob Harvey and his crew would not be able easily to give an account of what had happened during the night on board the brig. Had this half-naked man, who had forced the door of the powder-magazine, and with whom they had struggled, who had six times discharged his revolver at them, who had killed one and wounded two others, escaped their shot? Had he been able to swim to shore? Whence did he come? What had been his object? Had his design really been to blow up the brig, as Bob Harvey had thought? All this must be confused enough to the convicts' minds. But what they could no longer doubt was that the unknown island before which the Speedy had cast anchor was inhabited, and that there was, perhaps, a numerous colony ready to defend it. And yet no one was to be seen, neither on the shore, nor on the heights. The beach appeared to be absolutely deserted. At any rate, there was no trace of dwellings. Had the inhabitants fled into the interior? Thus probably the pirate captain reasoned, and doubtless, like a prudent man, he wished to reconnoitre the locality before he allowed his men to venture there.

During an hour and a half, no indication of attack or landing could be observed on board the brig. Evidently Bob Harvey was hesitating. Even with his strongest telescopes he could not have perceived one of the settlers crouched among the rocks. It was not even probable that his attention had been awakened by the screen of green branches and creepers hiding the windows of Granite House, and showing rather conspicuously on the bare rock. Indeed, how could he imagine that a dwelling was hollowed out, at that height, in the solid granite. From Claw Cape to the Mandible Capes, in all the extent of Union Bay, there was nothing to lead him to suppose that the island was or could be inhabited.
At eight o'clock, however, the colonists observed a movement on board the Speedy. A boat was lowered, and seven men jumped into her. They were armed with muskets: one took the yoke-lines, four others the oars, and the two others, kneeling in the bows, ready to fire, reconnoitred the island. Their object was no doubt to make an examination but not to land, for in the latter case they would have come in larger numbers. The pirates from their look-out could have seen that the coast was sheltered by an islet, separated from it by a channel half a mile in width. However, it was soon evident to Cyrus Harding, on observing the direction followed by the boat, that they would not attempt to penetrate into the channel, but would land on the islet.

Pencroft and Ayrton, each hidden in a narrow cleft of the rock, saw them coming directly towards them, and waited till they were within range.

The boat advanced with extreme caution. The oars only dipped into the water at long intervals. It could now be seen that one of the convicts held a lead-line in his hand, and that he wished to fathom the depth of the channel hollowed out by the current of the Mercy. This showed that it was Bob Harvey's intention to bring his brig as near as possible to the coast. About thirty pirates, scattered in the rigging, followed every movement of the boat, and took the bearings of certain landmarks which would allow them to approach without danger. The boat was not more than two cables-lengths off the islet when she stopped. The man at the tiller stood up and looked for the best place at which to land.

At that moment two shots were heard. Smoke curled up from among the rocks of the islet. The man at the helm and the man with the lead-line fell backwards into the boat. Ayrton's and Pencraft's balls had struck them both at the same moment.

Almost immediately a louder report was heard, a cloud of smoke issued from the brig's side, and a ball, striking the summit of the rock which sheltered Ayrton and Pencroft, made it fly in splinters, but the two marksmen remained unhurt.

Horrible imprecations burst from the boat, which immediately continued its way. The man who had been at the tiller was replaced by one of his comrades, and the oars were rapidly plunged into the water. However, instead of returning on board as might have been expected, the boat coasted along the islet, so as to round its southern point. The pirates pulled vigorously at their oars that they might get out of range of the bullets.

They advanced to within five cables-lengths of that part of the shore terminated by Flotsam Point, and after having rounded it in a semicircular line, still protected by the brig's guns, they proceeded towards the mouth of the Mercy.

Their evident intention was to penetrate into the channel, and cut off the colonists posted on the islet, in such a way, that whatever their number might be, being placed between the fire from the boat and the fire from the brig, they would find themselves in a very disadvantageous position.

A quarter of an hour passed whilst the boat advanced in this direction. Absolute silence, perfect calm reigned in the air and on the water.

Pencroft and Ayrton, although they knew they ran the risk of being cut off, had not left their post, both that they did not wish to show themselves as yet to their assailants, and expose themselves to the Speedy's guns, and that they relied on Neb and Gideon Spilett, watching at the mouth of the river, and on Cyrus Harding and Herbert, in ambush among the rocks at the Chimneys.

Twenty minutes after the first shots were fired, the boat was less than two cables-lengths off the Mercy. As the tide was beginning to rise with its accustomed violence, caused by the narrowness of the straits, the pirates were drawn towards the river, and it was only by dint of hard rowing that they were able to keep in the middle of the channel. But, as they were passing within good range of the mouth of the Mercy, two balls saluted them, and two more of their number were laid in the bottom of the boat. Neb and Spilett had not missed their aim.

The brig immediately sent a second ball on the post betrayed by the smoke, but without any other result than that of splintering the rock.

The boat now contained only three able men. Carried on by the current, it shot through the channel with the rapidity of an arrow, passed before Harding and Herbert, who, not thinking it within range, withheld their fire, then, rounding the northern point of the islet with the two remaining oars, they pulled towards the brig.

Hitherto the settlers had nothing to complain of. Their adversaries had certainly had the worst of it. The latter already counted four men seriously wounded if not dead; they, on the contrary, unwounded, had not missed a shot. If the pirates continued to attack them in this way, if they renewed their attempt to land by means of a boat, they could be destroyed one by one.

It was now seen how advantageous the engineer's arrangements had been. The pirates would think that they had to deal with numerous and well-armed adversaries, whom they could not easily get the better of.

Half an hour passed before the boat, having to pull against the current, could get alongside the Speedy. Frightful cries were heard when they returned on board with the wounded, and two or three guns were fired with no result.
But now about a dozen other convicts, maddened with rage, and possibly by the effect of the evening’s potations, threw themselves into the boat. A second boat was also lowered, in which eight men took their places, and whilst the first pulled straight for the islet, to dislodge the colonists from thence, the second manoeuvred so as to force the entrance of the Mercy.

The situation was evidently becoming very dangerous for Pencroft and Ayrton, and they saw that they must regain the mainland.

However, they waited till the first boat was within range, when two well-directed balls threw its crew into disorder. Then, Pencroft and Ayrton, abandoning their posts, under fire from the dozen muskets, ran across the islet at full speed, jumped into their boat, crossed the channel at the moment the second boat reached the southern end, and ran to hide themselves in the Chimneys.

They had scarcely rejoined Cyrus Harding and Herbert, before the islet was overrun with pirates in every direction. Almost at the same moment, fresh reports resounded from the Mercy station, to which the second boat was rapidly approaching. Two, out of the eight men who manned her, were mortally wounded by Gideon Spilett and Neb, and the boat herself, carried irresistibly onto the reefs, was stoved in at the mouth of the Mercy. But the six survivors, holding their muskets above their heads to preserve them from contact with the water, managed to land on the right bank of the river. Then, finding they were exposed to the fire of the ambush there, they fled in the direction of Flotsam Point, out of range of the balls.

The actual situation was this: on the islet were a dozen convicts, of whom some were no doubt wounded, but who had still a boat at their disposal; on the island were six, but who could not by any possibility reach Granite House, as they could not cross the river, all the bridges being raised.

"Hallo," exclaimed Pencroft as he rushed into the Chimneys, "hallo, captain! What do you think of it, now?"

"I think," answered the engineer, "that the combat will now take a new form, for it cannot be supposed that the convicts will be so foolish as to remain in a position so unfavourable for them!"

"They won't cross the channel," said the sailor. "Ayrton and Mr Spilett's rifles are there to prevent them. You know that they carry more than a mile!"

"No doubt," replied Herbert; "but what can two rifles do against the brig's guns?"

"Well, the brig isn't in the channel yet, I fancy!" said Pencroft.

"But suppose she does come there?" said Harding.

"That's impossible, for she would risk running aground and being lost!"

"It is possible," said Ayrton. "The convicts might profit by the high tide to enter the channel, with the risk of grounding at low tide, it is true; but then, under the fire from her guns, our posts would be no longer tenable."

"Confound them!" exclaimed Pencroft. "It really seems as if the blackguards were preparing to weigh anchor."

"Perhaps we shall be obliged to take refuge in Granite House!" observed Herbert.

"We must wait!" answered Cyrus Harding.

"But Mr Spilett and Neb?" said Pencroft.

"They will know when it is best to rejoin us. Be ready, Ayrton. It is yours and Spilett's rifles which must speak now."

It was only too true. The Speedy was beginning to weigh her anchor, and her intention was evidently to approach the islet. The tide would be rising for an hour and a half, and the ebb current being already weakened, it would be easy for the brig to advance. But as to entering the channel, Pencroft, contrary to Ayrton's opinion, could not believe that she would dare to attempt it.

In the meanwhile, the pirates who occupied the islet had gradually advanced to the opposite shore, and were now only separated from the mainland by the channel.

Being armed with muskets alone, they could do no harm to the settlers, in ambush at the Chimneys and the mouth of the Mercy; but, not knowing the latter to be supplied with long range rifles, they on their side did not believe themselves to be exposed. Quite uncovered, therefore, they surveyed the islet, and examined the shore.

Their illusion was of short duration. Ayrton's and Gideon Spilett's rifles then spoke, and no doubt imparted some very disagreeable intelligence to two of the convicts, for they fell backwards.

"Eight less!" exclaimed Pencroft. "Really, one would have thought that Mr Spilett and Ayrton had given the word to fire together!"

"Gentlemen," said Ayrton, as he reloaded his gun, "this is becoming more serious. The brig is making sail!"

"The anchor is weighed!" exclaimed Pencroft.

"Yes; and she is already moving."
In fact, they could distinctly hear the creaking of the windlass. The Speedy was at first held by her anchor; then, when that had been raised, she began to drift towards the shore. The wind was blowing from the sea; the jib and the fore-topsail were hoisted, and the vessel gradually approached the island.

From the two posts of the Mercy and the Chimneys they watched her without giving a sign of life; but not without some emotion. What could be more terrible for the colonists than to be exposed, at a short distance, to the brig's guns, without being able to reply with any effect? How could they then prevent the pirates from landing?

Cyrus Harding felt this strongly, and he asked himself what it would be possible to do. Before long, he would be called upon for his determination. But what was it to be? To shut themselves up in Granite House, to be besieged there, to remain there for weeks, for months even, since they had an abundance of provisions? So far good! But after that? The pirates would not be less masters of the island, which they would ravage at their pleasure, and in time they would end by having their revenge on the prisoners in Granite House.

However, one chance yet remained; it was that Bob Harvey, after all, would not venture his ship into the channel, and that he would keep outside the islet. He would be still separated from the coast by half a mile, and at that distance his shot could not be very destructive.

"Never!" repeated Pencroft, "Bob Harvey will never, if he is a good seaman, enter that channel! He knows well that it would risk the brig, if the sea got up ever so little! And what would become of him without his vessel?"

In the meanwhile the brig approached the islet, and it could be seen that she was endeavouring to make the lower end. The breeze was light, and as the current had then lost much of its force, Bob Harvey had absolute command over his vessel.

The route previously followed by the boats had allowed her to reconnoitre the channel, and she boldly entered it.

The pirate's design was now only too evident: he wished to bring her broadside to bear on the Chimneys and from there to reply with shell and ball to the shot which had till then decimated her crew.

Soon the Speedy reached the point of the islet; she rounded it with ease; the mainsail was braced up, and the brig hugging the wind, stood across the mouth of the Mercy.

"The scoundrels! they are coming!" said Pencroft.

At that moment, Cyrus Harding, Ayrton, the sailor, and Herbert, were rejoined by Neb and Gideon Spilett.

The reporter and his companion had judged it best to abandon the post at the Mercy, from which they could do nothing against the ship, and they had acted wisely. It was better that the colonists should be together at the moment when they were about to engage in a decisive action. Gideon Spilett and Neb had arrived by dodging behind the rocks, though not without attracting a shower of bullets, which had not, however, reached them.

"Spilett! Neb!" cried the engineer, "you are not wounded?"

"No," answered the reporter; "a few bruises only from the ricochet! But that cursed brig has entered the channel!"

"Yes," replied Pencroft, "and in ten minutes she will have anchored before Granite House!"

"Have you formed any plan, Cyrus?" asked the reporter.

"We must take refuge in Granite House whilst there is still time, and the convicts cannot see us."

"That is my opinion, too," replied Gideon Spilett; "but once shut up--"

"We must be guided by circumstances," said the engineer.

"Let us be off, then, and make haste!" said the reporter.

"Would you not wish, captain, that Ayrton and I should remain here?" asked the sailor.

"What would be the use of that, Pencroft?" replied Harding. "No. We will not separate!"

There was not a moment to be lost. The colonists left the Chimneys. A bend of the cliff prevented them from being seen by those in the brig; but two or three reports, and the crash of bullets on the rock, told them that the Speedy was at no great distance.

To spring into the lift, hoist themselves up to the door of Granite House, where Top and Jup had been shut up since the evening before, to rush into the large room, was the work of a minute only.

It was quite time, for the settlers, through the branches, could see the Speedy, surrounded with smoke, gliding up the channel. The firing was incessant, and shot from the four guns struck blindly, both on the Mercy post, although it was not occupied, and on the Chimneys. The rocks were splintered, and cheers accompanied each discharge. However, they were hoping that Granite House would be spared, thanks to Harding's precaution of concealing the windows, when a shot, piercing the door, penetrated into the passage.

"We are discovered!" exclaimed Pencroft.

The colonists had not, perhaps, been seen; but it was certain that Bob Harvey had thought proper to send a ball through the suspected foliage which concealed that part of the cliff. Soon he redoubled his attack, when another ball having torn away the leafy screen, disclosed a gaping aperture in the granite.

The colonists' situation was desperate. Their retreat was discovered. They could not oppose any obstacle to these
missiles, nor protect the stone, which flew in splinters around them. There was nothing to be done but to take refuge in the upper passage of Granite House, and leave their dwelling to be devastated, when a deep roar was heard, followed by frightful cries!

Cyrus Harding and his companions rushed to one of the windows--

The brig, irresistibly raised on a sort of water-spout, had just split in two, and in less than ten seconds she was swallowed up with all her criminal crew!

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CHAPTER FOUR.


"She has blown up!" cried Herbert.

"Yes! blown up, just as if Ayrton had set fire to the powder!" returned Pencroft, throwing himself into the lift together with Neb and the lad.

"But what has happened?" asked Gideon Spilett, quite stunned by this unexpected catastrophe.

"Oh! this time, we shall know," answered the engineer quickly.

"What shall we know?--"

"Later! later! Come, Spilett. The main point is that these pirates have been exterminated!"

And Cyrus Harding, hurrying away the reporter and Ayrton, joined Pencroft, Neb, and Herbert on the beach.

Nothing could be seen of the brig, not even her masts. After having been raised by the water-spout, she had fallen on her side, and had sunk in that position, doubtless in consequence of some enormous leak. But as in that place the channel was not more than twenty feet in depth, it was certain that the sides of the submerged brig would reappear at low-water.

A few things from the wreck floated on the surface of the water. A raft could be seen consisting of spare spars, coops of poultry with their occupants still living, boxes and barrels, which gradually came to the surface, after having escaped through the hatchways, but no pieces of the wreck appeared, neither planks from the deck, nor timber from the hull,--which rendered the sudden disappearance of the Speedy perfectly inexplicable.

However, the two masts, which had been broken and escaped from the shrouds and stays, came up, with their sails, some furled and the others spread. But it was not necessary to wait for the tide to bring up these riches, and Ayrton and Pencroft, jumped into the boat with the intention of towing the pieces of wreck either to the beach or to the islet. But just as they were shoving off an observation from Gideon Spilett arrested them.

"What about those six convicts who disembarked on the right bank of the Mercy?" said he.

In fact, it would not do to forget that the six men whose boat had gone to pieces on the rocks, had landed at Flotsam Point.

They looked in that direction. None of the fugitives were visible. It was probable that, having seen their vessel engulfed in the channel, they had fled into the interior of the island.

"We will deal with them later," said Harding. "As they are armed, they will still be dangerous; but as it is six against six, the chances are equal. To the most pressing business first."

Ayrton and Pencroft pulled vigorously towards the wreck.

The sea was calm and the tide very high, as there had been a new moon but two days before. A whole hour at least would elapse before the hull of the brig could emerge from the water of the channel.

Ayrton and Pencroft were able to fasten the masts and spars by means of ropes, the ends of which were carried to the beach. There, by the united efforts of the settlers the pieces of wreck were hauled up. Then the boat picked up all that was floating, coops, barrels, and boxes, which were immediately carried to the Chimneys.

Several bodies floated also. Amongst them, Ayrton recognised that of Bob Harvey, which he pointed out to his companion, saying with some emotion--

"That is what I have been, Pencroft."

"But what you are no longer, brave Ayrton!" returned the sailor warmly.

It was singular enough that so few bodies floated. Only five or six were counted, which were already being carried by the current towards the open sea. Very probably the convicts had not had time to escape, and the ship lying over on her side, the greater number of them had remained below. Now the current, by carrying the bodies of these miserable men out to sea, would spare the colonists the sad task of burying them in some corner of their island.

For two hours, Cyrus Harding and his companions were solely occupied in hauling up the spars onto the sand, and then in spreading the sails, which were perfectly uninjured, to dry. They spoke little, for they were absorbed in
their work, but what thoughts occupied their minds!

The possession of this brig, or rather all that she contained, was a perfect mine of wealth. In fact, a ship is like a
little world in miniature, and the stores of the colony would be increased by a large number of useful articles. It
would be, on a large scale, equivalent to the chest found at Flotsam Point.

"And besides," thought Pencroft, "why should it be impossible to refloat the brig? If she has only a leak, that
may be stopped up; a vessel from three to four hundred tons, why she is a regular ship compared to our
Bonadventure! And we could go a long distance in her! We could go anywhere we liked! Captain Harding, Ayrton
and I must examine her! She would be well worth the trouble!"

In fact, if the brig was still fit to navigate, the colonists' chances of returning to their native land was singularly
increased. But, to decide this important question, it was necessary to wait until the tide was quite low, so that every
part of the brig's hull might be examined.

When their treasures had been safely conveyed on shore, Harding and his companions agreed to devote some
minutes to breakfast. They were almost famished: fortunately, the larder was not far off, and Neb was noted for
being an expeditious cook. They breakfasted, therefore, near the Chimneys, and during their repast, as may be
supposed, nothing was talked of but the unexpected event which had so miraculously saved the colony.

"Miraculous is the word," repeated Pencroft, "for it must be acknowledged that those rascals blew up just at the
right moment! Granite House was beginning to be uncomfortable as a habitation!"

"And can you guess, Pencroft," asked the reporter, "how it happened, or what can have occasioned the
explosion?"

"Oh! Mr Spilett, nothing is more simple," answered Pencroft. "A convict vessel is not disciplined like a man-of-
war! Convicts are not sailors. Of course the powder-magazine was open, and as they were firing incessantly, some
careless or clumsy fellow just blew up the vessel!"

"Captain Harding," said Herbert, "what astonishes me is that the explosion has not produced more effect. The
report was not loud, and besides there are so few planks and timbers torn out. It seems as if the ship had rather
foundered than blown up."

"Does that astonish you, my boy?" asked the engineer.

"Yes, captain."

"And it astonishes me also Herbert," replied he, "but when we visit the hull of the brig, we shall no doubt find
the explanation of the matter."

"Why, captain," said Pencroft, "you don't suppose that the Speedy simply foundered like a ship which has struck
on a rock?"

"Why not," observed Neb, "if there are rocks in the channel?"

"Nonsense, Neb," answered Pencroft, "you did not look at the right moment. An instant before she sank, the
brig, as I saw perfectly well, rose on an enormous wave, and fell back on her larboard side. Now, if she had only
struck, she would have sunk quietly and gone to the bottom like an honest vessel."

"It was just because she was not an honest vessel!" returned Neb.

"Well, we shall soon see, Pencroft," said the engineer.

"We shall soon see," rejoined the sailor, "but I would wager my head there are no rocks in the channel. Look
here, captain, to speak candidly, do you mean to say that there is anything marvellous in the occurrence?"

Cyrus Harding did not answer.

"At any rate," said Gideon Spilett, "whether rock or explosion, you will agree, Pencroft, that it occurred just in
the nick of time!"

"Yes! yes!" replied the sailor, "but that is not the question. I ask Captain Harding if he sees anything supernatural
in all this."

"I cannot say, Pencroft," said the engineer. "That is all the answer I can make."

A reply which did not satisfy Pencroft at all. He stuck to "an explosion," and did not wish to give it up. He would
never consent to admit that in that channel, with its fine sandy bed, just like the beach, which he had often crossed at
low-water, there could be an unknown rock.

And besides, at the time the brig foundered, it was high-water, that is to say, there was enough water to carry the
vessel clear over any rocks which would not be uncovered at low tide. Therefore, there could not have been a
collision. Therefore, the vessel had not struck. Therefore, she had blown up.

And it must be confessed that the sailor's arguments were not without reason.

Towards half-past one, the colonists embarked in the boat to visit the wreck. It was to be regretted that the brig's
two boats had not been saved; but one, as has been said, had gone to pieces at the mouth of the Mercy, and was
absolutely useless; the other had disappeared when the brig went down, and had not again been seen, having
doubtless been crushed.
The hull of the Speedy was just beginning to issue from the water. The brig was lying right over on her side, for her masts being broken, pressed down by the weight of the ballast displaced by the shock, the keel was visible along her whole length. She had been regularly turned over by the inexplicable but frightful submarine action, which had been at the same time manifested by an enormous water-spout.

The settlers rowed round the hull, and, in proportion as the tide went down, they could ascertain, if not the cause which had occasioned the catastrophe, at least the effect produced.

Towards the bows, on both sides of the keel, seven or eight feet from the beginning of the stem, the sides of the brig were frightfully torn. Over a length of at least twenty feet there opened two large leaks, which it would be impossible to stop up. Not only had the copper sheathing and the planks disappeared, reduced, no doubt, to powder, but also the ribs, the iron bolts, and tree-nails which united them. From the entire length of the hull to the stern the false keel had been separated with unaccountable violence, and the keel itself, torn from the carline in several places, was split in all its length.

"I've a notion!" exclaimed Pencroft, "that this vessel will be difficult to get afloat again."

"It will be impossible," said Ayrton.

"At any rate," observed Gideon Spilett to the sailor, "the explosion, if there has been one, has produced singular effects! It has split the lower part of the hull, instead of blowing up the deck and topsides! These great rents appear rather to have been made by a rock than by the explosion of a powder-magazine."

"There is not a rock in the channel!" answered the sailor. "I will admit anything you like, except the rock."

"Let us try to penetrate into the interior of the brig," said the engineer; "perhaps we shall then know what to think of the cause of her destruction."

This was the best thing to be done, and it was agreed, besides, to take an inventory of all the treasures on board, and to arrange for their preservation.

Access to the interior of the brig was now easy. The tide was still going down, and the deck was practicable. The ballast, composed of heavy masses of iron, had broken through in several places. The noise of the sea could be heard as it rushed out at the holes in the hull.

Cyrus Harding and his companions, hatchets in hand, advanced along the shattered deck. Cases of all sorts encumbered it, and, as they had been but a very short time in the water, their contents were perhaps uninjured.

They then busied themselves in placing all this cargo in safety. The water would not return for several hours, and these hours must be employed in the most profitable way. Ayrton and Pencroft had, at the entrance made in the hull, discovered tackle, which would serve to hoist up the barrels and chests. The boat received them and transported them to the shore. They took the articles as they came, intending to sort them afterwards.

At any rate, the settlers saw at once, with extreme satisfaction, that the brig possessed a very varied cargo—an assortment of all sorts of articles, utensils, manufactured goods, and tools—such as the ships which make the great coasting-trade of Polynesia are usually laden with. It was probable that they would find a little of everything, and they agreed that it was exactly what was necessary for the colony of Lincoln Island.

However—and Cyrus Harding observed it in silent astonishment—not only, as has been said, had the hull of the brig enormously suffered from the shock, whatever it was, that had occasioned the catastrophe, but the interior arrangements had been destroyed, especially towards the bows. Partitions and staunchions were smashed, as if some tremendous shell had burst in the interior of the brig. The colonists could easily go fore and aft, after having removed the cases as they were extricated. They were not heavy bales, which would have been difficult to remove, but simple packages, of which the stowage, besides, was no longer recognisable.

The colonists then reached the stern of the brig—the part formerly surmounted by the poop. It was there that, following Ayrton's directions, they must look for the powder-magazine. Cyrus Harding thought that it had not exploded; that it was possible some barrels might be saved, and that the powder, which is usually enclosed in metal coverings, might not have suffered from contact with the water.

This, in fact, was just what had happened. They extricated from amongst a large number of shot twenty barrels, the insides of which were lined with copper. Pencroft was convinced by the evidence of his own eyes that the destruction of the Speedy could not be attributed to an explosion. That part of the hull in which the magazine was situated was, moreover, that which had suffered least.

"It may be so," said the obstinate sailor; "but as to a rock, there is not one in the channel!"

"Then, how did it happen?" asked Herbert.

"I don't know," answered Pencroft, "Captain Harding doesn't know, and nobody knows or ever will know!"

Several hours had passed during these researches, and the tide began to flow. Work must be suspended for the present. There was no fear of the brig being carried away by the sea, for she was already fixed as firmly as if moored by her anchors.

They could therefore, without inconvenience, wait until the next day to resume operations; but, as to the vessel
herself, she was doomed, and it would be best to hasten to save the remains of her hull, as she would not be long in disappearing in the quicksands of the channel.

It was now five o'clock in the evening. It had been a hard day's work for the men. They ate with good appetite, and, notwithstanding their fatigue, they could not resist, after dinner, their desire of inspecting the cases which composed the cargo of the Speedy.

Most of them contained clothes, which, as may be believed, were well received. There were enough to clothe a whole colony—linen for every one's use, shoes for every one's feet.

"We are too rich!" exclaimed Pencroft. "But what are we going to do with all this?"

And every moment burst forth the hurrahs of the delighted sailor when he caught sight of the barrels of gunpowder, fire-arms and side-arms, balls of cotton, implements of husbandry, carpenter's, joiner's, and blacksmith's tools, and boxes of all kinds of seeds, not in the least injured by their short sojourn in the water. Ah, two years before, how these things would have been prized! And now, even although the industrious colonists had provided themselves with tools, these treasures would find their use.

There was no want of space in the store-rooms of Granite House, but that daytime would not allow them to stow away the whole. It would not do also to forget that the six survivors of the Speedy's crew had landed on the island, for they were in all probability scoundrels of the deepest dye, and it was necessary that the colonists should be on their guard against them. Although the bridges over the Mercy were raised, the convicts would not be stopped by a river or a stream, and, rendered desperate, these wretches would be capable of anything.

They would see later what plan it would be best to follow; but in the meantime it was necessary to mount guard over cases and packages heaped up near the Chimneys, and thus the settlers employed themselves in turn during the night.

The morning came, however, without the convicts having attempted any attack. Master Jup and Top, on guard at the foot of Granite House, would have quickly given the alarm. The three following days--the 19th, 20th, and 21st of October--were employed in saving everything of value, or of any use whatever, either from the cargo or rigging of the brig. At low tide they overhauled the hold—at high tide they stowed away the rescued articles. A great part of the copper sheathing had been torn from the hull, which every day sank lower. But before the sand had swallowed the heavy things which had fallen through the bottom, Ayrton and Pencroft, diving to the bed of the channel, recovered the chains and anchors of the brig, the iron of her ballast, and even four guns, which, floated by means of empty casks, were brought to shore.

It may be seen that the arsenal of the colony had gained by the wreck, as well as the store-rooms of Granite House. Pencroft, always enthusiastic in his projects, already spoke of constructing a battery to command the channel and the mouth of the river. With four guns, he engaged to prevent any fleet, "however powerful it might be," from venturing into the waters of Lincoln Island!

In the meantime, when nothing remained of the brig but a useless hulk, bad weather came on, which soon finished her. Cyrus Harding had intended to blow her up, so as to collect the remains on the shore, but a strong gale from the north-east and a heavy sea compelled him to economise his powder.

In fact, on the night of the 23rd, the hull entirely broke up, and some of the wreck was cast up on the beach.

As to the papers on board, it is useless to say that, although he carefully searched the lockers of the poop, Harding did not discover any trace of them. The pirates had evidently destroyed everything that concerned either the captain or the owners of the Speedy, and, as the name of her port was not painted on her counter, there was nothing which would tell them her nationality. However, by the shape of her boats Ayrton and Pencroft believed that the brig was of English build.

A week after the catastrophe—or, rather, after the fortunate, though inexplicable, event to which the colony owed its preservation—nothing more could be seen of the vessel, even at low tide. The wreck had disappeared, and Granite House was enriched by nearly all it had contained.

However, the mystery which enveloped its strange destruction would doubtless never have been cleared away if, on the 30th of November, Neb, strolling on the beach, had not found a piece of a thick iron cylinder, bearing traces of explosion. The edges of this cylinder were twisted and broken, as if they had been subjected to the action of some explosive substance.

Neb brought this piece of metal to his master, who was then occupied with his companions in the workshop of the Chimneys.

Cyrus Harding examined the cylinder attentively, then, turning to Pencroft—
"You persist, my friend," said he, "in maintaining that the Speedy was not lost in consequence of a collision?"
"Yes, captain," answered the sailor. "You know as well as I do that there are no rocks in the channel."
"But suppose she had run against this piece of iron?" said the engineer, showing the broken cylinder.
"What, that bit of pipe!" exclaimed Pencroft in a tone of perfect incredulity.
"My friends," resumed Harding, "you remember that before she foundered the brig rose on the summit of a regular water-spout?"

"Yes, captain," replied Herbert.

"Well, would you like to know what occasioned that water-spout? It was this," said the engineer, holding up the broken tube.

"That?" returned Pencroft.

"Yes! This cylinder is all that remains of a torpedo!"

"A torpedo!" exclaimed the engineer's companions.

"And who put the torpedo there?" demanded Pencroft, who did not like to yield.

"All that I can tell you is, that it was not I," answered Cyrus Harding; "but it was there, and you have been able to judge of its incomparable power!"

CHAPTER FIVE.
THE ENGINEER'S DECLARATION--PENCROFT'S GRAND HYPOTHESIS--AN AERIAL BATTERY--THE FOUR CANNONS--THE SURVIVING CONVICTS--ARYTON'S HESITATION--CYRUS HARDING'S GENEROUS SENTIMENTS--PENCROFT'S REGRET.

So, then, all was explained by the submarine explosion of this torpedo. Cyrus Harding could not be mistaken, as, during the war of the Union, he had had occasion to try these terrible engines of destruction. It was under the action of this cylinder, charged with some explosive substance, nitro-glycerine, picrate, or some other material of the same nature, that the water of the channel had been raised like a dome, the bottom of the brig crushed in, and she had sunk instantly, the damage done to her hull being so considerable that it was impossible to refloat her. The Speedy had not been able to withstand a torpedo that would have destroyed an ironclad as easily as a fishing-boat!

Yes! all was explained, everything--except the presence of the torpedo in the waters of the channel!

"My friends, then," said Cyrus Harding, "we can no longer be in doubt as to the presence of a mysterious being, a castaway like us, perhaps, abandoned on our island, and I say this in order that Ayrton may be acquainted with all the strange events which have occurred during these two years. Who this beneficent stranger is, whose intervention has, so fortunately for us, been manifested on many occasions, I cannot imagine. What his object can be in acting thus, in concealing himself after rendering us so many services, I cannot understand. But his services are not the less real, and are of such a nature that only a man possessed of prodigious power, could render them. Ayrton is indebted to him as much as we are, for, if it was the stranger who saved me from the waves after the fall from the balloon, evidently it was he who wrote the document, who placed the bottle in the channel, and who has made known to us the situation of our companion. I will add that it was he who guided that chest, provided with everything we wanted, and stranded it on Flotsam Point; that it was he who lighted that fire on the heights of the island, which permitted you to land; that it was he who fired that bullet found in the body of the peccary; that it was he, who as everything leads us to believe, saved you from the waves, and that under circumstances in which any one else would not have been able to act? If it was he, he possesses a power which renders him master of the elements."

"You are right in speaking thus, my dear Cyrus," replied Gideon Spilett. "Yes, there is an almost all-powerful being, hidden in some part of the island, and whose influence has been singularly useful to our colony. I will add that the unknown appears to possess means of action which border on the supernatural if, in the events of practical life, the supernatural were recognisable. Is it he who is in secret communication with us by the well in Granite House, and has he thus a knowledge of all our plans? Was it he who threw us that bottle, when the vessel made her first cruise? Was it he who threw Top out of the lake, and killed the dugong? Was it he, who as everything leads us to believe, saved you from the waves, and that under circumstances in which any one else would not have been able to act? If it was he, he possesses a power which renders him master of the elements."

The reporter's reasoning was just, and every one felt it to be so.

"Yes," rejoined Cyrus Harding, "if the intervention of a human being is not more questionable for us, I agree that he has at his disposal means of action beyond those possessed by humanity. There is a mystery still, but if we discover the man, the mystery will be discovered also. The question, then, is, ought we to respect the incognito of this generous being, or ought we to do everything to find him out? What is your opinion on the matter?"

"My opinion," said Pencroft, "is that, whoever he may be, he is a brave man, and he has my esteem!"

"Be it so," answered Harding, "but that is not an answer, Pencroft."

"Master," then said Neb, "my idea is, that we may search as long as we like for this gentleman whom you are talking about, but that we shall not discover him till he pleases."
"That's not bad, what you say, Neb," observed Pencroft.

"I am of Neb's opinion," said Gideon Spilett, "but that is no reason for not attempting the adventure. Whether we find this mysterious being or not, we shall at least have fulfilled our duty towards him."

"And you, my boy, give us your opinion," said the engineer, turning to Herbert.

"Oh," cried Herbert, his countenance full of animation, "how I should like to thank him, he who saved you first, and who has now saved us!"

"Of course, my boy," replied Pencroft, "so would I and all of us. I am not inquisitive, but I would give one of my eyes to see this individual face to face! It seems to me that he must be handsome, tall, strong, with a splendid beard, radiant hair, and that he must be seated on the clouds, a great ball in his hands!"

"But, Pencroft," answered Spilett, "you are describing a picture of the Creator."

"Possibly, Mr Spilett," replied the sailor, "but that is how I imagine him!"

"And you, Ayrton?" asked the engineer.

"Captain Harding," replied Ayrton, "I can give you no better advice in this matter. Whatever you do will be best, when you wish me to join you in your researches, I am ready to follow you."

"I thank you, Ayrton," answered Cyrus Harding, "but I should like a more direct answer to the question I put to you. You are our companion; you have already endangered your life several times for us, and you, as well as the rest, ought to be consulted in the matter of any important decision. Speak, therefore."

"Captain Harding," replied Ayrton, "I think that we ought to do everything to discover this unknown benefactor. Perhaps he is alone. Perhaps he is suffering. Perhaps he has a life to be renewed. I, too, as you said, have a debt of gratitude to pay him. It was he, it could be only he who must have come to Tabor Island, who found there the wretch you knew, and who made known to you that there was an unfortunate man there to be saved! Therefore it is, thanks to him, that I have become a man again. No, I will never forget him!"

"That is settled, then," said Cyrus Harding. "We will begin our researches as soon as possible. We will not leave a corner of the island unexplored. We will search into its most secret recesses, and will hope that our unknown friend will pardon us in consideration of our intentions!"

For several days the colonists were actively employed in haymaking and harvest. Before putting their project of exploring the yet unknown parts of the island into execution, they wished to get all possible work finished. It was also the time for collecting the various vegetables from the Tabor Island plants. All was stowed away, and happily there was no want of room in Granite House, in which they might have housed all the treasures of the island. The products of the colony were there, methodically arranged, and in a safe place, as may be believed, sheltered as much from animals as from man.

There was no fear of damp in the middle of that thick mass of granite. Many natural excavations situated in the upper passage were enlarged either by pick-axe or mine, and Granite House thus became a general warehouse, containing all the provisions, arms, tools, and spare utensils--in a word, all the stores of the colony.

As to the guns obtained from the brig, they were pretty pieces of ordnance, which, at Pencroft's entreaty, were hoisted by means of tackle and pulleys, right up into Granite House; embrasures were made between the windows, and the shining muzzles of the guns could soon be seen through the granite cliff. From this height they commanded all Union Bay. It was like a little Gibraltar, and any vessel anchored off the islet would inevitably be exposed to the fire of this aerial battery.

"Captain," said Pencroft one day, it was the 8th of November, "now that our fortifications are finished, it would be a good thing if we tried the range of our guns."

"Do you think that is useful?" asked the engineer.

"It is more than useful, it is necessary! Without that how are we to know to what distance we can send one of those pretty shot with which we are provided?"

"Try them, Pencroft," replied the engineer. "However, I think that in making the experiment, we ought to employ, not the ordinary powder, the supply of which, I think, should remain untouched, but the pyroxile which will never fail us."

"Can the cannon support the shock of the pyroxile?" asked the reporter, who was not less anxious than Pencroft to try the artillery of Granite House.

"I believe so. However," added the engineer, "we will be prudent."

The engineer was right in thinking that the guns were of excellent make. Made of forged steel, and breech-loaders, they ought consequently to be able to bear a considerable charge, and also have an enormous range. In fact, as regards practical effect, the transit described by the ball ought to be as extended as possible, and this tension could only be obtained under the condition that the projectile should be impelled with a very great initial velocity.

"Now," said Harding to his companions, "the initial velocity is in proportion to the quantity of powder used. In the fabrication of these pieces, everything depends on employing a metal with the highest possible power of
resistance, and steel is incontestably that metal of all others which resists the best. I have, therefore, reason to believe that our guns will bear without risk the expansion of the pyroxile gas, and will give excellent results."

"We shall be a great deal more certain of that when we have tried them!" answered Pencroft.

It is unnecessary to say that the four cannons were in perfect order. Since they had been taken from the water, the sailor had bestowed great care upon them. How many hours he had spent, in rubbing, greasing, and polishing them, and in cleaning the mechanism! And now the pieces were as brilliant as if they had been on board a frigate of the United States' Navy.

On this day, therefore, in presence of all the members of the colony, including Master Jup and Top, the four cannon were successively tried. They were charged with pyroxile, taking into consideration its explosive power, which, as has been said, is four times that of ordinary powder: the projectile to be fired was cylindro-conic.

Pencroft, holding the end of the quick-match, stood ready to fire.

At Harding's signal, he fired. The shot, passing over the islet, fell into the sea at a distance which could not be calculated with exactitude.

The second gun was pointed at the rocks at the end of Flotsam Point, and the shot, striking a sharp rock nearly three miles from Granite House, made it fly into splinters. It was Herbert who had pointed this gun and fired it, and very proud he was of his first shot. Pencroft only was prouder than he! Such a shot, the honour of which belonged to his dear boy.

The third shot, aimed this time at the downs forming the upper side of Union Bay, struck the sand at a distance of four miles, then having ricocheted, was lost in the sea in a cloud of spray.

For the fourth piece Cyrus Harding slightly increased the charge, so as to try its extreme range. Then, all standing aside for fear of its bursting, the match was lighted by means of a long cord.

A tremendous report was heard, but the piece had held good, and the colonists rushing to the windows, saw the shot graze the rocks of Mandible Cape, nearly five miles from Granite House, and disappear in Shark Gulf.

"Well, captain," exclaimed Pencroft, whose cheers might have rivalled the reports themselves, "what do you say of our battery? All the pirates in the Pacific have only to present themselves before Granite House! Not one can land there now without our permission!"

"Believe me, Pencroft," replied the engineer, "it would be better not to have to make the experiment."

"Well," said the sailor, "what ought to be done with regard to those six villains who are roaming about the island? Are we to leave them to overrun our forests, our fields, our plantations. These pirates are regular jaguars, and it seems to me we ought not to hesitate to treat them as such! What do you think, Ayrton?" added Pencroft, turning to his companion.

Ayrton hesitated at first to reply, and Cyrus Harding regretted that Pencroft had so thoughtlessly put this question. And he was much moved when Ayrton replied in a humble tone--

"I have been one of those jaguars, Mr Pencroft. I have no right to speak."

And with a slow step he walked away.

Pencroft understood.

"What a brute I am!" he exclaimed. "Poor Ayrton! He has as much right to speak here as any one!"

"Yes," said Gideon Spilett, "but his reserve does him honour, and it is right to respect the feeling which he has about his sad past."

"Certainly, Mr Spilett," answered the sailor, "and there is no fear of my doing so again. I would rather bite my tongue off than cause Ayrton any pain! But to return to the question. It seems to me that these ruffians have no right to any pity, and that we ought to rid the island of them as soon as possible."

"Is that your opinion, Pencroft?" asked the engineer.

"Quite my opinion."

"And before hunting them mercilessly, you would not wait until they had committed some fresh act of hostility against us?"

"Isn't what they have done already enough?" asked Pencroft, who did not understand these scruples.

"They may adopt other sentiments!" said Harding, "and perhaps repent."

"They repent!" exclaimed the sailor, shrugging his shoulders.

"Pencroft, think of Ayrton!" said Herbert, taking the sailor's hand. "He became an honest man again!"

Pencroft looked at his companions one after the other. He had never thought of his proposal being met with any objection. His rough nature could not allow that they ought to come to terms with the rascals who had landed on the island with Bob Harvey's accomplices, the murderers of the crew of the Speedy; and he looked upon them as wild beasts which ought to be destroyed without delay and without remorse.

"Come!" said he. "Everybody is against me! You wish to be generous to those villains! Very well; I hope we mayn't repent it!"
"What danger shall we run," said Herbert, "if we take care to be always on our guard!"

"Hum!" observed the reporter, who had not given any decided opinion. "They are six and well-armed. If they each lay hid in a corner, and each fired at one of us, they would soon be masters of the colony!"

"Why have they not done so?" said Herbert. "No doubt because it was not their interest to do it. Besides, we are six also."

"Well, well!" replied Pencroft, whom no reasoning could have convinced. "Let us leave these good people to do what they like, and don't think anything more about them!"

"Come, Pencroft," said Neb, "don't make yourself out so bad as all that! Suppose one of these unfortunate men were here before you, within good range of your gun, you would not fire."

"I would fire on him as I would on a mad dog, Neb," replied Pencroft coldly.

"Pencroft," said the engineer, "you have always shown much deference to my advice; will you, in this matter, yield to me?"

"I will do as you please, Captain Harding," answered the sailor, who was not at all convinced.

"Very well, wait, and we will not attack them unless we are attacked first."

Thus their behaviour towards the pirates was agreed upon, although Pencroft augured nothing good from it. They were not to attack them, but were to be on their guard. After all, the island was large and fertile. If any sentiment of honesty yet remained in the bottom of their hearts, these wretches might perhaps be reclaimed. Was it not their interest in the situation in which they found themselves to begin a new life? At any rate, for humanity's sake alone, it would be right to wait. The colonists would no longer, as before, be able to go and come without fear. Hitherto they had only wild beasts to guard against, and now six convicts of the worst description, perhaps, were roaming over their island. It was serious, certainly, and to less brave men, it would have been security lost! No matter! At present, the colonists had reason on their side against Pencroft. Would they be right in the future? That remained to be seen.

CHAPTER SIX.

EXPEDITIONS PLANNED--AYRTON AT THE CORRAL--VISIT TO PORT BALLOON--PENCROFT'S OBSERVATIONS ON BOARD THE BONADVENTURE--DESPATCH SENT TO THE CORRAL--NO REPLY FROM AYRTON--DEPARTURE THE NEXT DAY--THE REASON WHY THE WIRE DID NOT WORK--A REPORT.

However, the chief business of the colonists was to make that complete exploration of the island which had been decided upon, and which would have two objects: to discover the mysterious being whose existence was now indisputable, and at the same time to find out what had become of the pirates, what retreat they had chosen, what sort of life they were leading, and what was to be feared from them. Cyrus Harding wished to set out without delay; but as the expedition would be of some days' duration, it appeared best to load the cart with different materials and tools in order to facilitate the organisation of the encampments. One of the onagers, however, having hurt its leg, could not be harnessed at present, and a few days' rest was necessary. The departure was, therefore, put off for a week, until the 20th of November. The month of November in this latitude corresponds to the month of May in the northern zones. It was, therefore, the fine season. The sun was entering the tropic of Capricorn, and gave the longest days in the year. The time was, therefore, very favourable for the projected expedition, which, if it did not accomplish its principal object, would at any rate be fruitful in discoveries, especially of natural productions, since Harding proposed to explore those dense forests of the Far West, which stretched to the extremity of the Serpentine Peninsula.

During the nine days which preceded their departure, it was agreed that the work on Prospect Heights should be finished off.

Moreover, it was necessary for Ayrton to return to the corral, where the domesticated animals required his care. It was decided that he should spend two days there, and return to Granite House after having liberally supplied the stables.

As he was about to start, Harding asked him if he would not like one of them to accompany him, observing that the island was less safe than formerly. Ayrton replied that this was unnecessary, as he was enough for the work, and that besides he apprehended no danger. If anything occurred at the corral, or in the neighbourhood, he could instantly warn the colonists by sending a telegram to Granite House.

Ayrton departed at dawn on the 9th, taking the cart drawn by one onager, and two hours after, the electric wire announced that he had found all in order at the corral.

During these two days Harding busied himself in executing a project which would completely guard Granite House against any surprise. It was necessary to completely conceal the opening of the old outlet, which was already
walled up and partly hidden under grass and plants, at the southern angle of Lake Grant. Nothing was easier, since if the level of the lake was raised two or three feet, the opening would be quite beneath it. Now, to raise this level they had only to establish a dam at the two openings made by the lake, and by which were fed Creek Glycerine and Falls River.

The colonists worked with a will, and the two dams, which besides did not exceed eight feet in width by three in height, were rapidly erected by means of well-cemented blocks of stone.

This work finished, it would have been impossible to guess that at that part of the lake, there existed a subterranean passage through which the overflow of the lake formerly escaped.

Of course the little stream which fed the reservoir of Granite House and worked the lift had been carefully preserved, and the water could not fail. The lift once raised, this sure and comfortable retreat would be safe from any surprise.

This work had been so quickly done, that Pencroft, Gideon Spilett, and Herbert found time to make an expedition to Port Balloon. The sailor was very anxious to know if the little creek in which the Bonadventure was moored, had been visited by the convicts.

"These gentlemen," he observed, "landed on the south coast, and if they followed the shore, it is to be feared that they may have discovered the little harbour, and in that case, I wouldn't give half-a-dollar for our Bonadventure."

Pencroft's apprehensions were not without foundation, and a visit to Port Balloon appeared to be very desirable. The sailor and his companions set off on the 10th of November, after dinner, well-armed. Pencroft, ostentatiously slipping two bullets into each barrel of his rifle, shook his head in a way which betokened nothing good to any one who approached too near to him, whether "man or beast," as he said. Gideon Spilett and Herbert also took their guns, and about three o'clock all three left Granite House.

Neb accompanied them to the turn of the Mercy, and after they had crossed, he raised the bridge. It was agreed that a gun-shot should announce the colonists' return, and that at the signal Neb should return and re-establish the communication between the two banks of the river.

The little band advanced directly along the road which led to the southern coast of the island. This was only a distance of three miles and a half, but Gideon Spilett and his companions took two hours to traverse it. They examined all the border of the road, the thick forest, as well as Tabor Marsh. They found no trace of the fugitives who, no doubt, not having yet discovered the number of the colonists, or the means of defence which they had at their disposal, had gained the less accessible parts of the island.

Arrived at Port Balloon, Pencroft saw with extreme satisfaction that the Bonadventure was tranquilly floating in the narrow creek. However, Port Balloon was so well hidden amongst high rocks that it could scarcely be discovered either from the land or the sea.

"Come," said Pencroft, "the blackguards have not been there yet. Long grass suits reptiles best, and evidently we shall find them in the Far West."

"And it's very lucky, for if they had found the Bonadventure," added Herbert, "they would have gone off in her, and we should have been prevented from returning to Tabor Island."

"Indeed," remarked the reporter, "it will be important to take a document there which will make known the situation of Lincoln Island, and Ayrton's new residence, in case the Scotch yacht returns to fetch him."

"Well, the Bonadventure is always there, Mr Spilett," answered the sailor. "She and her crew are ready to start at a moment's notice!"

"I think, Pencroft, that that is a thing to be done after our exploration of the island is finished. It is possible after all that the stranger, if we manage to find him, may know as much about Tabor Island as about Lincoln Island. Do not forget that he is certainly the author of the document, and he may, perhaps, know how far we may count on the return of the yacht!"

"But!" exclaimed Pencroft, "who in the world can he be? The fellow knows us and we know nothing about him! If he is a simple castaway, why should he conceal himself? We are honest men, I suppose, and the society of honest men isn't unpleasant to any one. Did he come here voluntarily? Can he leave the island if he likes? Is he here still? Will he remain any longer?"

Chatting thus, Pencroft, Gideon Spilett, and Herbert got on board and looked about the deck of the Bonadventure. All at once, the sailor having examined the bitts to which the cable of the anchor was secured--

"Hallo," he cried, "this is queer!"

"What is the matter, Pencroft?" asked the reporter.

"The matter is, that it was not I who made this knot!"

And Pencroft showed a rope which fastened the cable to the bitt itself.

"What, it was not you?" asked Gideon Spilett.

"No! I can swear to it. This is a reef knot, and I always make a running bowline."
"You must be mistaken, Pencroft."
"I am not mistaken!" declared the sailor. "My hand does it so naturally, and one's hand is never mistaken!"
"Then can the convicts have been on board?" asked Herbert.
"I know nothing about that," answered Pencroft, "but what is certain, is that some one has weighed the Bonadventure's anchor and dropped it again! And look here, here is another proof! The cable of the anchor has been run out, and its service is no longer at the hawse-hole. I repeat that some one has been using our vessel!"
"But if the convicts had used her, they would have pillaged her, or rather gone off with her."
"Gone off! where to——to Tabor Island?" replied Pencroft. "Do you think they would risk themselves in a boat of such small tonnage?"
"We must, besides, be sure that they know of the islet," rejoined the reporter.
"However that may be," said the sailor, "as sure as my name is Bonadventure Pencroft, of the Vineyard, our Bonadventure has sailed without us!"

The sailor was so positive that neither Gideon Spilett nor Herbert could dispute his statement. It was evident that the vessel had been moved, more or less, since Pencroft had brought her to Port Balloon. As to the sailor, he had not the slightest doubt that the anchor had been raised and then dropped again. Now, what was the use of these two manoeuvres, unless the vessel had been employed in some expedition?

"But how was it we did not see the Bonadventure pass in sight of the island?" observed the reporter, who was anxious to bring forward every possible objection.
"Why, Mr Spilett," replied the sailor, "they would only have to start in the night with a good breeze, and they would be out of sight of the island in two hours."
"Well," resumed Gideon Spilett, "I ask again, what object could the convicts have had in using the Bonadventure, and why, after they had made use of her, should they have brought her back to port?"
"Why, Mr Spilett," replied the sailor, "we must put that among the unaccountable things, and not think anything more about it. The chief thing is that the Bonadventure was there, and she is there now. Only, unfortunately, if the convicts take her a second time, we shall very likely not find her again in her place!"
"Then, Pencroft," said Herbert, "would it not be wisest to bring the Bonadventure off to Granite House?"
"Yes and no," answered Pencroft, "or rather no. The mouth of the Mercy is a bad place for a vessel, and the sea is heavy there."

"But by hauling her up on the sand, to the foot of the Chimneys?"
"Perhaps yes," replied Pencroft. "At any rate, since we must leave Granite House for a long expedition, I think the Bonadventure will be safer here during our absence, and we shall do best to leave her here until the island is rid of these blackguards."

"That is exactly my opinion," said the reporter. "At any rate in the event of bad weather, she will not be exposed here as she would be at the mouth of the Mercy."

"But suppose the convicts pay her another visit," said Herbert.
"Well, my boy," replied Pencroft, "not finding her here, they would not be long in finding her on the sands of Granite House, and, during our absence, nothing could hinder them from seizing her! I agree, therefore, with Mr Spilett, that she must be left in Port Balloon. But, if on our return we have not rid the island of those rascals, it will be prudent to bring our boat to Granite House, until the time when we need not fear any unpleasant visits."

"That's settled. Let us be off," said the reporter.

Pencroft, Herbert, and Gideon Spilett, on their return to Granite House, told the engineer all that had passed, and the latter approved of their arrangements both for the present and the future. He also promised the sailor that he would study that part of the channel situated between the islet and the coast; so as to ascertain if it would not be possible to make an artificial harbour there by means of dams. In this way, the Bonadventure would be always within reach, under the eyes of the colonists, and if necessary, under lock and key.

That evening a telegram was sent to Ayrton, requesting him to bring from the corral a couple of goats, which Neb wished to acclimatise to the plateau. Singularly enough, Ayrton did not acknowledge the receipt of the despatch, as he was accustomed to do. This could not but astonish the engineer. But it might be that Ayrton was not at that moment in the corral, or even that he was on his way back to Granite House. In fact, two days had already passed since his departure, and it had been decided that on the evening of the 10th or at the latest the morning of the 11th, he should return. The colonists waited, therefore, for Ayrton to appear on Prospect Heights. Neb and Herbert even watched at the bridge so as to be ready to lower it the moment their companion presented himself.

But up to ten in the evening, there were no signs of Ayrton. It was, therefore, judged best to send a fresh despatch, requiring an immediate reply.

The bell of the telegraph at Granite House remained mute.

The colonists' uneasiness was great. What had happened? Was Ayrton no longer at the corral, or if he was still
there, had he no longer control over his movements? Could they go to the corral in this dark night?

They consulted. Some wished to go, the others to remain.

"But," said Herbert, "perhaps some accident had happened to the telegraphic apparatus, so that it works no longer?"

"That may be," said the reporter.

"Wait till to-morrow," replied Cyrus Harding. "It is possible, indeed, that Ayrton has not received our despatch, or even that we have not received his."

They waited, of course not without some anxiety.

At dawn of day, the 11th of November, Harding again sent the electric current along the wire and received no reply.

He tried again: the same result.

"Off to the corral," said he.

"And well-armed!" added Pencroft.

It was immediately decided that Granite House should not be left alone and that Neb should remain there. After having accompanied his friends to Creek Glycerine, he raised the bridge; and waiting behind a tree he watched for the return of either his companions or Ayrton.

In the event of the pirates presenting themselves and attempting to force the passage, he was to endeavour to stop them by firing on them, and as a last resource he was to take refuge in Granite House, where, the lift once raised, he would be in safety.

Cyrus Harding, Gideon Spilett, Herbert, and Pencroft were to repair to the corral, and if they did not find Ayrton, search the neighbouring woods.

At six o'clock in the morning, the engineer and his three companions had passed Creek Glycerine, and Neb posted himself behind a small mound crowned by several dragoniners on the left bank of the stream.

The colonists, after leaving the plateau of Prospect Heights, immediately took the road to the corral. They shouldered their guns, ready to fire on the smallest hostile demonstration. The two rifles and the two guns had been loaded with ball.

The wood was thick on each side of the road and might easily have concealed the convicts, who owing to their weapons would have been really formidable.

The colonists walked rapidly and in silence. Top preceded them, sometimes running on the road, sometimes taking a ramble into the wood, but always quiet and not appearing to fear anything unusual. And they could be sure that the faithful dog would not allow them to be surprised, but would bark at the least appearance of danger.

Cyrus Harding and his companions followed beside the road the wire which connected the corral with Granite House. After walking for nearly two miles, they had not as yet discovered any explanation of the difficulty. The posts were in good order, the wire regularly expended. However, at that moment the engineer observed that the wire appeared to be slack, and on arriving at post Number 74, Herbert, who was in advance stopped, exclaiming--

"The wire is broken!"

His companions hurried forward and arrived at the spot where the lad was standing. The post was rooted up and lying across the path. The unexpected explanation of the difficulty was here, and it was evident that the despatches from Granite House had not been received at the corral, nor those from the corral at Granite House.

"It wasn't the wind that blew down this post," observed Pencroft.

"No," replied Gideon Spilett. "The earth has been dug up round its foot, and it has been torn up by the hand of man."

"Besides, the wire is broken," added Herbert, showing that the wire had been snapped.

"Is the fracture recent?" asked Harding.

"Yes," answered Herbert, "it has certainly been done quite lately."

"To the corral! to the corral!" exclaimed the sailor.

The colonists were now half way between Granite House and the corral, having still two miles and a half to go.

They pressed forward with redoubled speed.

Indeed, it was to be feared that some serious accident had occurred in the corral. No doubt, Ayrton might have sent a telegram which had not arrived, but this was not the reason why his companions were so uneasy, for, a more unaccountable circumstance, Ayrton, who had promised to return the evening before, had not reappeared. In short, it was not without a motive that all communication had been stopped between the corral and Granite House, and who but the convicts could have any interest in interrupting this communication?

The settlers hastened on, their hearts oppressed with anxiety. They were sincerely attached to their new companion. Were they to find him struck down by the hands of those of whom he was formerly the leader?

Soon they arrived at the place where the road led along the side of a little stream which flowed from the Red
Creek and watered the meadows of the corral. They then moderated their pace so that they should not be out of breath at the moment when a struggle might be necessary. Their guns were in their hands ready cocked. The forest was watched on every side. Top uttered sullen groans which were rather ominous.

At last the palisade appeared through the trees. No trace of any damage could be seen. The gate was shut as usual. Deep silence reigned in the corral. Neither the accustomed bleating of the sheep nor Ayrton's voice could be heard.

"Let us enter," said Cyrus Harding.

And the engineer advanced, whilst his companions, keeping watch about twenty paces behind him, were ready to fire at a moment's notice.

Harding raised the inner latch of the gate and was about to push it back, when Top barked loudly. A report sounded and was responded to by a cry of pain.

Herbert, struck by a bullet, lay stretched on the ground.

CHAPTER SEVEN.

THE REPORTER AND PENCROFT IN THE CORRAL--HERBERT'S WOUND--THE SAILOR'S DESPAIR--CONSULTATION BETWEEN THE REPORTER AND THE ENGINEER--MODE OF TREATMENT--HOPE NOT ABANDONED--HOW IS NEB TO BE WARNED--A SURE AND FAITHFUL MESSENGER--NEB'S REPLY.

At Herbert's cry Pencroft, letting his gun fall, rushed towards him.

"They have killed him!" he cried. "My boy! They have killed him!"

Cyrus Harding and Gideon Spilett ran to Herbert.

The reporter listened to ascertain if the poor lad's heart was still beating.

"He lives," said he; "but he must be carried--"

"To Granite House? that is impossible!" replied the engineer.

"Into the corral, then!" said Pencroft.

"In a moment," said Harding.

And he ran round the left corner of the palisade. There he found a convict who, aiming at him, sent a ball through his hat. In a few seconds, before he had even time to fire his second barrel, he fell, struck to the heart by Harding's dagger, more sure even than his gun.

During this time, Gideon Spilett and the sailor hoisted themselves over the palisade, leapt into the enclosure, threw down the props which supported the inner door, ran into the empty house, and soon poor Herbert was lying on Ayrton's bed. In a few moments, Harding was by his side.

On seeing Herbert senseless, the sailor's grief was terrible. He sobbed, he cried, he tried to beat his head against the wall. Neither the engineer nor the reporter could calm him. They themselves were choked with emotion. They could not speak.

However, they knew that it depended on them to rescue from death the poor boy who was suffering beneath their eyes. Gideon Spilett had not passed through the many incidents by which his life had been chequered without acquiring some slight knowledge of medicine. He knew a little of everything, and several times he had been obliged to attend to wounds produced either by a sword-bayonet or shot. Assisted by Cyrus Harding, he proceeded to render the aid Herbert required.

The reporter was immediately struck by the complete stupor in which Herbert lay, a stupor owing either to the haemorrhage, or to the shock, the ball having struck a bone with sufficient force to produce a violent concussion.

Herbert was deadly pale, and his pulse so feeble that Spilett only felt it beat at long intervals, as if it was on the point of stopping. These symptoms were very serious. Herbert's chest was laid bare, and the blood having been staunched with handkerchiefs, it was bathed with cold water. The contusion, or rather the contused wound appeared,--an oval below the chest between the third and fourth ribs. It was there that Herbert had been hit by the bullet.

Cyrus Harding and Gideon Spilett then turned the poor boy over; as they did so, he uttered a moan so feeble that they almost thought it was his last sigh.

Herbert's back was covered with blood from another contused wound, by which the ball had immediately escaped.

"God be praised!" said the reporter, "the ball is not in the body, and we shall not have to extract it."

"But the heart?" asked Harding.

"The heart has not been touched; if it had been, Herbert would be dead!"

"Dead!" exclaimed Pencroft, with a groan. The sailor had only heard the last words uttered by the reporter.
"No, Pencroft," replied Cyrus Harding, "no! He is not dead. His pulse still beats. He has even uttered a moan. But for your boy's sake, calm yourself. We have need of all our self-possession. Do not make us lose it, my friend."

Pencroft was silent, but a reaction set in, and great tears rolled down his cheeks.

In the meanwhile, Gideon Spilett endeavoured to collect his ideas, and proceed methodically. After his examination he had no doubt that the ball, entering in front, between the seventh and eighth ribs, had issued behind between the third and fourth. But what mischief had the ball committed in its passage? What important organs had been reached? A professional surgeon would have had difficulty in determining this at once, and still more so the reporter.

However, he knew one thing, this was that he would have to prevent the inflammatory strangulation of the injured parts, then to contend with the local inflammation and fever which would result from the wound, perhaps mortal! Now, what stiptics, what antiphlogistics ought to be employed? By what means could inflammation be prevented?

At any rate, the most important thing was that the two wounds should be dressed without delay. It did not appear necessary to Gideon Spilett that a fresh flow of blood should be caused by bathing them in tepid water, and compressing their lips. The haemorrhage had been very abundant, and Herbert was already too much enfeebled by the loss of blood.

The reporter, therefore, thought it best to simply bathe the two wounds with cold water. Herbert was placed on his left side, and was maintained in that position.

"He must not be moved," said Gideon Spilett. "He is in the most favourable position for the wounds in his back and chest to suppurate easily, and absolute rest is necessary."

"What! can't we carry him to Granite House?" asked Pencroft.

"No, Pencroft," replied the reporter.

"I'll pay the villains off!" cried the sailor, shaking his fist in a menacing manner.

"Pencroft!" said Cyrus Harding.

Gideon Spilett had resumed his examination of the wounded boy. Herbert was still so frightfully pale that the reporter felt anxious.

"Cyrus," said he, "I am not a surgeon. I am in terrible perplexity. You must aid me with your advice, your experience!"

"Take courage, my friend," answered the engineer, pressing the reporter's hand. "Judge coolly. Think only of this: Herbert must be saved!"

These words restored to Gideon Spilett that self-possession which he had lost in a moment of discouragement on feeling his great responsibility. He seated himself close to the bed. Cyrus Harding stood near. Pencroft had torn up his shirt, and was mechanically making lint.

Spilett then explained to Cyrus Harding that he thought he ought first of all to stop the haemorrhage, but not close the two wounds, or cause their immediate cicatrization, for there had been internal perforation, and the suppuration must not be allowed to accumulate in the chest.

Harding approved entirely, and it was decided that the two wounds should be dressed without attempting to close them by immediate coaptation.

And now, did the colonists possess an efficacious agent to act against the inflammation which might occur?

Yes. They had one, for nature had generously lavished it. They had cold water, that is to say, the most powerful sedative that can be employed against inflammation of wounds, the most efficacious therapeutic agent in grave cases, and the one which is now adopted by all physicians. Cold water has, moreover, the advantage of leaving the wound in absolute rest, and preserving it from all premature dressing, a considerable advantage, since it has been found by experience that contact with the air is dangerous during the first days.

Gideon Spilett and Cyrus Harding reasoned thus with their simple good sense, and they acted as the best surgeon would have done. Compresses of linen were applied to poor Herbert's two wounds, and were kept constantly wet with cold water.

The sailor had at first lighted a fire in the hut, which was not wanting in things necessary for life. Maple sugar, medicinal plants, the same which the lad had gathered on the banks of Lake Grant, enabled them to make some refreshing drinks, which they gave him without his taking any notice of it. His fever was extremely high, and all that day and night passed without his becoming conscious.

Herbert's life hung on a thread, and this thread might break at any moment. The next day, the 12th of November, the hopes of Harding and his companions slightly revived. Herbert had come out of his long stupor. He opened his eyes, he recognised Cyrus Harding, the reporter, and Pencroft. He uttered two or three words. He did not know what had happened. They told him, and Spilett begged him to remain perfectly still, telling him that his life was not in danger, and that his wounds would heal in a few days. However, Herbert scarcely suffered at all, and the cold water
with which they were constantly bathed, prevented any inflammation of the wounds. The supputation was established in a regular way, the fever did not increase, and it might now be hoped that this terrible wound would not involve any catastrophe. Pencroft felt the swelling of his heart gradually subside. He was like a sister of mercy, like a mother by the bed of her child.

Herbert dozed again, but his sleep appeared more natural.

"Tell me again that you hope, Mr Spilett," said Pencroft. "Tell me again that you will save Herbert!"

"Yes, we will save him!" replied the reporter. "The wound is serious, and, perhaps, even the ball has traversed the lungs, but the perforation of this organ is not fatal."

"God bless you!" answered Pencroft.

As may be believed, during the four-and-twenty hours they had been in the corral, the colonists had no other thought than that of nursing Herbert. They did not think either of the danger which threatened them should the convicts return, or of the precautions to be taken for the future.

But on this day, whilst Pencroft watched by the sick-bed, Cyrus Harding and the reporter consulted as to what it would be best to do.

First of all they examined the corral. There was not a trace of Ayrton. Had the unhappy man been dragged away by his former accomplices? Had he resisted, and been overcome in the struggle? This last supposition was only too probable. Gideon Spilett, at the moment he scaled the palisade, had clearly seen some one of the convicts running along the southern spur of Mount Franklin, towards whom Top had sprung. It was one of those whose object had been so completely defeated by the rocks at the mouth of the Mercy. Besides, the one killed by Harding, and whose body was found outside the enclosure, of course belonged to Bob Harvey's crew.

As to the corral, it had not suffered any damage. The gates were closed, and the animals had not been able to disperse in the forest. Nor could they see traces of any struggle, any devastation, either in the hut, or in the palisade. The ammunition only, with which Ayrton had been supplied, had disappeared with him.

"The unhappy man has been surprised," said Harding, "and as he was a man to defend himself, he must have been overpowered."

"Yes, that is to be feared!" said the reporter. "Then, doubtless, the convicts installed themselves in the corral where they found plenty of everything, and only fled when they saw us coming. It is very evident, too, that at this moment Ayrton, whether living or dead, is not here!"

"We shall have to beat the forest," said the engineer, "and rid the island of these wretches. Pencroft's presentiments were not mistaken, when he wished to hunt them as wild beasts. That would have spared us all these misfortunes!"

"Yes," answered the reporter, "but now we have the right to be merciless!"

"At any rate," said the engineer, "we are obliged to wait some time, and to remain at the corral until we can carry Herbert without danger to Granite House."

"But Neb?" asked the reporter.

"Neb is in safety."

"But if, uneasy at our absence, he would venture to come?"

"He must not come!" returned Cyrus Harding quickly. "He would be murdered on the road!"

"It is very probable, however, that he will attempt to rejoin us!"

"Ah, if the telegraph still acted, he might be warned! But that is impossible now! As to leaving Pencroft and Herbert here alone, we could not do it! Well, I will go alone to Granite House."

"No, no! Cyrus," answered the reporter, "you must not expose yourself! Your courage would be of no avail. The villains are evidently watching the corral, they are hidden in the thick woods which surround it, and if you go we shall soon have to regret two misfortunes instead of one!"

"But Neb?" repeated the engineer. "It is now four-and-twenty hours since he has had any news of us! He will be sure to come!"

"And as he will be less on his guard than we should be ourselves," added Spilett, "he will be killed!"

"Is there really no way of warning him?"

Whilst the engineer thought, his eyes fell on Top, who, going backwards and forwards, seemed to say--

"Am not I here?"

"Top!" exclaimed Cyrus Harding.

The animal sprang at his master's call.

"Yes, Top will go," said the reporter, who had understood the engineer. "Top can go where we cannot! He will carry to Granite House the news of the corral, and he will bring back to us that from Granite House!"

"Quick!" said Harding. "Quick!"

Spilett rapidly tore a leaf from his notebook, and wrote these words:--
"Herbert wounded. We are at the corral. Be on your guard. Do not leave Granite House. Have the convicts appeared in the neighbourhood? Reply by Top."

This laconic note contained all that Neb ought to know, and at the same time asked all the colonists wished to know. It was folded and fastened to Top's collar in a conspicuous position.

"Top, my dog," said the engineer, caressing the animal, "Neb, Top! Neb! Go, go!"

Top bounded at these words. He understood, he knew what was expected of him. The road to the corral was familiar to him. In less than an hour he could clear it, and it might be hoped that where neither Cyrus Harding nor the reporter could have ventured without danger, Top, running amongst the grass or in the wood, would pass unperceived.

The engineer went to the gate of the corral and opened it.

"Neb, Top! Neb!" repeated the engineer, again pointing in the direction of Granite House.

Top sprang forwards, and almost immediately disappeared.

"He will get there!" said the reporter.

"Yes, and he will come back, the faithful animal!"

"What o'clock is it?" asked Gideon Spilett.

"Ten."

"In an hour he may be here. We will watch for his return."

The gate of the corral was closed. The engineer and the reporter re-entered the house. Herbert was still in a sleep. Pencroft kept the compressor always wet. Spilett, seeing there was nothing he could do at that moment, busied himself in preparing some nourishment, whilst attentively watching that part of the enclosure against the hill, at which an attack might be expected.

The settlers awaited Top's return with much anxiety. A little before eleven o'clock, Cyrus Harding and the reporter, rifle in hand, were behind the gate, ready to open it at the first bark of their dog.

They did not doubt that if Top had arrived safely at Granite House, Neb would have sent him back immediately. They had both been there for about ten minutes, when a report was heard, followed by repeated barks.

The engineer opened the gate, and seeing smoke a hundred feet off in the wood, he fired in that direction.

Almost immediately Top bounded into the corral, and the gate was quickly shut.

"Top, Top!" exclaimed the engineer, taking the dog's great honest head between his hands.

A note was fastened to his neck, and Cyrus Harding read these words, traced in Neb's large writing:

"No pirates in the neighbourhood of Granite House. I will not stir. Poor Mr Herbert!"

CHAPTER EIGHT.

THE CONVICTS IN THE NEIGHBOURHOOD OF THE CORRAL--PROVISIONAL ESTABLISHMENT--CONTINUATION OF THE TREATMENT OF HERBERT--PENCROFT'S FIRST REJOICINGS--CONVERSATION ON PAST EVENTS--WHAT THE FUTURE HAS IN RESERVE--CYRUS HARDING'S IDEAS ON THIS SUBJECT.

So the convicts were still there, watching the corral, and determined to kill the settlers one after the other. There was nothing to be done but to treat them as wild beasts. But great precautions must be taken, for just now the wretches had the advantage on their side, seeing, and not being seen, being able to surprise by the suddenness of their attack, yet not to be surprised themselves. Harding made arrangements, therefore, for living in the corral, of which the provisions would last for a tolerable length of time. Ayrton's house had been provided with all that was necessary for existence, and the convicts, scared by the arrival of the settlers, had not had time to pillage it. It was probable, as Gideon Spilett observed, that things had occurred as follows:--The six convicts, disembarking on the island, had followed the southern shore, and after having traversed the double shore of the Serpentine Peninsula, not being inclined to venture into the Far West woods, they had reached the mouth of Falls River. From this point, by following the right bank of the watercourse, they would arrive at the spurs of Mount Franklin, among which they would naturally seek a retreat, and they could not have been long in discovering the corral, then uninhabited. There they had regularly installed themselves, awaiting the moment to put their abominable schemes into execution. Ayrton's arrival had surprised them, but they had managed to overpower the unfortunate man, and--the rest may be easily imagined!

Now, the convicts,--reduced to five, it is true, but well-armed,--were roaming the woods, and to venture there was to expose themselves to their attacks, which could be neither guarded against nor prevented.

"Wait! There is nothing else to be done!" repeated Cyrus Harding. "When Herbert is cured, we can organise a general battue of the island, and have satisfaction of these convicts. That will be the object of our grand expedition at the same time--"
"As the search for our mysterious protector," added Gideon Spilett, finishing the engineer's sentence. "Ah, it must be acknowledged, my dear Cyrus, that this time his protection was wanting at the very moment when it was most necessary to us!"

"Who knows?" replied the engineer.

"What do you mean?" asked the reporter.

"That we are not at the end of our trouble yet, my dear Spilett, and that his powerful invention may, perhaps, have another opportunity of exercising itself. But that is not the question now. Herbert's life before everything."

This was the colonists' saddest thought. Several days passed, and the poor boy's state was happily no worse. Cold water, always kept at a suitable temperature, had completely prevented the inflammation of the wounds. It even seemed to the reporter that this water, being slightly sulphurous,--which was explained by the neighbourhood of the volcano,--had a more direct action on the healing. The suppuration was much less abundant, and--thanks to the incessant care by which he was surrounded!--Herbert returned to life, and his fever abated. He was besides subjected to a severe diet, and consequently his weakness was and would be extreme; but there was no want of refreshing drinks, and absolute rest was of the greatest benefit to him. Cyrus Harding, Gideon Spilett, and Pencroft had become very skilful in dressing the lad's wounds. All the linen in the house had been sacrificed. Herbert's wounds, covered with compresses and lint, were pressed neither too much nor too little, so as to cause their cicatrisation without determining on inflammatory reaction. The reporter used extreme care in the dressing, knowing well the importance of it, and repeating to his companions that which most surgeons willingly admit, that it is perhaps rarer to see a dressing well done than an operation well performed.

In ten days, on the 22nd of November, Herbert was considerably better. He had begun to take some nourishment. The colour was returning to his cheeks, and his bright eyes smiled at his nurses. He talked a little, notwithstanding Pencroft's efforts, who talked incessantly to prevent him from beginning to speak, and told him the most improbable stories. Herbert had questioned him on the subject of Ayrton, whom he was astonished not to see near him, thinking that he was at the corral. But the sailor, not wishing to distress Herbert, contented himself by replying that Ayrton had rejoined Neb, so as to defend Granite House.

"Humph!" said Pencroft, "these pirates! they are gentlemen who have no right to any consideration! And the captain wanted to win them by kindness! I'll send them some kindness, but in the shape of a good bullet!"

"And have they not been seen again?" asked Herbert.

"No, my boy," answered the sailor, "but we shall find them, and when you are cured we shall see if the cowards, who strike us from behind, will dare to meet us face to face!"

"I am still very weak, my poor Pencroft!"

"Well! your strength will return gradually! What's a ball through the chest? Nothing but a joke! I've seen many, and I don't think much of them!"

At last things appeared to be going on well, and if no complication occurred, Herbert's recovery might be regarded as certain. But what would have been the condition of the colonists if his state had been aggravated,—if, for example, the ball had remained in his body, if his arm or his leg had had to be amputated?

"No," said Spilett more than once, "I have never thought of such a contingency without shuddering!"

"And yet, if it had been necessary to operate," said Harding one day to him, "you would not have hesitated?"

"No, Cyrus!" said Gideon Spilett, "but thank God that we have been spared this complication!"

As in so many other conjectures, the colonists had appealed to the logic of that simple good sense of which they had made use so often, and once more, thanks to their general knowledge, it had succeeded! But might not a time come when all their science would be at fault? They were alone on the island. Now, men in all states of society are necessary to each other. Cyrus Harding knew this well, and sometimes he asked himself if some circumstance might not occur which they would be powerless to surmount. It appeared to him besides, that he and his companions, till then so fortunate, had entered into an unlucky period. During the three years and a half which had elapsed since their escape from Richmond, it might be said that they had had everything their own way. The island had abundantly supplied them with minerals, vegetables, animals, and as Nature had constantly loaded them, their science had known how to take advantage of what she offered them.

The well-being of the colony was therefore complete. Moreover, in certain occurrences an inexplicable influence had come to their aid! ... But all that could only be for a time.

In short, Cyrus Harding believed that fortune had turned against them.

In fact, the convicts' ship had appeared in the waters of the island, and if the pirates had been, so to speak, miraculously destroyed, six of them, at least, had escaped the catastrophe. They had disembarked on the island, and it was almost impossible to get at the five who survived. Ayrton had no doubt been murdered by these wretches, who possessed fire-arms, and at the first use that they had made of them, Herbert had fallen, wounded almost mortally. Were these the first blows aimed by adverse fortune at the colonists? This was often asked by Harding.
This was often repeated by the reporter; and it appeared to him also that the intervention, so strange, yet so efficacious, which till then had served them so well, had now failed them. Had this mysterious being, whatever he was, whose existence could not be denied, abandoned the island? Had he in his turn succumbed?

No reply was possible to these questions. But it must not be imagined that because Harding and his companion spoke of these things, they were men to despair. Far from that. They looked their situation in the face, they analysed the chances, they prepared themselves for any event, they stood firm and straight before the future, and if adversity was at last to strike them, it would find in them men prepared to struggle against it.

CHAPTER NINE.

NO NEWS OF NEB--A PROPOSAL FROM PENCROFT AND THE REPORTER, WHICH IS NOT ACCEPTED--SEVERAL SORTIES BY GIDEON SPILETT--A RAG OF CLOTH--A MESSAGE--HASTY DEPARTURE--ARRIVAL ON THE PLATEAU OF PROSPECT HEIGHTS.

The convalescence of the young invalid was regularly progressing. One thing only was now to be desired, that his state would allow him to be brought to Granite House. However well built and supplied the corral house was, it could not be so comfortable as the healthy granite dwelling. Besides, it did not offer the same security, and its tenants, notwithstanding their watchfulness, were here always in fear of some shot from the convicts. There, on the contrary, in the middle of that impregnable and inaccessible cliff, they would have nothing to fear, and any attack on their persons would certainly fail. They therefore waited impatiently for the moment when Herbert might be moved without danger from his wound, and they were determined to make this move, although the communication through Jacamar Wood was very difficult.

They had no news from Neb, but were not uneasy on that account. The courageous negro, well intrenched in the depths of Granite House, would not allow himself to be surprised. Top had not been sent again to him, as it appeared useless to expose the faithful dog to some shot which might deprive the settlers of their most useful auxiliary.

They waited, therefore, although they were anxious to be reunited at Granite House. It pained the engineer to see his forces divided, for it gave great advantage to the pirates. Since Ayrton's disappearance they were only four against five, for Herbert could not yet be counted, and this was not the least care of the brave boy, who well understood the trouble of which he was the cause.

The question of knowing how, in their condition, they were to act against the pirates, was thoroughly discussed on the 29th of November by Cyrus Harding, Gideon Spilett, and Pencroft, at a moment when Herbert was asleep and could not hear them.

"My friends," said the reporter, after they had talked of Neb and of the impossibility of communicating with him, "I think, like you, that to venture on the road to the corral would be to risk receiving a gun-shot without being able to return it. But do you not think that the best thing to be done now is to openly give chase to these wretches?"

"That is just what I was thinking," answered Pencroft. "I believe we're not fellows to be afraid of a bullet, and as for me, if Captain Harding approves, I'm ready to dash into the forest! Why, hang it, one man is equal to another!"

"But is he equal to five?" asked the engineer.

"I will join Pencroft," said the reporter, "and both of us, well-armed and accompanied by Top--"

"My dear Spilett, and you, Pencroft," answered Harding, "let us reason coolly. If the convicts were hid in one spot of the island, if we knew that spot, and had only to dislodge them, I would undertake a direct attack; but is there not occasion to fear, on the contrary, that they are sure to fire the first shot."

"Well, captain," cried Pencroft, "a bullet does not always reach its mark."

"That which struck Herbert did not miss, Pencroft," replied the engineer. "Besides, observe that if both of you left the corral I should remain here alone to defend it. Do you imagine that the convicts will not see you leave it, that they will not allow you to enter the forest, and that they will not attack it during your absence, knowing that there is no one here but a wounded boy and a man?"

"You are right, captain," replied Pencroft, his chest swelling with sullen anger. "You are right; they will do all they can to retake the corral, which they know to be well stored; and alone you could not hold it against them."

"Oh, if we were only at Granite House!"

"If we were at Granite House," answered the engineer, "the case would be very different. There I should not be afraid to leave Herbert with one, whilst the other three went to search the forests of the island. But we are at the corral, and it is best to stay here until we can leave it together."

Cyrus Harding's reasoning was unanswerable, and his companions understood it well.

"If only Ayrton was still one of us!" said Gideon Spilett. "Poor fellow! his return to social life will have been but of short duration."

"If he is dead," added Pencroft, in a peculiar tone.
"Do you hope, then, Pencroft, that the villains have spared him?" asked Gideon Spilett.
"Yes, if they had any interest in doing so."
"What! you suppose that Ayrton, finding his old companions, forgetting all that he owes us--"
"Who knows?" answered the sailor, who did not hazard this shameful supposition without hesitating.
"Pencroft," said Harding, taking the sailor's arm, "that is a wicked idea of yours, and you will distress me much if you persist in speaking thus. I will answer for Ayrton's fidelity."
"And I also," added the reporter quickly.
"Yes, yes, captain, I was wrong," replied Pencroft; "it was a wicked idea indeed that I had, and nothing justifies it. But what can I do? I'm not in my senses. This imprisonment in the corral wearies me horribly, and I have never felt so excited as I do now."

"Be patient, Pencroft," replied the engineer. "How long will it be, my dear Spilett, before you think Herbert may be carried to Granite House?"
"That is difficult to say, Cyrus," answered the reporter, "for any imprudence might involve terrible consequences. But his convalescence is progressing, and if he continues to gain strength, in eight days from now--well, we shall see."

Eight days! That would put off the return to Granite House until the first days of December. At this time two months of spring had already passed. The weather was fine, and the heat began to be great. The forests of the island were in full leaf, and the time was approaching when the usual crops ought to be gathered. The return to the plateau of Prospect Heights would, therefore, be followed by extensive agricultural labours, interrupted only by the projected expedition through the island.

It can, therefore, be well understood how injurious this seclusion in the corral must be to the colonists. But if they were compelled to bow before necessity, they did not do so without impatience.

Once or twice the reporter ventured out into the road and made the tour of the palisade. Top accompanied him, and Gideon Spilett, his gun cocked, was ready for any emergency.

He met with no misadventure and found no suspicious traces. His dog would have warned him of any danger, and, as Top did not bark, it might be concluded that there was nothing to fear at that moment at least, and that the convicts were occupied in another part of the island.

However, on his second sortie, on the 27th of November, Gideon Spilett, who had ventured a quarter of a mile into the wood, towards the south of the mountains, remarked that Top scented something. The dog had no longer his unconcerned manner; he went backwards and forwards, ferreting amongst the grass and bushes as if his smell had revealed some suspicious object to him.

Gideon Spilett followed Top, encouraged him, excited him by his voice, whilst keeping a sharp look-out, his gun ready to fire, and sheltering himself behind the trees. It was not probable that Top scented the presence of man, for in that case, he would have announced it by half-uttered, sullen, angry barks. Now, as he did not growl, it was because danger was neither near nor approaching.

Nearly five minutes passed thus, Top rummaging, the reporter following him prudently, when, all at once, the dog rushed towards a thick bush, and drew out a rag.

It was a piece of cloth, stained and torn, which Spilett immediately brought back to the corral. There it was examined by the colonists, who found that it was a fragment of Ayrton's waistcoat, a piece of that felt, manufactured solely by the Granite House factory.

"You see, Pencroft," observed Harding, "there has been resistance on the part of the unfortunate Ayrton. The convicts have dragged him away in spite of himself! Do you still doubt his honesty?"

"No, captain," answered the sailor, "and I repented of my suspicion a long time ago! But it seems to me that something may be learned from the incident."

"What is that?" asked the reporter.

"It is that Ayrton was not killed at the corral! That they dragged him away living, since he has resisted. Therefore, perhaps, he is still living!"

"Perhaps, indeed," replied the engineer, who remained thoughtful.

This was a hope, to which Ayrton's companions could still hold. Indeed, they had before believed that, surprised in the corral, Ayrton had fallen by a bullet, as Herbert had fallen. But if the convicts had not killed him at first, if they had brought him living to another part of the island, might it not be admitted that he was still their prisoner? Perhaps, even, one of them had found in Ayrton his old Australian companion Ben Joyce, the chief of the escaped convicts. And who knows but that they had conceived the impossible hope of bringing back Ayrton to themselves? He would have been very useful to them, if they had been able to make him turn traitor!

This incident was, therefore, favourably interpreted at the corral, and it no longer appeared impossible that they should find Ayrton again. On his side, if he was only a prisoner, Ayrton would no doubt do all he could to escape
from the hands of the villains, and this would be a powerful aid to the settlers!

"At any rate," observed Gideon Spilett, "if happily Ayrton did manage to escape, he would go directly to Granite House, for he could not know of the attempt of assassination of which Herbert has been a victim, and consequently would never think of our being imprisoned in the corral!"

"Oh! I wish that he was there, at Granite House!" cried Pencroft, "and that we were there, too! For, although the rascals can do nothing to our house, they may plunder the plateau, our plantations, our poultry-yard!"

Pencroft had become a thorough farmer, heartily attached to his crops. But it must be said that Herbert was more anxious than any to return to Granite House, for he knew how much the presence of the settlers was needed there. And it was he who was keeping them at the corral! Therefore, one idea occupied his mind—to leave the corral, and when! He believed he could bear removal to Granite House. He was sure his strength would return more quickly in his room, with the air and sight of the sea!

Several times he pressed Gideon Spilett, but the latter, fearing, with good reason, that Herbert's wounds, half healed, might reopen on the way, did not give the order to start.

However, something occurred which compelled Cyrus Harding and his two friends to yield to the lad's wish, and God alone knew that this determination might cause them grief and remorse.

It was the 29th of November, seven o'clock in the evening. The three settlers were talking in Herbert's room, when they heard Top utter quick barks.

Harding, Pencroft, and Spilett seized their guns and ran out of the house. Top, at the foot of the palisade, was jumping, barking, but it was with pleasure, not anger.

"Some one is coming."
"Yes."
"It is not an enemy!"
"Neb, perhaps?"
"Or Ayrton?"

These words had hardly been exchanged between the engineer and his two companions when a body leapt over the palisade and fell on the ground inside the corral.

It was Tup, Master Jup in person, to whom Top immediately gave a most cordial reception.
"Jup!" exclaimed Pencroft.
"Neb has sent him to us," said the reporter.
"Then," replied the engineer, "he must have some note on him."

Pencroft rushed up to the orang. Certainly if Neb had any important matter to communicate to his master he could not employ a more sure or more rapid messenger, who could pass where neither the colonists could, nor even Top himself.

Cyrus Harding was not mistaken. At Jup's neck hung a small bag, and in this bag was found a little note traced by Neb's hand.

The despair of Harding and his companions may be imagined when they read these words:--
"Friday, six o'clock in the morning.
"Plateau invaded by convicts.
"Neb."

They gazed at each other without uttering a word, then they re-entered the house. What were they to do? The convicts on Prospect Heights! that was disaster, devastation, ruin.

Herbert, on seeing the engineer, the reporter, and Pencroft re-enter, guessed that their situation was aggravated, and when he saw Jup, he no longer doubted that some misfortune menaced Granite House.

"Captain Harding," said he, "I must go; I can bear the journey. I must go."

Gideon Spilett approached Herbert; then, having looked at him--
"Let us go, then!" said he.

The question was quickly decided whether Herbert should be carried on a litter or in the cart which had brought Ayrton to the corral. The motion of the litter would have been more easy for the wounded lad, but it would have necessitated two bearers, that is to say, there would have been two guns less for defence if an attack was made on the road. Would they not, on the contrary, by employing the cart leave every arm free? Was it impossible to place the mattress on which Herbert was lying in it, and to advance with so much care than any jolt should be avoided? It could be done.

The cart was brought. Pencroft harnessed the onaga. Cyrus Harding and the reporter raised Herbert's mattress and placed it on the bottom of the cart. The weather was fine. The sun's bright rays glanced through the trees.

"Are the guns ready?" asked Cyrus Harding.

They were. The engineer and Pencroft, each armed with a double-barrelled gun, and Gideon Spilett carrying his
rifle, had nothing to do but start.

"Are you comfortable, Herbert?" asked the engineer.

"Ah, captain," replied the lad, "don't be uneasy, I shall not die on the road!"

Whilst speaking thus, it could be seen that the poor boy had called up all his energy, and by the energy of a powerful will had collected his failing strength.

The engineer felt his heart sink painfully. He still hesitated to give the signal for departure; but that would have driven Herbert to despair—killed him perhaps.

"Forward!" said Harding.

The gate of the corral was opened. Jup and Top, who knew when to be silent, ran in advance. The cart came out, the gate was reclosed, and the onaga, led by Pencroft, advanced at a slow pace.

Certainly, it would have been safer to have taken a different road than that which led straight from the corral to Granite House, but the cart would have met with great difficulties in moving under the trees. It was necessary, therefore, to follow this way, although it was well-known to the convicts.

Cyrus Harding and Gideon Spilett walked one on each side of the cart, ready to answer to any attack. However, it was not probable that the convicts would have yet left the plateau of Prospect Heights.

Neb's note had evidently been written and sent as soon as the convicts had shown themselves there. Now, this note was dated six o'clock in the morning, and the active orang, accustomed to come frequently to the corral, had taken scarcely three quarters of an hour to cross the five miles which separated it from Granite House. They would, therefore, be safe at that time, and if there was any occasion for firing, it would probably not be until they were in the neighbourhood of Granite House. However, the colonists kept a strict watch. Top and Jup, the latter armed with his club, sometimes in front, sometimes beating the wood at the sides of the road, signalised no danger.

The cart advanced slowly under Pencroft's guidance. It had left the corral at half-past seven. An hour after four out of the five miles had been cleared, without any incident having occurred. The road was as deserted as all that part of the Jacamar Wood which lay between the Mercy and the lake. There was no occasion for any warning. The wood appeared as deserted as on the day when the colonists first landed on the island.

They approached the plateau. Another mile and they would see the bridge over Creek Glycerine. Cyrus Harding expected to find it in its place; supposing that the convicts; would have crossed it, and that, after having passed one of the streams which enclosed the plateau, they would have taken the precaution to lower it again, so as to keep open a retreat.

At length an opening in the trees allowed the sea-horizon to be seen. But the cart continued its progress, for not one of its defenders thought of abandoning it.

At that moment Pencroft stopped the onaga, and in a hoarse voice—

"Oh! the villains!" he exclaimed.

And he pointed to a thick smoke rising from the mill, the sheds, and the buildings at the poultry-yard.

A man was moving about in the midst of the smoke. It was Neb.

His companions uttered a shout. He heard, and ran to meet them.

The convicts had left the plateau nearly half-an-hour before, having devastated it!

"And Mr Herbert?" asked Neb.

Gideon Spilett returned to the cart.

Herbert had lost consciousness!

CHAPTER TEN.

HERBERT CARRIED TO GRANITE HOUSE—NEB RELATES ALL THAT HAS HAPPENED—HARDING'S VISIT TO THE PLATEAU—RUIN AND DEVASTATION—THE COLONISTS BAFFLED BY HERBERT'S ILLNESS—WILLOW BARK—A DEADLY FEVER—TOP BARKS AGAIN!

Of the convicts, the dangers which menaced Granite House, the ruins with which the plateau was covered, the colonists thought no longer. Herbert's critical state outweighed all other considerations. Would the removal prove fatal to him by causing some internal injury? The reporter could not affirm it, but he and his companions almost despaired of the result. The cart was brought to the bend of the river. There some branches, disposed as a litter, received the mattress on which lay the unconscious Herbert. Ten minutes after, Cyrus Harding, Spilett, and Pencroft were at the foot of the cliff, leaving Neb to take the cart onto the plateau of Prospect Heights. The lift was put in motion, and Herbert was soon stretched on his bed in Granite House.

What cares were lavished on him to bring him back to life! He smiled for a moment on finding himself in his room, but could scarcely even murmur a few words, so great was his weakness. Gideon Spilett examined his wounds. He feared to find them reopened, having been imperfectly healed. There was nothing of the sort. From
whence, then, came this prostration? Why was Herbert so much worse? The lad then fell into a kind of feverish sleep, and the reporter and Pencroft remained near the bed. During this time, Harding told Neb all that had happened at the corral, and Neb recounted to his master the events of which the plateau had just been the theatre.

It was only during the preceding night that the convicts had appeared on the edge of the forest, at the approaches to Creek Glycerine. Neb, who was watching near the poultry-yard, had not hesitated to fire at one of the pirates, who was about to cross the stream; but in the darkness he could not tell whether the man had been hit or not. At any rate, it was not enough to frighten away the band, and Neb had only just time to get up to Granite House, where at least he was in safety.

But what was he to do there? How prevent the devastations with which the convicts threatened the plateau? Had Neb any means by which to warn his master? And, besides, in what situation were the inhabitants of the corral themselves? Cyrus Harding and his companions had left on the 11th of November, and it was now the 29th. It was, therefore, nineteen days since Neb had had other news than that brought by Top--disastrous news: Ayrton disappeared, Herbert severely wounded, the engineer, reporter, and sailor, as it were, imprisoned in the corral!

What was he to do? asked poor Neb. Personally he had nothing to fear, for the convicts could not reach him in Granite House. But the buildings, the plantations, all their arrangements at the mercy of the pirates! Would it not be best to let Cyrus Harding judge of what he ought to do, and to warn him, at least, of the danger which threatened him?

Neb then thought of employing Jup, and confiding a note to him. He knew the orang's great intelligence, which had been often put to the proof. Jup understood the word corral, which had been frequently pronounced before him, and it may be remembered, too, that he had often driven the cart thither in company with Pencroft. Day had not yet dawned. The active orang would know how to pass unperceived through the woods, of which the convicts, besides, would think he was a native.

Neb did not hesitate. He wrote the note, he tied it to Jup's neck, he brought the ape to the door of Granite House, from which he let down a long cord to the ground; then, several times, he repeated these words--

"Jup, Jup! corral, corral!"

The creature understood, seized the cord, glided rapidly down to the beach, and disappeared in the darkness without the convicts' attention having been in the least excited.

"You did well, Neb," said Harding; "but perhaps in not warning us you would have done still better!"

And, in speaking thus, Cyrus Harding thought of Herbert, whose recovery the removal had so seriously checked.

Neb ended his account. The convicts had not appeared at all on the beach. Not knowing the number of the island's inhabitants, they might suppose that Granite House was defended by a large party. They must have remembered that during the attack by the brig numerous shot had been fired both from the lower and upper rocks, and no doubt they did not wish to expose themselves. But the plateau of Prospect Heights was open to them, and not covered by the fire of Granite House. They gave themselves up, therefore, to their instinct of destruction,--plundering, burning, devastating everything,--and only retiring half an hour before the arrival of the colonists, whom they believed still confined in the corral.

On their retreat, Neb hurried out. He climbed the plateau at the risk of being perceived and fired at, tried to extinguish the fire which was consuming the buildings of the poultry-yard, and had struggled, though in vain, against it until the cart appeared at the edge of the wood.

Such had been these serious events. The presence of the convicts constituted a permanent source of danger to the settlers in Lincoln Island, until then so happy, and who might now expect still greater misfortunes.

Spilett remained in Granite House with Herbert and Pencroft, while Cyrus Harding, accompanied by Neb, proceeded to judge for himself of the extent of the disaster.

It was fortunate that the convicts had not advanced to the foot of Granite House. The workshop at the Chimneys would in that case not have escaped destruction. But after all, this evil would have been more easily reparable than the ruins accumulated on the plateau of Prospect Heights. Harding and Neb proceeded towards the Mercy, and ascended its left bank without meeting with any trace of the convicts; nor on the other side of the river, in the depths of the wood, could they perceive any suspicious indications.

Besides, it might be supposed that in all probability either the convicts knew of the return of the settlers to Granite House, by having seen them pass on the road from the corral, or, after the devastation of the plateau, they had penetrated into Jacamar Wood, following the course of the Mercy, and were thus ignorant of their return.

In the former case, they must have returned towards the corral, now without defenders, and which contained valuable stores.

In the latter, they must have regained their encampment, and would wait an opportunity to recommence the attack.

It was, therefore, possible to prevent them, but any enterprise to clear the island was now rendered difficult by
reason of Herbert's condition. Indeed, their whole force would have been barely sufficient to cope with the convicts, and just now no one could leave Granite House.

The engineer and Neb arrived on the plateau. Desolation reigned everywhere. The fields had been trampled over; the ears of wheat, which were nearly full grown, lay on the ground. The other plantations had not suffered less.

The kitchen-garden was destroyed. Happily, Granite House possessed a store of seed which would enable them to repair these misfortunes.

As to the wall and buildings of the poultry-yard and the onagas' stable, the fire had destroyed all. A few terrified creatures roamed over the plateau. The birds, which during the fire had taken refuge on the waters of the lake, had already returned to their accustomed spot, and were dabbling on the banks. Everything would have to be reconstructed.

Cyrus Harding's face, which was paler than usual, expressed an internal anger which he commanded with difficulty, but he did not utter a word. Once more he looked at his devastated fields, and at the smoke which still rose from the ruins, then he returned to Granite House.

The following days were the saddest of any that the colonists had passed on the island! Herbert's weakness visibly increased. It appeared that a more serious malady, the consequence of the profound physiological disturbance he had gone through, threatened to declare itself, and Gideon Spilett feared such an aggravation of his condition that he would be powerless to fight against it!

In fact, Herbert remained in an almost continuous state of drowsiness, and symptoms of delirium began to manifest themselves. Refreshing drinks were the only remedies at the colonists' disposal. The fever was not as yet very high, but it soon appeared that it would probably recur at regular intervals. Gideon Spilett first recognised this on the 6th of December.

The poor boy, whose fingers, nose, and ears had become extremely pale, was at first seized with slight shiverings, horripilations, and tremblings. His pulse was weak and irregular, his skin dry, his thirst intense. To this soon succeeded a hot fit; his face became flushed; his skin reddened; his pulse quick; then a profuse perspiration broke out, after which the fever seemed to diminish. The attack had lasted nearly five hours.

Gideon Spilett had not left Herbert, who, it was only too certain was now seized by an intermittent fever, and this fever must be cured at any cost before it should assume a more serious aspect.

"And in order to cure it," said Spilett to Cyrus Harding, "we need a febrifuge."

"A febrifuge," answered the engineer. "We have neither Peruvian bark, nor sulphate of quinine?"

"No," said Gideon Spilett, "but there are willows on the border of the lake, and the bark of the willow might, perhaps, prove to be a substitute for quinine."

"Let us try it without losing a moment," replied Cyrus Harding.

The bark of the willow has, indeed, been justly considered as a succedaneum for Peruvian bark, as has also that of the horse-chestnut-tree, the leaf of the holly, the snake-root, etcetera. It was evidently necessary to make trial of this substance, although not so valuable as Peruvian bark, and to employ it in its natural state, since they had no means for extracting its essence.

Cyrus Harding went himself to cut from the trunk of a species of black willow, a few pieces of bark; he brought them back to Granite House, and reduced them to a powder, which was administered that same evening to Herbert.

The night passed without any important change. Herbert was somewhat delirious, but the fever did not reappear in the night, and did not return either during the following day.

Pencroft again began to hope. Gideon Spilett said nothing. It might be that the fever was not quotidian, but tertian, and that it would return next day. Therefore, he awaited the next day with the greatest anxiety.

It might have been remarked besides that during this period Herbert remained utterly prostrate, his head weak and giddy. Another symptom alarmed the reporter to the highest degree. Herbert's liver became congested, and soon a more intense delirium showed that his brain was also affected.

Gideon Spilett was overwhelmed by this new complication. He took the engineer aside.

"It is a malignant fever," said he.

"A malignant fever!" cried Harding. "You are mistaken, Spilett. A malignant fever does not declare itself spontaneously; its germ must previously have existed."

"I am not mistaken," replied the reporter. "Herbert no doubt contracted the germ of this fever in the marshes of the island. He has already had one attack; should a second come on and should we not be able to prevent a third, he is lost."

"But the willow bark?"

"That is insufficient," answered the reporter; "and the third attack of a malignant fever, which is not arrested by means of quinine, is always fatal."

Fortunately, Pencroft heard nothing of this conversation or he would have gone mad.
It may be imagined what anxiety the engineer and the reporter suffered during the day of the 7th of December and the following night.

Towards the middle of the day the second attack came on. The crisis was terrible. Herbert felt himself sinking. He stretched his arms towards Cyrus Harding, towards Spilett, towards Pencroft. He was so young to die! The scene was heartrending. They were obliged to send Pencroft away.

The fit lasted five hours. It was evident that Herbert could not survive a third.

The night was frightful. In his delirium Herbert uttered words which went to the hearts of his companions. He struggled with the convicts, he called to Ayrton, he poured forth entreaties to that mysterious being,—that powerful unknown protector,—whose image was stamped upon his mind; then he again fell into a deep exhaustion which completely prostrated him. Several times Gideon Spilett thought that the poor boy was dead.

The next day, the 8th of December, was but a succession of the fainting fits. Herbert's thin hands clutched the sheets. They had administered further doses of pounded bark, but the reporter expected no result from it.

"If before to-morrow morning we have not given him a more energetic febrifuge," said the reporter, "Herbert will be dead."

Night arrived—the last night, it was too much to be feared, of the good, brave, intelligent boy, so far in advance of his years, and who was loved by all as their own child. The only remedy which existed against this terrible malignant fever, the only specific which could overcome it, was not to be found in Lincoln Island.

During the night of the 8th of December, Herbert was seized by a more violent delirium. His liver was fearfully congested, his brain affected, and already it was impossible for him to recognise any one.

Would he live until the next day, until that third attack which must infallibly carry him off? It was not probable. His strength was exhausted, and in the intervals of fever he lay as one dead.

Towards three o'clock in the morning Herbert uttered a piercing cry. He seemed to be torn by a supreme convulsion. Neb, who was near him, terrified, ran into the next room where his companions were watching.

Top, at that moment, barked in a strange manner.

All rushed in immediately and managed to restrain the dying boy, who was endeavouring to throw himself out of his bed, whilst Spilett, taking his arm, felt his pulse gradually quicken.

It was five in the morning. The rays of the rising sun began to shine in at the windows of Granite House. It promised to be a fine day, and this day was to be poor Herbert's last!

A ray glanced on the table placed near the bed.

Suddenly Pencroft, uttering a cry, pointed to the table.

On it lay a little oblong box, of which the cover bore these words:—

"Sulphate of Quinine."

CHAPTER ELEVEN.


Gideon Spilett took the box and opened it. It contained nearly two hundred grains of a white powder, a few particles of which he carried to his lips. The extreme bitterness of the substance precluded all doubt; it was certainly the precious extract of quinine, that pre-eminent antifebrile.

This powder must be administered to Herbert without delay. How it came there might be discussed later.

"Some coffee!" said Spilett.

In a few moments Neb brought a cup of the warm infusion. Gideon Spilett threw into it about eighteen grains of quinine, and they succeeded in making Herbert drink the mixture.

There was still time, for the third attack of the malignant fever had not yet shown itself. How they longed to be able to add that it would not return!

Besides, it must be remarked, the hopes of all had now revived. The mysterious influence had been again exerted, and in a critical moment, when they had despaired of it.

In a few hours Herbert was much calmer. The colonists could now discuss this incident. The intervention of the stranger was more evident than ever. But how had he been able to penetrate during the night into Granite House? It was inexplicable, and, in truth, the proceedings of the genius of the island were not less mysterious than was that genius himself. During this day the sulphate of quinine was administered to Herbert every three hours.

The next day some improvement in Herbert's condition was apparent. Certainly, he was not out of danger, intermittent fevers being subject to frequent and dangerous relapses, but the most assiduous care was bestowed on him. And besides, the specific was at hand; nor, doubtless, was he who had brought it far-distant! and the hearts of
all were animated by returning hope.

This hope was not disappointed. Ten days after, on the 20th of December, Herbert's convalescence commenced.

He was still weak, and strict diet had been imposed upon him, but no access of fever supervened. And then, the poor boy submitted with such docility to all the prescriptions ordered him! He longed so to get well!

Pencroft was as a man who has been drawn up from the bottom of an abyss. Fits of joy approaching to delirium seized him. When the time for the third attack had passed by, he nearly suffocated the reporter in his embrace. Since then, he always called him Dr Spilett.

The real doctor, however, remained undiscovered.

"We will find him!" repeated the sailor.

Certainly, this man, whoever he was, might expect a somewhat too energetic embrace from the worthy Pencroft!

The month of December ended, and with it the year 1867, during which the colonists of Lincoln Island had of late been so severely tried. They commenced the year 1868 with magnificent weather, great heat, and a tropical temperature, delightfully cooled by the sea-breeze. Herbert's recovery progressed, and from his bed, placed near one of the windows of Granite House, he could inhale the fresh air, charged with ozone, which could not fail to restore his health. His appetite returned, and what numberless delicate, savoury little dishes Neb prepared for him!

"It is enough to make one wish to have a fever oneself!" said Pencroft.

During all this time, the convicts did not once appear in the vicinity of Granite House. There was no news of Ayrton, and though the engineer and Herbert still had some hopes of finding him again, their companions did not doubt but that the unfortunate man had perished. However, this uncertainty could not last, and when once the lad should have recovered, the expedition, the result of which must be so important, would be undertaken. But they would have to wait a month, perhaps, for all the strength of the colony must be put into requisition to obtain satisfaction from the convicts.

However, Herbert's convalescence progressed rapidly. The congestion of the liver had disappeared, and his wounds might be considered completely healed.

During the month of January, important work was done on the plateau of Prospect Heights; but it consisted solely in saving as much as was possible from the devastated crops, either of corn or vegetables. The grain and the plants were gathered, so as to provide a new harvest for the approaching half-season. With regard to rebuilding the poultry-yard, wall, or stables, Cyrus Harding preferred to wait. Whilst he and his companions were in pursuit of the convicts, the latter might very probably pay another visit to the plateau, and it would be useless to give them an opportunity of recommencing their work of destruction. When the island should be cleared of these miscreants, they would set about rebuilding. The young convalescent began to get up in the second week of January, at first for one hour a day, then two, then three. His strength visibly returned, so vigorous was his constitution. He was now eighteen years of age. He was tall, and promised to become a man of noble and commanding presence. From this time his recovery, while still requiring care,—and Dr Spilett was very strict,—made rapid progress. Towards the end of the month, Herbert was already walking about on Prospect Heights, and the beach.

He derived, from several sea-baths, which he took in company with Pencroft and Neb, the greatest possible benefit. Cyrus Harding thought he might now settle the day for their departure, for which the 15th of February was fixed. The nights, very clear at this time of year, would be favourable to the researches they intended to make all over the island.

The necessary preparations for this exploration were now commenced, and were important, for the colonists had sworn not to return to Granite House until their twofold object had been achieved; on the one hand, to exterminate the convicts, and rescue Ayrton, if he was still living; on the other, to discover who it was that presided so effectually over the fortunes of the colony.

Of Lincoln Island, the settlers knew thoroughly all the eastern coast from Claw Cape to the Mandible Capes, the extensive Tadorn Marsh, the neighbourhood of Lake Grant, Jacamar Wood, between the road to the corral and the Mercy, the courses of the Mercy and Red Creek, and lastly, the spurs of Mount Franklin, among which the corral had been established.

They had explored, though only in an imperfect manner, the vast shore of Washington Bay from Claw Cape to Reptile End, the woody and marshy border of the west coast, and the interminable downs, ending at the open mouth of Shark Gulf. But they had in no way surveyed the woods which covered the Serpentine Peninsula, all to the right of the Mercy, the left bank of Falls River, and the wilderness of spurs and valleys which supported three quarters of the base of Mount Franklin, to the east, the north, and the west, and where doubtless many secret retreats existed. Consequently, many millions of acres of the island had still escaped their investigations.

It was, therefore, decided that the expedition should be carried through the Far West, so as to include all that region situated on the right of the Mercy.

It might, perhaps, be better worth while to go direct to the corral, where it might be supposed that the convicts
had again taken refuge, either to pillage or to establish themselves there. But either the devastation of the corral would have been an accomplished fact by this time, and it would be too late to prevent it; or it had been the convicts' interest to intrench themselves there, and there would be still time to go and turn them out on their return.

Therefore, after some discussion, the first plan was adhered to, and the settlers resolved to proceed through the wood to Reptile End. They would make their way with their hatchets, and thus lay the first draft of a road which would place Granite House in communication with the end of the peninsula for a length of from sixteen to seventeen miles.

The cart was in good condition. The onagas, well rested, could go a long journey. Provisions, camp effects, a portable stove, and various utensils were packed in the cart, as also weapons and ammunition, carefully chosen from the new complete arsenal of Granite House. But it was necessary to remember that the convicts were, perhaps, roaming about the woods, and that in the midst of these thick forests a shot might quickly be fired and received. It was therefore resolved that the little band of settlers should remain together and not separate under any pretext whatever.

It was also decided that no one should remain at Granite House. Top and Jup themselves were to accompany the expedition; the inaccessible dwelling needed no guard. The 14th of February, eve of the departure, was Sunday. It was consecrated entirely to repose, and thanksgivings addressed by the colonists to the Creator. A place in the cart was reserved for Herbert, who, though thoroughly convalescent, was still a little weak. The next morning, at daybreak, Cyrus Harding took the necessary measures to protect Granite House from any invasion. The ladders, which were formerly used for the ascent, were brought to the Chimneys and buried deep in the sand, so that they might be available on the return of the colonists, for the machinery of the lift had been taken to pieces, and nothing of the apparatus remained. Pencroft stayed the last in Granite House in order to finish this work, and he then lowered himself down by means of a double rope held below, and which, when once hauled down, left no communication between the upper landing and the beach.

The weather was magnificent.
"We shall have a warm day of it," said the reporter, laughing.
"Pooh! Dr Spilett," answered Pencroft, "we shall walk under the shade of the trees and shan't even see the sun!"
"Forward!" said the engineer.

The cart was waiting on the beach before the Chimneys. The reporter made Herbert take his place in it during the first hours at least of the journey, and the lad was obliged to submit to his doctor's orders.

Neb placed himself at the onagas' heads. Cyrus Harding, the reporter, and the sailor, walked in front. Top bounded joyfully along. Herbert offered a seat in his vehicle to Jup, who accepted it without ceremony. The moment for departure had arrived, and the little band set out.

The cart first turned the angle of the mouth of the Mercy, then, having ascended the left bank for a mile, crossed the bridge, at the other side of which commenced the road to Port Balloon and there the explorers, leaving this road on their left, entered the cover of the immense woods which formed the region of the Far West.

For the first two miles the widely-scattered trees allowed the cart to pass with ease; from time to time it became necessary to cut away a few creepers and bushes, but no serious obstacle impeded the progress of the colonists.

The thick foliage of the trees threw a grateful shade on the ground. Deodars, douglas-firs, casuarinas, banksias, gum-trees, dragon-trees, and other well-known species, succeeded each other far as the eye could reach. The feathered tribes of the island were all represented--tetras, jacamars, pheasants, lories, as well as the chattering cockatoos, parrots, and paroquets. Agouties, kangaroos, and capybaras fled swiftly at their approach; and all this reminded the settlers of the first excursions they had made on their arrival at the island.

"Nevertheless," observed Cyrus Harding, "I notice that these creatures, both birds and quadrupeds, are more timid than formerly. These woods have, therefore, been recently traversed by the convicts, and we shall certainly find some traces of them."

And, in fact, in several places they could distinguish traces, more or less recent, of the passage of a band of men-here branches broken off the trees, perhaps to mark out the way; there the ashes of a fire, and footprints in clayey spots; but nothing which appeared to belong to a settled encampment.

The engineer had recommended his companions to refrain from hunting. The reports of the fire-arms might give the alarm to the convicts, who, were, perhaps, roaming through the forest. Moreover, the hunters would necessarily ramble some distance from the cart, which it was dangerous to leave unguarded.

In the after-part of the day, when about six miles from Granite House, their progress became much more difficult. In order to make their way through some thickets, they were obliged to cut down trees. Before entering such places Harding was, careful to send in Top and Jup, who faithfully accomplished their commission, and when the dog and orang returned without giving any warning, there was evidently nothing to fear, either from convicts or wild beasts, two varieties of the animal kingdom, whose ferocious instincts placed them on the same level. On the
evening of the first day the colonists encamped about nine miles from Granite House, on the border of a little stream falling into the Mercy, and of the existence of which they had till then been ignorant; it evidently, however, belonged to the hydrographical system to which the soil owed its astonishing fertility. The settlers made a hearty meal, for their appetites were sharpened, and measures were then taken that the night might be passed in safety. If the engineer had had only to deal with wild beasts, jaguars, or others, he would have simply lighted fires all round his camp, which would have sufficed for its defence; but the convicts would be rather attracted than terrified by the flames, and it was, therefore, better to be surrounded by the profound darkness of night.

The watch was, however, carefully organised. Two of the settlers were to watch together, and every two hours it was agreed that they should be relieved by their comrades. And so, notwithstanding his wish to the contrary, Herbert was exempted from guard, Pencroft and Gideon Spilett in one party, the engineer and Neb in another, mounted guard in turns over the camp.

The night, however, was but of few hours. The darkness was due rather to the thickness of the foliage than to the disappearance of the sun. The silence was scarcely disturbed by the howling of jaguars and the chattering of the monkeys, the latter appearing to particularly irritate master Jup. The night passed without incident, and on the next day, the 15th of February, the journey through the forest, rather tedious than difficult, was continued. This day they could not accomplish more than six miles, for every moment they were obliged to cut a road with their hatchets.

Like true settlers, the colonists spared the largest and most beautiful trees, which would besides have cost immense labour to fell, and the small ones only were sacrificed, but the result was that the road took a very winding direction, and lengthened itself by numerous detours.

During the day Herbert discovered several new specimens not before met with in the island, such as the tree-fern, with its leaves spread out like the waters of a fountain, locust-trees, on the long pods of which the onagas browsed greedily, and which supplied a sweet pulp of excellent flavour. There, too, the colonists again found groups of magnificent kauries, their cylindrical trunks, crowned with a cone of verdure, rising to a height of two hundred feet. These were the tree-kings of New Zealand, as celebrated as the cedars of Lebanon.

As to the fauna, there was no addition to those species already known to the hunters. Nevertheless, they saw, though unable to get near them, a couple of those large birds peculiar to Australia, a sort of cassowary, called emu, five feet in height, and with brown plumage, which belong to the tribe of waders. Top darted after them as fast as his four legs could carry him, but the emus distanced him with ease, so prodigious was their speed.

As to the traces left by the convicts, a few more were discovered. Some footprints found near an apparently recently-extinguished fire were attentively examined by the settlers. By measuring them one after the other, according to their length and breadth, the marks of five men's feet were easily distinguished. The five convicts had evidently camped on this spot; but,--and this was the object of so minute an examination,--a sixth foot-print could not be discovered, which in that case would have been that of Ayrton.

"Ayrton was not with them!" said Herbert.

"No," answered Pencroft, "and if he was not with them, it was because the wretches had already murdered him! but then these rascals have not a den to which they may be tracked like tigers!"

"No," replied the reporter; "it is more probable that they wander at random, and it is their interest to rove about until the time when they will be masters of the island!"

"The masters of the island!" exclaimed the sailor; "the masters of the island!" he repeated, and his voice was choked, as if his throat was seized in an iron grasp. Then in a calmer tone, "Do you know, Captain Harding," said he, "what the ball is which I have rammed into my gun?"

"No, Pencroft!"

"It is the ball that went through Herbert's chest, and I promise you it won't miss its mark!"

But this just retaliation would not bring Ayrton back to life, and from the examination of the footprints left in the ground, they must, alas! conclude that all hopes of ever seeing him again must be abandoned.

That evening they encamped fourteen miles from Granite House, and Cyrus Harding calculated that they could not be more than five miles from Reptile Point.

And, indeed, the next day the extremity of the peninsula was reached, and the whole length of the forest had been traversed; but there was nothing to indicate the retreat in which the convicts had taken refuge, nor that, no less secret, which sheltered the mysterious unknown.

CHAPTER TWELVE.

EXPLORATION OF THE SERPENTINE PENINSULA--ENCAMPMENT AT THE MOUTH OF FALLS RIVER--GIDEON SPILETT AND PENCROFT RECONNOITRE--THEIR RETURN-- FORWARD, ALL!--AN OPEN DOOR--A LIGHTED WINDOW--BY THE LIGHT OF THE MOON!
The next day, the 18th of February, was devoted to the exploration of all that wooded region forming the shore from Reptile End to Falls River. The colonists were able to search this forest thoroughly, for, as it was comprised between the two shores of the Serpentine Peninsula, it was only from three to four miles in breadth. The trees, both by their height and their thick foliage, bore witness to the vegetative power of the soil, more astonishing here than in any other part of the island. One might have said that a corner from the virgin forests of America or Africa had been transported into this temperate zone. This led them to conclude that the superb vegetation found a heat in this soil, damp in its upper layer, but warmed in the interior by volcanic fires, which could not belong to a temperate climate. The most frequently-occurring trees were kauries and eucalypti of gigantic dimensions.

But the colonists’ object was not simply to admire the magnificent vegetation. They knew already that in this respect Lincoln Island would have been worthy to take the first rank in the Canary group, to which the first name given was that of the Happy Isles. Now, alas! their island no longer belonged to them entirely; others had taken possession of it, miscreants polluted its shores, and they must be destroyed to the last man.

No traces were found on the western coast, although they were carefully sought for. No more footprints, no more broken branches, no more deserted camps.

"This does not surprise me," said Cyrus Harding to his companions. "The convicts first landed on the island in the neighbourhood of Flotsam Point, and they immediately plunged into the Far West forests, after crossing Tadorn Marsh. They then followed almost the same route that we took on leaving Granite House. This explains the traces we found in the wood. But, arriving on the shore, the convicts saw at once that they would discover no suitable retreat there, and it was then that, going northwards again, they came upon the corral."

"Where they have perhaps returned," said Pencroft.

"I do not think so," answered the engineer, "for they would naturally suppose that our researches would be in that direction. The corral is only a store-house to them, and not a definitive encampment."

"I am of Cyrus' opinion," said the reporter, "and I think that it is among the spurs of Mount Franklin that the convicts will have made their lair."

"Then, captain, straight to the corral!" cried Pencroft. "We must finish them off, and till now we have only lost time!"

"No, my friend," replied the engineer; "you forget that we have a reason for wishing to know if the forests of the Far West do not contain some habitation. Our exploration has a double object, Pencroft. If, on the one hand, we have to chastise crime, we have, on the other, an act of gratitude to perform."

"That was well said, captain," replied the sailor; "but, all the same, it is my opinion that we shall not find that gentleman until he pleases."

And truly Pencroft only expressed the opinion of all. It was probable that the stranger's retreat was not less mysterious than he himself.

That evening the cart halted at the mouth of Falls River. The camp was organised as usual, and the customary precautions were taken for the night. Herbert, become again the healthy and vigorous lad he was before his illness, derived great benefit from this life in the open air, between the sea-breezes and the vivifying air from the forests. His place was no longer in the cart, but at the head of the troop.

The next day, the 19th of February, the colonists, leaving the shore, where, beyond the mouth, basalts of every shape were so picturesquely piled up, ascended the river by its left bank. The settlers were now about six miles from Mount Franklin.

The engineer's plan was this:—To minutely survey the valley forming the bed of the river, and to cautiously approach the neighbourhood of the corral; if the corral was occupied, to seize it by force; if it was not, to intrench themselves there and make it the centre of the operations which had for their object the exploration of Mount Franklin.

This plan was unanimously approved by the colonists, for they were impatient to regain entire possession of their island.

They made their way along the narrow valley separating two of the largest spurs of Mount Franklin. The trees, crowded on the river's bank, became rare on the upper slopes of the mountain. The ground was hilly and rough, very suitable for ambushes, and over which they did not venture without extreme precaution. Top and Jup skirmished on the flanks, springing right and left through the thick brushwood, and emulating each other in intelligence and activity. But nothing showed that the banks of the stream had been recently frequented—nothing announced either the presence or the proximity of the convicts. Towards five in the evening the cart stopped nearly 600 feet from the palisade. A semicircular screen of trees still hid it.

It was necessary to reconnoitre the corral, in order to ascertain if it was occupied. To go there openly, in broad daylight, when the convicts were probably in ambush, would be to expose themselves, as poor Herbert had done, to
the fire-arms of the ruffians. It was better, then, to wait until night came on.

However, Gideon Spilett wished without further delay to reconnoitre the approaches to the corral, and Pencroft, who was quite out of patience, volunteered to accompany him.

"No, my friends," said the engineer, "wait till night. I will not allow one of you to expose himself in open day."

"But, captain," answered the sailor, little disposed to obey.

"I beg you, Pencroft," said the engineer.

"Very well!" replied the sailor, who vented his anger in another way, by bestowing on the convicts the worst names in his maritime vocabulary.

The colonists remained, therefore, near the cart, and carefully watched the neighbouring parts of the forest.

Three hours passed thus. The wind had fallen, and absolute silence reigned under the great trees. The snapping of the smallest twig, a footstep on the dry leaves, the gliding of a body amongst the grass, would have been heard without difficulty. All was quiet. Besides, Top, lying on the grass, his head stretched out on his paws, gave no signs of uneasiness. At eight o'clock the day appeared far enough advanced for the reconnaissance to be made under favourable conditions. Gideon Spilett declared himself ready to set out accompanied by Pencroft. Cyrus Harding consented. Top and Jup were to remain with the engineer, Herbert, and Neb, for a bark or a cry at a wrong moment would give the alarm.

"Do not be imprudent," said Harding to the reporter and Pencroft; "you have not to gain possession of the corral, but only to find out whether it is occupied or not."

"All right," answered Pencroft.

And the two departed.

Under the trees, thanks to the thickness of their foliage, the obscurity rendered any object invisible beyond a radius of from thirty to forty feet. The reporter and Pencroft, halting at any suspicious sound, advanced with great caution.

They walked a little distance apart from each other so as to offer a less mark for a shot. And, to tell the truth, they expected every moment to hear a report. Five minutes after leaving the cart, Gideon Spilett and Pencroft arrived at the edge of the wood before the clearing beyond which rose the palisade.

They stopped. A few straggling beams still fell on the field clear of trees. Thirty feet distant was the gate of the corral, which appeared to be closed. This thirty feet, which it was necessary to cross from the border of the wood to the palisade, constituted the dangerous zone, to coin a term: in fact, one or more bullets fired from behind the palisade might knock over any one who ventured onto this zone. Gideon Spilett and the sailor were not men to draw back, but they knew that any imprudence on their part, of which they would be the first victims, would fall afterwards on their companions. If they themselves were killed, what would become of Harding, Neb, and Herbert?

But Pencroft, excited at feeling himself so near the corral where he supposed the convicts had taken refuge, was about to press forward, when the reporter held him back with a grasp of iron.

"In a few minutes it will be quite dark," whispered Spilett in the sailor's ear; "then will be the time to act."

Pencroft, convulsively clasping the butt-end of his gun, restrained his eagerness, and waited, swearing to himself.

Soon the last of the twilight faded away. Darkness, which seemed as if it issued from the dense forest, covered the clearing. Mount Franklin rose like an enormous screen before the western horizon, and night spread rapidly over all, as it does in regions of low latitudes. Now was the time.

The reporter and Pencroft, since posting themselves on the edge of the wood, had not once lost sight of the palisade. The corral appeared to be absolutely deserted. The top of the palisade formed a line, a little darker than the surrounding shadow, and nothing disturbed its distinctness. Nevertheless, if the convicts were there, they must have posted one of their number to guard against any surprise.

Spilett grasped his companion's hand, and both crept towards the corral, their guns ready to fire.

They reached the gate without the darkness being illuminated by a single ray of light.

Pencroft tried to push open the gate, which, as the reporter and he had supposed, was closed. However, the sailor was able to ascertain that the outer bars had not been put up. It might, then, be concluded that the convicts were there in the corral, and that very probably they had fastened the gate in such a way that it could not be forced open.

Gideon Spilett and Pencroft listened. Not a sound could be heard inside the palisade. The musmons and the goats, sleeping no doubt in their huts, in no way disturbed the calm of night.

The reporter and the sailor hearing nothing, asked themselves whether they had not better scale the palisades and penetrate into the corral. This would have been contrary to Cyrus Harding's instructions.

It is true that the enterprise might succeed, but it might also fail. Now, if the convicts were suspecting nothing, if they knew nothing of the expedition against them, if, lastly, there now existed a chance of surprising them, ought this chance to be lost by inconsiderately attempting to cross the palisade?
This was not the reporter's opinion. He thought it better to wait until all the settlers were collected together before attempting to penetrate into the corral. One thing was certain, that it was possible to reach the palisade without being seen, and also that it did not appear to be guarded. This point settled, there was nothing to be done but to return to the cart, where they would consult.

Pencroft probably agreed with this decision, for he followed the reporter without making any objection when the latter turned back to the wood.

In a few minutes the engineer was made acquainted with the state of affairs.

"Well," said he, after a little thought, "I now have reason to believe that the convicts are not in the corral."

"We shall soon know," said Pencroft, "when we have scaled the palisade."

"To the corral, my friends!" said Cyrus Harding.

"Shall we leave the cart in the wood?" asked Neb.

"No," replied the engineer, "it is our waggon of ammunition and provisions, and, if necessary, it would serve as an intrenchment."

"Forward, then!" said Gideon Spilett.

The cart emerged from the wood and began to roll noiselessly towards the palisade. The darkness was now profound, the silence as complete as when Pencroft and the reporter crept over the ground. The thick grass completely muffled their footsteps.

The colonists held themselves ready to fire. Jup, at Pencroft's orders, kept behind. Neb led Top in a leash, to prevent him from bounding forward.

The clearing soon came in sight. It was deserted. Without hesitating, the little band moved towards the palisade. In a short space of time the dangerous zone was passed. Not a shot had been fired. When the cart reached the palisade, it stopped. Neb remained at the onagas' heads to hold them. The engineer, the reporter, Herbert, and Pencroft, proceeded to the door, in order to ascertain if it was barricaded inside. It was open!

"What do you say now?" asked the engineer, turning to the sailor and Spilett. Both were stupefied.

"I can swear," said Pencroft, "that this gate was shut just now!"

The colonists now hesitated. Were the convicts in the corral when Pencroft and the reporter made their reconnaissance? it could not be doubted, as the gate then closed could only have been opened by them. Were they still there, or had one of their number just gone out?

All these questions presented themselves simultaneously to the minds of the colonists, but how could they be answered?

At that moment, Herbert, who had advanced a few steps into the enclosure, drew back hurriedly, and seized Harding's hand.

"What's the matter?" asked the engineer. "Alight!"

"In the house?"

"Yes!"

All five advanced and indeed, through the window fronting them, they saw glimmering a feeble light. Cyrus Harding made up his mind rapidly. "It is our only chance," said he to his companions, "of finding the convicts collected in this house, suspecting nothing! They are in our power! Forward!" The colonists crossed through the enclosure, holding their guns ready in their hands. The cart had been left outside under the charge of Jup and Top, who had been prudently tied to it.

Cyrus Harding, Pencroft, and Gideon Spilett on one side, Herbert and Neb on the other, going along by the palisade, surveyed the absolutely dark and deserted corral.

In a few moments they were near the closed door of the house.

Harding signed to his companions not to stir, and approached the window, then feebly lighted by the inner light.

He gazed into the apartment.

On the table burned a lantern. Near the table was the bed formerly used by Ayrton.

On the bed lay the body of a man.

Suddenly Cyrus Harding drew back, and in a hoarse voice--

"Ayrton!" he exclaimed.

Immediately the door was forced rather than opened, and the colonists rushed into the room.

Ayrton appeared to be asleep. His countenance showed that he had long and cruelly suffered. On his wrists and ankles could be seen great bruises.

Harding bent over him.

"Ayrton!" cried the engineer, seizing the arm of the man whom he had just found again under such unexpected circumstances.

At this exclamation Ayrton opened his eyes, and, gazing at Harding, then at the others--
"You!" he cried, "you?"
"Ayrton! Ayrton!" repeated Harding.
"Where am I?"
"In the house in the corral!"
"Alone?"
"Yes!"
"But they will come back!" cried Ayrton. "Defend yourselves! defend yourselves!"
And he fell back exhausted.

"Spilett," exclaimed the engineer, "we may be attacked at any moment. Bring the cart into the corral. Then barricade the door, and all come back here."

Pencroft, Neb, and the reporter hastened to execute the engineer's orders. There was not a moment to be lost. Perhaps even now the cart was in the hands of the convicts!

In a moment the reporter and his two companions had crossed the corral and reached the gate of the palisade behind which Top was heard growling sullenly.

The engineer, leaving Ayrton for an instant, came out ready to fire. Herbert was at his side. Both surveyed the crest of the spur overlooking the corral. If the convicts were lying in ambush there, they might knock the settlers over one after the other.

At that moment the moon appeared in the east, above the black curtain of the forest, and a white sheet of light spread over the interior of the enclosure. The corral, with its clumps of trees, the little stream which watered it, and its wide carpet of grass, was suddenly illuminated. From the side of the mountain, the house and a part of the palisade stood out white in the moonlight. On the opposite side towards the door, the enclosure remained dark.

A black mass soon appeared. This was the cart entering the circle of light, and Cyrus Harding could hear the noise made by the door, as his companions shut it and fastened the interior bars.

But, at that moment, Top, breaking loose, began to bark furiously and rush to the back of the corral, to the right of the house.

"Be ready to fire, my friends!" cried Harding.
The colonists raised their pieces and waited the moment to fire.
Top still barked, and Jup, running towards the dog, uttered shrill cries.
The colonists followed him, and reached the borders of the little stream, shaded by large trees. And there, in the bright moonlight, what did they see? Five corpses, stretched on the bank!
They were those of the convicts who, four months previously, had landed on Lincoln Island!

CHAPTER THIRTEEN.

How had it happened? Who had killed the convicts? Was it Ayrton? No, for a moment before he was dreading their return.

But Ayrton was now in a profound stupor, from which it was no longer possible to rouse him. After uttering those few words he had again become unconscious, and had fallen back motionless on the bed.

The colonists, a prey to a thousand confused thoughts, under the influence of violent excitement, waited all night, without leaving Ayrton's house, or returning to the spot where lay the bodies of the convicts. It was very probable that Ayrton would not be able to throw any light on the circumstances under which the bodies had been found, since he himself was not aware that he was in the corral. But at any rate he would be in a position to give an account of what had taken place before this terrible execution. The next day Ayrton awoke from his torpor, and his companions cordially manifested all the joy they felt, on seeing him again, almost safe and sound, after a hundred and four days' separation.

Ayrton then in a few words recounted what had happened, or at least as much as he knew.

The day after his arrival at the corral, on the 10th of last November, at nightfall, he was surprised by the convicts, who had scaled the palisade. They bound and gagged him; then he was led to a dark cavern, at the foot of Mount Franklin, where the convicts had taken refuge.

His death had been decided upon, and the next day the convicts were about to kill him, when one of them recognised him, and called him by the name which he bore in Australia. The wretches had no scruples as to murdering Ayrton! They spared Ben Joyce!
But from that moment Ayrton was exposed to the importunities of his former accomplices. They wished him to join them again, and relied upon his aid to enable them to gain possession of Granite House, to penetrate into that hitherto inaccessible dwelling, and to become masters of the island, after murdering the colonists!

Ayrton remained firm. The once convict, now repentant and pardoned, would rather die than betray his companions. Ayrton—bound, gagged, and closely watched—lived in this cave for four months.

Nevertheless the convicts had discovered the corral a short time after their arrival in the island, and since then they had subsisted on Ayrton's stores, but did not live at the corral.

On the 11th of November, two of the villains, surprised by the colonists' arrival, fired at Herbert, and one of them returned, boasting of having killed one of the inhabitants of the island; but he returned alone. His companion, as is known, fell by Cyrus Harding's dagger.

Ayrton's anxiety and despair may be imagined when he learnt the news of Herbert's death. The settlers were now only four, and, as it seemed, at the mercy of the convicts. After this event, and during all the time that the colonists, detained by Herbert's illness, remained in the corral, the pirates did not leave their cavern, and even after they had pillaged the plateau of Prospect Heights, they did not think it prudent to abandon it.

The ill-treatment inflicted on Ayrton was now redoubled. His hands and feet still bore the bloody marks of the cords which bound him day and night. Every moment he expected to be put to death, nor did it appear possible that he could escape.

Matters remained thus until the third week of February. The convicts, still watching for a favourable opportunity, rarely quitted their retreat, and only made a few hunting excursions, either to the interior of the island, or the south coast.

Ayrton had no further news of his friends, and relinquished all hope of ever seeing them again. At last, the unfortunate man, weakened by ill-treatment, fell into a prostration so profound that sight and hearing failed him. From that moment, that is to say, since the last two days, he could give no information whatever of what had occurred.

"But, Captain Harding," he added, "since I was imprisoned in that cavern, how is it that I find myself in the corral?"

"How is it that the convicts are lying yonder dead, in the middle of the enclosure?" answered the engineer.

"Dead!" cried Ayrton, half rising from his bed, notwithstanding his weakness.

His companions supported him. He wished to get up, and with their assistance he did so. They then proceeded together towards the little stream.

It was now broad daylight.

There, on the bank, in the position in which they had been stricken by death in its most instantaneous form, lay the corpses of the five convicts!

Ayrton was astounded. Harding and his companions looked at him without uttering a word. On a sign from the engineer, Neb and Pencroft examined the bodies, already stiffened by the cold.

They bore no apparent trace of any wound.

Only, after carefully examining them, Pencroft found on the forehead of one, on the chest of another, on the back of this one, on the shoulder of that, a little red spot, a sort of scarcely visible bruise, the cause of which it was impossible to conjecture.

"It is there that they have been struck!" said Cyrus Harding.

"But with what weapon?" cried the reporter.

"A weapon, lightning-like in its effects, and of which we have not the secret!"

"And who has struck the blow?" asked Pencroft.

"The avenging power of the island," replied Harding, "he who brought you here, Ayrton, whose influence has once more manifested itself, who does for us all that which we cannot do for ourselves, and who, his will accomplished, conceals himself from us."

"Let us make search for him, then!" exclaimed Pencroft.

"Yes, we will search for him," answered Harding; "but we shall not discover this powerful being who performs such wonders, until he pleases to call us to him!"

This invisible protection, which rendered their own action unavailing, both irritated and piqued the engineer. The relative inferiority which it proved was of a nature to wound a haughty spirit. A generosity evinced in such a manner as to elude all tokens of gratitude, implied a sort of disdain for those on whom the obligation was conferred, which in Cyrus Harding's eyes marred, in some degree, the worth of the benefit.

"Let us search," he resumed, "and God grant that we may some day be permitted to prove to this haughty protector that he has not to deal with ungrateful people! What would I not give could we repay him, by rendering him in our turn, although at the price of our lives, some signal service!"
From this day, the thoughts of the inhabitants of Lincoln Island were solely occupied with the intended search. Everything incited them to discover the answer to this enigma, an answer which could only be the name of a man endowed with a truly inexplicable, and in some degree superhuman power. In a few minutes, the settlers re-entered the house, where their influence soon restored to Ayrton his moral and physical energy.

Neb and Pencroft carried the corpses of the convicts into the forest, some distance from the corral, and buried them deep in the ground.

Ayrton was then made acquainted with the facts which had occurred during his seclusion. He learnt Herbert's adventures, and through what various trials the colonists had passed. As to the settlers, they had despaired of ever seeing Ayrton again, and had been convinced that the convicts had ruthlessly murdered him.

"And now," said Cyrus Harding, as he ended his recital, "a duty remains for us to perform. Half of our task is accomplished, but although the convicts are no longer to be feared, it is not owing to ourselves that we are once more masters of the island."

"Well!" answered Gideon Spilett, "let us search all this labyrinth of the spurs of Mount Franklin. We will not leave a hollow, not a hole unexplored! Ah! if ever a reporter found himself face to face with a mystery, it is I who now speak to you, my friends!"

"And we will not return to Granite House until we have found our benefactor," said Herbert.

"Yes," said the engineer, "we will do all that it is humanly possible to do, but I repeat we shall not find him until he himself permits us."

"Shall we stay at the corral?" asked Pencroft.

"We shall stay here," answered Harding. "Provisions are abundant, and we are here in the very centre of the circle we have to explore. Besides, if necessary, the cart will take us rapidly to Granite House."

"Good!" answered the sailor. "Only I have a remark to make."

"What is it?"

"Here is the fine season getting on, and we must not forget that we have a voyage to make."

"A voyage?" said Gideon Spilett.

"Yes, to Tabor Island," answered Pencroft. "It is necessary to carry a notice there to point out the position of our island and say that Ayrton is here in case the Scotch yacht should come to take him off. Who knows if it is not already too late?"

"But, Pencroft," asked Ayrton, "how do you intend to make this voyage?"

"In the Bonadventure."

"The Bonadventure!" exclaimed Ayrton. "She no longer exists."

"My Bonadventure exists no longer!" shouted Pencroft, bounding from his seat.

"No," answered Ayrton. "The convicts discovered her in her little harbour only eight days ago, they put to sea in her, and--"

"And?" said Pencroft, his heart beating.

"And not having Bob Harvey to steer her, they ran on the rocks, and the vessel went to pieces."

"Oh, the villains, the cut-throats, the infamous scoundrels!" exclaimed Pencroft.

"Pencroft," said Herbert, taking the sailor's hand, "we will build another Bonadventure—a larger one. We have all the iron-work—all the rigging of the brig at our disposal."

"But do you know," returned Pencroft, "that it will take at least five or six months to build a vessel of from thirty to forty tons?"

"We can take our time," said the reporter, "and we must give up the voyage to Tabor Island for this year."

"Oh, my Bonadventure! my poor Bonadventure!" cried Pencroft, almost broken-hearted at the destruction of the vessel of which he was so proud.

The loss of the Bonadventure was certainly a thing to be lamented by the colonists, and it was agreed that this loss should be repaired as soon as possible. This settled, they now occupied themselves with bringing their researches to bear on the most secret parts of the island.

The exploration was commenced at daybreak on the 19th of February, and lasted an entire week. The base of the mountain, with its spurs and their numberless ramifications, formed a labyrinth of valleys and elevations. It was evident that there, in the depths of these narrow gorges, perhaps even in the interior of Mount Franklin itself, was the proper place to pursue their researches. No part of the island could have been more suitable to conceal a dwelling whose occupant wished to remain unknown. But so irregular was the formation of the valleys that Cyrus Harding was obliged to conduct the exploration in a strictly methodical manner.

The colonists first visited the valley opening to the south of the volcano, and which first received the waters of Falls River. There Ayrton showed them the cavern where the convicts had taken refuge, and in which he had been imprisoned until his removal to the corral. This cavern was just as Ayrton had left it. They found there a
considerable quantity of ammunition and provisions, conveyed thither by the convicts in order to form a reserve.

The whole of the valley bordering on the cave, shaded by fir and other trees, was thoroughly explored, and on turning the point of the south-western spur, the colonists entered a narrower gorge similar to the picturesque columns of basalt on the coast. Here the trees were fewer. Stones took the place of grass. Goats and musmons gambolled among the rocks. Here began the barren part of the island. It could already be seen that, of the numerous valleys branching off at the base of Mount Franklin, three only were wooded and rich in pasturage like that of the corral, which bordered on the west on the Falls River valley, and on the east on the Red Creek valley. These two streams, which lower down became rivers by the absorption of several tributaries, were formed by all the springs of the mountain and thus caused the fertility of its southern part. As to the Mercy, it was more directly fed from ample springs concealed under the cover of Jacamar Wood, and it was by springs of this nature, spreading in a thousand streamlets, that the soil of the Serpentine Peninsula was watered.

Now, of these three well-watered valleys, either might have served as a retreat to some solitary who would have found there everything necessary for life. But the settlers had already explored them, and in no part had they discovered the presence of man.

Was it then in the depths of those barren gorges, in the midst of the piles of rock, in the rugged northern ravines, among the streams of lava, that this dwelling and its occupant would be found?

The northern part of Mount Franklin was at its base composed solely of two valleys, wide, not very deep, without any appearance of vegetation, strewn with masses of rock, paved with lava, and varied with great blocks of mineral. This region required a long and careful exploration. It contained a thousand cavities, comfortless no doubt, but perfectly concealed and difficult of access.

The colonists even visited dark tunnels, dating from the volcanic period, still black from the passage of the fire, and penetrated into the depths of the mountain. They traversed these sombre galleries, waving lighted torches; they examined the smallest excavations; they sounded the shallowest depths, but all was dark and silent. It did not appear that the foot of man had ever before trodden these ancient passages, or that his arm had ever displaced one of these blocks, which remained as the volcano had cast them up above the waters, at the time of the submersion of the island.

However, although these passages appeared to be absolutely deserted, and the obscurity was complete, Cyrus Harding was obliged to confess that absolute silence did not reign there.

On arriving at the end of one of these gloomy caverns, extending several hundred feet into the interior of the mountain, he was surprised to hear a deep rumbling noise, increased in intensity by the sonorousness of the rocks. Gideon Spilett, who accompanied him, also heard these distant mutterings, which indicated a revivification of the subterranean fires. Several times both listened, and they agreed that some chemical process was taking place in the bowels of the earth.

"Then the volcano is not totally extinct?" said the reporter.

"It is possible that since our exploration of the crater," replied Cyrus Harding, "some change has occurred. Any volcano, although considered extinct, may evidently again burst forth."

"But if an eruption of Mount Franklin occurred," asked Spilett, "would there not be some danger to Lincoln Island?"

"I do not think so," answered the reporter. "The crater--that is to say, the safety-valve, exists, and the overflow of smoke and lava would escape, as it did formerly, by its customary outlet."

"Unless the lava opened a new way for itself towards the fertile parts of the island!"

"And why, my dear Spilett," answered Cyrus Harding, "should it not follow the road naturally traced out for it?"

"Well, volcanoes are capricious," returned the reporter.

"Notice," answered the engineer, "that the inclination of Mount Franklin favours the flow of water towards the valleys which we are exploring just now. To turn aside this flow, an earthquake would be necessary to change the mountain's centre of gravity."

"But an earthquake is always to be feared at these times," observed Gideon Spilett.

"Always," replied the engineer, "especially when the subterranean forces begin to awake, as they risk meeting with some obstruction, after a long rest. Thus, my dear Spilett, an eruption would be a serious thing for us, and it would be better that the volcano should not have the slightest desire to wake up. But we could not prevent it, could we? At any rate, even if it should occur, I do not think Prospect Heights would be seriously threatened. Between them and the mountain, the ground is considerably depressed, and if the lava should ever take a course towards the lake, it would be cast on the downs and the neighbouring parts of Shark Gulf."

"We have not yet seen any smoke at the top of the mountain, to indicate an approaching eruption," said Gideon Spilett.

"No," answered Harding, "not a vapour escapes from the crater, for it was only yesterday that I attentively
surveyed the summit. But it is probable that at the lower part of the chimney, time may have accumulated rocks, cinders, hardened lava, and that this valve of which I spoke, may at any time become overcharged. But at the first serious effort, every obstacle will disappear, and you may be certain, my dear Spilett, that neither the island, which is the boiler, nor the volcano, which is the chimney, will burst under the pressure of gas. Nevertheless, I repeat, it would be better that there should not be an eruption."

"And yet we are not mistaken," remarked the reporter. "Mutterings can be distinctly heard in the very bowels of the volcano!"

"You are right," said the engineer, again listening attentively. "There can be no doubt of it. A commotion is going on there, of which we can neither estimate the importance nor the ultimate result."

Cyrus Harding and Spilett, on coming out, rejoined their companions, to whom they made known the state of affairs.

"Very well!" cried Pencroft, "the volcano wants to play his pranks! Let him try, if he likes! He will find his master!"

"Who?" asked Neb.

"Our good genius, Neb, our good genius, who will shut his mouth for him, if he so much as pretends to open it!"

As may be seen, the sailor's confidence in the tutelary deity of his island was absolute, and, certainly, the occult power, manifested until now in so many inexplicable ways, appeared to be unlimited; but also it knew how to escape the colonists' most minute researches, for, in spite of all their efforts, in spite of the more than zeal,---the obstinacy,---with which they carried on their exploration, the retreat of the mysterious being could not be discovered.

From the 19th to the 25th of February the circle of investigation was extended to all the northern region of Lincoln Island, whose most secret nooks were explored. The colonists even went the length of tapping every rock. The search was extended to the extreme verge of the mountain. It was explored thus to the very summit of the truncated cone terminating the first row of rocks, then to the upper ridge of the enormous hat, at the bottom of which opened the crater.

They did more; they visited the gulf, now extinct, but in whose depths the rumbling could be distinctly heard. However, no sign of smoke or vapour, no heating of the rock, indicated an approaching eruption. But neither there, nor in any other part of Mount Franklin, did the colonists find any traces of him of whom they were in search.

Their investigations were then directed to the downs. They carefully examined the high lava-cliffs of Shark Gulf from the base to the crest, although it was extremely difficult to reach even the level of the gulf. No one!--nothing!

In short, in these two words was summed up so much fatigue uselessly expended, so much energy producing no result, that somewhat of anger mingled with the discomfiture of Cyrus Harding and his companions.

It was now time to think of returning, for these researches could not be prolonged indefinitely. The colonists were certainly right in believing that the mysterious being did not reside on the surface of the island, and the wildest fancies haunted their excited imaginations. Pencroft and Neb, particularly, were not contented with the mystery, but allowed their imaginations to wander into the domain of the supernatural.

On the 25th of February the colonists re-entered Granite House, and by means of the double cord, carried by an arrow to the threshold of the door, they re-established communication between their habitation and the ground.

A month later they commemorated, on the 25th of March, the third anniversary of their arrival on Lincoln Island.

CHAPTER FOURTEEN.
THREE YEARS HAVE PASSED--THE NEW VESSEL--WHAT IS AGREED ON--PROSPERITY OF THE COLONY--THE DOCKYARD--COLD OF THE SOUTHERN HEMISPHERE--WASHING LINEN--MOUNT FRANKLIN.

Three years had passed away since the escape of the prisoners from Richmond, and how often during those three years had they spoken of their country, always present in their thoughts!

They had no doubt that the civil war was at an end, and to them it appeared impossible that the just cause of the North had not triumphed. But what had been the incidents of this terrible war? How much blood had it not cost? How many of their friends must have fallen in the struggle? They often spoke of these things, without as yet being able to foresee the day when they would be permitted once more to see their country. To return thither, were it but for a few days, to renew the social link with the inhabited world, to establish a communication between their native land and their island, then to pass the longest, perhaps the best, portion of their existence in this colony founded by them, and which would then be dependent of their country, was this a dream impossible to realise?

There were only two ways of accomplishing it--either a ship must appear off Lincoln Island, or the colonists must themselves build a vessel strong enough to sail to the nearest land.

"Unless," said Pencroft, "our good genius himself provides us with the means of returning to our country."
And, really, had any one told Pencroft and Neb that a ship of 300 tons was waiting for them in Shark Gulf or at Port Balloon, they would not even have made a gesture of surprise. In their state of mind nothing appeared improbable.

But Cyrus Harding, less confident, advised them to confine themselves to fact, and more especially so with regard to the building of a vessel—a really urgent work, since it was for the purpose of depositing, as soon as possible, at Tabor Island a document indicating Ayrton's new residence.

As the Bonadventure no longer existed, six months at least would be required for the construction of a new vessel. Now winter was approaching, and the voyage could not be made before the following spring.

"We have time to get everything ready for the fine season," remarked the engineer, who was consulting with Pencroft about these matters. "I think, therefore, my friend, that since we have to rebuild our vessel it will be best to give her larger dimensions. The arrival of the Scotch yacht at Tabor Island is very uncertain. It may even be that, having arrived several months ago, she has again sailed after having vainly searched for some trace of Ayrton. Will it not then be best to build a ship which, if necessary, could take us either to the Polynesian Archipelago or to New Zealand? What do you think?"

"I think, captain," answered the sailor; "I think that you are as capable of building a large vessel as a small one. Neither the wood nor the tools are wanting. It is only a question of time."

"And how many months would be required to build a vessel of from 250 to 300 tons?" asked Harding.

"Seven or eight months at least," replied Pencroft. "But it must not be forgotten that winter is drawing near, and that in severe frost wood is difficult to work. We must calculate on several weeks' delay, and if our vessel is ready by next November we may think ourselves very lucky."

"Well," replied Cyrus Harding, "that will be exactly the most favourable time for undertaking a voyage of any importance, either to Tabor Island or to a more distant land."

"So it will, captain," answered the sailor. "Make out your plans then; the workmen are ready, and I imagine that Ayrton can lend us a good helping hand."

The colonists, having been consulted, approved the engineer's plan, and it was, indeed, the best thing to be done. It is true that the construction of a ship of from two to three hundred tons would be great labour, but the colonists had confidence in themselves, justified by their previous success.

Cyrus Harding then busied himself in drawing the plan of the vessel and making the model. During this time his companions employed themselves in felling and carting trees to furnish the ribs, timbers, and planks. The forest of the Far West supplied the best oaks and elms. They took advantage of the opening already made on their last excursion to form a practicable road, which they named the Far West Road, and the trees were carried to the Chimneys, where the dockyard was established. As to the road in question, the choice of trees had rendered its direction somewhat capricious, but that at the same time facilitated the access to a large part of the Serpentine Peninsula.

It was important that the trees should be quickly felled and cut up, for they could not be used while yet green, and some time was necessary to allow them to get seasoned. The carpenters, therefore, worked vigorously during the month of April, which was troubled only by a few equinoctial gales of some violence. Master Jup aided them dexterously, either by climbing to the top of a tree to fasten the ropes or by lending his stout shoulders to carry the lopped trunks.

All this timber was piled up under a large shed, built near the Chimneys, and there awaited the time for use.

The month of April was tolerably fine, as October often is in the northern zone. At the same time other work was actively continued, and soon all trace of devastation disappeared from the plateau of Prospect Heights. The mill was rebuilt, and new buildings rose in the poultry-yard. It had appeared necessary to enlarge their dimensions, for the feathered population had increased considerably. The stable now contained five onagas, four of which were well broken, and allowed themselves to be either driven or ridden, and a little colt. The colony now possessed a plough, to which the onagas were yoked like regular Yorkshire or Kentucky oxen. The colonists divided their work, and their arms never tired. Then who could have enjoyed better health than these workers, and what good humour enlivened the evenings in Granite House as they formed a thousand plans for the future!

As a matter of course Ayrton shared the common lot in every respect, and there was no longer any talk of his going to live at the corral. Nevertheless he was still sad and reserved, and joined more in the work than in the pleasures of his companions. But he was a valuable workman at need—strong, skilful, ingenious, intelligent. He was esteemed and loved by all, and he could not be ignorant of it.

In the meanwhile the corral was not abandoned. Every other day one of the settlers, driving the cart or mounted on an onaga, went to look after the flock of musmons and goats and bring back the supply of milk required by Neb. These excursions at the same time afforded opportunities for hunting. Therefore Herbert and Gideon Spilett, with Top in front, traversed more often than their companions the road to the corral, and with the capital guns which they
carried, capybaras, agouties, kangaroos, and wild pigs for large game, ducks, tetras, grouse, jacamars, and snipe for small, were never wanting in the house. The produce of the warren, of the oyster-bed, several turtles which were taken, excellent salmon which came up the Mercy, vegetables from the plateau, wild fruit from the forest, were riches upon riches, and Neb, the head cook, could scarcely by himself store them away.

The telegraphic wire between the corral and Granite House had of course been repaired, and it was worked whenever one or other of the settlers was at the corral and found it necessary to spend the night there. Besides, the island was safe now and no attacks were to be feared, at any rate from men.

However, that which had happened might happen again. A descent of pirates, or even of escaped convicts, was always to be feared. It was possible that companions or accomplices of Bob Harvey had been in the secret of his plans, and might be tempted to imitate him. The colonists, therefore, were careful to observe the sea around the island, and every day their telescope swept the horizon enclosed by the Union and Washington Bays. When they went to the corral they examined the sea to the west with no less attention, and by climbing the spur their gaze extended over a large section of the western horizon.

Nothing suspicious was discerned, but still it was necessary for them to be on their guard.

The engineer one evening imparted to his friends a plan which he had conceived for fortifying the corral. It appeared prudent to him to heighten the palisade and to flank it with a sort of block-house, which, if necessary, the settlers could hold against the enemy. Granite House might, by its very position, be considered impregnable; therefore the corral with its buildings, its stores, and the animals it contained, would always be the object of pirates, whoever they were, who might land on the island, and should the colonists be obliged to shut themselves up there they ought also to be able to defend themselves without any disadvantage. This was a project which might be left for consideration, and they were, besides, obliged to put off its execution until the next spring.

About the 15th of May the keel of the new vessel lay along the dockyard, and soon the stem and stern-post, mortised at each of its extremities, rose almost perpendicularly. The keel, of good oak, measured 110 feet in length, this allowing a width of five-and-twenty feet to the midship beam. But this was all the carpenters could do before the arrival of the frosts and bad weather. During the following week they fixed the first of the stern timbers, but were then obliged to suspend work.

During the last days of the month the weather was extremely bad. The wind blew from the east, sometimes with the violence of a tempest. The engineer was somewhat uneasy on account of the dockyard sheds—which, besides, he could not have established in any other place near to Granite House—for the islet only imperfectly sheltered the shore from the fury of the open sea, and in great storms the waves beat against the very foot of the granite cliff.

But, very fortunately, these fears were not realised. The wind shifted to the south-east, and there the beach of Flotsam Point.

Pencroft and Ayrton, the most zealous workmen at the new vessel, pursued their labour as long as they could. They were not men to mind the wind tearing at their hair, nor the rain wetting them to the skin, and a blow from a hammer is worth just as much in bad as in fine weather. But when a severe frost succeeded this wet period, the wood, its fibres acquiring the hardness of iron, became extremely difficult to work, and about the 10th of June ship-building was obliged to be entirely discontinued.

Cyrus Harding and his companions had not omitted to observe how severe was the temperature during the winters of Lincoln Island. The cold was comparable to that experienced in the States of New England, situated at almost the same distance from the equator. In the northern hemisphere, or at any rate in the part occupied by British America and the north of the United States, this phenomenon is explained by the flat conformation of the territories bordering on the pole, and on which there is no intumescence of the soil to oppose any obstacle to the north winds; here, in Lincoln Island, this explanation would not suffice.

"It has even been observed," remarked Harding one day to his companions, "that in equal latitudes the islands and coast regions are less tried by the cold than inland countries. I have often heard it asserted that the winters of Lombardy, for example, are not less rigorous than those of Scotland, which results from the sea restoring during the winter the heat which it received during the summer. Islands are, therefore, in a better situation for benefiting by this restitution."

"But then, Captain Harding," asked Herbert, "why does Lincoln Island appear to escape the common law?"

"That is difficult to explain," answered the engineer. "However, I should be disposed to conjecture that this peculiarity results from the situation of the island in the southern hemisphere, which, as you know, my boy, is colder than the northern hemisphere."

"Yes," said Herbert, "and icebergs are met with in lower latitudes in the south than in the north of the Pacific."

"That is true," remarked Pencroft, "and when I have been serving on board whalers I have seen icebergs off Cape Horn."

"The severe cold experienced in Lincoln Island," said Gideon Spilett, "may then perhaps be explained by the
presence of floes or icebergs comparatively near to Lincoln Island."

"Your opinion is very admissible indeed, my dear Spilett," answered Cyrus Harding, "and it is evidently to the proximity of icebergs that we owe our rigorous winters. I would draw your attention also to an entirely physical cause, which renders the southern colder than the northern hemisphere. In fact, since the sun is nearer to this hemisphere during the summer, it is necessarily more distant during the winter. This explains then the excess of temperature in the two seasons, for, if we find the winters very cold in Lincoln Island, we must not forget that the summers here, on the contrary, are very hot."

"But why, if you please, captain," asked Pencroft, knitting his brows, "why should our hemisphere, as you say, be so badly divided? It isn't just, that!"

"Friend Pencroft," answered the engineer, laughing, "whether just or not, we must submit to it, and here lies the reason for this peculiarity. The earth does not describe a circle round the sun, but an ellipse, as it must by the laws of rational mechanics. Now, the earth occupies one of the centres of the ellipse, and consequently, at the time of its transfer, it is further from the sun, that is to say, at its apogee, and at another time nearer, that is to say, at its perigee. Now it happens that it is during the winter of the southern countries that it is at its most distant point from the sun, and consequently, in a situation for those regions to feel the greatest cold. Nothing can be done to prevent that, and men, Pencroft, however learned they may be, can never change anything of the cosmographical order established by God Himself."

"And yet," added Pencroft, persisting, "the world is very learned. What a big book, captain, might be made with all that is known!"

"And what a much bigger book still with all that is not known!" answered Harding.

At last, for one reason or another, the month of June brought the cold with its accustomed intensity, and the settlers were often confined to Granite House. Ah! how wearisome this imprisonment was to them, and more particularly to Gideon Spilett.

"Look here," said he to Neb one day, "I would give you by notarial deed all the estates which will come to me some day, if you were a good-enough fellow to go, no matter where, and subscribe to some newspaper for me! Decidedly the thing that is most essential to my happiness is the knowing every morning what has happened the day before in other places than this!"

Neb began to laugh.

"'Pon my word," he replied, "the only thing I think about is my daily work!"

The truth was that indoors as well as out there was no want of work.

The colony of Lincoln Island was now at its highest point of prosperity, achieved by three years of continued hard work. The destruction of the brig had been a new source of riches. Without speaking of the complete rig which would serve for the vessel now on the stocks, utensils and tools of all sorts, weapons and ammunition, clothes and instruments, were now piled in the store-rooms of Granite House. It had not even been necessary to resort again to the manufacture of the coarse felt materials. Though the colonists had suffered from cold during their first winter, the bad season might now come without their having any reason to dread its severity. Linen was plentiful also, and besides, they kept it with extreme care. From chloride of sodium, which is nothing else than sea salt, Cyrus Harding easily extracted the soda and chlorine. The soda, which it was easy to change into carbonate of soda, and the chlorine, of which he made chloride of lime, were employed for various domestic purposes, and especially in bleaching linen. Besides, they did not wash more than four times a year, as was done by families in the olden time, and it may be added, that Pencroft and Gideon Spilett, whilst waiting for the postman to bring him his newspaper, distinguished themselves as washermen.

So passed the winter months, June, July, and August. They were very severe, and the average observations of the thermometer did not give more than eight degrees of Fahrenheit. It was therefore lower in temperature than the preceding winter. But then, what splendid fires blazed continually on the hearths of Granite House, the smoke marking the granite wall with long, zebra-like streaks! Fuel was not spared, as it grew naturally a few steps from them. Besides, the chips of the wood destined for the construction of the ship enabled them to economise the coal, which required more trouble to transport.

Men and animals were all well. Master Jup was a little chilly, it must be confessed. This was perhaps his only weakness, and it was necessary to make him a well-wadded dressing-gown. But what a servant he was, clever, zealous, indefatigable, not indiscreet, not talkative, and he might have been with reason proposed as a model for all his biped brothers in the Old and the New World!

"As for that," said Pencroft, "when one has four hands at one's service, of course one's work ought to be done so much the better!"

And indeed the intelligent creature did it well.

During the seven months which had passed since the last researches made round the mountain, and during the
month of September, which brought back fine weather, nothing was heard of the genius of the island. His power was not manifested in any way. It is true that it would have been inutile, for no incident occurred to put the colonists to any painful trial.

Cyrus Harding even observed that if by chance the communication between the unknown and the tenants of Granite House had ever been established through the granite, and if Top’s instinct had as it were felt it, there was no further sign of it during this period. The dog’s growling had entirely ceased, as well as the uneasiness of the orang. The two friends—for they were so—no longer prowled round the opening of the inner well, nor did they bark or whine in that singular way which from the first the engineer had noticed. But could he be sure that this was all that was to be said about this enigma, and that he should never arrive at a solution? Could he be certain that some conjunction would not occur which would bring the mysterious personage on the scene? Who could tell what the future might have in reserve?

At last the winter was ended, but an event, the consequences of which might be serious, occurred in the first days of the returning spring.

On the 7th of September, Cyrus Harding, having observed the crater, saw smoke curling round the summit of the mountain, its first vapours rising in the air.

CHAPTER FIFTEEN.


The colonists, warned by the engineer, left their work and gazed in silence at the summit of Mount Franklin. The volcano had awoke, and the vapour had penetrated the mineral layer heaped up at the bottom of the crater. But would the subterranean fires provoke any violent eruption? This was an event which could not be foreseen. However, even while admitting the possibility of an eruption, it was not probable that the whole of Lincoln Island would suffer from it. The flow of volcanic matter is not always disastrous, and the island had already undergone this trial, as was shown by the streams of lava hardened on the northern slopes of the mountain. Besides, from the shape of the crater—the opening broken in the upper edge—the matter would be thrown to the side opposite the fertile regions of the island.

However, the past did not necessarily answer for the future. Often, at the summit of volcanoes, the old craters close and new ones open. This has occurred in the two hemispheres—at Etna, Popocatepetl, at Orizaba—and on the eve of an eruption there is everything to be feared. In fact, an earthquake—a phenomenon which often accompanies volcanic eruptions—is enough to change the interior arrangement of a mountain, and to open new outlets for the burning lava.

Cyrus Harding explained these things to his companions, and, without exaggerating the state of things, he told them all the pros and cons. After all they could not prevent it. It did not appear likely that Granite House would be threatened unless the ground was shaken by an earthquake. But the corral would be in great danger should a new crater open in the southern side of Mount Franklin.

From that day the smoke never disappeared from the top of the mountain, and it could even be perceived that it increased in height and thickness, without any flame mingling in its heavy volumes. The phenomenon was still concentrated in the lower part of the central crater.

However, with the fine days work had been continued. The building of the vessel was hastened as much as possible, and, by means of the waterfall on the shore, Cyrus Harding managed to establish an hydraulic saw-mill, which rapidly cut the trunks of trees into planks and joists. The mechanism of this apparatus was as simple as those used in the rustic saw-mills of Norway. A first horizontal movement to move the piece of wood, a second vertical movement to move the saw—this was all that was wanted; and the engineer succeeded by means of a wheel, two cylinders, and pulleys properly arranged. Towards the end of the month of September the skeleton of the vessel, which was to be rigged as a schooner, lay in the dockyard. The ribs were almost entirely completed, and, all the timbers having been sustained by a provisional band, the shape of the vessel could already be seen. This schooner, sharp in the bows, very slender in the after-part, would evidently be suitable for a long voyage, if wanted; but laying the planking would still take a considerable time. Very fortunately, the iron-work of the pirate brig had been saved after the explosion. From the planks and injured ribs Pencroft and Ayrton had extracted the bolts and a large quantity of copper nails. It was so much work saved for the smiths, but the carpenters had much to do.

Ship-building was interrupted for a week for the harvest, the haymaking, and the gathering in of the different crops on the plateau. This work finished, every moment was devoted to finishing the schooner. When night came the
workmen were really quite exhausted. So as not to lose any time they had changed the hours for their meals; they
dined at twelve o'clock, and only had their supper when daylight failed them. They then ascended to Granite House,
when they were always ready to go to bed.

Sometimes, however, when the conversation bore on some interesting subject the hour for sleep was delayed for
a time. The colonists then spoke of the future, and talked willingly of the changes which a voyage in the schooner to
inhabited lands would make in their situation. But always, in the midst of these plans, prevailed the thought of a
subsequent return to Lincoln Island. Never would they abandon this colony, founded with so much labour and with
such success, and to which a communication with America would afford a fresh impetus. Pencroft and Neb
especially hoped to end their days there.

"Herbert," said the sailor, "you will never abandon Lincoln Island?"
"Never, Pencroft, and especially if you make up your mind to stay there."
"That was made up long ago, my boy," answered Pencroft. "I shall expect you. You will bring me your wife and
children, and I shall make jolly little chaps of your youngsters!"
"That's agreed," replied Herbert, laughing and blushing at the same time.
"And you, Captain Harding," resumed Pencroft enthusiastically, "you will be still the governor of the island! Ah!
how many inhabitants could it support? Ten thousand at least!"

They talked in this way, allowing Pencroft to run on, and at last the reporter actually started a newspaper--the
New Lincoln Herald!
So is man's heart. The desire to perform a work which will endure, which will survive him, is the origin of his
superiority over all other living creatures here below. It is this which has established his dominion, and this it is
which justifies it, over all the world.

After that, who knows if Jup and Top had not themselves their little dream of the future.
Ayrton silently said to himself that he would like to see Lord Glenarvan again and show himself to all restored.
One evening, on the 15th of October, the conversation was prolonged later than usual. It was nine o'clock.
Already, long badly-concealed yawns gave warning of the hour of rest, and Pencroft was proceeding towards his
bed, when the electric bell, placed in the dining-room, suddenly rang.

All were there, Cyrus Harding, Gideon Spilett, Herbert, Ayrton, Pencroft, Neb. Therefore none of the colonists
were at the corral.
Cyrus Harding rose. His companions stared at each other, scarcely believing their ears.
"What does that mean?" cried Neb. "Was it the devil who rang it?"
No one answered.
"The weather is stormy," observed Herbert. "Might not its influence of electricity--"
Herbert did not finish his phrase. The engineer, towards whom all eyes were turned, shook his head negatively.
"We must wait," said Gideon Spilett. "If it is a signal, whoever it may be who has made it, he will renew it."
"But who do you think it is?" cried Neb. "Who?" answered Pencroft, "but he--"
The sailor's sentence was cut short by a new tinkle of the bell.
Harding went to the apparatus, and sent this question to the tenants of Granite House:--
"What do you want?"
A few moments later the needle, moving on the alphabetic dial, gave this reply to the tenants of Granite House:--
"Come to the corral immediately."
"At last!" exclaimed Harding.

Yes! At last! The mystery was about to be unveiled. The colonists' fatigue had disappeared before the
tremendous interest which was about to urge them to the corral, and all wish for rest had ceased. Without having
uttered a word, in a few moments they had left Granite House, and were standing on the beach. Jup and Top alone
were left behind. They could do without them.
The night was black. The new moon had disappeared at the same time as the sun. As Herbert had observed great
stormy clouds formed a lowering and heavy vault, preventing any star rays. A few lightning-flashes, reflections from
distant storm, illuminated the horizon.

It was possible that a few hours later the thunder would roll over the island itself. The night was very
threatening. But however deep the darkness was, it would not prevent them from finding the familiar road to the
corral.
They ascended the left bank of the Mercy, reached the plateau, passed the bridge over Creek Glycerine, and
advanced through the forest.
They walked at a good pace, a prey to the liveliest emotions. There was no doubt but that they were now going
to learn the long-searched-for answer to the enigma, the name of that mysterious being, so deeply concerned in their
life, so generous in his influence, so powerful in his action! Must not this stranger have indeed mingled with their
existence, have known the smallest details, have heard all that was said in Granite House, to have been able always
to act in the very nick of time?

Every one, wrapped up in his own reflections, pressed forward. Under the arch of trees the darkness was such
that the edge of the road even could not be seen. Not a sound in the forest. Both animals and birds, influenced by the
heaviness of the atmosphere, remained motionless and silent. Not a breath disturbed the leaves. The footsteps of the
colonists alone resounded on the hardened ground.

During the first quarter of an hour the silence was only interrupted by this remark from Pencroft:--
"We ought to have brought a torch."

And by this reply from the engineer:--
"We shall find one at the corral."

Harding and his companions had left Granite House at twelve minutes past nine. At forty-seven minutes past
nine they had traversed three out of the five miles which separated the mouth of the Mercy from the corral.

At that moment sheets of lightning spread over the island and illumined the dark trees. The flashes dazzled and
almost blinded them. Evidently the storm would not be long in bursting forth.

The flashes gradually became brighter and more rapid. Distant thunder growled in the sky. The atmosphere was
stifling.

The colonists proceeded as if they were urged onwards by some irresistible force.

At ten o'clock a vivid flash showed them the palisade, and as they reached the gate the storm burst forth with
tremendous fury.

In a minute the corral was crossed, and Harding stood before the hut.

Probably the house was occupied by the stranger, since it was from thence that the telegram had been sent.
However, no light shone through the window.

The engineer knocked at the door.

No answer.

Cyrus Harding opened the door, and the settlers entered the room, which was perfectly dark. A light was struck
by Neb, and in a few moments the lantern was lighted and the light thrown into every corner of the room.

There was no one there. Everything was in the state in which it had been left.

"Have we been deceived by an illusion?" murmured Cyrus Harding.

No! that was not possible! The telegram had clearly said--
"Come to the corral immediately."

They approached the table specially devoted to the use of the wire. Everything was in order--the pile and the box
containing it, as well as all the apparatus.

"Who came here the last time?" asked the engineer.

"I did, captain," answered Ayrton.

"And that was--"

"Four days ago."

"Ah! a note!" cried Herbert, pointing to a paper lying on the table.

On this paper were written these words in English:--
"Follow the new wire."

"Forward!" cried Harding, who understood that the despatch had not been sent from the corral, but from the
mysterious retreat, communicating directly with Granite House by means of a supplementary wire joined to the old
one.

Neb took the lighted lantern, and all left the corral. The storm then burst forth with tremendous violence. The
interval between each lightning-flash and each thunder-clap diminished rapidly. The summit of the volcano, with its
plume of vapour, could be seen by occasional flashes.

There was no telegraphic communication in any part of the corral between the house and the palisade; but the
engineer, running straight to the first post, saw by the light of a flash a new wire hanging from the isolater to the
ground.

"There it is!" said he.

This wire lay along the ground, and was surrounded with an isolating substance like a submarine cable, so as to
assure the free transmission of the current. It appeared to pass through the wood and the southern spurs of the
mountain, and consequently it ran towards the west.

"Follow it!" said Cyrus Harding.

And the settlers immediately pressed forward, guided by the wire.

The thunder continued to roar with such violence that not a word could be heard. However, there was no
occasion for speaking, but to get forward as fast as possible.
Cyrus Harding and his companions then climbed the spur rising between the corral valley and that of Falls River, which they crossed at its narrowest part. The wire, sometimes stretched over the lower branches of the trees, sometimes lying on the ground, guided them surely. The engineer had supposed that the wire would perhaps stop at the bottom of the valley, and that the stranger's retreat would be there.

Nothing of the sort. They were obliged to ascend the south-western spur, and re-descend on that arid plateau terminated by the strangely-wild basalt cliff. From time to time one of the colonists stooped down and felt for the wire with his hands; but there was now no doubt that the wire was running directly towards the sea. There, to a certainty, in the depths of those rocks, was the dwelling so long sought for in vain.

The sky was literally on fire. Flash succeeded flash. Several struck the summit of the volcano in the midst of the thick smoke. It appeared there as if the mountain was vomiting flame. At a few minutes to eleven the colonists arrived on the high cliff overlooking the ocean to the west. The wind had risen. The surf roared 500 feet below.

Harding calculated that they had gone a mile and a half from the coral.

At this point the wire entered among the rocks, following the steep side of a narrow ravine. The settlers followed it at the risk of occasioning a fall of the slightly-balanced rocks, and being dashed into the sea. The descent was extremely perilous, but they did not think of the danger; they were no longer masters of themselves, and an irresistible attraction drew them towards this mysterious place as the magnet draws iron.

Thus they almost unconsciously descended this ravine, which even in broad daylight would have been considered impracticable.

The stones rolled and sparkled like fiery balls when they crossed through the gleams of light. Harding was first--Ayrton last. On they went, step by step. Now they slid over the slippery rock; then they struggled to their feet and scrambled on.

At last the wire touched the rocks on the beach. The colonists had reached the bottom of the basalt cliff.

There appeared a narrow ridge, running horizontally and parallel with the sea. The settlers followed the wire along it. They had not gone a hundred paces when the ridge by a moderate incline sloped down to the level of the sea.

The engineer seized the wire and found that it disappeared beneath the waves.

His companions were stupefied.

A cry of disappointment, almost a cry of despair, escaped them! Must they then plunge beneath the water and seek there for some submarine cavern? In their excited state they would not have hesitated to do it.

The engineer stopped them.

He led his companions to a hollow in the rocks, and there--

"We must wait," said he. "The tide is high. At low-water the way will be open."

"But what can make you think--" asked Pencroft.

"He would not have called us if the means had been wanting to enable us to reach him!"

Cyrus Harding spoke in a tone of such thorough conviction that no objection was raised. His remark, besides, was logical. It was quite possible that an opening, practicable at low-water, though hidden now by the high tide, opened at the foot of the cliff.

There was some time to wait. The colonists remained silently crouching in a deep hollow. Rain now began to fall in torrents. The thunder was re-echoed among the rocks with a grand sonorousness.

The colonists' emotion was great. A thousand strange and extraordinary ideas crossed their brains, and they expected some grand and superhuman apparition, which alone could come up to the notion they had formed of the mysterious genius of the island.

At midnight, Harding, carrying the lantern, descended to the beach to reconnoitre.

The engineer was not mistaken. The beginning of an immense excavation could be seen under the water. There the wire, bending at a right angle, entered the yawning gulf.

Cyrus Harding returned to his companions, and said simply--

"In an hour the opening will be practicable."

"It is there, then?" said Pencroft.

"Did you doubt it?" returned Harding.

"But this cavern must be filled with water to a certain height," observed Herbert.

"Either the cavern will be completely dry," replied Harding, "and in that case we can traverse it on foot, or it will not be dry, and some means of transport will be put at our disposal."

An hour passed. All climbed down through the rain to the level of the sea. There was now eight feet of the opening above the water. It was like the arch of a bridge, under which rushed the foaming water.

Leaning forward, the engineer saw a black object floating on the water. He drew it towards him. It was a boat, moored to some interior projection of the cave. This boat was iron-plated. Two oars lay at the bottom.
"Jump in!" said Harding.
In a moment the settlers were in the boat. Neb and Ayrton took the oars, Pencroft the rudder. Cyrus Harding in the bows, with the lantern, lighted the way.

The elliptical roof, under which the boat at first passed, suddenly rose; but the darkness was too deep, and the light of the lantern too slight, for either the extent, length, height, or depth of the cave to be ascertained. Solemn silence reigned in this basaltic cavern. Not a sound could penetrate into it, even the thunder peals could not pierce its thick sides.

Such immense caves exist in various parts of the world, natural crypts dating from the geological epoch of the globe. Some are filled by the sea; others contain entire lakes in their sides. Such is Fingal's Cave, in the island of Staffa, one of the Hebrides; such are the caves of Morgat, in the bay of Douarucuez, in Brittany, the caves of Bonifacier, in Corsica, those of Lyse-Fjord, in Norway; such are the immense Mammoth caverns in Kentucky, 500 feet in height, and more than twenty miles in length! In many parts of the globe, nature has excavated these caverns, and preserved them for the admiration of man.

Did the cavern which the settlers were now exploring extend to the centre of the island? For a quarter of an hour the boat had been advancing, making detours, indicated to Pencroft by the engineer in short sentences, when all at once--

"More to the right!" he commanded. The boat, altering its course, came up alongside the right wall. The engineer wished to see if the wire still ran along the side. The wire was there fastened to the rock. "Forward!" said Harding.

And the two oars, plunging into the dark waters, urged the boat onwards.

On they went for another quarter of an hour, and a distance of half-a-mile must have been cleared from the mouth of the cave, when Harding's voice was again heard. "Stop!" said he.

The boat stopped, and the colonists perceived a bright light illuminating the vast cavern, so deeply excavated in the bowels of the island, of which nothing had ever led them to suspect the existence.

At a height of a hundred feet rose the vaulted roof, supported on basalt shafts. Irregular arches, strange mouldings, appeared on the columns erected by nature in thousands from the first epochs of the formation of the globe. The basalt pillars, fitted one into the other, measured from forty to fifty feet in height, and the water, calm in spite of the tumult outside, washing their base. The brilliant focus of light, pointed out by the engineer, touched every point of rock, and flooded the walls with light. By reflection the water reproduced the brilliant sparkles, so that the boat appeared to be floating between two glittering zones.

They could not be mistaken in the nature of the irradiation thrown from the centre light, whose clear rays broke all the angles, all the projections of the cavern. This light proceeded from an electric source, and its white colour betrayed its origin. It was the sun of this cave, and it filled it entirely.

At a sign from Cyrus Harding the oars again plunged into the water, causing a regular shower of gems, and the boat was urged forward towards the light, which was now not more than half a cable's length distant.

At this place the breadth of the sheet of water measured nearly 350 feet, and beyond the dazzling centre could be seen an enormous basaltic wall, blocking up any issue on that side. The cavern widened here considerably, the sea forming a little lake. But the roof, the side walls, the end cliff, all the prisms, all the peaks, were flooded with the electric fluid, so that the brilliancy belonged to them, and as if the light issued from them.

In the centre of the lake a long cigar-shaped object floated on the surface of the water, silent, motionless. The brilliancy which issued from it escaped from its sides as from two kilns heated to a white heat. This apparatus, similar in shape to an enormous whale, was about 250 feet long, and rose about ten or twelve above the water.

The boat slowly approached it. Cyrus Harding stood up in the bows. He gazed, a prey to violent excitement. Then, all at once, seizing the reporter's arm--

"It is he! It can only be he!" he cried, "he!--"

Then, falling back on the seat, he murmured a name which Gideon Spilett alone could hear.

The reporter evidently knew this name, for it had a wonderful effect upon him, and he answered in a hoarse voice--

"He! an outlawed man!"

"He!" said Harding.

At the engineer's command the boat approached this singular floating apparatus. The boat touched the left side, from which escaped a ray of light through a thick glass.

Harding and his companions mounted on the platform. An open hatchway was there. All darted down the opening.

At the bottom of the ladder was a deck, lighted by electricity. At the end of this deck was a door, which Harding opened.

A richly-ornamented room, quickly traversed by the colonists, was joined to a library, over which a luminous
ceiling shed a flood of light.
At the end of the library a large door, also shut, was opened by the engineer.
An immense saloon—a sort of museum, in which were heaped up, with all the treasures of the mineral world, works of art, marvels of industry—appeared before the eyes of the colonists, who almost thought themselves suddenly transported into a land of enchantment.
Stretched on a rich sofa they saw a man, who did not appear to notice their presence.
Then Harding raised his voice, and to the extreme surprise of his companions, he uttered these words—
"Captain Nemo, you asked for us! We are here."

CHAPTER SIXTEEN.
CAPTAIN NEMO—HIS FIRST WORDS—THE HISTORY OF THE RECLUSE—HIS ADVENTURES—HIS
SENTIMENTS—HIS COMRADES—SUBMARINE LIFE—ALONE—THE LAST REFUGE OF THE NAUTILUS
IN LINCOLN ISLAND—THE MYSTERIOUS GENIUS OF THE ISLAND.
At these words the reclining figure rose, and the electric light fell upon his countenance; a magnificent head, the forehead high, the glance commanding, beard white, hair abundant and falling over the shoulders.
His hand rested upon the cushion of the divan from which he had just risen. He appeared perfectly calm. It was evident that his strength had been gradually undermined by illness, but his voice seemed yet powerful, as he said in English, and in a tone which evinced extreme surprise—
"Sir, I have no name."
"Nevertheless, I know you!" replied Cyrus Harding.
Captain Nemo fixed his penetrating gaze upon the engineer as though he were about to annihilate him.
Then, falling back amid the pillows of the divan—
"After all, what matters now?" he murmured; "I am dying!"
Cyrus Harding drew near the captain, and Gideon Spilett took his hand— it was of a feverish heat. Ayrton, Pencroft, Herbert, and Neb, stood respectfully apart in an angle of the magnificent saloon, whose atmosphere was saturated with the electric fluid.
Meanwhile Captain Nemo withdrew his hand, and motioned the engineer and the reporter to be seated.
All regarded him with profound emotion. Before them they beheld that being whom they had styled the "genius of the island," the powerful protector whose intervention, in so many circumstances, had been so efficacious, the benefactor to whom they owed such a debt of gratitude! Their eyes beheld a man only, and a man at the point of death, where Pencroft and Neb had expected to find an almost supernatural being!
But how happened it that Cyrus Harding had recognised Captain Nemo? Why had the latter so suddenly risen on hearing this name uttered, a name which he had believed known to none?
The captain had resumed his position on the divan, and leaning on his arm, he regarded the engineer, seated near him.
"You know the name I formerly bore, sir?" he asked.
"I do," answered Cyrus Harding, "and also that of this wonderful submarine vessel—"
"The Nautilus?" said the captain, with a faint smile.
"The Nautilus!"
"But do you—do you know who I am?"
"I do."
"It is nevertheless many years since I have held any communication with the inhabited world; three long years have I passed in the depths of the sea, the only place where I have found liberty! Who then can have betrayed my secret?"
"A man who was bound to you by no tie, Captain Nemo, and who, consequently, cannot be accused of treachery."
"The Frenchman who was cast on board my vessel by chance sixteen years since?"
"The same."
"He and his two companions did not then perish in the Maelstrom, in the midst of which the Nautilus was struggling."
"They escaped, and a book has appeared under the title of Twenty Thousand Leagues under the Sea, which contains your history."
"The history of a few months only of my life!" interrupted the captain impetuously.
"It is true," answered Cyrus Harding, "but a few months of that strange life have sufficed to make you known—"
"As a great criminal, doubtless!" said Captain Nemo, a haughty smile curling his lips. "Yes, a rebel, perhaps an
outlaw against humanity!"

The engineer was silent.

"Well, sir?"

"It is not for me to judge you, Captain Nemo," answered Cyrus Harding, "at any rate as regards your past life. I
am, with the rest of the world, ignorant of the motives which induced you to adopt this strange mode of existence,
and I cannot judge of effects without knowing their causes; but what I do know is, that a beneficent hand has
constantly protected us since our arrival on Lincoln Island, that we all owe our lives to a good, generous, and
powerful being, and that this being so powerful, good and generous, Captain Nemo, is yourself!"

"It is I," answered the captain simply.

The engineer and reporter rose. Their companions had drawn near, and the gratitude with which their hearts were
charged was about to express itself in their gestures and words.

Captain Nemo stopped them by a sign, and in a voice which betrayed more emotion than he doubtless intended
to show.

"Wait till you have heard all," he said. [See Note 1.]

And the captain, in a few concise sentences, ran over the events of his life.

His narrative was short, yet he was obliged to summon up his whole remaining energy to arrive at the end. He
was evidently contending against extreme weakness. Several times Cyrus Harding entreated him to repose for a
while, but he shook his head as a man to whom the morrow may never come, and when the reporter offered his
assistance--

"It is useless," he said; "my hours are numbered."

Captain Nemo was an Indian, the Prince Dakkar, son of a rajah of the then independent territory of Bundelkund.
His father sent him, when ten years of age, to Europe, in order that he might receive an education in all respects
complete, and in the hopes that by his talents and knowledge he might one day take a leading part in raising his long
degraded and heathen country to a level with the nations of Europe.

From the age of ten years to that of thirty Prince Dakkar, endowed by Nature with her richest gifts of intellect,
accumulated knowledge of every kind, and in science, literature, and art his researches were extensive and profound.

He travelled over the whole of Europe. His rank and fortune caused him to be everywhere sought after; but the
pleasures of the world had for him no attractions. Though young and possessed of every personal advantage, he was
ever grave--sombre even--devoured by an unquenchable thirst for knowledge, and cherishing in the recesses of his
heart the hope that he might become a great and powerful ruler of a free and enlightened people.

Still, for long the love of science triumphed over all other feelings. He became an artist deeply impressed by the
marvels of art, a philosopher to whom no one of the higher sciences was unknown, a statesman versed in the policy
of European courts. To the eyes of those who observed him superficially he might have passed for one of those
cosmopolitans, curious of knowledge, but disdaining action; one of those opulent travellers, haughty and cynical,
who move incessantly from place to place, and are of no country.

This artist, this philosopher, this man was, however, still cherishing the hope instilled into him from his earliest
days.

Prince Dakkar returned to Bundelkund in the year 1849. He married a noble Indian lady, who was imbued with
an ambition not less ardent than that by which he was inspired. Two children were born to them, whom they
tenderly loved. But domestic happiness did not prevent him from seeking to carry out the object at which he aimed.
He waited an opportunity. At length, as he vainly fancied, it presented itself.

Instigated by princes equally ambitious and less sagacious and more unscrupulous than he was, the people of
India were persuaded that they might successfully rise against their English rulers, who had brought them out of a
state of anarchy and constant warfare and misery, and had established peace and prosperity in their country. Their
ignorance and gross superstition made them the facile tools of their designing chiefs.

In 1857 the great sepoy revolt broke out. Prince Dakkar, under the belief that he should thereby have the
opportunity of attaining the object of his long-cherished ambition, was easily drawn into it. He forthwith devoted his
talents and wealth to the service of this cause. He aided it in person; he fought in the front ranks; he risked his life
equally with the humblest of the wretched and misguided fanatics; he was ten times wounded in twenty
engagements, seeking death but finding it not, when at length the sanguinary rebels were utterly defeated, and the
atrocious mutiny was brought to an end.

Never before had the British power in India been exposed to such danger, and if, as they had hoped, the sepoys
had received assistance from without, the influence and supremacy in Asia of the United Kingdom would have been
a thing of the past.

The name of Prince Dakkar was at that time well-known. He had fought openly and without concealment. A
price was set upon his head, but he managed to escape from his pursuers.
penetrated all the secrets of their existence. By means of the diving-dress he could easily reach the well in the
desert island, but had no wish to be himself discovered by them. By degrees he became interested in their efforts
there was not enough for the Nautilus, whose draught of water was considerable.

through the entrance of the vault. Though there was sufficient depth of water to allow a light craft to pass the bar,
consequence of an elevation of the basalt, produced by the influence of volcanic action, he could no longer pass
compassion the captain saved Cyrus Harding.
cables' length from the shore of the island, when the engineer had been thrown into the sea. Moved by a feeling of
moment when he should rejoin his former companions, when by chance he observed the descent of the balloon
Nautilus.
submarine caverns which had sometimes served him as a harbour.

Captain Nemo remained the solitary survivor of all those who had taken refuge with him in the depths of the ocean.
companions died, and found their last resting-place in their cemetery of coral, in the bed of the Pacific. At last
eventful navigation of the Nautilus were narrated and exposed to the curiosity of the public.

had been miraculously cast on shore, that the fishermen of the Loffoden Islands had rendered them assistance, and
whirlpool, found their death at the bottom of the abyss. He was ignorant that the Frenchman and his two companions
Maelstrom, off the coast of Norway, the captain naturally believed that the fugitives, engulfed in that frightful
succeeded in escaping in one of the Nautilus's boats. But as at this time the Nautilus was drawn into the vortex of the
behold all the wonders of a voyage of twenty thousand leagues under the sea.
mysterious existence. Instead of doing this he kept them prisoners, and during seven months they were enabled to

Prince Dakkar, unable to find that death he courted, returned to the mountain fastnesses of Bundelkund. There,
alone in the world, overcome by disappointment at the destruction of all his vain hopes, a prey to profound disgust
for all human beings, filled with hatred of the civilised world, he realised the wreck of his fortune, assembled some
score of his most faithful companions, and one day disappeared, leaving no trace behind.

Where, then, did he seek that liberty denied him upon the inhabited earth? Under the waves, in the depths of the
ocean, where none could follow.
The warrior became the man of science. Upon a deserted island of the Pacific he established his dockyard, and
there a submarine vessel was constructed from his designs. By methods which will at some future day be revealed
he had rendered subservient the illimitable forces of electricity, which, extracted from inexhaustible sources, was
employed for all the requirements of his floating equipage, as a moving, lighting, and heating agent. The sea, with
its countless treasures, its myriads of fish, its numberless wrecks, its enormous mammalia, and not only all that
nature supplied, but also all that man had lost in its depths, sufficed for every want of the prince and his crew--and
thus was his most ardent desire accomplished, never again to hold communication with the earth. He named his
submarine vessel the Nautilus, called himself simply Captain Nemo, and disappeared beneath the seas.

During many years this strange being visited every ocean, from pole to pole. Outcast of the inhabited earth in
these unknown worlds he gathered incalculable treasures. The millions lost in the Bay of Vigo, in 1702, by the
galleons of Spain, furnished him with a mine of inexhaustible riches which he devoted always, anonymously, in
favour of those nations who fought for the independence of their country. [See Note 2.]

For long, however, he had held no communication with his fellow-creatures, when, during the night of the 6th of
November, 1866, three men were cast on board his vessel. They were a French professor, his servant, and a
Canadian fisherman. These three men had been hurled overboard by a collision which had taken place between the
Nautilus and the United States frigate Abraham Lincoln, which had chased her.

Captain Nemo learnt from this professor that the Nautilus, taken now for a gigantic mammal of the whale
species, now for a submarine vessel carrying a crew of pirates, was sought for in every sea.

He might have returned these three men to the ocean, from whence chance had brought them in contact with his
mysterious existence. Instead of doing this he kept them prisoners, and during seven months they were enabled to
behold all the wonders of a voyage of twenty thousand leagues under the sea.

One of these ports was hollowed beneath Lincoln Island, and at this moment furnished an asylum to the
Nautilus.

One day, the 22nd of June, 1867, these three men, who knew nothing of the past history of Captain Nemo,
 succeeds in escaping in one of the Nautilus's boats. But as at this time the Nautilus was drawn into the vortex of the
Maelstrom, off the coast of Norway, the captain naturally believed that the fugitives, engulfed in that frightful
whirlpool, found their death at the bottom of the abyss. He was ignorant that the Frenchman and his two companions
had been miraculously cast on shore, that the fishermen of the Loffoden Islands had rendered them assistance, and
that the professor, on his return to France, had published that work in which seven months of the strange and
eventful navigation of the Nautilus were narrated and exposed to the curiosity of the public.

For a long time after this, Captain Nemo continued to live thus, traversing every sea. But one by one his
companions died, and found their last resting-place in their cemetery of coral, in the bed of the Pacific. At last
Captain Nemo remained the solitary survivor of all those who had taken refuge with him in the depths of the ocean.

He was now sixty years of age. Although alone, he succeeded in navigating the Nautilus towards one of those
submarine caverns which had sometimes served him as a harbour.

One of these ports was hollowed beneath Lincoln Island, and at this moment furnished an asylum to the
Nautilus.

The captain had now remained there six years, navigating the ocean no longer, but awaiting death, and that
moment when he should rejoin his former companions, when by chance he observed the descent of the balloon
which carried the prisoners of the Confederates. Clad in his diving-dress he was walking beneath the water at a few
cables' length from the shore of the island, when the engineer had been thrown into the sea. Moved by a feeling of
compassion the captain saved Cyrus Harding.

His first impulse was to fly from the vicinity of the five castaways; but his harbour of refuge was closed, for in
consequence of an elevation of the basalt, produced by the influence of volcanic action, he could no longer pass
through the entrance of the vault. Though there was sufficient depth of water to allow a light craft to pass the bar,
there was not enough for the Nautilus, whose draught of water was considerable.

Captain Nemo was compelled, therefore, to remain. He observed these men thrown without resources upon a
desert island, but had no wish to be himself discovered by them. By degrees he became interested in their efforts
when he saw them honest, energetic, and bound to each other by the ties of friendship. As if despite his wishes, he
penetrated all the secrets of their existence. By means of the diving-dress he could easily reach the well in the
interior of Granite House, and climbing by the projections of rock to its upper orifice he heard the colonists as they recounted the past, and studied the present and future. He learnt from them the tremendous conflict of America with America itself, for the abolition of slavery. Yes, these men were worthy to reconcile Captain Nemo with that humanity which they represented so nobly in the island.

Captain Nemo had saved Cyrus Harding. It was he also who had brought back the dog to the Chimneys, who rescued Top from the waters of the lake, who caused to fall at Flotsam Point the case containing so many things useful to the colonists, who conveyed the canoe back into the stream of the Mercy, who cast the cord from the top of Granite House at the time of the attack by the baboons, who made known the presence of Ayrton upon Tabor Island, by means of the document enclosed in the bottle, who caused the explosion of the brig by the shock of a torpedo placed at the bottom of the canal, who saved Herbert from a certain death by bringing the sulphate of quinine; and finally, it was he who had killed the convicts with the electric balls, of which he possessed the secret, and which he employed in the chase of submarine creatures. Thus were explained so many apparently supernatural occurrences, and which all proved the generosity and power of the captain.

Nevertheless, this noble misanthrope longed to benefit his proteges still further. There yet remained much useful advice to give them, and, his heart being softened by the approach of death, he invited, as we are aware, the colonists of Granite House to visit the Nautilus, by means of a wire which connected it with the corral. Possibly he would not have done this had he been aware that Cyrus Harding was sufficiently acquainted with his history to address him by the name of Nemo.

The captain concluded the narrative of his life. Cyrus Harding then spoke; he recalled all the incidents which had exercised so beneficent an influence upon the colony, and in the names of his companions and himself thanked the generous being to whom they owed so much.

But Captain Nemo paid little attention; his mind appeared to be absorbed by one idea, and without taking the proffered hand of the engineer--

"Now, sir," said he, "now that you know my history, your judgment!"

In saying this, the captain evidently alluded to an important incident witnessed by the three strangers thrown on board his vessel, and which the French professor had related in his work, causing a profound and terrible sensation. Some days previous to the flight of the professor and his two companions, the Nautilus, being chased by a frigate in the north of the Atlantic, had hurled herself as a ram upon this frigate, and sunk her without mercy.

Cyrus Harding understood the captain's allusion, and was silent.

"It was an enemy's frigate," exclaimed Captain Nemo, transformed for an instant into the Prince Dakkar, "an enemy's frigate! It was she who attacked me--I was in a narrow and shallow bay--the frigate barred my way--and I sank her!"

A few moments of silence ensued; then the captain demanded--

"What think you of my life, gentlemen?"

Cyrus Harding extended his hand to the ci-devant prince and replied gravely, "Sir, your error was in supposing that the past can be resuscitated, and in contending against inevitable progress. It is one of those errors which some admire, others blame; which God alone can judge. He who is mistaken in an action which he sincerely believes to be right may be an enemy, but retains our esteem. Your error is one that we may admire, and your name has nothing to fear from the judgment of history, which does not condemn heroic folly, but its results."

The old man's breast swelled with emotion, and raising his hand to heaven--

"Was I wrong, or in the right?" he murmured.

Cyrus Harding replied, "All great actions return to God, from whom they are derived. Captain Nemo, we, whom you have succoured, shall ever mourn your loss."

Herbert, who had drawn near the captain, fell on his knees and kissed his hand.

A tear glistened in the eyes of the dying man. "My child," he said, "may God bless you!"

Note 1. The history of Captain Nemo has, in fact, been published under the title of Twenty Thousand Leagues under the Sea. Here, therefore, will apply the observation already made as to the adventures of Ayrton with regard to the discrepancy of dates. Readers should therefore refer to the note already published on this point.

Note 2. This refers to the insurrection of the Candiotes, who were, in fact largely assisted by Captain Nemo.

CHAPTER SEVENTEEN.
LAST MOMENTS OF CAPTAIN NEMO--WISHES OF THE DYING MAN--A PARTING GIFT TO HIS FRIENDS OF A DAY--CAPTAIN NEMO'S COFFIN--ADVICE TO THE COLONISTS-- THE SUPREME MOMENT--AT THE BOTTOM OF THE SEA.
Day had returned. No ray of light penetrated into the profundity of the cavern. It being high-water, the entrance was closed by the sea. But the artificial light, which escaped in long streams from the skylights of the Nautilus, was as vivid as before, and the sheet of water shone around the floating vessel.

An extreme exhaustion now overcame Captain Nemo, who had fallen back upon the divan. It was useless to contemplate removing him to Granite House, for he had expressed his wish to remain in the midst of those marvels of the Nautilus which millions could not have purchased, and to await there for that death which was swiftly approaching.

During a long interval of prostration, which rendered him almost unconscious, Cyrus Harding and Gideon Spilett attentively observed the condition of the dying man. It was apparent that his strength was gradually diminishing. That frame, once so robust, was now but the fragile tenement of a departing soul. All of life was concentrated in the heart and head.

The engineer and reporter consulted in whispers. Was it possible to render any aid to the dying man? Might his life, if not saved, be prolonged for some days? He himself had said that no remedy could avail, and he awaited with tranquillity that death which had for him no terrors.

"We can do nothing," said Gideon Spilett.
"But of what is he dying?" asked Pencroft.
"Life is simply fading out," replied the reporter.
"Nevertheless," said the sailor, "if we moved him into the open air, and the light of the sun, he might perhaps recover."

"No, Pencroft," answered the engineer, "it is useless to attempt it. Besides, Captain Nemo would never consent to leave his vessel. He has lived for a dozen years on board the Nautilus, and on board the Nautilus he desires to die."

Without doubt Captain Nemo heard Cyrus Harding's reply, for he raised himself slightly, and in a voice more feeble, but always intelligible--
"You are right, sir," he said. "I shall die here--it is my wish; and therefore I have a request to make of you."

Cyrus Harding and his companions had drawn near the divan, and now arranged the cushions in such a manner as to better support the dying man.

They saw his eyes wander over all the marvels of this saloon, lighted by the electric rays which fell from the arabesques of the luminous ceiling. He surveyed, one after the other, the pictures hanging from the splendid tapestries of the partitions, the chef-d'oeuvres of the Italian, Flemish, French, and Spanish masters; the statues of marble and bronze on their pedestals; the magnificent organ, leaning against the after-partition; the aquarium, in which bloomed the most wonderful productions of the sea--marine plants, zoophytes, chaplets of pearls of inestimable value; and, finally, his eyes rested on this device, inscribed over the pediment of the museum--the motto of the Nautilus--

"Mobilis in mobile."

His glance seemed to rest fondly for the last time on these masterpieces of art and of nature, to which he had limited his horizon during a sojourn of so many years in the abysses of the seas.

Cyrus Harding respected the captain's silence, and waited till he should speak.

After some minutes, during which, doubtless, he passed in review his whole life, Captain Nemo turned to the colonists and said--
"You consider yourselves, gentlemen, under some obligations to me?"
"Captain, believe us that we would give our lives to prolong yours."
"Promise, then," continued Captain Nemo, "to carry out my last wishes, and I shall be repaid for all I have done for you."

"We promise," said Cyrus Harding.

And by this promise he bound both himself and his companions.
"Gentlemen," resumed the captain, "to-morrow I shall be dead."

Herbert was about to utter an exclamation, but a sign from the captain arrested him.

"To-morrow I shall die, and I desire no other tomb than the Nautilus. It is my grave! All my friends repose in the depths of the ocean; their resting-place shall be mine."

These words were received with profound silence.
"Pay attention to my wishes," he continued. "The Nautilus is imprisoned in this grotto, the entrance of which is blocked up; but, although egress is impossible, the vessel may at least sink in the abyss, and there bury my remains."

The colonists listened reverently to the words of the dying man.
"To-morrow, after my death, Mr Harding," continued the captain, "yourself and companions will leave the Nautilus, for all the treasures it contains must perish with me. One token alone will remain with you of Prince
Dakkar, with whose history you are now acquainted. That coffer yonder contains diamonds of the value of many millions, most of them mementoes of the time when, husband and father, I thought happiness possible for me, and a collection of pearls gathered by my friends and myself in the depths of the ocean. Of this treasure, at a future day, you may make good use. In the hands of such men as yourself and your comrades, Captain Harding, money will never be a source of danger. From on high I shall still participate in your enterprises, and I fear not but that they will prosper."

After a few moments’ repose, necessitated by his extreme weakness, Captain Nemo continued--

"To-morrow you will take the coffer, you will leave the saloon, of which you will close the door; then you will ascend onto the deck of the Nautilus, and you will lower the main-hatch so as entirely to close the vessel."

"It shall be done, captain," answered Cyrus Harding.

"Good. You will then embark in the canoe which brought you hither; but, before leaving the Nautilus, go to the stern and there open two large stop-cocks which you will find upon the water-line. The water will penetrate into the reservoirs, and the Nautilus will gradually sink beneath the water to repose at the bottom of the abyss."

And, comprehending a gesture of Cyrus Harding, the captain added--

"Fear nothing! You will but bury a corpse!"

Neither Cyrus Harding nor his companions ventured to offer any observation to Captain Nemo. He had expressed his last wishes, and they had nothing to do but to conform to them.

"I have your promise, gentlemen?" added Captain Nemo.

"You have, captain," replied the engineer.

The captain thanked the colonists by a sign, and requested them to leave him for some hours. Gideon Spilett wished to remain near him, in the event of a crisis coming on, but the dying man refused, saying, "I shall live until to-morrow, sir."

All left the saloon, passed through the library and the dining-room, and arrived forward, in the machine-room, where the electrical apparatus was established, which supplied not only heat and light but the mechanical power of the Nautilus.

The Nautilus was a masterpiece, containing masterpieces within itself, and the engineer was struck with astonishment.

The colonists mounted the platform, which rose seven or eight feet above the water. There they beheld a thick glass lenticular covering, which protected a kind of large eye, from which flashed forth light. Behind this eye was apparently a cabin containing the wheels of the rudder, and in which was stationed the helmsman, when he navigated the Nautilus over the bed of the ocean, which the electric rays would evidently light up to a considerable distance.

Cyrus Harding and his companions remained for a time silent, for they were vividly impressed by what they had just seen and heard, and their hearts were deeply touched by the thought that he whose arm had so often aided them, the protector whom they had known but a few hours, was at the point of death.

Whatever might be the judgment pronounced by posterity upon the events of this, so to speak, extra-human existence, the character of Prince Dakkar would ever remain as one of those whose memory time can never efface.

"What a man!" said Pencroft. "Is it possible that he can have lived at the bottom of the sea? And it seems to me that perhaps he has not found peace there any more than elsewhere."

"The Nautilus," observed Ayrton, "might have enabled us to leave Lincoln Island and reach some inhabited country."

"Good Heavens!" exclaimed Pencroft, "I for one would never risk myself in such a craft. To sail on the seas, good; but under the seas, never!"

"I believe, Pencroft," answered the reporter, "that the navigation of a submarine vessel such as the Nautilus ought to be very easy, and that we should soon become accustomed to it. There would be no storms, no lee-shore to fear. At some feet beneath the surface the waters of the ocean are as calm as those of a lake."

"That may be," replied the sailor, "but I prefer a gale of wind on board a well-found craft. A vessel is built to sail on the sea, and not beneath it."

"My friends," said the engineer, "it is useless, at any rate as regards the Nautilus, to discuss the question of submarine vessels. The Nautilus is not ours, and we have not the right to dispose of it. Moreover, we could in no case avail ourselves of it. Independently of the fact that it would be impossible to get it out of this cavern, whose entrance is now closed by the uprising of the basaltic rocks, Captain Nemo's wish is that it shall be buried with him. His wish is our law, and we will fulfil it."

After a somewhat prolonged conversation, Cyrus Harding and his companions again descended to the interior of the Nautilus. There they took some refreshment and returned to the saloon.

Captain Nemo had somewhat rallied from the prostration which had overcome him, and his eyes shone with
their wonted fire. A faint smile even curled his lips.

The colonists drew around him.

"Gentlemen," said the captain, "you are brave and honest men. You have devoted yourselves to the common weal. Often have I observed your conduct. I have esteemed you--I esteem you still! Your hand, Mr Harding!"

Cyrus Harding gave his hand to the captain, who clasped it affectionately.

"It is well!" he murmured.

He resumed--

"But enough of myself. I have to speak concerning yourselves, and this Lincoln Island, upon which you have taken refuge. You desire to leave it?"

"To return, captain!" answered Pencroft quickly.

"To return, Pencroft?" said the captain, with a smile. "I know, it is true, your love for this island. You have helped to make it what it now is, and it seems to you a paradise!"

"Our project, captain," interposed Cyrus Harding, "is to annex it to the United States, and to establish for our shipping a port so fortunately situated in this part of the Pacific."

"Your thoughts are with your country, gentlemen," continued the captain; "your toils are for her prosperity and glory. You are right. One's native land!--there should one live! there die! And I! I die far from all I loved!"

"You have some last wish to transmit," said the engineer with emotion, "some souvenir to send to those friends you have left in the mountains of India?"

"No, Captain Harding; no friends remain to me! I am the last of my race, and to all whom I have known I have long been as are the dead.-- But to return to yourselves. Solitude, isolation, are painful things, and beyond human endurance. I die of having thought it possible to live alone! You should, therefore, dare all in the attempt to leave Lincoln Island, and see once more the land of your birth. I am aware that those wretches have destroyed the vessel you had built."

"We propose to construct a vessel," said Gideon Spilett, "sufficiently large to convey us to the nearest land; but if we should succeed, sooner or later we shall return to Lincoln Island. We are attached to it by too many recollections ever to forget it."

"It is here that we have known Captain Nemo," said Cyrus Harding.

"It is here only that we can make our home!" added Herbert.

"And here shall I sleep the sleep of eternity, if--" replied the captain.

He paused for a moment, and, instead of completing the sentence, said simply--

"Mr Harding, I wish to speak with you--alone!"

The engineer's companions, respecting the wish of the dying man, retired.

Cyrus Harding remained but a few minutes alone with Captain Nemo, and soon recalled his companions; but he said nothing to them of the private matters which the dying man had confided to him.

Gideon Spilett now watched the captain with extreme care. It was evident that he was no longer sustained by his moral energy, which had lost the power of reaction against his physical weakness.

The day closed without change. The colonists did not quit the Nautilus for a moment. Night arrived, although it was impossible to distinguish it from day in the cavern.

Captain Nemo suffered no pain, but he was visibly sinking. His noble features, paled by the approach of death, were perfectly calm. Inaudible words escaped at intervals from his lips, bearing upon various incidents of his chequered career. Life was evidently ebbing slowly, and his extremities were already cold.

Once or twice more he spoke to the colonists who stood around him, and smiled on them with that last smile which continues after death.

At length, shortly after midnight, Captain Nemo by a supreme effort succeeded in folding his arms across his breast, as if wishing in that attitude to compose himself for death.

By one o'clock his glance alone showed signs of life. A dying light gleamed in those eyes once so brilliant. Then, murmuring the words, "God and my country!" he quietly expired.

Cyrus Harding, bending low, closed the eyes of him who had once been the Prince Dakkar, and was now not even Captain Nemo.

Herbert and Pencroft sobbed aloud. Tears fell from Ayrton's eyes. Neb was on his knees by the reporter's side, motionless as a statue.

Then Cyrus Harding, extending his hand over the forehead of the dead, said solemnly--

"May his soul be with God! Let us pray!"

Some hours later the colonists fulfilled the promise made to the captain by carrying out his dying wishes.

Cyrus Harding and his companions quitted the Nautilus, taking with them the only memento left them by their benefactor, that coffer which contained wealth amounting to millions.
The marvellous saloon, still flooded with light, had been carefully closed. The iron door leading on deck was then securely fastened in such a manner as to prevent even a drop of water from penetrating to the interior of the Nautilus.

The colonists then descended into the canoe, which was moored to the side of the submarine vessel. The canoe was now brought round to the stern. There, at the water-line, were two large stop-cocks, communicating with the reservoirs employed in the submersion of the vessel.

The stop-cocks were opened, the reservoirs filled, and the Nautilus, slowly sinking, disappeared beneath the surface of the lake.

But the colonists were yet able to follow its descent through the waves. The powerful light it gave forth lighted up the translucent water, while the cavern became gradually obscure. At length this vast effusion of electric light faded away, and soon after the Nautilus, now the tomb of Captain Nemo, reposed in its ocean bed.

CHAPTER EIGHTEEN.


At break of day the colonists regained in silence the entrance of the cavern, to which they gave the name of "Dakkar Grotto," in memory of Captain Nemo. It was now low-water, and they passed without difficulty under the arcade, washed on the right by the sea.

The canoe was left here, carefully protected from the waves. As an excess of precaution, Pencroft, Neb, and Ayrton drew it up on a little beach which bordered one of the sides of the grotto, in a spot where it could run no risk of harm.

The storm had ceased during the night. The last low mutterings of the thunder died away in the west. Rain fell no longer, but the sky was yet obscure by clouds. On the whole, this month of October, the first of the southern spring, was not ushered in by satisfactory tokens, and the wind had a tendency to shift from one point of the compass to another, which rendered it impossible to count upon settled weather.

Cyrus Harding and his companions, on leaving Dakkar Grotto, had taken the road to the corral. On their way Neb and Herbert were careful to preserve the wire which had been laid down by the captain between the corral and the grotto, in a spot where it could run no risk of harm.

The colonists spoke but little on the road. The various incidents of the night of the 15th October had left a profound impression on their minds. The unknown being whose influence had so effectually protected them, the man whom their imagination had endowed with supernatural powers, Captain Nemo, was no more. His Nautilus and he were buried in the depths of the abyss. To each one of them their existence seemed even more isolated than before. They had been accustomed to count upon the intervention of that power which existed no longer, and Gideon Spilett, and even Cyrus Harding, could not escape this impression. Thus they maintained a profound silence during their journey to the corral.

Towards nine in the morning the colonists arrived at Granite House.

It had been agreed that the construction of the vessel should be actively pushed forward, and Cyrus Harding more than ever devoted his time and labour to this object. It was impossible to divine what future lay before them. Evidently the advantage to the colonists would be great of having at their disposal a substantial vessel, capable of keeping the sea even in heavy weather, and large enough to attempt, in case of need, a voyage of some duration. Even if, when their vessel should be completed, the colonists should not resolve to leave Lincoln Island as yet, in order to gain either one of the Polynesian archipelagos of the Pacific or the shores of New Zealand, they might at least, sooner or later, proceed to Tabor Island, to leave there the notice relating to Ayrton. This was a precaution rendered indispensable by the possibility of the Scotch yacht reappearing in those seas, and it was of the highest importance that nothing should be neglected on this point.

The works were then resumed. Cyrus Harding, Pencroft, and Ayrton, assisted by Neb, Gideon Spilett, and Herbert, except when unavoidably called off by other necessary occupations, worked without cessation. It was important that the new vessel should be ready in five months—thus to say, by the beginning of March—if they wished to visit Tabor Island before the equinoctial gales rendered the voyage impracticable. Therefore the carpenters lost not a moment. Moreover, it was unnecessary to manufacture rigging, that of the Speedy having been saved entire, so that the hull only of the vessel needed to be constructed.

The end of the year 1868 found them occupied by these important labours, to the exclusion of almost all others. At the expiration of two months and a half the ribs had been set up and the first planks adjusted. It was already
evident that the plans made by Cyrus Harding were admirable, and that the vessel would behave well at sea.

Pencroft brought to the task a devouring energy, and scrupled not to grumble when one or the other abandoned the carpenter's axe for the gun of the hunter. It was nevertheless necessary to keep up the stores of Granite House, in view of the approaching winter. But this did not satisfy Pencroft. The brave honest sailor was not content when the workmen were not at the dockyard. When this happened he grumbled vigorously, and, by way of venting his feelings, did the work of six men.

The weather was very unfavourable during the whole of the summer season. For some days the heat was overpowering, and the atmosphere, saturated with electricity, was only cleared by violent storms. It was rarely that the distant growling of the thunder could not be heard, like a low but incessant murmur, such as is produced in the equatorial regions of the globe.

The 1st of January, 1869, was signalised by a storm of extreme violence, and the thunder burst several times over the island. Large trees were struck by the electric fluid and shattered, and among others one of those gigantic micocouliers which shaded the poultry-yard at the southern extremity of the lake. Had this meteor any relation to the phenomena going on in the bowels of the earth? Was there any connection between the commotion of the atmosphere and that of the interior of the earth? Cyrus Harding was inclined to think that such was the case, for the development of these storms was attended by the renewal of volcanic symptoms.

It was on the 3rd of January that Herbert, having ascended at daybreak to the plateau of Prospect Heights to harness one of the onagas, perceived an enormous hat-shaped cloud rolling from the summit of the volcano.

"Ah!" exclaimed Pencroft, "those are not vapours this time! It seems to me that the giant is not content with breathing; he must smoke!"

This figure of speech employed by the sailor exactly expressed the changes going on at the mouth of the volcano. Already for three months had the crater emitted vapours more or less dense, but which were as yet produced only by an internal ebullition of mineral substances. But now the vapours were replaced by a thick smoke, rising in the form of a greyish column, more than three hundred feet in width at its base, and which spread like an immense mushroom to a height of from seven to eight hundred feet above the summit of the mountain.

"The fire is in the chimney," observed Gideon Spilett.

"And we can't put it out!" replied Herbert.

"The volcano ought to be swept," observed Neb, who spoke as if perfectly serious.

"Well said, Neb!" cried Pencroft, with a shout of laughter; "and you'll undertake the job, no doubt?"

Cyrus Harding attentively observed the dense smoke emitted by Mount Franklin, and even listened, as if expecting to hear some distant muttering. Then, turning towards his companions, from whom he had gone somewhat apart, he said--

"The truth is, my friends, we must not conceal from ourselves that an important change is going forward. The volcanic substances are no longer in a state of ebullition, they have caught fire, and we are undoubtedly menaced by an approaching eruption."

"Well, captain," said Pencroft, "we shall witness the eruption; and if it is a good one, we'll applaud it. I don't see that we need concern ourselves further about the matter."

"It may be so," replied Cyrus Harding, "for the ancient track of the lava is still open; and thanks to this, the crater has hitherto overflowed towards the north. And yet--"

"And yet, as we can derive no advantage from an eruption, it might be better it should not take place," said the reporter.

"Who knows?" answered the sailor. "Perhaps there may be some valuable substance in this volcano, which it will spout forth, and which we may turn to good account!"

Cyrus Harding shook his head with the air of a man who augured no good from the phenomenon whose developments had been so sudden. He did not regard so lightly as Pencroft the results of an eruption. If the lava, in consequence of the position of the crater, did not directly menace the wooded and cultivated parts of the island, other complications might present themselves. In fact, eruptions are not unfrequently accompanied by earthquakes; and an island of the nature of Lincoln Island formed of substances so varied, basalt on one side, granite on the other, lava on the north, rich soil on the south, substances which consequently could not be firmly attached to each other, would be exposed to the risk of disintegration. Although, therefore, the spreading of the volcanic matter might not constitute a serious danger, any movement of the terrestrial structure which should shake the island might entail the gravest consequences.

"It seems to me," said Ayrton, who had reclined so as to place his ear to the ground, "it seems to me that I can hear a dull, rumbling sound, like that of a wagon loaded with bars of iron."

The colonists listened with the greatest attention, and were convinced that Ayrton was not mistaken. The
rumbling was mingled with a subterranean roar, which formed a sort of rinforzando, and died slowly away, as if some violent storm had passed through the profundities of the globe. But no explosion, properly so termed, could be heard. It might therefore be concluded that the vapours and smoke found a free passage through the central shaft; and that the safety-valve being sufficiently large, no convulsion would be produced, no explosion was to be apprehended.

"Well, then!" said Pencroft, "are we not going back to work? Let Mount Franklin smoke, groan, bellow, or spout forth fire and flame as much as it pleases, that is no reason why we should be idle! Come, Ayrton, Neb, Herbert, Captain Harding, Mr Spilett, every one of us must turn to at our work to-day! We are going to place the keelson, and a dozen pair of hands would not be too many. Before two months I want our new Bonadventure--for we shall keep the old name, shall we not?--to float on the waters of Port Balloon! Therefore there is not an hour to lose!"

All the colonists, their services thus requisitioned by Pencroft, descended to the dockyard, and proceeded to place the keelson, a thick mass of wood which forms the lower portion of a ship and unites firmly the timbers of the hull. It was an arduous undertaking, in which all took part.

They continued their labours during the whole of this day, the 3rd of January, without thinking further of the volcano, which could not, besides, be seen from the shore of Granite House. But once or twice, large shadows, veiling the sun, which described its diurnal arc through an extremely clear sky, indicated that a thick cloud of smoke passed between its disc and the island. The wind, blowing on the shore, carried all these vapours to the westward. Cyrus Harding and Gideon Spilett remarked these sombre appearances, and from time to time discussed the evident progress of the volcanic phenomena, but their work went on without interruption. It was, besides, of the first importance from every point of view, that the vessel should be finished with the least possible delay. In presence of the eventualities which might arise, the safety of the colonists would be to a great extent secured by their ship. Who could tell that it might not prove some day their only refuge?

In the evening, after supper, Cyrus Harding, Gideon Spilett, and Herbert, again ascended the plateau of Prospect Heights. It was already dark, and the obscurity would permit them to ascertain if flames or incandescent matter thrown up by the volcano were mingled with the vapour and smoke accumulated at the mouth of the crater.

"The crater is on fire!" said Herbert, who, more active than his companions, first reached the plateau.

Mount Franklin, distant about six miles, now appeared like a gigantic torch, around the summit of which turned fuliginous flames. So much smoke, and possibly scoriae and cinders were mingled with them, that their light gleamed but faintly amid the gloom of the night. But a kind of lurid brilliancy spread over the island, against which stood out confusedly the wooded masses of the heights. Immense whirlwinds of vapour obscured the sky, through which glimmered a few stars.

"The change is rapid!" said the engineer. "That is not surprising," answered the reporter. "The re-awakening of the volcano already dates back some time. You may remember, Cyrus, that the first vapours appeared about the time we searched the sides of the mountain to discover Captain Nemo’s retreat. It was, if I mistake not, about the 15th of October."

"Yes," replied Herbert, "two months and a half ago!"

"The subterranean fires have therefore been smouldering for ten weeks," resumed Gideon Spilett, "and it is not to be wondered at that they now break out with such violence!"

"Do not you feel a certain vibration of the soil?" asked Cyrus Harding.

"Yes," replied Gideon Spilett, "but there is a great difference between that and an earthquake."

"I do not affirm that we are menaced with an earthquake," answered Cyrus Harding, "may God preserve us from that! No; these vibrations are due to the effervescence of the central fire. The crust of the earth is simply the shell of a boiler, and you know that such a shell, under the pressure of steam, vibrates like a sonorous plate. It is this effect which is being produced at this moment."

"What magnificent flames!" exclaimed Herbert.

At this instant a kind of bouquet of flames shot forth from the crater, the brilliancy of which was visible even through the vapours. Thousands of luminous sheets and barbed tongues of fire were cast in various directions. Some, extending beyond the dome of smoke, dissipated it, leaving behind an incandescent powder. This was accompanied by successive explosions, resembling the discharge of a battery of mitrailleuses.

Cyrus Harding, the reporter, and Herbert, after spending an hour on the plateau of Prospect Heights, again descended to the beach, and returned to Granite House. The engineer was thoughtful and preoccupied, so much so, indeed, that Gideon Spilett inquired if he apprehended any immediate danger, of which the eruption might directly or indirectly be the cause.

"Yes, and no," answered Cyrus Harding.

"Nevertheless," continued the reporter, "would not the greatest misfortune which could happen to us be an earthquake which would overturn the island? Now, I do not suppose that this is to be feared, since the vapours and
lava have found a free outlet."

"True," replied Cyrus Harding, "and I do not fear an earthquake in the sense in which the term is commonly
applied to convulsions of the soil provoked by the expansion of subterranean gases. But other causes may produce
great disasters."

"How so, my dear Cyrus?"

"I am not certain. I must consider. I must visit the mountain. In a few days I shall learn more on this point."

Gideon Spilett said no more, and soon, in spite of the explosions of the volcano, whose intensity increased, and
which were repeated by the echoes of the island, the inhabitants of Granite House were sleeping soundly.

Three days passed by—the 4th, 5th, and 6th of January. The construction of the vessel was diligently continued,
and without offering further explanations the engineer pushed forward the work with all his energy. Mount Franklin
was now hooded by a sombre cloud of sinister aspect, and, amid the flames, vomited forth incandescent rocks, some
of which fell back into the crater itself. This caused Pencroft, who would only look at the matter in the light of a
joke, to exclaim—

"Ah! the giant is playing at cup and ball; he is a conjuror."

In fact, the substances thrown up fell back again into the abyss, and it did not seem that the lava, though swollen
by the internal pressure, had yet risen to the orifice of the crater. At any rate, the opening on the north-east, which
was partly visible, poured out no torrent upon the northern slope of the mountain.

Nevertheless, however pressing was the construction of the vessel, other duties demanded the presence of the
colonists on various portions of the island. Before everything it was necessary to go to the corral, where the flocks of
musmons and goats were enclosed, and replenish the provision of forage for those animals. It was accordingly
arranged that Ayrton should proceed thither the next day, the 7th of January; and as he was sufficient for the task, to
which he was accustomed, Pencroft and the rest were somewhat surprised on hearing the engineer say to Ayrton—

"As you are going to-morrow to the corral I will accompany you."

"But, Captain Harding," exclaimed the sailor, "our working days will not be many, and if you go also we shall be
two pair of hands short!"

"We shall return to-morrow," replied Cyrus Harding, "but it is necessary that I should go to the corral. I must
learn how the eruption is progressing."

"The eruption! always the eruption!" answered Pencroft, with an air of discontent. "An important thing, truly,
this eruption! I trouble myself very little about it."

Whatever might be the sailor's opinion, the expedition projected by the engineer was settled for the next day.
Herbert wished to accompany Cyrus Harding, but he would not vex Pencroft by his absence.

The next day, at dawn, Cyrus Harding and Ayrton, mounting the cart drawn by two onagas, took the road to the
 corral and set off at a round trot.

Above the forest were passing large clouds, to which the crater of Mount Franklin incessantly added fuliginous
matter. These clouds, which rolled heavily in the air, were evidently composed of heterogeneous substances. It was
not alone from the volcano that they derived their strange opacity and weight. Scorias, in a state of dust, like
powdered pumice-stone, and greyish ashes as small as the finest feculae, were held in suspension in the midst of
their thick folds. These ashes are so fine that they have been observed in the air for whole months. After the eruption
of 1783 in Iceland for upwards of a year the atmosphere was thus charged with volcanic dust through which the rays
of the sun were only with difficulty discernible.

But more often this pulverised matter falls, and this happened on the present occasion. Cyrus Harding and
Ayrton had scarcely reached the corral when a sort of black snow like fine gunpowder fell, and instantly changed the
appearance of the soil. Trees, meadows, all disappeared beneath a covering several inches in depth. But, very
fortunately, the wind blew from the north-east, and the greater part of the cloud dissolved itself over the sea.

"This is very singular, Captain Harding," said Ayrton.

"It is very serious," replied the engineer. "This powdered pumice-stone, all this mineral dust, proves how grave
is the convulsion going forward in the lower depths of the volcano."

"But can nothing be done?"

"Nothing, except to note the progress of the phenomenon. Do you, therefore, Ayrton, occupy yourself with the
necessary work at the corral. In the meantime I will ascend just beyond the source of Red Creek and examine the
condition of the mountain upon its northern aspect. Then—"

"Well, Captain Harding?"

"Then we will pay a visit to Dakkar Grotto. I wish to inspect it. At any rate I will come back for you in two
hours."

Ayrton then proceeded to enter the corral, and, while waiting the engineer's return, busied himself with the
musmons and goats, which seemed to feel a certain uneasiness in presence of these first signs of an eruption.
Meanwhile Cyrus Harding ascended the crest of the eastern spur, passed Red Creek, and arrived at the spot where he and his companions had discovered a sulphureous spring at the time of their first exploration.

How changed was everything! Instead of a single column of smoke he counted thirteen, forced through the soil as if violently propelled by some piston. It was evident that the crust of the earth was subjected in this part of the globe to a frightful pressure. The atmosphere was saturated with gases and carbonic acid, mingled with aqueous vapours. Cyrus Harding felt the volcanic tufa with which the plain was strewn, and which were but pulverised cinders hardened into solid blocks by time, tremble beneath him, but he could discover no traces of fresh lava.

The engineer became more assured of this when he observed all the northern part of Mount Franklin. Pillars of smoke and flame escaped from the crater; a hail of scoriæ fell on the ground; but no current of lava burst from the mouth of the volcano, which proved that the volcanic matter had not yet attained the level of the superior orifice of the central shaft.

"But I would prefer that it were so," said Cyrus Harding to himself. "At any rate, I should then know that the lava had followed its accustomed track. Who can say that they may not take a new course? But the danger does not consist in that! Captain Nemo foresaw it clearly! No, the danger does not lie there!"

Cyrus Harding advanced towards the enormous causeway whose prolongation enclosed the narrow Shark Gulf. He could now sufficiently examine on this side the ancient channels of the lava. There was no doubt in his mind that the most recent eruption had occurred at a far-distant epoch.

He then returned by the same way, listening attentively to the subterranean mutterings which rolled like long-continued thunder, interrupted by deafening explosions. At nine in the morning he reached the corral.

Ayrton awaited him.

"The animals are cared for, Captain Harding," said Ayrton.

"Good, Ayrton."

"They seem uneasy, Captain Harding."

"Yes, instinct speaks through them, and instinct is never deceived."

"Are you ready?"

"Take a lamp, Ayrton," answered the engineer; "we will start at once."

Ayrton did as desired. The onagas, unharnessed, roamed in the corral. The gate was secured on the outside, and Cyrus Harding, preceding Ayrton, took the narrow path which led westward to the shore.

The soil they walked upon was choked with the pulverised matter fallen from the cloud. No quadruped appeared in the woods. Even the birds had fled. Sometimes a passing breeze raised the covering of ashes, and the two colonists, enveloped in a whirlwind of dust, lost sight of each other. They were then careful to cover their eyes and mouths with handkerchiefs, for they ran the risk of being blinded and suffocated.

It was impossible for Cyrus Harding and Ayrton, with these impediments, to make rapid progress. Moreover, the atmosphere was close, as if the oxygen had been partly burnt up, and had become unfit for respiration. At every hundred paces they were obliged to stop to take breath. It was therefore past ten o’clock when the engineer and his companion reached the crest of the enormous mass of rocks of basalt and porphyry which composed the north-west coast of the island.

Ayrton and Cyrus Harding commenced the descent of this abrupt declivity, following almost step for step the difficult path which, during that stormy night, had led them to Dakkar Grotto. In open day the descent was less perilous, and, besides, the bed of ashes which covered the polished surface of the rock enabled them to make their footing more secure.

The ridge at the end of the shore, about forty feet in height, was soon reached. Cyrus Harding recollected that this elevation gradually sloped towards the level of the sea. Although the tide was at present low, no beach could be seen, and the waves, thickened by the volcanic dust, beat upon the basaltic rocks.

Cyrus Harding and Ayrton found without difficulty the entrance to Dakkar Grotto, and paused for a moment at the last rock before it.

"The iron boat should be there," said the engineer.

"It is here, Captain Harding," replied Ayrton, drawing towards him the fragile craft, which was protected by the arch of a vault.

"On board, Ayrton!"

The two colonists stepped into the boat. A slight undulation of the waves carried it farther under the low arch of the crypt, and there Ayrton, with the aid of flint and steel, lighted the lamp. He then took the oars, and the lamp having been placed in the bow of the boat, so that its rays fell before them, Cyrus Harding took the helm and steered through the shades of the grotto.

The Nautilus was there no longer to illuminate the cavern with its electric light. Possibly it might not yet be extinguished, but no ray escaped from the depths of the abyss in which reposed all that was mortal of Captain Nemo.
The light afforded by the lamp, although feeble, nevertheless enabled the engineer to advance slowly, following
the wall of the cavern. A deathlike silence reigned under the vaulted roof, or at least in the anterior portion, for soon
Cyrus Harding distinctly heard the rumbling which proceeded from the bowels of the mountain.
"That comes from the volcano," he said.
Besides these sounds, the presence of chemical combinations was soon betrayed by their powerful odour, and
the engineer and his companion were almost suffocated by sulphureous vapours.
"This is what Captain Nemo feared," murmured Cyrus Harding, changing countenance. "We must go to the end,
notwithstanding."
"Forward!" replied Ayrton, bending to his oars and directing the boat towards the head of the cavern.
Twenty-five minutes after entering the mouth of the grotto the boat reached the extreme end.
Cyrus Harding then, standing up, cast the light of the lamp upon the walls of the cavern which separated it from
the central shaft of the volcano. What was the thickness of this wall? It might be ten feet or a hundred feet—it was
impossible to say. But the subterranean sounds were too perceptible to allow of the supposition that it was of any
great thickness.
The engineer, after having explored the wall at a certain height horizontally, fastened the lamp to the end of an
oar, and again surveyed the basaltic wall at a greater elevation.
There, through scarcely visible clefts and joinings, escaped a pungent vapour, which infected the atmosphere of
the cavern. The wall was broken by large cracks, some of which extended to within two or three feet of the water's
edge.
Cyrus Harding thought for a brief space. Then he said in a low voice—
"Yes! the captain was right! The danger lies there, and a terrible danger!"
Ayrton said not a word, but, upon a sign from Cyrus Harding, resumed the oars, and half an hour later the
engineer and he reached the entrance of Dakkar Grotto.

CHAPTER NINETEEN.
CYRUS HARDING GIVES AN ACCOUNT OF HIS EXPLORATION--THE CONSTRUCTION OF THE
SHIP PUSHED FORWARD--A LAST VISIT TO THE CORRAL--THE BATTLE BETWEEN FIRE AND
WATER--ALL THAT REMAINS OF THE ISLAND--IT IS DECIDED TO LAUNCH THE VESSEL--THE
NIGHT OF THE 8TH OF MARCH.
The next day, the 8th of January, after a day and night passed at the corral, where they left all in order, Cyrus
Harding and Ayrton arrived at Granite House.
The engineer immediately called his companions together, and informed them of the imminent danger which
threatened Lincoln Island, and from which no human power could deliver them.
"My friends," he said, and his voice betrayed the depth of his emotion, "our island is not among those which will
endure while this earth endures. It is doomed to more or less speedy destruction, the cause of which it bears within
itself, and from which nothing can save it."
The colonists looked at each other, then at the engineer. They did not clearly comprehend him.
"Explain yourself, Cyrus!" said Gideon Spilett.
"I will do so," replied Cyrus Harding, "or rather I will simply afford you the explanation which, during our few
minutes of private conversation, was given me by Captain Nemo."
"Captain Nemo!" exclaimed the colonists.
"Yes, and it was the last service he desired to render us before his death!"
"The last service!" exclaimed Pencroft, "the last service! You will see that though he is dead he will render us
others yet!"
"But what did the captain say?" inquired the reporter.
"I will tell you, my friends," said the engineer. "Lincoln Island does not resemble the other islands of the Pacific,
and a fact of which Captain Nemo has made me cognisant must sooner or later bring about the subversion of its
foundation."
"Nonsense! Lincoln Island, it can't be!" cried Pencroft, who, in spite of the respect he felt for Cyrus Harding,
could not prevent a gesture of incredulity.
"Listen, Pencroft," resumed the engineer, "I will tell you what Captain Nemo communicated to me, and which I
myself confirmed yesterday, during the exploration of Dakkar Grotto. This cavern stretches under the island as far as
the volcano, and is only separated from its central shaft by the wall which terminates it. Now, this wall is seamed
with fissures and clefts which already allow the sulphureous gases generated in the interior of the volcano to
escape."
"Well?" said Pencroft, his brow suddenly contracting.

"Well, then, I saw that these fissures widen under the internal pressure from within, that the wall of basalt is gradually giving way, and that after a longer or shorter period it will afford a passage to the waters of the lake which fill the cavern."

"Good!" replied Pencroft, with an attempt at pleasantry. "The sea will extinguish the volcano, and there will be an end of the matter!"

"Not so!" said Cyrus Harding, "should a day arrive when the sea, rushing through the wall of the cavern, penetrates by the central shaft into the interior of the island to the boiling lava, Lincoln Island will that day be blown into the air--just as would happen to the island of Sicily were the Mediterranean to precipitate itself into Mount Etna."

The colonists made no answer to these significant words of the engineer. They now understood the danger by which they were menaced.

It may be added that Cyrus Harding had in no way exaggerated the danger to be apprehended. Many persons have formed an idea that it would be possible to extinguish volcanoes, which are almost always situated on the shores of a sea or lake, by opening a passage for the admission of the water. But they are not aware that this would be to incur the risk of blowing up a portion of the globe, like a boiler whose steam is suddenly expanded by intense heat. The water, rushing into a cavity whose temperature might be estimated at thousands of degrees, would be converted into steam with a sudden energy which no enclosure could resist.

It was not therefore doubtful that the island, menaced by a frightful and approaching convulsion, would endure only so long as the wall of Dakkar Grotto itself should endure. It was not even a question of months, nor of weeks; but of days, it might be of hours.

The first sentiment which the colonists felt was that of profound sorrow. They thought not so much of the peril which menaced themselves personally, but of the destruction of the island which had sheltered them, which they had cultivated, which they loved so well, and had hoped to render so flourishing. So much effort ineffectually expended, so much labour lost.

Pencroft could not prevent a large tear from rolling down his cheek, nor did he attempt to conceal it.

Some further conversation now took place. The chances yet in favour of the colonists were discussed; but finally it was agreed that there was not an hour to be lost, that the building and fitting of the vessel should be pushed forward with their utmost energy, and that this was the sole chance of safety for the inhabitants of Lincoln Island.

All hands, therefore, set to work on the vessel. What could it now avail to sow, to reap, to hunt, to increase the stores of Granite House? The contents of the store-house and outbuildings contained more than sufficient to provide the ship for a voyage, however long might be its duration. But it was imperative that the ship should be ready to receive them before the inevitable catastrophe should arrive.

Their labours were now carried on with feverish ardour. By the 23rd of January the vessel was half-decked over. Up to this time no change had taken place in the summit of the volcano. Vapour and smoke mingled with flames and incandescent stones were thrown up from the crater. But during the night of the 23rd, in consequence of the lava attaining the level of the first stratum of the volcano, the hat-shaped cone which formed over the latter disappeared. A frightful sound was heard. The colonists at first thought the island was rent asunder, and rushed out of Granite House.

This occurred about two o'clock in the morning.

The sky appeared on fire. The superior cone, a mass of rock a thousand feet in height, and weighing thousands of millions of pounds, had been thrown down upon the island, making it tremble to its foundation. Fortunately, this cone inclined to the north, and had fallen upon the plain of sand and tufa stretching between the volcano and the sea. The aperture of the crater being thus enlarged projected towards the sky a glare so intense that by the simple effect of reflection the atmosphere appeared red-hot. At the same time a torrent of lava, bursting from the new summit, poured out in long cascades, like water escaping from a vase too full, and a thousand tongues of fire crept over the sides of the volcano.

"The corral! the corral!" exclaimed Ayrton.

It was, in fact, towards the corral that the lava was rushing, as the new crater faced the east, and consequently the fertile portions of the island, the springs of Red Creek and Jacamar Wood, were menaced with instant destruction.

At Ayrton's cry the colonists rushed to the onagas' stables. The cart was at once harnessed. All were possessed by the same thought--to hasten to the corral and set at liberty the animals it enclosed.

Before three in the morning they arrived at the corral. The cries of the terrified musmons and goats indicated the alarm which possessed them. Already a torrent of burning matter and liquefied minerals fell from the side of the mountain upon the meadows as far as the side of the palisade. The gate was burst open by Ayrton, and the animals, bewildered with terror, fled in all directions.
An hour afterwards the boiling lava filled the corral, converting into vapour the water of the little rivulet which ran through it, burning up the house like dry grass, and leaving not even a post of the palisade to mark the spot where the corral once stood.

To contend against this disaster would have been folly--nay, madness. In presence of Nature's grand convulsions man is powerless.

It was now daylight--the 24th of January. Cyrus Harding and his companions, before returning to Granite House, desired to ascertain the probable direction this inundation of lava was about to take. The soil sloped gradually from Mount Franklin to the east coast, and it was to be feared that, in spite of the thick Jacamar Wood, the torrent would reach the plateau of Prospect Heights.

"The lake will cover us," said Gideon Spilett.

"I hope so!" was Cyrus Harding's only reply.

The colonists were desirous of reaching the plain upon which the superior cone of Mount Franklin had fallen, but the lava arrested their progress. It had followed, on one side, the valley of Red Creek, and on the other that of Falls River, evaporating those watercourses in its passage. There was no possibility of crossing the torrent of lava; on the contrary, the colonists were obliged to retreat before it. The volcano, without its crown, was no longer recognisable, terminated as it was by a sort of flat table which replaced the ancient crater. From two openings in its southern and eastern sides an unceasing flow of lava poured forth, thus forming two distinct streams. Above the new crater a cloud of smoke and ashes, mingled with those of the atmosphere, massed over the island. Loud peals of thunder broke, and could scarcely be distinguished from the rumblings of the mountain, whose mouth vomited forth ignited rocks, which, hurled to more than a thousand feet, burst in the air like shells. Flashes of lightning rivalled in intensity the volcano's eruption.

Towards seven in the morning the position was no longer tenable by the colonists, who accordingly took shelter in the borders of Jacamar Wood. Not only did the projectiles begin to rain around them, but the lava, overflowing the bed of Red Creek, threatened to cut off the road to the corral. The nearest rows of trees caught fire, and their sap, suddenly transformed into vapour, caused them to explode with loud reports, whilst others, less moist, remained unhurt in the midst of the inundation.

The colonists had again taken the road to the corral. They proceeded but slowly, frequently looking back; but, in consequence of the inclination of the soil, the lava gained rapidly in the east, and as its lower waves became solidified, others at boiling heat covered them immediately.

Meanwhile, the principal stream of Red Creek valley became more and more menacing. All this portion of the forest was on fire, and enormous wreaths of smoke rolled over the trees, whose trunks were already consumed by the lava. The colonists halted near the lake, about half a mile from the mouth of Red Creek. A question of life or death was now to be decided.

Cyrus Harding, accustomed to the consideration of important crises, and aware that he was addressing men capable of hearing the truth, whatever it might be, then said--

"Either the lake will arrest the progress of the lava, and a part of the island will be preserved from utter destruction, or the stream will overrun the forests of the Far West, and not a tree or plant will remain on the surface of the soil. We shall have no prospect but that of starvation upon these barren rocks--a death which will probably be anticipated by the explosion of the island."

"In that case," replied Pencroft, folding his arms and stamping his foot, "what's the use of working any longer on the vessel?"

"Pencroft," answered Cyrus Harding, "we must do our duty to the last!"

At this instant the river of lava, after having broken a passage through the noble trees it devoured in its course, reached the borders of the lake. At this point there was an elevation of the soil which, had it been greater, might have sufficed to arrest the torrent.

"To work!" cried Cyrus Harding.

The engineer's thought was at once understood. It might be possible to dam, as it were, the torrent, and thus compel it to pour itself into the lake.

The colonists hastened to the dockyard. They returned with shovels, picks, axes, and by means of banking the earth with the aid of fallen trees they succeeded in a few hours in raising an embankment three feet high and some hundreds of paces in length. It seemed to them, when they had finished, as if they had scarcely been working more than a few minutes.

It was not a moment too soon. The liquefied substances soon after reached the bottom of the barrier. The stream of lava swelled like a river about to overflow its banks, and threatened to demolish the sole obstacle which could prevent it from overrunning the whole Far West. But the dam held firm, and after a moment of terrible suspense the torrent precipitated itself into Grant Lake from a height of twenty feet.
The colonists, without moving or uttering a word, breathlessly regarded this strife of the two elements.

What a spectacle was this conflict between water and fire! What pen could describe the marvellous horror of this scene—what pencil could depict it? The water hissed as it evaporated by contact with the boiling lava. The vapour whirled in the air to an immeasurable height, as if the valves of an immense boiler had been suddenly opened. But, however considerable might be the volume of water contained in the lake, it must eventually be absorbed, because it was not replenished, whilst the stream of lava, fed from an inexhaustible source, rolled on without ceasing new waves of incandescent matter.

The first waves of lava which fell in the lake immediately solidified, and accumulated so as speedily to emerge from it. Upon their surface fell other waves, which in their turn became stone, but a step nearer the centre of the lake. In this manner was formed a pier which threatened to gradually fill up the lake, which could not overflow, the water displaced by the lava being evaporated. The hissing of the water rent the air with a deafening sound, and the vapour, blown by the wind, fell in rain upon the sea. The pier became longer and longer, and the blocks of lava piled themselves one on another. Where formerly stretched the calm waters of the lake now appeared an enormous mass of smoking rocks, as if an upheaving of the soil had formed immense shoals. Imagine the waters of the lake aroused by a hurricane, then suddenly solidified by an intense frost, and some conception may be formed of the aspect of the lake three hours after the irruption of this irresistible torrent of lava.

This time water would be vanquished by fire.

Nevertheless it was a fortunate circumstance for the colonists that the effusion of lava should have been in the direction of Lake Grant. They had before them some days' respite. The plateau of Prospect Heights, Granite House, and the dockyard were for the moment preserved. And these few days it was necessary to employ them in planking, carefully caulking the vessel, and launching her. The colonists would then take refuge on board the vessel, content to rig her after she should be afloat on the waters. With the danger of an explosion which threatened to destroy the island there could be no security on shore. The walls of Granite House, once so sure a retreat, might at any moment fall in upon them.

During the six following days, from the 25th to the 30th of January, the colonists accomplished as much of the construction of their vessel as twenty men could have done. They hardly allowed themselves a moment's repose, and the glare of the flames which shot from the crater enabled them to work night and day. The flow of lava continued, but perhaps less abundantly. This was fortunate, for Lake Grant was almost entirely choked up, and if more lava should accumulate it would inevitably spread over the plateau of Prospect Heights, and thence upon the beach.

But if the island was thus partially protected on this side, it was not so with the western part.

In fact, the second stream of lava, which had followed the valley of Falls River, a valley of great extent, the land on both sides of the creek being flat, met with no obstacle. The burning liquid had then spread through the forest of the Far West. At this period of the year, when the trees were dried up by a tropical heat, the forest caught fire instantaneously, in such a manner that the conflagration extended itself both by the trunks of the trees and by their higher branches, whose interlacement favoured its progress. It even appeared that the current of flame spread more rapidly among the summits of the trees than the current of lava at their bases.

Thus it happened that the wild animals, jaguars, wild boars, cabybaras, koulas, and game of every kind, mad with terror, had fled to the banks of the Mercy and to the Tadorn Marsh, beyond the road to Port Balloon. But the colonists were too much occupied with their task to pay any attention to even the most formidable of these animals. They had abandoned Granite House, and would not even take shelter at the Chimneys, but encamped under a tent, near the mouth of the Mercy.

Each day Cyrus Harding and Gideon Spilett ascended the plateau of Prospect Heights. Sometimes Herbert accompanied them, but never Pencroft, who could not bear to look upon the prospect of the island now so utterly devastated.

It was, in truth, a heartrending spectacle. All the wooded part of the island was now completely bare. One single clump of green trees raised their heads at the extremity of Serpentine Peninsula. Here and there were a few grotesque blackened and branchless stumps. The site of the devastated forest was even more barren than Tadorn Marsh. The irruption of the lava had been complete. Where formerly sprang up that charming verdure, the soil was now nothing but a savage mass of volcanic tufa. In the valleys of the Falls and Mercy rivers no drop of water now flowed towards the sea, and should Lake Grant be entirely dried up, the colonists would have no means of quenching their thirst. But, fortunately, the lava had spared the southern corner of the lake, containing all that remained of the drinkable water of the island. Towards the north-west stood out the rugged and well-defined outlines of the sides of the volcano, like a gigantic claw hovering over the island. What a sad and fearful sight, and how painful to the colonists, who, from a fertile domain covered with forests, irrigated by watercourses, and enriched by the produce of their toils, found themselves, as it were, transported to a desolate rock, upon which, but for their reserves of provisions, they could not even gather the means of subsistence!
"It is enough to break one's heart!" said Gideon Spilett, one day.

"Yes, Spilett," answered the engineer. "May God grant us the time to complete this vessel, now our sole refuge!"

"Do not you think, Cyrus, that the violence of the eruption has somewhat lessened? The volcano still vomits forth lava, but somewhat less abundantly, if I mistake not."

"It matters little," answered Cyrus Harding. "The fire is still burning in the interior of the mountain, and the sea may break in at any moment. We are in the condition of passengers whose ship is devoured by a conflagration which they cannot extinguish, and who know that sooner or later the flames must reach the powder-magazine. To work, Spilett, to work, and let us not lose an hour!"

During eight days more, that is to say until the 7th of February, the lava continued to flow, but the eruption was confined within the previous limits. Cyrus Harding feared above all lest the liquefied matter should overflow the shore, for in that event the dockyard could not escape. Moreover, about this time the colonists felt in the frame of the island vibrations which alarmed them to the highest degree.

It was the 20th of February. Yet another month must elapse before the vessel would be ready for sea. Would the island hold together till then? The intention of Pencroft and Cyrus Harding was to launch the vessel as soon as the hull should be complete. The deck, the upper-works, the interior woodwork and the rigging, might be finished afterwards, but the essential point was that the colonists should have an assured refuge away from the island. Perhaps it might be even better to conduct the vessel to Port Balloon, that is to say, as far as possible from the centre of eruption, for at the mouth of the Mercy, between the islet and the wall of granite, it would run the risk of being crushed in the event of any convulsion. All the exertions of the voyagers were therefore concentrated upon the completion of the hull.

Thus the 3rd of March arrived, and they might calculate upon launching the vessel in ten days.

Hope revived in the hearts of the colonists, who had, in this fourth year of their sojourn on Lincoln Island, suffered so many trials. Even Pencroft lost in some measure the sombre taciturnity occasioned by the devastation and ruin of his domain. His hopes, it is true, were concentrated upon his vessel.

"We shall finish it," he said to the engineer, "we shall finish it, captain, and it is time, for the season is advancing and the equinox will soon be here. Well, if necessary, we must put in to Tabor Island to spend the winter. But think of Tabor Island after Lincoln Island. Ah, how unfortunate! Who could have believed it possible?"

"Let us get on," was the engineer's invariable reply.

And they worked away without losing a moment.

"Master," asked Neb, a few days later, "do you think all this could have happened if Captain Nemo had been still alive?"

"Certainly, Neb," answered Cyrus Harding.

"I, for one, don't believe it!" whispered Pencroft to Neb.

"Nor I!" answered Neb seriously.

During the first week of March appearances again became menacing. Thousands of threads like glass, formed of fluid lava, fell like rain upon the island. The crater was again boiling with lava which overflowed the back of the volcano. The torrent flowed along the surface of the hardened tufa, and destroyed the few meagre skeletons of trees which had withstand the first eruption. The stream flowing this time towards the south-west shore of Lake Grant, stretched beyond Creek Glycerine, and invaded the plateau of Prospect Heights. This last blow to the work of the colonists was terrible. The mill, the buildings of the inner court, the stables, were all destroyed. The affrighted poultry fled in all directions. Top and Jup showed signs of the greatest alarm, as if their instinct warned them of an impending catastrophe. A large number of the animals of the island had perished in the first eruption. Those which survived found no refuge but Tadorn Marsh, save a few to which the plateau of Prospect Heights afforded an asylum. But even this last retreat was now closed to them, and the lava-torrent, flowing over the edge of the granite wall, began to pour down upon the beach its cataracts of fire. The sublime horror of this spectacle passed all description. During the night it could only be compared to a Niagara of molten fluid, with its incandescent vapours above and its boiling masses below.

The colonists were driven to their last entrenchment, and although the upper seams of the vessel were not yet caulked, they decided to launch her at once.

Pencroft and Ayrton therefore set about the necessary preparations for the launch, which was to take place the morning of the next day, the 9th of March.

But, during the night of the 8th an enormous column of vapour escaping from the crater rose with frightful explosions to a height of more than three thousand feet. The wall of Dakkar Grotto had evidently given way under the pressure of the gases, and the sea, rushing through the central shaft into the igneous gulf, was at once converted into vapour. But the crater could not afford a sufficient outlet for this vapour. An explosion, which might have been heard at a distance of a hundred miles, shook the air. Fragments of mountains fell into the Pacific, and, in a few
minutes, the ocean rolled over the spot where Lincoln Island once stood.

CHAPTER TWENTY.

AN ISOLATED ROCK IN THE PACIFIC--THE LAST REFUGE OF THE COLONISTS OF LINCOLN ISLAND--DEATH THEIR ONLY PROSPECT--UNEXPECTED SUCCOUR--WHY AND HOW IT ARRIVES--A LAST KINDNESS--AN ISLAND ON TERRA FIRMA--THE TOMB OF CAPTAIN PRINCE DAKkar NEMO.

An isolated rock, thirty feet in length, twenty in breadth, scarcely ten from the water's edge, such was the only solid point which the waves of the Pacific had not engulfed.

It was all that remained of the structure of Granite House! The wall had fallen headlong and been then shattered to fragments, and a few of the rocks of the large room were piled one above another to form this point. All around had disappeared in the abyss; the inferior cone of Mount Franklin, rent asunder by the explosion; the lava jaws of Shark Gulf, the plateau of Prospect Heights, Safety Islet, the granite rocks of Port Balloon, the basaltis of Dakkar Grotto, the long Serpentine Peninsula, so distant nevertheless from the centre of the eruption. All that could now be seen of Lincoln Island was the narrow rock which now served as a refuge to the six colonists and their dog Top.

The animals had also perished in the catastrophe; the birds, as well as those representing the fauna of the island--all either crushed or drowned, and the unfortunate Jup himself had, alas! found his death in some crevice of the soil.

If Cyrus Harding, Gideon Spilett, Herbert, Pencroft, Neb, and Ayrton had survived, it was because, assembled under their tent, they had been hurled into the sea at the instant when the fragments of the island rained down on every side.

When they reached the surface they could only perceive, at half a cable's length, this mass of rocks, towards which they swam and on which they found footing.

On this barren rock they had now existed for nine days. A few provisions taken from the magazine of Granite House before the catastrophe, a little fresh water from the rain which had fallen in a hollow of the rock, was all that the unfortunate colonists possessed. Their last hope, the vessel, had been shattered to pieces. They had no means of quitting the reef; no fire, nor any means of obtaining it. It seemed that they must inevitably perish.

This day, the 18th of March, there remained only provisions for two days, although they limited their consumption to the bare necessities of life. All their science and intelligence could avail them nothing in their present position. They were in the hand of God.

Cyrus Harding was calm, Gideon Spilett more nervous, and Pencroft, a prey to sullen anger, walked to and fro on the rock. Herbert did not for a moment quit the engineer's side as if demanding from him that assistance he had no power to give. Neb and Ayrton were resigned to their fate.

"Ah, what a misfortune! what a misfortune!" often repeated Pencroft. "If we had but a walnut-shell to take us to Tabor Island! But we have nothing, nothing!"

"Captain Nemo did right to die," said Neb.

During the five ensuing days Cyrus Harding and his unfortunate companions husbanded their provisions with the most extreme care, eating only what would prevent them from succumbing to starvation. Their weakness was extreme. Herbert and Neb began to show symptoms of delirium.

Under these circumstances was it possible for them to retain even the shadow of a hope? No! What was their sole remaining chance? That a vessel should appear in sight off the rock? But they knew only too well from experience that no ships ever visited this part of the Pacific. Could they calculate that, by a truly providential coincidence, the Scotch yacht would arrive precisely at this time in search of Ayrton at Tabor Island? It was scarcely probable; and, besides, supposing she should come there, as the colonists had not been able to deposit a notice pointing out Ayrton's change of abode, the commander of the yacht, after having explored Tabor Island without result, would again set sail and return to lower latitudes.

No! no hope of being saved could be retained, and a horrible death, death from hunger and thirst, awaited them upon this rock.

Already they were stretched on the rock, inanimate, and no longer conscious of what passed around them. Ayrton alone, by a supreme effort, from time to time raised his head, and cast a despairing glance over the desert ocean.

But on the morning of the 24th of March Ayrton's arms were extended towards a point in the horizon; he raised himself, at first on his knees, then upright, and his hand seemed to make a signal.

A sail was in sight off the rock. She was evidently not without an object. The reef was the mark for which she was making in a direct line, under all steam, and the unfortunate colonists might have made her out some hours before if they had had the strength to watch the horizon.

"The Duncan!" murmured Ayrton--and fell back without sign of life.
When Cyrus Harding and his companions recovered consciousness, thanks to the attention lavished upon them, they found themselves in the cabin of a steamer, without being able to comprehend how they had escaped death.

A word from Ayrton explained everything.

"The Duncan!" he murmured.

"The Duncan!" exclaimed Cyrus Harding. And raising his hand to Heaven, he said, "Oh! Almighty God! mercifully hast Thou preserved us!"

It was, in fact, the Duncan, Lord Glenarvan's yacht, now commanded by Robert, son of Captain Grant, who had been despatched to Tabor Island to find Ayrton, and bring him back to his native land after twelve years of expiation.

The colonists were not only saved, but already on the way to their native country.

"Captain Grant," asked Cyrus Harding, "who can have suggested to you the idea, after having left Tabor Island, where you did not find Ayrton, of coming a hundred miles farther north-east?"

"Captain Harding," replied Robert Grant, "it was in order to find, not only Ayrton, but yourself and your companions."

"My companions and myself?"

"Doubtless, at Lincoln Island."

"At Lincoln Island!" exclaimed in a breath Gideon Spilett, Herbert, Neb, and Pencroft, in the highest degree astonished.

"How could you be aware of the existence of Lincoln Island?" inquired Cyrus Harding, "it is not even named in the charts."

"I knew of it from a document left by you on Tabor Island," answered Robert Grant.

"A document?" cried Gideon Spilett.

"Without doubt, and here it is;" answered Robert Grant, producing a paper which indicated the longitude and latitude of Lincoln Island, "the present residence of Ayrton and five American colonists."

"It is Captain Nemo!" cried Cyrus Harding, after having read the notice, and recognised that the handwriting was similar to that of the paper found at the corral.

"Ah!" said Pencroft, "it was then he who took our Bonadventure and hazarded himself alone to go to Tabor Island!"

"In order to leave this notice," added Herbert.

"I was then right in saying," exclaimed the sailor, "that even after his death the captain would render us a last service."

"My friends," said Cyrus Harding, in a voice of the profoundest emotion, "may the God of mercy have had pity on the soul of Captain Nemo, our benefactor!"

The colonists uncovered themselves at these last words of Cyrus Harding, and murmured the name of Captain Nemo.

Then Ayrton, approaching the engineer, said simply, "Where should this coffer be deposited?"

It was the coffer which Ayrton had saved at the risk of his life, at the very instant that the island had been engulfed, and which he now faithfully handed to the engineer.

"Ayrton! Ayrton!" said Cyrus Harding, deeply touched. Then, addressing Robert Grant, "Sir," he added, "you left behind you a criminal; you find in his place a man who has become honest by penitence, and whose hand I am proud to clasp in mine."

Robert Grant was now made acquainted with the strange history of Captain Nemo and the colonists of Lincoln Island. Then, observations being taken of what remained of this shoal, which must henceforward figure on the charts of the Pacific, the order was given to make all sail.

A few weeks afterwards the colonists landed in America, and found their country once more at peace after the terrible conflict in which right and justice had triumphed.

Of the treasures contained in the coffer left by Captain Nemo to the colonists of Lincoln Island, the larger portion was employed in the purchase of a vast territory in the State of Iowa. One pearl alone, the finest, was reserved from the treasure and sent to Lady Glenarvan in the name of the castaways restored to their country by the Duncan.

There, upon this domain, the colonists invited to labour, that is to say, to wealth and happiness, all those to whom they had hoped to offer the hospitality of Lincoln Island. There was founded a vast colony to which they gave the name of that island sunk beneath the waters of the Pacific. A river was there called the Mercy, a mountain took the name of Mount Franklin, a small lake was named Lake Grant, and the forests became the forests of the Far West. It might have been an island on terra firma.

There, under the intelligent hands of the engineer and his companions, everything prospered. Not one of the
former colonists of Lincoln Island was absent, for they had sworn to live always together. Neb was with his master; Ayton was there ready to sacrifice himself for all; Pencroft was more a farmer than he had even been a sailor; Herbert, who completed his studies under the superintendence of Cyrus Harding; and Gideon Spilett, who founded the New Lincoln Herald, the best-informed journal in the world.

There Cyrus Harding and his companions received at intervals visits from Lord and Lady Glenarvan, Captain John Mangles and his wife, the sister of Robert Grant, Robert Grant himself, Major McNab, and all those who had taken part in the history both of Captain Grant and Captain Nemo.

There, to conclude, all were happy, united in the present as they had been in the past; but never could they forget that island upon which they had arrived poor and friendless, that island which, during four years, had supplied all their wants, and of which there remained but a fragment of granite washed by the waves of the Pacific, the tomb of him who had borne the name of Captain Nemo.

FINIS.

THE SURVIVORS OF THE CHANCELLOR.
DIARY OF J.R.KAZALLON, PASSENGER.
By Jules Verne

CHAPTER I.

CHARLESTON, SEPTEMBER 27th, 1869.--It is high tide, and three o'clock in the afternoon when we leave the Battery-quay; the ebb carries us off shore, and as Captain Huntly has hoisted both main and top sails, the northerly breeze drives the "Chancellor" briskly across the bay. Fort Sumter ere long is doubled, the sweeping batteries of the mainland on our left are soon passed, and by four o'clock the rapid current of the ebbing tide has carried us through the harbour-mouth.

But as yet we have not reached the open sea; we have still to thread our way through the narrow channels which the surge has hollowed out amongst the sand-banks. The captain takes a south-west course, rounding the lighthouse at the corner of the fort; the sails are closely trimmed; the last sandy point is safely coasted, and at length, at seven o'clock in the evening; we are out free upon the wide Atlantic.

The "Chancellor" is a fine square-rigged three-master, of 900 tons burden, and belongs to the wealthy Liverpool firm of Laird Brothers. She is two years old, is sheathed and secured with copper, her decks being of teak, and the base of all her masts, except the mizzen, with all their fittings, being of iron. She is registered first class A I, and is now on her third voyage between Charleston and Liverpool. As she wended her way through the channels of Charleston harbour, it was the British flag that was lowered from her mast-head; but without colours at all, no sailor could have hesitated for a moment in telling her nationality,—for English she was, and nothing but English from her water-line upwards to the truck of her masts.

I must now relate how it happens that I have taken my passage on board the "Chancellor" on her return voyage to England. At present there is no direct steamship service between South Carolina and Great Britain, and all who wish to cross must go either northwards to New York or southwards to New Orleans. It is quite true that if I had chosen to start from New York I might have found plenty of vessels belonging to English, French, or Hamburg lines, any of which would have conveyed me by a rapid voyage to my destination; and it is equally true that if I had selected New Orleans for my embarkation I could readily have reached Europe by one of the vessels of the National Steam Navigation Company, which join the French Transatlantic line of Colon and Aspinwall. But it was fated to be otherwise.

One day, as I was loitering about the Charleston quays, my eye lighted upon this vessel. There was something about the "Chancellor" that pleased me, and a kind of involuntary impulse took me on board, where I found the internal arrangements perfectly comfortable. Yielding to the idea that a voyage in a sailing vessel had certain charms beyond the transit in a steamer, and reckoning that with wind and wave in my favour there would be little material difference in time; considering, moreover, that in these low latitudes the weather in early autumn is fine and unbroken, I came to my decision, and proceeded forthwith to secure my passage by this route to Europe.

Have I done right or wrong? Whether I shall have reason to regret my determination is a problem to be solved in the future. However, I will begin to record the incidents of our daily experience, dubious as I feel whether the lines of my chronicle will ever find a reader.

CHAPTER II.
SEPTEMBER 28th.--John Silas Huntly, the captain of the "Chancellor," has the reputation of being an experienced navigator of the Atlantic. He is a Scotchman, a native of Dundee, and is about fifty years of age. He is of middle height and slight build, and has a small head, which he has a habit of holding a little over his left shoulder. I do not pretend to be much of a physiognomist, but I am inclined to believe that my few hours' acquaintance with our captain has given me considerable insight into his character. That he is a good seaman and thoroughly understands his duties I could not for a moment venture to deny; but that he is a man of resolute temperament, or that he possesses the amount of courage that would render him, physically or morally, capable of coping with any great emergency, I confess I cannot believe. I observe a certain heaviness and dejection about his whole carriage. His wavering glances, the listless motions of his hands, and his slow, unsteady gait, all seem to me to indicate a weak and sluggish disposition. He does not appear as though he could be energetic enough ever to be stubborn; he never frowns, sets his teeth, or clenches his fist. There is something enigmatical about him; however, I shall study him closely and do what I can to understand the man who, as commander of a vessel, should be to those around him "second only to God."

Unless I am greatly mistaken there is another man on board who, if circumstances should require it, would take the more prominent position—I mean the mate. I have hitherto, however, had such little opportunity of observing his character, that I must defer saying more about him at present.

Besides the captain and this mate, whose name is Robert Curtis, our crew consists of Walter, the lieutenant, the boatswain, and fourteen sailors, all English or Scotch, making eighteen altogether, a number quite sufficient for working a vessel of 900 tons burden. Up to this time my sole experience of their capabilities is, that under the command of the mate, they brought us skillfully enough through the narrow channels of Charleston; and I have no reason to doubt but that they are well up to their work.

My list of the ship's officials is incomplete unless I mention Hobart, the steward, and Jynxstrop, the negro cook.

In addition to these, the "Chancellor" carries eight passengers, including myself. Hitherto, the bustle of embarkation, the arrangement of cabins, and all the variety of preparations inseparable from starting on a voyage for at least twenty or five-and-twenty days have precluded the formation of any acquaintanceships; but the monotony of the voyage, the close proximity into which we must be thrown, and the natural curiosity to know something of each other's affairs, will doubtless lead us in due time to an interchange of ideas. Two days have elapsed and I have not even seen all the passengers. Probably sea-sickness has prevented some of them from making their appearance at the common table. One thing, however, I do know; namely, that there are two ladies occupying the stern-cabins, the windows of which are in the aft-board of the vessel.

I have seen the ship's list and subjoin a list of the passengers. They are as follow:--Mr. and Mrs. Kear, Americans, of Buffalo. Miss Herbey, a young English lady, companion to Mrs. Kear. M. Letourneur and his son Andre, Frenchmen, of Havre. William Falsten, a Manchester engineer. John Ruby, a Cardiff merchant; and myself, J. R. Kazallon, of London.

CHAPTER III.

SEPTEMBER 29th.—Captain Huntly's bill of lading, that is to say, the document that describes the "Chancellor's" cargo and the conditions of transport, is couched in the following terms:--

"BRONSFIELD AND CO., AGENTS, CHARLESTON.

"I, John Silas Huntly, of Dundee, Scotland, commander of the ship 'Chancellor,' of about 900 tons burden, now at Charleston, do purpose, by the blessing of God, at the earliest convenient season, and by the direct route, to sail for the port of Liverpool, where I shall obtain my discharge. I do hereby acknowledge that I have received from you, Messrs. Bronsfeld and Co., Commission Agents, Charleston, and have placed the same under the gun-deck of the aforesaid ship, seventeen hundred bales of cotton, of the estimated value of 26,000l., all in good condition, marked and numbered as in the margin; which goods I do undertake to transport to Liverpool, and there to deliver, free from injury (save only such injury as shall have been caused by the chances of the sea), to Messrs. Laird Brothers, or to their order, or to their representative, who shall on due delivery of the said freight pay me the sum of 2000l. inclusive, according to the charter-party and damages in addition, according to the usages and customs of the sea.

"And for the fulfillment of the above covenant, I have pledged and do pledge my person, my property, and my interest in the vessel aforesaid, with all its appurtenances. In witness whereof, I have signed three agreements, all of the same purport; on the condition that when the terms of one are accomplished, the other two shall be absolutely null and void.

"Given at Charleston, September 13th, 1869,

"J. S. HUNTLY."

From the foregoing document it will be understood that the "Chancellor" is conveying 1700 bales of cotton to
Liverpool; that the shippers are Bronsfield, of Charleston, and the consignees are Laird Brothers, of Liverpool. The ship was constructed with the especial design of carrying cotton, and the entire hold, with the exception of a very limited space reserved for passengers' luggage, is closely packed with the bales. The lading was performed with the utmost care, each bale being pressed into its proper place by the aid of screw-jacks, so that the whole freight forms one solid and compact mass; not an inch of space is wasted, and the vessel is thus made capable of carrying her full complement of cargo.

CHAPTER IV.
SEPTEMBER 30th to OCTOBER 6th.--The "Chancellor" is a rapid sailer, and more than a match for many a vessel of the same dimensions. She scuds along merrily in the freshening breeze, leaving in her wake, far as the eye can reach, a long white line of foam as well defined as a delicate strip of lace stretched upon an azure ground.

The Atlantic is not visited by many gales, and I have every reason to believe that the rolling and pitching of the vessel no longer incommode any of the passengers, who are all more or less accustomed to the sea. A vacant seat at our table is now very rare; we are beginning to know something about each other, and our daily life, in consequence, is becoming somewhat less monotonous.

M. Letourneur, our French fellow-passenger, often has a chat with me. He is a fine tall man, about fifty years of age, with white hair and a grizzly beard. To say the truth, he looks older than he really is: his drooping head, his dejected manner, and his eye, ever and again suffused with tears, indicate that he is haunted by some deep and abiding sorrow. He never laughs; he rarely even smiles, and then only on his son: his countenance ordinariily bearing a look of bitterness tempered by affection, while his general expression is one of caressing tenderness. It excites an involuntary commiseration to learn that M. Letourneur is consuming himself by exaggerated reproaches on account of the infirmity of an afflicted son.

Andre Letourneur is about twenty years of age, with a gentle, interesting countenance, but, to the irrepressible grief of his father, is a hopeless cripple. His left leg is miserably deformed, and he is quite unable to walk without the assistance of a stick. It is obvious that the father's life is bound up with that of his son; his devotion is unceasing; every thought, every glance is for Andre; he seems to anticipate his most trifling wish, watches his slightest movement, and his arm is ever ready to support or otherwise assist the child whose sufferings he more than shares.

M. Letourneur seems to have taken a peculiar fancy to myself, and constantly talks about Andre. This morning, in the course of conversation, I said,--

"You have a good son, M. Letourneur. I have just been talking to him. He is a most intelligent young man."

"Yes, Mr. Kazallon," replied M. Letourneur, brightening up into a smile, "his afflicted frame contains a noble mind. He is like his mother, who died at his birth."

"He is full of reverence and love for you, sir," I remarked.

"Dear boy!" muttered the father half to himself. "Ah, Mr. Kazallon," he continued, "you do not know what it is to a father to have a son a cripple, beyond hope of cure."

"M. Letourneur," I answered, "you take more than your share of the affliction which has fallen upon you and your son. That M. Andre is entitled to the very greatest commiseration no one can deny; but you should remember, that after all a physical infirmity is not so hard to bear as mental grief. Now, I have watched your son pretty closely, and unless I am much mistaken there is nothing, that troubles him so much as the sight of your own sorrow."

"But I never let him see it," he broke in hastily. "My sole thought is how to divert him. I have discovered, that in spite of his physical weakness, he delights in travelling; so for the last few years we have been constantly on the move. We first went all over Europe, and are now returning from visiting the principal places in the United States. I never allowed my son to go to college, but instructed him entirely myself, and these travels, I hope, will serve to complete his education. He is very intelligent, and has a lively imagination, and I am sometimes tempted to hope that in contemplating the wonders of nature he forgets his own infirmity."

"Yes, sir, of course he does," I assented.

"But," continued M. Letourneur, taking my hand, "although, perhaps, HE may forget, I can never forget. Ah, sir, do you suppose that Andre can ever forgive his parents for bringing him into the world a cripple?"

The remorse of the unhappy father was very distressing, and I was about to say a few kind words of sympathy when Andre himself made his appearance. M. Letourneur hastened toward him and assisted him up the few steep steps that led to the poop.

As soon as Andre was comfortably seated on one of the benches, and his father had taken his place by his side, I joined them, and we fell into conversation upon ordinary topics, discussing the various points of the "Chancellor," the probable length of the passage, and the different details of our life on board. I find that M. Letourneur's estimate of Captain Huntly's character very much coincided with my own, and that, like me, he is impressed with the man's
undecided manner and sluggish appearance. Like me, too, he has formed a very favourable opinion of Robert Curtis, the mate, a man of about thirty years of age, of great muscular power, with a frame and a will that seem ever ready for action.

Whilst we were still talking of him, Curtis himself came on deck, and as I watched his movements I could not help being struck with his physical development; his erect and easy carriage, his fearless glance and slightly contracted brow all betokened a man of energy, thoroughly endowed with the calmness and courage that are indispensable to the true sailor. He seems a kind-hearted fellow, too, and is always ready to assist and amuse young Letourneur, who evidently enjoys his company. After he had scanned the weather and examined the trim of the sails, he joined our party and proceeded to give us some information about those of our fellow-passengers with whom at present we have made but slight acquaintance.

Mr. Kear, the American, who is accompanied by his wife, has made a large fortune in the petroleum springs in the United States. He is a man of about fifty, a most uninteresting companion, being overwhelmed with a sense of his own wealth and importance, and consequently supremely indifferent to all around him. His hands are always in his pockets, and the chink of money seems to follow him wherever he goes. Vain and conceited, a fool as well as an egotist, he struts about like a peacock showing its plumage, and to borrow the words of the physiognomist Gratiolet, "il se flaire, il se savoure, il se goute." Why he should have taken his passage on board a mere merchant vessel instead of enjoying the luxuries of a Transatlantic steamer, I am altogether at a loss to explain.

The wife is an insignificant, insipid woman, of about forty years of age. She never reads, never talks, and I believe I am not wrong in saying, never thinks. She seems to look without seeing, and listen without hearing, and her sole occupation consists in giving her orders to her companion, Miss Herbey, a young English girl of about twenty.

Miss Herbey is extremely pretty. Her complexion is fair and her eyes deep blue, whilst her pleasing countenance is altogether free from that insignificance of feature which is not unfrequently alleged to be characteristic of English beauty. Her mouth would be charming if she ever smiled, but exposed as she is to the ridiculous whims and fancies of a capricious mistress, her lips rarely relax from their ordinary grave expression. Yet humiliating as her position must be, she never utters a word of open complaint, but quietly and gracefully performs her duties accepting without a murmur the paltry salary which the bumptious petroleum-merchant condescends to allow her.

The Manchester engineer, William Falsten, looks like a thorough Englishman. He has the management of some extensive hydraulic works in South Carolina, and is now on his way to Europe to obtain some improved apparatus, and more especially to visit the mines worked by centrifugal force, belonging to the firm of Messrs. Cail. He is forty-five years of age, with all his interests so entirely absorbed by his machinery that he seems to have neither a thought nor a care beyond his mechanical calculations. Once let him engage you in conversation, and there is no chance of escape; you have no help for it but to listen as patiently as you can until he has completed the explanation of his designs.

The last of our fellow-passengers, Mr. Ruby, is the type of a vulgar tradesman. Without any originality or magnanimity in his composition, he has spent twenty years of his life in mere buying and selling, and as he has generally contrived to do business at a profit, he has realized a considerable fortune. What he is going to do with the money, he does not seem able to say: his ideas do not go beyond retail trade, his mind having been so long closed to all other impressions that it appears incapable of thought or reflection on any subject besides. Pascal says, "L'homme est visiblement fait pour penser. C'est toute sa dignité et tout-son merite;" but to Mr. Ruby the phrase seems altogether inapplicable.

CHAPTER V.

OCTOBER 7th.--This is the tenth day since we left Charleston, and I should think our progress has been very rapid. Robert Curtis, the mate, with whom I continue to have many a friendly chat, informed me that we could not be far off Cape Hatteras in the Bermudas; the ship's bearings, he said were lat. 32deg. 20min. N. and long. 64deg. 50min. W., so that he had every reason to believe that we should sight St. George's Island before night.

"The Bermudas!" I exclaimed. "But how is it we are off the Bermudas? I should have thought that a vessel sailing from Charleston to Liverpool, would have kept northwards, and have followed the track of the Gulf Stream."

"Yes, indeed; sir," replied Curtis, "that is the usual course; but you see that this time the captain hasn't chosen to take it."

"But why not?" I persisted.

"That's not for me to say, sir; he ordered us eastwards, and eastwards we go."

"Haven't you called his attention to it?" I inquired.

Curtis acknowledged that he had already pointed out what an unusual route they were taking, but that the captain
had said that he was quite aware what he was about. The mate made no further remark; but the knit of his brow, as he passed his hand mechanically across his forehead, made me fancy that he was inclined to speak out more strongly.

"All very well, Curtis," I said, "but I don't know what to think about trying new routes. Here we are at the 7th of October, and if we are to reach Europe before the bad weather sets in, I should suppose there is not a day to be lost."

"Right, sir, quite right; there is not a day to be lost."

Struck by his manner, I ventured to add, "Do you mind, Mr. Curtis giving me your honest opinion of Captain Huntly?"

He hesitated a moment, and then replied shortly, "He is my captain, sir."

This evasive answer of course put an end to any further interrogation on my part, but it only set me thinking the more.

Curtis was not mistaken. At about three o'clock the lookout man sung out that there was land to windward, and descried what seemed as if it might be a line of smoke in the north-east horizon. At six, I went on deck with M. Letourneur and his son, and we could then distinctly make out the low group of the Bermudas, encircled by their formidable chain of breakers.

"There," said Andre Letourneur to me, as we stood gazing at the distant land, "there lies the enchanted Archipelago, sung by your poet Moore. The exile Waller, too, as long ago as 1643, wrote an enthusiastic panegyric on the islands, and I have been told that at one time English ladies would wear no other bonnets than such as were made of the leaves of the Bermuda palm."

"Yes," I replied, "the Bermudas were all the rage in the seventeenth century, although latterly they have fallen into comparative oblivion."

"But let me tell you, M. Andre," interposed Curtis, who had as usual joined our party, "that although poets may rave, and be as enthusiastic as they like about these islands, sailors will tell a different tale. The hidden reefs that lie in a semicircle about two or three leagues from shore make the attempt to land a very dangerous piece of business. And another thing, I know. Let the natives boast as they will about their splendid climate, they, are visited by the most frightful hurricanes. They get the fag-end of the storms that rage over the Antilles; and the fag-end of a storm is like the tail of a whale; it's just the strongest bit of it. I don't think you'll find a sailor listening much to your poets,-your Moores, and your Wallers."

"No, doubt you are right, Mr. Curtis," said Andre, smiling, "but poets are like proverbs; you can always find one to contradict another. Although Waller and Moore have chosen to sing the praises of the Bermudas, it has been supposed that Shakspeare was depicting them in the terrible scenes that are found in 'The Tempest.'"

The whole vicinity of these islands is beyond a question extremely perilous to mariners. Situated between the Antilles and Nova Scotia, the Bermudas have ever since their discovery belonged to the English, who have mainly used them for a military station. But this little archipelago, comprising some hundred and fifty different isles and islets, is destined to increase, and that, perhaps, on a larger scale than has yet been anticipated. Beneath the waves there are madrepores, in infinity of number, silently but ceaselessly pursuing their labours; and with time, that fundamental element in nature's workings, who shall tell whether these may not gradually build up island after island, which shall unite and form another continent?

I may mention that there was not another of our fellow-passengers who took the trouble to come on deck and give a glance at this strange cluster of islands. Miss Herbey, it is true, was making an attempt to join us, but she had barely reached the poop, when Mrs. Kear's languid voice was heard recalling her for some trifling service to her side.

CHAPTER VI.

OCTOBER 8th to OCTOBER 13th.--The wind is blowing hard from the north-east; and the "Chancellor" under low-reefed top-sail and fore-sail, and labouring against a heavy sea, has been obliged to be brought ahull. The joists and girders all creak again until one's teeth are set on edge. I am the only passenger not remaining below; but I prefer being on deck notwithstanding the driving rain, fine as dust, which penetrates to my very skin. We have been driven along in this fashion for the best part of two days; the "stiffish breeze" has gradually freshened into "a gale;" the top-gallants have been lowered, and, as I write, the wind is blowing with a velocity of fifty or sixty miles an hour. Although the "Chancellor" has many good points, her drift is considerable, and we have been carried far to the south we can only guess at our precise position, as the cloudy atmosphere entirely precludes us from taking the sun's altitude.

All along throughout this period, my fellow-passengers are totally ignorant of the extraordinary course that we are taking England lies to the NORTH-EAST, yet we are sailing directly SOUTH-EAST, and Robert Curtis owns
that he is quite bewildered; he cannot comprehend why the captain, ever since this north-easterly gale has been blowing, should persist in allowing the ship to drive to the south, instead of tacking to the north-west until she gets into better quarters.

I was alone with Curtis to-day upon the poop, and could not help saying to him "Curtis, is your captain mad?"

"Perhaps, sir, I might be allowed to ask what YOU think upon that matter," was his cautious reply.

"Well to say the truth," I answered, "I can hardly tell; but I confess there is every now and then a wandering in his eye, and an odd look on his face that I do not like. Have you ever sailed with him before?"

"No; this is our first voyage together. Again last night I spoke to him about the route we were taking, but he only said he knew all about it, and that it was all right."

"What do Lieutenant Walter and your boatswain think of it all?" I inquired.

"Think; why they think just the same as I do," replied the mate; "but if the captain chooses to take the ship to China we should obey his orders."

"But surely," I exclaimed, "there must be some limit to your obedience! Suppose the man is actually mad, what then?"

"If he should be mad enough, Mr. Kazallon, to bring the vessel into any real danger, I shall know what to do."

With this assurance I am forced to be content. Matters, however, have taken a different turn to what I bargained for when I took my passage on board the "Chancellor." The weather has become worse and worse. As I have already said, the ship under her large low-reefed top-sail and fore stay-sail has been brought ahull, that is to say, she copes directly with the wind, by presenting her broad bows to the sea; and so we go on still drift, drift, continually to the south.

How southerly our course has been is very apparent; for upon the night of the 11th we fairly entered upon that portion of the Atlantic which is known as the Sargassos Sea. An extensive tract of water is this, enclosed by the warm current of the Gulf Stream, and thickly covered with the wrack, called by the Spaniards "sargasso," the abundance of which so seriously impeded the progress of Columbus's vessels on his first voyage across the ocean.

Each morning at daybreak the Atlantic has presented an aspect so remarkable, that at my solicitation, M. Letourneur and his son have ventured upon deck to witness the unusual spectacle. The squally gusts make the metal shrouds vibrate like harp-strings; and unless we were on our guard to keep our clothes wrapped tightly to us, they would have been torn off our backs in shreds. The scene presented to our eyes is one of strangest interest. The sea, carpeted thickly with masses of prolific fucus, is a vast unbroken plain of vegetation, through which the vessel makes her way as a plough. Long strips of seaweed caught up by the wind become entangled in the rigging, and hang between the masts in festoons of verdure; whilst others, varying from two to three hundred feet in length, twine themselves up to the very mast-heads, from whence they float like streaming pendants. For many hours now, the "Chancellor" has been contending with this formidable accumulation of algae; her masts are circled with hydrophytes; her rigging is wreathed everywhere with creepers, fantastic as the untrammelled tendrils of a vine, and as she works her arduous course, there are times when I can only compare her to an animated grove of verdure making its mysterious way over some illimitable prairie.

CHAPTER VII.

OCTOBER 14th.--At last we are free from the sea of vegetation, the boisterous gale has moderated into a steady breeze, the sun is shining brightly, the weather is warm and genial, and thus, two reefs in her top-sails, briskly and merrily sails the "Chancellor."

Under conditions so favourable, we have been able to take the ship's bearings: our latitude, we find, is 21deg. 33min. N., our longitude 50deg. 17min. W.

Incomprehensible altogether is the conduct of Captain Huntly. Here we are, already more than ten degrees south of the point from which, we started, and yet still we are persistently following a south-easterly course! I cannot bring myself to the conclusion that the man is mad. I have had various conversations with him: he has always spoken rationally and sensibly. He shows no tokens of insanity. Perhaps his case is one of those in which insanity is partial, and where the mania is of a character which extends only to the matters connected with his profession. Yet it is unaccountable.

I can get nothing out of Curtis; he listens coldly whenever I allude to the subject, and only repeats what he has said before, that nothing short of an overt act of madness on the part of the captain could induce him to supersede the captain's authority and that the imminent peril of the ship could alone justify him in taking so decided a measure.

Last evening I went to my cabin about eight o'clock, and after an hour's reading by the light of my cabin-lamp, I retired to my berth and was soon asleep. Some hours later I was aroused by an unaccustomed noise on deck. There were heavy footsteps hurrying to and fro, and the voices of the men were loud and eager, as if the crew were
agitated by some strange disturbance. My first impression was, that some tacking had been ordered which rendered it needful to fathom the yards; but the vessel continuing to lie to starboard convinced me that this was not the origin of the commotion, I was curious to know the truth, and made all haste I could to go on deck; but before I was ready, the noise had ceased. I heard Captain Huntly return to his cabin, and accordingly I retired again to my own berth. Whatever may have been the meaning of the manoeuvre, I cannot tell; it did not seem to have resulted in any improvement in the ship's pace; still it must be owned there was not much wind to speed us along.

At six o'clock this morning I mounted the poop and made as keen a scrutiny as I could of everything on board. Everything appeared as usual. The "Chancellor" was running on the larboard tack, and carried low-sails, top-sails, and gallant-sails. Well braced she was; and under a fresh, but not uneasy breeze, was making no less than eleven knots an hour.

Shortly afterwards M. Letourneur and Andre came an deck. The young man enjoyed the early morning air, laden with its briny fragrance, and I assisted him to mount the poop. In answer to my inquiry as to whether they had been disturbed by any bustle in the night, Andre replied that he did not wake at all, and had heard nothing.

"I am glad, my boy," said his father, "that you have slept so soundly. I heard the noise of which Mr. Kazallon speaks. It must have been about three o'clock this morning, and it seemed to me as though they were shouting. I thought I heard them say, 'Here, quick, look to the hatches!' but as nobody was called up, I presumed that nothing serious was the matter."

As he spoke I cast my eye at the panel-slides, which fore and aft of the main-mast open into the hold. They seemed to be all close as usual, but I now observed for the first time that they were covered with heavy tarpauling. Wondering; in my own mind what could be the reason for these extra precautions I did not say anything to M. Letourneur, but determined to wait until the mate should come on watch, when he would doubtless give me, I thought, an explanation of the mystery.

The sun rose gloriously, with every promise of a fine dry day. The waning moon was yet above the western horizon, for as it still wants three days to her last quarter she does not set until 10.57 am. On consulting my almanac, I find that there will be a new moon on the 24th, and that on that day, little as it may affect us here in mid ocean, the phenomenon of the high syzygian tides will take place on the shores of every continent and island.

At the breakfast hour M. Letourneur and Andre went below for a cup of tea, and I remained on the poop alone. As I expected, Curtis appeared, that he might relieve Lieutenant Walter of the watch. I advanced to meet him, but before he even wished me good morning, I saw him cast a quick and searching glance upon the deck, and then, with a slightly contracted brow, proceed to examine the state of the weather and the trim of the sails.

"Where is Captain Huntly?" he said to Walter.
"I have seen nothing of him," answered the lieutenant "is there anything fresh up?"
"Nothing, whatever," was the curt reply.

They then conversed for a few moments in an undertone, and I could see that Walter by his gesture gave a negative answer to some question which the mate had asked him. "Send me the boatswain, Walter," said Curtis aloud as the lieutenant moved away.

The boatswain immediately appeared, and another conversation was carried on in whispers. The man repeatedly shook his head as he replied to Curtis's inquiries, and then, in obedience to orders, called the men who were on watch, and made them plentifully water the tarpauling that covered the great hatchway.

Curious to fathom the mystery I went up to Curtis and began to talk to him upon ordinary topics, hoping that he would himself introduce the subject that was uppermost in my mind; finding, however, that he did not allude to it; I asked him point blank.

"What was the matter in the night, Curtis?"
"He looked at me steadily, but made no reply.
"What was it?" I repeated. "M. Letourneur and myself were both of us disturbed by a very unusual commotion overhead."
"Oh, a mere nothing," he said at length; "the man at the helm had made a false move, and we had to pipe hands to brace the ship a bit; but it was soon all put to rights. It was nothing, nothing at all."

I said no more; but I cannot resist the impression that Robert Curtis has not acted with me in his usual straightforward manner.

CHAPTER VIII.

OCTOBER 15th to OCTOBER 18th.--The wind is still in the north-east. There is no change in the "Chancellor's" course, and to an unprejudiced eye all would appear to be going on as usual. But I have an uneasy consciousness that something is not quite right. Why should the hatchways be so hermetically closed as though a
mutinous crew was imprisoned between decks? I cannot help thinking too that there is something in the sailors so constantly standing in groups and breaking off their talk so suddenly whenever we approach; and several times I have caught the word "hatches" which arrested M. Letourneur's attention on the night of the disturbance.

On the 15th, while I was walking on the forecastle, I overheard one of the sailors, a man named Owen say to his mates,—

"Now I just give you all warning that I am not going to wait until the last minute. Every one for himself, say I."

"Why, what do you mean to do?" asked Jynxstrop, the cook.

"Pshaw!" said Owen, "do you suppose that longboats were only made for porpoises?"

Something at that moment occurred to interrupt the conversation, and I heard no more. It occurred to me whether there was not some conspiracy among the crew, of which probably Curtis had already detected the symptoms. I am quite aware that some sailors are most rebelliously disposed, and require to be ruled with a rod of iron.

Yesterday and to-day I have observed Curtis remonstrating somewhat vehemently with Captain Huntly, but there is no obvious result arising from their interviews; the Captain apparently being bent upon some purpose, of which it is only too manifest that the mate decidedly disapproves.

Captain Huntly is undoubtedly labouring under strong nervous excitement; and M. Letourneur has more than once remarked how silent he has become at meal-times; for although Curtis continually endeavours to start some subject of general interest, yet neither Mr. Falsten, Mr. Kear, nor Mr. Ruby are the men to take it up, and consequently the conversation flags hopelessly, and soon drops. The passengers too are now, with good cause, beginning to murmur at the length of the voyage, and Mr. Kear, who considers that the very elements ought to yield to his convenience, lets the captain know by his consequential and haughty manner that he holds him responsible for the delay.

During the course of yesterday the mate gave repeated orders for the deck to be watered again and again, and although as a general rule this is a business which is done, once for all, in the early morning, the crew did not utter a word of complaint at the additional work thus imposed upon them. The tarpaulins on the hatches have thus been kept continually wet, so that their close and heavy texture is rendered quite impervious to the air, The "Chancellor's" pumps afford a copious supply of water, so that I should not suppose that even the daintiest and most luxurious craft belonging to an aristocratic yacht-club was ever subject to a more thorough scouring. I tried to reconcile myself to the belief that it was the high temperature of the tropical regions upon which we are entering, that rendered such extra sousings a necessity, and recalled to my recollection how, during the night of the 13th, I had found the atmosphere below deck so stifling that in spite of the heavy swell I was obliged to open the porthole of my cabin, on the starboard side, to get a breath of air.

This morning at daybreak I went on deck. The sun had scarcely risen, and the air was fresh and cool, in strange contrast to the heat which below the poop had been quite oppressive. The sailors as usual were washing the deck, A great sheet of water, supplied continuously by the pumps was rolling in tiny wavelets, and escaping now to starboard, now to larboard through the scupper-holes. After watching the men for a while as they ran about bare-footed, I could not resist the desire to join them, so taking off my shoes and stockings I proceeded to dabble in the flowing water.

Great was my amazement to find the deck perfectly hot to my feet! Curtis heard my exclamation of surprise, and before I could put my thoughts into words, said,—

"Yes! there is fire on board!"

CHAPTER IX.

OCTOBER 19th.--Everything, then, is clear. The uneasiness of the crew, their frequent conferences, Owen's mysterious words, the constant scourings of the deck and the oppressive heat of the cabins which had been noticed even by my fellow-passengers, all are explained.

After his grave communication, Curtis remained silent. I shivered with a thrill of horror; a calamity the most terrible that can befall a voyager stared me in the face, and it was some seconds before I could recover sufficient composure to inquire when the fire was first discovered.

"Six days ago," replied the mate.

"Six days ago!" I exclaimed; "why, then, it was that night."

"Yes," he said, interrupting me; "it was the night you heard the disturbance upon deck. The men on watch noticed a slight smoke issuing from the large hatchway and immediately called Captain Huntly and myself. We found beyond all doubt, that the cargo was on fire, and what was worse, that there was no possibility of getting at the seat of the combustion. What could we do? Why; we took the only precaution that was practicable under the circumstances, and resolved most carefully to exclude every breath of air from penetrating into the hold, For some
time I hoped that we had been successful. I thought that the fire was stifled; but during the last three days there is
every reason to make us know that it has been gaining strength. Do what we will, the deck gets hotter and hotter, and
unless it were kept constantly wet, it would be unbearable to the feet. But I am glad, Mr. Kazallon," he added; "that
you have made the discovery. It is better that you should know it."

I listened in silence, I was now fully aroused to the gravity of the situation and thoroughly comprehended how
we were in the very face of a calamity which it seemed that no human power could avert.

"Do you know what has caused the fire?" I presently inquired.

"It probably arose," he answered, "from the spontaneous combustion of the cotton. The case is rare, but it is far
from unknown. Unless the cotton is perfectly dry when it is shipped, its confinement in a damp or ill-ventilated hold
will sometimes cause it to ignite; and I have no doubt it is this that has brought about our misfortune."

"But after all," I said, "the cause matters very little. Is there no remedy? Is there nothing to be done?"

"Nothing; Mr. Kazallon," he said. "As I told you before, we have adopted the only possible measure within our
power to check the fire. At one time I thought of knocking a hole in the ship's timbers just on her waterline, and
letting in just as much water as the pumps could afterwards get rid of again; but we found the combustion was right
in the middle of the cargo and that we should be obliged to flood the entire hold before we could get at the right
place. That scheme consequently was no good. During the night, I had the deck bored in various places and water
poured down through the holes; but that again seemed all of no use. There is only one thing that can be done; we
must persevere in excluding most carefully every breath of outer air, so that perhaps the conflagration deprived of
oxygen may smoulder itself out. That is our only hope."

"But, you say the fire is increasing?"

"Yes; and that shows that in spite of all our care there is some aperture which we have not been able to discover,
by which, somehow or other, air gets into the hold."

"Have you ever heard of a vessel surviving such circumstances?" I asked.

"Yes, Mr. Kazallon," said Curtis; "it is not at all an unusual thing for ships laden with cotton to arrive at
Liverpool or Havre with a portion of their cargo consumed; and I have myself known more than one captain run into
port with his deck scorching his very feet, and who, to save his vessel and the remainder of his freight has been
compelled to unload with the utmost expedition. But, in such cases, of course the fire has been more or less under
control throughout the voyage; with us, it is increasing day by day, and I tell you I am convinced there is an aperture
somewhere which has escaped our notice."

"But would it not be advisable for us to retrace our course, and make for the nearest land?"

"Perhaps it would," he answered. "Walter and I, and the boatswain, are going to talk the matter over seriously
with the captain to-day. But, between ourselves, I have taken the responsibility upon myself; I have already changed
the tack to the south-west; we are now straight before the wind, and consequently we are sailing towards the coast."

"I need hardly ask," I added; "whether any of the other passengers are at all aware of the imminent danger in
which we are placed."

"None of them," he said; "not in the least; and I hope you will not enlighten them. We don't want terrified
women and cowardly men to add to our embarrassment; the crew are under orders to keep a strict silence on the
subject. Silence is indispensable."

I promised to keep the matter a profound secret, as I fully entered into Curtis's views as to the absolute necessity
for concealment.

CHAPTER X.

OCTOBER 20th AND 21st.--The "Chancellor" is now crowded with all the canvas she can carry, and at times
her top-masts threaten to snap with the pressure. But Curtis is ever on the alert; he never leaves his post beside the
man at the helm, and without compromising the safety of the vessel, he contrives by tacking to the breeze, to urge
her on at her utmost speed.

All day long on the 20th, the passengers were assembled on the poop. Evidently they found the heat of the
 cabins painfully oppressive, and most of them lay stretched upon benches and quietly enjoyed the gentle rolling of
the vessel. The increasing heat of the deck did not reveal itself to their well-shod feet and the constant scouring of
the boards did not excite any suspicion in their torpid minds. M. Letourneur, it is true, did express his surprise that
the crew of an ordinary merchant vessel should be distinguished by such extraordinary cleanliness, but as I replied to
him in a very casual tone, he passed no further remark. I could not help regretting that I had given Curtis my pledge
of silence, and longed intensely to communicate the melancholy secret to the energetic Frenchman; for at times
when I reflect upon the eight-and-twenty victims who may probably, only too soon, be a prey to the relentless
flames, my heart seems ready to burst.
The important consultation between captain, mate, lieutenant, and boatswain has taken place. Curtis has confided the result to me. He says that Huntly, the captain, is completely demoralized; he has lost all power and energy; and practically leaves the command of the ship to him. It is now certain the fire is beyond control, and that sooner or later it will burst out in full violence. The temperature of the crew's quarters has already become almost unbearable. One solitary hope remained; it is that we may reach the shore before the final catastrophe occurs. The Lesser Antilles are the nearest land; and although they are some five or six hundred miles away, if the wind remains north-east there is yet a chance of reaching them in time.

Carrying royals and studding-sails, the "Chancellor" during the last four-and-twenty hours has held a steady course. M. Letourneur is the only one of all the passengers who has remarked the change of tack; Curtis however, has set all speculation on his part to rest by telling him that he wanted to get ahead of the wind, and that he was tacking to the west to catch a favourable current.

To-day, the 21st, all has gone on as usual; and as far as the observation of the passengers has reached, the ordinary routine has been undisturbed. Curtis indulges the hope even yet that by excluding the air, the fire may be stifled before it ignites the general cargo; he has hermetically closed every accessible aperture, and has even taken the precaution of plugging the orifices of the pumps, under the impression that their suction-tubes, running as they do to the bottom of the hold, may possibly be channels for conveying some molecules of air. Altogether, he considers it a good sign that the combustion has not betrayed itself by some external issue of smoke.

The day would have passed without any incident worth recording if I had not chanced to overhear a fragment of a conversation which demonstrated that our situation hitherto precarious enough, had now become most appalling.

As I was sitting on the poop, two of my fellow-passengers, Falsten, the engineer, and Ruby, the merchant whom I had observed to be often in company, were engaged in conversation almost close to me. What they said was evidently not intended for my hearing, but my attention was directed towards them by some very emphatic gestures of dissatisfaction on the part of Falsten, and I could not forbear listening to what followed.

"Preposterous! shameful!" exclaimed Falsten; "nothing could be more imprudent."
"Pooh! pooh!" replied Ruby; "it's all right; it is not the first time I have done it."
"But don't you know that any shock at any time might cause an explosion?"
"Oh, it's all properly secured," said Ruby, "tight enough; I have no fears on that score, Mr. Falsten."
"But why," asked Falsten, "did you not inform the captain?"
"Just because if I had informed him, he would not have taken the case on board."

The wind dropped for a few seconds; and for a brief interval I could not catch what passed; but I could see that Falsten continued to remonstrate, whilst Ruby answered by shrugging his shoulders. At length I heard Falsten say,--

"Well, at any rate the captain must be informed of this, and the package shall be thrown overboard. I don't want, to be blown up."

I started. To what could the engineer be alluding? Evidently he had not the remotest suspicion that the cargo was already on fire. In another moment the words "picrate of potash" brought me to my feet? and with an involuntary impulse I rushed up to Ruby, and seized him by the shoulder.

"Is there picrate of potash on board?" I almost shrieked.
"Yes," said Falsten, "a case containing thirty pounds."
"Where is it?" I cried.
"Down in the hold, with the cargo."

CHAPTER XI.

What my feelings were I cannot describe; but it was hardly in terror so much as with a kind of resignation that I made my way to Curtis on the forecastle, and made him aware that the alarming character of our situation was now complete, as there was enough explosive matter on board to blow up a mountain. Curtis received the information as coolly as it was delivered, and after I had made him acquainted with all the particulars said,--

"Not a word of this must be mentioned to any one else, Mr. Kazallon, where is Ruby now?"
"On the poop," I said.
"Will you then come with me, sir?"

Ruby and Falsten were sitting just as I had left them. Curtis walked straight up to Ruby, and asked him whether what he had been told was true.

"Yes, quite true," said Ruby, complacently, thinking that the worst that could befall him would be that he might be convicted of a little smuggling.

I observed that Curtis was obliged for a moment or two to clasp his hands tightly together behind his back to prevent himself from seizing the unfortunate passenger by the throat; but suppressing his indignation, he proceeded
quietly, though sternly, to interrogate him about the facts of the case. Ruby only confirmed what I had already told him. With characteristic Anglo-Saxon incautiousness he had brought on board with the rest of his baggage, a case containing no less than thirty pounds of picrate, and had allowed the explosive matter to be stowed in the hold with as little compunction as a Frenchman would feel in smuggling a single bottle of wine. He had not informed the captain of the dangerous nature of the contents of the package, because he was perfectly aware that he would have been refused permission to bring the package on board.

"Any way," he said, with a shrug of his shoulders, "you can't hang me for it; and if the package gives you so much concern, you are quite at liberty to throw it into the sea. My luggage is insured."

I was beside myself with fury, and not being endowed with Curtis's reticence and self-control, before he could interfere to stop me, I cried out,--

"You fool! don't you know that there is fire on board?"

In an instant I regretted my words. Most earnestly I wished them unuttered, But it was too late: their effect upon Ruby was electrical. He was paralyzed with terror his limbs stiffened convulsively; his eye was dilated; he gasped for breath, and was speechless. All of a sudden he threw up his arms and, as though he momentarily expected an explosion, he darted down from the poop, and paced frantically up and down the deck, gesticulating like a madman, and shouting,--

"Fire on board! Fire! Fire!"

On hearing the outcry, all the crew, supposing that the fire had now in reality broken out, rushed on deck; the rest of the passengers soon joined them, and the scene that ensued was one of the utmost confusion. Mrs. Kear fell down senseless on the deck, and her husband, occupied in looking after himself, left her to the tender mercies of Miss Herbey. Curtis endeavoured to silence Ruby's ravings, whilst I, in as few words as I could, made M. Letourneur aware of the extent to which the cargo was on fire. The father's first thought was for Andre but the young man preserved an admirable composure, and begged his father not to be alarmed, as the danger was not immediate. Meanwhile the sailors had loosened all the tacklings of the long-boat; and were preparing to launch it, when Curtis's voice was heard peremptorily bidding them to desist; he assured them that the fire had made no further progress; that Mr. Ruby had been unduly excited and not conscious of what he had said; and he pledged his word that when the right moment should arrive he would allow them all to leave the ship; but that moment, he said, had not yet come.

At the sound of a voice which they had learned to honour and respect, the crew paused in their operations, and the long-boat remained suspended in its place. Fortunately, even Ruby himself in the midst of his ravings, had not dropped a word about the picrate that had been deposited in the hold; for although the mate had a power over the sailors that Captain Huntly had never possessed, I feel certain that if the true state of the case had been known, nothing on earth would have prevented some of them, in their consternation, from effecting an escape. As it was, only Curtis, Falsten, and myself were cognizant of the terrible secret.

As soon as order was restored, the mate and, I joined Falsten on the poop, where he had remained throughout the panic, and where we found him with folded arms, deep in thought, as it might be, solving some hard mechanical problem. He promised, at my request, that he would reveal nothing of the new danger to which we were exposed through Ruby's imprudence. Curtis himself took the responsibility of informing Captain Huntly of our critical situation.

In order to insure complete secrecy, it was necessary to secure the person of the unhappy Ruby, who, quite beside himself, continued to rave up and down the deck with the incessant cry of "Fire! fire!" Accordingly Curtis gave orders to some of his men to seize him and gag him; and before he could make any resistance the miserable man was captured and safely lodged in confinement in his own cabin.

CHAPTER XII.

OCTOBER 22nd.--Curtis has told the captain everything; for he persists in ostensibly recognizing him as his superior officer, and refuses to conceal from him our true situation. Captain Huntly received the communication in perfect silence, and merely passing his hand across his forehead as though to, banish some distressing thought, re-entered his cabin without a word.

Curtis, Lieutenant Walter, Falsten, and myself have been discussing the chances of our safety, and I am surprised to find with how much composure we can all survey our anxious predicament.

"There is no doubt" said Curtis, "that we must abandon all hope of arresting the fire; the heat towards the bow has already become well-nigh unbearable, and the time must come when the flames will find a vent through the deck. If the sea is calm enough for us to make use of the boats, well and good; we shall of course get quit of the ship as quietly as we can; if on the other hand, the weather should be adverse, or the wind be boisterous, we must stick to our place, and contend with the flames to the very last; perhaps, after all, we shall fare better with the fire as a
declared enemy than as a hidden one."

Falsten and I agreed with what he said, but I pointed out to him that he had quite overlooked the fact of there being thirty pounds of combustible matter in the hold.

"No" he gravely replied, "I have not forgotten it, but it is a circumstance of which I do not trust myself to think I dare not run the risk of admitting air into the hold by going down to search for the powder, and yet I know not at what moment it may explode. No; it is a matter that I cannot take at all into my reckoning, it must remain in higher hands than mine."

We bowed our heads in a silence which was solemn. In the present state of the weather, immediate flight was, we knew, impossible.

After a considerable pause, Falsten, as calmly as though he were delivering some philosophic dogma, observed,-

"The explosion, if I may use the formula of science, is not necessary, but contingent."

"But tell me, Mr. Falsten," I asked, "is it possible for picrate of potash to ignite without concussion?"

"Certainly it is," replied the engineer. "Under-ordinary circumstances, picrate of potash although not MORE inflammable than common powder, yet possesses the same degree of inflammability."

We now prepared to go on deck. As we left the saloon, in which we had been sitting, Curtis seized my hand.

"Oh, Mr. Kazallon," he exclaimed, "if you only knew the bitterness of the agony I feel at seeing this fine vessel doomed to be devoured by flames, and at being so powerless to save her." Then quickly recovering himself, he continued, "But I am forgetting myself; you, if no other, must know what I am suffering. It is all over now," he said more cheerfully.

"Is our condition quite desperate?" I asked.

"It is just this," he answered deliberately "we are over a mine, and already the match has been applied to the train. How long that train may be, 'tis not for me to say." And with these words he left me.

The other passengers, in common with the crew, are still in entire ignorance of the extremity of peril to which we are exposed, although they are all aware that there is fire in the hold. As soon as the fact was announced, Mr. Kear, after communicating to Curtis his instructions that he thought he should have the fire immediately extinguished and intimating that he held him responsible for all contingencies that might happen, retired to his cabin, where he has remained ever since, fully occupied in collecting and packing together the more cherished articles of his property and without the semblance of a care or a thought for his unfortunate wife, whose condition, in spite of her ludicrous complaints, was truly pitiable. Miss Herbey, however, is unrelaxing in her attentions, and the unremitted diligence with which she fulfills her offices of duty, commands my highest admiration.

OCTOBER 23rd.--This morning, Captain Huntly sent for Curtis into his cabin, and the mate has since made me acquainted with what passed between them.

"Curtis," began the captain, his haggard eye betraying only too plainly some mental derangement, "I am a sailor, am I not?"

"Certainly, captain," was the prompt acquiescence of the mate.

"I do not know how it is," continued the captain, "but I seem bewildered; I cannot recollect anything. Are we not bound for Liverpool? Ah! yes! of course. And have we kept a north-easterly direction since we left?"

"No, sir, according to your orders we have been sailing south-east, and here we are in the tropics."

"And what is the name of the ship?"

"The 'Chancellor,' sir."

"Yes, yes, the 'Chancellor,' so it is. Well, Curtis, I really can't take her back to the north. I hate the sea, the very sight of it makes me ill, I would much rather not leave my cabin."

Curtis went on to tell me how he had tried to persuade him that with a little time and care he would soon recover his indisposition, and feel himself again; but the captain had interrupted him by saying,--

"Well, well; we shall see by-and-by; but for the present you must take this for my positive order; you must, from this time, at once take the command of the ship, and act just as if I were not on board. Under present circumstances, I can do nothing. My brain is all in a whirl, you cannot tell what I am suffering;" and the unfortunate man pressed both his hands convulsively against his forehead.

"I weighed the matter carefully for a moment," added Curtis, "and seeing what his condition too truly was, I acquiesced in all that he required and withdrew, promising him that all his orders should be obeyed."

After hearing these particulars, I could not help remarking how fortunate it was that the captain had resigned of his own accord, for although he might not be actually insane, it was very evident that his brain was in a very morbid condition.

"I succeed him at a very critical moment;" said Curtis thoughtfully; "but I shall endeavour to do my duty."

A short time afterwards he sent for the boatswain, and ordered him to assemble the crew at the foot of the main-
mast. As soon as the men were together, he addressed them very calmly, but very firmly.

"My men," he said, "I have to tell you that Captain Huntly, on account of the dangerous situation in which circumstances have placed us, and for other reasons known to myself, has thought right to resign his command to me. From this time forward, I am captain of this vessel."

Thus quietly and simply the change was effected, and we have the satisfaction of knowing that the "Chancellor" is now under the command of a conscientious, energetic man, who will shirk nothing that he believes to be for our common good. M. Letourneur, Andre, Mr. Falsten, and myself immediately offered him our best wishes, in which Lieutenant Walter and the boatswain most cordially joined.

The ship still holds her course south-west and Curtis crowds on all sail and makes as speedily as possible for the nearest of the Lesser Antilles.

CHAPTER XIII.

OCTOBER 24th to 29th.--For the last five days the sea has been very heavy, and although the "Chancellor" sails with wind and wave in her favour, yet her progress is considerably impeded. Here on board this veritable fireship I cannot help contemplating with a longing eye this vast ocean that surrounds us. The water supply should be all we need.

"Why not bore the deck?" I said to Curtis. "Why not admit the water by tons into the hold? What could be the harm? The fire would be quenched; and what would be easier than to pump the water out again?"

"I have already told you, Mr. Kazallon," said Curtis, "that the very moment we admit the air, the flames will rush forth to the very top of the masts. No; we must have courage and patience; we must wait. There is nothing whatever to be done, except to close every aperture."

The fire continued to progress even more rapidly than we had hitherto suspected. The heat gradually drove the passengers nearly all, on deck, and the two stern cabins, lighted, as I said, by their windows in the aft-board were the only quarters below that were inhabitable. Of these Mrs. Kear occupied one, and Curtis reserved the other for Ruby, who, a raving maniac, had to be kept rigidly under restraint. I went down occasionally to see him, but invariably found him in a state of abject terror, uttering horrible shrieks, as though possessed with the idea that he was being scorched by the most excruciating heat.

Once or twice, too, I looked in upon the ex-captain. He was always calm and spoke quite rationally upon any subject except his own profession; but in connexion with that he prated away the merest nonsense. He suffered greatly, but steadily declined all my offers of attention, and pertinaciously refused to leave his cabin.

To-day, an acrid, nauseating smoke made its way through the panellings that partition off the quarters of the crew. At once Curtis ordered the partition to be enveloped in wet tarpaulin, but the fumes penetrated even this, and filled the whole neighbourhood of the ship's bows with a reeking vapour that was positively stifling. As we listened, too, we could hear a dull rumbling sound, but we were as mystified as ever to comprehend where the air could have entered that was evidently fanning the flames. Only too certainly, it was now becoming a question not of days nor even of hours before we must be prepared for the final catastrophe. The sea was still running high, and escape by the boats was plainly impossible. Fortunately, as I have said, the main-mast and the mizzen are of iron; otherwise the heat at their base would long ago have brought them down and our chances of safety would have been much imperiled; but by crowding on sail the "Chancellor" in the full north-east wind continued to make her way with undiminished speed.

It is now a fortnight since the fire was first discovered, and the proper working of the ship has gradually become a more and more difficult matter. Even with thick shoes any attempt to walk upon deck up to the forecastle was soon impracticable, and the poop, simply because its door is elevated somewhat above the level of the hold, is now the only available standing-place. Water began to lose its effect upon the scorched and shrivelling planks; the resin oozed out from the knots in the wood, the seams burst open, and the tar, melted by the heat, followed the rollings of the vessel, and formed fantastic patterns about the deck.

Then to complete our perplexity, the wind shifted suddenly round to the north-west, whence it blew a perfect hurricane. To no purpose did Curtis do everything in his power to bring the ship ahull; every effort was vain; the "Chancellor" could not bear her triesail, so there was nothing to be done but to let her go with the wind, and drift further and further from the land for which we are longing so eagerly.

To-day, the 29th, the tempest seemed to reach its height; the waves appeared to us mountains high, and dashed the spray most violently across the deck. A boat could not live for a moment in such a sea.

Our situation is terrible. We all wait in silence, some few on the forecastle, the great proportion of us on the poop. As for the picrate, for the time we have quite forgotten its existence; indeed it might almost seem as though its explosion would come as a relief, for no catastrophe, however terrible, could far exceed the torture of our suspense.
While he had still the remaining chance, Curtis rescued from the store-room such few provisions as the heat of the compartment allowed him to obtain; and a lot of cases of salt meat and biscuits, a cask of brandy, some barrels of fresh water, together with some sails and wraps, a compass and other instruments are now lying packed in a mass all ready for prompt removal to the boats whenever we shall be obliged to leave the ship.

About eight o'clock in the evening, a noise is heard, distinct even above the raging of the hurricane. The panels of the deck are upheaved, and volumes of black smoke issue upwards as if from a safety-valve. An universal consternation seizes one and all: we must leave the volcano which is about to burst beneath our feet. The crew run to Curtis for orders. He hesitates; looks first at the huge and threatening waves; looks then at the boats. The long-boat is there, suspended right along the centre of the deck; but it is impossible to approach it now; the yawl, however, hoisted on the starboard side, and the whale-boat suspended aft, are still available. The sailors make frantically for the yawl.

"Stop, stop," shouts Curtis; "do you mean to cut off our last and only chance of safety? Would you launch a boat in such a sea as this?"

A few of them, with Owen at their head, give no heed to what he says. Rushing to the poop, and seizing a cutlass, Curtis shouts again,—

"Touch the tackling of the davit, one of you; only touch it, and I'll cleave your skull."

Awed by his determined manner, the men retire, some clambering into the shrouds, whilst others mount to the very top of the masts.

At eleven o'clock, several loud reports are heard, caused by the bursting asunder of the partitions of the hold. Clouds of smoke issue from the front, followed by a long tongue of lambent flame that seems to encircle the mizen-mast. The fire now reaches to the cabin occupied by Mrs. Kear, who, shrieking wildly, is brought on deck by Miss Herbey. A moment more, and Silas Huntly makes his appearance, his face all blackened with the grimy smoke; he bows to Curtis, as he passes, and then proceeds in the calmest manner to mount the aft-shrouds, and installs himself at the very top of the mizen.

The sight of Huntly recalls to my recollection the prisoner still below, and my first impulse is to rush to the staircase and do what I can to set him free. But the maniac has already eluded his confinement, and with singed hair and his clothes already alight, rushes upon deck. Like a salamander he passes across the burning deck with unscathed feet, and glides through the stifling smoke with unchoked breath. Not a sound escapes his lips.

Another loud report; the long-boat is shivered into fragments; the middle panel bursts the tarpaulin that covered it, and a stream of fire, free at length from the restraint that had held it, rises half-mast high.

"The picrate! the picrate!" shrieks the madman; "we shall all be blown up! the picrate will blow us all up."

And in an instant, before we can get near him, he has hurled himself, through the open hatchway, down into the fiery furnace below.

CHAPTER XIV.

OCTOBER 29th:--NIGHT.--The scene, as night came on, was terrible indeed. Notwithstanding the desperateness of our situation, however, there was not one of us so paralyzed by fear, but that we fully realized the horror of it all.

Poor Ruby, indeed, is lost and gone, but his last words were productive of serious consequences. The sailors caught his cry of "Picrate, picrate!" and being thus for the first time made aware of the true nature of their peril, they resolved at every hazard to accomplish their escape. Beside themselves with terror, they either did not or would not, see that no boat could brave the tremendous waves that were raging around, and accordingly they made a frantic rush towards the yawl. Curtis again made a vigorous endeavour to prevent them, but this time all in vain; Owen urged them on, and already the tackling was loosened, so that the boat was swung over to the ship's side. For a moment it hung suspended in mid-air, and then, with a final effort from the sailors, it was quickly lowered into the sea. But scarcely had it touched the water, when it was caught by an enormous wave which, recoiling with resistless violence, dashed it to atoms against the "Chancellor's" side.

The men stood aghast; they were dumbfoundered. Long-boat and yawl both gone, there was nothing now remaining to us but a small whale-boat. Not a word was spoken; not a sound was heard but the hoarse whistling of the wind, and the mournful roaring of the flames. From the centre of the ship, which was hollowed out like a furnace, there issued a column of sooty vapour that ascended to the sky. All the passengers, and several of the crew, took refuge in the aft-quarters of the poop. Mrs. Kear was lying senseless on one of the hen-coops; M. Letourneur held his son tightly clasped to his bosom. I saw Falsten calmly consult his watch, and note down the time in his memorandum-book, but I was far from sharing his, composure, for I was overcome by a nervous agitation that I could not suppress.
As far as we knew, Lieutenant Walter, the boatswain, and such of the crew as were not with us, were safe in the bow; but it was impossible to tell how they were faring because the sheet of fire intervened like a curtain, and cut off all communication between stem and stern.

I broke the dismal silence, saying "All over now, Curtis."

"No, sir, not yet," he replied, "now that the panel is open we will set to work, and pour water with all our might down into the furnace, and may be, we shall put it out, even yet."

"But how can you work your pumps while the deck is burning? and how can you get at your men beyond that sheet of flame?"

He made no answer to my impetuous questions, and finding that he had nothing more to say, I repeated that it was all over now.

After a pause, he said, "As long as a plank of the ship remains to stand on, Mr. Kazallon, I shall not give up my hope."

But the conflagration raged with redoubled fury, the sea around us was lighted with a crimson glow, and the clouds above shone with a lurid glare. Long jets of fire darted across the hatchways, and we were forced to take refuge on the taffrail at the extreme end of the poop. Mrs. Kear was laid in the whale-boat that hung from the stern, Miss Herbey persisting to the last in retaining her post by her side.

No pen could adequately portray the horrors of this fearful night. The "Chancellor" under bare poles, was driven, like a gigantic fire-ship with frightful velocity across the raging ocean; her very speed as it were, making common cause with the hurricane to fan the fire that was consuming her. Soon there could be no alternative between throwing ourselves into the sea, or perishing in the flames.

But where, all this time, was the picrate? perhaps, after all, Ruby had deceived us and there was no volcano, such as we dreaded, below our feet.

At half-past eleven, when the tempest seems at its very height there is heard a peculiar roar distinguishable even above the crash of the elements. The sailors in an instant recognize its import.

"Breakers to starboard!" is the cry.

Curtis leaps on to the netting, casts a rapid glance at the snow-white billows, and turning to the helmsman shouts with all his might "Starboard the helm!"

But it is too late. There is a sudden shock; the ship is caught up by an enormous wave; she rises upon her beam ends; several times she strikes the ground; the mizzen-mast snaps short off level with the deck, falls into the sea, and the "Chancellor" is motionless.

CHAPTER XV.

THE NIGHT OF THE 29th CONTINUED.--It was not yet midnight; the darkness was most profound, and we could see nothing. But was it probable that we had stranded on the coast of America?

Very shortly after the ship had thus come to a standstill a clanking of chains was heard proceeding from her bows.

"That is well," said Curtis; "Walter and the boatswain have cast both the anchors. Let us hope they will hold."

Then, clambering along the starboard side, on which the ship had heeled, as far as the flames would allow him. He clung to the holdfasts of the shrouds, and in spite of the heavy seas that dashed against the vessel he maintained his position for a considerable time, evidently listening to some sound that had caught his ear in the midst of the tempest. In about a quarter of an hour he returned to the poop.

"Heaven be praised!" he said, "the water is coming in, and perhaps may get the better of the fire."

"True," said I, "but what then?"

"That," he replied, "is a question for by-and-by. We can now only think of the present."

Already I fancied that the violence of the flames was somewhat abated, and that the two opposing elements were in fierce contention. Some plank in the ship's side was evidently stove in, admitting free passage for the waves. But how, when the water had mastered the fire, should we be able to master the water? Our natural course would be to use the pumps, but these, in the very midst of the conflagration, were quite unavailable.

For three long hours, in anxious suspense, we watched and watched, and waited. Where we were we could not tell. One thing alone was certain: the tide was ebbing beneath us, and the waves were relaxing in their violence. Once let the fire be extinguished, and then, perhaps, there would be room to hope that the next high tide would set us afloat.

Towards half-past four in the morning the curtain of fire and smoke, which had shut off communication between the two extremities of the ship, became less dense, and we could faintly distinguish that party of the crew who had taken refuge in the forecastle; and before long, although it was impracticable to step upon the deck, the lieutenant
and the boatswain contrived to clamber over the gunwale, along the rails, and joined Curtis on the poop.

Here they held a consultation, to which I was admitted. They were all of opinion that nothing could be done until daylight should give us something of an idea of our actual position. If we then found that we were near the shore, we would, weather permitting, endeavour to land, either in the boat or upon a raft. If, on the other hand, no land were in sight, and the "Chancellor" were ascertained to be stranded on some isolated reef, all we could do would be to get her afloat, and put her into condition for reaching the nearest coast. Curtis told us that it was long since he had been able to take any observation of altitude, but there was no doubt the north-west wind had driven us far to the south; and he thought, as he was ignorant of the existence of any reef in this part of the Atlantic, that it was just possible that we had been driven on to the coast of some portion of South America.

I reminded him that we were in momentary expectation of an explosion, and suggested that it would be advisable to abandon the ship and take refuge on the reef. But he would not hear of such a proceeding, said that the reef would probably be covered at high tide, and persisted in the original resolution, that no decided action could be taken before the daylight appeared.

I immediately reported this decision of the captain to my fellow passengers. None of them seem to realize the new danger to which the "Chancellor" may be exposed by being cast upon an unknown reef, hundreds of miles it may be from land. All are for the time possessed with one idea, one hope; and that is, that the fire may now be quenched and the explosion averted.

And certainly their hopes seem in a fair way of being fulfilled. Already the raging flames that poured forth from the hatches have given place to dense black smoke, and although occasionally some fiery streaks dart across the dusky fumes, yet they are instantly extinguished. The waves are doing what pumps and buckets could never have effected; by their inundation they are steadily stifling the fire which was as steadily spreading to the whole bulk of the 1700 bales of cotton.

CHAPTER XVI.

OCTOBER 30th.--At the first gleam of daylight we eagerly scanned the southern and western horizons, but the morning mists limited our view. Land was nowhere to be seen. The tide was now almost at its lowest ebb, and the colour of the few peaks of rock that jutted up around us showed that the reef on which we had stranded was of basaltic formation. There were now only about six feet of water around the "Chancellor," though with a full freight she draws about fifteen. It was remarkable how far she had been carried on to the shelf of rock, but the number of times that she had touched the bottom before she finally ran aground left us no doubt that she had been lifted up and borne along on the top of an enormous wave. She now lies with her stern considerably higher than her bows, a position which renders walking upon the deck anything but an easy matter; moreover as the tide-receded she heeled over so much to larboard that at one time Curtis feared she would altogether capsize; that fear, however, since the tide has reached its lowest mark, has happily proved groundless.

At six o'clock some violent blows were felt against the ship's side, and at the same time a voice was distinguished, shouting loudly, "Curtis! Curtis!" Following the direction of the cries we saw that the broken mizzen-mast was being washed against the vessel, and in the dusky morning twilight we could make out the figure of a man clinging to the rigging. Curtis, at the peril of his life, hastened to bring the man on board. It proved to be none other than Silas Huntly, who, after being carried overboard with the mast, had thus, almost by a miracle, escaped a watery grave. Without a word of thanks to his deliverer, the ex-captain, passive, like an automaton, passed on and took his seat in the most secluded corner of the poop. The broken mizen may, perhaps, be of service to us at some future time, and with that idea it has been rescued from the waves and lashed securely to the stern.

By this time it was light enough to see for a distance of three miles round; but as yet nothing could be discerned to make us think that we were near a coast. The line of breakers ran for about a mile from south-west to north-east, and two hundred fathoms to the north of the ship an irregular mass of rocks formed a small islet. This islet rose about fifty feet above the sea, and was consequently above the level of the highest tides; whilst a sort of causeway, available at low water, would enable us to reach the island, if necessity required. But there the reef ended; beyond it the sea again resumed its sombre hue, betokening deep water. In all probability, then, this was a solitary shoal, unattached to a shore, and the gloom of a bitter disappointment began to weigh upon our spirits.

In another hour the mists had totally disappeared, and it was broad daylight. I and M. Letourneur stood watching Curtis as he continued eagerly to scan the southern horizon. Astonishment was written on his countenance; to him it appeared perfectly incredible that, after our course for so long had been due south from the Bermudas, no land should be in sight. But not a speck, however minute, broke the clearly-defined line that joined sea and sky. After a time Curtis made his way along the netting to the shrouds, and swung himself quickly up to the top of the mainmast. For several minutes he remained there examining the open space around, then seizing one of the backstays he glided
down and rejoined us on the poop.

"No land in sight," he said, in answer to our eager looks of inquiry.

At this point Mr. Kear interposed, and in a gruff, ill-tempered tone, asked Curtis where we were. Curtis replied that he did not know.

"You don't know, sir? Then all I can say is that you ought to know!" exclaimed the petroleum merchant.

"That may be, sir; but at present I am as ignorant of our whereabouts as you are yourself," said Curtis.

"Well," said Mr. Kear, "just please to know that I don't want to stay for ever on your everlasting ship, so I beg you will make haste and start off again."

Curtis condescended to make no other reply than a shrug of the shoulders, and turning away he informed M. Letourneur and myself that if the sun came out he intended to take its altitude and find out to what part of the ocean we had been driven. His next care was to distribute preserved meat and biscuit amongst the passengers and crew already half fainting with hunger and fatigue, and then he set to work to devise measures for setting the ship afloat.

The conflagration was greatly abated; no flames now appeared, and although some black smoke still issued from the interior, yet its volume was far less than before. The first step was to discover how much water had entered the hold. The deck was still too hot to walk upon; but after two hours' irrigation the boards became sufficiently cool for the boatswain to proceed to take some soundings, and he shortly afterwards announced that there were five feet of water below. This the captain determined should not be pumped out at present, as he wanted it thoroughly to do its duty before he got rid of it.

The next subject for consideration was whether it would be advisable to abandon the vessel, and to take refuge on the reef. Curtis thought not; and the lieutenant and the boatswain agreed with him. The chances of an explosion were greatly diminished, as it had been ascertained that the water had reached that part of the hold in which Ruby's luggage had been deposited; while, on the other hand, in the event of rough weather, our position even upon the most elevated points of rock might be very critical. It was accordingly resolved that both passengers and crew were safest on board.

Acting upon this decision we proceeded to make a kind of encampment on the poop, and the few mattresses that were rescued uninjured have been given up for the use of the two ladies. Such of the crew as had saved their hammocks have been told to place them under the forecastle where they would have to stow themselves as best they could, their ordinary quarters being absolutely uninhabitable.

Fortunately, although the store-room has been considerably exposed to the heat, its contents are not very seriously damaged, and all the barrels of water and the greater part of the provisions are quite intact. The stack of spare sails, which had been packed away in front, is also free from injury. The wind has dropped considerably since the early morning, and the swell in the sea is far less heavy. On the whole our spirits are reviving, and we begin to think we may yet find a way out of our troubles.

M. Letourneur, his son, and I, have just had a long conversation about the ship's officers. We consider their conduct, under the late trying circumstances, to have been most exemplary, and their courage, energy, and endurance to have been beyond all praise. Lieutenant Walter, the boatswain, and Dowlas the carpenter have all alike distinguished themselves, and made us feel that they are men to be relied on. As for Curtis, words can scarcely be found to express our admiration of his character; he is the same as he has ever been, the very life of his crew, cheering them on by word or gesture; finding an expedient for every difficulty, and always foremost in every action.

The tide turned at seven this morning, and by eleven all the rocks were submerged, none of them being visible except the cluster of those which formed the rim of a small and almost circular basin from 250 to 300 feet in diameter, in the north angle of which the ship is lying. As the tide rose the white breakers disappeared, and the sea, fortunately for the "Chancellor," was pretty calm; otherwise the dashing of the waves against her sides, as she lies motionless, might have been attended by serious consequences.

As might be supposed, the height of the water in the hold increased with the tide from five feet to nine; but this was rather a matter for congratulation, insomuch as it sufficed to inundate another layer of cotton.

At half-past eleven the sun, which had been behind the clouds since ten o'clock, broke forth brightly. The captain, who had already in the morning been able to calculate an horary angle, now prepared to take the meridian altitude, and succeeded at midday in making his observation most satisfactorily. After retiring for a short time to calculate the result; he returned to the poop and announced that we are in lat. 18 deg. 5 min. N. and long. 45 deg. 53 min. W., but that the reef on which we are aground is not marked upon the charts. The only explanation that can be given for the omission is that the islet must be of recent formation, and has been caused by some subterranean volcanic disturbance. But whatever may be the solution of the mystery, here we are 800 miles from land; for such, on consulting the map, we find to be the actual distance to the coast of Guiana, which is the nearest shore. Such is the position to which we have been brought, in the first place, by Huntly's senseless obstinacy, and, secondly, by the furious north-west gale.
Yet, after all, the captain's communication does not dishearten us. As I said before, our spirits are reviving. We have escaped the peril of fire; the fear of explosion is past and gone; and oblivious of the fact that the ship with a hold full of water is only too likely to Found when she puts out to sea, we feel a confidence in the future that forbids us to despond.

Meanwhile Curtis prepares to do all that common sense demands. He proposes, when the fire is quite extinguished, to throw overboard the whole, or the greater portion of the cargo, including of course, the picrate; he will next plug up the leak, and then, with a lightened ship, he will take advantage of the first high tide to quit the reef as speedily as possible.

CHAPTER XVII.
OCTOBER 30th.---Once again I talked to M. Letourneur about our situation, and endeavoured to animate him with the hope that we should not be detained for long in our present predicament; but he could not be brought to take a very sanguine view of our prospects.

"But surely," I protested, "it will not be difficult to throw overboard a few hundred bales of cotton; two or three days at most will suffice for that."

"Likely enough," he replied, "when the business is once begun; but you must remember, Mr. Kazallon, that the very heart of the cargo is still smouldering, and that it will still be several days before any one will be able to venture into the hold. Then the leak, too, that has to be caulked; and, unless it is stopped up very effectually, we shall be only doomed most certainly to perish at sea. Don't, then, be deceiving yourself; it must be three weeks at least before you can expect to put out to sea. I can only hope meanwhile that the weather will continue propitious; it wouldn't take many storms to knock the 'Chancellor,' shattered as she is, completely into pieces."

Here, then, was the suggestion of a new danger to which we were to be exposed; the fire might be extinguished, the water might be got rid of by the pumps, but, after all, we must be at the mercy of the wind and waves; and, although the rocky island might afford a temporary refuge from the tempest, what was to become of passengers and crew if the vessel should be reduced to a total wreck? I made no remonstrance, however, to this view of our case, but merely asked M. Letourneur if he had confidence in Robert Curtis?

"Perfect confidence," he answered; "and I acknowledge it most gratefully, as a providential circumstance, that Captain Huntly had given him the command in time. Whatever man can do I know that Curtis will not leave undone to extricate us from our dilemma."

Prompted by this conversation with M. Letourneur I took the first opportunity of trying to ascertain from Curtis himself, how long he reckoned we should be obliged to remain upon the reef; but he merely replied, that it must depend upon circumstances, and that he hoped the weather would continue favourable. Fortunately the barometer is rising steadily, and there is every sign of a prolonged calm.

Meantime Curtis is taking active measures for totally extinguishing the fire. He is at no great pains to spare the cargo, and as the bales that lie just above the level of the water are still a-light he has resorted to the expedient of thoroughly saturating the upper layers of the cotton, in order that the combustion may be stifled between the moisture descending from above and that ascending from below. This scheme has brought the pumps once more into requisition. At present the crew are adequate to the task of working them, but I and some of our fellow passengers are ready to offer our assistance whenever it shall be necessary.

With no immediate demand upon our labour, we are thrown upon our own resources for passing our time. Letourneur, Andre and myself, have frequent conversations; I also devote an hour or two to my diary. Falsten holds little communication with any of us, but remains absorbed in his calculations, and amuses himself by tracing mechanical diagrams with ground-plan, section, elevation, all complete. It would be a happy inspiration if he could invent some mighty engine that could set us all afloat again. Mr. and Mrs. Kear, too, hold themselves aloof from their fellow passengers, and we are not sorry to be relieved from the necessity of listening to their incessant grumbling; unfortunately, however, they carry off Miss Herbey with them, so that we enjoy little or nothing of the young lady's society. As for Silas Huntly, he has become a complete nonentity; he exists, it is true, but merely, it would seem, to vegetate.

Hobart, the steward, an obsequious, sly sort of fellow, goes through his routine of duties just as though the vessel were pursuing her ordinary course; and, as usual, is continually falling out with Jynxstrop, the cook, an impudent, ill-favoured negro, who interferes with the other sailors in a manner which, I think, ought not to be allowed.

Since it appears likely that we shall have abundance of time on our hands, I have proposed to M. Letourneur and his son that we shall together explore the reef on which we are stranded. It is not very probable that we shall be able to discover much about the origin of this strange accumulation of rock, yet the attempt will at least occupy us for some hours, and will relieve us from the monotony of our confinement on board. Besides, as the reef is not marked
in any of the maps, I could not but believe that it would be rendering a service to hydrography if we were to take an accurate plan of the rocks, of which Curtis could afterwards verify the true position by a second observation made with a closer precision than the one he has already taken.

M. Letourneur agrees to my proposal, Curtis has promised to let us have the boat and some sounding-lines, and to allow one of the sailors to accompany us; so to-morrow morning, we hope to make our little voyage of investigation.

CHAPTER XVIII.

OCTOBER 31st to NOVEMBER 5th.—Our first proceeding on the morning of the 31st was to make the proposed tour of the reef, which is about a quarter of a mile long. With the aid of our sounding-lines we found that the water was deep, right up to the very rocks, and that no shelving shores prevented us coasting along them. There was not a shadow of doubt as to the rock being of purely volcanic origin, upheaved by some mighty subterranean convulsion. It is formed of blocks of basalt, arranged in perfect order, of which the regular prisms give the whole mass the effect of being one gigantic crystal; and the remarkable transparency of the sea enabled us plainly to observe the curious shafts of the prismatic columns that support the marvelous substructure.

"This is indeed a singular island," said M. Letourneur; "evidently it is of quite a recent origin."

"Yes, father," said Andre, "and I should think it has been caused by a phenomenon similar to those which produced the Julia Island, off the coast of Sicily, or the group of the Santorini, in the Grecian Archipelago. One could almost fancy that it had been created expressly for the 'Chancellor' to stand upon."

"It is very certain," I observed, "that some upheaving has lately taken place. This is by no means an unfrequented part of the Atlantic, so that it is not at all likely that it could have escaped the notice of sailors if it had been always in existence; yet it is not marked even in the most modern charts. We must try and explore it thoroughly and give future navigators the benefit of our observations."

"But, perhaps, it will disappear as it came," said Andre. "You are no doubt aware, Mr. Kazallon, that these volcanic islands sometimes have a very transitory existence. Not impossibly, by the time it gets marked upon the maps it may no longer be here."

"Never mind, my boy," answered his father, "it is better to give warning of a danger that does not exist than overlook one that does. I daresay the sailors will not grumble much, if they don't find a reef where we have marked one."

"No, I daresay not, father," said Andre. "and after all this island is very likely as firm as a continent. However, if it is to disappear, I expect Captain Curtis would be glad to see it take its departure as soon as possible after he has finished his repairs; it would save him a world of trouble in getting his ship afloat."

"Why, what a fellow you are Andre!" I said, laughing. "I believe you would like to rule Nature with a magic wand; first of all, you would call up a reef from the depth of the ocean to give the 'Chancellor' time to extinguish her flames, and then you would make it disappear just that the ship might be free again."

Andre smiled; then, in a more serious tone, he expressed his gratitude for the timely help that had been vouchsafed us in our hour of need.

The more we examined the rocks that formed the base of the little island, the more we became convinced that its formation was quite recent. Not a mollusk, not a tuft of seaweed was found clinging to the sides of the rocks; not a germ had the wind carried to its surface, not a bird had taken refuge amidst the crags upon its summits. To a lover of natural history, the spot did not yield a single point of interest; the geologist alone would find subject of study in the basaltic mass.

When we reached the southern point of the island I proposed that we should disembark. My companions readily assented, young Letourneur jocosely observing that if the little island was destined to vanish, it was quite right that it should first be visited by human beings. The boat was accordingly brought alongside, and we set, foot upon the reef, and began to ascend the gradual slope that leads to its highest elevation.

The walking was not very rough, and as Andre could get along tolerably well without the assistance of an arm, he led the way, his father and I following close behind. A quarter of an hour sufficed to bring us to the loftiest point in the islet, when we seated ourselves on the basaltic prism that crowned its summit.

Andre took a sketch-book from his pocket, and proceeded to make a drawing of the reef. Scarcely had he completed the outline when his father exclaimed,—

"Why, Andre, you have drawn a ham!"

"Something uncommonly like it, I confess," replied Andre. "I think we had better ask Captain Curtis to let us call our island Ham Rock."

"Good," said I; "though sailors will need to keep it at a respectful distance, for they will scarcely find that their
M. Letourneur was quite correct; the outline of the reef as it stood clearly defined against the deep green water resembled nothing so much as a fine York ham, of which the little creek, where the "Chancellor" had been stranded, corresponded to the hollow place above the knuckle. The tide at this time was low, and the ship now lay heeled over very much to the starboard side, the few points of rock that emerged in the extreme south of the reef plainly marking the narrow passage through which she had been forced before she finally ran aground.

As soon as Andre had finished his sketch we descended by a slope as gradual as that by which we had come up, and made our way towards the west. We had not gone very far when a beautiful grotto, perfect as an architectural structure, arrested our attention. M. Letourneur and Andre who have visited the Hebrides, pronounced it to be a Fingal's cave in miniature; a Gothic chapel that might form a fit vestibule for the cathedral cave of Staffa. The basaltic rocks had cooled down into the same regular concentric prisms; there was the same dark canopied roof with its interstices filled up with its yellow lutings; the same precision of outline in the prismatic angles, sharp as though chiselled by a sculptor's hand; the same sonorous vibration of the air across the basaltic rocks, of which the Gaelic poets have feigned that the harps of the Fingal minstrelsy were made. But whereas at Staffa the floor of the cave is always covered with a sheet of water, here the grotto was beyond the reach of all but the highest waves, whilst the prismatic shafts themselves formed quite a solid pavement.

After remaining nearly an hour in our newly-discovered grotto we returned to the "Chancellor," and communicated the result of our explorations to Curtis, who entered the island upon his chart by the name that Andre Letourneur had proposed.

Since its discovery we have not permitted a day to pass without spending some time in our Ham Rock grotto. Curtis has taken an opportunity of visiting it, but he is too preoccupied with other matters to have much interest to spare for the wonders of nature. Falsten, too, came once and examined the character of the rocks, knocking and chipping them about with all the mercilessness of a geologist. Mr. Kear would not trouble himself to leave the ship; and although I asked his wife to join us in one of our excursions she declined, upon the plea that the fatigue, as well as the inconvenience of embarking in the boat, would be more than she could bear.

Miss Herbey, only too thankful to escape even for an hour from her capricious mistress, eagerly accepted M. Letourneur's invitation to pay a visit to the reef but to her great disappointment Mrs. Kear at first refused point-blank to allow her to leave the ship. I felt intensely annoyed, and resolved to intercede in Miss Herbey's favour; and as I had already rendered that self-indulgent lady sundry services which she thought she might probably be glad again to accept, I gained my point, and Miss Herbey has several times been permitted to accompany us across the rocks, where the young girl's delight at her freedom has been a pleasure to behold.

Sometimes we fish along the shore, and, then enjoy a luncheon in the grotto, whilst the basalt columns vibrate like harps to the breeze. This arid reef, little as it is, compared with the cramped limits of the "Chancellor's" deck is like some vast domain; soon there will be scarcely a stone with which we are not familiar, scarcely a portion of its surface which we have not merrily trodden, and I am sure that when the hour of departure arrives we shall leave it with regret.

In the course of conversation, Andre Letourneur one day happened to say that he believed the island of Staffa belonged to the Macdonald family, who let it for the small sum of 12 pounds a year.

"I suppose then," said Miss Herbey, "that we should hardly get more than half-a-crown a year for our pet little island."

"I don't think you would get a penny for it, Miss Herbey; but are you thinking of taking a lease?" I said, laughing.

"Not at present," she said; then added, with a half-suppressed sigh, "and yet it is a place where I have seemed to know what it is to be really happy."

Andre murmured some expression of assent, and we all felt that there was something touching in the words of the orphaned, friendless girl who had found her long-lost sense of happiness on a lonely rock in the Atlantic.
the weather should be favourable, I believe we could reach the shore. What I now propose to do is to stop the leak
are now 800 miles from the coast of Paramaribo, the nearest portion of Dutch Guiana, and in ten or twelve days, if
construct a smaller vessel that might have carried us safely to land; but I dare not run the risk of remaining here. We
suspected, and that her hull is very seriously damaged. If we had been stranded anywhere than on a barren reef,
passengers and crew, and announcing to them the facts of the case.
not long since gaped completely open.
started away from the butt-ends and seams; so much so that it was little short of a miracle that the whole ship had
of the fire on the flanks of the ship had been of a much more serious character; a long portion of the inside boarding
less injured than they expected, and the thick, heavy planks had only been scorched very superficially. But the action
had been done by the conflagration. They found that the deck and the cross-beams that supported it had been much
of the island, and there it remains.
by the flames. Why it was not at once pitched into the sea I cannot say; but it was merely conveyed to the extremity
were found was the case of picrate, perfectly intact; having neither been injured by the water, nor of course reached
grant that we may not be called to make like efforts, and to make them hopelessly, for a foundering ship!
satisfaction of knowing that we are not contending with a flood that encroaches faster than it can be resisted. Heaven
incessant swing of the handles, and I can well understand the dislike which sailors always express to the labour.
All of us, including even Andre Letourneur, have been taking our turn at the pumps, for the work is so extremely
up the hole in such a way as will insure our reaching land in safety.
be fatal to her altogether. But the captain has very little doubt that by some device or other he shall manage to patch
undertaking; moreover, any bad weather which might occur while the ship was on her flank would only too certainly
the damage would be to careen the ship, and to shift the planking, but the appliances are wanting for such an
action of the pumps; so Curtis ordered that a number of the bales should be piled up inside against the broken
planks. The scheme succeeded very well, and as the water got lower and lower in the hold the men were enabled to
resume their task of unlading.

Curtis thinks it quite probable that the leaks may be mended from the interior. By far the best way of repairing
the damage would be to careen the ship, and to shift the planking, but the appliances are wanting for such an
undertaking; moreover, any bad weather which might occur while the ship was on her flank would only too certainly
be fatal to her altogether. But the captain has very little doubt that by some device or other he shall manage to patch
up the hole in such a way as will insure our reaching land in safety.

After two days' toil the water was entirely reduced and without further difficulty the unlading was completed. All
of us, including even Andre Letourneur, have been taking our turn at the pumps, for the work is so extremely
fatiguing that the crew require some occasional respite; arms and back soon become strained and weary with the
incessant swing of the handles, and I can well understand the dislike which sailors always express to the labour.

One thing there is which is much in our favour; the ship lies on a firm and solid bottom, and we have the
satisfaction of knowing that we are not contending with a flood that encroaches faster than it can be resisted. Heaven
grant that we may not be called to make like efforts, and to make them hopelessly, for a foundering ship!

CHAPTER XX.

NOVEMBER 15th to 20th.--The examination of the hold has at last been made. Amongst the first things that
were found was the case of picrate, perfectly intact; having neither been injured by the water, nor of course reached
by the flames. Why it was not at once pitched into the sea I cannot say; but it was merely conveyed to the extremity of
the island, and there it remains.

While they were below, Curtis and Dowlas made themselves acquainted with the full extent of the mischief that
had been done by the conflagration. They found that the deck and the cross-beams that supported it had been much
less injured than they expected, and the thick, heavy planks had only been scorched very superficially. But the action
of the fire on the flanks of the ship had been of a much more serious character; a long portion of the inside boarding
had been burnt away, and the very ribs of the vessel were considerably damaged; the oakum caulking had all
started away from the butt-ends and seams; so much so that it was little short of a miracle that the whole ship had
not long since gaped completely open.

The captain and the carpenter returned to the deck with anxious faces. Curtis lost no time in assembling
passengers and crew, and announcing to them the facts of the case.

"My friends," he said, "I am here to tell you that the 'Chancellor' has sustained far greater injuries than we
suspected, and that her hull is very seriously damaged. If we had been stranded anywhere else than on a barren reef,
that may at any time be overwhelmed by a tempestuous sea I should not have hesitated to take the ship to pieces, and
construct a smaller vessel that might have carried us safely to land; but I dare not run the risk of remaining here. We
are now 800 miles from the coast of Paramaribo, the nearest portion of Dutch Guiana, and in ten or twelve days, if
the weather should be favourable, I believe we could reach the shore. What I now propose to do is to stop the leak
by the best means we can command, and make at once for the nearest port."

As no better plan seemed to suggest itself, Curtis's proposal was unanimously accepted. Dowlas and his assistants immediately set to work to repair the charred frame-work of the ribs, and to stop the leak; they took care thoroughly to caulk from the outside all the seams that were above low water mark; lower than that they were unable to work, and had to content themselves with such repairs as they could effect in the interior. But after all the pains there is no doubt the "Chancellor" is not fit for a long voyage, and would be condemned as unseaworthy at any port at which we might put in.

To-day, the 20th, Curtis having done all that human power could do to repair his ship, determined to put her to sea.

Ever since the "Chancellor" had been relieved of her cargo, and of the water in her hold, she had been able to float in the little natural basin into which she had been driven. The basin was enclosed on either hand by rocks that remained uncovered even at high water, but was sufficiently wide to allow the vessel to turn quite round at its broadest part, and by means of hawsers fastened on the reef to be brought with her bows towards the south; while, to prevent her being carried back on to the reef, she has been anchored fore and aft.

To all appearance, then, it seemed as though it would be an easy matter to put the "Chancellor" to sea; if the wind were favourable the sails would be hoisted, if otherwise, she would have to be towed through the narrow passage. All seemed simple. But unlooked-for difficulties had yet to be surmounted.

The mouth of the passage is guarded by a kind of ridge of basalt, which at high tide we knew was barely covered with sufficient water to float the "Chancellor," even when entirely unfreighted. To be sure she had been carried over the obstacle once before, but then, as I have already said, she had been caught up by an enormous wave, and might have been said to be LIFTED over the barrier into her present position. Besides, on that ever-memorable night, there had not only been the ordinary spring-tide, but an equinoctial tide, such a one as could not be expected to occur again for many months. Waiting was out of the question; so Curtis determined to run the risk, and to take advantage of the spring-tide, which would occur to-day, to make an attempt to get the ship, lightened as she was, over the bar; after which, he might ballast her sufficiently to sail.

The wind was blowing from the north-west, and consequently right in the direction of the passage. The captain, however, after a consultation, preferred to tow the ship over the ridge, as he considered it was scarcely safe to allow a vessel of doubtful stability at full sail to charge an obstacle that would probably bring her to a dead lock. Before the operation was commenced, Curtis took the precaution of having an anchor ready in the stern, for, in the event of the attempt being unsuccessful, it would be necessary to bring the ship back to her present moorings. Two more anchors were next carried outside the passage, which was not more than two hundred feet in length. The chains were attached to the windlass, the sailors worked away at the handspikes, and at four o'clock in the afternoon the "Chancellor" was in motion.

High tide would be at twenty minutes past four, and at ten minutes before that time the ship had been hauled as far as her sea-range would allow; her keel grazed the ridge, and her progress was arrested. When the lowest part of her stern, however, just cleared the obstruction, Curtis deemed that there was no longer any reason why the mechanical action of the wind should not be brought to bear and contribute its assistance. Without delay, all sails were unfurled and trimmed to the wind. The tide was exactly at its height, passengers and crew together were at the windlass, M. Letourneur, Andre, Falsten, and myself being at the starboard bar. Curtis stood upon the poop, giving his chief attention to the sails; the lieutenant was on the forecastle; the boatswain by the helm. The sea seemed propitiously calm and, as it swelled gently to and fro, lifted the ship several times.

"Now, my boys," said Curtis in his calm clear voice, "all together! Off!!"

Round went the windlass; click, click, clanked the chains as link by link they were forced through the hawse-holes.
The breeze freshened, and the masts gave to the pressure of the sails, but round and round we went, keeping time in regular monotony to the sing-song tune hummed by one of the sailors.

We had gained about twenty feet, and were redoubling our efforts when the ship grounded again.

And now no effort would avail; all was in vain; the tide began to turn; and the "Chancellor" would not advance an inch. Was there time to go back? She would inevitably go to pieces if left balanced upon the ridge. In an instant the captain has ordered the sails to be furled, and the anchor dropped from the stern.

One moment of terrible anxiety, and all is well. The "Chancellor" tacks to stern, and glides back into the basin, which is once more her prison.

"Well, captain," says the boatswain, "what's to be done now?"

"I don't know" said Curtis, "but we shall get across somehow."
CHAPTER XXI.

NOVEMBER 21st to 24th.—There was assuredly no time to be lost before we ought to leave Ham Rock reef. The barometer had been falling ever since the morning, the sea was getting rougher, and there was every symptom that the weather, hitherto so favourable, was on the point of breaking; and in the event of a gale the "Chancellor" must inevitably be dashed to pieces on the rocks.

In the evening, when the tide was quite low, and the rocks uncovered, Curtis, the boatswain, and Dowlas went to examine the ridge which had proved so serious an obstruction, Falsten and I accompanied them. We came to the conclusion that the only way of effecting a passage was by cutting away the rocks with pikes over a surface measuring ten feet by six. An extra depth of nine or ten inches would give a sufficient gauge, and the channel might be accurately marked out by buoys; in this way it was conjectured the ship might be got over the ridge and so reach the deep water beyond.

"But this basalt is as hard as granite," said the boatswain; "besides, we can only get at it at low water, and consequently could only work at it for two hours out of the twenty-four."

"All the more reason why we should begin at once, boatswain," said Curtis.

"But if it is to take us a month, captain, perhaps by that time the ship may be knocked to atoms. Couldn't we manage to blow up the rock? we have got some powder on board."

"Not enough for that;" said the boatswain.

"You have something better than powder," said Falsten.

"What's that?" asked the captain.

"Picrate of potash," was the reply.

And so the explosive substance with which poor Ruby had so grievously imperilled the vessel was now to serve her in good stead, and I now saw what a lucky thing it was that the case had been deposited safely on the reef, instead of being thrown into the sea.

Picric acid is a crystalline bitter product extracted from coal-tar, and forming, in combination with potash, a yellow salt known as picrate of potash. The explosive power of this substance is inferior to that of gun-cotton or of dynamite, but far greater than that of ordinary gunpowder; one grain of picric powder producing an effect equal to that of thirteen grains of common powder. Picrate is easily ignited by any sharp or violent shock, and some gun-priming which we had in our possession would answer the purpose of setting it alight.

The sailors went off at once for their pikes, and Dowlas and his assistants, under the direction of Falsten, who, as an engineer, understood such matters, proceeded to hollow out a mine wherein to deposit the powder. At first we hoped that everything would be ready for the blasting to take place on the following morning, but when daylight appeared we found that the men, although they had laboured with a will, had only been able to work for an hour at low water and that four tides must ebb before the mine had been sunk to the required depth.

Not until eight o'clock on the morning of the 23rd was the work complete. The hole was bored obliquely in the rock, and was large enough to contain about ten pounds of explosive matter. Just as the picrate was being introduced into the aperture, Falsten interposed:--

"Stop," he said, "I think it will be best to mix the picrate with common powder, as that will allow us to fire the mine with a match instead of the gun-priming which would be necessary to produce a shock. Besides, it is an understood thing that the addition of gunpowder renders picrate far more effective in blasting such rocks as this, as then the violence of the picrate prepares the way for the powder which, slower in its action, will complete the dismemberment of the basalt."

Falsten is not a great talker, but what he does say is always very much to the point. His good advice was immediately followed; the two substances were mixed together, and after a match had been introduced the compound was rammed closely into the hole.

Notwithstanding that the "Chancellor" was at a distance from the rocks that insured her from any danger of being injured by the explosion, it was thought advisable that the passengers and crew should take refuge in the grotto at the extremity of the reef, and even Mr. Kear, in spite of his many objections, was forced to leave the ship. Falsten, as soon as he had set fire to the match, joined us in our retreat.

The train was to burn for ten minutes, and at the end of that time the explosion took place; the report, on account of the depth of the mine, being muffled, and much less noisy than we had expected. But the operation had been perfectly successful. Before we reached the ridge we could see that the basalt had been literally reduced to powder, and that a little channel, already being filled by the rising tide, had been cut right through the obstacle. A loud hurrah rang through the air; our prison-doors were opened, and we were prisoners no more!

At high tide the "Chancellor" weighed anchor and floated out into the open sea, but she was not in a condition to sail until she had been ballasted; and for the next twenty-four hours the crew were busily employed in taking up blocks of stone, and such of the bales of cotton as had sustained the least amount of injury.
In the course of the day, M. Letourneur, Andre, Miss Herbey, and I took a farewell walk round the reef, and Andre with artistic skill, carved on the wall of the grotto the word "Chancellor,"--the designation Ham Rock, which we had given to the reef,--and the date of our running aground. Then we bade adieu to the scene of our three week's sojourn, where we had passed days that to some at least of our party will be reckoned as far from being the least happy of their lives.

At high tide this morning, the 24th, with low, top, and gallant sails all set, the "Chancellor" started on her onward way, and two hours later the last peak of Ham Rock had vanished below the horizon.

CHAPTER XXII.

NOVEMBER 24th to DECEMBER 1st.--Here we were then once more at sea, and although on board a ship of which the stability was very questionable, we had hopes, if the wind continued favourable, of reaching the coast of Guiana in the course of a few days.

Our way was south-west and consequently with the wind, and although Curtis would not crowd on all sail lest the extra speed should have a tendency to spring the leak afresh, the "Chancellor" made a progress that was quite satisfactory. Life on board began to fall back into its former routine; the feeling of insecurity and the consciousness that we were merely retracing our path doing much, however, to destroy the animated intercourse that would otherwise go on between passenger and passenger.

The first few days passed without any incident worth recording, then on the 29th, the wind shifted to the north, and it became necessary to brace the yards, trim the sails, and take a starboard tack. This made the ship lurch very much on one side, and as Curtis felt that she was labouring far too heavily, he clued up the top-gallants, prudently reckoning that, under the circumstances, caution was far more important than speed.

The night came on dark and foggy. The breeze freshened considerably, and, unfortunately for us, hailed from the north-west. Although we carried no top-sails at all, the ship seemed to heel over more than ever. Most of the passengers had retired to their cabins, but all the crew remained on deck, whilst Curtis never quitted his post upon the poop.

Towards two o'clock in the morning I was myself preparing to go to my cabin, when Burke, one of the sailors who had been down into the hold, came on deck with the ominous cry,--

"Two feet of water below."

In an instant Curtis and the boatswain had descended the ladder. The startling news was only too true; the seawater was entering the hold, but whether the leak had sprung afresh, or whether the caulking in some of the seams was insufficient, it was then impossible to determine; all that could be done was to let the ship go with the wind and wait for day.

At daybreak they sounded again:--"Three feet of water!" was the report, I glanced at Curtis, his lips were white, but he had not lost his self-possession. He quietly informed such of the passengers as were already on deck of the new danger that threatened us; it was better that they should know the worst, and the fact could not be long concealed. I told M. Letourneur that I could not help hoping that there might yet be time to reach the land before the last crisis came. Falsten was about to give vent to an expression of despair, but he was soon silenced by Miss Herbey asserting her confidence that all would yet be well.

Curtis at once divided the crew into two sets, and made them work incessantly, turn and turn about at the pumps. The men applied themselves to their task with resignation rather than with ardour; the labour was hard and scarcely repaid them; the pumps were constantly getting out of order, the valves being choked up by the ashes and bits of cotton that were floating about in the hold, while every moment that was spent in cleaning or repairing them was so much time lost.

Slowly, but surely, the water continued to rise, and on the following morning the soundings gave five feet for its depth, I noticed that Curtis's brow contracted each time that the boatswain or the lieutenant brought him their report. There was no doubt it was only a question of time, and not for an instant must the efforts for keeping down the level be relaxed. Already the ship had sunk a foot lower in the water, and as her weight increased she no longer rose buoyantly with the waves, but pitched and rolled considerably.

All yesterday, and last night, the pumping continued; but still the sea gained upon us. The crew are weary and discouraged, but the second officer and the boatswain set them a fine example of endurance, and the passengers have now begun to take their turn at the pumps.

But all are conscious of toiling almost against hope; we are no longer secured firmly to the solid soil of the Ham Rock reef, but we are floating over an abyss which daily, nay hourly, threatens to swallow us into its depths.
DECEMBER 2nd and 3rd.--For four hours we have succeeded in keeping the water in the hold to one level; now, however, it is very evident that the time cannot be far distant when the pumps will be quite unequal to their task.

Yesterday Curtis, who does not allow himself a minute's rest, made a personal inspection of the hold. I, with the boatswain and carpenter, accompanied him. After dislodging some of the bales of cotton we could hear a splashing, or rather gurgling sound; but whether the water was entering at the original aperture, or whether it found its way in through a general dislocation of the seams, we were unable to discover. But whichever might be the case, Curtis determined to try a plan which, by cutting off communication between the interior and exterior of the vessel, might, if only for a few hours, render her hull more watertight. For this purpose he had some strong, well-tarred sails drawn upwards by ropes from below the keel, as high as the previous leaking-place, and then fastened closely and securely to the side of the hull. The scheme was dubious, and the operation difficult, but for a time it was effectual, and at the close of the day the level of the water had actually been reduced by several inches. The diminution was small enough, but the consciousness that more water was escaping through the scupper-holes than was finding its way into the hold gave us fresh courage to persevere with our work.

The night was dark, but the captain carried all the sail he could, eager to take every possible advantage of the wind, which was freshening considerably. If he could have sighted a ship he would have made signals of distress, and would not have hesitated to transfer the passengers, and even have allowed the crew to follow, if they were ready to forsake him; for himself his mind was made up, he should remain on board the "Chancellor" until she foundered beneath his feet. No sail, however, hove in sight; consequently escape by such means was out of our power.

During the night the canvas covering yielded to the pressure of the waves, and this morning, after taking the sounding, the boatswain could not suppress an oath when he announced "Six feet of water in the hold!"

The ship, then, was filling once again, and already had sunk considerably below her previous water-line. With aching arms and bleeding hands we worked harder than ever at the pumps, and Curtis makes those who are not pumping form a line and pass buckets, with all the speed they can, from hand to hand.

But all in vain! At half-past eight more water is reported in the hold, and some of the sailors, overcome by despair, refuse to work one minute longer.

The first to abandon his post was Owen, a man whom I have mentioned before, as exhibiting something of a mutinous spirit, He is about forty years of age, and altogether unprepossessing in appearance; his face is bare, with the exception of a reddish beard, which terminates in a point; his forehead is furrowed with sinister-looking wrinkles, his lips curl inwards, and his ears protrude, whilst his bleared and bloodshot eyes are encircled with thick red rings.

Amongst the five or six other men who had struck work, I noticed Jynxstrop the cook, who evidently shared all Owen's ill feelings.

Twice did Curtis order the men back to the pumps, and twice did Owen, acting as spokesman for the rest, refuse; and when Curtis made a step forward as though to approach him, he said savagely,--

"I advise you not to touch me," and walked away to the forecastle.

Curtis descended to his cabin, and almost immediately returned with a loaded revolver in his hand.

For a moment Owen surveyed the captain with a frown of defiance; but at a sign from Jynxstrop he seemed to recollect himself; and, with the remainder of the men, he returned to his work.

DECEMBER 4th.--The first attempt at mutiny being thus happily suppressed, it is to be hoped that Curtis will succeed as well in future. An insubordinate crew would render us powerless indeed.

Throughout the night the pumps were kept, without respite, steadily at work, but without producing the least sensible benefit. The ship became so water-logged and heavy that she hardly rose at all to the waves, which consequently often washed over the deck and contributed their part towards aggravating our case. Our situation was rapidly becoming as terrible as it had been when the fire was raging in the midst of us; and the prospect of being swallowed by the devouring billows was no less formidable than that of perishing in the flames.

Curtis kept the men up to the mark, and, willing or unwilling, they had no alternative but to work on as best they might; but, in spite of all their efforts, the water perpetually rose, till, at length, the men in the hold who were passing the buckets found themselves immersed up to their waists and were obliged to come on deck.

This morning, after a somewhat protracted consultation with Walter and the boatswain, Curtis resolved to abandon the ship. The only remaining boat was far too small to hold us all, and it would therefore be necessary to
construct a raft that should carry those who could not find room in her. Dowlas the carpenter, Mr. Falsten, and ten sailors were told off to put the raft in hand, the rest of the crew being ordered to continue their work assiduously at the pumps, until the time came and everything was ready for embarkation.

Hatchet or saw in hand, the carpenter and his assistants made a beginning without delay by cutting and trimming the spare yards and extra spars to a proper length. These were then lowered into the sea, which was propitiously calm, so as to favour the operation (which otherwise would have been very difficult) of lashing them together into a firm framework, about forty feet long and twenty-five feet wide, upon which the platform was to be supported.

I kept my own place steadily at the pumps, and Andre Letourneur worked at my side; I often noticed his father glance at him sorrowfully, as though he wondered what would become of him if he had to struggle with waves to which even the strongest man could hardly fail to succumb. But come what may, his father will never forsake him, and I myself shall not be wanting in rendering him whatever assistance I can.

Mrs. Kear, who had been for some time in a state of drowsy unconsciousness, was not informed of the immediate danger, but when Miss Herbey, looking somewhat pale with fatigue, paid one of her flying visits to the deck, I warned her to take every precaution for herself and to be ready for any emergency.

"Thank you, doctor, I am always ready," she cheerfully replied, and returned to her duties below. I saw Andre follow the young girl with his eyes, and a look of melancholy interest passed over his countenance.

Towards eight o'clock in the evening the framework for the raft was almost complete, and the men were lowering empty barrels, which had first been securely bunged, and were lashing them to the wood-work to insure its floating.

Two hours later and suddenly there arose the startling cry, "We are sinking! we are sinking!"

Up to the poop rushed Mr. Kear, followed immediately by Falsten and Miss Herbey, who were bearing the inanimate form of Mrs. Kear. Curtis ran to his cabin, instantly returning with a chart; a sextant, and a compass in his hand.

The scene that followed will ever be engraven in my memory; the cries of distress, the general confusion, the frantic rush of the sailors towards the raft that was not yet ready to support them, can never be forgotten. The whole period of my life seemed to be concentrated into that terrible moment when the planks bent below my feet and the ocean yawned beneath me.

Some of the sailors had taken their delusive refuge in the shrouds, and I was preparing to follow them when a hand was laid upon my shoulder. Turning round I beheld M. Letourneur, with tears in his eyes, pointing towards his son. "Yes, my friend," I said, pressing his hand, "we will save him, if possible."

But Curtis had already caught hold of the young man, and was hurrying him to the main-mast shrouds, when the "Chancellor," which had been scudding along rapidly with the wind, stopped suddenly, with a violent shock, and began to settle. The sea rose over my ankles and almost instinctively I clutched at the nearest rope. All at once, when it seemed all over, the ship ceased to sink, and hung motionless in mid-ocean.

CHAPTER XXV.

NIGHT OF DECEMBER 4th.--Curtis caught young Letourneur again in his arms, and running with him across the flooded deck deposited him safely in the starboard shrouds, whither his father and I climbed up beside him. I now had time to look about me. The night was not very dark, and I could see that Curtis had returned to his post upon the poop; whilst in the extreme aft near the taffrail, which was still above water, I could distinguish the forms of Mr. and Mrs. Kear, Miss Herbey, and Mr. Falsten. The lieutenant and the boatswain were on the far end of the forecastle; the remainder of the crew in the shrouds and top-masts.

By the assistance of his father, who carefully guided his feet up the rigging, Andre was hoisted into the main-top. Mrs. Kear could not be induced to join him in his elevated position, in spite of being told that if the wind were to freshen she would inevitably be washed overboard by the waves; nothing could induce her to listen to remonstrance, and she insisted upon remaining on the poop, Miss Herbey, of course, staying by her side.

As soon as the captain saw the "Chancellor" was no longer sinking, he set to work to take down all the sails, yards and all, and the top-gallants, in the hope that by removing everything that could compromise the equilibrium of the ship he might diminish the chance of her capsizing altogether.

"But may she not founder at any moment?" I said to Curtis, when I had joined him for a while upon the poop. "Everything depends upon the weather," he replied, in his calmest manner; "that, of course, may change at any hour. One thing, however, is certain, the 'Chancellor' preserves her equilibrium for the present."

"But do you mean to say," I further asked, "that she can sail with two feet of water over her deck?" No, Mr. Kazallon, she can't sail, but she can drift with the wind, and if the wind remains in its present quarter, in the course of a few days we might possibly sight the coast. Besides, we shall have our raft as a last resource; in a
few hours it will be ready, and at daybreak we can embark."

"You have not then," I added, "abandoned all hope even yet?" I marvelled at his composure.

"While there's life there's hope, you know Mr. Kazallon; out of a hundred chances, ninety-nine may be against us, but perhaps the odd one may be in our favour. Besides, I believe that our case is not without precedent. In the year 1795 a three-master, the 'Juno,' was precisely in the same half-sunk, water-logged condition as ourselves; and yet with her passengers and crew clinging to her top-masts she drifted for twenty days, until she came in sight of land, when those who had survived the deprivation and fatigue were saved. So let us not despair; let us hold on to the hope that the survivors of the 'Chancellor' may be equally fortunate."

I was only too conscious that there was not much to be said in support of Curtis's sanguine view of things, and that the force of reason pointed all the other way; but I said nothing, deriving what comfort I could from the fact that the captain did not yet despond of an ultimate rescue.

As it was necessary to be prepared to abandon the ship almost at a moment's notice, Dowlas was making every exertion to hurry on the construction of the raft. A little before midnight he was on the point of conveying some planks for this purpose, when, to his astonishment and horror, he found that the framework had totally disappeared. The ropes that had attached it to the vessel had snapped as she became vertically displaced, and probably it had been adrift for more than an hour.

The crew were frantic at this new misfortune, and shouting "Overboard with the masts!" they began to cut down the rigging preparatory to taking possession of the masts for a new raft.

But here Curtis interposed:--

"Back to your places, my men; back to your places. The ship will not sink yet, so don't touch a rope until I give you leave."

The firmness of the captain's voice brought the men to their senses, and although some of them could ill disguise their reluctance, all returned to their posts.

When daylight had sufficiently advanced Curtis mounted the mast, and looked around for the missing raft; but it was nowhere to be seen. The sea was far too rough for the men to venture to take out the whaleboat in search of it, and there was no choice but to set to work and to construct a new raft immediately.

Since the sea has become so much rougher, Mrs. Kear has been induced to leave the poop, and has managed to join M. Letourneur and his son on the main-top, where she lies in a state of complete prostration. I need hardly add that Miss Herbey continues in her unwearied attendance. The space to which these four people are limited is necessarily very small, nowhere measuring twelve feet across; to prevent them losing their balance some spars have been lashed from shroud to shroud, and for the convenience of the two ladies Curtis has contrived to make a temporary awning of a sail. Mr. Kear has installed himself with Silas Huntly on the foretop.

A few cases of preserved meat and biscuit and some barrels of water, that floated between the masts after the submersion of the deck, have been hoisted to the top-masts and fastened firmly to the stays. These are now our only provisions.

CHAPTER XXVI.

DECEMBER 5th.--The day was very hot. December in latitude 16deg. N. is a summer month, and unless a breeze should rise to temper the burning sun, we might expect to suffer from an oppressive heat.

The sea still remained very rough, and as the heavy waves broke over the ship as though she were a reef, the foam flew up to the very top-masts, and our clothes were perpetually drenched by the spray.

The "Chancellor's" hull is three-fourths immersed; besides the three masts and the bowsprit, to which the whaleboat was suspended, the poop and the forecastle are the only portions that now are visible; and as the intervening section of the deck is quite below the water, these appear to be connected only by the framework of the netting that runs along the vessel's sides. Communication between the top-masts is extremely difficult, and would be absolutely precluded, were it not that the sailors, with practised dexterity, manage to hoist themselves about by means of the stays. For the passengers, cowering on their narrow and unstable platform, the spectacle of the raging sea below was truly terrific; every wave that dashed over the ship shook the masts till they trembled again, and one could venture scarcely to look or to think lest he should be tempted to cast himself into the vast abyss.

Meanwhile, the crew worked away with all their remaining vigour at the second raft, for which the top-gallants and yards were all obliged to be employed; the planks, too, which were continually being loosened and broken away by the violence of the waves from the partitions of the ship, were rescued before they had drifted out of reach, and were brought into use. The symptoms of the ship foundering did not appear to be immediate; so that Curtis insisted upon the raft being made with proper care to insure its strength; we were still several hundred miles from the coast of Guiana, and for so long a voyage it was indispensable to have a structure of considerable solidity. The
reasonableness of this was self-apparent, and as the crew had recovered their assurance they spared no pains to accomplish their work effectually.

Of all the number, there was but one, an Irishman, named O'Ready, who seemed to question the utility of all their toil. He shook his head with an oracular gravity. He is an oldish man, not less than sixty, with his hair and beard bleached with the storms of many travels. As I was making my way towards the poop, he came up to me and began talking.

"And why, bedad, I'd like to know, why is it that they'll all be afther lavin' of the ship?"

He turned his quid with the most serene composure, and continued,—

"And isn't it me myself that's been wrecked nine times already? and sure, poor fools are they that ever have put their trust in rafts or boats sure and they found a wathery grave. Nay, nay; while the ould ship lasts, let's stick to her, says I."

Having thus unburdened his mind he relapsed, into silence, and soon went away.

About three o'clock I noticed that Mr. Kear and Silas Huntly were holding an animated conversation in the foretop. The petroleum merchant had evidently some difficulty in bringing the ex-captain round to his opinion, for I saw him several times shake his head as he gave long and scrutinizing looks at the sea and sky. In less than an hour afterwards I saw Huntly let himself down by the forestays and clamber along to the forecastle where he joined the group of sailors, and I lost sight of him.

I attached little importance to the incident, and shortly afterwards joined the party in the main-top, where we continued talking for some hours. The heat was intense, and if it had not been for the shelter afforded by the sail-tent, would have been unbearable. At five o'clock we took as refreshment some dried meat and biscuit, each individual being also allowed half a glass of water. Mrs. Kear, prostrate with fever, could not touch a mouthful; and nothing could be done by Miss Herbey to relieve her, beyond occasionally moistening her parched lips. The unfortunate lady suffers greatly, and sometimes I am inclined to think that she will succumb to the exposure and privation. Not once had her husband troubled himself about her; but when shortly afterwards I heard him hail some of the sailors on the forecastle and ask them to help him down from the foretop, I began to think that the selfish fellow was coming to join his wife.

At first the sailors took no notice of his request, but on his repeating it with the promise of paying them handsomely for their services, two of them, Burke and Sandon, swung themselves along the netting into the shrouds, and were soon at his side.

A long discussion ensued. The men evidently were asking more than Mr. Kear was inclined to give, and at one time it seemed as though the negotiation would fall through altogether. But at length the bargain was struck, and I saw Mr. Kear take a bundle of paper dollars from his waistcoat pocket, and hand a number of them over to one of the men. The man counted them carefully, and from the time it took him, I should think that he could not have pocketed anything less than a hundred dollars.

The next business was to get Mr. Kear down from the foretop, and Burke and Sandon proceeded to tie a rope round his waist, which they afterwards fastened to the forestay; then, in a way which provoked shouts of laughter from their mates, they gave the unfortunate man a shove, and sent him rolling down like a bundle of dirty clothes on to the forecastle.

I was quite mistaken as to his object. Mr. Kear had no intention of looking after his wife, but remained by the side of Silas Huntly until the gathering darkness hid them both from view.

As night drew on, the wind grew calmer, but the sea remained very rough. The moon had been up ever since four in the afternoon, though she only appeared at rare intervals between the clouds. Some long lines of vapour on the horizon were tinged with a rosy glare that foreboded a strong breeze for the morrow, and all felt anxious to know from which quarter the breeze would come, for any but a north-easter would bear the frail raft on which we were to embark far away from land.

About eight o'clock in the evening Curtis mounted to the main-top but he seemed preoccupied and anxious, and did not speak to any one. He remained for a quarter of an hour, then after silently pressing my hand, he returned to his old post.

I laid myself down in the narrow space at my disposal, and tried to sleep; but my mind was filled with strange forebodings, and sleep was impossible. The very calmness of the atmosphere was oppressive; scarcely a breath of air vibrated through the metal rigging, and yet the sea rose with a heavy swell as though it felt the warnings of a coming tempest.

All at once, at about eleven o'clock, the moon burst brightly forth through a rift in the clouds, and the waves sparkled again as if illumined by a submarine glimmer. I start up and look around me. Is it merely imagination? or do I really see a black speck floating on the dazzling whiteness of the waters, a speck that cannot be a rock; because it rises and falls with the heaving motion of the billows? But the moon once again becomes overclouded; the sea, is
darkened, and I return to my uneasy couch close to the larboard shrouds.

CHAPTER XXVII.

DECEMBER 6th.--I must have fallen asleep for a few hours, when at four o'clock in the morning, I was rudely aroused by the roaring of the wind, and could distinguish Curtis's voice as he shouted in the brief intervals between the heavy gusts.

I got up, and holding tightly to the purlin--for the waves made the masts tremble with their violence--I tried to look around and below me. The sea was literally raging beneath, and great masses of livid-looking foam were dashing between the masts, which were oscillating terrifically. It was still dark, and I could only faintly distinguish two figures on the stern, whom, by the sound of their voices, that I caught occasionally above the tumult, I made out to be Curtis and the boatswain.

Just at that moment a sailor, who had mounted to the main-top to do something to the rigging, passed close behind me.

"What's the matter?" I asked,

"The wind has changed," he answered, adding something which I could not hear distinctly, but which sounded like "dead against us."

Dead against us! then, thought I, the wind had shifted to the south-west, and my last night's forebodings had been correct.

When daylight at length appeared, I found the wind although not blowing actually from the south-west, had veered round to the north-west, a change which was equally disastrous to us, inasmuch as it was carrying us away from land. Moreover, the ship had sunk considerably during the night, and there were now five feet of water above deck; the side netting had completely disappeared, and the forecastle and the poop were now all but on a level with the sea, which washed over them incessantly. With all possible expedition Curtis and his crew were labouring away at their raft, but the violence of the swell materially impeded their operations, and it became a matter of doubt as to whether the woodwork would not fall asunder before it could be properly fastened together.

As I watched the men at their work M. Letourneur, with one arm supporting his son, came and stood by my side.

"Don't you think this main-top will soon give way?" he said, as the narrow platform on which we stood creaked and groaned with the swaying of the masts.

Miss Herbey heard his words, and pointing towards Mrs. Kear, who was lying prostrate at her feet, asked what we thought ought to be done.

"We can do nothing but stay where we are," I replied.

"No;" said Andre "this is our best refuge; I hope you are not afraid."

"Not for myself," said the young girl quietly "only for those to whom life is precious."

At a quarter to eight we heard the boatswain calling to the sailors in the bows.

"Ay, ay, sir," said one of the men--O'Ready, I think.

"Where's the whale boat?" shouted the boatswain.

"I don't know, sir. Not with us," was the reply.

"She's gone adrift, then!"

And sure enough the whale-boat was no longer hanging from the bowsprit; and in a moment the discovery was made that Mr. Kear, Silas Huntly, and three sailors,--a Scotchman and two Englishmen,--were missing. Afraid that the "Chancellor" would founder before the completion of the raft, Kear and Huntly had plotted together to effect their escape, and had bribed the three sailors to seize the only remaining boat.

This, then, was the black speck that I had seen during the night. The miserable husband had deserted his wife, the faithless captain had abandoned the ship that had once been under his command.

"There are five saved, then," said the boatswain.

"Faith, an it's five lost ye'll be maning," said O'Ready; and the state of the sea fully justified his opinion.

The crew were furious when they heard of the surreptitious flight, and loaded the fugitives with all the invectives they could lay their tongues to. So enraged were they at the dastardly trick of which they had been made the dupes, that if chance should bring the deserters again on board I should be sorry to answer for the consequences.

In accordance with my advice, Mrs. Kear has not been informed of her husband's disappearance. The unhappy lady is wasting away with a fever for which we are powerless to supply a remedy, for the medicine chest was lost when the ship began to sink. Nevertheless, I do not think we have anything to regret on that score, feeling as I do, that in a case like Mrs. Kear's, drugs would be of no avail.
CHAPTER XXVIII.

DECEMBER 6th CONTINUED.--The "Chancellor" no longer maintained her equilibrium; we felt that she was gradually going down, and her hull was probably breaking up. The main-top was already only ten feet above the water, whilst the bowsprit, with the exception of the extreme end, that rose obliquely from the waves, was entirely covered.

The "Chancellor's" last day, we felt, had come.

Fortunately the raft was all but finished, and unless Curtis preferred to wait till morning we should be able to embark in the evening.

The raft is a very solid structure. The spars that form the framework are crossed one above another and lashed together with stout ropes, so that the whole pile rises a couple of feet above the water. The upper platform is constructed from the planks that were broken from the ship's sides by the violence of the waves, and which had not drifted away. The afternoon has been employed in charging the raft with such provisions, sails, tools, and instruments as we have been able to save.

And how can I attempt to give any idea of the feelings with which, one and all, we now contemplated the fate before us? For my own part I was possessed rather by a benumbed indifference than by any sense of genuine resignation. M. Letourneur was entirely absorbed in his son, who, in his turn, thought only of his father; at the same time exhibiting a calm Christian fortitude, which was shown by no one else of the party except Miss Herbey, who faced her danger with the same brave composure. Incredible as it may seem, Falsten remained the same as ever, occupying himself with writing down figures and memoranda in his pocket-book. Mrs. Kear, in spite of all that Miss Herbey could do for her, was evidently dying.

With regard to the sailors, two or three of them were calm enough, but the rest had well-nigh lost their wits. Some of the more ill-disposed amongst them seemed inclined to run into excesses; and their conduct, under the bad influence of Owen and Jynxstrop, made it doubtful whether they would submit to control when once we were limited to the narrow dimensions of the raft. Lieutenant Walter, although his courage never failed him, was worn out with bodily fatigue, and obliged to give up all active labour; but Curtis and the boatswain were resolute, energetic and firm as ever. To borrow an expression from the language of metallurgic art, they were men "at the highest degree of hardness."

At five o'clock one of our companions in misfortune was released from her sufferings. Mrs. Kear, after a most distressing illness, through which her young companion tended her with the most devoted care, has breathed her last. A few deep sighs and all was over, and I doubt whether the sufferer was ever conscious of the peril of her situation.

The night passed on without further incident. Towards morning I touched the dead woman's hand, and it was cold and stiff. The corpse could not remain any longer on the main-top, and after Miss Herbey and I had carefully wrapped the garments about it, with a few short prayers the body of the first victim of our miseries was committed to the deep.

As the sea closed over the body I heard one of the men in the shrouds say,--
"There goes a carcass that we shall be sorry we have thrown away!"

I looked round sharply. It was Owen who had spoken, But horrible as were his words, the conviction was forced upon my mind that the day could not be far distant when we must want for food.

CHAPTER XXIX.

DECEMBER 7th.--The ship was sinking rapidly; the water had risen to the fore-top; the poop and forecastle were completely submerged; the top of the bowsprit had disappeared, and only the three mast-tops projected from the waves.

But all was ready on the raft; an erection had been made on the fore to hold a mast, which was supported by shrouds fastened to the sides of the platform; this mast carried a large royal.

Perhaps, after all, these few frail planks will carry us to the shore which the "Chancellor" has failed to reach; at any rate, we cannot yet resign all hope.

We were just on the point of embarking at 7 a.m. when the "Chancellor" all at once began to sink so rapidly that the carpenter and men who were on the raft were obliged with all speed to cut the ropes that secured it to the vessel to prevent it from being swallowed up in the eddying waters. Anxiety, the most intense, took possession of us all. At the very moment when the ship was descending into the fathomless abyss, the raft, our only hope of safety, was drifting off before our eyes. Two of the sailors and an apprentice, beside themselves with terror, threw themselves headlong into the sea; but it was evident from the very first that they were quite powerless to combat the winds and waves. Escape was impossible; they could neither reach the raft, nor return to the ship. Curtis tied a rope round his waist and tried to swim to their assistance; but long before he could reach them the unfortunate men, after a vain
struggle for life, sank below the waves and were seen no more. Curtis, bruised and beaten with the surf that raged about the mast-heads, was hauled back to the ship.

Meantime, Dowlas and his men, by means of some spars which they used as oars, were exerting themselves to bring back the raft, which had drifted about two cables-lengths away; but, in spite of all their efforts, it was fully an hour,—an hour which seemed to us, waiting as we were with the water up to the level of the top-masts, like an eternity—before they succeeded in bringing the raft alongside, and lashing it once again to the "Chancellor's" main-mast.

Not a moment was then to be lost. The waves were eddying like a whirlpool around the submerged vessel, and numbers of enormous air-bubbles were rising to the surface of the water.

The time was come. At Curtis's word "Embark!" we all hurried to the raft. Andre who insisted upon seeing Miss Herbey go first, was helped safely on to the platform, where his father immediately joined him. In a very few minutes all except Curtis and old O'Ready had left the "Chancellor."

Curtis remained standing on the main-top, deeming it not only his duty, but his right, to be the last to leave the vessel he had loved so well, and the loss of which he so much deplored.

"Now then, old fellow off of this!" cried the captain to the old Irishman, who did not move.

"And is it quite sure ye are that she's sinkin?" he said.

"Ay, ay! sure enough, my man; and you'd better look sharp."

"Faith, then, and I think I will;" and not a moment too soon (for the water was up to his waist) he jumped on to the raft.

Having cast one last, lingering look around him, Curtis then left the ship; the rope was cut and we went slowly adrift.

All eyes were fixed upon the spot where the "Chancellor" lay foundering. The top of the mizzen was the first to disappear, then followed the main-top; and soon, of what had been a noble vessel, not a vestige was to be seen.

CHAPTER XXX.

Will this frail float, forty feet by twenty, bear us in safety? Sink it cannot; the material of which it is composed is of a kind that must surmount the waves. But it is questionable whether it will hold together. The cords that bind it will have a tremendous strain to bear in resisting the violence of the sea. The most sanguine amongst us trembles to face the future; the most confident dares to think only of the present. After the manifold perils of the last seventy-two days' voyage all are too agitated to look forward without dismay to what in all human probability must be a time of the direst distress.

Vain as the task may seem, I will not pause in my work of registering the events of our drama, as scene after scene they are unfolded before our eyes.

Of the twenty-eight persons who left Charleston in the "Chancellor," only eighteen are left to huddle together upon this narrow raft; this number includes the five passengers, namely M. Letourneur, Andre, Miss Herbey, Falsten, and myself; the ship's officers, Captain Curtis, Lieutenant Walter, the boatswain, Hobart the steward, Jynxstrop the cook, and Dowlas the carpenter; and seven sailors, Austin, Owen, Wilson, O'Ready, Burke, Sandon, and Flaypole.

Such are the passengers on the raft; it is but a brief task to enumerate their resources.

The greater part of the provisions in the store-room were destroyed at the time when the ship's deck was submerged, and the small quantity that Curtis has been able to save will be very inadequate to supply the wants of eighteen people, who too probably have many days to wait ere they sight either land or a passing vessel. One cask of biscuit, another of preserved meat, a small keg of brandy, and two barrels of water complete our store, so that the utmost frugality in the distribution of our daily rations becomes absolutely necessary.

Of spare clothes we have positively none; a few sails will serve for shelter by day, and covering by night. Dowlas has his carpenter's tools, we have each a pocket-knife, and O'Ready an old tin pot; of which he takes the most tender care; in addition to these, we are in possession of a sextant, a compass, a chart, and a metal tea-kettle, everything else that was placed on deck in readiness for the first raft having been lost in the partial submersion of the vessel.

Such then is our situation; critical indeed, but after all perhaps not desperate. We have one great fear; some there are amongst us whose courage, moral as well as physical, may give way, and over failing spirits such as these we may have no control.

CHAPTER XXXI.
DECEMBER 7th CONTINUED.--Our first day on the raft has passed without any special incident. At eight o'clock this morning Curtis asked our attention for a moment.

"My friends," he said, "listen to me. Here on this raft, just as when we were on board the 'Chancellor,' I consider myself your captain; and as your captain, I expect that all of you will strictly obey my orders. Let me beg of you, one and all, to think solely of our common welfare; let us work with one heart and with one soul, and may Heaven protect us!"

After delivering these few words with an emotion that evidenced their earnestness, the captain consulted his compass, and found that the freshening breeze was blowing from the north. This was fortunate for us, and no time was to be lost in taking advantage of it to speed us on our dubious way. Dowlas was occupied in fixing the mast into the socket that had already been prepared for its reception, and in order to support it more firmly he placed spurs of wood, forming arched buttresses, on either side. While he was thus employed the boatswain and the other seamen were stretching the large royal sail on the yard that had been reserved for that purpose.

By half-past nine the mast was hoisted, and held firmly in its place by some shrouds attached securely to the sides of the raft; then the sail was run up and trimmed to the wind, and the raft began to make a perceptible progress under the brisk breeze.

As soon as we had once started, the carpenter set to work to contrive some sort of a rudder, that would enable us to maintain our desired direction. Curtis and Falsten assisted him with some serviceable suggestions, and in a couple of hours' time he had made and fixed to the back of the raft a kind of paddle, very similar to those used by the Malays.

At noon, after the necessary preliminary observations, Curtis took the altitude of the sun. The result gave lat. 15deg. 7min. N. by long. 49deg. 35min. W. as our position, which, on consulting the chart, proved to be about 650 miles north-east of the coast of Paramaribo in Dutch Guiana.

Now even under the most favourable circumstances, with trade-winds and weather always in our favour, we cannot by any chance hope to make more than ten or twelve miles a day, so that the voyage cannot possibly be performed under a period of two months. To be sure there is the hope to be indulged that we may fall in with a passing vessel, but as the part of the Atlantic into which we have been driven is intermediate between the tracks of the French and English Transatlantic steamer either from the Antilles or the Brazils, we cannot reckon at all upon such a contingency happening in our favour; whilst if a calm should set in, or worse still, if the wind were to blow from the east, not only two months, but twice, nay, three times that length of time will be required to accomplish the passage.

At best, however, our provisions, even though used with the greatest care, will barely last three months. Curtis has called us into consultation, and as the working of the raft does not require such labour as to exhaust our physical strength, all have agreed to submit to a regimen which, although it will suffice to keep us alive, will certainly not fully satisfy the cravings of hunger and thirst.

As far as we can estimate, we have somewhere about 500 lbs. of meat and about the same quantity of biscuit. To make this last for three months we ought not to consume very much more than 5 lbs. a day of each, which, when divided among eighteen people, will make the daily ration 5 oz. of meat and 5 oz. of biscuit for each person. Of water we have certainly not more than 200 gallons, but by reducing each person's allowance to a pint a day, we hope to eke out that, too, over the space of three months.

It is arranged that the food shall be distributed under the boatswain's superintendence every morning at ten o'clock. Each person will then receive his allowance of meat and biscuit, which may be eaten when and how he pleases. The water will be given out twice a day--at ten in the morning and six in the evening; but as the only drinking-vessels in our possession are the tea-kettle and the old Irishman's tin pot, the water has to be consumed immediately on distribution. As for the brandy, of which there are only five gallons, it will be doled out with the strictest limitation, and no one will be allowed to touch it except with the captain's express permission.

I should not forget that there are two sources from which we may hope to increase our store. First, any rain that may fall will add to our supply of water, and two empty barrels have been placed ready to receive it; secondly, we hope to do something in the way of fishing, and the sailors have already begun to prepare some lines.

All have mutually agreed to abide by the rules that have been laid down, for all are fully aware that by nothing but the most precise regimen can we hope to avert the horrors of famine, and forewarned by the fate, of many who in similar circumstances have miserably perished, we are determined to do all that prudence can suggest for husbanding our stores.

CHAPTER XXXII.

DECEMBER 8th to 17th.--When night came we wrapped ourselves in our sails. For my own part, worn out with
the fatigue of the long watch in the top-mast, I slept for several hours; M. Letourneur and Andre did the same, and Miss Herbey obtained sufficient rest to relieve the tired expression that her countenance had lately been wearing. The night passed quietly. As the raft was not very heavily laden the waves did not break over it at all, and we were consequently able to keep ourselves perfectly dry. To say the truth, it was far better for us that the sea should remain somewhat boisterous, for any diminution in the swell of the waves would indicate that; the wind had dropped, and it was with a feeling of regret that when the morning came I had to note down "weather calm" in my journal.

In these low latitudes the heat in the day-time is so intense, and the sun burns with such an incessant glare, that the entire atmosphere becomes pervaded with a glowing vapour. The wind, too, blows only in fitful gusts and through long intervals of perfect calm the sails flap idly and uselessly against the mast. Curtis and the boatswain, however, are of opinion that we are not entirely dependent on the wind. Certain indications, which a sailor's eye alone could detect, make them almost sure that we are being carried along by a westerly current, that flows at the rate of three or four miles an hour. If they are not mistaken, this is a circumstance that may materially assist our progress, and at which we can hardly fail to rejoice, for the high temperature often makes our scanty allowance of water quite inadequate to allay our thirst.

But with all our hardships I must confess that our condition is far preferable to what it was when we were still clinging to the "Chancellor." Here at least we have a comparatively solid platform beneath our feet, and we are relieved from the incessant dread of being carried down with a foundering vessel. In the day-time we can move about with a certain amount of freedom, discuss the weather, watch the sea, and examine our fishing-lines; whilst at night we can rest securely under the shelter of our sails.

"I really think, Mr. Kazallon," said Andre Letourneur to me a few days after we had embarked, "that our time on board the raft passes as pleasantly as it did upon Ham Rock; and the raft has one advantage even over the reef, for it is capable of motion."

"Yes, Andre," replied, "as long as the wind continues favourable the raft has decidedly the advantage; but supposing the wind shifts, what then?"

"Oh, we musn't think about that," he said; "let us keep up our courage while we can."

I felt that he was right, and that the dangers we had escaped should make us more hopeful for the future; and I think that nearly all of us are inclined to share his opinion.

Whether the captain is equally sanguine I am unable to say. He holds himself very much aloof, and as he evidently feels that he has the great responsibility of saving other lives than his own, we are reluctant to disturb his silent meditations.

Such of the crew as are not on watch spend the greater portion of their time in dozing on the fore part of the raft. The aft, by the captain's orders, has been reserved for the use of us passengers, and by erecting some uprights we have contrived to make a sort of tent, which affords some shelter from the burning sun. On the whole our bill of health is tolerably satisfactory. Lieutenant Walter is the only invalid, and he, in spite of all our careful nursing, seems to get weaker every day.

Andre Letourneur is the life of our party, and I have never appreciated the young man so well. His originality of perception makes his conversation both lively and entertaining and as he talks, his wan and suffering countenance lights up with an intelligent animation. His father seems to become more devoted to him than ever, and I have seen him sit for an hour at a time, with his hand resting on his son's, listening eagerly to his every word.

Miss Herbey occasionally joins in our conversation, but although we all do our best to make her forget that she has lost those who should have been her natural protectors, M. Letourneur is the only one amongst us to whom she speaks without a certain reserve. To him, whose age gives him something of the authority of a father, she has told the history of her life—a life of patience and self-denial such as not unfrequently falls to the lot of orphans. She had been, she said, two years with Mrs. Kear, and although now left alone in the world, homeless and without resources, hope for the future does not fail her. The young lady's modest deportment and energy of character command the respect of all on board, and I do not think that even the coarsest of the sailors has either by word or gesture acted towards her in a way that she could deem offensive.

The 12th, 13th, and 14th of December passed away without any change in our condition. The wind continued to blow in irregular gusts, but always in the same direction, and the helm, or rather the paddle at the back of the raft has never once required shifting; and the watch, who are posted on the fore, under orders to examine the sea with the most scrupulous attention, have had no change of any kind to report.

At the end of a week we found ourselves growing accustomed to our limited diet, and as we had no manual exertion, and no wear and tear of our physical constitution, we managed very well. Our greatest deprivation was the short supply of water, for, as I said before, the unmitigated heat made our thirst at times very painful.

On the 15th we held high festival. A shoal of fish, of the sparus tribe, swarmed round the raft, and although our tackle consisted merely of long cords baited with morsels of dried meat stuck upon bent nails, the fish were so
voracious that in the course of a couple of days we had caught as many as weighed almost 200lbs., some of which were grilled, and others boiled in sea-water over a fire made on the fore part of the raft. This marvelous haul was doubly welcome, inasmuch as it not only afforded us a change of diet, but enabled us to economize our stores; if only some rain had fallen at the same time we should have been more than satisfied.

Unfortunately the shoal of fish did not remain long in our vicinity. On the 17th they all disappeared, and some sharks, not less than twelve or fifteen feet long, belonging to the species of spotted dog-fish, took their place. These horrible creatures have black backs and fins, covered with white spots and stripes. Here, on our low raft, we seem almost on a level with them, and more than once their tails have struck the spars with terrible violence. The sailors manage to keep them at a distance by means of handspikes, but I shall not be surprised if they persist in following us, instinctively intelligent that we are destined to become their prey. For myself, I confess that they give me a feeling of uneasiness; they seem to me like monsters of ill-omen.

CHAPTER XXXIII.

DECEMBER 18th to 20th.--On the 18th the wind freshened a little, but as it blew from the same favourable quarter we did not complain, and only took the precaution of putting an extra support to the mast, so that it should not snap with the tension of the sail. This done, the raft was carried along with something more than its ordinary speed, and left a long line of foam in its wake.

In the afternoon the sky became slightly overclouded, and the heat consequently somewhat less oppressive. The swell made it more difficult for the raft to keep its balance, and we shipped two or three heavy seas; but the carpenter managed to make with some planks a kind of wall about a couple of feet high, which protected us from the direct action of the waves. Our casks of food and water were secured to the raft with double ropes, for we dared not run the risk of their being carried overboard, an accident that would at once have reduced us to the direst distress.

In the course of the day the sailors gathered some of the marine plants known by the name of sargassos, very similar to those we saw in such profusion between the Bermudas and Ham Rock. I advised my companions to chew the laminary tangles, which they would find contained a saccharine juice, affording considerable relief to their parched lips and throats.

The remainder of the day passed without incident. I should not, however, omit to mention that the frequent conferences held amongst the sailors, especially between Owen, Burke, Flaypole, Wilson, and Jynxstrop, the negro, aroused some uneasy suspicions in my mind. What was the subject of their conversation I could not discover, for they became silent immediately that a passenger or one of the officers approached them. When I mentioned the matter to Curtis I found he had already noticed these secret interviews, and that they had given him enough concern to make him determined to keep a strict eye upon Jynxstrop and Owen, who, rascals as they were themselves, were evidently trying to disaffect their mates.

On the 19th the heat was again excessive. The sky was cloudless, and as there was not enough wind to fill the sail the raft lay motionless upon the surface of the water. Some of the sailors found a transient alleviation for their thirst by plunging into the sea, but as we were fully aware that the water all round was infested with sharks, none of us was rash enough to follow their example, though if, as seems likely, we remain long becalmed, we shall probably in time overcome our fears, and feel constrained to indulge ourselves with a bath.

The health of Lieutenant Walter continues to cause us grave anxiety, the young man being weakened by attacks of intermittent fever. Except for the loss of the medicine-chest we might have temporarily reduced this by quinine; but it is only too evident that the poor fellow is consumptive, and that that hopeless malady is making ravages upon him that no medicine could permanently arrest. His sharp dry cough, his short breathing, his profuse perspirations, more especially in the morning; the pinched-in nose, the hollow cheeks, of which the general pallour is only relieved by a hectic flush, the contracted lips, the too brilliant eye and wasted form—all bear witness to a slow but sure decay.

To-day, the 20th, the temperature is as high as ever, and the raft still motionless. The rays of the sun penetrate even through the shelter of our tent, where we sit literally gasping with the heat. The impatience with which we awaited the moment when the boatswain should dole out our meagre allowance of water, and the eagerness with which those lukewarm drops were swallowed, can only be realized by those who for themselves have endured the agonies of thirst.

Lieutenant Walter suffers more than any of us from the scarcity of water, and I noticed that Miss Herbey reserved almost the whole of her own share for his use. Kind and compassionate as ever, the young girl does all that lies in her power to relieve the poor fellow's sufferings.

"Mr. Kazallon," she said to me this morning, "that young man gets manifestly weaker every day."

"Yes, Miss Herbey," I replied, "and how sorrowful it is that we can do nothing for him, absolutely nothing."

"Hush!" she said, with her wonted consideration, "perhaps he will hear what we are saying."
And then she sat down near the edge of the raft, where, with her head resting on her hands, she remained lost in thought.

An incident sufficiently unpleasant occurred to-day. For nearly an hour Owen, Flaypole, Burke, and Jynxstrop had been engaged in close conversation and, although their voices were low, their gestures had betrayed that they were animated by some strong excitement. At the conclusion of the colloquy Owen got up and walked deliberately to the quarter of the raft that has been reserved for the use of the passengers.

"Where are you off to now, Owen?" said the boatswain.

"That's my business," said the man insolently, and pursued his course.

The boatswain was about to stop him, but before he could interfere Curtis was standing and looking Owen steadily in the face.

"Ah, captain, I've got a word from my mates to say to you," he said, with all the effrontery imaginable.

"Say on, then," said the captain coolly.

"We should like to know about that little keg of brandy. Is it being kept for the porpoises or the officers?"

Finding that he obtained no reply, he went on,--

"Look here, captain, what we want is to have our grog served out every morning as usual."

"Then you certainly will not," said the captain.

"What! what!" exclaimed Owen, "don't you mean to let us have our grog?"

"Once and for all, no."

For a moment, with a malicious grin upon his lips, Owen stood confronting the captain; then, as though thinking better of himself, he turned round and rejoined his companions, who were still talking together in an undertone.

When I was afterwards discussing the matter with Curtis I asked him whether he was sure he had done right in refusing the brandy.

"Right!" he cried, "to be sure I have. Allow those men to have brandy! I would throw it all overboard first."

CHAPTER XXXIV.

DECEMBER 21st.--No further disturbance has taken place amongst the men. For a few hours the fish appeared again, and we caught a great many of them, and stored them away in an empty barrel. This addition to our stock of provisions makes us hope that food, at least, will not fail us.

Usually the nights in the tropics are cool, but to-day, as evening drew on, the wonted freshness did not return, but the air remained stifling and oppressive, whilst heavy masses of vapour hung over the water.

There was no moonlight; there would be a new moon at half-past one in the morning, but the night was singularly dark, except for dazzling flashes of summer lightning that from time to time illumined the horizon far and wide. There was, however, no answering roll of thunder, and the silence of the atmosphere seemed almost awful.

For a couple of hours, in the vain hope of catching a breath of air, Miss Herbey, Andre Letourneur, and I, sat watching the imposing struggle of the electric vapours. The clouds appeared like embattled turrets crested with flame, and the very sailors, coarse-minded men as they were, seemed struck with the grandeur of the spectacle, and regarded attentively, though with an anxious eye, the preliminary tokens of a coming storm. Until midnight we kept our seats upon the stern of the raft, whilst the lightning ever and again shed around us a livid glare similar to that produced by adding salt to lighted alcohol.

"Are you afraid of a storm, Miss Herbey?" said Andre to the girl.

"No, Mr. Andre, my feelings are always rather those of awe than of fear," she replied. "I consider a storm one of the sublimest phenomena that we can behold--don't you think so too?"

"Yes, and especially when the thunder is pealing," he said; "that majestic rolling, far different to the sharp crash of artillery, rises and falls like the long-drawn notes of the grandest music, and I can safely say that the tones of the most accomplished ARTISTE have never moved me like that incomparable voice of nature."

"Rather a deep bass, though," I said, laughing.

"That may be," he answered; "but I wish we might hear it now, for this silent lightning is somewhat unexpressive."

"Never mind that, Andre" I said; "enjoy a storm when it comes, if you like, but pray don't wish for it."

"And why not?" said he; "a storm will bring us wind, you know."

"And water, too," added Miss Herbey, "the water of which we are so seriously in need."

The young people evidently wished to regard the storm from their own point of view, and although I could have opposed plenty of common sense to their poetical sentiments, I said no more, but let them talk on as they pleased for fully an hour.

Meantime the sky was becoming quite overclouded, and after the zodiacal constellations had disappeared in the
mists that hung round the horizon, one by one the stars above our heads were veiled in dark rolling masses of
vapour, from which every instant there issued forth sheets of electricity that formed a vivid background to the dark
grey fragments of cloud that floated beneath.

As the reservoir of electricity was confined to the higher strata of the atmosphere, the lightning was still
unaccompanied by thunder; but the dryness of the air made it a weak conductor. Evidently the fluid could only
escape by terrible shocks, and the storm must ere long burst forth with fearful violence.

This was the opinion of Curtis and the boatswain. The boatswain is only weather-wise from his experience as a
sailor; but Curtis, in addition to his experience, has some scientific knowledge, and he pointed out to me an
appearance in the sky known to meteorologists as a "cloud-ring," and scarcely ever seen beyond the regions of the
torrid zone, which are impregnated by damp vapours brought from all quarters of the ocean by the action of the
trade-winds.

"Yes, Mr. Kazallon," said Curtis, "our raft has been driven into the region of storms, of which it has been justly
remarked that any one endowed with very sensitive organs can at any moment distinguish the growlings of thunder."

"Hark!" I said, as I strained my ears to listen, "I think I can hear it now."

"You can," he answered; "yet what you hear is but the first warning of the storm which, in a couple of hours, will
burst upon us with all its fury. But never mind, we must be ready for it."

Sleep, even if we wished it, would have been impossible in that stifling temperature. The lightning increased in
brilliancy, and appeared from all quarters of the horizon, each flash covering large arcs, varying from 100deg. to
150deg., leaving the atmosphere pervaded by one incessant phosphorescent glow.

The thunder became at length more and more distinct, the reports, if I may use the expression, being "round,"
rather than rolling. It seemed almost as though the sky were padded with heavy clouds of which the elasticity
muffled the sound of the electric bursts.

Hitherto, the sea had been calm, almost stagnant as a pond. Now, however, long undulations took place, which
the sailors recognized, all too well, as being the rebound produced by a distant tempest. A ship, in such a case,
would have been instantly brought ahull, but no manoeuvring could be applied to our raft, which could only drift
before the blast.

At one o'clock in the morning one vivid flash, followed, after the interval of a few seconds, by a loud report of
thunder, announced that the storm was rapidly approaching. Suddenly the horizon was enveloped in a vapourous
fog, and seemed to contract until it was close around us. At the same instant the voice of one of the sailors was heard
shouting,--

"A squall! a squall!"

CHAPTER XXXV.

DECEMBER 21st, NIGHT.--The boatswain rushed to the halliards that supported the sail, and instantly lowered
the yard; and not a moment too soon, for with the speed of an arrow the squall was upon us, and if it had not been
for the sailor's timely warning we must all have been knocked down and probably precipitated into the sea; as it was,
our tent on the back of the raft was carried away.

The raft itself, however, being so nearly level with the water, had little peril to encounter from the actual wind;
but from the mighty waves now raised by the hurricane we had everything to dread. At first the waves had been
crushed and flattened as it were by the pressure of the air, but now, as though strengthened by the reaction, they rose
with the utmost fury. The raft followed the motions of the increasing swell, and was tossed up and down, to and fro,
and from side to side with the most violent oscillations. "Lash yourselves tight," cried the boatswain, as he threw us
some ropes; and in a few moments, with Curtis's assistance, M. Letourneur, Andre, Falsten, and myself were
fastened so firmly to the raft, that nothing but its total disruption could carry us away. Miss Herbey was bound by a
rope passed round her waist to one of the uprights that had supported our tent, and by the glare of the lightning I
could see that her countenance was as serene and composed as ever.

Then the storm began to rage indeed. Flash followed flash, peal followed peal in quick succession. Our eyes
were blinded, our ears deafened, with the roar and glare. The clouds above, the ocean beneath, seemed verily to have
taken fire, and several times I saw forked lightnings dart upwards from the crest of the waves, and mingle with those
that radiated from the fiery vault above. A strong odour of sulphur pervaded the air, but though thunderbolts fell
thick around us, not one had touched our raft.

By two o'clock the storm had reached its height. The hurricane had increased, and the heavy waves, heated to a
strange heat by the general temperature, dashed over us until we were drenched to the skin. Curtis, Dowlas, the
boatswain, and the sailors did what they could to strengthen the raft with additional ropes. M. Letourneur placed
himself in front of Andre to shelter him from the waves. Miss Herbey stood upright and motionless as a statue.
Soon dense masses of lurid clouds came rolling up, and a crackling, like the rattle of musketry, resounded through the air. This was produced by a series of electrical concussions, in which volleys of hailstones were discharged from the cloud-batteries above. In fact, as the storm-sheet came in contact with a current of cold air, hail was formed with great rapidity, and hailstones, large as nuts, came pelting down, making the platform of the raft re-echo with a metallic ring.

For about half an hour the meteoric shower continued to descend, and during that time the wind slightly abated in violence; but after having shifted from quarter to quarter, it once more blew with all its former fury. The shrouds were broken, but happily the mast, already bending almost double, was removed by the men from its socket before it should be snapped short off. One gust caught away the tiller, which went adrift beyond all power of recovery, and the same blast blew down several of the planks that formed the low parapet on the larboard side, so that the waves dashed in without hindrance through the breach.

The carpenter and his mates tried to repair the damage, but, tossed from wave to wave, the raft was inclined to an angle of more than forty-five degrees, making it impossible for them to keep their footing, and rolling one over another, they were thrown down by the violent shocks. Why they were not altogether carried away, why we were not all hurled into the sea, was to me a mystery. Even if the cords that bound us should retain their hold, it seemed perfectly incredible that the raft itself should not be overturned, so that we should be carried down and stifled in the seething waters.

At last, towards three in the morning, when the hurricane seemed to be raging more fiercely than ever, the raft, caught up on the crest of an enormous wave, stood literally perpendicularly on its edge. For an instant, by the illumination of the lightning, we beheld ourselves raised to an incomprehensible height above the foaming breakers. Cries of terror escaped our lips. All must be over now! But no; another moment, and the raft had resumed its horizontal position. Safe, indeed, we were, but the tremendous upheaval was not without its melancholy consequences. The cords that secured the cases of provisions had burst asunder. One case rolled overboard, and the side of one of the water-barrels was staved in, so that the water which it contained was rapidly escaping. Two of the sailors rushed forward to rescue the case of preserved meat; but one of them caught his foot between the planks of the platform, and, unable to disengage it, the poor fellow stood uttering cries of distress.

I tried to go to his assistance, and had already untied the cord that was round me; but I was too late. Another heavy sea dashed over us, and by the light of a dazzling flash I saw the unhappy man, although he had managed without assistance to disengage his foot, washed overboard before it was in my power to get near him. His companion had also disappeared.

The same ponderous wave laid me prostrate on the platform, and as my head came in collision with the corner of a spar, for a time I lost all consciousness.

CHAPTER XXXVI.

DECEMBER 22nd.—Daylight came at length, and the sun broke through and dispersed the clouds that the storm had left behind. The struggle of the elements, while it lasted, had been terrific, but the swoon into which I was thrown by my fall, prevented me from observing the final incidents of the visitation. All that I know is, that shortly after we had shipped the heavy sea that I have mentioned, a shower of rain had the effect of calming the severity of the hurricane, and tended to diminish the electric tension of the atmosphere.

Thanks to the kind care of M. Letourneur and Miss Herbey, I recovered consciousness, but I believe that it is to Robert Curtis that I owe my real deliverance, for he it was that prevented me from being carried away by a second heavy wave.

The tempest, fierce as it was, did not last more than a few hours; but even in that short space of time what an irreparable loss we have sustained, and what a load of misery seems stored up for us in the future!

Of the two sailors who perished in the storm, one was Austin, a fine active young man of about eight-and-twenty; the other was old O'Ready, the survivor of so many ship wrecks. Our party is thus reduced to sixteen souls, leaving a total barely exceeding half the number of those who embarked on board the “Chancellor” at Charleston.

Curtis's first care had been to take a strict account of the remnant of our provisions. Of all the torrents of rain that fell in the night we were unhappily unable to catch a single drop; but water will not fail us yet, for about fourteen gallons still remain in the bottom of the broken barrel, whilst the second barrel has not yet been touched. But of food we have next to nothing. The cases containing the dried meat, and the fish that we had preserved, have both been washed away, and all that now remains to us is about sixty pounds of biscuit. Sixty pounds of biscuit between sixteen persons! Eight days, with half a pound a day apiece, will consume it all.

The day has passed away in silence. A general depression has fallen upon all: the spectre of famine has appeared amongst us, and each has remained wrapped in his own gloomy meditations, though each has doubtless but one idea
dominant in his mind.

Once, as I passed near the group of sailors lying on the fore part of the raft, I heard Flaypole say with a sneer,--
"Those who are going to die had better make haste about it."

"Yes," said Owen, "leave their share of food to others."

At the regular hour each person received his half-pound of biscuit. Some, I noticed, swallowed it ravenously,
others reserved it for another time. Falsten divided his ration into several portions, corresponding, I believe, to the
number of meals to which he was ordinarily accustomed. What prudence he shows! If any one survives this misery,
I think it will be he.

CHAPTER XXXVII.

DECEMBER 23rd to 30th--After the storm the wind settled back into its old quarter, blowing pretty briskly from
the north-east. As the breeze was all in our favour it was important to make the most of it, and after Dowlas had
carefully readjusted the mast, the sail was once more hoisted, and we were carried along at the rate of two or two
and a half knots an hour. A new rudder, formed of a spar and a good-sized plank, has been fitted in the place of the
one we lost, but with the wind in its present quarter it is in little requisition. The platform of the raft has been
repaired, the disjointed planks have been closed by means of ropes and wedges, and that portion of the parapet that
was washed away has been replaced, so that we are no longer wetted by the waves. In fact, nothing has been left
undone to insure the solidity of our raft, and to render it capable of resisting the wear and tear of the wind and
waves. But the dangers of wind and waves are not those which we have most to dread.

Together with the unclouded sky came a return of the tropical heat, which during the preceding days had caused
us such serious inconvenience; fortunately on the 23rd the excessive warmth was somewhat tempered by the breeze,
and as the tent was once again put up, we were able to find shelter under it by turns.

But the want of food was beginning to tell upon us sadly, and our sunken cheeks and wasted forms were visible
tokens of what we were enduring. With most of us hunger seemed to attack the entire nervous system, and the
constriction of the stomach produced an acute sensation of pain. A narcotic, such as opium or tobacco, might have
availed to soothe, if not to cure, the gnawing agony; but of sedatives we had none, so the pain must be endured.

One alone there was amongst us who did not feel the pangs of hunger. Lieutenant Walter seemed as it were to
feed upon the fever that raged within him; but then he was the victim of the most torturing thirst, Miss Herbey,
besides reserving for him a portion of her own insufficient allowance, obtained from the captain a small extra supply
of water, with which every quarter of an hour she moistened the parched lips of the young man, who almost too
weak to speak, could only express his thanks by a grateful smile. Poor fellow! all our care cannot avail to save him
now; he is doomed, most surely doomed to die.

On the 23rd he seemed to be conscious of his condition, for he made a sign to me to sit down by his side, and
then summoning up all his strength to speak, he asked me in a few broken words how long I thought he had to live?
Slight as my hesitation was, Walter noticed it immediately.

"The truth," he said; "tell me the plain truth."

"My dear fellow, I am not a doctor, you know," I began, "and I can scarcely judge--"

"Never mind," he interrupted, "tell me just what you think."

I looked at him attentively for some moments, then laid my ear against his chest. In the last few days his malady
had made fearfully rapid strides, and it was only too evident that one lung had already ceased to act, whilst the other
was scarcely capable of performing the work of respiration. The young man was now suffering from the fever which
is the sure symptom of the approaching end in all tuberculous complaints.

The lieutenant kept his eye fixed upon me with a look of eager inquiry. I knew not what to say, and sought to
 evade his question.

"My dear boy," I said, "in our present circumstances not one of us can tell how long he has to live. Not one of us
knows what may happen in the course of the next eight days."

"The next eight days," he murmured, as he looked eagerly into my face.

And then, turning away his head, he seemed to fall into a sort of doze.

The 24th, 25th, and 26th passed without any alteration in our circumstances, and strange, nay, incredible as it
may sound, we began to get accustomed to our condition of starvation. Often, when reading the histories of
shipwrecks, I have suspected the accounts to be greatly exaggerated; but now I fully realize their truth, and marvel
when I find on how little nutriment it is possible to exist for so long a time. To our daily half-pound of biscuit the
captain has thought to add a few drops of brandy, and the stimulant helps considerably to sustain our strength. If we
had the same provisions for two months, or even for one, there might be room for hope; but our supplies diminish
rapidly, and the time is fast approaching when of food and drink there will be none.
The sea had furnished us with food once, and, difficult as the task of fishing had now become, at all hazards the attempt must be made again. Accordingly the carpenter and the boatswain set to work and made lines out of some untwisted hemp, to which they fixed some nails that they pulled out of the flooring of the raft, and bent into proper shape. The boatswain regarded his device with evident satisfaction.

"I don't mean to say," said he to me, "that these nails are first-rate fish-hooks; but one thing I do know, and that is, with proper bait they will act as well as the best. But this biscuit is no good at all. Let me but just get hold of one fish, and I shall know fast enough how to use it to catch some more."

And the true difficulty was how to catch the first fish. It was evident that fish were not abundant in these waters, nevertheless the lines were cast. But the biscuit with which they were baited dissolved at once in the water, and we did not get a single bite. For two days the attempt was made in vain, and as it only involved what seemed a lavish waste of our only means of subsistence, it was given up in despair.

To-day, the 30th, as a last resource, the boatswain tried what a piece of coloured rag might do by way of attracting some voracious fish, and having obtained from Miss Herbey a little piece of the red shawl she wears, he fastened it to his hook. But still no success; for when, after several hours, he examined his lines, the crimson shred was still hanging intact as he had fixed it. The man was quite discouraged at his failure.

"But there will be plenty of bait before long," he said to me in a solemn undertone.

"What do you mean?" said I, struck by his significant manner.

"You'll know soon enough," he answered.

What did he insinuate? The words, coming from a man usually so reserved, have haunted me all night.

CHAPTER XXXVIII.

JANUARY 1st to 5th.--More than three months had elapsed since we left Charleston in the "Chancellor," and for no less than twenty days had we now been borne along on our raft at the mercy of the wind and waves. Whether we were approaching the American coast, or whether we were drifting farther and farther to sea, it was now impossible to determine, for, in addition to the other disasters caused by the hurricane, the captain's instruments had been hopelessly smashed, and Curtis had no longer any compass by which to direct his course, nor a sextant by which he might make an observation.

Desperate, however, as our condition might be judged, hope did not entirely abandon our hearts, and day after day, hour after hour were our eyes strained towards the horizon, and many and many a time did our imagination shape out the distant land. But ever and again the illusion vanished; a cloud, a mist, perhaps even a wave, was all that had deceived us; no land, no sail ever broke the grey line that united sea and sky, and our raft remained the centre of the wide and dreary waste.

On the 1st of January we swallowed our last morsel of biscuit. The 1st of January! New Year's Day! What a rush of sorrowful recollections overwhelmed our minds! Had we not always associated the opening of another year with new hopes, new plans, and coming joys? And now, where were we? Could we dare to look at one another, and breathe a new year's greeting?

The boatswain approached me with a peculiar look on his countenance.

"You are surely not going to wish me a happy new year?" I said.

"No indeed, sir," he replied, "I was only going to wish you well through the first day of it; and that is pretty good assurance on my part, for we have not another crumb to eat."

True as it was, we scarcely realized the fact of there being actually nothing until on the following morning the hour came round for the distribution of the scanty ration, and then, indeed, the truth was forced upon us in a new and startling light. Towards evening I was seized with violent pains in the stomach, accompanied by a constant desire to yawn and gape that was most distressing; but in a couple of hours the extreme agony passed away, and on the 3rd I was surprised to find that I did not suffer more. I felt, it is true, that there was some great void within myself, but the sensation was quite as much moral as physical. My head was so heavy that I could not hold it up; it was swimming with giddiness, as though I were looking over a precipice.

My symptoms were not shared by all my companions, some of whom endured the most frightful tortures. Dowlas and the boatswain especially, who were naturally large eaters, uttered involuntary cries of agony, and were obliged to gird themselves tightly with ropes to subdue the excruciating pain that was gnawing their very vitals.

And this was only the second day of our misery! what would we not have given for half, nay, for a quarter of the meagre ration which a few days back we had deemed so inadequate to supply our wants, and which now, eked out crumb by crumb, might, perhaps, serve for several days? In the streets of a besieged city, dire as the distress may be, some gutter, some rubbish-heap, some corner may yet be found that will furnish a dry bone or a scrap of refuse that may for a moment allay the pangs of hunger; but these bare planks, so many times washed clean by the relentless
waves, offer nothing to our eager search, and after every fragment of food that the wind carried into their interstices has been scraped out devoured, our resources are literally at an end.

The nights seem even longer than the days. Sleep, when it comes, brings no relief; it is rather a feverish stupour, broken and disturbed by frightful nightmares. Last night, however, overcome by fatigue, I managed to rest for several hours.

At six o'clock this morning I was roused by the sound of angry voices, and, starting up, I saw Owen and Jynxstrop, with Flaypole, Wilson, Burke, and Sandon, standing in a threatening attitude. They had taken possession of the carpenter's tools, and now, armed with hatchets, chisels, and hammers, they were preparing to attack the captain, the boatswain, and Dowlas. I attached myself in a moment to Curtis's party. Falsten followed my example, and although our knives were the only weapons at our disposal, we were ready to defend ourselves to the very last extremity.

Owen and his men advanced towards us. The miserable wretches were all drunk, for during the night they had knocked a hole in the brandy-barrel, and had recklessly swallowed its contents. What they wanted they scarcely seemed to know, but Owen and Jynxstrop, not quite so much intoxicated as the rest; seemed to be urging them on to massacre the captain and the officers.

"Down with the captain! Overboard with Curtis! Owen shall take the command!" they shouted from time to time in their drunken fury; and, armed as they were, they appeared completely masters of the situation.

"Now, then, down with your arms!" said Curtis sternly, as he advanced to meet them.

"Overboard with the captain!" howled Owen, as by word and gesture he urged on his accomplices.

Curtis' pushed aside the excited rascals, and, walking straight up to Owen, asked him what he wanted.

"What do we want? Why, we want no more captains; we are all equals now."

Poor stupid fool! as though misery and privation had not already reduced us all to the same level.

"Owen," said the captain once, again, "down with your arms!"

"Come on, all of you," shouted Owen to his companions, without giving the slightest heed to Curtis's words.

A regular struggle ensued. Owen and Wilson attacked Curtis, who defended himself with a piece of a spar; Burke and Flaypole rushed upon Falsten and the boatswain, whilst I was left to confront the negro Jynxstrop, who attempted to strike me with the hammer which he brandished in his hand. I endeavoured to paralyze his movements by pinioning his arms, but the rascal was my superior in muscular strength. After wrestling for a few moments, I felt that he was getting the mastery over me when all of a sudden he rolled over on to the platform, dragging me with him. Andre Letourneur had caught hold of one of his legs, and thus saved my life. Jynxstrop dropped his weapon in his fall; I seized it instantly, and was about to cleave the fellow's skull, when I was myself arrested by Andre's hand upon my arm.

By this time the mutineers had been driven back to the forepart of the raft, and Curtis, who had managed to parry the blows which had been aimed at him, had caught hold of a hatchet, with which he was preparing to strike at Owen. But Owen made a sidelong movement to avoid the blow, and the weapon caught Wilson full in the chest. The unfortunate man rolled over the side of the raft and instantly disappeared.

"Save him! save him!" shouted the boatswain.

"It's too late; he's dead!" said Dowlas.

"Ah, well! he'll do for--" began the boatswain; but he did not finish his sentence.

Wilson's death, however, put an end to the fray. Flaypole and Burke were lying prostrate in a drunken stupour, and Jynxstrop was soon overpowered, and lashed tightly to the foot of the mast. The carpenter and the boatswain seized hold of Owen.

"Now then," said Curtis, as he raised his blood-stained hatchet, "make your peace with God, for you have not a moment to live."

"Oh, you want to eat me, do you?" sneered Owen, with the most hardened effrontery.

But the audacious reply saved his life; Curtis turned as pale as death, the hatchet dropped from his hand, and he went and seated himself moodily on the farthest corner of the raft.

CHAPTER XXXIX.

JANUARY 5th and 6th.--The whole scene made a deep impression on our minds, and Owen's speech coming as a sort of climax, brought before us our misery with a force that was well-nigh overwhelming.

As soon as I recovered my composure, I did not forget to thank Andre Letourneur for the act of intervention that had saved my life.

"Do you thank me for that; Mr. Kazallon?" he said; "it has only served to prolong your misery."

"Never mind, M. Letourneur," said Miss Herbey; "you did your duty."
Enfeebled and emaciated as the young girl is, her sense of duty never deserts her, and although her torn and bedraggled garments float dejectedly about her body, she never utters a word of complaint, and never loses courage.

"Mr. Kazallon," she said to me, "do you think we are fated to die of hunger?"

"Yes; Miss Herbey, I do," I replied in a hard, cold tone.

"How long do you suppose we have to live?" she asked again.

"I cannot say; perhaps we shall linger on longer than we imagine."

"The strongest constitutions suffer the most, do they not?" she said.

"Yes; but they have one consolation; they die the soonest;" I replied coldly.

Had every spark of humanity died out of my breast that I thus brought the girl face to face with the terrible truth without a word of hope or comfort? The eyes of Andre and his father, dilated with hunger, were fixed upon me, and I saw reproach and astonishment written in their faces.

Afterwards, when we were quite alone, Miss Herbey asked me if I would grant her a favour.

"Certainly, Miss Herbey; anything you like to ask," I replied; and this time my manner was kinder and more genial.

"Mr. Kazallon," she said, "I am weaker than you, and shall probably die first. Promise me that, if I do, you will throw my body into the sea."

"Oh, Miss Herbey," I began, "it was very wrong of me to speak to you as I did!"

"No, no," she replied, half smiling; "you were quite right. But it is a weakness of mine; I don't mind what they do with me as long as I am alive, but when I am dead--" she stopped and shuddered. "Oh, promise me that you will throw me into, the sea!"

I gave her the melancholy promise, which she acknowledged by pressing my hand feebly with her emaciated fingers.

Another night passed away. At times my sufferings were so intense that cries of agony involuntarily escaped my lips; then I became calmer, and sank into a kind of lethargy. When I awoke, I was surprised to find my companions still alive.

The one of our party who seems to bear his privations the best is Hobart the steward, a man with whom hitherto I have had very little to do. He is small, with a fawning expression remarkable for its indecision, and has a smile which is incessantly playing round his lips; he goes about with his eyes half-closed, as though he wished to conceal his thoughts, and there is something altogether false and hypocritical about his whole demeanour. I cannot say that he bears his privations without a murmur, for he sighs and moans incessantly; but, with it all, I cannot but think that there is a want of genuineness in his manner, and that the privation has not really told upon him as much as it has upon the rest of us. I have my suspicions about the man, and intend to watch him carefully. To-day, the 6th, M. Letourneur drew me aside to the stern of the raft, saying that he had a secret to communicate, but that he wished neither to be seen nor heard speaking to me. I withdrew with him to the larboard corner of the raft; and, as it was growing dusk, nobody observed what we were doing.

"Mr. Kazallon," M. Letourneur began in a low voice, "Andre is dying of hunger: he is growing weaker and weaker, and oh! I cannot, will not see him die!"

He spoke passionately, almost fiercely, and I fully understood his feelings. Taking his hand, I tried to reassure him.

"We will not despair yet," I said, "perhaps some passing ship--"

"Ship!" he cried impatiently, "don't try to console me with empty commonplaces; you know as well as I do that there is no chance of falling in with a passing ship." Then, breaking off suddenly, he asked, "How long is it since my son and all of you have had anything to eat?"

Astonished at his question, I replied that it was now four days since the biscuit had failed.

"Four days," he repeated; "well, then, it is eight since I have tasted anything. I have been saving my share for my son."

Tears rushed to my eyes; for a few moments I was unable to speak, and could only once more grasp his hand in silence.

"What do you want me to do?" I asked at length.

"Hush! not so loud; some one will hear us," he said, lowering his voice, "I want you to offer it to Andre as though it came from yourself. He would not accept it from me; he would think I had been depriving myself for him. Let me implore you to do me this service and for your trouble," and here he gently stroked my hand, "for your trouble you shall have a morsel for yourself."

I trembled like a child as I listened to the poor father's words, and my heart was ready to burst when I felt a tiny piece of biscuit slipped into my hand.

"Give it him," M. Letourneur went on under his breath, "give it him; but do not let any one see you; the monsters
would murder you if they knew it. This is only for to-day; I will give you some more to-morrow."

The poor fellow did not trust me, and well he might not, for I had the greatest difficulty to withstand the temptation to carry the biscuit to my mouth, But I resisted the impulse, and those alone who have suffered like me can know what the effort was.

Night came on with the rapidity peculiar to these low latitudes, and I glided gently up to Andre and slipped the piece of biscuit into his hand as "a present from myself." The young man clutched at it eagerly.

"But my father?" he said inquiringly.

I assured him that his father and I had each had our share, and that he must eat this now, and, perhaps, I should be able to bring him some more another time. Andre asked no more questions, and eagerly devoured the morsel of food.

So this evening at least, notwithstanding M. Letourneur's offer, I have tasted nothing.

CHAPTER XL.

JANUARY 7th.--During the last few days since the wind has freshened, the salt water constantly dashing over the raft has terribly punished the feet and legs of some of the sailors. Owen, whom the boatswain ever since the revolt kept bound to the mast, is in a deplorable state, and at our request has been released from his restraint. Sandon and Burke are also suffering from the severe smarting caused in this way, and it is only owing to our more sheltered position on the aft-part of the raft, that we have not; all shared the same inconvenience.

Today the boatswain, maddened by starvation, laid hands upon everything that met his voracious eyes, and I could hear the grating of his teeth as he gnawed at fragments of sails and bits of wood, instinctively endeavouring to fill his stomach by putting the mucus' into circulation at length, by dint of an eager search, he came upon a piece of leather hanging to one of the spars that supported the platform. He snatched it off and devoured it greedily, and as it was animal matter, it really seemed as though the absorption of the substance afforded him some temporary relief. Instantly we all followed his example; a leather hat, the rims of caps, in short, anything that contained any animal matter at all, were gnawed and sucked with the utmost avidity. Never shall I forget the scene. We were no longer human, the impulses and instincts of brute beasts seemed to actuate our every movement.

For a moment the pangs of hunger were somewhat allayed; but some of us revolted against the loathsome food, and were seized either with violent nausea or absolute sickness. I must be pardoned for giving these distressing details, but how otherwise can I depict the misery, moral and physical, which we are enduring? And with it all, I dare not venture to hope that we have reached the climax of our sufferings.

The conduct of Hobart during the scene that I have just described has only served to confirm my previous suspicions of him. He took no part in the almost fiendish energy with which we gnawed at our scraps of leather, and although by his conduct and perpetual groanings, he might be considered to be dying of inanition, yet to me he has the appearance of being singularly exempt from the tortures which we are all enduring. But whether the hypocrite is being sustained, by some secret store of food, I have been unable to discover.

Whenever the breeze drops the heat is overpowering; but although our allowance of water is very meagre, at present the pangs of hunger far exceed the pain of thirst. It has often been remarked that extreme thirst is far less endurable than extreme hunger. Is it possible that still greater agonies are in store for us? I cannot, dare not, believe it. Fortunately, the broken barrel still contains a few pints of water, and the other one has not yet been opened. But I am glad to say that notwithstanding our diminished numbers, and in spite of some opposition, the captain has thought right to reduce the daily allowance to half a pint for each person. As for the brandy, of which there is only a quart now left, it has been stowed away safely in the stern of the raft.

This evening has ended the sufferings of another of our companions, making our number now only fourteen. My attentions and Miss Herbey's nursing could do nothing for Lieutenant Walter, and about half-past seven he expired in my arms.

Before he died, in a few broken words he thanked Miss Herbey and myself for the kindness we had shown him. A crumpled letter fell from his hand, and in a voice that was scarcely audible from weakness, he said,--

"It is my mother's letter: the last I had from her--she was expecting me home; but she will never see me more. Oh, put it to my lips--let me kiss it before I die. Mother! mother! Oh my God!"

I placed the letter in his cold hand, and raised it to his lips; his eye lighted for a moment; we heard the faint sound of a kiss, and all was over!

CHAPTER XLI.

JANUARY 8th.--All night I remained by the side of the poor fellow's corpse, and several times Miss Herbey...
joined me in my mournful watch.

Before daylight dawned the body was quite cold, and as I knew there must be no delay in throwing it overboard, I asked Curtis to assist me in the sad office. The body was frightfully emaciated, and I had every hope that it would not float.

As soon as it was quite light, taking every precaution that no one should see what we were about, Curtis and I proceeded to our melancholy task. We took a few articles from the lieutenant's pockets, which we purposed, if either of us should survive, to remit to his mother. But as we wrapped him in his tattered garments that would have to suffice for his winding-sheet, I started back with a thrill of horror. The right foot had gone, leaving the leg a bleeding stump!

No doubt that, overcome by fatigue, I must have fallen asleep for an interval during the night, and some one had taken advantage of my slumber to mutilate the corpse. But who could have been guilty of so foul a deed! Curtis looked around with anger flashing in his eye; but all seemed as usual, and the silence was only broken by a few groans of agony.

But there was no time to be lost; perhaps we were already observed, and more horrible scenes might be likely to occur. Curtis said a few short prayers, and we cast the body into the sea. It sank immediately.

"They are feeding the sharks well, and no mistake," said a voice behind me.

I turned round quickly, and found that it was Jynxstrop who had spoken.

As the boatswain now approached, I asked him whether he thought it possible that any of the wretched men could have taken the dead man's foot.

"Oh yes, I dare say," he replied, in a significant tone "and perhaps they thought they were right."

"Right! what do you mean?" I exclaimed.

"Well, sir," he said coldly, "isn't it better to eat a dead man than a living one?"

I was at a loss to comprehend him, and, turning away, laid myself down at the end of the raft.

Towards eleven o'clock, a most suspicious incident occurred. The boatswain, who had cast his lines early in the morning, caught three large cod, each more than thirty inches long, of the species which, when dried, is known by the name of stock-fish. Scarcely had he hauled them on board, when the sailors made a dash at them, and it was with the utmost difficulty that Curtis, Falsten, and myself could restore order, so that we might divide the fish into equal portions. Three cod were not much amongst fourteen starving persons, but, small as the quantity was, it was allotted in strictly equal shares. Most of us devoured the food raw, almost I might say, alive; only Curtis, Andre and Miss Herbey having the patience to wait until their allowance had been boiled at a fire which they made with a few scraps of wood. For myself, I confess that I swallowed my portion of fish just as it was,--raw and bleeding. M. Letourneur followed my example; the poor man devoured his food like a famished wolf, and it is only a wonder to me how, after his lengthened fast, he came to be alive at all.

The boatswain's delight at his success was, excessive, and amounted almost to delirium. I went up to him, and encouraged him to repeat his attempt.

"Oh, yes," he said; "I'll try again. I'll try again."

"And why not try at once," I asked.

"Not now," he said evasively; "the night is the best time for catching large fish. Besides, I must manage to get some bait, for we have been improvident enough not to save a single scrap."

"But you have succeedced once without bait; why may you not succeed again?"

"Oh! I had some very good bait last night," he said. I stared at him in amazement. He steadily returned my gaze, but said nothing.

"Have you none left?" at last I asked.

"Yes!" he almost whispered and left me without another word.

Our meal, meagre as it had been, served to rally our shattered energies; our hopes were slightly raised; there was no reason why the boatswain should not have the same good luck again.

One evidence of the degree to which our spirits were revived was that our minds were no longer fixed upon the miserable present and hopeless future, but we began to recall and discuss the past; and M. Letourneur, Andre Mr. Falsten, and I held a long conversation with the captain about the various incidents of our eventful voyage, speaking of our lost companions, of the fire, of the stranding of the ship, of our sojourn on Ham Rock, of the springing of the leak, of our terrible voyage in the top-masts, of the construction of the raft, and of the storm. All these things seemed to have happened so long ago, and yet we were living still. Living, did I say? Ay, if such an existence as ours could be called a life, fourteen of us were living still. Who would be the next to go? We should then be thirteen.

"An unlucky number!" said Andre with a mournful smile.

During the night the boatswain cast his lines from the stern of the raft, and, unwilling to trust them to any one else, remained watching them himself. In the morning I went to ascertain what success had attended his patience. It
was scarcely light, and with eager eyes he was peering down into the water. He had neither seen nor heard me coming.

"Well, boatswain!" I said, touching him on the shoulder.

He turned round quickly.

"Those villainous sharks have eaten every morsel of my bait," he said, in a despairing voice.

"And you have no more left?" I asked.

"No more," he said. Then grasping my arm he added, "and that only shows me that it is no good doing things by halves."

The truth flashed upon me at once, and I laid my hand upon his mouth. Poor Walter!

CHAPTER XLII.

JANUARY 9th and 10th.--On the 9th the wind dropped, and there was a dead calm; not a ripple disturbed the surface of the long undulations as they rose and fell beneath us; and if it were not for the slight current which is carrying us we know not whither, the raft would be absolutely stationary.

The heat was intolerable; our thirst more intolerable still; and now it was that for the first time I fully realized how the insufficiency of drink could cause torture more unendurable than the pangs of hunger. Mouth, throat, pharynx, all alike were parched and dry, every gland becoming hard as horn under the action of the hot air we breathed. At my urgent solicitation the captain was for once induced to double our allowance of water; and this relaxation of the ordinary rule enabled us to attempt to slake our thirst four times in the day, instead of only twice. I use the word "attempt" advisedly; for the water at the bottom of the barrel, though kept covered by a sail, became so warm that it was perfectly flat and unrefreshing.

It was a most trying day, and the sailors relapsed into a condition of deep despondency. The moon was nearly full, but when she rose the breeze did not return. Continuance of high temperature in daytime is a sure proof that we have been carried far to the south, and here, on this illimitable ocean, we have long ceased even to look for land; it might almost seem as though this globe of ours had veritably become a liquid sphere!

To-day we are still becalmed, and the temperature is as high as ever. The air is heated like a furnace, and the sun scorches like fire. The torments of famine are all forgotten: our thoughts are concentrated with fevered expectation upon the longed-for moment when Curtis shall dole out the scanty measure of lukewarm water that makes up our ration. O for one good draught, even if it should exhaust the whole supply! At least, it seems as if we then could die in peace!

About noon we were startled by sharp cries of agony, and looking round I saw Owen writhing in the most horrible convulsions. I went towards him, for, detestable as his conduct had been, common humanity prompted me to see whether I could afford him any relief. But before I reached him, a shout from Flaypole arrested my attention. The man was up in the mast, and with great excitement pointing to the east.

"A ship! A ship!" he cried.

In an instant all were on their feet. Even Owen stopped his cries and stood erect. It was quite true that in the direction indicated by Flaypole there was a white speck visible upon the horizon. But did it move? Would the sailors with their keen vision pronounce it to be a sail? A silence the most profound fell upon us all. I glanced at Curtis as he stood with folded arms intently gazing at the distant point. His brow was furrowed, and he contracted every feature, as with half-closed eyes, he concentrated his power of vision upon that one faint spot in the far-off horizon.

But at length he dropped his arms and shook his head. I looked again, but the spot was no longer there. If it were a ship, that ship had disappeared; but probably it had been a mere reflection, or, more likely still, only the crest of some curling wave.

A deep dejection followed this phantom ray of hope. All returned to their accustomed places. Curtis alone remained motionless, but his eye no longer scanned the distant view.

Owen now began to shriek more wildly than ever. He presented truly a most melancholy sight; he writhed with the most hideous contortions, and had all the appearance of suffering from tetanus. His throat was contracted by repeated spasms, his tongue was parched, his body swollen, and his pulse, though feeble, was rapid and irregular. The poor wretch's symptoms were precisely such as to lead us to suspect that he had taken some corrosive poison. Of course it was quite out of our power to administer any antidote; all that we could devise was to make him swallow something that might act as an emetic. I asked Curtis for a little of the lukewarm water. As the contents of the broken barrel were now exhausted, the captain, in order to comply with my request, was about to tap the other barrel, when Owen started suddenly to his knees, and with a wild, unearthly shriek, exclaimed,--

"No! no! no! of that water I will not touch a drop."

I supposed he did not understand what we were going to do, and endeavoured to explain; but all in vain; he
persisted in refusing to taste the water in the second barrel. I then tried to induce vomiting by tickling his uvula, and he brought off some bluish secretion from his stomach, the character of which confirmed our previous suspicions—that he had been poisoned by oxide of copper. We now felt convinced that any efforts on our part to save him would be of no avail. The vomiting, however, had for the time relieved him, and he was able to speak.

Curtis and I both implored him to let us know what he had taken to bring about consequences so serious. His reply fell upon us as a startling blow.

The ill fated wretch had stolen several pints of water from the barrel that had been untouched, and that water had poisoned him!

CHAPTER XLIII.

JANUARY 11th to 14th.--Owen's convulsions returned with increased violence, and in the course of the night he expired in terrible agony. His body was thrown overboard almost directly; it had decomposed so rapidly that the flesh had not even consistency enough for any fragments of it to be reserved for the boatswain to use to bait his lines. A plague the man had been to us in his life; in his death he was now of no service!

And now, perhaps, still more than ever, did the horror of our situation stare us in the face. There was no doubt that the poisoned barrel had at some time or other contained copperas; but what strange fatality had converted it into a water-cask, or what fatality, stranger still, had caused it to be brought on board the raft, was a problem that none could solve. Little, however, did it matter now: the fact was evident; the barrel was poisoned, and of water we had not a drop.

One and all, we fell into the gloomiest silence. We were too irritable to bear the sound of each other's voices; and it did not require a word, a mere look or gesture was enough, to provoke us to anger that was little short of madness. How it was that we did not all become raving maniacs, I cannot tell.

Throughout the 12th no drain of moisture crossed our lips, and not a cloud arose to warrant the expectation of a passing shower; in the shade, if shade it might be called, the thermometer would have registered at least 100deg., and, perhaps, considerably more.

No change next day. The salt water began to chafe my legs, but although the smarting was at times severe, it was an inconvenience to which I gave little heed; others who had suffered from the same trouble had become no worse. Oh! if this water that surrounds us could be reduced to vapour or to ice! its particles of salt extracted, it would be available for drink. But no! we have no appliances, and we must suffer on.

At the risk of being devoured by the sharks, the boatswain and two sailors took a morning bath, and as their plunge seemed to refresh them, I and three of my companions resolved to follow their example. We had never learnt to swim, and had to be fastened to the end of a rope and lowered into the water; while Curtis during the half-hour of our bath, kept a sharp look-out to give warning of any danger from approaching sharks. No recommendation, however, on our part, nor any representation of the benefit we felt we had derived, could induce Miss Herbey to allay her sufferings in the same way.

At about eleven o'clock, the captain came up to me, and whispered in my ear,--
"Don't say a word, Mr. Kazallon; I do not want to raise false hopes, but I think I see a ship."

It was as well that the captain had warned me; otherwise, I should have raised an involuntary shout of joy; as it was, I had the greatest difficulty in restraining my expressions of delight. "Look behind to larboard," he continued in an undertone.

Affecting an indifference which I was far from feeling, I cast an anxious glance to that quarter of the horizon of which he spoke, and there, although mine is not a nautical eye, I could plainly distinguish the outline of a ship under sail.

Almost at the same moment the boatswain who happened to be looking in the same direction, raised the cry, "Ship ahoy!"

Whether it was that no one believed it, or whether all energies were exhausted, certain it is that the announcement produced none of the effects that might have been expected. Not a soul exhibited the slightest emotion, and it was only when the boatswain had several times sung out his tidings that all eyes turned to the horizon. There, most undeniably, was the ship, and the question rose at once to the minds of all, and to the lips of many, "Would she see us?"

The sailors immediately began discussing the build of the vessel, and made all sorts of conjectures as to the direction she was taking. Curtis was far more deliberate in his judgment. After examining her attentively for some time, he said, "She is a brig running close upon the wind, on the starboard tack, If she keeps her course for a couple of hours, she will come right athwart our track."

A couple of hours! The words sounded to our ears like a couple of centuries. The ship might change her course
at any moment; closely trimmed as she was, it was very probable that she was only tacking about to catch the wind, in which case, as soon as she felt a breeze, she would resume her larboard tack and make away again. On the other hand, if she were really sailing with the wind, she would come nearer to us, and there would be good ground for hope.

Meantime, no exertion must be spared, and no means left untried, to make our position known. The brig was about twelve miles to the east of us, so that it was out of the question to think of any cries of ours being overheard; but Curtis gave directions that every possible signal should be made. We had no fire-arms by which we could attract attention, and nothing else occurred to us beyond hoisting a flag of distress. Miss Herbey's red shawl, as being of a colour most distinguishable against the background of sea and sky, was run up to the mast-head, and was caught by the light breeze that just then was ruffling the surface of the water. As a drowning man clutches at a straw, so our hearts bounded with hope every time that our poor flag fluttered in the wind.

For an hour our feelings alternated between hope and despair. The ship was evidently making her way in the direction of the raft, but every now and then she seemed to stop, and then our hearts would almost stand still with agony lest she was going to put about. She carried all her canvas, even to her royals and stay-sails, but her hull was only partially visible above the horizon.

How slowly she advanced! The breeze was very, very feeble, and perhaps soon it would drop altogether! We felt that we would give years of our life to know the result of the coming hour!

At half-past twelve the captain and the boatswain considered that the brig was about nine miles away; she had, therefore, gained only three miles in an hour and a half, and it was doubtful whether the light breeze that had been passing over our heads had reached her at all. I fancied, too, that her sails were no longer filled, but were hanging loose against her masts. Turning to the direction of the wind I tried to make out some chance of a rising breeze; but no, the waves were calm and torpid, and the little puff of air that had aroused our hopes had died away across the sea.

I stood aft with M. Letourneur, Andre and Miss Herbey, and our glances perpetually wandered from the distant ship to our captain's face. Curtis stood leaning against the mast, with the boatswain by his side; their eyes seemed never for a moment to cease to watch the brig, but their countenances clearly expressed the varying emotions that passed through their minds. Not a word was uttered, nor was the silence broken, until the carpenter exclaimed, in accents of despair,—

"She's putting about!"

All started up: some to their knees, others to their feet, The boatswain dropped a frightful oath. The ship was still nine miles away, and at such a distance it was impossible for our signal to be seen; our tiny raft, a mere speck upon the waters, would be lost in the intense irradiation of the sunbeams. If only we could be seen, no doubt all would be well; no captain would have the barbarous inhumanity to leave us to our fate; but there had been no chance; only too well we knew that we had not been within the range of sight.

"My friends," said Curtis, "we must make a fire; it is our last and only chance."

Some planks were quickly loosened and thrown into a heap upon the fore part of the raft. They were damp and troublesome to light; but the very dampness made the smoke more dense, and ere long a tall column of dusky fumes was rising straight upwards in the air. If darkness should come on before the brig was completely out of view, the flames we hoped might still be visible. But the hours passed on; the fire died out; and yet no signs of help.

The temper of resignation now deserted me entirely; faith, hope, confidence—all vanished from my mind, and like the boatswain, I swore long and loudly. A gentle hand was laid upon my arm, and turning round I saw Miss Herbey with her finger pointing to the sky. I could stand it no longer, but gliding underneath the tent I hid my face in my hands and wept aloud.

Meanwhile the brig had altered her tack, and was moving slowly to the east. Three hours later and the keenest eye could not have discerned her top-sails above the horizon.

CHAPTER XLIV.

JANUARY 15th.—After this further shattering of our excited hopes death alone now stares us in the face; slow and lingering as that death may be, sooner or later it must inevitably come.

To-day some clouds that rose in the west have brought us a few puffs of wind; and in spite of our prostration, we appreciate the moderation, slight as it is, in the temperature. To my parched throat the air seemed a little less trying but it is now seven days since the boatswain took his haul of fish, and during that period we have eaten nothing even Andre Letourneur finished yesterday the last morsel of the biscuit which his sorrowful and self-denying father had entrusted to my charge.

Jynxstrop the negro has broken loose from his confinement, but Curtis has taken no measures for putting him
handle of the hammer. Another moment and it had turned round and was completely gone.

A short sharp snap was heard. The shark had closed its jaws, and bitten through the wooden animal could possibly release it. Dowlas seized his hatchet, ready to despatch the brute the moment if should be in need, under the hope that either the sharp edge of the adze or the pointed extremity opposite would stick firmly into the jaws of any shark that might swallow it. The wooden handle of the hammer was secured to the rope, which, in its turn, was tightly fastened to the raft.

With eager, almost breathless, excitement we stood watching the preparations, at the same time using every means in our power to attract the attention of the sharks. As soon as the whirl was ready the boatswain began to think about bait; and, talking rapidly to himself, ransacked every corner of the raft, as though he expected to find some dead body coming opportunely to sight. But his search ended in nothing; and the only plan that suggested itself was again to have recourse to Miss Herbey's red shawl, of which a fragment was wrapped round the head of the hammer. After testing the strength of his line, and reassuring-himself that it was fastened firmly both to the hammer and to the raft, the boatswain lowered it into the water.

The sea was quite transparent, and any object was clearly visible to a depth of two hundred feet below the surface. Leaning over the low parapet of the raft we looked on in breathless silence, as the scarlet rag, distinct as it was against the blue mass of water, made its slow descent. But one by one the sharks seemed to disappear. They could not, however, have gone far away, and it was not likely that anything in the shape of bait dropped near them would long escape their keen voracity.

Suddenly, without speaking, the boatswain raised his hand and pointed to a dark mass skimming along the surface of the water, and making straight in our direction. It was a shark, certainly not less than twelve feet long. As soon as the creature was about four fathoms from the raft, the boatswain gently drew in his line until the whirl was in such a position that the shark must cross right over it; at the same time he shook the line a little, that he might give the whirl the appearance, if he could, of being something alive and moving. As the creature came near, my heart beat violently; I could see its eyes flashing above the waves; and its gaping jaws, as it turned half over on its back, exhibited long rows of pointed teeth.

I know not who it was, but some one at that moment uttered an involuntary cry of horror. The shark came to a standstill, turned about, and escaped quite out of sight. The boatswain was pale with anger.

"The first man who speaks," he said, "I will kill him on the spot."

Again he applied himself to his task. The whirl again was lowered, this time to the depth of twenty fathoms, but for half an hour or more not a shark could be distinguished; but as the waters far below seemed somehow to be troubled I could not help believing that some of the brutes at least were still there.

All at once, with a violent jerk, the cord was wrested from the boatswain's hands; firmly attached, however, as it was to the raft, it was not lost. The bait had been seized by a shark, and the iron had made good its hold upon the creature's flesh.

"Now, then, my lads," cried the boatswain, "haul away!"

Passengers and sailors, one and all, put forth what strength they had to drag the rope, but so violent were the creature's struggles that it required all our efforts (and it is needless to say that they were willing enough) to bring it to the surface. At length, after exertions that almost exhausted us, the water became agitated by the violent flappings of the tail and fins; and looking down I saw the huge carcass of the shark writhing convulsively amidst waves that were stained with blood.

"Steady! steady!" said the boatswain, as the head appeared above.

The whirl had passed right through the jaw into the middle of the throat; so that no struggle on the part of the animal could possibly release it. Dowlas seized his hatchet, ready to despatch the brute the moment if should be landed on the raft. A short sharp snap was heard. The shark had closed its jaws, and bitten through the wooden handle of the hammer. Another moment and it had turned round and was completely gone.

A howl of despair burst from all our lips. All the labour and the patience, all had been in vain. Dowlas made a
few more unsuccessful attempts, but as the whirl was lost, and they had no means of replacing it, there was no further room for hope. They did, indeed, lower some cords twisted into running knots, but (as might have been expected) these only slipped over, without holding, the slimy bodies of the sharks. As a last resource the boatswain allowed his naked leg to hang over the side of the raft; the monsters, however, were proof even against this attraction.

Reduced once again to a gloomy despondency, all turned to their places, to await the end that cannot now be long deferred.

Just as I moved away I heard the boatswain say to Curtis,—
"Captain, when shall we draw lots?"

The captain made no reply.

CHAPTER XLV.

JANUARY 16th.—If the crew of any passing vessel had caught sight of us as we lay still and inanimate upon our sail-cloth, they would scarcely, at first sight, have hesitated to pronounce us dead.

My sufferings were terrible; tongue, lips, and throat were so parched and swollen that if food had been at hand I question whether I could have swallowed it. So exasperated were the feelings of us all, however, that we glanced at each other with looks as savage as though we were about to slaughter and without delay eat up one another.

The heat was aggravated by the atmosphere being somewhat stormy. Heavy vapours gathered on the horizon, and there was a look as if it were raining all around. Longing eyes and gasping mouths turned involuntarily towards the clouds, and M. Letourneur, on bended knee, was raising his hands, as it might be in supplication to the relentless skies.

It was eleven o'clock in the morning. I listened for distant rumblings which might announce an approaching storm, but although the vapours had obstructed the sun's rays, they no longer presented the appearance of being charged with electricity. Thus our prognostications ended in disappointment; the clouds, which in the early morning had been marked by the distinctness of their outline, had melted one into another and assumed an uniform dull grey tint; in fact, we were enveloped in an ordinary fog. But was it not still possible that this fog might turn to rain?

Happily this hope was destined to be realized; for in a very short time, Dowlas, with a shout of delight, declared that rain was actually coming; and sure enough, not half a mile from the raft, the dark parallel streaks against the sky testified that there at least the rain was falling. I fancied I could see the drops rebounding from the surface of the water. The wind was fresh and bringing the cloud right on towards us, yet we could not suppress our trepidation lest it should exhaust itself before it reached us.

But no: very soon large heavy drops began to fall, and the storm-cloud, passing over our heads, was outpouring its contents upon us. The shower, however, was very transient; already a bright streak of light along the horizon marked the limit of the cloud and warned us that we must be quick to make the most of what it had to give us. Curtis had placed the broken barrel in the position that was most exposed, and every sail was spread out to the fullest extent our dimensions would allow.

We all laid ourselves down flat upon our backs and kept our mouths wide open. The rain splashed into my face, wetted my lips, and trickled down my throat. Never can I describe the ecstasy with which I imbibed that renovating moisture. The parched and swollen glands relaxed, I breathed afresh, and my whole being seemed revived with a strange and requickened life.

The rain lasted about twenty minutes, when the cloud, still only half exhausted, passed quite away from over us.

We grasped each other's hands as we rose from the platform on which we had been lying, and mutual congratulations, mingled with gratitude, poured forth from our long silent lips. Never can I describe the ecstasy with which I imbibed that renovating moisture. The parched and swollen glands relaxed, I breathed afresh, and my whole being seemed revived with a strange and requickened life.

The next consideration was how to preserve and economize what little had been collected by the barrel, or imbibed by the outspread sails. It was found that only a few pints of rain-water had fallen into the barrel to this small quantity the sailors were about to add what they could by wringing out the saturated sails, when Curtis made them desist from their intention.

"Stop, stop!" he said, "we must wait a moment; we must see whether this water from the sails is drinkable."

I looked at him in amazement. Why should not this be as drinkable as the other? He squeezed a few drops out of one of the folds of a sail into the tin pot, and put it to his lips. To my surprise, he rejected it immediately, and upon tasting it for myself I found it not merely brackish, but briny as the sea itself. The fact was that the canvas had been so long exposed to the action of the waves, that it had become thoroughly impregnated by salt, which of course was taken up again by the water that fell upon it. Disappointed we were; but with several pints of water in our
possession, we were not only contented for the present, but sanguine in our prospect for the future.

CHAPTER XLVI.

JANUARY 17th.--As a natural consequence of the alleviation of our thirst, the pangs of hunger returned more violently than ever. Although we had no bait, and even if we had we could not use it for want of a whirl, we could not help asking whether no possible means could be devised for securing one out of the many sharks that were still perpetually swimming about the raft. Armed with knives, like the Indians in the pearl fisheries, was it not practicable to attack the monsters in their own element? Curtis expressed his willingness personally to make the attempt, but so numerous were the sharks that we would not for one moment hear of his risking his life in a venture of which the danger was as great as the success was doubtful.

By plunging into the sea, or by gnawing at a piece of metal, we could always, or at least often, do something that cheated us into believing that we were mitigating the pains of thirst; but with hunger it was different. The prospect, too, of rain seemed hopeful, whilst for getting food there appeared no chance; and, as we knew that nothing could compensate for the lack of nutritive matter, we were soon all cast down again. Shocking to confess, it would be untrue to deny that we surveyed each other with the eye of an eager longing; and I need hardly explain to what a degree of savageness the one idea that haunted us had reduced our feelings.

Ever since the storm-cloud brought us the too transient shower the sky has been tolerably clear, and although at that time the wind had slightly freshened, it has since dropped, and the sail hangs idly against our mast. Except for the trifling relief it brings by modifying the temperature we care little now for any breeze. Ignorant as we are as to what quarter of the Atlantic we have been carried by the currents, it matters very little to us from what direction the wind may blow if only it would bring, in rain or dew, the moisture of which we are so dreadfully in need.

The moon was entering her last quarter, so that it was dark till nearly midnight, and the stars were misty, not glowing with that lustre which is so often characteristic of cool nights. Half frantic with that sense of hunger which invariably returns with redoubled vigour at the close of every day, I threw myself, in a kind of frenzy, upon a bundle of sails that was lying on the starboard of the raft, and leaning over, I tried to get some measure of relief by inhaling the moist coolness that rarely fails to circulate just above the water. My brain was haunted by the most horrible nightmares; not that I suppose I was in any way more distressed than my companions, who were lying in their usual places, vainly endeavouring to forget their sufferings in sleep.

After a time I fell into a restless, dreamy doze. I was neither asleep nor awake. How long I remained in that state of stupor I could hardly say, but at length a strange sensation half brought me to myself. Was I dreaming, or was there not really some unaccustomed odour floating in the air? My nostrils became distended, and I could scarcely suppress a cry of astonishment; but some instinct kept me quiet, and I laid myself down again with the puzzled sensation sometimes experienced when we have forgotten a word or name. Only a few minutes, however, had elapsed before another still more savoury puff induced me to take several long inhalations. Suddenly, the truth seemed to dash across my mind. "Surely," I muttered to myself "this must be cooked meat that I can smell."

Again and again I sniffed and became more convinced than ever that my senses were not deceiving me. But from what part of the raft could the smell proceed? I rose to my knees, and having satisfied myself that the odour came from the front, I crept stealthily as a cat under the sails and between the spars in that direction. Following the promptings of my scent, rather than my vision, like a bloodhound in the track of his prey, I searched everywhere I could, now finding, now losing, the smell according to my change of position, or the dropping of the wind. At length I got the true scent; once for all, so that I could go straight to the object for which I was in search.

Approaching the starboard angle of the raft, I came to the conclusion that the smell that had thus keenly excited my cravings was the smell of smoked bacon; the membranes of my tongue almost bristled with the intenseness of my longing.

Crawling along a little farther, under a thick roll of sail-cloth, I was not long in securing my prize. Forcing my arm below the roll, I felt my hand in contact with something wrapped up in paper. I clutched it up, and carried it off to a place where I could examine it by the help of the light of the moon that had now made its appearance above the horizon. I almost shrieked for joy. It was a piece of bacon. True, it did not weigh many ounces, but small as it was it would suffice to alleviate the pangs of hunger for one day at least. I was just on the point of raising it to my mouth, when a hand was laid upon my arm. It was only by a most determined effort that I kept myself from screaming out one instant more, and I found myself face to face with Hobart.

In a moment I understood all. Plainly this rascal Hobart had saved some provision from the wreck, upon which he had been subsisting ever since. The steward had provided for himself, whilst all around him were dying of starvation. Detestable wretch! This accounts for the inconsistency of his well-to-do looks and his piteous groans. Vile hypocrite!
Yet why, it struck me, should I complain? Was not I reaping the benefit of that secret store that he, for himself, had saved?

But Hobart had no idea of allowing me the peaceable possession of what he held to be his own. He made a dash at the fragment of bacon, and seemed determined to wrest it from my grasp. We struggled with each other, but although our wrestling was very violent, it was very noiseless. We were both of us aware that it was absolutely necessary that not one of those on board should know anything at all about the prize for which we were contending. Nor was my own determination lessened by hearing him groan out that it was his last, his only morsel. "His!" I thought; "it shall be mine now!"

And still careful that no noise of commotion should arise, I threw him on his back, and grasping his throat so that it gurgled again, I held him down until, in rapid mouthfuls, I had swallowed up the last scrap of the food for which we had fought so hard.

I released my prisoner, and quietly crept back to my own quarters.

And not a soul is aware that I have broken my fast!

CHAPTER XLVII.

JANUARY 18th.--After this excitement I awaited the approach of day with a strange anxiety. My conscience told me that Hobart had the right to denounce me in the presence of all my fellow-passengers; yet my alarm was vain. The idea of my proceedings being exposed by him was quite absurd; in a moment he would himself be murdered without pity by the crew, if it should be revealed that, unknown to them, he had been living on some private store which, by clandestine cunning, he had reserved. But, in spite of my anxiety, I had a longing for day to come.

The bit of food that I had thus stolen was very small; but small as it was it had alleviated my hunger, and I was now tortured with remorse, because I had not shared the meagre morsel with my fellow-sufferers. Miss Herbey, Andre, his father, all had been forgotten, and from the bottom of my heart I repented of my cruel selfishness.

Meantime the moon rose high in the heavens, and the first streaks of dawn appeared. There is no twilight in these low latitudes, and the full daylight came well nigh at once. I had not closed my eyes since my encounter with the steward, and ever since the first blush of day I had laboured under the impression that I could see some unusual dark mass half way up the mast. But although it again and again caught my eye, it hardly roused my curiosity, and I did not rise from the bundle of sails on which I was lying to ascertain what it really was. But no sooner did the rays of the sun fall full upon it than I saw at once that it was the body of a man, attached to a rope, and swinging to and fro with the motion of the raft.

A horrible presentiment carried me to the foot of the mast, and, just as I had guessed, Hobart had hanged himself. I could not for a moment; doubt that it was I myself that had impelled him to the suicide. A cry of horror had scarcely escaped my lips, when my fellow-passengers were at my side, and the rope was cut. Then came the sailors. And what was it that made the group gather so eagerly around the body? Was it a humane desire to see whether any spark of life remained? No, indeed; the corpse was cold, and the limbs were rigid; there was no chance that animation should be restored. What then was it that kept them lingering so close around? It was only too apparent what they were about to do.

But I did not, could not, look. I refused to take part in the horrible repast that was proposed. Neither would Miss Herbey, Andre nor his father, consent to alleviate their pangs of hunger by such revolting means. I know nothing for certain as to what Curtis did, and I did not venture to inquire; but of the others,--Falsten, Dowlas, the boatswain, and all the rest,--I know that, to assuage their cravings, they consented to reduce themselves to the level of beasts of prey; they were transformed from human beings into ravenous brutes.

The four of us who sickened at the idea of partaking of the horrid meal withdrew to the seclusion of our tent; it was bad enough to hear; without witnessing the appalling operation. But, in truth, I had the greatest difficulty in the world in preventing Andre from rushing out upon the cannibals, and snatching the odious food from their clutches. I represented to him the hopelessness of his attempt, and tried to reconcile him by telling him that if they liked the food they had a right to it. Hobart had not been murdered; he had died by his own hand; and, after all, as the boatswain had once remarked to me, "it was better to eat a dead man than a live one."

Do what I would, however, I could not quiet Andre's feeling of abhorrence; in his disgust and loathing he seemed for the time to have quite forgotten his own sufferings.

Meanwhile, there was no concealing the truth that we were ourselves dying of starvation, whilst our eight companions would probably, by their loathsome diet, escape that frightful destiny. Owing to his secret hoard of provisions Hobart had been by far the strongest amongst us; he had been supported, so that no organic disease had affected his tissues, and really might be said to be in good health when his chagrin drove him to his desperate
suicide. But what was I thinking of! whither were my meditations carrying me away? was it not coming to pass that the cannibals were rousing my envy instead of exciting my horror?

Very shortly after this I heard Dowlas talking about the possibility of obtaining salt by evaporating sea-water in the sun; "and then," he added, "we can salt down the rest."

The boatswain assented to what the carpenter had said, and probably the suggestion was adopted.

Silence, the most profound, now reigns upon the raft. I presume that nearly all have gone to sleep. One thing I do know, that they are no longer hungry!

CHAPTER XLVIII.

JANUARY 19th.--All through the day the sky remained unclouded and the heat intense; and night came on without bringing much sensible moderation in the temperature. I was unable to get any sleep, and, towards morning, was disturbed by hearing an angry clamour going on outside the tent; it aroused M. Letourneur, Andre and Miss Herbey, as much as myself, and we were anxious to ascertain the cause of the tumult.

The boatswain, Dowlas, and all the sailors were storming at each other in frightful rage; and Curtis, who had come forward from the stern, was vainly endeavouring to pacify them.

"But who has done it? we must know who has done it," said Dowlas, scowling with vindictive passion on the group around him.

"There's a thief," howled out the boatswain, "and he shall be found! Let's know who has taken it."

"I haven't taken it!" "Nor I!" "Nor I!" cried the sailors one after another.

And then they set to work again to ransack every quarter of the raft; they rolled every spar aside, they overturned everything on board, and only grew more and more incensed with anger as their search proved fruitless.

"Can YOU tell us," said the boatswain, coming up to me, "who is the thief?"

"Thief!" I replied. "I don't know what you mean."

And while we were speaking the others all came up together, and told me that they had looked everywhere else, and that they were going now to search the tent.

"Shame!" I said. "You ought to allow those whom you know to be dying of hunger at least to die in peace. There is not one of us who has left the tent all night. Why suspect us?"

"Now just look here, Mr. Kazallon," said the boatswain, in a voice which he was endeavouring to calm down into moderation, "we are not accusing you of anything; we know well enough you, and all the rest of you, had a right to your shares as much as anybody; but that isn't it. It's all gone somewhere, every bit."

"Yes," said Sandon gruffly; "it's all gone somewheres, and we are a going to search the tent."

Resistance was useless, and Miss Herbey, M. Letourneur, and Andre were all turned out.

I confess I was very fearful. I had a strong suspicion that for the sake of his son, for whom he was ready to venture anything, M. Letourneur had committed the theft; in that case I knew that nothing would have prevented the infuriated men from tearing the devoted father to pieces. I beckoned to Curtis for protection, and he came and stood beside me. He said nothing, but waited with his hands in his pockets, and I think I am not mistaken in my belief that there was some sort of a weapon in each.

To my great relief the search was ineffectual. There was no doubt that the carcase of the suicide had been thrown overboard, and the rage of the disappointed cannibals knew no bounds.

Yet who had ventured to do the deed! I looked at M. Letourneur and Miss Herbey; but their countenances at once betrayed their ignorance. Andre turned his face away, and his eyes did not meet my own. Probably it is he; but, if it be, I wonder whether he has reckoned up the consequences of so rash an act.

CHAPTER XLIX.

JANUARY 20th to 22nd.--For the day or two after the horrible repast of the 18th those who had partaken of it appeared to suffer comparatively little either from hunger or thirst; but for the four of us who had tasted nothing, the agony of suffering grew more and more intense. It was enough to make us repine over the loss of the provision that had so mysteriously gone; and if any one of us should die, I doubt whether the survivors would a second time resist the temptation to assuage their pangs by tasting human flesh.

As is always the case with shipwrecked men, we were tormented by thirst far more than by hunger; and if, in the height of our sufferings, we had been offered our choice between a few drops of water and a few crumbs of biscuit, I
do not doubt that we should, without exception, have preferred to take the water.

And what a mockery to our condition did it seem that all this while there was water, water, nothing but water, everywhere around us! Again and again, incapable of comprehending how powerless it was to relieve me, I put a few drops within my lips, but only with the invariable result of bringing on a most trying nausea, and rendering my thirst more unendurable than before.

Forty-two days had passed since we quitted the sinking "Chancellor." There could be no hope now; all of us must die, and by the most deplorable of deaths. I was quite conscious that a mist was gathering over my brain; I felt my senses sinking into a condition of torpor; I made an effort, but all in vain, to master the delirium that I was aware was taking possession of my reason. It is out of my power to decide for how long I lost my consciousness; but when I came to myself I found that Miss Herbey had folded some wet bandages around my forehead. I am somewhat better; but I am weakened, mind and body, and I am conscious that I have not long to live.

A frightful fatality occurred to-day. The scene was terrible. Jynxstrop the negro went raving mad. Curtis and several of the men tried their utmost to control him, but in spite of everything he broke loose, and tore up and down the raft, uttering fearful yells. He had gained possession of a handspike, and rushed upon us all with the ferocity of an infuriated tiger; how we contrived to escape mischief from his attacks, I know not. All at once, by one of those unaccountable impulses of madness, his rage turned against himself. With his teeth and nails he gnawed and tore away at his own flesh; dashing the blood into our faces, he shrieked out with a demoniacal grin, "Drink, drink!" and flinging us gory morsels, kept saying "Eat, eat!" In the midst of his insane shrieks he made a sudden pause, then dashing back again from the stern to the front, he made a bound and disappeared beneath the waves.

Falsten, Dowlas, and the boatswain, made a rush that at least they might secure the body; but it was too late; all that they could see was a crimson circle in the water, and some huge sharks disporting themselves around the spot.

CHAPTER L.

JANUARY 23rd.--Only eleven of us now remain; and the probability is very great that every day must now carry off at least its one victim, and perhaps more. The end of the tragedy is rapidly approaching, and save for the chance, which is next to an impossibility, of our sighting land, or being picked up by a passing vessel, ere another week has elapsed not a single survivor of the "Chancellor" will remain.

The wind freshened considerably in the night, and it is now blowing pretty briskly from the north-east. It has filled our sail, and the white foam in our wake is an indication that we are making some progress. The captain reckons that we must be advancing at the rate of about three miles an hour.

Curtis and Falsten are certainly in the best condition amongst us, and in spite of their extreme emaciation they bear up wonderfully under the protracted hardships we have all endured. Words cannot describe the melancholy state to which poor Miss Herbey bodily is reduced; her whole being seems absorbed into her soul, but that soul is brave and resolute as ever, living in heaven rather than on earth. The boatswain, strong, energetic man that he was, has shrunk into a mere shadow of his former self, and I doubt whether any one would recognize him to be the same man. He keeps perpetually to one corner of the raft, his head dropped upon his chest, and his long, bony hands lying upon knees that project sharply from his worn-out trowsers. Unlike Miss Herbey, his spirit seems to have sunk into apathy, and it is at times difficult to believe that he is living at all, so motionless and statue-like does he sit.

Silence continues to reign upon the raft. Not a sound, not even a groan, escapes our lips. We do not exchange ten words in the course of the day, and the few syllables that our parched tongue and swollen lips can pronounce are almost unintelligible. Wasted and bloodless, we are no longer human beings; we are spectres.

CHAPTER LI.

JANUARY 24th.--I have inquired more than once of Curtis if he has the faintest idea to what quarter of the Atlantic we have drifted, and each time he has been unable to give me a decided answer, though from his general observation of the direction of the wind and currents he imagines that we have been carried westwards, that is to say, towards the land.

To-day the breeze has dropped entirely, but the heavy swell is still upon the sea, and is an unquestionable sign that a tempest has been raging at no great distance. The raft labours hard against the waves, and Curtis, Falsten, and the boatswain, employ the little energy that remains to them in strengthening the joints. Why do they give themselves such trouble? Why not let the few frail planks part asunder, and allow the ocean to terminate our miserable existence? Certain it seems that our sufferings must have reached their utmost limit, and nothing could exceed the torture that we are enduring. The sky pours down upon us a heat like that of molten lead, and the sweat that saturates the tattered clothes that hang about our bodies goes far to aggravate the agonies of our thirst. No words
of mine can describe this dire distress; these sufferings are beyond human estimate.

Even bathing, the only means of refreshment that we possessed, has now become impossible, for ever since
Jynxstrop's death the sharks have hung about the raft in shoals.

To-day I tried to gain a few drops of fresh water by evaporation, but even with the exercise of the greatest
patience, it was with the utmost difficulty that I obtained enough to moisten a little scrap of linen; and the only kettle
that we had was so old and battered, that it would not bear the fire, so that I was obliged to give up the attempt in
despair.

Falsten is now almost exhausted, and if he survives us at all, it can only be for a few days. Whenever I raised my
head I always failed to see him, but he was probably lying sheltered somewhere beneath the sails. Curtis was the
only man who remained on his feet, but with indomitable pluck he continued to stand on the front of the raft,
waiting, watching, hoping. To look at him, with his unflagging energy, almost tempted me to imagine that he did
well to hope, but I dared nor entertain one sanguine thought; and there I lay, waiting, nay, longing for death.

How many hours passed away thus I cannot tell, but after a time a loud peal of laughter burst upon my ear Some
one else, then, was going mad, I thought; but the idea did not rouse me in the least. The laughter was repeated with
greater vehemence, but I never raised my head. Presently I caught a few incoherent words.

"Fields, fields, gardens and trees! Look, there's an inn under the trees! Quick, quick! brandy, gin, water! a guinea
a drop! I'll pay for it! I've lots of money! lots! lots!"

Poor deluded wretch! I thought again; the wealth of a nation could not buy a drop of water here. There was
silence for a minute, when all of a sudden I heard the shout of "Land! land!"

The words acted upon me like an electric shock, and, with a frantic effort, I started to my feet. No land, indeed,
was visible, but Flaypole, laughing, singing, and gesticulating, was raging up and down the raft. Sight, taste and
hearing—-all were gone; but the cerebral derangement supplied their place, and in imagination the maniac was
conversing with absent friends, inviting them into the George Inn at Cardiff, offering them gin, whisky, and, above
all water! Stumbling at every step, and singing in a cracked, discordant voice, he staggered about amongst us like an
intoxicated man. With the loss of his senses all his sufferings had vanished, and his thirst was appeased. It was hard
not to wish to be a partaker of his hallucination.

Dowlas, Falsten, and the boatswain, seemed to think that the unfortunate wretch would, like Jynxstrop, put an
end to himself by leaping into the sea; but, determined this time to preserve the body, that it might serve a better
purpose than merely feeding the sharks, they rose and followed the madman everywhere he went, keeping a strict
eye upon his every movement.

But the matter did not end as they expected. As though he were really intoxicated by the stimulants of which he
had been raving, Flaypole at last sank down in a heap in a corner of the raft, where he lay lost in a heavy slumber.

CHAPTER LII.

JANUARY 25th.--Last night was very misty, and for some unaccountable reason, one of the hottest that can be
imagined. The atmosphere was really so stifling, that it seemed as if it only required a spark to set it alight. The raft
was not only quite stationary, but did not even rise and fall with any motion of the waves.

During the night I tried to count how many there were now on board, but I was utterly unable to collect my ideas
sufficiently to make the enumeration. Sometimes I counted ten, sometimes twelve, and although I knew that eleven,
since Jynxstrop was dead, was the correct number, I could never bring my reckoning right. Of one thing I felt quite
sure, and that was that the number would very soon be ten. I was convinced that I could myself last but very little
longer. All the events and associations of my life passed rapidly through my brain, My country, my friends, and my
family all appeared as it were in a vision, and seemed as though they had come to bid me a last farewell.

Towards morning I woke from my sleep, if the languid stupor into which I had fallen was worthy of that name.
One fixed idea had taken possession of my brain; I would put an end to myself, and I felt a sort of pleasure as I
glouted over the power that I had to terminate my sufferings. I told Curtis, with the utmost composure, of my
intention, and he received the intelligence as calmly as it was delivered.

"Of course you will do as you please," he said; "for, my own part, I shall not abandon my post. It is my duty to
remain here, and unless death comes to carry me away, I shall stay where I am to the very last."

The dull grey fog still hung heavily over the ocean, but the sun was evidently shining above the mist, and would,
in course of time, dispel the vapour. Towards seven o'clock I fancied I heard the cries of birds above my head. The
sound was repeated three times, and as I went up to the captain to ask him about it, I heard him mutter to himself,--

"Birds! why, that looks as if land were not far off."

But although Curtis might still cling to the hope of reaching land, I knew not what it was to have one sanguine
thought. For me there was neither continent nor island; the world was one fluid sphere, uniform, monotonous, as in
the most primitive period of its formation. Nevertheless it must be owned that it was with a certain amount of
impatience that I awaited the rising of the mist, for I was anxious to shake off the phantom fallacies that Curtis's
words had suggested to my mind.

Not till eleven o'clock did the fog begin to break, and as it rolled in heavy folds along the surface of the water, I
could every now and then catch glimpses of a clear blue sky beyond. Fierce sunbeams pierced the cloud-ripts,
scorching and burning our bodies like red-hot iron; but it was only above our heads that there was any sunlight to
condense the vapour; the horizon was still quite invisible. There was no wind, and for half an hour longer the fog
hung heavily round the raft; whilst Curtis, leaning against the side, strove to penetrate the obscurity. At length the
sun burst forth in full power, and, sweeping the surface of the ocean, dispelled the fog, and left the horizon opened
to our eyes.

There, exactly as we had seen it for the last six weeks, was the circle that bounded sea and sky, unbroken,
definite, distinct as ever! Curtis gazed with intensest scrutiny, but did not speak a word. I pitied him sincerely, for he
alone of us all felt that he had not the right to put an end to his misery. For myself I had fully determined that if I
lived till the following day, I would die by my own hand. Whether my companions were still alive, I hardly cared to
know; it seemed as though days had passed since I had seen them.

Night drew on, but I could not sleep for a moment. Towards two o'clock in the morning my thirst was so intense
that I was unable to suppress loud cries of agony. Was there nothing that would serve to quench the fire that was
burning within me? What if instead of drinking the blood of others I were to drink my own? It would be all
unavailing, I was well aware, but scarcely had the thought crossed my mind, than I proceeded to put it into
execution. I unclasped my knife, and, stripping my arm, with a steady thrust I opened a small vein. The blood oozed
out slowly, drop by drop, and as I eagerly swallowed the source of my very life, I felt that for a moment my
torments were relieved, But only for a moment; all energy had failed my pulses, and almost immediately the blood
had ceased to flow.

How long it seemed before the morning dawned! and when that morning came it brought another fog, heavy as
before that again shut out the horizon. The fog was hot as the burning steam that issues from a boiler. It was to be
my last day upon earth, and I felt that I would like to press the hand of a friend before I died. Curtis was standing
near, and crawling up to him, I took his hand in my own. He seemed to know that I was taking my farewell, and
with one last lingering hope he endeavoured to restrain me. But all in vain, my mind was finally made up.

I should have like to speak once again to M. Letourneur, Andre and Miss Herbey, but my courage failed me. I
knew that the young girl would read my resolution in my eyes, and that she would speak to me of duty and of God,
and of eternity, and I dared not meet her gaze; and I would not run the risk of being persuaded to wait until a
lingering death should overtake me. I returned to the back of the raft, and after making several efforts, I managed to
get on to my feet. I cast one long look at the pitiless ocean and the unbroken horizon; if a sail or the outline of a
coast had broken on my view, I believe that I should only have deemed myself the victim of an illusion; but nothing
of the kind appeared, and the sea was dreary as a desert.

It was ten o'clock in the morning. The pangs of hunger and the torments of thirst were racking me with
redoubled vigour. All instinct of self-preservation had left me, and I felt that the hour had come when I must cease to
suffer. Just as I was on the point of casting myself headlong into the sea, a voice, which I recognized as Dowlas's;
broke upon my ear.

"Captain," he said, "we are going to draw lots."
Involuntarily I paused; I did not take my plunge, but returned to my place upon the raft.

CHAPTER LIII.

JANUARY 26th.--All heard and understood the proposition; in fact, it had been in contemplation for several
days, but no one had ventured to put the idea into words. However, it was done now; lots were to be drawn, and to
each would be assigned his share of the body of the one ordained by fate to be the victim. For my own part, I profess
that I was quite resigned for the lot to fall upon myself. I thought I heard Andre Letourneur beg for an exception to
be made in favour of Miss Herbey, but the sailors raised a murmur of dissent. As there were eleven of us on board,
there were ten chances to one in each one's favour, a proportion which would be diminished if Miss Herbey were
excluded, so that the young lady was forced to take her chance among the rest.

It was then half-past ten, and the boatswain, who had been roused from his lethargy by what the carpenter had
said, insisted that the drawing should take place immediately. There was no reason for postponing the fatal lottery.
There was not one of us that clung in the least to life, and we knew that at the worst, whoever should be doomed to
die, would only precede the rest by a few days, or even hours. All that we desired was just once to slake our raging
thirst and moderate our gnawing hunger.
How all the names found their way to the bottom of a hat I cannot tell. Very likely Falsten wrote them upon a leaf torn from his memorandum-book. But be that as it may, the eleven names were there, and it was unanimously agreed that the last name drawn should be the victim.

But who would draw the names? There was hesitation for a moment; then, "I will," said a voice behind me. Turning round, I beheld M. Letourneur standing with outstretched hand, and with his long white hair falling over his thin livid face that was almost sublime in its calmness. I divined at once the reason of this voluntary offer; I knew that it was the father's devotion in self-sacrifice that led him to undertake the office.

"As soon as you please," said the boatswain, and handed him the hat.

M. Letourneur proceeded to draw out the folded strips of paper one by one, and after reading out aloud the name upon it, handed it to its owner.

The first name called was that of Burke, who uttered a cry of delight; then followed Flaypole and the boatswain. What his name really was I never could exactly learn. Then came Falsten, Curtis, Sandon. More than half had now been called, and my name had not yet been drawn. I calculated my remaining chance; it was still four to one in my favour.

M. Letourneur continued his painful task. Since Burke's first exclamation of joy not a sound had escaped our lips, but all were listening in breathless silence. The seventh name was Miss Herbey's, but the young girl heard it without a start. Then came mine, yes, mine! and the ninth was that of Letourneur.

"Which one?" asked the boatswain.


With one cry Andre fell back senseless. Only two names now remained in the hat; those of Dowlas and of M. Letourneur himself.

"Go on," almost roared the carpenter, surveying his partner in peril as though he could devour him. M. Letourneur almost had a smile upon his lips, as he drew forth the last paper but one, and with a firm, unfaltering voice, marvelous for his age, unfolded it slowly, and read the name of Dowlas. The carpenter gave a yell of relief as he heard the word.

M. Letourneur took the last bit of paper from the hat, and without looking at it, tore it to pieces. But, unperceived by all but myself, one little fragment flew into a corner of the raft. I crawled towards it and picked it up. On one side of it was written Andr--; the rest of the word was torn away. M. Letourneur saw what I had done, and rushing towards me, snatched the paper from my hands, and flung it into the sea.

CHAPTER LIV.

JANUARY 26th.--I understood it all; the devoted father having nothing more to give, had given his life for his son.

M. Letourneur was no longer a human being in the eyes of the famished creatures who were now yearning to see him sacrificed to their cravings. At the very sight of the victim thus provided, all the tortures of hunger returned with redoubled violence. With lips distended, and teeth displayed, they waited like a herd of carnivora until they could attack their prey with brutal voracity; it seemed almost doubtful whether they would not fall upon him while he was still alive. It seemed impossible that any appeal to their humanity could, at such a moment, have any weight; nevertheless, the appeal was made, and, incredible as it may seem, prevailed.

Just as the boatswain was about to act the part of butcher, and Dowlas stood, hatchet in hand, ready to complete the barbarous work, Miss Herbey advanced, or rather crawled, towards them.

"My friends," she pleaded, "will you not wait just one more day? If no land or ship is in sight to-morrow, then I suppose our poor companion must become your victim. But allow him one more day; in the name of mercy I entreat, I implore you."

My heart bounded as she made her pitiful appeal. It seemed to me as though the noble girl had spoken with an inspiration on her lips, and I fancied that, perhaps, in super-natural vision she had viewed the coast or the ship of which she spoke; and one more day was not much to us who had already suffered so long, and endured so much.

Curtis and Falsten agreed with me, and we all united to support Miss Herbey's merciful petition. The sailors did not utter a murmur, and the boatswain in a smothered voice said,--

"Very well, we will wait till daybreak tomorrow," and threw down his hatchet.

To-morrow, then, unless land or a sail appear, the horrible sacrifice will be accomplished. Stifling their sufferings by a strenuous effort, all returned to their places. The sailors crouched beneath the sails, caring nothing about scanning the ocean. Food was in store for them to-morrow, and that was enough for them.

As soon as Andre Letourneur came to his senses, his first thought was for his father, and I saw him count the passengers on the raft. He looked puzzled; when he lost consciousness there had been only two names left in the hat,
those of his father and the carpenter; and yet M. Letourneur and Dowlas were both there still. Miss Herbey went up to him and told him quietly that the drawing of the lots had not yet been finished. Andre asked no further question, but took his father's hand. M. Letourneur's countenance was calm and serene; he seemed to be conscious of nothing except that the life of his son was spared, and as the two sat conversing in an undertone at the back of the raft, their whole existence seemed bound up in each other.

Meantime, I could not disabuse my mind of the impression caused by Miss Herbey's intervention. Something told me that help was near at hand, and that we were approaching the termination of our suspense and misery; the chimeras that were floating through my brain resolved themselves into realities, so that nothing appeared to me more certain than that either land or sail, be they miles away, would be discovered somewhere to leeward.

I imparted my convictions to M. Letourneur and his son. Andre was as sanguine as myself; poor boy! he little thinks what a loss there is in store for him tomorrow. His father listened gravely to all we said, and whatever he might think in his own mind, he did not give us any discouragement; Heaven, he said, he was sure would still spare the survivors of the "Chancellor," and then he lavished on his son caresses which he deemed to be his last.

Some time afterwards, when I was alone with him, M. Letourneur whispered in my ear,--

"Mr. Kazallon, I commend my boy to your care, and mark you, he must never know--"

His voice was choked with tears, and he could not finish his sentence.

But I was full of hope, and, without a moment's intermission, I kept my eyes fixed upon the unbroken horizon, Curtis, Miss Herbey, Falsten, and even the boatswain, were also eagerly scanning the broad expanse of sea.

Night has come on; but I have still a profound conviction that through the darkness some ship will approach, and that at daybreak our raft will be observed.

CHAPTER LV.

JANUARY 27th.--I did not close my eyes all night, and was keenly alive to the faintest sounds, and every ripple of the water, and every murmur of the waves, broke distinctly on my ear. One thing I noticed and accepted as a happy omen; not a single shark now lingered-round the raft. The waning moon rose at a quarter to one, and through the feeble glimmer which she cast across the ocean, many and many a time I fancied I caught sight of the longed-for sail, lying only a few cables' lengths away.

But when morning came, the sun rose once again upon a desert ocean, and my hopes began to fade. Neither ship nor shore had appeared, and as the shocking hour of execution drew near, my dreams of deliverance melted away; I shuddered in my very soul as I was brought face to face with the stern reality. I dared not look upon the victim, and whenever his eyes, so full of calmness and resignation, met my own, I turned away my head. I felt choked with horror, and my brain reeled as though I were intoxicated.

It was now six o'clock, and all hope had vanished from my breast; my heart beat rapidly, and a cold sweat of agony broke out all over me. Curtis and the boatswain stood by the mast attentively scanning the horizon. The boatswain's countenance was terrible to look upon; one could see that although he would not forestall the hour, he was determined not to wait a moment after it arrived. As for the captain, it was impossible to tell what really passed within his mind; his face was livid, and his whole existence seemed concentrated in the exercise of his power of vision. The sailors were crawling about the platform, with their eyes gleaming, like wild beasts ready to pounce upon their devoted prey.

I could no longer keep my place, and glided along to the front of the raft. The boatswain was still standing intent on his watch, but all of a sudden, in a voice that made me start he shouted,--

"Now then, time's up!" and followed by Dowlas, Burke, Flaypole, and Sandon, ran to the back of the raft. As Dowlas seized the hatchet convulsively, Miss Herbey could not suppress a cry of terror. Andre started to his feet.

"What are you going to do to my father?" he asked in accents choked with emotion.

"My boy," said M. Letourneur, "the lot has fallen upon me, and I must die!"

"Never!" shrieked Andre, throwing his arms about his father, "They shall kill me first. It was I who threw Hobart's body into the sea, and it is I who ought to die!"

But the words of the unhappy youth had no other effect than to increase the fury of the men who were so staunchly bent upon their bloody purpose.

"Come, come, no more fuss," said Dowlas, as he tore the young man away from his father's embrace. Andre fell upon his back, in which position two of the sailors held him down so tightly that he could not move, whilst Burke and Sandon carried off their victim to the front.

All this had taken place much more rapidly than I have been able to describe it. I was transfixed with horror, and much as I wished to throw myself between M. Letourneur and his executioners, I seemed to be rooted to the spot where I was standing.
Meantime the sailors had been taking off some of M. Letourneur's clothes, and his neck and shoulders were already bare.

"Stop a moment!" he said in a tone in which was the ring of indomitable courage. "Stop! I don't want to deprive you of your ration; but I suppose you will not require to eat the whole of me today."

The sailors, taken aback by his suggestion, stared at him with amazement.

"There are ten of you," he went on. "My two arms will give you each a meal; cut them off for to-day, and to-morrow you shall have the rest of me."

"Agreed!" cried Dowlas; and as M. Letourneur held out his bare arms, quick as lightning the carpenter raised his hatchet.

Curtis and I could bear this scene no longer; whilst we were alive to prevent it, this butchery should not be permitted, and we rushed forwards simultaneously to snatch the victim from his murderers. A furious struggle ensued, and in the midst of the MELEE I was seized by one of the sailors, and hurled violently into the sea.

Closing my lips, I tried to die of suffocation in the water; but in spite of myself, my mouth opened, and a few drops trickled down my throat.

Merciful Heaven! the water was fresh!

CHAPTER LVI.

JANUARY 27th CONTINUED.--A change came over me as if by miracle. No longer had I any wish to die, and already Curtis, who had heard my cries, was throwing me a rope. I seized it eagerly, and was hauled up on to the raft, "Fresh water!" were the first words I uttered.

"Fresh water?" cried Curtis, "why then, my friends, we are not far from land!"

It was not too late; the blow had not been struck, and so the victim had not yet fallen. Curtis and Andre (who had regained his liberty) had fought with the cannibals, and it was just as they were yielding to overpowering numbers that my voice had made itself heard.

The struggle came to an end. As soon as the words "Fresh water" had escaped my lips, I leaned over the side of the raft and swallowed the life-giving liquid in greedy draughts. Miss Herbey was the first to follow my example, but soon Curtis, Falsten, and all the rest were on their knees and drinking eagerly, The rough sailors seemed as if by a magic touch transformed back from ravenous beasts to human beings, and I saw several of them raise their hands to heaven in silent gratitude, Andre and his father were the last to drink.

"But where are we?" I asked at length.

"The land is there," said Curtis pointing towards the west.

We all stared at the captain as though he were mocking us; no land was in sight, and the raft, just as ever, was the centre of a watery waste. Yet our senses had not deceived us the water we had been drinking was perfectly fresh.

"Yes," repeated the captain, "land is certainly there, not more than twenty miles to leeward."

"What land?" inquired the boatswain.

"South America," answered Curtis, "and near the Amazon; no other river has a current strong enough to freshen the ocean twenty miles from shore!"

CHAPTER LVII.

JANUARY 27th CONTINUED.--Curtis, no doubt was right. The discharge from the mouth of the Amazon is enormously large, but we had probably drifted into the only spot in the Atlantic where we could find fresh water so far from land. Yet land, undoubtedly was there, and the breeze was carrying us onwards slowly but surely to our deliverance.

Miss Herbey's voice was heard pouring out fervent praise to Heaven, and we were all glad to unite our thanksgivings with hers. Then the whole of us (with the exception of Andre and his father, who remained by themselves together at the stern) clustered in a group, and kept our expectant gaze upon the horizon.

We had not long to wait. Before an hour had passed Curtis, leaped in ecstasy and raised the joyous shout of "Land ahoy!"

* * * *

My journal has come to a close.

I have only to relate, as briefly as possible, the circumstances that finally brought us to our destination.

A few hours after we first sighted land the raft was off Cape Magoari, on the Island of Marajo, and was observed by some fishermen who, with kind-hearted alacrity picked us up, and tended us most carefully. They conveyed us to Para, where we became the objects of unbounded sympathy.
The raft was brought to land in lat. 0° 12′ N., so that since we abandoned the "Chancellor" we had drifted at least fifteen degrees to the south-west. Except for the influence of the Gulf Stream we must have been carried far, far to the south, and in that case we should never have reached the mouth of the Amazon, and must inevitably have been lost.

Of the thirty-two souls—nine passengers, and twenty-three seamen—who left Charleston on board the ship, only five passengers and six seamen remain. Eleven of us alone survive.

An official account of our rescue was drawn up by the Brazilian authorities. Those who signed were Miss Herbey, J. R. Kazallon, M. Letourneur, Andre Letourneur, Mr. Falsten, the boatswain, Dowlas, Burke, Flaypole, Sandon, and last, though not least,

"Robert Curtis, captain."

At Para we soon found facilities for continuing our homeward route. A vessel took us to Cayenne, where we secured a passage on board one of the steamers of the French Transatlantic Aspinwall line, the "Ville de St. Nazaire," which conveyed us to Europe.

After all the dangers and privations which we have undergone together, it is scarcely necessary to say that there has arisen between the surviving passengers of the "Chancellor" a bond of friendship too indissoluble, I believe, for either time or circumstance to destroy; Curtis must ever remain the honoured and valued friend of those whose welfare he consulted so faithfully in their misfortunes; his conduct was beyond all praise.

When we were fairly on our homeward way, Miss Herbey by chance intimated to us her intention of retiring from the world and devoting the remainder of her life to the care of the sick and suffering.

"Then why not come and look after my son?" said M. Letourneur, adding, "he is an invalid, and he requires, as he deserves, the best of nursing."

Miss Herbey, after some deliberation, consented to become a member of their family, and finds in M. Letourneur a father, and in Andre a brother. A brother, I say; but may we not hope that she may be united by a dearer and a closer tie, and that the noble-hearted girl may experience the happiness that so richly she deserves?

THE UNDERGROUND CITY
OR
THE BLACK INDIES
(Sometimes Called The Child of the Cavern)

CHAPTER I. CONTRADICTORY LETTERS
To Mr. F. R. Starr, Engineer, 30 Canongate, Edinburgh.

IF Mr. James Starr will come to-morrow to the Aberfoyle coal-mines, Dochart pit, Yarrow shaft, a communication of an interesting nature will be made to him.

"Mr. James Starr will be awaited for, the whole day, at the Callander station, by Harry Ford, son of the old overman Simon Ford."

"He is requested to keep this invitation secret."

Such was the letter which James Starr received by the first post, on the 3rd December, 18—, the letter bearing the Aberfoyle postmark, county of Stirling, Scotland.

The engineer's curiosity was excited to the highest pitch. It never occurred to him to doubt whether this letter might not be a hoax. For many years he had known Simon Ford, one of the former foremen of the Aberfoyle mines, of which he, James Starr, had for twenty years, been the manager, or, as he would be termed in English coal-mines, the viewer. James Starr was a strongly-constituted man, on whom his fifty-five years weighed no more heavily than if they had been forty. He belonged to an old Edinburgh family, and was one of its most distinguished members. His labors did credit to the body of engineers who are gradually devouring the carboniferous subsoil of the United Kingdom, as much at Cardiff and Newcastle, as in the southern counties of Scotland. However, it was more particularly in the depths of the mysterious mines of Aberfoyle, which border on the Alloa mines and occupy part of the county of Stirling, that the name of Starr had acquired the greatest renown. There, the greater part of his existence had been passed. Besides this, James Starr belonged to the Scottish Antiquarian Society, of which he had been made president. He was also included amongst the most active members of the Royal Institution; and the Edinburgh Review frequently published clever articles signed by him. He was in fact one of those practical men to
whom is due the prosperity of England. He held a high rank in the old capital of Scotland, which not only from a physical but also from a moral point of view, well deserves the name of the Northern Athens.

We know that the English have given to their vast extent of coal-mines a very significant name. They very justly call them the "Black Indies," and these Indies have contributed perhaps even more than the Eastern Indies to swell the surprising wealth of the United Kingdom.

At this period, the limit of time assigned by professional men for the exhaustion of coal-mines was far distant and there was no dread of scarcity. There were still extensive mines to be worked in the two Americas. The manufactory, appropriated to so many different uses, locomotives, steamers, gas works, &c., were not likely to fail for want of the mineral fuel; but the consumption had so increased during the last few years, that certain beds had been exhausted even to their smallest veins. Now deserted, these mines perforated the ground with their useless shafts and forsaken galleries. This was exactly the case with the pits of Aberfoyle.

Ten years before, the last butty had raised the last ton of coal from this colliery. The underground working stock, traction engines, trucks which run on rails along the galleries, subterranean tramways, frames to support the shaft, pipes—in short, all that constituted the machinery of a mine had been brought up from its depths. The exhausted mine was like the body of a huge fantastically-shaped mastodon, from which all the organs of life have been taken, and only the skeleton remains.

Nothing was left but long wooden ladders, down the Yarrow shaft—the only one which now gave access to the lower galleries of the Dochart pit. Above ground, the sheds, formerly sheltering the outside works, still marked the spot where the shaft of that pit had been sunk, it being now abandoned, as were the other pits, of which the whole constituted the mines of Aberfoyle.

It was a sad day, when for the last time the workmen quitted the mine, in which they had lived for so many years. The engineer, James Starr, had collected the hundreds of workmen which composed the active and courageous population of the mine. Overmen, brakemen, putters, wastemen, barrowmen, masons, smiths, carpenters, outside and inside laborers, women, children, and old men, all were collected in the great yard of the Dochart pit, formerly heaped with coal from the mine.

Many of these families had existed for generations in the mine of old Aberfoyle; they were now driven to seek the means of subsistence elsewhere, and they waited sadly to bid farewell to the engineer.

James Starr stood upright, at the door of the vast shed in which he had for so many years superintended the powerful machines of the shaft. Simon Ford, the foreman of the Dochart pit, then fifty-five years of age, and other managers and overseers, surrounded him. James Starr took off his hat. The miners, cap in hand, kept a profound silence. This farewell scene was of a touching character, not wanting in grandeur.

"My friends," said the engineer, "the time has come for us to separate. The Aberfoyle mines, which for so many years have united us in a common work, are now exhausted. All our researches have not led to the discovery of a new vein, and the last block of coal has just been extracted from the Dochart pit." And in confirmation of his words, James Starr pointed to a lump of coal which had been kept at the bottom of a basket.

"This piece of coal, my friends," resumed James Starr, "is like the last drop of blood which has flowed through the veins of the mine! We shall keep it, as the first fragment of coal is kept, which was extracted a hundred and fifty years ago from the bearings of Aberfoyle. Between these two pieces, how many generations of workmen have succeeded each other in our pits! Now, it is over! The last words which your engineer will address to you are a farewell. You have lived in this mine, which your hands have emptied. The work has been hard, but not without profit for you. Our great family must disperse, and it is not probable that the future will ever again unite the scattered members. But do not forget that we have lived together for a long time, and that it will be the duty of the miners of Aberfoyle to help each other. Your old masters will not forget you either. When men have worked together, they must never be stranger to each other again. We shall keep our eye on you, and wherever you go, our recommendations shall follow you. Farewell then, my friends, and may Heaven be with you!"

So saying, James Starr wrung the horny hand of the oldest miner, whose eyes were dim with tears. Then the overmen of the different pits came forward to shake hands with him, whilst the miners waved their caps, shouting, "Farewell, James Starr, our master and our friend!"

This farewell would leave a lasting remembrance in all these honest hearts. Slowly and sadly the population quitted the yard. The black soil of the roads leading to the Dochart pit resounded for the last time to the tread of miners' feet, and silence succeeded to the bustling life which had till then filled the Aberfoyle mines.

One man alone remained by James Starr. This was the overman, Simon Ford. Near him stood a boy, about fifteen years of age, who for some years already had been employed down below.

James Starr and Simon Ford knew and esteemed each other well. "Good-by, Simon," said the engineer.

"Good-by, Mr. Starr," replied the overman, "let me add, till we meet again!"

"Yes, till we meet again. Ford!" answered James Starr. "You know that I shall be always glad to see you, and
talk over old times."

"I know that, Mr. Starr."

"My house in Edinburgh is always open to you."

"It's a long way off, is Edinburgh!" answered the man shaking his head. "Ay, a long way from the Dochart pit."

"A long way, Simon? Where do you mean to live?"

"Even here, Mr. Starr! We're not going to leave the mine, our good old nurse, just because her milk is dried up! My wife, my boy, and myself, we mean to remain faithful to her!"

"Good-by then, Simon," replied the engineer, whose voice, in spite of himself, betrayed some emotion.

"No, I tell you, it's TILL WE MEET AGAIN, Mr. Starr, and not Just 'good-by,'" returned the foreman. "Mark my words, Aberfoyle will see you again!"

The engineer did not try to dispel the man's illusion. He patted Harry's head, again wrung the father's hand, and left the mine.

All this had taken place ten years ago; but, notwithstanding the wish which the overman had expressed to see him again, during that time Starr had heard nothing of him. It was after ten years of separation that he got this letter from Simon Ford, requesting him to take without delay the road to the old Aberfoyle colliery.

A communication of an interesting nature, what could it be? Dochart pit. Yarrow shaft! What recollections of the past these names brought back to him! Yes, that was a fine time, that of work, of struggle,—the best part of the engineer's life. Starr re-read his letter. He pondered over it in all its bearings. He much regretted that just a line more had not been added by Ford. He wished he had not been quite so laconic.

Was it possible that the old foreman had discovered some new vein? No! Starr remembered with what minute care the mines had been explored before the definite cessation of the works. He had himself proceeded to the lowest soundings without finding the least trace in the soil, burrowed in every direction. They had even attempted to find coal under strata which are usually below it, such as the Devonian red sandstone, but without result. James Starr had therefore abandoned the mine with the absolute conviction that it did not contain another bit of coal.

"No," he repeated, "no! How is it possible that anything which could have escaped my researches, should be revealed to those of Simon Ford. However, the old overman must well know that such a discovery would be the one thing in the world to interest me, and this invitation, which I must keep secret, to repair to the Dochart pit!" James Starr always came back to that.

On the other hand, the engineer knew Ford to be a clever miner, peculiarly endowed with the instinct of his trade. He had not seen him since the time when the Aberfoyle colliery was abandoned, and did not know either what he was doing or where he was living, with his wife and his son. All that he now knew was, that a rendezvous had been appointed him at the Yarrow shaft, and that Harry, Simon Ford's son, was to wait for him during the whole of the next day at the Callander station.

"I shall go, I shall go!" said Starr, his excitement increasing as the time drew near.

Our worthy engineer belonged to that class of men whose brain is always on the boil, like a kettle on a hot fire. In some of these brain kettles the ideas bubble over, in others they just simmer quietly. Now on this day, James Starr's ideas were boiling fast.

But suddenly an unexpected incident occurred. This was the drop of cold water, which in a moment was to condense all the vapors of the brain. About six in the evening, by the third post, Starr's servant brought him a second letter. This letter was enclosed in a coarse envelope, and evidently directed by a hand unaccustomed to the use of a pen. James Starr tore it open. It contained only a scrap of paper, yellowed by time, and apparently torn out of an old copy book.

On this paper was written a single sentence, thus worded:

"It is useless for the engineer James Starr to trouble himself, Simon Ford's letter being now without object."

No signature.

CHAPTER II. ON THE ROAD

The course of James Starr's ideas was abruptly stopped, when he got this second letter contradicting the first.

"What does this mean?" said he to himself. He took up the torn envelope, and examined it. Like the other, it bore the Aberfoyle postmark. It had therefore come from the same part of the county of Stirling. The old miner had evidently not written it. But, no less evidently, the author of this second letter knew the overman's secret, since it expressly contradicted the invitation to the engineer to go to the Yarrow shaft.

Was it really true that the first communication was now without object? Did someone wish to prevent James Starr from troubling himself either uselessly or otherwise? Might there not be rather a malevolent intention to thwart Ford's plans?
This was the conclusion at which James Starr arrived, after mature reflection. The contradiction which existed between the two letters only wrought in him a more keen desire to visit the Dochart pit. And besides, if after all it was a hoax, it was well worth while to prove it. Starr also thought it wiser to give more credence to the first letter than to the second; that is to say, to the request of such a man as Simon Ford, rather than to the warning of his anonymous contradictor.

"Indeed," said he, "the fact of anyone endeavoring to influence my resolution, shows that Ford's communication must be of great importance. To-morrow, at the appointed time, I shall be at the rendezvous."

In the evening, Starr made his preparations for departure. As it might happen that his absence would be prolonged for some days, he wrote to Sir W. Elphiston, President of the Royal Institution, that he should be unable to be present at the next meeting of the Society. He also wrote to excuse himself from two or three engagements which he had made for the week. Then, having ordered his servant to pack a traveling bag, he went to bed, more excited than the affair perhaps warranted.

The next day, at five o'clock, James Starr jumped out of bed, dressed himself warmly, for a cold rain was falling, and left his house in the Canongate, to go to Granton Pier to catch the steamer, which in three hours would take him up the Forth as far as Stirling.

For the first time in his life, perhaps, in passing along the Canongate, he did NOT TURN TO LOOK AT HOLYROOD, the palace of the former sovereigns of Scotland. He did not notice the sentinels who stood before its gateways, dressed in the uniform of their Highland regiment, tartan kilt, plaid and sporran complete. His whole thought was to reach Callander where Harry Ford was supposedly awaiting him.

The better to understand this narrative, it will be as well to hear a few words on the origin of coal. During the geological epoch, when the terrestrial spheroid was still in course of formation, a thick atmosphere surrounded it, saturated with watery vapors, and copiously impregnated with carbonic acid. The vapors gradually condensed in diluvial rains, which fell as if they had leapt from the necks of thousands of millions of seltzer water bottles. This liquid, loaded with carbonic acid, rushed in torrents over a deep soft soil, subject to sudden or slow alterations of form, and maintained in its semi-fluid state as much by the heat of the sun as by the fires of the interior mass. The internal heat had not as yet been collected in the center of the globe. The terrestrial crust, thin and incompletely hardened, allowed it to spread through its pores. This caused a peculiar form of vegetation, such as is probably produced on the surface of the inferior planets, Venus or Mercury, which revolve nearer than our earth around the radiant sun of our system.

The soil of the continents was covered with immense forests. Carbonic acid, so suitable for the development of the vegetable kingdom, abounded. The feet of these trees were drowned in a sort of immense lagoon, kept continually full by currents of fresh and salt waters. They eagerly assimilated to themselves the carbon which they, little by little, extracted from the atmosphere, as yet unfit for the function of life, and it may be said that they were destined to store it, in the form of coal, in the very bowels of the earth.

It was the earthquake period, caused by internal convulsions, which suddenly modified the unsettled features of the terrestrial surface. Here, an intumescence which was to become a mountain, there, an abyss which was to be filled with an ocean or a sea. There, whole forests sunk through the earth's crust, below the unfixed strata, either until they found a resting-place, such as the primitive bed of granitic rock, or, settling together in a heap, they formed a solid mass.

As the waters were contained in no bed, and were spread over every part of the globe, they rushed where they liked, tearing from the scarcely-formed rocks material with which to compose schists, sandstones, and limestones. This the roving waves bore over the submerged and now peaty forests, and deposited above them the elements of rocks which were to superpose the coal strata. In course of time, periods of which include millions of years, these earths hardened in layers, and enclosed under a thick carapace of pudding-stone, schist, compact or friable sandstone, gravel and stones, the whole of the massive forests.

And what went on in this gigantic crucible, where all this vegetable matter had accumulated, sunk to various depths? A regular chemical operation, a sort of distillation. All the carbon contained in these vegetables had agglomerated, and little by little coal was forming under the double influence of enormous pressure and the high temperature maintained by the internal fires, at this time so close to it.

Thus there was one kingdom substituted for another in this slow but irresistible reaction. The vegetable was transformed into a mineral. Plants which had lived the vegetative life in all the vigor of first creation became petrified. Some of the substances enclosed in this vast herbal left their impression on the other more rapidly mineralized products, which pressed them as an hydraulic press of incalculable power would have done.

Thus also shells, zoophytes, star-fish, polypi, spirofiores, even fish and lizards brought by the water, left on the yet soft coal their exact likeness, "admirably taken off."

Pressure seems to have played a considerable part in the formation of carboniferous strata. In fact, it is to its
degree of power that are due the different sorts of coal, of which industry makes use. Thus in the lowest layers of the coal ground appears the anthracite, which, being almost destitute of volatile matter, contains the greatest quantity of carbon. In the higher beds are found, on the contrary, lignite and fossil wood, substances in which the quantity of carbon is infinitely less. Between these two beds, according to the degree of pressure to which they have been subjected, are found veins of graphite and rich or poor coal. It may be asserted that it is for want of sufficient pressure that beds of peaty bog have not been completely changed into coal. So then, the origin of coal mines, in whatever part of the globe they have been discovered, is this: the absorption through the terrestrial crust of the great forests of the geological period; then, the mineralization of the vegetables obtained in the course of time, under the influence of pressure and heat, and under the action of carbonic acid.

Now, at the time when the events related in this story took place, some of the most important mines of the Scottish coal beds had been exhausted by too rapid working. In the region which extends between Edinburgh and Glasgow, for a distance of ten or twelve miles, lay the Aberfoyle colliery, of which the engineer, James Starr, had so long directed the works. For ten years these mines had been abandoned. No new seams had been discovered, although the soundings had been carried to a depth of fifteen hundred or even of two thousand feet, and when James Starr had retired, it was with the full conviction that even the smallest vein had been completely exhausted.

Under these circumstances, it was plain that the discovery of a new seam of coal would be an important event. Could Simon Ford's communication relate to a fact of this nature? This question James Starr could not cease asking himself. Was he called to make conquest of another corner of these rich treasure fields? Fain would he hope it was so.

The second letter had for an instant checked his speculations on this subject, but now he thought of that letter no longer. Besides, the son of the old overman was there, waiting at the appointed rendezvous. The anonymous letter was therefore worth nothing.

The moment the engineer set foot on the platform at the end of his journey, the young man advanced towards him.

"Are you Harry Ford?" asked the engineer quickly.
"Yes, Mr. Starr." 
"I should not have known you, my lad. Of course in ten years you have become a man!"
"I knew you directly, sir," replied the young miner, cap in hand. "You have not changed. You look just as you did when you bade us good-by in the Dochart pit. I haven't forgotten that day."
"Put on your cap, Harry," said the engineer. "It's pouring, and politeness needn't make you catch cold."
"Shall we take shelter anywhere, Mr. Starr?" asked young Ford.
"No, Harry. The weather is settled. It will rain all day, and I am in a hurry. Let us go on."
"I am at your orders," replied Harry.
"Tell me, Harry, is your father well?"
"Very well, Mr. Starr."
"And your mother?"
"She is well, too."
"Was it your father who wrote telling me to come to the Yarrow shaft?"
"No, it was I."
"Then did Simon Ford send me a second letter to contradict the first?" asked the engineer quickly.
"No, Mr. Starr," answered the young miner.
"Very well," said Starr, without speaking of the anonymous letter. Then, continuing, "And can you tell me what you father wants with me?"
"Mr. Starr, my father wishes to tell you himself."
"But you know what it is?"
"I do, sir."
"Well, Harry, I will not ask you more. But let us get on, for I'm anxious to see Simon Ford. By-the-bye, where does he live?"
"In the mine."
"What! In the Dochart pit?"
"Yes, Mr. Starr," replied Harry.
"Really! has your family never left the old mine since the cessation of the works?"
"Not a day, Mr. Starr. You know my father. It is there he was born, it is there he means to die!"
"I can understand that, Harry. I can understand that! His native mine! He did not like to abandon it! And are you happy there?"
"Yes, Mr. Starr," replied the young miner, "for we love one another, and we have but few wants."
"Well, Harry," said the engineer, "lead the way."

And walking rapidly through the streets of Callander, in a few minutes they had left the town behind them.

CHAPTER III. THE DOCHART PIT

HARRY FORD was a fine, strapping fellow of five and twenty. His grave looks, his habitually passive expression, had from childhood been noticed among his comrades in the mine. His regular features, his deep blue eyes, his curly hair, rather chestnut than fair, the natural grace of his person, altogether made him a fine specimen of a lowlander. Accustomed from his earliest days to the work of the mine, he was strong and hardy, as well as brave and good. Guided by his father, and impelled by his own inclinations, he had early begun his education, and at an age when most lads are little more than apprentices, he had managed to make himself of some importance, a leader, in fact, among his fellows, and few are very ignorant in a country which does all it can to remove ignorance. Though, during the first years of his youth, the pick was never out of Harry's hand, nevertheless the young miner was not long in acquiring sufficient knowledge to raise him into the upper class of the miners, and he would certainly have succeeded his father as overman of the Dochart pit, if the colliery had not been abandoned.

James Starr was still a good walker, yet he could not easily have kept up with his guide, if the latter had not slackened his pace. The young man, carrying the engineer's bag, followed the left bank of the river for about a mile. Leaving its winding course, they took a road under tall, dripping trees. Wide fields lay on either side, around isolated farms. In one field a herd of hornless cows were quietly grazing; in another sheep with silky wool, like those in a child's toy sheep fold.

The Yarrow shaft was situated four miles from Callander. Whilst walking, James Starr could not but be struck with the change in the country. He had not seen it since the day when the last ton of Aberfoyle coal had been emptied into railway trucks to be sent to Glasgow. Agricultural life had now taken the place of the more stirring, active, industrial life. The contrast was all the greater because, during winter, field work is at a standstill. But formerly, at whatever season, the mining population, above and below ground, filled the scene with animation. Great wagons of coal used to be passing night and day. The rails, with their rotten sleepers, now disused, were then constantly ground by the weight of wagons. Now stony roads took the place of the old mining tramways. James Starr felt as if he was traversing a desert.

The engineer gazed about him with a saddened eye. He stopped now and then to take breath. He listened. The air was no longer filled with distant whistlings and the panting of engines. None of those black vapors which the manufacturer loves to see, hung in the horizon, mingling with the clouds. No tall cylindrical or prismatic chimney vomited out smoke, after being fed from the mine itself; no blast-pipe was puffing out its white vapor. The ground, formerly black with coal dust, had a bright look, to which James Starr's eyes were not accustomed.

When the engineer stood still, Harry Ford stopped also. The young miner waited in silence. He felt what was passing in his companion's mind, and he shared his feelings; he, a child of the mine, whose whole life had been passed in its depths.

"Yes, Harry, it is all changed," said Starr. "But at the rate we worked, of course the treasures of coal would have been exhausted some day. Do you regret that time?"

"I do regret it, Mr. Starr," answered Harry. "The work was hard, but it was interesting, as are all struggles."

"No doubt, my lad. A continuous struggle against the dangers of landslips, fires, inundations, explosions of firedamp, like claps of thunder. One had to guard against all those perils! You say well! It was a struggle, and consequently an exciting life."

"The miners of Alva have been more favored than the miners of Aberfoyle, Mr. Starr!"

"Ay, Harry, so they have," replied the engineer.

"Indeed," cried the young man, "it's a pity that all the globe was not made of coal; then there would have been enough to last millions of years!"

"No doubt there would, Harry; it must be acknowledged, however, that nature has shown more forethought by forming our sphere principally of sandstone, limestone, and granite, which fire cannot consume."

"Do you mean to say, Mr. Starr, that mankind would have ended by burning their own globe?"

"Yes! The whole of it, my lad," answered the engineer. "The earth would have passed to the last bit into the furnaces of engines, machines, steamers, gas factories; certainly, that would have been the end of our world one fine day!"

"There is no fear of that now, Mr. Starr. But yet, the mines will be exhausted, no doubt, and more rapidly than the statistics make out!"

"That will happen, Harry; and in my opinion England is very wrong in exchanging her fuel for the gold of other nations! I know well," added the engineer, "that neither hydraulics nor electricity has yet shown all they can do, and
that some day these two forces will be more completely utilized. But no matter! Coal is of a very practical use, and lends itself easily to the various wants of industry. Unfortunately man cannot produce it at will. Though our external forests grow incessantly under the influence of heat and water, our subterranean forests will not be reproduced, and if they were, the globe would never be in the state necessary to make them into coal."

James Starr and his guide, whilst talking, had continued their walk at a rapid pace. An hour after leaving Callander they reached the Dochart pit.

The most indifferent person would have been touched at the appearance this deserted spot presented. It was like the skeleton of something that had formerly lived. A few wretched trees bordered a plain where the ground was hidden under the black dust of the mineral fuel, but no cinders nor even fragments of coal were to be seen. All had been carried away and consumed long ago.

They walked into the shed which covered the opening of the Yarrow shaft, whence ladders still gave access to the lower galleries of the pit. The engineer bent over the opening. Formerly from this place could be heard the powerful whistle of the air inhaled by the ventilators. It was now a silent abyss. It was like being at the mouth of some extinct volcano.

When the mine was being worked, ingenious machines were used in certain shafts of the Aberfoyle colliery, which in this respect was very well off; frames furnished with automatic lifts, working in wooden slides, oscillating ladders, called "man-engines," which, by a simple movement, permitted the miners to descend without danger.

But all these appliances had been carried away, after the cessation of the works. In the Yarrow shaft there remained only a long succession of ladders, separated at every fifty feet by narrow landings. Thirty of these ladders placed thus end to end led the visitor down into the lower gallery, a depth of fifteen hundred feet. This was the only way of communication which existed between the bottom of the Dochart pit and the open air. As to air, that came in by the Yarrow shaft, from whence galleries communicated with another shaft whose orifice opened at a higher level; the warm air naturally escaped by this species of inverted siphon.

"I will follow you, my lad," said the engineer, signing to the young man to precede him.

"As you please, Mr. Starr."

"Have you your lamp?"

"Yes, and I only wish it was still the safety lamp, which we formerly had to use!"

"Sure enough," returned James Starr, "there is no fear of fire-damp explosions now!"

Harry was provided with a simple oil lamp, the wick of which he lighted. In the mine, now empty of coal, escapes of light carburetted hydrogen could not occur. As no explosion need be feared, there was no necessity for interposing between the flame and the surrounding air that metallic screen which prevents the gas from catching fire. The Davy lamp was of no use here. But if the danger did not exist, it was because the cause of it had disappeared, and with this cause, the combustible in which formerly consisted the riches of the Dochart pit.

Harry descended the first steps of the upper ladder. Starr followed. They soon found themselves in a profound obscurity, which was only relieved by the glimmer of the lamp. The young man held it above his head, the better to light his companion. A dozen ladders were descended by the engineer and his guide, with the measured step habitual to the miner. They were all still in good condition.

James Starr examined, as well as the insufficient light would permit, the sides of the dark shaft, which were covered by a partly rotten lining of wood.

Arrived at the fifteenth landing, that is to say, half way down, they halted for a few minutes.

"Decidedly, I have not your legs, my lad," said the engineer, panting.

"You are very stout, Mr. Starr," replied Harry, "and it's something too, you see, to live all one's life in the mine."

"Right, Harry. Formerly, when I was twenty, I could have gone down all at a breath. Come, forward!"

But just as the two were about to leave the platform, a voice, as yet far distant, was heard in the depths of the shaft. It came up like a sonorous billow, swelling as it advanced, and becoming more and more distinct.

"Halloo! who comes here?" asked the engineer, stopping Harry.

"I cannot say," answered the young miner.

"Is it not your father?"

"My father, Mr. Starr? no."

"Some neighbor, then?"

"We have no neighbors in the bottom of the pit," replied Harry. "We are alone, quite alone."

"Well, we must let this intruder pass," said James Starr. "Those who are descending must yield the path to those who are ascending."

They waited. The voice broke out again with a magnificent burst, as if it had been carried through a vast speaking trumpet; and soon a few words of a Scotch song came clearly to the ears of the young miner.

"The Hundred Pipers!" cried Harry. "Well, I shall be much surprised if that comes from the lungs of any man but
Jack Ryan."

"And who is this Jack Ryan?" asked James Starr.

"An old mining comrade," replied Harry. Then leaning from the platform, "Halloo! Jack!" he shouted.

"Is that you, Harry?" was the reply. "Wait a bit, I'm coming." And the song broke forth again.

In a few minutes, a tall fellow of five and twenty, with a merry face, smiling eyes, a laughing mouth, and sandy hair, appeared at the bottom of the luminous cone which was thrown from his lantern, and set foot on the landing of the fifteenth ladder. His first act was to vigorously wring the hand which Harry extended to him.

"Delighted to meet you!" he exclaimed. "If I had only known you were to be above ground to-day, I would have spared myself going down the Yarrow shaft!"

"This is Mr. James Starr," said Harry, turning his lamp towards the engineer, who was in the shadow.

"Mr. Starr!" cried Jack Ryan. "Ah, sir, I could not see. Since I left the mine, my eyes have not been accustomed to see in the dark, as they used to do."

"Ah, I remember a lad who was always singing. That was ten years ago. It was you, no doubt?"

"Ay, Mr. Starr, but in changing my trade, I haven't changed my disposition. It's far better to laugh and sing than to cry and whine!"

"You're right there, Jack Ryan. And what do you do now, as you have left the mine?"

"I am working on the Melrose farm, forty miles from here. Ah, it's not like our Aberfoyle mines! The pick comes better to my hand than the spade or hoe. And then, in the old pit, there were vaulted roofs, to merrily echo one's songs, while up above ground!—But you are going to see old Simon, Mr. Starr?"

"Yes, Jack," answered the engineer.

"Don't let me keep you then."

"Tell me, Jack," said Harry, "what was taking you to our cottage to-day?"

"I wanted to see you, man," replied Jack, "and ask you to come to the Irvine games. You know I am the piper of the place. There will be dancing and singing."

"Thank you, Jack, but it's impossible."

"Impossible?"

"Yes; Mr. Starr's visit will last some time, and I must take him back to Callander."

"Well, Harry, it won't be for a week yet. By that time Mr. Starr's visit will be over, I should think, and there will be nothing to keep you at the cottage."

"Indeed, Harry," said James Starr, "you must profit by your friend Jack's invitation."

"Well, I accept it, Jack," said Harry, "in a week we will meet at Irvine."

"In a week, that's settled," returned Ryan. "Good-by, Harry! Your servant, Mr. Starr. I am very glad to have seen you again! I can give news of you to all my friends. No one has forgotten you, sir."

"And I have forgotten no one," said Starr.

"Thanks for all, sir," replied Jack.

"Good-by, Jack," said Harry, shaking his hand. And Jack Ryan, singing as he went, soon disappeared in the heights of the shaft, dimly lighted by his lamp.

A quarter of an hour afterwards James Starr and Harry descended the last ladder, and set foot on the lowest floor of the pit.

From the bottom of the Yarrow shaft radiated numerous empty galleries. They ran through the wall of schist and sandstone, some shored up with great, roughly-hewn beams, others lined with a thick casing of wood. In every direction embankments supplied the place of the excavated veins. Artificial pillars were made of stone from neighboring quarries, and now they supported the ground, that is to say, the double layer of tertiary and quaternary soil, which formerly rested on the seam itself. Darkness now filled the galleries, formerly lighted either by the miner's lamp or by the electric light, the use of which had been introduced in the mines.

"Will you not rest a while, Mr. Starr?" asked the young man.

"No, my lad," replied the engineer, "for I am anxious to be at your father's cottage."

"Follow me then, Mr. Starr. I will guide you, and yet I daresay you could find your way perfectly well through this dark labyrinth."

"Yes, indeed! I have the whole plan of the old pit still in my head."

Harry, followed by the engineer, and holding his lamp high the better to light their way, walked along a high gallery, like the nave of a cathedral. Their feet still struck against the wooden sleepers which used to support the rails.

They had not gone more than fifty paces, when a huge stone fell at the feet of James Starr. "Take care, Mr. Starr!" cried Harry, seizing the engineer by the arm.

"A stone, Harry! Ah! these old vaultings are no longer quite secure, of course, and--"
"Mr. Starr," said Harry Ford, "it seems to me that stone was thrown, thrown as by the hand of man!"

"Thrown!" exclaimed James Starr. "What do you mean, lad?"

"Nothing, nothing, Mr. Starr," replied Harry evasively, his anxious gaze endeavoring to pierce the darkness. "Let us go on. Take my arm, sir, and don't be afraid of making a false step."

"Here I am, Harry." And they both advanced, whilst Harry looked on every side, throwing the light of his lamp into all the corners of the gallery.

"Shall we soon be there?" asked the engineer.

"In ten minutes at most."

"Good."

"But," muttered Harry, "that was a most singular thing. It is the first time such an accident has happened to me. That stone falling just at the moment we were passing."

"Harry, it was a mere chance."

"Chance," replied the young man, shaking his head. "Yes, chance." He stopped and listened.

"What is the matter, Harry?" asked the engineer.

"I thought I heard someone walking behind us," replied the young miner, listening more attentively. Then he added, "No, I must have been mistaken. Lean harder on my arm, Mr. Starr. Use me like a staff."

"A good solid staff, Harry," answered James Starr. "I could not wish for a better than a fine fellow like you."

They continued in silence along the dark nave. Harry was evidently preoccupied, and frequently turned, trying to catch, either some distant noise, or remote glimmer of light.

But behind and before, all was silence and darkness.

CHAPTER IV. THE FORD FAMILY

TEN minutes afterwards, James Starr and Harry issued from the principal gallery. They were now standing in a glade, if we may use this word to designate a vast and dark excavation. The place, however, was not entirely deprived of daylight. A few rays straggled through the opening of a deserted shaft. It was by means of this pipe that ventilation was established in the Dochart pit. Owing to its lesser density, the warm air was drawn towards the Yarrow shaft. Both air and light, therefore, penetrated in some measure into the glade.

Here Simon Ford had lived with his family ten years, in a subterranean dwelling, hollowed out in the schistous mass, where formerly stood the powerful engines which worked the mechanical traction of the Dochart pit.

Such was the habitation, "his cottage," as he called it, in which resided the old overman. As he had some means saved during a long life of toil, Ford could have afforded to live in the light of day, among trees, or in any town of the kingdom he chose, but he and his wife and son preferred remaining in the mine, where they were happy together, having the same opinions, ideas, and tastes. Yes, they were quite fond of their cottage, buried fifteen hundred feet below Scottish soil. Among other advantages, there was no fear that tax gatherers, or rent collectors would ever come to trouble its inhabitants.

At this period, Simon Ford, the former overman of the Dochart pit, bore the weight of sixty-five years well. Tall, robust, well-built, he would have been regarded as one of the most conspicuous men in the district which supplies so many fine fellows to the Highland regiments.

Simon Ford was descended from an old mining family, and his ancestors had worked the very first carboniferous seams opened in Scotland. Without discussing whether or not the Greeks and Romans made use of coal, whether the Chinese worked coal mines before the Christian era, whether the French word for coal (HOUILLE) is really derived from the farrier Houillos, who lived in Belgium in the twelfth century, we may affirm that the beds in Great Britain were the first ever regularly worked. So early as the eleventh century, William the Conqueror divided the produce of the Newcastle bed among his companions-in-arms. At the end of the thirteenth century, a license for the mining of "sea coal" was granted by Henry III. Lastly, towards the end of the same century, mention is made of the Scotch and Welsh beds.

It was about this time that Simon Ford's ancestors penetrated into the bowels of Caledonian earth, and lived there ever after, from father to son. They were but plain miners. They labored like convicts at the work of extracting the precious combustible. It is even believed that the coal miners, like the salt-makers of that period, were actual slaves.

However that might have been, Simon Ford was proud of belonging to this ancient family of Scotch miners. He had worked diligently in the same place where his ancestors had wielded the pick, the crowbar, and the mattock. At thirty he was overman of the Dochart pit, the most important in the Aberfoyle colliery. He was devoted to his trade. During long years he zealously performed his duty. His only grief had been to perceive the bed becoming impoverished, and to see the hour approaching when the seam would be exhausted.

It was then he devoted himself to the search for new veins in all the Aberfoyle pits, which communicated
underground one with another. He had had the good luck to discover several during the last period of the working. His miner's instinct assisted him marvelously, and the engineer, James Starr, appreciated him highly. It might be said that he divined the course of seams in the depths of the coal mine as a hydroscope reveals springs in the bowels of the earth. He was par excellence the type of a miner whose whole existence is indissolubly connected with that of his mine. He had lived there from his birth, and now that the works were abandoned he wished to live there still. His son Harry foraged for the subterranean housekeeping; as for himself, during those ten years he had not been ten times above ground.

"Go up there! What is the good?" he would say, and refused to leave his black domain. The place was remarkably healthy, subject to an equable temperature; the old overman endured neither the heat of summer nor the cold of winter. His family enjoyed good health; what more could he desire?

But at heart he felt depressed. He missed the former animation, movement, and life in the well-worked pit. He was, however, supported by one fixed idea. "No, no! the mine is not exhausted!" he repeated.

And that man would have given serious offense who could have ventured to express before Simon Ford any doubt that old Aberfoyle would one day revive! He had never given up the hope of discovering some new bed which would restore the mine to its past splendor. Yes, he would willingly, had it been necessary, have resumed the miner's pick, and with his still stout arms vigorously attacked the rock. He went through the dark galleries, sometimes alone, sometimes with his son, examining, searching for signs of coal, only to return each day, wearied, but not in despair, to the cottage.

Madge, Simon's faithful companion, his "gude-wife," to use the Scotch term, was a tall, strong, comely woman. Madge had no wish to leave the Dochart pit any more than had her husband. She shared all his hopes and regrets. She encouraged him, she urged him on, and talked to him in a way which cheered the heart of the old overman. "Aberfoyle is only asleep," she would say. "You are right about that, Simon. This is but a rest, it is not death!"

Madge, as well as the others, was perfectly satisfied to live independent of the outer world, and was the center of the happiness enjoyed by the little family in their dark cottage.

The engineer was eagerly expected. Simon Ford was standing at his door, and as soon as Harry's lamp announced the arrival of his former viewer he advanced to meet him.

"Welcome, Mr. Starr!" he exclaimed, his voice echoing under the roof of schist. "Welcome to the old overman's cottage! Though it is buried fifteen hundred feet under the earth, our house is not the less hospitable."

"And how are you, good Simon?" asked James Starr, grasping the hand which his host held out to him.

"Very well, Mr. Starr. How could I be otherwise here, sheltered from the inclemencies of the weather? Your ladies who go to Newhaven or Portobello in the summer time would do much better to pass a few months in the coal mine of Aberfoyle! They would run no risk here of catching a heavy cold, as they do in the damp streets of the old capital."

"I'm not the man to contradict you, Simon," answered James Starr, glad to find the old man just as he used to be. "Indeed, I wonder why I do not change my home in the Canongate for a cottage near you."

"And why not, Mr. Starr? I know one of your old miners who would be truly pleased to have only a partition wall between you and him."

"And how is Madge?" asked the engineer.

"The goodwife is in better health than I am, if that's possible," replied Ford, "and it will be a pleasure to her to see you at her table. I think she will surpass herself to do you honor."

"We shall see that, Simon, we shall see that!" said the engineer, to whom the announcement of a good breakfast could not be indifferent, after his long walk.

"Are you hungry, Mr. Starr?"

"Ravenously hungry. My journey has given me an appetite. I came through horrible weather."

"Ah, it is raining up there," responded Simon Ford.

"Yes, Simon, and the waters of the Forth are as rough as the sea."

"Well, Mr. Starr, here it never rains. But I needn't describe to you all the advantages, which you know as well as myself. Here we are at the cottage. That is the chief thing, and I again say you are welcome, sir."

Simon Ford, followed by Harry, ushered their guest into the dwelling. James Starr found himself in a large room lighted by numerous lamps, one hanging from the colored beams of the roof.

"The soup is ready, wife," said Ford, "and it mustn't be kept waiting any more than Mr. Starr. He is as hungry as a miner, and he shall see that our boy doesn't let us want for anything in the cottage! By-the-bye, Harry," added the old overman, turning to his son, "Jack Ryan came here to see you."

"I know, father. We met him in the Yarrow shaft."

"He's an honest and a merry fellow," said Ford; "but he seems to be quite happy above ground. He hasn't the true miner's blood in his veins. Sit down, Mr. Starr, and have a good dinner, for we may not sup till late."
As the engineer and his hosts were taking their places:

"One moment, Simon," said James Starr. "Do you want me to eat with a good appetite?"

"It will be doing us all possible honor, Mr. Starr," answered Ford.

"Well, in order to eat heartily, I must not be at all anxious. Now I have two questions to put to you."

"Go on, sir."

"Your letter told me of a communication which was to be of an interesting nature."

"It is very interesting indeed."

"To you?"

"To you and to me, Mr. Starr. But I do not want to tell it you until after dinner, and on the very spot itself. Without that you would not believe me."

"Simon," resumed the engineer, "look me straight in the face. An interesting communication? Yes. Good! I will not ask more," he added, as if he had read the reply in the old overman's eyes.

"And the second question?" asked the latter.

"Do you know, Simon, who the person is who can have written this?" answered the engineer, handing him the anonymous letter.

Ford took the letter and read it attentively. Then giving it to his son, "Do you know the writing?" he asked.

"No, father," replied Harry.

"And had this letter the Aberfoyle postmark?" inquired Simon Ford.

"Yes, like yours," replied James Starr.

"What do you think of that, Harry?" said his father, his brow darkening.

"I think, father," returned Harry, "that someone has had some interest in trying to prevent Mr. Starr from coming to the place where you invited him."

"But who," exclaimed the old miner, "who could have possibly guessed enough of my secret?" And Simon fell into a reverie, from which he was aroused by his wife.

"Let us begin, Mr. Starr," she said. "The soup is already getting cold. Don't think any more of that letter just now."

On the old woman's invitation, each drew in his chair, James Starr opposite to Madge--to do him honor--the father and son opposite to each other. It was a good Scotch dinner. First they ate "hotchpotch," soup with the meat swimming in capital broth. As old Simon said, his wife knew no rival in the art of preparing hotchpotch. It was the same with the "cockyleeky," a cock stewed with leeks, which merited high praise. The whole was washed down with excellent ale, obtained from the best brewery in Edinburgh.

But the principal dish consisted of a "haggis," the national pudding, made of meat and barley meal. This remarkable dish, which inspired the poet Burns with one of his best odes, shared the fate of all the good things in this world--it passed away like a dream.

Madge received the sincere compliments of her guest. The dinner ended with cheese and oatcake, accompanied by a few small glasses of "usquebaugh," capital whisky, five and twenty years old--just Harry's age. The repast lasted a good hour. James Starr and Simon Ford had not only eaten much, but talked much too, chiefly of their past life in the old Aberfoyle mine.

Harry had been rather silent. Twice he had left the table, and even the house. He evidently felt uneasy since the incident of the stone, and wished to examine the environs of the cottage. The anonymous letter had not contributed to reassure him.

Whilst he was absent, the engineer observed to Ford and his wife, "That's a fine lad you have there, my friends."

"Yes, Mr. Starr, he is a good and affectionate son," replied the old overman earnestly.

"Is he happy with you in the cottage?"

"He would not wish to leave us."

"Don't you think of finding him a wife, some day?"

"A wife for Harry," exclaimed Ford. "And who would it be? A girl from up yonder, who would love merry-makings and dancing, who would prefer her clan to our mine! Harry wouldn't do it!"

"Simon," said Madge, "you would not forbid that Harry should take a wife."

"I would forbid nothing," returned the old miner, "but there's no hurry about that. Who knows but we may find one for him."

Harry re-entered at that moment, and Simon Ford was silent.

When Madge rose from the table, all followed her example, and seated themselves at the door of the cottage.

"Well, Simon," said the engineer, "I am ready to hear you."

"Mr. Starr," responded Ford, "I do not need your ears, but your legs. Are you quite rested?"

"Quite rested and quite refreshed, Simon. I am ready to go with you wherever you like."
"Harry," said Simon Ford, turning to his son, "light our safety lamps."
"Are you going to take safety lamps!" exclaimed James Starr, in amazement, knowing that there was no fear of
explosions of fire-damp in a pit quite empty of coal.
"Yes, Mr. Starr, it will be prudent."
"My good Simon, won't you propose next to put me in a miner's dress?"
"Not just yet, sir, not just yet!" returned the old overman, his deep-set eyes gleaming strangely.
Harry soon reappeared, carrying three safety lamps. He handed one of these to the engineer, the other to his
father, and kept the third hanging from his left hand, whilst his right was armed with a long stick.
"Forward!" said Simon Ford, taking up a strong pick, which was leaning against the wall of the cottage.
"Forward!" echoed the engineer. "Good-by, Madge."
"GOD speed you!" responded the good woman.
"A good supper, wife, do you hear?" exclaimed Ford. "We shall be hungry when we come back, and will do it
justice!"

CHAPTER V. SOME STRANGE PHENOMENA

Many superstitious beliefs exist both in the Highlands and Lowlands of Scotland. Of course the mining
population must furnish its contingent of legends and fables to this mythological repertory. If the fields are peopled
with imaginary beings, either good or bad, with much more reason must the dark mines be haunted to their lowest
depths. Who shakes the seam during tempestuous nights? who puts the miners on the track of an as yet unworked
vein? who lights the fire-damp, and presides over the terrible explosions? who but some spirit of the mine? This, at
least, was the opinion commonly spread among the superstitious Scotch.

In the first rank of the believers in the supernatural in the Dochart pit figured Jack Ryan, Harry's friend. He was
the great partisan of all these superstitions. All these wild stories were turned by him into songs, which earned him
great applause in the winter evenings.

But Jack Ryan was not alone in his belief. His comrades affirmed, no less strongly, that the Aberfoyle pits were
haunted, and that certain strange beings were seen there frequently, just as in the Highlands. To hear them talk, it
would have been more extraordinary if nothing of the kind appeared. Could there indeed be a better place than a
dark and deep coal mine for the freaks of fairies, elves, goblins, and other actors in the fantastical dramas? The
scenery was all ready, why should not the supernatural personages come there to play their parts?

So reasoned Jack Ryan and his comrades in the Aberfoyle mines. We have said that the different pits
communicated with each other by means of long subterranean galleries. Thus there existed beneath the county of
Stirling a vast tract, full of burrows, tunnels, bored with caves, and perforated with shafts, a subterranean labyrinth,
which might be compared to an enormous ant-hill.

Miners, though belonging to different pits, often met, when going to or returning from their work. Consequently
there was a constant opportunity of exchanging talk, and circulating the stories which had their origin in the mine,
from one pit to another. These accounts were transmitted with marvelous rapidity, passing from mouth to mouth,
and gaining in wonder as they went.

Two men, however, better educated and with more practical minds than the rest, had always resisted this
temptation. They in no degree believed in the intervention of spirits, elves, or goblins. These two were Simon Ford
and his son. And they proved it by continuing to inhabit the dismal crypt, after the desertion of the Dochart pit.
Perhaps good Madge, like every Highland woman, had some leaning towards the supernatural. But she had to repeat
all these stories to herself, and so she did, most conscientiously, so as not to let the old traditions be lost.

Even had Simon and Harry Ford been as credulous as their companions, they would not have abandoned the
mine to the imps and fairies. For ten years, without missing a single day, obstinate and immovable in their
convictions, the father and son took their picks, their sticks, and their lamps. They went about searching, sounding
the rock with a sharp blow, listening if it would return a favorable sound. So long as the soundings had not been
pushed to the granite of the primary formation, the Fords were agreed that the search, unsuccessful to-day, might
succeed to-morrow, and that it ought to be resumed. They spent their whole life in endeavoring to bring Aberfoyle
back to its former prosperity. If the father died before the hour of success, the son was to go on with the task alone.

It was during these excursions that Harry was more particularly struck by certain phenomena, which he vainly
sought to explain. Several times, while walking along some narrow cross-alley, he seemed to hear sounds similar to
those which would be produced by violent blows of a pickax against the wall.

Harry hastened to seek the cause of this mysterious work. The tunnel was empty. The light from the young
miner's lamp, thrown on the wall, revealed no trace of any recent work with pick or crowbar. Harry would then ask
himself if it was not the effect of some acoustic illusion, or some strange and fantastic echo. At other times, on
suddenly throwing a bright light into a suspicious-looking cleft in the rock, he thought he saw a shadow. He rushed forward. Nothing, and there was no opening to permit a human being to evade his pursuit!

Twice in one month, Harry, whilst visiting the west end of the pit, distinctly heard distant reports, as if some miner had exploded a charge of dynamite. The second time, after many careful researches, he found that a pillar had just been blown up.

By the light of his lamp, Harry carefully examined the place attacked by the explosion. It had not been made in a simple embankment of stones, but in a mass of schist, which had penetrated to this depth in the coal stratum. Had the object of the explosion been to discover a new vein? Or had someone wished simply to destroy this portion of the mine? Thus he questioned, and when he made known this occurrence to his father, neither could the old overman nor he himself answer the question in a satisfactory way.

"It is very queer," Harry often repeated. "The presence of an unknown being in the mine seems impossible, and yet there can be no doubt about it. Does someone besides ourselves wish to find out if a seam yet exists? Or, rather, has he attempted to destroy what remains of the Aberfoyle mines? But for what reason? I will find that out, if it should cost me my life!"

A fortnight before the day on which Harry Ford guided the engineer through the labyrinth of the Dochart pit, he had been on the point of attaining the object of his search. He was going over the southwest end of the mine, with a large lantern in his hand. All at once, it seemed to him that a light was suddenly extinguished, some hundred feet before him, at the end of a narrow passage cut obliquely through the rock. He darted forward.

His search was in vain. As Harry would not admit a supernatural explanation for a physical occurrence, he concluded that certainly some strange being prowled about in the pit. But whatever he could do, searching with the greatest care, scrutinizing every crevice in the gallery, he found nothing for his trouble.

If Jack Ryan and the other superstitious fellows in the mine had seen these lights, they would, without fail, have called them supernatural, but Harry did not dream of doing so, nor did his father. And when they talked over these phenomena, evidently due to a physical cause, "My lad," the old man would say, "we must wait. It will all be explained some day."

However, it must be observed that, hitherto, neither Harry nor his father had ever been exposed to any act of violence. If the stone which had fallen at the feet of James Starr had been thrown by the hand of some ill-disposed person, it was the first criminal act of that description.

James Starr was of opinion that the stone had become detached from the roof of the gallery; but Harry would not admit of such a simple explanation. According to him, the stone had not fallen, it had been thrown; for otherwise, without rebounding, it could never have described a trajectory as it did.

Harry saw in it a direct attempt against himself and his father, or even against the engineer.

CHAPTER VI. SIMON FORD'S EXPERIMENT

THE old clock in the cottage struck one as James Starr and his two companions went out. A dim light penetrated through the ventilating shaft into the glade. Harry's lamp was not necessary here, but it would very soon be of use, for the old overman was about to conduct the engineer to the very end of the Dochart pit.

After following the principal gallery for a distance of two miles, the three explorers--for, as will be seen, this was a regular exploration--arrived at the entrance of a narrow tunnel. It was like a nave, the roof of which rested on woodwork, covered with white moss. It followed very nearly the line traced by the course of the river Forth, fifteen hundred feet above.

"So we are going to the end of the last vein?" said James Starr.

"Ay! You know the mine well still."

"Well, Simon," returned the engineer, "it will be difficult to go further than that, if I don't mistake."

"Yes, indeed, Mr. Starr. That was where our picks tore out the last bit of coal in the seam. I remember it as if it were yesterday. I myself gave that last blow, and it re-echoed in my heart more dismally than on the rock. Only sandstone and schist were round us after that, and when the truck rolled towards the shaft, I followed, with my heart as full as though it were a funeral. It seemed to me that the soul of the mine was going with it."

The gravity with which the old man uttered these words impressed the engineer, who was not far from sharing his sentiments. They were those of the sailor who leaves his disabled vessel--of the proprietor who sees the house of his ancestors pulled down. He pressed Ford's hand; but now the latter seized that of the engineer, and, wringing it:

"That day we were all of us mistaken," he exclaimed. "No! The old mine was not dead. It was not a corpse that the miners abandoned; and I dare to assert, Mr. Starr, that its heart beats still."

"Speak, Ford! Have you discovered a new vein?" cried the engineer, unable to contain himself. "I know you have! Your letter could mean nothing else."
"Mr. Starr," said Simon Ford, "I did not wish to tell any man but yourself."

"And you did quite right, Ford. But tell me how, by what signs, are you sure?"

"Listen, sir!" resumed Simon. "It is not a seam that I have found."

"What is it, then?"

"Only positive proof that such a seam exists."

"And the proof?"

"Could fire-damp issue from the bowels of the earth if coal was not there to produce it?"

"No, certainly not!" replied the engineer. "No coal, no fire-damp. No effects without a cause."

"Just as no smoke without fire."

"And have you recognized the presence of light carburetted hydrogen?"

"An old miner could not be deceived," answered Ford. "I have met with our old enemy, the fire-damp!"

"But suppose it was another gas," said Starr. "Firedamp is almost without smell, and colorless. It only really betrays its presence by an explosion."

"Mr. Starr," said Simon Ford, "will you let me tell you what I have done? Harry had once or twice observed something remarkable in his excursions to the west end of the mine. Fire, which suddenly went out, sometimes appeared along the face of the rock or on the embankment of the further galleries. How those flames were lighted, I could not and cannot say. But they were evidently owing to the presence of fire-damp, and to me fire-damp means a vein of coal."

"Did not these fires cause any explosion?" asked the engineer quickly.

"Yes, little partial explosions," replied Ford, "such as I used to cause myself when I wished to ascertain the presence of fire-damp. Do you remember how formerly it was the custom to try to prevent explosions before our good genius, Humphry Davy, invented his safety-lamp?"

"Yes," replied James Starr. "You mean what the 'monk,' as the men called him, used to do. But I have never seen him in the exercise of his duty."

"Indeed, Mr. Starr, you are too young, in spite of your five-and-fifty years, to have seen that. But I, ten years older, often saw the last 'monk' working in the mine. He was called so because he wore a long robe like a monk. His proper name was the 'fireman.' At that time there was no other means of destroying the bad gas but by dispersing it in little explosions, before its buoyancy had collected it in too great quantities in the heights of the galleries. The monk, as we called him, with his face masked, his head muffled up, all his body tightly wrapped in a thick felt cloak, crawled along the ground. He could breathe down there, when the air was pure; and with his right hand he waved above his head a blazing torch. When the firedamp had accumulated in the air, so as to form a detonating mixture, the explosion occurred without being fatal, and, by often renewing this operation, catastrophes were prevented. Sometimes the 'monk' was injured or killed in his work, then another took his place. This was done in all mines until the Davy lamp was universally adopted. But I knew the plan, and by its means I discovered the presence of firedamp and consequently that of a new seam of coal in the Dochart pit."

All that the old overman had related of the so-called "monk" or "fireman" was perfectly true. The air in the galleries of mines was formerly always purified in the way described.

Fire-damp, marsh-gas, or carburetted hydrogen, is colorless, almost scentless; it burns with a blue flame, and makes respiration impossible. The miner could not live in a place filled with this injurious gas, any more than one could live in a gasometer full of common gas. Moreover, fire-damp, as well as the latter, a mixture of inflammable gases, forms a detonating mixture as soon as the air unites with it in a proportion of eight, and perhaps even five to the hundred. When this mixture is lighted by any cause, there is an explosion, almost always followed by a frightful catastrophe.

As they walked on, Simon Ford told the engineer all that he had done to attain his object; how he was sure that the escape of fire-damp took place at the very end of the farthest gallery in its western part, because he had provoked small and partial explosions, or rather little flames, enough to show the nature of the gas, which escaped in a small jet, but with a continuous flow.

An hour after leaving the cottage, James Starr and his two companions had gone a distance of four miles. The engineer, urged by anxiety and hope, walked on without noticing the length of the way. He pondered over all that the old miner had told him, and mentally weighed all the arguments which the latter had given in support of his belief. He agreed with him in thinking that the continued emission of carburetted hydrogen certainly showed the existence of a new coal-seam. If it had been merely a sort of pocket, full of gas, as it is sometimes found amongst the rock, it would soon have been empty, and the phenomenon have ceased. But far from that. According to Simon Ford, the fire-damp escaped incessantly, and from that fact the existence of an important vein might be considered certain. Consequently, the riches of the Dochart pit were not entirely exhausted. The chief question now was, whether this was merely a vein which would yield comparatively little, or a bed occupying a large extent.
Harry, who preceded his father and the engineer, stopped.

"Here we are!" exclaimed the old miner. "At last, thank Heaven! you are here, Mr. Starr, and we shall soon know." The old overman's voice trembled slightly.

"Be calm, my man!" said the engineer. "I am as excited as you are, but we must not lose time."

The gallery at this end of the pit widened into a sort of dark cave. No shaft had been pierced in this part, and the gallery, bored into the bowels of the earth, had no direct communication with the surface of the earth.

James Starr, with intense interest, examined the place in which they were standing. On the walls of the cavern the marks of the pick could still be seen, and even holes in which the rock had been blasted, near the termination of the working. The schist was excessively hard, and it had not been necessary to bank up the end of the tunnel where the works had come to an end. There the vein had failed, between the schist and the tertiary sandstone. From this very place had been extracted the last piece of coal from the Dochart pit.

"We must attack the dyke," said Ford, raising his pick; "for at the other side of the break, at more or less depth, we shall assuredly find the vein, the existence of which I assert."

"And was it on the surface of these rocks that you found out the fire-damp?" asked James Starr.

"Just there, sir," returned Ford, "and I was able to light it only by bringing my lamp near to the cracks in the rock. Harry has done it as well as I."

"At what height?" asked Starr.

"Ten feet from the ground," replied Harry.

James Starr had seated himself on a rock. After critically inhaling the air of the cavern, he gazed at the two miners, almost as if doubting their words, decided as they were. In fact, carburetted hydrogen is not completely scentless, and the engineer, whose sense of smell was very keen, was astonished that it had not revealed the presence of the explosive gas. At any rate, if the gas had mingled at all with the surrounding air, it could only be in a very small stream. There was no danger of an explosion, and they might without fear open the safety lamp to try the experiment, just as the old miner had done before.

What troubled James Starr was, not lest too much gas mingled with the air, but lest there should be little or none. "Could they have been mistaken?" he murmured. "No: these men know what they are about. And yet--"

He waited, not without some anxiety, until Simon Ford's phenomenon should have taken place. But just then it seemed that Harry, like himself, had remarked the absence of the characteristic odor of fire-damp; for he exclaimed in an altered voice, "Father, I should say the gas was no longer escaping through the cracks!"

"No longer!" cried the old miner--and, pressing his lips tight together, he snuffed the air several times. Then, all at once, with a sudden movement, "Hand me your lamp, Harry," he said.

Ford took the lamp with a trembling hand. He drew off the wire gauze case which surrounded the wick, and the flame burned in the open air.

As they had expected, there was no explosion, but, what was more serious, there was not even the slight crackling which indicates the presence of a small quantity of firedamp. Simon took the stick which Harry was holding, fixed his lamp to the end of it, and raised it high above his head, up to where the gas, by reason of its buoyancy, would naturally accumulate. The flame of the lamp, burning straight and clear, revealed no trace of the carburetted hydrogen.

"Close to the wall," said the engineer.

"Yes," responded Ford, carrying the lamp to that part of the wall at which he and his son had, the evening before, proved the escape of gas.

The old miner's arm trembled whilst he tried to hoist the lamp up. "Take my place, Harry," said he.

Harry took the stick, and successively presented the lamp to the different fissures in the rock; but he shook his head, for of that slight crackling peculiar to escaping fire-damp he heard nothing. There was no flame. Evidently not a particle of gas was escaping through the rock.

"Nothing!" cried Ford, clenching his fist with a gesture rather of anger than disappointment.

A cry escaped Harry.

"What's the matter?" asked Starr quickly.

"Someone has stopped up the cracks in the schist!"

"Is that true?" exclaimed the old miner.

"Look, father!" Harry was not mistaken. The obstruction of the fissures was clearly visible by the light of the lamp. It had been recently done with lime, leaving on the rock a long whitish mark, badly concealed with coal dust.

"It's he!" exclaimed Harry. "It can only be he!"

"He?" repeated James Starr in amazement.

"Yes!" returned the young man, "that mysterious being who haunts our domain, for whom I have watched a hundred times without being able to get at him--the author, we may now be certain, of that letter which was intended
CHAPTER VII. NEW ABERFOYLE

THE old overman's experiment had succeeded. Firedamp, it is well known, is only generated in coal seams; therefore the existence of a vein of precious combustible could no longer be doubted. As to its size and quality, that must be determined later.

"Yes," thought James Starr, "behind that wall lies a carboniferous bed, undiscovered by our soundings. It is vexatious that all the apparatus of the mine, deserted for ten years, must be set up anew. Never mind. We have found the vein which was thought to be exhausted, and this time it shall be worked to the end!"

"Well, Mr. Starr," asked Ford, "what do you think of our discovery? Was I wrong to trouble you? Are you sorry to have paid this visit to the Dochart pit?"

"No, no, my old friend!" answered Starr. "We have not lost our time; but we shall be losing it now, if we do not return immediately to the cottage. To-morrow we will come back here. We will blast this wall with dynamite. We will lay open the new vein, and after a series of soundings, if the seam appears to be large, I will form a new Aberfoyle Company, to the great satisfaction of the old shareholders. Before three months have passed, the first corves full of coal will have been taken from the new vein."

"Well said, sir!" cried Simon Ford. "The old mine will grow young again, like a widow who remarries! The bustle of the old days will soon begin with the blows of the pick, and mattock, blasts of powder, rumbling of wagons, neighing of horses, creaking of machines! I shall see it all again! I hope, Mr. Starr, that you will not think me too old to resume my duties of overman?"

"No, Simon, no indeed! You wear better than I do, my old friend!"

"And, sir, you shall be our viewer again. May the new working last for many years, and pray Heaven I shall have the consolation of dying without seeing the end of it!"

The old miner was overflowing with joy. James Starr fully entered into it; but he let Ford rave for them both. Harry alone remained thoughtful. To his memory recurred the succession of singular, inexplicable circumstances attending the discovery of the new bed. It made him uneasy about the future.

An hour afterwards, James Starr and his two companions were back in the cottage. The engineer supped with good appetite, listening with satisfaction to all the plans unfolded by the old overman; and had it not been for his excitement about the next day's work, he would never have slept better than in the perfect stillness of the cottage.

The following day, after a substantial breakfast, James Starr, Simon Ford, Harry, and even Madge herself, took the road already traversed the day before. All looked like regular miners. They carried different tools, and some dynamite with which to blast the rock. Harry, besides a large lantern, took a safety lamp, which would burn for twelve hours. It was more than was necessary for the journey there and back, including the time for the working--supposing a working was possible.

"To work! to work!" shouted Ford, when the party reached the further end of the passage; and he grasped a heavy crowbar and brandished it.

"Stop one instant," said Starr. "Let us see if any change has taken place, and if the fire-damp still escapes through the crevices."

"You are right, Mr. Starr," said Harry. "Whoever stopped it up yesterday may have done it again to-day!"

Madge, seated on a rock, carefully observed the excavation, and the wall which was to be blasted.

It was found that everything was just as they left it. The crevices had undergone no alteration; the carburetted hydrogen still filtered through, though in a small stream, which was no doubt because it had had a free passage since
the day before. As the quantity was so small, it could not have formed an explosive mixture with the air inside. James Starr and his companions could therefore proceed in security. Besides, the air grew purer by rising to the heights of the Dochart pit; and the fire-damp, spreading through the atmosphere, would not be strong enough to make any explosion.

"To work, then!" repeated Ford; and soon the rock flew in splinters under his skilful blows. The break was chiefly composed of pudding-stone, interspersed with sandstone and schist, such as is most often met with between the coal veins. James Starr picked up some of the pieces, and examined them carefully, hoping to discover some trace of coal.

Starr having chosen the place where the holes were to be drilled, they were rapidly bored by Harry. Some cartridges of dynamite were put into them. As soon as the long, tarred safety match was laid, it was lighted on a level with the ground. James Starr and his companions then went off to some distance.

"Oh! Mr. Starr," said Simon Ford, a prey to agitation, which he did not attempt to conceal, "never, no, never has my old heart beaten so quick before! I am longing to get at the vein!"

"Patience, Simon!" responded the engineer. "You don't mean to say that you think you are going to find a passage all ready open behind that dyke?"

"Excuse me, sir," answered the old overman; "but of course I think so! If there was good luck in the way Harry and I discovered this place, why shouldn't the good luck go on?"

As he spoke, came the explosion. A sound as of thunder rolled through the labyrinth of subterranean galleries. Starr, Madge, Harry, and Simon Ford hastened towards the spot.

"Mr. Starr! Mr. Starr!" shouted the overman. "Look! the door is broken open!"

Ford's comparison was justified by the appearance of an excavation, the depth of which could not be calculated. Harry was about to spring through the opening; but the engineer, though excessively surprised to find this cavity, held him back. "Allow time for the air in there to get pure," said he.

"Yes! beware of the foul air!" said Simon.

A quarter of an hour was passed in anxious waiting. The lantern was then fastened to the end of a stick, and introduced into the cave, where it continued to burn with unaltered brilliancy. "Now then, Harry, go," said Starr, "and we will follow you."

The opening made by the dynamite was sufficiently large to allow a man to pass through. Harry, lamp in hand, entered unhesitatingly, and disappeared in the darkness. His father, mother, and James Starr waited in silence. A minute--which seemed to them much longer--passed. Harry did not reappear, did not call. Gazing into the opening, James Starr could not even see the light of his lamp, which ought to have illuminated the dark cavern.

Had the ground suddenly given way under Harry's feet? Had the young miner fallen into some crevice? Could his voice no longer reach his companions?

The old overman, dead to their remonstrances, was about to enter the opening, when a light appeared, dim at first, but gradually growing brighter, and Harry's voice was heard shouting, "Come, Mr. Starr! come, father! The road to New Aberfoyle is open!"

If, by some superhuman power, engineers could have raised in a block, a thousand feet thick, all that portion of the terrestrial crust which supports the lakes, rivers, gulfs, and territories of the counties of Stirling, Dumbarton, and Renfrew, they would have found, under that enormous lid, an immense excavation, to which but one other in the world can be compared--the celebrated Mammoth caves of Kentucky. This excavation was composed of several hundred divisions of all sizes and shapes. It might be called a hive with numberless ranges of cells, capriciously arranged, but a hive on a vast scale, and which, instead of bees, might have lodged all the ichthyosauri, megatheriums, and pterodactyles of the geological epoch.

A labyrinth of galleries, some higher than the most lofty cathedrals, others like cloisters, narrow and winding--these following a horizontal line, those on an incline or running obliquely in all directions--connected the caverns and allowed free communication between them.

The pillars sustaining the vaulted roofs, whose curves allowed of every style, the massive walls between the passages, the naves themselves in this layer of secondary formation, were composed of sandstone and schistous rocks. But tightly packed between these useless strata ran valuable veins of coal, as if the black blood of this strange mine had circulated through their tangled network. These fields extended forty miles north and south, and stretched even under the Caledonian Canal. The importance of this bed could not be calculated until after soundings, but it would certainly surpass those of Cardiff and Newcastle.

We may add that the working of this mine would be singularly facilitated by the fantastic dispositions of the secondary earths; for by an unaccountable retreat of the mineral matter at the geological epoch, when the mass was solidifying, nature had already multiplied the galleries and tunnels of New Aberfoyle.

Yes, nature alone! It might at first have been supposed that some works abandoned for centuries had been
discovered afresh. Nothing of the sort. No one would have deserted such riches. Human termites had never gnawed away this part of the Scottish subsoil; nature herself had done it all. But, we repeat, it could be compared to nothing but the celebrated Mammoth caves, which, in an extent of more than twenty miles, contain two hundred and twenty-six avenues, eleven lakes, seven rivers, eight cataracts, thirty-two unfathomable wells, and fifty-seven domes, some of which are more than four hundred and fifty feet in height. Like these caves, New Aberfoyle was not the work of men, but the work of the Creator.

Such was this new domain, of matchless wealth, the discovery of which belonged entirely to the old overman. Ten years' sojourn in the deserted mine, an uncommon pertinacity in research, perfect faith, sustained by a marvelous mining instinct—all these qualities together led him to succeed where so many others had failed. Why had the soundings made under the direction of James Starr during the last years of the working stopped just at that limit, on the very frontier of the new mine? That was all chance, which takes great part in researches of this kind.

However that might be, there was, under the Scottish subsoil, what might be called a subterranean county, which, to be habitable, needed only the rays of the sun, or, for want of that, the light of a special planet.

Water had collected in various hollows, forming vast ponds, or rather lakes larger than Loch Katrine, lying just above them. Of course the waters of these lakes had no movement of currents or tides; no old castle was reflected there; no birch or oak trees waved on their banks. And yet these deep lakes, whose mirror-like surface was never ruffled by a breeze, would not be without charm by the light of some electric star, and, connected by a string of canals, would well complete the geography of this strange domain.

Although unfit for any vegetable production, the place could be inhabited by a whole population. And who knows but that in this steady temperature, in the depths of the mines of Aberfoyle, as well as in those of Newcastle, Alloa, or Cardiff—when their contents shall have been exhausted—who knows but that the poorer classes of Great Britain will some day find a refuge?

CHAPTER VIII. EXPLORING

AT Harry's call, James Starr, Madge, and Simon Ford entered through the narrow orifice which put the Dochart pit in communication with the new mine. They found themselves at the beginning of a tolerably wide gallery. One might well believe that it had been pierced by the hand of man, that the pick and mattock had emptied it in the working of a new vein. The explorers question whether, by a strange chance, they had not been transported into some ancient mine, of the existence of which even the oldest miners in the county had ever known.

No! It was merely that the geological layers had left this passage when the secondary earths were in course of formation. Perhaps some torrent had formerly dashed through it; but now it was as dry as if it had been cut some thousand feet lower, through granite rocks. At the same time, the air circulated freely, which showed that certain natural vents placed it in communication with the exterior atmosphere.

This observation, made by the engineer, was correct, and it was evident that the ventilation of the new mine would be easily managed. As to the fire-damp which had lately filtered through the schist, it seemed to have been contained in a pocket now empty, and it was certain that the atmosphere of the gallery was quite free from it. However, Harry prudently carried only the safety lamp, which would insure light for twelve hours.

James Starr and his companions now felt perfectly happy. All their wishes were satisfied. There was nothing but coal around them. A sort of emotion kept them silent; even Simon Ford restrained himself. His joy overflowed, not in long phrases, but in short ejaculations.

It was perhaps imprudent to venture so far into the crypt. Pooh! they never thought of how they were to get back. The gallery was practicable, not very winding. They met with no noxious exhalations, nor did any chasm bar the path. There was no reason for stopping for a whole hour; James Starr, Madge, Harry, and Simon Ford walked on, though there was nothing to show them what was the exact direction of this unknown tunnel.

And they would no doubt have gone farther still, if they had not suddenly come to the end of the wide road which they had followed since their entrance into the mine.

The gallery ended in an enormous cavern, neither the height nor depth of which could be calculated. At what altitude arched the roof of this excavation—at what distance was its opposite wall—the darkness totally concealed; but by the light of the lamp the explorers could discover that its dome covered a vast extent of still water—pond or lake—whose picturesque rocky banks were lost in obscurity.

"Halt!" exclaimed Ford, stopping suddenly. "Another step, and perhaps we shall fall into some fathomless pit."

"Let us rest awhile, then, my friends," returned the engineer. "Besides, we ought to be thinking of returning to the cottage."

"Our lamp will give light for another ten hours, sir," said Harry.

"Well, let us make a halt," replied Starr; "I confess my legs have need of a rest. And you, Madge, don't you feel
tired after so long a walk?"

"Not over much, Mr. Starr," replied the sturdy Scotchwoman; "we have been accustomed to explore the old Aberfoyle mine for whole days together."

"Tired? nonsense!" interrupted Simon Ford; "Madge could go ten times as far, if necessary. But once more, Mr. Starr, wasn't my communication worth your trouble in coming to hear it? Just dare to say no, Mr. Starr, dare to say no!"

"Well, my old friend, I haven't felt so happy for a long while!" replied the engineer; "the small part of this marvelous mine that we have explored seems to show that its extent is very considerable, at least in length."

"In width and in depth, too, Mr. Starr!" returned Simon Ford.

"That we shall know later."

"And I can answer for it! Trust to the instinct of an old miner! It has never deceived me!"

"I wish to believe you, Simon," replied the engineer, smiling. "As far as I can judge from this short exploration, we possess the elements of a working which will last for centuries!"

"Centuries!" exclaimed Simon Ford; "I believe you, sir! A thousand years and more will pass before the last bit of coal is taken out of our new mine!"

"Heaven grant it!" returned Starr. "As to the quality of the coal which crops out of these walls?"

"Superb! Mr. Starr, superb!" answered Ford; "just look at it yourself!"

And so saying, with his pick he struck off a fragment of the black rock.

"Look! look!" he repeated, holding it close to his lamp; "the surface of this piece of coal is shining! We have here fat coal, rich in bituminous matter; and see how it comes in pieces, almost without dust! Ah, Mr. Starr! twenty years ago this seam would have entered into a strong competition with Swansea and Cardiff! Well, stokers will quarrel for it still, and if it costs little to extract it from the mine, it will not sell at a less price outside."

"Indeed," said Madge, who had taken the fragment of coal and was examining it with the air of a connoisseur; "that's good quality of coal. Carry it home, Simon, carry it back to the cottage! I want this first piece of coal to burn under our kettle."

"Well said, wife!" answered the old overman, "and you shall see that I am not mistaken."

"Mr. Starr," asked Harry, "have you any idea of the probable direction of this long passage which we have been following since our entrance into the new mine?"

"No, my lad," replied Harry; "with a compass I could perhaps find out its general bearing; but without a compass I am here like a sailor in open sea, in the midst of fogs, when there is no sun by which to calculate his position."

"No doubt, Mr. Starr," replied Ford; "but pray don't compare our position with that of the sailor, who has everywhere and always an abyss under his feet! We are on firm ground here, and need never be afraid of foundering."

"I won't tease you, then, old Simon," answered James Starr. "Far be it from me even in jest to depreciate the New Aberfoyle mine by an unjust comparison! I only meant to say one thing, and that is that we don't know where we are."

"We are in the subsoil of the county of Stirling, Mr. Starr," replied Simon Ford; "and that I assert as if--"

"Listen!" said Harry, interrupting the old man. All listened, as the young miner was doing. His ears, which were very sharp, had caught a dull sound, like a distant murmur. His companions were not long in hearing it themselves. It was above their heads, a sort of rolling sound, in which though it was so feeble, the successive CRESCEndo and DIMINUENDO could be distinctly heard.

All four stood for some minutes, their ears on the stretch, without uttering a word. All at once Simon Ford exclaimed, "Well, I declare! Are trucks already running on the rails of New Aberfoyle?"

"Father," replied Harry, "it sounds to me just like the noise made by waves rolling on the sea shore."

"We can't be under the sea though!" cried the old overman.

"No," said the engineer, "but it is not impossible that we should be under Loch Katrine."

"The roof cannot have much thickness just here, if the noise of the water is perceptible."

"Very little indeed," answered James Starr, "and that is the reason this cavern is so huge."

"You must be right, Mr. Starr," said Harry.

"Besides, the weather is so bad outside," resumed Starr, "that the waters of the loch must be as rough as those of the Firth of Forth."

"Well! what does it matter after all?" returned Simon Ford; "the seam won't be any the worse because it is under a loch. It would not be the first time that coal has been looked for under the very bed of the ocean! When we have to work under the bottom of the Caledonian Canal, where will be the harm?"

"Well said, Simon," cried the engineer, who could not restrain a smile at the overman's enthusiasm; "let us cut
our trenches under the waters of the sea! Let us bore the bed of the Atlantic like a strainer; let us with our picks join our brethren of the United States through the subsoil of the ocean! let us dig into the center of the globe if necessary, to tear out the last scrap of coal."

"Are you joking, Mr. Starr?" asked Ford, with a pleased but slightly suspicious look.

"I joking, old man? no! but you are so enthusiastic that you carry me away into the regions of impossibility! Come, let us return to the reality, which is sufficiently beautiful; leave our picks here, where we may find them another day, and let's take the road back to the cottage."

Nothing more could be done for the time. Later, the engineer, accompanied by a brigade of miners, supplied with lamps and all necessary tools, would resume the exploration of New Aberfoyle. It was now time to return to the Dochart pit. The road was easy, the gallery running nearly straight through the rock up to the orifice opened by the dynamite, so there was no fear of their losing themselves.

But as James Starr was proceeding towards the gallery Simon Ford stopped him.

"Mr. Starr," said he, "you see this immense cavern, this subterranean lake, whose waters bathe this strand at our feet? Well! it is to this place I mean to change my dwelling, here I will build a new cottage, and if some brave fellows will follow my example, before a year is over there will be one town more inside old England."

James Starr, smiling approval of Ford's plans, pressed his hand, and all three, preceding Madge, re-entered the gallery, on their way back to the Dochart pit. For the first mile no incident occurred. Harry walked first, holding his lamp above his head. He carefully followed the principal gallery, without ever turning aside into the narrow tunnels which radiated to the right and left. It seemed as if the returning was to be accomplished as easily as the going, when an unexpected accident occurred which rendered the situation of the explorers very serious.

Just at a moment when Harry was raising his lamp there came a rush of air, as if caused by the flapping of invisible wings. The lamp escaped from his hands, fell on the rocky ground, and was broken to pieces.

James Starr and his companions were suddenly plunged in absolute darkness. All the oil of the lamp was spilt, and it was of no further use. "Well, Harry," cried his father, "do you want us all to break our necks on the way back to the cottage?"

Harry did not answer. He wondered if he ought to suspect the hand of a mysterious being in this last accident? Could there possibly exist in these depths an enemy whose unaccountable antagonism would one day create serious difficulties? Had someone an interest in defending the new coal field against any attempt at working it? In truth that seemed absurd, yet the facts spoke for themselves, and they accumulated in such a way as to change simple presumptions into certainties.

In the meantime the explorers' situation was bad enough. They had now, in the midst of black darkness, to follow the passage leading to the Dochart pit for nearly five miles. There they would still have an hour's walk before reaching the cottage.

"Come along," said Simon Ford. "We have no time to lose. We must grope our way along, like blind men. There's no fear of losing our way. The tunnels which open off our road are only just like those in a molehill, and by following the chief gallery we shall of course reach the opening we got in at. After that, it is the old mine. We know that, and it won't be the first time that Harry and I have found ourselves there in the dark. Besides, there we shall find the lamps that we left. Forward then! Harry, go first. Mr. Starr, follow him. Madge, you go next, and I will bring up the rear. Above everything, don't let us get separated."

All complied with the old overman's instructions. As he said, by groping carefully, they could not mistake the way. It was only necessary to make the hands take the place of the eyes, and to trust to their instinct, which had with Simon Ford and his son become a second nature.

James Starr and his companions walked on in the order agreed. They did not speak, but it was not for want of thinking. It became evident that they had an adversary. But what was he, and how were they to defend themselves against these mysteriously-prepared attacks? These disquieting ideas crowded into their brains. However, this was not the moment to get discouraged.

Harry, his arms extended, advanced with a firm step, touching first one and then the other side of the passage. If a cleft or side opening presented itself, he felt with his hand that it was not the main way; either the cleft was too shallow, or the opening too narrow, and he thus kept in the right road.

In darkness through which the eye could not in the slightest degree pierce, this difficult return lasted two hours. By reckoning the time since they started, taking into consideration that the walking had not been rapid, Starr calculated that he and his companions were near the opening. In fact, almost immediately, Harry stopped.

"Have we got to the end of the gallery?" asked Simon Ford.

"Yes," answered the young miner.

"Well! have you not found the hole which connects New Aberfoyle with the Dochart pit?"

"No," replied Harry, whose impatient hands met with nothing but a solid wall.
The old overman stepped forward, and himself felt the schistous rock. A cry escaped him.

Either the explorers had strayed from the right path on their return, or the narrow orifice, broken in the rock by the dynamite, had been recently stopped up. James Starr and his companions were prisoners in New Aberfoyle.

CHAPTER IX. THE FIRE-MAIDENS

A WEEK after the events just related had taken place, James Starr's friends had become very anxious. The engineer had disappeared, and no reason could be brought forward to explain his absence. They learnt, by questioning his servant, that he had embarked at Granton Pier. But from that time there were no traces of James Starr. Simon Ford's letter had requested secrecy, and he had said nothing of his departure for the Aberfoyle mines.

Therefore in Edinburgh nothing was talked of but the unaccountable absence of the engineer. Sir W. Elphiston, the President of the Royal Institution, communicated to his colleagues a letter which James Starr had sent him, excusing himself from being present at the next meeting of the society. Two or three others produced similar letters. But though these documents proved that Starr had left Edinburgh—which was known before—they threw no light on what had become of him. Now, on the part of such a man, this prolonged absence, so contrary to his usual habits, naturally first caused surprise, and then anxiety.

A notice was inserted in the principal newspapers of the United Kingdom relative to the engineer James Starr, giving a description of him and the date on which he left Edinburgh; nothing more could be done but to wait. The time passed in great anxiety. The scientific world of England was inclined to believe that one of its most distinguished members had positively disappeared. At the same time, when so many people were thinking about James Starr, Harry Ford was the subject of no less anxiety. Only, instead of occupying public attention, the son of the old overman was the cause of trouble alone to the generally cheerful mind of Jack Ryan.

It may be remembered that, in their encounter in the Yarrow shaft, Jack Ryan had invited Harry to come a week afterwards to the festivities at Irvine. Harry had accepted and promised expressly to be there. Jack Ryan knew, having had it proved by many circumstances, that his friend was a man of his word. With him, a thing promised was a thing done. Now, at the Irvine merry-making, nothing was wanting; neither song, nor dance, nor fun of any sort—nothing but Harry Ford.

The notice relative to James Starr, published in the papers, had not yet been seen by Ryan. The honest fellow was therefore only worried by Harry's absence, telling himself that something serious could alone have prevented him from keeping his promise. So, the day after the Irvine games, Jack Ryan intended to take the railway from Glasgow and go to the Dochart pit; and this he would have done had he not been detained by an accident which nearly cost him his life. Something which occurred on the night of the 12th of December was of a nature to support the opinions of all partisans of the supernatural, and there were many at Melrose Farm.

Irvine, a little seaport of Renfrew, containing nearly seven thousand inhabitants, lies in a sharp bend made by the Scottish coast, near the mouth of the Firth of Clyde. The most ancient and the most famed ruins on this part of the coast were those of this castle of Robert Stuart, which bore the name of Dundonald Castle.

At this period Dundonald Castle, a refuge for all the stray goblins of the country, was completely deserted. It stood on the top of a high rock, two miles from the town, and was seldom visited. Sometimes a few strangers took it into their heads to explore these old historical remains, but then they always went alone. The inhabitants of Irvine would not have taken them there at any price. Indeed, several legends were based on the story of certain "fire-maidens," who haunted the old castle.

The most superstitious declared they had seen these fantastic creatures with their own eyes. Jack Ryan was naturally one of them. It was a fact that from time to time long flames appeared, sometimes on a broken piece of wall, sometimes on the summit of the tower which was the highest point of Dundonald Castle.

Did these flames really assume a human shape, as was asserted? Did they merit the name of fire-maidens, given them by the people of the coast? It was evidently just an optical delusion, aided by a good deal of credulity, and science could easily have explained the phenomenon.

However that might be, these fire-maidens had the reputation of frequenting the ruins of the old castle and there performing wild strathspeys, especially on dark nights. Jack Ryan, bold fellow though he was, would never have dared to accompany those dances with the music of his bagpipes.

"Old Nick is enough for them!" said he. "He doesn't need me to complete his infernal orchestra."

We may well believe that these strange apparitions frequently furnished a text for the evening stories. Jack Ryan was ending the evening with one of these. His auditors, transported into the phantom world, were worked up into a state of mind which would believe anything.

All at once shouts were heard outside. Jack Ryan stopped short in the middle of his story, and all rushed out of the barn. The night was pitchy dark. Squalls of wind and rain swept along the beach. Two or three fishermen, their
backs against a rock, the better to resist the wind, were shouting at the top of their voices.

Jack Ryan and his companions ran up to them. The shouts were, however, not for the inhabitants of the farm, but to warn men who, without being aware of it, were going to destruction. A dark, confused mass appeared some way out at sea. It was a vessel whose position could be seen by her lights, for she carried a white one on her foremast, a green on the starboard side, and a red on the outside. She was evidently running straight on the rocks.

"A ship in distress?" said Ryan.

"Ay," answered one of the fishermen, "and now they want to tack, but it's too late!"

"Do they want to run ashore?" said another.

"It seems so," responded one of the fishermen, "unless he has been misled by some--"

The man was interrupted by a yell from Jack. Could the crew have heard it? At any rate, it was too late for them to beat back from the line of breakers which gleamed white in the darkness.

But it was not, as might be supposed, a last effort of Ryan's to warn the doomed ship. He now had his back to the sea. His companions turned also, and gazed at a spot situated about half a mile inland. It was Dundonald Castle. A long flame twisted and bent under the gale, on the summit of the old tower.

"The Fire-Maiden!" cried the superstitious men in terror.

Clearly, it needed a good strong imagination to find any human likeness in that flame. Waving in the wind like a luminous flag, it seemed sometimes to fly round the tower, as if it was just going out, and a moment after it was seen again dancing on its blue point.

"The Fire-Maiden! the Fire-Maiden!" cried the terrified fishermen and peasants.

All was then explained. The ship, having lost her reckoning in the fog, had taken this flame on the top of Dundonald Castle for the Irvine light. She thought herself at the entrance of the Firth, ten miles to the north, when she was really running on a shore which offered no refuge.

What could be done to save her, if there was still time? It was too late. A frightful crash was heard above the tumult of the elements. The vessel had struck. The white line of surf was broken for an instant; she heeled over on her side and lay among the rocks.

At the same time, by a strange coincidence, the long flame disappeared, as if it had been swept away by a violent gust. Earth, sea, and sky were plunged in complete darkness.

"The Fire-Maiden!" shouted Ryan, for the last time, as the apparition, which he and his companions believed supernatural, disappeared. But then the courage of these superstitious Scotchmen, which had failed before a fancied danger, returned in face of a real one, which they were ready to brave in order to save their fellow-creatures. The tempest did not deter them. As heroic as they had before been credulous, fastening ropes round their waists, they rushed into the waves to the aid of those on the wreck.

Happily, they succeeded in their endeavors, although some--and bold Jack Ryan was among the number--were severely wounded on the rocks. But the captain of the vessel and the eight sailors who composed his crew were hauled up, safe and sound, on the beach.

The ship was the Norwegian brig MOTALA, laden with timber, and bound for Glasgow. Of the MOTALA herself nothing remained but a few spars, washed up by the waves, and dashed among the rocks on the beach.

Jack Ryan and three of his companions, wounded like himself, were carried into a room of Melrose Farm, where every care was lavished on them. Ryan was the most hurt, for when with the rope round his waist he had rushed into the sea, the waves had almost immediately dashed him back against the rocks. He was brought, indeed, very nearly lifeless on to the beach.

The brave fellow was therefore confined to bed for several days, to his great disgust. However, as soon as he was given permission to sing as much as he liked, he bore his trouble patiently, and the farm echoed all day with his jovial voice. But from this adventure he imbibed a more lively sentiment of fear with regard to brownies and other goblins who amuse themselves by plaguing mankind, and he made them responsible for the catastrophe of the Motala. It would have been vain to try and convince him that the Fire-Maidens did not exist, and that the flame, so suddenly appearing among the ruins, was but a natural phenomenon. No reasoning could make him believe it. His companions were, if possible, more obstinate than he in their credulity. According to them, one of the Fire-Maidens had maliciously attracted the MOTALA to the coast. As to wishing to punish her, as well try to bring the tempest to justice! The magistrates might order what arrests they pleased, but a flame cannot be imprisoned, an impalpable being can't be handcuffed. It must be acknowledged that the researches which were ultimately made gave ground, at least in appearance, to this superstitious way of explaining the facts.

The inquiry was made with great care. Officials came to Dundonald Castle, and they proceeded to conduct a most vigorous search. The magistrate wished first to ascertain if the ground bore any footprints, which could be attributed to other than goblins' feet. It was impossible to find the least trace, whether old or new. Moreover, the earth, still damp from the rain of the day before, would have preserved the least vestige.
The result of all this was, that the magistrates only got for their trouble a new legend added to so many others—a legend which would be perpetuated by the remembrance of the catastrophe of the MOTALA, and indisputably confirm the truth of the apparition of the Fire-Maidens.

A hearty fellow like Jack Ryan, with so strong a constitution, could not be long confined to his bed. A few sprains and bruises were not quite enough to keep him on his back longer than he liked. He had not time to be ill.

Jack, therefore, soon got well. As soon as he was on his legs again, before resuming his work on the farm, he wished to go and visit his friend Harry, and learn why he had not come to the Irvine merry-making. He could not understand his absence, for Harry was not a man who would willingly promise and not perform. It was unlikely, too, that the son of the old overman had not heard of the wreck of the MOTALA, as it was in all the papers. He must know the part Jack had taken in it, and what had happened to him, and it was unlike Harry not to hasten to the farm and see how his old chum was going on.

As Harry had not come, there must have been something to prevent him. Jack Ryan would as soon deny the existence of the Fire-Maidens as believe in Harry's indifference.

Two days after the catastrophe Jack left the farm merrily, feeling nothing of his wounds. Singing in the fullness of his heart, he awoke the echoes of the cliff, as he walked to the station of the railway, which VIA Glasgow would take him to Stirling and Callander.

As he was waiting for his train, his attention was attracted by a bill posted up on the walls, containing the following notice:

"On the 4th of December, the engineer, James Starr, of Edinburgh, embarked from Granton Pier, on board the Prince of Wales. He disembarked the same day at Stirling. From that time nothing further has been heard of him.

"Any information concerning him is requested to be sent to the President of the Royal Institution, Edinburgh."

Jack Ryan, stopping before one of these advertisements, read it twice over, with extreme surprise.

"Mr. Starr!" he exclaimed. "Why, on the 4th of December I met him with Harry on the ladder of the Dochart pit! That was ten days ago! And he has not been seen from that time! That explains why my chum didn't come to Irvine."

And without taking time to inform the President of the Royal Institution by letter, what he knew relative to James Starr, Jack jumped into the train, determining to go first of all to the Yarrow shaft. There he would descend to the depths of the pit, if necessary, to find Harry, and with him was sure to be the engineer James Starr.

"They haven't turned up again," said he to himself. "Why? Has anything prevented them? Could any work of importance keep them still at the bottom of the mine? I must find out!" and Ryan, hastening his steps, arrived in less than an hour at the Yarrow shaft.

Externally nothing was changed. The same silence around. Not a living creature was moving in that desert region. Jack entered the ruined shed which covered the opening of the shaft. He gazed down into the dark abyss—nothing was to be seen. He listened—nothing was to be heard.

"My lamp!" he exclaimed; "suppose it isn't in its place!" The lamp which Ryan used when he visited the pit was usually deposited in a corner, near the landing of the topmost ladder. He had disappeared.

"Here is a nuisance!" said Jack, beginning to feel rather uneasy. Then, without hesitating, superstitious though he was, "I will go," said he, "though it's as dark down there as in the lowest depths of the infernal regions!"

And he began to descend the long flight of ladders, which led down the gloomy shaft. Jack Ryan had not forgotten his old mining habits, and he was well acquainted with the Dochart pit, or he would scarcely have dared to venture thus. He went very carefully, however. His foot tried each round, as some of them were worm-eaten. A false step would entail a deadly fall, through this space of fifteen hundred feet. He counted each landing as he passed it, knowing that he could not reach the bottom of the shaft until he had left the thirtieth. Once there, he would have no trouble, so he thought, in finding the cottage, built, as we have said, at the extremity of the principal passage.

Jack Ryan went on thus until he got to the twenty-sixth landing, and consequently had two hundred feet between him and the bottom.

Here he put down his leg to feel for the first rung of the twenty-seventh ladder. But his foot swinging in space found nothing to rest on. He knelt down and felt about with his hand for the top of the ladder. It was in vain.

"Old Nick himself must have been down this way!" said Jack, not without a slight feeling of terror.

He stood considering for some time, with folded arms, and longing to be able to pierce the impenetrable darkness. Then it occurred to him that if he could not get down, neither could the inhabitants of the mine get up. There was now no communication between the depths of the pit and the upper regions. If the removal of the lower ladders of the Yarrow shaft had been effected since his last visit to the cottage, what had become of Simon Ford, his wife, his son, and the engineer?

The prolonged absence of James Starr proved that he had not left the pit since the day Ryan met with him in the shaft. How had the cottage been provisioned since then? The food of these unfortunate people, imprisoned fifteen
hundred feet below the surface of the ground, must have been exhausted by this time.

All this passed through Jack's mind, as he saw that by himself he could do nothing to get to the cottage. He had no doubt but that communication had been interrupted with a malevolent intention. At any rate, the authorities must be informed, and that as soon as possible. Jack Ryan bent forward from the landing.

"Harry! Harry!" he shouted with his powerful voice.

Harry's name echoed and re-echoed among the rocks, and finally died away in the depths of the shaft.

Ryan rapidly ascended the upper ladders and returned to the light of day. Without losing a moment he reached the Callander station, just caught the express to Edinburgh, and by three o'clock was before the Lord Provost.

There his declaration was received. His account was given so clearly that it could not be doubted. Sir William Elphiston, President of the Royal Institution, and not only colleague, but a personal friend of Starr's, was also informed, and asked to direct the search which was to be made without delay in the mine. Several men were placed at his disposal, supplied with lamps, picks, long rope ladders, not forgetting provisions and cordials. Then guided by Jack Ryan, the party set out for the Aberfoyle mines.

The same evening the expedition arrived at the opening of the Yarrow shaft, and descended to the twenty-seventh landing, at which Jack Ryan had been stopped a few hours previously. The lamps, fastened to long ropes, were lowered down the shaft, and it was thus ascertained that the four last ladders were wanting.

As soon as the lamps had been brought up, the men fixed to the landing a rope ladder, which unrolled itself down the shaft, and all descended one after the other. Jack Ryan's descent was the most difficult, for he went first down the swinging ladders, and fastened them for the others.

The space at the bottom of the shaft was completely deserted; but Sir William was much surprised at hearing Jack Ryan exclaim, "Here are bits of the ladders, and some of them half burnt!"

"Burnt?" repeated Sir William. "Indeed, here sure enough are cinders which have evidently been cold a long time!"

"Do you think, sir," asked Ryan, "that Mr. Starr could have had any reason for burning the ladders, and thus breaking of communication with the world?"

"Certainly not," answered Sir William Elphiston, who had become very thoughtful. "Come, my lad, lead us to the cottage. There we shall ascertain the truth."

Jack Ryan shook his head, as if not at all convinced. Then, taking a lamp from the hands of one of the men, he proceeded with a rapid step along the principal passage of the Dochart pit. The others all followed him.

In a quarter of an hour the party arrived at the excavation in which stood Simon Ford's cottage. There was no light in the window. Ryan darted to the door, and threw it open. The house was empty.

They examined all the rooms in the somber habitation. No trace of violence was to be found. All was in order, as if old Madge had been still there. There was even an ample supply of provisions, enough to last the Ford family for several days.

The absence of the tenants of the cottage was quite unaccountable. But was it not possible to find out the exact time they had quitted it? Yes, for in this region, where there was no difference of day or night, Madge was accustomed to mark with a cross each day in her almanac.

The almanac was pinned up on the wall, and there the last cross had been made at the 6th of December; that is to say, a day after the arrival of James Starr, to which Ryan could positively swear. It was clear that on the 6th of December, ten days ago, Simon Ford, his wife, son, and guest, had quitted the cottage. Could a fresh exploration of the mine, undertaken by the engineer, account for such a long absence? Certainly not.

It was intensely dark all round. The lamps held by the men gave light only just where they were standing. Suddenly Jack Ryan uttered a cry. "Look there, there!"

His finger was pointing to a tolerably bright light, which was moving about in the distance. "After that light, my men!" exclaimed Sir William.

"It's a goblin light!" said Ryan. "So what's the use? We shall never catch it."

The president and his men, little given to superstition, darted off in the direction of the moving light. Jack Ryan, bravely following their example, quickly overtook the head-most of the party.

It was a long and fatiguing chase. The lantern seemed to be carried by a being of small size, but singular agility.

Every now and then it disappeared behind some pillar, then was seen again at the end of a cross gallery. A sharp turn would place it out of sight, and it seemed to have completely disappeared, when all at once there would be the light as bright as ever. However, they gained very little on it, and Ryan's belief that they could never catch it seemed far from groundless.

After an hour of this vain pursuit Sir William Elphiston and his companions had gone a long way in the southwest direction of the pit, and began to think they really had to do with an impalpable being. Just then it seemed as if the distance between the goblin and those who were pursuing it was becoming less. Could it be fatigued, or did
this invisible being wish to entice Sir William and his companions to the place where the inhabitants of the cottage had perhaps themselves been enticed. It was hard to say.

The men, seeing that the distance lessened, redoubled their efforts. The light which had before burnt at a distance of more than two hundred feet before them was now seen at less than fifty. The space continued to diminish. The bearer of the lamp became partially visible. Sometimes, when it turned its head, the indistinct profile of a human face could be made out, and unless a sprite could assume bodily shape, Jack Ryan was obliged to confess that here was no supernatural being. Then, springing forward,--

"Courage, comrades!" he exclaimed; "it is getting tired! We shall soon catch it up now, and if it can talk as well as it can run we shall hear a fine story."

But the pursuit had suddenly become more difficult. They were in unknown regions of the mine; narrow passages crossed each other like the windings of a labyrinth. The bearer of the lamp might escape them as easily as possible, by just extinguishing the light and retreating into some dark refuge.

"And indeed," thought Sir William, "if it wishes to avoid us, why does it not do so?"

Hitherto there had evidently been no intention to avoid them, but just as the thought crossed Sir William's mind the light suddenly disappeared, and the party, continuing the pursuit, found themselves before an extremely narrow natural opening in the schistous rocks.

To trim their lamps, spring forward, and dart through the opening, was for Sir William and his party but the work of an instant. But before they had gone a hundred paces along this new gallery, much wider and loftier than the former, they all stopped short. There, near the wall, lay four bodies, stretched on the ground--four corpses, perhaps!

"James Starr!" exclaimed Sir William Elphiston.

"Harry! Harry!" cried Ryan, throwing himself down beside his friend.

It was indeed the engineer, Madge, Simon, and Harry Ford who were lying there motionless. But one of the bodies moved slightly, and Madge's voice was heard faintly murmuring, "See to the others! help them first!"

Sir William, Jack, and their companions endeavored to reanimate the engineer and his friends by getting them to swallow a few drops of brandy. They very soon succeeded. The unfortunate people, shut up in that dark cavern for ten days, were dying of starvation. They must have perished had they not on three occasions found a loaf of bread and a jug of water set near them. No doubt the charitable being to whom they owed their lives was unable to do more for them.

Sir William wondered whether this might not have been the work of the strange sprite who had allured them to the very spot where James Starr and his companions lay.

However that might be, the engineer, Madge, Simon, and Harry Ford were saved. They were assisted to the cottage, passing through the narrow opening which the bearer of the strange light had apparently wished to point out to Sir William. This was a natural opening. The passage which James Starr and his companions had made for themselves with dynamite had been completely blocked up with rocks laid one upon another.

So, then, whilst they had been exploring the vast cavern, the way back had been purposely closed against them by a hostile hand.

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CHAPTER X. COAL TOWN

THREE years after the events which have just been related, the guide-books recommended as a "great attraction," to the numerous tourists who roam over the county of Stirling, a visit of a few hours to the mines of New Aberfoyle.

No mine in any country, either in the Old or New World, could present a more curious aspect.

To begin with, the visitor was transported without danger or fatigue to a level with the workings, at fifteen hundred feet below the surface of the ground. Seven miles to the southwest of Callander opened a slanting tunnel, adorned with a castellated entrance, turrets and battlements. This lofty tunnel gently sloped straight to the stupendous crypt, hollowed out so strangely in the bowels of the earth.

A double line of railway, the wagons being moved by hydraulic power, plied from hour to hour to and from the village thus buried in the subsoil of the county, and which bore the rather ambitious title of Coal Town.

Arrived in Coal Town, the visitor found himself in a place where electricity played a principal part as an agent of heat and light. Although the ventilation shafts were numerous, they were not sufficient to admit much daylight into New Aberfoyle, yet it had abundance of light. This was shed from numbers of electric discs; some suspended from the vaulted roofs, others hanging on the natural pillars--all, whether suns or stars in size, were fed by continuous currents produced from electro-magnetic machines. When the hour of rest arrived, an artificial night was easily produced all over the mine by disconnecting the wires.

Below the dome lay a lake of an extent to be compared to the Dead Sea of the Mammoth caves--a deep lake
whose transparent waters swarmed with eyeless fish, and to which the engineer gave the name of Loch Malcolm.

There, in this immense natural excavation, Simon Ford built his new cottage, which he would not have exchanged for the finest house in Prince's Street, Edinburgh. This dwelling was situated on the shores of the loch, and its five windows looked out on the dark waters, which extended further than the eye could see. Two months later a second habitation was erected in the neighborhood of Simon Ford’s cottage: this was for James Starr. The engineer had given himself body and soul to New Aberfoyle, and nothing but the most imperative necessity ever caused him to leave the pit. There, then, he lived in the midst of his mining world.

On the discovery of the new field, all the old colliers had hastened to leave the plow and harrow, and resume the pick and mattock. Attracted by the certainty that work would never fail, allured by the high wages which the prosperity of the mine enabled the company to offer for labor, they deserted the open air for an underground life, and took up their abode in the mines.

The miners’ houses, built of brick, soon grew up in a picturesque fashion; some on the banks of Loch Malcolm, others under the arches which seemed made to resist the weight that pressed upon them, like the piers of a bridge. So was founded Coal Town, situated under the eastern point of Loch Katrine, to the north of the county of Stirling. It was a regular settlement on the banks of Loch Malcolm. A chapel, dedicated to St. Giles, overlooked it from the top of a huge rock, whose foot was laved by the waters of the subterranean sea.

When this underground town was lighted up by the bright rays thrown from the discs, hung from the pillars and arches, its aspect was so strange, so fantastic, that it justified the praise of the guide-books, and visitors flocked to see it.

It is needless to say that the inhabitants of Coal Town were proud of their place. They rarely left their laboring village—in that imitating Simon Ford, who never wished to go out again. The old overman maintained that it always rained “up there,” and, considering the climate of the United Kingdom, it must be acknowledged that he was not far wrong. All the families in New Aberfoyle prospered well, having in three years obtained a certain competency which they could never have hoped to attain on the surface of the county. Dozens of babies, who were born at the time when the works were resumed, had never yet breathed the outer air.

This made Jack Ryan remark, “It’s eighteen months since they were weaned, and they have not yet seen daylight!”

It may be mentioned here, that one of the first to run at the engineer’s call was Jack Ryan. The merry fellow had thought it his duty to return to his old trade. But though Melrose farm had lost singer and piper it must not be thought that Jack Ryan sang no more. On the contrary, the sonorous echoes of New Aberfoyle exerted their strong lungs to answer him.

Jack Ryan took up his abode in Simon Ford’s new cottage. They offered him a room, which he accepted without ceremony, in his frank and hearty way. Old Madge loved him for his fine character and good nature. She in some degree shared his ideas on the subject of the fantastic beings who were supposed to haunt the mine, and the two, when alone, told each other stories wild enough to make one shudder—stories well worthy of enriching the hyperborean mythology.

Jack thus became the life of the cottage. He was, besides being a jovial companion, a good workman. Six months after the works had begun, he was made head of a gang of hewers.

“That was a good work done, Mr. Ford,” said he, a few days after his appointment. “You discovered a new field, and though you narrowly escaped paying for the discovery with your life—well, it was not too dearly bought.”

“No, Jack, it was a good bargain we made that time!” answered the old overman. “But neither Mr. Starr nor I have forgotten that to you we owe our lives.”

“Not at all,” returned Jack. “You owe them to your son Harry, when he had the good sense to accept my invitation to Irvine.”

“And not to go, isn’t that it?” interrupted Harry, grasping his comrade’s hand. “No, Jack, it is to you, scarcely healed of your wounds— to you, who did not delay a day, no, nor an hour, that we owe our being found still alive in the mine!”

“Rubbish, no!” broke in the obstinate fellow. “I won’t have that said, when it’s no such thing. I hurried to find out what had become of you, Harry, that’s all. But to give everyone his due, I will add that without that unapproachable goblin—”

“Ah, there we are!” cried Ford. “A goblin!”

“A goblin, a brownie, a fairy’s child,” repeated Jack Ryan, “a cousin of the Fire-Maidens, an Urisk, whatever you like! It’s not the less certain that without it we should never have found our way into the gallery, from which you could not get out.”

“No doubt, Jack,” answered Harry. “It remains to be seen whether this being was as supernatural as you choose to believe.”
"Supernatural!" exclaimed Ryan. "But it was as supernatural as a Will-o'-the-Wisp, who may be seen skipping along with his lantern in his hand; you may try to catch him, but he escapes like a fairy, and vanishes like a shadow! Don't be uneasy, Harry, we shall see it again some day or other!"

"Well, Jack," said Simon Ford, "Will-o'-the-Wisp or not, we shall try to find it, and you must help us."

"You'll get into a scrap if you don't take care, Mr. Ford!" responded Jack Ryan.

"We'll see about that, Jack!"

We may easily imagine how soon this domain of New Aberfoyle became familiar to all the members of the Ford family, but more particularly to Harry. He learnt to know all its most secret ins and outs. He could even say what point of the surface corresponded with what point of the mine. He knew that above this seam lay the Firth of Clyde, that there extended Loch Lomond and Loch Katrine. Those columns supported a spur of the Grampian mountains. This vault served as a basement to Dumbarton. Above this large pond passed the Balloch railway. Here ended the Scottish coast. There began the sea, the tumult of which could be distinctly heard during the equinoctial gales. Harry would have been a first-rate guide to these natural catacombs, and all that Alpine guides do on their snowy peaks in daylight he could have done in the dark mine by the wonderful power of instinct.

He loved New Aberfoyle. Many times, with his lamp stuck in his hat, did he penetrate its furthest depths. He explored its ponds in a skillfully-managed canoe. He even went shooting, for numerous birds had been introduced into the crypt—pintails, snipes, ducks, who fed on the fish which swarmed in the deep waters. Harry's eyes seemed made for the dark, just as a sailor's are made for distances. But all this while Harry felt irresistibly animated by the hope of finding the mysterious being whose intervention, strictly speaking, had saved himself and his friends. Would he succeed? He certainly would, if presentiments were to be trusted; but certainly not, if he judged by the success which had as yet attended his researches.

The attacks directed against the family of the old overman, before the discovery of New Aberfoyle, had not been renewed.

CHAPTER XI. HANGING BY A THREAD

ALTHOUGH in this way the Ford family led a happy and contented life, yet it was easy to see that Harry, naturally of a grave disposition, became more and more quiet and reserved. Even Jack Ryan, with all his good humor and usually infectious merriment, failed to rouse him to gayety of manner.

One Sunday—it was in the month of June—the two friends were walking together on the shores of Loch Malcolm. Coal Town rested from labor. In the world above, stormy weather prevailed. Violent rains fell, and dull sultry vapors brooded over the earth; the atmosphere was most oppressive.

Down in Coal Town there was perfect calm; no wind, no rain. A soft and pleasant temperature existed instead of the strife of the elements which raged without. What wonder then, that excursionists from Stirling came in considerable numbers to enjoy the calm fresh air in the recesses of the mine?

The electric discs shed a brilliancy of light which the British sun, oftener obscured by fogs than it ought to be, might well envy. Jack Ryan kept talking of these visitors, who passed them in noisy crowds, but Harry paid very little attention to what he said.

"I say, do look, Harry!" cried Jack. "See what numbers of people come to visit us! Cheer up, old fellow! Do the honors of the place a little better. If you look so glum, you'll make all these outside folks think you envy their life above-ground."

"Never mind me, Jack," answered Harry. "You are jolly enough for two, I'm sure; that's enough."

"I'll be hanged if I don't feel your melancholy creeping over me though!" exclaimed Jack. "I declare my eyes are getting quite dull, my lips are drawn together, my laugh sticks in my throat; I'm forgetting all my songs. Come, man, what's the matter with you?"

"You know well enough, Jack."

"What? the old story?"

"Yes, the same thoughts haunt me."

"Ah, poor fellow!" said Jack, shrugging his shoulders. "If you would only do like me, and set all the queer things down to the account of the goblins of the mine, you would be easier in your mind."

"But, Jack, you know very well that these goblins exist only in your imagination, and that, since the works here have been reopened, not a single one has been seen."

"That's true, Harry; but if no spirits have been seen, neither has anyone else to whom you could attribute the extraordinary doings we want to account for."

"I shall discover them."

"Ah, Harry! Harry! it's not so easy to catch the spirits of New Aberfoyle!"
"I shall find out the spirits as you call them," said Harry, in a tone of firm conviction.
"Do you expect to be able to punish them?"
"Both punish and reward. Remember, if one hand shut us up in that passage, another hand delivered us! I shall not soon forget that."
"But, Harry, how can we be sure that these two hands do not belong to the same body?"
"What can put such a notion in your head, Jack?" asked Harry.
"Well, I don't know. Creatures that live in these holes, Harry, don't you see? they can't be made like us, eh?"
"But they ARE just like us, Jack."
"Oh, no! don't say that, Harry! Perhaps some madman managed to get in for a time."
"A madman! No madman would have formed such connected plans, or done such continued mischief as befell us after the breaking of the ladders."
"Well, but anyhow he has done no harm for the last three years, either to you, Harry, or any of your people."
"No matter, Jack," replied Harry; "I am persuaded that this malignant being, whoever he is, has by no means given up his evil intentions. I can hardly say on what I found my convictions. But at any rate, for the sake of the new works, I must and will know who he is and whence he comes."
"For the sake of the new works did you say?" asked Jack, considerably surprised.
"I said so, Jack," returned Harry. "I may be mistaken, but, to me, all that has happened proves the existence of an interest in this mine in strong opposition to ours. Many a time have I considered the matter; I feel almost sure of it. Just consider the whole series of inexplicable circumstances, so singularly linked together. To begin with, the anonymous letter, contradictory to that of my father, at once proves that some man had become aware of our projects, and wished to prevent their accomplishment. Mr. Starr comes to see us at the Dochart pit. No sooner does he enter it with me than an immense stone is cast upon us, and communication is interrupted by the breaking of the ladders in the Yarrow shaft. We commence exploring. An experiment, by which the existence of a new vein would be proved, is rendered impossible by stoppage of fissures. Notwithstanding this, the examination is carried out, the vein discovered. We return as we came, a prodigious gust of air meets us, our lamp is broken, utter darkness surrounds us. Nevertheless, we make our way along the gloomy passage until, on reaching the entrance, we find it blocked up. There we were--imprisoned. Now, Jack, don't you see in all these things a malicious intention? Ah, yes, believe me, some being hitherto invisible, but not supernatural, as you will persist in thinking, was concealed in the mine. For some reason, known only to himself, he strove to keep us out of it. WAS there, did I say? I feel an inward conviction that he IS there still, and probably prepares some terrible disaster for us. Even at the risk of my life, Jack, I am resolved to discover him."
Harry spoke with an earnestness which strongly impressed his companion. "Well, Harry," said he, "if I am forced to agree with you in certain points, won't you admit that some kind fairy or brownie, by bringing bread and water to you, was the means of--"
"Jack, my friend," interrupted Harry, "it is my belief that the friendly person, whom you will persist in calling a spirit, exists in the mine as certainly as the criminal we speak of, and I mean to seek them both in the most distant recesses of the mine."
"But," inquired Jack, "have you any possible clew to guide your search?"
"Perhaps I have. Listen to me! Five miles west of New Aberfoyle, under the solid rock which supports Ben Lomond, there exists a natural shaft which descends perpendicularly into the vein beneath. A week ago I went to ascertain the depth of this shaft. While sounding it, and bending over the opening as my plumb-line went down, it seemed to me that the air within was agitated, as though beaten by huge wings."
"Some bird must have got lost among the lower galleries," replied Jack.
"But that is not all, Jack. This very morning I went back to the place, and, listening attentively, I thought I could detect a sound like a sort of groaning."
"Groaning!" cried Jack, "that must be nonsense; it was a current of air--unless indeed some ghost--"
"I shall know to-morrow what it was," said Harry.
"To-morrow?" answered Jack, looking at his friend.
"Yes; to-morrow I am going down into that abyss."
"Harry! that will be a tempting of Providence."
"No, Jack, Providence will aid me in the attempt. Tomorrow, you and some of our comrades will go with me to that shaft. I will fasten myself to a long rope, by which you can let me down, and draw me up at a given signal. I may depend upon you, Jack?"
"Well, Harry," said Jack, shaking his head, "I will do as you wish me; but I tell you all the same, you are very wrong."
"Nothing venture nothing win," said Harry, in a tone of decision. "To-morrow morning, then, at six o'clock. Be
silent, and farewell!"

It must be admitted that Jack Ryan's fears were far from groundless. Harry would expose himself to very great danger, supposing the enemy he sought for lay concealed at the bottom of the pit into which he was going to descend. It did not seem likely that such was the case, however.

"Why in the world," repeated Jack Ryan, "should he take all this trouble to account for a set of facts so very easily and simply explained by the supernatural intervention of the spirits of the mine?"

But, notwithstanding his objections to the scheme, Jack Ryan and three miners of his gang arrived next morning with Harry at the mouth of the opening of the suspicious shaft. Harry had not mentioned his intentions either to James Starr or to the old overman. Jack had been discreet enough to say nothing.

Harry had provided himself with a rope about 200 feet long. It was not particularly thick, but very strong--sufficiently so to sustain his weight. His friends were to let him down into the gulf, and his pulling the cord was to be the signal to withdraw him.

The opening into this shaft or well was twelve feet wide. A beam was thrown across like a bridge, so that the cord passing over it should hang down the center of the opening, and save Harry from striking against the sides in his descent.

He was ready.

"Are you still determined to explore this abyss?" whispered Jack Ryan.

"Yes, I am, Jack."

The cord was fastened round Harry's thighs and under his arms, to keep him from rocking. Thus supported, he was free to use both his hands. A safety-lamp hung at his belt, also a large, strong knife in a leather sheath.

Harry advanced to the middle of the beam, around which the cord was passed. Then his friends began to let him down, and he slowly sank into the pit. As the rope caused him to swing gently round and round, the light of his lamp fell in turns on all points of the side walls, so that he was able to examine them carefully. These walls consisted of pit coal, and so smooth that it would be impossible to ascend them.

Harry calculated that he was going down at the rate of about a foot per second, so that he had time to look about him, and be ready for any event.

During two minutes—that is to say, to the depth of about 120 feet, the descent continued without any incident.

No lateral gallery opened from the side walls of the pit, which was gradually narrowing into the shape of a funnel. But Harry began to feel a fresher air rising from beneath, whence he concluded that the bottom of the pit communicated with a gallery of some description in the lowest part of the mine.

The cord continued to unwind. Darkness and silence were complete. If any living being whatever had sought refuge in the deep and mysterious abyss, he had either left it, or, if there, by no movement did he in the slightest way betray his presence.

Harry, becoming more suspicious the lower he got, now drew his knife and held it in his right hand. At a depth of 180 feet, his feet touched the lower point and the cord slackened and unwound no further.

Harry breathed more freely for a moment. One of the fears he entertained had been that, during his descent, the cord might be cut above him, but he had seen no projection from the walls behind which anyone could have been concealed.

The bottom of the abyss was quite dry. Harry, taking the lamp from his belt, walked round the place, and perceived he had been right in his conjectures.

An extremely narrow passage led aside out of the pit. He had to stoop to look into it, and only by creeping could it be followed; but as he wanted to see in which direction it led, and whether another abyss opened from it, he lay down on the ground and began to enter it on hands and knees.

An obstacle speedily arrested his progress. He fancied he could perceive by touching it, that a human body lay across the passage. A sudden thrill of horror and surprise made him hastily draw back, but he again advanced and felt more carefully.

His senses had not deceived him; a body did indeed lie there; and he soon ascertained that, although icy cold at the extremities, there was some vital heat remaining. In less time than it takes to tell it, Harry had drawn the body from the recess to the bottom of the shaft, and, seizing his lamp, he cast its lights on what he had found, exclaiming immediately, "Why, it is a child!"

The child still breathed, but so very feebly that Harry expected it to cease every instant. Not a moment was to be lost; he must carry this poor little creature out of the pit, and take it home to his mother as quickly as he could. He eagerly fastened the cord round his waist, stuck on his lamp, clasped the child to his breast with his left arm, and, keeping his right hand free to hold the knife, he gave the signal agreed on, to have the rope pulled up.

It tightened at once; he began the ascent. Harry looked around him with redoubled care, for more than his own life was now in danger.
For a few minutes all went well, no accident seemed to threaten him, when suddenly he heard the sound of a great rush of air from beneath; and, looking down, he could dimly perceive through the gloom a broad mass arising until it passed him, striking him as it went by.

It was an enormous bird—of what sort he could not see; it flew upwards on mighty wings, then paused, hovered, and dashed fiercely down upon Harry, who could only wield his knife in one hand. He defended himself and the child as well as he could, but the ferocious bird seemed to aim all its blows at him alone. Afraid of cutting the cord, he could not strike it as he wished, and the struggle was prolonged, while Harry shouted with all his might in hopes of making his comrades hear.

He soon knew they did, for they pulled the rope up faster; a distance of about eighty feet remained to be got over. The bird ceased its direct attack, but increased the horror and danger of his situation by rushing at the cord, clinging to it just out of his reach, and endeavoring, by pecking furiously, to cut it.

Harry felt overcome with terrible dread. One strand of the rope gave way, and it made them sink a little.

A shriek of despair escaped his lips.

A second strand was divided, and the double burden now hung suspended by only half the cord.

Harry dropped his knife, and by a superhuman effort succeeded, at the moment the rope was giving way, in catching hold of it with his right hand above the cut made by the beak of the bird. But, powerfully as he held it in his iron grasp, he could feel it gradually slipping through his fingers.

He might have caught it, and held on with both hands by sacrificing the life of the child he supported in his left arm. The idea crossed him, but was banished in an instant, although he believed himself quite unable to hold out until drawn to the surface. For a second he closed his eyes, believing they were about to plunge back into the abyss.

He looked up once more; the huge bird had disappeared; his hand was at the very extremity of the broken rope—when, just as his convulsive grasp was failing, he was seized by the men, and with the child was placed on the level ground.

The fearful strain of anxiety removed, a reaction took place, and Harry fell fainting into the arms of his friends.

CHAPTER XII. NELL ADOPTED

A COUPLE of hours later, Harry still unconscious, and the child in a very feeble state, were brought to the cottage by Jack Ryan and his companions. The old overman listened to the account of their adventures, while Madge attended with the utmost care to the wants of her son, and of the poor creature whom he had rescued from the pit.

Harry imagined her a mere child, but she was a maiden of the age of fifteen or sixteen years.

She gazed at them with vague and wondering eyes; and the thin face, drawn by suffering, the pallid complexion, which light could never have tinged, and the fragile, slender figure, gave her an appearance at once singular and attractive. Jack Ryan declared that she seemed to him to be an uncommonly interesting kind of ghost.

It must have been due to the strange and peculiar circumstances under which her life hitherto had been led, that she scarcely seemed to belong to the human race. Her countenance was of a very uncommon cast, and her eyes, hardly able to bear the lamp-light in the cottage, glanced around in a confused and puzzled way, as if all were new to them.

As this singular being reclined on Madge's bed and awoke to consciousness, as from a long sleep, the old Scotchwoman began to question her a little.

"What do they call you, my dear?" said she.

"Nell," replied the girl.

"Do you feel anything the matter with you, Nell?"

"I am hungry. I have eaten nothing since—since—"

Nell uttered these few words like one unused to speak much. They were in the Gaelic language, which was often spoken by Simon and his family. Madge immediately brought her some food; she was evidently famished. It was impossible to say how long she might have been in that pit.

"How many days had you been down there, dearie?" inquired Madge.

Nell made no answer; she seemed not to understand the question.

"How many days, do you think?"

"Days?" repeated Nell, as though the word had no meaning for her, and she shook her head to signify entire want of comprehension.

Madge took her hand, and stroked it caressingly. "How old are you, my lassie?" she asked, smiling kindly at her. Nell shook her head again.

"Yes, yes," continued Madge, "how many years old?"

"Years?" replied Nell. She seemed to understand that word no better than days! Simon, Harry, Jack, and the rest,
looked on with an air of mingled compassion, wonder, and sympathy. The state of this poor thing, clothed in a miserable garment of coarse woolen stuff, seemed to impress them painfully.

Harry, more than all the rest, seemed attracted by the very peculiarity of this poor stranger. He drew near, took Nell's hand from his mother, and looked directly at her, while something like a smile curved her lip. "Nell," he said, "Nell, away down there--in the mine--were you all alone?"

"Alone! alone!" cried the girl, raising herself hastily. Her features expressed terror; her eyes, which had appeared to soften as Harry looked at her, became quite wild again. "Alone!" repeated she, "alone!"--and she fell back on the bed, as though deprived of all strength.

"The poor bairn is too weak to speak to us," said Madge, when she had adjusted the pillows. "After a good rest, and a little more food, she will be stronger. Come away, Simon and Harry, and all the rest of you, and let her go to sleep." So Nell was left alone, and in a very few minutes slept profoundly.

This event caused a great sensation, not only in the coal mines, but in Stirlingshire, and ultimately throughout the kingdom. The strangeness of the story was exaggerated; the affair could not have made more commotion had they found the girl enclosed in the solid rock, like one of those antediluvian creatures who have occasionally been released by a stroke of the pickax from their stony prison. Nell became a fashionable wonder without knowing it. Superstitious folks made her story a new subject for legendary marvels, and were inclined to think, as Jack Ryan told Harry, that Nell was the spirit of the mines.

"Be it so, Jack," said the young man; "but at any rate she is the good spirit. It can have been none but she who brought us bread and water when we were shut up down there; and as to the bad spirit, who must still be in the mine, we'll catch him some day."

Of course James Starr had been at once informed of all this, and came, as soon as the young girl had sufficiently recovered her strength, to see her, and endeavor to question her carefully.

She appeared ignorant of nearly everything relating to life, and, although evidently intelligent, was wanting in many elementary ideas, such as time, for instance. She had never been used to its division, and the words signifying hours, days, months, and years were unknown to her.

Her eyes, accustomed to the night, were pained by the glare of the electric discs; but in the dark her sight was wonderfully keen, the pupil dilated in a remarkable manner, and she could see where to others there appeared profound obscurity. It was certain that her brain had never received any impression of the outer world, that her eyes had never looked beyond the mine, and that these somber depths had been all the world to her.

The poor girl probably knew not that there were a sun and stars, towns and counties, a mighty universe composed of myriads of worlds. But until she comprehended the significance of words at present conveying no precise meaning to her, it was impossible to ascertain what she knew.

As to whether or not Nell had lived alone in the recesses of New Aberfoyle, James Starr was obliged to remain uncertain; indeed, any allusion to the subject excited evident alarm in the mind of this strange girl. Either Nell could not or would not reply to questions, but that some secret existed in connection with the place, which she could have explained, was manifest.

"Should you like to stay with us? Should you like to go back to where we found you?" asked James Starr.

"Oh, yes!" exclaimed the maiden, in answer to his first question; but a cry of terror was all she seemed able to say to the second.

James Starr, as well as Simon and Harry Ford, could not help feeling a certain amount of uneasiness with regard to this persistent silence. They found it impossible to forget all that had appeared so inexplicable at the time they made the discovery of the coal mine; and although that was three years ago, and nothing new had happened, they always expected some fresh attack on the part of the invisible enemy.

They resolved to explore the mysterious well, and did so, well armed and in considerable numbers. But nothing suspicious was to be seen; the shaft communicated with lower stages of the crypt, hollowed out in the carboniferous bed.

Many a time did James Starr, Simon, and Harry talk over these things. If one or more malevolent beings were concealed in the coal-pit, and there concocted mischief, Nell surely could have warned them of it, yet she said nothing. The slightest allusion to her past life brought on such fits of violent emotion, that it was judged best to avoid the subject for the present. Her secret would certainly escape her by-and-by.

By the time Nell had been a fortnight in the cottage, she had become a most intelligent and zealous assistant to old Madge. It was clear that she instinctively felt she should remain in the dwelling where she had been so charitably received, and perhaps never dreamt of quitting it. This family was all in all to her, and to the good folks themselves Nell had seemed an adopted child from the moment when she first came beneath their roof. Nell was in truth a charming creature; her new mode of existence added to her beauty, for these were no doubt the first happy days of her life, and her heart was full of gratitude towards those to whom she owed them. Madge felt towards her as a
mother would; the old woman doted upon her; in short, she was beloved by everybody. Jack Ryan only regretted one thing, which was that he had not saved her himself. Friend Jack often came to the cottage. He sang, and Nell, who had never heard singing before, admired it greatly; but anyone might see that she preferred to Jack's songs the graver conversation of Harry, from whom by degrees she learnt truths concerning the outer world, of which hitherto she had known nothing.

It must be said that, since Nell had appeared in her own person, Jack Ryan had been obliged to admit that his belief in hobgoblins was in a measure weakened. A couple of months later his credulity experienced a further shock. About that time Harry unexpectedly made a discovery which, in part at least, accounted for the apparition of the fire-maidens among the ruins of Dundonald Castle at Irvine.

During several days he had been engaged in exploring the remote galleries of the prodigious excavation towards the south. At last he scrambled with difficulty up a narrow passage which branched off through the upper rock. To his great astonishment, he suddenly found himself in the open air. The passage, after ascending obliquely to the surface of the ground, led out directly among the ruins of Dundonald Castle.

There was, therefore, a communication between New Aberfoyle and the hills crowned by this ancient castle. The upper entrance to this gallery, being completely concealed by stones and brushwood, was invisible from without; at the time of their search, therefore, the magistrates had been able to discover nothing.

A few days afterwards, James Starr, guided by Harry, came himself to inspect this curious natural opening into the coal mine. "Well," said he, "here is enough to convince the most superstitious among us. Farewell to all their brownies, goblins, and fire-maidens now!"

"I hardly think, Mr. Starr, we ought to congratulate ourselves," replied Harry. "Whatever it is we have instead of these things, it can't be better, and may be worse than they are."

"That's true, Harry," said the engineer; "but what's to be done? It is plain that, whatever the beings are who hide in the mine, they reach the surface of the earth by this passage. No doubt it was the light of torches waved by them during that dark and stormy night which attracted the MOTALA towards the rocky coast, and like the wreckers of former days, they would have plundered the unfortunate vessel, had it not been for Jack Ryan and his friends. Anyhow, so far it is evident, and here is the mouth of the den. As to its occupants, the question is--Are they here still?"

"I say yes; because Nell trembles when we mention them--yes, because Nell will not, or dare not, speak about them," answered Harry in a tone of decision.

Harry was surely in the right. Had these mysterious denizens of the pit abandoned it, or ceased to visit the spot, what reason could the girl have had for keeping silence?

James Starr could not rest till he had penetrated this mystery. He foresaw that the whole future of the new excavations must depend upon it. Renewed and strict precautions were therefore taken. The authorities were informed of the discovery of the entrance. Watchers were placed among the ruins of the castle. Harry himself lay hid for several nights in the thickets of brushwood which clothed the hill-side.

Nothing was discovered--no human being emerged from the opening. So most people came to the conclusion that the villains had been finally dislodged from the mine, and that, as to Nell, they must suppose her to be dead at the bottom of the shaft where they had left her.

While it remained unworked, the mine had been a safe enough place of refuge, secure from all search or pursuit. But now, circumstances being altered, it became difficult to conceal this lurking-place, and it might reasonably be hoped they were gone, and that nothing for the future was to be dreaded from them.

James Starr, however, could not feel sure about it; neither could Harry be satisfied on the subject, often repeating, "Nell has clearly been mixed up with all this secret business. If she had nothing more to fear, why should she keep silence? It cannot be doubted that she is happy with us. She likes us all--she adores my mother. Her absolute silence as to her former life, when by speaking out she might benefit us, proves to me that some awful secret, which she dares not reveal, weighs on her mind. It may also be that she believes it better for us, as well as for herself, that she should remain mute in a way otherwise so unaccountable."

In consequence of these opinions, it was agreed by common consent to avoid all allusion to the maiden's former mode of life. One day, however, Harry was led to make known to Nell what James Starr, his father, mother, and himself believed they owed to her interference.

It was a fete-day. The miners made holiday on the surface of the county of Stirling as well as in its subterranean domains. Parties of holiday-makers were moving about in all directions. Songs resounded in many places beneath the sonorous vaults of New Aberfoyle. Harry and Nell left the cottage, and slowly walked along the left bank of Loch Malcolm.

Then the electric brilliance darted less vividly, and the rays were interrupted with fantastic effect by the sharp angles of the picturesque rocks which supported the dome. This imperfect light suited Nell, to whose eyes a glare
was very unpleasant.

"Nell," said Harry, "your eyes are not fit for daylight yet, and could not bear the brightness of the sun."

"Indeed they could not," replied the girl; "if the sun is such as you describe it to me, Harry."

"I cannot by any words, Nell, give you an idea either of his splendor or of the beauty of that universe which your eyes have never beheld. But tell me, is it really possible that, since the day when you were born in the depths of the coal mine, you never once have been up to the surface of the earth?"

"Never once, Harry," said she; "I do not believe that, even as an infant, my father or mother ever carried me thither. I am sure I should have retained some impression of the open air if they had."

"I believe you would," answered Harry. "Long ago, Nell, many children used to live altogether in the mine; communication was then difficult, and I have met with more than one young person, quite as ignorant as you are of things above-ground. But now the railway through our great tunnel takes us in a few minutes to the upper regions of our country. I long, Nell, to hear you say, 'Come, Harry, my eyes can bear daylight, and I want to see the sun! I want to look upon the works of the Almighty.'"

"I shall soon say so, Harry, I hope," replied the girl; "I shall soon go with you to the world above; and yet--"

"What are you going to say, Nell?" hastily cried Harry; "can you possibly regret having quitted that gloomy abyss in which you spent your early years, and whence we drew you half dead?"

"No, Harry," answered Nell; "I was only thinking that darkness is beautiful as well as light. If you but knew what eyes accustomed to its depth can see! Shades flit by, which one longs to follow; circles mingle and intertwine, and one could gaze on them forever; black hollows, full of indefinite gleams of radiance, lie deep at the bottom of the mine. And then the voice-like sounds! Ah, Harry! one must have lived down there to understand what I feel, what I can never express."

"And were you not afraid, Nell, all alone there?"

"It was just when I was alone that I was not afraid."

Nell's voice altered slightly as she said these words; however, Harry thought he might press the subject a little further, so he said, "But one might be easily lost in these great galleries, Nell. Were you not afraid of losing your way?"

"Oh, no, Harry; for a long time I had known every turn of the new mine."

"Did you never leave it?"

"Yes, now and then," answered the girl with a little hesitation; "sometimes I have been as far as the old mine of Aberfoyle."

"So you knew our old cottage?"

"The cottage! oh, yes; but the people who lived there I only saw at a great distance."

"They were my father and mother," said Harry; "and I was there too; we have always lived there--we never would give up the old dwelling."

"Perhaps it would have been better for you if you had," murmured the maiden.

"Why so, Nell? Was it not just because we were obstinately resolved to remain that we ended by discovering the new vein of coal? And did not that discovery lead to the happy result of providing work for a large population, and restoring them to ease and comfort? and did it not enable us to find you, Nell, to save your life, and give you the love of all our hearts?"

"Ah, yes, for me indeed it is well, whatever may happen," replied Nell earnestly; "for others--who can tell?"

"What do you mean?"

"Oh, nothing--nothing. But it used to be very dangerous at that time to go into the new cutting--yes, very dangerous indeed, Harry! Once some rash people made their way into these chasms. They got a long, long way; they were lost!"

"They were lost!" said Harry, looking at her."

"Yes, lost!" repeated Nell in a trembling voice. "They could not find their way out."

"And there," cried Harry, "they were imprisoned during eight long days! They were at the point of death, Nell; and, but for a kind and charitable being--an angel perhaps--sent by God to help them, who secretly brought them a little food; but for a mysterious guide, who afterwards led to them their deliverers, they never would have escaped from that living tomb!"

"And how do you know about that?" demanded the girl.

"Because those men were James Starr, my father, and myself, Nell!"

Nell looked up hastily, seized the young man's hand, and gazed so fixedly into his eyes that his feelings were stirred to their depths. "You were there?" at last she uttered.

"I was indeed," said Harry, after a pause, "and she to whom we owe our lives can have been none other than yourself, Nell!"
Nell hid her face in her hands without speaking. Harry had never seen her so much affected.
"Those who saved your life, Nell," added he in a voice tremulous with emotion, "already owed theirs to you; do you think they will ever forget it?"

CHAPTER XIII. ON THE REVOLVING LADDER

THE mining operations at New Aberfoyle continued to be carried on very successfully. As a matter of course, the engineer, James Starr, as well as Simon Ford, the discoverers of this rich carboniferous region, shared largely in the profits.

In time Harry became a partner. But he never thought of quitting the cottage. He took his father's place as overman, and diligently superintended the works of this colony of miners. Jack Ryan was proud and delighted at the good fortune which had befallen his comrade. He himself was getting on very well also.

They frequently met, either at the cottage or at the works in the pit. Jack did not fail to remark the sentiments entertained by Harry towards Nell. Harry would not confess to them; but Jack only laughed at him when he shook his head and tried to deny any special interest in her.

It must be noted that Jack Ryan had the greatest possible wish to be of the party when Nell should pay her first visit to the upper surface of the county of Stirling. He wished to see her wonder and admiration on first beholding the yet unknown face of Nature. He very much hoped that Harry would take him with them when the excursion was made. As yet, however, the latter had made no proposal of the kind to him, which caused him to feel a little uneasy as to his intentions.

One morning Jack Ryan was descending through a shaft which led from the surface to the lower regions of the pit. He did so by means of one of those ladders which, continually revolving by machinery, enabled persons to ascend and descend without fatigue. This apparatus had lowered him about a hundred and fifty feet, when at a narrow landing-place he perceived Harry, who was coming up to his labors for the day.

"Well met, my friend!" cried Jack, recognizing his comrade by the light of the electric lamps.
"Ah, Jack!" replied Harry, "I am glad to see you. I've got something to propose."
"I can listen to nothing till you tell me how Nell is," interrupted Jack Ryan.
"Nell is all right, Jack--so much so, in fact, that I hope in a month or six weeks--"
"To marry her, Harry?"
"Jack, you don't know what you are talking about!"
"Ah, that's very likely; but I know quite well what I shall do."
"What will you do?"
"Marry her myself, if you don't; so look sharp," laughed Jack. "By Saint Mungo! I think an immense deal of bonny Nell! A fine young creature like that, who has been brought up in the mine, is just the very wife for a miner. She is an orphan--so am I; and if you don't care much for her, and if she will have me--"

Harry looked gravely at Jack, and let him talk on without trying to stop him. "Don't you begin to feel jealous, Harry?" asked Jack in a more serious tone.
"Not at all," answered Harry quietly.
"But if you don't marry Nell yourself, you surely can't expect her to remain a spinster?"
"I expect nothing," said Harry.

A movement of the ladder machinery now gave the two friends the opportunity--one to go up, the other down the shaft. However, they remained where they were.
"Harry," quoth Jack, "do you think I spoke in earnest just now about Nell?"
"No, that I don't, Jack."
"Well, but now I will!"
"You? speak in earnest?"
"My good fellow, I can tell you I am quite capable of giving a friend a bit of advice."
"Let's hear, then, Jack!"
"Well, look here! You love Nell as heartily as she deserves. Old Simon, your father, and old Madge, your mother, both love her as if she were their daughter. Why don't you make her so in reality? Why don't you marry her?"
"Come, Jack," said Harry, "you are running on as if you knew how Nell felt on the subject."
"Everybody knows that," replied Jack, "and therefore it is impossible to make you jealous of any of us. But here goes the ladder again--I'm off!"
"Stop a minute, Jack!" cried Harry, detaining his companion, who was stepping onto the moving staircase.
"I say! you seem to mean me to take up my quarters here altogether!"
"Do be serious and listen, Jack! I want to speak in earnest myself now."
"Well, I'll listen till the ladder moves again, not a minute longer."
"Jack," resumed Harry, "I need not pretend that I do not love Nell; I wish above all things to make her my wife."
"That's all right!"
"But for the present I have scruples of conscience as to asking her to make me a promise which would be irrevocable."
"What can you mean, Harry?"
"I mean just this--that, it being certain Nell has never been outside this coal mine in the very depths of which she was born, it stands to reason that she knows nothing, and can comprehend nothing of what exists beyond it. Her eyes--yes, and perhaps also her heart--have everything yet to learn. Who can tell what her thoughts will be, when perfectly new impressions shall be made upon her mind? As yet she knows nothing of the world, and to me it would seem like deceiving her, if I led her to decide in ignorance, upon choosing to remain all her life in the coal mine. Do you understand me, Jack?"
"Hem!--yes--pretty well. What I understand best is that you are going to make me miss another turn of the ladder."
"Jack," replied Harry gravely, "if this machinery were to stop altogether, if this landing-place were to fall beneath our feet, you must and shall hear what I have to say."
"Well done, Harry! that's how I like to be spoken to! Let's settle, then, that, before you marry Nell, she shall go to school in Auld Reekie."
"No indeed, Jack; I am perfectly able myself to educate the person who is to be my wife."
"Sure that will be a great deal better, Harry!"
"But, first of all," resumed Harry, "I wish that Nell should gain a real knowledge of the upper world. To illustrate my meaning, Jack, suppose you were in love with a blind girl, and someone said to you, 'In a month's time her sight will be restored,' would you not wait till after she was cured, to marry her?"
"Faith, to be sure I would!" exclaimed Jack.
"Well, Jack, Nell is at present blind; and before she marries me, I wish her to see what I am, and what the life really is to which she would bind herself. In short, she must have daylight let in upon the subject!"
"Well said, Harry! Very well said indeed!" cried Jack. "Now I see what you are driving at. And when may we expect the operation to come off?"
"In a month, Jack," replied Harry. "Nell is getting used to the light of our reflectors. That is some preparation. In a month she will, I hope, have seen the earth and its wonders--the sky and its splendors. She will perceive that the limits of the universe are boundless."

But while Harry was thus giving the rein to his imagination, Jack Ryan, quitting the platform, had leaped on the step of the moving machinery.
"Hullo, Jack! Where are you?"
"Far beneath you," laughed the merry fellow. "While you soar to the heights, I plunge into the depths."
"Fare ye well. Jack!" returned Harry, himself laying hold of the rising ladder; "mind you say nothing about what I have been telling you."
"Not a word," shouted Jack, "but I make one condition."
"What is that?"
"That I may be one of the party when Nell's first excursion to the face of the earth comes off!"
"So you shall, Jack, I promise you!"

A fresh throb of the machinery placed a yet more considerable distance between the friends. Their voices sounded faintly to each other. Harry, however, could still hear Jack shouting:
"I say! do you know what Nell will like better than either sun, moon, or stars, after she's seen the whole of them?"
"No, Jack!"
"Why, you yourself, old fellow! still you! always you!" And Jack's voice died away in a prolonged "Hurrah!"

Harry, after this, applied himself diligently, during all his spare time, to the work of Nell's education. He taught her to read and to write, and such rapid progress did she make, it might have been said that she learnt by instinct. Never did keen intelligence more quickly triumph over utter ignorance. It was the wonder of all beholders.

Simon and Madge became every day more and more attached to their adopted child, whose former history continued to puzzle them a good deal. They plainly saw the nature of Harry's feelings towards her, and were far from displeased thereof. They recollected that Simon had said to the engineer on his first visit to the old cottage, "How can our son ever think of marrying? Where could a wife possibly be found suitable for a lad whose whole life must be passed in the depths of a coal mine?"
Well! now it seemed as if the most desirable companion in the world had been led to him by Providence. Was not this like a blessing direct from Heaven? So the old man made up his mind that, if the wedding did take place, the miners of New Aberfoyle should have a merry-making at Coal Town, which they would never during their lives forget. Simon Ford little knew what he was saying!

It must be remarked that another person wished for this union of Harry and Nell as much as Simon did—and that was James Starr, the engineer. Of course he was really interested in the happiness of the two young people. But another motive, connected with wider interests, influenced him to desire it.

It has been said that James Starr continued to entertain a certain amount of apprehension, although for the present nothing appeared to justify it. Yet that which had been might again be. This mystery about the new cutting--Nell was evidently the only person acquainted with it. Now, if fresh dangers were in store for the miners of Aberfoyle, how were they possibly to be guarded against, without so much as knowing the cause of them?

"Nell has persisted in keeping silence," said James Starr very often, "but what she has concealed from others, she will not long hide from her husband. Any danger would be danger to Harry as well as to the rest of us. Therefore, a marriage which brings happiness to the lovers, and safety to their friends, will be a good marriage, if ever there is such a thing here below."

Thus, not illogically, reasoned James Starr. He communicated his ideas to old Simon, who decidedly appreciated them. Nothing, then, appeared to stand in the way of the match. What, in fact, was there to prevent it? They loved each other; the parents desired nothing better for their son. Harry's comrades envied his good fortune, but freely acknowledged that he deserved it. The maiden depended on no one else, and had but to give the consent of her own heart.

Why, then, if there were none to place obstacles in the way of this union--why, as night came on, and, the labors of the day being over, the electric lights in the mine were extinguished, and all the inhabitants of Coal Town at rest within their dwellings--why did a mysterious form always emerge from the gloomier recesses of New Aberfoyle, and silently glide through the darkness?

What instinct guided this phantom with ease through passages so narrow as to appear to be impracticable?

Why should the strange being, with eyes flashing through the deepest darkness, come cautiously creeping along the shores of Lake Malcolm? Why so directly make his way towards Simon's cottage, yet so carefully as hitherto to avoid notice? Why, bending towards the windows, did he strive to catch, by listening, some fragment of the conversation within the closed shutters?

And, on catching a few words, why did he shake his fist with a menacing gesture towards the calm abode, while from between his set teeth issued these words in muttered fury, "She and he? Never! never!"

CHAPTER XIV. A SUNRISE

A MONTH after this, on the evening of the 20th of August, Simon Ford and Madge took leave, with all manner of good wishes, of four tourists, who were setting forth from the cottage.

James Starr, Harry, and Jack Ryan were about to lead Nell's steps over yet untrodden paths, and to show her the glories of nature by a light to which she was as yet a stranger. The excursion was to last for two days. James Starr, as well as Harry, considered that during these eight and forty hours spent above ground, the maiden would be able to see everything of which she must have remained ignorant in the gloomy pit; all the varied aspects of the globe, towns, plains, mountains, rivers, lakes, gulfs, and seas would pass, panorama-like, before her eyes.

In that part of Scotland lying between Edinburgh and Glasgow, nature would seem to have collected and set forth specimens of every one of these terrestrial beauties. As to the heavens, they would be spread abroad as over the whole earth, with their changeful clouds, serene or veiled moon, their radiant sun, and clustering stars. The expedition had been planned so as to combine a view of all these things.

Simon and Madge would have been glad to go with Nell; but they never left their cottage willingly, and could not make up their minds to quit their subterranean home for a single day.

James Starr went as an observer and philosopher, curious to note, from a psychological point of view, the novel impressions made upon Nell; perhaps also with some hope of detecting a clue to the mysterious events connected with her childhood. Harry, with a little trepidation, asked himself whether it was not possible that this rapid initiation into the things of the exterior world would change the maiden he had known and loved hitherto into quite a different girl. As for Jack Ryan, he was as joyous as a lark rising in the first beams of the sun. He only trusted that his gayety would prove contagious, and enliven his traveling companions, thus rewarding them for letting him join them. Nell was pensive and silent.

James Starr had decided, very sensibly, to set off in the evening. It would be very much better for the girl to pass gradually from the darkness of night to the full light of day; and that would in this way be managed, since between
midnight and noon she would experience the successive phases of shade and sunshine, to which her sight had to get accustomed.

Just as they left the cottage, Nell took Harry's hand saying, "Harry, is it really necessary for me to leave the mine at all, even for these few days?"

"Yes, it is, Nell," replied the young man. "It is needful for both of us."

"But, Harry," resumed Nell, "ever since you found me, I have been as happy as I can possibly be. You have been teaching me. Why is that not enough? What am I going up there for?"

Harry looked at her in silence. Nell was giving utterance to nearly his own thoughts.

"My child," said James Starr, "I can well understand the hesitation you feel; but it will be good for you to go with us. Those who love you are taking you, and they will bring you back again. Afterwards you will be free, if you wish it, to continue your life in the coal mine, like old Simon, and Madge, and Harry. But at least you ought to be able to compare what you give up with what you choose, then decide freely. Come!"

"Come, dear Nell!" cried Harry.

"Harry, I am willing to follow you," replied the maiden. At nine o'clock the last train through the tunnel started to convey Nell and her companions to the surface of the earth. Twenty minutes later they alighted on the platform where the branch line to New Aberfoyle joins the railway from Dumbarton to Stirling. 

The night was already dark. From the horizon to the zenith, light vapory clouds hurried through the upper air, driven by a refreshing northwesterly breeze. The day had been lovely; the night promised to be so likewise.

On reaching Stirling, Nell and her friends, quitting the train, left the station immediately. Just before them, between high trees, they could see a road which led to the banks of the river Forth.

The first physical impression on the girl was the purity of the air inhaled eagerly by her lungs.

"Breathe it freely, Nell," said James Starr; "it is fragrant with all the scents of the open country."

"What is all that smoke passing over our heads?" inquired Nell.

"Those are clouds," answered Harry, "blown along by the westerly wind."

"Ah!" said Nell, "how I should like to feel myself carried along in that silent whirl! And what are those shining sparks which glance here and there between rents in the clouds?"

"Those are the stars I have told you about, Nell. So many suns they are, so many centers of worlds like our own, most likely."

The constellations became more clearly visible as the wind cleared the clouds from the deep blue of the firmament. Nell gazed upon the myriad stars which sparkled overhead. "But how is it," she said at length, "that if these are suns, my eyes can endure their brightness?"

"My child," replied James Starr, "they are indeed suns, but suns at an enormous distance. The nearest of these millions of stars, whose rays can reach us, is Vega, that star in Lyra which you observe near the zenith, and that is fifty thousand millions of leagues distant. Its brightness, therefore, cannot affect your vision. But our own sun, which will rise to-morrow, is only distant thirty-eight millions of leagues, and no human eye can gaze fixedly upon that, for it is brighter than the blaze of any furnace. But come, Nell, come!"

They pursued their way, James Starr leading the maiden, Harry walking by her side, while Jack Ryan roamed about like a young dog, impatient of the slow pace of his masters. The road was lonely. Nell kept looking at the great trees, whose branches, waving in the wind, made them seem to her like giants gesticulating wildly. The sound of the breeze in the tree-tops, the deep silence during a lull, the distant line of the horizon, which could be discerned when the road passed over open levels—all these things filled her with new sensations, and left lasting impressions on her mind.

After some time she ceased to ask questions, and her companions respected her silence, not wishing to influence by any words of theirs the girl's highly sensitive imagination, but preferring to allow ideas to arise spontaneously in her soul.

At about half past eleven o'clock, they gained the banks of the river Forth. There a boat, chartered by James Starr, awaited them. In a few hours it would convey them all to Granton. Nell looked at the clear water which flowed up to her feet, as the waves broke gently on the beach, reflecting the starlight. "Is this a lake?" said she.

"No," replied Harry, "it is a great river flowing towards the sea, and soon opening so widely as to resemble a gulf. Taste a little of the water in the hollow of your hand, Nell, and you will perceive that it is not sweet like the waters of Lake Malcolm."

The maiden bent towards the stream, and, raising a little water to her lips, "This is quite salt," said she.

"Yes, the tide is full; the sea water flows up the river as far as this," answered Harry.

"Oh, Harry! Harry!" exclaimed the maiden, "what can that red glow on the horizon be? Is it a forest on fire?"

"No, it is the rising moon, Nell."

"To be sure, that's the moon," cried Jack Ryan, "a fine big silver plate, which the spirits of air hand round and
round the sky to collect the stars in, like money."

"Why, Jack," said the engineer, laughing, "I had no idea you could strike out such bold comparisons!"

"Well, but, Mr. Starr, it is a just comparison. Don't you see the stars disappear as the moon passes on? so I suppose they drop into it."

"What you mean to say, Jack, is that the superior brilliancy of the moon eclipses that of stars of the sixth magnitude, therefore they vanish as she approaches."

"How beautiful all this is!" repeated Nell again and again, with her whole soul in her eyes. "But I thought the moon was round?"

"So she is, when 'full,'" said James Starr; "that means when she is just opposite to the sun. But to-night the moon is in the last quarter, shorn of her just proportions, and friend Jack's grand silver plate looks more like a barber's basin."

"Oh, Mr. Starr, what a base comparison!" he exclaimed, "I was just going to begin a sonnet to the moon, but your barber's basin has destroyed all chance of an inspiration."

Gradually the moon ascended the heavens. Before her light the lingering clouds fled away, while stars still sparkled in the west, beyond the influence of her radiance. Nell gazed in silence on the glorious spectacle. The soft silvery light was pleasant to her eyes, and her little trembling hand expressed to Harry, who clasped it, how deeply she was affected by the scene.

"Let us embark now," said James Starr. "We have to get to the top of Arthur's Seat before sunrise."

The boat was moored to a post on the bank. A boatman awaited them. Nell and her friends took their seats; the sail was spread; it quickly filled before the northwesterly breeze, and they sped on their way.

What a new sensation was this for the maiden! She had been rowed on the waters of Lake Malcolm; but the oar, handled ever so lightly by Harry, always betrayed effort on the part of the oarsman. Now, for the first time, Nell felt herself borne along with a gliding movement, like that of a balloon through the air. The water was smooth as a lake, and Nell reclined in the stern of the boat, enjoying its gentle rocking. Occasionally the effect of the moonlight on the waters was as though the boat sailed across a glittering silver field. Little wavelets rippled along the banks. It was enchanting.

At length Nell was overcome with drowsiness, her eyelids drooped, her head sank on Harry's shoulder--she slept. Harry, sorry that she should miss any of the beauties of this magnificent night, would have aroused her.

"Let her sleep!" said the engineer. "She will better enjoy the novelties of the day after a couple of hours' rest."

At two o'clock in the morning the boat reached Granton pier. Nell awoke. "Have I been asleep?" inquired she.

"No, my child," said James Starr. "You have been dreaming that you slept, that's all."

The night continued clear. The moon, riding in mid-heaven, diffused her rays on all sides. In the little port of Granton lay two or three fishing boats; they rocked gently on the waters of the Firth. The wind fell as the dawn approached. The atmosphere, clear of mists, promised one of those fine autumn days so delicious on the sea coast.

A soft, transparent film of vapor lay along the horizon; the first sunbeam would dissipate it; to the maiden it exhibited that aspect of the sea which seems to blend it with the sky. Her view was now enlarged, without producing the impression of the boundless infinity of ocean.

Harry taking Nell's hand, they followed James Starr and Jack Ryan as they traversed the deserted streets. To Nell, this suburb of the capital appeared only a collection of gloomy dark houses, just like Coal Town, only that the roof was higher, and gleamed with small lights.

She stepped lightly forward, and easily kept pace with Harry. "Are you not tired, Nell?" asked he, after half an hour's walking.

"No! my feet seem scarcely to touch the earth," returned she. "This sky above us seems so high up, I feel as if I could take wing and fly!"

"I say! keep hold of her!" cried Jack Ryan. "Our little Nell is too good to lose. I feel just as you describe though, myself, when I have not left the pit for a long time."

"It is when we no longer experience the oppressive effect of the vaulted rocky roof above Coal Town," said James Starr, "that the spacious firmament appears to us like a profound abyss into which we have, as it were, a desire to plunge. Is that what you feel, Nell?"

"Yes, Mr. Starr, it is exactly like that," said Nell. "It makes me feel giddy."

"Ah! you will soon get over that, Nell," said Harry. "You will get used to the outer world, and most likely forget all about our dark coal pit."

"No, Harry, never!" said Nell, and she put her hand over her eyes, as though she would recall the remembrance of everything she had lately quitted.

Between the silent dwellings of the city, the party passed along Leith Walk, and went round the Calton Hill, where stood, in the light of the gray dawn, the buildings of the Observatory and Nelson's Monument. By Regent's
Bridge and the North Bridge they at last reached the lower extremity of the Canongate. The town still lay wrapt in slumber.

Nell pointed to a large building in the center of an open space, asking, "What great confused mass is that?"

"That confused mass, Nell, is the palace of the ancient kings of Scotland; that is Holyrood, where many a sad scene has been enacted! The historian can here invoke many a royal shade; from those of the early Scottish kings to that of the unhappy Mary Stuart, and the French king, Charles X. When day breaks, however, Nell, this palace will not look so very gloomy. Holyrood, with its four embattled towers, is not unlike some handsome country house. But let us pursue our way. There, just above the ancient Abbey of Holyrood, are the superb cliffs called Salisbury Crags. Arthur's Seat rises above them, and that is where we are going. From the summit of Arthur's Seat, Nell, your eyes shall behold the sun appear above the horizon seaward."

They entered the King's Park, then, gradually ascending they passed across the Queen's Drive, a splendid carriageway encircling the hill, which we owe to a few lines in one of Sir Walter Scott's romances.

Arthur's Seat is in truth only a hill, seven hundred and fifty feet high, which stands alone amid surrounding heights. In less than half an hour, by an easy winding path, James Starr and his party reached the crest of the crouching lion, which, seen from the west, Arthur's Seat so much resembles. There, all four seated themselves; and James Starr, ever ready with quotations from the great Scottish novelist, simply said, "Listen to what is written by Sir Walter Scott in the eighth chapter of the Heart of Mid-Lothian. 'If I were to choose a spot from which the rising or setting sun could be seen to the greatest possible advantage, it would be from this neighborhood.' Now watch, Nell! the sun will soon appear, and for the first time you will contemplate its splendor."

The maiden turned her eyes eastward. Harry, keeping close beside her, observed her with anxious interest. Would the first beams of day overpower her feelings? All remained quiet, even Jack Ryan. A faint streak of pale rose tinted the light vapors of the horizon. It was the first ray of light attacking the laggards of the night. Beneath the hill lay the silent city, massed confusedly in the twilight of dawn. Here and there lights twinkled among the houses of the old town. Westward rose many hill-tops, soon to be illuminated by tips of fire.

Now the distant horizon of the sea became more plainly visible. The scale of colors fell into the order of the solar. Every instant they increased in intensity, rose color became red, red became fiery, daylight dawned. Nell now glanced towards the city, of which the outlines became more distinct. Lofty monuments, slender steeples emerged from the gloom; a kind of ashy light was spread abroad. At length one solitary ray struck on the maiden's sight. It was that ray of green which, morning or evening, is reflected upwards from the sea when the horizon is clear.

An instant afterwards, Nell turned, and pointing towards a bright prominent point in the New Town, "Fire!" cried she.

"No, Nell, that is no fire," said Harry. "The sun has touched with gold the top of Sir Walter Scott's monument"--and, indeed, the extreme point of the monument blazed like the light of a pharos.

It was day—the sun arose—his disc seemed to glitter as though he indeed emerged from the waters of the sea. Appearing at first very large from the effects of refraction, he contracted as he rose and assumed the perfectly circular form. Soon no eye could endure the dazzling splendor; it was as though the mouth of a furnace was opened through the sky.

Nell closed her eyes, but her eyelids could not exclude the glare, and she pressed her fingers over them. Harry advised her to turn in the opposite direction. "Oh, no," said she, "my eyes must get used to look at what yours can bear to see!"

Even through her hands Nell perceived a rosy light, which became more white as the sun rose above the horizon. As her sight became accustomed to it, her eyelids were raised, and at length her eyes drank in the light of day.

The good child knelt down, exclaiming, "Oh Lord God! how beautiful is Thy creation!" Then she rose and looked around. At her feet extended the panorama of Edinburgh—the clear, distinct lines of streets in the New Town, and the irregular mass of houses, with their confused network of streets and lanes, which constitutes Auld Reekie, properly so called. Two heights commanded the entire city; Edinburgh Castle, crowning its huge basaltic rock, and the Calton Hill, bearing on its rounded summit, among other monuments, ruins built to represent those of the Parthenon at Athens.

Fine roadways led in all directions from the capital. To the north, the coast of the noble Firth of Forth was indented by a deep bay, in which could be seen the seaport town of Leith, between which and this Modern Athens of the north ran a street, straight as that leading to the Piraeus.

Beyond the wide Firth could be seen the soft outlines of the county of Fife, while beneath the spectator stretched the yellow sands of Portobello and Newhaven.

Nell could not speak. Her lips murmured a word or two indistinctly; she trembled, became giddy, her strength failed her; overcome by the purity of the air and the sublimity of the scene, she sank fainting into Harry's arms, who, watching her closely, was ready to support her.
The youthful maiden, hitherto entombed in the massive depths of the earth, had now obtained an idea of the
universe—of the works both of God and of man. She had looked upon town and country, and beyond these, into the
immensity of the sea, the infinity of the heavens.

CHAPTER XV. LOCH LOMOND AND LOCH KATRINE

HARRY bore Nell carefully down the steeps of Arthur's Seat, and, accompanied by James Starr and Jack Ryan,
they reached Lambert's Hotel. There a good breakfast restored their strength, and they began to make further plans
for an excursion to the Highland lakes.

Nell was now refreshed, and able to look boldly forth into the sunshine, while her lungs with ease inhaled the
free and healthful air. Her eyes learned gladly to know the harmonious varieties of color as they rested on the green
trees, the azure skies, and all the endless shades of lovely flowers and plants.

The railway train, which they entered at the Waverley Station, conveyed Nell and her friends to Glasgow. There,
from the new bridge across the Clyde, they watched the curious sea-like movement of the river. After a night's rest
at Comrie's Royal Hotel, they betook themselves to the terminus of the Edinburgh and Glasgow Railway, from
whence a train would rapidly carry them, by way of Dumbarton and Balloch, to the southern extremity of Loch
Lomond.

"Now for the land of Rob Roy and Fergus MacIvor!—the scenery immortalized by the poetical descriptions of
Walter Scott," exclaimed James Starr. "You don't know this country, Jack?"

"Only by its songs, Mr. Starr," replied Jack; "and judging by those, it must be grand."

"So it is, so it is!" cried the engineer, "and our dear Nell shall see it to the best advantage."

A steamboat, the SINCLAIR by name, awaited tourists about to make the excursion to the lakes. Nell and her
companions went on board. The day had begun in brilliant sunshine, free from the British fogs which so often veil
the skies.

The passengers were determined to lose none of the beauties of nature to be displayed during the thirty miles'
voyage. Nell, seated between James Starr and Harry, drank in with every faculty the magnificent poetry with which
lovely Scottish scenery is fraught. Numerous small isles and islets soon appeared, as though thickly sown on the
bosom of the lake. The SINCLAIR steamed her way among them, while between them glimpses could be had of
quiet valleys, or wild rocky gorges on the mainland.

"Nell," said James Starr, "every island here has its legend, perhaps its song, as well as the mountains which
overshadow the lake. One may, without much exaggeration, say that the history of this country is written in gigantic
characters of mountains and islands."

Nell listened, but these fighting stories made her sad. Why all that bloodshed on plains which to her seemed
enormous, and where surely there must have been room for everybody?

The shores of the lake form a little harbor at Luss. Nell could for a moment catch sight of the old tower of its
ancient castle. Then, the SINCLAIR turning northward, the tourists gazed upon Ben Lomond, towering nearly 3,000
feet above the level of the lake.

"Oh, what a noble mountain!" cried Nell; "what a view there must be from the top!"

"Yes, Nell," answered James Starr; "see how haughtily its peak rises from amidst the thicket of oaks, birches,
and heather, which clothe the lower portion of the mountain! From thence one may see two-thirds of old Caledonia.
This eastern side of the lake was the special abode of the clan McGregor. At no great distance, the struggles of the
Jacobites and Hanoverians repeatedly dyed with blood these lonely glens. Over these scenes shines the pale moon,
called in old ballads 'Macfarlane's lantern.' Among these rocks still echo the immortal names of Rob Roy and
McGregor Campbell."

As the SINCLAIR advanced along the base of the mountain, the country became more and more abrupt in
character. Trees were only scattered here and there; among them were the willows, slender wands of which were
formerly used for hanging persons of low degree.

"To economize hemp," remarked James Starr.

The lake narrowed very much as it stretched northwards.

The steamer passed a few more islets, Inveruglas, Eilad-whow, where stand some ruins of a stronghold of the
clan MacFarlane. At length the head of the loch was reached, and the SINCLAIR stopped at Inversnaid.

Leaving Loch Arklet on the left, a steep ascent led to the Inn of Stronachlacar, on the banks of Loch Katrine.

There, at the end of a light pier, floated a small steamboat, named, as a matter of course, the Rob Roy. The
travelers immediately went on board; it was about to start. Loch Katrine is only ten miles in length; its width never
exceeds two miles. The hills nearest it are full of a character peculiar to themselves.

"Here we are on this famous lake," said James Starr. "It has been compared to an eel on account of its length and
windings: and justly so. They say that it never freezes. I know nothing about that, but what we want to think of is, that here are the scenes of the adventures in the Lady of the Lake. I believe, if friend Jack looked about him carefully, he might see, still gliding over the surface of the water, the shade of the slender form of sweet Ellen Douglas."

"To be sure, Mr. Starr," replied Jack; "why should I not? I may just as well see that pretty girl on the waters of Loch Katrine, as those ugly ghosts on Loch Malcolm in the coal pit."

It was by this time three o'clock in the afternoon. The less hilly shores of Loch Katrine westward extended like a picture framed between Ben An and Ben Venue. At the distance of half a mile was the entrance to the narrow bay, where was the landing-place for our tourists, who meant to return to Stirling by Callander.

Nell appeared completely worn out by the continued excitement of the day. A faint ejaculation was all she was able to utter in token of admiration as new objects of wonder or beauty met her gaze. She required some hours of rest, were it but to impress lastingly the recollection of all she had seen.

Her hand rested in Harry's, and, looking earnestly at her, he said, "Nell, dear Nell, we shall soon be home again in the gloomy region of the coal mine. Shall you not pine for what you have seen during these few hours spent in the glorious light of day?"

"No, Harry," replied the girl; "I shall like to think about it, but I am glad to go back with you to our dear old home."

"Nell!" said Harry, vainly attempting to steady his voice, "are you willing to be bound to me by the most sacred tie? Could you marry me, Nell?"

"Yes, Harry, I could, if you are sure that I am able to make you happy," answered the maiden, raising her innocent eyes to his.

Scarcely had she pronounced these words when an unaccountable phenomenon took place. The Rob Roy, still half a mile from land, experienced a violent shock. She suddenly grounded. No efforts of the engine could move her. The cause of this accident was simply that Loch Katrine was all at once emptied, as though an enormous fissure had opened in its bed. In a few seconds it had the appearance of a sea beach at low water. Nearly the whole of its contents had vanished into the bosom of the earth.

"My friends!" exclaimed James Starr, as the cause of this marvel became suddenly clear to him, "God help New Aberfoyle!"

CHAPTER XVI. A FINAL THREAT

ON that day, in the colliery of New Aberfoyle, work was going on in the usual regular way. In the distance could be heard the crash of great charges of dynamite, by which the carboniferous rocks were blasted. Here masses of coal were loosened by pick-ax and crowbar; there the perforating machines, with their harsh grating, bored through the masses of sandstone and schist.

Hollow, cavernous noises resounded on all sides. Draughts of air rushed along the ventilating galleries, and the wooden swing-doors slammed beneath their violent gusts. In the lower tunnels, trains of trucks kept passing along at the rate of fifteen miles an hour, while at their approach electric bells warned the workmen to cower down in the refuge places. Lifts went incessantly up and down, worked by powerful engines on the surface of the soil. Coal Town was throughout brilliantly lighted by the electric lamps at full power.

Mining operations were being carried on with the greatest activity; coal was being piled incessantly into the trucks, which went in hundreds to empty themselves into the corves at the bottom of the shaft. While parties of miners who had labored during the night were taking needful rest, the others worked without wasting an hour.

Old Simon Ford and Madge, having finished their dinner, were resting at the door of their cottage. Simon smoked a good pipe of tobacco, and from time to time the old couple spoke of Nell, of their boy, of Mr. Starr, and wondered how they liked their trip to the surface of the earth. Where would they be now? What would they be doing? How could they stay so long away from the mine without feeling homesick?

Just then a terrific roaring noise was heard. It was like the sound of a mighty cataract rushing down into the mine. The old people rose hastily. They perceived at once that the waters of Loch Malcolm were rising. A great wave, unfurling like a billow, swept up the bank and broke against the walls of the cottage. Simon caught his wife in his arms, and carried her to the upper part of their dwelling.

At the same moment, cries arose from all parts of Coal Town, which was threatened by a sudden inundation. The inhabitants fled for safety to the top of the schist rocks bordering the lake; terror spread in all directions; whole families in frantic haste rushed towards the tunnel in order to reach the upper regions of the pit.

It was feared that the sea had burst into the colliery, for its galleries and passages penetrated as far as the Caledonian Canal. In that case the entire excavation, vast as it was, would be completely flooded. Not a single
inhabitant of New Aberfoyle would escape death.

But when the foremost fugitives reached the entrance to the tunnel, they encountered Simon Ford, who had quitted his cottage. "Stop, my friends, stop!" shouted the old man; "if our town is to be overwhelmed, the floods will rush faster than you can; no one can possibly escape. But see! the waters are rising no further! it appears to me the danger is over."

"And our comrades at the far end of the works--what about them?" cried some of the miners.

"There is nothing to fear for them," replied Simon; "they are working on a higher level than the bed of the loch."

It was soon evident that the old man was in the right. The sudden influx of water had rushed to the very lowest bed of the vast mine, and its only ultimate effect was to raise the level of Loch Malcolm a few feet. Coal Town was uninjured, and it was reasonable to hope that no one had perished in the flood of water which had descended to the depths of the mine never yet penetrated by the workmen.

Simon and his men could not decide whether this inundation was owing to the overflow of a subterranean sheet of water penetrating fissures in the solid rock, or to some underground torrent breaking through its worn bed, and precipitating itself to the lowest level of the mine. But that very same evening they knew what to think about it, for the local papers published an account of the marvelous phenomenon which Loch Katrine had exhibited.

The surprising news was soon after confirmed by the four travelers, who, returning with all possible speed to the cottage, learned with extreme satisfaction that no serious damage was done in New Aberfoyle.

The bed of Loch Katrine had fairly given way. The waters had suddenly broken through by an enormous fissure into the mine beneath. Of Sir Walter Scott's favorite loch there was not left enough to wet the pretty foot of the Lady of the Lake; all that remained was a pond of a few acres at the further extremity.

This singular event made a profound sensation in the country. It was a thing unheard of that a lake should in the space of a few minutes empty itself, and disappear into the bowels of the earth. There was nothing for it but to erase Loch Katrine from the map of Scotland until (by public subscription) it could be refilled, care being of course taken, in the first place, to stop the rent up tight. This catastrophe would have been the death of Sir Walter Scott, had he still been in the world.

The accident was explicable when it was ascertained that, between the bed of the lake and the vast cavity beneath, the geological strata had become reduced to a thin layer, incapable of longer sustaining the weight of water.

Now, although to most people this event seemed plainly due to natural causes, yet to James Starr and his friends, Simon and Harry Ford, the question constantly recurred, was it not rather to be attributed to malevolence? Uneasy suspicions continually harassed their minds. Was their evil genius about to renew his persecution of those who ventured to work this rich mine?

At the cottage, some days later, James Starr thus discussed the matter with the old man and his son: "Well, Simon," said he, "to my thinking we must class this circumstance with the others for which we still seek elucidation, although it is no doubt possible to explain it by natural causes."

"I am quite of your mind, Mr. James," replied Simon, "but take my advice, and say nothing about it; let us make all researches ourselves."

"Oh, I know the result of such research beforehand!" cried the engineer.

"And what will it be, then?"

"We shall find proofs of malevolence, but not the malefactor."

"But he exists! he is there! Where can he lie concealed? Is it possible to conceive that the most depraved human being could, single-handed, carry out an idea so infernal as that of bursting through the bed of a lake? I believe I shall end by thinking, like Jack Ryan, that the evil demon of the mine revenges himself on us for having invaded his domain."

Nell was allowed to hear as little as possible of these discussions. Indeed, she showed no desire to enter into them, although it was very evident that she shared in the anxieties of her adopted parents. The melancholy in her countenance bore witness to much mental agitation.

It was at length resolved that James Starr, together with Simon and Harry, should return to the scene of the disaster, and endeavor to satisfy themselves as to the cause of it. They mentioned their project to no one. To those unacquainted with the group of facts on which it was based, the opinion of Starr and his friends could not fail to appear wholly inadmissible.

A few days later, the three friends proceeded in a small boat to examine the natural pillars on which had rested the solid earth forming the basin of Loch Katrine. They discovered that they had been right in suspecting that the massive columns had been undermined by blasting. The blackened traces of explosion were to be seen, the waters having subsided below the level of these mysterious operations. Thus the fall of a portion of the vast vaulted dome was proved to have been premeditated by man, and by man's hand had it been effected.

"It is impossible to doubt it," said James Starr; "and who can say what might not have happened had the sea,
instead of a little loch, been let in upon us?"

"You may well say that," cried the old overman, with a feeling of pride in his beloved mine; "for nothing less than a sea would have drowned our Aberfoyle. But, once more, what possible interest could any human being have in the destruction of our works?"

"It is quite incomprehensible," replied James Starr. "This case is something perfectly unlike that of a band of common criminals, who, concealing themselves in dens and caves, go forth to rob and pillage the surrounding country. The evil deeds of such men would certainly, in the course of three years have betrayed their existence and lurking-places. Neither can it be, as I sometimes used to think, that smugglers or coiners carried on their illegal practices in some distant and unknown corner of these prodigious caverns, and were consequently anxious to drive us out of them. But no one coins false money or obtains contraband goods only to conceal them!

"Yet it is clear that an implacable enemy has sworn the ruin of New Aberfoyle, and that some interest urges him to seek in every possible way to wreak his hatred upon us. He appears to be too weak to act openly, and lays his schemes in secret; but displays such intelligence as to render him a most formidable foe.

"My friends, he must understand better than we do the secrets of our domain, since he has all this time eluded our vigilance. He must be a man experienced in mining, skilled beyond the most skillful--that's certain, Simon! We have proof enough of that.

"Let me see! Have you never had a personal enemy, to whom your suspicions might point? Think well! There is such a thing as hatred which time never softens. Go back to recollections of your earliest days. What befalls us appears the work of a stern and patient will, and to explain it demands every effort of thought and memory."

Simon did not answer immediately--his mind evidently engaged in a close and candid survey of his past life. Presently, raising his head, "No," said he; "no! Heaven be my witness, neither Madge nor I have ever injured anybody. We cannot believe that we have a single enemy in the world."

"Ah! if Nell would only speak!" cried the engineer.

"Mr. Starr--and you, father," said Harry, "I do beg of you to keep silence on this matter, and not to question my poor Nell. I know she is very anxious and uneasy; and I feel positive that some great secret painfully oppresses her heart. Either she knows nothing it would be of any use for us to hear, or she considers it her duty to be silent. It is impossible to doubt her affection for us--for all of us. If at a future time she informs me of what she has hitherto concealed from us, you shall know about it immediately."

"So be it, then, Harry," answered the engineer; "and yet I must say Nell's silence, if she knows anything, is to me perfectly inexplicable."

Harry would have continued her defense; but the engineer stopped him, saying, "All right, Harry; we promise to say no more about it to your future wife."

"With my father's consent she shall be my wife without further delay."

"My boy," said old Simon, "your marriage shall take place this very day month. Mr. Starr, will you undertake the part of Nell's father?"

"You may reckon upon me for that, Simon," answered the engineer.

They then returned to the cottage, but said not a word of the result of their examinations in the mine, so that to the rest of its inhabitants, the bursting in of the vaulted roof of the caverns continued to be regarded as a mere accident. There was but a loch the less in Scotland.

Nell gradually resumed her customary duties, and Harry made good use of her little visit to the upper air, in the instructions he gave her. She enjoyed the recollections of life above ground, yet without regretting it. The somber region she had loved as a child, and in which her wedded life would be spent, was as dear to her as ever.

The approaching marriage created great excitement in New Aberfoyle. Good wishes poured in on all sides, and foremost among them were Jack Ryan's. He was detected busily practicing his best songs in preparation for the great day, which was to be celebrated by the whole population of Coal Town.

During the month preceding the wedding-day, there were more accidents occurring in New Aberfoyle than had ever been known in the place. One would have thought the approaching union of Harry and Nell actually provoked one catastrophe after another. These misfortunes happened chiefly at the further and lowest extremity of the works, and the cause of them was always in some way mysterious.

Thus, for instance, the wood-work of a distant gallery was discovered to be in flames, which were extinguished by Harry and his companions at the risk of their lives, by employing engines filled with water and carbonic acid, always kept ready in case of necessity. The lamp used by the incendiary was found; but no clew whatever as to who he could be.

Another time an inundation took place in consequence of the stanchions of a water-tank giving way; and Mr. Starr ascertained beyond a doubt that these supports had first of all been partially sawn through. Harry, who had been overseeing the works near the place at the time, was buried in the falling rubbish, and narrowly escaped death.
A few days afterwards, on the steam tramway, a train of trucks, which Harry was passing along, met with an obstacle on the rails, and was overturned. It was then discovered that a beam had been laid across the line. In short, events of this description became so numerous that the miners were seized with a kind of panic, and it required all the influence of their chiefs to keep them on the works.

"You would think that there was a whole band of these ruffians," Simon kept saying, "and we can't lay hands on a single one of them."

Search was made in all directions. The county police were on the alert night and day, yet discovered nothing. The evil intentions seeming specially designed to injure Harry. Starr forbade him to venture alone beyond the ordinary limits of the works.

They were equally careful of Nell, although, at Harry's entreaty, these malicious attempts to do harm were concealed from her, because they might remind her painfully of former times. Simon and Madge watched over her by day and by night with a sort of stern solicitude. The poor child yielded to their wishes, without a remark or a complaint. Did she perceive that they acted with a view to her interest? Probably she did. And on her part, she seemed to watch over others, and was never easy unless all whom she loved were together in the cottage.

When Harry came home in the evening, she could not restrain expressions of child-like joy, very unlike her usual manner, which was rather reserved than demonstrative. As soon as day broke, she was astir before anyone else, and her constant uneasiness lasted all day until the hour of return home from work.

Harry became very anxious that their marriage should take place. He thought that, when the irrevocable step was taken, malevolence would be disarmed, and that Nell would never feel safe until she was his wife. James Starr, Simon, and Madge, were all of the same opinion, and everyone counted the intervening days, for everyone suffered from the most uncomfortable forebodings.

It was perfectly evident that nothing relating to Nell was indifferent to this hidden foe, whom it was impossible to meet or to avoid. Therefore it seemed quite possible that the solemn act of her marriage with Harry might be the occasion of some new and dreadful outbreak of his hatred.

One morning, a week before the day appointed for the ceremony, Nell, rising early, went out of the cottage before anyone else. No sooner had she crossed the threshold than a cry of indescribable anguish escaped her lips. Her voice was heard throughout the dwelling; in a moment, Madge, Harry, and Simon were at her side. Nell was pale as death, her countenance agitated, her features expressing the utmost horror. Unable to speak, her eyes were riveted on the door of the cottage, which she had just opened.

With rigid fingers she pointed to the following words traced upon it during the night: "Simon Ford, you have robbed me of the last vein in our old pit. Harry, your son, has robbed me of Nell. Woe betide you! Woe betide you all! Woe betide New Aberfoyle!--SILFAX."

"Silfax!" exclaimed Simon and Madge together.

"Who is this man?" demanded Harry, looking alternately at his father and at the maiden.

"Silfax!" repeated Nell in tones of despair, "Silfax!"--and, murmuring this name, her whole frame shuddering with fear and agitation, she was borne away to her chamber by old Madge.

James Starr, hastening to the spot, read the threatening sentences again and again.

"The hand which traced these lines," said he at length, "is the same which wrote me the letter contradicting yours, Simon. The man calls himself Silfax. I see by your troubled manner that you know him. Who is this Silfax?"

CHAPTER XVII. THE "MONK"

THIS name revealed everything to the old overman. It was that of the last "monk" of the Dochart pit.

In former days, before the invention of the safety-lamp, Simon had known this fierce man, whose business it was to go daily, at the risk of his life, to produce partial explosions of fire-damp in the passages. He used to see this strange solitary being, prowling about the mine, always accompanied by a monstrous owl, which he called Harfang, who assisted him in his perilous occupation, by soaring with a lighted match to places Silfax was unable to reach.

One day this old man disappeared, and at the same time also, a little orphan girl born in the mine, who had no relation but himself, her great-grandfather. It was perfectly evident now that this child was Nell. During the fifteen years, up to the time when she was saved by Harry, they must have lived in some secret abyss of the mine.

The old overman, full of mingled compassion and anger, made known to the engineer and Harry all that the name of Silfax had revealed to him. It explained the whole mystery. Silfax was the mysterious being so long vainly sought for in the depths of New Aberfoyle.

"So you knew him, Simon?" demanded Mr. Starr.

"Yes, that I did," replied the overman. "The Harfang man, we used to call him. Why, he was old then! He must be fifteen or twenty years older than I am. A wild, savage sort of fellow, who held aloof from everyone and was
known to fear nothing—neither fire nor water. It was his own fancy to follow the trade of 'monk,' which few would have liked. The constant danger of the business had unsettled his brain. He was prodigiously strong, and he knew the mine as no one else—at any rate, as well as I did. He lived on a small allowance. In faith, I believed him dead years ago."

"But," resumed James Starr, "what does he mean by those words, 'You have robbed me of the last vein of our old mine'?"

"Ah! there it is," replied Simon; "for a long time it had been a fancy of his—I told you his mind was deranged—that he had a right to the mine of Aberfoyle; so he became more and more savage in temper the deeper the Dochart pit—his pit!—was worked out. It just seemed as if it was his own body that suffered from every blow of the pickax. You must remember that, Madge?"

"Ay, that I do, Simon," replied she.

"I can recollect all this," resumed Simon, "since I have seen the name of Silfax on the door. But I tell you, I thought the man was dead, and never imagined that the spiteful being we have so long sought for could be the old fireman of the Dochart pit."

"Well, now, then," said Starr, "it is all quite plain. Chance made known to Silfax the new vein of coal. With the egotism of madness, he believed himself the owner of a treasure he must conceal and defend. Living in the mine, and wandering about day and night, he perceived that you had discovered the secret, and had written in all haste to beg me to come. Hence the letter contradicting yours; hence, after my arrival, all the accidents that occurred, such as the block of stone thrown at Harry, the broken ladder at the Yarrow shaft, the obstruction of the openings into the wall of the new cutting; hence, in short, our imprisonment, and then our deliverance, brought about by the kind assistance of Nell, who acted of course without the knowledge of this man Silfax, and contrary to his intentions."

"You describe everything exactly as it must have happened, Mr. Starr," returned old Simon. "The old 'Monk' is mad enough now, at any rate!"

"All the better," quoth Madge.

"I don't know that," said Starr, shaking his head; "it is a terrible sort of madness this."

"Ah! now I understand that the very thought of him must have terrified poor little Nell, and also I see that she could not bear to denounce her grandfather. What a miserable time she must have had of it with the old man!"

"Miserable with a vengeance," replied Simon, "between that savage and his owl, as savage as himself. Depend upon it, that bird isn't dead. That was what put our lamp out, and also so nearly cut the rope by which Harry and Nell were suspended."

"And then, you see," said Madge, "this news of the marriage of our son with his granddaughter added to his rancor and ill-will."

"To be sure," said Simon. "To think that his Nell should marry one of the robbers of his own coal mine would just drive him wild altogether."

"He will have to make up his mind to it, however," cried Harry. "Mad as he is, we shall manage to convince him that Nell is better off with us here than ever she was in the caverns of the pit. I am sure, Mr. Starr, if we could only catch him, we should be able to make him listen to reason."

"My poor Harry! there is no reasoning with a madman," replied the engineer. "Of course it is better to know your enemy than not; but you must not fancy all is right because we have found out who he is. We must be on our guard, my friends; and to begin with, Harry, you positively must question Nell. She will perceive that her silence is no longer reasonable. Even for her grandfather's own interest, she ought to speak now. For his own sake, as well as for ours, these insane plots must be put a stop to."

"I feel sure, Mr. Starr," answered Harry, "that Nell will of herself propose to tell you what she knows. You see it was from a sense of duty that she has been silent hitherto. My mother was very right to take her to her room just now. She much needed time to recover her spirits; but now I will go for her."

"You need not do so, Harry," said the maiden in a clear and firm voice, as she entered at that moment the room in which they were. Nell was very pale; traces of tears were in her eyes; but her whole manner showed that she had nervèd herself to act as her loyal heart dictated as her duty.

"Nell!" cried Harry, springing towards her.

The girl arrested her lover by a gesture, and continued, "Your father and mother, and you, Harry, must now know all. And you too, Mr. Starr, must remain ignorant of nothing that concerns the child you have received, and whom Harry—unfortunately for him, alas!—drew from the abyss."

"Oh, Nell! what are you saying?" cried Harry.

"Allow her to speak," said James Starr in a decided tone.

"I am the granddaughter of old Silfax," resumed Nell. "I never knew a mother till the day I came here," added she, looking at Madge.
“Blessed be that day, my daughter!” said the old woman.

“I knew no father till I saw Simon Ford,” continued Nell; “nor friend till the day when Harry’s hand touched mine. Alone with my grandfather I have lived during fifteen years in the remote and most solitary depths of the mine. I say WITH my grandfather, but I can scarcely use the expression, for I seldom saw him. When he disappeared from Old Aberfoyle, he concealed himself in caverns known only to himself. In his way he was kind to me, dreadful as he was; he fed me with whatever he could procure from outside the mine; but I can dimly recollect that in my earliest years I was the nursling of a goat, the death of which was a bitter grief to me. My grandfather, seeing my distress, brought me another animal—a dog he said it was. But, unluckily, this dog was lively, and barked. Grandfather did not like anything cheerful. He had a horror of noise, and had taught me to be silent; the dog he could not teach to be quiet, so the poor animal very soon disappeared. My grandfather’s companion was a ferocious bird, Harfang, of which, at first, I had a perfect horror; but this creature, in spite of my dislike to it, took such a strong affection for me, that I could not help returning it. It even obeyed me better than its master, which used to make me quite uneasy, for my grandfather was jealous. Harfang and I did not dare to let him see us much together; we both knew it would be dangerous. But I am talking too much about myself: the great thing is about you.”

“No, my child,” said James Starr, “tell us everything that comes to your mind.”

“My grandfather,” continued Nell, “always regarded your abode in the mine with a very evil eye—not that there was any lack of space. His chosen refuge was far—very far from you. But he could not bear to feel that you were there. If I asked any questions about the people up above us, his face grew dark, he gave no answer, and continued quite silent for a long time afterwards. But when he perceived that, not content with the old domain, you seemed to think of encroaching upon his, then indeed his anger burst forth. He swore that, were you to succeed in reaching the new mine, you should assuredly perish. Notwithstanding his great age, his strength is astonishing, and his threats used to make me tremble.”

“Go on, Nell, my child,” said Simon to the girl, who paused as though to collect her thoughts.

“On the occasion of your first attempt,” resumed Nell, “as soon as my grandfather saw that you were fairly inside the gallery leading to New Aberfoyle, he stopped up the opening, and turned it into a prison for you. I only knew you as shadows dimly seen in the gloom of the pit, but I could not endure the idea that you would die of hunger in these horrid places; and so, at the risk of being detected, I succeeded in obtaining bread and water for you during some days. I should have liked to help you to escape, but it was so difficult to avoid the vigilance of my grandfather. You were about to die. Then arrived Jack Ryan and the others. By the providence of God I met with them, and instantly guided them to where you were. When my grandfather discovered what I had done, his rage against me was terrible. I expected death at his hands. After that my life became insupportable to me. My grandfather completely lost his senses. He proclaimed himself King of Darkness and Flame; and when he heard your tools at work on coal-beds which he considered entirely his own, he became furious and beat me cruelly. I would have fled from him, but it was impossible, so narrowly did he watch me. At last, in a fit of ungovernable fury, he threw me down into the abyss where you found me, and disappeared, vainly calling on Harfang, which faithfully stayed by me, to follow him. I know not how long I remained there, but I felt I was at the point of death when you, my Harry, came and saved me. But now you all see that the grandchild of old Silfax can never be the wife of Harry Ford, because it would be certain death to you all!”

“No!” cried Harry.

“No,” continued the maiden, “my resolution is taken. By one means only can your ruin be averted; I must return to my grandfather. He threatens to destroy the whole of New Aberfoyle. His is a soul incapable of mercy or forgiveness, and no mortal can say to what horrid deed the spirit of revenge will lead him. My duty is clear; I should have taught me what happiness is. Whatever may befall, believe that my whole heart remains with you.”

“Nell! is it possible you would leave us?”

James Starr put them all aside with an air of authority, and, going straight up to Nell, he took both her hands in his, saying quietly, “Very right, my child; you have said exactly what you ought to say; and now listen to what we have to say in reply. We shall not let you go away; if necessary, we shall keep you by force. Do you think we could be so base as to accept of your generous proposal? These threats of Silfax are formidable—no doubt about it! But, after all, a man is but a man, and we can take precautions. You will tell us, will you not, even for his own sake, all you can about his habits and his lurking-places? All we want to do is to put it out of his power to do harm, and perhaps bring him to reason.”

“You want to do what is quite impossible,” said Nell. “My grandfather is everywhere and nowhere. I have never seen his retreats. I have never seen him sleep. If he meant to conceal himself, he used to leave me alone, and vanish. When I took my resolution, Mr. Starr, I was aware of everything you could say against it. Believe me, there is but
one way to render Silfax powerless, and that will be by my return to him. Invisible himself, he sees everything that goes on. Just think whether it is likely he could discover your very thoughts and intentions, from that time when the letter was written to Mr. Starr, up to now that my marriage with Harry has been arranged, if he did not possess the extraordinary faculty of knowing everything. As far as I am able to judge, my grandfather, in his very insanity, is a man of most powerful mind. He formerly used to talk to me on very lofty subjects. He taught me the existence of God, and never deceived me but on one point, which was--that he made me believe that all men were base and perfidious, because he wished to inspire me with his own hatred of all the human race. When Harry brought me to the cottage, you thought I was simply ignorant of mankind, but, far beyond that, I was in mortal fear of you all. Ah, forgive me! I assure you, for many days I believed myself in the power of wicked wretches, and I longed to escape. You, Madge, first led me to perceive the truth, not by anything you said, but by the sight of your daily life, for I saw that your husband and son loved and respected you! Then all these good and happy workmen, who so revere and trust Mr. Starr, I used to think they were slaves; and when, for the first time, I saw the whole population of Aberfoyle come to church and kneel down to pray to God, and praise Him for His infinite goodness, I said to myself, 'My grandfather has deceived me.' But now, enlightened by all you have taught me, I am inclined to think he himself is deceived. I mean to return to the secret passages I formerly frequented with him. He is certain to be on the watch. I will call to him; he will hear me, and who knows but that, by returning to him, I may be able to bring him to the knowledge of the truth?"

The maiden spoke without interruption, for all felt that it was good for her to open her whole heart to her friends. But when, exhausted by emotion, and with eyes full of tears, she ceased speaking, Harry turned to old Madge and said, "Mother, what should you think of the man who could forsake the noble girl whose words you have been listening to?"

"I should think he was a base coward," said Madge, "and, were he my son, I should renounce and curse him."

"Nell, do you hear what our mother says?" resumed Harry. "Wherever you go I will follow you. If you persist in leaving us, we will go away together."

"Harry! Harry!" cried Nell.

Overcome by her feelings, the girl's lips blanched, and she sank into the arms of Madge, who begged she might be left alone with her.

CHAPTER XVIII. NELL'S WEDDING

IT was agreed that the inhabitants of the cottage must keep more on their guard than ever. The threats of old Silfax were too serious to be disregarded. It was only too possible that he possessed some terrible means by which the whole of Aberfoyle might be annihilated.

Armed sentinels were posted at the various entrances to the mine, with orders to keep strict watch day and night. Any stranger entering the mine was brought before James Starr, that he might give an account of himself. There being no fear of treason among the inhabitants of Coal Town, the threatened danger to the subterranean colony was made known to them. Nell was informed of all the precautions taken, and became more tranquil, although she was not free from uneasiness. Harry's determination to follow her wherever she went compelled her to promise not to escape from her friends.

During the week preceding the wedding, no accident whatever occurred in Aberfoyle. The system of watching was carefully maintained, but the miners began to recover from the panic, which had seriously interrupted the work of excavation. James Starr continued to look out for Silfax. The old man having vindictively declared that Nell should never marry Simon's son, it was natural to suppose that he would not hesitate to commit any violent deed which would hinder their union.

The examination of the mine was carried on minutely. Every passage and gallery was searched, up to those higher ranges which opened out among the ruins of Dundonald Castle. It was rightly supposed that through this old building Silfax passed out to obtain what was needful for the support of his miserable existence (which he must have done, either by purchasing or thieving).

As to the "fire-maidens," James Starr began to think that appearance must have been produced by some jet of fire-damp gas which, issuing from that part of the pit, could be lighted by Silfax. He was not far wrong; but all search for proof of this was fruitless, and the continued strain of anxiety in this perpetual effort to detect a malignant and invisible being rendered the engineer--outwardly calm--an unhappy man.

As the wedding-day approached, his dread of some catastrophe increased, and he could not but speak of it to the old overman, whose uneasiness soon more than equaled his own. At length the day came. Silfax had given no token of existence.
By daybreak the entire population of Coal Town was astir. Work was suspended; overseers and workmen alike desired to do honor to Simon Ford and his son. They all felt they owed a large debt of gratitude to these bold and persevering men, by whose means the mine had been restored to its former prosperity. The ceremony was to take place at eleven o'clock, in St. Giles's chapel, which stood on the shores of Loch Malcolm.

At the appointed time, Harry left the cottage, supporting his mother on his arm, while Simon led the bride. Following them came Starr, the engineer, composed in manner, but in reality nerved to expect the worst, and Jack Ryan, stepping superb in full Highland piper's costume. Then came the other mining engineers, the principal people of Coal Town, the friends and comrades of the old overman--every member of this great family of miners forming the population of New Aberfoyle.

In the outer world, the day was one of the hottest of the month of August, peculiarly oppressive in northern countries. The sultry air penetrated the depths of the coal mine, and elevated the temperature. The air which entered through the ventilating shafts, and the great tunnel of Loch Malcolm, was charged with electricity, and the barometer, it was afterwards remarked, had fallen in a remarkable manner. There was, indeed, every indication that a storm might burst forth beneath the rocky vault which formed the roof of the enormous crypt of the very mine itself.

But the inhabitants were not at that moment troubling themselves about the chances of atmospheric disturbance above ground. Everybody, as a matter of course, had put on his best clothes for the occasion. Madge was dressed in the fashion of days gone by, wearing the "toy" and the "rokelay," or Tartan plaid, of matrons of the olden time, old Simon wore a coat of which Bailie Nicol Jarvie himself would have approved.

Nell had resolved to show nothing of her mental agitation; she forbade her heart to beat, or her inward terrors to betray themselves, and the brave girl appeared before all with a calm and collected aspect. She had declined every ornament of dress, and the very simplicity of her attire added to the charming elegance of her appearance. Her hair was bound with the "snood," the usual head-dress of Scottish maidens.

All proceeded towards St. Giles's chapel, which had been handsomely decorated for the occasion.

The electric discs of light which illuminated Coal Town blazed like so many suns. A luminous atmosphere pervaded New Aberfoyle. In the chapel, electric lamps shed a glow over the stained-glass windows, which shone like fiery kaleidoscopes. At the porch of the chapel the minister awaited the arrival of the wedding party.

It approached, after having passed in stately procession along the shore of Loch Malcolm. Then the tones of the organ were heard, and, preceded by the minister, the group advanced into the chapel. The Divine blessing was first invoked on all present. Then Harry and Nell remained alone before the minister, who, holding the sacred book in his hand, proceeded to say, "Harry, will you take Nell to be your wife, and will you promise to love her always?"

"I promise," answered the young man in a firm and steady voice.

"And you, Nell," continued the minister, "will you take Harry to be your husband, and--"

Before he could finish the sentence, a prodigious noise resounded from without. One of the enormous rocks, on which was formed the terrace overhanging the banks of Loch Malcolm, had suddenly given way and opened without explosion, disclosing a profound abyss, into which the waters were now wildly plunging.

In another instant, among the shattered rocks and rushing waves appeared a canoe, which a vigorous arm propelled along the surface of the lake. In the canoe was seen the figure of an old man standing upright. He was clothed in a dark mantle, his hair was dishevelled, a long white beard fell over his breast, and in his hand he bore a lighted Davy safety lamp, the flame being protected by the metallic gauze of the apparatus.

In a loud voice this old man shouted, "The fire-damp is upon you! Woe--woe betide ye all!"

At the same moment the slight smell peculiar to carburetted hydrogen was perceptibly diffused through the atmosphere. And, in truth, the fall of the rock had made a passage of escape for an enormous quantity of explosive gas, accumulated in vast cavities, within the which the waters were now wildly plunging.

Jets and streams of the fire-damp now rose upward in the vaulted dome; and well did that fierce old man know that the consequence of what he had done would be to render explosive the whole atmosphere of the mine.

James Starr and several others, having hastily quitted the chapel, and perceived the imminence of the danger, now rushed back, crying out in accents of the utmost alarm, "Fly from the mine! Fly instantly from the mine!"

"Now for the fire-damp! Here comes the fire-damp!" yelled the old man, urging his canoe further along the lake.

Harry with his bride, his father and his mother, left the chapel in haste and in terror.

"Fly! fly for your lives!" repeated James Starr. Alas! it was too late to fly! Old Silfax stood there, prepared to fulfill his last dreadful threat--prepared to stop the marriage of Nell and Harry by overwhelming the entire population of the place beneath the ruins of the coal mine.

As he stood ready to accomplish this act of vengeance, his enormous owl, whose white plumage was marked with black spots, was seen hovering directly above his head.

At that moment a man flung himself into the waters of the lake, and swam vigorously towards the canoe.

It was Jack Ryan, fully determined to reach the madman before he could do the dreadful deed of destruction.
Silfax saw him coming. Instantly he smashed the glass of his lamp, and, snatching out the burning wick, waved it in the air.

Silence like death fell upon the astounded multitude. James Starr, in the calmness of despair, marvelled that the inevitable explosion was even for a moment delayed.

Silfax, gazing upwards with wild and contracted features, appeared to become aware that the gas, lighter than the lower atmosphere, was accumulating far up under the dome; and at a sign from him the owl, seizing in its claw the lighted match, soared upwards to the vaulted roof, towards which the madman pointed with outstretched arm.

Another second and New Aberfoyle would be no more.

Suddenly Nell sprang from Harry's arms, and, with a bright look of inspiration, she ran to the very brink of the waters of the lake. "Harfang! Harfang!" cried she in a clear voice; "here! come to me!"

The faithful bird, surprised, appeared to hesitate in its flight. Presently, recognizing Nell's voice, it dropped the burning match into the water, and, describing a wide circle, flew downwards, alighting at the maiden's feet.

Then a terrible cry echoed through the vaulted roofs. It was the last sound uttered by old Silfax.

Just as Jack Ryan laid his hand on the edge of the canoe, the old man, foiled in his purpose of revenge, cast himself headlong into the waters of the lake.

"Save him! oh, save him!" shrieked Nell in a voice of agony. Immediately Harry plunged into the water, and, swimming towards Jack Ryan, he dived repeatedly.

But his efforts were useless. The waters of Loch Malcolm yielded not their prey: they closed forever over Silfax.

CHAPTER XIX. THE LEGEND OF OLD SILFAX

Six months after these events, the marriage, so strangely interrupted, was finally celebrated in St. Giles's chapel, and the young couple, who still wore mourning garments, returned to the cottage. James Starr and Simon Ford, henceforth free from the anxieties which had so long distressed them, joyously presided over the entertainment which followed the ceremony, and prolonged it to the following day.

On this memorable occasion, Jack Ryan, in his favorite character of piper, and in all the glory of full dress, blew up his chanter, and astonished the company by the unheard of achievement of playing, singing, and dancing all at once.

It is needless to say that Harry and Nell were happy. These loving hearts, after the trials they had gone through found in their union the happiness they deserved.

As to Simon Ford, the ex-overman of New Aberfoyle, he began to talk of celebrating his golden wedding, after fifty years of marriage with good old Madge, who liked the idea immensely herself.

"And after that, why not golden wedding number two?"

"You would like a couple of fifties, would you, Mr. Simon?" said Jack Ryan.

"All right, my boy," replied the overman quietly, "I see nothing against it in this fine climate of ours, and living far from the luxury and intemperance of the outer world."

Will the dwellers in Coal Town ever be called to witness this second ceremony? Time will show. Certainly the strange bird of old Silfax seemed destined to attain a wonderful longevity. The Harfang continued to haunt the gloomy recesses of the cave. After the old man's death, Nell had attempted to keep the owl, but in a very few days he flew away. He evidently disliked human society as much as his master had done, and, besides that, he appeared to have a particular spite against Harry. The jealous bird seemed to remember and hate him for having carried off Nell from the deep abyss, notwithstanding all he could do to prevent him. Still, at long intervals, Nell would see the creature hovering above Loch Malcolm.

Could he possibly be watching for his friend of yore? Did he strive to pierce, with keen eye, the depths which had engulfed his master?

The history of the Harfang became legendary, and furnished Jack Ryan with many a tale and song. Thanks to him, the story of old Silfax and his bird will long be preserved, and handed down to future generations of the Scottish peasantry.

THE WAIF OF THE "CYNTHIA."

By

Jules Verne and André Laurie
CHAPTER I.
MR. MALARIUS' FRIEND.

There is probably neither in Europe nor anywhere else a scholar whose face is more universally known than that of Dr. Schwaryencrona, of Stockholm. His portrait appears on the millions of bottles with green seals, which are sent to the confines of the globe.

Truth compels us to state that these bottles only contain cod liver oil, a good and useful medicine; which is sold to the inhabitants of Norway for a "couronnes," which is worth one franc and thirty-nine centimes.

Formerly this oil was made by the fishermen, but now the process is a more scientific one, and the prince of this special industry is the celebrated Dr. Schwaryencrona.

There is no one who has not seen his pointed beard, his spectacles, his hooked nose, and his cap of otter skin. The engraving, perhaps, is not very fine, but it is certainly a striking likeness. A proof of this is what happened one day in a primary school in Noroe, on the western coast of Norway, a few leagues from Bergen.

Two o'clock had struck. The pupils were in their classes in the large, sanded hall—the girls on the left and the boys on the right—occupied in following the demonstration which their teacher, Mr. Malarius, was making on the black-board. Suddenly the door opened, and a fur coat, fur boots, fur gloves, and a cap of otter, made their appearance on the threshold.

The pupils immediately rose respectfully, as is usual when a stranger visits the class-room. None of them had ever seen the new arrival before, but they all whispered when they saw him, "Doctor Schwaryencrona," so much did the picture engraved on the bottles resemble the doctor.

We must say that the pupils of Mr. Malarius had the bottles continually before their eyes, for one of the principal manufactories of the doctor was at Noroe. But for many years the learned man had not visited that place, and none of the children consequently could have beheld him in the flesh. In imagination it was another matter, for they often spoke of him in Noroe, and his ears must have often tingled, if the popular belief has any foundation. Be this as it may, his recognition was unanimous, and a triumph for the unknown artist who had drawn his portrait—a triumph of which this modest artist might justly be proud, and of which more than one photographer in the world might well be jealous.

But what astonished and disappointed the pupils a little was to discover that the doctor was a man below the ordinary height, and not the giant which they had imagined him to be. How could such an illustrious man be satisfied with a height of only five feet three inches? His gray head hardly reached the shoulder of Mr. Malarius, and he was already stooping with age. He was also much thinner than the doctor, which made him appear twice as tall. His large brown overcoat, to which long use had given a greenish tint, hung loosely around him; he wore short breeches and shoes with buckles, and from beneath his black silk cap a few gray locks had made their escape. His rosy cheeks and smiling countenance gave an expression of great sweetness to his face. He also wore spectacles, through which he did not cast piercing glances like the doctor, but through them his blue eyes shone with inexhaustible benevolence.

In the memory of his pupils Mr. Malarius had never punished a scholar. But, nevertheless, they all respected him, and loved him. He had a brave soul, and all the world knew it very well. They were not ignorant of the fact that in his youth he had passed brilliant examinations, and that he had been offered a professorship in a great university, where he might have attained to honor and wealth. But he had a sister, poor Kristina, who was always ill and suffering. She would not have left her native village for the world, for she felt sure that she would die if they removed to the city. So Mr. Malarius had submitted gently to her wishes, and sacrificed his own prospects. He had accepted the humble duty of the village school-master, and when twenty years afterward Kristina had died, blessing him, he had become accustomed to his obscure and retired life, and did not care to change it. He was absorbed in his work, and forgot the world. He found a supreme pleasure in becoming a model instructor, and in having the best-conducted school in his country. Above all, he liked to instruct his best pupils in the higher branches, to initiate them into scientific studies, and in ancient and modern literature, and give them the information which is usually the portion of the higher classes, and not bestowed upon the children of fishermen and peasants.

"What is good for one class, is good for the other," he argued. "If the poor have not as many comforts, that is no reason why they should be denied an acquaintance with Homer and Shakespeare; the names of the stars which guide them across the ocean, or of the plants which grow on the earth. They will soon see them laid low by their ploughs, but in their infancy at least they will have drunk from pure sources, and participated in the common patrimony of mankind." In more than one country this system would have been thought imprudent, and calculated to disgust the lowly with their humble lot in life, and lead them to wander away in search of adventures. But in Norway nobody thinks of these things. The patriarchal sweetness of their dispositions, the distance between the villages, and the laborious habits of the people, seem to remove all danger of this kind. This higher instruction is more frequent than a stranger would believe to be possible. Nowhere is education more generally diffused, and nowhere is it carried so
high; as well in the poorest rural schools, as in the colleges.

Therefore the Scandinavian Peninsula may flatter herself, that she has produced more learned and distinguished
men in proportion to her population, than any other region of Europe. The traveler is constantly astonished by the
contrast between the wild and savage aspect of nature, and the manufactures, and works of art, which represent the
most refined civilization.

But perhaps it is time for us to return to Noroe, and Dr. Schwaryencrona, whom we have left on the threshold of
the school. If the pupils had been quick to recognize him, although they had never seen him before, it had been
different with the instructor, whose acquaintance with him dated further back.

"Ah! good-day, my dear Malarius!" said the visitor cordially, advancing with outstretched hands toward the
school-master.

"Sir! you are very welcome," answered the latter, a little surprised, and somewhat timidly, as is customary with
all men who have lived secluded lives; and are interrupted in the midst of their duties. "But excuse me if I ask whom
I have the honor of--"

"What! Have I changed so much since we ran together over the snow, and smoked our long pipes at Christiania;
have you forgotten our Krauss boarding-house, and must I name your comrade and friend?"

"Schwaryencrona!" cried Mr. Malarius. "Is it possible.--Is it really you.--Is it the doctor?"

"Oh! I beg of you, omit all ceremony. I am your old friend Roff, and you are my brave Olaf, the best, the dearest
friend of my youth. Yes, I know you well. We have both changed a little in thirty years; but our hearts are still
young, and we have always kept a little corner in them for those whom we learned to love, when we were students,
and eat our dry bread side by side."

The doctor laughed, and squeezed the hands of Mr. Malarius, whose eyes were moist.

"My dear friend, my good excellent doctor, you must not stay here," said he; "I will give all these youngsters a
holiday, for which they will not be sorry, I assure you, and then you must go home with me."

"Not at all!" declared the doctor, turning toward the pupils who were watching this scene with lively interest. "I
must neither interfere with your work, nor the studies of these youths. If you wish to give me great pleasure, you
will permit me to sit here near you, while you resume your teaching."

"I would willingly do so," answered Mr. Malarius, "but to tell you the truth, I have no longer any heart for
geometry; besides, having mentioned a holiday, I do not like to disappoint the children. There is one way of
arranging the matter however. If Doctor Schwaryencrona would deign to do my pupils the honor of questioning
them about their studies, and then I will dismiss them for the rest of the day."

"An excellent idea. I shall be only too happy to do so. I will become their examiner."

Then taking the master's seat, he addressed the school:

"Tell me," asked the doctor, "who is the best pupil?"

"Erik Hersebom!" answered fifty youthful voices unhesitatingly.

"Ah! Erik Hersebom! Well, Erik, will you come here?"

A young boy, about twelve years of age, who was seated on the front row of benches, approached his chair. He
was a grave, serious-looking child, whose pensive cast of countenance, and large deep set eyes, would have attracted
attention anywhere, and he was the more remarkable, because of the blonde heads by which he was surrounded.
While all his companions of both sexes had hair the color of flax, rosy complexions, and blue eyes, his hair was of
deep chestnut color, like his eyes, and his skin was brown. He had not the prominent cheek bones, the short nose,
and the stout frame of these Scandinavian children. In a word, by his physical characteristics so plainly marked, it
was evident that he did not belong to the race by whom he was surrounded.

He was clothed like them in the coarse cloth of the country, made in the style common among the peasantry of
Bergen; but the delicacy of his limbs, the smallness of his head, the easy elegance of his poise, and the natural
gracefulness of his movements and attitudes, all seemed to denote a foreign origin.

No physiologist could have helped being struck at once by these peculiarities, and such was the case with Dr.
Schwaryencrona.

However, he had no motive for calling attention to these facts, and he simply proceeded to fulfill the duty which
he had undertaken.

"Where shall we begin--with grammar?" he asked the young lad.

"I am at the command of the doctor," answered Erik, modestly.

The doctor then gave him two or three simple questions, but was astonished to hear him answer them, not only
in the Swedish language, but also in French and English. It was the usual custom of Mr. Malarius, who contended
that it was as easy to learn three languages at once as it was to learn only one.

"You teach them French and English then?" said the doctor, turning toward his friend.

"Why not? also the elements of Greek and Latin. I do not see what harm it can do them."
"Nor I," said the doctor, laughing, and Erik Hersebom translated several sentences very correctly.

In one of the sentences, reference was made to the hemlock drunk by Socrates, and Mr. Malarius asked the doctor to question him as to the family which this plant belonged to.

Erik answered without hesitation "that it was one of the family of umbelliferous plants," and described them in detail.

From botany they passed to geometry, and Erik demonstrated clearly a theorem relative to the sum of the angles of a triangle.

The doctor became every moment more and more surprised.

"Let us have a little talk about geography," he said. "What sea is it which bounds Scandinavia, Russia and Siberia on the north?"

"It is the Arctic Ocean."

"And what waters does this ocean communicate with?"

"The Atlantic on the west, and the Pacific on the east."

"Can you name two or three of the most important seaports on the Pacific?"

"I can mention Yokohama, in Japan; Melbourne, in Australia; San Francisco, in the State of California."

"Well, since the Arctic Ocean communicates on one side with the Atlantic, and on the other with the Pacific, do you not think that the shortest route to Yokohama or San Francisco would be through this Arctic Ocean?"

"Assuredly," answered Erik, "it would be the shortest way, if it were practicable, but all navigators who have attempted to follow it have been prevented by ice, and been compelled to renounce the enterprise, when they have escaped death."

"Have they often attempted to discover the north-east passage?"

"At least fifty times during the last three centuries, but without success."

"Could you mention a few of the expeditions?"

"The first was organized in 1523, under the direction of Francois Sebastian Cabot. It consisted of three vessels under the command of the unfortunate Sir Hugh Willoughby, who perished in Lapland, with all his crew. One of his lieutenants, Chancellor, was at first successful, and opened a direct route through the Polar Sea. But he also, while making a second attempt, was shipwrecked, and perished. A captain, Stephen Borough, who was sent in search of him, succeeded in making his way through the strait which separates Nova Zembla from the Island of Waigate and in penetrating into the Sea of Kara. But the fog and ice prevented him from going any further."

"Two expeditions which were sent out in 1580 were equally unsuccessful. The project was nevertheless revived by the Hollanders about fifteen years later, and they fitted out, successively, three expeditions, under the command of Barentz."

"In 1596, Barentz also perished, in the ice of Nova Zembla."

"Ten years later Henry Hudson was sent out, but also failed."

"The Danes were not more successful in 1653."

"In 1676, Captain John Wood was also shipwrecked. Since that period the north-east passage has been considered impracticable, and abandoned by the maritime powers."

"Has it never been attempted since that epoch?"

"It has been by Russia, to whom it would be of immense advantage, as well as to all the northern nations, to find a direct route between her shores and Siberia. She has sent out during a century no less than eighteen expeditions to explore the coasts of Nova Zembla, the Sea of Kara, and the eastern and western coasts of Siberia. But, although these expeditions have made these places better known, they have also demonstrated the impossibility of forcing a passage through the Arctic Ocean. The academician Van Baer, who made the last attempt in 1837, after Admiral Lutke and Pachtusow, declared emphatically that this ocean is simply a glacier, as impracticable for vessels as it would be if it were a continent."

"Must we, then, renounce all hopes of discovering a north-east passage?"

"That seems to be the conclusion which we must arrive at, from the failure of these numerous attempts. It is said, however, that a great navigator, named Nordenskiold, wishes to make another attempt, after he has prepared himself by first exploring portions of this polar sea. If he then considers it practicable, he may get up another expedition."
"Mr. Malarius may be proud of you, then," said the doctor, turning toward the master.
"I am very well satisfied with Erik," said the latter.
"He has been my pupil for eight years. When I first took him he was very young, and he has always been at the head of his section."

The doctor became silent. His piercing eyes were fixed upon Erik, with a singular intensity. He seemed to be considering some problem, which it would not be wise to mention.
"He could not have answered my question better and I think it useless to continue the examination," he said at last. "I will no longer delay your holiday, my children, and since Mr. Malarius desires it, we will stop for to-day."
At these words, the master clapped his hands. All the pupils rose at once, collected their books, and arranged themselves in four lines, in the empty spaces between the benches.
Mr. Malarias clapped his hands a second time. The column started, and marched out, keeping step with military precision.
At a third signal they broke their ranks, and took to flight with joyous cries.
In a few seconds they were scattered around the blue waters of the fiord, where might be seen also the turf roofs of the village of Noroe.

CHAPTER II.
THE HOME OF A FISHERMAN IN NOROE.
The house of Mr. Hersebom was, like all others in Noroe, covered by a turf roof, and built of enormous timbers of fir-trees, in the Scandinavian fashion. The two large rooms were separated by a hall in the center, which led to the boat-house where the canoes were kept. Here were also to be seen the fishing-tackle and the codfish, which they dry and sell. These two rooms were used both as living-rooms and bedrooms. They had a sort of wooden drawer let into the wall, with its mattress and skins, which serve for beds, and are only to be seen at night. This arrangement for sleeping, with the bright panels, and the large open fire-place, where a blazing fire of wood was always kept burning, gave to the interior of the most humble homes an appearance of neatness and domestic luxury unknown to the peasantry of Southern Europe.

This evening all the family were gathered round the fire-place, where a huge kettle was boiling, containing "sillsallat," or smoked herring, salmon and potatoes.
Mr. Hersebom, seated in a high wooden chair, was making a net, which was his usual occupation when he was not on the sea, or drying his fish. He was a hardy fisherman, whose skin had been bronzed by exposure to the arctic breezes, and his hair was gray, although he was still in the prime of life. His son Otto, a great boy, fourteen years old, who bore a strong resemblance to him, and who was destined to also become famous as a fisherman, sat near him. At present he was occupied in solving the mysteries of the rule of three, covering a little slate with figures, although his large hands looked as if they would be much more at home handling the oars.
Erik, seated before the dining-table, was absorbed in a Volume of history that Mr. Malarius had lent him.
Katrina, Hersebom, the goodwife, was occupied peacefully with her spinning-wheel, while little Vanda, a blonde of ten years, was seated on a stool, knitting a large stocking with red wool.
At their feet a large dog of a yellowish-white color, with wool as thick as that of a sheep, lay curled up sound asleep.
For more than one hour the silence had been unbroken, and the copper lamp suspended over their heads, and filled with fish oil, lighted softly this tranquil interior.
To tell the truth, the silence became oppressive to Dame Katrina, who for some moments had betrayed the desire of unloosing her tongue.
At last she could keep quiet no longer.
"You have worked long enough for to-night," she said, "it is time to lay the cloth for supper."
Without a word of expostulation. Erik lifted his large book, and seated himself nearer the fire-place, whilst Vanda laid aside her knitting, and going to the buffet brought out the plates and spoons.
"Did you say, Otto," asked the little girl, "that our Erik answered the doctor very well?"
"Very well, indeed," said Otto enthusiastically, "he talked like a book in fact. I do not know where he learned it all. The more questions the doctor asked the more he had to answer. The words came and came. Mr. Malarius was well satisfied with him."
"I am also," said Vanda, gravely.
"Oh, we were all well pleased. If you could have seen, mother, how the children all listened, with their mouths open. We were only afraid that our turn would come. But Erik was not afraid, and answered the doctor as he would have answered the master."
“Stop. Mr. Malarius is as good as the doctor, and quite as learned,” cried Erik, whom their praises seemed to annoy.

The old fisherman gave him an approving smile.

“You are right, little boy,” he said; “Mr. Malarius, if he chose, could be the superior of all the doctors in the town, and besides he does not make use of his scientific knowledge to ruin poor people.”

“Has Doctor Schwaryencrona ruined any one?” asked Erik with curiosity.

“Well—if he has not done so, it has not been his fault. Do you think that I have taken any pleasure in the erection of his factory, which is sending forth its smoke on the borders of our fiord? Your mother can tell you that formerly we manufactured our own oil, and that we sold it easily in Bergen for a hundred and fifty to two hundred kroners a year. But that is all ended now—nobody will buy the brown oil, or, if they do, they pay so little for it, that it is not worth while to take the journey. We must be satisfied with selling the livers to the factory, and God only knows how this tiresome doctor has managed to get them for such a low price. I hardly realize forty-five kroners now, and I have to take twice as much trouble as formerly. Ah, well. I say it is not just, and the doctor would do better to look after his patients in Stockholm, instead of coming here to take away our trade by which we earn our bread.”

After these bitter words they were all silent. They heard nothing for some minutes except the clicking of the plates, as Vanda arranged them, whilst her mother emptied the contents of the pot into a large dish.

Erik reflected deeply upon what Mr. Hersebom had said. Numerous objections presented themselves to his mind, and as he was candor itself—he could not help speaking.

“It seems to me that you have a right to regret your former profits, father,” he said, “but is it just to accuse Doctor Schwaryencrona of having diminished them? Is not his oil worth more than the home-made article?”

“Ah! it is clearer, that is all. It does not taste as strong as ours, they say; and that is the reason why all the fine ladies in the town prefer it, no doubt; but it does not do any more good to the lungs of sick people than our oil.”

“But for some reason or other they buy it in preference; and since it is a very useful medicine it is essential that the public should experience as little disgust as possible in taking it. Therefore, if a doctor finds out a method of making it more palatable, is it not his duty to make use of his discovery?”

Master Hersebom scratched his ear.

“Doubtless,” he said, reluctantly, “it is his duty as a doctor, but that is no reason why he should prevent poor fishermen from getting their living.”

“I believe the doctor's factory gives employment to three hundred, whilst there were only twenty in Noroe at the time of which you speak,” objected Erik, timidly.

“You are right, and that is why the business is no longer worth anything,” said Hersebom.

“Come, supper is ready. Seat yourselves at the table,” said Dame Katrina, who saw that the discussion was in danger of becoming unpleasantly warm.

Erik understood that further opposition on his part would be out of place, and he did not answer the last argument of his father, but took his habitual seat beside Vanda.

“Were the doctor and Mr. Malarius friends in childhood?” he asked, in order to give a turn to the conversation.

“Yes,” answered the fisherman, as he seated himself at the table. “They were both born in Noroe, and I can remember when they played around the school-house, although they are both ten years older than I am. Mr. Malarius was the son of the physician, and Doctor Schwaryencrona only the son of a simple fisherman. But he has risen in the world, and they say that he is now worth millions, and that his residence in Stockholm is a perfect palace. Oh, learning is a fine thing.”

After uttering this aphorism the brave man took a spoon to help the smoking fish and potatoes, when a knock at the door made him pause.

“May I come in, Master Hersebom?” said a deep-toned voice. And without waiting for permission the person who had spoken entered, bringing with him a great blast of icy air.

“Doctor Schwaryencrona!” cried the three children, while the father and mother rose quickly.

“My dear Hersebom,” said the doctor, taking the fisherman's hand, “we have not seen each other for many years, but I have not forgotten your excellent father, and thought I might call and see a friend of my childhood!”

The worthy man felt a little ashamed of the accusations which he had so recently made against his visitor, and he did not know what to say. He contented himself, therefore, with returning the doctor's shake of the hand cordially, and smiling a welcome, whilst his good wife was more demonstrative.

“Quick, Otto, Erik, help the doctor to take off his overcoat, and you, Vanda, prepare another place at the table,” she said, for, like all Norwegian housekeepers, she was very hospitable.

“Will you do us the honor, doctor, of eating a morsel with us?”

“Indeed I would not refuse, you may be sure, if I had the least appetite; for I see you have a tempting dish before you. But it is not an hour since I took supper with Mr. Malarius, and I certainly would not have called so
early if I had thought you would be at the table. It would give me great pleasure if you would resume your seats and
eat your supper."

"Oh, doctor!" implored the good wife, "at least you will not refuse some 'snorgas' and a cup of tea?"

"I will gladly take a cup of tea, but on condition that, you eat your supper first," answered the doctor, seating
himself in the large arm-chair.

Vanda immediately placed the tea-kettle on the fire, and disappeared in the neighboring room. The rest of the
family understanding with native courtesy that it would annoy their guest if they did not do as he wished, began to
eat their supper.

In two minutes the doctor was quite at his ease. He stirred the fire, and warmed his legs in the blaze of the dry
wood that Katrina had thrown on before going to supper. He talked about old times, and old friends; those who had
disappeared, and those who remained, about the changes that had taken place even in Bergen.

He made himself quite at home, and, what was more remarkable, he succeeded in making Mr. Hersebom eat his
supper.

Vanda now entered carrying a large wooden dish, upon which was a saucer, which she offered so graciously to
the doctor that he could not refuse it. It was the famous "snorgas" of Norway, slices of smoked reindeer, and shreds
of herring, and red pepper, minced up and laid between slices of black bread, spiced cheese, and other condiments;
which they eat at any hour to produce an appetite.

It succeeded so well in the doctor's case, that although he only took it out of politeness, he was soon able to do
honor to some preserved mulberries which were Dame Katrina's special pride, and so thirsty that he drank seven or
eight cups of tea.

Mr. Hersebom brought out a bottle of "schiedam," which he had bought of a Hollander.

Then supper being ended, the doctor accepted an enormous pipe which his host offered him, and smoked away
to their general satisfaction.

By this time all feeling of constraint had passed away, and it seemed as if the doctor had always been a member
of the family. They joked and laughed, and were the best of friends in the world, until the old clock of varnished
wood struck ten.

"My good friends, it is growing late," said the doctor.

"If you will send the children to bed, we will talk about more serious matters."

Upon a sign from Dame Katrina, Otto, Erik, and Vanda bade them good-night and left the room.

"You wonder why I have come," said the doctor, after a moments' silence, fixing his penetrating glance upon the
fisherman.

"My guests are always welcome," answered the fisherman, sententiously.

"Yes! I know that Noroe is famous for hospitality. But you must certainly have asked yourself what motive
could have induced me to leave the society of my old friend Malarius and come to you. I am sure that Dame
Hersebom has some suspicion of my motive."

"We shall know when you tell us," replied the good woman, diplomatically.

"Well," said the doctor, with a sigh, "since you will not help me, I must face it alone. Your son, Erik, Master
Hersebom, is a most remarkable child."

"I do not complain of him," answered the fisherman.

"He is singularly intelligent, and well informed for his age," continued the doctor. "I questioned him to-day, in
school, and I was very much surprised by the extraordinary ability which his answers displayed. I was also
astonished, when I learned his name, to see that he bore no resemblance to you, nor indeed to any of the natives of
this country."

The fisherman and his wife remained silent and motionless.

"To be brief," continued the doctor, with visible impatience, "this child not only interests me--he puzzles me. I
have talked with Malarius, who told me that he was not your son, but that he had been cast on your shore by a
shipwreck, and that you took him in and adopted him, bringing him up as your own, and bestowing your name upon
him. This is true, is it not?"

"Yes, doctor," answered Hersebom, gravely.

"If he is not our son by birth, he is in love and affection," said Katrina, with moist eyes and trembling hands.

"Between him, and Otto, and Vanda, we have made no difference--we have never thought of him only as our own
child."

"These sentiments do you both honor," said the doctor, moved by the emotion of the brave woman. "But I beg of
you, my friends, relate to me the history of this child. I have come to hear it, and I assure you that I wish him well."

The fisherman appeared to hesitate a moment. Then seeing that the doctor was waiting impatiently for him to
speak, he concluded to gratify him.
"You have been told the truth," he said, regretfully; "the child is not our son. Twelve years ago I was fishing near
the island at the entrance of the fiord, near the open sea. You know it is surrounded by a sand bank, and that cod-fish
are plentiful there. After a good day's work, I drew in my lines, and was going to hoist my sail, when something
white moving upon the water, about a mile off, attracted my attention. The sea was calm, and there was nothing
pressing to hurry me home, so I had the curiosity to go and see what this white object was. In ten minutes I had
reached it. It was a little wicker cradle, enveloped in a woolen cloth, and strongly tied to a buoy. I drew it toward
me; an emotion which I could not understand seized me; I beheld a sleeping infant, about seven or eight months old,
whose little fists were tightly clinched. He looked a little pale and cold, but did not appear to have suffered much
from his adventurous voyage, if one might judge by his lusty screams when he awoke, as he did immediately, when
he no longer felt himself rocked by the waves. Our little Otto was over two years old, and I knew how to manage
such little rogues. I rolled up a bit of rag, dipped it in some _eau de vie_ and water that I had with me, and gave it to
him to suck. This quieted him at once, and he seemed to enjoy the cordial. But I knew that he would not be quiet
long, therefore I made all haste to return to Noroe. I had untied the cradle and placed it in the boat at my feet; and
while I attended to my sail, I watched the poor little one, and asked myself where it could possibly have come from.
Doubtless from some shipwrecked vessel. A fierce tempest had been raging during the night, and there had been
many disasters. But by what means had this infant escaped the fate of those who had had the charge of him? How
had they thought of tying him to the buoy? How many hours had he been floating on the waves? Where were his
father and mother, those who loved him? But all these questions had to remain unanswered, the poor baby was
unable to give us any information. In half an hour I was at home, and gave my new possession to Katrina. We had a
cow then, and she was immediately pressed into service as a nurse for the infant. He was so pretty, so smiling, so
rosy, when he had been fed and warmed before the fire, that we fell in love with him at once; just the same as if he
had been our own. And then, you see, we took care of him; we brought him up, and we have never made any
difference between him and our own two children. Is it not true, wife?" added Mr. Hersebom, turning toward
Katrina.

"Very true, the poor little one," answered the good dame, drying her eyes, which this recital had filled with tears.
"And he is our child now, for we have adopted him. I do not know why Mr. Malarius should say anything to the
contrary."

"It is true," said Hersebom, and I do not see that it concerns any one but ourselves."

"That is so," said the doctor, in a conciliatory tone, "but you must not accuse Mr. Malarius of being indiscreet. I
was struck with the physiognomy of the child, and I begged my friend confidentially to relate his history. He told me
that Erik believed himself to be your son, and that every one in Noroe had forgotten how he had become yours.
Therefore, you see, I took care not to speak until the children had been sent to bed. You say that he was about seven
or eight months old when you found him?"

"About that; he had already four teeth, the little brigand, and I assure you that it was not long before he began to
use them," said Hersebom, laughing.

"Oh, he was a superb child," said Katrinn, eagerly. "He was so white, and strong, and plump; and such arms and
legs. You should have seen them!"

"How was he dressed?" asked Dr. Schwaryencrona.

Hersebom did not answer, but his wife was less discreet.

"Like a little prince," she answered. "Imagine a robe of piquè, trimmed all over with lace, a pelisse of quilted
satin, a cloak of white velvet, and a little cap; the son of a king could not have more. Everything he had was
beautiful. But you can see for yourself, for I have kept them all just as they were. You may be sure that we did not
dress the baby in them. Oh, no; I put Otto's little garments on him, which I had laid away, and which also served,
later on, for Vanda. But his outfit is here, and I will show it to you."

While she was speaking, the worthy woman knelt down before a large oaken chest, with an antique lock, and
after lifting the lid, began searching the compartments.

She drew out, one by one, all the garments of which she had spoken, and displayed them with pride before the
eyes of the doctor. She also showed the linen, which was exquisitely fine, a little quilt of silk, and a pair of white
merino boots. All the articles were marked with the initials "E.D.", elegantly embroidered, as the doctor saw at a
glance.

"E.D.;' is that why you named the child Erik?" he asked.

"Precisely," answered Katrina, who it was evident enjoyed this exhibition, while her husband's face grew more
gloomy. "See," she said, "this is the most beautiful of all. He wore it around his neck."

And she drew from its box a rattle of coral and gold, suspended from a little chain.

The initials "E.D." were here surrounded by a Latin motto, "Semper idem."

"We thought at first it was the baby's name, but Mr. Malarius told us it meant 'always the same,'" she continued,
seeing that the doctor was trying to decipher the motto.

"Mr. Malarius told you the truth," said the doctor. "It is evident the child belonged to a rich and distinguished family," he added, while Katrina replaced the babe's outfit in the oaken chest.

"Have you any idea what country he came from?"

"How could we know anything about it, since I found him on the sea?" replied Hersebom. "Yes, but the cradle was attached to a buoy, you said, and it is customary on all vessels to write on the buoy the name of the ship to which it belongs," answered the doctor, fixing his penetrating eyes upon those of the fisherman.

"Doubtless," said the latter, hanging his head.

"Well, this buoy, what name did it bear?"

"Doctor, I am not a _savant_. I can read my own language a little, but as for foreign tongues--and then it was so long ago."

"However, you ought to be able to remember something about it--and doubtless you showed it to Mr. Malarius, with the rest of the articles--make a little effort, Mr. Hersebom. Was not this name inscribed on the buoy, 'Cynthia'?"

"I believe it was something like that," answered the fisherman vaguely.

"It is a strange name. To what country does it belong in your judgment, Mr. Hersebom?"

"How should I know? Have I ever been beyond the shores of Noroe and Bergen, except once or twice to fish off the coast of Greenland and Iceland?" answered the good man, in a tone which grew more and more morose.

"I think it is either an English or a German name," said the doctor, taking no notice of his crossness. "It would be easy to decide on account of the shape of the letters, if I could see the buoy. Have you preserved it?"

"By my faith no. It was burnt up ages ago," answered Hersebom, triumphantly.

"As near as Mr. Malarius could remember, the letters were Roman," said the doctor, as if he were talking to himself--"and the letters on the linen certainly are. It is therefore probable that the 'Cynthia' was not a German vessel. I think it was an English one. Is not this your opinion, Mr. Hersebom?"

"Well, I have thought little about it," replied the fisherman. "Whether it was English, German, or Russian, makes no difference to me. For many years according to all appearances, they have lain beneath the sea, which alone could tell the secret."

"But you have doubtless made some effort to discover the family to whom the child belonged?" said the doctor, whose glasses seemed to shine with irony. "You doubtless wrote to the Governor of Bergen, and had him insert an advertisement in the journals?"

"I!" cried the fisherman, "I did nothing of the kind. God knows where the baby came from; why should I trouble myself about it? Can I afford to spend money to find his people, who perhaps care little for him? Put yourself in my place, doctor. I am not a millionaire, and you may be sure if we had spent all we had, we should have discovered nothing. I have done the best I could; we have raised the little one as our own son, we have loved him and taken care of him."

"Even more than the two others, if it were possible," interrupted Katrina, drying her eyes on the corner of her apron. "If we have anything to reproach ourselves for, it is for bestowing upon him too large a share of our tenderness."

"Dame Hersebom, you must not do me the injustice to suppose that your kindness to the little shipwrecked child inspires me with any other feeling than the greatest admiration," said the doctor.

"No, you must not think such a thing. But if you wish me to speak frankly--I must say that this tenderness has blinded you to your duty. You should have endeavored to discover the family of the infant, as far as your means permitted."

There was perfect silence for a few minutes.

"It is possible that we have done wrong," said Mr. Hersebom, who had hung his head under this reproach. "But what is done can not be altered. Erik belongs to us now, and I do not wish any one to speak to him about these old reminiscences."

"You need have no fear, I will not betray your confidence," answered the doctor, rising.

"I must leave you, my good friends, and I wish you good-night--a night free from remorse," he added, gravely.

Then he put on his fur cloak, and shook hands cordially with his hosts, and being conducted to the door by Hersebom, he took the road toward his factory.

The fisherman stood for a moment on the threshold, watching his retreating figure in the moonlight.

"What a devil of a man!" he murmured, as at last he closed his door.

CHAPTER III.
MR. HERSEBOM'S REFLECTIONS.
The next morning Dr. Schwaryencrona had just finished breakfast with his overseer, after having made a thorough inspection of his factory when he saw a person enter whom he did not at first recognize as Mr. Hersebom.

He was clothed in his holiday suit: his embroidered waistcoat, his furred riding coat, and his high hat, and the fisherman looked very different to what he did in his working clothes. But what made the change more apparent, was the deep sadness and humility portrayed in his countenance. His eyes were red, and looked as if he had had no sleep all the night.

This was in fact the case. Mr. Hersebom who up to this time had never felt his conscience trouble him, had passed hours of sad remorse, on his mattress of skins.

Toward morning he had exchanged confidences with Dame Katrina, who had also been unable to close her eyes.

"Wife, I have been thinking of what the doctor said to us," he said, after several hours of wakefulness.

"I have been thinking of it also, ever since he left us," answered his worthy helpmate.

"It is my opinion that there is some truth in what he said, and that we have perhaps acted more egotistically than we should have done. Who knows but that the child may have a right to some great fortune, of which he is deprived by our negligence? Who knows if his family have not mourned for him these twelve years, and they could justly accuse us of having made no attempt to restore him to them?"

"This is precisely what I have been saying to myself," answered Katrina, sighing. "If his mother is living what frightful anguish the poor woman must have endured, in believing that her infant was drowned. I put myself in her place, and imagine that we had lost Otto in this manner. We would never have been consoled."

"It is not thoughts of his mother that trouble me, for according to all appearances, she is dead," said Hersebom, after a silence broken only by their sighs.

"How can we suppose that an infant of that age would travel without her, or that it would have been tied to a buoy and left to take its chances on the ocean, if she had been living?"

"Perhaps some one has taken her infant from her--this idea has often occurred to me," answered Hersebom. "Some one might be interested in his disappearance. To expose so young a child to such a hazardous proceeding is so extraordinary that such conjectures are possible, and in this case we have become accomplices of a crime--we have contributed to its success. Is it not horrible to think of?"

"And we thought we were doing such a good and charitable work in adopting the poor little one."

"Oh, it is evident that we had no malicious intentions. We nourished it, and brought it up as well as we were able, but that does not prevent me from seeing that we have acted rashly, and the little one will have a right to reproach us some of these days."

"We need not be afraid of that, I am sure. But it is too bad that we should feel at this late day that we have done anything for which we must reproach ourselves."

"How strange it is that the same action regarded from a different point of view, can be judged so differently. I never would have thought of such a thing. And yet a few words from the doctor seems to have turned my brain."

Thus these good people talked during the night.

The result of their nocturnal conversation was that Mr. Hersebom resolved to call upon the doctor, and ask him what they could do to make amends for the error of which they had been guilty.

Dr. Schwaryencrona did not revert to the conversation which had taken place the previous evening. He appeared to regard the visit of the fisherman as simply an act of politeness, and received him cordially, and began talking about the weather and the price of fish.

Mr. Hersebom tried to lead the conversation toward the subject which occupied his mind. He spoke of Mr. Malarius' school, and at last said plainly: "Doctor, my wife and I have been thinking all night about what you said to us last evening about the boy. We never thought that we were doing him a wrong in educating him as our son. But you have changed our opinion, and we want to know what you would advise us to do, in order to repair our fault. Do you think that we still ought to seek to find Erik's family?"

"It is never too late to do our duty," said the doctor, "although the task is certainly much more difficult now than it would have been at first."

"Will you interest yourself in the matter?"

"I will, with pleasure," answered the doctor; "and I promise you to use every exertion to fulfill it, upon one condition: that is, that you let me take the boy to Stockholm."

If Mr. Hersebom had been struck on the head with a club, he would not have been more astonished than he was by this proposal.

"Intrust Erik to you! Send him to Stockholm! Why should I do this, doctor?" he asked, in an altered voice.

"I will tell you. My attention was drawn to the child, not only on account of his physical appearance, which was so different to that of his companions, but by his great intelligence and his evident taste for study. Before knowing
the circumstances which had brought him to Noroe, I said to myself that it was a shame to leave a boy so gifted in a village school--even under such a master as Malarius; for here there is nothing to assist in the development of his exceptionally great faculties. There are no museums, nor scientific collections, nor libraries, nor competitors who are worthy of him. I felt a strong desire to give him the advantages of a complete education. You can understand that, after the confidence which you have bestowed upon me, I am more anxious to do so than before. You can see, Mr. Hersebom, that your adopted son belongs to some rich and distinguished family. If I succeed in finding them, would you wish to restore to them a child educated in a village, and deprived of this education, without which he will feel out of place among his kindred? It is not reasonable; and you are too sensible not to understand it."

Mr. Hersebom hung his head: without his being aware of it, two large tears rolled down his cheeks.

"But then," he said, "this would be an entire separation. Before we ever know whether the child will find his relations, he must be taken from his home. It is asking too much, doctor--asking too much of my wife. The child is happy with us. Why can he not be left alone, at least until he is sure of a better one?"

"Happy. How do you know that he will be so when he grows older? How can you tell whether he may not regret having been saved? Intelligent and superior as he will be, perhaps he would be stiffered with the life which you would offer him in Noroe."

"But, doctor, this life which you disdain, is good enough for us. Why is it not good enough for him?"

"I do not disdain it," said the doctor. "Nobody admires and honors those who work more than I do. Do you believe, Mr. Hersebom, that I forget my birth? My father and grandfather were fishermen like yourself, and it is just because they were so far-seeing as to educate me, that I appreciate the value of it, and I would assure it to a child who merits it. It is his interest alone which guides me, I beg of you to believe."

"Ah--what do I know about it? Erik will be almost grown up when you have made a gentleman of him, and he will not know how to use his arms. Then if you do not find his family, which is more than possible, since twelve years have passed since I found him, what a beautiful future we are preparing for him! Do you not see, doctor, that a fisherman's life is a brave one--better than any other: with a good boat under his feet and four or five dozen of cod-fish at the end of his lines, a Norwegian fisherman need have no fear, nor be indebted to any one. You say that Erik would not be happy leading such a life. Permit me to believe the contrary. I know the child well, he loves his books, but, above all, he loves the sea. It also almost seems as if he felt that he had been rocked upon it, and all the museums in the world would not console him for the loss of it."

"But we have the sea around us also at Stockholm," said the doctor, smiling--touched in spite of himself by this affectionate resistance.

"Well," said the fisherman, crossing his arms, "what do you wish to do? what do you propose, doctor?"

"There, you see, after all, the necessity of doing something. Well this is my proposition--Erik is twelve years old, nearly thirteen, and he appears to be highly gifted. We will say nothing about his origin--he is worthy of being supplied with the means of developing and utilizing his faculties; that is all we need trouble ourselves about at present. I am rich, and I have no children. I will undertake to furnish the means, and give him the best masters, and all possible facilities for profiting by their instructions. I will do this for two years. During this time I will make inquiries, insert advertisements in the newspapers; make every possible exertion, move heaven and earth to discover his parents. If I do not find them in two years, we shall never do it. If his relatives are found, they will naturally decide his future career in life. If we do not find them, I will send Erik back to you. He will then be fifteen years old--he will have seen something of the world. The hour will have arrived to tell him the truth about his birth. Then aided by our advice, and the opinions of his teachers, he can choose what path he would prefer to follow. If he wishes to become a fisherman, I will not oppose it. If he wishes to continue his studies, I engage to furnish the means for him to follow any profession that he may choose. Does this seem a reasonable proposition to you?"

"More than reasonable. It is wisdom itself issuing from your lips, doctor," said Mr. Hersebom, overcome in spite of himself. "See what it is to have an education!" he continued, shaking his head. "The difficulty will be to repeat all you have said to my wife. When will you take the child away?"

"To-morrow. I can not delay my return to Stockholm any longer."

Mr. Hersebom heaved a deep sigh, which was almost a sob.

"To-morrow! So soon!" he said. "Well, what must be, must be. I will go and talk to my wife about it."

"Yes, do so, and consult Mr. Malarius also; you will find that he is of my opinion."

"I do not doubt it," answered the fisherman, with a sad smile.

He shook the hand which Dr. Schwaryencrona held out to him, and went away looking very thoughtful.

That evening before dinner the doctor again directed his steps toward the dwelling of Mr. Hersebom. He found the family assembled round the hearth, as they were the evening before, but not wearing the same appearance of peaceful happiness. The father was seated the furthest from the fire, silent, and with idle hands. Katrina, with tears in her eyes, held Erik's hands between her own, whose cheeks were reddened by the hope of the new destiny which
seemed opening before him, but who looked sad at leaving all whom he loved, and who did not know what feeling
he ought to yield to.

Little Vanda’s face was hidden in her father’s knees, and nothing could be seen except her long braids of golden
hair. Otto, also greatly troubled at this proposed separation, sat motionless beside his brother.

“How sad and disconsolate you look!” said the doctor, stopping on the threshold. “If Erik were about to set out
on a distant and most perilous expedition you could not show more grief. He is not going to do anything of the kind,
I assure you, my good friends. Stockholm is not at the antipodes, and the child is not going away forever. He can
write to you, and I do not doubt that he will do so often. He is only going away to school, like so many other boys.
In two years he will return tall, and well-informed, and accomplished, I hope. Is this anything to feel sad about?
Seriously, it is not reasonable.”

Katrina arose with the natural dignity of the peasant of the North.

“Doctor,” she said, “God is my witness that I am profoundly grateful to you for what you propose to do for Erik-
but we can not help feeling sad because of his departure. Mr. Hersebom has explained to me that it is necessary,
and I submit. Do not think that I shall feel no regret.”

“Mother,” said Erik, “I will not go, if it causes you such pain.”

“No, child,” answered the worthy woman, taking him in her arms. “Education is a benefit which we have no
right to refuse you. Go, my son, and thank the doctor who has provided it for you, and prove to him by constant
application to your studies that you appreciate his kindness.”

“There, there,” said the doctor, whose glasses were dimmed by a singular cloudiness, “let us rather speak of
practical matters, that will be better. You know, do you not, that we must set out to-morrow very early, and that you
must have everything ready. We will go by sleigh to Bergen, and thence by railroad. Erik only needs a change of
linen, I will procure everything else that is necessary at Stockholm.”

“Everything shall be ready,” answered Dame Hersebom.

“Vanda,” she added, with Norwegian hospitality, “the doctor is still standing.”

The little girl hurriedly pushed a large arm-chair toward him.

“I can not stay,” said the doctor. “I promised my friend Malarius to dine with him, and he is waiting for me.
Little girl,” he said, laying his hand gently upon Vanda’s blonde head, “I hope you do not wish me any harm because
I am taking your brother away from you?”

“No, doctor,” she answered gravely. “Erik will be happier with you—he was not intended to live in a village.”

“And you, little one, will you be very unhappy without him?”

“The shore will seem deserted,” she answered; “the seagulls will look for him without finding him, the little
waves will be astonished because they no longer see him, and the house will seem empty, but Erik will be contented,
because he will have plenty of books, and he will become a learned man.”

“And his little sister will rejoice in his happiness—is it not so, my child?” said the doctor, kissing the forehead of
the little girl. “And she will be proud of him when he returns—see we have arranged the whole matter—but I must
hurry away. Good-bye until to-morrow.”

“Doctor,” murmured Vanda, timidly, “I wish to ask a favor of you!”

“Speak, child.”

“You are going in a sleigh, you said. I wish with my papa’s and mamma’s permission to drive you to the first
relay.”

“Ah, ah! but I have already arranged that. Reguild, the daughter of my overseer, should do this.”

“Yes, I know it, but she is willing that I should take her place, if you will authorize me to do so.”

“Well, in that case you have only to obtain the permission of your father and mother.”

“I have done so.”

“Then you have mine also, dear child,” said the doctor, and he took his departure.

The next morning when the sleigh stopped before the door of Mr. Hersebom little Vanda held the reins
according to her desire, seated upon the front seat.

She was going to drive them to the next village, where the doctor would procure another horse and sleigh, and
thus procure relays until he reached Bergen. This new kind of coachman always astonishes a stranger, but it is the
custom in Norway and Sweden. The men would think it a loss of time to pursue such a calling, and it is not rare to
see children of ten or twelve years of age managing heavy equipages with perfect ease.

The doctor was already installed in the back of the sleigh, nearly hidden by his furs. Erik took his seat beside
Vanda, after having tenderly embraced his father and brother, who contented themselves by showing by their mute
sadness the sorrow which his departure caused them; but the good Katrina was more open in the expression of her
feelings.

“Adieu, my son!” she said, in the midst of her tears. “Never forget what you have learned from your poor
parents--be honest, and brave, and never tell a lie. Work as hard as you can--always protect those who are weaker than yourself--and if you do not find the happiness you merit come back and seek it with us."

Vanda touched the horse which set out at a trot, and made the bells ring. The air was cold, and the road as hard as glass. Just above the horizon a pale sun began to throw his golden beams upon the snowy landscape. In a few minutes Noroe was out of sight behind them.

CHAPTER IV.
AT STOCKHOLM.

Doctor Schwaryencrona lived in a magnificent house in Stockholm. It was in the oldest and most aristocratic quarter of the charming capital, which is one of the most pleasant and agreeable in Europe. Strangers would visit it much more frequently if it were better known and more fashionable. But tourists, unfortunately for themselves, plan their journeys much upon the same principle as they purchase their hats. Situated between Lake Melar and the Baltic, it is built upon eight small islands, connected by innumerable bridges, and bordered by splendid quays, enlivened by numerous steam-boats, which fulfill the duties of omnibuses. The population are hardworking, gay, and contented. They are the most hospitable, the most polite, and the best educated of any nation in Europe. Stockholm, with its libraries, its museums, its scientific establishments, is in fact the Athens of the North, as well as a very important commercial center.

Erik, however, had not recovered from the sadness incident upon parting from Vanda, who had left them at the first relay. Their parting had been more sorrowful than would have been expected at their age, but they had not been able to conceal their emotion.

When the carriage stopped before a large brick house, whose double windows shone resplendently with gaslight, Erik was fairly dazzled. The copper knocker of the door appeared to him to be of fine gold. The vestibule, paved with marble and ornamented with statues, bronze torches, and large Chinese-vases, completed his amazement.

A footman in livery removed his master's furs, and inquired after his health with the affectionate cordiality which is habitual with Swedish servants. Erik looked around him with amazement.

The sound of voices attracted his attention toward the broad oaken staircase, covered with heavy carpet. He turned, and saw two persons whose costumes appeared to him the height of elegance.

One was a lady with gray hair, and of medium height, who wore a dress of black cloth, short enough to show her red stockings with yellow clock-work, and her buckled shoes. An enormous bunch of keys attached to a steel chain hung at her side. She carried her head high, and looked about her with piercing eyes. This was "Fru," or Madame Greta--Maria, the lady in charge of the doctor's house, and who was the undisputed autocrat of the mansion in everything that pertained to the culinary or domestic affairs. Behind her came a little girl, eleven or twelve years old, who appeared to Erik like a fairy princess. Instead of the national costume, the only one which he had ever seen worn by a child of that age, she had on a dress of deep blue velvet, over which her yellow hair was allowed to fall loosely. She wore black stockings and satin shoes; a knot of cherry-colored ribbon was poised in her hair like a butterfly, and gave a little color to her pale cheeks, while her large eyes shone with a phosphorescent light.

"How delightful, uncle, to have you back again! Have you had a pleasant journey?" she cried, clasping the doctor around the neck. She hardly deigned to cast a glance at Erik, who stood modestly aside.

The doctor returned her caresses, and shook hands with his housekeeper, then he made a sign for Erik to advance.

"Kajsa, and Dame Greta, I ask your friendship for Erik Hersebom, whom I have brought from Norway with me!" he said, "and you, my boy, do not be afraid," he said kindly. "Dame Greta is not as severe as she looks, and you and my niece Kajsa, will soon be the best of friends, is it not so, little girl?" he added, pinching gently the cheek of the little fairy.

Kajsa only responded by making a disdainful face.

As for the housekeeper, she did not appear very enthusiastic over the new recruit thus presented to her notice.

"If you please, doctor," she said, with a severe air, as they ascended the staircase, "may I ask who this child is?"

"Certainly, Dame Greta; I will tell you all about it before long. Do not be afraid; but now, if you please, give us something to eat."

In the "matsal," or dining-room, the table was beautifully laid with damask and crystal, and the "snorgas" was ready.

Poor Erik had never seen a table covered with a white cloth, for they are unknown to the peasants of Norway, who hardly use plates, as they have only recently been introduced, and many of them still eat their fish on rounds of black bread, and find it very good. Therefore the doctor had to repeat his invitation several times before the boy took his seat at the table, and the awkwardness of his movements caused "Froken," or Miss Kajsa, to cast upon him more
than one ironical glance during the repast. However, his journey had sharpened his appetite, and this was of great assistance to him.

The "snorgas" was followed by a dinner that would have frightened a Frenchman by its massive solidity, and would have sufficed to appease the appetites of a battalion of infantry after a long march. Soup, fish, home-made bread, goose stuffed with chestnuts, boiled beef, flanked with a mountain of vegetables, a pyramid of potatoes, hard-boiled eggs by the dozen, and a raisin pudding; all these were gallantly attacked and dismantled.

This plentiful repast being ended, almost without a word having been spoken, they passed into the parlor, a large wainscoted room, with six windows draped with heavy curtains, large enough to have sufficed a Parisian artist with hangings for the whole apartment. The doctor seated himself in a corner by the fire, in a large leather arm-chair, Kajsa took her place at his feet upon a footstool, whilst Erik, intimidated and ill at ease, approached one of the windows, and would have gladly hidden himself in its deep embrasure.

But the doctor did not leave him alone long.
"Come and warm yourself, my boy!" he said, in his sonorous voice; "and tell us what you think of Stockholm."
"The streets are very black and very narrow, and the houses are very high," said Erik.
"Yes, a little higher than they are in Norway," answered the doctor, laughing.
"They prevent one from seeing the stars!" said the young boy.
"Because we are in the quarter where the nobility live," said Kajsa, piqued by his criticisms. "When you pass the bridges the streets are broader."
"I saw that as we rode along; but the best of them are not as wide as that which borders the fiord of Noroe," answered Erik.
"Ah, ah!" said the doctor, "are you home-sick already?"
"No," answered Erik, resolutely. "I am too much obliged to you, dear doctor, for having brought me. But you asked me what I thought of Stockholm, and I had to answer."

"Noroe must be a frightful little hole," said Kajsa.
"A frightful little hole!" repeated Erik, indignantly. "Those who say that must be without eyes. If you could only see our rocks of granite, our mountains, our glaciers, and our forests of pine, looking so black against the pale sky! And besides all this, the great sea; sometimes tumultuous and terrible, and sometimes so calm as scarcely to rock one; and then the flight of the sea-gulls, which are lost in infinitude, and then return, to fan you with their wings. Oh, it is beautiful! Yes, far more beautiful than a town."
"I was not speaking of the country but of the houses," said Kajsa, "they are only peasants' cabins--are they not, uncle?"
"In these peasants' cabins, your father and grandfather as well as myself were born, my child," answered the doctor, gravely.

Kajsa blushed and remained silent.
"They are only wooden houses, but they answer as well as any," said Erik.
"Often in the evening while my father mends his nets, and my mother is busy with her spinning-wheel, we three sit on a little bench, Otto, Vanda, and I, and we repeat together the old sagas, while we watch the shadows that play upon the ceiling; and when the wind blows outside, and all the fishermen are safe at home, it does one good to gather around the blazing fire. We are just as happy as if we were in a beautiful room like this."
"This is not the best room," said Kajsa proudly. "I must show you the grand drawing-room, it is worth seeing!"
"But there are so many books in this one," said Erik, "are there as many in the drawing-room?"
"Books--who cares for them? There are velvet armchairs, and sofas, lace curtains, a splendid French clock, and carpets from Turkey!"

Erik did not appear to be fascinated by this description, but cast envious glances toward the large oaken bookcase, which filled one side of the parlor.
"You can go and examine the books, and take any you like," said the doctor. Erik did not wait for him to repeat this permission. He chose a volume at once, and seating himself in a corner where there was a good light, he was soon completely absorbed in his reading. He hardly noticed the successive entrance of two old gentlemen, who were intimate friends of Dr. Schwaryencrona, and who came almost every evening to play a game of whist with him.

The first who arrived was Professor Hochstedt, a large man with cold and stately manners, who expressed in polished terms the pleasure which he felt at the doctor's safe return. He was scarcely seated in the arm-chair which had long borne the name of the "professor's seat," when a sharp ring was heard.
"It is Bredejord," exclaimed the two friends simultaneously.

The door soon opened to admit a thin sprightly little man, who entered like a gust of wind, seized both the doctor's hands, kissed Kajsa on the forehead affectionately, greeted the professor, and cast a glance as keen as that of a mouse around the room.
It was the Advocate Bredejord, one of the most illustrious lawyers of Stockholm.

"Ha! Who is this?" said he, suddenly, as he beheld Erik.

The doctor tried to explain in as few words as possible.

"What--a young fisherman, or rather a boy from Bergen--and who reads Gibbon in English?" he asked. For he saw at a glance what the book was which so absorbed the little peasant.

"Does that interest you, my boy?" he asked.

"Yes, sir, it is a work that I have wanted to read for a long time, the first volume of the 'Fall of the Roman Empire,'" answered Erik, simply.

"Upon my word," exclaimed the lawyer, "it appears that the peasants of Bergen are fond of serious reading. But are you from Bergen?" he asked.

"I am from Noroe, which is not far from there," answered Erik.

"Ah, have they usually eyes and hair as brown as yours at Noroe?"

"No, sir; my brother and sister, and all the others, are blondes like Miss Kajsa. But they are not dressed like her," he added, laughing; "therefore they do not look much like her."

"No; I have no doubt of it," said Mr. Bredejord. "Miss Kajsa is a product of civilization. And what are you going to do at Stockholm, my boy, if I am not too curious?"

"The doctor has been kind enough to offer to send me to school," said Erik.

"Ah, ah!" said Mr. Bredejord, tapping his snuff-box with the ends of his fingers. His glance seemed to question the doctor about this living problem; but the latter made a sign to him, which was almost imperceptible, not to pursue his investigations, and he changed the conversation. They then talked about court affairs, the city news, and all that had taken place since the departure of the doctor. Then Dame Greta came, and opened the card-table, and laid out the cards. Soon silence reigned, while the three friends were absorbed in the mysteries of whist.

The doctor made pretension to being a great player, and had no mercy for the mistakes of his partners. He exulted loudly when their errors caused him to win, and scolded when they made him lose. After every rubber he took pleasure in showing the delinquent where he had erred; what card he should have led, and which he should have held back. It is generally the habit of whist-players, but it is not always conducive to amiability, particularly when the victims are the same every evening.

Happily for him, the doctor's two friends never lost their temper. The professor was habitually cool, and the lawyer severely skeptical.

"You are right," the first would say gravely, in answer to the most severe reproaches.

"My dear Schwaryencrona, you know very well you are only losing your time lecturing me," Mr. Bredejord would say, laughing. "All my life I have made the greatest blunders whenever I play whist, and the worst of it is, I do not improve." What could any one do with two such hardened sinners?

The doctor was compelled to discontinue his criticisms, but it was only to renew them a quarter of an hour later, for he was incorrigible.

It happened, however, that this evening he lost every game, and his consequent ill-humor made his criticisms very severe upon his two companions, and even upon the "dummy."

But the professor coolly acknowledged his faults, and the lawyer answered his most bitter reproaches by jokes.

"Why should I alter my play, when I win by playing badly, and you lose by following your correct rules?" he said to the doctor.

They played until ten o'clock. Then Kajsa made the tea in a magnificent "samovar," and served it with pretty gracefulness; then she discreetly disappeared. Soon Dame Greta appeared, and, calling Erik, she conducted him to the apartment which had been prepared for him. It was a pretty little room, clean and well furnished, on the second floor.

The three friends were now left alone.

"Now, at last, you can tell us who this young fisherman from Noroe is, who reads Gibbon in the original text?" said Mr. Bredejord, as he put some sugar into his second cup of tea. "Or is it a forbidden subject, which it is indiscreet for me to mention?"

"There is nothing mysterious about the matter, and I will willingly tell you Erik's history, for I know that I can rely upon your discretion," answered Dr. Schwaryencrona.

"Ah! I knew that he had a history," said the lawyer, seating himself comfortably in his arm-chair. "We will listen, dear doctor. I assure you that your confidence will not be misplaced. I confess this youth arouses my curiosity like a problem."

"He is, indeed, a living problem," answered the doctor, flattered by the curiosity of his friend. "A problem which I hope to be able to solve. But I must tell you all about it, and see if you think as I do."
The doctor settled himself comfortably, and began by telling them that he had been struck by Erik's appearance in the school at Noroe, and by his unusual intelligence. He had made inquiries about him, and he related all that Mr. Malarius and Mr. Hessebom had told. He omitted none of the details. He spoke of the buoy, of the name of "Cynthia," of the little garments which Dame Katrina had shown him, of the coral ornament, of the device upon it, and of the character of the letters.

"You are now in possession of all the facts as far as I have been able to learn them," he said. "And you must bear in mind that the extraordinary ability of the child is only a secondary phenomenon, and largely due to the interest with which Mr. Malarius has always regarded him, and of which he has made the best use. It was his unusual acquirements which first drew my attention to him and led me to make inquiries about him. But in reality this has little connection with the questions which now occupy me, which are: where did this child come from, and what course would it be best for me to take in order to discover his family? We have only two facts to guide us in this search. First: The physical indications of the race to which the child belongs. Second: The name 'Cynthia,' which was engraved on the buoy.

"As to the first fact, there can be no doubt; the child belongs to the Celtic race. He presents the type of a Celt in all its beauty and purity.

"Let us pass to the second fact:

"'Cynthia' is certainly the name of the vessel to which the buoy belonged. This name might have belonged to a German vessel, as well as to an English one; but it was written in the Roman characters. Therefore, the vessel was an English one—or we will say Anglo-Saxon to be more precise. Besides, everything confirms the hypothesis, for more than one English vessel going and coming from Inverness, or the Orkneys, have been driven on the coast of Norway by a tempest; and you must not forget that the little living waif could not have been floating for a long while, since he had resisted hunger, and all the dangers of his perilous journey. Well, now you know all, and what is your conclusion my dear friends?"

Neither the professor nor the lawyer thought it prudent to utter a word.

"You have not been able to arrive at any conclusion," said the doctor, in a tone which betrayed a secret triumph. "Perhaps you even think there is a contradiction between the two facts—a child of the Celtic race—an English vessel. But this is simply because you have failed to bear in mind the existence on the coast of Great Britain of a people of the Celtic race, on her sister island, Ireland. I did not think of it at first myself, and it prevented me from solving the problem. But when it occurred to me, I said to myself: the child is Irish. Is this your opinion, Hochstedt?"

If there was anything in the world the professor disliked, it was to give a positive opinion upon any subject. It must also be confessed that to give such an opinion in this case would have been premature. He therefore contented himself with nodding his head, and saying:

"It is an incontestable fact that the Irish belong to the Celtic branch of the Arian race."

This was a sufficiently safe aphorism, but Doctor Schwaryencrona asked nothing more, and only saw in it the entire confirmation of his theory.

"You think so, yourself," he said eagerly. "The Irish were Celts, and the child has all the characteristics of the race. The 'Cynthia' having been an English vessel, it appears to me that we are in possession of the necessary links, in order to find the family of the poor child. It is in Great Britain that we must look for them. Some advertisements in the 'Times' will probably be sufficient to put us on their tracks."

The doctor continued to enlarge upon his plan of proceeding, when he remarked the obstinate silence of the lawyer and the slightly ironical expression with which he listened to his conclusions.

"If you are not of my opinion, Bredejord, I wish you would say so. You know that I do not fear to discuss the matter," he said, stopping short.

"I have nothing to say," answered Mr. Bredejord. "Hochstedt can bear witness that I have said nothing."

"No. But I see very well that you do not share my opinion; and I am curious to know why," said the doctor.

"Is Cynthia an English name?" he asked, with vehemence. "Yes! it was written in Roman characters—it could not have been German. You have heard our eminent friend, Hochstedt, affirm that the Irish are Celts. Has the child all the characteristics of the Celtic race? You can judge for yourself. You were struck by his appearance before I opened my mouth about the subject. I conclude, therefore, that it is a want of friendship for you to refuse to agree with me, and recognize the fact that the boy belongs to an Irish family."

"Want of friendship is a strong charge," answered Mr. Bredejord, "if you apply it to me. I can only say that I have not, as yet, expressed the slightest opinion."

"No; but I see that you do not spare mine."

"Have I not a right?"

"But give some facts to support your theory."

"I have not said that I have formed any."
"Then it is a systematic opposition, just for the sake of contradicting me, as you do in whist."
"Nothing is further from my thoughts, I assure you. Your reasoning appeared to me to be too peremptory, that is all."
"In what way, if you please, I am curious to know?"
"It would take too long to tell you. Eleven o'clock is striking. I will content myself with offering you a bet. Your copy of Pliny against my Quintilian, that you have not judged rightly, and that the child is not Irish."
"You know that I do not like to bet," said the doctor, softened by his unconquerable good humor. "But I shall take so much pleasure in your discomfiture that I accept your offer."
"Well, then it is a settled affair. How much time do you expect to take for your researches?"
"A few months will suffice, I hope, but I have said two years to Hersebom, in order to be sure that no efforts were wanting."
"Ah! well--I give you two years. Hochstedt shall be our witness; and there is no ill-feeling, I hope?"
"Assuredly not, but I see your Quintilian in great danger of coming to keep company with my Pliny," answered the doctor.
Then, after shaking hands with his two friends, he accompanied them to the door.

CHAPTER V.
THE THIRTEEN DAYS OF CHRISTMAS.
The next day Erik began his new life at school.
Dr. Schwaryencrona first took him to his tailors, and fitted him out with some new suits of clothes; then he introduced him to the principal of one of the best schools in town. It was called in Swedish "Hogre elementar larovek."

In this school were taught the ancient and modern languages, the elementary sciences, and all that it was necessary to learn before entering college. As in Germany and Italy, the students did not board in the college. They lived with their families in the town, with the professors, or wherever they could obtain comfortable accommodations. The charges are very moderate; in fact, they have been reduced almost to nothing. Large gymnasiums are attached to each of the higher classes, and physical culture is as carefully attended to as the intellectual.

Erik at once gained the head of his division. He learned everything with such extreme facility that he had a great deal of time to himself. The doctor therefore thought that it would be better for him to utilize his evenings by taking a course at the "Slodjskolan," the great industrial school of Stockholm. It was an establishment especially devoted to the practice of the sciences, particularly to making experiments in physics and chemistry, and to geometrical constructions which are only taught theoretically in the schools.

Doctor Schwaryencrona judged rightly that the teachings of this school, which was one of the wonders of Stockholm, would give a new impetus to the rapid progress which Erik was making, and he hoped for great results from this double training.

His young _protégé_ proved worthy of the advantages which he procured for him. He penetrated the depths of the fundamental sciences, and instead of vague and superficial ideas, the ordinary lot of so many pupils, he stored up a provision of just, precise, and definite facts. The future development of these excellent principles could only be a question of time.

Hereafter he would be able to learn without difficulty the more elevated branches of these studies which would be required in college; in fact it would be only play to him.

The same service which Mr. Malarius had rendered him, in teaching him languages, history, and botany, the "Slodjskolan" now did for him by inculcating the A, B, C, of the industrial arts; without which the best teaching so often remains a dead letter.

Far from fatiguing Erik's brain, the multiplicity and variety of his studies strengthened it much more than a special course of instruction could have done.

Besides, the gymnasium was always open to him to recruit his body when his studies were over; and here as well as in the school Erik stood first. On holidays he never failed to pay a visit to the sea which he loved with filial tenderness. He talked with the sailors and fishermen, and often brought home a fine fish, which was well received by Dame Greta.

This good woman had conceived a great affection for this new member of the household. Erik was so gentle, and naturally so courteous and obliging, so studious and so brave, that it was impossible to know him and not to like him. In eight days he had become a favorite with Mr. Bredejord and Mr. Hochstedt, as he was already with Doctor Schwaryencrona.
The only person who treated him with coldness was Kajsa. Whether the little fairy thought that her hitherto undisputed sovereignty in the house was in danger, or whether she bore Erik a grudge, because of the sarcasms which her aristocratic air toward him inspired in the doctor, nobody knew. However, she persisted in treating him with a disdainful coldness, which no courtesy or politeness on his part could overcome. Her opportunities of displaying her disdain were fortunately rare, for Erik was always either out-of-doors, or else busy in his own little room.

Time passed in the most peaceful manner, and without any notable incidents.

We will pass with our reader without further comment over the two years which Erik spent at school and return to Noroe.

Christmas had returned for the second time since Erik's departure. It is in all Central and Northern Europe the great annual festival; because it is coincident with the dull season in nearly all industries. In Norway especially, they prolong the festival for thirteen days—"Tretten yule dage" (the thirteen days of Christmas), and they make it a season of great rejoicings. It is a time for family reunions, for dinners, and even for weddings.

Provisions are abundant, even in the poorest dwellings. Everywhere the greatest hospitality is the order of the day.

The "Yule ol," or Christmas beer, is drunk freely. Every visitor is offered a bumper in a wooden cup, mounted in gold, silver, or copper, which the poorest families possess, and which cups have been transmitted to them from time immemorial. The visitor must empty this cup, and exchange with his hosts the joyful wishes of the season, and for a happy New Year.

It is also at Christmas that the servants receive their new clothes; which are often the best part of their wages—that the cows, and even the birds of the air, receive a double ration, which is exceptionally large. They say in Norway of a "poor man," that he is so poor that he can not even give the sparrows their dinner at Christmas.

Of these thirteen traditional days, Christmas-eve is the gayest. It is the custom for the young girls and boys to go around in bands on their "schnee-schuhe," or snow-shoes, and stop before the houses, and sing in chorus the old national melodies. The clear voices suddenly sounding through the fresh night air, in the lonely valleys, with their wintry surroundings, have an odd and charming effect. The doors are immediately opened, the singers are invited to enter, and they offer them cake, dried apples, and ale; and often make them dance. After this frugal supper the joyous band depart, like a flock of gulls, to perform the same ceremony further away. Distances are regarded as nothing, for on their "schnee-schuhe," which are attached to their feet by leather straps, they glide over several miles with marvelous rapidity. The peasants of Norway also use, with these show-shoes, a strong stick, to balance themselves, and help them along. This year the festival would be a joyous one for the Herseboms. They were expecting Erik.

A letter from Stockholm had announced that he would arrive that evening. Therefore Otto and Vanda could not sit still. Every moment they ran to the door, to see if he was coming. Dame Katrina, although she reproved them for their impatience, felt in the same way herself. Mr. Hersebom smoked his pipe silently, and was divided in his mind between a longing to see his adopted son, and the fear that he would not be able to keep him with them very long.

For the fiftieth time, perhaps, Otto had gone to the door, when he gave a shout and cried out:

"Mother! Vanda! I believe it is he!"

They all rushed to the door. In the distance, on the road which led from Bergen, they saw a black object. It grew larger rapidly, and soon took the shape of a young man, clothed in gray cloth, wearing a fur cap, and carrying merrily over his shoulders a knapsack of green leather. He had on snow-shoes, and would soon be near enough to recognize.

The traveler perceived those who were watching before the door, and taking off his cap, he waved it around his head.

Two minutes later Erick was in the arms of Katrina, Otto, Vanda, and even Mr. Hersebom, who had left his armchair and advanced to the door.

They hugged him, and almost stifled him with caresses. They went into ecstasies over his improved appearance. Dame Katrina among them all could not get accustomed to it.

"What—is this the dear babe that I nursed on my knees?" she cried. "This great boy, with such a frank and resolute air, with these strong shoulders, this elegant form, and on whose lip I can already see signs of a mustache. Is it possible?"

The brave woman was conscious of feeling a sort of respect for her former nursling. She was proud of him, above all for the tears of joy which she saw in his eyes. For he also was deeply affected.

"Mother, is it really you," he exclaimed. "I can hardly believe that I am with you all again. The two years have seemed so long to me. I have missed you all, as I know you have missed me."

"Yes," said Mr. Hersebom, gravely. "Not a day has passed without our having spoken of you. Morning and
evening, and at meal times, it was your name that was constantly on our lips. But you, my boy, you have not
forgotten us in the grand city? You are contented to return and see the old country and the old house?"

"I am sure that you do not doubt it," said Erik, as he embraced them all. "You were always in my thoughts. But
above all when the wind blew a gale. I thought of you, father. I said to myself, Where is he? Has he returned home
in safety? And in the evening I used to read the meteorological bulletin in the doctor's newspaper, to see what kind
of weather you had had on the coast of Norway; if it was the same as on the coast of Sweden?--and I found that you
have severe storms more often than we have in Stockholm, which come from America, and beat on our mountains.
Ah! how often I have wished that I could be with you in your little boat to help you with the sail, and overcome all
difficulties. And on the other hand when the weather was fine it seemed to me as if I was in prison in that great city,
between the tall three-story houses. Yes! I would have given all the world to be on the sea for one hour, and to feel
as formerly free, and joyfully exhilarated by the fresh air!"

A smile brightened the weather-beaten face of the fisherman.

"His books have not spoiled him," he said. "A joyful season and a happy New-Year to you, my child!" he added.
"Come, let us go to the table. Dinner is only waiting for you."

When he was once more seated in his old place on the right hand of Katrina, Erik was able to look around him,
and mark the changes that two years had made in the family. Otto was now a large, robust boy of sixteen years of
age, and who looked twenty. As for Vanda, two years had added wonderfully to her size and beauty. Her
countenance had become more refined. Her magnificent blonde hair, which lay in heavy braids upon her shoulders,
formed around her forehead a light silvery cloud. Modest and sweet as usual, she busied herself, almost
unconsciously, with seeing that no one wanted for anything.

"Vanda has grown to be a great girl!" said her mother, proudly. "And if you knew, Erik, how learned she has
become, how hard she has worked and studied since you left us! She is the best scholar in the school now, and Mr.
Malaria says she is his only consolation for no longer having you among his pupils."

"Dear Mr. Malarius! how glad I shall be to see him again," said Erik. "So our Vanda has become so learned, has
she?" he replied with interest, while the young girl blushed up to the roots of her hair at these maternal praises.

"She has learned to play the organ also, and Mr. Malarius says that she has the sweetest voice of all the choir?"

"Oh, decidedly, it is a very accomplished young person whom I find on my return," Erik said, laughing, to
relieve the embarrassment of his sister. "We must make her display all her talents to-morrow."

And without affectation he began to talk about all the good people of Noroe, asking questions about each one;
inquiring for his old school-mates, and about all that had happened since he went away. He asked about their fishing
adventures, and all the details of their daily life. Then on his part, he satisfied the curiosity of his family, by giving
an account of his mode of life in Stockholm; he told them about Dame Greta, about Kajsa, and the doctor.

"That reminds me that I have a letter for you, father," he said, drawing it out of the inside pocket of his vest. "I
do not know what it contains, but the doctor told me to take good care of it, for it was about me."

Mr. Hersebom took the letter, and laid it on the table by his side.

"Well!" said Erik, "are you not going to read it?"

"No," answered the fisherman, laconically.

"But, since it concerns me?" persisted the young man.

"It is addressed to me," said Mr. Hersebom, holding the letter before his eyes. "Yes, I will read it at my leisure."

Filiaf obedience is the basis of family government in Norway.

Erik bowed his head in acquiescence.

When they rose from the table, the three children seated themselves on their little bench in the chimney-corner,
as they had so often done before, and began one of those confidential conversations, where each one relates what the
other is curious to know, and where they tell the same things a hundred times.

Katrina busied herself about the room, putting everything in order; insisting that Vanda should for once "play the
lady," as she said, and not trouble herself about household matters.

As for Mr. Hersebom, he had seated himself in his favorite arm-chair, and was smoking his pipe in silence. It
was only after he had finished this important operation that he decided to open the doctor's letter.

He read it through without saying a single word; then he folded it up, put it in his pocket, and smoked a second
pipe, like the first, without uttering a sound. He seemed to be absorbed in his own reflections.

Although he was never a talkative man, his silence appeared singular to Dame Katrina. After she had finished
her work, she went and seated herself beside him, and made two or three attempts to draw him into conversation, but
she only received the most brief replies. Being thus repulsed, she became melancholy, and the children themselves,
after talking breathlessly for some time, began to be affected by the evident sadness of their parents.

Twenty youthful voices singing in chorus before the door suddenly greeted their ears, and made a happy
diversion. It was a merry band of Erik's old classmates, who had conceived the pleasant idea of coming to give him a
cordial welcome home.

They hastened to invite them into the house, and offered them the customary feast, whilst they eagerly pressed around their old friend to express the great pleasure which they felt in seeing him again. Erik was touched by the unexpected visit of the friends of his childhood, and was anxious to go with them on their Christmas journey, and Vanda and Otto also were, naturally, eager to be of the party. Dame Katrina charged them not to go too far, but to bring their brother back early, as he needed rest after his journey.

The door was hardly closed upon them, when she resumed her seat beside her husband.

"Well, has the doctor discovered anything?" she asked, anxiously.

Instead of answering, Mr. Hersebom took the letter from his pocket, and read it aloud, but not without hesitating over some words which were strange to him:

"MY DEAR HERSEBOM," wrote the doctor, "it is now two years since you intrusted your dear child to my care, and every day I have had renewed pleasure in watching his progress in all the studies that he has undertaken. His intelligence is as remarkable as his heart is generous. Erik is truly one of nature's nobleman, and the parents who have lost such a son, if they knew the extent of their misfortune, would be objects of pity. But it is very doubtful whether his parents are still living. As we agreed, I have spared no efforts to discover them. I have written to several persons in England who have an agency for making special researches. I have had advertisements inserted in twenty different newspapers, English, Irish, and Scotch. Not the least ray of light has been thrown upon this mystery, and I have to confess that all the information which I have succeeded in procuring has rather tended to deepen the mystery.

"The name 'Cynthia,' I find in very common use in the English navy. From Lloyd's office, they inform me, that there are seventeen ships, of different tonnage, bearing this name. Some of these ships belong to English ports, and some to Scotland and Ireland. My supposition concerning the nationality of the child is therefore confirmed, and it becomes more and more evident to me that Erik is of Irish parentage. I do not know whether you agree with me on this point, but I have already mentioned it to two of my most intimate friends in Stockholm, and everything seems to confirm it.

"Whether this Irish family are all dead, or whether they have some interest in remaining unknown, I have not been able to discover any trace of them.

"Another singular circumstance, and which I also think looks still more suspicious, is the fact that no shipwreck registered at Lloyd's, or at any of the marine insurance companies, corresponds with the date of the infant's arrival on your coast. Two vessels named 'Cynthia' have been lost, it is true, during this century; but one was in the Indian Ocean, thirty-two years ago, and the other was in sight of Portsmouth eighteen years ago.

"We are therefore obliged to conclude that the infant was not the victim of a shipwreck.

"Doubtless he was intentionally exposed to the mercy of the waves. This would explain why all my inquiries have been fruitless.

"Be this as it may, after having questioned successively all the proprietors of the vessels bearing the name of 'Cynthia,' without obtaining any information, and after exhausting all known means of pursuing my investigations, I have been compelled to conclude that there is no hope of discovering Erik's family.

"The question that arises for us to decide, my dear Hersebom, and particularly for you, is what we ought to say to the boy, and what we ought to do for him.

"If I were in your place, I should now tell him all the facts about himself which affect him so nearly, and leave him free to choose his own path in life. You know we agreed to adopt this course if my efforts should prove unsuccessful. The time has come for you to keep your word. I have wished to leave it to you to relate all this to Erik. He is returning to Noroe still ignorant that he is not your son, and he does not know whether he is to return to Stockholm or remain with you. It is for you to tell him.

"Remember, if you refuse to fulfill this duty, Erik would have the right some day, perhaps, to be astonished at you. Recall to mind also that he is a boy of too remarkable abilities to be condemned to an obscure and illiterate life. Such a sentence would have been unmerited two years ago, and now, after his brilliant career at Stockholm, it would be positively unjustifiable.

"I therefore renew my offer: let him return to me and finish his studies, and take at Upsal the degree of Doctor of Medicine. I will continue to provide for him as if he were my own son, and he has only to go on and win honors and a fortune.

"I know that, in addressing you and the excellent adopted mother of Erik, I leave his future in good hands. No personal consideration, I am sure, will prevent you from accepting my offer. Take Mr. Malarius' advice in this matter.

"While awaiting your reply, Mr. Hersebom, I greet you affectionately, and I beg you to remember me most kindly to your worthy wife and children."
"R.W. SCHWARYENCRONA, M.D."

When the fisherman had finished reading this letter, Dame Katrina, who had been silently weeping while she listened to it, asked him what he intended to do.

"My duty is very clear," he said. "I shall tell the boy everything."

"That is my opinion also; it must be done, or we should never have another peaceful moment," she murmured, as she dried her eyes.

Then they both relapsed into silence.

It was past midnight when the three children returned from their expedition. Their cheeks were rosy, and their eyes shone with pleasure from their walk in the fresh air. They seated themselves around the fire to finish gayly their Christmas-eve by eating a last cake before the enormous log which looked like a burning cavern.

CHAPTER VI.
ERIK'S DECISION.

The next day the fisherman called Erik to him, and in the presence of Katrina, Otto, and Vanda, spoke to him as follows:

"Erik, the letter of Doctor Schwaryencrona was about you. He writes that you have given entire satisfaction to your teachers, and the doctor offers to pay all the expenses of your education, if you wish to continue your studies. But this letter also requires you to decide for yourself, whether you will accept this offer, or remain with us at Noroe, which we would like so much to have you do, as you no doubt know. But before you make up your mind, I must tell you a great secret, a secret that my wife and I would have preferred to keep to ourselves."

At this moment Dame Katrina could not restrain her tears, and, sobbing, she took the hand of Erik and pressed it to her heart, as if protesting against the information which the young man was now to hear.

"This secret," continued Mr. Hersebom, in a strangely altered voice, "is that you are our son only by adoption. I found you on the sea, my child, and brought you home when you were only eight or nine months old. God is my witness that we never intended to tell you this, and neither my wife nor myself have ever made the least difference between you, and Otto, and Vanda. But Doctor Schwaryencrona requires us to do so. Therefore, I wish you to read what he has written to me."

Erik had suddenly become deadly pale. Otto and Vanda, surprised at what they had heard, both uttered a cry of astonishment. Then they put their arms around Erik, and clung closely to him, one on the right, and the other on the left.

Then Erik took the doctor's letter, and without trying to conceal his emotion, he read what he had written to Mr. Hersebom.

The fisherman then told him all the facts about himself. He explained how Dr. Schwaryencrona had undertaken to try and discover the family to which he belonged; and, also, that he had been unsuccessful. How, that but for his advice and suggestions, they would never have thought of doing so. Then Dame Katrina arose, and going to the oaken chest, brought out the garments that the baby had worn, and showed him also the coral which had been fastened around his neck. The story was naturally so full of dramatic interest to the children, that they forgot for a time, at least, how sad it was. They looked with wonder at the lace, and velvet, the golden setting of the coral, and the inscription. It almost seemed to them as if they were taking part in some fairy tale. The impossibility of obtaining any information, as reported by the doctor, only made them regard these articles as almost sacred.

Erik looked at them as if he were in a dream, and his thoughts flew to the unknown mother, who, without doubt, had herself dressed him in these little garments, and more than once shook the coral before the eyes of the baby to make him smile. It seemed to him when he touched them as if he held direct communion with her through time and space.

But where was this mother? Was she still living, or had she perished? Was she weeping for her lost son, or must the son, on the contrary, think of her as forever lost to him?

He remained for some minutes absorbed in these reflections, with his head bent, but a word from Dame Katrina recalled him to himself.

"Erik, you are always our child," she cried, disturbed by his silence.

The eyes of the young man as he looked around him fell on all their loving countenances—the maternal look of the loving wife, the honest face of Mr. Hersebom, that of Otto even more affectionate than usual, and that of Vanda, serious and troubled. As he read the tenderness and disquietude displayed on all their faces, Erik felt as if his heart was melting within him. In a moment he realized his situation, and saw vividly the scene which his father had described. The cradle abandoned to the mercy of the waves, rescued by the hardy fisherman, and carried to his wife; and these people, humble and poor as they were, had not hesitated to take care of the little stranger, to adopt and
cherish him as their own son. They had not spoken of the matter for fourteen years, and now they were hanging on his words as if they were a matter of life and death to them.

All this touched him so deeply that suddenly his tears came. An irresistible feeling of love and gratitude overwhelmed him. He felt eager on his part to repay by some devotion the tenderness which they had shown to him. He resolved to stay with them at Noroe forever, and content himself with their humble lot, while he endeavored to do everything in his power to repay them.

"Mother," said he, throwing himself into Katrina's arms, "do you think that I can hesitate, now that I know all? We will write to the doctor, and thank him for his kind offer, and tell him that I have chosen to remain with you. I will be a fisherman, like you, father, and like Otto. Since you have given me a place at your fireside, I would prefer to retain it. Since you have nourished me by the labor of your hands, I ask to be allowed to repay you in your old age for your generosity toward me when I was a helpless infant."

"God be praised!" cried Dame Katrina, pressing Erik to her heart in a transport of joy and tenderness.

"I knew that the child would prefer the sea to all their books," said Mr. Hersebom, not understanding the sacrifice that Erik's decision would be to him.

"Come, the matter is settled. We will not talk about it any more, but only try to enjoy this good festival of Christmas!"

They all embraced each other, with eyes humid with happiness, and vowed they would never be separated.

When Erik was alone he could not help a stifled sigh, as he thought about all his former dreams of work, and of the career which he had renounced. But still he experienced at the same time a joy which he believed would repay him for the sacrifice.

"Since it is the wish of my adopted parents," he said to himself, "the rest does not signify. I ought to be willing to work for them in the sphere and condition where their devotion has placed me. If I have sometimes felt ambitious to take a higher position in the world, was it not that I might be able to assist them? Since it makes them happy to have me with them, and as they desire nothing better than their present life, I must try to be contented, and endeavor by good conduct and hard work to give them satisfaction. Adieu, then, to my books."

Thus he mused, and soon his thoughts returned to the time when the fisherman had found him floating in his little cradle on the waves. What country did he belong to? Who were his parents? Were they still alive? Had he in some foreign country brothers and sisters whom he would never know?

Christmas had also been in Dr. Schwaryencrona's house in Stockholm a season of great festivity. It was at this time, as the reader doubtless remembers, that they had agreed to decide the bet between him and Mr. Bredejord, and that Professor Hochstedt was to be the umpire.

For two years not a word had been said by either of them about this bet. The doctor had been patiently pursuing his researches in England, writing to the maritime agencies, and multiplying his advertisements in the newspapers; but he had taken care not to confess that his efforts had been fruitless.

As for Mr. Bredejord, he had had the good taste to avoid all allusion to the subject, and contented himself with occasionally admiring the beautiful binding of the Pliny which was displayed in the doctor's book-case.

But when he struck his snuff-box sharply with the ends of his fingers, while he looked at the book, the doctor correctly interpreted the pantomime, which was a shock to his nerves, and said to himself:

"Oh, yes; he is thinking how well the Pliny will look beside his elegant editions of Quintilian and Horace."

On these evenings he was more merciless than ever, if his unfortunate partner made any mistakes at whist.

But time had taken its flight, and he was now obliged to submit the question to the impartial arbitration of Professor Hochstedt.

Dr. Schwaryencrona approached the subject frankly. Kajsa had hardly left him alone with his two friends when he confessed to them, as he had confessed in his letter to Mr. Hersebom, that his investigations had been without result. Nothing had occurred to throw any light on the mystery which surrounded Erik's origin, and the doctor in all sincerity declared that the problem was thought by him to be insolvable.

"But," he continued, "I should be doing myself an injustice if I did not declare with equal sincerity that I do not believe that I have lost my bet. I have not discovered Erik's family, it is true, but all the information that I have been able to obtain corroborates the conclusion which I had arrived at. The 'Cynthia' was, no doubt, an English vessel, for there are at least seventeen ships bearing this name registered at Lloyd's. As for ethnographical characteristics, they are clearly Celtic. My hypothesis, therefore, as to the nationality of Erik is victoriously confirmed. I am more than ever certain that he is of Irish extraction as I at first surmised. But I can not compel his family to come forward and acknowledge him, if they have any reasons of their own for wishing him to continue lost to them. This is all I have to say, my dear Hochstedt; and now you must be the judge as to whether the Quintilian of our friend Bredejord should not legitimately be transferred to my book-case!"

At these words, which seemed to occasion a strong inclination to laugh, the lawyer fell back in his arm-chair,
raised his hands as if in protestation, then he fixed his brilliant eyes upon Professor Hochstedt to see how he would regard the matter. The professor did not betray the embarrassment which might have been expected. He would have certainly felt miserable if the doctor had urged any incontrovertible argument, which would have compelled him to decide in favor of one or the other. His prudent character led him to speak in indefinite terms. He excelled in presenting, one after the other, both sides of a question, and he reveled in his vagaries, like a fish in water. Therefore, this evening he felt quite equal to the situation.

"The fact is incontestable," he said, shaking his head, "that there are seventeen English vessels bearing the name of 'Cynthia,' and this seems to favor the conclusion arrived at by our eminent friend. The characteristic traits also have assuredly great weight, and I do not hesitate to say that they appear to me to be quite conclusive. I do not hesitate to confess that if I were called upon to give an opinion as to Erik's nationality, I should say that he was Irish. But to decide the bet in question we require something more than probabilities; we must have facts to guide us. The chances so far greatly favor the opinion of Dr. Schwaryencrona, but Bredejord can allege that nothing has actually been proved. I see, therefore, no sufficient reason for declaring that the Quintilian has been won by the doctor; neither can I say that the professor has lost his Pliny. In my opinion, as the question remains undecided, it ought to be annulled, which is the best thing to do in such a case."

The doctor's face clearly betrayed his dissatisfaction. As for Mr. Bredejord he leaped to his feet, saying:

"Your argument is a beautiful one, my dear Hochstedt, but I think you are hasty in your conclusions. Schwaryencrona, you say, has not verified his opinions sufficiently for you to say positively that he has won the bet, although you think that all the probabilities are in his favor. What will you say then, if I prove to you immediately that the 'Cynthia' was not an English vessel at all?"

"What would I say?" said the professor, somewhat troubled by this sudden attack. "Upon my word I do not know. I would have to consider the question in a different aspect."

"Examine it then at your leisure," answered the advocate, thrusting his hand into the inner pocket of his coat, and taking out a case from which he selected a letter inclosed in one of those yellow envelopes, which betray at the first glance their American origin.

"This is a document which you can not controvert," he added, placing the letter before the doctor's eyes, who read aloud:

_"To Mr. Bredejord, Stockholm._

"NEW YORK, October 27th.

"SIR,—In reply to your letter of the 5th instant, I hasten to write you the following facts:--

"1st.—A vessel named 'Cynthia,' commanded by Captain Barton, and the property of the Canadian General Transportation Company, was lost, with her cargo and all on board, just fourteen years ago, in the neighborhood of the Faroe Islands.

"2d.—The vessel was insured in the General Steam Navigation Company of New York for the sum of eight hundred thousand dollars.

"3d.—The disappearance of the 'Cynthia' having remained unexplained, and the causes of the sad accident never having been clearly proved to the satisfaction of the insurance company, a lawsuit ensued, which was lost by the proprietors of the said vessel.

"4th.—The loss of this lawsuit occasioned the dissolution of the Canadian General Transportation Company, which has ceased to exist for the last eleven years, having gone into liquidation. While waiting to hear from you again, I beg of you, sir, to accept our sincere salutations.

"JEREMIAH SMITH, WALKER & CO., "Maritime Agents."

"Well, what do you say to that?" asked Mr. Bredejord, when the doctor had finished reading the letter. "It is a document of some value, I think. Do you agree with me?"

"I quite agree with you," answered the doctor. "How did you procure it?"

"In the simplest way in the world. That evening when you spoke to me about the 'Cynthia' being necessarily an English vessel, I thought that you were taking too limited a field for your researches, and that the vessel might be an American one. When time passed, and you received no intelligence, for you would have told us if you had, the idea occurred to me of writing to New York. The third letter brought the result which you have before you. The affair is no longer a complicated one. Do you not think that it assures to me beyond contest the possession of your Pliny?"

"It appears to me to be rather a forced conclusion," replied the doctor, taking the letter and reading it over again, to see if he could find any new arguments to support his theory.

"How forced?" cried the advocate.

"I have proved to you that the vessel was an American one, and that she was lost off the Faroe Islands, that is to say, near the coast of Norway, precisely at the time which corresponds to the arrival of the infant, and still you are not convinced of your error."
"Not in the least, my dear friend. I do not dispute the value or your document. You have discovered what I have found it impossible to do--the true 'Cynthia,' which was lost at a little distance from our coast, and at a specified epoch; but permit me to say, that this only confirms precisely my theory, for the vessel was a Canadian one, or in other words, English, and the Irish element is very strong in some parts of Canada, and I have therefore more reason than ever for being sure that the child is of Irish origin."

"Ah, is that what you find in my letter?" said Mr. Bredejord, more vexed than he was willing to appear to be.

"Then without doubt you persist in believing that you have not lost your Pliny?"

"Assuredly!"

"Perhaps you think you have a right to my Quintilian?"

"I hope in any case to be able to prove my right, thanks to your discovery, if you will only give me time by renewing the bet."

"I am willing. I ask nothing better. How much time do you want?"

"Let us take two more years, and wait until the second Christmas after this one."

"It is agreed," answered Mr. Bredejord. "But be assured, doctor, that you will finally see me in possession of your Pliny!"

"By my faith no. It will make a fine appearance in my book-case beside your Quintilian."

CHAPTER VII.

VANDA'S OPINION.

In the beginning, Erik burning with zeal at the sacrifice which he had made, devoted all his energies to a fisherman's life, and tried to forget that he had ever known any other. He was always the first to rise and prepare the boat for his adopted father, who found every morning all the arrangements completed, and he had only to step on board. If the wind failed, then Erik took the heavy oars, and rowed with all his strength, seeming to choose the hardest and most fatiguing duties. Nothing discouraged him, neither the long waiting for the fish to seize the bait, nor the various preparations to which the captive was subjected--first, the removal of the tongue, which is a most delicate morsel; then the head, then the bones, before placing them in the reservoir, where they receive their first salting. Whatever their work was, Erik did his part not only conscientiously, but eagerly. He astonished the placid Otto by his extreme application to the smallest details of their business.

"How you must have suffered, when you were shut up in the town," said the lad to him, naively. "You only seem to be in your element when you are on the borders of the fiord or on the open sea."

When their conversation took this turn, Erik always remained silent. Sometimes, however, he would revert to the subject himself, and try to prove to Otto, or rather to himself, that there was no better state of existence than their own.

"It is what I have always heard," the other would answer with his calm smile.

And poor Erik would turn away and stifle a sigh.

The truth is that he suffered cruelly after renouncing his studies and seeing himself condemned to a life of manual labor. When these thoughts came to him he fought against them with all his might. He did not wish any one to suspect that he felt in this way, and in hiding them within his own breast he suffered all the more.

A catastrophe which occurred at the beginning of the spring, only served to increase his discouragement.

One day, as there was a great deal of work to do at home in piling together the salted fish, Mr. Hersebom had intrusted it to Erik and to Otto, and had gone out to fish alone. The weather was stormy, and the sky very cloudy for the time of the year. The two young men, although they worked actively, could not help noticing that it was exceptionally dull, and they felt the atmosphere very heavy.

"It is singular!" said Erik, "but I feel a roaring in my ears as if I were some distance above the earth in a balloon."

Almost immediately his nose began to bleed. Otto had a similar sensation, although not quite so severe.

"I think the barometer must be very low," said Erik. "If I had time I would run to Mr. Malarius' and see."

"You have plenty of time," said Otto. "Our work is nearly done, and even if you were delayed I could easily finish it alone."

"Then I will go," replied Erik. "I do not know why the state of the atmosphere should trouble me so much. I wish father was home."

As he walked toward the school, he met Mr. Malarius on the road.

"Is it you, Erik?" said the teacher. "I am glad to see you, and make sure that you are not on the sea. I was just going to inquire. The barometer has fallen with such rapidity during the last half hour. I have never seen anything like it. We are surely going to have a change of weather."
Mr. Malarius had hardly finished speaking, when a distant grumbling, followed by a lugubrious roaring, fell upon their ears. The sky became covered with a cloud as black as ink, which spread rapidly in all directions, and obscured every object with great swiftness. Then suddenly, after an interval of complete silence, the leaves of the trees, the bits of straw, the sand, and even the stones, were swept away by a sudden gust of wind.

The hurricane had begun.

It raged with unheard-of violence. The chimneys, the window shutters, and in some places even the roofs of the houses were blown down; and the boat-houses without exception were carried away and destroyed by the wind. In the fiord, which was usually as calm as a well in a court-yard, the most terrible tempest raged; the waves were enormous and came and went, breaking against the shore with a deafening noise.

The cyclone raged for an hour, then arrested in its course by the heights of Norway, it moved toward the south, and swept over continental Europe. It is noted in meteorological annals as one of the most extraordinary and disastrous that ever was known upon the Atlantic coast. These great changes of the atmosphere are now generally announced beforehand by the telegraph. Most of the European sea-ports forewarned of the danger have time to warn vessels and seamen of the threatened tempest, and they seek a safe anchorage. By this means many disasters are averted.

But on the distant and less frequented coasts, in the fishing-hamlets, the number of shipwrecks was beyond computation.

In one office, that of "Veritas" in France, there were registered not less than 730.

The first thought of all the members of the Hersebom family, as well as of all the other families of fishermen, was naturally for those who were on the sea on this disastrous day. Mr. Hersebom went most often to the western coast of a large island which was about two miles distant, beyond the entrance to the fiord. It was the spot where he had first seen Erik. They hoped that during the tempest he had been able to find shelter by running his boat upon the low and sandy shore. But Erik and Otto felt so anxious that they could not wait until evening to see if this hope was well founded.

The fiord had hardly resumed its ordinary placidity, after the passage of the hurricane, when they borrowed a boat of one of their neighbors, in order to go in search of him. Mr. Malarius insisted upon accompanying the young men upon their expedition, and they all three set out, anxiously watched by Katrina and her daughter.

On the fiord the wind had nearly gone down, but it blew from the west, and to reach the entrance to the harbor they were obliged to use their oars. This took them more than an hour.

When they reached the entrance an unexpected obstacle presented itself. The tempest was still raging on the ocean, and the waves dashed against the island which, formed the entrance to the fiord of Noroe, forming two currents, which came and went with such violence in the narrow pass that it was impossible to gain the open sea. A steamboat could not have ventured through it, and a weak boat could not have resisted it for a moment.

The only thing they could do, therefore, was to return to Noroe, and wait as patiently as they could.

The hour when he habitually came home passed without bringing Mr. Hersebom, but none of the other fishermen returned; so they hoped that they were all detained by the impassable state of the entrance to the fiord, and would not believe that he had personally met with any disaster. That evening was a very sad one at all the firesides where a member was missing. As the night passed without any of the absent men making their appearance, the anxieties of their families increased. In Mr. Hersebom's house nobody went to bed. They passed the long hours of waiting seated in a circle around the fire, silent and anxious.

Dawn is late in these high latitudes in March, but when at last it grew light it was bright and clear. The wind was calm, and they hoped they would be able to get through the pass. A regular fleet of boats, composed of every one who could get away from Noroe, was ready to go in search of the absent men. Just at this moment several vessels hove in sight, and soon reached the village. They were the fishermen who had gone out the day before, not expecting such a cyclone; but Mr. Hersebom was not among them.

Nobody could give any account of him, and the fact of his not returning with the others increased their anxiety as all the men had been in great peril. Some had been surprised by the cyclone and dashed upon the shore, others had time to shelter themselves in a secure place of anchorage. A few had reached the land just in time to save themselves.

It was decided that the flotilla should go in search of those who were missing. Mr. Malarius who still wished to take part in the expedition accompanied Erik and Otto. A large yellow dog begged so earnestly to go with them, that at length they yielded. It was Kaas, the Greenland dog that Mr. Hersebom had brought back with him, after a voyage to Cape Farewell.

After issuing from the pass the boats separated, some going to the right, and others to the left, to explore the shores of the innumerable islands which lie scattered near the entrance to the fiord of Noroe, as well as all along the coast of Norway.
When they met at midday at a given point, which had been agreed upon before separating, no trace of Mr. Hersebom had been discovered. As the search had apparently been well conducted, everyone was of the opinion that they had nothing more to do but to go home.

But Erik was not willing to own himself defeated, and give up all hope so easily. He declared that having visited all the islands which lay toward the south, he now wished to explore those which were in the north. Mr. Malarius and Otto supported him; and seeing this they granted his desire.

This persistence deserved some recompense. Toward two o'clock as they approached a large island, Kaas began suddenly to bark furiously; then before they could prevent him he threw himself into the water, and swam to the shore.

Erik and Otto rowed with all their strength in the same direction. Soon they saw the dog reach the island, and bound, while he uttered loud howls, toward what appeared to be a human form lying extended upon the sand. They made all possible haste, and soon saw beyond a doubt that it was a man who was lying there, and this man was Mr. Hersebom; bloody, pale, cold, inanimate--dead, perhaps. Kaas was licking his hands, and uttering mournful cries.

Erik's first action was to drop on his knees beside the cold body, and apply his ear to his heart.

"He is alive, I feel it beat," he cried.

Mr. Malarias had taken one of Mr. Hersebom's hand's, and was feeling his pulse and he shook his head, sadly and doubtfully; but he would not neglect any of the means which are usually tried in such cases. After taking off a large woolen girdle which he wore around his waist, he tore it in three pieces, and giving one to each of the young men, they rubbed vigorously the body, the arms, and the legs of the fisherman.

It was soon manifest that this simple treatment had produced the effect of restoring the circulation. The beating of the heart grew stronger, the chest rose, and a feeble respiration escaped through the lips. In a little while Mr. Hersebom was partially restored to consciousness, for he distinctly moaned.

Mr. Malarias, and the two young men lifted him from the ground, and carried him to the boat, where they hastily arranged a bed for him of sails. As they laid him in the bottom of the boat he opened his eyes.

"A drink!" he said in a weak voice.

Erik held a flask of brandy to his lips. He swallowed a mouthful and appeared to be conscious of their arrival, for he tried to give them an affectionate and grateful smile. But fatigue overcame him almost immediately, and he fell into a heavy sleep which resembled a complete lethargy. Thinking justly that the best thing they could do was to get him home as speedily as possible, they took his oars and rowed vigorously; and in a very short time they reached Noroe.

Mr. Hersebom was carried to his bed, and his wounds were dressed with arnica. He was fed with broth, and given a glass of beer, and in a short time he recovered consciousness. His injuries were not of a very grave nature. One of his arms was fractured, and his body was covered with wound and bruises. But Mr. Malarius insisted that he should remain quiet and rest, and not fatigue himself by attempting to talk. He was soon sleeping peacefully.

It was not until the next day that they permitted him to speak and explain in a few words what had happened to him.

He had been overtaken by the cyclone just as he had hoisted his sail to return to Noroe. He had been dashed against the rocks of the island and his boat had been broken into a thousand pieces and carried away by the waves. He had thrown himself into the sea to escape the frightful shock, when she struck, but in spite of all his efforts, he had been dashed by the waves upon the rocks and terribly wounded; he had only been able to drag himself beyond the reach of the waves.

Exhausted by fatigue, one arm broken, and his whole body covered with wounds, he had lain in an unconscious state, unable to move. He could give no account of the manner in which he had passed the twenty hours; doubtless he had either been delirious or unconscious.

Now that he was saved, he began to lament for the loss of his boat, and because of his broken arm, which was now in splints. What would become of him, even admitting that he might be able to use his arm again after eight or ten weeks? The boat was the only capital possessed by the family, and the boat had been broken to pieces by the wind.

It would be very hard for a man of his age to be compelled to work for others. Besides, could he find work? It was very doubtful, for nobody in Noroe employed any assistant, and the factory even had lately reduced its hands.

Such were the bitter reflections of Mr. Hersebom, while he lay upon his bed of pain; and he felt still worse when he was able to get up, and occupy his accustomed seat in his arm-chair.

While waiting for his complete recovery, the family lived upon such provisions as they had in the house, and by the sale of the salt cod-fish which still remained. But the future looked very dark, and nobody could see how it was to be lightened.

This imminent distress had given a new turn to Erik's thoughts. For two or three days he reflected that it was by
his good fortune that Mr. Hersebom had been discovered. How could he help feeling proud, when he saw Dame Katrina and Vanda look at him with intense gratitude, as they said: "Dear Erik, our father saved you from the waves, and now, in your turn, you have snatched him from death."

Certainly it was the highest recompense that he could desire for the self-abnegation of which he had given such a noble proof, in condemning himself to a fisherman's life. To feel that he had been able to render his adopted family such an inestimable benefit was to him a thought full of sweetness and strength. This family, who had so generously shared with him all that they possessed, were now in trouble, and in want of food. But, could he remain to be a burden to them? Was it not rather his duty to try and do something to assist them?

Erik did not doubt his obligation to do this. He only hesitated as to the best way for him to do it. Should he go to Bergen and become a sailor? or was there some better occupation open to him, where he could be immediately useful to them. He resolved to consult Mr. Malarius, who listened to his reasons, and approved of them, but did not think well of his project of becoming a sailor.

"I understood, but I deplored your decision when you were resigned to remain here and share the life of your adopted parents; but I can not understand why you should condemn yourself to the life of a sailor, which would take you far away from them, when Doctor Schwaryencrona offers you every advantage to pursue a more congenial career," said Mr. Malarius. "Reflect, my dear child, before you make such a decision."

Mr. Malarius did not tell him that he had already written to Stockholm to inform the doctor of the sad state of their affairs, and the change which the cyclone of the 3d of March had made in the circumstances of Erik's family. He was not surprised, when three days after his conversation with Erik, he received the following letter, which he lost no time in carrying to the house of Mr. Hersebom.

The letter read as follows:

"STOCKHOLM, March 17th.

"MY DEAR MR. MALARIUS,--I thank you cordially for informing me of the disastrous consequences of the cyclone of the 3d of March to the worthy Mr. Hersebom. I am proud and happy to learn that Erik acted in these circumstances, as always before, like a brave boy and a devoted son. You will find a check in this letter for 500 kroners; and I beg you to give them to him from me. Tell him if it is not enough to buy at Bergen a first-class boat, he must let me know without delay. He must name this boat 'Cynthia,' and then present it to Mr. Hersebom as a souvenir of filial love. That done, if Erik wishes to please me he will return to Stockholm and resume his studies. His place is always ready for him at my fireside, and if he needs a motive to assist in this decision, I add that I have at length obtained some information, and hope yet to be able to solve the mystery enshrouding his birth.

"Believe me, my dear Malarius, your sincere and devoted friend,

"R.W. SCHWARYENCRONA, M.D."

You may imagine with what joy this letter was received. The doctor, by sending this gift to Erik, showed that he understood the character of the old fisherman. If he had offered it directly to him, it is hardly probable that Mr. Hersebom would have accepted it. But he could not refuse the boat from Erik's hand, and bearing the name of "Cynthia," which recalled how Erik had become a member of the family. Their only grief now, which already began to sadden all their countenances, was the thought that he must soon leave them again. Nobody dared to speak about it, although it was constantly in their thoughts. Erik himself, with his head bowed, was divided between the desire of satisfying the doctor, and realizing the secret wishes of his own heart, and the no less natural wish of giving no offense to his adopted parents.

It was Vanda who first broke the reserve, and spoke upon the subject.

"Erik," she said, in her sweet grave voice, "you can not say 'No' to the doctor after receiving such a letter. You can not do it, because it would be treating him most ungratefully, and sinning against yourself. Your place is among scholars, and not among fishermen. I have thought so for a long time. Nobody has dared to tell you, therefore I tell you."

"Vanda is right," said Mr. Malarius, with a smile.

"Vanda is right," repeated Dame Katrina, drying her eyes.

And in this manner, for the second time, Erik's departure was decided.

CHAPTER VIII.

PATRICK O'DONOGHAN.

The information which Dr. Schwaryencrona had received was not very important, but it sufficed to start his inquiries in a new direction.

He had learned the name of the ex-director of the Canadian Transportation Company, it was Mr. Joshua Churchill. But they did not know what had become of this gentleman since the dissolution of the company. If they
could succeed in finding him, he might be able to give them some information about the old records of the company; perhaps there might have been a list of the passengers by the "Cynthia," and the baby might have been registered with his family or with the persons who had charge of him. But their investigations proved very unsatisfactory. The solicitor who had formerly had the books in his possession as the receiver of the company about ten years before; did not know what had become of Mr. Churchill. For a moment Dr. Schwaryencrona consoled himself with a false hope. He remembered that the American newspapers usually published a list of the passengers embarking for Europe, and he sent for a number of old gazettes to see if he could find the "Cynthia's" list; but he was soon convinced that this was a fruitless effort. He discovered that the practice of publishing the names of passengers on European steamships was of comparatively recent date. But the old gazettes were of one use to him, they gave the exact date of sailing of the "Cynthia," which had left on the 3d of November, not from a Canadian port as they had at first supposed, but from New York, to go to Hamburg.

It was therefore in New York that the doctor must first make his investigations, and, if unsuccessful, then in other parts of the United States.

At Hamburg all his inquiries proved to be useless. The consignee of the Canadian Transportation Company knew nothing about the passengers of the "Cynthia," and could only give them information about the freight, which they had already obtained.

Erik had been in Stockholm six months when they learned that the ex-director, Mr. Joshua Churchill, had died several years before, in an hospital, without leaving any known heirs, or probably any money. As for the registers of the company, they had probably been sold long before as waste paper.

These long researches led to nothing, except to provoke the sarcasms of Mr. Bredejord, which were wounding, to the doctor's self-love, who, however, did not as yet give way to despair.

Erik's history was now well known in the doctor's household. They no longer forbore to speak openly about it, and the results of their researches were talked of both in the dining-room and the parlor.

Perhaps the doctor had acted more discreetly during the first two years of Erik's sojourn with him, when he had kept his affairs a secret. Now they furnished food for the gossiping of Kajsa and Dame Greta, and even occupied the thoughts of Erik himself; and his reflections were often very melancholy.

Not to know whether his parents were still living, to reflect that he might never be able to discover the secret of his birth, was in itself a sad thought to him; but it was still more sad to be ignorant of the land of his birth.

"The poorest child in the streets, the most miserable peasant, knew at least what his country was, and to what branch of the great human family he belonged," he would sometimes say to himself, as he thought of those things. "But I am ignorant of all this. I am cast on the globe like a waif, like a grain of dust tossed by the winds, and nobody knows where I came from. I have no tradition—no past. The spot where my mother was born, and where her ashes now rest, is perhaps profaned and trodden under foot, and I am powerless to defend and protect it."

These thoughts saddened Erik. Sometimes he would tell himself that he had a mother in Dame Katrina, and a home at Mr. Hersebom's, and that Noroe was his country. He vowed that he would repay their kindness to him fourfold, and would always be a devoted son to Norway, but still he felt himself in an exceptional position.

Sometimes when he caught a glimpse of himself in a mirror, he could observe the physical difference between himself and those surrounding him. The color of his eyes and his skin often occasioned him gloomy reflections. Sometimes he would ask himself which country he would prefer to be a native of if he had a choice, and he studied history and geography that he might become better acquainted with the civilization of different countries, and with the habits of their inhabitants. It was a sort of consolation to him to believe that he belonged to the Celtic race, and he sought in books a confirmation of the theory of the doctor.

But when the learned man repeated that in his opinion he was certainly Irish, Erik felt depressed. Why among all the Celtic race should he belong to the people who were the most oppressed? If he had felt absolutely sure of this, he would have loved this unfortunate country. But all proof being wanting, why might he not rather believe that he was French? There were certainly Celts in France, and it was a country that he would have been proud to claim as his own, with her glorious traditions, her dramatic history, and her fruitful principles, which she had disseminated all over the world. Oh! he could have passionately loved, and served with devotion, such a country. He would have felt a filial interest in studying her glorious annals, in reading the works of her great authors, and in studying her poets. But alas! all these delicate emotions were denied him, and he felt that the problem of his origin would never be solved, since after so many years spent in making inquiries they had learned nothing.

However, it seemed to Erik that if he could pursue these inquiries himself, and follow up the information already obtained, that he might discover something which might lead to some result, and his activity and zeal might succeed where money had failed. Would he not work with an ardor which must overcome all difficulties?

This idea took possession of his mind, and insensibly had a marked effect in his studies, giving them a special direction; although he was not aware of this fact himself. As he had made up his mind to travel, he commenced to
study cosmography and nautical matters; in fact, everything that was taught in the school for marines.

"Some day," he said to himself, "I will pass my examination as a captain, and then I shall go to New York in my own vessel, and pursue my inquiries with regard to the 'Cynthia.'"

As a natural consequence, this project of personally investigating the matter of his birth soon became known, for he was candor itself.

Dr. Schwaryencrona, Mr. Bredejord and Professor Hochstedt ended by becoming interested, and finally adopted his views as their own. The question of Erik's birth, which had at first only been an interesting problem in their eyes, engrossed them more and more. They saw how much Erik took it to heart, and as they were sincerely attached to him, they realized how important it was to him, and they were disposed to do everything in their power to cast some light upon the mystery.

One fine evening, just as the vacation was approaching, it occurred to them that it would be a good idea to make an excursion to New York together, and see if they could, obtain any further news about the matter.

Who first conceived this idea was a disputed point among them, and gave rise to many discussions between the doctor and Mr. Bredejord, each claiming a priority. Doubtless it occurred to them both simultaneously; but be this as it may, the proposal was adopted unanimously, and in the month of September the three friends, accompanied by Erik, embarked at Christiana for New York. Ten days later they had reached that city, and opened communication with the house of Jeremiah Smith, Walker & Company, from whom they had received the first intelligence.

And now a new agent appeared on the scene, whose assistance they had had little suspicion of, and this was Erik himself. In New York he only saw what would assist him in his search. He was up at daybreak visiting the wharves, accosting the sailors, whom he might chance to meet, working with indefatigable activity to collect the most minute intelligence.

"Do you know anything about the Canadian Transportation Company? Could you tell me of any officer, or passenger, or sailor, who had sailed on the 'Cynthia?'" he asked everywhere.

Thanks to his perfect knowledge of the English language, his sweet and serious countenance, and his familiarity with everything pertaining to the sea, he was well received everywhere. They mentioned to him successively several old officers, sailors, and employes, of the Canadian Transportation Company. Sometimes he was able to find them. Sometimes all traces of them were lost. But none of them could give him any useful information about the last voyage of the "Cynthia." It took fifteen days of walking, and searching incessantly, to obtain one little bit of information which might prove valuable, among all the confused and contradictory accounts which were poured into poor Erik's willing ears.

This one little truth however seemed to be worth its weight in gold.

They assured him that a sailor named Patrick O'Donoghan, had survived the shipwreck of the "Cynthia," and had even returned to New York several times since that eventful voyage. This Patrick O'Donoghan had been on the "Cynthia," on her last voyage, and had been a special attendant of the captain. In all probability he would know the first-class passengers, who always eat at the captain's table. They judged by the fineness of the infant's clothing that he belonged to this class. It was now a matter of the greatest importance to find this sailor.

This was the conclusion of Dr. Schwaryencrona and Mr. Bredejord, when Erik informed them of his discovery, when he returned to the Fifth Avenue Hotel to dinner.

As usual it led to a discussion, since the doctor tried to draw from this discovery a confirmation of his favorite theory.

"If ever there was an Irish name," he cried, "Patrick O'Donoghan is one. Did I not always say that I was sure that Erik was of Irish birth?"

"Does this discovery prove it?" asked Mr. Bredejord laughing. "An Irish cabin-boy does not prove much. It would be difficult, I fancy, to find an American vessel without one or two natives of Erin among her crew."

They discussed the matter for two or three hours, neither of them willing to give way to the other.

From that day Erik devoted all his energies to the task of finding Patrick O'Donoghan. He was not successful it is true, but by force of seeking, and questioning, he discovered a sailor who had known this man, and who was able to give him some information. Patrick O'Donoghan was a native of the County Cork. He was between thirty-three and thirty-four years old, of medium height, with red hair, black eyes, and a nose which had been broken by some accident.

"A boy one would remember among a thousand," said the sailor. "$I\text{ recollect him very well, although I have not seen him for seven or eight years.}"

"Is it in New York you usually meet him?" asked Erik.

"Yes, in New York, and in other places; but the last time was in New York."

"Do you know any one who could give me any information about him, so that I could find out what has become of him?"
"No, unless it is the proprietor of the hotel called the Red Anchor, in Brooklyn. Patrick O'Donoghan lodges there when he is in New York. The name of the hotel-keeper is Mr. Bowles, and he is an old sailor. If he does not know, I do not know of any one else who can tell you anything about him."

Erik hurried on board one of the ferry-boats that cross the East River, and ten minutes later he was in Brooklyn.

At the door-way of the Red Anchor he saw an old woman, who was neatly dressed, and busily occupied in peeling potatoes.

"Is Mr. Bowles at home?" he said, saluting her politely, after the custom of his adopted country.

"He is at home, but he is taking a nap," answered the good woman, looking with curiosity at her questioner. "If you have any message for him, you can give it to me. I am Mrs. Bowles."

"Oh, madam, you can no doubt give me the information I desire as well as Mr. Bowles," answered Erik. "I wish to know whether you are acquainted with a sailor named Patrick O'Donoghan, and whether he is now with you, or if you can tell me where I can find him?"

"Patrick O'Donoghan: yes, I know him, but it is five or six years since he has been here, and I am unable to say where he is now."

Erik's countenance displayed such great disappointment that the old woman was touched.

"Are you so anxious to find Patrick O'Donoghan that you are disappointed in not finding him here?" she asked.

"Yes, indeed," he answered. "He alone can solve a mystery that I shall seek all my life to make clear."

During the three weeks that Erik had been running everywhere in search of information, he gained a certain amount of experience in human nature. He saw that the curiosity of Mrs. Bowles was aroused by his questions, he therefore entered the hotel and asked for a glass of soda-water.

The low room in which he found himself was furnished with green tables, and wooden chairs, but it was empty. This circumstance emboldened Erik to enter into conversation with Mrs. Bowles, when she handed him the bottle of soda-water which he had ordered.

"You are doubtless wondering, madam, what I can want with Patrick O'Donoghan, and I will tell you," said he, with a smile.

"An American vessel called the 'Cynthia' was lost about seventeen years ago on the coast of Norway; Patrick O'Donoghan was employed on board. I was picked up by a Norwegian fisherman when I was about nine months old. I was floating in a cradle attached to a buoy of the 'Cynthia.' I am seeking O'Donoghan to see if he can give me any information about my family, or at least about my country."

Mrs. Bowles uttered a cry that put a stop to Erik's explanation.

"To a buoy, do you say? You were tied to a buoy?"

But without waiting for any reply she ran to the stairway. "Bowles! Bowles! come down quickly," she cried, in a piercing voice.

Erik, pale and with tightly compressed lips, hung upon his words, expecting some revelation, but this he had to wait for. Mr. Bowles obeyed without any protestation; Erik did the same. He repeated in as few words as he could what he had told the old woman.

As he listened, the countenance of Mr. Bowles dilated like a full moon, his lips parted in a broad smile, and he looked at his wife, and rubbed his hands. She on her side appeared equally well pleased.

"Must I suppose that you are already acquainted with my story?" asked Erik, with a beating heart.

Mr. Bowles made an affirmative sign, and scratching his ear, made up his mind to speak:

"I know it without your telling me," he said, at length, "and my wife knows it as well as I do. We have often talked about it without understanding it."

Erik, pale and with tightly compressed lips, hung upon his words, expecting some revelation, but this he had to wait for. Mr. Bowles had not the gift of either eloquence or clearness, and perhaps his ideas were still clouded with sleep, and in order to recover his faculties he took two or three glasses of a liquor called "pick me up," which greatly resembled gin.

After his wife had placed the bottle and two glasses before him, and he had sufficiently fortified himself, he began to speak.

His story was so confused, and mingled with so many useless details, that it was impossible to draw any
conclusions from it, but Erik listened attentively to all he said, and by questioning and insisting, and aided by Mrs. Bowles, he ended by gathering some facts about himself.

CHAPTER IX.
IN WHICH A REWARD OF FIVE HUNDRED POUNDS STERLING IS OFFERED.

Patrick O'Donoghan, as far as Erik could make out through Mr. Bowles' rambling account of him, was not a model of virtue. The proprietor of the Red Anchor had known him as a cabin-boy and sailor, both before and after the loss of the "Cynthia." Up to that time Patrick O'Donoghan had been poor, as all sailors are. After the shipwreck he had returned from Europe with a large bundle of bank-notes, pretending to have inherited some money in Ireland, which seemed likely enough.

Mr. Bowles, however, had never believed in this inheritance. He thought that this sudden accession of wealth was connected in some way with the loss of the "Cynthia," and that Patrick O'Donoghan was afraid to say so; for it was evident that contrary to the usual habit of seamen in such cases, he carefully avoided speaking about the sad occurrence. He would always turn the conversation if any one alluded to it before him, and he was very anxious to start on a long voyage before the lawsuit brought by the company to recover the insurance due on the "Cynthia" should take place. He did not wish to be summoned as a witness. This conduct appeared very suspicious, as he was the sole known survivor from the shipwreck. Mr. Bowles and his wife had always suspected him, but they had kept their own counsel.

What looked still more suspicious was the fact that when Patrick O'Donoghan was in New York he was never short of money. He brought back very little with him after a voyage, but a few days after his return he always had gold and bank-notes; and when he was tipsy, which frequently happened, he would boast of being in possession of a secret which was worth a fortune to him. The words which most frequently escaped from his lips were, "the baby tied to the buoy!"

"The baby tied to the buoy," he would say, striking the table with his fist, "The baby tied to the buoy is worth its weight in gold."

Then he would laugh, as if well satisfied with himself. But they could never draw out of him any explanation of these words, and for many years the Bowles household were lost in conjectures as to what they could possibly mean.

This accounted for Mrs. Bowles' excitement, when Erik suddenly announced to her that he was the famous baby who had been tied to a buoy.

Patrick O'Donoghan, who had been in the habit of lodging at the Red Anchor, whenever he was in New York, for more than fifteen years, had not been seen there now for more than four years. There had also been something mysterious about his last departure. He had received a visit from a man who had been closeted with him for more than an hour. After this visit Patrick O'Donoghan, who had seemed worried and troubled, had paid his board bill, taken his carpet bag, and left in a hurry.

They had never seen him since that day.

Mr. and Mrs. Bowles were naturally ignorant of the cause of his sudden departure, but they had always thought that it had some connection with the loss of the "Cynthia." In their opinion the visitor had come to warn Patrick O'Donoghan of some danger which threatened him, and the Irishman had thought it prudent to leave New York immediately. Mrs. Bowles did not think he had ever returned. If he had done so, they would have been sure to hear of him through other seamen who frequented their house, and who would have been astonished if Patrick O'Donoghan had boarded anywhere else, and would have been sure to ask questions as to the reasons for his doing so.

This was the substance of the story related to Erik, and he hastened to communicate it to his friends.

His report was naturally received with all the interest which it merited. For the first time, after so many years, they were on the track of a man who had made reiterated allusions to the baby tied to a buoy. It was true they did not know where this man was, but they hoped to find him some day. It was the most important piece of news which they had as yet obtained. They resolved to telegraph to Mrs. Bowles, and beg her to prepare a dinner for six persons. Mr. Bredejord had suggested this idea, as a good means of drawing the worthy couple out; for while they talked during the dinner, they might be able to glean some new facts.

Erik had little hopes of obtaining any further information. He thought that he already knew Mr. and Mrs. Bowles well enough to be convinced that they had told him all that they knew. But he did not take into account Mr. Bredejord's skill in questioning witnesses, and in drawing from them information which they themselves were scarcely aware of.

Mrs. Bowles had surpassed herself in preparing the dinner. She had laid the table in the best room on the first floor. She felt very much flattered at being invited to partake of it, in the society of such distinguished guests, and
answered willingly all of Mr. Bredejord's questions. They gathered from this conversation a certain number of facts which were not unimportant.

One was that Patrick O'Donoghan had said at the time, of the lawsuit against the insurance company, that he was going away to avoid being summoned as a witness. This was evident proof that he did not wish to explain the circumstances under which the shipwreck had occurred, and his subsequent conduct confirmed this theory. It was also evident that in New York or its environs he received the suspicious revenue which seemed to be connected with his secret. For when he arrived he was always without money, but after he had been about for a short time he always returned with his pockets full of gold. They could not doubt that his secret was connected with the infant tied to the buoy, for he had frequently affirmed that such was the case.

The evening before his sudden departure Patrick O'Donoghan had said that he was tired of a sea-faring life, and that he thought he should give up making voyages, and settle in New York for the remainder of his life.

Lastly, the individual who had called to see Patrick O'Donoghan was interested in his departure, for he had called the next day and asked for the Irishman who was boarding at the Red Anchor, and had seemed pleased to hear that he was no longer there. Mr. Bowles felt sure that he would recognize this man if he saw him again. By his conversation and actions he had believed him to be a detective, or some agent of the police.

Mr. Bredejord concluded from these facts that Patrick O'Donoghan had been systematically frightened by the person from whom he drew the money, and that this man had been sent to make him fear that criminal proceedings were about to be taken against him. This would explain his precipitate flight, and why he had never returned to New York.

It was important to find this detective, as well as Patrick O'Donoghan.

Mr. and Mrs. Bowles, by referring to their books, were able to give the exact date of the Irishman's departure, which was four years, lacking three months; although they had previously believed that it was four or five years ago.

Dr. Schwaryencrona was immediately struck by the fact that the date of his departure, and consequently of the visit of the detective, corresponded precisely with the date of the first advertisements which he had caused to be made in Great Britain for the survivors of the "Cynthia." This coincidence was so striking that it was impossible not to believe that there was some connection between them.

They began to understand the mystery a little better. The abandonment of Erik on the buoy had been the result of some crime—a crime of which the cabin-boy O'Donoghan had been a witness or an accomplice. He knew the authors of this crime, who lived in New York or its environs, and he had for a long time enjoyed the reward of his secrecy. Then a day had come when the excessive demands of the Irishman had become burdensome, and the announcement in the newspapers by advertisement had been made use of to frighten Patrick, and cause his hurried departure.

In any case, even if these deductions were not correct in every point, they had obtained sufficient information to entitle them to demand a judicial investigation.

Erik and his friends therefore left the Red Anchor full of hope that they would soon obtain some favorable intelligence.

The next day Mr. Bredejord was introduced by the Swedish consul to the chief of police of New York, and he made him acquainted with the facts which had become known to him. At the same time he entered into conversation with the officers of the insurance company who had refused to pay the claims due on the "Cynthia," and read the old documents relative to this matter, which had lain undisturbed so many years. But the examination of these papers did not afford him any important intelligence. The matter had been decided upon technical points, relating to an excess of insurance far above the value of the vessel and cargo. Neither side had been able to produce any person who had been a witness of the shipwreck. The owners of the "Cynthia" had not been able to prove their good faith, or to explain how the shipwreck had taken place, and the Court had decided in favor of their adversaries. Their defense had been weak, and their opponents had triumphed.

The insurance company, however, had been compelled to pay several claims on the lives of the passengers to their heirs. But, in all these law proceedings, there was no trace of any infant nine months old.

These examinations had occupied several days. Finally, the chief of police informed Mr. Bredejord that he had been unable to obtain any intelligence about the matter. Nobody in New York knew any detective who answered to Mr. Bowles' description. Nobody could tell who the individual was who was interested in the departure of Patrick O'Donoghan. As for this sailor, he did not appear to have set his foot in the United States for at least four years. All they could do was to keep the address of the place where he was born, which might prove useful some time. But the chief of police told Mr. Bredejord, without any dissimulation, that the affair had happened so long ago—now nearly twenty years—that even if Patrick O'Donoghan ever returned to New York, it was at least doubtful if the authorities would be willing to investigate the matter.

At the moment when Erik believed that he was about to obtain a solution of the mystery which clouded his life, all their investigations came to a sudden end, and without producing the slightest result. The only thing that
remained to be done was to pass through Ireland as they returned to Sweden, to see if perchance Patrick O'Donoghan had returned there to pass the remainder of his days planting cabbages.

Dr. Schwaryencrona and his friends, after taking leave of Mr. and Mrs. Bowles, resolved to pursue this route. The steamers between New York and Liverpool touch at Cork, and this was only a few miles from Innishannon, the place where Patrick was born. There they learned that Patrick O'Donoghan had never returned to his native place since he left it at the age of twelve years, and that they had never heard from him.

"Where shall we look for him now?" asked Dr. Schwaryencrona, as they embarked for England, on the way to Stockholm.

"At the seaport towns evidently, and clearly at those which are not American," answered Mr. Bredejord. "For note this point, a sailor, a sea-faring man, does not renounce his profession at the age of thirty-five. It is the only one he knows. Patrick is doubtless still on the sea. And all vessels have some port or other for their destination, and it is only there that we can hope to find this man. What do you think, Hochstedt?"

"Your reasoning seems to be just, although not altogether indisputable," answered the professor, with his customary prudence.

"Admit that it is right," continued Mr. Bredejord. "We know that Patrick O'Donoghan was frightened away and would be in dread of pursuit, perhaps of being extradited. In that case, he would avoid his old companions, and seek in preference ports where he was not likely to meet any of them. I know that my ideas can be contradicted, but let us suppose they are well founded. The number of ports which are not frequented by American vessels is not very large. I think we might begin by seeking in these places news of Patrick O'Donoghan."

"Why not have recourse to advertisements?" asked Dr. Schwaryencrona.

"Because Patrick O'Donoghan would not answer them if he is trying to hide himself; even supposing that a sailor would be likely to see your advertisement."

"But you could word your advertisement so as to assure him that you intended to do him no injury, but rather that it would be greatly to his advantage to communicate with you."

"You are right, but still I am afraid that an ordinary seaman would not be likely to see such an advertisement."

"Well, you might try offering a reward to Patrick O'Donoghan, or to any one who would give you information as to where he might be found. What do you think about it, Erik?"

"It seems to me that such an advertisement to produce any result would have to be continued for a long time, and in a great many different papers. That would cost a great deal, and might only frighten Patrick O'Donoghan, no matter how well worded the advertisement might be, provided it is to his interest to remain concealed. Would it not be better to employ some one to visit personally those seaports which this man would be likely to frequent?"

"But where could we find a trusty man who would be willing to undertake such a task?"

"I can furnish one, if you wish it," answered Erik. "I would go myself."

"You, my dear child--and what would become of your studies?"

"My studies need not suffer. There is nothing to prevent me from pursuing them, even during my travels. And another thing, doctor, I must confess to you, that I have already secured the means of doing so without costing me anything."

"How is that possible," asked Dr. Schwaryencrona, Mr. Bredejord, and Professor Hochstedt, simultaneously.

"I have simply been preparing myself for a sea-faring life. I can pass the examination to-day if necessary. Once in possession of my diploma, it would be easy for me to obtain a position as a lieutenant in any sea-port."

"And you have done all this without saying a word to me?" said the doctor, half grieved, while the lawyer and the professor both laughed heartily.

"Well," said Erik, "I do not think that I have committed any great crime. I have only made inquiries as to the requisite amount of knowledge, and I have mastered it. I should not have made any use of it without asking your permission, and I now solicit it."

"And I shall grant it, wicked boy," said the doctor, "But to let you set out all alone now is another matter--we will wait until you have attained your majority."

Erik submitted to this decision willingly and gratefully.

However, the doctor was not willing to give up his own ideas. To search the sea-ports personally he regarded as a last expedient. An advertisement on the other hand would go everywhere. If Patrick O'Donoghan was not hiding away, they might possibly find him by this means. If he was hiding, some one might see it and betray him. He therefore had this advertisement written in seven or eight different languages, and dispatched to the four quarters of the globe in a hundred of the most widely circulated newspapers.

"Patrick O'Donoghan, a sailor, has been absent from New York for four years. A reward of one hundred pounds sterling will be paid to any one who can give me news of him. Five hundred pounds sterling will be given to the said Patrick O'Donoghan if he will communicate with the advertiser. He need fear nothing, as no advantage will be taken
of him.

"DOCTOR SCHWARYENCRONA.

"Stockholm."

By the 20th of October, the doctor and his companions had returned to their homes.

The next day the advertisement was sent to the advertising agency in Stockholm, and three days afterward it had made its appearance in several newspapers. Erik could not repress a sigh and a presentiment that it would be unsuccessful as he read it.

As for Mr. Bredejord, he declared openly that it was the greatest folly in the world, and that for the future he considered the affair a failure.

But Erik and Mr. Bredejord were deceived, as events afterward proved.

CHAPTER X.
TUDOR BROWN, ESQUIRE.

One morning in May the doctor was in his office, when his servant brought him a visitor's card. This card, which was small as is usual in America, had the name of "Mr. Tudor Brown, on board the 'Albatross'" printed upon it.

"Mr. Tudor Brown," said the doctor, trying to remember whom he had ever known who bore this name.

"This gentleman asked to see the doctor," said the servant.

"Can he not come at my office-hour?" asked the doctor.

"He said his business was about a personal matter."

"Show him in, then," said the doctor, with a sigh.

He lifted his head as the door opened again, and was surprised when he beheld the singular person who answered to the feudal name of Tudor, and the plebeian name of Brown.

He was a man about fifty years of age, his forehead was covered with a profusion of little ringlets, of a carroty color, while the most superficial examination betrayed that they were made of curled silk; his nose was hooked, and surmounted with an enormous pair of gold spectacles; his teeth were as long as those of a horse, his cheeks were smooth, but under his chin he wore a little red beard. This odd head, covered by a high hat which he did not pretend to remove, surmounted a thin angular body, clothed from head to foot in a woolen suit. In his cravat he wore a pin, containing a diamond as large as a walnut; also a large gold chain, and his vest buttons were amethysts. He had a dozen rings on his fingers, which were as knotty as those of a chimpanzee. Altogether he was the most pretentious and grotesque-looking man that it was possible to behold. This person entered the doctor's office as if he had been entering a railway station, without even bowing. He stopped to say, in a voice that resembled that of Punch, its tone was so nasal and guttural:

"Are you Doctor Schwaryencrona?"

"I am," answered the doctor, very much astonished at his manners.

He was debating in his mind whether he should ring for his servant to conduct this offensive person to the door, when a word put a stop to his intention.

"I saw your advertisement about Patrick O'Donoghan," said the stranger, "and I thought you would like to know that I can tell you something about him."

"Take a seat, sir," answered the doctor.

But he perceived that the stranger had not waited to be asked.

After selecting the most comfortable arm-chair, he drew it toward the doctor, then he seated himself with his hands in his pockets, lifted his feet and placed his heels on the window-sill, and looked at the doctor with the most self-satisfied air in the world.

"I thought," he said, "that you would listen to these details with pleasure, since you offer five hundred pounds for them. That is why I have called upon you."

The doctor bowed without saying a word.

"Doubtless," continued the other, in his nasal voice, "you are wondering who I am. I am going to tell you. My card has informed you as to my name, and I am a British subject."

"Irish perhaps?" asked the doctor with interest.

The Granger, evidently surprised, hesitated a moment, and then said:

"No, Scotch. Oh, I know I do not look like a Scotchman, they take me very often for a Yankee--but that is nothing--I am Scotch."

As he gave this piece of information, he looked at Dr. Schwaryencrona as much as to say:

"You can believe what you please, it is a matter of indifference to me."

"From Inverness, perhaps?" suggested the doctor, still clinging to his favorite theory.
The stranger again hesitated for a moment. "No, from Edinburgh," he answered. "But that is of no importance after all, and has nothing to do with the matter in hand. I have an independent fortune and owe nothing to anybody. If I tell you who I am, it is because it gives me pleasure to do so, for I am not obliged to do it."

"Permit me to observe that I did not ask you," said the doctor, smiling. "No, but do not interrupt me, or we shall never reach the end of this matter. You published an advertisement to find out what became of Patrick O'Donoghan, did you not?--you therefore have some interest in knowing, I know what has become of him."

"You know?" asked the doctor, drawing his seat closer to that of the stranger. "I know, but before I tell you, I want to ask you what interest you have in finding him?"

"That is only just," answered the doctor.

In as few words as possible, he related Erik's history, to which his visitor listened with profound attention.

"And this boy is still living?" asked Tudor Brown.

"Assuredly he is living. He is in good health, and in October next he will begin his studies in the Medical University at Upsal."

"Ah! ah!" answered the stranger, who seemed lost in reflection. "Tell me," he said at length, "have you no other means of solving this mystery of his birth except by finding Patrick O'Donoghan?"

"I know of no other," replied the doctor. "After years of searching I only found out that this O'Donoghan was in possession of the secret, that he alone could reveal it to me, and that is why I have advertised for him in the papers. I must confess that I had no great hopes of finding him by this means."

"How is that?"

"Because I had reasons for believing that this O'Donoghan has grave motives for remaining unknown, consequently it was not likely that he would respond to my advertisement. I had the intention of resorting to other means. I have a description of him. I know what ports he would be likely to frequent, and I propose to employ special agents to be on the lookout for him."

Dr. Schwaryencrona did not say this lightly. He spoke with the intention of seeing what effect these words would produce on the man before him. And as he watched him intently, he saw that in spite of the affected coolness of the stranger his eyelids fell and the muscles of his mouth contracted. But almost immediately Tudor Brown recovered his self-possession, and said:

"Well, doctor, if you have no other means of solving this mystery, except by discovering Patrick O'Donoghan, I am afraid that you will never find it out. Patrick O'Donoghan is dead."

The doctor was too much taken aback by this disappointing announcement to say a word, and only looked at his visitor, who continued:

"Dead and buried, three hundred fathoms beneath the sea. This man, whose past life always appeared to me to have been mysterious, was employed three years on board my yacht, the 'Albatross.' I must tell you that my yacht is a stanch vessel, in which I often cruise for seven or eight months at a time. Nearly three years ago we were passing through the Straits of Madeira, when Patrick O'Donoghan fell overboard. I had the vessel stopped, and some boats lowered, and after a diligent search we recovered him; but though we spared no pains to restore him to life, our efforts were in vain. Patrick O'Donoghan was dead. We were compelled to return to the sea the prey which we had snatched from it. The accident was put down on the ship's log, and recorded in the notary's office at the nearest place we reached. Thinking that this act might be useful to you, I have brought you a certified copy of it."

As he said this, Mr. Tudor Brown took out his pocket-book and presented the doctor with a paper stamped with a notarial seal.

The latter read it quickly. It was a record of the death of Patrick O'Donoghan, while passing through the Straits of Madeira, duly signed and sworn to, before two witnesses, as being an exact copy of the original--it was also registered in London, at Somerset House, by the commissioners of her Britannic Majesty.

This instrument was evidently authentic. But the manner in which he had received it was so strange that the doctor could not conceal his astonishment. He took it, however, with his habitual courtesy.

"Permit me to ask one question, sir," he said to his visitor.

"Speak, doctor."

"How is it that you have this document in your pocket duly prepared and certified? And why have you brought it to me?"

"If I can count, you have asked two questions," said Tudor Brown. "I will answer them, however--I had this paper in my pocket, because I read your advertisement two months ago, and wishing to furnish you with the information which you asked for, I thought it better to give it to you, in the most complete and definite form that lay in my power. I have brought it to you personally, because I happened to be cruising in these waters; and I wished at
the same time to gratify your curiosity and my own."
    "There was nothing to answer to this reasoning--this was the only conclusion the doctor could draw.
    "Yon are here, then, with the 'Albatross'?' he asked, eagerly.
    "Without doubt."
    "And you have still on board some sailors who have known Patrick O'Donoghan?"
    "Yes, several."
    "Would you permit me to see them?"
    "As many as you please. Will you accompany me on board now?"
    "If you have no objection."
    "I have none," said the stranger, as he arose.

Dr. Schwaryencrona touched his bell, and they brought him his fur pelisse, his hat, and his cane, and he departed with Mr. Tudor Brown.

Fifteen minutes later they were on board the "Albatross."

They were received by an old gray-headed seaman, with a rubicund face, whose open countenance betrayed only truth and loyalty.

"Mr. Ward, this gentleman wishes to make some inquiries about the fate of Patrick O'Donoghan," said Mr. Tudor Brown.

"Patrick O'Donoghan," answered the old sailor, "God rest his soul. He gave us trouble enough to pick him up the day he was drowned in the Straits of Madeira. What is the use of inquiries now that he has gone to feed the fishes?"

"Had you known him for a long time?" asked the doctor.

"The rascal--no--for a year or two perhaps. I believe that it was at Zanzibar that we took him on board--am I right, Tommy Duff?"

"Is any one hailing me?" asked a young sailor, who was busily employed in polishing a copper bowl.

"Come here," said the other--"Was it at Zanzibar that we recruited Patrick O'Donoghan?"

"Patrick O'Donoghan," repeated the young sailor, as if his remembrance of the man was not very good. "Oh yes, I remember him. The man who fell overboard in the Straits of Madeira. Yes, Mr. Ward, it was at Zanzibar that he came on board."

Dr. Schwaryencrona made him describe Patrick O'Donoghan, and was convinced that it was the same man whom he was seeking. Both these men seemed honest and sincere. They had honest and open countenances. The uniformity of their answers seemed a little strange, and almost preconcerted; but after all it might be only the natural consequence of relating facts. Having known Patrick O'Donoghan only a year at the most, they would have but little to say about him, except the fact of his death.

Besides the "Albatross" was a yacht of such large proportions, that if she had been furnished with some cannon she might easily have passed for a man-of-war. The most rigorous cleanliness was observed on board. The sailors were in good condition, well clothed, and under perfect discipline. The general appearance of the vessel insensibly acted upon the doctor, and carried conviction of the truth of the statement which he had just heard. He therefore declared himself perfectly satisfied, and could not leave without inviting Mr. Tudor Brown to dine with him. But Mr. Tudor Brown did not think it best to accept this invitation. He declined it in these courteous terms:

"No--I can not--I never dine in town."

It now only remained for Dr. Schwaryencrona to retire. This he did without having obtained even the slightest bow from this strange individual.

The doctor's first thought was to go and relate his adventure to Mr. Bredejord, who listened to him without saying a word, only promising himself to institute counter inquiries.

But he, with Erik, who had been told the whole story upon his return from school, repaired to the vessel to see if they could elicit any further information, but the "Albatross" had left Stockholm, without leaving word where she was going, and they could not, therefore, obtain even the address of Mr. Tudor Brown.

All that resulted from this affair was the possession of the document, which legally proved the death of Patrick O'Donoghan.

Was this paper of any value? This was the question that Mr. Bredejord could not help doubting, in spite of the evidence of the British consul at Stockholm, whom he questioned, and who declared that the signatures and stamp were perfectly authentic. He also caused inquiries to be made at Edinburgh, but nobody knew Mr. Tudor Brown, which he thought looked suspicious.

But it was an undeniable fact that they obtained no further intelligence of Patrick O'Donoghan, and all their advertisements were ineffectual.

If Patrick O'Donoghan had disappeared for good, they had no hope of penetrating the mystery that surrounded Erik's birth. He himself saw this, and was obliged to recognize the fact that, for the future, the inquiries would have
to be based upon some other theory. He therefore made no opposition about commencing his medical studies the following autumn at the university at Upsal, according to the doctor’s wishes. He only desired, first, to pass his examination as a captain, but this sufficed to show that he had not renounced his project of traveling.

Besides, he had another trouble which lay heavy at his heart, and for which he saw no other remedy but absence. Erik wished to find some pretext for leaving the doctor’s house as soon as his studies were completed; but he wished to do this without exciting any suspicion. The only pretext which he could think of was this plan of traveling. He desired to do this because of the aversion of Kajsa, the doctor’s niece. She lost no occasion of showing her dislike; but he would not at any price have had the excellent man suspect this state of affairs between them. His relations toward the young girl had always been most singular. In the eyes of Erik during these seven years as well as on the first day of his arrival at Stockholm, the pretty little fairy had always been a model of elegance and all earthly perfections. He had bestowed on her his unreserved admiration, and had made heroic efforts to overcome her dislike, and become her friend.

But Kajsa could not make up her mind calmly to see this “intruder,” as she called Erik, take his place in the doctor’s home, be treated as an adopted son, and become a favorite of her uncle and his friends. The scholastic success of Erik, his goodness and his gentleness, far from making him pleasing in her eyes, were only new motives of jealousy.

In her heart Kajsa could not pardon the young man for being only a fisherman and a peasant. It seemed to her that he brought discredit upon the doctor’s household and on herself, who, she liked to believe, occupied a very high position in the social scale.

But it was worse when she learned that Erik was even less than a peasant, only a child that had been picked up. That appeared to her monstrous and dishonorable. She thought that such a child had a lower place in society than a cat or a dog; she manifested these sentiments by the most disdainful looks, the most mortifying silence, and the most cruel insults. If Erik was invited with her to any little social gathering at the house of a friend, she would positively refuse to dance with him. At the table she would not answer anything he said, nor pay any attention to him. She tried on all occasions, and in every possible way, to humiliate him.

Poor Erik had divined the cause of this uncharitable conduct, but he could not understand how ignorance of his family, and of the land of his birth, could be regarded by her as such a heinous crime. He tried one day to reason with Kajsa, and to make her understand the injustice and cruelty of such a prejudice, but she would not even deign to listen to him. Then as they both grew older, the abyss which separated them seemed to widen. At eighteen Kajsa made her _début_ in society. She was flattered and noticed as the rich heiress, and this homage only confirmed her in the opinion that she was superior to common mortals.

Erik, who was at first greatly afflicted by her disdain, ended by becoming indignant, and vowing to triumph over it. This feeling of humiliation had a great share in producing the passionate ardor with which he pursued his studies. He dreamed of raising himself so high in public esteem, by the force of his own industry, that every one would bow before him. But he also vowed that he would go away on the first opportunity, and that he would not remain under a roof where every day he was exposed to some secret humiliation.

Only the good doctor must be kept in ignorance of the cause of his departure. He must attribute it solely to a passion for traveling. And Erik therefore frequently spoke of his desire, when his studies were completed, of engaging in some scientific expedition. While pursuing his studies at Upsal, he prepared himself by work, and the most severe exercise, for the life of fatigue and danger which is the lot of great travelers.

CHAPTER XI.

THE "VEGA."

In the month of December, 1878, Erik had attained the age of twenty, and passed his first examination for his doctor’s degree. The learned men of Sweden were greatly excited about the proposed arctic expedition of the navigator Nordenskiöld, and their enthusiasm was shared by a large proportion of the population. After preparing himself for the undertaking by several voyages to the polar regions, and after studying the problem in all its aspects, Nordenskiöld intended to attempt once more to discover the north-east passage from the Atlantic to the Pacific, which for three centuries had defied the efforts of all the maritime nations.

The programme for the expedition had been defined by the Swedish navigator, and he announced the reasons which led him to believe that the north-east passage was practicable in summer, and the means by which he hoped to realize this geographical desideratum. The intelligent liberality of two Scandinavian gentlemen, and the assistance of the Swedish government, enabled him to organize his expedition upon a plan which he believed would insure its success.

It was on the 21st of July, 1878, that Nordenskiöld quitted From-sae, on board of the "Vega," to attempt to reach
Behring's Strait by passing to the north of Russia and Siberia. Lieutenant Palanders, of the Swedish navy, was in command of the vessel, with the instigator of the voyage, and they had also a staff of botanists, geologists, and astronomical doctors.

The "Vega," which had been especially prepared for the expedition under the surveillance of Nordenskiold, was a vessel of five hundred tons, which had been recently built at Bremen, and carried an engine of sixty-horse power. Three ships were to accompany her to successive points on the Siberian coast, which had been previously determined upon. They were all provisioned for a cruise of two years, in case it might be necessary for them to winter in those arctic regions. But Nordenskiold did not conceal his hope of being able to reach Behring's Strait before autumn, on account of his careful arrangements, and all Sweden shared this hope.

They started from the most northerly point of Norway, and the "Vega" reached Nova Zembla on the 29th of July, on the 1st of August the Sea of Kara, and on the 6th of August the mouth of the Gulf Yenisei. On the 9th of August she doubled Cape Schelynschin, or Cape North-East, the extreme point of the continent, which no vessel had hitherto been able to reach. On the 7th of September she cast anchor at the mouth of the Lena, and separated from the third of the vessels which had accompanied her thus far. On the 16th of October a telegraphic dispatch from Irkutsk announced to the world that the expedition had been successful up to this point.

We can imagine the impatience with which the friends of the Swedish navigator waited for the details of the expedition. These details did not reach them until the 1st of December. For if electricity flies over space with the rapidity of thought, it is not the same with the Siberian post. The letters from the "Vega," although deposited in the post-office at Irkutsk, at the same time that the telegraphic message was dispatched, did not reach Sweden until six weeks afterward. But they arrived at last; and on the 5th of December one of the principal newspapers of Sweden published an account of the first part of the expedition, which had been written by a young medical doctor attached to the "Vega."

That same day, at breakfast, Mr. Bredejord was occupied in reading with great interest the details of the voyage, given in four columns, when his eyes fell upon a paragraph which almost upset him. He re-read it attentively, and then read it again; then he arose, and seizing his hat and coat, he rushed to the house of Dr. Schwaryencrona.

"Have you read the correspondence of the 'Vega'?” he cried, as he rushed like a hurricane into the dining-room where the doctor and Kajsa were taking their breakfast.

"I have just commenced it,” replied the doctor, “and was intending to finish reading it after breakfast, while I smoked my pipe."

"Then you have not seen!” exclaimed Mr. Bredejord, out of breath. "You do not know what this correspondence contains?"

"No,” replied Doctor Schwaryencrona, with perfect calmness.

"Well, listen to this,” continued Mr. Bredejord, approaching the window. "It is the journal of one of your brethren, the aid of the naturalist of the 'Vega.'"

"30th and 31st of July, we entered the strait of Jugor, and cast anchor before a Samoyede village called Chabarova. We landed, and I questioned some of the natives to discover, by Holmgren's method, the extent of their perception of colors. I found that this sense was normally developed among them. Bought of a Samoyede fisherman two magnificent salmon."

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"Pardon me,” interrupted the doctor; "but is this a charade you are reading to me. I confess I do not see how these details can interest me."

"Ah! they do not interest you?” said Mr. Bredejord, in a triumphant tone. "Well, wait a moment and you will see: Bought of a Samoyede fisherman two magnificent salmon, which I have preserved in alcohol, notwithstanding the protestations of our cook. This fisherman fell into the water as he was quitting the ship. They pulled him out half suffocated and stiffened by the cold, so that he resembled a bar of iron, and he, also, had a serious cut on his head. We were just under way, and they carried him to the infirmary of the "Vega," while still unconscious, undressed him, and put him to bed. They then discovered that this fisherman was an European. He had red hair; his nose had been broken by some accident, and on his chest, on a level with his heart, these words were tattooed: "Patrick O'Donoghane--Cynthia.""

Here Dr. Schwaryencrona uttered a cry of surprise.

"Wait! listen to the rest of it," said Mr. Bredejord; and he continued his reading:

"Bought of a Samoyede fisherman two magnificent salmon, which I have preserved in alcohol, notwithstanding the protestations of our cook. This fisherman fell into the water as he was quitting the ship. They pulled him out half suffocated and stiffened by the cold, so that he resembled a bar of iron, and he, also, had a serious cut on his head. We were just under way, and they carried him to the infirmary of the "Vega," while still unconscious, undressed him, and put him to bed. They then discovered that this fisherman was an European. He had red hair; his nose had been broken by some accident, and on his chest, on a level with his heart, these words were tattooed: "Patrick O'Donoghane--Cynthia.""

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He speaks English with a nasal accent like a Yankee, but pretends to be Scotch, and calls himself Tommy Bowles. He came from Nova Zembla with some fishermen, and he has lived on these shores for the last twelve years. The name tattooed upon his chest he says, 'is that of one of the friends of his infancy who has been dead for a long time.'

"It is evidently our man," cried the doctor, with great emotion.

"Yes, there can be no doubt of it," answered the lawyer. "The name, the vessel, the description, all prove it; even this choice of a pseudonym Johnny Bowles, and his declaring that Patrick O'Donoghan was dead, these are superabundant proofs!"

They were both silent, reflecting upon the possible consequences of this discovery.

"How can we go so far in search of him?" said the doctor, at length.

"It will be very difficult, evidently," replied Mr. Bredejord. "But it is something to know that he is alive, and the part of the world where he can be found. And, besides, who can tell what the future may have in store? He may even return to Stockholm in the 'Vega,' and explain all that we wish to find out. If he does not do this, perhaps we may, sooner or later, find an opportunity to communicate with him. Voyages to Nova Zembla will become more frequent, on account of this expedition of the 'Vega.' Ship-owners are already talking about sending every year some vessels to the mouth of the Yenisei."

The discussion of this topic was inexhaustible, and the two friends were still talking about the matter, when Erik arrived from Upsal, at two o'clock. He also had read this great piece of news, and had taken the train for home without losing a moment. But it was a singular fact that he was not joyful, but rather disturbed by this new intelligence.

"Do you know what I am afraid of?" said he to the doctor and Mr. Bredejord. "I fear that some misfortune has happened to the 'Vega.' You know it is now the 5th of December, and you know the leaders of the expedition counted upon arriving at Behring's Strait before October. If this expectation had been realized, we should have heard from her by this time; for she would have reached Japan, or at least Petropaulosk, in the Aleutian Islands, or some station in the Pacific, from which we should have received news of her. The dispatches and letters here came by the way of Irkutsk, and are dated the 7th of September, so that for three entire months we have heard nothing from the 'Vega.' So we must conclude that they did not reach Behring's Strait as soon as they expected, and that she has succumbed to the common fate of all expeditious which for the last three centuries have attempted to discover the north-east passage. This is the deplorable conclusion which I have been compelled to arrive at."

"The 'Vega' might have been obliged to encounter in the Polar regions a great deal which was unforeseen, and she might have been unprovided for such a contingency," replied Dr. Schwaryencrona.

"Evidently; but this is the most favorable hypothesis; and a winter in that region is surrounded by so many dangers that it is equivalent to a shipwreck. In any case, it is an indisputable fact that if we ever have any news of the 'Vega' it will not be possible to do so before next summer."

"Why, how is that?"

"Because, if the 'Vega' has not perished she is inclosed in the ice, and she will not be able, at the best, to extricate herself before June or July."

"That is true," answered Mr. Bredejord.

"What conclusion do you draw from this reasoning?" asked the doctor, disturbed by the sad tone of Erik's voice as he made the announcement.

"The conclusion that it is impossible to wait so long before solving a question which is of such great importance to me."

"What do you want to do? We must submit to what is inevitable."

"Perhaps it only appears to be so," answered Erik. "The letters which have reached us have come across the Arctic Ocean by the way of Irkutsk. Why could I not follow the same route? I would keep close to the coast of Siberia. I would endeavor to communicate with the people of that country, and find out whether any foreign vessel had been shipwrecked, or was held prisoner among the icebergs. Perhaps I might succeed in finding Nordenskiold, and Patrick O'Donoghun. It is an enterprise worth undertaking."

"In the middle of winter?"

"Why not? It is the most favorable season for traveling in sleighs in that latitude."

"Yes; but you forget that you are not there yet, and that it will be spring before you could get there."

"That is true," said Erik, who was compelled to recognize the force of this argument. He sat with his eyes fixed on the floor, absorbed in thought.

"No, matter," said he suddenly; "Nordenskiold must be found, and with him Patrick O'Donoghun. They shall be, or it will not be my fault."

Erik's plan was a very simple one. He proposed to write an anonymous letter to the leading newspapers of Stockholm, and thus proclaim his fears as to the fate of the "Vega." Had she been shipwrecked, or was she held a
prisoner by icebergs, and he concluded his communication by representing how important it was that some vessel should be sent to her assistance in the latter case.

The truth of his reasoning was so apparent, and the interest in the expedition so general, that the young student of Upsal was certain that the question would be warmly discussed in scientific circles.

But the effect of his letter was beyond his highest expectations. All the newspapers without exception expressed their approval of his proposition while commenting upon his communication.

Public opinion was unanimously in favor of fitting out a relief expedition. Commercial men, manufacturers, the members of schools and colleges, the judicial corps—in fact, all classes voluntarily contributed to the enterprise. A rich ship-owner offered to equip a vessel at his own expense, to go to the relief of the "Vega;" and he named it the "Nordenskiold."

The enthusiasm increased as days passed without bringing any intelligence of the "Vega." By the end of December, the subscription had reached a considerable sum. Dr. Sehwaryencrona and Mr. Bredejord had headed the list with a subscription of ten thousand kroners each. They were members of the committee who had chosen Erik for their secretary.

The latter was in fact the soul of the undertaking. His ardor, his modesty, his evident ability with regard to all questions relative to the expedition, which he studied untiringly, soon acquired for him a most decided influence. From the first he did not conceal the fact that it was his dream to take part in the enterprise, if only as a simple sailor, and that he had a supreme and personal interest in the matter. This only gave the greater weight to the excellent suggestions which he made to the originators of the expedition, and he personally directed all the preparatory labors.

It was agreed that a second vessel should accompany the "Nordenskiold," and that it should be like the "Vega," a steamship. Nordenskiold himself had demonstrated that the principal cause of the failure of previous attempts had been the employment of sailing vessels. Arctic navigators, especially when on an exploring expedition, must not be dependent upon the wind, but must be able to force their way speedily through a difficult or perilous pass—and above all, always be able to take the open sea, which it was often impossible to do with a sailing vessel.

This fundamental point having been established, it was decided also to cover the vessel with a lining of green oak, six inches thick, and to divide it into compartments, so that it would be better able to resist a blow from the ice. They were also desirous that she should not draw too much water, and that all her arrangements should be so made as to enable her to carry a full supply of coal. Among the offers which were made to the committee, was a vessel of one hundred and forty tons, which had been recently built at Bremen, and which had a crew of eighteen men, who could easily maneuver her. She was a schooner, but while she carried her masts, she also was furnished with an engine of eighty horse-power. One of her boilers was so arranged that it could burn oil or fat, which was easily procurable in the arctic regions, in case their coal should fail. The schooner protected by its lining of oak, was further strengthened by transverse beams, so as to offer the greatest possible resistance to the pressure of the ice. Lastly, the front of it was armed with a spur of steel, to enable it to break its way through a thick field of ice. The vessel when placed on the stocks, was named the "Alaska," on account of the direction which she was destined to take. It had been decided that while the "Nordenskiold" should pursue the same course as the "Vega" had followed, that the second vessel should take an opposite direction around the world, and gain the Siberian Ocean, by the island of Alaska and Behring's Straits. The chances of meeting the Swedish expedition, or of discovering traces of her if she had perished would thus, they thought, be double, for while one vessel followed on her track, the other would, as it were, precede her.

Erik, who had been the originator of this plan, had often asked himself which of the vessels he had better join, and he had finally concluded to attach himself to the second.

The "Nordenskiold," he said to himself, would follow the same course as the "Vega." It was therefore necessary that she should be equally successful in making the first part of the voyage, and double Cape Tchelynskin, but they might not be able to do this, since it had only been accomplished once. Besides, the last news which they had received from the "Vega," she was only two or three hundred leagues from Behring's Straits; therefore they would have a better chance of meeting her. The "Nordenskiold" might follow her for many months without overtaking her. But the other vessel could hardly fail to meet her, if she was still in existence.

The principal thing in Erik's eyes was to reach the "Vega" as quickly as possible, in order to meet Patrick O'Donoghan without delay.

The doctor and Mr. Bredejord warmly approved of his motives when he explained them to them.

The work of preparing the "Alaska" was pushed on as rapidly as possible. Her provisions, equipments, and the clothing, were all carefully chosen, for they profited by the experience of former Arctic explorers. Her crew were all experienced seamen, who had been inured to cold by frequent fishing voyages to Iceland and Greenland. Lastly, the captain chosen by the committee, was an officer of the Swedish marines, then in the employment of a maritime company, and well known on account of his voyages to the Arctic Ocean; his name was Lieutenant Marsilas. He
chose for his first lieutenant Erik himself, who seemed designed for the position by the energy he had displayed in
the service of the expedition, and who was also qualified by his diploma. The second and third officers were tried
seamen, Mr. Bosewitz and Mr. Kjellguist.

The "Alaska" carried some explosive material in order to break the ice, if it should be necessary, and abundant
provisions of an anti-scorbutic character, in order to preserve the officers and crew from the common Arctic
maladies. The vessel was furnished with a heater, in order to preserve an even temperature, and also with a portable
observatory called a "raven's nest," which they could hoist to the top of the highest mast, in those regions where they
meet with floating ice, to signal the approach of icebergs.

By Erik's proposal this observatory contained a powerful electric light, which at night could illuminate the route
of the "Alaska." Seven small boats, of which two were whale-boats, a steam-cutter, six sledges, snow-shoes for each
of the crew, four Gatling cannons and thirty guns, with the necessary ammunition, were stored away on board.
These preparations were approaching an end, when Mr. Hersebom and his son Otto arrived from Noroe with their
large dog Kaas, and solicited the favor of being employed as seamen on board of the "Alaska." They knew from a
letter of Erik's the strong personal interest which he had in this voyage, and they wished to share its dangers with
him.

Mr. Hersebom spoke of the value of his experience as a fisherman on the coast of Greenland, and of the
usefulness of his dog Kaas, who could be used as a leader of the dogs which would be necessary to draw the sledges.
Otto had only his good health, his herculean strength, and his devotion to the cause to recommend him. Thanks to
the influence of the doctor and Mr. Bredejord, they were all three engaged by the committee.

By the beginning of February, 1879, all was ready. The "Alaska" had therefore five months before the first of
June to reach Behring's Straits, which was accounted the most favorable season for the exploration. They intended
also to take the most direct route, that is to say, through the Mediterranean, the Suez Canal, the Indian Ocean, and
the China Seas, stopping successively to take in coal at Gibraltar, Aden, Colombo in Ceylon, Singapore, Hong
Kong, Yokohama, and Petropaulosk.

From all these stations the "Alaska" was to telegraph to Stockholm, and it was also agreed that, if in the
meantime any news was received of the "Vega," they should not fail to send information.

The voyage of the "Alaska," although intended primarily for an arctic exploration, would begin by a voyage
through tropical seas, and along the continents most favored by the sun. The programme had not, however, been
arranged to give them pleasure; it was the result of an imperative necessity, since they must reach Behring's Straits
by the shortest route and remain in telegraphic communication with Stockholm up to the last moment. But a serious
difficulty threatened to retard the expedition. They had spent so much in equipping the vessel that the funds which
were indispensable for the success of the enterprise, began to run short. They would require considerable to purchase
coal, and for other incidental expenses.

A new appeal for money became necessary. As soon as it was issued the committee received two letters
simultaneously.

One was from Mr. Malarius, the public teacher of Noroe, and laureate of the Botanical Society. It contained a
check for one hundred kroners, and begged that he might be attached to the expedition as the assistant naturalist of
the "Alaska."

The other contained a check for twenty-five thousand kroners, with this laconic note:
"For the voyage of the 'Alaska,' from Mr. Tudor Brown, on condition that he is received as a passenger."

CHAPTER XII.
UNEXPECTED PASSENGERS.

The request of Mr. Malarius could only be received with gratitude by the committee. It was therefore passed
enthusiastically, and the worthy teacher, whose reputation as a botanist was greater than he himself suspected, was
appointed assistant naturalist of the expedition.

As for the condition upon which Tudor Brown bestowed his donation of twenty-five thousand kroners, both Dr.
Schwaryencrona and Mr. Bredejord were strongly inclined to refuse to grant it. But if called upon to give some
motive for their repugnance, they had to confess that they would not know what to say. What sufficient reason could
they give the committee if they asked them to refuse such a large subscription? They really had no valid one. Tudor
Brown had called upon Dr. Schwaryencrona, and brought him a certified account of the death of Patrick
O'Donoghon; and now Patrick O'Donoghon appeared to be living. But they could not prove that Tudor Brown had
willfully deceived them in this matter, and the committee would require some sufficient cause before rejecting so
large a sum. Tudor Brown could easily declare that he had been truthful. His present attitude seemed to prove it.
Perhaps he intended to go himself, only to find out how Patrick O'Donoghon, whom he believed to have been
drowned in the Straits of Madeira, could now be living on the shores of Siberia. But even supposing that Tudor Brown had other projects, it would be to their interest to find them out, and keep him in their hands. For, one of two facts was certain: either Tudor Brown had no interest in the search which had occupied Erik's friends for so long a time, and in that case it would be useless to treat him as an enemy; or he had some slight personal interest in the matter, and then it would be better to watch his plans, and overthrow them.

The doctor and Mr. Bredejord therefore concluded that they would not oppose his becoming a passenger. Then they gradually were filled with a desire to study this singular man, and find out why he wished to take passage on the "Alaska." But how could they do this without sailing with him. It would not be such an absurd thing to do after all. The course which the "Alaska" was to take was a very attractive one, at least the first part of it. To be brief, Dr. Schwaryencrona, who was a great traveler, asked to be taken as a passenger, to accompany the expedition as far as the China seas, by paying such a price as the committee might judge proper.

This example immediately acted with irresistible force upon Mr. Bredejord, who had dreamed for a long time about an excursion to the land of the Sun. He also solicited a cabin under the same conditions.

Every one in Stockholm now believed that Mr. Hochstedt would do the same, partly out of scientific curiosity, and partly from terror at the thought of passing so many months without the society of his friends. But all Stockholm was deceived. The professor was strongly tempted to go, and he reviewed all the arguments for and against it, and found it almost impossible to arrive at any decision, but fate ordained that he should stay at home.

The time of their departure was irrevocably fixed for the 10th of February. On the 9th Erik went to meet Mr. Malarius, and was agreeably surprised to see Dame Hersebom, and Vanda, who had come to bid him farewell. They were modestly intending to go to a hotel in the town, but the doctor insisted that they should come and stay with him, to the great displeasure of Kajsa, who did not think that they were sufficiently distinguished.

Vanda was now a tall girl, whose beauty fulfilled its early promise. She had passed successfully a very difficult examination at Bergen which entitled her to take a professor's chair, in a superior school. But she preferred to remain at Noroe with her mother, and she was going to fill Mr. Malarius' place during his absence: always serious and gentle, she found in teaching a strange and inexplicable charm, but it had not changed the simplicity of her home life. This beautiful girl, in her quaint Norwegian costume, was able to give tranquilly her opinion on the deepest scientific subjects, or seat herself at the piano, and play with consummate skill a sonata of Beethoven. But her greatest charm was the absence of all pretension, and her perfectly natural manners. She no more thought of being vain of her talents, or of making any display of them, than she did of blushing on account of her rural costume. She bloomed like some wild flower, that, growing beside the fiord, had been transplanted by her old master, and cultivated and cherished in his little garden behind the school.

In the evening all Erik's adopted family were assembled in the parlor of Dr. Schwaryencrona; Mr. Bredejord and the doctor were about to play a last game of whist with Mr. Hochstedt. They discovered that Mr. Malarius was also an authority in this noble game, which would enable them to while away many leisure hours on board the "Alaska." Unfortunately the worthy instructor also told them, at the same time, that he was always a victim of sea-sickness, and nearly always confined to his bed as soon as he set foot upon a vessel. Only his affection for Erik had induced him to join the expedition, added to the ambition, long fondly cherished, of being able to add some more varieties to his catalogue of botanical families.

After which they had a little music: Kajsa, with a disdainful air, played a fashionable waltz; Vanda sung an old Scandinavian melody with a sweetness that surprised them all. The tea was served, and a large bowl of punch, which they drank to the success of the expedition, followed. Erik noticed that Kajsa avoided touching his glass.

"Will you not wish me a happy voyage?" he said to her, in a low tone.

"What is the use of wishing for what we do not expect to see granted?" she answered.

The next morning, at day-break, every one went on board, except Tudor Brown.

Since the receipt of his letter containing the check they had not heard a word from him. The time of departure had been fixed for ten o'clock. At the first stroke, the commander, Mr. Marsilas, had the anchor hoisted, and rang the bell to warn all visitors to leave the ship.

"Adieu, Erik!" cried Vanda, throwing her arms around his neck.

"Adieu, my son!" said Katrina, pressing the young lieutenant to her heart.

"And you, Kajsa, have you nothing to say to me?" he asked, as he walked toward her as if to embrace her also.

"I hope that you will not get your nose frozen, and that you will discover that you are a prince in disguise!" said she, laughing impertinently.

"If that should happen, then at least I might hope to win a little of your affection?" he said, trying to smile, to hide his feelings, for her sarcasm had cut him to the heart.

"Do you doubt it?" answered Kajsa, as she turned toward her uncle, to show that her adieu to him was finished.

The time of departure had indeed come. The warning bell rang imperiously.
The crowd of visitors descended the stairs to the boats which were waiting for them.

In the midst of this confusion every one noticed the arrival of a tardy passenger, who mounted to the deck with his valise in his hand.

The tardy one was Tudor Brown. He presented himself to the captain, and claimed his cabin, to which he was immediately shown.

A moment later, after two or three prolonged whistles, the engine began to work, and a sea of foam whitening the waters behind her, the "Alaska" glided majestically over the green waters of the Baltic, and soon left Stockholm behind her, followed by the acclamations of the crowd who were waving their hats and handkerchiefs.

Erik, on the bridge, directed the maneuvers of the vessel, while Mr. Bredejord and the doctor waved a last farewell to Vanda from the deck.

Mr. Malarius, already frightfully seasick, had retired to his bed. They were all so occupied with saying farewell that not one of them had noticed the arrival of Tudor Brown.

Therefore the doctor could not repress a start of surprise when as he turned around, he saw him ascending from the depths of the vessel, and marching straight toward him, with his hands in his pockets, clothed as he had been at their first interview, and with his hat always seemingly glued to his head.

"Fine weather!" said Tudor Brown, by way of salutation and introduction.

The doctor was stupefied by his effrontery. He waited for some moments to see if this strange man would make any excuse, or give any explanation of his conduct.

Seeing that he did not intend to say anything, he opened the subject himself.

"Well, sir, it appears that Patrick O'Donoghan is not dead, as we supposed!" he said, with his customary vivacity.

"That is precisely what I want to find out, and it is on that account I have undertaken this voyage."

After saying this, Tudor Brown turned away, and began to walk up and down the deck, whistling his favorite air, appearing to think that his explanation was perfectly satisfactory.

Erik and Mr. Bredejord listened to this conversation with a natural curiosity. They had never seen Tudor Brown before, and they studied him attentively, even more so than Dr. Schwaryencrona. It seemed to them that the man, although he affected indifference, cast a furtive glance at them from time to time, to see what impression he made upon them. Perceiving this, they also immediately feigned to take no notice of him, and did not address a word to him. But as soon as they descended to the saloon, upon which their cabins opened, they took counsel together.

"What could have been Tudor Brown's motive in trying to make them believe that Patrick O'Donoghan was dead? And what was his purpose in taking this voyage upon the 'Alaska'? It was impossible for them to say. But it was difficult not to believe that it had some connection with the shipwreck of the 'Cynthia,' and the infant tied to the buoy. The only interest which Patrick O'Donoghan had for Erik and his friends, was the fact of his supposed knowledge of the affair, and this was their only reason for seeking for him. Now they had before them a man who was uninvited, and who had come to them, and declared that Patrick O'Donoghan was dead. And this man had forced his society upon the members of the expedition, as soon as his assertion in the most unexpected manner had been proved to be false. They were therefore obliged to conclude that he had some personal interest in the matter, and the fact of his seeking out Doctor Schwaryencrona indicated the connection between his interests, and the inquiries instituted by the doctor."

All these facts therefore seemed to indicate that Tudor Brown was in this problem a factor quite as important as Patrick O'Donoghan himself. Who could tell whether he was not already in possession of the secret which they were trying to elucidate? If this was the case, was it a happy thing for them that they had him on board, or should they rather be disturbed by his presence?

Mr. Bredejord inclined to the latter opinion, and did not consider his appearance among them as at all reassuring. The doctor, on the other side, argued that Tudor Brown might have acted in good faith, and also that he might be honest at heart, notwithstanding his unattractive exterior.

"If he knows anything," said he, "we can hope that the familiarity which a long voyage necessarily produces may induce him to speak out; in that case it would be a stroke of good luck to have had him with us. At least we shall see what he can have to do with O'Donoghan, if we ever find the Irishman."

As for Erik, he did not even dare to express the sentiments which the sight of this man awakened in him. It was more than repulsion, it was positive hatred, and an instinctive desire to rush upon him and throw him into the sea. He was convinced that this man had had some share in the misfortune of his life, but he would have blushed to abandon himself to such a conviction, or even to speak of it. He contented himself with saying that he would never have allowed Tudor Brown to come on board if he had had any voice in the matter.

How should they treat him?

On this point also they were divided. The doctor declared that it would be politic to treat Tudor Brown with at least outward courtesy, in the hope of inducing him to speak out. Mr. Bredejord, as well as Erik, felt a great
repugnance to act out such a comedy, and it was by no means certain that Dr. Schwaryencrona himself would be able to conform to his own programme. They determined to leave the matter to be decided by circumstances, and the behavior of Tudor Brown himself.

They did not have to wait long. Precisely at midday the bell rang for dinner. Mr. Bredejord and the doctor, went to the table of the commander. There they found Tudor Brown already seated, with his hat on his head, and he did not manifest the least inclination to enter into any relations with his neighbors. The man proved to be so rude and coarse that he disarmed indignation. He seemed to be ignorant of the simplest rules of politeness. He helped himself first, chose the best portions, and ate and drank like an ogre. Two or three times the commander, and Dr. Schwaryencrona addressed a few words to him. He did not even deign to speak, but answered them by gestures.

That did not prevent him however, when he had finished his repast, and armed himself with an enormous toothpick, from throwing himself back in his seat, and saying to Mr. Marsilas:

"What day shall we reach Gibraltar?"

"About the nineteenth or twentieth I think," answered the captain.

Tudor Brown drew a book from his pocket, and examined his calendar.

"That will bring us to Malta on the twenty-second, to Alexandria on the twenty-fifth, and to Aden at the end of the month," said he, as if speaking to himself.

Then he got up, and going on deck again, began to pace up and down.

"A pleasant traveling companion truly," Mr. Marsilas could not help saying.

Mr. Bredejord was about to answer, when a frightful noise at the head of the staircase prevented him. They heard cries, and barking, and a confusion of voices. Everybody arose and ran on deck.

The tumult had been caused by Kaas, Mr. Hersebom's Greenland dog. It seemed that he did not approve of Mr. Tudor Brown, for after evincing his displeasure by low growls every time he passed and repassed him, he finished by seizing him by the legs. Tudor Brown had drawn his revolver from his pocket, and was about to use it when Otto appeared on the scene and prevented him from doing so, and then sent Kaas away to his kennel. A stormy discussion then took place. Tudor Brown, white with rage and terror, insisted that the dog's brains should be blown out. Mr. Hersebom, who had come to the rescue, protested warmly against such a project.

The commander arriving at this moment, settled the matter by desiring Tudor Brown to put away his revolver, and decreeing that henceforth Kaas must be kept chained.

This ridiculous incident was the only one that varied the monotony of their first days of voyaging. Every one became accustomed to the silence and strange manners of Tudor Brown. At the captain's table they at length took no more notice of him than if he had not been in existence. Everybody pursued their own avocations.

Mr. Malarius, after passing two days in bed, was able to crawl upon deck, he commenced to eat, and was soon able to take his place at the innumerable whist parties of the doctor and Mr. Bredejord.

Erik, very much occupied with his business as lieutenant, spent every spare moment in reading.

On the eleventh they passed the island of Oland, on the thirteenth they reached Shayer Rock, passed through the sound, signaled Heligoland on the fourteenth, and on the sixteenth they doubled Cape Hogue.

On the following night Erik was sleeping in his cabin when he was awakened by a sudden silence, and perceived that he no longer felt the vibrations of the engine. He was not however alarmed, for he knew that Mr. Kjellguist was in charge of the vessel; but out of curiosity he arose and went on deck to see what had happened.

He was told by the chief engineer that the engine had broken down, and that they would be compelled to extinguish the fires. They could proceed, however, under sail, with a light breeze from the south-west.

A careful inspection threw no light on the cause of the damage, and the engineer asked permission to repair to the nearest port to repair the injury.

Commander Marsilas, after a personal examination, was of the same opinion. They found that they were thirty miles from Brest, and the order was given to steer for the great French port.

CHAPTER XIII.
THE SHIPWRECK.

The next day the "Alaska" entered the harbor of Brest. The damage which she had sustained was fortunately not important. An engineer who was applied to immediately promised that her injuries should be repaired in three days. It was therefore not a very serious delay, and they could make up for it in a measure by taking in coal. They would therefore not be obliged to stop at Gibraltar for this purpose, as they had at first intended. Their next stopping-place was to be at Malta, which they hoped to reach twenty-four hours earlier than they had at first expected, and thus would reduce the time of their delay in reality to two days. They therefore had nothing to worry themselves about, and everyone felt disposed to view the accident in the most philosophical manner.
It soon became evident that their mischance was going to be turned into a festival. In a few hours the arrival of the "Alaska" became known through the town, and as the newspapers made known the object of the expedition, the commander of the Swedish vessel soon found himself the recipient of the most flattering attentions. The admiral and Mayor of Brest, the commander of the port, and the captains of the vessels which were lying at anchor, all came to pay an official visit to Captain Marsilas. A dinner and a ball were tendered to the hardy explorers, who were to take part in the search for the "Nordenskiold." Although the doctor and Mr. Malaris cared little for such gatherings, they were obliged to take their places at the table which was prepared for them. As for Mr. Bredejord, he was in his true element.

Among the friends invited by the admiral, was a grand-looking old man with a refined but sad countenance. He soon attracted Erik's attention, who felt a sympathy for him which he could hardly explain. It was Mr. Durrien, Honorary Consul-general, and an active member of the Geographical Society, who was well known on account of his travels and researches in Asia Minor and the Soudan.

Erik had read his works with very great interest, and he mentioned that he had done so, when he had been presented to the French _savant_, who experienced a feeling of satisfaction as he listened to the enthusiastic young man.

It is often the fate of travelers, when their adventures make a stir in the world, to receive the loud admiration of the crowd; but to find that their labors are appreciated, by those who are well informed and capable of judging, does not occur so frequently. Therefore the respectful curiosity of Erik went straight to the heart of the old geographer, and brought a smile to his pale lips.

"I have never attached any great merit to my discoveries," he said, in reply to a few words from Erik, regarding the fortunate excavations which had recently been made. "I went ahead seeking, to forget my own cruel misfortunes, and not caring so much for the results as I did for prosecuting a work which was in entire accordance with my tastes. Chance has done the rest."

Seeing Erik and Mr. Durrien so friendly, the admiral took care to seat them together at table, so that they could continue their conversation during dinner.

As they were taking their coffee, the young lieutenant of the "Alaska" was accosted by a little bald-headed man, who had been introduced to him as Dr. Kergaridec, who asked him without any preamble to what country he belonged. A little surprised at first by the question, Erik answered that he was from Sweden, or, to be more exact, from Norway, and that his family lived in the province of Bergen. Then he inquired his motive for asking the question.

"My motive is a very simple one," answered his interlocutor. "For an hour I have been studying your face across the table, while we were at dinner, and I have never seen anywhere such a perfect type of the Celt as I behold in you! I must tell you that I am devoted to Celtic studies, and it is the first time that I have met with this type among the Scandinavians. Perhaps this is a precious indication for science, and we may be able to place Norway among the regions visited by our Gaelic ancestors?"

Erik was about to explain to the worthy _savant_ the reasons which would invalidate this hypothesis, when Dr. Kergaridec turned away to pay his respects to a lady who had just entered the room, and their conversation was not resumed.

The young lieutenant of the "Alaska" would probably never have thought of this incident again, but the next day as they were passing through a street near the market, Dr. Schwaryencrona said suddenly to him:

"My dear child, if I have ever had a doubt as to your Celtic origin, I should have lost it here. See how you resemble these Bretons. They have the same brown eyes, black hair, bony neck, colored skin and general appearance. Bredejord may say what he likes, but you are a pure-blooded Celt--you may depend upon it." Erik then told him what old Dr. Kergaridec had said to him, and Dr. Schwaryencrona was so delighted that he could not talk of anything else all the day.

With the other passengers of the "Alaska," Tudor Brown had received and accepted an invitation from the prefect. They thought up to the last moment that he would go in his accustomed dress, for he had made his appearance in it just as they were all going ashore to the dinner. But doubtless the necessity of removing his precious hat appeared too hard to him, for they saw him no more that evening.

When he returned after the ball, Erik learned from Mr. Hersebom that Tudor Brown had returned at seven o'clock and dined alone. After that, he had entered the captain's room to consult a marine chart; then he had returned to the town in the same small boat which had brought him on board.

This was the last news which they received of him.

The next evening at five o'clock Tudor Brown had not made his appearance. He knew, however, that the machinery of the "Alaska" would be repaired by that time, and her fires kindled, after which it would be impossible to defer her departure. The captain had been careful to notify every one. He gave the order to hoist the anchor.
The vessel had been loosened from her moorings when a small boat was signaled making all speed toward them. Every one believed that it carried Tudor Brown, but they soon saw that it was only a letter which had been sent on board. It occasion general surprise when it was discovered that this letter was directed to Erik.

When he opened it, Erik found that it simply contained the card of Mr. Durrien, the Honorary Consul-general, and member of the Geographical Society, with these words written in pencil:

"A good voyage--a speedy return."

We can not explain Erik's feelings.

This attention from an amiable and distinguished _savant_ brought tears to his eyes. In leaving this hospitable shore where he had remained three days, it seemed to him as if he was leaving his own country. He placed Mr. Durrien's card in his memorandum book, and said to himself that this adieu from an old man could not fail to bring him good luck.

It was now the 20th of February. The weather was fine. The sun had sunk below the horizon, leaving a sky as cloudless as that of summer.

Erik had the watch during the first quarter, and he walked the quarter-deck with a light step. It seemed to him that, with the departure of Tudor Brown, the evil genius of the expedition had disappeared.

"Provided that he does not intend to rejoin us at Malta or Suez," he said to himself.

It was possible--indeed, even probable--if Tudor Brown wished to spare himself the long voyage which the "Alaska" would make before reaching Egypt. While the vessel was going around the coasts of France and Spain, he could, if it so pleased him, stay for a week in Paris, or at any other place, and then take the mail packet either to Alexandria or Suez, and rejoin the "Alaska" at either of those places; or he could even defer doing so until they reached Singapore or Yokohama.

But this was only a possibility. The fact was that he was no longer on board, and that he could not cast a damper upon the spirits of the company.

Their dinner, also, which they took at six o'clock, as usual, was the gayest which they had yet sat down to. At dessert they drank to the success of the expedition, and every one, in his heart, associated it, more or less, with the absence of Tudor Brown. Then they went on deck and smoked their cigars.

It was a dark night, but in the distance toward the north they could see the light of Cape Saint Matthew. They soon signaled, also, the little light on the shore at Bec-du-Raze, which proved that they were in their right course. A good breeze from the north-east accelerated the speed of the vessel, which rolled very little, although the sea was quite rough.

As the dinner-party reached the deck, one of the sailors approached the captain, and said: "Six knots and a quarter."

"In that case we shall not want any more coal until we arrive at Behring's Straits," answered the captain. After saying these words, he left the doctor and went down to his room. There he selected a large chart, which he spread out before him under a brilliant light, which was suspended from the ceiling. It was a map of the British Admiralty, and indicated all the details of the course which the "Alaska" intended to take. The shores, the islands, the sand-banks, the light-houses, revolving lights, and the most minute details were all clearly marked out. With such a chart and a compass it seemed as if even a child might be able to guide the largest ship through these perilous passes; and yet, a distinguished officer of the French Navy, Lieutenant Mage, who had explored the Niger, had been lost in these waters, with all his companions, and his vessel, the "Magician."

It had happened that Captain Marsilas had never before navigated in these waters. In fact, it was only the necessity of stopping at Brest which had brought him here now, otherwise he would have passed a long distance from shore. Therefore he was careful to study his chart attentively, in order to keep his proper course. It seemed a very easy matter, keeping on his left the Pointe-du-Van, the Bec-du-Raze, and the Island of Sein, the legendary abode of the nine Druidesses, and which was nearly always veiled by the spray of the roaring waters; he had only to run straight to the west and to the south to reach the open sea. The light on the island indicated clearly his position, and according to the chart, the island ended in rocky heights, bordered by the open sea, whose depth reached one hundred meters. The light on the island was a useful guide on a dark night, and he resolved to keep closer to it than he would have done in broad daylight. He therefore ascended to the deck, and told Erik to sail twenty-five degrees toward the southwest.

This order appeared to surprise the young lieutenant.

"To the south-west, did you say?" he asked in a respectful manner, believing that he had been mistaken.

"Yes, I said to the south-west!" repeated the commander, dryly: "Do you not like this route?"

"Since you ask me the question, captain, I must confess that I do not. I should have preferred running west for some time."

"To what purpose? we should only lose another night."
The commander spoke in a tone that did not permit of any contradiction, and Erik gave the order which he had received. After all the captain was an experienced seaman in whom they might have perfect confidence.

Slight as was the change in her course, it sufficed to modify sensibly the sailing of the vessel. The "Alaska" commenced to roll a great deal, and to dip her prow in the waves. The log indicated fourteen knots, and as the wind was increasing, Erik thought it prudent to take a couple of reefs.

The doctor and Mr. Bredejord both became a prey to seasickness, and descended to their cabins. The captain, who had for some time been pacing up and down the deck, soon followed their example.

He had hardly entered his own apartment when Erik stood before him.

"Captain," said the young man, "I have heard suspicious noises, like waves breaking over rocks. I feel conscientiously bound to tell you that in my opinion we are following a dangerous route."

"Certainly, sir, you are gifted with tenaciousness," cried the captain. "What danger can you fear when we have this light at least three good miles, if not four, distant from us?"

And he impatiently with his finger pointed out their position upon the chart, which he had kept spread out upon his table.

Erik followed the direction of his finger, and he saw clearly that the island was surrounded by very deep waters. Nothing could be more decisive and reassuring, in the eyes of a mariner. But still he felt sure that it was not an illusion, those noises which he had heard, and which certainly were made by waves breaking upon a rocky shore very close to them.

It was a strange case, and Erik hardly liked to acknowledge it to himself, but it did not seem to him that he could recognize in this profile of the coast which lay spread out before his eyes the dangerous spot which he had pursued. But could he venture to oppose his dim impressions and vague remembrances against a chart of the British Admiralty? Erik dared not do it. These charts are made expressly to guard navigators against errors or any illusions of their memory. He therefore bowed respectfully to his chief and returned to his position on deck.

He had scarcely reached it when he heard this cry resounding through the vessel, "Breakers on the starboard!" followed almost immediately by a second shout of "Breakers on the larboard!"

There was a loud whistle and a clattering of many feet followed by a series of effective maneuvers. The "Alaska" slackened her course, and tried to back out. The captain made a rush up the stairs.

At this moment he heard a grating noise, then suddenly a terrible shock which shook the vessel from prow to stern. Then all was silent, and the "Alaska" remained motionless.

She was wedged in between two submarine rocks.

Commander Marsilas, his head bleeding from a fall, mounted the deck, where the greatest confusion reigned. The dismayed sailors made a rush for the boats. The waves dashed furiously over the rocks upon which the vessel had been shipwrecked. The distant light-houses, with their fixed lights, seemed to reproach the "Alaska" for having thrown herself into the dangers which it was their duty to point out. Erik tried vainly to penetrate through the gloom and discover the extent of the damage which the vessel had sustained.

"What is the matter?" cried the captain, still half-stunned by his fall.

"By sailing south-west, sir, according to your orders, we have run upon breakers," replied Erik.

Commander Marsilas did not say a word. What could he answer? He turned on his heel, and walked toward the staircase again.

Their situation was a tragical one, although they did not appear to be in any immediate peril. The vessel remained motionless between the rocks which seemed to hold her firmly, and their adventure appeared to be more sad than frightful. Erik had only one thought--the expedition was brought to a full stop--his hope of finding Patrick O'Donoghan was lost.

He had scarcely made his somewhat hasty reply to the captain, which had been dictated by this bitter disappointment, than he regretted having done so. He therefore left the deck to go in search of his superior officer with the generous intention of comforting him, if it were possible to do so. But the captain had disappeared, and three minutes had not elapsed when a detonation was heard.

Erik ran to his room. The door was fastened on the inside. He forced it open with a blow of his fist.

Commander Marsilas lay stretched out upon the carpet, with a revolver in his right hand, and a bullet wound in his forehead.

Seeing that the vessel was shipwrecked by his fault, he had blown his brains out. Death had been instantaneous. The doctor and Mr. Bredejord, who had run in after the young lieutenant, could only verify the sad fact.

But there was no time for vain regrets. Erik left to his two friends the care of lifting the body and laying it upon the couch. His duty compelled him to return to the deck, and attend to the safety of the crew and passengers.

As he passed the door of Mr. Malarius, the excellent man, who had been awakened by the stopping of the vessel,
and also by the report of the pistol, opened his door and put out his white head, covered by his black silk night-cap. He had been sleeping ever since they left Brest, and was therefore ignorant of all that had occurred.

"Ah, well, what is it? Has anything happened?" he asked quietly.

"What has happened?" replied Erik. "My dear master, the 'Alaska' has been cast upon breakers, and the captain has killed himself!"

"Oh!" said Mr. Malarius, overcome with surprise. "Then, my dear child, adieu to our expedition!"

"That is another affair," said Erik. "I am not dead, and as long as a spark of life remains in me, I shall say, 'Go forward!'"

CHAPTER XIV.

ON THE ROCKS.

The "Alaska" had been thrown upon the rocks with such violence that she remained perfectly motionless, and the situation did not appear to be immediately dangerous for her crew and passengers. The waves, encountering this unusual obstacle, beat over the deck, and covered everything with their spray; but the sea was not rough enough to make this state of affairs dangerous. If the weather did not change, day would break without any further disaster. Erik saw this at a glance. He had naturally taken command of the vessel, as he was the first officer. Having given orders to close the port-holes and scuttles carefully, and to throw tarred cloths over all openings, in case the sea should become rougher, he descended to the bottom of the hold, in company with the master carpenter. There he saw with great satisfaction that no water had entered. The exterior covering of the "Alaska" had protected her, and the precaution which they had taken against polar icebergs had proved very efficacious against the rocky coast; in fact the engine had stopped at once, being disarranged by the frightful shock, but it had produced no explosion, and they had, therefore, no vital damage to deplore. Erik resolved to wait for daybreak, and then disembark his passengers if it should prove necessary.

He, therefore, contented himself with firing a cannon to ask aid from the inhabitants of the Island of Sein, and with dispatching his small steam launch to L'Orient.

He said to himself, that at no place would they find the means of repairing their damages so promptly and well as at this great maritime arsenal of Western France.

Thus in this glooming hour when everyone on board believed that their chances were irretrievably lost, he already began to feel hopeful, or rather he was one of those courageous souls who know no discouragement and never confess themselves vanquished.

"If we can only get the 'Alaska' off these rocks, everything may yet go well with us," he said.

But he was careful not to express this hope to the others, who would doubtless have considered it chimerical. He only told them when he returned from his visit to the hold that they were in no danger at present, and that there was plenty of time for them to receive aid.

Then he ordered a distribution of tea and rum to all the crew.

This sufficed to put these children of a larger growth in a good humor, and their little steam-boat was speedily launched.

Some rockets from the light-house of Sein soon announced that aid was coming to the assistance of the shipwrecked vessel. Red lights now became visible, and voices hailed them. They answered that they had been shipwrecked upon the rocks surrounding Sein.

It was a full hour before the boat could reach them. The breakers were so strong that the attempt was perilous. But at length six men succeeded in seizing a small cable, and hoisting themselves on board of the "Alaska."

They were six rude fishermen of Sein—strong, intrepid fellows—and it was not the first time they had gone to the assistance of shipwrecked mariners. They fully approved of the idea of sending to L'Orient for assistance, for their little port could not offer the necessary resources. It was agreed that two of them should depart in the little steamer with Mr. Hersebom and Otto, as soon as the moon arose above the horizon. While they were waiting for it to do so, they gave some account of the place where they were shipwrecked.

The rocks extend in a westerly direction for nine miles beyond the Island of Sein. They are divided into two parts, which are called the Pont du Sein and the Basse Froid.

The Pont du Sein is about four miles long, and a mile and a half wide. It is composed of a succession of high rocks, which form a chain above the waters. The Basse Froid extends beyond the Pont du Sein for five miles, and is two thirds of a mile wide; it consist of a great number of rocks of about an equal height, which can be seen at a great distance. The principal rocks are the Cornengen, Schomeur, Cornoc-ar-Goulet-Bas-ven, Madiou and Ar-men. These are the least dangerous, because they can be seen. The number and irregularity of their points under the water are not fully known, for the sea beats over them with extreme violence, the force of the current is very strong, and they are
the scene of many shipwrecks. Light-houses have been erected on the Island of Sein and at Bec-du-Raze, so that these rocks can be seen and avoided by vessels coming from the west, but they are very dangerous for vessels coming from the south. Unfortunately there is no rock or small island at the extreme end where a signal could be placed, and the turbulence of the waters will not permit a floating one to be placed there. Therefore it was resolved to build a light-house on the rock Ar-men, which is three miles from the extreme point. This work is so extremely difficult that although it was commenced in 1867, twelve years later, in 1879, it was only half built. They say that during the latter year it was only possible to work for eight hours, although the workmen were always ready to seize a favorable moment. The light-house therefore was not yet completed at the time when the "Alaska" met with her disaster. But this did not suffice to explain how, after leaving Brest, they had been run into such peril. Erik promised himself that he would solve this difficulty as soon as the little steam-boat had been dispatched for aid. This departure was easily effected, the moon having soon made its appearance. The young captain then appointed the night watch, and sent the rest of the crew to bed, then he descended to the captain's room.

Mr. Bredejord, Mr. Malarius, and the doctor were keeping watch beside the corpse. They arose as soon as they saw Erik.

"My poor child, what is the cause of this sad state of things? How did it happen?" asked the doctor.

"It is inexplicable," answered the young man, looking at the chart which lay open upon the table. "I felt instinctively that we were out of our route, and I said so; but in my estimation we are at least three miles from the light-house; and all the seamen agree with me," he added, designating a spot with his finger on the map—and you see no danger is indicated—no sand-banks or rocks. This coloring indicates deep water. It is inconceivable how the mistake can have occurred. We can not suppose that a chart of the British Admiralty can be at fault, for it is a region well known to mariners, as it has been minutely explored for centuries!"

"Is it not possible to make a mistake as to our position? Could not one light be mistaken for another?" asked Mr. Bredejord.

"That is scarcely possible in a voyage as short as ours has been since we left Brest," said Erik. "Remember that we have not lost, sight of land for a moment, and that we have been passing from one point to another. We can only suppose that one of the lights indicated on the chart has not been lighted or that some supplementary light has been added—in a word, we must imagine what is highly improbable. Our course has been so regular, the soundings have been so carefully made, that it seems impossible that we could have mistaken our route, and yet the fact remains that we are on the rocks, when we ought to have been some distance out to sea."

"But how is it going to end? That is what I want to know," cried the doctor.

"We shall soon see," answered Erik, "if the maritime authorities show any eagerness to come to our assistance. For the present the best thing that every one can do is to go quietly to bed, since we are as secure as if we were at anchor in some quiet bay."

The young commander did not add that it was his intention to keep watch while his friends slept.

Nevertheless this is what he did for the remainder of the night, sometimes promenading the deck and encouraging the men, sometimes descending for a few minutes to the saloon.

As day commenced to dawn he had the satisfaction of perceiving that the waves visibly receded, and if they continued to do so the "Alaska" would be left almost on dry rocks. This gave him hope of being able speedily to determine the extent of the damage which the vessel had received, and, in fact, toward seven o'clock they were able to proceed with this examination.

They found that three points of the rocks had pierced the "Alaska," and held her firmly on her rocky bed. The direction in which she lay, slightly inclined to the north, which was contrary to her course, showed that the commands given by Erik to back the vessel had saved her, and also rendered the shock, when she struck, less severe. The engine had been reversed some seconds before she touched, and she had been carried on the reef by the remainder of her previous speed, and by the force of the current. Doubtless but for this she would have gone to pieces. Besides, the waves having continued to break against her all night in the same direction, had helped to keep her in her place instead of fixing her more firmly on the rocks, which would have happened if the wind had changed. So, after all, there was a favorable view to take of the disaster. The question now was how to get the vessel off before the wind should change, and reverse these favorable conditions.

Erik resolved not to lose a moment. Immediately after breakfast he set all his men to work. He hoped that when the tow-boat should arrive, which he had sent for from L'Orient, it might be possible at high tide to disengage the "Alaska."

We can therefore imagine that the young captain waited impatiently for the first trace of smoke upon the horizon.

All turned out as he desired. The water remained calm and peaceful. Toward noon the boat arrived.

Erik, with his staff, received the mariners with due honors.
"But explain to me," said the captain of the tow-boat, "how you came to cast your vessel on these rocks after leaving Brest?"

"This chart will explain it," said Erik. "It does not point out any such danger."

The French officer examined the chart with curiosity at first, and then he looked stupefied.

"In fact the Basse-Froide is not marked down, nor the point of Sein," he cried. "What unparalleled negligence. Why, even the position of the light-house is not correctly marked. I am more and more surprised. This is a chart of the British Admiralty. I should say that some one has taken pleasure in making it as deceitful and perfidious as possible. Navigators of olden times frequently played such tricks upon their rivals. I should never have believed such traditions would be imitated in England."

"Are you sure that this is an English chart?" asked Mr. Bredejord. "For myself I suspect that the chart is the work of a rascal, and has been placed with criminal intentions among the charts of the 'Alaska.'"

"By Tudor Brown!" cried Erik, impetuously. "That evening when we dined with the authorities at Brest he entered the captain's room upon the pretense of examining the charts. Oh, the infamous wretch! This then is the reason that he did not come on board again!"

"It appears to be only too evident that he is the culprit," said Dr. Schwaryencrona. "But such a dastardly action betrays such an abyss of iniquity. What motive could he have for committing such a crime?"

"What was his motive in coming to Stockholm, expressly to tell you that Patrick O'Donoghan was dead?" answered Mr. Bredejord. "For what purpose did he subscribe twenty thousand kroners for the voyage of the 'Alaska,' when it was doubtful if she would ever make the journey? Why did he embark with us to leave us at Brest? I think we must be blind indeed if we do not see in these facts a chain of evidence as logical as it is frightful. What interest has Tudor Brown in all this? I do not know. But this interest must be very strong, very powerful, to induce him to have recourse to such means to prevent our journey; for I am convinced now that it was he who caused the accident which detained us at Brest, and it was he who led us upon these rocks, where he expected we would all lose our lives."

"It seems difficult, however, to believe that he could have foreseen the route that Captain Marsilas would choose!" objected Mr. Malarias. "Why did he not indicate this route by altering the chart? After delaying us for three days, he felt certain that the captain would take the shortest way. The latter, believing that the waters were safe around Sein, was thrown upon the rocks."

"It is true," said Erik; "but the proof that the result of his maneuvers was uncertain lies in the fact that I insisted, before Captain Marsilas, that we ought still to keep to the west."

"But who knows whether he has not prepared other charts to lead us astray, in case this one failed to do so?" said Mr. Bredejord.

"That is easily determined," answered Erik, who went and brought all the charts and maps that were in the case.

The first one which they opened was that of Corunna, and at a glance the French officer pointed out two or three grave errors. The second was that of Cape Vincent. It was the same.

The third was that of Gibraltar. Here the errors were apparent to every eye. A more thorough examination would have been superfluous, as it was impossible to doubt any longer. If the 'Alaska' had not been shipwrecked on the Island of Sein, this fate would surely have awaited her before she could have reached Malta.

A careful examination of the charts revealed the means which had been employed to effect these changes. They were undoubtedly English charts, but they had been partly effaced by some chemical process, and then retouched so as to indicate false routes among the true ones. They had been recolored so skilfully that only a very slight difference in the tints could be perceived after the most careful scrutiny.

But there was one circumstance which betrayed the criminal intentions with which they had been placed on board the 'Alaska.' All the charts belonging to the vessel bore the seal of the secretary of the Swedish navy. The forger had foreseen that they would not be examined too minutely, and had hoped that by following them they would all come to a watery grave.

These successive discoveries had produced consternation in the breasts of all who were present.

Erik was the first to break the silence which had succeeded the conversation.

"Poor Captain Marsilas!" he said, in a trembling voice, "he has suffered for us all. But since we have escaped almost by a miracle the fate which was prepared for us, let us run no more risks. The tide is rising, and it may be possible to draw the 'Alaska' off the rocks. If you are willing, gentlemen, we will go and commence operations without delay."

He spoke with simple authority and a modest dignity, with which the feeling of responsibility had already inspired him.

To see a young man of his age invested with the command of a ship under such circumstances, and for such a hazardous expedition, was certainly an unforeseen occurrence. But he felt that he was equal to the performance of all
his duties. He knew that he could rely upon himself and upon his crew, and these thoughts transfigured him. The youth of yesterday was a man to-day. The spirit of a hero burned in his eyes. He rose superior to the calamity which had befallen them. His ability impressed all who approached him. Even the doctor and Mr. Bredejord submitted to him like the others.

The operation of preparing for their morning’s work proved easier than they had hoped.

Lifted by the rising waters, the vessel only required a slight force to take her off the rocks. A few hours of hard work were sufficient to accomplish this, and the "Alaska" was once more afloat, strained indeed, and weighed down by the water which made its way into some of her compartments, and with her engine silent, but manageable.

All the crew, who were assembled on the deck, watched anxiously the result of these efforts, and a loud hurrah greeted the deliverance of the "Alaska."

The Frenchmen replied to this joyful cry with similar acclamations. It was now three o’clock in the afternoon. Above the horizon the beautiful February sun inundated the calm sparkling sea with floods of sunshine, which fell also on the rocks of the Basse-Froide, as if to efface all remembrance of the drama which had been enacted there the previous night.

That same evening the "Alaska" had been safely towed into the harbor of L’Orient.

The next day the French maritime authorities, with the utmost courtesy, authorized the necessary repairs to be made without delay. The damage which the vessel had sustained was not serious, but that of the machinery was more complicated, although not irremediable. Necessarily it would take some time to render her seaworthy, but nowhere in the world, as Erik had foreseen, could this be accomplished so speedily as at this port, which possessed such immense resources for naval construction. The house of Gainard, Norris & Co., undertook to make the repairs in three weeks. It was now the 23d of February; on the 16th of March they would be able to resume their voyage, and this time with good charts.

That would leave three months and a half for them to reach Behring’s Strait by the end of June. It was not impossible to do this, although the time was very limited. Erik would not hear of abandoning the enterprise. He feared only one thing, and that was being compelled to do so. Therefore he refused to send to Stockholm a report of the shipwreck, and he would not make a formal complaint against the presumed author of the attempt to shipwreck them for fear of being delayed by legal proceedings, yet he had his fears that this might encourage Tudor Brown to throw some new obstacle in the way of the "Alaska." This is what Dr. Schwaryencrona and Mr. Bredejord asked each other as they were playing at whist with Mr. Malarius, in the little sitting-room of the hotel to which they had gone after arriving at L’Orient.

As for Mr. Bredejord, he had no doubts about the matter.

A rascal like Tudor Brown, if he knew of the failure of his scheme—and how could any one doubt that he was acquainted with this fact?—would not hesitate to renew the attempt.

To believe that they would ever succeed in reaching Behring’s Strait was therefore more than self-delusion—it was foolishness. Mr. Bredejord did not know what steps Tudor Brown would take to prevent this, but he felt certain that he would find some means of doing so. Dr. Schwaryencrona was inclined to the same opinion, and even Mr. Malarius could not think of anything very reassuring to say. The games of whist were therefore not very lively, and the long strolls that the three friends took were not very gay.

Their principal occupation was to watch the erection of the mausoleum which they were building for poor Captain Marsilas, whose funeral obsequies had been attended by the entire population of L’Orient.

The sight of this funeral monument was not calculated to raise the spirits of the survivors of the "Alaska."

But when they joined Erik again their hopes revived. His resolution was unshakable, his activity untiring, he was so bent upon overcoming all obstacles, so certain of success, that it was impossible for them to express, or even to preserve, less heroic sentiments.

They had a new proof of the malignity of Tudor Brown, and that he still was pursuing them.

On the 14th of March, Erik saw that the work upon the machinery was almost finished. They only had to adjust the pumps, and that was to be done the next day.

But in the night, between the 14th and 15th, the body of the pump disappeared from the workshop of the Messrs. Gainard, Norris & Co.

It was impossible to find it.

How had it been taken away--who had done it?

After investigation they were unable to discover.

However, it would take ten days more to replace it, and that would make it the 25th of March before the "Alaska" could leave L’Orient.

It was a singular fact, but this incident affected Erik’s spirits more than the shipwreck had done. He saw in it a sure sign of a persistent desire to prevent the voyage of the "Alaska."
But these efforts only redoubled his ardor, and he determined that nothing should be wanting on his part to bring the expedition to a successful termination.

These ten days of delay were almost exclusively occupied by him in considering the question in all its aspects. The more he studied, the more he became convinced that he could not reach Behring's Straits in three months, for they had suffered a detention of forty days since they had left Stockholm, and to persist would only be to court failure and perhaps some irremediable disaster.

This conclusion did not stop him, but it only led him to think that some modification of their original plans was indispensable.

He took care, however, to say nothing, rightly judging that secrecy was the first condition of victory. He contented himself with watching more closely than ever the work of repairing the vessel.

But his companions thought that they perceived that he was less eager to set out.

They therefore concluded that he saw that the enterprise was impracticable, which they had also believed for some time.

But they were mistaken.

On the 25th of March, at midday, the repairs of the "Alaska" were completed, and she was once more afloat in the harbor of L'Orient.

CHAPTER XV.
THE SHORTEST ROUTE.

Night was closing in when Erik summoned his three friends and counselors to hold a serious consultation.

"I have reflected a great deal," he said to them, "upon the circumstances which have made our voyage memorable since we left Stockholm. I have been forced to arrive at one conclusion, which is that we must expect to meet with obstacles or accidents during our voyage. Perhaps they may befall us at Gibraltar or at Malta. If we are not destroyed, it appears to me certain that we shall be delayed. In that case we can not reach Behring's Straits during the summer, which is the only season when it is practicable to navigate the polar sea!"

"That is also the conclusion which I formed some time ago," declared Mr. Bredejord: "but I kept it to myself, as I did not wish to dampen your hopes, my dear boy. But I am sure that we must give up the idea of reaching Behring's Straits in three months!"

"That is also my opinion," said the doctor.

Mr. Malarius on his part indicated by a motion of his head that he agreed with them all.

"Well!" said Erik, "having settled that point, what line of conduct now remains for us to adopt?"

"There is one right course which it is our duty to take," answered Mr. Bredejord, "it is to renounce an enterprise which we see clearly is impracticable and return to Stockholm. You understand this fact, my child, and I congratulate you upon being able to look the situation calmly in the face!"

"You pay me a compliment which I can not accept," said Erik smiling, "for I do not merit it. No--I have no thoughts of abandoning the expedition, for I am far from regarding it as impracticable. I only think that it is best for us all to baffle the machinations of that scoundrel who is lying in wait for us, and the first thing to do is to change our route."

"Such a change would only complicate our difficulties," replied the doctor, "since we have adopted the shortest one. If it would be difficult to reach Behring's Straits by the Mediterranean and the Suez Canal, it would be impossible by the Cape of Good Hope, or Cape Horn, for either of these routes would necessarily take five or six months."

"There is another way which would shorten our voyage, instead of lengthening it, and where we would be sure not to meet Tudor Brown," said Erik.

"Another way?" answered Dr. Schwaryencrona; "upon my word I do not know of any unless you are thinking of the way of Panama. But it is not yet practicable for vessels, and it will not be yet for several years."

"I am not thinking of Panama, nor of Cape Horn, nor of the Cape of Good Hope," answered the young captain of the "Alaska." "The route I propose is the only one by which we can reach Behring's Strait in three months: it is to go by way of the Arctic Ocean, the north-west passage."

Then seeing that his friends were stupefied by this unexpected announcement, Erik proceeded to develop his plans.

"The north-west passage now is no longer what it was formerly, frightful to navigators--it is intermittent, since it is only open for eight or ten weeks every year, but it is now well known, marked out upon excellent charts, and frequented by hundreds of whaling-vessels. It is rarely taken by any vessel going from the Atlantic to the Pacific Ocean, I must admit. Most of them who enter it from either side only traverse it partially. It might even happen, if
circumstances were not favorable, that we might find the passage closed, or that it might not be open at the precise time when we desired to enter it. It is a risk that one must take. But I think there are many reasons to make us hopeful of success if we take this route, whilst as far as I can see there is none, if we take any of the others. This being the state of affairs, I think it is our duty—a duty which we owe to those who have fitted out the expedition—to take the shortest way of reaching Behring's Strait. An ordinary vessel equipped for navigating tropical waters might hesitate before deciding upon such a course, but with a vessel like the 'Alaska' fitted out especially for polar navigation, we need not hesitate. For my part I declare that I will not return to Stockholm before having attempted to find Nordenskiold."

Erik's reasoning was so sound that nobody tried to contradict it.

What objections could the doctor, Mr. Bredejord, and Mr. Malarius raise?

They saw the difficulties which beset the new plan. But it was possible that these difficulties might not prove insurmountable, whilst, if they pursued any other course, they must abandon all hopes of success. Besides, they did not hesitate to agree with Erik that it would be more glorious, in any case, to make the attempt, than to return to Stockholm and acknowledge themselves conquered.

"I see but one serious objection, for my part," said Dr. Schwaryencrona, after he had remained for a few moments lost in reflection. "It is the difficulty of procuring coal in the arctic regions. For without coal, adieu to the possibility of making the north-west passage, and of profiting by the time, often very short, during which it is practicable."

"I have foreseen this difficulty, which is in fact the only one," answered Erik, "and I do not think it is insurmountable. In place of going to Malta or Gibraltar, where we might doubtless expect new machinations on the part of Tudor Brown, I propose that we go to London; from there I can send, by transatlantic cable, a dispatch to a house in Montreal, to send without delay a boat loaded with coal to wait for us in Baffin's Bay, and to a house in San Francisco to send to Behring's Strait. We have the necessary funds at our disposal, and, besides, we will not require as much as we would have done if we had gone by the way of Asia, for our new route is a much shorter one. It is useless for us to reach Baffin's Bay before the end of May, and we can not hope to reach Behring's Strait before the end of June. Our correspondents in Montreal and San Francisco will therefore have plenty of time to execute our orders, which will be covered by funds deposited with bankers in London. This accomplished, we shall only have to find out whether the north-west passage is practicable, and that evidently depends upon ourselves. But, if we find the passage closed, at least we shall have the consolation of knowing that we have neglected nothing that could have insured our success."

"It is evident!" said Mr. Malarius, "that your arguments are unanswerable!"

"Gently, gently," said Mr. Bredejord. "Do not let us go too fast. I have another objection. Do you think, my dear Erik, that the 'Alaska' can pass unnoticed through these waters? No, it is not possible. The newspapers would mention our arrival. The telegraph companies would make it known. Tudor Brown would know it. He would know that we had changed our plans. What would prevent him from altering his? Do you think, for example, that it would be very difficult to prevent our boat with coals from reaching us?—and without it we could do nothing!"

"That is true," answered Erik, "and it proves that we must think of everything. We must not go to London. We must put into Lisbon as if we were _en route_ to Gibraltar and Suez. Then one of us must go _incognito_ to Madrid, and without explaining why, or for whom it is intended, must open telegraphic communications with Montreal and San Francisco, to order the supply of coal. The crews of these boats must not know for whom the coal is destined, but remain at designated points at the disposition of a captain who will carry an order to them previously agreed upon!"

"A perfect arrangement. It will be almost impossible for Tudor Brown to track us."

"You mean to track me, for I hope that you do not think of accompanying me to these arctic regions," said Erik. "Indeed that is my intention!" answered the doctor. "It shall not be said that that rascal, Tudor Brown, made me turn back!"

"Nor me either," cried Mr. Bredejord and Mr. Malarius together.

The young captain tried to combat this resolution, and explained to his friends the dangers and monotony of the voyage which they proposed to take with him. But he could not alter their decision. The perils which they had already encountered, made them feel it a duty to keep together; for the only way of rendering such a voyage acceptable to them all was not to separate. Every precaution had been taken to protect the persons on board the "Alaska" from suffering unduly from cold; and neither Swedes nor Norwegians fear frost.

Erik was obliged to yield to their wishes, only stipulating that their change of route should not be made known to the crew of the vessel.

The first part of their voyage was quickly accomplished.

On the 2d of April the "Alaska" reached Lisbon. Before the newspapers had given notice of their arrival, Mr.
Bredejord had gone to Madrid, and by means of a banking-house opened communications with two large firms, one in Montreal and one in San Francisco.

He had arranged to have two boat-loads of coal sent to two designated points, and had given the sign by which Erik was to make himself known.

This sign was the words found upon him when he was discovered floating, tied to the buoy of the "Cynthia," "Semper idem."

Finally these arrangements having all been happily concluded, on the 9th of April Mr. Bredejord returned to Lisbon, and the "Alaska" resumed her voyage.

On the twenty-fifth of the same month, having crossed the Atlantic and reached Montreal, where they took in coal, and Erik was assured that his orders had been punctually fulfilled, they left the waters of the St. Lawrence and Straits of Belle Isle, which separate Labrador from Newfoundland. On the 10th of May they reached the coast of Greenland and found the vessel with their coal, it having arrived before them.

Erik knew very well that at this early date it would be useless to attempt to force his way through the Arctic Ocean, which was still firmly frozen over the largest part of his route. But he counted upon obtaining on these shores, which were much frequented by whaling-vessels, precise information as to the best charts, and he was not mistaken. He was also able to buy, although at a high price, a dozen dogs, who with Kaas could draw their sledges if necessary.

Among the Danish stations on the coast of Greenland, he found Godhaven, which is only a poor village, and is used as a depot by dealers in oil and the furs of the country. At this time of the year the cold is not more severe than at Stockholm or Noroe. But Erik and his friends beheld with surprise the great difference between the two countries, both situated at the same distance from the pole. Godhaven is in precisely the same latitude as Bergen. But whilst the southern port of Norway is in April covered with green forests and fruit trees, and even cultivated vines trained upon trellises above green meadows, Greenland is still in May covered with ice and snow, without a tree to enliven the monotony. The shape of the Norwegian coast, deeply indented by forests and sheltered by chains of islands, which contribute almost as much as the warmth of the Gulf Stream to raise the temperature of the country. Greenland, on the contrary, has a low regular coast and receives the full shock of the cold blasts from the pole, consequently she is enveloped almost to the middle of the island by fields of ice several feet in thickness.

They spent fifteen days in the harbor and then the "Alaska" mounted Davis' Straits, and keeping along the coast of Greenland, gained the polar sea.

On the 28th of May for the first time they encountered floating ice in 70 15' of north latitude, with a temperature two degrees below zero. These first icebergs, it is true, were in a crumbling condition, rapidly breaking up into small fragments. But soon they became more dense, and frequently they had to break their way through them. Navigation, although difficult, was not as yet dangerous. By a thousand signs they perceived, however, that they were in a new world. All objects at a little distance appeared to be colorless, and almost without form; the eye could find no place to repose in this perpetually changing horizon, which every minute assumed a new aspect.

"Who can describe," says an eye-witness, "these melancholy surroundings, the roaring of the waves beating beneath the floating ice, the singular noise made by the snow as it falls suddenly into the abyss of waters? Who can imagine the beauty of the cascades which gush out on all sides, the sea of foam produced by their fall, the fright of the sea-birds who, having fallen asleep on a pyramid of ice, suddenly find their resting-place overturned and themselves obliged to fly to some other spot? And in the morning, when the sun bursts through the fog, at first only a little of the blue sky is visible, but it gradually widens, until the view is only limited by the horizon."

These spectacles, presented by the polar sea, Erik and his friends were able to contemplate at their leisure as they left the coast of Greenland, to which they had kept close until they had reached Upernavik. Then they sailed westward across Baffin's Bay. Here navigation became more difficult, for this sea is the ordinary course of the polar icebergs which are drawn in by the innumerable currents which traverse it. Sometimes they found their course checked by insurmountable barriers of ice, which it was impossible to break, and therefore they were compelled to turn aside. The "Alaska" was obliged continually to break her way through immense fields of ice. Sometimes a tempest of snow assailed them which covered the deck and the masts with a thick coat. Sometimes they were assailed by ice dashed over them by the wind, which threatened to sink the vessel by its weight. Sometimes they found themselves in a sort of lake, surrounded on all sides by fields of ice apparently firm and impassable, and from which they had great difficulty to extricate themselves and gain the open sea. Then they had to exercise great vigilance to escape some enormous iceberg sailing down from the north with incredible swiftness, a frightful mass, which could have crushed the "Alaska" like a walnut. But a greater danger still was the submarine ice, which could injure her and act like a battering-ram.

The "Alaska" lost her two large boats. One must experience the dangers which polar navigation presents at every moment to have any just appreciation of them.
After one or two weeks of such experience the most intrepid crew become exhausted, and repose is necessary for them.

Sometimes, although surrounded by all these dangers, they made rapid progress; at others they made scarcely any; but at length, on the 11th of June, they came in sight of land again, and cast anchor at the entrance to Lancaster Sound.

Erik had expected to be obliged to wait some days before being able to enter the sound; but, to his surprise and joy, he found it open, at least at the entrance. He entered resolutely, but only to find the next day his passage impeded by ice, which held them prisoners for three days; but, thanks to the violent currents which sweep through this Arctic canal, he at last was able to free his vessel and continue his route as the whalers of Godhaven had told him he would be able to do.

On the seventeenth he arrived at Barrow's Straits, and made all the speed he could; but on the nineteenth, as he was about to enter Melville Sound, he was again blocked in by the ice.

At first he patiently accepted the situation, waiting for it to break up; but day succeeded to day and still this did not happen.

There were, however, many sources of amusement open to the voyagers. They were near the coast and supplied with everything that could render their life comfortable in that latitude. They could take sleigh-rides and see in the distance the whales enjoying their diversions. The summer solstice was approaching. Since the fifteenth the occupants of the "Alaska" had beheld a new and astonishing spectacle, even for Norwegians and the natives of southern Sweden; it was the sun at midnight touching the horizon without disappearing and then mounting again in the sky. In these high latitudes and desolate coasts the star of day describes in twenty-four hours a complete circle in space. The light, it is true, is pale and languishing, objects lose their perfect shape, and all nature has a shadowy appearance. One realizes profoundly how far he is removed from the world, and how near he is to the pole. The cold, however, was not extreme. The temperature did not fall more than four or five degrees below zero, and the air was sometimes so mild that they could hardly believe that they were in the center of the arctic zone.

But those novel surroundings were not sufficient to satisfy Erik, or make him lose sight of the supreme object which had brought them there. He had not come to herbalize like Mr. Malarius, who returned every evening more and more delighted with his explorations, both of the country and of its unknown plants, which he added to his collection; nor to enjoy with Dr. Schwaryencrona and Mr. Bredejord the novelty of the sights which nature offered to them in these polar regions. He wanted to find Nordenskiold and Patrick O'Donoghans--to fulfill a sacred duty which hemmed them in. He made excursions with his sleigh and on his snow-shoes, reconnoitered in every direction for ten days, but it was all in vain. At the west, as well as the north and east, the banks of ice remained firm.

It was the 20th of June, and they were still far from the Siberian Sea.

Must he confess himself vanquished? Erik could not make up his mind to do this. Repeated soundings had revealed that under the ice there was a swift current running toward Franklin's Strait, that is to say toward the south; he told himself that some effort might suffice to break up the ice, and he resolved to attempt it.

For the length of seven marine miles he had hollowed in the ice a series of chambers, and in each of them was placed a kilogramme of dynamite. These were connected by a copper wire inclosed in gutta percha.

On the 30th of June, at eight o'clock in the morning, Erik from the deck of the "Alaska" pressed the button of the electrical machine, and a formidable explosion took place. The field of ice shook and trembled, and clouds of frightened sea-birds hovered around uttering discordant cries. When silence was restored, a long black train cut into innumerable fissures met their anxious gaze. The explosion of the terrible agent had broken up the ice field. There was, so to speak, a moment of hesitation, and then the ice acted as if it had only been waiting for some signal to move. Cracking in all parts it yielded to the action of the current, and they beheld here and there whole continents, as it were, gradually moving away from them. Some portions, however, were more slow to move; they seemed to be protesting against such violence. The next day the passage was clear, and the "Alaska" rekindled her fires.

Erik and his dynamite had done what it would probably have taken the pale arctic sun a month longer to accomplish.

On the 2d of July, the expedition arrived at Banks' Straits; on the fourth, she issued from the Arctic Sea properly speaking. From this time the route was open notwithstanding icebergs, fogs, and snow-storms. On the twelfth, the "Alaska" doubled Ice Cape; on the thirteenth, Cape Lisburne, and on the fourteenth she entered the Gulf of Kotzebue to the north of Behring's Straits and found there, according to instructions, the boat loaded with coal which had been sent from San Francisco.

Thus in two months and sixteen days they had accomplished the programme arranged by Erik before they left the coast of France.

The "Alaska" had hardly ceased to move, when Erik rushed into a small boat and hurried off to accost the officer
who had charge of the boat loaded with coal.

"_Semper idem!_" said he, as he approached.

"Lisbon!" answered the Yankee.

"How long have you been waiting here for me?"

"Five weeks--we left San Francisco one month after the arrival of your dispatch."

"Have you heard any news of Nordenskiold?"

"At San Francisco they had not received any reliable information about him. But since I have been here I have
spoken to several captains of whaling-vessels, who said that they had heard from the natives of Serdze-Kamen that
an European vessel had been frozen in by the ice for nine or ten months; they thought it was the 'Vega.'"

"Indeed!" said Erik, with a joy which we can easily understand. "And do you believe that it has not yet
succeeded in getting through the straits?"

"I am sure of it--not a vessel has passed us for the last five weeks, which I have not seen and spoken to."

"God be praised--our troubles will not be without recompense, if we succeed in finding Nordenskiold."

"You will not be the first who has done so!" said the Yankee, with an ironical smile--"an American yacht has
preceded you. It passed here three days ago, and like you was inquiring for Nordenskiold."

"An American yacht?" repeated Erik, half stupefied.

"Yes--the 'Albatross,' Captain Tudor Brown, from Vancouver's Island. I told him what I had heard, and he
immediately started for Cape Serdze-Kamen."

CHAPTER XVI.
FROM SERDZE-KAMEN TO LJAKOW.

Tudor Brown had evidently heard of the change in the route of the "Alaska." He had reached Behring's Straits
before them. But by what means? It seemed almost supernatural, but still the fact remained that he had done so.

Erik was greatly depressed by this information, but he concealed his feelings from his friends. He hurried on the
work of transporting the coal, and set out again without losing a moment.

Serdze-Kamen is a long Asiatic-promontory situated nearly a hundred miles to the west of Behring's Straits, and
whaling-vessels from the Pacific visit it every year.

The "Alaska" reached there after a voyage of twenty-four hours, and soon in the bay of Koljutschin behind a
wall of ice, they discovered the masts of the "Vega," which had been frozen in for nine months.

The barrier which held Nordenskiold captive was not more than ten kilometers in size. After passing around it,
the "Alaska" came to anchor in a little creek, where she would be sheltered from the northerly winds. Then Erik with
his three friends made their way overland to the establishment which the "Vega" had made upon the Siberian coast
to pass this long winter, and which a column of smoke pointed out to them.

This coast of the Bay of Koljutschin consists of a low and slightly undulating plain. There are no trees, only
some dwarf willows, marine grasses and lichens. Summer had already brought forth some plants, which Mr.
Malarius recognized as a species which was very common in Norway.

The encampment of the "Vega" consisted of a large store-house for their eatables, which had been made by the
orders of Nordenskiold, in case the pressure of the ice should destroy his ship, which so frequently happens on these
dangerous coasts. It was a touching fact that the poor population, although always half starved, and to whom this
depot represented incalculable wealth in the shape of food, had respected it, although it was but poorly guarded. The
huts of skin of these Tschoutskes were grouped here and there around the station. The most imposing structure was
the "Tintinjaranga," or ice-house, which they had especially arranged to use for a magnetic observatory, and where
all the necessary apparatus had been placed. It had been built of blocks of ice delicately tinted and cemented together
with snow; the roof of planks was covered with cloth.

The voyagers of the "Alaska" were cordially welcomed by the young astronomer, whom they found at the time
of their arrival holding a consultation with the man in charge of the store-house. He offered with hearty goodwill to
take them on board the "Vega" by the path which had been cut in the ice in order to keep open the means of
communication between the vessel and the land, and a rope attached to stones served as a guide on dark nights. As
they walked, he related to them their adventures since they had been unable to send home any dispatches.

After leaving the mouth of the Lena, Nordenskiold had directed his course toward the islands of New Siberia,
which he wished to explore, but finding it almost impossible to approach them, on account of the ice which
surrounded them, and the shallowness of the water in that vicinity, he abandoned the idea, and resumed his course
toward the east. The "Vega" encountered no great difficulties until the 10th of September, but about that time a
continuance of fogs, and freezing nights, compelled her to slacken her speed, besides the darkness necessitated
frequented stoppages. It was therefore the 27th of September before she reached Cape Serdze-Kamen. They cast her
anchor on a bank of ice, hoping to be able the next day to make the few miles which separated her from Behring's Straits and the free waters of the Pacific. But a north wind set in during the night, and heaped around the vessel great masses of ice. The "Vega" found herself a prisoner for the winter at the time when she had almost accomplished her work.

"It was a great disappointment to us, as you can imagine!" said the young astronomer, "but we soon rallied our forces, and determined to profit by the delay as much as possible, by making scientific investigations. We made the acquaintance of the 'Tschoutskes' of the neighborhood, whom no traveler has hitherto known well, and we have made a vocabulary of their language, and also gathered together a collection of their arms and utensils. The naturalists of the 'Vega' have also been diligent, and added many new arctic plants to their collection. Lastly, the end of the expedition has been accomplished, since we have doubled Cape Tchelynskin, and traversed the distance between it and the mouth of the Yenisei and of the Lena. Henceforth the north-east passage must become a recognized fact. It would have been more agreeable to us, if we could have effected it in two months, as we so nearly succeeded in doing. But provided we are not blocked in much longer, as the present indications lead us to hope, we will not have much to complain of, and we shall be able to return with the satisfaction of knowing that we have accomplished a useful work."

While listening to their guide with deep interest, the travelers were pursuing their way. They were now near enough to the "Vega" to see that her deck was covered over with a large canvas, and that her sides were protected by lofty masses of snow, and that her smoke-stacks had been carefully preserved from contact with the ice.

The immediate approach to the vessel was still more strange; she was not, as one would have expected, completely incrusted in a bed of ice, but she was suspended, as it were, in a labyrinth of lakes, islands, and canals, between which they had been obliged to throw bridges formed of planks.

"The explanation is very simple," said the young astronomer, in reply to a question from Erik. "All vessels that pass some months surrounded by ice form around them a bed of refuse, consisting principally of coal ashes. This is heavier than snow, and when a thaw begins, the bed around the vessel assumes the aspect which you behold."

The crew of the "Vega," in arctic clothing, with two or three officers, had already seen the visitors whom the astronomer was bringing with him. Their joy was great when they saluted them in Swedish, and when they beheld among them the well-known and popular physiognomy of Dr. Schwaryencrona.

Neither Nordenskiold nor Captain Palender were on board. They had gone upon a geological excursion into the interior of the country, and expected to be absent five or six days. This was a disappointment to the travelers, who had naturally hoped when they found the "Vega" to present their congratulations to the great explorer.

But this was not their only disappointment.[1]

[Footnote 1: They returned sooner, for on the 18th of July the ice broke up, and after 264 days of captivity the "Vega" resumed her voyage. On the 20th of July she issued from Behring's Straits and set out for Yokohama.]

They had hardly entered the officer's room, when Erik and his friends were informed that three days before the "Vega" had been visited by an American yacht, or rather by its owner, Mr. Tudor Brown. This gentleman had brought them news of the world beyond their settlement, which was very acceptable, they being confined to the limited neighborhood of the Bay of Koljutschin. He told them what had happened in Europe since their departure—the anxiety that Sweden and indeed all civilized nations felt about their fate, and that the "Alaska" had been sent to search for them. Mr. Tudor Brown came from Vancouver's Island, in the Pacific, and his yacht had been waiting there for him for three months.

"But," exclaimed a young doctor, attached to the expedition, "he told us that he had at first embarked with you, and only left you at Brest, because he doubted whether you would be able to bring the enterprise to a successful termination!"

"He had excellent reasons for doubting it," replied Erik, coolly, but not without a secret tremor.

"His yacht was at Valparaiso and he telegraphed for her to wait for him at Victoria, on the coast of Vancouver," continued the doctor; "then he took the steamer from Liverpool to New York, and the railroad to the Pacific. This explains how he was able to reach here before you."

"Did he tell you why he came?" asked Mr. Bredejord.

"He came to help us, if we stood in need of assistance, and also to inquire about a strange enough personage, whom I had incidentally mentioned in my correspondence, and in whom Mr. Tudor Brown seemed to take a great interest."

The four visitors exchanged glances.

"Patrick O'Donoughan—was not that the name?" asked Erik.

"Precisely—or at least it is the name which is tattooed on his body, although he pretends it is not his own, but that of a friend. He calls himself Johnny Bowles."

"May I ask if this man is still here?"
"He left us ten months ago. We had at first believed that he might prove useful to us by acting as interpreter between us and the natives of this coast, on account of his apparent knowledge of their language; but we soon discovered that his acquaintance with it was very superficial—confined, in fact, to a few words. Besides, until we came here, we were unable to hold any communications with the natives. This Johnny Bowles, or Patrick O’Donoghan, was lazy, drunken, and undisciplined. His presence on board would only have occasioned trouble for us. We therefore acceded without regret to his request to be landed on the large Island of Ljakow, as we were following the southern coast."

"What! did he go there? But this island is uninhabited!" cried Erik.

"Entirely; but what attracted the man appeared to be the fact that its shores are literally covered by bones, and consequently by fossil ivory. He had conceived the plan of establishing himself there, and of collecting, during the summer months, all the ivory that he could find; then when, in winter, the arm of the sea which connects Ljakow with the continent should be frozen over, to transport in a sleigh this treasure to the Siberian coast, in order to sell it to the Russian traders, who come every year in search of the products of the country."

"Did you tell these facts to Mr. Tudor Brown?" asked Erik.

"Assuredly, he came far enough to seek for them," replied the young doctor, unaware of the deep personal interest that the commander of the "Alaska" took in the answers to the questions which he addressed to him.

The conversation then became more general. They spoke of the comparative facility with which Nordenskiold had carried out his programme. He had not met with any serious difficulties, and consequently the discovery of the new route would be an advantage to the commerce of the world. "Not," said the officer of the "Vega," "that this path was ever destined to be much frequented, but the voyage of the 'Vega' would prove to the maritime nations of the Atlantic and Pacific that it was possible to hold direct communication with Siberia by water. And nowhere would these nations, notwithstanding the vulgar opinions, find a field as vast and rich."

"Is it not strange," observed Mr. Bredejord, "that they have failed completely during the last three centuries in this attempt that you have now accomplished without difficulty?"

"The singularity is only apparent," answered one of the officers. "We have profited by the experience of our predecessors, an experience often only acquired at the cost of their lives. Professor Nordenskiold has been preparing himself for this supreme effort during the last twenty years, in which he has made eight arctic expeditions. He has patiently studied the problem in all its aspects, and finally succeeded in solving it. Then we have had what our predecessors lacked, a steam vessel especially equipped for this voyage. This has enabled us to accomplish in two months a voyage that it would have taken a sailing vessel two years to do. We have also constantly been able not only to choose, but also to seek out, the most accessible route. We have fled from floating ice and been able to profit by the winds and tides. And still we have been overtaken by winter. How much more difficult it would have been for a mariner who was compelled to wait for favorable winds, and see the summer passing in the meantime."

In such conversation they passed the afternoon, and after accepting their invitation and dining on board the "Vega," they carried back with them to supper on board the "Alaska" all the officers who could be spared from duty. They mutually gave each other all the information and news in their power. Erik took care to inform himself exactly what his predecessors lacked, a steam vessel especially equipped for this voyage. This has enabled us to accomplish in two months a voyage that it would have taken a sailing vessel two years to do. We have also constantly been able not only to choose, but also to seek out, the most accessible route. We have fled from floating ice and been able to profit by the winds and tides. And still we have been overtaken by winter. How much more difficult it would have been for a mariner who was compelled to wait for favorable winds, and see the summer passing in the meantime."

The next day at dawn Erik had the 'Alaska' steering for the island of Ljakow. As for the "Vega" she had to wait until the breaking up of the ice would permit her to reach the Pacific.

The first part of Erik's task was now accomplished. He had found Nordenskiold. The second still remained to be fulfilled: to find Patrick O'Donoghan, and see if he could persuade him to disclose his secret. That this secret was an important one they were now all willing to admit, or Tudor Brown would never have committed such a dastardly crime to prevent them from becoming acquainted with it.

Would they be able to reach the Island of Ljakow before him?

It was hardly probable, for he was three days in advance of them: never mind—he would make the attempt.

The "Albatross" might lose her way, or meet with some unforeseen obstacles. As long as there was even a probability of success Erik determined to take the chances.

The weather was now mild and agreeable. Light fogs indicated an open sea, and a speedy breaking of the ice along the Siberian coast where the "Vega" had been held prisoner so long. Summer was advancing, and the "Alaska" could reasonably count upon at least ten weeks of favorable weather. The experience which they had acquired amongst the American ice had its value and would render this new enterprise comparatively easy. Lastly the northeast passage was the most direct way to return to Sweden, and besides the deep personal interest which induced Erik to take it, he had a truly scientific desire to accomplish in a reverse route the task which Nordenskiold had fulfilled. If he had succeeded, why should he not be able to do so?—this would be proving practically the experiment of the great navigator.
The wind favored the "Alaska." For ten days it blew almost constantly from the south-east, and enabled them to make from nine to ten knots at least without burning any coal. This was a precious advantage, and besides the wind drove the floating ice toward the north and rendered navigation much less difficult. During these ten days they met with very little floating ice.

On the eleventh day, it is true they had a tempestuous snow storm followed by dense fogs which sensibly retarded the progress of the "Alaska." But on the 29th of July the sun appeared in all its brilliancy, and on the morning of the 2d of August they came in sight of the Island of Ljakow.

Erik gave orders immediately to sail around it in order to see if the "Albatross" was not hidden in some of its creeks. Having done this they cast anchor in a sandy bottom about three miles from the southern shore. Then he embarked in his boat accompanied by his three friends and six of his sailors. Half an hour later they had reached the island.

Erik had not chosen the southern coast of the island to anchor his vessel without a reason. He had said to himself that Patrick O'Donoghan might have told the truth when he had stated that his object was to collect ivory; but if it was his intention to leave the island at the first opportunity which afforded, he would be sure to establish himself upon a spot where he would have a good view of the sea. He would undoubtedly choose some elevated place, and one as near as possible to the Siberian coast. Besides the necessity of sheltering himself against the polar winds would lead him to establish himself upon the southern coast of the island.

Erik did not pretend that his conclusions were necessarily incontrovertible, but he thought that, in any case, they would suffer no inconvenience from adopting them as the basis of a systematic exploration of the place. The results fully justified his expectations. The travelers had not walked along the shore for an hour, when they perceived on a height, perfectly sheltered by a chain of hills, facing the south, an object which could only be a human habitation. To their extreme surprise this little cottage, which was of a cubical form, was perfectly white, as if it had been covered with plaster. It only lacked green shutters to perfectly resemble a country home near Marseilles, or an American cottage.

After they had climbed the height and approached near to it, they discovered a solution of the mystery. The cottage was not plastered, it was simply built of enormous bones skillfully arranged, which gave it its white color. Strange as the materials were, they were forced to admit that the idea of utilizing them was a natural one; besides there was nothing else available on the island where vegetation was most meagre; but the whole place, even the neighboring hills were covered with bones, which Dr. Schwaryencrona recognized as the remains of wild beasts.

CHAPTER XVII.
AT LAST.

The door of the cottage was open. The visitors entered, and saw at a glance that the single room of which it consisted was empty, although it had been recently occupied. Upon the hearth, which was built of three large stones, lay some extinguished embers upon which the light ashes still lingered, although the lightest breeze would have been sufficient to carry them away. The bed, consisting of a wooden frame, from which was suspended a sailor's hammock, still bore the impress of a human figure.

This hammock, that Erik examined immediately, bore the stamp of the "Vega." On a sort of table formed from the shoulder-blade of some animal and supported by four thigh bones, lay some crumbs of ship's biscuit, a pewter goblet, and a wooden spoon of Swedish workmanship.

They could not doubt that they were in the dwelling-place of Patrick O'Donoghan, and according to all appearances he had only left it a short time ago. Had he quitted the island, or had he only gone to take a walk? The only thing they could do was to make a thorough exploration of the island.

Around the habitation excavations bore witness to the fact that a great amount of hard work had been done; on a sort of plateau that formed the summit of the hill, a great quantity of ivory had been piled up, and indicated the nature of the work. The voyagers perceived that all the skeletons of elephants and other animals had been despoiled of their ivory, and they arrived at the conclusion that the natives of the Siberian coast had been aware, long before the visit of Patrick O'Donoghan, of the treasure which was to be found upon the island, and had come and carried off large quantities of it. The Irishman, therefore, had not found the quantity of ivory upon the surface of the ground which he had expected, and had been compelled to make excavations and exhume it. The quality of this ivory, which had been buried probably for a long time, appeared to the travelers to be of a very inferior quality.

Now the young doctor of the "Vega" had told them, as had the proprietor of the Red Anchor, in Brooklyn, that laziness was one of the distinguishing characteristics of Patrick O'Donoghan. It therefore seemed to them very improbable that he would be resigned to follow such a laborious and unremunerative life. They therefore felt sure that he would embrace the first opportunity to leave the Island of Ljakow. The only hope that still remained of
finding him there was that which the examination of his cabin had furnished them.

A path descended to the shore, opposite to that by which our explorers had climbed up. They followed it, and
soon reached the bottom, where the melting snows had formed a sort of little lake, separated from the sea by a wall
of rocks. The path followed the shores of this quiet water, and going around the cliff they found a natural harbor.

They saw a sleigh abandoned on the land, and also traces of a recent fire; Erik examined the shore carefully, but
could find no traces of any recent embarkation. He was returning to his companions, when he perceived at the foot
of a shrub a red object, which he picked up immediately. It was one of those tin boxes painted outside with carmine
which had contained that preserved beef commonly called "endaubage," and which all vessels carry among their
provisions. It was not so great a prize, since the captain of the "Vega" had supplied Patrick O'Donoghah with food.
But what struck Erik as significant, was the fact that there was printed on the empty box the name of Martinez
Domingo, Valparaiso.

"Tudor Brown has been here," he cried. "They told us on board the 'Vega' that his vessel was at Valparaiso when
he telegraphed them to wait for him at Vancouver. Besides, this box from Chili could not have been brought here by
the 'Vega,' for it is evidently quite fresh. It can not be three days, perhaps not twenty-four hours since it has been
opened!"

Dr. Schwaryencrona and Mr. Bredejord shook their heads, as if they hesitated to accept Erik's conclusions, when
turning the box in his hands, he descried written in pencil the word "Albatross," which had doubtless been done by
the person who had furnished the vessel with the beef. He pointed it out to his friends.

"Tudor Brown has been here," he repeated, "and why should he come except to carry off Patrick O'Donoghah.
Let us go, it is evident they embarked at this creek. His men, while they were waiting for him, have taken breakfast
around this fire. He has carried off the Irishman, either willingly or unwillingly. I am as certain of it as if I saw them
embark."

Notwithstanding this firm belief, Erik carefully explored the neighborhood, to assure himself that Patrick
O'Donoghah was no longer there. An hour's walk convinced him that the island was uninhabited. There was no trace
of a path, nor the least vestige of a human being. On all sides valleys extended as far as his sight could reach,
without even a bird to animate its solitude; and above all, the gigantic bones which they beheld lying around in
every direction, gave them a feeling of disgust; it seemed as if an army of animals had taken refuge in this solitary
island only to die there.

"Let us go!" said Dr. Schwaryencrona. "There is no use in making a more complete search of the island; we have
seen sufficient to assure us that Patrick O'Donoghah would not require much urging to induce him to leave this
place!"

Four hours later they were again on board of the "Alaska," and continuing their journey.

Erik did not hide the fact that his hopes had received a severe check. Tudor Brown had been ahead of him, he
had succeeded in reaching the island first, and doubtless had carried off Patrick O'Donoghah. It was therefore hardly
probable that they would succeed in finding him again. A man capable of displaying such ability in his fiendish
attack upon the "Alaska," and who could adopt such energetic measures to carry off the Irishman from such a place,
would assuredly exert himself to the utmost to prevent them from ever coming in contact with him. The world is
large, and its waters were open to the "Albatross." Who could tell to what point of the compass Patrick O'Donoghah
and his secret would be carried?

This is what the captain of the "Alaska" said to himself, as he walked the deck of his vessel, after giving orders
to steer to the westward. And to these doleful thoughts was added a feeling of remorse that he had permitted his
friends to share the dangers and fatigue of his useless expedition. It was doubly useless, since Tudor Brown had
found Nordenskiold before the "Alaska," and also preceded them to the Island of Ljakow. They must then return to
Stockholm, if they ever succeeded in reaching it, without having accomplished one of the objects of the expedition.
It was indeed a great disappointment. But at least their returning in a contrary direction to the "Vega" would prove
the feasibility of the northeast passage. At any risk he must reach Cape Tchelynskin, and double it from east to west.
At any risk he must return to Sweden by way of the Sea of Kara. It was this redoubtable Cape Tchelynskin, formerly
considered impassable, that the "Alaska" crowded on steam to reach. They did not follow the exact route of the
"Vega," for Erik had no occasion to descend the Siberian coast.

Leaving to starboard the islands of Stolbovvi and Semenofski, which they sighted on the 4th of August, they
sailed due west, following closely the 76th degree of latitude, and made such good speed that in eight days they had
made 35 degrees of longitude, from the 140th to the 105th degree east of Greenwich. It is true that they had to burn
a great deal of coal to accomplish this, for the "Alaska" had had contrary winds almost all the time. But Erik thought
rightly that everything was subordinate to the necessity of making their way out of these dangerous passes as
speedily as possible. If they could once reach the mouth of the Yenisei, they could always procure the necessary
fuel.
On the 14th of August, at midday they were unable to make a solar observation on account of a thick fog, which covered the whole sky. But they knew that they were approaching a great Asiatic promontory, therefore Erik advanced with extreme caution, while at the same time he had the speed of the vessel slackened.

Toward night he gave orders to have the vessel stopped. These precautions were not useless. The following morning at daylight they made soundings and found that they were in only thirty fathoms of water, and an hour afterward they came in sight of land; and the "Alaska" soon reached a bay in which she could cast anchor. They resolved to wait until the fog dispersed before going on land, but as the 15th and 16th of August passed without bringing about this desired result, Erik determined to start accompanied by Mr. Bredejord, Mr. Malarius, and the doctor. A short examination showed them that the "Alaska" was at the extreme north of the two points of Cape Tchelynskin; on two sides the land lay low toward the sea, but it rose gradually toward the south, and they perceived that it was about two or three hundred feet in height. No snow or ice was to be seen in any direction, except along the borders of the sea where there was a little band, such as is commonly seen in all arctic regions. The clayey soil was covered with abundant vegetation, consisting of mossy grasses and lichens. The coast was enlivened by great numbers of wild geese and walruses. A white bear displayed himself on top of a rock. If it had not been for the fog which cast a gray mantle over everything, the general aspect of this famous Cape Tchelynskin was not particularly disagreeable; certainly there was nothing to justify the name of Cape Sever, which it had borne for three centuries.

As they advanced to the extreme point at the west of the bay, the travelers perceived a sort of monument that crowned a height, and naturally pressed forward to visit it. They saw, as they approached, that it was a sort of "cairn," or mass of stones supporting a wooden column made out of a post. This column bore two inscriptions; the first read as follows:

"On the 19th of August, 1878, the 'Vega' left the Atlantic to double Cape Tchelynskin, _en route_ for Behring's Straits."

The second read:

"On the 12th of August, 1879, the 'Albatross,' coming from Behring's Straits, doubled Cape Tchelynskin, _en route_ for the Atlantic."

Once again Tudor Brown had preceded the "Alaska." It was now the 16th of August.

He had written this inscription only four days previously.

In Erik's eyes it appeared cruel and ironical; it seemed to him to say: "I will defeat you at every turn. All your efforts will be useless. Nordenskiold has solved the problem. Tudor Brown, the counter proof."

As for himself he would return humiliated and ashamed, without having demonstrated, found or proved anything. He was going without adding a single word to the inscriptions on the column. But Dr. Schwaryencrona would not listen to him, and taking out his knife from his pocket he wrote on the bottom of the post these words:

"On the 16th of August, 1879, the 'Alaska' left Stockholm, and came here across the Atlantic and the Siberian Sea, and has doubled Cape Tchelynskin, _en route_ to accomplish the first circumpolar periplus."

There is a strange power in words. This simple phrase recalled to Erik what a geographical feat he was in hopes of accomplishing, and without his being conscious of it, restored him to good humor. It was true, after all, that the "Alaska" would be the first vessel to accomplish this voyage. Other navigators before him had sailed through the arctic-American seas, and accomplished the northwest passage. Nordenskiold and Tudor Brown had doubled Cape Tchelynskin; but no person had as yet gone from one to the other, completely around the pole, completing the three hundred and sixty degrees.

This prospect restored every one's ardor, and they were eager to depart. Erik thought it best, however, to wait until the next day and see if the fog would lift; but fogs appeared to be the chronic malady of Cape Tchelynskin, and when next morning the sun rose without dissipating it, he gave orders to hoist the anchor.

Leaving to the south the Gulf of Taymis—which is also the name of the great Siberian peninsula of which Cape Tchelynskin forms the extreme point—the "Alaska," directing her course westward, sailed uninterruptedly during the day and night of the 17th of August.

On the eighteenth, at day-break, the fog disappeared at last and the atmosphere was pure and enlivened by the sunshine. By midday they had rounded the point, and immediately descried a distant sail to the south-west.

The presence of a sailing-vessel in these unfrequented seas was too extraordinary a phenomenon not to attract special attention. Erik, with his glass in his hand, ascended to the lookout and examined the vessel carefully for a long time. It appeared to lie low in the water, was rigged like a schooner and had a smoke-stack, although he could not perceive any smoke. When he descended from the bridge the young captain said to the doctor:

"It looks exactly like the 'Albatross!'" Then he gave orders to put on all steam possible. In less than a quarter of an hour he saw that they were gaining on the vessel, whose appointments they were now able to discern with the naked eye. They could see that the breeze had slackened, and that her course was at right angles with that of the "Alaska."
But suddenly a change took place in the distant vessel; Clouds of smoke issued from her smoke-stack, and formed behind her a long black cloud. She was now going by steam and in the same direction as the "Alaska."

"There is now no doubt of it. It is the 'Albatross,'" said Erik.

He gave orders to the engineer to increase the speed of the "Alaska," if possible. They were then making fourteen knots, and in a quarter of an hour they were making sixteen knots. The vessel that they were pursuing had not been able to attain a like rate of speed, for the "Alaska" continued to gain upon her. In thirty minutes they were near enough to her to distinguish all her men who were maneuvering her. At last they could see the moldings and letters forming her name, "Albatross."

Erik gave orders to hoist the Swedish flag. The "Albatross" immediately hoisted the stars and stripes of the United States of America.

In a few minutes the two vessels were only separated by a few hundred yards. Then the captain of the "Alaska" took his speaking-trumpet and hailed the vessel in English:

"Ship ahoy! I wish to speak with your captain!"

In a few moments some one made his appearance on the bridge of the "Albatross." It was Tudor Brown.

"I am the proprietor and captain of this yacht," he said. "What do you want?"

"I wish to know whether Patrick O'Donoghan is on board!"

"Patrick O'Donoghan is on board and can speak for himself," answered Tudor Brown.

He made a sign, and a man joined him on the bridge.

"This is Patrick O'Donoghan," said Tudor Brown. "What do you want with him?"

Erik was desirous of this interview so long, he had come so far in search of this man, that when he found himself unexpectedly in his presence and recognized him by his red hair and broken nose, he was at first taken aback and scarcely knew what to say to him. But gathering his ideas together, he at last made an attempt.

"I have been wishing to talk to you confidentially for several years," he said. "I have been seeking for you, and it was to find you that I came into these seas. Will you come on board of my vessel?"

"I do not know you, and I am very well satisfied to stay where I am," answered the man.

"But I know you. I have heard through Mr. Bowles that you were on board when the 'Cynthia' was wrecked, and that you had spoken to him about the infant who was tied to a buoy. I am that infant, and it is about this matter that I wish you to give me all the information in your power."

"You must question somebody else, for I am not in the humor to give any."

"Do you wish me to suppose that the information is not to your credit?"

"You can think what you like; it is a matter of perfect indifference to me," said the man.

Erik resolved to betray no irritation.

"It would be better for you to tell me what I wish to know of your own free will than to be compelled to do so before a court of justice," he said, coolly.

"A court of justice! They will have to catch me first," answered the other, mockingly.

Here Tudor Brown interposed.

"You see it is not my fault if you have not obtained the information that you desired," said he to Erik. "The best thing is now for us both to resume our course and go where we desire."

"Why should we each go our way?" answered the young captain. "Would it not be better for us to keep together until we reach some civilized country where we can settle these matters."

"I have no business with you, and do not want any one's company," answered Tudor Brown, moving as if he was about to leave the bridge.

Erik stopped him by a sign.

"Proprieter of the 'Albatross,'" he said, "I bear a regular commission from my government, and am besides an officer of the maritime police. I therefore ask you to show me your papers immediately!"

Tudor Brown did not make the slightest answer, but descended the bridge with the man whom he had called. Erik waited a couple of minutes, and then he spoke again:

"Commander of the 'Albatross,' I accuse you of having attempted to shipwreck my vessel on the rocks of Sein, and I now summon you to come and answer this accusation before a marine tribunal. If you refuse to answer this summons it will be my duty to compel you to do so!"

"Try it if you like," cried Tudor Brown, and gave orders to resume his journey.

During this colloquy his vessel had insensibly tacked, and now stood at right angles with the "Alaska." Suddenly the wheel commenced to revolve and beat the water which boiled and foamed around it. A prolonged whistle was heard, and the "Albatross" carrying all the steam she could raise sped over the waters in the direction of the North Pole.

Two minutes later, the "Alaska" was rushing after her.
CHAPTER XVIII.
CANNON-BALLS.

At the same time that he gave orders to pursue the "Albatross," Erik also desired his men to get the cannon in readiness. The operation took some time, and when they had everything in order the enemy was beyond their reach. Doubtless they had taken advantage of the time occupied by their stoppage to increase their fires, and they were two or three miles ahead. This was not too great a distance for a Gatling gun to carry, but the rolling and speed of the two vessels made it probable that they would miss her; and they thought it better to wait, hoping that the "Alaska" would gain upon the enemy. It soon became evident, however, that the two vessels were equally matched, for the distance between them remained about the same for several hours.

They were obliged to burn an enormous amount of coal—an article which was becoming very scarce on board the "Alaska"—and this would be a heavy loss if they could not succeed in overtaking the "Albatross" before night set in. Erik did not think it right to do this without consulting his crew. He therefore mounted the bridge, and frankly explained to them the position in which he was placed.

"My friends," he said, "you know that I am anxious to seize and deliver up to justice this rascal who attempted to shipwreck our vessel on the rocks of Sein. But we have hardly coal enough left to last us for six days. Any deviation from our route will compel us to finish our voyage under sail, which may make it very long and toilsome for all of us, and may even cause us to fail in our undertaking. On the other hand, the 'Albatross' counts upon being able to get away from us during the night. To prevent this we must not slacken our speed for a moment, and we must keep her within the range of our electric light. I feel sure, however, that we will eventually overtake her, but it may take us some time to do so. I did not feel willing to continue this pursuit without laying the facts plainly before you, and asking you if you were willing to risk the dangers which may arise for us."

The men consulted together in a low tone, and then commissioned Mr. Hersebom to speak for them:

"We are of opinion that it is the duty of the 'Alaska' to capture this rascal at any sacrifice!" he said, quietly.

"Very well, then, we will do our best to accomplish it," answered Erik.

When he found that he had the confidence of his crew, he did not spare fuel, and in spite of the desperate efforts of Tudor Brown, he could not increase the distance between them. The sun had scarcely set when the electric light of the "Alaska" was brought to bear unpityingly upon the "Albatross," and continued in this position during the night. At day-break the distance between them was still the same, and they were flying toward the pole. At midday they made a solar observation, and found that they were in 78, 21', 14" of latitude north, by 90 of longitude east.

Floating ice, which they had not encountered for ten or fifteen days, now became very frequent. It was necessary to ward it off, as they had been compelled to do in Baffin's Bay. Erik, feeling sure that they would soon reach fields of ice, was careful to steer obliquely to the right of the "Albatross" so as to bar the way toward the east if she should attempt to change her course, finding her path toward the north obstructed. His foresight was soon rewarded, for in two hours a lofty barrier of ice casts its profile on the horizon. The American yacht immediately steered toward the west, leaving the ice two or three miles on its starboard. The "Alaska" immediately imitated this maneuver, but so obliquely to the left of the "Albatross" as to cut her off if she attempted to sail to the south.

The chase became very exciting. Feeling sure of the course which the "Albatross" would be compelled to take, the "Alaska" tried to push her more toward the ice. The yacht's course becomes more and more wavering, every moment they made some change, at one time steering north at another west. Erik, mounted aloft, watched every movement she made, and thwarted her attempts to escape by appropriate maneuvers. Suddenly she stopped short, swung round and faced the "Alaska." A long white line which was apparent extending westward told the reason of this change. The "Albatross" found herself so close to the ice-banks that she had no recourse but to turn and face them.

The young captain of the "Alaska" had scarcely time to descend, before some missile whistled past his head. The "Albatross" was armed, and relied upon being able to defend herself.

"I prefer that it should be so, and that he should fire the first shot," said Erik, as he gave orders to return it.

His first attack was not more successful than that of Tudor Brown—for it fell short two or three hundred yards. But the combat was now begun, and the firing became regular. An American projectile cut the large sail yards of the "Alaska," and it fell upon the deck killing two men. A small bomb from the Swedish vessel fell upon the bridge of the "Albatross," and must have made great havoc. Then other projectiles skillfully thrown lodged in various parts of the vessel.

They had been constantly approaching each other, when suddenly a distant rumbling mingled with the roar of artillery, and the crews raising their heads saw that the sky was very black in the east.

Was a storm with its accompanying fog and blinding snow, coming to interpose between the "Albatross" and the
"Alaska," to permit Tudor Brown to escape?

This Erik wished to prevent at any price. He resolved to attempt to board her. Arming his men with sabers, cutlasses, and hatchets, he crowded on all the steam the vessel could carry and rushed toward the "Albatross."

Tudor Brown tried to prevent this. He retreated toward the banks of ice, firing a shot from his cannon every five minutes. But his field of action had now become too limited; between the ice and the "Alaska" he saw that he was lost unless he made a bold attempt to regain the open sea. He attempted this after a few feigned maneuvers to deceive his adversary.

Erik let him do it. Then at the precise moment when the "Albatross" tried to pass the "Alaska," she made a gaping hole in the side of the yacht which stopped her instantly, and rendered her almost unmanageable; then she fell quickly behind and prepared to renew the assault. But the weather, which had become more and more menacing, did not give him time to do this.

The tempest was upon them. A fierce wind from the south-east, accompanied by blinding clouds of snow, which not only raised the waves to a prodigious height, but dashed against the two vessels immense masses of floating ice. It seemed as if they were attacked at all points at once. Erik realized his situation, and saw that he had not a minute to lose in escaping, unless he wished to be hemmed in perhaps permanently. He steered due east, struggling against the wind, the snow, and the dashing ice.

But he was soon obliged to confess that his efforts were fruitless. The tempest raged with such violence that neither the engine of the "Alaska" nor her steel buttress were of much use. Not only did the vessel advance very slowly, but at times she seemed to be fairly driven backward. The snow was so thick that it obscured the sky, blinded the crew, and covered the bridge a foot in depth. The ice driven against the "Alaska" by the fierce wind increased and barred their progress, so that at length they were glad to retreat toward the banks, in the hope of finding some little haven where they could remain until the storm passed over.

The American yacht had disappeared, and after the blow it had received from the "Alaska" they almost doubted if it would be able to resist the tornado.

Their own situation was so perilous that they could only think of their own safety, for every moment it grew worse.

There is nothing more frightful than those arctic tempests, in which all the primitive forces of nature seem to be awakened in order to give the navigator a specimen of the cataclysms of the glacial period. The darkness was profound although it was only five o'clock in the afternoon. The engine had stopped, and they were unable to light their electric light. To the raging of the storm was added the roars of thunder and the tumult made by the floating blocks of ice dashing against each other. The ice-banks were continually breaking with a noise like the roar of a cannon.

The "Alaska" was soon surrounded by ice. The little harbor in which she had taken refuge was soon completely filled with it, and it commenced to press upon and dash against her sides until she began to crack, and they feared every moment that she would go to pieces.

Erik resolved not to succumb to the storm without a combat with it, and he set the crew to work arranging heavy beams around the vessel so as to weaken the pressure as much as possible, and distribute it over a wider surface. But, although this protected the vessel, it led to an unforeseen result which threatened to be fatal.

The vessel, instead of being suddenly crushed, was lifted out of the water by every movement of the ice, and then fell back again on it with the force of a trip-hammer. At any moment after one of these frightful falls they might be broken up, crushed, buried. To ward off this danger there was only one resource, and this was to re-enforce their barrier by heaping up the drift ice and snow around the vessel to protect her as well as they could.

Everybody set to work with ardor. It was a touching spectacle to see this little handful of men taxing their pygmy muscles to resist the forces of nature--trying with anchors, chains, and planks to fill up the fissures made in the ice and to cover them with snow, so that there might be a uniformity of motion among the mass. After four or five hours of almost superhuman exertions, and when their strength was exhausted, they were in no less danger, for the storm had increased.

Erik held a consultation with his officers, and it was decided that they should make a depot on the ice-field for their food and ammunition in case the "Alaska" should be unable to resist the powerful shocks to which she was being subjected. At the first moment of danger every man had received provisions enough for eight days, with precise instructions in case of disaster, besides being ordered to keep his gun in his belt even while he was working. The operation of transporting twenty tons of provisions was not easy of accomplishment, but at last it was done and the food was placed about two hundred yards from the ship under a covering of tarred canvas, which was soon covered by the snow with a thick white mantle.

This precaution, having been taken, everybody felt more comfortable as to the result of a shipwreck, and the crew assembled to recruit their strength with a supper supplemented with tea and rum.
Suddenly, in the midst of supper, a more violent shock than any that had as yet agitated the vessel, split the bed of ice and snow around the "Alaska." She was lifted up in the stern with a terrible noise, and then it appeared as if she were plunging head-foremost into an abyss. There was a panic, and every one rushed on deck. Some of the men thought that the moment had come to take refuge on the ice, and without waiting for the signal of the officers they commenced clambering over the bulwarks.

Four or five of these unfortunate ones managed to leap on a snow-bank. Two others were caught between the masses of floating ice and the beams of the starboard, as the "Alaska" righted herself.

Their cries of pain and the noise of their crushed bones were lost in the storm. There was a lull, and the vessel remained motionless. The lesson which the sailors had been taught was a tragical one. Erik made use of it to enforce on the crew the necessity of each man's retaining his presence of mind, and of waiting for positive orders on all occasions.

"You must understand," he said to his men, "that to leave the ship is a supreme measure, to which we must have recourse only at the last extremity. All our efforts ought to be directed toward saving the 'Alaska.' Deprived of her, our situation will be a very precarious one on the ice. It is only in case of our vessel becoming uninhabitable that we must desert it. In any case such a movement should be made in an orderly manner to avoid disasters. I therefore expect that you will return quietly to your supper, and leave to your superior officers the task of determining what is best to do!"

The firmness with which he spoke had the effect of reassuring the most timid, and they all descended again. Erik then called Mr. Hersebom and asked him to untie his good dog Kaas, and follow him without making any noise.

"We will go on the field of ice," he said, "and seek for the fugitives and make them return to their duty, which will be better for them than wandering about."

The poor devils were huddled together on the ice, ashamed of their escapade, and at the first summons were only too glad to take the path toward the "Alaska."

Erik and Mr. Hersebom having seen them safely on board, walked as far as their depot of provisions, thinking that another sailor might have taken refuge there. They went all around it but saw no one.

"I have been asking myself the last few moments," said Erik, "if it would not be better to prevent another panic by landing part of the crew?"

"It might be better perhaps," answered the fisherman. "But would not the men who remained on board feel jealous and become demoralized by this measure?"

"That is true," said Erik. "It would be wiser to occupy them up to the last moment in struggling against the tempest, and it is in fact the only chance we have of saving the ship. But since we are on the ice we may as well take advantage of it, and explore it a little. I confess all these crackings and detonations inspire me with some doubt as to its solidity!"

Erik and his adopted father had not gone more than three hundred feet from their depot of provisions before they were stopped short by a gigantic crevasse which lay open at their feet. To cross it would have required long poles, with which they had neglected to supply themselves. They were therefore compelled to walk beside it obliquely toward the west, in order to see how far it reached.

They found that this crevasse extended for a long distance, so long that after they had walked for half an hour they could not see the end of it. Feeling more secure about the extent of this field of ice upon which they had established their depot of provisions, they turned to retreat their steps.

After they had walked over about half of the distance a new vibration occurred, followed by detonations and tumultuous heavings of ice. They were not greatly disturbed by this, but increased their speed, being anxious to discover whether this shock had had done the "Alaska" any mischief.

The depot was soon reached, then the little haven that sheltered the vessel.

Erik and Mr. Hersebom rubbed their eyes, and asked each other whether they were dreaming, for the "Alaska" was no longer there.

Their first thought was that she had been swallowed up by the waters. It was only too natural that they should think this after such an evening as they had just passed.

But immediately they were struck by the fact that no _débris_ was visible, and that the little harbor had assumed a new aspect since their departure. The drift ice which the tempest had piled up around the "Alaska" had been broken up, and much of it had drifted away. At the same time Mr. Hersebom mentioned a fact which had not struck him while they were hurrying along, and this was that the wind had changed and was now blowing from the west.

Was it not possible that the storm had carried away the floating ice in which the "Alaska" had become embedded. Yes, evidently it was possible; but it remained for them to discover whether this supposition was true. Without delaying a moment, Erik proceeded to reconnoiter, followed by Mr. Hersebom.

They walked for a long time. Everywhere the drift was floating freely, the waves came and went, but the whole
aspect of things around them looked strange and different.

At length Erik stopped. Now he understood what had befallen them. He took Mr. Hersebom's hand and pressed it with both his own.

"Father," said he, in a grave voice, "you are one of those to whom I can only speak the truth. Well, the fact is that this ice-field has split; it has broken away from that which surrounded the 'Alaska,' and we are on an island of ice hundreds of yards long, and carried along by the waters, and at the mercy of the storm."

CHAPTER XIX.

GUNSHOTS.

About two o'clock in the morning Erik and Mr. Hersebom, exhausted with fatigue, laid down side by side between two casks, under the canvas that protected their provisions. Kaas, also, was close to them and kept them warm with his thick fur. They were not long in falling asleep. When they awoke the sun was already high in the heavens, the sky was blue and the sea calm. The immense bank of ice upon which they were floating appeared to be motionless, its movement was so gentle and regular. But along the two edges of it which were nearest to them enormous icebergs were being carried along with frightful rapidity. These gigantic crystals reflected like a prism the solar rays, and they were the most marvelous that Erik had ever beheld.

Mr. Hersebom also, although but little inclined in general, and especially in his present situation, to admire the splendor of Nature in the arctic regions, could not help being impressed with them.

"How beautiful this would look were we on a good ship!" he said, sighing.

"Bah!" answered Erik, with his usual good humor. "On board a ship one must be thinking only how to avoid the icebergs so as not to be crushed to pieces, whilst on this island of ice we have none of these miseries to worry us."

As this was evidently the view of an optimist, Mr. Hersebom answered with a sad smile. But Erik was determined to take a cheerful view of things.

"Is it not an extraordinary piece of good luck that we have this depot of provisions?" he said. "Our case would, indeed, be a desperate one if we were deprived of everything; but, with twenty casks of biscuits, preserved meats, and, above all, our guns and cartridges, what have we to fear? At the most, we will only have to remain some weeks without seeing any land that we can reach. You see, dear father, that we have happened upon this adventure in the same manner as the crew of the 'Hansa.'"

"Of the 'Hansa'?’ asked Mr. Hersebom, with curiosity.

"Yes, a vessel that set out in 1869 for the arctic seas. Part of her crew were left, as we are, on a floating field of ice, while they were occupied in transporting some provisions and coal. The brave men accommodated themselves as well as they could to this new life, and after floating for six months and a half over a distance of several thousand leagues, ended by landing in the arctic regions of North America."

"May we be as fortunate!" said Mr. Hersebom, with a sigh. "But it would be well I think for us to eat something."

"That is also my opinion!" said Erik. "A biscuit and a slice of beef would be very acceptable."

Mr. Hersebom opened two casks to take out what they required for their breakfast, and as soon as his arrangements were completed they did ample justice to the provisions.

"Was the raft of the crew of the 'Hansa' as large as ours?" asked the old fisherman, after ten minutes conscientiously devoted to repairing his strength.

"I think not--ours is considerably larger. The 'Hansa's' became gradually much smaller, so that the unfortunate shipwrecked men were at last compelled to abandon it, for the waves began to dash over them. Fortunately they had a large boat which enabled them, when their island was no longer habitable, to reach another. They did this several times before they at last reached the mainland." "Ah, I see!" said Mr. Hersebom, "they had a boat--but we have not. Unless we embark in an empty hogshead I do not see how we can ever leave this island of ice."

"We shall see about it when the time comes!" answered Erik. "At the present moment I think the best thing that we can do is to make a thorough exploration of our domain."

He arose, as did Mr. Hersebom, and they commenced climbing a hill of ice and snow--a hummock is the technical name--in order to obtain a general idea of their island.

They found it from one end to the other lying and floating insensibly upon the polar ocean. But it was very difficult to form a correct estimate either of its size or shape; for a great number of hummocks intercepted their view on all sides. They resolved, however, to walk to the extremity of it. As far as they could judge from the position of the sun, that end of the island which extended toward the west had been detached from the mass of which it had formerly been a part, and was now turning to the north. They therefore supposed that their ice raft was being carried
toward the south by the influence of the tide and breeze, and the fact that they no longer saw any trace of the long barriers of ice, which are very extensive in the 78, fully corroborated this hypothesis.

Their island was entirely covered with snow, and upon this snow they saw distinctly here and there at a distance some black spots, which Mr. Hersebom immediately recognized as "ongionks," that is to say, a species of walrus of great size. These walruses doubtless inhabited the caverns and crevasses in the ice, and believing themselves perfectly secure from any attack, were basking in the sunshine.

It took Erik and Mr. Hersebom more than an hour to walk to the extreme end of their island. They had followed closely the eastern side, because that permitted them to explore at the same time both their raft and the sea. Suddenly Kaas, who ran ahead of them, put to flight some of the walruses which they had seen in the distance. They ran toward the border of the field of ice in order to throw themselves into the water. Nothing would have been more easy than to have killed a number of them. But what would have been the use of their doing so, since they could not make a fire to roast their delicate flesh? Erik was occupied about other matters. He carefully examined the ice-field, and found that it was far from being homogeneous. Numerous crevasses and fissures, which seemed to extend in many cases for a long distance, made him fear that a slight shock might divide it into several fragments. It was true that these fragments might in all probability be of considerable size; but the possibility of such an accident made them realize the necessity of keeping as close as possible to their depot of provisions, unless they wished to be deprived of them. Erik resolved to examine carefully their whole domain, and to make his abode on the most massive portion; the one that seemed capable of offering the greatest resistance. He also determined to transport to this spot their depot of provisions.

It was with this resolve that Mr. Hersebom and Erik continued their exploration of the western coast, after resting a few minutes at the northerly point. They were now following that portion of the ice-field where they had attacked the American yacht.

Kaas ran on before them, seeming to enjoy the freshness of the air, and being in his true element on this carpet of snow, which doubtless reminded him of the plains of Greenland.

Suddenly Erik saw him sniff the air and then dart forward like an arrow, and stop barking beside some dark object, which was partially hidden by a mass of ice.

"Another walrus, I suppose!" he said, hurrying forward.

It was not a walrus which lay extended on the snow, and which had so excited Kaas. It was a man, insensible, and covered with blood, whose clothing of skins was assuredly not the dress worn by any seamen of the "Alaska." It reminded Erik of the clothing worn by the man who had passed the winter on the "Vega." He raised the head of the man; it was covered with thick red hair, and it was remarkable that his nose was crushed in like that of a negro.

Erik asked himself whether he was the sport of some illusion. He opened the man's waistcoat, and bared his chest. It was perhaps as much to ascertain whether his heart still beat as to seek for his name.

He found his name tattooed in blue, on a rudely designed escutcheon. "Patrick O'Donoghan, 'Cynthia,'" and his heart still beat. The man was not dead. He had a large wound in his head, another in his shoulder, and on his chest a contusion, which greatly interfered with his respiration.

"He must be carried to our place of shelter, and restored to life," said Erik, to Mr. Hersebom. And then he added in a low tone as if he was afraid of being overheard.

"It is he, father, whom we have been seeking for such a long time without being able to find him--Patrick O'Donoghan--and see he is almost unable to breathe."

The thought that the secret of his life was known to this bloody object upon which death already appeared to have set his seal, kindled a gloomy flame in Erik's eyes. His adopted father divined his thoughts, and could not help shrugging his shoulders--he seemed to say:

"Of what use would it be to discover it now. The knowledge of all the secrets in the world would be useless to us."

He, however, took the body by the limbs, while Erik lifted him under the arms, and loaded with this burden they resumed their walk.

The motion made the wounded man open his eyes. Soon the pain caused by his wounds was so great that he began to moan and utter confused cries, among which they distinguished the English word "drink!"

They were still some distance from their depot of provisions. Erik, however, stopped and propped the unfortunate man against a hummock, and then put his leathern bottle to his lips.

It was nearly empty, but the mouthful of strong liquor that Patrick O'Donoghan swallowed seemed to restore him to life. He looked around him, heaved a deep sigh and then said:

"Where is Mr. Jones?"

"We found you alone on the ice," answered Erik. "Had you been there long?"
"I do not know!" answered the wounded man, with difficulty. "Give me something more to drink." He swallowed a second mouthful and then he recovered sufficiently to be able to speak.

"When the tempest overtook us the yacht sank," he explained. "Some of the crew had time to throw themselves into the boats, the rest perished. At the first moment of peril Mr. Jones made a sign for me to go with him into a life-boat, which was suspended in the stern of the yacht and that every one else disdained on account of its small dimensions, but which proved to be safe, as it was impossible to sink it. It is the only one which reached the ice island--all the others were upset before they reached it. We were terribly wounded by the drift ice which the waves threw into our boat, but at length we were able to draw ourselves beyond their reach and wait for the dawn of day. This morning Mr. Jones left me to go and see if he could kill a walrus, or some sea-bird, in order that we might have something to eat. I have not seen him since!"

"Is Mr. Jones one of the officers of the 'Albatross'?" asked Erik.

"He is the owner and captain of her!" answered O'Donoghan, in a tone which seemed to express surprise at the question.

"Then Mr. Tudor Brown is not the captain of the 'Albatross'?"

"I don't know," said the wounded man, hesitatingly, seeming to ask himself whether he had been too confidential in speaking as freely as he had done.

Erik did not think it wise to insist on this point. He had too many other questions to ask.

"You see," he said to the Irishman, as he seated himself on the snow beside him, "you refused the other day to come on board of my ship and talk with me, and your refusal has occasioned many disasters. But now that we have met again, let us profit by this opportunity to talk seriously and like rational men. You see you are here on a floating ice-bank, without food, and seriously wounded, incapable by your own efforts of escaping the most cruel death. My adopted father and myself have all that you need, food, fire-arms, and brandy. We will share with you, and take care of you until you are well again. In return for our care, we only ask you to treat us with a little confidence!"

The Irishman gave Erik an irresolute look in which gratitude seemed to mingle with fear--a look of fearful indecision.

"That depends on the kind of confidence that you ask for?" he said, evasively.

"Oh, you know very well," answered Erik, making an effort to smile, and taking in his hands those of the wounded man. "I told you the other day; you know what I want to find out and what I have come so far to discover. Now, Patrick O'Donoghan, make a little effort and disclose to me this secret which is of so much importance to me, tell me what you know about the infant tied to the buoy. Give me the faintest indication of who I am, so that I may find my family. What do you fear? What danger do you run in satisfying me?"

O'Donoghan did not answer, but seemed to be turning over in his obtuse brain the arguments that Erik had used.

"But," he said at last, with an effort, "if we succeed in getting away from here, and we reach some country where there are judges and courts, you could do me some harm?"

"No, I swear that I would not. I swear it by all that is sacred," said Erik, hotly. "Whatever may be the injuries you have inflicted upon me or upon others, I guarantee that you shall not suffer for them in any way. Besides, there is one fact of which you seem to be ignorant, it is that there is a limit to such matters. When such events have taken place more than twenty years ago, human justice has no longer the right to demand an accounting for them."

"Is that true?" asked Patrick O'Donoghan, distrustfully. "Mr. Jones told me that the 'Alaska' had been sent by the police, and you yourself spoke of a tribunal."

"That was about recent events--an accident that happened to us at the beginning of our journey. You may be sure that Mr. Jones was mocking you, Patrick. Doubtless he has some interest of his own for wishing you not to tell."

"You may be sure of that," said the Irishman, earnestly. "But how did you discover that I was acquainted with this secret?"

"Through Mr. and Mrs. Bowles of the Red Anchor in Brooklyn, who had often heard you speak of the infant tied to the buoy."

"That is true," said the Irishman. He reflected again. "Then you are sure that you were not sent by the police?" he said, at length.

"No--what an absurd idea. I came of my own accord on account of my ardent desire, my thirst, to discover the land of my birth and to find out who my parents were, that is all."

O'Donoghan smiled, proudly:

"Ah, that is what you want to know," he said. "Well, it is true that I can tell you. It is true that I know."

"Tell me--tell me!" cried Erik, seeing that he hesitated. "Tell me and I promise you pardon for all the evil that you have done, and my everlasting gratitude if I am ever in a position to show it!"

The Irishman gave a covetous look at the leathern bottle.

"It makes my throat dry to talk so much," he said, in a faint tone. "I will drink a little more if you are willing to
give it to me."
"There is no more here, but we can get some at our depot of provisions. We have two large cases of brandy
there," answered Erik, handing the bottle to Mr. Hersebom.

The latter immediately walked away, followed by Kaas.

"They will not be gone long," said the young man, turning toward his companion. "Now, my brave fellow, do
not make merchandise of your confidence. Put yourself in my place. Suppose that during all your life you had been
ignorant of the name of your country, and that of your mother, and that at last you found yourself in the presence of
a man who knew all about it, and who refused the information which was of such inestimable value to you, and that
at the very time when you had saved him, restored him to consciousness and life. I do not ask you to do anything
impossible. I do not ask you to criminate yourself if you have anything to reproach yourself with. Give me only an
indication, the very slightest. Put me on the track, so that I can find my family; and that is all that I shall ask of you."

"By my faith, I will do you this favor!" said Patrick, evidently moved. "You know that I was a cabin-boy on
board the 'Cynthia'?"

He stopped short.

Erik hung upon his words. Was he at last going to find out the truth? Was he going to solve this enigma and
discover the name of his family, the land of his birth? Truly the scene appeared to him almost chimerical. He
fastened his eyes upon the wounded man, ready to drink in his words with avidity. For nothing in the world would
he have interfered with his recital, neither by interruption nor gesture. He did not even observe that a shadow had
appeared behind him. It was the sight of this shadow which had stopped the story of Patrick O'Donoghan.

"Mr. Jones!" he said, in the tone of a school-boy detected in some flagrant mischief.

Erik turned and saw Tudor Brown coming around a neighboring hummock, where until this moment he had been
hidden from their sight.

The exclamation of the Irishman confirmed the suspicion which during the last hour had presented itself to his
mind.

Mr. Jones and Tudor Brown were one and the same person.
He had hardly time to make this reflection before two shots were heard.
Tudor Brown raised his gun and shot Patrick O'Donoghan through the heart, who fell backward.
Then before he had time to lower his rifle, Tudor Brown received a bullet in his forehead, and fell forward on his
face.

"I did well to come back when I saw suspicious footprints in the snow," said Mr. Hersebom, coming forward, his
gun still smoking in his hands.

CHAPTER XX.
THE END OF THE VOYAGE.

Erik gave a cry and threw himself on his knees beside Patrick O'Donoghan, seeking for some sign of life, a ray
of hope. But the Irishman was certainly dead this time, and that without revealing his secret.

As for Tudor Brown, one convulsion shook his body, his gun fell from his hands, in which he had tightly held it
at the moment of his fall, and he expired without a word.

"Father, what have you done?" cried Erik, bitterly. "Why have you deprived me of the last chance that was left to
me of discovering the secret of my birth? Would it not have been better for us to throw ourselves upon this man and
take him prisoner?"

"And do you believe that he would have allowed us to do so?" answered Mr. Hersebom. "His second shot was
intended for you, you may be sure. I have avenged the murder of this unfortunate man, punished the criminal who
attempted to shipwreck us, and who is guilty perhaps of other crimes. Whatever may be the result, I do not regret
having done so. Besides of what consequence is the mystery surrounding your birth, my child, to men in our
situation? The secret of your birth before long, without doubt, will be revealed to us by God."

He had hardly finished speaking, when the firing of a cannon was heard, and it was re-echoed by the icebergs. It
seemed like a reply to the discouraging words of the old fisherman. It was doubtless a response to the two gunshots
which had been fired on their island of ice.

"The cannon of the 'Alaska!' We are saved!" cried Erik, jumping up and climbing a hummock to get a better
view of the sea that surrounded them.

He saw nothing at first but the icebergs, driven by the wind and sparkling in the sunshine. But Mr. Hersebom,
who had immediately reloaded his gun, fired into the air, and a second discharge from the cannon answered him
almost immediately.

Then Erik discovered a thin streak of black smoke toward the west, clearly defined against the blue sky.
Gunshots, answered by the cannon, were repeated at intervals of a few minutes, and soon the "Alaska" steamed around an iceberg and made all speed toward the north of the island.

Erik and Mr. Hersebom, weeping for joy, threw themselves into each other's arms. They waved their handkerchiefs and threw their caps into the air, seeking by all means to attract the attention of their friends.

At length the "Alaska" stopped, a boat was lowered, and in twenty minutes it reached their island.

Who can describe the unbounded joy of Dr. Schwaryencrona, Mr. Bredejord, Mr. Malarius, and Otto when they found them well and safe; for through the long hours of that sad night they had mourned them as lost.

They related all that had befallen them--their fears and despair during the night, their vain appeals, their useless anger. The "Alaska" had been found in the morning to be almost entirely clear of the ice, and they had dislodged what remained with the assistance of their gunpowder. Mr. Bosewitz had taken command, being the second-officer, and had immediately started in search of the floating island, taking the direction in which the wind would carry it. This navigation amidst floating icebergs was the most perilous which the "Alaska" had as yet attempted; but thanks to the excellent training to which the young captain had accustomed his crew, and to the experience which they had acquired in maneuvering the vessel, they passed safely among these moving masses of ice without being crushed by them. The "Alaska" had had the advantage of being able to travel more swiftly than the icebergs, and she had been able to benefit by this circumstance. Kind Providence had willed that her search should not prove fruitless. At nine o'clock in the morning the island had been sighted. They recognized it by its shape, and then the two shots from the guns made them hopeful of finding their two shipwrecked friends.

All their other troubles now appeared to them as insignificant. They had a long and dangerous voyage before them, which they must accomplish under sail, for their coal was exhausted.

"No," said Erik, "we will not make it under sail. I have another plan. We will permit the ice island to tow us along, as long as she goes toward the south or west. That will spare us incessantly fighting with the icebergs, for our island will chase them ahead of her. Then we can collect here all the combustibles that we will require in order to finish the voyage, when we are ready to resume it."

"What are you talking about?" asked the doctor, laughing. "Is there an oil-well on this island?"

"Not exactly an oil-well," answered Erik, "but what will answer our purpose nearly as well, multitudes of fat walruses. I wish to try an experiment, since we have one furnace especially adapted for burning oil."

They began their labors by performing the last rites of the two dead men. They tied weights to their feet and lowered them into the sea. Then the "Alaska" made fast to the ice bank in such a manner as to follow its movements without sustaining any injury to herself. They were able, with care, to carry on board again the provisions which they had landed, and which it was important for them not to lose. That operation accomplished, they devoted all their energies to the pursuit of the walrus.

Two or three times a day, parties armed with guns and harpoons and accompanied by all their Greenland dogs landed on the ice bank, and surrounded the sleeping monsters at the mouth of their holes. They killed them by firing a ball into their ears, then they cut them up, and placed the lard with which they were filled in their sleighs, and the dogs drew it to the "Alaska." Their hunting was so easy and so productive, that in eight days they had all the lard that they could carry. The "Alaska," still towed by the floating island, was now in the seventy-fourth degree; that is to say, she had passed Nova Zembla.

The ice island was now reduced at least one-half, and cracked by the sun was full of fissures, more or less extensive, evidently ready to go to pieces. Erik resolved not to wait until this happened, and ordering their anchor to be lifted, he sailed away westward.

The lard was immediately utilized in the fire of the "Alaska," and proved an excellent combustible. The only fault was that it choked up the chimney, which necessitated a daily cleaning. As for its odor, that would doubtless have been very disagreeable to southern passengers, but to a crew composed of Swedes and Norwegians, it was only a secondary inconvenience.

Thanks to this supply, the "Alaska" was able to keep up steam during the whole of the remainder of her voyage. She proceeded rapidly, in spite of contrary winds, and arrived on the 5th of September in sight of Cape North or Norway. They pursued their route with all possible speed, turned the Scandinavian Peninsula, repassed Skager-Rack, and reached the spot from which they had taken their departure.

On the 14th of September they cast anchor before Stockholm, which they had left on the tenth of the preceding February.

Thus, in seven months and four days, the first circumpolar periplus had been accomplished by a navigator of only twenty-two years of age.

This geographical feat, which so promptly completed the great expedition of Nordenskiold, would soon make a prodigious commotion in the world. But the journals and reviews had not as yet had time to expatiate upon it. The uninitiated were hardly prepared to understand it, and one person, at least, reviewed it with suspicion--this was
The public authorities proposed a national recompense for them.

All these praises were painful to Erik. His conscience told him that the principal motive of this expedition on his part had been purely a personal one, and he felt scrupulous about accepting honors which appeared to him greatly exaggerated. He therefore availed himself of the first opportunity to state frankly that he had gone to the polar seas to discover if possible the secret of his birth, and of the shipwreck of the "Cynthia," that he had been unsuccessful in doing so.

The occasion was offered by a reporter of one of the principal newspapers of Stockholm, who presented himself on board of the "Alaska" and solicited the favor of a private interview with the young captain. The object of this intelligent gazetteer, let us state briefly, was to extract from his victim the outlines of a biography which would cover one hundred lines. He could not have fallen on a subject more willing to submit to vivisection. Erik had been eager to tell the truth, and to proclaim to the world that he did not deserve to be regarded as a second Christopher Columbus. He therefore related unreservedly his story, explaining how he had been picked up at sea by a poor fisherman of Noroe, educated by Mr. Malarius, taken to Stockholm by Dr. Schwaryencrona; how they had found out that Patrick O'Donoghan probably held the key to the mystery that surrounded him. They discovered that he was on board of the "Vega;" they had gone in search of him. He related the accident which had induced them to change their route. Erik told all this to convince the world that he was no hero. He told it because he felt ashamed of being so overwhelmed with praises for a performance that only seemed to him natural and right.

During this time the pen of the delighted reporter, Mr. Squirrelius, flew over the paper with stenographic rapidity. The dates, the names, the least details were noted with avidity. Mr. Squirrelius told himself with a beating heart that he had obtained matter not only for one hundred lines, but that he could make five or six hundred out of it. And what a story it would be--more interesting than a novel!

The next day Erik's revelations filled the columns of the most largely circulated newspaper in Stockholm, and indeed in all Sweden. As is usually the case, Erik's sincerity, instead of diminishing his popularity, only increased it, on account of his modesty, and the romantic interest attached to his history. The press and the public seized upon it with avidity. These biographical details were soon translated into all languages, and made the tour of Europe. In this way they reached Paris, and penetrated in the form of a French newspaper into a modest drawing-room on Varennes Street.

There were two persons in this room. One was a lady dressed in black, with white hair, although she still appeared to be young, but her whole appearance betrayed profound sorrow. Seated under a lighted lamp she worked mechanically at some embroidery, which at times fell from her thin fingers, while her eyes, fixed on vacancy, seemed to be thinking of some overwhelming calamity.

On the other side of the table sat a fine-looking old gentleman, who took the newspaper abstractedly which his servant brought in.

It was Mr. Durrien, the honorary consul-general of the geographical society, the same person who had been at Brest when the "Alaska" reached that place.

This was doubtless the reason why Erik's name attracted his notice, but while reading the article carefully which contained the biography of the young Swedish navigator, he was startled. Then he read it again carefully, and little
by little an intense pallor spread over his face, which was always pale. His hands trembled nervously, and his uneasiness became so evident that his companion noticed it.

"Father, are you suffering?" she asked with solicitude.

"I believe it is too warm here--I will go to the library and get some fresh air. It is nothing; it will pass off," answered Mr. Durrien, rising and walking into the adjoining room.

As if by accident, he carried the paper with him.

If his daughter could have read his thoughts, she would have known that amidst the tumults of hopes and fears that so agitated him was also a determination not to let her eyes rest upon that paper.

A moment later she thought of following him into the library, but she imagined that he wished to be alone, and discreetly yielded to his desire. Besides she was soon reassured by hearing him moving about and opening and closing the window.

At the end of an hour, she decided to look in, and see what Mr. Durrien was doing. She found that he was seated before his desk writing a letter. But she did not see that he wrote his eyes filled with tears.

CHAPTER XXI.
A LETTER FROM PARIS.

Since his return to Stockholm, Erik had received every day from all parts of Europe a voluminous correspondence. Some learned society wished for information on some point, or wrote to congratulate him; foreign governments wished to bestow upon him some honor or recompense; ship-owners, or traders, solicited some favor which would serve their interests.

Therefore he was not surprised when he received one morning two letters bearing the Paris postmark.

The first that he opened was an invitation from the Geographical Society of France, asking him and his companions to come and receive a handsome medal, which had been voted in a solemn conclave "to the navigators of the first circumpolar periphas of the arctic seas."

The second envelope made Erik start, he looked at it. On the box which closed it was a medallion upon which the letters "E.D." were engraved, surrounded by the motto "Semper idem."

These initials and devices were also stamped in the corner of the letter enclosed in the envelope, which was that from Mr. Durrien.

The letter read as follows:

"My dear child,--Let me call you this in any case. I have just read in a French newspaper a biography translated from the Swedish language, which has overcome me more than I can tell you. It was your account of yourself. You state that you were picked up at sea about twenty-two years ago by a Norwegian fisherman in the neighborhood of Bergen; that you were tied to a buoy, bearing the name of 'Cynthia;' that the especial motive of your arctic voyage was to find a survivor of the vessel of that name--ship wrecked in October, 1858; and then you state that you have returned from the voyage without having been able to gain any information about the matter.

"If all this is true (oh, what would I not give if it is true!), I ask you not to lose a moment in running to the telegraph office and letting me know it. In that case, my child, you can understand my impatience, my anxiety, and my joy. In that case you are my grandson, for whom I have mourned so many years, whom I believed lost to me forever, as did also my daughter, my poor daughter, who, broken-hearted at the tragedy of the 'Cynthia,' still mourns every day for her only child--the joy and consolation at first of her widowhood, but afterward the cause of her despair.

"But we shall see you again alive, covered with glory. Such happiness is too great, too wonderful. I dare not believe it until a word from you authorizes me to do so. But now it seems so probable, the details and dates agree so perfectly, your countenance and manners recall so vividly those of my unfortunate son-in-law. Upon the only occasion when chance led me into your society, I felt myself mysteriously drawn toward you by a deep and sudden sympathy. It seems impossible that there should be no reason for this.

"One word, telegraph me one word. I do not know how to exist until I hear from you. Will it be the response that I wait for so impatiently? Can you bring such happiness to my poor daughter and myself as will cause us to forget our past years of tears and mourning?

"E. DURRIEN, Honorary Consul-general,

"104 Rue de Varennes, Paris."

To this letter was added one of explanation, that Erik devoured eagerly. It was also in Mr. Durrien's handwriting, and read as follows:

"I was the French consul at New Orleans when my only daughter, Catherine, married a young Frenchman, Mr. George Durrien, a distant connection, and, like ourselves, of Breton origin. Mr. George Durrien was a mining
engineer. He had come to the United States to explore the recently discovered mines of petroleum and intended to remain several years. I received him into my family--he being the son of a dear friend--and when he asked for my daughter's hand, I gave her to him with joy. Shortly after their marriage I was appointed consul to Riga; and my son-in-law being detained by business interests in the United States, I was obliged to leave my daughter. She became a mother, and to her son was given my Christian name, united to that of his father--Emile Henry Georges.

"Six months afterward my son-in-law was killed by an accident in the mines. As soon as she could settle up his affairs, my poor daughter, only twenty years of age, embarked at New York on the 'Cynthia' for Hamburg, to join me by the most direct route.

"On the 7th of October, 1858, the 'Cynthia' was shipwrecked off the Faroe Islands. The circumstances of the shipwreck were suspicious, and have never been explained.

"At the moment of the disaster, when the passengers were taking their places one by one in the boat, my little grandson, seven months old--whom his mother had tied to a buoy for safety--slipped or was pushed into the sea, and was carried away by the storm and disappeared. His mother, crazed by this frightful spectacle, tried to throw herself into the sea. She was prevented by main force and placed in a fainting condition in one of the boats, in which were three other persons, and who had alone escaped from the shipwrecked vessel. In forty-nine hours this boat reached one of the Faroe Islands. From there my daughter returned to me after a dangerous illness which lasted seven weeks, thanks to the devoted attentions of the sailor who saved her and who brought her to me. This brave man, John Denman, died in my service in Asia Minor.

"We had but little hope that the baby had survived the shipwreck. I, however, sought for him among the Faroe and Shetland Islands, and upon the Norwegian coast north of Bergen. The idea of his cradle floating any further seemed impossible, but I did not give up my search for three years; and Noroe must be a very retired spot, or surely some inquiries would have been made there. When I had given up all hope I devoted myself exclusively to my daughter, whose physical and moral health required great attention. I succeeded in being sent to the Orient, and I sought, by traveling and scientific enterprises, to draw off her thoughts from her affliction. She has been my inseparable companion sharing all my labors, but I have never been able to lighten her incurable grief. We returned to France, and we now live in Paris in an old house which I own.

"Will it be my happiness to receive there my grandson, for whom we have mourned so many years? This hope fills me with too much joy, and I dare not speak of it to my daughter, until I am assured of its truth; for, if it should prove false, the disappointment would be too cruel.

"To-day is Monday: they tell me at the post-office that by next Saturday I can receive your answer."

Erik had hardly been able to read this, for the tears would obscure his sight. He also felt afraid to yield too quickly to the hope which had been so suddenly restored to him. He told himself that every detail coincided--the dates agreed; all the events down to the most minute particulars. He hardly dared to believe, however, that it could be true. It was too much happiness to recover in a moment his family, his own mother, his country. And such a country--the one that he could have chosen above all because she possessed the grandeur, the graces, the supreme gifts of humanity--because she had fostered genius, and the civilization of antiquity, and the discoveries and inventions of modern times.

He was afraid that he was only dreaming. His hopes had been so often disappointed. Perhaps the doctor would say something to dispel his illusions. Before he did anything he would submit these facts to his cooler judgment.

The doctor read the documents attentively which he carried to him, but not without exclamations of joy and surprise.

"You need not feel the slightest doubt!" he said, when he had finished. "All the details agree perfectly, even those that your correspondent omits to mention, the initials on the linen, the device engraved on the locket, which are the same as those on the letter. My dear child, you have found your family this time. You must telegraph immediately to your grandfather!"

"But what shall I tell him?" asked Erik, pale with joy.

"Tell him that to-morrow you will set out by express, to go and embrace him and your mother!"

The young captain only took time to press the hands of this excellent man, and he ran and jumped into a cab to hasten to the telegraph office.

He left Stockholm that same day, took the railroad to Malmo on the north-west coast of Sweden, crossed the strait in twenty minutes, reached Copenhagen, took the express train through to Holland and Belgium, and at Brussels the train for Paris.

On Saturday, at seven o'clock in the evening, exactly six days after Mr. Durrien had posted his letter, he had the joy of waiting for his grandson at the depot.

As soon as the train stopped they fell into each other's arms. They had thought so much about each other during these last few days that they both felt already well acquainted.
"My mother?" asked Erik.

"I have not dared to tell her, much as I was tempted to do so!" answered Mr. Durrien.

"And she knows nothing yet?"

"She suspects something, she fears, she hopes. Since your dispatch I have done my best to prepare her for the unheard-of joy that awaits her. I told her of a track upon which I had been placed by a young Swedish officer, the one whom I had met at Brest, and of whom I had often spoken to her. She does not know, she hesitates to hope for any good news, but this morning at breakfast I could see her watching me, and two or three times I felt afraid that she was going to question me. One can not tell, something might have happened to you, some other misfortune, some sudden mischance. So I did not dine with her to-night, I made an excuse to escape from a situation intolerable to me."

Without waiting for his baggage, they departed in the _coup_ that Mr. Durrien had brought.

Mme. Durrien, alone in the parlor in Varennes Street, awaited impatiently the return of her father. She had had her suspicions aroused, and was only waiting until the dinner hour arrived to ask for an explanation.

For several days she had been disturbed by his strange behavior, by the dispatches which were continually arriving, and by the double meaning which she thought she detected beneath all he said. Accustomed to talk with him about his lightest thoughts and impressions, she could not understand why he should seek to conceal anything from her. Several times she had been on the point of demanding a solution of the enigma, but she had kept silence, out of respect for the evident wishes of her father.

"He is trying to prepare me for some surprise, doubtless," she said to herself. "He is sure to tell me if anything pleasant has occurred."

But for the last two or three days, especially that morning, she had been impressed with a sort of eagerness which Mr. Durrien displayed in all his manner, as well as the happy air with which he regarded her, insisting in hearing over and over again from her lips, all the details of the disaster of the "Cynthia," which he had avoided speaking of for a long time. As she mused over his strange behavior a sort of revelation came to her. She felt sure that her father must have received some favorable intelligence which had revived the hope of finding her child. But without the least idea that he had already done so, she determined not to retire that night until she had questioned him closely.

Mme. Durrien had never definitely renounced the idea that her son was living. She had never seen him dead before her eyes, and she clung mother-like to the hope that he was not altogether lost to her. She said that the proofs were insufficient, and she nourished the possibility of his sudden return. She might be said to pass her days waiting for him. Thousands of women, mothers of soldiers and sailors, pass their lives under this touching delusion. Mrs. Durrien had a greater right than they had to preserve her faith in his existence. In truth the tragical scene enacted twenty-two years ago was always before her eyes. She beheld the "Cynthia" filling with water and ready to sink. She saw herself tying her infant to a large buoy while the passengers and sailors were rushing for the boats. They left her behind, she saw herself imploring, beseeching that they would at least take her baby. A man took her precious burden, and threw it into one of the boats, a heavy sea dashed over it, and to her horror she saw the buoy floating away on the crest of the waves. She gave a despairing cry and tried to jump after him, then came unconsciousness. When she awoke she was a prey to despair, to fever, to delirium. To this succeeded increasing grief. Yes, the poor woman recalled all this. Her whole being had in fact received a shock from which she had never recovered. It was now nearly a quarter of a century since this had happened, and Mrs. Durrien still wept for her son as on the first day. Her maternal heart so full of grief was slowly consuming her life. She sometimes pictured to herself her son passing through the successive phases of infancy, youth, and manhood. From year to year she represented to herself how he would have looked, how he was looking, for she obstinately clung to her belief of the possibility of his return.

This vain hope nothing had as yet had the power to shake--neither travels, nor useless researches, nor the passage of time.

This is why this evening she awaited her father with the firm resolution of knowing all that he had to tell.

Mr. Darrien entered. He was followed by a young gentleman, whom he presented to her in the following words:

"My daughter, this is Mr. Erik Hersebom, of whom I have often spoken to you, and who has just arrived at Paris. The Geographical Society wish to bestow upon him a grand medal, and he has done me the honor to accept our hospitality."

She had arisen from her arm-chair, and was looking kindly at him. Suddenly her eyes dilated, her lips trembled, and she stretched out her hands toward him.

"My son! you are my son!" she cried.
Then she advanced a step toward Erik.

"Yes, you are my child," she said. "Your father lives over again in you!"

When Erik, bursting into tears, fell on his knees before her, the poor woman took his head in her hands, and
CHAPTER XXII.
AT VAL-FERAY.

A month later at Val-Féray, an old homestead of the family, situated half a league from Brest, Erik's adopted family were assembled, together with his mother and grandfather. Mrs. Durrien had, with the delicacy of feeling habitual to her, desired that the good, simple-hearted beings who had saved her son's life should share her profound and inexpressible joy. She had insisted that Dame Katrina, and Vanda, Mr. Hersebom, and Otto should accompany Doctor Schwaryencrona, Kajsa, Mr. Bredejord, and Mr. Malarius, and they held a great festival together.

Amidst the rugged natural scenery of Breton and near the sea, her Norwegian guests felt more at their ease than they could have done in Varennes Street. They took long walks in the woods together, and told each other all they knew about Erik's still somewhat obscure history, and little by little many hitherto inexplicable points became clear. Their long talks and discussions cast light upon many obscure circumstances.

The first question they asked each other was, Who was Tudor Brown? What great interest did he have in preventing Patrick O'Donoghan from telling who Erik's relations were? The words of that unfortunate man had established one fact, viz., that Tudor Brown's real name was Jones, as it was the only one that the Irishman had known him by. Now, a Mr. Noah Jones had been associated with Erik's father in working a petroleum mine, that the young engineer had discovered in Pennsylvania. The simple announcement of this fact gave a sinister aspect to many events which had so long appeared mysterious: the suspicious wreck of the "Cynthia," the fall of the infant into the sea, perhaps the death of Erik's father. A document that Mr. Durrien found among his papers elucidated many of these perplexing questions.

"Several months before his marriage," he said to Erik's friends, "my son-in-law had discovered, near Harrisburg, a petroleum well. He lacked the capital necessary to purchase it, and he saw that he was in danger of losing all the advantages which the possession of it would secure to him. Chance made him acquainted with Mr. Noah Jones, who represented himself as a cattle dealer from the far West. But in reality, as he found out afterward, he was a slave-trader.

"This individual agreed to advance the sum necessary to purchase and work the petroleum mine, which was called the Vandalia. He made my son-in-law sign, in exchange for this assistance, an agreement which was very profitable to himself. I was ignorant of the terms of this contract at the time of his marriage to my daughter, and according to all appearances he thought but little of it. Unusually gifted, and understanding chemistry and mechanics, yet he was entirely ignorant of business matters, and already had to pay dearly for his inexperience. No doubt he had trusted all the arrangements to Noah Jones, according to his usual habit. Probably he signed with closed eyes the contract which was laid before him. These are the principle articles agreed upon:

"Art. III. The Vandalia shall remain the sole property of Mr. George Durrien, the discoverer, and Mr. Noah Jones, his silent partner.

"Art. IV. Mr. Noah Jones will take charge of moneys, and pay out what is necessary for the exploration of the mine, he will also sell the product, take charge of the receipts, and have a settlement with his partner every year, when they will divide the net profits.

"Art. V. If either of the partners should wish to sell his share, the other would have the first right to purchase it, and he should have three months in which to make arrangements to do so. He might then become sole proprietor by paying the capital and three per cent. on the net revenue, according to what it had been proved to be at the last inventory.

"Art. VI. Only the children of the two partners could become inheritors of these rights. In case one of the partners should die childless, or his children should not live until they were twenty-one years of age, the entire property to revert to the survivor, to the exclusion of all other heirs of the dead partner.

"N.B. The last article is on account of the different nationalities of the two partners, and because of the complications that could not fail to arise in case of the death of either of them without issue."

"Such," continued Mr. Durrien, "was the contract which my future son-in-law had signed at the time, when he had no thought of marrying, and when everybody, except, perhaps, Mr. Noah Jones, was ignorant of what immense value the Vandalia mine would become in the course of time. They had then hardly commenced operations, and they met with the usual discouragements incident to all new undertakings. Perhaps Noah Jones hoped that his associate would become disgusted with the whole business and retire, leaving him sole proprietor. The marriage of George with my daughter, the birth of his son, and the well becoming suddenly prodigiously fruitful, must have modified his plans by degrees. He could no longer hope to purchase for a trifling sum this splendid property; but before it came into the possession of Noah Jones, first George himself, and then his only child, must disappear from the world. Two
years after his marriage and six months after the birth of my grandson, George was found dead near one of the wells--asphyxiated, the doctors said, by gas. I had left the United States upon my nomination as consul to Riga. The business relating to the partnership was left to an attorney to settle. Noah Jones behaved very well, and agreed to all the arrangements that were made for the benefit of my daughter. He agreed to continue the work, and pay every six months into the Central Bank of New York that part of the net profits which belonged to the infant. Alas! he never made the first payment. My daughter took passage in the 'Cynthia' in order to join me. The 'Cynthia' was lost with her crew and freight under such suspicious circumstances that the insurance company refused to pay; and in this shipwreck the sole heir of my son-in-law disappeared.

"Noah Jones remained the sole proprietor of the Vandalia, which has yielded him at the least since that event an annual income of one hundred and eighty thousand dollars a year."

"Did you never suspect that he had had some hand in these successive catastrophies?" asked Mr. Bredejord.

"I have certainly suspected him; it was only too natural. Such an accumulation of misfortunes, and all tending to his private enrichment, seemed to point him out as the author only too clearly. But how could I prove my suspicions, particularly in a court of justice? They were only vague, and I knew too well that they would have but little weight in an international contest. And then, besides I had my daughter to console, or at least to try and draw away her thoughts from this tragedy, and a lawsuit would only have revived her grief. Briefly I resigned myself to silence. Did I do wrong? Is it to be regretted?"

"I think not, for I feel convinced that it would have produced no results. You see how difficult it is even today, after we have related all the facts in our possession, to arrive at any definite conclusion!"

"But how can you explain the part which Patrick O'Donoghan has taken in this matter?" asked Dr. Schwaryencrona.

"On this point, as on many others, we are reduced to conjectures, but it seems to me that there is one which is plausible enough. This O'Donoghan was cabin-boy on board of the 'Cynthia,' in the personal service of the captain, and consequently in constant communication with the first-class passengers, who always eat at the captain's table. He therefore certainly knew the name of my daughter, and her French origin, and he could easily have found her again.

"Had he been commissioned by Noah Jones to perform some dark mission? Had he a hand in causing the shipwreck of the 'Cynthia,' or simply in pushing the infant into the sea? this they could never know for a certainty since he was dead. One thing was evident, he was aware how important the knowledge of this fact was for Noah Jones. But did this lazy drunken man know that the infant was living? Had he any hand in saving it? Had he rescued it from the sea to leave it floating near Noroe?"

"This was a doubtful point. In any case he must have assured Noah Jones that the infant had survived. He was doubtless proud of knowing the country which had received him, and her French origin, and he could easily have found her well for his silence. He was doubtless the person from whom he received money every time he landed in New York."

"All this appears to me to be very probable," said Mr. Bredejord, "and I think that subsequent events confirm it. The first advertisements of Doctor Schwaryencrona disturbed Noah Jones, and he believed it to be an imperative necessity to get rid of Patrick O'Donoghan, but he was obliged to act prudently. He therefore contented himself with frightening the Irishman, by making him believe that he would be brought before a criminal court. The result of this we know from Mr. and Mrs. Bowles, of the Red Anchor, who told us of the haste with which Patrick O'Donoghan had taken flight. He evidently believed that he was in danger of being arrested, or he would not have gone so far, to live among the Samoyedes, and under an assumed name, which Noah Jones had doubtless advised him to do.

"But the announcement in the newspapers about Patrick O'Donoghan must have been a severe blow to him. He had made a journey to Stockholm expressly to assure us that the Irishman was dead, and doubtless to discover if possible how far we had pushed our inquiries. The publication of the correspondence of the 'Vega,' and the departure of the 'Alaska,' must have made Noah Jones, or Tudor Brown, as he called himself, feel that he was in imminent peril, for his confidence in Patrick O'Donoghan could be only very limited, and he would have revealed his secret to any one who would have assured him that he would not be punished. Happily as affairs have turned out, we may congratulate ourselves upon having escaped pretty well."

"Who knows?" said the doctor, "perhaps all the danger we have encountered has only helped to bring us to the knowledge of the truth. But for running on the rocks of the Basse-Froide, we would probably have pursued the route through the Suez Canal, and then we should have reached Behring's Strait too late to meet the 'Vega.' It is at least doubtful whether we would have undertaken the voyage to the Island of Ljakow, and more doubtful still whether we would have been able to extract any information from Patrick O'Donoghan if we had met him in company with Tudor Brown."
"So, although our entire voyage has been marked by tragical events, it is due to the fact of our having accomplished the periplus in the 'Alaska, and the consequent celebrity which has been the result for Erik, that he has at last found his family."

"Yes," said Mrs. Durrien, laying her hand proudly on the head of her son, "it is his glory which has restored him to me."

And immediately she added:

"It was a crime that deprived me of you, but your own goodness which has restored you to me!"

"And the rascality of Noah Jones has resulted in making our Erik one of the richest men in America," cried Mr. Bredejord.

Every one looked at him with surprise.

"Doubtless," answered the eminent lawyer. "Erik is his father's heir, and has a share in the income, derived from the Vandalia mine. Has he not been unjustly deprived of this for the last twenty-two years?

"We have only to give proofs of his identity, and we have plenty of witnesses, Mr. Hersebom, Dame Katrina and Mr. Malarius, besides ourselves. If Noah Jones has left any children, they are responsible for the enormous arrears which will probably consume all their share of the capital stock.

"If the rascal has left no children, by the terms of the contract which Mr. Durrien has just read, Erik is the sole inheritor of the entire property; and according to all accounts he ought to have in Pennsylvania an income of one hundred and fifty to two hundred thousand dollars a year!"

"Ah, ah," said the doctor, laughing. "Behold the little fisherman of Noroe become an eligible _parti!_ Laureate of the Geographical Society, author of the first circumpolar periplus, and afflicted with the modest income of two hundred thousand dollars. There are not many such husbands to be met with in Stockholm. What do you say Kajsa?"

The young girl blushed painfully at being thus addressed, but her uncle had no suspicion that he had made a cruel speech.

Kajsa had felt that she had not acted wisely in treating Erik as she had done, and she resolved for the future to show him more attention.

But it was a singular fact that Erik no longer cared for her, since he felt himself elevated above her unjust disdain. Perhaps it was absence, or the lonely hours which he had spent walking the deck at night, which had revealed to him the poverty of Kajsa's heart; or it might be the satisfaction he felt that she could no longer regard him as "a waif"; he only treated her now with the most perfect courtesy, to which she was entitled as a young lady and Dr. Schwaryencrona's niece.

All his preference now was for Vanda, who indeed grew every day more and more charming, and was losing all her little village awkwardness under the roof of an amiable and cultivated lady. Her exquisite goodness, her native grace, and perfect simplicity, made her beloved by all who approached her. She had not been eight days at Val-Fray, when Mrs. Durrien declared positively that it would be impossible for her ever to part with her.

Erik undertook to arrange with Mr. Hersebom and Dame Katrina that they should leave Vanda behind them, with the express condition that he would bring her himself every year to see them. He had tried to keep all his adopted family with him, even offering to transport from Noroe the house with all its furniture where he had passed his infancy. But this project of emigration was generally regarded as impracticable. Mr. Hersebom and Katrina were too old to change their habits. They would not have been perfectly happy in a country of whose language and habits they were ignorant. He was obliged, therefore, to permit them to depart, but not before making such provision for them as would enable them to spend the remainder of their days in ease and comfort, which, notwithstanding their honest, laborious lives, they had been unable to accomplish.

Erik would have liked to have kept Otto at least, but he preferred his fjord, and thought that there was no life preferable to that of a fisherman. It must also be confessed that the golden-haired and blue-eyed daughter of the overseer of the oil-works had something to do with the attractions which Noroe had for him. At least we must conclude so, since it was soon made known that he expected to marry her at the next "Yule," or Christmas.

Mr. Malarius counted upon educating their children as he had educated Erik and Vanda. He modestly resumed his position in the village school, after sharing in the honor of the decorations bestowed by the Geographical Society of France upon the captain of the "Alaska." He was also busily occupied in correcting the proofs of his magnificent work on the "Flora of the Arctic Regions." As for Dr. Schwaryencrona, he has not quite finished his "Treatise on Iconography," which will transmit his name to posterity.

The latest legal business of Mr. Bredejord has been to establish Erik's claim as sole proprietor of the Vandalia mine. He gained his case in the first instance, and also on appeal, which was no small success.

Erik took advantage of this, and of the enormous fortune thus accruing to him, to purchase the "Alaska," which he converted into a pleasure yacht. He uses it every year to go to Noroe in company with Mme. Durrien and Vanda, to visit his adopted family. Although his civil rights have been accorded to him, and his legal name is Emile Durrien,
he has added that of Hersebom, and among his relatives he is still called only Erik.

The secret desire of his mother is to see him some day married to Vanda, whom she already loves as a daughter, and, as Erik evidently shares this desire, we may suppose that it will be realized one of these days.

Kajsa still remains single, with the knowledge that she has lost her opportunity.

Dr. Schwaryencrona, Mr. Bredejord, and Professor Hochstedt still play innumerable games of whist.

One evening the doctor, having played worse than usual, Mr. Bredejord, as he tapped his snuff-box, had the pleasure of recalling to his mind a circumstance which had too long been forgotten.

"When do you intend to send me your Pliny?" he asked, with a wicked gleam in his eye. "Certainly you can no longer think that Erik is of Irish origin?"

The doctor was thunder-struck for a moment by this speech, but he soon recovered himself.

"Bah! an ex-president of the French Republic was a direct descendant of one of the Irish kings," he said, seriously. "I should not be at all surprised if Mr. Durrien belongs to the same family!"

"Evidently," replied Mr. Bredejord. "In fact it is so extremely probable that out of sport I will send you my Quintilian!"

THE END.

TICKET NO. "9672"

by

JULES VERNE

CHAPTER I.

"What time is it?" inquired Dame Hansen, shaking the ashes from her pipe, the last curling rings from which were slowly disappearing between the stained rafters overhead.

"Eight o'clock, mother," replied Hulda.

"It isn't likely that any travelers will come to-night. The weather is too stormy."

"I agree with you. At all events, the rooms are in readiness, and if any one comes, I shall be sure to hear them."

"Has your brother returned?"

"Not yet."

"Didn't he say he would be back to-night?"

"No, mother. Joel went to take a traveler to Lake Tinn, and as he didn't start until very late, I do not think he can get back to Dal before to-morrow."

"Then he will spend the night at Moel, probably."

"Yes; unless he should take it into his head to go on to Bamble to see Farmer Helmboe."

"And his daughter Siegfried."

"Yes. Siegfried, my best friend, whom I love like a sister!" replied the young girl, smiling.

"All, well, Hulda, shut up the house, and let's go to bed."

"You are not ill, are you, mother?"

"No; but I want to be up bright and early to-morrow morning. I must go to Moel."

"What for?"

"Why, we must be laying in our stock of provisions for the coming summer, and--"

"And I suppose the agent from Christiania has come down with his wagon of wines and provisions."

"Yes; Lengling, the foreman at the saw-mill, met him this afternoon, and informed me of the fact as he passed. We have very little left in the way of ham and smoked salmon, and I don't want to run any risk of being caught with an empty larder. Tourists are likely to begin their excursions to the Telemark almost any day now; especially, if the weather should become settled, and our establishment must be in a condition to receive them. Do you realize that this is the fifteenth of April?"

"The fifteenth of April!" repeated the young girl, thoughtfully.

"Yes, so to-morrow I must attend to these matters," continued Dame Hansen. "I can make all my purchases in two hours, and I will return with Joel in the kariol."

"In case you should meet the postman, don't forget to ask him if there is a letter for us--"

"And especially for you. That is quite likely, for it is a month since you heard from Ole."

"Yes, a month--a whole month."

"Still, you should not worry, child. The delay is not at all surprising. Besides, if the Moel postman has nothing
for you, that which didn't come by the way of Christiania may come by the way of Bergen, may it not?"

"Yes, mother," replied Hulda. "But how can I help worrying, when I think how far it is from here to the
Newfoundland fishing banks. The whole broad Atlantic to cross, while the weather continues so bad. It is almost a
year since my poor Ole left me, and who can say when we shall see him again in Dal?"

"And whether we shall be here when he returns," sighed Dame Hansen, but so softly that her daughter did not
hear the words.

Hulda went to close the front door of the inn which stood on the Vesfjorddal road; but she did not take the
trouble to turn the key in the lock. In hospitable Norway, such precautions are unnecessary. It is customary for
travelers to enter these country inns either by night or by day without calling any one to open the door; and even the
loneliest habitations are safe from the depredations of thieves or assassins, for no criminal attempts against life or
property ever disturb the peace of this primitive land.

The mother and daughter occupied two front rooms on the second story of the inn--two neat and airy, though
plainly furnished rooms. Above them, directly under the sloping roof, was Joel's chamber, lighted by a window
incased in a tastefully carved frame-work of pine.

From this window, the eye, after roaming over the grand mountain horizon, returned with delight to the narrow
valley through which flowed the Maan, which is half river, half torrent.

A wooden staircase, with heavy balusters and highly polished steps, led from the lower hall to the floors above,
and nothing could be more neat and attractive than the whole aspect of this establishment, in which the travelers
found a comfort that is rare in Norwegian inns.

Hulda and her mother were in the habit of retiring early when they were alone, and Dame Hansen had already
lighted her candle, and was on her way upstairs, when a loud knocking at the door made them both start.

"Dame Hansen! Dame Hansen!" cried a voice.

Dame Hansen paused on the stairs.

"Who can have come so late?" she exclaimed.

"Can it be that Joel has met with an accident?" returned Hulda, quickly.

And she hastened toward the door.

She found a lad there--one of the young rascals known as _skydskarls_, that make a living by clinging to the
back of kariols, and taking the horse back when the journey is ended.

"What do you want here at this hour?" asked Hulda.

"First of all to bid you good-evening," replied the boy, mischievously.

"Is that all?"

"No; that isn't all; but a boy oughtn't to forget his manners, ought he?"

"You are right. But who sent you?"

"Your brother Joel."

"And what for?" asked Dame Hansen, advancing to the door with the slow and measured tread that is a
characteristic of the inhabitants of Norway. There is quicksilver in the veins of their soil, but little or none in the
veins of their bodies.

The reply had evidently caused the mother some anxiety, however, for she added hastily:

"Has anything happened to my son?"

"No, but the Christiania postman gave him a letter, and--"

"A letter from Drammen?" repeated Dame Hansen, in a lower tone.

"I don't know about that," replied the youth. "All I do know is, that Joel can't get home before to-morrow, and he
sent me here to deliver the letter."

"It is important then?"

"I should judge so."

"Hand it here," said Dame Hansen, in a tone that betrayed keen anxiety.

"Here it is, clean and not wrinkled in the least. But the letter is not for you."

Dame Hansen seemed to breathe more freely.

"Then who is it for?" she asked.

"For your daughter."

"For me!" cried Hulda. "It is a letter from Ole! I am sure it is--a letter that came by way of Christiania. My
brother did not want me to be kept waiting."

Hulda had snatched the letter from the boy's hand, and now taking it to the table upon which her mother had
deposited the candle, she examined the address.

"Yes, it is from him. It is certainly from him! Heaven grant that he writes to announce the speedy return of the
"Viking!"
"Won't you come in?" said Dame Hansen, turning to the boy.
"Only for a minute. I must get back home to-night, for I am to go with a kariol to-morrow morning."
"Very well. Tell Joel, from me, that I expect to go to Moel to-morrow, and that he must wait for me there."
"To-morrow evening?"
"No; to-morrow morning, and he must not leave Moel until he sees me. We will return to Dal together."
"Very well, Dame Hansen."
"Won't you take a drop of _brandevin_?"
"With pleasure."

The boy approached the table, and Dame Hansen handed him a glass of the beverage which is such a powerful protection against the evening fogs. It is needless to say that he drained the glass, then,

"_God-aften!_" he said.

"_God-aften_, my son!"

This is the Norwegian good-night. It was simply spoken, without even an inclination of the head, and the lad instantly departed, without seeming to mind in the least the long walk that he had before him. The sound of his footsteps soon died away beneath the trees that border the swiftly flowing river.

Hulda still stood gazing at Ole's letter. Think of it! This frail envelope must have crossed the broad ocean to reach her, the broad ocean in which the rivers of western Norway lose themselves. She examined the different postmarks. Though mailed on the 15th of March, the missive had not reached Dal until the 15th of April. Why! a month had already elapsed since the letter was written! How many things might have happened in a month on the shores of Newfoundland! Was it not still winter, the dangerous season of equinoxes? Are not these fishing banks the most dangerous in the world, swept by terrible gales from the North Pole? A perilous and arduous vocation was this business of fishing which Ole followed! And if he followed it was it not that she, his betrothed, whom he was to marry on his return, might reap the benefits?

Poor Ole! What did he say in this letter? Doubtless that he loved Hulda as faithfully and truly as Hulda loved him, that they were united in thought, in spite of the distance that separated them, and that he longed for the day of his return to Dal.

Yes, he said all this, Hulda was sure of it. But perhaps he might add that the day of his return was near at hand--that the fishing cruise which had enticed the inhabitants of Bergen so far from their native land, was nearly at an end. Perhaps Ole would tell her that the "Viking" had finished taking aboard her cargo, that she was about to sail, and that the last days of April would not pass without a blissful meeting in the pleasant home at Vesfjorddal. Perhaps, too, he would assure her, at last, that she might safely appoint the day for the pastor to come to Moel to unite them in the little chapel whose steeple rose from a small grove not a hundred yards from Dame Hansen's inn.

To learn all this, it might only be necessary to break the seal, draw out Ole's letter, and read it, through the tears of joy or sorrow that its contents would be sure to bring to Hulda's eyes, and doubtless more than one impatient girl of the south, or even of Denmark or Holland, would already have known all! But Hulda was in a sort of a dream, and dreams terminate only when God chooses to end them, and how often one regrets them, so bitter is the reality.

"Is it really a letter from Ole that your brother has sent you, my daughter?" inquired Dame Hansen.
"Yes; I recognize the handwriting."
"Well, are you going to wait until to-morrow to read it?"

Hulda took one more look at the envelope, then, after slowly breaking the seal, she drew out the carefully written letter, which read as follows:

"Saint-Pierre-Miquelon, March 17th, 1862.

"My Dearest Hulda,--You will hear, with pleasure, that our fishing venture has prospered, and that it will be concluded in a few days. Yes; we are nearing the end of the season, and after a year's absence how glad I shall be to return to Dal and find myself in the midst of the only friends I have in the world--yours and mine.

"My share in the profits of the expedition amounts to quite a handsome sum, which will start us in housekeeping. Messrs. Help Bros., the owners of the ship, have been informed that the 'Viking' will probably return by the 15th or 20th of May; so you may expect to see me at that time; that is to say, in a few weeks at the very longest.

"My dear Hulda, I trust to find you looking even prettier than at my departure, and in the best of health, you and your mother as well, also that hardy, brave comrade, my cousin Joel, your brother, who asks nothing better than to become mine.

"On receipt of this, give my very best respects to Dame Hansen--I can see her now, sitting in her wooden armchair by the old stove in the big hall--and tell her I love her with a twofold love, for she is my aunt as well as your mother.

"Above all, don't take the trouble to come to Bergen to meet me, for it is quite possible that the 'Viking' will arrive at an earlier date than I have mentioned. However that may be, my dear Hulda can count upon seeing me at
We have had a pretty rough time of it, this past winter, the weather having been more severe than any our fishermen have ever encountered; but fortunately fish have been plenty. The 'Viking' brings back nearly five thousand quintals, deliverable at Bergen, and already sold by the efforts of Help Bros. And last, but not least, we have succeeded in selling at a handsome profit, and I, who have a share in the venture, will realize something quite handsome from it.

Besides, even if I should not bring a small competence home with me, I have an idea, or rather, I have a presentiment that it is awaiting me on my return. Yes; comparative wealth, to say nothing of happiness! In what way? That is my secret, my dearest Hulda, and you will forgive me for having a secret from you! It is the only one! Besides, I will tell you all about it. When? Well, as soon as an opportunity offers--before our marriage, if it should be delayed by some unforeseen misfortune--afterward, if I return at the appointed time, and you become my wife within a week after my arrival, as I trust you will.

A hundred fond kisses, my darling Hulda. Kiss Dame Hansen, and Joel, too, for me. In fancy, I imprint another kiss upon your brow, around which the shining crown of the brides of the Telemark will cast a saint-like halo. Once more, farewell, dearest Hulda, farewell!

"Your devoted lover,
"OLE KAMP."

CHAPTER II.

Dal is a modest hamlet consisting of but a few houses; some on either side of a road that is little more than a bridle-path, others scattered over the surrounding hills. But they all face the narrow valley of Vesfjorddal, with their backs to the line of hills to the north, at the base of which flows the Maan.

A little church erected in 1855, whose chancel is pierced by two narrow stained-glass windows, lifts its square belfry from out a leafy grove hard by. Here and there rustic bridges cross the rivulets that dance merrily along toward the river. In the distance are two or three primitive saw-mills, run by water-power, with a wheel to move the saw, as well as a wheel to move the beam or the tree; and seen from a little distance, the chapel, saw-mills, houses, and cabins, all seem to be enveloped in a soft olive haze that emanates from the dark-green firs and the paler birches which either singly or in groups extend from the winding banks of the Maan to the crests of the lofty mountains.

Such is the fresh and laughing hamlet of Dal, with its picturesque dwellings, painted, some of them, in delicate green or pale pink tints, others in such glaring colors as bright yellow and blood-red. The roofs of birch bark, covered with turf, which is mown in the autumn, are crowned with natural flowers. All this is indescribably charming, and eminently characteristic of the most picturesque country in the world. In short, Dal is in the Telemark, the Telemark is in Norway, and Norway is in Switzerland, with thousands of fiords that permit the sea to kiss the feet of its mountains.

The Telemark composes the broad portion of the immense horn that Norway forms between Bergen and Christiania.

This dependency of the prefecture of Batsberg, has the mountains and glaciers of Switzerland, but it is not Switzerland. It has gigantic water-falls like North America, but it is not America. The landscape is adorned with picturesque cottages, and processions of inhabitants, clad in costumes of a former age, like Holland, but it is not Holland. The Telemark is far better than any or all of these; it is the Telemark, noted above all countries in the world for the beauty of its scenery. The writer has had the pleasure of visiting it. He has explored it thoroughly, in a kariol with relays of post-horses--when he could get them--and he brought back with him such a vivid recollection of its manifold charms that he would be glad to convey some idea of it to the reader of this simple narrative.

At the date of this story, 1862, Norway was not yet traversed by the railroad that now enables one to go from Stockholm to Dronthem, by way of Christiania. Now, an extensive network of iron rails extends entirely across these two Scandinavian countries, which are so averse to a united existence. But imprisoned in a railroad-carriage, the traveler, though he makes much more rapid progress than in a kariol, misses all the originality that formerly pervaded the routes of travel. He misses the journey through Southern Sweden on the curious Gotha Canal, in which the steamboats, by rising from lock to lock, manage to reach an elevation of three hundred feet. Nor does he have an opportunity to visit the falls of Trolletann, nor Drammen, nor Kongsberg, nor any of the beauties of the Telemark.

In those days the railroad existed only upon paper. Twenty years were to elapse before one could traverse the Scandinavian kingdom from one shore to the other in forty hours, and visit the North Cape on excursion tickets to Spitzberg.

In those days Dal was, and may it long remain, the central point for foreign or native tourists, these last being for the most part students from Christiania. From Dal they could wander over the entire Telemark and Hardanger
region, explore the valley of Vesfjorddal between Lakes Mjos and Tinn, and visit the wonderful cataracts of the Rjukan Tun. The hamlet boasts of but one inn, but that is certainly the most attractive and comfortable imaginable, and one of the most important also, for it can offer four bed-chambers for the accommodation of its guests. In a word, it is Dame Hansen's inn.

A few benches surround the base of its pink walls, which are separated from the ground by a substantial granite foundation. The spruce rafters and weather-boarding have acquired such hardness and toughness with age that the sharpest hatchet can make little or no impression upon them. Between the roughly hewn rafters, which are placed horizontally one above the other, a mixture of clay and turf forms a stanch roof, through which the hardest winter rains can not force their way.

Upstairs, in the bedrooms, the ceilings are painted in dark red or black tints to contrast with the more cheerful and delicate hues of the wood-work.

In one corner of the large hall stands a huge cylinder stove, the pipe of which rises nearly to the ceiling, before it disappears in the kitchen chimney. In another corner stands a tall clock which emits a sonorous tick-tack, as its carved hands travel slowly around its enameled face. Here is a secretary, black with age, side by side with a massive iron tripod. Upon the mantel is an immense terra-cotta candlestick which can be transformed into a three-branched candelabrum by turning it upside down. The handsomest furniture in the house adorns this spacious hall--the birch-root table, with its spreading feet, the big chest with its richly wrought brass handles, in which the Sunday and holiday clothing is kept, the tall arm-chair, hard and uncomfortable as a church-pew, the painted wooden chairs, and the spinning-wheel striped with green, to contrast with the scarlet petticoat of the spinner.

Yonder stands the pot in which the butter is kept, and the paddle with which it is worked, and here is the tobacco-box, and the grater of elaborately carved bone.

And, finally, over the door which opens into the kitchen is a large dresser, with long rows of brass and copper cooking-utensils and bright-colored dishes, the little grindstone for sharpening knives, half-buried in its varnished case, and the egg-dish, old enough to serve as a chalice.

And how wonderful and amusing are the walls, hung with linen tapestries representing scenes from the Bible, and brilliant with all the gorgeous coloring of the pictures of Epinal.

As for the guests' rooms, though they are less pretentious, they are no less comfortable, with their spotless neatness, their curtains of hanging-vines that droop from the turf-covered roof, their huge beds, sheeted with snowy and fragrant linen, and their hangings with verses from the Old Testament, embroidered in yellow upon a red ground.

Nor must we forget that the floor of the main hall, and the floors of all the rooms, both upstairs and down, are strewn with little twigs of birch, pine, and juniper, whose leaves fill the house with their healthful and exhilarating odor.

Can one imagine a more charming _posada_ in Italy, or a more seductive _fonda_ in Spain? No. And the crowd of English tourists have not yet raised the scale of prices as in Switzerland--at least, they had not at the time of which I write. In Dal, the current coin is not the pound sterling, the sovereign of which the travelers' purse is soon emptied. It is a silver coin, worth about five francs, and its subdivisions are the mark, equal in value to about a franc, and the skilling, which must not be confounded with the English shilling, as it is only equivalent to a French _sou_.

Nor will the tourist have any opportunity to use or abuse the pretentious bank-note in the Telemark. One-mark notes are white; five-mark notes are blue; ten-mark notes are yellow; fifty-mark notes, green; one hundred mark notes, red. Two more, and we should have all the colors of the rainbow.

Besides--and this is a point of very considerable importance--the food one obtains at the Dal inn is excellent; a very unusual thing at houses of public entertainment in this locality, for the Telemark deserves only too well its surname of the Buttermilk Country. At Tiness, Listhus, Tinoset, and many other places, no bread is to be had, or if there be, it is of such poor quality as to be uneatable. One finds there only an oaten cake, known as _flat brod_., dry, black, and hard as pasteboard, or a coarse loaf composed of a mixture of birch-bark, lichens, and chopped straw. Eggs are a luxury, and a most stale and unprofitable one; but there is any quantity of poor beer to be had, a profusion of buttermilk, either sweet or sour, and sometimes a little coffee, so thick and muddy that it is much more like distilled soot than the products of Mocha or Rio Nunez.

In Dame Hansen's establishment, on the contrary, cellar and larder were alike well-stored. What more could the most exacting tourist ask than salmon, either salt or smoked--fresh salmon that have never tasted tainted waters, fish from the pure streams of the Telemark, fowls, neither too fat nor too lean, eggs in every style, crisp oaten and barley cakes, fruits, more especially strawberries, bread--unleavened bread, it is here, but of the very best quality--beer, and some old bottles of that Saint Julien that have spread the fame of French vineyards even to this distant land?

And this being the case, it is not strange that the inn at Dal is well and favorably known in all the countries of Northern Europe.
One can see this, too, by glancing over the register in which many travelers have not only recorded their names, but paid glowing tributes to Dame Hansen’s merits as an inn-keeper. The names are principally those of Swedes and Norwegians from every part of Scandinavia; but the English make a very respectable showing; and one of them, who had waited at least an hour for the summit of Gousta to emerge from the morning mist that enveloped it, wrote upon one of the pages:

"Patientia omnia vincit?"

CHAPTER III.

Without being very deeply versed in ethnography, one may be strongly inclined to believe, in common with many _savants_, that a close relationship exists between the leading families of the English aristocracy and the oldest families of Scandinavia. Numerous proofs of this fact, indeed, are to be found in the ancestral names which are identical in both countries. There is no aristocracy in Norway, however; still, though the democracy everywhere rules, that does not prevent it from being aristocratic to the highest degree. All are equals upon an exalted plane instead of a low one. Even in the humblest hut may be found a genealogical tree which has not degenerated in the least because it has sprung up anew in humble soil; and the walls are adorned with the proud blazons of the feudal lords from whom these plain peasants are descended.

So it was with the Hansens of Dal, who were unquestionably related, though rather remotely, to the English peers created after Rollo’s invasion of Normandy, and though rank and wealth had both departed they had at least preserved the old pride, or rather dignity, which becomes all social ranks.

It was a matter of very little consequence, however. Whether he had ancestors of lofty lineage or not, Harald Hansen was simply a village inn-keeper. The house had come down to him from his father and from his grandfather, who were widely known and respected, and after his death his widow continued the business in a way that elicited universal commendation.

Whether or not Harald had made a fortune in the business, no one was able to say; but he had been able to rear his son Joel and his daughter Hulda in comfort; and Ole Kamp, a son of his wife’s sister, had also been brought up like one of his own children. But for his uncle Harald, this orphan child would doubtless have been one of those poor creatures who come into the world only to leave it; and Ole Kamp evinced a truly filial devotion toward his parents by adoption. Nothing would ever sever the tie that bound him to the Hansen family, to which his marriage with Hulda was about to bind him still more closely.

Harald Hansen had died about eighteen months before, leaving his wife, in addition to the inn, a small farm on the mountain, a piece of property which yielded very meager returns, if any. This was especially true of late, for the seasons had been remarkably unpropitious, and agriculture of every kind had suffered greatly, even the pastures. There had been many of those “iron nights,” as the Norwegian peasants call them—nights of north-easterly gales and ice that kill the corn down to the very root—and that meant ruin to the farmers of the Telemark and the Hardanger.

Still, whatever Dame Hansen might think of the situation of affairs, she had never said a word to any living soul, not even to her children. Naturally cold and reserved, she was very uncommunicative—a fact that pained Hulda and Joel not a little. But with that respect for the head of the family innate in Northern lands, they made no attempt to break down a reserve which was eminently distasteful to them. Besides, Dame Hansen never asked aid or counsel, being firmly convinced of the infallibility of her own judgment, for she was a true Norwegian in that respect.

Dame Hansen was now about fifty years old. Advancing age had not bowed her tall form, though it had whitened her hair; nor had it dimmed the brightness of her dark-blue eyes, whose azure was reflected in the clear orbs of her daughter; but her complexion had taken on the yellow hue of old parchment, and a few wrinkles were beginning to furrow her forehead.

The madame, as they say in Scandinavia, was invariably attired in a full black skirt, for she had never laid aside her mourning since her husband’s death. Below the shoulder-straps of a brown bodice appeared the long full sleeves of an unbleached cotton chemise. On her shoulders she wore a small dark-colored fichu that crossed upon her breast, which was also covered by the large bib of her apron. She always wore as a head-dress a close-fitting black-silk cap that covered almost her entire head, and tied behind, a kind of head-dress that is rarely seen nowadays.

Seated stiffly erect in her wooden arm-chair, the grave hostess neglected her spinning-wheel only to enjoy a small birchwood pipe, whose smoke enveloped her in a faint cloud.

Really, the house would have seemed very gloomy had it not been for the presence of the two children.

A worthy lad was Joel Hansen. Twenty-five years of age, well built, tall, like all Norwegian mountaineers, proud in bearing, though not in the least boastful or conceited. He had fine hair, verging upon chestnut, with blue eyes so dark as to seem almost black. His garb displayed to admirable advantage his powerful shoulders, his broad chest, in which his lungs had full play, and stalwart limbs which never failed him even in the most difficult mountain ascents.
His dark-blue jacket, fitting tightly at the waist, was adorned on the shoulders with epaulets, and in the back with designs in colored embroidery similar to those that embellish the vests of the Breton peasantry. His yellow breeches were fastened at the knee by large buckles. Upon his head he wore a broad-brimmed brown hat with a red-and-black band, and his legs were usually incased either in coarse cloth gaiters or in long stout boots without heels.

His vocation was that of a mountain guide in the district of the Telemark, and even in the Hardanger. Always ready to start, and untiring in his exertions, he was a worthy descendant of the Norwegian hero Rollo, the walker, celebrated in the legends of that country. Between times he accompanied English sportsmen who repair to that region to shoot the riper, a species of ptarmigan, larger than that found in the Hebrides, and the jerpir, a partridge much more delicate in its flavor than the grouse of Scotland. When winter came, the hunting of wolves engrossed his attention, for at that season of the year these fierce animals, emboldened by hunger, not unfrequently venture out upon the surface of the frozen lake. Then there was bear hunting in summer, when that animal, accompanied by her young, comes to secure its feast of fresh grass, and when one must pursue it over plateaus at an altitude of from ten to twelve thousand feet. More than once Joel had owed his life solely to the great strength that enabled him to endure the embraces of these formidable animals, and to the imperturbable coolness which enabled him to eventually dispatch them.

But when there was neither tourist nor hunter to be guided through the valley of the Vesfjorddal, Joel devoted his attention to the _soetur_, the little mountain farm where a young shepherd kept guard over half a dozen cows and about thirty sheep--a _soetur_ consisting exclusively of pasture land.

Joel, being naturally very pleasant and obliging, was known and loved in every village in the Telemark; but two persons for whom he felt a boundless affection were his cousin Ole and his sister Hulda.

When Ole Kamp left Dal to embark for the last time, how deeply Joel regretted his inability to dower Hulda and thus avert the necessity for her lover's departure! In fact, if he had been accustomed to the sea, he would certainly have gone in his cousin's place. But money was needed to start them in housekeeping, and as Dame Hansen had offered no assistance, Joel understood only too well that she did not feel inclined to devote any portion of the estate to that purpose, so there was nothing for Ole to do but cross the broad Atlantic.

Joel had accompanied him to the extreme end of the valley on his way to Bergen, and there, after a long embrace, he wished him a pleasant journey and a speedy return, and then returned to console his sister, whom he loved with an affection which was at the same time fraternal and paternal in its character.

Hulda at that time was exactly eighteen years of age. She was not the _piga_, as the servant in a Norwegian inn is called, but rather the _froken_, the young lady of the house, as her mother was the madame. What a charming face was hers, framed in a wealth of pale golden hair, under a thin linen cap projecting in the back to give room for the long plaits of hair! What a lovely form incased in this tightly fitting bodice of red stuff, ornamented with green shoulder-straps and surmounted by a snowy chemisette, the sleeves of which were fastened at the wrist by a ribbon bracelet! What grace and perfect symmetry in the waist, encircled by a red belt with clasps of silver filigree which held in place the dark-green skirt, below which appeared the white stocking protected by the dainty pointed toed shoe of the Telemark!

Yes, Ole's betrothed was certainly charming, with the slightly melancholy expression of the daughters of the North softening her smiling face; and on seeing her one instantly thought of Hulda the Fair, whose name she bore, and who figures as the household fairy in Scandinavian mythology.

Nor did the reserve of a chaste and modest maiden mar the grace with which she welcomed the guests who came to the inn. She was well known to the world of tourists; and it was not one of the smallest attractions of the inn to be greeted by that cordial shake of the hand that Hulda bestowed on one and all. And after having said to her, "_Tack for mad_" (Thanks for the meal), what could be more delightful than to hear her reply in her fresh sonorous voice: "_Wed bekomme_!" (May it do you good!)

CHAPTER IV.

Ole Kamp had been absent a year; and as he said in his letter, his winter's experience on the fishing banks of Newfoundland had been a severe one. When one makes money there one richly earns it. The equinocial storms that rage there not unfrequently destroy a whole fishing fleet in a few hours; but fish abound, and vessels which escape find ample compensation for the toil and dangers of this home of the tempest.

Besides, Norwegians are excellent seamen, and shrink from no danger. In the numberless fiords that extend from Christiansand to Cape North, among the dangerous reefs of Finland, and in the channels of the Lofoden Islands, opportunities to familiarize themselves with the perils of ocean are not wanting; and from time immemorial they have given abundant proofs of their courage. Their ancestors were intrepid mariners at an epoch when the Hanse monopolized the commerce of northern Europe. Possibly they were a trifle prone to indulge in piracy in days gone
by, but piracy was then quite common. Doubtless commerce has reformed since then, though one may perhaps be 
pardoned for thinking that there is still room for improvement.

However that may be, the Norwegians were certainly fearless seamen; they are to-day, and so they will ever be. Ole Kamp was not the man to belie his origin; besides, he had served his apprenticeship under his father, who was the master of a Bergen coasting vessel. His childhood had been spent in that port, which is one of the most 
frequented in Scandinavia. Before he ventured out upon the open sea he had been an untiring fisher in the fiords, and a 
fearless robber of the sea-birds' nests, and when he became old enough to serve as cabin-boy he made a voyage 
across the North Sea and even to the waters of the Polar Ocean.

Soon afterward his father died, and as he had lost his mother several years before, his uncle Harald Hansen 
invited him to become a member of his family, which he did, though he continued to follow the same calling.

In the intervals between his voyages he invariably spent his time with the friends he loved; but he made regular 
voyages upon large fishing vessels, and rose to the rank of mate when he was but twenty-one. He was now twenty-
three years of age.

When he visited Dal, Joel found him a most congenial companion. He accompanied him on his excursions to the 
mountains, and across the highest table-lands of the Telemark. The young sailor seemed as much at home in the 
fields as in the fiords, and never lagged behind unless it was to keep his cousin Hulda company.

A close friendship gradually sprung up between Joel and Ole, and quite naturally the same sentiment assumed a 
different form in respect to the young girl. Joel, of course, encouraged it. Where would his sister ever find a better 
fellow, a more sympathetic nature, a warmer and more devoted heart? With Ole for a husband, Hulda's happiness 
was assured. So it was with the entire approval of her mother and brother that the young girl followed the natural 
promptings of her heart. Though these people of the North are undemonstrative, they must not be accused of a want 
of sensibility. No! It is only their way; and perhaps their way is as good as any other, after all.

So it came to pass that one day, when all four of them were sitting quietly together, Ole remarked, without any 
preamble whatever:

"An idea occurs to me, Hulda."
"What is it?"
"It seems to me that we ought to marry."
"I think so too."
"And so do I," added Dame Hansen as coolly as if the matter had been under discussion for some time.
"I agree with you," remarked Joel, "and in that case I shall naturally become your brother-in-law."
"Yes," said Ole; "but it is probable that I shall only love you the better for it."
"That is very possible."
"We have your consent, then?"
"Upon my word! nothing would please me better," replied Joel.
"So it is decided, Hulda?" inquired Dame Hansen.
"Yes, mother," replied the girl, quietly.
"You are really willing?" asked Ole. "I have loved you a long time, Hulda, without saying so."
"And I you, Ole."
"How it came about, I really do not know."
"Nor I."
"But it was doubtless seeing you grow more beautiful and good day by day."
"That is saying a little too much, my dear Ole."
"No; I certainly ought to be able to say that without making you blush, for it is only the truth. Didn't you see that I was beginning to love Hulda, Dame Hansen?"
"I suspected as much."
"And you, Joel?"
"I was sure of it."
"Then I certainly think that you ought to have warned me," said Ole, smiling.
"But how about your voyages, Ole?" inquired Dame Hansen. "Won't they seem intolerable to you after you are married?"
"So intolerable that I shall not follow the sea any more after my marriage."
"You will not go to sea any more?"
"No, Hulda. Do you think it would be possible for me to leave you for months at a time?"
"So this is to be your last voyage?"
"Yes, and if we have tolerable luck, this voyage will yield me quite a snug little sum of money, for Help Bros. have promised me a share in the profits."
"They are good men," remarked Joel.

"The best men living," replied Ole, "and well known and highly respected by all the sailors of Bergen."

"But what do you expect to do after you cease to follow the sea, my dear Ole?" inquired Hulda.

"I shall go into partnership with Joel in his business, I have pretty good legs, and if they are not good enough, I will improve them by going into regular training. Besides, I have thought of a plan which will not prove a bad one perhaps. Why can't we establish a messenger service between Drammen, Kongsberg and a few other towns in the Telemark Communication now is neither easy nor regular, and there might be money in the scheme. Besides, I have other plans, to say nothing of--"

"Of what?"

"Never mind, now. I will tell you on my return. But I warn you that I am firmly resolved to make my Hulda the happiest woman in the country. Yes, I am."

"If you but knew how easy that will be!" replied Hulda, offering him her hand. "Am I not that already, and is there a home in all Dal as pleasant as ours?"

Dame Hansen hastily averted her head.

"So the matter is settled?" asked Ole, cheerfully.

"Yes," replied Joel.

"And settled beyond recall?"

"Certainly."

"And you feel no regret, Hulda?"

"None whatever, my dear Ole."

"I think, however, that it would be better not to appoint the day for your marriage until after your return," remarked Joel.

"Very well, but it will go hard with me if I do not return in less than a year to lead Hulda to the church at Moel, where our friend, Pastor Andersen, will not refuse to make his best prayer for us!"

And it was in this way that the marriage of Hulda Hansen and Ole Kamp had been decided upon.

The young sailor was to go aboard his vessel a week later; but before they parted the lovers were formally betrothed in accordance with the touching custom of Scandinavian countries.

In simple and honest Norway lovers are almost invariably publicly betrothed before marriage. Sometimes the marriage is not solemnized until two or three years afterward, but one must not suppose that the betrothal is simply an interchange of vows which depend only upon the honesty of the parties interested. No, the obligation is much more sacred, and even if this act of betrothal is not binding in the eyes of the law, it is, at least, so regarded by that universal law called custom.

So, in this case, it was necessary to make arrangements for a ceremony over which Pastor Andersen should preside. There was no minister in Dal, nor in any of the neighboring hamlets. In Norway they have what they call Sunday towns, in which the minister resides, and where the leading families of the parish assemble for worship. They even lease apartments there, in which they take up their abode for twenty-four hours or more--time to perform their religious duties--and people return from the town as from a pilgrimage.

Dal, it is true, boasted of a chapel, but the pastor came only when he was summoned.

After all, Moel was not far off, only about eight miles distant, at the end of Lake Tinn, and Pastor Andersen was a very obliging man, and a good walker; so the worthy minister was invited to attend the betrothal in the twofold capacity of minister and family friend. The acquaintance was one of long standing. He had seen Joel and Hulda grow up, and loved them as well as he loved that young sea-dog, Ole Kamp, so the news of the intended marriage was very pleasing to him.

So Pastor Andersen gathered together his robe, his collar, and his prayer-book, and started off for Dal one misty, moisty morning. He arrived there in the company of Joel, who had gone half-way to meet him, and it is needless to say that his coming was hailed with delight at Dame Hansen's inn, that he had the very best room in the house, and that the floor was freshly strewn with twigs of juniper that perfumed it like a chapel.

At one o'clock on the following day the little church was thrown open, and there, in the presence of the pastor and a few friends and neighbors, Ole and Hulda solemnly promised to wed each other when the young sailor should return from the last voyage he intended to make. A year is a long time to wait, but it passes all the same, nor is it intolerable when two persons can trust each other.

And now Ole could not, without good cause, forsake her to whom he had plighted his troth, nor could Hulda retract the promise she had given to Ole; and if Ole had not left Norway a few days after the betrothal, he might have profited by the incontestable right it gave him to visit the young girl whenever he pleased, to write to her whenever he chose, walk out with her arm in arm, unaccompanied by any member of the family, and enjoy a preference over all others in the dances that form a part of all fêtes and ceremonies.
But Ole Kamp had been obliged to return to Bergen, and one week afterward the “Viking” set sail for the fishing banks of Newfoundland, and Hulda could only look forward to the letters which her betrothed had promised to send her by every mail.

And these impatiently expected letters never failed her, and always brought a ray of happiness to the house which seemed so gloomy after the departure of one of its inmates. The voyage was safely accomplished; the fishing proved excellent, and the profits promised to be large. Besides, at the end of each letter, Ole always referred to a certain secret, and of the fortune it was sure to bring him. It was a secret that Hulda would have been glad to know, and Dame Hansen, too, for reasons one would not have been likely to suspect.

Dame Hansen seemed to have become even more gloomy and anxious and reticent than ever, and a circumstance which she did not see fit to mention to her children increased her anxiety very considerably.

Three days after the arrival of Ole’s last letter, as Dame Hansen was returning alone from the saw-mill, to which place she had gone to order a bag of shavings from the foreman, Lengling, she was accosted near her own door by a man who was a stranger in that part of the country.

“This is Dame Hansen, is it not?” he inquired.

“Yes; but I do not know you,” was the reply.

“That doesn’t matter,” rejoined the man. “I arrived here only this morning from Drammen, and am now on my way back.”

“From Drammen?” repeated Dame Hansen, quickly.

“You are acquainted, I think, with a certain Monsieur Sandgoist, who lives there?”

“Monsieur Sandgoist!” repeated Dame Hansen, whose face paled at the name. “Yes, I know him.”

“Ah, well! When Monsieur Sandgoist heard that I was coming to Dal, he asked me to give his respects to you.”

“Was that all?”

“And to say to you that it was more than probable that he would pay you a visit next month. Good health to you, and good-evening, Dame Hansen.”

CHAPTER V.

Hulda was considerably surprised at the persistency with which Ole alluded in his letters to the fortune that was to be his on his return. Upon what did the young man base his expectations? Hulda could not imagine, and she was very anxious to know. Was this anxiety due solely to an idle curiosity on her part? By no means, for the secret certainly affected her deeply. Not that she was ambitious, this modest and honest young girl; nor did she in looking forward to the future ever aspire to what we call wealth. Ole’s affection satisfied, and would always satisfy her. If wealth came, she would welcome it with joy. If it did not come, she would still be content.

This is precisely what Hulda and Joel said to each other the day after Ole’s last letter reached Dal. They agreed perfectly upon this subject, as upon all others, by the way. And then Joel added:

“No; it is impossible, little sister. You certainly must be keeping something from me.”

“Keeping something from you!”

“Yes; for I can not believe that Ole went away without giving you some clew to his secret.”

“Did he say anything to you about it?”

“No; but you and I are not one and the same person.”

“Yes, we are, brother.”

“I am not Ole’s betrothed, at all events.”

“Almost,” said the young girl; “and if any misfortune should befall him, and he should not return from this voyage, you would be as inconsolable as I would be, and your tears would flow quite as freely as mine.”

“Really, little sister. I forbid you to even speak of such a thing,” replied Joel. “Ole not return from his last voyage to the great fishing banks! What can have put such an idea into your head? You surely can not mean what you say, Hulda!”

“No, certainly not. And yet, I do not know. I can not drive away certain presentiments--the result, perhaps, of bad dreams.”

“Dreams are only dreams.”

“True, brother, but where do they come from?”

“From ourselves, not from heaven. You are anxious, and so your fears haunt you in your slumber. Besides, it is almost always so when one has earnestly desired a thing and the time when one’s desires are to be realized is approaching.”

“I know it, Joel.”

“Really, I thought you were much more sensible, little sister. Yes, and more energetic. Here you have just
received a letter from Joel saying that the 'Viking' will return before the end of the month, and it is now the 19th of April, and consequently none too soon for you to begin your preparations for the wedding."

"Do you really think so, Joel?"

"Certainly I think so, Hulda. I even think that we have delayed too long already. Think of it. We must have a wedding that will not only create a sensation in Dal, but in all the neighboring villages. I intend it shall be the grandest one ever known in the district, so I am going to set to work immediately."

An affair of this kind is always a momentous occasion in all the country districts of Norway, particularly in the Telemark, so that every day Joel had a conversation with his mother on the subject. It was only a few moments after Dame Hansen's meeting with the stranger, whose message had so deeply agitated her, and though she had seated herself at her spinning-wheel as usual, it would have been plain to a close observer that her thoughts were far away.

Even Joel noticed that his mother seemed even more despondent than usual, but as she invariably replied that there was nothing the matter with her when she was questioned on the subject, her son decided to speak only of Hulda's marriage.

"Mother," he began, "you, of course, recollect that Ole announced in his last letter that he should probably return to Dal in a few weeks."

"It is certainly to be hoped that he will," replied Dame Hansen, "and that nothing will occur to occasion any further delay."

"Do you see any objection to our fixing upon the twenty-fifth of May as the day of the marriage?"

"None, whatever, if Hulda is willing."

"Her consent is already given. And now I think I had better ask you, mother, if you do not intend to do the handsome thing on that occasion?"

"What do you mean by the handsome thing?" retorted Dame Hansen, without raising her eyes from her spinning-wheel.

"Why, I am anxious, if you approve, of course, that the wedding should correspond with the position we hold in the neighborhood. We ought to invite all our friends to it, and if our own house is not large enough to accommodate them, our neighbors, I am sure, will be glad to lodge our guests."

"Who will these guests be, Joel?"

"Why, I think we ought to invite all our friends from Moel, Tiness and Bamble. I will attend to that. I think, too, that the presence of Help Bros., the shipowners, would be an honor to the family, and with your consent, I repeat, I will invite them to spend a day with us at Dal. They are very fine men, and they think a great deal of Ole, so I am almost sure that they will accept the invitation."

"Is it really necessary to make this marriage such an important event?" inquired Dame Hansen, coldly.

"I think so, mother, if only for the sake of our inn, which I am sure has maintained its old reputation since my father's death."

"Yes, Joel, yes."

"And it seems to me that it is our duty to at least keep it up to the standard at which he left it; consequently, I think it would be advisable to give considerable publicity to my sister's marriage."

"So be it, Joel."

"And do you not agree with me in thinking that it is quite time for Hulda to begin her preparations, and what do you say to my suggestion?"

"I think that you and Hulda must do whatever you think necessary," replied Dame Hansen.

Perhaps the reader will think that Joel was in too much of a hurry, and that it would have been much more sensible in him to have waited until Ole's return before appointing the wedding-day, and beginning to prepare for it, but as he said, what was once done would not have to be done over again; besides, the countless details connected with a ceremonial of this kind would serve to divert Hulda's mind from these forebodings for which there seemed to be no foundation.

The first thing to be done was to select the bride's maid of honor. That proved an easy matter, however, for Hulda's choice was already made. The bride-maid, of course, must be Hulda's intimate friend, Farmer Helmboe's daughter. Her father was a prominent man, and the possessor of a very comfortable fortune. For a long time he had fully appreciated Joel's sterling worth, and his daughter Siegfrid's appreciation, though of a rather different nature, was certainly no less profound; so it was quite probable that at no very distant day after Siegfrid had served as Hulda's maid of honor, Hulda, in turn, would act in the same capacity for her friend. This is the custom in Norway, where these pleasant duties are generally reserved for married women, so it was rather on Joel's account that Siegfrid Helmboe was to serve Hulda Hansen in this capacity.

A question of vital importance to the bride-maid as well as to the bride, is the toilet to be worn on the day of the wedding.
Siegfrid, a pretty blonde of eighteen summers, was firmly resolved to appear to the best possible advantage on the occasion. Warned by a short note from her friend Hulda--Joel had kindly made himself responsible for its safe delivery--she immediately proceeded to devote her closest attention to this important work.

In the first place, an elaborately embroidered bodice must be made to incase Siegfrid's charming figure as if in a coat of enamel. There was also much talk about a skirt composed of a series of jupons which should correspond in number with the wearer's fortune, but in no way detract from her charms of person. As for jewelry, it was no easy matter to select the design of the collar of silver filigree, set with pearls, the heart-shaped ear-rings, the double buttons to fasten the neck of the chemisette, the belt of red silk or woolen stuff from which depend four rows of small chains, the finger-rings studded with tiny bangles that tinkle musically, the bracelets of fretted silver--in short, all the wealth of country finery in which gold appears only in the shape of the thinnest plating, silver in the guise of tin and pearls, and diamonds in the shape of wax and crystal beads. But what does that matter so long as the _tout ensemble_ is pleasing to the eye? Besides, if necessary, Siegfrid would not hesitate to go to the elegant stores of M. Benett, in Christiania, to make her purchases. Her father would not object--far from it! The kind-hearted man allowed his daughter full liberty in such matters; besides, Siegfrid was sensible enough not to draw too heavily upon her father's purse, though everything else was of secondary importance provided Joel would see her at her very best on that particular day.

As for Hulda, her anxiety on the subject was no less serious, for fashions are pitiless, and give, besides, not a little trouble in the selection of their wedding-toilet.

Hulda would now be obliged to abandon the long plaits tied with bright ribbons, which had heretofore hung from under her coquettish cap, the broad belt with fancy buckles that kept her apron in place upon her scarlet skirt, the girdle to which were appended several small embroidered leather cases containing a silver tea-spoon, knife, fork, needle-case and scissors--articles which a woman makes constant use of in the household.

No, on the fast approaching day of the nuptials, Hulda's hair would be allowed to float down upon her shoulders, and it was so abundant that it would not be necessary for her to have recourse to the jute switches used by Norwegian girls less favored by nature. Indeed, for her clothing, as well as for her ornaments, Hulda would only be obliged to resort to her mother's big chest. In fact, these articles of clothing are transmitted from marriage to marriage through all the different generations of the same family. So one sees reappearing again and again upon the scene the bodice embroidered in gold, the velvet sash, the skirt of striped silk, the gold chain for the neck, and the crown--the famous Scandinavian crown--carefully preserved in the most secure of all the chests, and made of pasteboard covered with embossed gilt paper, and studded with stars, or garlanded with leaves--that takes the place of the wreath of orange-blossoms worn by brides in other European countries.

In this case the crowned betrothed, as the bride is styled, would certainly do honor to her husband; and he would be worthy of her in his gay wedding suit: a short jacket trimmed with silver buttons, silk-embroidered waistcoat, tight breeches fastened at the knee with a bunch of bright ribbons, a soft felt hat, yellow top-boots, and in his belt the Scandinavian knife--the dolknife--with which the true Norwegian is always provided.

Consequently, there was plenty to occupy the attention of the young ladies for some time to come. Two or three weeks would barely suffice if they wished to have everything in readiness before Ole's return; but even if Ole should arrive sooner than he expected, and Hulda should not be quite ready, she would not be inconsolable, nor would he.

The last weeks of April and the first weeks of May were devoted to these matters. Joel assumed charge of the invitations, taking advantage of the fact that his vocation of guide gave him considerable leisure at this season of the year. One would have supposed that he had a large number of friends in Bamble, for he went there very often. He had already written to Help Bros., inviting them to attend his sister's wedding, and in accordance with his prediction, these worthy shipowners had promptly accepted the invitation.

The fifteenth of May came, and any day now they might expect Ole to alight from his kariol, throw open the door, and shout in his hearty, cheerful voice:

"It is! Here I am!"

A little patience was all that was needed now, for everything was in readiness, and Siegfrid needed only a word to appear before them in all her splendor.

The 16th and 17th passed, and still no Ole, nor did the postman bring any letter from Newfoundland.

"There is no cause for anxiety, little sister," Joel said, again and again. "A sailing-vessel is always subject to delays. It is a long way from St. Pierre-Miquelon to Bergen. How I wish the 'Viking' were a steamer and I the engine. How I would drive along against wind and tide, even if I should burst my boiler on coming into port."

He said all this because he saw very plainly that Hulda's uneasiness was increasing from day to day.

Just at this time, too, the weather was very bad in the Telemark. Violent gales swept the high table-lands, and these winds, which blew from the west, came from America.

"They ought to have hastened the arrival of the 'Viking,'" the young girl repeated again and again.
"Yes, little sister," replied Joel; "but they are so strong that they may have hindered its progress, and compelled it to face the gale. People can't always do as they like upon the sea."

"So you are not uneasy, Joel?"

"No, Hulda, no. It is annoying, of course, but these delays are very common. No; I am not uneasy, for there is really not the slightest cause for anxiety."

On the 19th a traveler arrived at the inn, and asked for a guide to conduct him over the mountains to the Hardanger, and though Joel did not like the idea of leaving Hulda, he could not refuse his services. He would only be absent forty-eight hours at the longest, and he felt confident that he should find Ole at Dal on his return, though, to tell the truth, the kind-hearted youth was beginning to feel very uneasy. Still, he started off early the next morning, though with a heavy heart, we must admit.

On the following day, at precisely one o'clock, a loud rap resounded at the door of the inn.

"It is Ole!" cried Hulda.

She ran to the door.

There, in a kariol, sat a man enveloped in a traveling-cloak, a man whose face was unknown to her.

CHAPTER VI.

"Is this Dame Hansen's inn?" he asked.

"Yes, sir," answered Hulda.

"Is Dame Hansen at home?"

"No; but she will soon return, and if you wish to speak to her--"

"I do not. There is nothing I want to say to her."

"Would you like a room?"

"Yes; the best in the house."

"Shall we prepare dinner for you?"

"As soon as possible, and see to it that everything is of the very best quality."

These remarks were exchanged between Hulda and the traveler before the latter had alighted from the kariol, in which he had journeyed to the heart of the Telemark across the forests, lakes, and valleys of Central Norway.

Every one who has visited Scandinavia is familiar with the kariol, the means of locomotion so dear to the hearts of her people. Two long shafts, between which trots a horse wearing a square wooden collar, painted yellow and striped with black, and guided with a simple rope passed, not through his mouth, but around his nose, two large, slender wheels, whose springless axle supports a small gay-colored, shell-shaped wagon-body, scarcely large enough to hold one person--no covering, no dash-board, no step--but behind, a board upon which the _skydskarl_ perches himself. The whole vehicle strongly reminds one of an enormous spider between two huge cobwebs represented by the wheels of the vehicle.

At a sign from the traveler the _skydskarl_ sprung to the horse's head, and the stranger rose, straightened himself out, and finally alighted, though not without some difficulty, judging from two or three muttered curses.

"Will they put my kariol under shelter?" he asked, curtly, pausing upon the threshold.

"Yes, sir," replied Hulda.

"And find my horse?"

"I will have him put in the stable immediately."

"Have him well cared for."

"Certainly, sir. May I ask if you intend to remain in Dal several days?"

"I don't know yet."

The kariol and horse were taken to a small barn built under the shelter of some trees at the foot of the mountain. It was the only stable connected with the inn, but it sufficed for the requirements of its guests.

In a few moments the traveler was duly installed in the best chamber, where, after removing his cloak, he proceeded to warm himself before the fire he had ordered lighted. In the meantime, Hulda, to satisfy this exacting guest, bade the _piga_ (a sturdy peasant-girl, who helped in the kitchen, and did the rough work of the inn during the summer) prepare the best dinner possible.

A strong, hardy man was this new-comer, though he had already passed his sixtieth year. Thin, slightly round-shouldered, of medium stature, with an angular head, smoothly shaven face, thin, pointed nose, small eyes that looked you through and through from behind large spectacles, a forehead generally contracted by a frown, lips too thin for a pleasant word ever to escape them, and long, crooked fingers, he was the very personification of an avaricious usurer or miser, and Hulda felt a presentiment that this stranger would bring no good fortune to Dame Hansen's house.
He was a Norwegian unquestionably, but one of the very worst type. His traveling costume consisted of a broad-brimmed, low-crowned hat, a snuff-colored suit, the breeches fastened at the knee with a leather strap, and over all a large brown cloak, lined with sheep-skin to protect its wearer from the chilly night air.

Hulda did not ask him his name, but she would soon learn it, as he would have to enter it upon the inn register.

Just then Dame Hansen returned, and her daughter announced the arrival of a guest who demanded the best room and the best food that the inn afforded, but who vouchsafed no information in regard to the probable length of his stay.

"And he did not give his name?" asked Dame Hansen.
"No, mother."
"Nor say whence he came?"
"No."
"If he is not a tourist, what can have brought him to Dal?" said Dame Hansen to herself rather than to her daughter, and in a tone that indicated some uneasiness.

But Hulda could not answer this question, as the new-comer had acquainted her with none of his plans.

About an hour after his arrival the man came out into the main hall, from which his door opened, but seeing Dame Hansen sitting there, he paused upon the threshold.

Evidently he was as much of a stranger to his hostess as his hostess was to him; but he finally walked toward her, and after a long look at her from over his spectacles:

"You are Dame Hansen, I suppose?" he said, without even touching the hat he had not yet removed from his head.
"Yes, sir."

In the presence of this man the widow, strange to say, experienced, like her daughter, an uneasiness for which she could not account, but which her guest must have noticed.

"So you are really Dame Hansen, of Dal?" he continued.
"Certainly, sir. Have you anything particular to say to me?"
"Nothing; I only wished to make your acquaintance. Am I not your guest? And now I should like you to see that I have my dinner as soon as possible."
"Your dinner is ready," interposed Hulda, "and if you will step into the dining-room--"
"I will."

As he spoke, the stranger directed his steps toward the door indicated, and a moment afterward he was seated near the window in front of a small, neatly spread table.

The dinner was certainly good. The most fastidious traveler could not have found fault with it; nevertheless, this ill-tempered individual was not sparing in his signs and words of dissatisfaction--especially signs, for he did not appear to be very loquacious. One could hardly help wondering whether this fault-finding was due to a poor digestion or a bad temper. The soup of cherries and gooseberries did not suit him, though it was excellent, and he scarcely tasted his salmon and salt-herring. The cold ham, broiled chicken and nicely seasoned vegetables did not seem to please him, and his bottle of claret and his half bottle of champagne seemed to be equally unsatisfactory, though they came from the best cellars in France; and when the repast was concluded the guest had not even a "_tack for mad_" for his hostess.

After dinner the old curmudgeon lighted his pipe and went out for a walk along the river bank.

On reaching the stream he turned and fixed his eyes upon the inn. He seemed to be studying it under all its varied aspects, as if trying to form a correct estimate of its value.

He counted every door and window, and finally on his return to the inn he stuck his knife into the horizontal beams at its base, as if to test the quality of the wood and its state of preservation. Could it be that he was trying to find out how much Dame Hansen's inn was really worth? Did he aspire to become the owner of it, though it was not for sale? All this was certainly very strange, especially as he afterward turned his attention to the little yard, the trees and shrubs of which he counted carefully, and finally measured both sides of the inclosure with regular strides, after which the movement of his pencil over a page of his memorandum-book seemed to indicate that he was multiplying one by the other.

All the while Dame Hansen and her daughter were watching him from one of the windows of the inn. What strange creature was this, and what could be the object of his visit? It was greatly to be regretted that all this took place during Joel's absence, especially as the eccentric individual was going to spend the night at the inn.

"What if he is a madman?" said Hulda.
"A madman? no," replied Dame Hansen. "But he is a very eccentric person, to say the least."
"It is always unpleasant to be ignorant of the name of the person you are entertaining," remarked the young girl.
"Before he re-enters the house, Hulda, be sure that you carry the register into his room. Perhaps he will conclude
to write his name in it."

"Yes, mother."

Just at dusk a fine rain began to fall, so the stranger returned to the inn. He asked for a small glass of brandy, then without saying a word, or even bidding any one good-night, he took his wooden candlestick, and entering his room bolted the door behind him, and nothing further was heard from him that night.

The _skydskarl_ had taken refuge in the barn, where he was already sound asleep in company with the sorrel horse.

Dame Hansen and her daughter rose with the sun the next morning, but no sound came from the room of their guest, who was probably still sleeping. A little after nine o'clock he made his appearance even more glum and ill-tempered than the evening before, complaining that his bed had been hard, and that the noise in the house had kept him awake; then he opened the door and looked out at the sky.

The prospect was not very cheering, certainly, for the wind was blowing a gale, and the stranger concluded not to venture out. Still he did not waste his time. With his pipe in his mouth he walked about the inn as if trying to familiarize himself with the arrangement of the interior. He visited all the different rooms, examined the furniture, and peered into cupboards and sideboards with as much coolness as if he had been in his own house.

Though the man was singular in appearance, his actions were certainly even more singular. Finally he seated himself in the big arm-chair, and proceeded to question Dame Hansen in a curt, almost rude tone. How long had the inn been built? Was it her husband that built it, or did he inherit it? How much land was there around it, and what was the extent of the adjoining _souter_? Was the inn well patronized, and did it pay well? How many tourists came there on an average during the summer? Did they usually spend one or several days there? etc., etc.

It was evident that the stranger had not looked at the register that had been placed in his room, for that would have given him all the information he desired upon this last point.

In fact, the book was still on the table where Hulda had placed it the evening before, and the traveler's name was not in it.

"I do not understand how and why these matters can interest you, sir," said Dame Hansen at last; "but if you wish to know the state of our business, nothing could be easier. You have only to examine the register, in which you would greatly oblige me by entering your name according to custom."

"My name? I will write my name in it, certainly. I will write it there before I leave, which will be immediately after breakfast, as I am anxious to get back to Drammen by to-morrow evening."

"Drammen!" repeated Dame Hansen, hastily.

"Yes. Will you give me my breakfast as soon as possible?"

"Do you live in Drammen?"

"Yes. May I ask if there is anything astonishing about the fact that I reside in Drammen?"

So, after spending scarcely twenty-four hours in Dal, or rather at the inn, the traveler left without making the slightest effort to see anything of the surrounding country, Gousta, and Rjukanfos, and the wonders of the valley of the Vesfjorddal were entirely ignored.

It certainly could not have been for pleasure that he left Drammen, so he must have come on business, and the sole object of his visit seemed to have been a careful examination of Dame Hansen's establishment.

It was plain to Hulda that her mother was deeply troubled, for she seated herself in her big arm-chair, and pushing aside her spinning-wheel, remained there silent and motionless.

In the meantime the traveler had gone into the dining-room and seated himself at the table. Though the breakfast was as carefully prepared as the dinner of the evening before, it seemed to give no better satisfaction; and yet the guest eat and drank in the same leisurely fashion. His attention seemed to be chiefly bestowed upon the silver—a luxury highly prized among Norwegian peasants, where the few forks and spoons which are handed down from father to son are carefully preserved with the family jewels.

Meanwhile the _skydskarl_ busied himself with his preparations for departure; and by eleven o'clock the horse and kariol were standing before the door of the inn.

The weather was still threatening; the sky was dull and overcast, and now and then big drops of rain dashed against the window-panes; but this traveler with his heavy cloak lined with sheep-skin was not a man to worry about the weather.

Breakfast over, he called for one more glass of brandy, lighted his pipe, and put on his coat, then stepping out into the hall he called for his bill.

"I will make it out immediately," replied Hulda, seating herself at a small desk.

"Be quick about it," said the traveler. "And now," he added, "you had better bring me your book so I can write my name in it."

Dame Hansen rose and left the room to get the register, which, on her return, she placed upon the large table.
The stranger picked up a pen and took one more long look at Dame Hansen over his spectacles; then he wrote his name in a large, round hand, and closed the book.

Just at that moment Hulda handed him his bill. He took it, examined each item separately, and then proceeded to add up the figures, grumbling all the while.

"Hum!" he exclaimed. "This is very dear! Seven marks and a half for a night's lodging and two meals!"

"You forget the _skydskarl_ and the horse," remarked Hulda.

"Nevertheless, I think your charge very high. I really don't see how you can expect to prosper if you are so exorbitant in your charges."

"You owe me nothing, sir," said Dame Hansen, in a voice that trembled so that it was scarcely audible.

She had just opened the register and read the name inscribed upon it, and now taking the bill and tearing it up, she repeated:

"You owe me nothing."

"That is exactly my opinion," replied the stranger.

And without bidding them good-bye on his departure any more than he had bidden them good-day on his arrival, he climbed into his kariol, and the _skydskarl_ jumped upon the board behind him. A few seconds later he had disappeared around a turn in the road. When Hulda opened the book she found there only this name--

"Sandgoist, from Drammen."

CHAPTER VII.

It was on the afternoon of the following day that Joel was to return home; and Hulda, who knew that her brother would come back by the table-lands of the Gousta and along the left bank of the Maan, went to meet him at the ferry across that impetuous stream. On arriving there she seated herself on the little wharf which serves as a landing-place for the ferry-boat, and abandoned herself to her thoughts.

To the deep uneasiness caused by the non-arrival of the "Viking" was now added another great anxiety. This last was caused by the mysterious visit of Sandgoist, and Dame Hansen's agitation in his presence. Why had she destroyed the bill and declined to accept the money due her as soon as she learned her guest's name? There must be some secret concealed under all this--and a grave one.

Hulda was finally aroused from her reverie by the approach of Joel. She first caught a glimpse of him as he was descending the topmost slope; soon he reappeared in the midst of a narrow clearing between the burned and fallen trees. Then he vanished from sight behind a clump of pines, and at last reached the opposite bank and jumped aboard the ferry-boat. With a few vigorous strokes of the oar he propelled the boat swiftly through the rapids, and then leaped upon the little pier beside his sister.

"Has Ole returned?" he asked, hastily.

It was of Ole that he thought first of all; but his question remained unanswered.

"Have you received no letter from him?"

"Not one."

And Hulda burst into tears.

"Don't cry, little sister," exclaimed Joel, "don't cry. You make me wretched. I can not bear to see you weep. Let me see! You say you have received no letter. The matter is beginning to look a little serious, I must admit, though there is no reason to despair as yet. If you desire it, I will go to Bergen, and make inquiries there. I will call on Help Bros. Possibly they may have some news from Newfoundland. It is quite possible that the 'Viking' may have put into some port for repairs, or on account of bad weather. The wind has been blowing a hurricane for more than a week, and not unfrequently ships from Newfoundland take refuge in Iceland, or at the Faroe Islands. This very thing happened to Ole two years ago, when he was on board the 'Strenna,' you remember. I am only saying what I really think, little sister. Dry your eyes. If you make me lose heart what will become of us?"

"But I can't help it, Joel."

"Hulda! Hulda! do not lose courage. I assure you that I do not despair, not by any means."

"Can I really believe you, Joel?"

"Yes, you can. Now, to reassure you, shall I start for Bergen to-morrow morning, or this very evening?"

"No, no, you must not leave me! No, you must not!" sobbed Hulda, clunging to her brother as if he was the only friend she had left in the world.

They started toward the inn. Joel sheltered his sister from the rain as well as he could, but the wind soon became so violent that they were obliged to take refuge in the hut of the ferryman, which stood a few hundred yards from the bank of the Maan.

There they were obliged to remain until the wind abated a little, and Joel was glad of an opportunity to have a
longer conversation with his sister.

"How does mother seem?" he inquired.
"Even more depressed in spirits than usual," replied Hulda.
"Has any one been here during my absence?"
"Yes, one traveler, but he has gone away."
"So there is no tourist at the inn now, and no one has asked for a guide?"
"No, Joel."

"So much the better, for I would much rather not leave you. Besides, if this unpleasant weather continues, it is not likely that many tourists will visit the Telemark this season. But tell me, was it yesterday that your guest left Dal?"
"Yes, yesterday morning."
"Who was he?"
"A man who resides in Drammen, and whose name is Sandgoist."
"Sandgoist?"
"Do you know him?"
"No."

Hulda had asked herself more than once if she should tell her brother all that had occurred in his absence. When Joel heard how coolly their guest had conducted himself, and how he seemed to have come merely to appraise the house and its contents, what would he think? Would not he, too, fear that his mother must have had grave reasons for acting as she had? What were these reasons? What could there be in common between her and Sandgoist? Joel would certainly desire to know, and would be sure to question his mother, and as Dame Hansen, who was always so uncommunicative, would doubtless persist in the silence she had maintained hitherto, the relations between her and her children, which were so unnatural and constrained now, would become still more unpleasant.

But would Hulda be able to keep anything from Joel? A secret from him! Would it not be a violation of the close friendship that united them? No, this friendship must never be broken! So Hulda suddenly resolved to tell him all.

"Have you ever heard any one speak of this Sandgoist when you were in Drammen?" she asked.
"Never."
"But our mother knew him, Joel; at least by name."
"She knew Sandgoist?"
"Yes."

"I certainly never heard the name before."
"But she has, though she had never seen the man until day before yesterday."

Then Hulda related all the incidents that had marked Sandgoist's sojourn at the inn, not neglecting to mention Dame Hansen's singular conduct at the moment of his departure. Then she hastened to add:

"I think, Joel, it would be best not to say anything to mother about it at present. You know her disposition, and it would only make her still more unhappy. The future will probably reveal what has been concealed from us in the past. Heaven grant that Ole may be restored to us, and then if any misfortune should befall the family there will at least be three of us to share it."

Joel had listened to his sister with profound attention. Yes, it was evident that Dame Hansen must be at this man's mercy, and it was impossible to doubt that he had come to take an inventory of the property. And the destruction of the bill at the time of his departure—a destruction that seemed only right and proper to him—what could be the meaning of that?

"You are right, Hulda," said Joel. "I had better not say anything to mother about it. Perhaps she will feel sorry by and by that she has not confided in us. Heaven grant that it may not be too late! She must be wretched, poor woman! How strange it is that she can not understand that her children were born to sympathize with her."

"She will find it out some day, Joel."
"Yes; so let us wait patiently, little sister. Still, there is no reason why I should not try to find out who the man is. Perhaps Farmer Helmboe knows him. I will ask him the first time I go to Bamble, and if need be I will push on to Drammen. There it will not be difficult for me to at least learn what the man does, and what people think of him—what could be the meaning of that?

"They do not think well of him, I am sure," replied Hulda. "His face is very unprepossessing, and I shall be very much surprised if there is a noble soul concealed under such a repulsive exterior."

"Come, come, little sister, it will not do to judge people by outward appearances," exclaimed Joel. "Don't be so suspicious, Hulda, and cheer up. Ole will soon be with us, and we will scold him roundly for having kept us waiting."

The rain having ceased the pair left the hut and started up the path leading to the inn.
"By the way, I must go away again to-morrow, little sister," said Joel.
"Go away again to-morrow!" repeated Hulda.
"Yes, early in the morning. On leaving the Hardanger I was informed by a comrade that a traveler, coming from
the north by way of the Rjukanfos would arrive to-morrow."
"Who is this traveler?"
"I don't know his name, but I must be on hand to conduct him to Dal."
"Ah, well! go, then, as there is no help for it," replied Hulda, with a sigh.
"Yes, I must start to-morrow at sunrise. Do you really feel so badly about it, Hulda?"
"Yes, brother, I feel much more unhappy when you leave me, even if it is only for a few hours."
"Ah, well, this time I shall not go alone."
"Why, who is to accompany you?"
"You, little sister. You need diversion, and I am going to take you with me."
"Oh, thank you, Joel, thank you!"

CHAPTER VIII.
The brother and sister left the inn at sunrise the next morning. The fifteen mile walk from Dal to the celebrated
falls of the Rjukan, and back again, was a mere trifle for Joel, but it was necessary to economize Hulda's strength, so
Joel hired foreman Lengling's kariol. This, like all kariols, had but one seat, but the worthy man was so large that he
had been obliged to have his kariol built to order, and this being the case the vehicle was large enough to enable
Hulda and Joel to sit side by side quite comfortably; and if the expected tourist was waiting for them at Rjukanfos as
they anticipated, he could take Joel's place and the latter could either return afoot or mounted upon the step behind
the kariol.

The road from Dal to the falls is very rough but indescribably charming. It is really rather a footpath than a road.
The bridges across the countless streams that dance merrily along to the Maan are all constructed of unhewn logs,
but the Norwegian horse traverses them with a sure step, and though the kariol has no springs, its long and slightly
elastic shafts soften the jolting at least to some extent.

The day was charming, and Hulda and Joel drove along at a brisk pace through the flowery fields, bathed on the
left by the clear waters of the Maan. Clumps of birches here and there shaded the sunny road, and the dew still
glittered on the blades of grass. To the right of the torrent towered the snow-clad summit of the Gousta, which rises
to an altitude of six thousand feet.

For nearly an hour, the vehicle moved on rapidly, the ascent being comparatively slight; but soon the valley
became narrower, the gay rivulets were transformed into foaming torrents, and though the road wound in and out it
could not avoid all the inequalities of the ground. Beyond came really dangerous passes, through which Joel guided
the vehicle with no little skill; besides, with him Hulda feared nothing. When the road was very rough she clung to
his arm, and the freshness of the morning air brought a glow to the pretty face which had been unusually pale for
some time.

But it was necessary for them to ascend to still greater heights, for the valley here contracted into merely a
narrow channel for the passage of the river, a channel inclosed on either side by massive walls of rock. Over the
neighboring fields were scattered a few dilapidated farm-houses, the remains of _soeters_, which were now
abandoned, and a few shepherd's huts almost hidden from view by clumps of birches and oaks. Soon it became
impossible for them to see the river, though they could distinctly hear it dashing along in its rocky channel, and the
country assumed an indescribably wild and imposing aspect.

A drive of two hours brought them to a rough saw-mill perched upon the edge of a water-fall at least fifteen
hundred feet in height. Water-falls of this height are by no means rare in the Vesfjorddal, but the volume of water is
usually small. This is not the case with the falls of the Rjukanfos however.

On reaching the saw-mill, Joel and Hulda both alighted.
"A half hour's walk will not be too much for you, will it, little sister?" asked Joel.
"No, brother; I am not tired, and a little exercise will do me good."
"It will be a good deal instead of a little, for you will have some pretty hard climbing to do."
"I can cling to your arm, Joel."

It was evident that the kariol must be abandoned at this point, for it would be impossible for it to make its way
through the rough paths, the narrow passes, and over the big, fantastically shaped rocks that heralded the close
proximity of the great falls.

Already, they could see in the distance a thick mist, the spray from the seething waters of Rjukan.
Hulda and Joel took a shady path which is well known to guides, and which leads to the end of the valley. A few
moments afterward they found themselves upon a moss-covered rock almost in front of the fall. In fact there was no
chance of getting any nearer to it on that side.

The brother and sister would have had considerable difficulty in making themselves heard if they had wished to speak; but their thoughts were those that could be exchanged without the agency of the lips.

The volume of the Rjukan fall is enormous, its height very considerable, and its roar deafening. The earth makes an abrupt descent of nine hundred feet to the bed of the Maan midway between Lake Mjos and Lake Tinn, nine hundred feet, that is to say six times the height of Niagara, though the width of this last water-fall from the American to the Canadian shore is three miles.

The Rjukan is so grand and unique in its aspect that any description falls far short of the reality, and even a painting can not do justice to it. There are certain wonders of nature that must be seen if one would form any adequate conception of their beauty; and this water-fall, which is one of the most widely celebrated in Europe, belongs to this category.

These were the very thoughts that were passing through the mind of a tourist who was at that very moment sitting perched upon a rock on the right bank of the Maan, from which spot he could command a nearer and more extended view of the fall.

Neither Joel nor his sister had yet noticed him, though he was plainly visible from the rock on which they were seated.

In a few minutes the traveler rose and very imprudently ventured out upon the rocky slope that is rounded like a dome on the side next the Maan. What the adventurous tourist wished to see was evidently the two caverns under the fall, the one to the left, which is ever filled to the top with a mass of seething foam, and the one to the right, which is always enshrouded in a heavy mist. Possibly he was even trying to ascertain if there were not a third cavern midway down the fall to account for the fact that the Rjukan at intervals projects straight outward into space a mass of water and spray, making it appear as if the waters had suddenly been scattered in a fine spray over the surrounding fields by some terrific explosion in the rear of the fall.

And now the daring tourist was slowly but persistently making his way over the rough and slippery ledge of rock, destitute alike of shrubbery or grass, know as the Passe de Marie, or the Maristien.

It is more than probable, however, that he was ignorant of the legend that has made this pass so widely know. One day Eystein endeavored to reach his betrothed, the beautiful Marie of Vesfjorddal, by this dangerous path. His sweetheart was holding out her arms to him from the other side of the gorge, when suddenly he lost his footing, fell, slipped further and further down the ledge of rock which is as smooth as glass, and disappeared forever in the seething rapids of the Maan.

Was this rash traveler about to meet a similar fate?

It seemed only too probable; and in fact he soon perceived the danger of his position, though not until it was too late. Suddenly his foot slipped, he uttered a cry, and after rolling nearly twenty feet, he finally succeeded in securing a hold upon a projecting rock on the very edge of the abyss.

Joel and Hulda, though they had not yet caught sight of him, heard his cry.

"What is that?" exclaimed Joel, springing to his feet.

"A cry!" replied Hulda.

"Yes, a cry of distress."

"From what direction did it come?"

"Let us listen."

Both looked first to the right, and then to the left of the fall, but they saw nothing, though they had certainly heard the words "Help! help!" uttered during one of the intervals between each rebound of the Rjukan.

The cry was repeated.

"Joel, some one who is in danger is calling for help," cried Hulda. "We must go to his aid."

"Yes, sister; and he can not be far off. But in what direction? Where is he? I see no one."

Hulda hastily climbed a little knoll behind the mossy rock upon which she had been sitting.

"Joel!" she cried, suddenly.

"Do you see him?"

"There, there!"

As she spoke she pointed to the imprudent man whose body seemed to be almost overhanging the abyss. If his foothold upon a tiny ledge of rock failed him, or he was seized with dizziness, he was lost.

"We must save him!" said Hulda.

"Yes," replied Joel, "if we can keep our wits about us we shall perhaps be able to reach him."

Joel gave a loud shout to attract the attention of the traveler, who immediately turned his head toward the spot from which the sound proceeded; then the worthy fellow devoted a few moments to deciding how he could best rescue the stranger from his dangerous position.
"You are not afraid, are you, Hulda?" he asked.
"No, brother."
"You know the Maristien well, do you not?"
"I have crossed it several times."
"Then walk along the brow of the cliff, gradually getting as near the traveler as you possibly can; then allow yourself to slide down gently toward him, and take him by the hand, so as to prevent him from falling any further; but do not let him try to lift himself up, because if he should be seized with vertigo he would certainly drag you down with him, and you would both be lost."
"And you, Joel?"
"While you are traversing the brow of the cliff I will creep along the edge of it on the river-side. I shall reach him about as soon as you do, and if you should slip I shall perhaps be able to prevent you both from falling."
Then, taking advantage of another interval in the roaring of the torrent, Joel shouted in stentorian tones:
"Don't move, sir. Wait; we will try to get to you!"
Hulda had already disappeared behind the trees that crowned the ledge, in order to ascend the Maristien from the other side of the declivity, and Joel soon caught a glimpse of the fast-receding form of the brave girl at the turn in the path where the last trees grew.
He, in turn, at the peril of his life, had begun to creep slowly along the shelving edge of the ledge that surrounds the Rjukan. What wonderful coolness, what steadiness of foot and of hand were required to thus advance in safety along the edge of an abyss whose borders were drenched with the spray of the cataract!
In a parallel direction, but at least one hundred feet above his head, Hulda was advancing obliquely in order to reach the traveler more easily; but the position of the latter was such that she could not see his face, that being turned toward the cataract.
Joel, on reaching a spot directly below the unfortunate man paused, and after planting his foot firmly in a small crevice in the rock, called out:
"Hallo, sir!"
The traveler turned his head.
"Don't move, sir; don't move an inch, but hold fast!"
"I'll do that, my friend, never fear," replied the stranger in a tone that reassured Joel. "If I hadn't a good grip, I should have gone to the bottom of the Rjukan a quarter of an hour ago."
"My sister is also coming to help you," continued Joel. "She will take hold of your hand, but don't attempt to get upon your feet until I reach you. Don't even move."
"No more than a rock," replied the traveler.
Hulda had already begun to descend the ledge, carefully selecting the less slippery parts of the slope with the clear head of a true daughter of the Telemark.
And she, too, now called out as Joel had done:
"Holdfast, sir!"
The traveler turned his head.
"Yes; I am holding fast, and I assure you that I shall continue to do so as long as I can."
"And above all don't be afraid!" added Hulda.
"I am not afraid."
"We'll save you yet!" cried Joel.
"I hope so, indeed; for by Saint Olaf I shall never succeed in getting out of this scrape myself."
It was evident that the tourist had lost none of his presence of mind; but his fall had probably disabled him, and all he could do now was to keep himself upon the narrow shelf of rock that separated him from the abyss.
Meanwhile Hulda continued her descent, and in a few minutes reached the traveler; then, bracing her foot against a projecting point in the rock, she caught hold of his hand.
The traveler involuntarily attempted to raise himself a little.
"Don't move, sir, don't move," cried Hulda. "You will be sure to drag me down with you, for I am not strong enough to keep you from falling! You must wait until my brother reaches us. When he gets between us and the fall you can then try to get up."
"That is more easily said than done I fear."
"Are you so much hurt, sir? I hope you have broken no bones."
"No; but one leg is badly cut and scratched."
Joel was about twenty yards from them, the rounded shape of the brow of the cliff having prevented him from joining them at once. He was now obliged to climb this rounded surface. This was, of course, the most difficult and also the most dangerous part of his task.
"Don't make the slightest movement, Hulda!" he cried. "If you should both slip while I am not in a position to
break your fall you would both be killed."

"You need not fear that, Joel!" replied Hulda. "Think only of yourself, and may God help you!"

Joel began to crawl slowly up the rock, dragging himself along on his belly like a veritable reptile. Two or three times he narrowly escaped sliding down into the abyss below, but finally he succeeded in reaching the traveler's side.

The latter proved to be an elderly but still vigorous-looking man, with a handsome face, animated with a very genial and kindly expression.

"You have been guilty of a very imprudent act, sir," remarked Joel as soon as he recovered his breath.

"Imprudent!" repeated the traveler. "Yes, and as absurd as it was imprudent."

"You have not only risked your life, but--"

"Made you risk yours."

"Oh! that is my business," replied Joel, lightly. Then he added, in an entirely different tone: "The thing to be done now is to regain the brow of the cliff, but the most difficult part of the task is already accomplished."

"The most difficult?"

"Yes, sir. That was to reach you. Now we have only to ascend a much more gradual slope."

"Still, you had better not place much dependence upon me, my boy. I have a leg that isn't of much use to me just now, nor will it be for some time to come I fear."

"Try to raise yourself a little."

"I will gladly do so if you will assist me."

"Then take hold of my sister's arm. I will steady you and push you from below."

"Very well, my friends, I will be guided entirely by you; as you have been so kind as to come to my assistance, I can not do less than yield you implicit obedience."

Joel's plan was carried out in the most cautious manner, and though the ascent was not made without considerable difficulty and danger, all three accomplished it more easily and quickly than they had thought possible. Besides, the injury from which the traveler was suffering was neither a sprain nor dislocation, but simply a very bad abrasion of the skin; consequently, he could use his limbs to much better purpose than he had supposed, and ten minutes later he found himself safe on the other side of the Maristien.

Once there, he would have been glad to rest awhile under the pines that border the upper field of the Rjukanfos, but Joel persuaded him to make one more effort. This was to reach a hut hidden among the trees, a short distance from the rock, on which the brother and sister had seated themselves on first arriving at the fall. The traveler yielded to their solicitations, and supported on one side by Hulda, and on the other by Joel, he finally succeeded in reaching the door of the humble dwelling.

"Let us go in, sir," said Hulda. "You must want to rest a moment."

"The moment will probably be prolonged to a quarter of an hour."

"Very well, sir; but afterward you must consent to accompany us to Dal."

"To Dal? Why, that is the very place I was going to!"

"Can it be that you are the tourist who was expected from the north?" asked Joel.

"Precisely."

"Had I foreseen what was going to happen, I should have gone to the other side of the Rjukanfos to meet you."

"That would have been a good idea, my brave fellow. You would have saved me from a foolhardy act unpardonable at my age."

"Or at any age," replied Hulda.

The three entered the hut which was occupied by a family of peasants, a father and two daughters, who received their unexpected guests with great cordiality.

Joel was able to satisfy himself that the traveler had sustained no injury beyond a severe abrasion of the skin a little below the knee; but though the wound would necessitate a week's rest, the limb was neither broken nor dislocated.

Some excellent milk, an abundance of strawberries, and a little black bread were offered and accepted. Joel gave incontestable proofs of an excellent appetite, and though Hulda eat almost nothing, the traveler proved a match for her brother.

"My exertions have given me a famous appetite," he remarked; "but I must admit that my attempt to traverse the Maristien was an act of the grossest folly. To play the part of the unfortunate Eystein when one is old enough to be his father--and even his grandfather--is absurd in the highest degree."

"So you know the legend?" said Hulda.

"Of course. My nurse used to sing me to sleep with it in the happy days when I still had a nurse. Yes, I know the story, my brave girl, so I am all the more to blame for my imprudence. Now, my friends, Dal seems a long way off..."
to a cripple like myself. How do you propose to get me there?"

"Don't worry about that, sir," replied Joel. "Our kariol is waiting for us at the end of the road, about three hundred yards from here."

"Hum! three hundred yards!"

"But downhill all the way," added Hulda.

"Oh, in that case, I shall do very well if you will kindly lend me an arm."

"Why not two, as we have four at your disposal?" responded Joel.

"We will say two then. It won't cost me any more, will it?"

"It will cost you nothing."

"Except my thanks; and that reminds me that I have not yet thanked you."

"For what, sir?" inquired Joel.

"Merely for saving my life at the risk of your own."

"Are you quite ready to start?" inquired Hulda, rising to escape any further expression of gratitude.

"Certainly, certainly. I am more than willing to be guided by the wishes of the other members of the party."

The traveler settled the modest charge made by the occupants of the cottage; then, supported by Joel and Hulda, he began the descent of the winding path leading to the river bank.

The descent was not effected without many exclamations of pain; but these exclamations invariably terminated in a hearty laugh, and at last they reached the saw-mill, where Joel immediately proceeded to harness the horse into the kariol.

Five minutes later the traveler was installed in the vehicle, with Hulda beside him.

"But I must have taken your seat," he remarked to Joel.

"A seat I relinquish to you with the utmost willingness."

"But perhaps by a little crowding we might make room for you?"

"No, no, I have my legs, sir—a guide's legs. They are as good as any wheels."

Joel placed himself at the horse's head, and the little party started for Dal. The return trip was a gay one, at least on the part of the traveler, who already seemed to consider himself an old friend of the Hansen family. Before they reached their destination they found themselves calling their companion M. Silvius; and that gentleman unceremoniously called them Hulda and Joel, as if their acquaintance had been one of long standing.

About four o'clock the little belfry of Dal became visible through the trees, and a few minutes afterward the horse stopped in front of the inn. The traveler alighted from the kariol, though not without considerable difficulty. Dame Hansen hastened to the door to receive him, and though he did not ask for the best room in the house, it was given to him all the same.

CHAPTER IX.

Sylvius Hogg was the name that the stranger inscribed upon the inn register, that same evening, directly underneath the name of Sandgoist, and there was as great a contrast between the two names as between the men that bore them. Between them there was nothing whatever in common, either mentally, morally, or physically. One was generous to a fault, the other was miserly and parsimonious; one was genial and kind-hearted, in the arid soul of the other every noble and humane sentiment seemed to have withered and died.

Sylvius Hogg was nearly sixty years of age, though he did not appear nearly so old. Tall, erect, and well built, healthy alike in mind and in body, he pleased at first sight with his handsome genial face, upon which he wore no beard, but around which clustered curling locks of silvery hair; eyes which were as smiling as his lips, a broad forehead that bore the impress of noble thoughts, and a full chest in which the heart beat untrammelled. To all these charms were added an inexhaustible fund of good humor, a refined and liberal nature, and a generous and self-sacrificing disposition.

Sylvius Hogg, of Christiania—no further recommendation was needed. That told the whole story. And he was not only known, appreciated, loved and honored in the Norwegian capital, but throughout the entire country, though the sentiments he inspired in the other half of the Scandinavian kingdom, that is to say in Sweden, were of an entirely different character.

This fact can easily be explained.

Sylvius Hogg was a professor of law at Christiania. In some lands to be a barrister, civil engineer, physician, or merchant, entitles one to a place on the upper rounds of the social ladder. It is different in Norway, however. To be a professor there is to be at the top of the ladder.

Though there are four distinct classes in Sweden, the nobility, the clergy, the gentry, and the peasantry, there are but three in Norway—the nobility being utterly wanting. No aristocracy is acknowledged, not even that of the office-
The people of Scandinavia are very intelligent, not only the inhabitants of the cities, but of the most remote rural districts. Their education goes far beyond reading, writing, and arithmetic. The peasant learns with avidity. His mental faculties are ever on the alert. He takes a deep interest in the public welfare and no mean part in all political and local affairs. More than half of the Storthing is made up of members of this rank in life; but they are justly noted for their remarkable good sense, acute reasoning powers, their clear though rather slow understanding, and above all, for their incorruptibility.

Sylvius Hogg was a thorough Norwegian in heart and in soul, and stoutly defended her rights upon all occasions; so, when in 1854 the Storthing was discussing the question of having neither a viceroy nor even a governor at the head of the state, he was one of the most enthusiastic champions of the measure.

Consequently, though he was by no means popular in the eastern part of Scandinavia, he was adored in the western part of it, even in the most remote hamlets. His name was a household word throughout Norway from the dunes of Christiansand to the bleak rocks of the North Cape, and so worthy was he of this universal respect that no breath of calumny had ever sullied the reputation of either the deputy or the professor. But though he was a Norwegian to the core he was a hot-blooded man, with none of the traditional coldness and apathy of his compatriots; but much more prompt and resolute in his thoughts and acts than most Scandinavians, as was proved by the quickness of his movements, the ardor of his words, and the vivacity of his gestures. Had he been born in France, one would have unhesitatingly pronounced him a Southerner.

Sylvius Hogg's fortune had never exceeded a fair competence, for he had not entered into politics for the purpose of making money. Naturally unselfish, he never thought of himself, but continually of others; nor was he tormented by a thirst for fame. To be a deputy was enough for him; he craved no further advancement.

Just at this time Sylvius Hogg was taking advantage of a three months' vacation to recuperate after a year of severe legislative toil. He had left Christiania six weeks before, with the intention of traveling through the country about Drontheim, the Hardanger, the Telemark, and the districts of Kongsberg and Drammen. He had long been anxious to visit these provinces of which he knew nothing; and his trip was consequently one of improvement and of pleasure. He had already explored a part of the region, and it was on his return from the northern districts that the idea of visiting the famous falls of the Rjukan--one of the wonders of the Telemark--first occurred to him. So, after surveying the route of the new railroad--which as yet existed only on paper--between the towns of Drontheim and Christiania, he sent for a guide to conduct him to Dal. He was to meet this guide on the left bank of the Maan; but lured on by the beauties of the Maristien, he ventured upon the dangerous pass without waiting for his guide. An unusual want of prudence in a man like him and one that nearly cost him his life, for had it not been for the timely assistance rendered by Joel and Hulda Hansen, the journey would have ended with the traveler himself in the grim depths of the Rjukanfos.
Consequently it is not at all strange that the name of Sylvius Hogg was a household word throughout Norway, and was uttered with respect even in the wilds of the Telemark; so Dame Hansen on receiving such a widely known and highly esteemed guest, thought it only proper to tell him how highly honored she felt at having him under her roof, if only for a few days.

"I don't know that I am doing you much honor, Dame Hansen," replied Sylvius Hogg, "but I do know that it gives me great pleasure to be here. I have heard my pupils talk of this hospitable inn for years. Indeed, that is one reason I intended to stop here and rest for about a week, but by Saint Olaf! I little expected to arrive here on one leg!"

And the good man shook the hand of his hostess most cordially.

"Wouldn't you like my brother to fetch a doctor from Bamble?" inquired Hulda.

"A doctor! my little Hulda! Why! do you want me to lose the use of both my legs?"

"Oh, Mr. Sylvius!"

"A doctor! Why not send for my friend, the famous Doctor Bork, of Christiania? All this ado about a mere scratch, what nonsense!"

"But even a mere scratch may become a very serious thing if not properly attended to," remarked Joel.

"Well, Joel, will you tell me why you are so very anxious for this to become serious?"

"Indeed, I am not, sir; God forbid!"

"Oh, well, He will preserve you and me, and all Dame Hansen's household, especially if pretty little Hulda here will be kind enough to give me some attention."

"Certainly, Mr. Sylvius."

"All right, my friends. I shall be as well as ever in four or five days. How could a man help getting well in such a pretty room? Where could one hope for better care than in this excellent inn? This comfortable bed, with its mottoes, is worth a great deal more than all the nauseous prescriptions of the faculty. And that quaint window overlooking the valley of the Maan! And the stream's soft, musical murmur that penetrates to the remotest corner of my cozy nest! And the fragrant, healthful scent of the pines that fills the whole house! And the air, this pure exhilarating mountain air! Ah! is not that the very best of physicians? When one needs him one has only to open the window and in he comes and makes you well without cutting off your rations."

He said all this so gayly that it seemed as if a ray of sunshine had entered the house with him. At least, this was the impression of the brother and sister, who stood listening to him, hand in hand.

All this occurred in a chamber on the first floor, to which the professor had been conducted immediately upon his arrival; and now, half reclining in a large arm-chair, with his injured limb resting upon a stool, he gratefully accepted the kindly attentions of Joel and Hulda. A careful bathing of the wound with cold water was the only remedy he would use, and in fact no other was needed.

"Thanks, my friends, thanks!" he exclaimed, "this is far better than drugs. And now do you know that but for your timely arrival upon the scene of action, I should have become much too well acquainted with the wonders of the Rjukanfoss! I should have rolled down into the abyss like a big stone, and have added another legend to those already associated with the Maristien. And there was no excuse for me. My betrothed was not waiting for me upon the opposite bank as in the case of poor Eystein!"

"And what a terrible thing it would have been to Madame Hogg!" exclaimed Hulda. "She would never have got over it."

"Madame Hogg!" repeated the professor. "Oh! Madame Hogg wouldn't have shed a tear--"

"Oh, Mister Sylvius."

"No, I tell you, for the very good reason that there is no Madame Hogg. Nor can I ever imagine what Madame Hogg would be like, stout or thin, tall or short."

"She would, of course, be amiable, intelligent and good, being your wife," replied Hulda, naïvely.

"Do you really think so, mademoiselle? Well, well, I believe you! I believe you!"

"But on hearing of such a calamity, Mister Sylvius," remarked Joel, "your relatives and many friends--"

"I have no relatives to speak of, but I have quite a number of friends, not counting those I have just made in Dame Hansen's house, and you have spared them the trouble of weeping for me. But tell me, children, you can keep me here a few days, can you not?"

"As long as you please, Mister Sylvius," replied Hulda. "This room belongs to you."

"You see, I intended to stop awhile at Dal as all tourists do, and radiate from here all over the Telemark district; but now, whether I shall radiate, or I shall not radiate, remains to be seen."

"Oh, you will be on your feet again before the end of the week, I hope, Mister Sylvius," remarked Joel.

"So do I, my boy."

"And then I will escort you anywhere in the district that you care to go."
"We'll see about that when Richard is himself again. I still have two months leave before me, and even if I should be obliged to spend the whole of it under Dame Hansen's roof I should have no cause for complaint. Could I not explore that portion of the valley of Vesfjorddal lying between the two lakes, make the ascent of Gousta, and pay another visit to the Rjukanfos? tor though I very narrowly escaped falling head foremost into its depths I scarcely got a glimpse of it, and am resolved to see it again."

"You shall do so, Mister Sylvius," replied Hulda.

"And we will visit it next time in company with good Dame Hansen if she will be kind enough to go with us. And now I think of it, my friends, I must drop a line to Kate, my old housekeeper, and Fink, my faithful old servant in Christiania. They will be very uneasy if they do not hear from me, and I shall get a terrible scolding. And now I have a confession to make to you. The strawberries and milk were delicious and extremely refreshing, but they scarcely satisfied my hunger, and as I won't submit to being put upon short allowance may I not ask if it is not nearly your dinner hour?"

"Oh! that makes no difference whatever, Mister Sylvius."

"On the contrary, it does make a great deal of difference. Do you think that I am going to sit in solitary grandeur at the table, and in my own room, all the time I stay at Dal? No, I want to take my meals with you and your mother if Dame Hansen has no objections."

Of course Dame Hansen could but assent when she was apprised of the professor's request, especially as it would be a great honor to her and hers to have a member of the Storthing at her table.

"It is settled, then, that we are to eat together in the living room," remarked Sylvius Hogg.

"Yes, Mister Sylvius," replied Joel. "I shall only have to wheel you out in your arm-chair when dinner is ready."

"Indeed, Mister Joel! Why don't you propose a kariol? No; with the aid of a friendly arm, I shall be able to reach the table. I haven't had my leg amputated yet, that I am aware of."

"As you please, Mister Sylvius," replied Hulda. "But don't be guilty of any imprudence, I beg of you, or Joel will have to hurry off in search of a doctor."

"More threats! Oh, well, I will be as prudent and docile as possible; provided you do not put me on short allowance, you will find me the most tractable of patient. Can it be that you are not hungry, my friends?"

"Give us only a quarter of an hour," replied Hulda; "and we will set before you a nice trout from the Maan, a grouse that Joel shot in the Hardanger yesterday, and a bottle of French wine."

"Thank you, my dear child, thank you!"

Hulda left the room to superintend the dinner and set the table, while Joel took the kariol back to Lengling's stable. Sylvius Hogg was left alone, and his thoughts very naturally reverted to the honest family whose guest and debtor he was. What could he do to repay Hulda and Joel for the inestimable service they had rendered him?

He had not much time for reflection, however, for scarcely ten minutes had elapsed before he was seated in the place of honor at the family table. The dinner was excellent. It corresponded with the reputation of the inn, and the professor ate very heartily.

The rest of the evening was spent in conversation in which Sylvius Hogg took the leading part. As Dame Hansen found it well-nigh impossible to overcome her habitual reserve, Joel and Hulda were obliged to respond to their genial host's advances, and the sincere liking the professor had taken to them from the very first naturally increased.

When night came, he returned to his room with the assistance of Joel and Hulda, gave and received a friendly good-night, and had scarcely stretched himself out upon the big bed before he was sound asleep.

The next morning he woke with the sun, and began to review the situation.

"I really don't know how I shall get out of the scrape," he said to himself. "One can not allow one's self to be saved from death, nursed without any other return than a mere thank you. I am under deep obligations to Hulda and Joel, that is undeniable; but the services they have rendered me are not of a kind that can be repaid with money. On the other hand, these worthy people appear to be perfectly happy, and I can do nothing to add to their happiness! Still, we shall probably have many talks together, and while we are talking, perhaps--"

During the three or four days the professor was obliged to keep his leg upon a stool he and the young Hansens had many pleasant chats together, but unfortunately it was with some reserve on the brother's and sister's part. Neither of them had much to say about their mother, whose cold and preoccupied manner had not escaped Sylvius Hogg's notice, and from a feeling of prudence they hesitated to reveal to their guest the uneasiness excited by Ole Kamp's delay, for might they not impair his good humor by telling him their troubles?

"And yet we perhaps make a great mistake in not confiding in Mister Sylvius," Joel remarked to her sister, one day. "He is a very clever man, and through his influential acquaintances he might perhaps be able to find out whether the Naval Department is making any effort to ascertain what has become of the 'Viking.'"

"You are right, Joel," replied Hulda. "I think we had better tell him all; but let us wait until he has entirely recovered from his hurt."
"That will be very soon," rejoined Joel.

By the end of the week Sylvius Hogg was able to leave his room without assistance, though he still limped a little; and he now began to spend hours on the benches in front of the house, gazing at the snow-clad summit of Gousta, while the Maan dashed merrily along at his feet.

People were continually passing over the road that led from Dal to the Rjukanfos now. Most of them were tourists who stopped an hour or two at Dame Hanson's inn either to breakfast or dine. There were also students in plenty with knapsacks on their backs, and the little Norwegian cockade in their caps.

Many of them knew the professor, so interminable greetings were exchanged, and cordial salutations, which showed how much Sylvius Hogg was loved by these young people.

"What, you here, Mister Sylvius?" they would exclaim.

"Yes, my friend."

"You, who are generally supposed to be in the remotest depths of the Hardanger!"

"People are mistaken, then. It was in the remotest depths of the Rjukanfos that I came very near staying."

"Very well, we shall tell everybody that you are in Dal."

"Yes, in Dal, with a game leg."

"Fortunately you are at Dame Hansen's inn, where you will have the best of food and care."

"Could one imagine a more comfortable place?"

"Most assuredly not."

"Or better people?"

"There are none in the world," responded the young travelers merrily.

Then they would all drink to the health of Hulda and Joel, who were so well known throughout the Telemark.

And then the professor would tell them all about his adventure, frankly admitting his unpardonable imprudence, and telling how his life had been saved, and how grateful he felt to his preservers.

"And I shall remain here until I have paid my debt," he would add. "My course of lectures on legislation will not be resumed for a long time, I fear, and you can enjoy an extended holiday."

"Good! good! Mister Sylvius," cried the light-hearted band. "Oh, you can't fool us! It is pretty Hulda that keeps you here at Dal."

"A sweet girl she is, my friends, and as pretty as a picture, besides; and by Saint Olaf! I'm only sixty."

"Here's to the health of Mister Sylvius!"

"And to yours, my dear boys. Roam about the country, gather wisdom, and yet be merry. Life is all sunshine at your age. But keep away from the Maristien. Joel and Hulda may not be on hand to rescue such of you as are imprudent enough to venture there."

Then they would resume their journey, making the whole valley ring with their joyful _God-aften_.

Once or twice Joel was obliged to act as guide to some tourists who wished to make the ascent of Gousta. Sylvius Hogg was anxious to accompany them. He declared that he was all right again. In fact, the wound on his leg was nearly healed; but Hulda positively forbade him to undertake a trip which would certainly prove too fatiguing for him, and Hulda's word was law.

A wonderful mountain, though, is this Gousta, whose lofty summit traversed by deep snow-covered ravines, rises out of a forest of pines that form a thick green ruff about its snowy throat! And what a superb view one enjoys from its summit. To the east lies the bailiwick of Numedal; On the west, the Hardanger and its magnificent glaciers; down at the base of the mountain, the winding valley of Vesfjorddal between Lakes Tinn and Mjos, Dal, and its miniature houses, and the bright waters of the Maan leaping and dancing merrily along through the verdant meadows to the music of its own voice.

To make the ascent Joel was obliged to leave Dal at five o'clock in the morning. He usually returned about six o'clock in the evening, and Sylvius Hogg and Hulda always went to meet him. As soon as the primitive ferry-boat landed the tourists and their guide a cordial greeting ensued, and the three spent yet another pleasant evening together. The professor still limped a little, but he did not complain. Indeed, one might almost have fancied that he was in no haste to be cured, or rather to leave Dame Hansen's hospitable roof.

The time certainly passed swiftly and pleasantly there. He had written to Christiania that he should probably spend some time at Dal. The story of his adventure at the Rjukanfos was known throughout the country. The newspapers had got hold of it, and embellished the account after their fashion, so a host of letters came to the inn, to say nothing of pamphlets and newspapers. All these had to be read and answered, and the names of Joel and Hulda which were necessarily mentioned in the correspondence, soon became known throughout Norway.

Nevertheless, this sojourn at Dame Hansen's inn could not be prolonged indefinitely, though Sylvius Hogg was still as much in doubt as ever, in regard to the manner in which he should pay his debt of gratitude. Of late, however, he had begun to suspect that this family was not as happy as he had at first supposed. The impatience with which the
brother and sister awaited the arrival of the daily mail from Christiania and Bergen, their disappointment and even chagrin in finding no letters for them, all this was only too significant.

It was already the ninth of June, and still no news from the "Viking!" The vessel was now more than a fortnight overdue, and not a single line from Ole! No news to assuage Hulda's anxiety. The poor girl was beginning to despair, and Sylvius Hogg saw that her eyes were red with weeping when he met her in the morning.

"What can be the matter?" he said to himself, more than once. "They seem to be concealing some misfortunes from me. Is it a family secret, I wonder, with which a stranger can not be allowed to meddle? But do they still regard me as a stranger? No. Still, they must think so; but when I announce my departure they will perhaps understand that it is a true friend who is about to leave them."

So that very day he remarked:

"My friends, the hour is fast approaching when, to my great regret, I shall be obliged to bid you good-bye."

"So soon, Mister Sylvius, so soon?" exclaimed Joel, with a dismay he could not conceal.

"The time has passed very quickly in your company, but it is now seventeen days since I came to Dal."

"What! seventeen days!" repeated Hulda.

"Yes, my dear child, and the end of my vacation is approaching. I have only a week at my disposal if I should extend my journey to Drammen and Kongsberg. And though the Storthing is indebted to you for not being obliged to elect another deputy in my place, the Storthing will know no better how to compensate you than I do."

"Oh! Mister Sylvius," cried Hulda, placing her little hand upon his lips to silence him.

"Oh, I understand, Hulda. That is a forbidden subject, at least here."

"Here and everywhere," replied the girl, gayly.

"So be it! I am not my own master, and I must obey. But you and Joel must come and pay me a visit at Christiania."

"Pay you a visit?"

"Yes, pay me a visit; spend several weeks at my house in company with your mother, of course."

"And if we should leave the inn who will attend to things in our absence?" replied Joel.

"But your presence here is not necessary after the excursion season is over, I imagine; so I have fully made up my mind to come for you late in the autumn."

"It will be impossible, my dear Mister Sylvius, for us to accept--"

"On the contrary, it will be perfectly possible. Don't say no. I shall not be content with such an answer. Besides, when I get you there in the very best room in my house, in the care of my old Kate and faithful Fink, you will be my own children, and then you can certainly tell me what I can do for you."

"What you can do for us?" repeated Joel, with a glance at his sister.

"Brother!" exclaimed Hulda, as if divining his intention.

"Speak, my boy, speak!"

"Ah, well, Mister Sylvius, you can do us a great honor."

"How?"

"By consenting to be present at my sister Hulda's marriage, if it would not inconvenience you too much."

"Hulda's marriage!" exclaimed Sylvius Hogg. "What! my little Hulda is going to be married, and no one has said a word to me about it!"

"Oh, Mister Sylvius!" exclaimed the girl, her eyes filling with tears.

"And when is the marriage to take place?"

"As soon as it pleases God to bring her betrothed, Ole Kamp, back to us," replied the girl.

CHAPTER XI.

Joel then proceeded to relate Ole Kamp's whole history. Sylvius Hogg, deeply moved, listened to the recital with profound attention. He knew all now. He even read Ole's letter announcing his speedy return. But Ole had not returned, and there had been no tidings from the missing one. What anxiety and anguish the whole Hansen family must have suffered!

"And I thought myself an inmate of a happy home!" he said to himself.

Still, after a little reflection, it seemed to him that the brother and sister were yielding to despair while there was still some room for hope. By counting these May and June days over and over again their imaginations had doubled the number, as it were.

The professor, therefore, concluded to give them his reasons for this belief, not feigned, but really sensible and plausible reasons that would also account for the delay of the "Viking."

Nevertheless his face had become very grave, for the poor girl's evident grief touched him deeply.
"Listen to me, my children," said he. "Sit down here by me, and let us talk the matter over calmly."

"Ah! what can you say to comfort us?" cried Hulda, whose heart was full to overflowing.

"I shall tell you only what I really and truly think," replied the professor. "I have been thinking over all that Joel just told me, and it seems to me that you are more anxious and despondent than you have any real cause to be. I would not arouse any false hopes, but we must view matters as they really are."

"Alas! Mister Sylvius," replied Hulda, "my poor Ole has gone down with the 'Viking,' and I shall never see him again!"

"Sister, sister!" exclaimed Joel, "becalm, I beseech you, and hear what Mister Sylvius has to say."

"Yes, be calm, my children, and let us talk the matter over quietly. It was between the fifteenth and twentieth of May that Ole expected to return to Bergen, was it not?"

"Yes; and it is now the ninth of June."

"So the vessel is only twenty days overdue, if we reckon from the latest date appointed for the return of the 'Viking.' That is enough to excite anxiety, I admit; still, we must not expect the same punctuality from a sailing-vessel as from a steamer."

"I have told Hulda that again and again, and I tell her so yet," interrupted Joel.

"And you are quite right, my boy. Besides, it is very possible that the 'Viking' is an old vessel, and a slow sailor, like most Newfoundland ships, especially when heavily laden. On the other hand, we have had a great deal of bad weather during the past few weeks, and very possibly the vessel did not sail at the date indicated in Ole's letter. In that case a week's delay in sailing would be sufficient to account for the non-arrival of the 'Viking' and for your failure to receive a letter from your lover. What I say is the result of serious reflection. Besides, how do you know but the instructions given to the captain of the 'Viking' authorize him to take his cargo to some other port, according to the state of the market?"

"In that case, Ole would have written," replied Hulda, who could not even be cheered by this hope.

"What is there to prove that he did not write?" retorted the professor. "If he did, it is not the 'Viking' that is behind time, but the American mail. Suppose, for instance, that Ole's ship touched at some port in the United States, that would explain why none of his letters have yet reached Europe."

"The United States, Mister Sylvius!"

"That sometimes happens, and it is only necessary to miss one mail to leave one's friends without news for a long time. There is, at all events, one very easy thing for us to do; that is to make inquiries of some of the Bergen shipowners. Are you acquainted with any of them?"

"Yes," replied Joel, "Messrs. Help Bros."

"Help Bros., the sons of old Help?"

"Yes."

"Why, I know them, too; at least, the younger brother, Help, Junior, they call him, though he is not far from my own age, and one of my particular friends. He has often dined with me in Christiania. Ah, well, my children, I can soon learn through him all that can be ascertained about the 'Viking.' I'll write him this very day, and if need be I'll go and see him."

"How kind you are, Mister Sylvius!" cried Hulda and Joel in the same breath.

"No thanks, if you please; I won't allow them. Did I ever thank you for what you did for me up there? And now I find an opportunity to do you a good turn, and here you are all in a flutter."

"But you were just talking of returning to Christiania," remarked Joel.

"Well, I shall go to Bergen instead, if I find it necessary to go to Bergen."

"But you were about to leave us, Squire, for instance, said Hulda.

"Well, I have changed my mind, that is all. I am master of my own actions, I suppose; and I sha'n't go until I see you safely out of this trouble, that is, unless you are disposed to turn me out-of-doors--"

"What can you be thinking of, Mister Sylvius?"

"I have decided to remain in Dal until Ole's return. I want to make the acquaintance of my little Hulda's betrothed. He must be a brave, honest fellow, of Joel's stamp, I am inclined to think."

"Yes, exactly like him," replied Hulda.

"I was sure of it!" exclaimed the professor, whose cheerfulness had returned, at least apparently.

"Ole is Ole, Mister Sylvius," said Joel, "and that is equivalent to saying that he is the best-hearted fellow in the world."

"I believe you, my dear Joel, and what you say only makes me the more anxious to see him. I sha'n't have to wait long. Something tells me that the 'Viking' will soon come safely into port."

"God grant it!"

"And why should He not hear your prayer? Yes, I shall certainly attend Hulda's wedding, as you have been kind
enough to invite me to it. The Storthing will have to do without me a few weeks longer, that is all. It would have
been obliged to grant me a much longer leave of absence if you had let me fall into the Rjukanfos as I deserved."

"How kind it is in you to say this, Mister Sylvius, and how happy you make us!"

"Not as happy as I could wish, my friends, as I owe my life to you, and I don't know--"" Oh! please, please say no more about that trifle."

"Yes, I shall. Come now, who drew me out of the frightful jaws of the Maristien? Who risked their own lives to
save me? Who brought me to the inn at Dal, and cared for me, and nursed me without any assistance from the
Faculty? Oh! I am as stubborn as an old cart-horse, I assure you, and I have made up my mind to attend the marriage
of Hulda to Ole Kamp, and attend it I shall!"

Hopefulness is contagious, and how could any one resist such confidence as Sylvius Hogg displayed? A faint
smile crept over poor Hulda's face. She longed to believe him; she only asked to hope.

"But we must recollect that the days are passing very rapidly," continued Sylvius Hogg, "and that it is high time
we began our preparations for the wedding."

"They are already begun, Mister Sylvius," replied Hulda. "In fact, they were begun more than three weeks ago."

"So much the better; but in that case, we must take good care not to allow anything to interrupt them."

"Interrupt them!" repeated Joel. "Why, everything is in readiness."

"What, the wedding-dress, the bodice with its silver clasps, the belt and its pendants?"

"Even the pendants."

"And the radiant crown that will make you look like a saint, my little Hulda?"

"Yes"

"And the invitations are written?"

"All written," replied Joel, "even the one to which we attach most importance, yours."

"And the bride-maid has been chosen from among the sweetest maidens of the Telemark?"

"And the fairest, Mister Sylvius," added Joel, "for it is Mademoiselle Siegfrid of Bamble."

"From the tone in which he uttered those words, and the way in which he blushed as he uttered them, I judge that
Mademoiselle Siegfrid Helmboe is destined to become Madame Joel Hansen of Dal," said the professor, laughing.

"Yes, Mr. Sylvius," replied Hulda.

"Good! so there is a fair prospect of yet another wedding," exclaimed Sylvius Hogg. "And as I feel sure that I
shall be honored with an invitation, I can do no less than accept it here and now. It certainly looks as if I should be
obliged to resign my seat in the Storthing, for I really don't see how I am to find time to attend its sessions. But
never mind, I will be your best man, Joel, after first serving in that capacity at your sister's wedding. You certainly
are making me do just what you like, or rather what I like. Kiss me, little Hulda! Give me your hand, my boy, and
now let me write to my friend Help, Junior, of Bergen."

The brother and sister left the apartment of which the professor had threatened to take permanent possession, and
returned to their daily tasks with rather more hopeful hearts.

Sylvius Hogg was left alone.

"Poor child! poor child!" he murmured. "Yes, I have made her forget her sorrow for a few moments. But the
delay has been a long one; and the sea is very rough at this season of the year. What if the 'Viking' has indeed gone
down, and Ole should never return!"

A moment afterward the professor was busily engaged in writing to his Bergen friend. He asked for the fullest
possible particulars in regard to everything connected with the "Viking" and her cruise, and inquired if some event,
unforeseen or otherwise, had made it necessary to send the vessel to a different port from that for which it was
originally destined. He also expressed a strong desire to hear as soon as possible how the shipping merchants and
sailors of Bergen explained the delay. In short, he begged his friend Help to give him all possible information in
regard to the matter by return mail.

This urgent letter also explained Sylvius Hogg's interest in the mate of the "Viking," the invaluable service
rendered him by the young man's betrothed, and the pleasure it would afford him to be able to give some
encouragement to Dame Hansen's children.

As soon as this letter was finished Joel took it to Moel so it would go on the following day. It would reach
Bergen on the eleventh, so a reply to it ought to be received on the evening of the twelfth or the morning of the
thirteenth at the very latest.

Nearly three days of dreary waiting! How interminable they seemed! Still, by dint of reassuring words and
encouraging arguments, the professor contrived to alleviate the painful suspense. Now he knew Hulda's secret, was
there not a topic of conversation ever ready? And what a consolation it was to Joel and his sister to be able to talk of
the absent one!

"I am one of the family now," Sylvius Hogg repeated again and again. "Yes, I am like an uncle that has just
arrived from America or some foreign land."

And as he was one of the family, they must have no more secrets from him.

Of course he had not failed to notice the children's constrained manner toward their mother, and he felt satisfied that the reserve the parent displayed had its origin in something besides the uneasiness she felt on Ole Kamp's account. He thought he might venture to question Joel; but the latter was unable to give any satisfactory reply. The professor than ventured to sound Dame Hansen on the subject, but she was so uncommunicative that he was obliged to abandon all hope of obtaining any knowledge of her secret until some future day.

As Sylvius Hogg had predicted, the letter from Help, Junior, reached Dal on the morning of the thirteenth. Joel started out before daylight to meet the postman, and it was he who brought the letter into the large hall where the professor was sitting with Dame Hansen and her daughter.

There was a moment's silence. Hulda, who was as pale as death, was unable to utter a word so violent was the throbbing of her heart, but she seized the hand of her brother, who was equally agitated, and held it tightly.

Sylvius Hogg opened the letter and read it aloud.

To his great regret the missive contained only some very vague information; and the professor was unable to conceal his disappointment from the young people who listened to the letter with tears in their eyes.

The "Viking" had left Saint-Pierre-Miquelon on the date mentioned in Ole Kamp's last letter. This fact had been established by the reports received from other vessels which had reached Bergen since the "Viking's" departure from Newfoundland. These vessels had seen nothing of the missing ship on their homeward voyage, but they had encountered very bad weather in the neighborhood of Iceland. Still they had managed to weather the gales; so it was possible that the "Viking" had been equally fortunate, and had merely been delayed somewhere, or had put into some port for repairs. The "Viking" was a stanch craft, very substantially built, and commanded by Captain Friel, of Hammersfest, a thoroughly competent officer. Still, this delay was alarming, and if it continued much longer there would be good reason to fear that the "Viking" had gone down with all on board.

The writer regretted that he had no better news to give the young Hansens, and spoke of Ole Kamp in the most complimentary terms. He concluded his letter by assuring the professor of his sincere friendship, and that of his family, and by promising to send him without delay any intelligence that might be received at any Norwegian port, in relation to the "Viking."

Poor Hulda sunk half fainting into a chair while Sylvius Hogg was reading this letter, and she was sobbing violently when he concluded its perusal.

Joel, with his arms folded tightly upon his breast, listened in silence, without daring to glance at his sister.

Dame Hansen, as soon as the reading was concluded, went up to her room. She seemed to have been expecting the blow.

The professor beckoned Hulda and her brother to his side. He wanted to talk with them calmly and sensibly on the subject, and he expressed a confidence that was singular, to say the least, after Help, Junior's letter. They had no reason to despair. Were there not countless examples of protracted delays while navigating the seas that lie between Norway and Newfoundland? Yes, unquestionably. And was not the "Viking" a strong craft, well officered, and manned by an excellent crew, and consequently in a much better condition than many of the vessels that had come safely into port? Most assuredly.

"So let us continue to hope," he added, "and wait. If the 'Viking' had been wrecked between Iceland and Newfoundland the numerous vessels that follow the same route to reach Europe would certainly have seen some trace of the disaster. But no, not a single floating plank or spar did they meet on the whole of this route, which is so much frequented at the conclusion of the fishing season. Still, we must take measures to secure information of a more positive nature. If we receive no further news of the 'Viking' during the coming week, nor any letter from Ole, I shall return to Christiania and ask the Naval Department to make careful inquiries, and I feel sure that the result will prove eminently satisfactory to all concerned."

In spite of the hopeful manner assumed by the professor, Joel and Hulda both felt that he did not speak as confidently as he had spoken before the receipt of the letter from Bergen--a letter whose contents gave them little if any grounds for hope. In fact, Sylvius Hogg no longer dared to venture any allusion to the approaching marriage of Hulda and Ole Kamp, though he said to himself again and again:

"No, no, it is impossible! Ole Kamp never cross the threshold of Dame Hansen's house again? Ole not marry Hulda? Nothing will ever make me believe such a misfortune possible."

He was perfectly sincere in this conviction. It was due to the energy of his character, to a spirit of hopefulness that nothing could crush. But how could he hope to convince others, especially those whom the fate of the "Viking" affected so directly?

A few days were allowed to elapse. Sylvius Hogg, who was now entirely well, took a long walk every day, and persuaded Hulda and her brother to accompany him. One day all three of them went up the valley of Vesfjorddal
half-way to the falls of the Rjukan. The next day they went to Moel and Lake Tinn. Once they were even absent twenty-four hours. This time they prolonged their excursion to Bamble, where the professor made the acquaintance of Farmer Helmboe and his daughter Siegfrid. What a cordial welcome the latter gave to her friend Hulda, and what words of tenderness she found to console her!

Here, too, Sylvius Hogg did all in his power to encourage these worthy people. He had written to the Navy Department, and the government was investigating the matter. Ole would certainly return at no distant day. He might drop in upon them, indeed, at any moment. No; the wedding would not have to be postponed more than six weeks! The good man seemed so thoroughly convinced of all this, that his auditors were influenced rather by his firm conviction than by his arguments.

This visit to the Helmboe family did the young Hansens good, and they returned home much calmer than they went away.

At last the fifteenth of June came. The "Viking" was now exactly one month overdue; and as the distance from Newfoundland to the coast of Norway is comparatively short, this delay was beyond all reason, even for a sailing-vessel.

Hulda seemed to have abandoned all hope; and her brother could not find a single word to say by way of encouragement. In the presence of these poor, unhappy creatures, the professor realized the utter futility of any well-meant attempt at consolation. Hulda and Joel crossed the threshold only to stand and gaze in the direction of Moel, or to walk up the road leading to Rjukanfos. Ole Kamp would probably come by the way of Bergen, but he might come by way of Christiania if the destination of the "Viking" had been changed. The sound of an approaching kariol, a hasty cry, the form of a man suddenly rounding a curve in the road made their hearts beat wildly; but all for naught. The good people of Dal were also eagerly watching. Not unfrequently they went half-way to meet the postman. Everybody was deeply interested, for the Hansen family was exceedingly popular in the neighborhood; and poor Ole was almost a child of the Telemark. But no letter came from Bergen or Christiania giving news of the absent one.

Nothing new occurred on the sixteenth. Sylvius Hogg could scarcely restrain his restlessness. He began to understand that he must proceed to act in person, so he announced to his friends that if no news was received on the following day he should go to Christiania and satisfy himself that nothing had been left undone. Of course, it was hard for him to leave Hulda and Joel, but there was no help for it; and he would return as soon as his task was accomplished.

On the seventeenth a greater part of the most wretched day they had ever spent together passed without bringing any new developments. It had rained incessantly since early morning; the wind was blowing a gale, and the rain dashed fiercely against the window on the side of the house nearest the Maan.

Seven o'clock came. They had just finished dinner, which had been eaten in profound silence, as if in a house of mourning. Even Sylvius Hogg had been unable to keep up the conversation. What could he say that he had not already said a hundred times before?

"I shall start for Christiania to-morrow morning," he remarked at last. "Joel, I wish you would procure a kariol and drive me to Moel."

"Very well, Mr. Sylvius. But wouldn't you like me to accompany you further?"

The professor shook his head, with a meaning glance at Hulda, for he did not want to see her separated from her brother.

Just then a sound, which was as yet scarcely audible, was heard on the road in the direction of Moel. They all listened breathlessly. Soon all doubts vanished. It was the sound of an approaching kariol coming swiftly toward Dal. Was the occupant some traveler who intended to spend the night at the inn? This was scarcely probable, as tourists rarely arrived at so late an hour.

Hulda sprung up trembling in every limb. Joel went to the door, opened it and looked out.

The noise grew louder. It was certain the clatter of horse's hoofs blended with, the roll of kariol wheels; but the storm without was so violent that Joel was obliged to close the door.

Sylvius Hogg tramped up and down the room in a perfect fever of impatience. Joel and his sister held each other tightly by the hand.

The kariol could not be more than twenty yards from the house now. Would it pause or go by?

The hearts of all three throbbed with suffocation.

The kariol stopped. They heard a voice calling; but it was not the voice of Ole Kamp!

Almost immediately some one rapped at the door.

Joel opened it.

A man stood upon the threshold.

"Is Mr. Sylvius Hogg here?" he asked.
"I am he," replied the professor. "Who are you, my friend?"
"A messenger sent you by the Secretary of the Navy at Christiania."
"Have you a letter for me?"
"Yes, sir; here it is."
And the messenger handed him a large envelope sealed with the Government seal.
Hulda's limbs tottered under her, and her brother sprung forward and placed her in a chair. Neither of them dared to ask Sylvius Hogg to open the letter.
At last he broke the seal and read the following:
"MR. PROFESSOR,—In reply to your last letter, I inclose a paper picked up at sea on the 3d instant by a Danish vessel. Unfortunately this discovery dispels any lingering doubt as to the fate of the 'Viking'—"
Sylvius Hogg, without taking time to read the rest of the letter, drew the paper from the envelope. He looked at it; he turned it over.
It was a lottery ticket bearing the number 9672.
On the other side of the ticket were the following lines:
"May 3d.
"DEAREST HULDA,—The 'Viking' is going down. I have only this ticket left of all I hoped to bring back to you. I intrust it to God's hands, hoping that it may reach you safely; and as I shall not be there, I beseech you to be present at the drawing. Accept the ticket with my last thought of you. Hulda, do not forget me in your prayers. Farewell, my beloved, farewell!
"OLE KAMP."

CHAPTER XII.

So this was the young man's secret! This was the source from which he expected to derive a fortune for his promised bride—a lottery ticket, purchased before his departure. And as the 'Viking' was going down, he inclosed the ticket in a bottle and threw it into the sea with the last farewell for Hulda.

This time Sylvius Hogg was completely disconcerted. He looked at the letter, then at the ticket. He was speechless with dismay. Besides, what could he say? How could any one doubt that the 'Viking' had gone down with all on board?

While Sylvius Hogg was reading the letter Hulda had nerved herself to listen, but after the concluding words had been read, she fell back unconscious in Joel's arms, and it became necessary to carry her to her own little chamber, where her mother administered restoratives. After she recovered consciousness she asked to be left alone for awhile, and she was now kneeling by her bedside, praying for Ole Kamp's soul.

Dame Hansen returned to the hall. At first she started toward the professor, as if with the intention of speaking to him, then suddenly turning toward the staircase, she disappeared.

Joel, on returning from his sister's room, had hastily left the house. He experienced a feeling of suffocation in the dwelling over which such a dense cloud of misfortune seemed to be hanging. He longed for the outer air, the fierce blast of the tempest, and spent a part of the night in wandering aimlessly up and down the banks of the Maan.

Sylvius Hogg was therefore left alone. Stunned by the stroke at first, he soon recovered his wonted energy. After tramping up and down the hall two or three times, he paused and listened, in the hope that he might hear a summons from the young girl, but disappointed in this, he finally seated himself at the table, and abandoned himself to his thoughts.

"Can it be possible that Hulda is never to see her betrothed again?" he said to himself. "No; such a misfortune is inconceivable. Everything that is within me revolts at the thought! Even admitting that the 'Viking' has gone to the bottom of the ocean, what conclusive proof have we of Ole's death? I can not believe it. In all cases of shipwreck time alone can determine whether or not any one has survived the catastrophe. Yes; I still have my doubts, and I shall continue to have them, even if Hulda and Joel refuse to share them. If the 'Viking' really foundered, how does it happen that no floating fragments of the wreck have been seen at sea—at least nothing except the bottle in which poor Ole placed his last message, and with it all he had left in the world."

Sylvius Hogg had the ticket still in his hand, and again he looked at it, and turned it over and held it up between him and the waning light—this scrap of paper upon which poor Ole had based his hopes of fortune.

But the professor, wishing to examine it still more carefully, rose, listened again to satisfy himself that the poor girl upstairs was not calling her mother or brother, and then entered his room.

The ticket proved to be a ticket in the Christiania Schools Lottery—a very popular lottery in Norway at that time. The capital prize was one hundred thousand marks; the total value of the other prizes, ninety thousand marks, and the number of tickets issued, one million, all of which had been sold.
Ole Kamp's ticket bore the number 9672; but whether this number proved lucky or unlucky, whether the young sailor had any secret reason for his confidence in it or not, he would not be present at the drawing, which was to take place on the fifteenth of July, that is to say, in twenty-eight days; but it was his last request that Hulda should take his place on that occasion.

By the light of his candle, Sylvius Hogg carefully reread the lines written upon the back of the ticket, as if with the hope of discovering some hidden meaning.

The lines had been written with ink, and it was evident that Ole's hand had not trembled while tracing them. This showed that the mate of the 'Viking' retained all his presence of mind at the time of the shipwreck, and that he was consequently in a condition to take advantage of any means of escape that might offer, such as a floating spar or plank, in case the raging waters had not swallowed up everything when the vessel foundered.

Very often writings of this kind that are recovered from the sea state the locality in which the catastrophe occurred; but in this neither the latitude nor longitude were mentioned; nor was there anything to indicate the nearest land. Hence one must conclude that no one on board knew where the "Viking" was at the time of the disaster. Driven on, doubtless, by a tempest of resistless power, the vessel must have been carried far out of her course, and the clouded sky making a solar observation impossible, there had been no way of determining the ship's whereabouts for several days; so it was more than probable that no one would ever know whether it was near the shores of North America or of Iceland that the gallant crew had sunk to rise no more.

This was a circumstance calculated to destroy all hope, even in the bosoms of the most sanguine.

With some clow, no matter how vague, a search for the missing vessel would have been possible. A ship or steamer could be dispatched to the scene of the catastrophe and perhaps find some trace of it. Besides, was it not quite possible that one or more survivors had succeeded in reaching some point on the shores of the Arctic continent, and that they were still there, homeless, and destitute, and hopelessly exiled from their native land?

Such was the theory that gradually assumed shape in Sylvius Hogg's mind—a theory that it would scarcely do to advance to Joel and Hulda, so painful would the disappointment prove if it should be without foundation.

"And though the writing gives no clew to the scene of the catastrophe," he said to himself, "we at least know where the bottle was picked up. This letter does not state, but they must know at the Naval Department; and is it not an indication that might be used to advantage? By studying the direction of the currents and of the prevailing winds at the time of the shipwreck might it not be possible? I am certainly going to write again. Search must be made, no matter how small the chances of success. No; I will never desert poor Hulda! And until I have positive proofs of it I will never credit the death of her betrothed."

Sylvius Hogg reasoned thus; but at the same time he resolved to say nothing about the measures he intended to adopt, or the search he intended to urge on with all his influence. Hulda and her brother must know nothing about his writing to Christiania; moreover, he resolved to postpone indefinitely the departure which had been announced for the next day, or rather he would leave in a few days, but only for a trip to Bergen. There, he could learn from the Messrs. Help all the particulars concerning the "Viking," ask the opinion of the most experienced mariners, and decide upon the way in which search could best be made.

In the meantime, from information furnished by the Navy Department, the press of Christiania, then that of Norway, Sweden, and finally all Europe, gradually got hold of this story of a lottery ticket transformed into an important legal document. There was something very touching about this gift from a shipwrecked mariner to his betrothed.

The oldest of the Norwegian journals, the "Morgen-Blad," was the first to relate the story of the "Viking" and Ole Kamp; and of the thirty-seven other papers published in that country at the time, not one failed to allude to it in touching terms. The illustred "Nyhedsblad" published an ideal picture of the shipwreck. There was the sinking "Viking," with tattered sails and hull partially destroyed, about to disappear beneath the waves. Ole stood in the bow throwing the bottle containing his last message into the sea, at the same time commending his soul to God. In a luminous cloud in the dim distance a wave deposited the bottle at the feet of his betrothed. The whole picture was upon an enlarged representation of a lottery ticket bearing the number 9672 in bold relief. An unpretending conception, unquestionably, but one that could hardly fail to be regarded as a masterpiece in the land which still clings to legends of the Undines and Valkyries. Then the story was republished and commented upon in France and England, and even in the United States. The story of Hulda and Ole became familiar to every one through the medium of pencil and pen. This young Norwegian girl, without knowing it, held a prominent place in the sympathy and esteem of the public. The poor child little suspected the interest she had aroused, however; besides, nothing could have diverted her mind from the loss that engrossed her every thought.

This being the case, no one will be surprised at the effect produced upon both continents—an effect easily explained when we remember how prone we all are to superstition. A lottery ticket so providentially rescued from the waves could hardly fail to be the winning ticket. Was it not miraculously designated as the winner of the capital
prize? Was it not worth a fortune--the fortune upon which Ole Kamp had counted?

Consequently it is not surprising that overtures for the purchase of this ticket came from all parts of the country. At first, the prices offered were small, but they increased from day to day; and it was evident that they would continue to increase in proportion as the day of the drawing approached.

These offers came not only from different parts of Scandinavia, which is a firm believer in the active intervention of supernatural powers in all mundane matters--but also from foreign lands, and even from France.

Even the phlegmatic English grew excited over the matter, and subsequently the Americans, who are not prone to spend their money so unpractically. A host of letters came to Dal, and the newspapers did not fail to make mention of the large sums offered to the Hansen family. A sort of minor stock exchange seemed to have been established, in which values were constantly changing, but always for the better.

Several hundred marks were, in fact, offered for this ticket, which had only one chance in a million of winning the capital prize. This was absurd, unquestionably, but superstitious people do not stop to reason; and as their imaginations became more and more excited, they were likely to bid much higher.

This proved to be the case. One week after the event the papers announced that the amounts offered for the ticket exceeded one thousand, fifteen hundred and even two thousand marks. A resident of Manchester, England, had even offered one hundred pounds sterling, or two thousand five hundred marks; while an American, and a Bostonian at that, announced his willingness to give one thousand dollars for ticket No. 9672 of the Christiania Schools Lottery.

It is needless to say that Hulda troubled herself very little about the matter that was exciting the public to such an extent. She would not even read the letters that were addressed to her on the subject; but the professor insisted that she must not be left in ignorance of these offers, as Ole Kamp had bequeathed his right and title in this ticket to her.

Hulda refused all these offers. This ticket was the last letter of her betrothed.

No one need suppose that this refusal was due to an expectation that the ticket would win one of the prizes in the lottery. No. She saw in it only the last farewell of her shipwrecked lover--a memento she wished to reverently preserve. She cared nothing for a fortune that Ole could not share with her. What could be more touching than this worship of a souvenir?

On appraising her of these different offers, however, neither Sylvius Hogg nor Joel made any attempt to influence Hulda. She was to be guided entirely by her own wishes in the matter. They knew now what her wishes were. Joel, moreover, approved his sister's decision unreservedly. Ole Kamp's ticket must not be sold to any person at any price.

Sylvius Hogg went even further. He not only approved Hulda's decision, but he congratulated her upon it. Think of seeing this ticket sold and resold, passing from hand to hand, transformed, as it were, into a piece of merchandise, until the time appointed for the drawing arrived, when it would very probably become a worthless scrap of paper?

And Sylvius Hogg went even further. Was it, perhaps, because he was slightly superstitious? No. Still, if Ole Kamp had been there, the professor would probably have said to him:

"Keep your ticket, my boy, keep it! First, your ticket, and then you, yourself, were saved from the wreck. You had better wait and see what will come of it. One never knows; no, one never knows!"

And when Sylvius Hogg, professor of law, and; a member of the Storthing, felt in this way, one can hardly wonder at the infatuation of the public, nor that No. 9672 could be sold at an enormous premium.

So in Dame Hansen's household there was no one who protested against the young girl's decision--at least no one except the mother.

She was often heard to censure it, especially in Hulda's absence, a fact that caused poor Joel not a little mortification and chagrin, for he was very much afraid that she would not always confine herself to covert censure, and that she would urge Hulda to accept one of the offers she had received.

"Five thousand marks for the ticket!" she repeated again and again. "They offer five thousand marks for it!"

It was evident that Dame Hansen saw nothing either pathetic or commendable in her daughter's refusal. She was thinking only of this large sum of five thousand marks. A single word from Hulda would bring it into the family. She had no faith either in the extraordinary value of the ticket, Norwegian though she was; and to sacrifice fire thousand marks for a millionth chance of winning one hundred thousand was an idea too absurd to be entertained far a moment by her cool and practical mind.

All superstition aside, it is undeniable that the sacrifice of a certainty, under such conditions, was not an act of worldly wisdom; but as we said before, the ticket was not a lottery ticket in Hulda's eyes; it was Ole's last farewell, and it would have broken her heart to part with it.

Nevertheless, Dame Hansen certainly disapproved her daughter's resolve. It was evident, too, that her dissatisfaction was constantly increasing, and it seemed more than likely that at no very distant day she would endeavor to make Hulda change her decision. Indeed, she had already intimated as much to Joel, who had promptly taken his sister's part.
Sylvius Hogg was, of course, kept informed of what was going on. Such an attempt on the mother's part would only be another trial added to those Hulda was already obliged to endure, and he was anxious to avert it if possible. Joel mentioned the subject to him sometimes.

"Isn't my sister right in refusing?" he asked. "And am I not justified in upholding her in her refusal?"

"Unquestionably," replied Sylvius Hogg. "And yet, from a mathematical point of view, your mother is a million times right. But the science of mathematics does not govern everything in this world. Calculation has nothing to do with the promptings of the heart."

During the next two weeks they were obliged to watch Hulda very closely, for the state of her health was such as to excite serious anxiety. Fortunately loving care and attention were not wanting. At Sylvius Hogg's request, the celebrated Dr. Bock, a personal friend, came to Dal to see the young invalid. He could only prescribe rest, and quiet of soul, if that were possible; but the only sure means of curing her was Ole's return, and this means God only could provide. Still, Sylvius Hogg was untiring in his efforts to console the young girl. His words were ever words of hope, and strange as it may appear, Sylvius Hogg did not despair.

Thirteen days had now elapsed since the arrival of the ticket forwarded by the Navy Department. It was now the thirteenth of June. A fortnight more, and the drawing of the lottery would take place with great pomp in the main hall of the University of Christiania.

On the morning of the thirtieth day of June Sylvius Hogg received another letter from the Navy Department. This letter advised him to confer with the maritime authorities of Bergen, and authorized him to immediately organize an expedition to search for the missing "Viking."

The professor did not want Joel or Hulda to know what he intended to do, so he merely told them that he must leave them for a few days to attend to some business matters.

"Pray do not desert us, Mister Sylvius," said the poor girl.

"Desert you--you, whom I regard as my own children!" replied Sylvius Hogg.

Joel offered to accompany him, but not wishing him to know that he was going to Bergen, the professor would only allow him to go as far as Moel. Besides, it would not do for Hulda to be left alone with her mother. After being confined to her bed several days, she was now beginning to sit up a little, though she was still very weak and not able to leave her room.

At eleven o'clock the kariol was at the door of the inn, and after bidding Hulda good-bye, the professor took his seat in the vehicle beside Joel. In another minute they had both disappeared behind a large clump of birches at the turn in the road.

That same evening Joel returned to Dal.

END OF FIRST HALF.

CHAPTER XIII.

Meanwhile, Sylvius Hogg was hastening toward Bergen. His tenacious nature and energetic character, though daunted for a moment, were now reasserting themselves. He refused to credit Ole's death, nor would he admit that Hulda was doomed never to see her lover again. No, until the fact was established beyond a doubt, he was determined to regard the report as false.

But had he any information which would serve as a basis for the task he was about to undertake in Bergen? Yes, though we must admit that the clew was of a very vague nature.

He knew merely the date on which the bottle had been cast into the sea by Ole Kamp, and the date and locality in which it had been recovered from the waves. He had learned those facts through the letter just received from the Naval Department, the letter which had decided him to leave for Bergen immediately, in order that he might consult with Help Bros., and with the most experienced seamen of that port.

The journey was made as quickly as possible. On reaching Moel, Sylvius Hogg sent his companion back with the kariol, and took passage upon one of the birch-bark canoes that are used in traversing the waters of Lake Finn. Then, at Tinoset, instead of turning his steps toward the south--that is to say, in the direction of Bamble--he hired another kariol, and took the Hardanger route, in order to reach the gulf of that name in the shortest possible time. From there, a little steamer called the "Run" transported him to the mouth of the gulf, and finally, after crossing a network of fiords and inlets, between the islands and islets that stud the Norwegian coast, he landed at Bergen on the morning of the second of July.

This old city, laved by the waters of both the Logne and Hardanger, is delightfully situated in a picturesque region which would bear a striking resemblance to Switzerland if an artificial arm of the sea should ever conduct the waters of the blue Mediterranean to the foot of the Alps.

A magnificent avenue of ash trees leads to the town.
The houses, with their fantastic, pointed gables, are as dazzling in their whiteness as the habitations of Arabian cities, and are all congregated in an irregular triangle that contains a population of about thirty thousand souls. Its churches date from the twelfth century. Its tall cathedral is visible from afar to vessels returning from sea, and it is the capital of commercial Norway, though situated off the regular lines of travel, and a long distance from the two cities which rank first and second in the kingdom, politically--Christiania and Drontheim.

Under any other circumstances the professor would have taken great pleasure in studying this important city, which is Dutch rather than Norwegian in its aspect and manners. It had been one of the cities included in his original route, but since his adventure on the Maristien and his subsequent sojourn at Dal, his plans had undergone important changes.

Sylvius Hogg was no longer the traveling deputy, anxious to ascertain the exact condition of the country from a commercial as well as a political point of view. He was the guest of the Hansens, the debtor of Joel and Hulda, whose interests now outweighed all else in his estimation--a debtor who was resolved to pay his debt of gratitude at any cost, though he felt that what he was about to attempt for them was but a trifle.

On his arrival in Bergen, Sylvius Hogg landed at the lower end of the town, on the wharf used as a fish-market, but he lost no time in repairing to the part of the town known as the Tyske Bodrone quarter, where Help, Junior, of the house of Help Bros., resided.

It was raining, of course, for rain falls in Bergen on at least three hundred and sixty days of every year; but it would be impossible to find a house better protected against the wind and rain than the hospitable mansion of Help, Junior, and nowhere could Sylvius Hogg have received a warmer and more cordial welcome. His friend took possession of him very much as if he had been some precious bale of merchandise which had been consigned to his care, and which would be delivered up only upon the presentation of a formal order.

Sylvius Hogg immediately made known the object of his visit to Help, Junior. He inquired if any news had yet been received of the "Viking," and if Bergen mariners were really of the opinion that she had gone down with all on board. He also inquired if this probable shipwreck, which had plunged so many homes into mourning, had not led the maritime authorities to make some search for the missing vessel.

"But where were they to begin?" replied Help, Junior. "They do not even know where the shipwreck occurred."
"True, my dear Help, and for that very reason they should endeavor to ascertain."
"But how?"
"Why, though they do not know where the 'Viking' foundered, they certainly know where the bottle was picked up by the Danish vessel. So we have one valuable clew which it would be very wrong to ignore."
"Where was it?"
"Listen, my dear Help, and I will tell you."
Sylvius Hogg then apprised his friend of the important information which had just been received through the Naval Department, and the full permission given him to utilize it.

The bottle containing Ole Kamp's lottery-ticket had been picked up on the third of June, about two hundred miles south of Iceland, by the schooner "Christian," of Elsineur, Captain Mosselman, and the wind was blowing strong from the south-east at the time.

The captain had immediately examined the contents of the bottle, as it was certainly his duty to do, inasmuch as he might-have rendered very effectual aid to the survivors of the "Viking" had he known where the catastrophe occurred; but the lines scrawled upon the back of the lottery-ticket gave no clew, so the "Christian" could not direct her course to the scene of the shipwreck.

This Captain Mosselman was an honest man. Very possibly some less scrupulous person would have kept the ticket; but he had only one thought--to transmit the ticket to the person to whom it was addressed as soon as he entered port. Hulda Hansen, of Dal, that was enough. It was not necessary to know any more.

But on reaching Copenhagen, Captain Mosselman said to himself that it would perhaps be better to transmit the document through the hands of the Danish authorities, instead of sending it straight to the person for whom it was intended. This would be the safest, as well as the regular way. He did so, and the Naval Department at Copenhagen promptly notified the Naval Department at Christiania.

Sylvius Hogg's letter, asking for information in regard to the "Viking," had already been received, and the deep interest he took in the Hansens was well known. It was known, too, that he intended to remain in Dal some time longer, so it was there that the ticket found by the Danish sea-captain was sent, to be delivered into Hulda Hansen's hands by the famous deputy.

And ever since that time the public had taken a deep interest in the affair, which had not been forgotten, thanks to the touching details given by the newspapers of both continents.

Sylvius Hogg stated the case briefly to his friend Help, who listened to him with the deepest interest, and without once interrupting him. He concluded his recital by saying:
There is certainly one point about which there can be no possible doubt: this is, that on the third day of June, about one month after the departure from Saint-Pierre-Miquelon, the ticket was picked up two hundred miles south-west of Iceland.

"And that is all you know?"

"Yes, my dear Help, but by consulting some of the most experienced mariners of Bergen, men who are familiar with that locality, with the general direction of its winds, and, above-all, with its currents, will it not be a comparatively easy matter to decide upon the route followed by the bottle? Then, by calculating its probable speed, and the time that elapsed before it was picked up, it certainly would not be impossible to discover the spot at which it was cast into the sea by Ole Kamp, that is to say, the scene of the shipwreck."

Help, Junior, shook his head with a doubting air. Would not any search that was based upon such vague indications as these be sure to prove a failure? The shipowner, being of a decided, cool and practical turn of mind, certainly thought so, and felt it his duty to say as much to Sylvius Hogg.

"Perhaps it may prove a failure, friend Help," was the prompt rejoinder; "but the fact that we have been able to secure only vague information, is certainly no reason for abandoning the undertaking. I am anxious that nothing shall be left undone for these poor people to whom I am indebted for my life. Yes, if need be, I would not hesitate to sacrifice all I possess to find Ole Kamp, and bring him safely back to his betrothed, Hulda Hansen."

Then Sylvius Hogg proceeded to give a full account of his adventure on the Rjukanfos. He related the intrepid manner in which Joel and his sister had risked their own lives to save him, and how, but for their timely assistance, he would not have had the pleasure of being the guest of his friend Help that day.

His friend Help, as we said before, was an eminently practical man, but he was not opposed to useless and even impossible efforts when a question "of humanity was involved, and he finally approved what Sylvius Hogg wished to attempt.

"Sylvius," he said, "I will assist you by every means in my power. Yes, you are right. However small the chance of finding some survivor of the 'Viking' may be, and especially of finding this brave Ole whose betrothed saved your life, it must not be neglected."

"No, Help, no," interrupted the professor; "not if it were but one chance in a hundred thousand."

"So this very day, Sylvius, I will assemble all the most experienced seamen of Bergen in my office. I will send for all who have navigated or who are now navigating the ocean between Iceland and Newfoundland, and we will see what they advise us to do."

"And what they advise us to do we will do," added Sylvius Hogg, without an instant's hesitation. "I have the approval of the government. In fact, I am authorized to send one of its dispatch-boats in search of the 'Viking,' and I feel sure that no one will hesitate to take part in such a work."

"I will pay a visit to the marine bureau, and see what I can learn there," remarked Help, Junior.

"Would you like me to accompany you?"

"It is not necessary, and you must be fatigued."

"Fatigued! I--at my age?"

"Nevertheless, you had better rest until my return, my dear and ever-young Sylvius."

That same day there was a large meeting of captains of merchant and whaling vessels, as well as pilots, in the office of Help Bros.--an assemblage of men who were still navigating the seas, as well as of those who had retired from active service.

Sylvius Hogg explained the situation briefly but clearly. He told them the date--May 3d--on which the bottle had been cast into the sea by Ole Kamp, and the date--June 3d--on which it had been picked up by the Danish captain, two hundred miles south-west of Iceland.

The discussion that followed was long and serious. There was not one of these brave men who were not familiar with the currents of that locality, and upon the direction of these currents they must, of course, chiefly depend for a solution of the problem.

But it was an incontestable fact that at the time of the shipwreck, and during the interval that elapsed between the sailing of the "Viking" from Saint-Pierre-Miquelon, and the discovery of the bottle by the Danish vessel, constant gales from the south-east had disturbed that portion of the Atlantic. In fact, it was to one of these tempests that the catastrophe must be attributed. Probably the "Viking," being unable to carry sail in the teeth of the tempest, had been obliged to scud before the windy and it being at this season of the year that the ice from the polar seas begins to make its way down into the Atlantic, it was more than likely that a collision had taken place, and that the "Viking" had been crushed by a floating iceberg, which it was impossible to avoid.

Still, in that case, was it not more than probable that the whole, or a part, of the ship's crew had taken refuge upon one of these ice fields after having placed a quantity of provisions upon it? If they had really done so, the iceberg, having certainly been driven in a north-westerly direction by the winds which were prevailing at the time, it
was not unlikely that the survivors had been able to reach some point on the coast of Greenland, so it was in that
direction, and in those seas, that search should be made.

This was the unanimous opinion of these experienced mariners, and there could be no doubt that this was the
only feasible plan. But would they find aught save a few fragments of the "Viking" in case the vessel had been
crushed by some enormous iceberg? Could they hope to effect the rescue of any survivors?

This was more than doubtful, and the professor on putting the question perceived that the more competent could
not, or would not, reply. Still, this was no cause for inaction--they were all agreed upon that point--but action must
be taken without delay.

There are always several government vessels at Bergen, and one of the three dispatch-boats charged with the
surveillance of the western coast of Norway is attached to this port. As good luck would have it, that very boat was
now riding at anchor in the bay.

After making a note of the various suggestions advanced by the most experienced seamen who had assembled at
the office of Help, Junior, Sylvius Hogg went aboard the dispatch-boat "Telegraph," and apprised the commander of
the special mission intrusted to him by the government.

The commander received him very cordially, and declared his willingness to render all the assistance in his
power. He had become familiar with the navigation of the locality specified during several long and dangerous
voyages from the Lofoden Islands and Finmark to the Iceland and Newfoundland fisheries; so he would have
experience to aid him in the humane work he was about to undertake, as he fully agreed with the seamen already
consulted that it was in the waters between Iceland and Greenland that they must look for the survivors, or at least
for some trace of the "Viking." If he did not succeed there, he would, however, explore the neighboring shores, and
perhaps the eastern part of Baffin's Bay.

"I am all ready to start, sir," he added. "My coal and provisions are on board, my crew has been selected, and I
can set sail this very day."

"Thank you, captain," replied the professor, "not only for your promptness, but for the very kind reception you
have given me. But one question more: Can you tell me how long it will take you to reach the shores of Greenland?"

"My vessel makes about eleven knots an hour, and as the distance from Bergen to Greenland is only about
twenty degrees, I can count upon arriving there in less than a week."

"Make all possible haste, captain," replied Sylvius Hogg. "If any of the shipwrecked crew did survive the
catastrophe, two months have already elapsed since the vessel went down, and they are perhaps in a destitute and
even famishing condition upon some desert coast."

"Yes, there is no time to lose, Monsieur Hogg. I will start this very day, keep my vessel going at the top of her
speed, and as soon as I find any trace whatever I will inform the Naval Department at Christiania by a telegram from
Newfoundland."

"God-speed you, captain," replied Sylvius Hogg, "and may you succeed."

That same day the "Telegraph" set sail, followed by the sympathizing cheers of the entire population of Bergen,
and it was not without keen emotion that the kind-hearted people watched the vessel make its way down the
channel, and finally disappear behind the islands of the fiord.

But Sylvius Hogg did not confine his efforts to the expedition undertaken by the dispatch-boat "Telegraph." On
the contrary, he was resolved to multiply the chances of finding some trace of the missing "Viking." Would it not be
possible to excite a spirit of emulation in the captains of merchant vessels and fishing-smacks that navigated the
waters of Iceland and the Faroe Islands? Unquestionably. So a reward of two thousand marks was promised in the
name of the government to any vessel that would furnish any information in regard to the missing "Viking," and one
of five thousand marks to any vessel that would bring one of the survivors of the shipwreck back to his native land.

So, during the two days spent in Bergen Sylvius Hogg did everything in his power to insure the success of the
enterprise, and he was cheerfully seconded in his efforts by Help, Junior, and all the maritime authorities. M. Help
would have been glad to have the worthy deputy as a guest some time longer, but though Sylvius Hogg thanked him
cordially he declined to prolong his stay. He was anxious to rejoin Hulda and Joel, being afraid to leave them to
themselves too long, but Help, Junior, promised him that any news that might be received should be promptly
transmitted to Dal.

So, on the morning of the 4th, after taking leave of his friend Help, Sylvius Hogg re-embarked on the "Run" to
cross the fiord of the Hardanger, and if nothing unforeseen occurred he counted on reaching the Telemark by the
evening of the 5th.

CHAPTER XIV.
The day that Sylvius Hogg left Bergen proved an eventful one at the inn.
After the professor's departure the house seemed deserted. It almost seemed as if the kind friend of the young Hansens had taken away with him, not only the last hope, but the life of the family, and left only a charnel-house behind him.

During the two days that followed no guests presented themselves at the inn. Joel had no occasion to absent himself, consequently, but could remain with Hulda, whom he was very unwilling to leave alone with her own thoughts.

Dame Hansen seemed to become more and more a prey to secret anxiety. She seemed to feel no interest in anything connected with her children, not even in the loss of the "Viking." She lived a life apart, remaining shut up in her own room, and appearing only at meal-time. When she did address a word to Hulda or Joel it was only to reproach them directly or indirectly on the subject of the lottery-ticket, which neither of them felt willing to dispose of at any price. Offers for the ticket continued to pour in from every corner of the globe. A positive mania seemed to have seized certain brains. Such a ticket must certainly be predestined to win the prize of one hundred thousand marks--there could be no doubt of it, so said every one. A person would have supposed there was but one ticket in the lottery, and that the number of it was 9672. The Manchester man and the Bostonian were still at the head of the list. The Englishman had outbid his rival by a few pounds, but he, in turn, was soon distanced by an advance of several hundred dollars. The last bid was one of eight thousand marks--and it could be explained only as the result of positive madness, unless it was a question of national pride on this part of an American and an Englishman.

However this may have been Hulda refused all these offers, and her conduct excited the bitter disapproval of Dame Hansen.

"What if I should order you to sell this ticket? Yes, order you to sell it," she said to her daughter one day.
"I should be very sorry, mother, but I should be obliged to refuse."
"But if it should become absolutely necessary, what then?"
"But how can that be possible?" asked Joel.

Dame Hansen made no reply. She had turned very pale on hearing this straightforward question, and now withdrew, muttering some incoherent words.

"There is certainly something wrong," remarked Joel. "There must be some difficulty between mother and Sandgoist."
"Yes, brother, we must be prepared for some serious complications in the future."
"Have we not suffered enough during the past few weeks, my poor Hulda? What fresh catastrophe threatens us?"
"How long Monsieur Sylvius stays!" exclaimed Hulda, without paying any apparent heed to the question. "When he is here I feel less despondent."
"And yet, what can he do for us?" replied Joel.

What could there have been in Dame Hansen's past that she was unwilling to confide to her children? What foolish pride prevented her from revealing to them the cause of her disquietude? Had she any real cause to reproach herself? And on the other hand, why did she endeavor to influence her daughter in regard to Ole Kamp's ticket, and the price that was to be set upon it? Why did she seem so eager to dispose of it, or rather, to secure the money that had been offered for it? Hulda and Joel were about to learn.

On the morning of the 4th Joel escorted his sister to the little chapel where she went every morning to pray for the lost one. Her brother always waited for her, and accompanied her back to the house.

That day, on returning, they both perceived Dame Hansen in the distance, walking rapidly in the direction of the inn. She was not alone. A man was walking beside her--a man who seemed to be talking in a loud voice, and whose gestures were vehement and imperious.

Hulda and her brother both paused suddenly.
"Who is that man?" inquired Joel.
Hulda advanced a few steps.
"I know him," she said at last.
"You know him?"
"Yes, it is Sandgoist."
"Sandgoist, of Drammen, who came here during my absence?"
"Yes."
"And who acted in such a lordly way that he would seem to have mother, and us, too, perhaps, in his power?"
"The same, brother; and he has probably come to make us feel his power to-day."
"What power? This time I will know the object of his visit."

Joel controlled himself, though not without an evident effort, and followed his sister.

In a few moments Dame Hansen and Sandgoist reached the door of the inn. Sandgoist crossed the threshold first; then the door closed upon Dame Hansen and upon him, and both of them entered the large parlor.
As Joel and Hulda approached the house the threatening voice of Sandgoist became distinctly audible. They paused and listened; Dame Hansen was speaking now, but in entreating tones.

"Let us go in," remarked Joel.

Hulda entered with a heavy heart; Joel was trembling with suppressed anger and impatience.

Sandgoist sat enthroned in the big arm-chair. He did not even take the trouble to rise on the entrance of the brother and sister. He merely turned his head and stared at them over his spectacles.

"Ah! here is the charming Hulda, if I'm not mistaken," he exclaimed in a tone that incensed Joel even more deeply.

Dame Hansen was standing in front of the man in an humble almost cringing attitude, but she instantly straightened herself up, and seemed greatly annoyed at the sight of her children.

"And this is her brother, I suppose?" added Sandgoist.

"Yes, her brother," retorted Joel.

Then, advancing until within a few steps of the arm-chair, he asked, brusquely:

"What do you want here?"

Sandgoist gave him a withering look; then, in a harsh voice, and without rising, he replied:

"You will soon learn, young man. You happen in just at the right time. I was anxious to see you, and if your sister is a sensible girl we shall soon come to an understanding. But sit down, and you, too, young woman, had better do the same."

Sandgoist seemed to be doing the honors of his own house, and Joel instantly noted the fact.

"Ah, ha! you are displeased! What a touchy young man you seem to be!"

"I am not particularly touchy that I know of, but I don't feel inclined to accept civilities from those who have no right to offer them."

"Joel!" cried Dame Hansen.

"Brother, brother!" exclaimed Hulda, with an imploring look.

Joel made a violent effort to control himself, and to prevent himself from yielding to his desire to throw this coarse wretch out of the window, he retired to a corner of the room.

"Can I speak now?" inquired Sandgoist.

An affirmative sign from Dame Hansen was all the answer he obtained, but it seemed to be sufficient.

"What I have to say is this," he began, "and I would like all three of you to listen attentively, for I don't fancy being obliged to repeat my words."

That he spoke like a person who had an indisputable right to his own way was only too evident to each and every member of the party.

"I have learned through the newspapers," he continued, "of the misfortune which has befallen a certain Ole Kamp--a young seaman of Bergen--and of a lottery-ticket that he bequeathed to his betrothed, Hulda Hansen, just as his ship, the 'Viking,' was going down. I have also learned that the public at large feels convinced that this will prove the fortunate ticket by reason of the peculiar circumstances under which it was found. I have also learned that some very liberal offers for the purchase of this ticket have been received by Hulda Hansen."

He was silent for a moment, then:

"Is this true?" he asked.

"Yes, it is true," replied Joel, at last. "And what of it, if you please?"

"These offers are, in my opinion, the result of a most absurd and senseless superstition," continued Sandgoist, "but for all that, they will continue to be made, and to increase in amount, as the day appointed for the drawing approaches. Now, I am a business man myself, and I have taken it into my head that I should like to have a hand in this little speculation myself, so I left Drammen yesterday to come to Dal to arrange for the transfer of this ticket, and to beg Dame Hansen to give me the preference over all other would-be purchasers."

Hulda was about to make Sandgoist the same answer she had given to all offers of this kind, though his remarks had not been addressed directly to her, when Joel checked her.

"Before replying, I should like to ask Monsieur Sandgoist if he knows to whom this ticket belongs?" he said haughtily.

"To Hulda Hansen, I suppose."

"Very well; then it is to Hulda Hansen that this application should be addressed."

"My son!" hastily interposed Dame Hansen.

"Let me finish, mother," continued Joel. "This ticket belonged originally to our cousin, Ole Kamp, and had not Ole Kamp a perfect right to bequeath it to his betrothed?"

"Unquestionably," replied Sandgoist.
"Then it is to Hulda Hanson that you must apply, if you wish to purchase it."

"So be it, Master Formality," retorted Sandgoist. "I now ask Hulda to sell me this ticket Number 9672 that Ole Kamp bequeathed to her."

"Monsieur Sandgoist," the young girl answered in firm but quiet tones, "I have received a great many offers for this ticket, but they have been made in vain. I shall say to you exactly what I have said to others. If my betrothed sent me this ticket with his last farewell upon it it was because he wished me to keep it, so I will not part with it at any price."

Having said this Hulda turned, as if to leave the room, evidently supposing that the conversation so far as she was concerned had been terminated by her refusal, but at a gesture from her mother she paused.

An exclamation of annoyance had escaped Dame Hansen, and Sandgoist's knitted brows and flashing eyes showed that anger was beginning to take possession of him.

"Yes, remain, Hulda," said he. "This is not your final answer. If I insist it is because I certainly have a right to do so. Besides, I think I must have stated the case badly, or rather you must have misunderstood me. It is certain that the chances of this ticket have not increased because the hand of a shipwrecked seaman placed it in a bottle and it was subsequently recovered; still, the public seldom or never reasons, and there is not the slightest doubt that many persons desire to become the owners of it. They have already offered to purchase it, and other offers are sure to follow. It is simply a business transaction, I repeat, and I have come to propose a good trade to you."

"You will have some difficulty in coming to an understanding with my sister, sir," replied Joel, ironically.

"When you talk business to her she replies with sentiment."

"That is all idle talk, young man," replied Sandgoist. "When my explanation is concluded you will see that however advantageous the transaction may be to me it will be equally so to her. I may also add that it will be equally so to her mother, Dame Hansen, who is personally interested in the matter."

Joel and Hulda exchanged glances. Were they about to learn the secret Dame Hansen had so long concealed from them?

"I do not ask that this ticket shall be sold to me for what Ole Kamp paid for it," continued Sandgoist. No! Right or wrong, it has certainly acquired an increased financial value, and I am willing to make a sacrifice to become the owner of it."

"You have already been told that Hulda has refused much better offers than yours," replied Joel.

"Indeed!" exclaimed Sandgoist. "Much better offers, you say. How do you know?"

"Whatever your offer may be, my sister refuses it, and I approve of her decision."

"Ah! am I dealing with Joel or Hulda Hansen, pray?"

"My sister and I are one," retorted Joel. "It would be well for you to become satisfied of this fact, as you seem to be ignorant of it."

Sandgoist shrugged his shoulders, but without being at all disconcerted, for like a man who is sure of his arguments, he replied:

"When I spoke of the price I was willing to pay for the ticket, I ought to have told you that I could offer inducements which Hulda Hansen can hardly reject if she takes any interest in the welfare of her family."

"Indeed?"

"Yes, and it would be well for you, young man, to understand, in your turn, that I did not come to Dal to beg your sister to sell me this ticket. No, a thousand times no."

"For what, then?"

"I do not ask for it, I demand it. I will have it."

"And by what right?" exclaimed Joel, "and how dare you, a stranger, speak in this way in my mother's house?"

"By the right every man has to speak as he pleases, and when he pleases, in his own house," retorted Sandgoist.

"In his own house?"

Joel, in his indignation, stepped threateningly toward Sandgoist, who, though not easily frightened, sprung hastily out of his arm-chair. But Hulda laid a detaining hand upon her brother's arm, while Dame Hansen, burying her face in her hands, retreated to the other end of the room.

"Brother, look at her!" whispered the young girl.

Joel paused suddenly. A glance at his mother paralyzed him. Her very attitude revealed how entirely Dame Hansen was in this scoundrel's power.

Sandgoist, seeing Joel's hesitation, recovered his self-possession, and resumed his former seat.

"Yes, in his own house," he continued in a still more arrogant voice. "Ever since her husband's death, Dame Hansen has been engaging in unsuccessful speculations. After losing the small fortune your father left at his death, she was obliged to borrow money of a Christiania banker, offering this house as security for a loan of fifteen thousand marks. About a year ago I purchased the mortgage, and this house will consequently become my property--"
and very speedily--if I am not paid when this mortgage becomes due."

"When is it due?" demanded Joel.

"On the 20th of July, or eighteen days from now," replied Sandgoist. "Then, whether you like it or not, I shall be in my own house here."

"You will not be in your own house here until that date, even if you are not paid at that time," retorted Joel, "and I forbid you to speak as you have been doing in the presence of my mother and sister."

"He forbids me--me!" exclaimed Sandgoist. "But how about his mother--what does she say?"

"Speak, mother!" cried Joel, approaching Dame Hansen, and endeavoring to remove her hands from her face.

"Joel, my brother," exclaimed Hulda. "I entreat you, for my sake, to be calm."

Dame Hansen bowed her head upon her breast, not daring to meet her son's searching eyes. It was only too true that she had been endeavoring to increase her fortune by rash speculations for several years past. The small sum of money at her disposal had soon melted away, and she had been obliged to borrow at a high rate of interest. And now the mortgage had passed into the hands of this Sandgoist--a heartless and unprincipled man--a well-known usurer, who was heartily despised throughout the country. Dame Hansen, however, had seen him for the first time when he came to Dal to satisfy himself in regard to the value of the property.

This was the secret that had weighed so heavily upon her. This, too, explained her reserve, for she had not dared to confide in her children. This was the secret she had sedulously kept from those whose future she had blighted.

Hulda scarcely dared to think of what she had just heard. Yes, Sandgoist was indeed a master who had the power to enforce his will! The ticket he wished to purchase would probably be worth nothing a fortnight hence, and if she did not consent to relinquish it certain ruin would follow--their house would be sold over their heads, and the Hansen family would be homeless and penniless.

Hulda dared not even glance at Joel, but Joel was too angry to pay any heed to these threats. He could think only of Sandgoist, and if the man continued to talk in this way the impetuous youth felt that he should not be able to control himself much longer.

Sandgoist, seeing that he had once more become master of the situation, grew even more arrogant and imperious in his manner.

"I want that ticket, and I intend to have it," he repeated. "In exchange for it I offer no fixed price, but I promise to extend the mortgage for one--two, or three years--Fix the date yourself, Hulda."

Hulda's heart was so deeply oppressed with anguish that she was unable to reply, but her brother answered for her.

"Ole Kamp's ticket can not be sold by Hulda Hansen. My sister refuses your offer, in spite of your threats. Now leave the house!"

"Leave the house," repeated Sandgoist. "I shall do nothing of the kind. If the offer I have made does not satisfy you I will go even further. In exchange for the ticket I offer you--I offer you--"

Sandgoist must certainly have felt an irresistible desire to possess this ticket--or at least he must have been convinced that the purchase would prove a most advantageous one to him, for he seated himself at a table upon which lay pen, ink, and paper, and a moment afterward he added:

"Here is what I offer."

It was a receipt for the amount of Dame Hansen's indebtedness--a receipt for the amount of the mortgage on the Dal property.

Dame Hansen cowered in her corner, with hands outstretched, and eyes fixed imploringly on her daughter.

"And now give me the ticket," cried Sandgoist, "I want it to-day--this very instant. I will not leave Dal without it"

As he spoke he stepped hastily toward the poor girl as if with the intention of searching her pockets, and wresting the ticket from her.

This was more than Joel could endure, especially when he heard Hulda's startled cry of "Brother! brother!"

"Get out of here!" he shouted, roughly. And seeing that Sandgoist showed no intention of obeying, the young man was about to spring upon him, when Hulda hastily interposed.

"Here is the ticket, mother," she cried.

Dame Hansen seized it, and as she exchanged it for Sandgoist's receipt her daughter sunk, almost fainting, into an arm-chair.

"Hulda! Hulda! Oh, what have you done?" cried Joel.

"What has she done," replied Dame Hansen. "Yes, I am guilty--for my children's sake I wished to increase the property left by their father, but instead I have reduced them to poverty. But Hulda has saved us all. That is what she has done. Thank you, Hulda, thank you."

Sandgoist still lingered. Joel perceived the fact.
“You are here still,” he continued, roughly. And springing upon Sandgoist he seized him by the shoulders and hustled him out-of-doors in spite of his protests and resistance.

CHAPTER XV.

Sylvius Hogg reached Dal on the evening of the following day. He did not say a word about his journey, and no one knew that he had been to Bergen. As long as the search was productive of no results he wished the Hansen family to remain in ignorance of it. Every letter or telegram, whether from Bergen or Christiania, was to be addressed to him, at the inn, where he intended to await further developments. Did he still hope? Yes, though it must be admitted that he had some misgivings.

As soon as he returned the professor became satisfied that some important event had occurred in his absence. The altered manner of Joel and Hulda showed conclusively that an explanation must have taken place between their mother and themselves. Had some new misfortunes befallen the Hansen household?

All this of course troubled Sylvius Hogg greatly. He felt such a paternal affection for the brother and sister that he could not have been more fond of them if they had been his own children. How much he had missed them during his short absence.

“They will tell me all by and by,” he said to himself. “They will have to tell me all. Am I not a member of the family?”

Yes; Sylvius Hogg felt now that he had an undoubted right to be consulted in regard to everything connected with the private life of his young friends, and to know why Joel and Hulda seemed even more unhappy than at the time of his departure. The mystery was soon solved.

In fact both the young people were anxious to confide in the excellent man whom they loved with a truly filial devotion, but they were waiting for him to question them. During his absence they had felt lonely and forsaken—the more so from the fact that Sylvius Hogg had not seen fit to tell them where he was going. Never had the hours seemed so long. It never once occurred to them that the journey was in any way connected with a search for the “Viking,” and that Sylvius Hogg had concealed the fact from them in order to spare them additional disappointment in case of failure.

And now how much more necessary his presence seemed to have become to them! How glad they were to see him, to listen to his words of counsel and hear his kind and encouraging voice. But would they ever dare to tell him what had passed between them and the Drammen usurer, and how Dame Hansen had marred the prospects of her children? What would Sylvius Hogg say when he learned that the ticket was no longer in Hulda's possession, and when he heard that Dame Hansen had used it to free herself from her inexorable creditor?

He was sure to learn these facts, however. Whether it was Sylvius Hogg or Hulda that first broached the subject, it would be hard to say, nor does it matter much. This much is certain, however, the professor soon became thoroughly acquainted with the situation of affairs. He was told of the danger that had threatened Dame Hansen and her children, and how the usurer would have driven them from their old home in a fortnight if the debt had not been paid by the surrender of the ticket.

Sylvius Hogg listened attentively to this sad story.

“You should not have given up the ticket,” he cried, vehemently; “no, you should not have done it.”

“How could I help it, Monsieur Sylvius?” replied the poor girl, greatly troubled.

“You could not, of course, and yet--Ah, if I had only been here!”

And what would Professor Sylvius Hogg have done had he been there? He did not say, however, but continued:

“Yes, my dear Hulda; yes, Joel, you did the best you could, under the circumstances. But what enrages me almost beyond endurance is the fact that this Sandgoist will profit greatly, no doubt, by this absurd superstition on the part of the public. If poor Ole's ticket should really prove to be the lucky one this unprincipled scoundrel will reap all the benefit. And yet, to suppose that this number, 9672, will necessarily prove the lucky one, is simply ridiculous and absurd. Still, I would not have given up the ticket, I think. After once refusing to surrender it to Sandgoist Hulda would have done better to turn a deaf ear to her mother's entreaties.”

The brother and sister could find nothing to say in reply. In giving the ticket to Dame Hansen, Hulda had been prompted by a filial sentiment that was certainly to be commended rather than censured. The sacrifice she had made was not one of more or less probable chance, but of Ole Kamp's last wishes and of her last memento of her lover.

But it was too late to think of this now. Sandgoist had the ticket. It belonged to him, and he would sell it to the highest bidder. A heartless usurer would thus coin money out of the touching farewell of the shipwrecked mariner. Sylvius Hogg could not bear the thought. It was intolerable to him.

He resolved to have a talk with Dame Hansen on the subject that very day. This conversation could effect no change in the state of affairs, but it had become almost necessary.
"So you think I did wrong, Monsieur Hogg?" she asked, after allowing the professor to say all he had to say on the subject.
"Certainly, Dame Hansen."
"If you blame me for having engaged in rash speculations, and for endangering the fortune of my children, you are perfectly right; but if you blame me for having resorted to the means I did to free myself, you are wrong. What have you to say in reply?"
"Nothing."
"But seriously, do you think that I ought to have refused the offer of Sandgoist, who really offered fifteen thousand marks for a ticket that is probably worth nothing; I ask you again, do you think I ought to have refused it?"
"Yes and no, Dame Hansen."
"It can not be both yes and no, professor; it is no. Under different circumstances, and if the future had appeared less threatening--though that was my own fault, I admit--I should have upheld Hulda in her refusal to part with the ticket she had received from Ole Kamp. But when there was a certainty of being driven in a few days from the house in which my husband died, and in which my children first saw the light, I could not understand such a refusal, and you yourself, Monsieur Hogg, had you been in my place, would certainly have acted as I did."
"No, Dame Hansen, no!"
"What would you have done, then?"
"I would have done anything rather than sacrifice a ticket my daughter had received under such circumstances."
"Do these circumstances, in your opinion, enhance the value of the ticket?"
"No one can say."
"On the contrary, every one does know. This ticket is simply one that has nine hundred and ninety-nine thousand nine hundred and ninety-nine chances of losing against one of winning. Do you consider it any more valuable because it was found in a bottle that was picked up at sea?"
Sylvius Hogg hardly knew what to say in reply to this straightforward question, so he reverted to the sentimental side of the question by remarking:
"The situation now seems to be briefly as follows: Ole Kamp, as the ship went down, bequeathed to Hulda the sole earthly possession left him, with the request that she should present it on the day of the drawing, provided, of course, that the ticket reached her; and now this ticket is no longer in Hulda's possession."
"If Ole Kamp had been here, he would not have hesitated to surrender his ticket to Sandgoist," replied Dame Hansen.
"That is quite possible," replied Sylvius Hogg; "but certainly no other person had a right to do it, and what will you say to him if he has not perished and if he should return to-morrow, or this very day?"
"Ole will never return," replied Dame Hansen, gloomily. "Ole is dead, Monsieur Hogg, dead, beyond a doubt."
"You can not be sure of that, Dame Hansen," exclaimed the professor. "In fact, you know nothing at all about it. Careful search is being made for some survivor of the shipwreck. It may prove successful; yes, even before the time appointed for the drawing of this lottery. You have no right to say that Ole Kamp is dead, so long as we have no proof that he perished in the catastrophe. The reason I speak with less apparent assurance before your children is that I do not want to arouse hopes that may end in bitter disappointment. But to you, Dame Hansen, I can say what I really think, and I can not, I will not believe that Ole Kamp is dead! No, I will not believe it!"
Finding herself thus worsted, Dame Hansen ceased to argue the question, and this Norwegian, being rather superstitious in her secret heart, hung her head as if Ole Kamp was indeed about to appear before her.
"At all events, before parting with the ticket," continued Sylvius Hogg, "there was one very simple thing that you neglected to do."
"What?"
"You should first have applied to your personal friends or the friends of your family. They would not have refused to assist you, either by purchasing the mortgage of Sandgoist, or by loaning you the money to pay it."
"I have no friends of whom I could ask such a favor."
"Yes, you have, Dame Hansen. I know at least one person who would have done it without the slightest hesitation."
"And who is that, if you please?"
"Sylvius Hogg, member of the Storting."
Dame Hansen, too deeply moved to reply in words, bowed her thanks to the professor.
"But what's done can't be undone, unfortunately," added Sylvius Hogg, "and I should be greatly obliged to you, Dame Hansen, if you would refrain from saying anything to your children about this conversation."
And the two separated.
The professor had resumed his former habits, and his daily walks as well. In company with Joel and Hulda, he
spent several hours every day in visiting the points of interest in and about Dal—not going too far, however, for fear of wearying the young girl. Much of his time, too, was devoted to his extensive correspondence. He wrote letter after letter to Bergen and Christiania, stimulating the zeal all who were engaged in the good work of searching for the "Viking." To find Ole seemed to be his sole aim in life now.

He even felt it his duty to again absent himself for twenty-four hours, doubtless for an object in some way connected with the affair in which Dame Hansen's family was so deeply interested; but, as before, he maintained absolute silence in regard to what he was doing or having done in this matter.

In the meantime Hulda regained strength but slowly. The poor girl lived only upon the recollection of Ole; and her hope of seeing him again grew fainter from day to day. It is true, she had near her the two beings she loved best in the world; and one of them never ceased to encourage her; but would that suffice? Was it not necessary to divert her mind at any cost? But how was her mind to be diverted from the gloomy thoughts that bound her, as it were, to the shipwrecked "Viking?"

The 12th of July came. The drawing of the Christiania Schools Lottery was to take place in four days. It is needless to say that Sandgoist's purchase had come to the knowledge of the public. The papers announced that the famous ticket bearing the number 9672 was now in the possession of M. Sandgoist, of Drammen, and that this ticket would be sold to the highest bidder; so, if M. Sandgoist was now the owner of the aforesaid ticket, he must have purchased it for a round sum of Hulda Hansen.

Of course this announcement lowered the young girl very decidedly in public estimation. What! Hulda Hansen had consented to sell the ticket belonging to her lost lover? She had turned this last memento of him into money?

But a timely paragraph that appeared in the "Morgen-Blad" gave the readers a true account of what had taken place. It described the real nature of Sandgoist's interference, and how the ticket had come into his hands. And now it was upon the Drammen usurer that public odium fell; upon the heartless creditor who had not hesitated to take advantage of the misfortunes of the Hansen family, and as if by common consent the offers which had been made while Hulda held the ticket were not renewed. The ticket seemed to have lost its supernatural value since it had been defiled by Sandgoist's touch, so that worthy had made but a bad bargain, after all, and the famous ticket, No. 9672, appeared likely to be left on his hands.

It is needless to say that neither Hulda nor Joel was aware of what had been said, and this was fortunate, for it would have been very painful to them to become publicly mixed up in an affair which had assumed such a purely speculative character since it came into the hands of the usurer.

Late on the afternoon of the 12th of July, a letter arrived, addressed to Professor Sylvius Hogg. This missive, which came from the Naval Department, contained another which had been mailed at Christiansand, a small town situated at the mouth of the Gulf of Christiania. It could hardly have contained any news, however, for Sylvius Hogg put it in his pocket and said nothing to Joel or his sister about its contents.

But when he bade them good-night on retiring to his chamber, he remarked:

"The drawing of the lottery is to take place in three days as you are, of course, aware, my children. You intend to be present, do you not?"

"What is the use, Monsieur Sylvius?" responded Hulda.

"But Ole wished his betrothed to witness it. In fact, he particularly requested it in the last lines he ever wrote, and I think his wishes should be obeyed."

"But the ticket is no longer in Hulda's possession," remarked Joel, "and we do not even know into whose hands it has passed."

"Nevertheless, I think you both ought to accompany me to Christiania to attend the drawing," replied the professor.

"Do you really desire it, Monsieur Sylvius?" asked the young girl.

"It is not I, my dear Hulda, but Ole who desires it, and Ole's wishes must be respected."

"Monsieur Sylvius is right, sister," replied Joel. "Yes; you must go. When do you intend to start, Monsieur Sylvius?"

"To-morrow, at day-break, and may Saint Olaf protect us!"

CHAPTER XVI.

The next morning Foreman Lengling's gayly painted kariol bore away Sylvius Hogg and Hulda, seated comfortably side by side. There was not room for Joel, as we know already, so the brave fellow trudged along on foot at the horse's head.

The fourteen kilometers that lay between Dal and Moel had no terrors for this untiring walker. Their route lay along the left bank of the Maan, down the charming valley of the Vesfjorddal--a narrow, heavily
wooded valley, watered by a thousand dashing cataracts. At each turn in the path, too, one saw appearing or disappearing the lofty summit of Gousta, with its two large patches of dazzling snow.

The sky was cloudless, the weather magnificent, the air not too cool, nor the sun too warm.

Strange to say, Sylvius Hogg's face seemed to have become more serene since his departure from the inn, though it is not improbable that his cheerfulness was a trifle forced, so anxious was he that this trip should divert Joel and Hulda from their sorrowful thoughts.

It took them only about two hours and a half to reach Moel, which is situated at the end of Lake Tinn. Here they were obliged to leave the kariol and take a small boat, for at this point a chain of small lakes begins. The kariol paused near the little church, at the foot of a water-fall at least five hundred feet in height. This water-fall, which is visible for only about one fifth of its descent, loses itself in a deep crevasse before being swallowed up by the lake.

Two boatmen were standing on the shore beside a birch-bark canoe, so fragile and unstable that the slightest imprudence on the part of its occupants would inevitably overturn it.

The lake was at its very best this beautiful morning. The sun had absorbed all the mist of the previous night, and no one could have asked for a more superb summer's day.

"You are not tired, my good Joel?" inquired the professor, as he alighted from the kariol.

"No, Monsieur Sylvius. You forget that I am accustomed to long tramps through the Telemark."

"That is true. Tell me, do you know the most direct route from Moel to Christiania?"

"Perfectly, sir. But I fear when we reach Tinoset, at the further end of the lake, we shall have some difficulty in procuring a kariol, as we have not warned them of our intended arrival, as is customary in this country."

"Have no fears, my boy," replied the professor: "I attended to that. You needn't be afraid that I have any intention of making you foot it from Dal to Christiania."

"I could easily do it if necessary," remarked Joel.

"But it will not be necessary, fortunately. Now suppose we go over our route again."

"Well, once at Tinoset, Monsieur Sylvius, we for a time follow the shores of Lake Fol, passing through Vik and Bolkesko, so as to reach Mose, and afterward Kongsberg, Hangsund, and Drammen. If we travel both night and day it will be possible for us to reach Christiania to-morrow afternoon."

"Very well, Joel. I see that you are familiar with the country, and the route you propose is certainly a very pleasant one."

"It is also the shortest."

"But I am not at all particular about taking the shortest route," replied Sylvius Hogg, laughing. "I know another and even more agreeable route that prolongs the journey only a few hours, and you, too, are familiar with it, my boy, though you failed to mention it."

"What route do you refer to?"

"To the one that passes through Bamble."

"Through Bamble?"

"Yes, through Bamble. Don't feign ignorance. Yes, through Bamble, where Farmer Helmboe and his daughter Siegfrid reside."

"Monsieur Sylvius!"

"Yes, and that is the route we are going to take, following the northern shore of Lake Fol instead of the southern, but finally reaching Kongsberg all the same."

"Yes, quite as well, and even better," answered Joel smiling.

"I must thank you in behalf of my brother, Monsieur Sylvius," said Hulda, archly.

"And for yourself as well, for I am sure that you too will be glad to see your friend Siegfrid."

The boat being ready, all three seated themselves upon a pile of leaves in the stern, and the vigorous strokes of the boatsmen soon carried the frail bark a long way from the shore.

After passing Hackenoes, a tiny hamlet of two or three houses, built upon a rocky promontory laved by the narrow fiord into which the Maan empties, the lake begins to widen rapidly. At first it is walled in by tall cliffs whose real height one can estimate accurately only when a boat passes their base, appearing no larger than some aquatic bird in comparison; but gradually the mountains retire into the background.

The lake is dotted here and there with small islands, some absolutely devoid of vegetation, others covered with verdure through which peep a few fishermen's huts. Upon the lake, too, may be seen floating countless logs not yet sold to the saw-mills in the neighborhood.

This sight led Sylvius Hogg to jestingly remark--and he certainly must have been in a mood for jesting:

"If our lakes are the eyes of Norway, as our poets pretend, it must be admitted that poor Norway has more than one beam in her eye, as the Bible says."

About four o'clock the boat reached Tinoset, one of the most primitive of hamlets. Still that mattered little,
Sylvius Hogg had no intention of remaining there even for an hour. As he had prophesied to Joel, a vehicle was awaiting them on the shore, for having decided upon this journey several weeks before, he had written to Mr. Benett, of Christiania, requesting him to provide the means of making it with the least possible fatigue and delay, which explains the fact that a comfortable carriage was in attendance, with its box well stocked with eatables, thus enabling the party to dispense with the stale eggs and sour milk with which travelers are usually regaled in the hamlets of the Telemark.

Tinset is situated near the end of Lake Tinn, and here the Maan plunges majestically into the valley below, where it resumes its former course.

The horses being already harnessed to the carriage, our friends immediately started in the direction of Bamble. In those days this was the only mode of travel in vogue throughout Central Norway, and through the Telemark in particular, and perhaps modern railroads have already caused the tourist to think with regret of the national kariol and Mr. Benett's comfortable carriages.

It is needless to say that Joel was well acquainted with this region, having traversed it repeatedly on his way from Dal to Bamble.

It was eight o'clock in the evening when Sylvius Hogg and his protégées reached the latter village. They were not expected, but Farmer Helmboe received them none the less cordially on that account. Siegfrid tenderly embraced her friend, and the two young girls being left alone together for a few moments, they had an opportunity to discuss the subject that engrossed their every thought.

"Pray do not despair, my dearest Hulda," said Siegfrid; "I have not ceased to hope, by any means. Why should you abandon all hope of seeing your poor Ole again? We have learned, through the papers, that search is being made for the 'Viking.' It will prove successful, I am certain it will, and I am sure Monsieur Sylvius has not given up all hope. Hulda, my darling, I entreat you not to despair."

Hulda's tears were her only reply, and Siegfrid pressed her friend fondly to her heart.

Ah! what joy would have reigned in Farmer Helmboe's household if they could but have heard of the safe return of the absent one, and have felt that they really had a right to be happy.

"So you are going direct to Christiania?" inquired the farmer.

"Yes, Monsieur Helmboe."

"To be present at the drawing of the great lottery?"

"Certainly."

"But what good will it do now that Ole's ticket is in the hands of that wretch, Sandgoist?"

"It was Ole's wish, and it must be respected," replied the professor.

"I hear that the usurer has found no purchaser for the ticket for which he paid so dearly."

"I too have heard so, friend Helmboe."

"Well, I must say that it serves the rascal right. The man is a scoundrel, professor, a scoundrel, and it serves him right."

"Yes, friend Helmboe, it does, indeed, serve him right."

Of course they had to take supper at the farm-house. Neither Siegfrid nor her father would allow their friends to depart without accepting the invitation, but it would not do for them to tarry too long if they wished to make up for the time lost by coming around by the way of Bamble, so at nine o'clock the horses were put to the carriage.

"At my next visit I will spend six hours at the table with you, if you desire it," said Sylvius Hogg to the farmer; "but to-day I must ask your permission to allow a cordial shake of the hand from you and the loving kiss your charming Siegfrid will give Hulda to take the place of the dessert."

This done they started.

In this high latitude twilight would still last several hours. The horizon, too, is distinctly visible for a long while after sunset, the atmosphere is so pure.

It is a beautiful and varied drive from Bamble to Kongsberg. The road passes through Hitterdal and to the south of Lake Fol, traversing the southern part of the Telemark, and serving as an outlet to all the small towns and hamlets of that locality.

An hour after their departure they passed the church of Hitterdal, an old and quaint edifice, surmounted with gables and turrets rising one above the other, without the slightest regard to anything like regularity of outline. The structure is of wood--walls, roofs and turrets--and though it strongly resembles a motley collection of pepper-boxes, it is really a venerable and venerated relic of the Scandinavian architecture of the thirteenth century.

Night came on very gradually--one of those nights still impregnated with a dim light which about one o'clock begins to blend with that of early dawn.

Joel, enthroned upon the front seat, was absorbed in his reflections. Hulda sat silent and thoughtful in the interior of the carriage. But few words were exchanged between Sylvius Hogg and the postilion, and these were almost
invariably requests to drive faster. No other sound was heard save the bells on the harness, the cracking of the whip, and the rumble of wheels over the stony road. They drove on all night, without once changing horses. It was not necessary to stop at Lísthus, a dreary station, situated in a sort of natural amphitheater, surrounded by pine-clad mountains. They passed swiftly by Tiness, too, a picturesque little hamlet, perched on a rocky eminence. Their progress was rapid in spite of the rather dilapidated condition of their vehicle, whose bolts and springs rattled and creaked dolorously, and certainly there was no just cause of complaint against the driver, though he was half asleep most of the time. But for all that, he urged his horses briskly on, whipping his jaded steeds mechanically, but usually aiming his blows at the off horse, for the near one belonged to him, while the other was the property of a neighbor.

About five o'clock in the morning Sylvius Hogg opened his eyes, stretched out his arms, and drank in huge draughts of the pungent odor of the pines.

They had now reached Kongsberg. The carriage was crossing the bridge over the Laagen, and soon it stopped in front of a house near the church, and not far from the water-fall of the Larbrù.

"If agreeable to you, my friends," remarked Sylvius Hogg, "we will stop here only to change horses, for it is still too early for breakfast. I think it would be much better not to make a real halt until we reach Drammen. There we can obtain a good meal, and so spare Monsieur Benett's stock of provisions."

This being decided the professor and Joel treated themselves to a tiny glass of brandy at the Hotel des Mines, and a quarter of an hour afterward, fresh horses being in readiness, they resumed their journey.

On leaving the city they were obliged to ascend a very steep hill. The road was roughly hewn in the side of the mountain, and from it the tall towers at the mouth of the silver mines of Kongsberg were distinctly visible. Then a dense pine forest suddenly hid everything else from sight—a pine forest through which the sun's rays never penetrate.

The town of Hangsund furnished fresh horses for the carriage. There our friends again found themselves on smooth level roads, frequently obstructed by turnpike gates, where they were obliged to pay a toll of five or six shillings. This was a fertile region, abounding in trees that looked like weeping willows, so heavily did the branches droop under their burden of fruit.

As they neared Drammen, which is situated upon an arm of Christiania Bay, the country became more hilly. About noon they reached the city with its two interminable streets, lined with gayly painted houses, and its wharves where the countless rafts left but a meager space for the vessels that come here to load with the products of the Northland.

The carriage paused in front of the Scandinavian Hotel. The proprietor, a dignified-looking personage, with a long, white beard, and a decidedly professional air, promptly appeared in the doorway of his establishment.

With that keenness of perception that characterizes inn-keepers in every country on the globe, he remarked:

"I should not wonder if these gentlemen and this young lady would like breakfast."

"Yes," replied Sylvius Hogg, "but let us have it as soon as possible."

"It shall be served immediately."

The repast was soon ready, and proved a most tempting one. Mention should especially be made of a certain fish, stuffed with a savory herb, of which the professor partook with evident delight.

At half past one o'clock the carriage, to which fresh horses had been harnessed, was brought to the hotel door, and our friends started down the principal street of Drammen at a brisk trot.

As they passed a small and dingy dwelling that contrasted strongly with the gayly painted houses around it, Joel could not repress a sudden movement of loathing.

"There is Sandgoist?" he exclaimed.

"So that is Sandgoist," remarked Sylvius Hogg. "He certainly has a bad face."

It was Sandgoist smoking on his door-step. Did he recognize Joel? It is impossible to say, for the carriage passed swiftly on between the huge piles of lumber and boards.

Next came a long stretch of level road, bordered with mountain ash-trees, laden with coral berries, and then they entered the dense pine forest that skirts a lovely tract of land known as Paradise Valley.

Afterward they found themselves confronted and surrounded by a host of small hills, each of which was crowned with a villa or farm-house. As twilight came on, and the carriage began to descend toward the sea through a series of verdant meadows, the bright red roofs of neat farm-houses peeped out here and there through the trees, and soon our travelers reached Christiania Bay, surrounded by picturesque hills, and with its innumerable creeks, its tiny ports and wooden piers, where the steamers and ferry-boats land.

At nine o'clock in the evening, and while it was still light, the old carriage drove noisily into the city through the already deserted streets.

In obedience to orders previously given by Sylvius Hogg, the vehicle drew up in front of the Hotel du Nord. It was there that Hulda and Joel were to stay, rooms having been engaged for them in advance. After bidding them an affectionate good-night the professor hastened to his own home, where his faithful servants, Kate and Fink, were
CHAPTER XVII.

Christiania, though it is the largest city in Norway, would be considered a small town in either England or France; and were it not for frequent fires, the place would present very much the same appearance that it did in the eleventh century. It was really rebuilt in 1624, by King Christian, however; and its name was then changed from Opsolo, as it had been previously called, to Christiania, in honor of its royal architect.

It is symmetrically laid out with broad, straight streets: and the houses are generally of gray stone or red brick. In the center of a fine garden stands the royal palace, known as the Oscarlot, a large quadrangular building, devoid of beauty, though built in the Ionic style of architecture. There are a few churches, in which the attention of worshipers is not distracted by any marvels of art; several municipal and government buildings, and one immense bazaar, constructed in the form of a rotunda, and stocked with both native and foreign goods.

There is nothing very remarkable about all this, but one thing the traveler can certainly admire without stint, and that is the site of the city, which is encircled by mountains so varied in shape and aspect as to form a most superb frame for Christiania.

Though the city is nearly flat in the new and wealthy quarter, the hilly portions, where the poorer classes live, are covered with brick or wooden huts of gaudy tints that astonish rather than charm the beholder.

Like all cities situated upon the water's edge, and upon fertile hills, Christiania is extremely picturesque, and it would not be unjust to compare its fiord to the famous Bay of Naples. Its shores, like those of Sorrento and Castellamare, are dotted with chalets and villas, half hidden in the dark, rich verdure of the pines, and enveloped in the light mist that imparts such a wonderful softness to northern landscapes.

Sylvius Hogg had at last returned to Christiania, though under conditions that he little dreamed of at the beginning of his interrupted journey. Oh, well, he would try that again another year! He could think only of Joel and Hulda Hansen now. Had there been time to prepare for them, he would certainly have taken them to his own home, where old Fink and old Kate would have made them heartily welcome; but under the circumstances, the professor had thought it advisable to take them to the Hotel du Nord, where, as protégées of Sylvius Hogg, they were sure of every attention, though he had carefully refrained from giving their names, for there had been so much talk about the brother and sister, and especially about the young girl, that it would be very embarrassing for her if her arrival in Christiania should become known.

It had been decided that Sylvius Hogg should not see them again until breakfast the next day, that is to say, between eleven and twelve o'clock, as he had some business matters to attend to that would engross his attention all the forenoon. He would then rejoin them and remain with them until three o'clock, the hour appointed for the drawing of the lottery.

Joel, as soon as he rose the next morning, tapped at the door of his sister's room, and being anxious to divert her thoughts, which were likely to be more melancholy than ever on such a day, he proposed that they should walk about the town until breakfast-time, and Hulda, to please her brother, consented.

It was Sunday, but though the streets of northern cities are usually quiet and well-nigh deserted on that day, an air of unusual bustle and animation pervaded the scene, for not only had the townspeople refrained from going to the country, as usual, but people from the surrounding towns and country was pouring in in such numbers that the Lake Miosen Railroad had been obliged to run extra trains.

The number of disinterested persons anxious to attend the drawing of the famous lottery was even greater than the number of ticket-holders, consequently the streets were thronged with people. Whole families, and even whole villages, had come to the city, in the hope that their journey would not be in vain. Only to think of it! one million tickets had been sold, and even if they should win a prize of only one or two hundred marks, how many good people would return home rejoicing!

On leaving the hotel, Joel and Hulda first paid a visit to the wharves that line the harbor. Here the crowd was not so great except about the taverns, where huge tankards of beer were being continually called for to moisten throats that seemed to be in a state of constant thirst.

As the brother and sister wandered about among the long rows of barrels and boxes, the vessels which were anchored both near and far from the shore came in for a liberal share of their attention, for might there not be some from the port of Bergen where the "Viking" would never more be seen?

"Ole! my poor Ole!" sighed Hulda, and hearing this pathetic exclamation, Joel led her gently away from the wharves, and up into the city proper.

There, from the crowds that filled the streets and the public squares, they overheard more than one remark in relation to themselves.
"Yes," said one man; "I hear that ten thousand marks have been offered for ticket 9672."
"Ten thousand!" exclaimed another. "Why, I hear that twenty thousand marks, and even more, have been offered."
"Mr. Vanderbilt, of New York, has offered thirty thousand."
"And Messrs. Baring, of London, forty thousand."
"And the Rothschilds, sixty thousand."
So much for public exaggeration. At this rate the prices offered would soon have exceeded the amount of the capital prize.

But if these gossips were not agreed upon the sum offered to Hulda Hansen, they were all of one mind in regard to the usurer of Drammen.

"What an infernal scoundrel Sandgoist must be. That rascal who showed those poor people no mercy."
"Yes; he is despised throughout the Telemark, and this is not the first time he has been guilty of similar acts of rascality."
"They say that nobody will buy Ole Kamp's ticket of him, now he has got it."
"No; nobody wants it now."
"That is not at all surprising. In Hulda Hansen's hands the ticket was valuable."
"And in Sandgoist's it seems worthless."
"I'm glad of it. He'll have it left on his hands, and I hope he'll lose the fifteen thousand marks it cost him."
"But what if the scoundrel should win the grand prize?"
"He? Never!"
"He had better not come to the drawing."
"No. If he does he will be roughly handled. There is no question about that."
These and many other equally uncomplimentary remarks about the usurer were freely bandied about.

It was evident that he did not intend to be present at the drawing, as he was at his house in Drammen the night before; but feeling his sister's arm tremble in his, Joel led her swiftly on, without trying to hear any more.

As for Sylvius Hogg, they had hoped to meet him in the street; but in this they were disappointed, though an occasional remark satisfied them that the public was already aware of the professor's return, for early in the morning he had been seen hurrying toward the wharves, and afterward in the direction of the Naval Department.

Of course, Joel might have asked anybody where Professor Sylvius Hogg lived. Any one would have been only too delighted to point out the house or even to accompany him to it; but he did not ask, for fear of being indiscreet, and as the professor had promised to meet them at the hotel, it would be better to wait until the appointed hour.

After a time Hulda began to feel very tired, and requested her brother to take her back to the hotel, especially as these discussions, in which her name was frequently mentioned, were very trying to her, and on reaching the house she went straight up to her own room to await the arrival of Sylvius Hogg.

Joel remained in the reading-room, on the lower floor, where he spent his time in mechanically looking over the Christiania papers. Suddenly he turned pale, a mist obscured his vision, and the paper fell from his hands.

In the "Morgen-Blad," under the heading of Maritime Intelligence, he had just seen the following cablegram from Newfoundland:

"The dispatch-boat 'Telegraph' has reached the locality where the 'Viking' is supposed to have been lost, but has found no trace of the wreck. The search on the coast of Greenland has been equally unsuccessful, so it may be considered almost certain that none of the unfortunate ship's crew survived the catastrophe."

CHAPTER XVIII.
"Good-morning, Mr. Benett. It is always a great pleasure to me when I have an opportunity to shake hands with you."
"And for me, professor, it is a great honor."
"Honor, pleasure--pleasure, honor," laughed the professor. "One balances the other."
"I am glad to see that your journey through Central Norway has been safely accomplished."
"Not accomplished, only concluded, for this year."
"But tell me, pray, all about those good people you met at Dal."
"Excellent people they were, friend Benett, in every sense of the word."
"From what I can learn through the papers they are certainly very much to be pitied."
"Unquestionably, Mr. Benett. I have never known misfortune to pursue persons so relentlessly."
"It seems so, indeed, professor; for right after the loss of the 'Viking' came that miserable Sandgoist affair."
"True, Mr. Benett."
"Still, Mr. Hogg, I think Hulda Hansen did right to give up the ticket under the circumstances."
"Indeed! and why, if you please?"
"Because it is better to secure fifteen thousand marks than to run a very great risk of gaining nothing at all."
"You talk like the practical business man and merchant that you are; but if you choose to look at the matter from another point of view, it becomes a matter of sentiment, and money exerts very little influence in such cases."
"Of course, Mr. Hogg, but permit me to remark that it is more than likely that your protégée has profited greatly by the exchange."
"Why do you think so?"
"But think of it. What does this ticket represent? One chance in a million of winning."
"Yes, one chance in a million. That is very small; it is true, Mr. Benett, very small."
"Yes; and consequently such a reaction has followed the late madness that it is said that this Sandgoist who purchased the ticket to speculate upon it has been unable to find a purchaser."
"So I have heard."
"And yet, if that rascally usurer should win the grand prize, what a shame it would be!"
"A shame, most assuredly, Mr. Benett; the word is not too strong--a shame, unquestionably."

This conversation took place while Sylvius Hogg was walking through the establishment of M. Benett--an establishment well known in Christiania, and indeed throughout Norway. It is difficult to mention an article that can not be found in this bazaar. Traveling-carriages, kariols by the dozen, canned goods, baskets of wine, preserves of every kind, clothing and utensils for tourists, and guides to conduct them to the remotest villages of Finmark, Lapland, or even to the North Pole. Nor is this all. M. Benett likewise offers to lovers of natural history specimens of the different stones and metals found in the earth, as well as of the birds, insects, and reptiles of Norway. It is well, too, to know that one can nowhere find a more complete assortment of the jewelry and bric-à-brac of the country than in his show-cases.

This gentleman is consequently the good angel of all tourists desirous of exploring the Scandinavian peninsula, and a man Christiania could scarcely do without.

"By the way, you found the carriage you had ordered waiting for you at Tinoset, did you not, professor?" he asked.
"Yes. Having ordered it through you, Monsieur Benett, I felt sure that it would be there at the appointed time."
"You are a sad flatterer, I fear, Monsieur Hogg. But I judged from your letter that there were to be three of you in the party."
"There were three of us, as I told you."
"And the others?"
"They arrived here safe and sound last evening, and are now waiting for me at the Hotel du Nord, where I am soon to join them."
"And these persons are--?"
"Precisely, Monsieur Benett, precisely; but I must beg you to say nothing about it. I don't wish their arrival to be noised abroad yet."
"Poor girl!"
"Yes, she has suffered terribly."
"And you wish her to be present at the drawing, though the ticket her betrothed bequeathed to her is no longer in her possession?"
"It is not my wish, Monsieur Benett, but that of Ole Kamp, and I say to you as I have said to others, Ole Kamp's last wishes would be obeyed."
"Unquestionably. What you do is not only right, but always for the best, professor."
"You are flattering me now, dear Monsieur Benett."
"Not at all. But it was a lucky day for them when the Hansen family made your acquaintance."
"Nonsense! it was a much more fortunate thing for me that they crossed my path."
"I see that you have the same kind heart still."
"Well, as one is obliged to have a heart it is best to have a good one, isn't it?" retorted the professor, with a genial smile. "But you needn't suppose that I came here merely in search of compliments," he continued. "It was for an entirely different object, I assure you."
"Believe me, I am quite at your service."
"You are aware, I suppose, that but for the timely intervention of Joel and Hulda Hansen, the Rjukanfos would never have yielded me up alive, and I should not have the pleasure of seeing you to-day?"
"Yes, yes, I know," replied Mr. Benett. "The papers have published full accounts of your adventure, and those courageous young people really deserve to win the capital prize."
"That is my opinion," answered Sylvius Hogg, "but as that is quite out of the question now, I am unwilling for my friend Hulda to return to Dal without some little gift as a sort of memento of her visit to Christiania."

"That is certainly an excellent idea, Mr. Hogg."

"So you must assist me in selecting something that would be likely to please a young girl."

"Very willingly," responded Mr. Benett. And he forthwith invited the professor to step into the jewelry department, for was not a Norwegian ornament the most charming souvenir that one could take away with one from Christiania and from Mr. Benett's wonderful establishment?

Such at least was the opinion of Sylvius Hogg when the genial merchant exhibited the contents of his show-cases.

"As I am no connoisseur in such matters I must be guided by your taste, Mr. Benett," he remarked.

They had before them a very large and complete assortment of native jewelry, which is usually valuable rather by reason of the elaborateness of its workmanship than any costliness of material.

"What is this?" inquired the professor.

"It is a ring with pendants which emit a very pleasant sound."

"It is certainly very pretty," replied Sylvius Hogg, trying the bauble on the tip of his little finger. "Lay it aside, Mr. Benett, and let us look at something else."

"Bracelets or necklaces?"

"At a little of everything, if you please, Mr. Benett--a little of everything. What is this?"

"A set of ornaments for the corsage. Look at that delicate tracery of copper upon a red worsted groundwork. It is all in excellent taste, though not very expensive."

"The effect is certainly charming, Mr. Benett. Lay the ornaments aside with the ring."

"But I must call your attention to the fact that these ornaments are reserved for the adornment of youthful brides on their wedding-day, and that--"

"By Saint Olaf! you are right, Mr. Benett, you are quite right. Poor Hulda! Unfortunately it is not Ole who is making her this present, but myself, and it is not to a blushing bride that I am going to offer it."

"True, true, Mr. Hogg."

"Let me look then at some jewelry suitable for a young girl. How about this cross, Mr. Benett?"

"It is to be worn as a pendant, and being cut in concave facets it sparkles brilliantly with every movement of the wearer's throat."

"It is very pretty, very pretty, indeed, and you can lay it aside with the other articles, Mr. Benett. When we have gone through all the show-cases we will make our selection."

"Yes, but--"

"What is the matter now?"

"This cross, too, is intended to be worn by Scandinavian brides on their marriage-day."

"The deuce! friend Benett. I am certainly very unfortunate in my selections."

"The fact is, professor, my stock is composed principally of bridal jewelry, as that meets with the readiest sale. You can scarcely wonder at that."

"The fact doesn't surprise me at all, Mr. Benett, though it places me in a rather embarrassing position."

"Oh, well, you can still take the ring you asked me to put aside."

"Yes, but I should like some more showy ornament."

"Then take this necklace of silver filigree with its four rows of chains which will have such a charming effect upon the neck of a young girl. See! it is studded with gems of every hue, and it is certainly one of the most quaint and curious productions of the Norwegian silversmiths."

"Yes, yes," replied Sylvius Hogg. "It is a pretty ornament, though perhaps rather showy for my modest Hulda. Indeed, I much prefer the corsage ornaments you showed me just now, and the pendant. Are they so especially reserved for brides that they can not be presented to a young girl?"

"I think the Storthing has as yet passed no law to that effect," replied Mr. Benett. "It is an unpardonable oversight, probably, but--"

"Well, well, it shall be attended to immediately, Mr. Benett. In the meantime I will take the cross and corsage ornaments. My little Hulda may marry some day after all. Good and charming as she is she certainly will not want for an opportunity to utilize these ornaments, so I will buy them and take them away with me."

"Very well, very well, professor."

"Shall we have the pleasure of seeing you at the drawing, friend Benett?"

"Certainly."

"I think it will be a very interesting affair."

"I am sure of it."
"But look here," exclaimed the professor, bending over a show-case, "here are two very pretty rings I did not notice before."

"Oh, they wouldn't suit you, Mr. Hogg. These are the heavily chased rings that the pastor places upon the finger of the bride and the groom during the marriage ceremony."

"Indeed? Ah, well, I will take them all the same. And now I must bid you good-bye, Mr. Benett, though I hope to see you again very soon."

Sylvius Hogg now left the establishment, and walked briskly in the direction of the Hotel du Nord. On entering the vestibule his eyes fell upon the words _Fiat lux_, which are inscribed upon the hall lamp.

"Ah! these Latin words are certainly very appropriate," he said to himself, "Yes. _Fiat lux! Fiat lux!_"

Hulda was still in her room, sitting by the window. The professor rapped at the door, which was instantly opened.

"Oh. Monsieur Sylvius!" cried the girl, delightedly.

"Yes, here I am, here I am! But never mind about Monsieur Sylvius now; our attention must be devoted to breakfast, which is ready and waiting. I'm as hungry as a wolf. Where is Joel?"

"In the reading-room."

"Well, I will go in search of him. You, my dear child, must come right down and join us."

Sylvius Hogg left the room and went to find Joel, who was also waiting for him, but in a state of mind bordering upon despair. The poor fellow immediately showed the professor the copy of the "Morgen-Blad," containing the discouraging telegram from the commander of the "Telegraph."

"Hulda has not seen it, I hope?" inquired the professor, hastily.

"No, I thought it better to conceal from her as long as possible what she will learn only too soon."

"You did quite right, my boy. Let us go to breakfast."

A moment afterward all three were seated at a table in a private dining-room, and Sylvius Hogg began eating with great zest.

An excellent breakfast it was, equal in fact to any dinner, as you can judge from the _menu_. Cold beer soup, salmon with egg sauce, delicious veal cutlets, rare roast beef, a delicate salad, vanilla ice, raspberry and cherry preserver—the whole moistened with some very fine claret.

"Excellent, excellent!" exclaimed Sylvius Hogg. "Why, we can almost imagine ourselves in Dame Hansen's inn at Dal."

And as his mouth was otherwise occupied his eyes smiled as much as it is possible for eyes to smile.

Joel and Hulda endeavored to reply in the same strain, but they could not, and the poor girl tasted scarcely anything. When the repast was concluded:

"My children," said Sylvius Hogg, "you certainly failed to do justice to a very excellent breakfast. Still, I can not compel you to eat, and if you go without breakfast you are likely to enjoy your dinner all the more, while I very much doubt if I shall be able to compete with you to-night. Now, it is quite time for us to leave the table."

The professor was already upon his feet, and he was about to take the hat Joel handed him, when Hulda checked him by saying:

"Monsieur Sylvius, do you still insist that I shall accompany you?"

"To witness the drawing? Certainly I do, my dear girl."

"But it will be a very painful ordeal for me."

"I admit it, but Ole wished you to be present at the drawing, Hulda, and Ole's wishes must be obeyed."

This phrase was certainly becoming a sort of refrain in Sylvius Hogg's mouth.

CHAPTER XIX.

What a crowd filled the large hall of the University of Christiana in which the drawing of the great lottery was to take place—a crowd that overflowed into the very court-yards, as even the immense building was not large enough to accommodate such a throng, and even into the adjoining streets, as the court-yards, too, proved inadequate toward the last.

On that Sunday, the 15th of July, it certainly was not by their calmness and phlegm that one would have recognized these madly excited people as Norwegians. Was this unwonted excitement due solely to the interest excited by this drawing, or was it due, at least, in a measure, to the unusually high temperature of the summer's day?

The drawing was to begin at three o'clock precisely. There were one hundred prizes—divided into three classes: 1st, ninety prizes ranging in value from one hundred to one thousand marks, and amounting in all to forty-five thousand marks; 2d, nine prizes of from one thousand to nine thousand marks, and amounting to forty-five thousand marks, and 3d, one prize of one hundred thousand marks.
Contrary to the rule that is generally observed in lotteries of this kind, the drawing of the grand prize was reserved for the last. It was not to the holder of the first ticket drawn that the grand prize would be given, but to the last, that is to say, the one hundredth. Hence, there would result a series of emotions and heart-throbbings of constantly increasing violence, for it had been decided that no ticket should be entitled to two prizes, but that having gained one prize, the drawing should be considered null and void if the same number were taken from the urns a second time.

All this was known to the public, and there was nothing for people to do but await the appointed hour; but to while away the tedious interval of waiting they all talked, and, chiefly, of the pathetic situation of Hulda Hansen. Unquestionably, if she had still been the possessor of Ole Kamp's ticket each individual present would have wished her the next best luck to himself.

Several persons having seen the dispatch published in the "Morgen-Blad," spoke of it to their neighbors, and the entire crowd soon became aware that the search of the "Telegraph" had proved futile. This being the case all felt that there was no longer any hope of finding even a vestige of the lost "Viking." Not one of the crew could have survived the shipwreck, and Hulda would never see her lover again.

Suddenly another report diverted the minds of the crowd. It was rumored that Sandgoist had decided to leave Drammen, and several persons pretended that they had seen him in the streets of Christiania. Could it be that he had ventured into this hall? If he had the wretch would certainly meet with a most unflattering reception. How audacious in him to think of such a thing as being present at this drawing! It was so improbable that it could not be possible. It must certainly be a false alarm, and nothing more.

About quarter past two quite a commotion was apparent in the crowd.

It was caused by the sudden appearance of Sylvius Hogg at the gate of the University. Every one knew the prominent part he had taken in the whole affair, and how, after having been received by Dame Hansen's children, he had endeavored to repay the obligation, so the crowd instantly divided to make way for him, and there arose from every side a flattering murmur, which Sylvius acknowledged by a series of friendly bows, and this murmur soon changed into hearty applause.

But the professor was not alone. When those nearest him stepped back to make way for him they saw that he had a young girl on his arm, and that a young man was following them.

A young man! a young girl! The discovery had very much the effect of an electric shock. The same thought flashed through every mind like a spark from an electric battery.

"Hulda! Hulda Hansen!"

This was the name that burst from every lip.

Yes, it was Hulda, so deeply agitated that she could hardly walk. Indeed, she certainly would have fallen had it not been for Sylvius Hogg's supporting arm. But it upheld her firmly--her, the modest, heart-broken little heroine of the fête to which Ole Kamp's presence only was wanting. How greatly she would have preferred to remain in her own little room at Dal! How she shrunk from this curiosity on the part of those around her, sympathizing though it was! But Sylvius Hogg had wished her to come, and she had done so.

"Room! room!" was heard on all sides.

And as Sylvius Hogg, and Hulda and Joel walked up the passage-way that had been cleared for them, as if by magic, how many friendly hands were outstretched to grasp theirs, how many kind and cordial words were lavished upon them, and with what delight Sylvius Hogg listened to these expressions of friendly feeling!

"Yes; it is she, my friends, my little Hulda, whom I have brought back with me from Dal," said he. "And this is Joel, her noble brother; but pray, my good friends, do not smother them!"

Though Joel returned every grasp with interest, the less vigorous hands of the professor were fairly benumbed by such constant shaking, but his eyes sparkled with joy, though a tear was stealing down his cheek; but--and the phenomenon was certainly well worthy the attention of ophthalmologists--the tear was a luminous one.

It took them fully a quarter of an hour to cross the court-yard, gain the main hall, and reach the seats that had been reserved for the professor. When this was at last accomplished, not without considerable difficulty, Sylvius Hogg seated himself between Hulda and Joel.

At precisely half past two o'clock, the door at the rear of the platform opened, and the president of the lottery appeared, calm and dignified, and with the commanding mien befitting his exalted position. Two directors followed, bearing themselves with equal dignity. Then came six little blue-eyed girls, decked out in flowers and ribbons, six little girls whose innocent hands were to draw the lottery.

Their entrance was greeted with a burst of loud applause that testified both to the pleasure all experienced on beholding the managers of the Christiania Lottery, and to the impatience with which the crowd was awaiting the beginning of the drawing.

There were six little girls, as we have remarked before, and there were also six urns upon a table that occupied
the middle of the platform. Each of these urns contained ten numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, representing the units, tens, hundreds, thousands, tens of thousands, and hundreds of thousands of the number one million. There was no seventh urn, for the million column, because it had been agreed that six ciphers drawn simultaneously should represent one million, as in this way the chances of success would be equally divided among all the numbers.

It had also been settled that the numbers should be drawn in succession from the urns, beginning with that to the left of the audience. The winning number would thus be formed under the very eyes of the spectators, first by the figure in the column of hundreds of thousands, then in the columns of tens of thousands, and so on until the column of units was reached, and the reader can judge with what emotion each person watched his chances of success increase with the drawing of each figure.

As the clock struck three, the president waved his hand, and declared the drawing begun.

The prolonged murmur that greeted the announcement lasted several minutes, after which quiet was gradually established.

The president rose, and though evidently much excited, made a short speech suited to the occasion, in which he expressed regret that there was not a prize for each ticket-holder; then he ordered the drawing of the first series of prizes, which consisted, as we have before remarked, of ninety prizes, and which would therefore consume a considerable length of time.

The six little girls began to perform their duties with automaton-like regularity, but the audience did not lose patience for an instant. It is true, however, that as the value of the prizes increased with each drawing, the excitement increased proportionately, and no one thought of leaving his seat, not even those persons whose tickets had been already drawn, and who had consequently nothing more to expect.

This went on for about an hour without producing any incident of particular interest, though people noticed that number 9672 had not been drawn, which would have taken away all chance of its winning the capital prize.

"That is a good omen for Sandgoist!" remarked one of the professor’s neighbors.

"It would certainly be an extraordinary thing if a man like that should meet with such a piece of good luck, even though he has the famous ticket," remarked another.

"A famous ticket, indeed!" replied Sylvius Hogg; "but don't ask me why, for I can't possibly tell you."

Then began the drawing of the second series of prizes, nine in number. This promised to be very interesting—the ninety-first prize being one of a thousand marks; the ninety-second, one of two thousand marks, and so on, up to the ninety-ninth, which was one of nine thousand. The third class, the reader must recollect, consisted of the capital prize only.

Number 72,521 won a prize of five thousand marks. This ticket belonged to a worthy seaman of Christiania, who was loudly cheered and who received with great dignity the congratulations lavished upon him.

Another number, 823,752, won a prize of six thousand marks, and how great was Sylvius Hogg's delight when he learned from Joel that it belonged to the charming Siegfried of Bamble.

An incident that caused no little excitement followed. When the ninety-seventh prize was drawn, the one consisting of seven thousand marks, the audience feared for a moment that Sandgoist was the winner of it. It was won, however, by ticket number 9627, which was within only forty-five points of Ole Kamp's number.

The two drawings that followed were numbers very widely removed from each other: 775 and 76,287.

The second series was now concluded, and the great prize of one hundred thousand marks alone remained to be drawn.

The excitement of the assemblage at that moment beggars all description.

At first there was a long murmur that extended from the large hall into the court-yards and even into the street. In fact, several minutes elapsed before quiet was restored. A profound silence followed, and in this calmness there was a certain amount of stupor—the stupor one experiences on seeing a prisoner appear upon the place of execution. But this time the still unknown victim was only condemned to win a prize of one hundred thousand marks, not to lose his head; that is, unless he lost it from ecstasy.

Joel sat with folded arms, gazing straight ahead of him, being the least moved, probably, in all that large assembly. Hulda, her head bowed upon her breast, was thinking only of her poor Ole. As for Sylvius Hogg—any attempt to describe the state of mind in which Sylvius Hogg found himself would be worse than useless.

"We will now conclude with the drawing of the one hundred thousand mark prize," announced the president.

"What a voice! It seemed to proceed from the inmost depths of this solemn-looking man, probably because he was the owner of several tickets which, not having yet been drawn, might still win the capital prize."

The first little girl drew a number from the left urn, and exhibited it to the audience.

"Zero!" said the president.

The zero did not create much of a sensation, however. The audience somehow seemed to have been expecting it.

"Zero!" said the president, announcing the figure drawn by the second little girl.
Two zeros. The chances were evidently increasing for all numbers between one and nine thousand nine hundred and ninety-nine, and every one recollected that Ole Kamp's ticket bore the number 9672.

Strange to say, Sylvius Hogg began to move restlessly about in his chair, as if he had suddenly been stricken with palsy.

"Nine," said the president, stating the number the third little girl had just extracted from the third urn.

Nine! That was the first figure on Ole Kamp's ticket.

"Six!" said the president.

For the fourth little girl was timidly displaying a six to all the eyes riveted upon her.

The chances of winning were now one out of a hundred for all the numbers from one to ninety-nine, inclusive.

Could it be that this ticket of Ole Kamp's was to be the means of placing one hundred thousand marks in that villainous Sandgoist's pocket. Really such a result would almost make one doubt the justice of God!

The fifth little girl plunged her hand into the next urn, and drew out the fifth figure.

"Seven!" said the president, in a voice that trembled so as to be scarcely audible, even to those seated on the first row of benches.

But those who could not hear were able to see for themselves, for the five little girls were now holding up the following figures to the gaze of the audience:

00967.

The winning number consequently must be one between 9670 and 9679, so there was now one chance out of ten for Ole Kamp's ticket to win the prize.

The suspense was at its height.

Sylvius Hogg had risen to his feet, and seized Hulda Hansen's hand. Every eye was riveted upon the young girl. In sacrificing this last moment of her betrothed, had she also sacrificed the fortune Ole Kamp had coveted for her and for himself?

The sixth little girl had some difficulty getting her hand into the urn, she was trembling so, poor thing! but at last the figure appeared.

"Two!" exclaimed the president, sinking back in his chair, quite breathless with emotion.

"Nine thousand six hundred and seventy two!" proclaimed one of the directors, in a loud voice.

This was the number of Ole Kamp's ticket, now in Sandgoist's possession. Everybody was aware of this fact, and of the manner in which the usurer had obtained it; so there was a profound silence instead of the tumultuous applause that would have filled the hall of the University if the ticket had still been in Hulda Hansen's hands.

And now was this scoundrel Sandgoist about to step forward, ticket in hand, to claim the prize?

"Number 9672 wins the prize of one hundred thousand marks!" repeated the director. "Who claims it?"

"I do."

Was it the usurer of Drammen who answered thus?

No. It was a young man--a young man with a pale face, whose features and whole person bore marks of prolonged suffering, but alive, really and truly alive.

On hearing this voice, Hulda sprung to her feet, uttering a cry that penetrated every nook and corner of the large hall; then she fell back fainting.

But the young man had forced his way impetuously through the crowd, and it was he who caught the unconscious girl in his arms.

It was Ole Kamp!

CHAPTER XX.

Yes; it was Ole Kamp! Ole Kamp, who, by a miracle, had survived the shipwreck of the "Viking." The reason the "Telegraph" had not brought him back to Europe can be easily explained. He was no longer in the region visited by the dispatch-boat, for the very good reason that he was already on his way to Christiania on board the vessel that had rescued him.

This is what Sylvius Hogg was telling. This is what he repeated to all who would listen to him. And what a crowd of listeners he had! This is what he related with the triumphant accents of a conqueror! Those around him repeated it to those who were not fortunate enough to be near him, and the good news flew from group to group until it reached the crowd that filled the court-yard and the neighboring streets.

In a few moments, all Christiania knew that the young mate of the "Viking" had returned, and that he had won the grand prize of the Schools Lottery.

It was a fortunate thing that Sylvius Hogg was acquainted with the whole story, as Ole certainly could not have told it, for Joel nearly smothered him in his embrace while Hulda was regaining consciousness.
"Hulda! dearest Hulda!" said Ole. "Yes, it is I--your betrothed--soon to be your husband!"

"Yes, soon, my children, very soon!" exclaimed Sylvius Hogg. "We will leave this very evening for Dal. And if such a thing was never seen before, it will be seen now. A professor of law, and a member of the Storthing will be seen dancing at a wedding like the wildest youth in the Telemark."

But how had Sylvius Hogg become acquainted with Ole Kamp's history? Simply through the last letter that the Naval Department had addressed to him at Dal. In fact this letter--the last he had received, and one whose receipt he had not mentioned to any one--contained another letter, dated from Christiansand. This second letter stated that the Danish brig "Genius" had just reached Christiansand, with several survivors of the "Viking" on board, among them the young mate, Ole Kamp, who would arrive in Christiania three days afterward.

The letter from the Naval Department added that these shipwrecked men had suffered so much that they were still in a very weak condition, and for this reason Sylvius Hogg had decided not to say anything to Hulda about her lover's return. In his response he had also requested the most profound secrecy in regard to this return--and in compliance with this request the facts had been carefully kept from the public.

The fact that the "Telegraph" had found no traces nor survivors of the "Viking" can also be easily explained.

During a violent tempest the vessel--which had become partially disabled--being obliged to scud along before the wind in a north-westerly direction, finally found herself about two hundred miles from the southern coast of Iceland. During the nights of the third and fourth of May the worst nights of the gale--it collided with one of those enormous icebergs that drift down from the shores of Greenland. The shock was terrible, so terrible, indeed, that the "Viking" went to pieces five minutes afterward.

It was then that Ole hastily penned his farewell message to his betrothed, and after inclosing it in a bottle, cast it into the sea.

Most of the "Viking's" crew, including the captain, perished at the time of the catastrophe, but Ole Kamp and four of his comrades succeeded in leaping upon the iceberg, just as the vessel went down; but their death would have been none the less certain if the terrible gale had not driven the mass of ice in a north-westerly direction. Two days afterward, exhausted and nearly dead with hunger, these survivors of the catastrophe were cast upon the southern coast of Greenland--a barren and deserted region--but where they nevertheless managed to keep themselves alive through the mercy of God.

If help had not reached them in a few days, it would have been all over with them, however; for they had not strength to reach the fisheries, or the Danish settlements on the other coast.

Fortunately the brig "Genius," which had been driven out of her course by the tempest, happened to pass. The shipwrecked men made signals to her. These signals were seen, and the men were saved.

The "Genius," delayed by head-winds, was a long time in making the comparatively short voyage between Greenland and Norway, and did not reach Christiansand until the 12th of July, nor Christiania until the morning of the 15th.

That very morning Sylvius Hogg went aboard the vessel. There he found Ole, who was still very weak, and told him all that had taken place since the arrival of his last letter, written from Saint-Pierre-Miquelon, after which he took the young sailor home with him, though not without having requested the crew of the "Genius" to keep the secret a few hours longer. The reader knows the rest.

It was then decided that Ole Kamp should attend the drawing of the lottery. But would he be strong enough to do it?

Yes; his strength would be equal to the ordeal, for was not Hulda to be there? But had he still any interest in this drawing? Yes, a hundred times, yes; both on his own account and that of his betrothed, for Sylvius Hogg had succeeded in getting the ticket out of Sandgoist's hands, having repurchased it from him at the same price the usurer had given for it, for Sandgoist was only too glad to dispose of it at that price now there were no more bidders for it.

"It was not for the sake of an improbable chance of gain that I wished to restore it to Hulda, my brave Ole," Sylvius Hogg remarked, as he gave him the ticket; "but because it was a last farewell you had addressed to her at the moment when you believed all was lost."

And now it seemed almost as if Professor Sylvius Hogg had been inspired of Heaven, certainly much more so than Sandgoist, who was strongly tempted to dash his brains out against the wall when he learned the result of the drawing. And now there was a fortune of one hundred thousand marks in the Hansen family. Yes, one hundred thousand marks, for Sylvius Hogg absolutely refused to take back the money he had paid to secure possession of Ole Kamp's ticket.

It was a dowry he was only too glad to offer little Hulda on her wedding-day.

Perhaps it will be considered rather astonishing that Ticket No. 9672, which had attracted so much attention from the public, should have happened to be the one that drew the grand prize.

Yes, it was astonishing, we must admit; but it was not impossible, and at all events, such was the fact.
Sylvius Hogg, Joel, and Hulda left Christiania that same evening. They returned to Dal by way of Bamble, as, of course, Siegfrid must be informed of her good fortune. As they passed the little church of Hitterdal, Hulda recollected the gloomy thoughts that beset her two days before, but the sight of Ole, seated beside her, speedily recalled her to the blissful reality.

By Saint Olaf! how beautiful Hulda looked under her bridal crown when she left the little chapel at Dal, four days afterward, leaning on her husband's arm. The brilliant festivities that followed were the talk of the whole Telemark for days and days afterward. And how happy everybody was! Siegfrid, the pretty bride-maid, her father, Farmer Helmboe, Joel, her affianced husband, and even Dame Hansen, who was no longer haunted by a fear of Sandgoist.

Perhaps the reader will ask whether all these friends and guests—Messrs. Help Bros., and hosts of others—came to witness the happiness of the newly married couple, or to see Sylvius Hogg, professor of law and a member of the Storthing, dance. It is hard to say. At all events he did dance, and very creditably, and after having opened the ball with his beloved Hulda, he closed it with the charming Siegfrid.

The next day, followed by the acclamations of the whole valley of Vesjorddal, he departed, but not without having solemnly promised to return for Joel's marriage, which was celebrated a few weeks afterward, to the great delight of the contracting parties.

This time the professor opened the ball with the charming Siegfrid, and closed it with his dear Hulda; and he has never given any display of his proficiency in the terpsichorean art since that time.

What happiness now reigned in this household which had been so cruelly tried! It was undoubtedly due in some measure, at least, to the efforts of Sylvius Hogg; but he would not admit it, and always declared:

"No, no; it is I who am still under obligations to Dame Hansen's children."

As for the famous ticket, it was returned to Ole Kamp after the drawing; and now, in a neat wooden frame, it occupies the place of honor in the hall of the inn at Dal. But what the visitor sees is not the side of the ticket upon which the famous number 9672 is inscribed, but the last farewell that the shipwrecked sailor, Ole Kamp, addressed to Hulda Hansen, his betrothed.

"TOPSY-TURVY"
BY JULES VERNE

CHAPTER I.
IN WHICH THE NORTH POLAR PRACTICAL ASSOCIATION RUSHES A DOCUMENT ACROSS TWO WORLDS

"Then Mr Maston, you pretend that a woman has never been able to make mathematical or experimental-science progress?"

"To my extreme regret, I am obliged to, Mrs. Scorbitt," answered J.T. Maston.

"That there have been some very remarkable women in mathematics, especially in Russia, I fully and willingly agree with you. But, with her cerebral conformation, she cannot become an Archimedes, much less a Newton."

"Oh, Mr. Maston, allow me to protest in the name of my sex."

"A sex, Mrs. Scorbitt, much too charming to give itself up to the higher studies."

"Well then, according to your opinion, no woman seeing an apple fall could have discovered the law of universal gravitation, so that it would have made her the most illustrious scientific person of the seventeenth century?"

"In seeing an apple fall, Mrs. Scorbitt, a woman would have but the single idea—to eat it—for example, our mother Eve."

"Pshaw, I see very well that you deny us all aptitude for high speculations."

"All aptitude? No, Mrs. Scorbitt, and in the meanwhile I would like to prove to you that since there are inhabitants on earth, and consequently women, there has not one feminine brain been found yet to which we owe any discoveries like those of Aristotle, Euclid, Kepler, Laplace, etc."

"Is this a reason? And does the past always prove the future?"

"Well, a person who has done nothing in a thousand years, without a doubt, never will do anything."

"I see now that I have to take our part, Mr. Maston, and that we are not worth much."

"In regard to being worth something"—began Mr. Maston, with as much politeness as he could command.

But Mrs. Evangelina Scorbitt, who was perfectly willing to be satisfied, answered promptly: "Each one has his or her lot in this world. You may remain the extraordinary calculator which you are, give yourself up entirely to the immense work to which your friends and yourself will devote their existence. I will be the woman in the case and bring to it my pecuniary assistance."
"And we will owe you an eternal gratitude," answered Mr. Maston.

Mrs. Evangelina Scorbitt blushed deliciously, for she felt, according to report, a singular sympathy for J.T. Maston. Besides, is not the heart of a woman an unfathomable gulf?

It was really an immense undertaking to which this rich American widow had resolved to devote large sums of money.

The scheme and its expected results, briefly outlined, were as follows:

The Arctic regions, accurately expressed, include according to Maltebrun, Roclus, Saint-Martin and other high authorities on geography:

1st. The northern Devon, including the ice-covered islands of Baffin’s Sea and Lancaster Sound.

2d. The northern Georgia, made up of banks and numerous islands, such as the islands of Sabine, Byam-Martin, Griffith, Cornwallis, and Bathurst.

3d. The archipelago of Baffin-Parry, including different parts of the circumpolar continent, embracing Cumberland, Southampton, James-Sommerset, Boothia-Felix, Melville, and other parts nearly unknown. Of this great area, crossed by the 78th parallel, there are over 1,400,000 square miles of land and over 700,000 square miles of water.

Within this area intrepid modern discoverers have advanced to the 84th-degree of latitude, reaching seacoasts lost behind the high chain of icebergs which may be called the Arctic Highlands, given names to capes, to mountains, to gulfs, to bays, etc. But beyond this 84th degree is mystery. It is the terra incognita of the chart-makers, and nobody knows as yet whether behind is hidden land or water for a distance of 6 degrees over impassable heaps of ice to the North Pole.

It was in the year 189- that the Government of the United States conceived the idea of putting the as yet undiscovered countries around the North Pole up at auction sale, and an American society had just been formed with the plan of purchasing this Arctic area and has asked the concession.

For several years, it is true, the Conference at Berlin had formulated a special plan for the guidance of such of the great powers as might wish to appropriate rights under the claim of colonization or the opening of commercial markets. This code was not acceptable to all, and the Polar region had remained without inhabitants. As that which belongs to none belongs to every one, the new Society did not wish merely to occupy it, but to purchase it outright, and so avoid further claims.

There never is in the United States any project so bold as not to find people to regard it as practical and back it with large amounts of money. This was well shown a few years ago when the Gun Club of Baltimore tried to send a projectile to the moon, hoping to obtain a direct communication with our satellite. Was it not enterprising Americans who furnished funds for this undertaking? Large amounts were necessary for this interesting trial and were promptly found. And, had it been realized, would we not have to thank the members of that club who had dared to take the risk of this super-human experience?

Should a Lesseps propose to dig a channel across Europe to Asia, from the banks of the Atlantic to the waters of China; should a well-sinker offer to bore from the curb-stones to reach the beds of molten silicates, to bring a supply to your fireplaces; should an enterprising electrician want to unite the scattered currents over the surface of the globe into one inexhaustible spring of heat and light; should a bold engineer conceive the idea of putting the excess of Summer temperature into large reservoirs for use during the Winter in our then frigid zones; should an anonymous society be founded to do any of a hundred different similar things, there would be found Americans ready to head the subscription lists and a regular stream of dollars would pour into the company safes as freely as the rivers of America flow into the ocean.

It is natural to expect that opinions were very varied when the news spread that the Arctic region was going to be sold at auction for the benefit of the highest and final bidder, particularly when no public subscription list was started in view of this purchase, as the capital had all been secured beforehand.

To use the Arctic region? Why, such an idea could "only be found in the brain of a fool," was the general verdict.

Nothing, however, was more serious than this project. A prospectus was sent to the papers of the two continents, to the European publications, to the African, Oceanic, Asiatic, and at the same time to the American journals. The American newspaper announcement read as follows:

To the Inhabitants of the Globe:

"The Arctic region situated within the eighty-fourth degree could not heretofore have been sold at auction for the very excellent reason that it had not been discovered as yet.

"The extreme points reached by navigators of different countries are the following:

"82° 45' N", reached by the English explorer, Parry, in July, 1847, on the twenty-eighth meridian, west, to the north of Spitzberg.
"83° 20' 28" , reached by Markham, with the English expedition of Sir John Georges Nares, in May, 1867, on the fiftieth meridian, west, in the north of Grinnell Land.

"83° 35' latitude, reached by Lockwood and Brainard, of the American expedition under Lieut. Greely, in May, 1882, on the forty-second meridian, west in the north of Nares Land.

The property extending from the eighty-fourth parallel to the pole on a surface of six degrees must be considered an undivided domain among the different states of the globe and not liable to be transformed into private property through a public auction sale.

"No one is compelled to live in this section, and the United States, relying on this non-ownership, has resolved to provide for the settlement and use of the domain. A company has been founded at Baltimore under the name of the North Polar Practical Association, representing officially the American Union. This Company intends to purchase the said country according to the common law, which should then give them an absolute right of proprietorship to the continent, islands, inlets, waters, rivers, etc.; in fact, of everything of which the Arctic region is composed. It is well understood by the law of nations that this title of proprietorship cannot be touched under any circumstances, no matter what shall happen.

"These conditions having been laid before all the powers, the Arctic region is to be sold at public auction for the benefit of the highest and last bidder. The date of the sale is set for the 3d of December of the current year, in the Auction Hall at Baltimore, Maryland, United States of America.

"Address for information Mr. W.S. Forster, Temporary Agent for the North Polar Practical Association, 93 High Street, Baltimore."

The reader may imagine how this communication was received by the public at large. Most people considered it as an absurd idea. Some only saw in it a sample of characteristic American humbug. Others thought that the proposition deserved to be fairly considered, and they pointed to the fact that the newly-founded company did not in any way appeal to the public for pecuniary help, but was willing to do everything with its own capital. It was with its own money that it wanted to purchase the Arctic region. The promoters did not try to put gold, silver, and bank-notes into their pockets and keep them for their own benefit. No, they only asked permission to pay for the land with their own money.

Some people who claimed to know said that the Company could have gone to work and taken possession of the country without any further ceremony, as it was their right as first occupants. But that is just where the difficulty came in, because until this time the Pole seemed to be forbidden ground to any one. Therefore, in case the United States should give possession of the country, the Company wanted a regular title to it without trouble about the matter in the future. It was unjust to blame them in any way, as in such an affair too many precautions cannot be taken. Besides, the circular had a paragraph which provided for all future chances. This paragraph was capable of so many interpretations that the exact meaning of it could not be rendered even by those who studied it closely. It was stipulated that the right of proprietorship should not depend upon any chances or changes in the country, no matter whether these changes were in the position or climate of the country.

What did this phrase mean? How could there ever be any changes in the geography or meteorology of a country like this one to be sold at auction? "Evidently," said some shrewd ones, "there must be something behind it."

The commentators had free swing and exercised it with a will. One paper in Philadelphia published the following pleasant notice:

"Undoubtedly the future purchasers of the Arctic region have information that a hard stone comet will strike this world under such conditions that its blow will produce geographic and meteorologic changes such as the purchasers of the Arctic region will profit by."

The idea of a blow with a hard stone planet was not accepted by serious people. In any case it was not likely that the would-be purchasers would have been informed of such a coming event.

"Perhaps," said a New Orleans newspaper, "the new Company thinks the precession of the equinox will in time favor the conditions likely to lead to the utilization of this domain."

"And why not? Because this movement modifies the direction of the axis of our spheroid," observed another correspondent.

"Really," answered the Scientific Review, of Paris. "As Adhemar has predicted in his book on the ocean currents, the precession of the equinox, combined with the movement of the earth’s axis, will be such as to modify in a long period the average temperature of the different parts of the earth and in the quantities of ice accumulated around the two poles."

"This is not certain," replied the Edinburgh Review, "and, besides, supposing that this would be the case, is not a lapse of 12,000 years necessary before Vega becomes our polar star in consequence of this movement and the situation of the Arctic territory consequently changed in regard to its climate?"

"Well," said the Copenhagen Dagblad, "in 12,000 years it will be time to make preparations, and before that time
risk nothing—not even a cent.”

It was possible that the Scientific Review was right with Adhemar. It was also very probable that the North Polar Practical Association had never counted on this modification of climate due to the precession of the equinox. In fact, nobody had clearly discovered what this last paragraph in the circular meant nor what kind of change it had in view.

Perhaps to know it, it would suffice to write to the Secretary of the new Society, or particularly its President. But the President was unknown. Unknown as much as the Secretary and all other members of the Council. It was not even known where the document came from. It was brought to the offices of the New York newspapers by a certain William S. Forster, a codfish dealer of Baltimore, a member of the house of Ardrinell & Co. Everything was so quiet and mysterious in the matter that the best reporters could not make out what it was all about. This North Polar Association had been so anonymous that it was impossible even to give it a definite name.

If, however, the promoters of this speculation persisted in making their personnel an absolute mystery, their intention was clearly indicated by the document spread before the public of two worlds.

Really, after all, the question was the purchase of that part of the arctic regions bounded by the 84th degree, and of which the North Pole was the central point. Nothing very exact concerning this region was known. The modern discoverers who had been nearest to this parallel were Parry, Markham, Lockwood and Brainard. In regard to the other navigators of the northern seas they stopped far short of the above-mentioned point—such as Payez, in 1874, to 82° 15’ north of the land of Francis Joseph, of New Zemble; Leout, in 1870, to 72°74’ above Siberia; De Long in the Jeanette expedition, in 1879, to 78° 45’ around the islands which bear his name. Others went around New Siberia and Greenland to the end of the Cape Bismarck, but had not passed the 76th, 77th, or 78th degree of latitude. The North Polar Practical Association wanted then a country which had never been touched before by mankind or discoverers, and which was absolutely uninhabited.

The length of this portion of the globe surrounded by the 84th degree, extending from the 84th to the 90th, making six degrees, which at sixty miles each make a radius of 360 miles and a diameter of 720 miles. The circumference therefore is, 2,260 miles and the surface 407 [square] miles. This is about the tenth part of the whole of Europe. A very desirable slice of land indeed. The document, as we have seen, also stated that these regions were not yet known geographically, belonged to no one and therefore belonged to everyone. But it could be foreseen that the adjoining States at least would consider these regions as the prolongation of their own possession towards the north and would consequently claim the right of ownership. Their pretensions would have more justice than those of discoverers who operated upon the whole of the Arctic countries and made explorations only for the glory of their own nation. The Federal Government represented in the new Society intended to make their rights valuable and to indemnify them for the price of their purchase. However it was the partisans of the North Polar Practical Association did not announce; the proprietorship was clear, and nobody being compelled to live there could object to the auction sale of this vast domain.

The countries whose rights were absolutely established as much as those of any countries could be were six in number—America, England, Russia, Denmark, Sweden-Norway and Holland.

Other countries could claim discoveries made by their mariners and their travellers.

France could interfere because some of her children had taken part in the expeditions sent out to conquer the territories around the pole.

Among the others the courageous Bellot, who died in 1853, in the islands of Beechey, during the Phoenix Expedition sent in search of Sir John Franklin. Nor must one forget Dr. Octave Pavy, who died in 1884, near Cape Sabine, while the Greely Mission was at Fort Conger. And the expedition which, in 1838-39, had gone to the Sea of Spitzberg with Charles Marmier, Bravais and his courageous companions, would it not be unfair to forget them. But despite all this France did not care to interfere in this commercial rather than scientific matter, and she abandoned all her rights for a share of the polar pie. The same of Germany. It had sent since 1671 the Hamburg expedition of Frederic Martens to the Spitsbergen, and in 1869 and ’70 the expeditions of the Germania and of the Hansa, commanded by Koldervey and Hegeman, which went as far as Cape Bismarck by going along the coast of Greenland. But even if they had made so many brilliant discoveries they did not care to add a piece of the polar empire to that of Germany. The same was true with Austria, which was already possessor of the land of Francis Joseph, situated north of Siberia.

In regard to Italy having no right to interfere, she did not interfere at all; which is as strange as it is true. Then, also, there were the Esquimaux, which are at home in those places, and the inhabitants of Greenland, of Labrador, of Baffin’s Archipelago and of the Aleutian Islands, situated between Asia and America, and also the tribe of Tchouktchis, who inhabited the old Russian Alaska and who became Americans in 1867. These people, in reality the real aborigines, had nothing at all to say about the matter. And how could these poor wretches have said anything, as they did not even have any sum of money, no matter how small, with which to pay for the land which the North Polar Practical Association was going to buy. Perhaps they could have paid a small sum by giving skins, teeth or oil,
and yet the land belonged to them more than to any others, as they were the first occupants of this domain which was going to be sold on auction. But the Esquimaux, the Tchouktchis, the Samoyedes were not consulted at all. So runs the world.

CHAPTER II.

IN WHICH THE DELEGATES FROM ENGLAND, HOLLAND, SWEDEN, DENMARK AND RUSSIA ARE PRESENTED TO THE READER.

One thing was evident to the whole world at once, namely, that if the new association should succeed in buying the Arctic regions, those regions would become absolutely the property of America or rather of the United States, a country which was always trying to acquire something. This was not a pleasing prospect to rival governments, but nevertheless, as has been said, the different States of Europe and of Asia not neighboring to these regions, refused to take part in the proposed auction sale so long as its results seemed so problematical to them. Only the powers whose property touched the eighty-fourth degree resolved to make their rights valuable by the attendance of official delegates. That was all. They did not care to buy even at a relatively moderate price land the possession of which was only a possibility. In this as in all cases insatiable England gave orders to its financial agents to make an imposing showing. The cession of the polar countries did not threaten any European trouble nor any international complication. Herr von Bismarck, the grand Iron Chancellor, who was yet living, did not even knit his heavy brow. There remained only England, Denmark, Sweden, Norway, Holland and Russia to be present and make their bids to the Commissioner of Baltimore, against those of the United States.

It was a difficult matter to fix prices for this polar earth cap, the business value of which was at least very problematic. Their main reason for presenting themselves at the sale was that some advantage might accrue to them. Sweden and Norway, proprietors of the North Cape, situated beyond the seventy-second parallel, did not conceal the fact that they thought they had certain rights of proprietorship on these vast lands which extended to Spitsbergen, and from there to the North Pole. Denmark said that it had already in its possession islands and fiords on the line of the polar circle where their colonies had been founded, such as Disko Island, in the Davis Channel; the settlements of Holstein, of Proven, of Godhaven, of Uppernavik, in the Baffin Sea, and on the west coast of Greenland. Besides, did not the famous navigator, Behring (of Danish origin, although he was then in the service of Russia), in the year 1728 pass over the channel which afterwards carried his name before he started again, thirteen years later, and died miserably with thirty of his men on a little island, which also carries his distinguished name.

In the year 1619 did not the navigator, Jean Munk, explore the east coast of Greenland and discover several points formerly totally unknown? Therefore, Denmark had, she thought, undisputable rights to be proprietor of these regions.

In regard to Holland, there were her sailors Barentz and Heemskerk, who had visited the Spitsbergen and the New Zealand about the end of the sixteenth century. It was by one of her children too, Jean Mayen, through whose courageous campaign against the north the island which carries his name came in their possession. It is situated below the 72d degree of latitude. Therefore Holland thought her past had given her rights of possession. In regard to Russia, with Alexis Tschirikof, having Behring under his command; with Paulutski, whose expedition advanced in 1751 beyond the limits of the ice-pack; with Capt. Martin Spangberg, and Lieut. William Walton, who dared to go into these unknown parts in 1739, she had taken a notable part in the search across the gulf which separates Asia and America.

Furthermore, the position of the Siberian territories, extending over 120 degrees to the extreme limits of Kamchatka, the length of the Asiatic coast, where the Samoyedes, Yakoutes, Tchuoktchis, and other conquered people lived, did Russia not rule half of the Northern Ocean? And then, on the 75th parallel to within less than nine hundred miles from the pole, did she not possess the islands of the new Siberia, the Archipelago of Liatkow, discovered in the beginning of the eighteenth century? And finally, since 1764, before the English, before the Americans, before the Swedes, did not the navigator Tschitschagoff search a passage in the North to shorten the route between the two continents? However, notwithstanding this, it seemed that the Americans were more anxious to become possessors of this particularly inaccessible point of the globe than anyone else.

They had often tried to obtain it by devoting themselves to the search of Sir John Franklin, with Grinnel, with Kane, with Hayes, with Greely, with De Long, and other courageous navigators. They could also plead the geographical situation of their country, which develops itself below the polar circle from the Behring Sea to Hudson’s Bay. And were not all these countries—all these islands—Wollaston, Prince Albert, Victoria, King William, Melville, Cockburne, Banks, Baffin, not counting the thousand small pieces of the archipelago—like a leaf spreading to the 90th degree? And then supposing that the North Pole should be attached by an uninterrupted line of territory to one of the large continents of the globe, would it not be more to America than to Asia or Europe? Therefore, nothing was more natural than the proposition to purchase this region by the Federal Government for the benefit of an American society.
If any power had undisputable modern rights to possess the polar domain it was certainly the United States of America. It must also be considered that the United Kingdom of Great Britain, which possessed Canada and British Columbia, numerous sailors of which had distinguished themselves in these Arctic countries, urged very good reasons for annexing this part of the globe to their vast empire. And its journals discussed the matter at great length. "Yes, without a doubt," answered the great English geographer, Kliptringan, in an article in a London newspaper, which made a great sensation; "yes, the Danes, the Hollanders, the Russians, and the Americans, can be proud of their rights." As for England, she did not wish to let this country escape her. Did not the northern part of the continent already belong to them? Have not these lands, these islands which composed them, been discovered and conquered by English discoverers since Willoughby, who visited Spitsbergen and New Zealand in 1739, to McClure, whose vessel made in 1853 the passage of the northwest? And then were not Frobisher, Davis, Hall, Weymouth, Hudson, Baffin, Cook, Ross, Parry, Bechey, Belcher, Franklin, Mulgrave, Scoresby, MacClintock, Kennedy, Nares, Collinson, Archer, all of Anglo-Saxon origin? And what country could make a more just claim on the portion of these Arctic regions that that which these navigators had been able to acquire? "Well," said a California journal, "let us put the matter on its real point, and as there is a question of amour-propre between the United States and England, let us ask, If the English Markham of the Nares expedition had gone 83 degrees 20 minutes of latitude and the Americans, Lockwood and Brainard, of the Greely expedition, went to 83 degrees 35 minutes, to whom then does the honor belong of having come nearest to the North Pole?"

Such were the demands and explanations, but one could see that the struggle would only be active between American dollars and English pounds sterling. However, according to the proposition made by the North Polar Practical Association all countries had to be consulted and given a chance at the auction. The sale was announced to take place Dec. 3, at Baltimore. The sum realized by the sale was to be divided among the States which were unsuccessful bidders, and they were to accept it as indemnity and renounce all their rights in the Arctic regions for the future.

The delegates, furnished with their letters of credit, left London. The Hague, Stockholm, Copenhagen, and St. Petersburg, and arrived three weeks before the day fixed for the auction sale.

Up to this time America had only been represented by Mr. W.S. Forster, of the North Polar Practical Association.

The delegates of the European powers who had been chosen were included in the following list:
For Holland—Jacques Jansen, formerly Counsellor of the Netherlandish India; fifty-three years old, stout, short, well formed, small arms, small bent legs, round and florid face, gray hair; a worthy man, only a little incredulous on the subject of an undertaking the practical consequences of which he failed to see.
For Denmark—Eric Baldenak, ex-Sub-Governor of the Greenlandish possessions; of medium height, a little bent over, large and round head, so short-sighted that the point of his nose would touch his books; not willing to listen to any claim denying the rights of his country, which he considered the legitimate proprietor of the northern region.
For the Swedish-Norwegian peninsula—Jan Harald, Professor of Cosmography in Christiania; a genuine Northern man, red-faced, beard and hair blond; he regarded it as an established fact that the Polar region, being only occupied by the Paleocristic Sea, had absolutely no value. He was, however, not much interested in the matter and went there only as a duty.
For Russia—Col. Boris Karkof, semi-military man, semi-diplomat; a stiff, stubby mustache, seeming uncomfortable in his citizen clothes and feeling absent-mindedly for his sword which he was accustomed to carry; very much puzzled to know what was hidden in the proposition of the North Polar Practical Association, and whether it would not be the cause of international difficulties.
Finally for England—Major Donellan and his secretary, Dean Toodrink. The last two named represented all the tastes and aspirations of the United Kingdom, its commercial and industrial instincts, its aptitude to consider, by a law of nature, the northern regions their own property just as any country which did not belong to anyone else.
If there ever was an Englishman it was Major Donellan, tall, meagre, bony, nervous, angular, with a little cough, a head a la Palmerston, on bending shoulders; legs well formed after his sixty years; indefatigable, a quality he had well shown when he worked on the frontiers of India. He never laughed in those days, and perhaps never had. And why should he? Did you ever see a locomotive or a steam-engine or an elevator laugh? On this point the Major was very much different from his secretary, Dean Toodrink, a talkative fellow, very pleasant, with large head, and his hair falling on his forehead, and small eyes. He became well known on account of his happy manner and his taste for fairy tales. But, even if he was cheerful, he did not seem any less personally conceited than Major Donellan when he talked about Great Britain.

These two delegates were probably going to be the most desperate opponents to the American Society. The North Pole belonged to them; it always belonged to them. It was to them as if the Lord had given the mission to the English people to keep up the rotation of the earth around its axis, and as if it was their duty to prevent it passing
into strange hands. It is necessary to observe here that France did not consider it necessary to send a delegate, but an
engineer, of France, was present at the sale, just for the fun of it. We shall introduce him later on. The delegates of
the Northern European States had arrived in Baltimore on different steamers, to give it the appearance that they had
nothing at all to do with each other. They were really rivals. Each one of them had in his pocket the necessary means
to fight against the American Society. But they could not fight with equal force. One could dispose of a sum of
money which amounted to nearly a million, another could pass that amount. And really to purchase a piece of our
globe to reach which seemed an impossibility, this ought still appear to be dear. In reality the best provided for was
the English delegate, to whose order the Government had opened a very large credit. Thanks to this credit Major
Donellan would not have very hard work to conquer his adversaries of Sweden, Denmark-Holland, and Russia. In
regard to America—well, that was a different thing. It would be much more difficult to win against the fusillade of
dollars. At least it was very probable that the mysterious society must have enough money on hand to go on in their
work. Therefore, the highest bidding, which might come to millions, was between America and England.

As soon as the European delegates had landed public opinion became more excited. The most singular stories
were printed in the newspapers. False theories were established, based on the purchase of the North Pole. What was
the Society going to do with it? And what could they do with it? Nothing; or perhaps it was all done to corner the
iceberg market. There was even a journal in Paris, the Figaro, which upheld this curious idea. But for this it would
be necessary to pass south of the eighty-fourth parallel.

Be it as it may, however, the delegates who had avoided each other during their passage over the Atlantic
became more and more associated after having arrived in Baltimore. Here is the reason: Since his arrival each one
had tried to open communications with the North Polar Practical Association separately, unknown to the other. That
which they wished to know were the motives hidden at the bottom of this affair and what profit the Society hoped to
make out of the sale. Now, until the present time nothing indicated that the Society had opened an office at
Baltimore. No office, no employees. All that could be learned was, "For information address only William S.
Forster, High Street, Baltimore." And it did not look as though the honest consignee of codfish knew any more in
this respect than the lowest street porter of the city.

The delegates could, therefore, learn nothing from him. They were accordingly compelled to rely upon the more
or less absurd guesses of the public at large. Was the secret of the Society going to be kept impenetrable as long as it
did not make it known itself? This was the question. Without doubt it did not seem inclined to give any information
on the subject until the purchase had been made. Therefore, it came that the delegates finished by seeing and
meeting each other; they made visits to each other, and finally came in close communication with each other,
perhaps with the idea of making a front against the common enemy, or, otherwise, the American Company. And so
it happened that one evening they were all together in the Hotel Wolesley, in the suite occupied by Major Donellan
and his secretary, Dean Toodrink, holding a conference. In fact, this tendency to a common understanding was
principally due to the advice of Col. Boris Karkof, the best diplomat known. At first the conversation was directed to
the commercial and industrial consequences which the Society pretended to gain by purchase of the Arctic domain.
Prof. Jan Harald asked if any one had been able to gain any information on that point. All finally agreed that they
had tried to get information from Mr. William S. Forster, to whom all letters should be addressed.

"I have failed," said Eric Baldenak.

"And I have not succeeded," added Jacques Jansen.

"In regard to myself," answered Dean Toodrink, "when I presented myself at the stores in High Street in the
name of Major Donellan I found a large man in black clothes, wearing a high hat, with a white apron, which was
short enough to show his high boots. When I asked him for information in the matter he informed me that the South
Star had arrived with a full cargo from Newfoundland and that he was ready to furnish me with a fresh stock of
codfish on account of Messrs. Ardronell & Co."

"And," answered the former councillor of the Dutch Indies, always a little sceptical, "it would be much better to
buy a load of codfish than to throw one's money into the ice-water of the North."

"This is not at all the question," says Major Donellan, with a short and high voice. "The question is not the
codfish, but the Polar region."

"Americans ought to stand on their heads," said Dean Toodrink, laughing at his own remark. "That will make
them catch cold," finally said Col. Karkof. "The question is not there," said Major Donellan. "One thing only is
certain, that for some reason or another America, represented by the N.P.P.A. (remark the word 'practical') wants to
buy a surface of 407 square miles around the North Pole, a surface which is actually (remark the word 'actually')
pierced by the eighty-fourth degree of latitude."

"We know it, Major Donellan, and much more," said Jan Harald. "But what we do not know is how the said
company will make use of those countries or waters, if they are waters, from a commercial standpoint."
"This is not the question," answered for the third time Major Donellan. "A power wants to purchase with money a large part of the globe which, by its geographical situation, seems to belong especially to England"—"to Russia," said Col. Karkof; "to Holland," said Jacques Jansen; "to Sweden-Norway," said Jan Harald; "to Denmark," said Eric Baldenak.

The five delegates jumped to their feet, and it seemed as if the Council would turn to harsh words, when Dean Toodrink tried to interfere the first time. "Gentlemen," said he, in a tone of reconciliation, "this is not the question, following the expression of my chief," of which he made such frequent use. "As long as Sweden, Norway, Russia, Denmark, Holland, and England have given large credits to their delegates, would it not be best for these nations to form a syndicate and raise a sum of money against which America could not make a bid? The delegates looked at each other. It was possible that Dean Toodrink had found the missing link. A syndicate—at present it is heard everywhere. Everything is syndicate nowadays, what one drinks, what one eats, what one reads, what one sleeps on. Nothing is more modern, in politics as well as business, than a trust. But an objection was started, or rather an explanation was needed, and Jacques Jansen tried to find out the sentiments of his colleagues by saying, "and afterwards," yes, after the purchase of the region by the syndicate, then what? "But it seems to me that England," said the Major in a rough voice, "and Russia," said the Colonel, with nostrils terribly dilated, "and Holland," said the Counsellor; "as God has given Denmark to the Danish," observed Eric Baldenak—"Excuse me, there is only one country," interrupted Dean Toodrink, "which has been given by our Lord, and that is the world." "And why," said the Swedish delegate? "Did not the poet say 'Deus nobis haec otia fecit,' " said this merryman in translating according to his fashion the close of the sixth verse of the first eclogue of Virgil. All began to laugh except Major Donellan, who stopped for the second time the discussion which threatened to finish badly. Then Dean Toodrink said, "Do not quarrel, gentlemen. What good will it do us? Let us rather form a syndicate."

"And afterwards?" asked Jan Harald.

"Afterwards," answered Dean Toodrink, "nothing more simple, gentlemen. After you shall have bought the polar domain it will remain undivided among us or will be divided after a regular indemnity to one of the States which have been purchasers. But our purpose would have already been obtained, which is to save it from the representative of America."

This proposition did some good, at least for the present moment. As very soon the delegates would not fail to fight with each other, and pull each other’s hair where there was any to pull, it would be at the moment when it was necessary to elect a final buyer of this immovable region, so much disputed and so useless.

"In all cases," cleverly remarked Dean Toodrink, "the United States will be entirely out of the question."

"It seems to me very sensible," said Eric Baldenak.

"Very handy," said Col. Karkof.

"Right," said Jan Harald.

"Mean," said Jacques Jansen.

"Very English," said Major Donellan.

Each one had given his opinion hoping to convince his colleagues.

"Then, gentlemen, it is perfectly understood that if we form a syndicate the rights of each State will be absolutely reserved for the future." ... It is understood. There was only to be found out what credit the different delegates had received from their governments. It was supposed that the whole when added up would represent such an enormous sum that there would not be the least doubt that the A.P.P.A. [N.P.P.A.] would fail to surpass this amount of money. This question of funds was met by Dean Toodrink.

Complete silence. Nobody would answer, show your pocketbook. Empty their pockets into the safes of a syndicate. Make known in advance how much each country would bid at the sale. No haste was shown. And if there should be a disagreement in this new-formed syndicate in the future, and circumstances should compel each one to make his own bids? And should the diplomat Karkof feel insulted at the trickery of Jacques Jansen, who would be insulted at the underhand intrigues of Jan Harald, who would refuse to support the high pretensions of Major Donellan, who, himself, would not stop to embroil each one of his associates. And now to show their credits—that was showing their play, when it was necessary to live up to it. There were really two ways only to answer the proper but indiscreet suggestion of Dean Toodrink. Either to exaggerate the credits, which would be very embarrassing, because it would then be the question of the payment, or to diminish them to such a point that they would be ridiculous and not to the purpose of the scheme. The ex-counsellor had this idea first, but it must be said to his credit, he did not seriously hold it. His colleagues, however, followed suit. "Gentlemen," said Holland, through its mouthpiece, "I regret, but for the purpose of the Arctic regions I can only dispose of fifty riechsthaler." "And I of
CHAPTER III.

IN WHICH THE ARCTIC REGIONS ARE SOLD AT AUCTION TO THE HIGHEST BIDDER.

Why was this sale on the 3d of December going to be held in the regular auction hall, where usually only such objects as furniture, utensils, tools, instruments, etc., or art pieces, pictures, medals, and antique objects were sold? Why, so long as it was a piece of realty, was it not sold before a referee or a court of justice appointed for such sales? And why was the aid of a public auctioneer necessary when a part of our globe was going to be sold? How could this piece of the world be compared with any movable object when it was the most fixed thing on the face of the earth? Really, this seemed to be quite illogical, but it was not so, since the whole of the Arctic regions was to be sold in such a way that the contract would be valuable. Did this not indicate that in the opinion of the N.P.P.A. the immovable object in question contained something movable?

This singularity puzzled even the most eminently sagacious minds to be found in the United States. On the other hand, there had been such a sale in the past already. One portion of our planet had been sold in the auction-rooms with the help of a public appraiser to the highest public bidder. And this case had happened in America.

It was some years before, in San Francisco, Cal., an island of the Pacific Ocean, Spencer Island, was sold to the rich William W. Kolderup, who bid $500,000 in opposition to J.R. Taskinar, of Stockton. This island had cost $4,000,000. It is true it was an island which had inhabitants, only a few miles away from the coast, with forests, water, productive and solid, with fields and prairies, in condition to be cultivated, and not a vague wild region of water covered with eternal ice, defended by impenetrable icebergs, which very probably nobody would ever live in. It was thought, therefore, that the unknown polar region would never bring so high a price if sold at auction. Nevertheless, on the day of the sale a great many serious and curious people assembled to learn the end of the affair.

The sale could hardly fail to be interesting.

Ever since their arrival in Baltimore the European delegates had found themselves very much gazed at and always surrounded by many people. Of course they were much interviewed. In view of all this it was only natural that the public of America should have become very much excited. One manner of expressing the public excitement, very characteristic of Americans, was to make bets upon the result, an example which Europe quickly began to follow. Divided as the American citizens were into those of New England, those of the Middle States, Western States, and Eastern States, there was only one wish, and that was for the well-being of their country. But there was still a great deal of uncertainty. It was neither Russia, nor Sweden, nor Norway, nor Denmark, nor Holland, the chances of which they dreaded most. But it was England, with its territorial ambitions, with its only too well-known tendency to swallow everything, and its world-known Bank of England notes. Large sums of money were placed on the result. Bets were made on America and Great Britain, the same as on race-horses, and in almost all cases even money was put up. Some offers were made of 12 and 13½ to 1 on Denmark, Sweden, Holland and Russia, but none would take such an offer.

The sale commenced at 12 o’clock.

Since early in the morning all business had been stopped in the street on account of the large crowd. By telegraph the papers were informed that most of the bets made by Americans had been taken up by the English, and Dean Toodrink immediately posted up a notice to that effect in the auction hall. The nearer the time came the higher grew the excitement. It was reported that the Government of Great Britain had placed large sums of money at the disposition of Major Donellan. “At the office of the Admiralty,” observed one of the New York papers, “the Admirals pushed the sale as much as possible, as they hoped to figure conspicuously in the expeditions fitted out.” How much truth there was in these stories no one knew. But the most conservative people in Baltimore thought that it was hardly possible that the amount of money at the command of the N.P.P.A. could cover the amount which would be bid by England, and therefore a very strong pressure was put on the Government of the United States at Washington to protect the interests of the society. In all this excitement the new society was represented by the single person, its agent, William S. Forster, who did not seem to worry at all over all these rumors and seemed quite confident of success.

As the time for the auction drew near the crowd grew larger. Three hours before the sale it was impossible to obtain admission to the auction hall. All the space set apart for the public was so much filled that there was danger that the building would fall in. There was only a small space left empty, surrounded by a railing, which had been reserved for the European delegates. They had just space enough to follow the progress of the sale, and were not even comfortably seated.
They were Eric Baldenak, Boris Karkof Jacques Jansen, Jan Harald, Major Donellan and his secretary, Dean Toodrink. They formed a solid group, standing together like soldiers on a battle-field. And were they not really going to battle for the possession of the North Pole? On the American side apparently nobody was represented. Only the codfish dealer was present and his face had an expression of the most supreme indifference.

He seemed little concerned and appeared to be thinking of his cargo which was to arrive by the next steamer. Where were the capitalists represented by this man, who, perhaps, was going to start millions of dollars rolling? This was such a mystery as to excite public curiosity to the utmost.

No one doubted that Mr. J. T. Maston and Mrs. Evangelina Scorbitt had something to do with the matter, but what could one guess on? Both were there, lost in the crowd, without any special place, surrounded by some members of the Baltimore Gun Club, friends of Mr. Maston. They seemed to be the least interested spectators in the hall. Mr. William S. Forster even did not seem to recognize them.

The auctioneer began by saying that contrary to the general rule it was impossible to show the article about to be sold. He could not pass from hand to hand the North Pole. Neither could they examine it nor look at it with a magnifying glass or touch it with their fingers to see whether the plating was real or only artificial, or whether it was an antique, which it really was, he said. It was as old as stone, it was as old as the world, since it dated back to the time the world was made.

If, however, the North Pole was not on the desk of the Public Appraiser, a large chart, clear in view of all interested persons, indicated with marked lines the parts which were going to be sold at auction. Seventeen degrees below the Polar Circle was a red line, clearly seen on the 84th parallel, which marked the section on the globe put up for sale. It appeared that there was only water in this region covered with ice of considerable thickness. But this was the risk of the purchaser. In any case he would not be disappointed in the nature of his merchandise by any misrepresentation.

At 12 o’clock exactly the public auctioneer entered by a little trap-door cut in the boards of the floor and took his place before the desk. His crier, Flint, had already arrived, and was walking up and down as agitated as a bear in a cage. Both were glad at the prospect, as they thought that the sale would run up to an enormous sum and put a large and acceptable percentage in their pockets. Of course the sale would have to be made under the regular, real American rule, “ready cash.”

The amount of money, no matter how large it would be, must be raised by the delegates. At this moment a large bell ringing with vigor indicated that the bidding was going to begin. What a solemn moment! Many hearts quivered in that neighborhood. A minor riot spread among the crowd outside and reached into the hall, and Andrew R. Gilmour, the auctioneer, had to wait until quiet was restored. He got up and looked steadily at his assistants. Then he let his eyeglasses fall on his breast and said in as quiet a voice as possible: "Gentlemen, according to the plan of the Federal government, and thanks to the acquiescence given it by the European powers, we will sell a great fixed mass, situated around the North Pole, all that is within the limits of the 84th parallel, continents, waters, bays, islands, icebergs, solid parts or liquid, whatever they may be." Then, turning towards the wall, he said "Look at this chart, which has been outlined according to the latest discoveries. You will see that the surface of this lot contains 407,000 square miles. Therefore, to make the sale easier, it has been decided that the bids should be made for each square mile. Each cent bid, for instance, will be equal to 407,000 cents and each dollar 407,000 dollars on the total purchase. A little silence, please, gentlemen."

This request was not superfluous, because the impatience of the public had reached such a degree that the voice of a bidder would hardly be heard. After partial silence had been established, thanks to the industry of the crier, Flint, who roared like a foghorn, Mr. Gilmour resumed as follows: "Before beginning I will mention only one condition of the sale. No matter what changes should happen, either from a geographical or meteorological standpoint, this region after being sold to the highest bidder is absolutely his own beyond any dispute, and the other countries have no right of possession whatever as long as the territory is not outside of the limits of the 84th degree north latitude." Again was this singular phrase mentioned at a very important moment. Some laughed at it, others considered it very seriously. "The bids are open," said the public auctioneer in a loud voice, and while his little ivory hammer was rolling in his hand he added in an undertone: "We have offers at 10 cents the square mile. Ten cents or the tenth part of a dollar—this would make an amount of $40,700 for the whole of this immovable property."

Whether the auctioneer had had such offers or not does not matter, because the bid was covered by Eric Baldenak in the name of the Danish Government. "Twenty cents," said he.

"Thirty cents," said Jan Harald, for Sweden-Norway.
"Forty cents," said Col. Boris Karkof, for Russia.

This represented already a sum of $162,800 to begin with. The representative of England had not as yet opened his mouth, not even moved his lips, which were pressed tightly together. On the other side Wm. S. Forster kept an impenetrable dumbness. Even at this moment he seemed absorbed in reading a newspaper which contained the
shipping arrivals and the financial reports of the markets each day.

"Forty cents per square mile," repeated Flint, in a voice which resembled a steam whistle, "40 cents."
The four colleagues of Major Donellan looked at each other. Had they already exhausted the credit allowed them at the beginning of the bidding? Were they already compelled to be silent?

"Go on, gentlemen," said the Auctioneer Gilmour, "40 cents. Who goes higher? Forty cents; why, the North Pole is worth much more than that, for it is guaranteed to be made of ice."
The Danish delegate said 50 cents and the Hollandish delegate promptly outbid him by 10 cents.

Nobody said a word. This 60 cents represented the respectable amount of $244,200. The lift given by Holland to the sale started a murmur of satisfaction. It seemed that the persons who had nothing in their pockets and nothing to their names were the most interested of all in this contest of dollars.

At the moment Jacques Jansen made his offer Major Donellan looked at his secretary, Dean Toodrink, and, with an almost imperceptible negative sign, kept him silent. Mr. William S. Forster, seeming very much interested in his paper, made some pencil notes. Mr. J.T. Maston, only replied to the smiles of Mrs. Evangelina Scorbitt with a nod of the head.

"Hurry up, gentlemen; a little life. Don’t let us linger. This is very weak, very slow," said the auctioneer. "Let me see. Nobody says more. Must I knock down the North Pole at such a price?" and as he spoke his hammer went up and down just like the cross in a priest’s hands when he wishes to bless his people.

"Seventy cents," said Jan Harald, with a voice which trembled a little.

"Eighty," immediately responded Col. Boris Karkof.

"Hurry up, 80 cents," said Flint, whose eyes were burning with excitement.

A gesture of Dean Toodrink made Major Donellan jump up like a spirit. "One hundred cents," said he with a short and sharp tone, becoming in one who represented Great Britain. That one word made England responsible for $407,000.

The friends of the bidders for the United Kingdom made a great hurrah, which was repeated like an echo by the outside crowd. The bidders for America looked at each other with disappointment; $407,000; this was already a very large figure for such a region as the North Pole; $407,000 for ice, icebergs, and icefields?

And the man of the N. P. A. did not say one word, did not even raise his head. Would he decide to make at last one overwhelming bid? If he wanted to wait until the Danish delegates, those of Sweden, Holland, and Russia had exhausted their credit, it would seem that the proper moment had come. Their faces plainly showed that before the "100 cents" of Major Donellan, they had decided to quit the battlefield. "One hundred cents the square mile," said the auctioneer for the second time, "One hundred, one hundred, one hundred," cried out Flint, making a speaking-trumpet of his half-closed hand. "Nobody goes higher?" questioned Auctioneer Gilmour. "Is it heard? Is it understood? No regrets afterwards? We will sell it now." And he took his position and looking at his clerk, said: "once, twice"—

"One hundred and ten," very quietly said William S. Forster, without even raising his eyes, after having turned the page of his paper.

"Hip, hip, hip," shouted the crowd who had put most of the money on America in the bets. Major Donellan was astonished. His long neck turned in all directions and he shrugged his shoulders, while his lips worked with great excitement. He tried to crush this American representative with one look, but without success, but Mr. Forster, cool as a cucumber, did not budge.

"One hundred and forty," said Major Donellan.

"One hundred and sixty," said Forster.

"One hundred and eighty," said the Major, with great excitement.

"One hundred and ninety," said Forster.

"One hundred and ninety-nine," roared the delegate of Great Britain. With this he crossed his arms and seemed to defy the United States of America.

One might have heard a mouse run, or a miller fly, or a worm creep. All hearts were beating. A life seemed hanging on the lips of Major Donellan. His head, generally restless, was still now. Dean Toodrink had sat down and was pulling out his hairs one by one. Auctioneer Gilmour let a few moments run by. They seemed as long as centuries. The codfish merchant continued reading his paper and making pencil figures which had evidently nothing at all to do with [with] the question. Was he also at the end of his credit? Did he intend to make a last offer? Did this amount of 199 cents for each square mile or $793,000 for the whole of the fixture at sale seem to him to have reached the last limit of absurdity?

"One hundred and ninety-nine cents," repeated the public auctioneer. "We will sell it," and his hammer fell on the table before him. "One hundred and ninety-nine," cried the helper. "Sell it! Sell it!" And every one was looking at the representative of the N.P.P.A.
That surprising gentleman was blowing his nose on a large handkerchief, which nearly covered his whole face. Mr. J. T. Maston was looking at him intently, and so was Mrs. Evangelina Scorbitt. It could easily be seen by their anxious faces how much they tried to suppress their violent emotion. Why was Forster hesitating to outbid Major Donellan? As for the imperturbable Forster, he blew his nose a second time, then a third time, with the noise of a real foghorn. But between the second and third blow he said as quietly as possible, with a modest and sweet voice. "Two hundred cents!"

A long shudder went through the hall. Then the American backers began to make such a noise that the very windows trembled. Major Donellan, overwhelmed, ruined, disappointed, had fallen into a seat by the side of Dean Toodrink, who himself was not in a much better condition. Two thousand miles at this price made the enormous sum of $814,000 and it was apparent that the credit of England did not permit them to overreach it.

"Two hundred cents," repeated the auctioneer. "Two hundred cents," said Flint. "Once, twice," said the auctioneer. "Does anybody go higher?" Major Donellan raised himself by a strong effort and looked wistfully at the other delegates. These only looked back their hope that by his bidding the Arctic region would escape the American bidder and would become the property of the European powers. But this was his last effort. The Major opened his mouth, closed it again, and in his person England sat down on itself. "Hip, hip, hurrah for the United States," roared the winners for victorious America. And in one instant the news of the purchase ran all over Baltimore, and by telegraph all over the United States, and by cable all over the Old World. Thus it was that the N.P.P.A. through the agency of William S. Forster, became the proprietor of the Arctic domain, including everything above the eighty-fourth parallel. The next day when Mr. Forster went to make his deposit for his purchase the name he gave was Impey Barbicane and the name of the house was Barbicane & Co.

CHAPTER IV.
IN WHICH OLD ACQUAINTANCES APPEAR TO OUR NEW READERS, AND IN WHICH A WONDERFUL MAN IS DESCRIBED.

Barbicane & Co. The president of a gunning club. And really what had gunners to do in such an operation? You will see. Is it necessary to present formally Impey Barbicane, President of the Gun Club, of Baltimore, and Capt. Nicholl, and J. T. Maston, and Tom Hunter with the wooden legs, and the lively Bilsby, and Col. Bloomsberry, and the other associates? No, if these strange persons were twenty years older than at the time when the attention of the world was upon them they had always remained the same, always as much incomplete personally, but equally noisy, equally courageous, equally confusing when it was a question of some extraordinary adventure. Time did not make an impression on these gunners; it respected them as it respects cannons no longer in use, but which decorate museums and arsenals. If the Gun Club had 1,833 members in it when it was founded, names rather than persons, for most of them had lost an arm or leg, if 30,575 corresponding members were proud to owe allegiance to the Club, these figures had not decreased. On the contrary, and even thanks to the incredible attempt which they had made to establish direct communication between earth and moon, its celebrity had grown in an enormous proportion. No one can ever forget the report on this subject which was made by this Club and which deserves a few words of mention here.

A few years after the civil war certain members of the Gun Club, tired of their idleness, proposed to send a projectile to the moon by means of a Columbiad monster. A cannon 900 feet long, nine feet broad at the bore, had been especially made at Moon City and had then been charged with 400,000 pounds of gun-cotton.

From this cannon a small cylindrical bomb had been flung towards the stars with a pressure of six milliards pounds per square inch. After having made a grand curve it fell back to the earth only to be swallowed up by the Pacific Ocean at 27° 7' of latitude and 41° 37' of longitude, west. It was in this region that the frigate, Susquehanna, of the American Navy, had fished it up to the surface of the ocean, to the great comfort of its occupants. Occupants? Yes, occupants; for two members of the Gun Club—its President, Impey Barbicane, and Capt. Nicholl—accompanied by a Frenchman well known for his boldness in such cases, had been in this flying-machine. All three of them came back well and healthy from this dangerous trip. But if the two Americans were here ready to risk any similar thing, the French Michel Ardan was not. On his return to Europe he brought a fortune with him, although it astonished a good many people, and now he is planting his own cabbage in his own garden, eating them and even digesting them, if one can believe the best-informed reporters.

After this discharge of the cannon, Impey Barbicane and Capt. Nicholl had lived on their reputation in comparative quietness. As they were always anxious to do another thing like it, they dreamt and tried to find out something else. Money they had in plenty. Out of five millions and a half which had been raised for them by subscription they had nearly $200,000 left. This money was raised in the Old and New Worlds alike. Besides, all they had to do was to exhibit themselves in their projectile in America and they could always realize large amounts of money. They had earned all the glory which the most ambitious mortal would look for. Impey Barbicane and Capt. Nicholl would have been well able to keep quiet and idle if this very idleness did not torment them. And it was
whom she would also bring a treasure of tenderness much more inexhaustible. And salt pork. Well, this fortune this generous widow would have been glad to use for the profit of J. T. Maston, to whom she would have liked to present the sum of five millions. In brief, Mrs. Evangelina Scorbitt had four millions of good sound dollars, or twenty millions at least.

There was not even a second in her heart who did not think that her appearance as the representative of our people, and the moon only our humble satellite. To his extreme regret, Mr. Maston was compelled to stay at home. Nevertheless he had not been idle. After having constructed an immense telescope, which was put on the mountain of Long’s Peak, one of the highest mountains of the Rocky range, he went up there personally, and after he had received the signal that the cannon-ball had been fired he did not once leave his post. From his place of observation he essayed the task of following his friends firing across the vast space. One might readily believe that his friends would be lost to the world; that it was very easily possible that this projectile could be compelled by the attraction of the moon to become a sub-satellite. A deviation which one might call providential had changed the direction of the projectile, and after having made one trip around the moon, in place of touching it, it was carried away in a terrible fall and returned to us with a speed of 576,000 miles a minute to the moment when it was swallowed up by the ocean. Happy it was that the great liquid mass had deadened the fall, and that the American frigate Susquehanna was present at the fall. As soon as the news reached Mr. Maston, the Secretary of the Gun Club, he rushed with all possible haste from his observation point at Long’s Peak to begin operations to save his friends. Divers were sent to the place where the projectile had fallen. And Mr. Maston even did not hesitate to put on a cork jacket to save and find his friends again. It was unnecessary to go to so much trouble. The projectile was found floating on the surface of the Pacific Ocean after having made its beautiful fall. And President Barbicane with Capt. Nicholl and Michel Ardan were found playing dominoes in their floating prison on the surface of the ocean.

To return to J.T. Maston, it is proper to say that his part in the affair deserves a good deal of credit. It is certain that he was not pretty with his metallic arm. He was not young, fifty-eight years old, at the time we write this story. But the originality of his character, the vivacity of his intelligence, the vigor which animated him, the ardor which he had in all such things, had made him the ideal of Mrs. Evangeline Scorbitt. His brain carefully hidden under his cover of gutta-percha was yet untouched, and he would still pass as one of the most remarkable calculators of his age.

Mrs. Evangelina Scorbitt, although the least figuring gave her a headache, had yet a great liking for mathematicians, even if she had no taste for mathematics. She considered them a higher and more endowed race of human beings. Heads where the X, Y, Z were mixed up like nuts in a barrel, brains which played with signs of algebra, hands which juggled with the integral triples, these were what she liked.

Yes, these wise people seemed to her worthy of all admiration and support. She felt herself drawn strongly towards them. And J.T. Maston was exactly that kind of man and one she adored, and her happiness would be complete if they two could be made one. This was the end of her mathematics. This did not disturb the Secretary of the Gun Club, who had never found happiness in unions of this kind.

Mrs Evangelina Scorbitt was not young any more. She was forty-five years old, had her hair pasted on her temples, like something which had been dyed and re-dyed; she had a mouth full of very long teeth, with not one missing; her waist was without shape, her walk without grace; in short, she had the appearance of an old maid, although she had been married only a few years before she became a widow. She was an excellent person withal, and nothing was lacking in her cup of happiness except one thing, namely, that she wished to make her appearance in the society of Baltimore as Mrs. J.T. Maston. Her fortune was very considerable. She was not rich like the Goulds, Mackays, or Vanderbilt, whose fortunes run into the millions, and who might give alms to the Rothschilds. Neither did she possess three hundred millions like Mrs. Stewart, eighty millions like Mrs. Crocker, and two hundred millions like Mrs. Carper. Neither was she rich like Mrs. Hamersley, Mrs. Hetty Green, Mrs. Maffitt, Mrs. Marshall, Mrs. Paran Stevens, Mrs. Minturn, and many others. At any rate she had a right to take a place at that memorable feast at the Fifth Avenue Hotel in New York, where there were only admitted as guests people who had at least five millions. In brief, Mrs. Evangelina Scorbitt had four millions of good sound dollars, or twenty millions of francs, which came to her from John P. Scorbitt, who made his fortune both in the business of selling dry goods and salt pork. Well, this fortune this generous widow would have been glad to use for the profit of J. T. Maston, to whom she would also bring a treasure of tenderness much more inexhaustible.

Therefore when Mrs. Evangelina Scorbitt had heard of the requirements of Mr. Maston she had gladly agreed to
put a few hundred thousand dollars in the affair of the N.P.P.A. without having the least idea of what they intended
to do with it. It is true she was convinced that as long as J.T. Maston had something to do with the affair it could not
help being grand, sublime, superhuman, etc. Thinking of the Secretary was for her future enough. One might think
that after the auction sale, when it was declared that Barbicane & Company would be the name of the new firm, and
it would be presided over by the President of the Gun Club, she would enjoy Mr. Maston’s whole confidence. Was
she not at the same time the largest stockholder in the affair? So it came about that Mrs. Evangeline Scorbitt found
herself proprietress of this polar region, all beyond the line of the eighty-fourth parallel. But what would she do with
it? Or rather, what profit would the Society get out of it? This was the question; and if it interested Mrs. Evangeline
Scorbitt from a financial standpoint it interested the whole world, more on account of the general curiosity about the
whole mystery. This excellent woman, otherwise very discreet, had often tried to get some information from Mr.
Maston on this subject before putting money at the disposal of the purchasers. Without a doubt there was a grand
enterprise, which, as Jean Jacques said, has never had its like before, and would never have any imitation, and which
would far outshine the reputation made by the Gun Club in sending a projectile to the moon and trying to get in
direct communication with our satellite. But when she persists with her queries Mr. Maston invariably replied: "Dear
madame, have patience," And if Mrs. Evangeline Scorbitt had confidence before, what an immense joy did she feel
when the triumph which the United States of America had won over the combined European powers. "But shall I not
finally know the object?" asked she, smiling at the eminent calculator.

"You will soon know it," answered Mr. Maston, shaking heartily the hand of his partner—the American lady.

This calmed for the moment the impatience of Mrs. Evangeline Scorbitt. A few days afterwards the Old and
New World were shaken up quite enough when the secret object of the company was announced, and for the
realization of which the N.P.P.A. made an appeal to the public for a subscription.

The Society had purchased this portion of the circumpolar region to make use of the coal mines of the North
Pole.

CHAPTER V.

IN WHICH THE POSSIBILITY THAT COAL MINES SURROUND THE NORTH POLE IS CONSIDERED.

Are there coal mines at the North Pole? This was the first question suggested to intelligent people. Some asked
why should there be coal mines at the North Pole? Others with equal propriety asked why should there not be? It is
well known that coal mines are spread all over the world. There are many in different parts of Europe. America also
possesses a great many, and it is probable that the United States mines are the richest of all. There are also many in
Asia, Africa, and Australia. The more our globe becomes known the more mines are discovered. We will not be in
need of coal for at least hundreds of years to come. England alone produces 160,000,000 tons every year, and over
the whole world it is estimated 400,000,000 tons are yearly produced. Naturally, this coal output must grow every
year in proportion with the constantly increasing industries. Even if electricity takes the place of steam, it will still
be necessary to use coal. We are so much in need of it that the world might be called "an animal of coal," and
therefore it is necessary to take good care of it. Coal is used not only as a fuel, but also as a crude substance of which
science makes great use. With the transformations to which it has been submitted in the laboratory, it is possible to
paint with it, perfume with it, purify, heat, light with it, and even beautify a diamond with it. It is as useful as iron or
even more so. It is fortunate that this last-mentioned metal will never be exhausted, as really the world is composed
of it. The world might be considered a vast mass of iron, as other metals, and even water and stone, stand far behind
it in the composition of our sphere. But if we are sure of a continuous supply for our consumption of iron, we are not
so of coal. Far from it. People who are competent to speak, and who look into the future for hundreds of years,
always allude to this coal famine. "But," say the opposing party—and in the United States there are many people
who like to contradict for the mere sake of argument, and who take pleasure in contradicting—"Why should there be
coal around the North Pole?"

"Why?" answered those who took the part of President Barbicane, "because, very probably at the geological
formation of the world, the sun was such that the difference of temperature around the equator and the poles were
not appreciable. Then immense forests covered this unknown polar region a long time before mankind appeared, and
when our planet was submitted to the incessant action of heat and humidity. This theory the journals, magazines, and
reviews publish in a thousand different articles either in a joking or serious way. And these large forests, which
disappeared with the gigantic changes of the earth before it had taken its present form, must certainly have changed
and transformed under the lapse of time and the action of internal heat and water into coal mines. Therefore nothing
seemed more admissible than this theory, and that the North Pole would open a large field to those who were able to
mine it. These are facts, undeniable facts. Even people who only calculated on simple probabilities could not deny
them. And these facts led many people to have great faith in them.

It was on this subject that Major Donellan and his secretary were talking together one day in the most obscure
corner of the "Two Friends" inn. "Well," said Dean Toodrink, "there is a possibility that this Barbicane (who I hope
may be hanged some day) is right."

"It is probable," said Major Donellan, "and I will almost admit that it is certain. There will be fortunes made in exploring this region around the pole. If North America possesses so many coal mines and, according to the papers, new ones are discovered quite frequently, it is not at all improbable that there are many yet to be discovered. I may add that Prof. Nordenskiol has found many kinds of different stones which contain a great variety of fossil plants in his researches in the Arctic region."

"Higher up?" asked Dean Toodrink.

"Higher up, or rather further up, in a northerly direction," answered the Major, "the presence of coal is practically established, and it seems as if you would only have to bend down to pick it up. Well, if coal is so plentiful on the surface of these countries, it is right to conclude that its beds must go all through the crust of the globe." He was right. Major Donellan knew the geological formation around the North Pole well, and he was not a safe person to dispute this question with. And he might have talked about it at length if other people in the inn had not listened. But he thought it better to keep quiet after asking: "Are you not surprised at one thing? One would expect to see engineers or at least navigators figure in this matter, while there are only gunners at the head of it?"

It is not surprising that the newspapers of the civilized world soon began to discuss the question of coal discoveries at the North Pole.

"And why not," asked the editor of an American paper who took the part of President Barbicane, "when it is remembered that Capt. Nares, in 1875 and 1876, at the eighty-second degree of latitude, discovered large flower-beds, hazel trees, poplars, beech trees, etc.?"

"And in 1881 and 1884," added a scientific publication of New York, "during the expedition of Lieut. Greely at Lady Franklin Bay, was not a layer of coal discovered by our explorers a little way from Fort Conger, near Waterhouse? And did not Dr. Pavy say that these countries are certainly full of coal, perhaps placed there to combat at some day the terrible masses of ice which are found there?"

Against such well-established facts brought out by American discoverers the enemies of President Barbicane did not know what to answer. And the people who asked why should there be coal mines began to surrender to the people who asked why should there be none. Certainly there were some, and very considerable ones, too. The circumpolar ice-cap conceals precious masses of coal contained in those regions where vegetation was formerly luxuriant. But if they could no longer dispute that there were really coal mines in this Arctic region the enemies of the association tried to get revenge in another way. "Well," said Major Donellan one day after a hard discussion which had arisen in the meeting-room of the Gun Club and during which he met President Barbicane face to face, "all right. I admit that there are coal mines; I even affirm it, there are mines in the region purchased by your society, but go and explore them—ha! ha! ha!"

"That is what we are going to do," said Impey Barbicane.

"Go over the eighty-fourth degree, beyond which no explorer as yet has been able to put his foot?"

"We will pass it—reach even the North Pole," said he. "We will reach it." And after hearing the President of the Gun Club answer with so much coolness, with so much assurance, to see his opinion so strongly, so perfectly affirmed, even the strongest opponent began to hesitate. They seemed to be in the presence of a man who had lost none of his old-time qualities, quiet, cold, and of an eminently serious mind, exact as a clock, adventurous, but carrying his practical ideas into the rashest enterprises.

Major Donellan had an ardent wish to strangle his adversary. But President Barbicane was stout and well able to stand against wind and tide, and therefore not afraid of the Major. His enemies, his friends and people who envied him knew it only too well. But there were many jealous people, and many jokes and funny stories went round in regard to the members of the Gun Club. Pictures and caricatures were made in Europe and particularly in England, where people could not get over the loss which they suffered in the matter of pounds sterling. "Ah," said they, "this Yankee has got it in his head to reach the North Pole. He wants to put his foot where, up to the present time, no living soul has yet been. He wants to build palaces and houses and, perhaps, the White House of the United States, in a part of the world which has never yet been reached, while every other part of the world is so well known to us."

And then wild caricatures appeared in the different newspapers. In the large show-windows and news-depots, as well in small cities of Europe as in the large cities of America, there appeared drawings and cartoons showing President Barbicane in the funniest of positions trying to reach the North Pole. One audacious American cut had all the members of the Gun Club trying to make an underground tunnel beneath the terrible mass of immovable icebergs, to the eighty-fourth degree of northern latitude, each with an axe in his hand. In another, Impey Barbicane, accompanied by Mr. J.T. Maston and Capt. Nicholl, had descended from a balloon on the much-desired point, and after many unsuccessful attempts and at the peril of their lives, had captured a piece of coal weighing about half a pound. This fragment was all they discovered of the anticipated coal-fields. There were also pictures made of J. T. Maston, who was as much used for such purposes as his chief. After having tried to find the electric attraction of the
North Pole, the secretary of the Gun Club became fixed to the ground by his metallic hand.

The celebrated calculator was too quick-tempered to find any pleasure in the drawings which referred to his personal conformation. He was exceedingly annoyed by them, and Mrs. Evangelina Scorbitt, it may be easily understood, was not slow to share his indignation. Another drawing in the Lanterne of Brussels represented the members of the Council and the members of the Gun Club tending a large number of fires. The idea was to melt the large quantities of ice by putting a whole sea of alcohol on them, which would convert the polar basin into a large quantity of punch. But of all these caricatures, which had the largest success was that which was published by the French Charivari, under the signature of its designer, "Stop." In the stomach of a whale Impey Barbicane and J. T. Maston were seated playing checkers and waiting their arrival at a good point. The new Jonah and his Secretary had got themselves swallowed by an immense fish, and it was in this way, after having gone under the icebergs, that they hoped to gain access to the North Pole. The President of this new Society did not care much about these pictures, and let them say and write and sing whatever they liked.

Immediately after the concession was made and the Society was absolute master of the northern region, appeal was made for a public subscription of $15,000,000. Shares were issued at $100, to be paid for at once, and the credit of Barbicane & Co. was such that the money ran in as fast as possible. The most of it came from the various States of the Union. "So much the better," said the people on the part of the N.P.P.A. "The undertaking will be entirely American."

So strong, indeed, were the foundations upon which Barbicane & Co. were established that the amount necessary to be subscribed was raised in a very short time, and even thrice the amount. Everybody was interested in the matter, and the most scientific experts did not doubt its success.

The shares were reduced one-third, and on Dec. 16 the capital of the Society was $15,000,000 in cash. This was about three times as much as the amount subscribed to the credit of the Gun Club when it was going to send a projectile from the earth to the moon.

CHAPTER VI.
IN WHICH A TELEPHONE COMMUNICATION BETWEEN MRS. SCORBITT AND J.T. MASTON IS INTERRUPTED.

President Barbicane was not only convinced that he would reach his object when the amount which had been raised took another obstacle out of his way. Had he not been perfectly sure of success he would not have made an application for a public subscription. And now the time had come when the North Pole would be conquered. It was felt certain that President Barbicane and his Council of Administration had means to succeed where so many others had failed. They would do what neither Franklin, nor Kane, nor De Long, nor Nares, nor Greely had been able to accomplish. They would pass the 84th parallel, they would take possession of the vast region purchased at an auction sale, they would make this country the thirty-ninth star in the flag of the American Union. "Fake," was all that the European delegates and their friends in the Old World could say. Nothing was more true, however, and this practical, logical means of conquering the North Pole, which was so simple that it was almost childish, was one which J.T. Maston had suggested to them. It was that brain, where ideas were constantly evolving, which had laid out this great geographical project in a way which could not but succeed.

It cannot be too often repeated that the Secretary of the Gun Club was a remarkable calculator, we might say a postgraduate calculator. But a single day was needed by him to solve the most complicated problems in mathematical science. He laughed at these difficulties whether in algebra or in plain mathematics. You should have seen him handle his figures, the signs which make up algebra, the letters in the alphabet, representing the unknown quantities, the square or crossed lines representing the way in which quantities are to be operated. All signs and lines, and radicals used in this complex language were perfectly familiar to him. And how they flew around under his pen, or rather under the piece of chalk which he attached to his iron hand, because he preferred to work on a blackboard. And this blackboard, six feet square, this was all he wanted, he was perfectly at home in his work. Nor was it figures alone which he used in his calculations. His figures were fantastic, gigantic, written with a practiced hand. His "2" and "3" were as nice and round as they could be, his "7" looked like a crutch and almost invited a person to hang on it. His 8 was as well formed as a pair of eye-glasses; and the letters with which he established his formulas, the first of the alphabet, a, b, c, which he used to represent given or known quantities, and the last, x, y, z, which he used for unknown quantities to be discovered, particularly the "x," and those Greek letters δ, ω, α. Really an Archimedes might have been well proud of them. And those other signs, made with a clean hand and without fault, it was simply astonishing. His + showed well that this sign meant an addition of one object to the other, his −, if it was a little smaller, was also in good shape. His =, too, showed that Mr. Maston lived in a country where equality was not a vain expression, at least amongst the people of the white race. Just as well were his > and his < and his ::, used in expressing proportions. And the √, which indicated the root of a certain number or quantity, it was to him a mark of triumph, and when he completed it with a horizontal line in this √—— , it seemed as if this outline on his blackboard would compel the whole world to submit to his figuring.

But do not think that Mr. J.T. Maston's mathematical intelligence was confined to elementary algebra! No; no matter what figuring he had to do, it was alike familiar to him, and with a practised hand he made all the signs and
Mrs. Evangelina Scorbitt appeared and made her last visit to Mr. Maston. He should not be disturbed by any one. This was a great disappointment for Mrs. Evangelina Scorbitt, but she was complicated and delicate to handle, involving several deep and important problems. Therefore, to avoid all impenetrable ice. He estimated that he needed at least a week to accomplish this mysterious calculation, exceedingly to the North Pole, and which would allow him to make use of those large fields of snow now covered with glittering banner. Three miles, three long miles at least separated the Palace at New Park from the “Ballistic tower on the top of the building, on which the blue and gold coat-of-arms of the Scorbitt family was upon a grand halls, its picture galleries, in which French artists held the highest places; its magnificent staircase, its great balconies, finished in the finest architecture, half Romanesque, half Gothic, with its richly-furnished apartments, its different was the mansion of Mrs. Evangelina Scorbitt, situated in the richest quarter of New Park, with facade of these walls there had been made calculations which would have made Newton, Euclid, or Laplace jealous. How and his working-studio, looking on the garden, and where the noise of the outer world could never penetrate. Within these walls there had been made calculations which would have made Newton, Euclid, or Laplace jealous. How different was the mansion of Mrs. Evangelina Scorbitt, situated in the richest quarter of New Park, with facade of balconies, finished in the finest architecture, half Romanesque, half Gothic, with its richly-furnished apartments, its grand halls, its picture galleries, in which French artists held the highest places; its magnificent staircase, its great number of domestics, its stables, its coach-houses, its garden, with the finest of flowers, statues, fountains, and the tower on the top of the building, on which the blue and gold coat-of-arms of the Scorbitt family was upon a glittering banner. Three miles, three long miles at least separated the Palace at New Park from the “Ballistic Cottage.” But a private telephone wire connected there, and in answer to "Hello! hello!" a conversation could be carried on between the mansion and cottage. If the persons could not look at each other they could at least hear each other. It will astonish none to hear that time upon time Mrs. Scorbitt began talking and ringing on the telephone to cottage was a very simple one. A ground-floor, with a veranda and a floor over it; a small parlor and small dining-room, with a kitchen and another room in an outbuilding stand at the back of the garden. Upstairs his sleeping-room and his working-studio, looking on the garden, and where the noise of the outer world could never penetrate. Within these walls there had been made calculations which would have made Newton, Euclid, or Laplace jealous. How different was the mansion of Mrs. Evangelina Scorbitt, situated in the richest quarter of New Park, with facade of balconies, finished in the finest architecture, half Romanesque, half Gothic, with its richly-furnished apartments, its grand halls, its picture galleries, in which French artists held the highest places; its magnificent staircase, its great number of domestics, its stables, its coach-houses, its garden, with the finest of flowers, statues, fountains, and the tower on the top of the building, on which the blue and gold coat-of-arms of the Scorbitt family was upon a glittering banner. Three miles, three long miles at least separated the Palace at New Park from the “Ballistic Cottage.” But a private telephone wire connected there, and in answer to "Hello! hello!" a conversation could be carried on between the mansion and cottage. If the persons could not look at each other they could at least hear each other. It will astonish none to hear that time upon time Mrs. Scorbitt began talking and ringing on the telephone to Mr. Maston when he was busily engaged with his figures. Then the calculator had to quit his work with some reluctance. He received a friendly "How do you do?" from Mrs. Scorbitt, which he answered with a grunt, which was sweetened into a kindly greeting by the distance over the telephone. After a conversation he was glad to go back to his figures. It was on the 3d of December, after a long and last conference, that Mr. Maston took leave of his friends and members of the Club to begin to do his share of the work. It was a very important work with which he had charged himself, for it was the question of figure mechanical appliance which would enable him to gain access to the North Pole, and which would allow him to make use of those large fields of snow now covered with impenetrable ice. He estimated that he needed at least a week to accomplish this mysterious calculation, exceedingly complicated and delicate to handle, involving several deep and important problems. Therefore, to avoid all unnecessary annoyance, it had been decided that the Secretary of the Gun Club should retire to his cottage and that he should not be disturbed by any one. This was a great disappointment for Mrs. Evangelina Scorbitt, but she was compelled to accept it. While President Barbicane, Capt. Nicholl and his associates, the jolly Bilbsy, Col. Bloomsberry, Tom Hunter, with the wooden legs, were all saying their good-bys to him and wishing him success, Mrs. Evangelina Scorbitt appeared and made her last visit to Mr. Maston. "You will succeed, my dear," said she at the moment of separation. "And above all do not make a mistake," added President Barbicane. "A mistake? He?" exclaimed Mrs. Scorbitt. "No more than God has made a mistake in putting together this world," modestly answered the Secretary. Then,
after shaking hands all around and after several more sighs and wishes of success and suggestions not to make too severe a work of it, the calculator was left alone. The door of the Ballistic cottage was closed and Fire-Fire had orders to admit none, not even if the President of the United States should ask admission.

During his first two days of seclusion J.T. Maston thought and thought, without even touching the piece of chalk, upon the problem which he had taken on himself. He consulted certain books relative to the elements, the earth—its size, its thickness, its volume, its form, its rotation upon its axis—all elements which he had to use as the basis of his calculations.

The principles of these elements which he used, and which we put before the reader, were as follows:

Form of the earth: An ellipsis of revolution the longest radius of which is 6,377,398 metres; the shortest, 6,356,080 meters. The circumference of the earth at the equator, 40,000 kilometres. Surface of the earth, approximate estimate, 510,000,000 of square kilometers. Bulk of the earth, about 1,000 milliards of cubic kilometres; that is, a cube having a metre in length, height, and thickness. Density of the earth, about five times that of the water.

Time of the earth on the orbit around the sun, 365 days, 6 hours, 9 minutes, 10 seconds, 37 centimes. This gives the globe a speed of 30,400 miles travelled over by the rotation of the earth upon its axis. For a point of its surface situated at the equator, 463 meters per second. These were the principal measures of space, time, bulk, etc., which Mr. Maston used in his calculations.

It was the 5th of October, about 5 o’clock in the afternoon, it is important to mention, when this remarkable work was begun, when J. T. Maston began to work upon it. He began his calculation with a diagram representing the circumference of the earth around one of its grand circles, say the equator. The blackboard was there, in a corner of his study, upon a polished oak easel, with good light shining on it, coming by one of the windows near by. Small pieces of chalk were on the board attached to the stand. The sponge was near the hand of the calculator. His right hand, or rather his right hook, was all ready for the placing of figures which he was going to use. Standing up, Mr. Maston made a large round circle, which represented the world. The equator he marked by a straight line. Then in the right corner of the blackboard he began to put the figures which represented the circumference of the earth:

40,000,000.

This done, he began figuring on his problem. He was so much occupied by it that he had not observed the weather without. For an hour a storm had raved through the country which affected all living beings. It was a terrific storm, the rain was falling in torrents, everything seemed turned upside down in nature. Two or three times lightning had illuminated the scene around him. But the mathematician, more and more absorbed in his work, saw and heard nothing. Suddenly an electric bolt, attracted by the lightning outside, sparkled in his room, and this disturbed the calculator. "Well," said Mr. Maston, "if unwelcome visitors cannot get in by the door they come by telephone. A nice invention for people who wish to be left alone. I will go to work and cut off the electric wire, so I will not be disturbed again while my figuring lasts." With this he went to the telephone and said sternly: "Who wants to talk to me? Just make it short." The reply came back: "Did you not recognize my voice, my dear Mr. Maston? It is I, Mrs. Scorbitt." "Mrs. Scorbitt! She will never give me a moment’s rest," uttered Mr. Maston to himself in a low voice that she could not hear. Then he thought he should at least answer her in a polite manner, and said: "Oh, is that you, Mrs. Scorbitt?"

"Yes, dear Mr. Maston."

"And what can I do for Mrs. Scorbitt?" asked Maston.

"I want to tell you that a terrible storm and lightning is destroying a large part of our city." "Well," he replied, "I cannot help it." "But I want to ask whether you have thought to close your windows?" Mrs. Scorbitt had hardly finished her sentence when a terrible thunderbolt struck the town. It struck in the neighborhood of the Ballistic cottage, and the electricity, passing along the wire with which the telephone was provided, threw the calculator to the floor with a terrible force. J.T. Maston made the best summersault he ever did in his life. His metal hook had touched the live wire and he was thrown down like a shuttlecock. The blackboard, which he had struck in his fall, was sent flying to another part of the room. Then the electricity passed into other objects and disappeared through the floor. The stupefied Mr. Maston got up and touched the different parts of his body to assure himself that he was not hurt internally. This done, he resumed his cold, calculating way. He picked everything up in his room, put it in the same place where it had been before and put his blackboard on the easel, picked up the small pieces of chalk and began again his work, which had been so suddenly interrupted. He noticed that on account of the fall the number which he had made on the right side of the blackboard was partly erased, and he was just about to replace it when his telephone again rang with a loud noise. "Again," said J.T. Maston, and going to the telephone he exclaimed, "who is there?" "Mistress Scorbitt." "And what does Mrs. Scorbitt want?" "Did not this terrible thunderbolt strike Ballistic cottage? I have good reason to think so. Ah, great God, the thunderbolt!"

"Don’t be alarmed, Mrs. Scorbitt."

"You have not been injured, Mr. Maston?"
"Not at all," he replied.
"You are sure you have no injuries whatever," said the lady.
"I am only touched by your kindness towards me," replied Mr. Maston, thinking it the best way to answer.
"Good evening, dear Mr. Maston."
"Good evening, dear Mrs. Scorbitt."

Returning to his work Mr. Maston said, sotto voce, "To the devil with her. If she had not handled the telephone at such a time I would not have run the risk of being hurt by electricity."

Mr. Maston did not wish to be interrupted in his work again and so took down his telephone and cut the wire. Then, taking again as basis the figure which he had written, he added different formulas of it, and finally a certain formula which he had written on his left side, and then he began to figure in all the language of algebra. A week later, on the 11th of October, this magnificent calculation was finished and the Secretary of the Gun Club brought his solution of the problem with great pride and satisfaction to the members of the Gun Club, who were awaiting it with very natural impatience. This then was the practical way to get to the North Pole mathematically discovered. Here was also a society, under the name of the N.P.P.A., to which the Government of Washington had accorded a clear title of the Arctic region in case they should buy it on auction, and we have told of the purchase made in favor of American buyers and of the appeal for a subscription of $15,000,000.

CHAPTER VII.

IN WHICH PRESIDENT BARBICANE SAYS NO MORE THAN SUITS HIS PURPOSE.

On the 22nd of December the subscribers to Barbicane & Co. were summoned to a general meeting. It is hardly necessary to say that the headquarters of the Gun Club were selected as the place of the meeting. In reality the whole block would not have been sufficient to give room to the large crowd of subscribers who assembled on that day. But a meeting in the fresh air on one of the public squares of Baltimore was not very agreeable in such cold weather. Usually the large hall of the Gun Club was decorated with models of all kinds lent by members of the Club. It was a real museum of artillery. Even the furniture, chairs and tables, sofas and divans, recalled by their strange shapes those murderous engines which had sent into a better world many brave people whose greatest wish was to die of old age.

On this meeting day all these things were taken down and out. This was not a meeting for the purpose of war, but a commercial and peaceful meeting over which Impey Barbicane was going to preside. All room possible had been made for the subscribers who arrived from all parts of the United States. In the hall as well as in the adjoining rooms the crowds were pushing and pressing each other without heeding the innumerable people who were standing on the adjoining streets. The members of the Gun Club, as first subscribers to the affair, had places reserved for them very near the desk. Among them could be found Col. Bloomsberry, more happy than ever; Tom Hunter, with his wooden legs, and the jolly Bilsby. Very snug in a comfortable armchair was Mrs. Evangelina Scorbitt, who should really have had a place on the right hand of the President, as she was in reality the owner of the Arctic region. Several other ladies were in the crowd. They could readily be seen by their large and much-decorated hats in many different colors. The large crowd on the outside tried to push into the hall, and one might easily have thought that all the people present were not merely helpmates of the members of the Gun Club, but rather their personal friends. The European delegates—Swedish, Norwegians, Danish, English, Dutch, and Russian—occupied reserved seats, and if they had bought any stock in this society it was only each one individually to such an extent as to justify a vote in the proceedings. After they had been so closely united in purchasing these regions they were united now only to annoy the purchasers. It may easily be imagined what intense curiosity they had to hear the important communication which the President was about to make to them. This communication undoubtedly would throw some information on the point as to how the society would proceed to reach the North Pole. Was this not a more difficult thing than merely to make use of the coal mines? If there should be any objections to make you may be assured that Major Donellan, backed up by his secretary, Dean Toorikin, would make them, and the other delegates would not be very slow in adding their word also. The Major had firmly decided to harass and annoy his rival, Impey Barbicane, as much as he possibly could.

It was 8 o'clock in the evening. The hall, the parlors, and all quarters occupied by the Gun Club blazed with lights which the Edison electroliers threw out. As soon as the doors were thrown open for the public a terrible crowd jammed into the hall. But everyone became silent as the ushers announced that the Council of Administration was coming. There, on a draped platform, with a table covered with black cloth, in full sight, President Barbicane, his Secretary, J.T. Maston, and his associates, took their places. A triple round of cheers, followed by hearty "tigers," rang through the hall and out to the adjoining streets. Very solemnly Mr. Maston and Capt. Nicholl took their seats. Then the President, who had remained standing, opened the proceedings. He put his right hand in his trouser's pocket and his left hand in his vest front and began as follows:

"Lady and gentlemen subscribers, the Council of Administration has called a meeting in these headquarters of
the Gun Club to make an important communication to you. You have learned by the circulars and through the
discussions in the papers that the object of our Club is to explore the large coal fields situated in the Arctic regions,
which we have recently purchased and to which we hold a title from the American Government. The amount of
money raised by public subscription will be used for these purposes. The success which will be attained by it
surpasses belief and the dividends your money will bring you will be unsurpassed in the commercial or financial
history of this or any other country." Here applause was heard for the first time and for a moment the orator was
interrupted. "You do not forget," said he, "how we have proved to you that there must be vast coal fields in these
regions, perhaps also fields of fossil ivory. The articles published on this subject do not allow any doubt that coal
fields are there, and coal is now, you know, the basis of all our commercial industry. Without mentioning the coal
which is used every year in firing and heating, we might think of coal used for many other purposes, of which I
could mention a hundred different ones. It is certain that coal is the most precious substance, and will some day, on
account of the large consumption of it; fail in its supply. Before 500 years have passed the coal mines which are at
present in use will have stopped giving coal."

"Three hundred years," cried one of those present. "Two hundred years," answered another.

"Let us say at some time sooner or later," continued the President, calmly, "and let us suppose, too, that we will
even discover new coal fields yet, whose coal will give out, say at the end of the nineteenth century." Here he
stopped to give his listeners a chance to grasp the idea. Then he began again: "Therefore, we come here, subscribers,
and I ask you to rise and go with me to the North Pole immediately." Everybody present got up and seemed about to
rush away and pack their trunks, as if President Barbicane had a vessel ready to take them direct to the North Pole.
But a remark made by Major Donellan in a clear and loud voice brought them back to reality and stopped them at
once. "Before starting" he asked, "I would like to know by what means we can reach the North Pole?"

"Either by water, or land, or by air," quietly answered President Barbicane.

All the people present sat down, and it may readily be understood with what a feeling of curiosity.

"In spite of all the devotion and courage of previous explorers, the eighty-fourth parallel has thus far been the
northern limit reached. And it may fairly be supposed that this is as far north as anybody will ever get by the means
employed at the present day. Up to the present time we have only used boats and vessels to reach the icebergs,
and rafts to pass over the fields of ice. People should not adopt such rash means and face the dangers to which they are
exposed through the low temperature. We must employ other means to reach the North Pole."

It could be seen by the excitement which took hold of the auditors, that they were on the point of hearing the
secret which has been so vigorously searched for by every one.

"And how will you reach it?" demanded the delegate of England.

"Before ten minutes have passed you will know it, Major Donellan," said President Barbicane, "and I may add in
addressing myself to all the stockholders, that they should have confidence in us as the promoters of this affair, for
we are the same who have tried to send a projectile to the moon."

"Yes," cried Dean Toodrink, sarcastically, "they tried to go as far as the moon. And we can easily see that they
are here yet,"

President Barbicane ignored the interruption. Shrugging his shoulders, he said in a loud voice: "Yes, ladies and
gentlemen, in ten minutes you will know what we are going to do."

A murmur, made up of many "Ahs!" and "Ohs!" followed this remark. It seemed to them as if the orator had said
in ten minutes they would be at the North Pole. He then continued in the following words:

"First of all, it is a continent which forms this arctic region, or it is an ocean, and has Commander Nares been
right in calling it 'paleocrystic ocean,' which means an ocean of old ice? To this question I must answer that I think
he was not right."

This is not sufficient," exclaimed Eric Baldenak. "It is not the question of supposing, it is the question of being
certain."

"Well, we are certain," came the answer to this furious inquirer. "Yes, it is a solid continent and not an ice ocean
which the N.P.P.A. has purchased and which now belongs to the United States and which no European power has
the right to touch."

A little murmur came from the neighborhood of the delegates of the Old World. "Bah!" they said. "It is full of
water, a regular washbasin which you will not be able to empty." Dean Toodrink as usual made most of the remarks
and met the hearty applause of his associates. "No, sir," answered President Barbicane, quickly. "There is a regular
continent, a platform which rises like the Gobi desert in Central Asia, three or four kilometres above the surface of
the ocean. This is very easy to be seen from the observations made in the neighboring countries, of which the polar
region is only an extension.

"After their explorations have not Nordenskiold, Perry and Maagaard stated that Greenland gets higher and
higher towards the North Pole?"
“Besides, they have found birds, different products and vegetables in the northern ice—ivory teeth also—which
dicate that this region must have been inhabited and that animals must have been there, and perhaps people as
well. There used to be large forests there, which must have been formed into coal-fields, which we will explore.
Yes, there is a continent, without a doubt, around the North Pole—a continent free from all human beings, and on
which we will place the banner of the United States.”

At this remark the auditors expressed great delight. When the noise had finally subsided Major Donellan could
be heard to remark: "Well, seven minutes have already gone by of the ten which, as you say, would be sufficient to
reach the North Pole."

"We shall be there in three minutes," coolly answered President Barbicane.

"But, even if this be a continent, which constitutes your purchase, and if it is a raised country, as we may have
reasons to believe, it is also obstructed by eternal ice, and in a condition which will make exploration extremely
difficult," responded the Major. "Impossible," cried Jan Harald, who emphasized this remark with a wave of his
hand. "Impossible, all right," said Impey Barbicane. "But it is to conquer this impossibility that we have purchased
this region. We will need neither vessels nor rafts to reach the North Pole; no, thanks to our operations, the ice and
icebergs, new or old, will melt by themselves, and it will not cost one dollar of our capital nor one minute of our
time." At this there was absolute silence. The most important moment had come.

"Gentlemen," said the President of the Gun Club, "Archimedes only asked for a lever to lift the world. Well, this
lever we have found. We are now in a position to remove the North Pole."

"What, remove the North Pole?" asked Eric Baldenak.

"Will you bring it to America?" asked Jan Harald. Without doubt President Barbicane did not wish to explain
himself just yet, for he continued: "In regard to this point of leverage—" "Do not tell it! do not tell it!" cried one of
his associates, with a terrible voice.

"In regard to this lever—"

"Keep the secret! keep the secret!" cried the majority of the spectators, taking up the cry.

"We will keep it," said President Barbicane.

Naturally, the European delegates were very much vexed at this remark. This will be easily understood. In spite
of all these exclamations the orator never had any intention of making his plan known. He continued to say: "We
obtained our object, thanks to a mechanical device, one which has no precedent in the annals of industrial art. We
will undertake it and bring it to a successful finish by means of our capital, and how I will inform you forthwith."

"Hear! hear!" said the others present.

"First of all, the idea of our plan comes from one of the ablest, most devoted and illustrious calculators and one
of our associates as well," said President Barbicane. "One to whom we owe all the calculations which allows us to
have our work in such good condition. As the exploration of the North Pole is not a piece of play the removal of the
pole is a problem which could only be solved by the highest calculations. Therefore we have called the assistance of
the honorable Secretary, Mr. J.T. Maston."

"Hip, hip, hip, hurrah, for J. T. Maston," exclaimed all the auditors, seemingly electrified by the presence of this
extraordinary calculator.

Mrs. Evangelina Scorbitt was deeply touched by this recognition of the celebrated mathematician, who had
already entirely gained her heart. He contented himself with turning his head to the right and left, bowing and
thanking his auditors.

"Already, dear subscribers," said President Barbicane, "since the great meeting in honor of the arrival of the
Frenchman, Michel Ardan, in America, some months before our departure for the moon" (and this confident Yankee
spoke of the trip to the moon as quietly as if it were no more than a trip to New York), "J T. Maston had already said
to himself: 'We must invent machines to move the North Pole. We must find a point for action and put the axis of
the earth in the right direction from the object.' Well, any or all of you who listen to me find it if you can. I can only
say the machines have been invented, the point of leverage has been found, and now let us pay our attention to the
question of fixing, in the right way, for our end of the axis of the earth." Here he stopped speaking, and the
astonishment which was expressed on the faces of his auditors it is impossible to describe.

"What!" cried Major Donellan, "you then have the idea of putting the axis of the earth in another direction?"

"Yes, sir," answered President Barbicane promptly. "We have the means of making a new one which will
hereafter regulate the routine of day and night."

"You want to modify the daily rotation of the earth?" repeated Col. Karkof, with fire in his eyes.

"Absolutely, but without affecting its duration," answered President Barbicane. This operation will bring the
pole at or about the sixty-seventh parallel of latitude, then the earth will be similar to the planet Jupiter, whose axis
is nearly perpendicular to the plane of its orbit. Now this movement of 23 degrees 28 minutes will be sufficient to
give at our North Pole such a degree of heat that it will melt in less than no time the icebergs and field which have
been there for thousands of years.”

The audience was out of breath. Nobody thought of interrupting the orator, even to applaud him. All were taken in by this idea, so ingenious and simple, of modifying the axis on which this earthly spheroid is rotating. And as for the European delegates, well, they were simply stupefied, paralyzed, and crushed, they kept their mouths shut in the last stage of astonishment. But the hurrahs seemed to rend the hall asunder, when President Barbicane made the additional remark: “It is the sun which will take upon himself the melting of the icebergs and fields around the North Pole, and thus make access to the same very easy. So, as people cannot go to the pole, the pole will come to them.”

CHAPTER VIII.

YES, JUST LIKE JUPITER.

Since that memorable meeting in honor of Michel Ardan, the Hon. J.T. Maston had talked and thought of nothing else but the “changing of the axis of the earth.” He had studied the subject as much as possible and found out all the facts and figures about it. As the problem had been solved by this eminent calculator a new axis was going to take the place of the old one upon which the earth was now turning, and the world would otherwise remain the same. In the scheme it would be possible for the climate around the North Pole to become exactly the same as that of Trondhjem, in Norway, in the Spring. Naturally, then the large amount of ice would melt under the ardent sun. At the same time the climates would be distributed over our sphere like those now on the surface of Jupiter. In other words, the new-formed society of Barbicane was going to change everything at present on the surface of the earth. And the creation of this new axis was possible, just as soon as the platform of which Archimedes had dreamed and the lever imagined by J.T. Maston were at the disposal of these courageous engineers. And as they had decided to make a secret of their invention until a future time, people could not do anything else but make their own figures. This was what all the papers did, calling on the most scientific persons and learning as well something from the most ignorant persons. If there really were people living on the surface of Jupiter, they had a good many advantages over those on the earth, advantages which had all been narrated and explained in the meeting which was held before the trip to the moon. All these advantages would come to the people living on the earth if Barbicane & Co. could accomplish what they intended to do. Twenty-four hours would then always separate two noons from each other. Twilight and dawn would always be as they are now. But the most curious thing of all would be the absence of the different seasons of the year. Now there were Summer, Winter, Fall, and Spring. The people living on Jupiter did not know these seasons at all. After this experiment people living on this globe would not know them either. As soon as the new axis would be in smooth working order there would be no more ice regions, nor torrid zones, but the whole world would have an even temperature climate.

What, after all, is the torrid zone? It is a part of the surface in which the people can see the sun twice yearly at its zenith, and the temperate zone but a part where the sun never goes to the zenith, and the icy region but a part of the world which the sun forgets entirely for a long time, and around the North Pole this extends for six months. It is simply the position of the sun which makes a country exceedingly hot or cold. Well, these things would not appear any longer on the surface of the world. The sun would be always over the equator: it would go down every twelve hours just as regularly as before. "And among the advantages of the new method," said the friends of President Barbicane, "were these, that each person could choose a climate which was best for himself and his health; no more rheumatism, no more colds, no more grippe; the variations of extreme heat would not be known any more. In short, Barbicane & Co. were going to change fixtures which had existed ever since the world was in existence. Certainly the observer would lose a few stars and things which he perhaps liked to look at now, and the poet would not have any longer his dreamy nights, etc., but what a great advantage it would be for the world at large. "And," said certain journals, "the products of the ground can be regulated so that agriculturists can give to each sort of plant life the temperature which suits it most." Other newspapers asked: "Will we no more have rain, or storms, or hail—things upon which a great deal depends in the harvest time?" "Undoubtedly," said the friends of Barbicane & Co., but these accidents will be more rare than they have been, as the temperature will be more even. Yes, taken in all, it will be a great advantage to humanity. It will be the real millennium of the earthly globe. And Barbicane & Co. will have done a service to mankind which but for them would have remained an impossibility." "Yes," said Michel Ardan, "our hemisphere, the surface of which is always either too cold or too warm, will no longer be the place for colds and rheumatism, etc." A New York paper of Dec. 27 printed the following article: "Honor to President Barbicane! His associates and himself will not only annex a new province to our American continent, and thereby enlarge the already vast possessions of the United States, but they will make the whole world more productive and inhabitable. It will be possible then to put seed in the ground as soon as the crop had grown up and been taken out; there would be no more time lost during the Winter. And the coal mines also would make the country richer than the value of its entire present reality. Barbicane & Co. will change the whole world and put it in better condition. Thanks, then, to the people who have done this greatest of benefits to humanity.”

CHAPTER IX.
IN WHICH APPEARS THE FRENCH GENTLEMAN TO WHOM WE REFERRED AT THE BEGINNING OF THIS TRUTHFUL STORY.

Such, then, were to be the profits due to the changes which were to be wrought by President Barbicane. The earth would continue to revolve and the course of the year would not be much altered. As the changes would concern the whole world it was natural that they became of interest to all. In regard to the new axis which was going to be used that was the secret which neither President Barbicane nor Capt. Nicholl nor J.T. Maston seemed to be willing to give to the public. Were they to reveal it before, or would none know of it until after the change had taken place? A degree of uncertainty began to fill the American mind. Criticisms very natural and to be expected were made in the papers. By what mechanical means was this project to be carried out which would bring about this change? It would necessarily demand a terrible power. One of the greatest papers at that time commented in the following article: "If the earth was not turning on its axis, perhaps a very feeble shock would be sufficient to give it such a movement as might be chosen, but otherwise it would be very difficult if not impossible to deviate it a fixed amount." Nothing seemed more correct after having discussed the effort which the engineers of the N.P.P.A. were to make. Discussion took on the interesting turn as to whether this result would be reached insensibly or suddenly. And if the latter, would not terrible accidents happen at the moment when the change took place? This troubled scientific people as well as ignorant people. It was not agreeable to know that a blow was to be struck and not know precisely what the after effects were to be.

It seemed as if the promoters of this undertaking had not fully considered the consequences - that they would be so very dangerous to the earth, and that it would not do as much good as first thought. The European delegates, more than ever angry at the loss which they had suffered, resolved to make the most of this question and to excite the public as much as possible upon it so as to turn feeling against the members of the Gun Club.

It will not be forgotten that France had absolutely nothing to do with these delegates, as it had no intentions of buying the Arctic region. However, a Frenchman had come to Baltimore, and for his own personal benefit and information had watched with great interest the proceedings of the Gun Club. He was an engineer, not more than thirty-five years old. He had been first in the polytechnic school, and came out of it with the highest honors. He was without doubt as skilful a calculator as Mr. J.T. Maston. This engineer was a very intelligent young man, very original, always pleasant, and with most amiable manners. He always spoke very frankly and used plain language, no matter whether he was speaking in earnest or in fun. He even went so far as to use slangy expressions when they served his purpose. He could sit for hours at his table and figure and calculate, making his figures and calculations as fast as he could write with a pen. His greatest pleasure, next to these difficult mathematical efforts, was in "whist," which he played apparently very indifferently, not forgetting to figure out all his chances. His name was Alcide Pierdeux, but he generally signed it, A. Pierd, and sometimes only A. Pie. He was very tall. His friends remarked that his height measured about the five millionth part of the quarter of the meridian, and they were not much mistaken. He had a small head, at least it looked so on his broad shoulders, but with a most lively expression on his face, and his blue eyes behind his eye-glasses twinkled merrily. This was characteristic of him, for he had one of those faces which appear merry, even when they are in sober earnest. He was at once the best scholar in his class and the best tempered. But even if his head did seem a little small on his shoulders, it is safe to say that it was filled to its highest capacity. He was a mathematician, as all his ancestors had been, but he did not study mathematics to use them in his profession, for which he never had any taste, as he disliked trade. No, he studied mathematics for themselves alone, simply to find them out more and more where there was so much unknown to man. Let us also remark that Alcide Pierdeux was a bachelor. He was as yet single, or, as he would express it, equal to one (= 1) although his greatest wish was to get married. His friends all thought that he would marry a very charming girl, gay and spirituelle. But, unhappily for him, the girl’s father said that he was too smart and that he would talk to his daughter in language which she would not be able to understand. How modest and simple this father was, indeed.

And for this reason the young engineer decided to place between himself and his country the broad ocean. He asked permission to go abroad for a year and obtained it. He thought that he could not make any better use of his time than to go to Baltimore and note the actions of the N.P.P.A. And this is how he came to be at this time in the United States. However, since he got to Baltimore he had cared little apparently for the great undertaking of Barbicane & Co. Whether the earth would have a change of the axis or not, what did it matter to him? He only wanted to know, and his curiosity was at the highest point to find out, by what means they were to move the earth. He thought again and again how they would do it and had several plans in his head and dismissed them only to consider the matter afresh. He concluded that they wanted probably to substitute a new axis, but he did not clearly see where their point of operations was to be. Then, again, he would say, "There is the daily movement. It is impossible to suppress it; how they will do it, is a perfect conundrum to me." He had no idea what the plans of Barbicane and Maston were. It is to be regretted very much that their intentions were not known to him, as he would have been able to figure out the formulae in a very short time. And so it came about that on this 29th day of December, Alcide Pierdeux was
walking with his hand at his brow, pondering, about the streets of Baltimore.

CHAPTER X.
IN WHICH A LITTLE UNEASINESS BEGINS TO SHOW ITSELF.

A month had elapsed since the meeting of the Gun Club and the stockholders of the new-formed society, and public opinion was getting much altered. The advantages of the change to be wrought in the axis of the earth were forgotten and its disadvantages began to be spoken of. It was very probable, public opinion said, that a terrible catastrophe would happen, as the change could only be brought about by a violent shock. What would this catastrophe exactly be? In regard to the change of climates, was it so desirable after all? The Esquimaux and the Laps and the Samoyeden and the Tchuktchees would benefit by it, as they had nothing to lose. The European delegates were very energetic in their talk against President Barbicane and his work. To begin with they sent information to their Government. They used the cable frequently and always sent cipher messages. They asked questions and received instructions. What, then, were these instructions, always in cipher and very guarded? "Show energy, but do not compromise our Government," said one. "Act very considerately, but do not touch the 'status quo,'" said another. Major Donellan and his associates did not fail to predict a terrible accident. "It is very evident that the American engineers have taken steps so as not to hurt, or at least as little as possible, the territory of the United States," thought Col. Boris Karkof. "But how could they do it?" asked Jan Harald. "If you shake a tree do not all its branches suffer while you are shaking it?" "And if somebody hits you on the back does not your whole body feel the pain?" said Jacques Jansen. "That is, then, what this strange paragraph of the document meant," said Dean Toodrink. "That is the reason why they mentioned certain geographical changes."

"Yes," said Eric Baldenak, "that is what we have to fear; this change will throw the sea out of its basin, and should the ocean leave its present quarters, would not certain inhabitants of this globe find themselves so located that they could not readily communicate with their fellow-citizens?"

"It is very possible that they may be brought into such a density of surrounding medium," said Jan Harald, gravely, "that they will be unable to breathe."

"We will see London at the top of Mount Blanc," exclaimed Major Donellan. And with his legs crossed and his head thrown back this gentleman looked straight up as if the capital of his country was already lost in the clouds. In short, it became a public danger and a most annoying one. True, it was only a question of a change of 23 degrees and 28 minutes, but this change might bring about a great movement of the oceans as the new earth flattened itself around the pole. Protestations were heard from all over, and the Government of the United States was asked to interfere. "It was best not to try the operation at all."

"The consequences of it might destroy this world." "God has done all things well; it was not necessary to better his work," were the comments. And yet there were people light-hearted enough to make merry at the whole matter. "Look at these Yankees," they said, "they want to turn the earth on its axis. If the earth had shown any faults in its motion it would be all right to better it, but it had gone on for millions of years and always as regularly as clockwork."

Instead of answering such questions Engineer Alcide Pierdeux tried to find which would be the countries and directions, figured out by Mathematician Maston, in which the test would take place—the exact point of the globe where the work would begin. As soon as he should know this he would be master of the situation and know exactly the place which would be in the most danger. It has been mentioned before that the countries of the old continent were probably connected with those of the new across the North Pole. Was it not possible, it was asked in Europe, that President Barbicane and Capt. Nicholl and J.T. Maston had considered only how to save their own country from any ill consequences which might come from the shock? He was a Yankee—it was pointed out they were all Yankees—and particularly this man Barbicane, who had created the idea of going to the moon. In any case, it was argued, the whole new world, from the Arctic regions to the Gulf of Mexico, would not have to fear anything from the shock. It is even probable on the other hand that America would profit immensely by it and gain some territory. "Who knows what is lying in the two oceans which wash the American coast? Was it not probable that there was some valuable territory which they wished to take possession of?" asked people who never saw anything but the

"Is it sure that there is no danger? Suppose J.T. Maston should make a mistake in his calculations? And could not the President have made a mistake when he came to put his apparatus in working order? This might happen to the smartest people. They might not always put the bullet in the target, or they might neglect to put the cannonball into the cannon," were the comments of these nervous folk. This uneasiness was fomented by the European delegates. Secretary Dean Toodrink published several articles in this line, and even stronger ones were put by him in the Standard. Jan Harald put some in the Swedish journal Aftenbladet, and Col. Boris Karkof in a Russian journal which had a large circulation. Even in America opinions differed. The Republicans were friends of President Barbicane, but the Democrats declared themselves against him. A part of the American press agreed with the European press. And as in the United States the papers had become great powers, paying yearly for news about twenty millions of dollars, they had great influence on the people. In vain did other journals of large circulation
One evening, the 13th of March, J.T. Maston was in his study at the Ballistic Cottage, very much interested in the calculator. The pressure of public opinion was so great that the Cabinet of the Government of the United States was compelled to give the Committee full permission to do what they thought most necessary and advisable in the matter. The Committee became known as the Inquiry Committee with orders to bring him to their meeting. The agent arrived at the cottage, knocked at the door, and introduced himself. He was harshly received by “Fire-Fire,” but much worse by the proprietor of the house. However, Mr. Maston thought it was no more than right that he should go to the meeting, and he went with the agent. As soon as he had arrived they began to question him.

The first question was, “Where is President Barbicane and Capt. Nicholl at present?” He answered with a steady voice, “I know where they are, but I am not at liberty to disclose this information.” Second question: “Have he and his associates made the necessary preparations to put this operation in working order?” “This,” said Maston, “is a part of the secret which I cannot reveal.” “Would he be land enough to let this Committee examine his own work, so that they could be able to judge if his Society would be in position to accomplish their intentions?” “No, most certainly I shall not allow it, never; I would rather destroy it. It is my right as a citizen of free America to refuse to communicate to any person the result of my work.”

“But,” said President Prestice in a very serious voice, “if it is your right to keep silent, it is the right of the whole United States to ask you to stop these rumors and give an explanation of the means which will be employed by your Company,” Mr. Maston did not agree that it was his right nor that it was his duty to answer further questions. In spite of their begging, threatening, etc., they could obtain nothing from this man with the iron hook. Never, never, would he say one word of it, and it was hardly possible to believe that such a strong will was concealed under that cover of “gutta-percha.” Mr. Maston went away as he had come; he was congratulated by Mrs. Evangelina Scorbitt, who was delighted by the courageous attitude taken by him. When the results of this last meeting of the Inquiry Committee became known public indignation really took a turn which threatened the security and safety of the public.

The uprising of public sentiment in the Northern, Southern, and Middle States of the Union did not allow them any other course. A commission of engineers, mechanicians, mathematicians, and geographers were appointed—fifty in all, presided over by John Prestice—by the act of the 19th of February, with full power to do anything which they considered necessary in the matter. At first the President of the Society received orders to appear before this committee. President Barbicane did not respond. Agents went to his house in Baltimore, but the President was gone. Where was he? No one knew. When did he depart? Six weeks ago, on the 11th of January, he had left the city, and the State of Maryland as well, in company with Capt. Nicholl.

Where did they both go? Nobody could tell. Evidently the two members of the Gun Club went to that mysterious region where preparations were going on for the great operation. But where could this place be? It was most important to know where this place was in order to break up and destroy the plans of these engineers before they had got too far in their work.

The consternation produced by this departure of the President and his associate was enormous. It soon changed public opinion to hatred against the N.P.P.A. and its managers. But there was one man who ought to know where the President and his associate had gone. There was one man who could answer this gigantic question, which at present excited the whole world and this man was—J.T. Maston. He was ordered to appear before the Committee of Inquiry under the Presidency of John Prestice. He did not appear. Had he also left Baltimore? Had he also gone to join his associates to aid them in their work, the results of which the whole world now expected with such immense fright? No. J.T. Maston was living still in his Ballistic Cottage, at No. 179 Franklin Street, working all the time and already beginning new calculations, only interrupting his work when he wanted to spend a social evening with Mrs. Evangelina Scorbitt at her magnificent residence at New Park. An agent was sent to him by the President of the Inquiry Committee with orders to bring him to their meeting. The agent arrived at the cottage, knocked at the door and introduced himself. He was harshly received by "Fire-Fire," but much worse by the proprietor of the house. However, Mr. Maston thought it was no more than right that he should go to the meeting, and he went with the agent. As soon as he had arrived they began to question him.

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The pressure of public opinion was so great that the Cabinet of the Government of the United States was compelled to give the Committee full permission to do what they thought most necessary and advisable in the matter. One evening, the 13th of March, J.T. Maston was in his study at the Ballistic Cottage, very much interested
in different figures, when suddenly the telephone bell attracted his attention. "Hello! hello!" said he, annoyed by this sudden interruption, "who wants me?" "Mme. Scorbitt." "What does Mrs. Scorbitt want?" "She wants to put you on your guard, I am informed this moment"—and she had not time to finish the phrase when Mr. Maston heard a terrible noise at the door of his house. On the stairs which led to his study there was an extraordinary racket. He could hear loud voices, many angry voices. Then the noise of a whole army of men moving towards his door. It was his servant Fire-Fire, who was trying to keep the intruders from breaking, into the house and disturbing the "home" of the master. A moment afterwards the door was violently opened and a policeman appeared, followed by several others. This policeman had a warrant to make a visit to the house and to take possession of all papers and also of J.T. Maston himself. The angry Secretary of the Gun Club reached for his revolver, and would have certainly defended himself had he not been suddenly disarmed. He was held by officers, and all his papers were put in a bundle. Suddenly he made a bold effort, freed himself, grabbed his note-book, out of which he tore the last page and began to chew it very quickly. "Now you can take it," said he, "for it will be no good to you." An hour afterwards he was a prisoner in the jail of Baltimore. This was undoubtedly the best that could happen to him, as it was extremely dangerous for him to be at liberty due to the then excited state of the public mind.

CHAPTER XI.

WHAT WAS FOUND IN THE NOTEBOOK OF J.T. MASTON AND WHAT IT NO LONGER CONTAINED.

The notebook, which was taken possession of by the police, had thirty pages covered with formulae and figures, including all the calculations of J.T. Maston. It was a work of the higher mathematics, which could only be appreciated by the highest mathematicians. The following formula,

Equation 1

[Equation 1]

which was also to be found in the calculation of From the Earth to the Moon, held a prominent place in these calculations. The majority of people could not understand anything of what was written in the notebook, but it would have given satisfaction to give out the results, which every one expected with so much curiosity. And so it was that all the newspapers, and the Inquiry Committee as well, tried to read the formulae of this celebrated calculator. In the work of Mr. Maston were found some problems correctly executed, others half solved, etc. The calculations had been made with great exactness and of course the Inquiry Committee supposed that they were absolutely correct. If the plan was carried out fully it was seen that without a doubt the earth’s axis would be greatly changed and that the terrible disasters which were predicted would take place with full force. The reports made by the Inquiry Committee to the different newspapers ran as follows:

"The idea followed by the Administrative Council of the N.P.P.A. and the object of which is to substitute a new axis for the old one is to be carried out by means of the recoil of a piece of ordnance fixed at a certain point of the earth. If the barrel of this device is immovably fixed to the ground it is not at all doubtful that it will communicate its shock over our whole planet. The engine adopted by the engineers of the Society is then nothing else but a monster cannon, the effect of shooting which would be absolutely nothing if it were pointed vertically. To produce its highest effect it is necessary to point it horizontally towards the north or south, and it is this last direction which has been chosen by Barbicane & Co. Under these conditions the recoil will produce a movement of the earth towards the north, a movement similar to that of one billiard ball touched very slightly by another."

This was really just what the clever Alcide Pierdeux had predicted. As soon as the cannon has been fired off, the center line of the earth would be displaced in a parallel direction to that of the recoil. This would change the direction of the orbit somewhat, and consequently the duration of the year, but in such a mild way that it must be considered as absolutely free from bad results. At the same time the earth takes a new movement of rotation around an axis in the plane of the equator, and the daily rotation will then be accomplished indeﬁnitely upon this new axis, as if no daily movement had existed previous to the shock. At present this movement is made around the lines of the poles, and in combination with the accessory force produced by the recoil there was created a new axis, the pole of which moves from the present to the amount of a quantity called "x." In other words, if the cannon is fired at the moment when the vernal equinox—one of the intersections of the equator and the ecliptic—is at the nadir of the point of shooting, and if the recoil is sufﬁciently strong to displace the old pole 23 degrees, 28 minutes, the new axis becomes perpendicular to the direction of the earth’s orbit, the same as it is for the planet Jupiter.

What the consequences were expected to be we already know, as President Barbicane had indicated them at the meeting of the 22d of December. But, given the mass of the earth and the quantity of momentum, which she possesses, is it possible to conceive a piece of ordnance so strong that its recoil will be able to produce a modification in the actual direction of the real pole, and especially to the extent of 23 degrees, 28 minutes? Yes, if a cannon or a series of cannons are built with the dimensions required by the laws of mechanics, or, in lieu of these dimensions, if the inventors were in possession of an explosive strong enough to impel a projectile with the
necessary velocity for such a displacement.

Now, taking as a basis model the cannon of 27 centimetres of the French Marine Corps, which throws a projectile of 180 kilograms with an initial velocity of 500 metres a second, by giving to this piece of ordnance an increased dimension of 100 times— that is, a million times in volume— it would throw a projectile of 180,000 tons: or, in other words, if the powder had strength sufficient to give to the projectile an initial velocity 5,600 times greater than that of the old black powder used for a cannon the desired result would be obtained. In fact, with a velocity of 2,800 kilometres a second, a velocity sufficient to go from Paris to St. Petersburg in one second, there was no doubt that the recoil of the projectile, acting against the earth, would put everything again in a state of quietude. Well, extraordinary as it may appear, J.T. Maston and his associates had in their possession exactly this explosive, of a nearly unlimited power, and of which the gunpowder used to throw the ball of the [C]olumbiad towards the moon gave but a faint idea. It was Capt. Nicholl who had discovered it. The substances which entered into its composition were only imperfectly entered in the notebook of Mr. Maston, and he merely named it "melimelonite." All that was known was that it was formed by the reaction of a melimelo of organic substances and azotic acids. No matter what the explosive was, with the power which it possessed it was more than sufficient to throw a projectile weighing 180,000 tons outside of the earth’s attraction, and it was evident that the recoil which it would produce to the cannon would have the effect of changing the axis, displacing the North Pole 23 degrees and 28 minutes, bringing the new axis in the direction of the ecliptic, and, as a consequence of this, effecting all the changes so justly dreaded by the inhabitants of the earth.

However, there was one chance for humanity to escape the consequences of this trial, which was to provoke such revulsions in the geographical and climatic conditions of the globe. Was it possible to build a cannon of such dimensions that it was to be a million times greater in volume than the one of 27 centimetres? It was doubtful. That was just the point and one of the reasons for thinking the attempt of Barbicane & Co. would not succeed. But there was the other possibility, for it seemed that the Company had already begun to work on their gigantic project. Now the question arose, where was their place of operations? No one knew, and consequently it was impossible to overtake these audacious operations. It was well known that Barbicane and Nicholl had left Baltimore and America. They had gone away two months ago. Where were they? Most certainly at that unknown point of the globe where the operations were under way for their grand object. It was evident that this place was indicated on the last page of the notebook of J.T. Maston. On this point there was no doubt. But this last page had been torn out and eaten up by the accomplice of Impey Barbicane, and Maston sat imprisoned in the Baltimore City Prison and absolutely refused to speak. This was the condition of affairs. If the President succeeded in making this monster cannon and its projectile—in a word, if the operation was carried out under the above stated conditions—it would modify the earth’s axis, and within six months the earth would be subject to the consequences of this audacious attempt of Barbicane & Co. This would come on the 22d day of September, twelve hours after the passage of the sun over the meridian of the place "x."

The facts that were known were: 1st. That the shooting would be done with a cannon a million times larger than the cannon of 27 centimetres. 2d. That the cannon would be loaded with a projectile of 180,000 tons. 3d. That the projectile would be animated with a velocity of 2,800 kilometres. 4th. That the shooting would take place on the 22d of September, twelve hours after the passage of the sun over the meridian of the place "x." Was it possible to deduce, under these facts, where was the spot "x," where the operation was to take place? Evidently not, said the Inquiry Committee. There was nothing by which to calculate where the point "x" was, as nothing in the calculations of Mr. Maston indicated through which point of the globe the new axis was to pass, or, in other words, on which part of the present earth the new poles would be situated. Therefore, it would be impossible to know which would be the elevated and submerged countries, due to the changed surface of the ocean, or which parts of the earth would be transformed into water, and where water would be transformed into land. It was evident that the maximum change in the ocean surface would be 8.415 metres, and that in certain points of the globe various areas would be lowered and raised to this amount. All, however, depended upon the location of the point "x," or where the shooting was to take place. In other words, "x" was the secret of the promoter of this uncertain affair. "We have," said the Committee, "only to mention again that the inhabitants of the world, no matter in what part of it they are living, are directly interested in knowing this secret, as they are all directly threatened by the actions of Barbicane & Co. Therefore all the inhabitants of Europe, Africa, Asia, America, and Australia are advised to watch all gun foundries, powder factories, etc., which are situated in their territory and to note the presence of all strangers whose arrival may appear suspicious, and to advise the Inquiry Committee at Baltimore by wire immediately. Heaven grant that this news may arrive before the 22d of September of the present year, as that date threatens to disturb the order established since the creation in our earthly system.

CHAPTER XII.
IN WHICH J.T. MASTON HEROICALLY CONTINUES TO BE SILENT.
According to a former story a gun was to be employed to throw the projectile from the earth to the moon; now the gun was to be employed to change the earth’s axis. The cannon, always the cannon; these gunners of the Gun Club had nothing else in their heads but the cannon. They had a real craze for the cannon. Was this brutal engine again threatening the universe? Yes, we are sorry to confess it, it was a cannon which was uppermost in the mind of President Barbicane and his associates. After the Columbiad of Florida, they had gone on to the monster cannon of the place “x.” We may almost hear them shout with a loud voice: “Take aim at the moon.” First act, “Fire.” “Change the axis of the earth.” Second act, “Fire.” And the wish which the whole world had for them was, “To hell.” Third act, “Fire.” And really their scheme justified the popular opinion.

As it was, the publication of this last report of the Committee in the newspapers produced an effect of which one can scarcely form an ideal. The operation to be tried by President Barbicane and Capt. Nicholl, it was very clear, was going to bring about one of the most disastrous interruptions in the daily routine of the earth. Everybody understood what the consequences of it would be. Therefore the experiment of Barbicane & Co. was generally cursed, denounced, etc. In the Old as well as in the New World the members of the N.P.P.A. had at the time only enemies. If there were indeed a few friends left to them among their cranky American admirers, they were very few.

Regarding only their personal security, President Barbicane and Capt. Nicholl had acted wisely in leaving Baltimore and America. It was safe to believe that some accident had happened to them. They could not without divine punishment threaten fourteen hundred million inhabitants by a change wrought in the habitability of the earth.

But how was it possible that the two leaders of the Gun Club had disappeared without leaving any trace behind them? How could they have sent away the material and assistants which were necessary to such an operation without any one seeing them? A hundred railroad cars, if it was by rail, a hundred vessels, if it was by water, would not have been more than sufficient to transport the loads of metal of coal, and of melimelonite. It was entirely incomprehensible how this departure could have been made incognito. However, it was done. And still more serious it appeared when it was known after inquiry that no orders had been sent to the gun foundries or powder factories, or the factories which produce chemical products in either of the two continents. How inexplicable all this was! Without doubt it would be explained some day.

At any rate, if President Barbicane and Capt. Nicholl, who had mysteriously disappeared, were sheltered from any immediate danger, their colleague, Mr. Maston, was under lock and key, and had to face all the public indignation. Nothing could make him yield, however. Deep at the bottom of the cell which he occupied in the prison of Baltimore, the Secretary of the Gun Club gave himself up more and more to thinking of those distant associates whom he was not able to follow. He pictured the vision of President Barbicane and his associate, Capt. Nicholl, preparing their gigantic operation at this unknown point of the globe, with nothing in their way. He saw them build their enormous device, combining their melimelonite, moulding the projectile which the sun would so soon count as one of its small satellites. This new star was to have the charming name “Scorbetta,” in gallant acknowledgment of the love and esteem felt towards the rich capitalist widow of New Park. J.T. Maston calculated the days which would elapse before the one on which the gun would be fired.

It was already the beginning of April. In two months and a half the meridian star, after having stopped on the Tropic of Cancer, would go back towards the Tropic of Capricorn. Three months later it would traverse the equatorial line at the Fall equinox.

And then these seasons, which have appeared annually for millions of years, and which have changed so regularly, will be brought to an end. For the last time in 189—the sphere would have submitted to this succession of days and nights. Truly, this was a magnificent work, superhuman, even divine. J.T. Maston forgot the Arctic region and the exploration of the coal mines around the pole, and he only saw, in his mind’s eye, the cosmographic consequences of the operation. The principal object of the association was now to make those changes and displacements which were to remodel the face of the earth.

But that was just the point. Did the earth wish to change her face at all? Was she not still young and charming with the one which God had given her at the first hour of her creation?

Alone and defenseless in his prison cell, nothing could induce Mr. Maston to speak about the matter, no matter what plan was tried. The members of the Inquiry Committee urged him daily to speak, and visited him daily, but they could obtain nothing. It was about this time that John Prestice had the idea of using an influence which might possibly succeed, and this was the aid of Mrs. Evangelina Scorbitt. Every one knew what feelings the generous widow entertained for Mr. Maston, how devoted she was to him, and what unlimited interest she had in this celebrated calculator. Therefore, after deliberation of the Committee, Mrs. Evangelina Scorbitt was authorized to come and go, visiting the prisoner as much as she liked.

Was she not threatened just as well as any other person on this earth by the recoil of this monster cannon? Would her palace at New Park be spared any more than the smallest hut of the Indian? Was not her very existence just as much in doubt as that of the savage living on the furthest isle of the Pacific Ocean? That is what the President of the
Inquiry Committee gave her to understand, and for this reason she was begged to use her influence with the mathematician. If he would consent to speak, and would say at what place President Barbicane and Capt. Nicholl were, and how many people they had with them to accomplish their ends, it would yet be time to go and stop them and put an end to their project, and thus save humanity from this most dangerous catastrophe which threatened the world.

Mrs. Evangelina Scorbitt was therefore admitted to the prison whenever she wished it. She was most desirous of seeing J.T. Maston again after he had been taken from his comfortable study at Ballistic Cottage by those rough police agents. If any impolite person had on the 9th of April put his ear at the door of his cell the first time when Mrs. Scorbitt entered he would have heard the following conversation:

"Ah, at last, my dear Maston, I see you again."
"You, Mrs. Scorbitt!"
"Yes, my dear friend, after four weeks—four long weeks of separation."
"Exactly twenty-eight days, five hours and forty-five minutes," answered J.T. Maston, after having consulted his watch.
"Finally we are reunited."
"But how did it happen that they allowed you to penetrate as far as this cell to see me, dear Mrs. Scorbitt?"
"Under the condition of using all my influence over you, thanks to my affection for you, in advising you to disclose the secret of the whereabouts of President Barbicane."
"What, Evangelina!" cried Mr. Maston, "and you have consented to give me such advice. You have entertained the thought that I could betray my associates."
"Me, dear Maston! Do you consider me so bad? Me! To sacrifice your security for your honor. Me! To persuade you to an act which would shame a life consecrated entirely to the highest speculations of pure mathematics."
"Bravo, Mrs. Scorbitt! I see in you once more the generous patron of our Society. No, I have never doubted your great heart."
"Thank you, Mr. Maston."
"In regard to myself," continued Maston, "allow me to say, before telling the point of the earth where our great shooting will take place—sell, so to speak, the secret which I have been able to keep so well, to allow these barbarians to fly and pursue our friends, to interrupt their works, which will make our profit and glory, I would rather die."
"Splendid, Mr. Maston!" cried Mrs. Evangelina Scorbitt.

And these two beings, united by the same enthusiasm, crazed by it if you will, one as well as the other, were well matched in understanding each other perfectly.

"No, they will never know the name of the country which my calculations have designated, and the reputation of which will become immortal," said J.T. Maston. "They can silence me if they like, but they will never have the secret from me."
"And they can kill me with you," said Mrs. Evangelina Scorbitt; "I will also be mute."
"It is lucky, dear Evangelina, that they are ignorant of your knowledge of the place."
"Do you believe that I would be capable of betraying it, because I am only a woman? Betray my associates and you! No, my friend, no. If they should raise the whole city and country against you—if the whole world would come to the door of this cell to take you away, I shall be there, too, and we will at least have one consolation—we will die together."

As if there could be any greater consolation and Mr. Maston could dream of a sweeter death than dying in the arms of Mrs. Evangelina Scorbitt! And so ended the conversation every time that this excellent woman visited the prisoner. And when the Inquiry Committee asked her what the result was, she would say: "Nothing as yet; perhaps with time I shall be able to reach my point."

Ah, women, women! What are women? "In time," she urged. But time went on with fast steps. Weeks went 'round like days, days like hours and hours like minutes.

It was already May. Mrs. Evangelina Scorbitt had not been able to get any information from J.T. Maston, and where she had failed there was no hope of any other person succeeding.

Was it, then, necessary to accept this terrible shock without interfering in any way? No, no! Under such circumstances resignation was impossible. The European delegates became more and more out of spirits. There was wrangling between them every day. Even Jacques Jansen woke up out of his Dutch placidity and annoyed his colleagues greatly by his daily charges and countercharges. Col. Boris Karkof even had a duel with the Secretary of the Inquiry Committee in which he only slightly injured his adversary. And Major Donellan; well, he neither fought with firearms nor with bare fists, quite contrary to English use, and he only looked on while his Secretary, Dean Toodrink, exchanged a few blows according to prize-ring rules with William S. Forster, the phlegmatic dealer in
codfish, the straw man of the N.P.P.A., who really knew absolutely nothing of the affair.

The whole world was leagued against the United States and wanted to hold the Americans responsible for the actions of one of their number—the celebrated Impey Barbicane. There was talk of recalling the ambassadors and the foreign Ministers at present accredited to this most reckless Government at Washington and of declaring war against the United States. Poor United States! It only wished to lay its hands on Barbicane & Co. In vain did the Republic reply to the Powers of Europe, Asia, Africa and Australia that they were at liberty to arrest these adventurous Americans wherever they found them. Nobody would listen patiently to such talk. And so, far away President Barbicane and his associate were occupied in preparing their great operation. As nothing could be found of them the foreign countries began to say: "You have their accomplice; now it is sure that Mr. Maston knows where these people are and what they are doing. Make him speak, this man, Mr. Maston. Why not use hot oil, melted lead, etc.? Why not use such means as were used formerly under circumstances less grave and for cases which only interested a few private people? But it was answered that, while such means were justified in former times, they could not be used at the end of a century as far advanced as the nineteenth century was. Therefore, J.T. Maston had nothing to fear in that line; all that was left to hope was that he would finally consider the enormity of his crime and decide to reveal his secret, or that some accident would reveal it for him.

CHAPTER XIII.

AT THE CLOSE OF WHICH J.T. MASTON UTTERS AN EPIGRAM.

Time went on, however, and very likely also the works of Barbicane and Capt. Nicholl who were going on also under these very surprising conditions, no one knew where.

How was it possible, it was asked, that an operation which required the establishment of a considerable iron foundry, the erection of high blast furnaces, capable of melting a mass of metal a million times as large as the marine corps cannon of 27 centimeters, and a projectile weighing 180,000 tons, all of which necessitated the employment of several thousand workmen, their transport, their management, etc.,—yes, how was it possible that such an operation could go on without the interested world getting any knowledge of it. In which part of the Old or New World had Barbicane & Co. secretly established a foothold so that no hint was given to people living in the vicinity? Was it on a deserted island in the Pacific Ocean or in the Indian Ocean? But there were no more deserted islands: the English had gobbled them all up. Perhaps the new Society had discovered one for this special purpose. Perhaps, one remarked, they might be in some part of the arctic regions. No, this could not be, as it was simply because they could not be reached that the N.P.P.A. was going to remove them. Therefore, to look for President Barbicane and Capt. Nicholl on one of these islands or in some inaccessible point was simply wasting time. Did not the notebook taken away from J.T. Maston state that the shooting would take place on or about the equator? And all the countries around it were inhabited by some people. It seemed impossible for them to be so secreted in any part of the habitable world without some one informing the committee at Baltimore.

Now, what did Alcide Pierdeux think of all this? He was dreaming of all kinds of consequences which this operation would have. That Capt. Nicholl had invented an explosive of such tremendous power, that he had found the melimelonite, with an expansive force three or four thousand times stronger than that of the most violent explosive known, and 5,600 times stronger than the good old black gunpowder of our ancestors, this was astonishing enough—very astonishing. But it was not impossible at all. One can hardly know what the future will bring in these days of progress when devices exist to destroy whole armies at very long distances. In any event, the change of the earth’s axis, produced by the recoil of a piece of ordnance, was not sufficiently novel to astonish the French engineer. Then, considering the plans of President Barbicane, he said: "It is evident that the earth receives daily the recoil of all the blows which are given on its surface. Hundreds of thousands of people amuse themselves daily by sending thousands of projectiles weighing a few kilograms or millions of projectiles weighing a few grammes, and even when I walk or jump, or when I stretch out my arm, all this takes place on the surface of our sphere and adds to or checks its motion. Is, then, your great machine of such a nature as to produce the recoil asked for? How in the name of candor can this recoil be sufficient to move the earth? And if the calculations of this fellow, J.T. Maston, prove it, it is easy enough to show it. Alcide Pierdeux could not but admire the ingenious calculations of the Secretary of the Gun Club, which were communicated by the members of the Inquiry Committee to those wise people who were able to understand them. And Alcide Pierdeux, who was able to read algebra like one would read a newspaper, found in this sort of reading matter an inexpressible charm. If these changes were to take place, what a terrible catastrophe it would be! Towns would be turned upside down, oceans would be thrown out of their beds, people killed by millions. It would be an earthquake of incomparable violence. If besides, said Alcide Pierdeux, this damnable powder of Capt. Nicholl were less strong, we might hope that the projectile would again strike the earth after the shooting, and after having made the trip around the globe, then everything would be replaced in a very short time and without having caused any very great destruction. But do not worry about that. Thanks to their melimelonite, the bullet will go its way and not return to the earth to beg her pardon for having deranged her by
putting her back again in her place. Pierdeux finally said: "If the place of shooting were known I would soon be able to say upon which places the movement would have the least and where the greatest effect. The people might be informed in time to save themselves before their cities and houses had fallen under the blow." But how were we to know it? "I think," he said, "the consequences of the shock may be more complicated than can even be imagined. The volcanoes, profiting by this occasion, would vomit like a person who is seasick. Perhaps a part of the ocean might fall into one of their craters. It would make small difference then. It is entirely possible that we might have explosions which would make our earth jump. Ah, this Satan Maston, imagine him juggling with our earthly globe and playing with it as if he were playing billiards!"

So talked and reasoned Alcide Pierdeux. Soon these terrible hypotheses were taken up and discussed by the newspapers. The confusion which would be the result of the scheme of Barbicane & Co. could only result in terrible accidents. And so it happened that the nearer the day came the greater the fright which took possession of the bravest people. It was the same as it was in the year 1000, when all living people supposed that they would be thrown suddenly into the jaws of death. It maybe recalled what happened at this period. According to the Apocalypse the people were led to believe that the judgment day had come. In the last year of the 10th century, says H. Martin, everything was interrupted—pleasures, business, interest, all, even the public works of the country. Thinking only of the eternity which was to begin on the morrow, provision was made only for the most necessary articles for one or two days. All possessions, real estate, castles, were bequeathed to the Church, so as to acquire protection in that kingdom of heaven where all were so soon to enter. Many donations to the churches were made with these words: "As the end of the world has come, and its ruin is imminent." When this fatal time came, all the people ran to the churches and places set apart for religious meetings, and waited to hear the seven trumpets of the seven angels of the judgment day sound and call from heaven. We know that the first day of 1,000 came and went, and nothing was changed. But this time it was not the question of a disturbance simply based upon some verse of the Bible. It was the question of removing the axis of the earth, and this was founded on very reliable calculations, and was very probable.

Under these conditions the situation of J.T. Maston became each day more and more critical. Mrs. Evangelina Scorbitt trembled lest he would become the victim of a universal cry for vengeance. Perhaps she even had in her mind the idea of making him give up the information which he so heroically held to himself. But she did not dare to mention it to him and she did well. It would have been unwise for her to expose herself to the volley of rebukes he would have given her. As we may well understand, fright had taken a strong foothold in the city of Baltimore and the inhabitants became nearly unmanageable. The excitement was increased by articles appearing in the daily papers. In any case, if J.T. Maston had been found among the crowd of people, his fate would have been soon settled. He would have been given to the wild beast. But he was content and said: "I am ready for it." No matter what happened, J.T. Maston refused to make known the situation of the "x," knowing very well that if he should unveil the secret President Barbicane and Capt. Nicholl would be unable to finish their work. It was an interesting struggle—this fight of one man against the whole world. It only made J.T. Maston a grander and better man in the eyes of Evangelina Scorbitt, and also in the opinion of his associates of the Gun Club. The Secretary of the Gun Club became such a celebrated person that he began to receive letters, as all criminals do, from people who wished to have a few lines from the hand which was going to turn the world over. But even if this was all very nice it became every day more and more dangerous for our Secretary. The population hung day and night around the prison, with great noise and great tumult. The enraged crowd wanted to lynch J.T. Maston. The police saw the moment would come when they would be unable to defend the prison and the prisoner J.T. Maston. Being desirous of giving satisfaction and information to the American people, as well as to the people of other countries, the Government at Washington decided to put J.T. Maston before a court of justice. "What other people have not been able to accomplish the Judges will not," said Alcide Pierdeux, who had after all a kind of a friendly feeling for the unhappy calculator.

On the morning of the 5th September the President of the Commission went personally to the cell of the prisoner. Mrs. Evangelina Scorbitt, at her own request, had been allowed to accompany him. Perhaps at this last attempt the influence of this excellent lady would succeed and bring the hoped-for result. There was nothing to be left undone. All means possible were to be used to make this last attempt successful. If it was not—well, we will see. "Yes, we will see." What we would see is the hanging of this brute Maston, said the people, and the event would have come off in all its horror if the people could have it their way. So it happened that at 11 o’clock J.T. Maston was ushered into the presence of Mrs. Evangelina Scorbitt and John Prestice, President of the Inquiry Committee.

The opening was a very simple one. The conversation consisted of the following questions and answers, very rapid on one side and very quiet on the other. And even under these circumstances the calm, quiet speaker was J.T. Maston.

"For the last time will you answer?" asked John Prestice.
"Answer what?" ironically observed the Secretary of the Gun Club.
"Answer the question, where is the place in which your associate, Barbicane, is at present."
"I have told it to you a hundred times."
"Repeat it for the one hundred and first time."
"He is where the shooting will take place."
"Where will the shooting take place?"
"Where my associate, Barbicane, is."
"Have a care, J.T. Maston."
"For what?"
"For the consequences of your refusal to answer, the result of which will be——"
"To prevent you from learning that which you should not know."
"What we have the right to know."
"That is not my opinion."
"We will bring you before the court."
"Go ahead."
"And the jury will condemn you."
"What care I."
"And as soon as judgment is rendered it will be executed."
"All right."
"Dear Maston," ventured Mrs. Evangelina Scorbitt, whose heart nearly broke on account of these terrible threats.
"What! You, madam?" said J.T. Maston. She hung her head and was silent.
"And do you want to know what this judgment will be?"
"If you wish to tell it," said J.T. Maston.
"That you will suffer capital punishment, as you deserve."
"Really?"
"That you will be hanged as sure, sir, as two and two make four."
"Then, sir, I have yet a chance," said J.T. Maston, reflectingly. "If you were a little better mathematician you would not say that two and two are four. You simply prove that all mathematicians have been fools until to-day in affirming that the sum of two numbers is equal to one of their parts; that is, two and two are exactly four."
"Sir!" cried the President, absolutely puzzled.
"Well," said J.T. Maston, "if you would say, as sure as one and one are two, all right. That is absolutely evident, because that is no longer a theorem; this is a definition."

After this lesson in simple arithmetic the President of the Committee went out, followed by Mrs. Evangelina Scorbitt, who had so much admiration for the calculator that she did not venture to look at him.

CHAPTER XIV.
VERY SHORT, BUT IN WHICH "X" TAKES A GEOGRAPHICAL VALUE.

Very luckily for J.T. Maston, the Federal Government received the following telegram sent by the American Consul stationed at Zanzibar:

"To John S. Wright, Minister of State, Washington, U.S.A.:
Zanzibar, Sept. 13, 5 A.M. (local time).—Great works are being executed in the Wamasai, south of the chain of Kilimanjaro. For eight months President Barbicane and Capt. Nicholl have been established there with a great number of black help under the authority of Sultan Bali-Bali. This is brought to the knowledge of the Government by its devoted
"RICHARD W. TRUST, Consul"

And this was how the secret of J.T. Maston became known. And therefore, were the Secretary of the Gun Club still in prison, he could not have been hanged.

But, after all, who knows whether he would not rather have been glad to meet with death in the full glory of his life than to live on with all the chances of disappointment.

CHAPTER XV.
WHICH CONTAINS A FEW INTERESTING DETAILS FOR THE INHABITANTS OF THE EARTHLY SPHERE.

Finally the Government of Washington had found out the place where Barbicane & Co. were operating. Should they doubt the authenticity of this cable? No, that was not reasonable. The Consul at Zanzibar was a very reliable person, and his information could be accepted without doubt. It was further corroborated by later telegrams. It was really in the center of the region of Kilimanjaro in the African Wamasai, a little under the equatorial line, where the
engineers of the N.P.P.A. were going to accomplish their gigantic works.

How could they have secretly reached this lost country, at the foot of the celebrated mountain, discovered in 1849 by Drs. Rebviani and Krapf, ascended by the travellers Otto Ehlers and Abbot? How were they able to establish their workshops there, erect a foundry and bring a large number of help, or at least enough to succeed? How had they been able to establish friendly relations with the dangerous tribes of the country and their sovereigns, as cunning as they were cruel? This we do not know. And perhaps it would never be known, as there were only a few days left before the 22d of September would arrive. J.T. Maston heard from Mrs. Evangelina Scorbitt that the mystery of Kilimanjaro had been unveiled by a telegram sent from Zanzibar. "Great Scott!" he exclaimed, sawing the air with his iron hand. "Well, we do not travel by telegram yet, nor by the telephone, and in six days the matter will be finished."

Those who saw and heard this remarkable man utter these words were astonished at the energy in the old gunner. J.T. Maston was right. There was no time left to send agents to Wamasai with orders to arrest President Barbicane. They would even have been too late had they departed from Algiers or Egypt, even from Aden, Madagascar, or Zanzibar, as they would have met thousands of difficulties in this mountainous region, and perhaps they would have met with an army composed of followers of the Sultan, who was interested in the matter. Therefore all hope of preventing this operation had to be given up. But if prevention was impossible nothing seemed more easy than the figuring out of the terrible consequences, as the exact situation of "x" was now known.

This problem was difficult enough, but all algebraists and mathematicians of large reputation ought to be able to solve it. As the cable of the Consul of Zanzibar had been sent direct to the Minister of State at Washington, the Federal Government wanted to keep it secret at first. They wished as well that its contents were published all over the country, so that they could indicate what the results would be of this displacement of the axis and the uprising of the oceans, and thus the inhabitants of the world might learn which place of refuge was open to them according to the section of the globe in which they lived. And it is easy to understand how anxious the people were to learn their fate.

On the 14th of September the cable dispatch was sent to the office of the Observatory at Washington, with orders to figure out the final consequences upon geographical locations. Two days afterwards the problem was all worked out. The Old World was notified of the results by cable and the New World by telegram. After this calculation had been published by thousands of papers, it was the only thing talked of in the great cities and everywhere. What will happen?

This was the question which everybody was asking at every point of the globe.

The following was the notice made by the Observatory at Washington:

IMPORTANT NOTICE

The operation which is being tried by President Barbicane and Capt. Nicholl is as follows:

The production of a recoil, on the 22d of September, at midnight, by means of a cannon a million times larger in volume than the cannon of twenty-seven centimetres, throwing a projectile of 180,000 tons, with a powder giving it a velocity of 2,800 kilometres.

Now, if this shooting takes place below the equatorial line, nearly on the thirty-fourth degree of latitude west of the meridian of Paris, at the foot of Kilimanjaro, and if it is directed towards the south, these are the mechanical effects which it will have on the earth’s sphere: Instantly, in consequence of the shock acting with the daily movement a new axis will be formed and, as the old axis will be displaced to the amount of twenty-three degrees and twenty-eight minutes, according to the figures obtained by J.T. Maston, the new axis will be perpendicular to the direction of the equinoctial.

Which point will the new axis start from? As the point of shooting is known, it has been easy to calculate this.

In the North the extremity of the new axis will be situated between Greenland and Grinnelland, exactly on that part of Baffin’s Sea where it cuts the Arctic polar circle. In the South it will be on the line of the antarctic circle, a few degrees east of Adelialand. Under these conditions a new zero meridian, starting from the new North Pole, will pass through Dublin in Ireland, Paris in France, Palermo in Sicily, the Gulf of Grand Sytre on the coast of Tripoli, Obed in Darfur, the mountain chain of Kilimanjaro, Madagascar; the Kerguelen Island, in the Central Pacific; the new antarctic pole, the antipodes of Paris, Cook Island, the Island of Quadra, Vancouver, on the margin of British Columbia; across North America to Melville Island, in the neighborhood of the North Pole.

In connection with this new axis of rotation, starting from Baffins’ Bay in the north, to Adelialand in the south, a new equator will be formed above which the sun will travel without ever changing his daily course. The equinocial line will cross the Kilimanjaro, at Wamasai, the Indian Ocean, Goa and Chicacola, a little below Calcutta in India, Mandalay in the Kingdom of Siam, Kesho in Tonquin, Hong Kong in China, Risa Island, Marshall Island, Gaspar Rico, Walker Island in the Pacific, the Cordilleras in the Argentine Republic, Rio de Janeiro in Brazil, the islands of Trinity and St. Helena in the Atlantic Ocean, St. Paul de Loando on the Congo, and finally it will meet again in the
territories of Wamasai, back of Kilimanjaro. This new equator being thus determined by the creation of the new axis, it became possible to calculate the changes of the ocean tides, which was so important for the security of the inhabitants of the earth. It is just to observe that the directors of the North Polar Practical Association had taken measure to weaken the shock as much as possible. If the shooting had been towards the north the consequences of it would have been much more disastrous for the more civilized parts of the earth. On the other hand, shooting towards the south the consequences would only be felt most in parts less populated and less civilized. The careful calculations made showed how the waters would be distributed when thrown out of their beds by the flattening of the sphere around the new poles. The globe would be divided by two great circles, intersecting in a right angle at Kilimanjaro, and at its antipodes in the equinoctial ocean. This would form four sections, two in the north and two in the south, separated by the lines upon which the ocean upheaval would be zero.

In the northern hemisphere: The first section west of Kilimanjaro would take in Africa from the Congo to Egypt, Europe from Turkey to Greenland, America from English Columbia to Peru, and from Brazil as high as San Salvador, and finally the whole northern Atlantic Ocean and the largest part of the temperate Atlantic zone.

The second section, east of Kilimanjaro, would include the greater part of Europe, from the Black Sea to Sweden, European and Asiatic Russia, Arabia, nearly the whole of India, Persia, Beloochistan, Afganistan, Turkestan, the Celestial Empire, Mongolia, Japan, Corea, the Black Sea, the Caspian Sea, the greater part of the Pacific Ocean, the territories of Alaska in North America, and also the polar region which belonged to the American society, North Polar Practical Association.

The southern hemisphere would embrace the third section east of Kilimanjaro, which would include Madagascar, the islands of Marion, Kerguelen, Maurice, Reunion, and all the islands of the Indian Ocean, the Antarctic Ocean (as far as the new pole), half the island of Malacca, Java, Sumatra, Borneo, the islands of Sonde, the Philippines, Australia, New Zealand, New Guinea, New Caledonia, all the northern parts of the Pacific and its numerous archipelagos, nearly up to the 160th meridian.

The fourth section, west of Kilimanjaro, would comprise the southern part of Africa, from the Congo to the canal of Mozambique to the Cape of Good Hope, the southern Atlantic Ocean from Pernambuco and Lima, Bolivia, Paraguay, Uruguay, the Argentine Republic, Patagonia, the Fire Islands, the Malouine Islands, Sandwich and Shetland Islands, and the southern part of the Pacific Ocean east of the present 160th degree of latitude.

These would be the four sections, separated by the line of zero in calculating the sea-level changes. Now, the question was to indicate the effects produced on the surface of the four sections in consequence of the displacement of the oceans.

Upon each of these sections there was a central point on which the effect would be at a maximum, either by the oceans rising up or by the waters retiring entirely. The calculations of J. T. Maston had established without a doubt, that at each of these maxima points the greatest height obtained would be 8,415 metres. It was therefore certain that the consequences would be most severe against the security of those points through the operation carried out by Barbicane & Co. The two effects may be considered separate in their action.

In two of the sections situated opposite each other in the northern hemisphere and in the southern as well, the oceans would retreat and invade the two other sections, opposing each other in each of the two hemispheres.

In the first section: The Atlantic Ocean would be nearly entirely emptied and the maximum point of depression being nearly at the region of Bermuda, where the ground would appear, if the depth of the ocean was inferior at that point to 8,415 metres. Consequently between Europe and America vast territories would be discovered which the United States, England, France, Spain, and Portugal could claim according to the geographical situation, as these powers might wish to do. It must be observed that in consequence of the falling of the oceans the air will also fall equally as much. Therefore the barometric pressure of Europe and that of America will be modified to such an extent that cities, situated even 20 or 30 degrees from the maxima points would only have the quantity of air which is now actually found in a height of one league in the atmosphere. The principal cities, such as New York, Philadelphia, Charleston, Panama, Lisbon, Madrid, Paris, London, Edinburgh, Dublin, Cairo, Constantinople, Danzig, Stockholm, on one side, and the cities corresponding in latitude on the other side, would keep their normal position with regard to the general level of the air. In regard to Bermuda, air would be missing there the same as it would be wanting to aeronauts who go higher than 8,000 metres. Therefore, it would be impossible to live there.

The same effect would obtain in the opposite section, which would contain the Indian Ocean, Australia, and a part of the Pacific Ocean, which would be thrown partly on the southern seacoasts of Australia.

The air into which they would be thrown would be very clear; there was no doubt on that point, but it would not be dense enough for human wants.

These in general were a part of the modifications which would take place in the two sections in which the oceans would be more or less emptied. There would undoubtedly appear new islands and mountains in such parts as the water did not entirely abandon.
But if the diminution of the thickness of the air did not bring enough inconveniences to those parts of the new
continents raised to the high zones of the atmosphere, what was to be the case of those parts which the eruption of
waters put below the surface? We may still breathe under the diminished pressure of air below the atmospheric
pressure. On the contrary, under a very few inches of water we cannot breathe at all, and this was the condition in
which the other two sections found themselves. In the section northwest of Kilimanjaro the maximum point would
be at Yakoutsk, in Siberia.

From this city submerged 8,415 metres under the water, less its present actual altitude, the liquid mass,
decreasing, would extend to the neutral lines, drowning the greater part of Asiatic Russia and of India, of China, of
Japan, and of American Alaska, to the Behring Sea. In regard to St. Petersburg and Moscow on one side, and
Calcutta, Bangkok, Saigon, Pekin, Hong Kong and Yeddo on the other side, these cities would disappear under a
cover of water sufficient to drown all Russians, Hindoos, Siamese, Cochin Chinese, Chinese and Japanese, if they
did not have time to emigrate before the catastrophe.

In the section southeast of Kilimanjaro the disasters would be equally marked. This section is in a great part
covered by the Atlantic and Pacific oceans, the level of which would raise 8,415 metres at the Archipelagos of the
Azores. All this vast area would disappear under this artificial deluge, among others the angle of Southern Africa
from Guinea and Kilimanjaro to the Cape of Good Hope, and the triangle of South America formed by Peru, Central
Brazil, Chili, and the Argentine Republic, as far as Terra del Fuego and Cape Horn. The Patagonians, high as they
are located, would not escape this immersion, and would not even have opportunity of taking refuge on that part of
the Andes, as the highest points of that range would not be visible at all in this part of the globe.

This, then, must be the result, the lowering of the upper and raising of the lower sections, and an entirely new
surface to the oceans, produced by the corruscations in the surface of the earth’s sphere. Such were the happenings
which would result, and against which the people of this world had no help if they could not promptly stop
Barbicane & Co. in their criminal attempt.

CHAPTER XVI.

IN WHICH A CROWD OF DISSATISFIED PEOPLE BREAK INTO THE CELL OF J. T. MASTON.

After this public notice there was nothing left but to wait for the coming danger or to run away to the neutral
lines, where there would be no danger. The threatened people were, in general, divided into two classes—"the
people who would be suffocated and those who would be drowned." This communication roused many different
suggestions, which, however, all turned into the strongest and most violent protestations against the schemer and
schemers. Among those who would suffocate were the Americans in the United States, the Europeans of France,
England, Spain, etc. Even the prospect of annexing territories now at the bottom of the ocean was not sufficient to
make them quietly accept these changes. Paris, carried towards the new pole a distance about equal to that which
separates it now from the old one, would gain nothing by it. It would have a continued Spring, it is true, but it would
lose considerable air. And this was not satisfactory to the Parisians, who like to have as much air as possible, and
boulevard property and cafés went begging. Among those who would be drowned were the inhabitants of South
America, of Australia, Canada, India, Zealand, etc. Great Britain would suffer the loss of her richest colonies, which
Barbicane & Co. would take away from her through their operation. Evidently the Gulf of Mexico would constitute
a vast kingdom of the Antilles, of which the Yankees and Mexicans could claim possession by the principles of the
Monroe doctrine. The islands of the Philippines, Celebes and the water around them would leave vast territories of
which the English and Spanish people could take possession. It is a vain compensation. It did not at all balance the
loss due to the terrible flood.

If under the new oceans only Samoyedens, Lapons of Siberia, Feugans, Patogonians—even Tartars, Chinese,
Japanese, or a few Argentines—would suffer and be lost, perhaps the civilized powers would have accepted this
sacrifice complacently. But too many powers took part in the great catastrophe not to raise a torrent of protest.

And what especially concerned Europe was, that although the central part of it would be nearly intact, it would
be raised in the west and lowered in the east, half suffocated on one side and half drowned on the other. This was not
very acceptable. The Mediterranean Sea would be almost emptied, and this would not be very agreeable to the
Frenchmen, Italians, Spaniards, Greeks, Turks, and Egyptians, who by their situation on the coast, had indisputable
rights in ocean travel. And then, what good would be the Suez Canal, which would be saved by its position on the
neutral line? But what use could be made of this immense work of Lesseps when there was no longer the
Mediterranean on one side of the isthmus and the Red Sea on the other, at least, within any reasonable distance of it?

No, never, never would England consent to see Gibralter, Malta, and Cyprus transformed into mountain-tops,
lost in the clouds, so that its men-of-war could no longer approach them. No, she would not be satisfied with the
possession of some of the territory which would be gained from the Atlantic Ocean. Major Donellan had, however,
prepared already to return to Europe to secure his rights on this new territory in case the operation of Barbicane &
Co. should succeed. It is seen how protests came from all parts of the world, even from States where the changes
These protestations became more and more violent after the arrival of the cablegram from Zanzibar which indicated the point of shooting, and which it was found necessary to publish the above report to explain. President Barbicane and Captain Nicholl as well as J.T. Maston, were put under the ban of humanity and declared outlaws. But what a business all this created for the newspapers. What sales they had, and how the circulations ran up; how on many occasions they were forced to print extra editions. It is perhaps the first time in journalistic history that they were all united with each other, as they generally quarrel incessantly. This was not a European or an American affair; it was an affair which concerned the whole world. It was like a bomb falling into a powder magazine.

In regard to Maston, it looked as if his last hour had come. A rabid crowd rushed into his prison on the evening of Sept. 17, with the intention of lynching him, and the jailer did not put any obstacles in their way. They rushed along the corridor but the cell of J.T. Maston was empty. Mrs. Evangelina Scorbitt had come to his help with a heavy purse of gold, and he had made his escape. The jailer had been bribed by an amount of money on which he could live the rest of his life without working. He remembered that Baltimore, Washington, New York, and many of the principal cities of America were on the line of those parts which would be raised, and which would still have enough air for the daily consumption of their inhabitants.

J.T. Maston had gained a quiet resting spot and a safe place from the enraged crowd of people, and so this great man owed his life to the devotion of a loving woman. There were only four days to wait, four days only before the gigantic operation of Barbicane & Co. would be accomplished. The public notice had been read far and wide and had created as much public excitement as such a momentous document only could. If there were at the beginning a few sceptics on the subject, there were none at present. The various governments had notified in haste those of their provinces which would be raised into the air and those, a much larger number, the territory of which would be overrun with water. In consequence of this advice sent by telegraph over the five continents of the world an emigration began such as had never been seen before. Every race was represented, white, black, brown, yellow, etc., in one chromatic procession. Unhappily, time was wanting for all to secure safety. The hours were now counted. A few months notice would be required for the Chinese to leave China, the Australians, Australia, the Siberians, Siberia. In some instances the danger was a local one as soon as the place of the shooting was known, so the fright became less general. Some provinces and even some States began to feel easy again. In a word, except in the regions directly threatened, there was only felt an apprehension of the terrible shock. And during all this time Alcide Pierdeux was saying to himself, "How in the wide world can President Barbicane make a cannon a million times larger than that of twenty-seven centimetres? This Maston, I would like very much to meet him—to have with him a talk upon this subject. This does not agree with anything sensible, it is too enormous and too improbable."

Be this as it may, the failure of the operation was the only hope which was left for certain parts of the world to escape more terrible destruction.

CHAPTER XVII.

WHAT HAD BEEN DONE AT KILIMANJARO DURING EIGHT MONTH OF THIS MEMORABLE YEAR.

The country of Wamasai is situated in the eastern part of Central Africa, between the coast of Zanzibar and the regions of the large lakes, where the Victoria Nyanza and the Tanganyika form a great interior ocean. The part best known is that which has been visited by the Englishman Johnston, Count Tekeli and the German doctor Meyer. This mountainous land is under the sovereignty of Sultan Bali-Bali, whose people consist of 30,000 or 40,000 Negroes.

Three degrees below the Equator is situated the chain of Kilimanjaro, which here reaches its greatest altitude. Among other peaks is the Mount of Kibo, with an altitude of 5,704 metres. The important ruler of this region has under his domination towards the south, north, and west the vast and fertile plains of Wamasai, which stretch from the lake of Victoria Nyanza across the province of Mozambique.

A few leagues below Kilimanjaro is the small village of Kisongo, the regular residence of the Sultan. This capital is in reality only a large hamlet. It is occupied by a very intelligent and industrious people, who work themselves as industriously as their slaves under the iron rule which Bali-Bali imposes on them.

This Sultan rightly ranked as one of the most remarkable rulers of those people of Central Africa who try to escape the influence, or more correctly the domination of England. At this capital of Kisongo, President Barbicane and Capt. Nicholl accompanied by six men who were devoted to them, arrived in the first week of January of the current year. On leaving the United States, whence their departure was only known to Mrs. Evangelina Scorbitt, and J. T. Maston, they had embarked in New York for the Cape of Good Hope, whence a vessel transported them to Zanzibar, on the island of the same name. There a bark secretly chartered by the Sultan brought them to the port of Mombas, on the African border on the other side of the channel. An escort sent by the Sultan waited for them at this port, and after a hard voyage nearly a hundred leagues across this terrible region, obstructed by forests, deep marshes, etc., they arrived at the royal residence. After knowing the calculations of J.T. Maston, President Barbicane had already put himself in communication with Bali-Bali through the help of a Swedish explorer, who had passed
Barbicane & Co. did not think of these difficulties. It was not a cannon, not even a mortar, which they intended to make, but simply a gallery bored in the massive rock of Kilimanjaro,—a shaft of a mine, if you wish to call it so. Barbicane & Co. had always entertained the idea of operating in this manner, and if the surface of this country was so rich in raw materials which they needed in a condition very easy to handle. A few months before leaving the United States President Barbicane had learnt from the Swedish explorer that at the foot of Kilimanjaro iron and coal were plentiful on the ground. No mines to dig into, no fields to explore a thousand feet deep in the earth’s shell. Iron and coal were so plentiful even for this great undertaking that they only had to stoop down to pick it up. In other words, there existed in the neighborhood of this mountain enormous fields of nitrate of soda and of iron pyrites, which were necessary for the manufacture of melimelonite. President Barbicane and Capt. Nicholl had taken with them only ten people, of whom they were absolutely sure, and no one else. These ten men had to supervise the 10,000 Negroes put at their disposal by Bali-Bali, and to them was given the task of manufacturing the monster cannon and its not less monster projectile. Two weeks after the arrival of President Barbicane and his associate at Wamasai three large workshops were established at the southern foot of Kilimanjaro, one for the cannon foundry, the second for the manufacture of the projectile, and the third for the manufacture of the melimelonite.

Now, first of all, how had Barbicane & Co. met the problem of manufacturing a cannon of such colossal dimensions? We will see and understand at the same time that the difficulty of creating such a device was not easily comprehensible by the inhabitants of the world. In reality the making of a cannon a million times larger than that of twenty-seven centimetres was a superhuman work. Already great difficulties had been met in the manufacture of pieces of forty-two centimetres long, which would throw projectiles of 780 kilos with 274 kilograms of powder. Barbicane & Co. did not think of these difficulties. It was not a cannon, not even a mortar, which they intended to make, but simply a gallery bored in the massive rock of Kilimanjaro,—a shaft of a mine, if you wish to call it so.

Evidently this shaft of a mine, this enormous elongated mine, could replace a metal cannon the fabrication of which would have been as dear as difficult and to which it would be necessary to give an unwieldy thickness to avoid all risk of an explosion. Barbicane & Co. had always entertained the idea of operating in this manner, and if the notebook of J. T. Maston mentioned a cannon it was that of 27 centimetres which had been used in the calculations as a basis. Consequently a spot was chosen at a height of a hundred feet on the southern slope of the mountain. Nothing would be in the way of the projectile when it would fly out of the mouth of this tunnel bored in the massive rock of Kilimanjaro. It was with extreme precision and not without very hard work that the men could dig this gallery. But Barbicane & Co. could readily make perforations with simple machines put in action by means of compressed air which was secured by using the powerful falls of water from the mountains. In the holes bored through the headings of the shaft were placed charges of melimelonite. And nothing more was necessary than this violent explosive to shiver the rock, extremely hard as it was.

The thousands of workmen, led by their ten co-operators under the general direction of Barbicane & Co., labored with a great deal of zeal and intelligence to bring the work to a speedy end. At the end of six months the shaft...
measured 27 metres in diameter and the lining of it 6 metres in thickness. As it was absolutely necessary that the projectile should glide through a bore perfectly smooth the interior of it was covered with a casting exactly prepared. In reality this part of the work was very similar to that of the celebrated Columbiad, of Moon City, which had sent the projectile to the moon. But such work as this is impossible to the ordinary engineers of this world at present.

As soon as the boring was finished the workmen pushed on with the work at the second workshop.

At the same time that this metallic lining was being made they were also employed at making the enormous projectile. For this operation it was necessary to obtain a cylindrical mass which would weigh 80,000,000 kilograms, or 180,000 tons. It must be understood that there was never any idea of melting this projectile in one single piece. It had to be manufactured in thousand-ton pieces, which would be hoisted one after the other into the shaft and put in place over the chamber where the melimelonite was stored. After having been jointed each to the other, these pieces would form a compact whole, which would fit the sides of the tubular lining. In regard to the construction of the massive furnaces to effect the melting of the metal, there was met perhaps the greatest difficulty. Ten furnaces of ten metres each in height were at the end of a month in working order and able to produce each 180 tons per day. This would be 1,800 tons for twenty-four hours—180,000 tons after 100 work-days.

In regard to the third workshop, made for the manufacture of the melimelonite, the work was easily done, but under such secret precautions, that the composition of this explosive it has not been possible to state perfectly. Everything went along splendidly. It could not have been possible to have met with more success in any factory. One would hardly expect to escape an accident of some sort on a three-hundred-thousand franc job. It is easily understood that the Sultan was delighted. He followed the operation with indefatigable interest. And the presence of His Majesty helped greatly to make these Negroes work as hard as possible. One day Bali-Bali asked what all these operations were going on for. He received his reply from President Barbicane: "It is a work," said he, "which will change the face of the earth—a work which will bring the greatest glory on the greatest Sultan of all the Eastern kings."

By the 29th of August the works were entirely finished.

The shaft was bored to the wished-for point. It was provided with a smooth bore of six metres diameter. At the bottom of the shaft were placed the 2,000 tons of melimelonite; then came the projectile 105 metres long. After deducting the space occupied by the powder and projectile there remained still 492 metres before the muzzle was reached, which secured all the effect possible by the recoil produced by the expansion of the gas.

Now, the first question which might come up was, would the projectile deviate from the trajectory assigned to it by the calculations of J.T. Maston? In no way, for the calculations were absolutely correct. They indicated to what extent the projectile would deviate to the east of the meridian of Kilimanjaro because of the rotation of the earth on its axis, and what would be the form of the curve which it would describe because of its enormous initial velocity. Secondly, would it be visible during its course? No, because in going out of the shaft it would be thrown in the shadow of the earth and it could not be seen, for in consequence of its low trajectory it would have a very sharp angle of velocity compared with the earth's course. In fact, Barbicane and Capt. Nicholl could well be proud of their work, which had so far succeeded in its every detail. Why was J.T. Maston not there to watch this great operation, founded on the figuring which he had done? And who was it that kept him so far away, so very far, when this terrible detonation would wake the echoes as far as the furthest horizon of Africa?

Thinking of him, his two associates did not know that the Secretary had been compelled to keep away from Ballistic Cottage after having got out of prison and hidden himself in a safe place away from the savage people. They did not know to what extent indignation had been roused against the engineer of the N. P. P. A. They did not know that they, too, would have been burnt or hanged and tortured to death if it had been possible to have reached them. Really, they ought to have been glad that at the moment when the shooting would take place they would only be saluted by the cries of this Negro people of Eastern Africa, "Well, at last!" said Capt. Nicholl to President Barbicane, when on the 22d of September they were standing before their finished work. "Yes, at last," said Impey Barbicane. "What a chance it was that placed at our disposition this admirable melimelonite!" said Capt. Nicholl. "Which will make you the most illustrious person on the earth, Nicholl." "Without doubt, Barbicane," modestly answered Capt. Nicholl. "But do you know how much it would have been necessary to dig out Kilimanjaro if we only had gun-cotton equal to that which threw our projectile to the moon?"

"How much, Nicholl?"
"One hundred and eighty galleries, Barbicane."
"Well, we would have digged them, Captain."
"And 180 projectiles of 180,000 tons."
"We would have melted them, Nicholl."

"It was useless to expect reasonable conversation between two persons of this type. But after they made the trip to the moon, what would they not be capable of? On the very same evening only a few hours before the minute
when the gun was to be fired, and while President Barbicane and Capt. Nicholl were congratulating themselves, Alcide Pierdeux, closeted in his studio at Baltimore, uttered a cry of hurrah! as if he were crazy.

Then, suddenly getting up from the table, which was covered with figures and calculations, he cried out:

"Ah! What a fool Maston is!—what a stupid fellow! His whole problem will go in the soup! Christopher Columbus! Why did I not see this before? If I only knew where he was at this moment I would invite him to have supper with me and to sip a glass of champagne at the very moment when they are going to fire off the gun."

And after these and many exclamations which he generally used in playing whist he said: "Oh, the old fool! Without a doubt he must have been dull when he made his calculations for this affair of Kilimanjaro. He will find it very necessary to make another. Oh, what a fool with his cannon!"

CHAPTER XVIII.

IN WHICH THE POPULATION OF WAMASAI ASSEMBLE TO HEAR PRESIDENT BARBICANE SAY "FIRE" TO CAPT. NICHOLL.

It was in the evening of the 22d of September, that memorable date which public opinion credited with an influence as unlucky as that of the 1st of January of the year 1000. Twelve hours after the sun had passed the meridian of Kilimanjaro, that is at midnight, Capt. Nicholl was to touch off the terrible cannon.

Kilimanjaro being 35 degrees east of the meridian of Paris, and Baltimore 79 degrees east of said meridian, there was a difference of 114 degrees between these two places, or 456 minutes in time, or 7 hours and 36 minutes. So the exact moment at which the shooting would take place would be 5 hours and 24 minutes post meridian in that great city of Maryland. The weather was magnificent. The sun had just gone down on the plains of Wamasai, behind a horizon of perfect purity. It was impossible to wish for a prettier night, one more calm or starry, in which to throw the projectile across space. Not a cloud would be mixed with the artificial vapors developed by the deflagration of the melimelonite.

Who knows, perhaps President Barbicane and Capt. Nicholl regretted that they were not able to get into the projectile. In the first second they would have travelled 2,800 kilometres. Sultan Bali-Bali, with the great personages of his court, that is, his Finance Ministers and his Ministers of Public Works, together with the Black Brigade, who had helped in the great work, were all assembled to watch the different steps of the shooting.

But, with great precaution, they had all taken a position three kilometres from the shaft bored in the Kilimanjaro, so that they would have nothing to fear from the concussion of the air.

Several thousand natives, deputed from Kisongo and neighboring States in the south of the province, by the orders of the Sultan, were present to witness this splendid spectacle. A wire was stretched, connecting an electric battery to the touch-hole of the shaft, ready to send the current and start the deflagration of the melimelonite. As a preliminary an excellent meal had been served at the table of the Sultan for his American guests and the persons of his court, all at the expense of Bali-Bali, who did everything very grandly as long as he was reimbursed by the members of the firm of Barbicane & Co.

It was 11 o'clock when this feast, commenced at 7:30, was finished, and at the end of it the Sultan proposed a toast to the engineers of the N. P. P. A. and to the success of their great enterprise. An hour yet, and the change in the geographical and climatic conditions of the earth would be accomplished.

President Barbicane, his associate, and his ten helpers took their places around the cannon, to the interior of which ran the wire of the electric battery. Barbicane with his chronometer in his hand counted the minutes, and never in his life did they seem so long to him. The minutes seemed not merely years but centuries. At ten minutes before midnight Capt. Nicholl and Barbicane approached the key which put the electric thread in communication with the shaft of Kilimanjaro. The Sultan, his court and the crowd of natives formed an immense circle around the cannon. It was important that the shooting should take place at the exact moment indicated in the calculations of J. T. Maston—that is, at the moment when the sun would cut that equinoctial line which it would never leave again in its apparent orbit around the earth. Five minutes to twelve, four minutes, three minutes, two minutes, one minute to twelve—

President Barbicane watched the hands of his chronometer, lighted by a lantern which was held by one of his helpers, while Capt. Nicholl, his finger on the button of the apparatus, was ready to connect the circuit of electricity.

Twenty seconds, ten seconds, five seconds, one second. Not the slightest tremor could be noted in the hand of the impassive Nicholl. His partner and himself were no more excited than, at the moment when they waited, sitting in the projectile, for the Columbiad to fire them to the regions of the moon.

"Fire," ordered President Barbicane.

At this moment Capt. Nicholl pressed the button. A terrible detonation followed, the echoes of which spread to the furthest corners of the province of Wamasai. A sharp whistle passed the crowd, a terrible rush of air, caused by the milliards of milliards of measures of gas, made by the instantaneous deflagrations of the 2,000 tons of melimelonite. It might be described as one of those meteors in which all the violence of nature is accumulated
sweeping across the earth. The effect could not have been more terrible if all the cannons of the whole globe had been joined together with all the thunderbolts of heaven and all had united in one grand report.

CHAPTER XIX.

IN WHICH J.T. MASTON REGRETS THAT THE CROWD DID NOT LYNCH HIM WHEN HE WAS IN PRISON.

The capitals of two worlds, the largest cities as well as the smaller ones, stood waiting terror-stricken. Thanks to the journals which had published the news broadcast over the world, every one knew the precise hour at which the shooting would take place and the local hour which corresponded with that of Kilimanjaro, situated 35 degrees east, allowing for the difference of longitude.

A few of the principal cities, the sun travelling a degree in four minutes were as follows:

At Paris, 9:40 P.M.
At St. Petersburg, 11:31 P.M.
At London, 9:30 P.M.
At Rome, 10:20 P.M.
At Madrid, 9:15 P.M.
At Berlin, 11:20 P.M.
At Constantinople, 11:26 P.M.
At Calcutta, 3:04 A.M.
At Nanking, 5:05 A.M.

At Baltimore, it was said, twelve hours after the passage of the sun of the meridian of Kilimanjaro, it was 5:24 P.M. It is impossible to describe the pangs which were produced at this moment. The most powerful of modern pens would be helpless at the task. The people of Baltimore stood fearing that they would be swept off the surface of the earth by the terrible mass of water which would fall on their city. They expected to see the Bay of Chesapeake empty itself upon them. Then, besides, the city, even should the waters not come upon it, would be terribly shaken up by the shock which would be produced. The monuments would be destroyed; its best quarters swallowed up at the bottom of the abysses which would open through the surface of the ground. These fears ran through the different parts of the globe which were not scheduled for submersion by the upheaval of the oceans.

Every human being felt the marrow in his bones creep and shake at this fearful moment.

Yes, all trembled, all save one person, and that one was the engineer Alcide Pierdeux. As he had not had time to make known to the public the discoveries which he had made by means of his last calculations, he drank a bumper of champagne to the health of both worlds in the café of one of the best known hotels. Just as the twenty-fourth minute after 5 o’clock, corresponding with midnight at Kilimanjaro, was reached—

At Baltimore, nothing.

Mr. John Milne, standing in his coal mine at Shamokui with a seismometer which he had arranged there, did not note the least abnormal movement in the earth’s shell in this part of the globe. In Baltimore the heavens were cloudy and it was impossible to note in the apparent movement of the stars any derangement which would have indicated the change in the earth’s axis.

What a night J.T. Maston passed in his place of safety which was unknown to all save Mrs. Evangelina Scorbitt! He was beside himself, this visionary engineer. He could not rest in his place of hiding. He seemed to have grown old in one day and looked sharply out to see if the daily course of the sun was modified. This would have been a certain proof of the success of his work. This change could not be seen even on the morning of the 23d of September, because at this date the star invariably rises in the east for all points of the globe. The next day the sun travelled over the horizon the same as it had always done.

The European delegates had assembled on the platform of their hotel. They had by their side instruments of extreme precision which would enable them to note if the sun took a course in the direction of the equator.

Well, nothing changed. A few minutes after the rising of the sun the great disc inclined away towards the Australian hemisphere. Nothing was changed in its apparent course.

Major Donellan and his associates saluted the heavenly torch with enthusiastic hurrahs, and gave it a reception like a favorite star in the theatre. The heavens were in superb condition, the horizon free from the vapors of the night, never did the great sun-god present a more beautiful aspect in such splendid condition before the astonished public. "And precisely at the place marked by the laws of astronomy," said Eric Baldenak.

"Yes by our old astronomy," said Boris Karkof, "and these fools pretended to destroy it."

"Well, they will have their expenses to pay and ridicule to endure besides," added Jacques Jansen, by whose voice Holland seemed to speak all alone.

"And the Arctic regions will eternally stay under the ice as they have discovered," said Prof. Jan Harald.
"Hurrah for the sun," said Major Donellan. "Such as it is, it has been and always will be sufficient for our earth."

"Hurrah, hurrah," repeated in single voice the representatives of old Europe. At this moment Dean Toodrink, who had not said anything so far, made this very cautious remark:

But perhaps they did not shoot yet.

"Not shoot yet," said the Major. "Heaven grant that they have fired off the cannon twice rather than once."

And that was exactly what J. T. Maston and Mrs. Evangelina Scorbitt were saying.

The wise and the ignorant were united this time by the logic of the situation. Even Alcide Pierdeux repeated it, and added: "Even if they did shoot, what is the difference? The earth will not stop waltzing on its old axis and turning as it used to do."

In fact no one knew what had happened at Kilimanjaro. But at the close of the day an answer came to the question which was engrossing the attention of mankind.

A cablegram arrived in the United States, and here is what this dispatch, sent by Richard W. Trust, Consul at Zanzibar, contained:

"Zanzibar, Sept. 23, 7:25 A.M. "To John S. Wright, Minister of State:

"The cannon was fired off yesterday evening at midnight exactly by the device bored in the southern part of Kilimanjaro. Passage of the projectile was accompanied with a powerful whirr and terrible detonation. Whole provinces destroyed by the concussion of the air. Ocean agitated as far as the Mozambique channel. A large number of vessels disabled and thrown on the coast. Towns and villages destroyed. Everything else is well. RICHARD W. TRUST."

Yes, everything else went on well. Nothing had been changed in the state of worldly affairs save the terrible disasters produced in Wamasai, which was partly deluged by the artificial waterspout, and the shipwrecks which were produced by the current of air. The same thing precisely happened when the Columbiad threw its projectile to the moon. The shock to the ground of Florida, was it not felt through a radius of 100 miles? Yes, certainly, but this time the effect should have been a hundred times stronger.

Whatever had happened the dispatch gave two pieces of information to the interested people of the old and new worlds.

First—That the enormous cannon had been erected in the flank of Kilimanjaro.

Second—That the gun had been fired at the fixed hour. And now, the whole world uttered an exclamation of intense satisfaction, followed by a great burst of laughter.

The trial which Barbicane & Co. had made had entirely failed. The calculations of J.T. Maston were good only for the waste basket. The N.P.P.A. could only announce its failure. But, perhaps, it might be that the secretary of the Gun Club had made a mistake in his calculations.

"Rather would I believe that I have been mistaken in the affection which I feel for him," said Mrs. Evangelina Scorbitt.

But beyond all, the most discontented human being was J.T. Maston. When he saw that nothing had been changed in the movement of the earth, that the conditions remained precisely the same as they were since the creation, he hoped that some accident had prevented the success of Barbicane & Co., and that his associates had met with some disaster.

But there was the cablegram from Zanzibar which stated without a doubt that the operation had taken place.

Failed! ! And what of the formulas and calculations on which he had spent so much time? Is it possible that a cylinder 600 metres long, 27 metres wide, throwing a projectile of 180,000 kilograms, with the deflagration of 200 tons of melimelonite, with an initial velocity of 2,800 kilometres, would not be sufficient to move the earthly axis? It did not seem probable.

But why?

So J.T. Maston, in a state of violent excitement, declared that he would quit his retreat. Mrs. Evangelina Scorbitt tried in vain to prevent it. Not that she feared for his life, as all danger of that sort had passed. But the insults which he would have to bear, the jokes which would be cracked about him, the remarks which would be made in regard to his work—she wanted to spare him from these. And then, moreover, what would his associates of the Gun Club say? Did they not have to thank this man for the want of success of their operation and for making them ridiculous? Was he not the man who had figured out the whole affair and on whose shoulders rested all the responsibility?

J.T. Maston would not listen to any one. He resisted the begging and tears of Mrs. Evangelina Scorbitt. He went out of the house where he had kept himself hiding. He was recognized, and those who had trembled for fear of the consequences of his work now took revenge by joking and laughing at him, and this in many thousand different ways. He was forced to listen to jeering remarks, even from the street gamins. "Ah," they shouted, "here he is who wanted to change the axis of the earth, who wanted to discover coal mines around the North Pole, who even wanted
to remove it." In short, the Secretary of the Gun Club was compelled to return to the mansion of Mrs. Evangelina Scorbitt, who used all her wealth of tenderness to console him. It was in vain, however. J.T. Maston could not be consoled, as his cannon had produced upon the earth’s sphere no more effect than a simple popgun would have done. A fortnight went by in this way, and the world resumed its daily routine and did not even think any longer of the projects of the N.P.P.A.

A fortnight and no news yet from President Barbicane and Capt. Nicholl. Had they perished by the discharge in the land of Wamasai? Had they sacrificed their lives in the most mysterious operation of modern times? No.

After the detonation both were overthrown along with the Sultan and his court, and a thousand natives in one grand tumble, but they all got up after a little time strong and hearty.

"Did you succeed?" asked Bali-Bali, rubbing his shoulder.
"Do you doubt it?"
"Me doubt it?"
"But when will you know?"
"In a few days," said Barbicane.

Did he appreciate that the operation had failed? Perhaps. But he never would have acknowledged it before the Sultan at Wamasai.

Forty-eight hours later the two partners had taken leave of Wamasai, not, however, before having paid an enormous sum for the damage done to the country. As this amount of money went into the private purse of the Sultan, and as his subjects did not receive one cent of it, he had no reason to complain of the operation.

Then the two associates, followed by their ten helpers, reached Zanzibar, where they found a vessel to take them to Suez. From there under false names the steamer Morris brought them to Marseilles; then they took the train to Paris, where they arrived without having had any collision or accident, and taking the railroad to Havre they arrived in time to go to America by the Bourgogne of the Transatlantic line. In twenty-two days they made the trip from Wamasai to New York, and on the 15th day of October the two knocked at the door of the mansion of New Park, at three minutes past noon. An instant afterwards they found themselves in the presence of Mrs. Evangelina Scorbitt and J. T. Maston.

CHAPTER XX.

IN WHICH THIS STORY, AS TRUTHFUL AS IT IS IMPROBABLE, IS FINISHED.

"Barbicane!!! Nicholl!!!"
"Maston."
"You."
"We."

And in this plural pronoun, uttered simultaneously by the two associates in a single voice, might be heard a flood of irony and reproaches.

J.T. Maston pressed his iron hook on his forehead. Then, with a voice which seemed to stick in his throat, he said:

"Did your shaft at Kilimanjaro really have a diameter of twenty-seven metres?"
"Yes, sir."
"Did your projectile really weigh 180,000,000 of kilograms?"
"Yes."
"And was the shooting really done with 2,000 pounds of melimelonite?"
"Yes."

This thrice-repeated "yes" fell on J. T. Maston like masses of stone on his head.
"Then I can only conclude"—said he.
"What?" asked President Barbicane.

"As follows," said J. T. Maston. "As the operation did not succeed, the powder did not give to the projectile an initial velocity of 2,800 kilometres."
"Really?" said Capt. Nicholl, with a tone of sarcasm.
"Yes, your melimelonite is good only to charge pistols of straw."
Capt. Nicholl sprang up at this remark, which was an outrageous insult to him.
"Maston!" said he.
"Nicholl!"
"You ought to be blown up with the melimelonite."
"No, gun cotton; that is more sure."

Mrs. Evangelina Scorbitt had to interfere and cool these two enraged gunners down.
"Gentlemen," said she, between associates.
"And anyhow," President Barbicane resumed, with a very calm expression, "what is the good of criminations? It is certain that the calculations of our friend, J. T. Maston, were correct, as it is certain that the explosive of our friend Nicholl had sufficient power. Yes, we have only employed known quantities of science. We lacked experience. Why did we fail? Perhaps we may never know."

"Well," said the Secretary of the Gun Club, "we will commence all over again." "And the money then which has been spent for this operation is a dead loss," observed Capt. Nicholl.

"But public opinion," said Evangelina Scorbitt, "would not allow you a second trial."

"What will become of our Arctic region?" said Capt. Nicholl. "Where will the stock of the N.P.P.A. fall to?" said President Barbicane. Well, it had already fallen so far that the stock was offered at the price of old paper.

This, then, was the result of the gigantic operation. This was the memorable fiasco to which the superhuman projects of Barbicane & Co. had led.

If ever engineers, unlucky engineers were laughed at in public, if ever the newspaper made drawings, songs, and paragraphs not at all flattering to the people mentioned in them, this occasion exceeded them all. President Barbicane, the Directors of the new Society and their associates of the Gun Club were universally sneered at. In every language they were made ridiculous, and to make it easier to the whole population of the world to read the scornful articles were printed in "Volapuk." In Europe, especially, all the remarks and songs to make the persons of the N.P.P.A. ridiculous were spread broadcast. The greatest hit was made by a Frenchman, who composed a ballad which was sung in every concert hall of France and America. But will we never know to what the failure of this enterprise was due? Did this failure prove that the operation was impossible of realization; that the powers at the disposal of mankind would never be sufficient to bring about a change in the earth's movement? Did it prove that the country around the North Pole would never be removed to those regions where the sun and heat would melt the ice without human help?

Information on this subject came a few days after the return of President Barbicane and Capt. Nicholl to the United States. A very simple paragraph appeared in the Times of the 17th of October. Here is the article:

"We all know that the result of the operation to create a new axis has been nothing. However, the calculations of J.T. Maston, founded on established facts, would have produced the desired result if through an unexplainable slip an error had not been embraced in them from the beginning. When the celebrated secretary of the Gun Club took for a basis of his calculations the circumference of the earth's sphere, he figured it at 40,000 metres in place of 40,000,000 metres, and to which the failing of the operation is due.

"Where could such an error come from? Who could have provoked it?... How could such a remarkable calculator commit such an error?

"It is certain that had the problem of the modification of the earth's axis been correctly figured, it would have had been exactly solved. But this forgetting of three zeros has made a change at the end of the calculation of twelve naughts.

"It is not a cannon one million times larger than that of twenty-seven centimetres, which was necessary. A trillion of these cannons throwing a trillion projectiles of 80,000 tons each would be necessary to displace the North Pole, admitting that the melimelonite had the expansive power which had been attributed to it by Capt. Nicholl.

"Therefore the whole shock under the conditions under which it was produced has displaced the North Pole only three-thousandths of a millimeter, and has only changed the level of the ocean at the most nine-thousandths of three-thousandths of a millimetre. In regard to the projectile fired, it will be a small planet, and will belong in future to the solar system, sustained by solar attraction.

ALCIDE PIERDEUX ".

So this want of attention on the part of J.T. Maston at the beginning of his calculations had produced such a humiliating result for his Company.

But even if his associates were very angry against him, if everybody laughed and joked at him, it is only fair to state in his favor that this mistake which had wrecked the operation had spared the world a terrible catastrophe.

A flood of telegrams and letters arrived from all parts of the world congratulating J.T. Maston on his mistake of three naughts. J.T. Maston, more downhearted and crushed than ever, would not listen to the hurrahs which the world now uttered for him. President Barbicane, Capt. Nicholl, Tom Hunter, with wooden legs; Col. Bloomsberry, the gay Bilsby, and his associates would never pardon him. But Mrs. Evangelina Scorbitt she could not be angry with him, most excellent lady.

J.T. Maston had begun to do his calculations over again, refusing to admit that he was wrong at that point.

He was, however; the Engineer Alcide Pierdeux had not made a mistake. Having learnt his error at the last moment, when he had no time to make it known, he had remained perfectly composed among all the fright and terror of those about him. That was why he proposed a toast in champagne at the moment when the shooting was taking place in the Old World. Yes, indeed, three naughts had been forgotten in the circumference of the earth.
Suddenly J.T. Maston remembered the whole matter.

It was at the beginning of his work when he had shut himself up in the "Ballistic Cottage," and written the number 40,000,000 on his blackboard. At that moment the electric bell began to ring with great force. J.T. Maston went to the phone. He exchanged a few words with Mrs. Evangelina Scorbitt. Suddenly a terrible stroke of lightning from the storm through the telephone knocked over his blackboard and himself. He got up, commenced to write over again the numbers which had been half rubbed out on his blackboard. He had just written the numbers 40,000 when the telephone rang for the second time. He went again to listen to Mme. Scorbitt, and when he did begin his work he forgot to put on the last three naughts of the earth’s circumference.

It was the fault of Mrs. Evangelina Scorbitt. If she had not interrupted him he would not have been thrown on the floor by the shock from the telephone. He would not have noticed anything of lightning and thunder, and all his mass of figures and calculations would not have ended in a mistake.

What a terrible blow it was to this unhappy lady when J.T. Maston was compelled to tell her the circumstances which had produced the mistake! Yes, she was the cause of the disaster. It was on her account that J.T. Maston found himself dishonored through the long years which he had yet to live, as nearly every member of the Gun Club usually lived to the age of a hundred years.

After this conversation at New Park, J. T. Maston had gone away from the mansion. He went back to his Ballistic Cottage and walked into his study muttering to himself: "Well, now I am not good for anything any more in this world."

"Not even good enough to get married," said a broken voice at his elbow.

It was that of Mrs. Evangelina Scorbitt. Absolutely crushed and heart-broken, she had followed him.

"Dear Maston"—she began.

"Well, yes," said he, "but only under one condition—that I shall never make any mathematical calculations."

"My dear friend, I have a horror of them," answered the excellent widow.

Thus it happened that the Secretary of the Gun Club made Mrs. Evangelina Scorbitt Mrs. J. T. Maston.

In regard to the article of Alcide Pierdeux, we might say that it brought him into great celebrity and reputation. It was translated into all languages, printed in every paper, and thus his name became known all over the world.

The father of his old sweetheart had refused him his daughter's hand, after telling him that he could not give him his daughter, as he was too smart. But now, after having read this article and being unable to understand it without any help, he began to feel sorry and know better. He sent him an invitation to dine with him and his daughter.

CHAPTER XXI.

VERY SHORT, SINCE ENOUGH HAS BEEN SAID TO MAKE THE WORLD'S POPULATION FEEL PERFECTLY SURE AGAIN.

And now the inhabitants of the world could again be perfectly easy. President Barbicane and Capt. Nicholl will not again begin that enterprise so woefully miscarried, J.T. Maston will not again figure out any calculations, however free from mistakes. The article of Alcide Pierdeux has told the truth. What the law of mechanics proves to us is that to produce a displacement of the axis of 23 degrees and 28 minutes, even with the melimelonite, a trillion cannons similar to the one which had been bored into the cliff of Kilimanjaro would be necessary. But our whole sphere, bored over its whole surface, is too small to accommodate them. Therefore the inhabitants of the earth may sleep in peace. To modify the conditions in which the earth is moving is beyond the efforts of humanity. It is not meet that mere humanity should change anything in the order established by our Creator in the system of the universe.

END OF THE VOYAGE EXTRAORDINAIRE

IN THE YEAR 2889

By Jules Verne

Little though they seem to think of it, the people of this twenty-ninth century live continually in fairyland. Surfeited as they are with marvels, they are indifferent in presence of each new marvel. To them all seems natural. Could they but duly appreciate the refinements of civilization in our day; could they but compare the present with the past, and so better comprehend the advance we have made! How much fairer they would find our modern towns, with populations amounting sometimes to 10,000,000 souls; their streets 300 feet wide, their houses 1000 feet in height; with a temperature the same in all seasons; with their lines of aërial locomotion crossing the sky in every direction! If they would but picture to themselves the state of things that once existed, when through muddy streets rumbling boxes on wheels, drawn by horses—yes, by horses!—were the only means of conveyance. Think of the railroads of the olden time, and you will be able to appreciate the pneumatic tubes through which to-day one travels
at the rate of 1000 miles an hour. Would not our contemporaries prize the telephone and the telephote more highly if they had not forgotten the telegraph?

Singularly enough, all these transformations rest upon principles which were perfectly familiar to our remote ancestors, but which they disregarded. Heat, for instance, is as ancient as man himself; electricity was known 3000 years ago, and steam 1100 years ago. Nay, so early as ten centuries ago it was known that the differences between the several chemical and physical forces depend on the mode of vibration of the etheric particles, which is for each specifically different. When at last the kinship of all these forces was discovered, it is simply astounding that 500 years should still have to elapse before men could analyze and describe the several modes of vibration that constitute these differences. Above all, it is singular that the mode of reproducing these forces directly from one another, and of reproducing one without the others, should have remained undiscovered till less than a hundred years ago. Nevertheless, such was the course of events, for it was not till the year 2792 that the famous Oswald Nier made this great discovery.

Truly was he a great benefactor of the human race. His admirable discovery led to many another. Hence is sprung a pleiad of inventors, its brightest star being our great Joseph Jackson. To Jackson we are indebted for those wonderful instruments the new accumulators. Some of these absorb and condense the living force contained in the sun's rays; others, the electricity stored in our globe; others again, the energy coming from whatever source, as a waterfall, a stream, the winds, etc. He, too, it was that invented the transformer, a more wonderful contrivance still, which takes the living force from the accumulator, and, on the simple pressure of a button, gives it back to space in whatever form may be desired, whether as heat, light, electricity, or mechanical force, after having first obtained from it the work required. From the day when these two instruments were contrived is to be dated the era of true progress. They have put into the hands of man a power that is almost infinite. As for their applications, they are numberless. Mitigating the rigors of winter, by giving back to the atmosphere the surplus heat stored up during the summer, they have revolutionized agriculture. By supplying motive power for aërial navigation, they have given to commerce a mighty impetus. To them we are indebted for the continuous production of electricity without batteries or dynamos, of light without combustion or incandescence, and for an unfailing supply of mechanical energy for all the needs of industry.

Yes, all these wonders have been wrought by the accumulator and the transformer. And can we not to them also trace, indirectly, this latest wonder of all, the great "Earth Chronicle" building in 253d Avenue, which was dedicated the other day? If George Washington Smith, the founder of the Manhattan "Chronicle", should come back to life tomorrow, what would he think were he to be told that this palace of marble and gold belongs to his remote descendant, Fritz Napoleon Smith, who, after thirty generations have come and gone, is owner of the same newspaper which his ancestor established!

For George Washington Smith's newspaper has lived generation after generation, now passing out of the family, anon coming back to it. When, 200 years ago, the political center of the United States was transferred from Washington to Centropolis, the newspaper followed the government and assumed the name of Earth Chronicle. Unfortunately, it was unable to maintain itself at the high level of its name. Pressed on all sides by rival journals of a more modern type, it was continually in danger of collapse. Twenty years ago its subscription list contained but a few hundred thousand names, and then Mr. Fritz Napoleon Smith bought it for a mere trifle, and originated telephonic journalism.

Every one is familiar with Fritz Napoleon Smith's system—a system made possible by the enormous development of telephony during the last hundred years. Instead of being printed, the Earth Chronicle is every morning spoken to subscribers, who, in interesting conversations with reporters, statesmen, and scientists, learn the news of the day. Furthermore, each subscriber owns a phonograph, and to this instrument he leaves the task of gathering the news whenever he happens not to be in a mood to listen directly himself. As for purchasers of single copies, they can at a very trifling cost learn all that is in the paper of the day at any of the innumerable phonographs set up nearly everywhere.

Fritz Napoleon Smith's innovation galvanized the old newspaper. In the course of a few years the number of subscribers grew to 80,000,000, and Smith's wealth went on growing, till now it reaches the almost unimaginable figure of $10,000,000,000. This lucky hit has enabled him to erect his new building, a vast edifice with four façades each 3,250 feet in length, over which proudly floats the hundred-starred flag of the Union. Thanks to the same lucky hit, he is to-day king of newspaperdom; indeed, he would be king of all the Americans, too, if Americans could ever accept a king. You do not believe it? Well, then, look at the plenipotentiaries of all nations and our own ministers themselves crowding about his door, entreating his counsels, begging for his approbation, imploring the aid of his all-powerful organ. Reckon up the number of scientists and artists that he supports, of inventors that he has under his pay.

Yes, a king is he. And in truth his is a royalty full of burdens. His labors are incessant, and there is no doubt at
all that in earlier times any man would have succumbed under the overpowering stress of the toil which Mr. Smith has to perform. Very fortunately for him, thanks to the progress of hygiene, which, abating all the old sources of unhealthfulness, has lifted the mean of human life from 37 up to 52 years, men have stronger constitutions now than heretofore. The discovery of nutritive air is still in the future, but in the meantime men today consume food that is compounded and prepared according to scientific principles, and they breathe an atmosphere freed from the micro-organisms that formerly used to swarm in it; hence they live longer than their forefathers and know nothing of the innumerable diseases of olden times.

Nevertheless, and notwithstanding these considerations, Fritz Napoleon Smith's mode of life may well astonish one. His iron constitution is taxed to the utmost by the heavy strain that is put upon it. Vain the attempt to estimate the amount of labor he undergoes; an example alone can give an idea of it. Let us then go about with him for one day as he attends to his multifarious concerns. What day? That matters little; it is the same every day. Let us then take at random September 25th of this present year 2889.

This morning Mr. Fritz Napoleon Smith awoke in very bad humor. His wife having left for France eight days ago, he was feeling disconsolate. Incredible though it seems, in all the ten years since their marriage, this is the first time that Mrs. Edith Smith, the professional beauty, has been so long absent from home; two or three days usually suffice for her frequent trips to Europe. The first thing that Mr. Smith does is to connect his phonotelephote, the wires of which communicate with his Paris mansion. The telephote! Here is another of the great triumphs of science in our time. The transmission of speech is an old story; the transmission of images by means of sensitive mirrors connected by wires is a thing but of yesterday. A valuable invention indeed, and Mr. Smith this morning was not niggard of blessings for the inventor, when by its aid he was able distinctly to see his wife notwithstanding the distance that separated him from her. Mrs. Smith, weary after the ball or the visit to the theater the preceding night, is still abed, though it is near noontide at Paris. She is asleep, her head sunk in the lace-covered pillows. What? She stirs? Her lips move. She is dreaming perhaps? Yes, dreaming. She is talking, pronouncing a name his name—Fritz! The delightful vision gave a happier turn to Mr. Smith's thoughts. And now, at the call of imperative duty, light-hearted he springs from his bed and enters his mechanical dresser.

Two minutes later the machine deposited him all dressed at the threshold of his office. The round of journalistic work was now begun. First he enters the hall of the novel-writers, a vast apartment crowned with an enormous transparent cupola. In one corner is a telephone, through which a hundred Earth Chronicle _littérateurs_ in turn recount to the public in daily installments a hundred novels. Addressing one of these authors who was waiting his turn, "Capital! Capital! my dear fellow," said he, "your last story. The scene where the village maid discusses interesting philosophical problems with her lover shows your very acute power of observation. Never have the ways of country folk been better portrayed. Keep on, my dear Archibald, keep on! Since yesterday, thanks to you, there is a gain of 5000 subscribers."

"Mr. John Last," he began again, turning to a new arrival, "I am not so well pleased with your work. Your story is not a picture of life; it lacks the elements of truth. And why? Simply because you run straight on to the end; because you do not analyze. Your heroes do this thing or that from this or that motive, which you assign without ever a thought of dissecting their mental and moral natures. Our feelings, you must remember, are far more complex than all that. In real life every act is the resultant of a hundred thoughts that come and go, and these you must study, each by itself, if you would create a living character. 'But,' you will say, 'in order to note these fleeting thoughts one must know them, must be able to follow them in their capricious meanderings.' Why, any child can do that, as you know. You have simply to make use of hypnotism, electrical or human, which gives one a two-fold being, setting free the witness-personality so that it may see, understand, and remember the reasons which determine the personality that acts. Just study yourself as you live from day to day, my dear Last. Imitate your associate whom I was complimenting a moment ago. Let yourself be hypnotized. What's that? You have tried it already? Not sufficiently, then, not sufficiently!"

Mr. Smith continues his round and enters the reporters' hall. Here 1500 reporters, in their respective places, facing an equal number of telephones, are communicating to the subscribers the news of the world as gathered during the night. The organization of this matchless service has often been described. Besides his telephone, each reporter, as the reader is aware, has in front of him a set of commutators, which enable him to communicate with any desired telephotic line. Thus the subscribers not only hear the news but see the occurrences. When an incident is described that is already past, photographs of its main features are transmitted with the narrative. And there is no confusion withal. The reporters' items, just like the different stories and all the other component parts of the journal, are classified automatically according to an ingenious system, and reach the hearer in due succession. Furthermore, the hearers are free to listen only to what specially concerns them. They may at pleasure give attention to one editor and refuse it to another.

Mr. Smith next addresses one of the ten reporters in the astronomical department—a department still in the
embryonic stage, but which will yet play an important part in journalism.

"Well, Cash, what's the news?"

"We have phototelegrams from Mercury, Venus, and Mars."

"Are those from Mars of any interest?"

"Yes, indeed. There is a revolution in the Central Empire."

"And what of Jupiter?" asked Mr. Smith.

"Nothing as yet. We cannot quite understand their signals. Perhaps ours do not reach them."

"That's bad," exclaimed Mr. Smith, as he hurried away, not in the best of humor, toward the hall of the scientific editors.

With their heads bent down over their electric computers, thirty scientific men were absorbed in transcendental calculations. The coming of Mr. Smith was like the falling of a bomb among them.

"Well, gentlemen, what is this I hear? No answer from Jupiter? Is it always to be thus? Come, Cooley, you have been at work now twenty years on this problem, and yet--"

"True enough," replied the man addressed. "Our science of optics is still very defective, and though our mile-and-three-quarter telescopes."

"Listen to that, Peer," broke in Mr. Smith, turning to a second scientist. "Optical science defective! Optical science is your specialty. But," he continued, again addressing William Cooley, "failing with Jupiter, are we getting any results from the moon?"

"The case is no better there."

"This time you do not lay the blame on the science of optics. The moon is immeasurably less distant than Mars, yet with Mars our communication is fully established. I presume you will not say that you lack telescopes?"

"Telescopes? O no, the trouble here is about inhabitants!"

"That's it," added Peer.

"So, then, the moon is positively uninhabited?" asked Mr. Smith.

"At least," answered Cooley, "on the face which she presents to us. As for the opposite side, who knows?"

"Ah, the opposite side! You think, then," remarked Mr. Smith, musingly, "that if one could but--"

"Could what?"

"Why, turn the moon about-face."

"Ah, there's something in that," cried the two men at once. And indeed, so confident was their air, they seemed to have no doubt as to the possibility of success in such an undertaking.

"Meanwhile," asked Mr. Smith, after a moment's silence, "have you no news of interest to-day?"

"Indeed we have," answered Cooley. "The elements of Olympus are definitively settled. That great planet gravitates beyond Neptune at the mean distance of 11,400,799,642 miles from the sun, and to traverse its vast orbit takes 1311 years, 294 days, 12 hours, 43 minutes, 9 seconds."

"Why didn't you tell me that sooner?" cried Mr. Smith. "Now inform the reporters of this straightaway. You know how eager is the curiosity of the public with regard to these astronomical questions. That news must go into to-day's issue."

Then, the two men bowing to him, Mr. Smith passed into the next hall, an enormous gallery upward of 3200 feet in length, devoted to atmospheric advertising. Every one has noticed those enormous advertisements reflected from the clouds, so large that they may be seen by the populations of whole cities or even of entire countries. This, too, is one of Mr. Fritz Napoleon Smith's ideas, and in the Earth Chronicle building a thousand projectors are constantly engaged in displaying upon the clouds these mammoth advertisements.

When Mr. Smith to-day entered the sky-advertising department, he found the operators sitting with folded arms at their motionless projectors, and inquired as to the cause of their inaction. In response, the man addressed simply pointed to the sky, which was of a pure blue. "Yes," muttered Mr. Smith, "a cloudless sky! That's too bad, but what's to be done? Shall we produce rain? That we might do, but is it of any use? What we need is clouds, not rain. Go," said he, addressing the head engineer, "go see Mr. Samuel Mark, of the meteorological division of the scientific department, and tell him for me to go to work in earnest on the question of artificial clouds. It will never do for us to be always thus at the mercy of cloudless skies!"

Mr. Smith's daily tour through the several departments of his newspaper is now finished. Next, from the advertisement hall he passes to the reception chamber, where the ambassadors accredited to the American government are awaiting him, desirous of having a word of counsel or advice from the all-powerful editor. A discussion was going on when he entered. "Your Excellency will pardon me," the French Ambassador was saying to the Russian, "but I see nothing in the map of Europe that requires change. 'The North for the Slavs?' Why, yes, of course; but the South for the Matins. Our common frontier, the Rhine, it seems to me, serves very well. Besides, my government, as you must know, will firmly oppose every movement, not only against Paris, our capital, or our two
great prefectures, Rome and Madrid, but also against the kingdom of Jerusalem, the dominion of Saint Peter, of which France means to be the trusty defender."

"Well said!" exclaimed Mr. Smith. "How is it," he asked, turning to the Russian ambassador, "that you Russians are not content with your vast empire, the most extensive in the world, stretching from the banks of the Rhine to the Celestial Mountains and the Kara-Korum, whose shores are washed by the Frozen Ocean, the Atlantic, the Mediterranean, and the Indian Ocean? Then, what is the use of threats? Is war possible in view of modern inventions—asphyxiating shells capable of being projected a distance of 60 miles, an electric spark of 90 miles, that can at one stroke annihilate a battalion; to say nothing of the plague, the cholera, the yellow fever, that the belligerents might spread among their antagonists mutually, and which would in a few days destroy the greatest armies?"

"True," answered the Russian; "but can we do all that we wish? As for us Russians, pressed on our eastern frontier by the Chinese, we must at any cost put forth our strength for an effort toward the west."

"O, is that all? In that case," said Mr. Smith, "the thing can be arranged. I will speak to the Secretary of State about it. The attention of the Chinese government shall be called to the matter. This is not the first time that the Chinese have bothered us."

"Under these conditions, of course—" And the Russian ambassador declared himself satisfied.

"Ah, Sir John, what can I do for you?" asked Mr. Smith as he turned to the representative of the people of Great Britain, who till now had remained silent.

"A great deal," was the reply. "If the Earth Chronicle would but open a campaign on our behalf—"

"And for what object?"

"Simply for the annulment of the Act of Congress annexing to the United States the British islands."

Though, by a just turn-about of things here below, Great Britain has become a colony of the United States, the English are not yet reconciled to the situation. At regular intervals they are ever addressing to the American government vain complaints.

"A campaign against the annexation that has been an accomplished fact for 150 years!" exclaimed Mr. Smith. "How can your people suppose that I would do anything so unpatriotic?"

"We at home think that your people must now be sated. The Monroe doctrine is fully applied; the whole of America belongs to the Americans. What more do you want? Besides, we will pay for what we ask."

"Indeed!" answered Mr. Smith, without manifesting the slightest irritation. "Well, you English will ever be the same. No, no, Sir John, do not count on me for help. Give up our fairest province, Britain? Why not ask France generously to renounce possession of Africa, that magnificent colony the complete conquest of which cost her the labor of 800 years? You will be well received!"

"You decline! All is over then!" murmured the British agent sadly. "The United Kingdom falls to the share of the Americans; the Indies to that of—"

"The Russians," said Mr. Smith, completing the sentence.

"Australia—"

"Has an independent government."

"Then nothing at all remains for us!" sighed Sir John, downcast.

"Nothing?" asked Mr. Smith, laughing. "Well, now, there's Gibraltar!"

With this sally, the audience ended. The clock was striking twelve, the hour of breakfast. Mr. Smith returns to his chamber. Where the bed stood in the morning a table all spread comes up through the floor. For Mr. Smith, being above all a practical man; has reduced the problem of existence to its simplest terms. For him, instead of the endless suites of apartments of the olden time, one room fitted with ingenious mechanical contrivances is enough. Here he sleeps, takes his meals, in short, lives.

He seats himself. In the mirror of the phonotelephote is seen the same chamber at Paris which appeared in it this morning. A table furnished forth is likewise in readiness here, for notwithstanding the difference of hours, Mr. Smith and his wife have arranged to take their meals simultaneously. It is delightful thus to take breakfast _tête-a-tête_ with one who is 3000 miles or so away. Just now, Mrs. Smith's chamber has no occupant.

"She is late! Woman's punctuality! Progress everywhere except there!" muttered Mr. Smith as he turned the tap for the first dish. For like all wealthy folk in our day, Mr. Smith has done away with the domestic kitchen and is a subscriber to the Grand Alimentation Company, which sends through a great network of tubes to subscribers' residences all sorts of dishes, as a varied assortment is always in readiness. A subscription costs money, to be sure, but the _cuisine_ is of the best, and the system has this advantage, that it, does away with the pestering race of the _cordons-bleus_. Mr. Smith received and ate, all alone, the _hors-d'oeuvre, entrées, rôti_ and _legumes_ that constituted the repast. He was just finishing the dessert when Mrs. Smith appeared in the mirror of the telephote.

"Why, where have you been?" asked Mr. Smith through the telephone.
"What! You are already at the dessert? Then I am late," she exclaimed, with a winsome naïveté. "Where have I been, you ask? Why, at my dress-maker's. The hats are just lovely this season! I suppose I forgot to note the time, and so am a little late."

"Yes, a little," growled Mr. Smith; "so little that I have already quite finished breakfast. Excuse me if I leave you now, but I must be going."

"O certainly, my dear; good-by till evening."

Smith stepped into his air-coach, which was in waiting for him at a window. "Where do you wish to go, sir?"

"Let me see; I have three hours," Mr. Smith mused. "Jack, take me to my accumulator works at Niagara."

For Mr. Smith has obtained a lease of the great falls of Niagara. For ages the energy developed by the falls went unutilized. Smith, applying Jackson's invention, now collects this energy, and lets or sells it. His visit to the works took more time than he had anticipated. It was four o'clock when he returned home, just in time for the daily audience which he grants to callers.

One readily understands how a man situated as Smith is must be beset with requests of all kinds. Now it is an inventor needing capital; again it is some visionary who comes to advocate a brilliant scheme which must surely yield millions of profit. A choice has to be made between these projects, rejecting the worthless, examining the questionable ones, accepting the meritorious. To this work Mr. Smith devotes every day two full hours.

The callers were fewer to-day than usual--only twelve of them. Of these, eight had only impracticable schemes to propose. In fact, one of them wanted to revive painting, an art fallen into desuetude owing to the progress made in color-photography. Another, a physician, boasted that he had discovered a cure for nasal catarrh! These impracticables were dismissed in short order. Of the four projects favorably received, the first was that of a young man whose broad forehead betokened his intellectual power.

"Sir, I am a chemist," he began, "and as such I come to you."

"Well!"

"Once the elementary bodies," said the young chemist, "were held to be sixty-two in number; a hundred years ago they were reduced to ten; now only three remain irresolvable, as you are aware."

"Yes, yes."

"Well, sir, these also I will show to be composite. In a few months, a few weeks, I shall have succeeded in solving the problem. Indeed, it may take only a few days."

"And then?"

"Then, sir, I shall simply have determined the absolute. All I want is money enough to carry my research to a successful issue."

"Very well," said Mr. Smith. "And what will be the practical outcome of your discovery?"

"The practical outcome? Why, that we shall be able to produce easily all bodies whatever--stone, wood, metal, fibers--"

"And flesh and blood?" queried Mr. Smith, interrupting him. "Do you pretend that you expect to manufacture a human being out and out?"

"Why not?"

Mr. Smith advanced $100,000 to the young chemist, and engaged his services for the Earth Chronicle laboratory.

The second of the four successful applicants, starting from experiments made so long ago as the nineteenth century and again and again repeated, had conceived the idea of removing an entire city all at once from one place to another. His special project had to do with the city of Granton, situated, as everybody knows, some fifteen miles inland. He proposes to transport the city on rails and to change it into a watering-place. The profit, of course, would be enormous. Mr. Smith, captivated by the scheme, bought a half-interest in it.

"As you are aware, sir," began applicant No. 3, "by the aid of our solar and terrestrial accumulators and transformers, we are able to make all the seasons the same. I propose to do something better still. Transform into heat a portion of the surplus energy at our disposal; send this heat to the poles; then the polar regions, relieved of their snow-cap, will become a vast territory available for man's use. What think you of the scheme?"

"Leave your plans with me, and come back in a week. I will have them examined in the meantime."

Finally, the fourth announced the early solution of a weighty scientific problem. Everyone will remember the bold experiment made a hundred years ago by Dr. Nathaniel Faithburn. The doctor, being a firm believer in human hibernation--in other words, in the possibility of our suspending our vital functions and of calling them into action again after a time--resolved to subject the theory to a practical test. To this end, having first made his last will and pointed out the proper method of awakening him; having also directed that his sleep was to continue a hundred years to a day from the date of his apparent death, he unhesitatingly put the theory to the proof in his own person.

Reduced to the condition of a mummy, Dr. Faithburn was coffined and laid in a tomb. Time went on. September
25th, 2889, being the day set for his resurrection, it was proposed to Mr. Smith that he should permit the second part of the experiment to be performed at his residence this evening.

"Agreed. Be here at ten o'clock," answered Mr. Smith; and with that the day's audience was closed.

Left to himself, feeling tired, he lay down on an extension chair. Then, touching a knob, he established communication with the Central Concert Hall, whence our greatest maestros send out to subscribers their delightful successions of accords determined by recondite algebraic formulas. Night was approaching. Entranced by the harmony, forgetful of the hour, Smith did not notice that it was growing dark. It was quite dark when he was aroused by the sound of a door opening. "Who is there?" he asked, touching a commutator.

Suddenly, in consequence of the vibrations produced, the air became luminous.

"Ah! you, Doctor?"
"Yes," was the reply. "How are you?"
"I am feeling well."
"Good! Let me see your tongue. All right! Your pulse. Regular! And your appetite?"
"Only passably good."
"Yes, the stomach. There's the rub. You are over-worked. If your stomach is out of repair, it must be mended. That requires study. We must think about it."

"In the meantime," said Mr. Smith, "you will dine with me."

As in the morning, the table rose out of the floor. Again, as in the morning, the _potage, rôti, ragoûts_, and _legumes_ were supplied through the food-pipes. Toward the close of the meal, phonotelephotic communication was made with Paris. Smith saw his wife, seated alone at the dinner-table, looking anything but pleased at her loneliness.

"Pardon me, my dear, for having left you alone," he said through the telephone. "I was with Dr. Wilkins."

"Ah, the good doctor!" remarked Mrs. Smith, her countenance lighting up.

"Yes. But, pray, when are you coming home?"
"This evening."
"Very well. Do you come by tube or by air-train?"
"Oh, by tube."
"Yes; and at what hour will you arrive?"
"About eleven, I suppose."
"Eleven by Centropolis time, you mean?"
"Yes."

"Good-by, then, for a little while," said Mr. Smith as he severed communication with Paris.

Dinner over, Dr. Wilkins wished to depart. "I shall expect you at ten," said Mr. Smith. "To-day, it seems, is the day for the return to life of the famous Dr. Faithburn. You did not think of it, I suppose. The awakening is to take place here in my house. You must come and see. I shall depend on your being here."

"I will come back," answered Dr. Wilkins.

Left alone, Mr. Smith busied himself with examining his accounts—a task of vast magnitude, having to do with transactions which involve a daily expenditure of upward of $800,000. Fortunately, indeed, the stupendous progress of mechanic art in modern times makes it comparatively easy. Thanks to the Piano Electro-Reckoner, the most complex calculations can be made in a few seconds. In two hours Mr. Smith completed his task. Just in time. Scarcely had he turned over the last page when Dr. Wilkins arrived. After him came the body of Dr. Faithburn, escorted by a numerous company of men of science. They commenced work at once. The casket being laid down in the middle of the room, the telephote was got in readiness. The outer world, already notified, was anxiously expectant, for the whole world could be eye-witnesses of the performance, a reporter meanwhile, like the chorus in the ancient drama, explaining it all _viva voce_ through the telephone.

"They are opening the casket," he explained. "Now they are taking Faithburn out of it— a veritable mummy, yellow, hard, and dry. Strike the body and it resounds like a block of wood. They are now applying heat; now electricity. No result. These experiments are suspended for a moment while Dr. Wilkins makes an examination of the body. Dr. Wilkins, rising, declares the man to be dead. 'Dead!' exclaims every one present. 'Yes,' answers Dr. Wilkins, 'dead!' 'And how long has he been dead?' Dr. Wilkins makes another examination. 'A hundred years,' he replies."

The case stood just as the reporter said. Faithburn was dead, quite certainly dead! "Here is a method that needs improvement," remarked Mr. Smith to Dr. Wilkins, as the scientific committee on hibernation bore the casket out. "So much for that experiment. But if poor Faithburn is dead, at least he is sleeping," he continued. "I wish I could get some sleep. I am tired out, Doctor, quite tired out! Do you not think that a bath would refresh me?"

"Certainly. But you must wrap yourself up well before you go out into the hall-way. You must not expose
yourself to cold."

"Hall-way? Why, Doctor, as you well know, everything is done by machinery here. It is not for me to go to the bath; the bath will come to me. Just look!" and he pressed a button. After a few seconds a faint rumbling was heard, which grew louder and louder. Suddenly the door opened, and the tub appeared.

Such, for this year of grace 2889, is the history of one day in the life of the editor of the Earth Chronicle. And the history of that one day is the history of 365 days every year, except leap-years, and then of 366 days--for as yet no means has been found of increasing the length of the terrestrial year.

JULES VERNE.